

AMIGA

COMPUTING

Issue 45 • February 1992 • £2.99

EXTRA!



32
page games
supplement

INSIDE: Bars & Pipes Pro • Floppy drive round-up • Videon digitiser review

FREE!

All you need to get
started with your
Amiga

ABSOLUTE BEGINNERS

32 FACT-PACKED PAGES OF ESSENTIAL INFO



Making the most
of Amiga sound
and vision

FREE WITH
FEBRUARY
1992 ISSUE

AMIGA
COM

NO DISK?
ASK YOUR
NEWSAGENT!

VIDEO MIRACLE

**Now 8 million colours
for less than £500!**

DESIGNER'S DREAM

**The latest CAD power
packages reviewed**



9 770959 963039

Comms • Music • DTV • Amos • DTP

EUROPRESS
PUBLICATIONS

Some things are worth waiting for ...

HiSoft Devpac 3

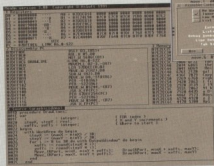
Devpac Version 3 is here at last. The two earlier versions of HiSoft Devpac for the Amiga set a standard in 68000 assembly language programming which was hard to surpass, but we think that we've done it. This new package has had a complete face-lift, from the editor through to the debugger; in fact so many features have been added and improved that we feel confident in the claim that Devpac 3 is the ultimate assembly language development system on the Amiga ... for now!

The Editor

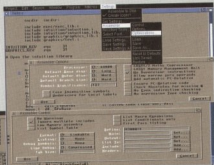
A new multi-window editor with bookmarks, mouse block marking, macros, complete window flexibility (including multi-views on one file), extensive user configuration and full integration with the other Devpac programs. The editor makes use of Workbench 2 or 1.3 automatically.

The Assembler

Improved and extended, the Devpac 3 assembler is now at least 40% faster than its predecessor (without pre-assembly), supports the full 68010 range of processors including the maths co-processors and has a tremendous number of switchable optimisations. With the ability to pre-assemble files for inclusion, it can now claim to be the fastest assembler on the Amiga.



the debugger supplied with both packages



Devpac 3 gives complete control over the assembly process

The Debugger

Devpac 3 is provided with a versatile debugger/disassembler for bug hunting and ease of learning. You can have as many views on your program as you like, including its source code; then set breakpoints, single-step instructions etc. even at a source code level. Again, there is support for all the new processors and the floating point chips.

Devpac 3 comes complete with all the necessary include files, a linker, many examples and a clear, helpful manual.

HighSpeed Pascal



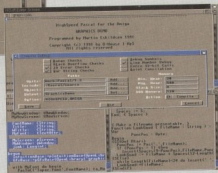
error detection is fully interactive

HiSoft Devpac 3 (£69.95) and HighSpeed Pascal (£99.95) should be in your local computer shop soon. If you have difficulty locating a copy, you can order directly from HiSoft using Access/Mastercard, Visa, UK debit card (Switch etc.) or a cheque/postal order. Mention this magazine when ordering to receive a free T-Shirt or mouse mat (offer subject to availability).

At last, a new Pascal compiler for your Amiga: HighSpeed Pascal. Compiling at close to 20 000 lines per minute on a humble A500 and with a fully integrated environment (based on the new HiSoft multi-window editor), HighSpeed Pascal is the answer to your programming prayers.

The compiler is very close to the standard set by Turbo Pascal 5 on the PC and enables you to port programs directly from the PC or ST - even the IBC1 unit is provided for graphic compatibility. You can compile separate units, link with assembler or use the inline assembler provided and we also supply a special version of our 68010 debugger which allows you to debug Pascal programs at a source code level.

The full Pascal language is supported including such worthy additions as structured constants, flexible string handling and absolute variables.



HighSpeed Pascal is remarkably friendly and easy-to-use

HighSpeed Pascal comes complete with all the necessary files for working with the Amiga's operating system, a host of examples and a professional, ring-bound manual.

HiSoft Devpac 3 and HighSpeed Pascal are just two of the products that we supply for your Amiga. Other titles include: ProFlight, HiSoft BASIC, Extend, SASLattice C 5 and HiSoft C. For more details contact us at: HiSoft, The Old School, Greenfield, Bedford MK45 5DE UK.

Tel: (0525) 711811, Fax: (0525) 713716.

HiSoft
High Quality Software

ANNOUNCING THE A5000 AND B5000

FREE
INFORMATION PACK
TELEPHONE
(0933) 650677

LIMITED STOCK

NEW

**EARLY JANUARY
SALE**

**A5000-16 1Mb
£199**

**B5000-40 2Mb
£499**

IS YOUR AMIGA STILL IN THE STONE AGE?

"UNLEASH THE POWER OF YOUR AMIGA"

▼ JUST ADD TO YOUR AMIGA FOR ▼

- B5000-25 Faster than the CBM A3000-25 •
- 500-1000% Faster than your Amiga •
- Massive 4-32Mb of superfast memory •
- 100% Software compatibility •
- Plug-in up to a 50 MHz Maths Co-Pro •
- B5000 has advanced 32-bit Paged-Mode design •
- 32-bit Kickstart — five/ten times faster •
- Three models — A5000-16/B5000-25/B5000-40 •

• THE MACHINES •

A5000-16: 16.67 MHz Asynchronous MC68020RC 2-3 MIPS (8 MIPS peak)
B5000-25: 25.00 MHz Asynchronous MC68030RFP 5-6 MIPS (12 MIPS peak)
B5000-40: 40.00 MHz Asynchronous MC68030RFP 8-8 MIPS (18 MIPS peak)
FPU: 12.5 MHz-50 MHz Asynchronous MC68881RC or MC68882RC
A5000-16 RAM: 4 Megabytes of 32-bit RAM 256 x 4 80ns DRAMs
B5000-25 RAM: 16 Megabytes of 32-bit RAM 1024 x 4 80ns DRAMs
B5000-40 RAM: 32 Megabytes of 32-bit RAM 1024 x 4 80ns DRAMs
SHADOW ROM: Move your Kickstart into 32-bit SUPER-FAST-RAM
SOFTWARE: 68020 fallback mode for 100% software compatibility
HARDWARE: 100% Compatible with Amiga 500/2000 and add-on cards
INTERFACE 1: Plugs into 68050 processor socket inside your Amiga
INTERFACE 2: A/B2000 Co-processor (ZorroII) card (for B5000-40 only)

A5000-16 £295
(Price includes 1Mb RAM)

B5000-25 £595
(Price includes 1Mb RAM)

B5000-40 £1162
(Price includes 4Mb RAM)

(All prices inclusive of VAT)



SOLID STATE LEISURE LIMITED

Offer ends 31st January, 1992

AMIGA

COMPUTING

FEBRUARY 1992

WHO'S WHO

PUBLISHER Richard Williams
EDITOR-IN-CHIEF Eddie McKendrick

EDITOR Stevie Kennedy
ART EDITOR Tym Lacky
ASSOCIATE EDITOR Paul Austin
NEWS EDITOR John Butters
PRODUCTION EDITOR Phil Morris
GAMER EDITOR Daniel Whitehead
STAFF WRITER Jonathan Maddock

AD MANAGER Simon Lees
SENIOR AD SALES Sue Horsfield
AD SALES John Derbyshire

AD PRODUCTION Martin Fitzgerald
MARKETING MANAGER Neil Dyson

CUSTOMER SERVICE Sunders Childs
Lynne Connaman
Linda Thomas
Sally Green
Reginald Buddick

CIRCULATION MGR David Wren
DISTRIBUTION CDM&S (0895) 444055
SUBSCRIPTIONS 051-337 2961

PRODUCTION MGR Sue Cantrell
SYSTEMS MANAGER David Stewart

Published by European Publications Ltd.
Europa House, Addington Park, Banstead, Surrey SM7 6NP
Tel: 0633 878888 Fax: 0633 879966

CHAIRMAN Derek Haskin
MANAGING DIRECTOR Peter Oliver
FINANCIAL CONTROLLER Ian Bloomfield

ABC Member of the Audit Bureau of Circulations

We regret Amiga Computing cannot offer technical help on a personal basis either by telephone or in writing. All reader enquiries should be submitted to the address above for possible publication.

Amiga Computing is an independent publication and Commodore Business Machines Ltd are not responsible for any of the articles in this issue or for any of the opinions expressed.

© 1992 European Publications Ltd. No material may be reproduced in whole or in part without written permission. While every care is taken, the publishers cannot be held legally responsible for any errors in articles, listings or advertisements.

EXPRESS
PUBLICATIONS

For almost four years Amiga Computing has been the leading magazine for Amiga enthusiasts. As a key member of the European magazine group, Amiga Computing promises to inform, educate and entertain its readers each month with the most dedicated coverage of the Amiga available.

Amiga Computing • Atari ST User • PC Today
Showertime Shopper • The Micro User
Comix • Amiga Action • 27 Action
Crash • Zzap • Total Home
Computer Trade Weekly

REGULARS

Amiga Newsline

More details of the A4000, exclusively in Amiga Computing 9

Gallery

More of the best in Amiga art, produced by our talented readers 102

ESP

Got a moan? Want to congratulate someone? Write to Ezral 111

Public Sector

A treasure of games and utilities unearthed and free! 118

ACAS

Expert help for all those technical problems 129

Entertainment extra

The latest video releases get the once-over 169

Rock Lobster

The bit you're not supposed to take seriously 170

Almanac

Expert coverage of all aspects of the Amiga is right here

DTV	149
Programming	151
Music	153
Communications	155
AMOS	157
DTP	159
Multimedia	161

VIDEO MIRACLE

DCTV brings 24-bit power to the masses, offering eight million colours for less than £500.

If you don't believe us, turn to page 21 and see for yourself...

THE COVERDISK

TDM

Save yourself a lot of typing with this superb directory utility



DICTATOR

Can you succeed where Mrs T failed and become ruler of all Britain?

PICTURESQUE

Draw pictures or design sprites with this fully featured utility

SWAPCOLS

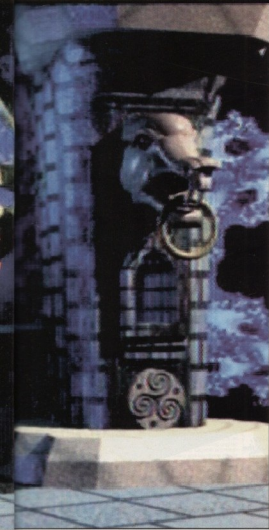
Make your old icons look right on the A500 Plus

Workbench 2 ONLY!

GREP

Finding well-hidden words has never been easier

CONTENTS



BugBlaster

Clean up your bug-infested garden with style in our frenetic shoot'em-up.



SMALL'S LAST BEEN SPENT...
...THE UNSTOPPABLE GAMES MAG

GAMER

COME FLY WITH ME...

BIRDS OF PREY

32 PAGES PACKED WITH THE VERY LATEST GAMES NEWS, CAPTIONS AND PREVIEWS!

INSIDE

WIN games and videos!

6

GREAT
subscription
offers
for new
readers

Turn to Page 152

SPECIALS

Pipe dreams

The latest Amiga sequencer could well be the best yet.....

29



Amiga updates

Tweaks and twiddles, or major revamps? Find out here!.....

55

Extra floppies

A definitive guide to your storage needs.....

58

Videon

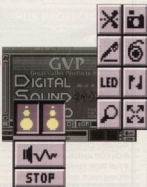
Capture those magic moments with the latest video digitiser.....

133

Digital designs

CAD explained, examined and extolled in the first of three supertests.....

45



Backup or bust?

Can you afford to ignore data security?.....

137

Sound studio

GVP's new 8-bit sampler does the lot.....

141

Evesham Micros

PRICES INC. DELIVERY & VAT @ 17.5%

Express Courier Delivery :
(UK Mainland Only) £6.50 Extra

HERE TODAY - HERE TO STAY

Evesham Micros First. First for choice, prices and service. Established for over eight years, with a strong financial position and secure future. Our Comprehensive Telesales Order Processing Investment means fast, efficient service. Well supported Retail Showrooms, with for per product range of computer, laptop, desktop, and peripheral products. Personal, reliable, and personal referrals, underlines our popularity. **REMEMBER** - when you need us, we will be there. Our extensive experience program means we would certainly be there for you.

HOW TO ORDER

Call us now on
0386 765500

TELESALES OPENING TIMES :
9am - 7pm Monday-Friday
9am - 5.30pm Saturday

Send Cheque, Postal Order or ACCESS/VISA card details to:

Evesham Micros Ltd.
Unit 9, St Richards Road
Evesham, Worcs. WR11 6XJ

ACCESS / VISA
Cards Welcome

Government, Education & PLC orders welcome
Same day despatch wherever possible
Express Courier delivery (UK Mainland only) £6.50 extra
Please note that 5 working days must be allowed for cheque clearance. Immediate clearance on Building Society cheques or Bank Drafts.

Mail Order Fax: 0386-765554

Unit 9 St Richards Road, Evesham
Worcestershire. WR11 6XJ
Tel: 0386 765180
Open Mon-Fri. 9.00 - 5.30 - 5.30

5 Gisson Rd, Cambridge CB1 2HA
Tel: 0223 323898
Open Mon-Fri. 9.30 - 4.00 & Sat. 9.30 - 5.30
Corporate Sales Dept. • IBM dealer

251-255 Moseley Road,
Highgate, Birmingham B12 0EA
Tel: 021 446 5050
Tel: 021 446 210
Open Mon-Sat. 9.00-5.30 • Easy Parking

320 WITAN GATE
MILTON KEYNES MK9 2HP
Tel: 0908 230 898
Tel: 0908 230 895
Open Mon-Sat. 9.00-5.30

TECHNICAL SUPPORT ☎ 0386-40303
Monday to Friday, 10.30 - 4.00

12 MONTHS WARRANTY
ON ALL PRODUCTS

All details correct at time of going to press • All goods subject to availability

3 1/2" Track Display Drive

High quality double-sided 3.5" floppy drive offering the full 800K formatted capacity per 3.5" disk. Features a special LED display which accurately shows the current track being accessed during any disk drive activity. **NEW LOW PRICE!**

ONLY £59.99

AMIGA 500 SOLDERLESS RAM UPGRADES

512K RAM/CLOCK UPGRADE

ONLY £24.99
INC. VAT AND DELIVERY

ALSO AVAILABLE WITHOUT
CLOCK FOR ONLY:
£19.99

➤ DIRECT REPLACEMENT FOR THE A501 EXPANSION ➤ CONVENIENT ON / OFF MEMORY SWITCH ➤ AUTO-RECHARGING BATTERY BACKED REAL-TIME CLOCK ➤ COMPACT UNIT SIZE - ULTRA NEAT DESIGN

'A500 PLUS' 1MB RAM UPGRADE

NEW • NEW • NEW • NEW • NEW

THE FASTEST AND EASIEST WAY TO UPGRADE YOUR A500- TO 2MB RAM!

Simply Plugs into Inboard expansion area ➤ Increases total RAM capacity to 2MB ChipRAM ➤ RAM On/Off Switch ➤ Compact unit size ➤ Only 8 low power RAM IC's ➤ High reliability

ONLY £44.99

1.5MB RAM BOARD

UPGRADE TO 2MB FOR ONLY £79.99

Fully populated board increases total RAM in A500 to 2Mb! ➤ Plugs into Inboard area, & connects to GARY chip ➤ Includes Battery-Backed Real-Time Clock ➤ Socketed RAM ICs on 512K / 1Mb Versions

Unpopulated RAM board with clock £34.95
With 512K installed £44.95 with 1Mb installed £69.95
RAM Board with 1.5Mb FASTRAM installed £79.00

N.B. The expansion board requires Kickstart 1.3 to operate. Kickstart 1.3 upgrade available from us for £29.95

'MEGABOARD' CONNECTS TO YOUR 512K RAM UPGRADE TO GIVE 1.5MB

With our MEGABOARD, you can further expand your A500's memory to the total of 2MB without disposing of your existing 512K upgrade (must be 4 x RAM-chip type, or not exceeding 9cm in length)

ONLY £54.99

MEGABOARD needs Kickstart 1.3 to operate. Kickstart 1.3 upgrade available from us for £29.95. Installation requires connection to the GARY chip. Easy to follow instructions provided.

A500 HARD DISKS

PRICE BREAKTHROUGH!

AT LAST... the chance to buy Quality, High Capacity Hard Disk Systems for the Amiga 500 at realistically low prices!

- NEC SCSI HARD DISK MECHANISMS for optimum performance.
- 25ms Access Time & Subpartitioning
- Includes its own DEDICATED PDS/ CDM recommends optimal use of Hard Disks without independent power supply.
- Option for up to 4MB additional easy RAM EXPANSION using "SIMMS"
- COOL... by popular demand, we have now fitted a Cooling Fan!
- FLAME SWITCH allows Games to be loaded without disconnection
- Includes SCSI THROUGHPORT & rear for further expansion
- High quality metal casing, colour matched to the Amiga 500
- Includes WRECKUP PRO as well as Configuration/Format software

40Mb MODEL ONLY £299
100Mb MODEL ONLY £449

2Mb Ram Version: ADD £80 • 4Mb Ram Version: ADD £160

3 1/2" EXTERNAL FLOPPY DRIVES

AMAZING LOW PRICE!
£49.99
including VAT & delivery

- Very quiet
- Slimline design
- Suits any Amiga
- Cooling Vents
- Sleek, high quality metal casing
- Quality Citizen/Sony drive mechanism
- On / Off switch on rear of drive
- Full 800K Formatted Capacity
- Long reach connection cable

Also available:
5.25" External Drive
40/80 Track Switchable
Only £99.00 inc VAT/delivery



PHOENIX

RAM expansions made for the older A500 will not work with the new A500 Plus if they are populated to more than 512k. Phoenix have developed a range of RAM expansion units specifically for the new A500 Plus.

WHY DO YOU NEED PHOENIX RAM EXPANSIONS?

The A500 Plus can only be expanded to 2 Mb of chip RAM using the trap door expansion port.

Chip Ram is required to unleash the full graphics capabilities of the Amiga 500 Plus

The A500 Plus can only use specific RAM expansion modules that will do this such as Phoenix.

Phoenix Ram expansion modules are built to the highest possible standards in the U.K.

Each unit is individually inspected and tested before release.

Phoenix 1 Mb RAM modules come in either 512K, 1Mb or unpopulated configurations.

All Phoenix product is backed by a full 2 year replacement guarantee.



EXPAND your **AMIGA A500 Plus** with the

A500 Plus 1Mb RAM modules

The Phoenix 1mb RAM expansion is available either unpopulated, populated to 512K or fully populated to 1Mb. All boards use industry standard 256 by 4 DRAMs. The Phoenix Ram will fit simply into the trap door expansion port without any modification and **Will Not** invalidate your warranty.

Unpopulated
only £16.99

512K populated
only £39.99

1Mb fully populated
only £49.99



Kickstart ROM1.3/2.04 sharer

Because some older Games and Business software will not run on the new Kickstart 2.04 ROM Phoenix have designed a sharer for both ROM chip sets.

Switchable between 1.3 and 2.04 you can get all the benefits of the latest A500 *Plus* without the drawback of losing some of your favourite software.



Kickstart ROM1.3/2.04 sharer
only £24.99

Kickstart ROM 1.3 chip
only £29.99

Order Hotline

TEL. 0532 311932

FCC Distribution, Unit 8, Armley, Park Court, Stanningley Road,
Leeds LS12 2AE. Tel (0532) 311932. Fax 637689

Phoenix products are solely distributed in the UK by FCC Distribution Ltd.
TRADE ENQUIRIES WELCOME



AMIGA COMPUTING NEWSLINE

A4000 - more amazing details

SINCE the exclusive report in our October issue outlining Commodore's plans to launch a new top-end Amiga during the next year, further details about its specifications have been gathered.

The machine will be named the Amiga 4000 and will be fitted with a 68040 processor, enabling the computer to run up to five times faster than the current 68030-based A3000.

It will have multi-monitor support and is claimed to have a 24-bit graphics board as standard, with 16-bit

By John Butters

sound. The CD-ROM drive which has recently been rumoured for the A4000 appears not to have been included.

Experts now believe that a SCSI II interface will be included to enable information to be transferred at up to ten megabytes per second and from hard drives.

Technology included in the "Super Amiga" is likely to mean that it will

sell for between £4,000 and £5,000, and will be aimed at high-end graphics applications such as broadcasting, multimedia and presentations.

The A4000 could also be employed comfortably for computer-aided design or desktop publishing work, where it would operate faster than the industry-standard Apple Macintosh. Commodore refused to talk about the A4000's details, simply commenting: "We haven't got a release date for that machine, either in the UK or US."

CDTV linked with Amiga

IN A surprise marketing move, Commodore have backed down on their refusal to link the CDTV with the Amiga, the machine at the centre of the player.

It follows several months of the manufacturer going out of their way to distance CDTV from computers. They maintain that this was needed to attract people who would not consider buying a conventional computer.

CDTV, they said, was new technology because it could show text and music from compact discs. None of the firm's advertising mentioned the word computer and stores selling the player were forced to display it at least four feet away from computers.

Latest press and television advertising labels the machine Amiga CDTV, which one marketing expert said was needed because of "difficulties in explaining the multimedia concept and the undeniable cachet of the market-leading Amiga brand". It continues to

be badged simply CDTV. Commodore's Andrew Ball said: "It seemed sensible to link CDTV with one of the strongest names in home entertainment."

"CDTV was always going to be launched in several stages - its potential is far greater than any games playing machine."

He added that the firm have spent money educating people about CDTV's abilities and thought that recent promotions on Radio 1 and coverage on BBC television's "Tomorrow's World" programme had helped the campaign.

By mid-December Commodore had sold 8,000 machines through to consumers and the company expects total UK sales to stand at 30,000 by the end of the Christmas selling period.

Meanwhile, two more High Street chains have taken the machine on board. Dixons and Comet are to stock it at more than 30 stores each and it is to enter about 100 independents.



The CDTV - sorry, the Amiga CDTV

Sales exceed three million

WORLDWIDE sales of the Amiga reached three million during the last couple of months of 1991, Commodore have announced.

A million machines were sold during the year, and total sales for the UK alone are predicted to pass the million mark early this year. The giant says that the Amiga's use in home computing, education, leisure and professional markets make it unique in the UK market place.

Commodore UK boss Steve Franklin enthused: "Actions speak louder than words. Right now I doubt there is any other computer which can equal the growth of the Amiga."

"This is an astonishing display of strength, especially during a worldwide recession, and 1992 promises to be even better," he added.

Classic bundle planned

THERE is growing speculation that Commodore are to release an Amiga 800 Classic bundle in the near future, containing a computer, hard disk drive and monitor.

Reports suggest that the A800 is to be powered from a 68020 processor and all the elements will be cased together, in a similar way to the Apple Macintosh Classic. The machine will also have 16-channel sound, says a source.

Industry newspaper *Computer Trade Weekly* has added weight to the rumour, claiming that the Amiga family is to be increased this year with a machine to fill the gap between the A500P and A1500. No other details were given.

A spokesman for Commodore said he was unaware of the bundle and added it was certainly not a product they were considering releasing in the UK.

AMIGA COMPUTING NEWSLINE

Multimedia packs go with A3000

PEOPLE buying A3000s now get three multimedia tools supplied with the machine at no extra cost, making it more attractive to creative businesses or single media producers.

The packages included are Scala, AmigaVision and Deluxe Paint IV. Commodore consider all of them to be ideal for multimedia applications.

It is the first time Deluxe Paint IV has been packaged with any Amiga and it supports overscan for desktop video, 3D perspective and animation, and enables work with all 4,096 colours onscreen.

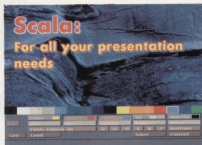
AmigaVision is the computer giant's own authoring language, integrating Amiga files into an icon-based flow chart and allowing users to assemble their own presentations, combining animation, audio, text and graphics.

Presentation system Scala has a button-style interface and includes display backgrounds, a variety of fonts for text overlay and support for Ascii and PostScript files.

Said Commodore's head of multimedia Barry Thurston: "This latest package makes multimedia available at a realistic price for any creative business user. The Amiga 3000 is

ideal for use in corporate communications and presentations, interactive training, animation, CAD and control and simulation procedures."

Price starts at £3,524.



Scala is one of three packages being given away in latest A3000 packs

Six thousand balloons released

THE sky turned white over the BBC's Pebble Mill studios recently as Evesham Micros handed over a cheque for £6,853 to the BBC Children in Need Appeal at the start of their Mighty Balloon Marathon.

The launch of more than 6,000 balloons was the result of months of writing tickets and was watched by millions of TV viewers.

Each balloon was labelled with the name of an Evesham Micros customer and the owner of the balloon which travelled the furthest by January 31, 1992 will win an A500 and colour monitor. The person returning the winning ticket receives an Atari Lynx games console.

"Sitting inside a cold enormous balloon net for several hours, with thousands of balloons to inflate, isn't everyone's idea of fun," said Evesham's marathon organiser Richard Hicks.

"But it was all worthwhile to raise such an amazing figure. The most thanks must go to our generous customers and everyone concerned with local fund raising which managed to boost the Marathon total by an extra £680," he added.



The balloons go up at Pebble Mill

A1500 to run at 33MHz

A CARD to increase the speed of A1500 and A2000s is set to be released in the UK soon by Silica Systems (081-309 1111).

Selling at £999, the Great Valley Products 68030 processor fitted with a 68882 floating processor unit will run at 33MHz, faster than any of its competitors.

It will have a hard disk controller and is supplied with four megabytes of 32-bit RAM which can be expanded to 16 megabytes. A spokesman for Silica said that while the board is based on Combo technology, it remains nameless.

Said Silica's Andy Leaming: "GVP's new card upgrades the Amiga 1500 to give it the processing power of an Amiga 3000. Anyone considering buying an Amiga 3000 can now buy an Amiga 1500 and GVP card and get the same specification and power for £1,575 less."

Facelift for A1500 bundle

DETAILS released for a new A1500 bundle show Commodore will continue to direct the computer towards the family.

Three games will be contained in the pack - Pazznik, Toki and Elf. Deluxe Paint III, Home Accounts and The Works make up the bundle's serious content.

A Commodore spokesman said the firm were optimistic that in 1992 sales for the mid-range machine would be increased to between 15,000 and 20,000 units. The A1500 continues to sell at £999.

Unix reseller appointed

A MAJOR supplier of systems solutions has been appointed by Commodore as the sole UK Amiga Unix reseller, supplying and installing Amiga Unix platforms, software and networking products.

Applied Systems Group have been working closely with Commodore for some time on the development of Unix and networking systems for the Amiga, including Network File System, TCP/IP, MS-DOS/Unix and AmigaDOS integration.

Commodore claim that the platform outperforms traditional vendors in its price bracket and say many early evaluators of the product have switched to the Amiga from Sun 4, 486 and 68000-based workstations.

Applied Systems' technical sales

director Tony Leatham said: "The adaptability of the Amiga is increasing all the time. Amiga Unix software titles will include the most popular database engines as well as graphics and PDF packages."

Commodore's Barry Thurston added: "As an Amiga Unix reseller for Commodore, Applied Systems can now translate their developments in both environments into complete business solutions."

Commodore added that ASG work with many blue chip firms and install systems where the multitasking Amiga could be employed.

Prices depend upon the type of application and number of computers required by firms. Applied Systems can be contacted on 0724 280222.

Amiga heads for BETT

FOLLOWING on from the publication of the Commodore Schools Catalogue recently, the company have announced that they plan to show curriculum solutions for all subjects at the BETT '92 education exhibition.

The complete range of the manufacturer's computers will be displayed, including the Amiga and Amiga CDTV.

The Amiga will feature as an ideal system for Special Needs departments and will be shown with the Concept 2000 keyboard and Touch Window.

The A500's high quality colour, graphics, sound, video, text and animation capabilities are also planned to be demonstrated through curriculum applications.

"Commodore are committed to providing affordable quality solutions to meet the needs of both teachers and pupils within the parameters of the National Curriculum," says their education manager Peter Talbot. "This will be demonstrated at BETT '92."

The show runs from January 22 to 25 at London's Barbican Centre and entrance is restricted to those working within education.

Four million colours for CDTV

AMIGA CDTV owners will soon be able to buy a card to enable 400,000 colours from a total palette of four million to be displayed onscreen at any time.

Plugging in to an expansion socket at the back of the machine, Advanced Video Mode Card will sell for £49.99 and is planned for launch within the first few months of 1992.



POWER COMPUTING

NEW LOW PRICES

PC880B POWER DRIVE



- Built-in Blitz hardware copier
- Built-in virus blocker
- No annoying click when drive is empty
- 12 month warranty **£69-95**

PC880 Drive (Anti-click) **£49-95**

DUAL DRIVE

The only company to make the dual drive 'Quite simply, the best all rounder' ... Amiga Shopper Best Buy April '91

New Dual 35" Drive with built-in power supply, same features as PC880B **£119-90**

A500 Replacement Internal Drive



No case modification required **£40**
40MB Slimline Hard Drive **£299**
A500 Internal Anti-click board **£9-95**

NEW BLITZ AMIGA

- Back-up your disks at lightning speed
- Copies up to 100 disks to the external drive
- Backs-up an Amiga disk in as little as 40 seconds
- Backs-up other format disks (Atari, PC)
- Copies up to three external drives at once
- Stops ALL external drives from clicking
- Contains ANTI-VIRUS switch - prevents viruses from being written into the bootblock
- Works on Amiga 500 or 2000 **£15**
- Original Blitz **£25**

MEMORY



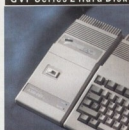
1.5MB Expansion Board **£79**
FULLY SUPPORTS 1MB CHIP RAM
MOST BOARDS DON'T
Plugs easily into your Amiga*

512K RAM Card without clock **£24**
512K RAM Card with clock **£29**
* Fully compatible with 'Faster Agnus' and 1MB Chip RAM Kickstart 1.3 and above, single internal fitting

8MB A500 RAM BOARD

- Plugs in the side slot
- Fully auto-config
- Full 'turbo' port
- Expand 2MB - 8MB **£CALL**
- Plug in & go operation

GVP Series 2 Hard Disk



- Up to 8MB FAST RAM on-board
- High speed 'FAASTROM' controller
- Auto-boot from FFS partition
- 520MB with 2MB RAM **£439**
- 105MB with 2MB RAM **£639**

AMIGA 500

- NEW A500 +, 1 MB, Kickstart V2, enhanced chip set **£399**
Amiga 500 512K **£330**
Amiga 500 1MB **£350**
Amiga 500 2MB **£395**
Amiga 500 1MB + 20MB Internal Hard Disk **£600**
A500, 1MB, 52MB GVP Hard Disk **£799**
Packs do not include software unless specifically stated

PC501 Plus RAM Card for the A500+

Our new RAM board is designed specially for the new A500 plus computer and comes with 1MB of RAM on board to expand your memory to 2MB of chip RAM!

- 1MB RAM expansion for A500+
- Plug in and go operation - fits into the trapdoor
- No need to open the computer
- Gives you a total of 2MB Chip RAM!

EPOA

GVP IMPACT VISION

- 24 Bit colour board **£1799**

OPTICAL MOUSE



- 300 DPI resolution
- 600mm/sec track tracking speed
- Mouse mat
- Mouse holder **£29-95**

OPTICAL MOUSE MAT



- A tough replacement pad for your optical mouse
- Strong plastic backing stops creasing
- High resolution grid gives precision mouse movement

Replacement optical mouse mat **£9-95**

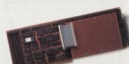
GENERAL

- Hard wearing dust cover **£9**
Philips colour monitor MkII **£249**
KCS PC Power Board **£235**
ATonce **£169**
ATonce A2000 **£199**
Floppy disk (min quantity 50) **£0-34 each**
Maxell multicolour disk (10) **£9-95**
Golden Image Optical Mouse **£39**
Power Mouse **£15**

6 8 0 4 0

- Accelerator board
- 50MHz
- Up to 32MB of RAM
- For Amiga 2000 **£1699**
(comes with 4MB)

NEXUS HARD CARDS



- High speed controller
- Up to 8MB RAM on board
- Easy to install
- Fully autobooting
- Compatible with GVP and ICD
- Nexus software **£199**
- Bare with 2MB of RAM **£339**
- 520MB with 2MB of RAM **£449**
- 114MB NEC 20ms **£449**

GVP A2000 RAM EXPANSION

- Up to 8MB
- 2MB fitted **£159**

GVP Series 2 Hard Card

- High speed 'FaastROM' controller
- Up to 8MB SimmRAM on board
- Fully autobooting
- Supports external SCSI devices
- Bare with 2MB RAM **£209**
- 52MB with 2MB RAM **£339**
- 105MB with 2MB RAM **£539**
- 200MB with 2MB RAM **£939**

GVP 'COMBO' Board

- 68030 with 68882 co-processor
- 22MHz Combo with 1MB of RAM **£599**
- 33MHz Combo with 4MB of RAM **£1299**
- 50MHz Combo with 4MB of RAM **£1799**
- Hard Drive Mount Kit **£39-95**
- Combo board **£249**
- Simm 32 x 1 **£69**
- Simm 32 x 4 **£249**

CHIPS

- 256K x 4 DRAM **£5**
- 1MB x 1 DRAM **£5**
- 1MB x 8 Simm **£30**
- 4MB x 8 Simm **£150**
- 8372 Fatter Agnus **£39**
- A3000 Static Column RAM **£24**

All prices include VAT, delivery and are subject to change. Specifications are subject to change without notice. Next day delivery £4.50 (U.K. mainland only). Dealer enquiries welcome.



POWER COMPUTING LTD

Unit 8 Raiton Road Woburn Road Industrial Estate Kempston Bedford MK42 7PN
Tel: 0234 843388 Fax: 0234 840234



HARD DISK DRIVES

PROTAR A500 HD

- * Perfect fitting to the A500 expansion bus
- * Colour matched to A500
- * Sub 24 millisecond access time
- * High speed SCSI controller
- * Approx 900KB per second data transfer
- * External Game Switch
- * 1MB, 2MB, 4MB or 8MB internal ram expansion facility
- * 1 year REPLACEMENT warranty
- * 2 years on Disk Cache models
- * Auto parking & auto booting
- * Ultra low power consumption from A500's own PSU
- * Supports multi tasking
- * Hard disk management software

Protar A500 HD 20Mb Hard Disk Drive	£275.00
Protar A500 HD 40Mb Hard Disk Drive	£345.00
Protar A500 HD 50Mb Hard Disk Drive	£425.00
Protar A500 HD 50Mb with Disk Cache	£525.00
Protar A500 HD 60Mb Hard Disk Drive	£540.00
Protar A500 HD 80Mb Hard Disk Drive	£595.00
Protar A500 HD 100Mb with Disk Cache	£635.00
Protar A500 HD 90Mb with Disk Cache	£695.00

Protar A500 HD 1Mb Ram Expansion*	£58.00
Protar A500 HD 2Mb Ram Expansion*	£115.00
Protar A500 HD 4Mb Ram Expansion*	£240.00
Protar A500 HD 8Mb Ram Expansion*	£480.00

* Requires use of external PSU	
Protar A500 HD Power Supply Unit	£34.00

GVP A500 SERIES II

- * Fits to the A500 expansion bus
- * Colour/Style matched to A500
- * 1" High Quantum hard disk drive
- * 11 millisecond access time
- * Fastest A500 hard drive available
- * Approx 1100KB per second data transfer
- * Custom VLSI and Faast Rom Chips
- * Autoboot / Game Switch
- * 2MB, 4MB or 8MB internal ram expansion facility
- * 2 year warranty
- * Dedicated PSU supplied
- * Built in cooling fan
- * Auto parking & auto booting
- * External SCSI port means upto 6 SCSI devices can be connected
- * "Mini Slot" expansion port built in to allow for future expansion
- * Hard disk management software
- * 105Mb version offers storage equivalent to over 170 Amiga floppies!
- * Rated 92% by Amiga Format
- * The best hard drive - Amiga Shopper

GVP Series II 52Mb Hard Disk Drive	£389.00
GVP Series II 105Mb Hard Disk Drive	£589.00
2Mb Ram Expansion for GVP Series II	£99.00
4Mb Ram Expansion for GVP Series II	£199.00
8Mb Ram Expansion for GVP Series II	£399.00

GVP A1500 IMPACT II

- * GVP Impact II SCSI hard card
- * Internally fits all A1500 & A2000 models
- * 1" High Quantum hard disk drive
- * 52MB - 11 millisecond access time
- * 105MB - 11 millisecond access time
- * Approx 1100KB per second data transfer
- * 200MB - 18 millisecond access time
- * Custom VLSI and Faast Rom Chips
- * 2MB, 4MB or 8MB internal ram expansion facility on the card
- * Ram and hard drive on 1 card saves on internal expansion slots
- * Supports upto 6Mb fast ram for PC bridgeboard users
- * 2 year warranty
- * Auto parking & auto booting
- * Excellent installation software
- * Hard disk management software
- * Supplied with all cables etc
- * 105Mb version offers storage equivalent to over 170 Amiga floppies!
- * Factory tested hard disk drives

GVP Impact II 52Mb Hard Disk Card	£269.00
GVP Impact II 105Mb Hard Disk Card	£469.00
GVP Impact II 200Mb Hard Disk Card	£549.00
2Mb Ram Expansion for GVP Impact II	£99.00
4Mb Ram Expansion for GVP Impact II	£199.00
8Mb Ram Expansion for GVP Impact II	£399.00

AMIGA PRINTERS AMIGA

Accessories

Accessories

512K ram expansion + clock	£29.99
Compatible external disk drive	£65.00
Golden Image Handy Scanner	£189.00
Squack replacement mouse	£14.99
Amiga A500 dust cover	£6.99
Moshe Mat	£3.50
Cruiser Joystick	£5.99
Zipstick Joystick	£3.99
40 capacity disk box	£4.95
80 capacity disk box	£7.95
Amiga stereo start lead	£2.99

ACCESSORIES & RIBBONS

All of our printers come with a parallel cable to suit Atari STs, Amigas and standard PC etc. All printers carry a full 12 months warranty. We only sell genuine UK stock - we do not offer inferior "grey imports". Phone for prices on ribbons and accessories for the printers listed below.

ATTENTION ALL CITIZEN PRINTER BUYERS!

We are offering to all buyers of Citizen printers 3 different special offers:

- 1. CITIZEN PRINTER STARTER PACK.** The pack comprises of: 35" disk full of printer drivers for the ST/Amiga & PC; 200 sheets of fanfold tractor feed paper; 200 fanfold tractor feed address labels; 5 tractor feed envelopes all for only £12.99.
- 2. CITIZEN COLOUR PRINTING KIT.** This kit enables you to upgrade either the Swift & Swift 24E, or 224 to a full colour printer. The kit comes with a colour ribbon. Normally retailing at around £400 we are offering while stocks last, the chance to buy this colour kit for only £139.99.
- 3. CITIZEN SHEET FEEDER.** This semi-automatic sheet feeder will fit the Citizen 1200 Swift 9 or Swift 24E. Put an end to having to feed each single sheet in by hand, simply put a ream of single sheets in this feeder, pull a lever and away you go! Special offer price of only £149.99.

Citizen 1200 - 9-pin, 144 cps draft, 30 cps NLI	£139.00
Citizen Swift 9 (9-pin, 182 cps draft, 48 cps NLI)	£199.00
Citizen 1240 (24-pin, 144 cps draft, 48 cps LCI)	£199.00
Citizen Swift 224 (24-pin, 322 cps draft, 64 cps LCI) NEW	£229.00
Citizen Swift 24E (24-pin, 216 cps draft, 72 cps LCI) NEW	£229.00
Citizen Swift 24X (24-pin, 85" carriage)	£399.00

Star LC20 Mono 9-pin, 180 cps draft, 44 cps NLI	£159.00
Star LC200 Colour 9-pin, 180 cps draft, 45 cps NLI	£299.00
Star LC24-200 Mono 24-pin, 200 cps draft, 67 cps LCI	£299.00
Star LC24-200 Colour 24-pin, 200 cps draft, 67 cps LCI	£295.00

Canon BJ100 Bubble Jet (ink jet, portable and compact)	£289.00
Hewlett Packard DeskJet 500 (ink jet, 3 pages per minute)	£399.00
Hewlett Packard PaintJet (colour inkjet, 180 DPI printing)	£785.00

COLOUR MONITORS

PROTAR VISTO C14M

- * Colour monitor
- * 14" screen
- * Stereo speakers
- * 800 x 285 pixel resolution
- * RGB / Composite inputs
- * Headphone socket
- * Green screen switch
- * Free with Amiga lead
- * Improved version of 8833 II
- * 1 year REPLACEMENT warranty

only £ 239.99

INTERNAL RAM EXPANSION FOR A1500 AND A2000

The GVP RAMB BOARD offers upto 8MB of zero-waitstate Fast memory expansion for the A1500 and A2000. Memory can be added in 2MB increments. The RAMB configuration is also fully supported which is extremely important for PC Bridgeboard Users. Because the GVP RAMB BOARD uses the new custom VLSI chip, the board has a very low consumption cost resulting in low power requirements and maximum reliability and life expectancy.

RAMB BOARD (2MB FITTED)	£179.00
RAMB BOARD (4MB FITTED)	£259.00
RAMB BOARD (6MB FITTED)	£329.00
RAMB BOARD (8MB FITTED)	£389.00

SOFTWARE PACKS FOR ALL AMIGA MACHINES

We have a limited supply of the software packs that are usually supplied with the A1500 Packs A and B.

PACK A comprises of - Platinum Works, Deluxe Paint 3, Populous, Simm City, Battle Chess and their Finest Hour

PACK B comprises of - Platinum Works, Deluxe Paint 3, Home Accounts, EK, Pazzini and Toki

Choose either Pack A or Pack B for only **£99.95**

TELESALES LINES OPEN 10AM TILL 12MIDNIGHT - 7 DAYS A WEEK - 0903 700714
TELESALES LINES ARE PERSONALLY MANNED TILL MIDNIGHT EVERY DAY !!

ONLY ONE QUESTION BUT MORE THAN ONE ANSWER !!

WHY BUY YOUR COMPUTER GOODS FROM US ??

- | | |
|--|---|
| <ul style="list-style-type: none"> ✓ FREE delivery anywhere in the UK. ✓ Next week day delivery only £7.00. ✓ All prices shown include VAT. ✓ Genuine UK stock only supplied. ✓ Stockists of GVP, Protar, Citizen, Star etc. ✓ Commodore specialists since 1984. ✓ No minimum order value. | <ul style="list-style-type: none"> ✓ Full range of A500 and A1500. ✓ 12 Months Warranty on all hardware. ✓ Mail order and shop facilities. ✓ Govt & Educational orders welcome. ✓ Fully computerised order system. ✓ Payment by Cash, Cheque or Credit Card. ✓ 1000's of satisfied customers. |
|--|---|

AMIGA PACKS

ALL AMIGA PRICES INCLUDE VAT AND UK DELIVERY. ALL PRODUCTS ARE UK STOCK AND CARRY A FULL 12 MONTH COMMODORE WARRANTY. PLEASE RING US BEFORE ORDERING TO CHECK STOCKS AND CURRENT PRICES.

All A500 packs include the AMIGA A500 PLUS.

- | | |
|---|----------------|
| AMIGA A500+ 1MB BASE A500 computer supplied with 1MB ram built in, Kickstart V2, expansion to 2MB ram possible via 'trap door', mouse, tv modulator, manuals, Workbench V2 software, etc supplied 'bare' with no games software. | £325.00 |
| AMIGA A500+ 2MB BASE A500 computer supplied with 1MB ram built in and an extra 1MB expansion board (giving a total of 2 megabytes of ram), Kickstart V2, mouse, tv modulator, manuals, Workbench V2 software, etc supplied 'bare' with no games software. | £385.00 |
| AMIGA A500+ 1MB CARTOON CLASSICS Amiga A500 computer, supplied with 1MB ram built in, Kickstart V2, expansion to 2MB ram possible via 'trap door', mouse, tv modulator, manuals, Workbench V2 etc disks, plus the following top selling software titles : Lemmings, The Simpsons, Captain Planet and Deluxe Paint 3 | £359.00 |
| AMIGA A500+ 2MB CARTOON CLASSICS Amiga A500 computer, supplied with 1MB ram built in and an extra 1MB expansion board (giving a total of 2 megabytes of ram), Kickstart V2, mouse, tv modulator, manuals, Workbench V2 etc disks, plus the following top selling software titles : Lemmings, The Simpsons, Captain Planet and Deluxe Paint 3 | £419.00 |
| AMIGA A1500 BASE A1500 computer with 1MB ram, detachable keyboard, 2 x 3.5" 800k disk drives built in, mouse and all manuals. The Amiga A1500 accepts A2000 peripherals. The A1500 base pack is supplied with no software. Please note that the A1500 does NOT have a modulator. | £599.00 |
| AMIGA A1500 PACK A consists of A1500 base pack and the following software : Platinum Works, Deluxe Paint Version 3, Populous, Sperm City, Battle Chess, Their Finest Hour (Battle of Britain) and 2 books | £649.00 |
| AMIGA A1500 PACK B consists of A1500 base pack and the following software : Platinum Works, Deluxe Paint Version 3, Home Accounts, EIT, Puzznic, Toki and Getting the Most Out Of Your Amiga book. | £649.00 |

If you are buying one of our Commodore A500 packs then why not add our **AMIGA STARTER KIT?**

Giving you all those little 'extras'.

- 10 Blank d/sided disks with labels
- Tailored dust cover to fit the A500
- High quality neoprene Mouse Mat
- and a Joystick for the games

only
£16.99

CARTOON CLASSICS SOFTWARE PACK

We have limited stocks of the software pack that is bundled with the A500 Cartoon Classics Pack. We are offering this excellent software pack to you for just **£49.99** inclusive. This is what you get :

- ★ **Deluxe Paint 3**
- ★ **The Simpsons**
- ★ **Lemmings**
- ★ **Captain Planet**

IF YOU WISH TO ORDER WITH US, THEN PLEASE SEND YOUR CHEQUES, BANKERS DRAFTS, POSTAL ORDERS, CASH ETC TO OUR MAIL ORDER ADDRESS (PLEASE MAKE CHEQUES PAYABLE TO JIST PRICE) OR RING OUR MAIL ORDER HOTLINE ANY TIME BETWEEN 10.00AM AND 12 MIDNIGHT 7 DAYS A WEEK. (OUR LINES ARE PERSONALLY MANAGED - THIS IS NOT AN ANSWERPHONE) AND USE YOUR ACCESS OR VISA CARDS, OR ALTERNATIVELY PAY A VISIT TO OUR SHOP. CHIPS COMPUTER CENTRE.

VISIT OUR SHOWROOM

CHIPS COMPUTER CENTRE, 53 RUGBY ROAD,

WORTHING, WEST SUSSEX BN11 5NB.

TEL : (0903) 700804.

OPENING - MON TO FRI 10AM TO 6PM SAT 9.30AM TO 5.30PM
FINANCE / CREDIT FACILITIES (SHOP ONLY)
PART EXCHANGE CONSIDERED (SHOP ONLY)
NEW AND USED ST AMIGA & PC EQUIPMENT ON DISPLAY
ALL TYPES OF SOFTWARE (BUSINESS / LEISURE / EDUCATIONAL)
REPAIRS UPGRADES, TRAINING, INSTALLATION, ON-SITE WARRANTIES



MAIL ORDER ONLY

BEST PRICES (DEPT AC), 53 RUGBY ROAD,

WORTHING, WEST SUSSEX BN11 5NB.

TEL : (0903) 700714.

OPENING : 7 DAYS A WEEK 10AM TO 12 MIDNIGHT
ALL PRICES INCLUDE 17.5% VAT AND FREE DELIVERY (AVERAGE 4 - 5 DAYS)
PLEASE ADD £7.00 FOR NEXT WEEKEND DELIVERY
GOODS USUALLY SENT OUT THE SAME DAY WHEN
CLEARED PAYMENT IS RECEIVED BEFORE 2PM
PERSONAL CHEQUES REQUIRE 7 DAY CLEARANCE

All prices include 17.5% VAT and free UK delivery unless stated otherwise. All prices / specifications / special offers subject to change without notice.

OUR TELESales LINES (NOT A ANSWERPHONE !!!) ARE OPEN FROM 10.00AM TILL 12 MIDNIGHT - 7 DAYS A WEEK !!!

Power Scanner

POWER SCANNER FEATURES

- 100-400 DPI scanning resolutions
- 64 Greyscales
- Thru port for printer

SOFTWARE

- Full screen image editor
- Interface mode on/off
- Edit true greyscale & colour images
- Fully multi-tasking



ACTUAL AMIGA SCREEN SHOTS

EDITING

- Cut rectangle, cut lasso, crop, flip,
- rotate, scale, draw, lines, circles,
- boxes, ellipses, freehand, zoom mode

SCANNING

- Unique 'True feel' real time scan
- mode - Know instantly if you are
- scanning the image too quickly.
- Automatic selection of 100-400 DPI
- Produce true greyscale images



Capture It

£99 inc. VAT
GREYSCALE

£239 inc. VAT
COLOUR
AVAILABLE SOON

Power Computing Ltd., Unit 8, Railton Road, Woburn Road Industrial Estate, Kempston, Bedford MK42 7PN.
Telephone 0234 843388 Fax 0234 840234

All prices include VAT delivery and are subject to change. Specifications are subject to change without notice. Next day delivery £4.50 (U.K. mainland only). Dealer enquiries welcome. All trademarks acknowledged.

Oxix grab Superbase 4

RIGHTS to top Amiga database Superbase 4 have been sold to an American software house only months after Software Publishing Corporation took over its developer Precision Software.

California-based Oxix will handle all support and updates for the package, and operate technical support and distribution from Precision Software's old UK office. Other Oxix packages are also available from the building.

SFC's Irfan Salim: "The sale of this division of Precision Software is consistent with our objectives, stated at the time of the acquisition. We intend to invest in the Superbase product line for Windows and build on the product's leading position in the GUI relational database market."

"Precision's Commodore and Atari products clearly do not fit in with our focus on PC application-based software," he added.

Oxix can be contacted on 081-330 6911 but the firm are looking for new premises and so this is expected to change.

Swapping OS

A BOARD which will enable Amiga owners to swap between different versions of the computer's operating system is now being imported into the UK by Aquarian PD (0703 685006).

Supplied without ROMs, MultiStart II can switch between Workbench 1.2, 1.3 and 2 through keyboard commands which reset the Amiga and force it to progress to the next ROM plugged in to the board.

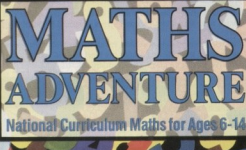
Complete with an easy-to-understand manual it costs £39.99. ROMs cost between £36 and £48 each and are available from the firm.

Amiga best buy

TESTS by consumer magazine *Which?* found the Amiga to be the best buy for games players, giving the machine a boost during the run-up to Christmas.

Five non-PC compatibles and four PC compatibles were examined by the magazine and while each had selling points, the Amiga was found to have the edge in terms of cost and games software availability.

The machine was criticised, however, for its user interface and disk drives. The Apple Macintosh Classic was awarded best overall buy.



Junior school-aged children can polish their maths in a fun way with Maths Adventure

Maths to be played with

A NEW maths adventure program for the Amiga enables children aged between six and 14 to revise and check their progress in National Curriculum maths in a fun way.

Using a series of four games, questions are asked on a wide range of maths topics with correct replies taking the pupil from the land of the cave men to being tasked with saving a city from destruction by unknown creatures.

Topics covered in Komos Software's (05255 3942) Maths Adventure include multiplication, addition, subtraction, division, fractions and decimals. Alternatively, everyday use of the subject can be covered in money problems, shape and space, or weights and measures.

Each section can be specifically asked for, allowing students to practise individual sections of the curriculum with which they have difficulty. There are four difficulty levels, adjusted automatically to suit the child's ability.

During the exercises, the computer keeps track of a pupil's progress and if mistakes are made the correct answers are displayed onscreen. Records of performance are kept for each topic and these can be examined or printed as hard copy at any time.

Price: £25.99.



The next time ProFlight goes into battle, there'll be 3D effects and dogfights

Tornado goes 3D

BUDDING fighter pilots will soon be able to get behind the controls of ProFlight 2, the latest version of the Tornado flight simulator for HiSoft (0525 718181).

The main addition will be enhanced gameplay, although the firm would like to maintain ProFlight 2's reputation as a serious program. This is achieved with 3D effects, mov-

ing objects and intelligent enemy jets which will engage in dogfights.

Scenery will be improved and the programmers are hoping to add runway lighting and different enemy aircraft types. Company boss David Link says it will take features from other military simulators and beat them. Upgrades will be available but prices remain to be fixed.

Citizen get Swifter

AN ENHANCED version of Citizen's Swift 24 printer is being targeted at home users, small businesses and schools.

The Swift 24e now runs at 216 characters per second. It has an extra two fonts and is supplied with a free colour kit worth £38. The printer sells for £369.

AMIGA COMPUTING NEWSLINE

Libraries share PD

PUBLIC domain and shareware disks are to become more freely available following a decision by more than 30 libraries to agree to share all releases with each other as soon as they become available. The deal came at a recent conference called by Derek Meakin, chairman of Europress Publications, publisher of Amiga Computing and its sister magazine *Shareware Shopper*.

He explained: "One of the main reasons we held the conference was because of the acute problems *Shareware Shopper* readers said they were facing in obtaining disks reviewed in the magazine."

The industry-proposed solution will involve all-formats library Advantage duplicating all disks reviewed in the shareware magazine and making them available to other libraries advertising in that month's issue.

Advantage live at 56 Bath Road, Cheltenham GL53 7JH and can be contacted by phone on 0242 224340.

Video help arrives

COMPLETE Training Package for the Amiga is a video package just released by New Image Videos (0723 362218).

Written by two Amiga experts, the video is sold with an Amiga Jargon Dictionary and Quick Technical Reference Guide which explains Amiga phrases.

The Guru Meditation Guide unravels the mysteries of Guru Meditations and enables users to benefit from the information they provide. Utility software supplied allows students to follow step-by-step examples shown on the video.

Price of £24.99 entitles customers to a postal help service.

Devpac assembly complete

ASSEMBLY language programmers are now able to buy Devpac 3, the latest version of the development system from Bedford-based HiSoft (0525 718181).

It now has a new multi-window editor and an improved assembler running up to 40 per cent faster than its predecessor. A debugger is also included to aid bug hunting and learning.

Complete with all necessary files, a linker and manual it costs £69.95. Upgrades from earlier copies are available for £34.95.

AMIGA COMPUTING NEWSLINE

Upgrade for Harlequin

The 24-bit graphics board, Harlequin, has been upgraded to offer improvement in applications such as animation and multimedia.

The enhancements give it an extra four modes, colour cycling, full-screen overlay and an increase from double buffer to six buffers. New modes are 24-bit look-up, 15-bit true colour, 8-bit true colour and 8-bit pseudo colour.

"The Harlequin+ represents the most exciting advance for the Amiga in professional video since Newtek announced the Video Toaster," commented Amiga Centre Scotland's Martin Lowe.

"The Harlequin+ provides broadcasters with features not found on any other PC platform. It offers a challenge to software developers to make full use of its additional functionality," he added.

At the time of going to press its price remained to be fixed, but the firm have pledged to offer an opportunity to upgrade to users of the earlier version.

40MHz planned for 040

AN AMERICAN hardware manufacturer is set to produce 68040 accelerator cards for the A2000 and A3000 which are designed to run at 40MHz when chips become available.

The first SupraTurbo 68040 cards will run at 25MHz, support 64 megabytes of RAM and have a 4k data cache.

Supra expect to have the product available for both machines early this year. Supplied with four megabytes of memory, it should sell in Germany for DM 2,800 (about £965).

DO YOU KNOW SOMETHING WE DON'T?

Although Amiga Computing has scores of contacts in the Amiga world, we need you. If you have some hot news ring John Butters on the news desk now on 0625 878888 or fax to 0625 879966. All information supplied will be treated in the strictest of confidence.

Saver for laser refills

FREQUENT laser printer users can now save up to 50 per cent on the cost of replacement toner with a long life toner system developed by Beach Imaging (081-850 8344).

Compatible with most types of printers, Permajet consists of a cartridge which has been modified to enable it to be used five times, and refill bottles. The system costs £190, making the price for each cartridge £38.



Talk to the CDTV

MICROIDE (0726 68020) have announced the immediate availability of a microphone and a French language tuition program for the CDTV player.

Voice Master is a package including a microphone and interface, plugging into the machine's parallel printer port and requiring no external power supply.

It is designed for use with the company's interactive CDTV software such as Joky Karaoke, Voice FX or latest education release Asterix and Son.

Based on the popular Asterix cartoon character, Asterix and Son provides more than 30 hours of French study. There is an hour of spoken French, 400 colour cartoon drawings, complete English translation and more than 1,500 vocabulary items.

Split into sections to allow students to learn in different ways, it is aimed at all levels. Voice Master costs £39.99 and Asterix and Son, £34.99.

Graphics standard proposed

AT a recent meeting between developers in America, two leading hardware manufacturers joined forces to propose a new standard in Amiga graphics, to be called Standard Amiga Graphics Extension.

SAGE, established by Progressive Peripherals and Software and Digital Microtronics, is described as providing a fast and efficient method for Amiga software developers to support all Texas Instruments processor boards.

PF6S say that while many firms were enthusiastic about SAGE, no firms have so far committed themselves to use it and say it is basically an "operating system within an operating system".

Budget genlock launched

AMIGA users are soon to be offered a new budget-priced genlock called Microgen from Power Computing (0234 843388).

A variety of fades are controlled through hardware and an on/off switch allows the user to swap to computer operation without the need to disconnect the genlock.

It can be used with composite monitors and has an RGB though port. Among its features are Key Invert, to enable special effects to be created "on the fly", without the user having to go through complex procedures.

Custom circuitry ensures that the Amiga will not crash and its low power design means it does not need its own external power.

Price: £199.

DIARY DATES

14 to 16 February 1992
5th International 16-bit Computer Show

Organiser: Westminster Exhibitions

(081-549 3444)

Venue: Wembley Exhibition Halls

The first post-Christmas show for Amiga owners.

7 to 10 April 1992

Which Computer? Show

Organiser: Reed

(081-948 9800)

National Exhibition Centre, Birmingham

One of the country's top shows, but heavily biased towards the PC.

12 to 14 April 1992

European Computer Trade Show

Organiser: Blenheim Online

(081-868 4466)

Venue: Business Design Centre, London

A trade-only show.

28 to 31 May 1992

Spring Computer Shopper Show

Organiser: Blenheim PEL

(081-868 4466)

Venue: Olympia, London

Promised to attract many Amiga exhibitors.

OVERSEAS

24 to 26 January 1992

BeneLux Computer '92

Organiser: Interepco & Media

(010 31 40 464601)

Venue: Eindhoven Trade Fair Building

Very similar to the UK's Computer Shopper Show.

3 to 5 April 1992

Amiga Berlin

Organiser: AMI Shows Europe

(010 49 8092 24086)

Venue: AMK Berlin

The first German Amiga show of the year.

28 to 31 May 1992

Consumer Electronics Show

Organiser: EIC/CEG

Venue: Chicago

The show opens for the first time to the public on May 30 and 31 1992.

8 to 11 October 1992

Amiga Köln

Organiser: AMI Shows Europe

(010 49 8092 24086)

Venue: Köln Messe

A chance to catch up on the year's developments in the active Amiga world.

● If your company is organising a show relevant to the Amiga and it's not listed, let us know so we can include the information in the diary.

The Digita range...

Home Accounts2®

An advanced version of Home Accounts, which is limited only by the capacity of your computer. Sophisticated reporting with graphics, and special options such as VAT and loan calculation facilities. Equally suitable for businesses, clubs and charities (ST and Amiga). **£54.99**



Home Accounts

Ideal for home users who want a simple low-cost way to plan and manage home finances. **£29.99**

DGCalc

This fast, simple spreadsheet includes many advanced features, including a windowing facility, so that you can look at different parts of the spreadsheet at the same time. **£39.99**



Mailshot Plus

If you ever need to send out mailings or print labels, this program is for you. Animated labels appear on-screen as a continuous sheet, allowing you to scroll backwards and forwards. You can search, sort and detect duplicate labels, print side by side and much more. **£49.99**

DGBase

If you're looking for fast access to information, and the ability to create customised reports, then this relational database is for you (ST). **£49.99**



Day-By-Day

An excellent way to get organised. You'll be reminded of birthdays, meetings and appointments. It includes month/week/day planners and automatic reminders of overdue events. **£29.99**



Personal Tax Planner

Plan your own tax with ease. This simple program will calculate your income tax liability, allowing you to perform instant 'what-if' calculations and produce pertinent facts about your tax position. A professional version is also available for accountants and financial advisers. **£49.99**



E-Type

Transform your computer into a typewriter. Because text is printed instantly, you can line up your form, press return and space a few times to move to the correct place, and then start typing. Ideal for filling in forms and envelopes. **£39.99**

System 3

A suite of programs which perform all the basic functions for a small business. They may be used independently or integrated and include Cashflow Controller, Stock Control and Invoicing and Statements. **£59.99**



System 3e

Like System 3, but with extended capacity for customer accounts and stock items. **£79.99**



Cashbook Controller

Take the drudgery out of book keeping as this program will replace your cash and petty cash books. In addition to recording cash, bank and VAT transactions, you can enter credit sales and purchases, and for all these entries the program will automatically complete double entry routines, to ensure your records are always in balance. **£59.99**

Final Accounts

Using the information created with Cashbook Controller, this program will produce a complete set of accounts, including Trial Balance, Trading and Profit and Loss Account, Balance Sheet, as well as useful accounting ratios. **£39.99**



Cashbook Combo

A money-saving combination pack containing Cashbook Controller and Final Accounts. **£79.99**



Wordworth®

The graphical nature of Wordworth makes producing documents faster and easier. With the enhanced printing fonts, Collins Spelling Checker and Thesaurus, no other word processor comes close (Amiga). **£129.99**

The Digita range is available for Commodore Amiga, Atari ST and IBM PC unless stated otherwise, and every program comes with a seven day money-back guarantee.

The only way to really appreciate Digita software is to use it. Phone 0395 270273 for more information, or write to Digita, FREEPOST, Exmouth EX8 2YZ. All prices include VAT, postage and packaging.

DIGITA®
INTERNATIONAL
software thats right®

The Digita range is available to the trade through Columbus, Gem, HB Marketing, IBD, Lazer, Leisuresoft, Precision and SDL.

Digita International Ltd Black Horse House Exmouth EX8 1JL ENGLAND Tel 0395 270273 Fax 0395 268893

- A member of the Digita group -
Digita, the Digita logo, Home Accounts2 and Wordworth are registered trademarks, and software that right are trademarks of Digita Holdings Ltd.
All other trademarks and their owners are acknowledged. Sold subject to standard conditions of sale E & OE.

SOUND **BLASTER**



PLAY ALL YOUR GAMES WITH ARCADE QUALITY STEREO SOUND

The SOUNDBLASTER is a 5 watt per channel stereo amplifier that comes complete with high quality 50 watt 3 way speakers, power supply and leads and instructions to allow it to be quickly & easily connected to your computer.

The SOUNDBLASTER adds an extra dimension to your games, imagine super stereo sound effects, crystal clear samples and terrific tunes.

The SOUNDBLASTER makes your games come to life, increasing playability and giving greater lasting appeal.

**FREE pair of stereo HEADPHONES with every
SOUNDBLASTER!!!**



ORDER YOURS NOW



FOR CREDIT CARD ORDERS, TELEPHONE: 061 724 7572. ACCESS/VISA.

PLEASE SEND ME A SOUNDBLASTER FOR MY COMPUTER

I ENCLOSE A CHEQUE FOR £52.99 OR CREDIT MY ACCESS/BARCLAYCARD No.

NAME

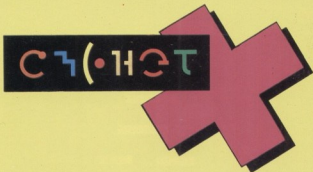
ADDRESS

..... POSTCODE

SIREN SOFTWARE,
WILTON HOUSE, BURY ROAD, RADCLIFFE, MANCHESTER, M26 9UR

X-BACKUP PROFESSIONAL

**The essential package for all your BACK-UP needs!
Now includes HARD DISK BACKUP & FILE BACKUP.**



★The most comprehensive back up utility ★includes floppy disk backup, hard disk backup and file backup. ★Also backs up ST, IBM etc disks. ★Checks disks for errors. ★Optimises data for faster loading. ★Fast formatting. ★Copies up to 4 disks in 48 seconds. ★Full update service available.

AVAILABLE NOW ONLY £39.99 PLUS £1.00 POSTAGE AND PACKING

1988 COPYRIGHT ACT. Siren Software neither condones nor authorises the use of its software for the reproduction of copyrighted software. The facilities offered by X-BACKUP Pro are intended to back up users own software, PD Software & other such programs where permission had been given. It is illegal to make copies of copyrighted material without the permission of the copyright holder.

X-BACKUP PROFESSIONAL IS THE BEST, GUARANTEED
OUR GUARANTEE:- At time of purchase, if you can find a program that is more powerful than X-BACKUP PRO we will refund your money.

Ordering X-BACKUP PROFESSIONAL

Access/Visa orders can be placed by telephoning 061 724 7572. For mail order, fill in the order form and send with a cheque or postal order to: Siren Software, Wilton House, Bury Rd., Radcliffe,

Manchester M26 9UR.



Name

Address.....

.....

.....

.....



£79.95 Inc Vat
1 Meg Required

GBRoute Plus

Route Planner for the Amiga

£79.95 Inc Vat
1 Meg Required

GBRoute Plus for the Amiga computer has been carefully designed to assist the United Kingdom motorist plan easily and efficiently journeys almost anywhere in the UK. GBRoute Plus will not only find routes but will also cost, time and distance a journey in a matter of seconds, allowing the user to then print out a route or graphical map in either black and white or colour. There are many other features within the software designed for ease of use many of which allow the user to customise the program to suit the individual driver.

Features include:-

- * Over 25 Million possible routes
- * Calculate shortest, fastest and cheapest routes
- * Includes Motorways, A roads and B roads
- * Includes Cities, Towns and many Villages
- * 5 Via options, 3 Avoid places and avoid road
- * Colour and wireframe map graphics
- * Interface display
- * Supports colour and black and white printers
- * Map scrolling and zooming facilities

Features Include:-

- * Motorway service stations included
- * Road Bias facility for six classes of road
- * 10 levels of magnification to a 1 mile scale
- * Mileage scale bar
- * National grid coordinates
- * Colour palette requester
- * ARexx support - over 50 commands
- * Vector mileage calculator
- * 3D look user interface

Dealers contact:

Leisure Soft
Centre Soft/IBD
H.B. Marketing
Lazer
S.D.L.

GBRoute Plus is available from most good Amiga dealers

Telephone: 0706 224531 - Fax: 0706 225320

Complex Computers-2 The Arcade, Waterfoot, Rossendale, Lancs BB4 9AF





This DCTV is hot stuff!

Colours without the cost

Eight million colours for less than £500? Stevie Kennedy looks at DCTV



If you feel left out of the 24-bit revolution by reason of budgetary constraints, the prospect of a pseudo-24-bit add-on for less than the price of a decent VCR may be hard to resist. HAM-E, covered in our July 1991 issue, was the first of such devices, but despite its impressive power-to-price ratio, it failed to make the impact its launch had promised. The newest contender, Digital Creation's DCTV, looks set to enjoy greater suc-

cess. DCTV stands for Digital Composite Television, and therein lies the unit's idiosyncrasy. The output from DCTV is in composite video form, so its images aren't displayed as sharp or detailed as a component RGB image. To view the DCTV screen, you must switch your monitor to CVBS input.

Initially, when the unit is first plugged in, this can be a bit off-putting because if you've been used to sharp

RGB images, you can feel a bit deflated by the comparatively fuzzy CVBS "telly" pictures you will see on your 1084 or CM8833. For video enthusiasts, however, this should not be a cause for alarm, as DCTV is actually outputting a video-legal signal of the kind they would expect to see on tape.

DCTV, just like HAM-E, comes in the form of an external box you connect between the Amiga and your

monitor. When physical installation is complete, taking no more than three minutes, installing the software on your hard disk is a breeze, and DCTV's paint/digitiser package is up and running.

There's no need to open your Amiga – all the user need do with DCTV is twiddle the Pixel Adjust knob until the unit is properly calibrated to the signals being output by the Amiga's video chips.

At this point, DCTV begins to show its superiority over HAM-E. The latter's bundled paint package, though free, was universally received as a disappointment. DCTV's software rests comfortably at the opposite pole, being easy to use, smooth in operation on even an unaccelerated A500, and offering many powerful features.

In one powerful package, Digital Creations have crammed in a fully specified paint package, digitising software complete with image processing controls, and a powerful conversion utility. It is possible, therefore, to import an image from a camera or VCR, apply the processing tools, touch it up in Paint mode, then convert the result to any Amiga video mode you please.

As DCTV uses a 24-bit palette, it is also possible to save images in 24-bit IFF format which, though usually 1Mb or greater in size, are ideal for use in DTP packages and the like. DCTV's proprietary Display and Raw formats produce files of a much smaller size, but these can only be properly viewed with the DCTV hardware attached, and appear as horribly fudged 16-colour images in any other Amiga package which doesn't as yet support the format.

Multiple formats

Two standalone utilities are provided with the four DCTV software disks to make this sort of to-and-fro operation easier on the user. Not to be confused with the conversion options available from within the paint package, the extra utilities enable the user to use images generated in other packages with DCTV.

The first is IFFtoDCTV. Not only will it handle all standard IFFs up to full 24-bit files, it will also convert Turbo Silver RGB8 and Sculpt4D compressed files, and offers the user a range of options on the parameters of the output file.

The second, S4DtoLBM, is used when dealing with Sculpt4D's component 24-bit images, which are saved by Sculpt as separate red, green, and blue files. S4DtoLBM grabs the three files and combines them in a standard 24-bit IFF which DCTV can import and display. As with IFFtoDCTV, the user can specify various parameters for the resulting image.

So much for DCTV's communication skills. They would be of little use if the paint software was of inferior quality. Happily that is not the case. DCTV's paint package is both powerful and friendly.

There are three options once DCTV has kicked in – Paint, Convert, and Digitise. The first to fall prey to

Generate titles for videos in full colour



Part one: Paw gets drunk

eager mouse clicks is bound to be Digitise, so let's start there.

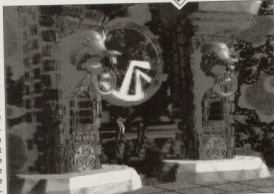
The on-board digitiser would appear a little disappointing at first sight. It has no instant snapshot facility and must take its images from a still source, either a camera pointed at a stationary object, or a VCR on pause. Having used it for a while, though, I found it a bit of a cracker. For a start, its inclusion puts DCTV far ahead of HAM-E, as the latter has no built-in digitiser. The biggest surprise, however, was the quality of grabs one could garner from even a fairly poor VCR.

I tried it first with a NICAM S-VHS machine sporting a high-quality pause feature, and the results were as good as I'd expected. Next, though, I gave the unit a bash on my ratty old VCR at home – one of those adept at making a paused picture look like a snowstorm – and DCTV made some pretty good attempts at grabbing what were rather indistinct images.

Once a frame has been imported, the digitise section has a selection of tools with which to process it. The user can sharpen the image, adjust the red, green, or blue components, or alter the picture's chrominance (colour level) and luminance (brightness). The latter pair are complemented by tint and contrast controls, rounding off an extremely useful and easy to use set of sliders.

The original image is stored in a buffer ready to be restored if you make an almighty mess of things, and when you're happy with the alterations, clicking on Commit will permanently alter the data. You're now ready to save the frame or shove it off to the paint section for touching up.

Here lies DCTV's heart and soul, and as a paint package there is little to fault it on. Operations are split into six main sections – Fill, Brush, Stencil,



DCTV can also excel at traditional art studies

Gradient, Color and Wells – each of which can be accessed no matter where in the package the user is currently working.

The Fill section offers four main types of fills and a host of variations on each. The gradient fill alone has eight different techniques to choose from, ranging from straightforward horizontal gradients to the quite weird looking spiral fill.

As the unit is displaying the gradients in composite video, they can look less smooth than a £1,500 24-bit card, but the results are still immeasurably better than standard Amiga displays, including even the best HAM picture.

A surprising extra is the warp fill, which wraps the currently active clip (brush) around either a cylinder or a sphere. Not as powerful as G2's Imagic software, perhaps, but a lovely touch in a bundled paint package for a peripheral in this price bracket.

DCTV's brush section is where a lot of the action takes place in paint mode. Here the user chooses with what type of brush to paint, how the colour will be applied, and the size and flow rates of the painted

Smooth colour transition

DCTV doesn't output an RGB signal, so it doesn't pretend to be another Amiga video mode – unlike the two extra register modes supplied by HAM-E. Instead, it offers four to eight million true colours on a "video-legal" composite screen.

This means you can have a full colour screen without the colour gradations resulting from HAM's method of modifying pixel colours depending on the colour of the pixels around them. There's no HAM fringing, and no ragged transitions from one colour to the next.

There is a full 24-bit palette to choose from, so there are actually many more colours available than a video-tape will handle. You'll notice the difference between a DCTV display and a Harlequin, of course, but then you gets what you pays for or, in the case of DCTV, you gets a lot more than you pays for.

>

lines. The effects available are, again, surprisingly complete in a free package. There are nine in total, any one of which can be applied with brushes of twenty different sizes. Control of paint flow is available from 1 to 100 per cent, and even the brush's X/Y ratio can be set manually.

Of the effects, Airbrush, Blend, Smooth, and Shade will be most familiar to Amiga owners, even if the quality of painting they can produce is not, but Rubthru and Water will be new to most. Rubthru enables the user to rub away part of the current image so that the picture held in the spare page shows through. If used with a low flow setting and a carefully planned spare page, Rubthru can produce excellent effects.

Faces appearing through the mist, pictures fading gently into one another, and even video effects can be rendered in this fashion. If, for example, the user enables Rubthru at a flow setting of 20 per cent, and uses full screen box fills, the spare page can be made to fade in over a number of frames, and the sequence saved to tape as a link in a video presentation.

True, the effect could be produced on a presentation package with a lot less hassle, but DCTV offers a much higher quality true video effect when used in this manner.

Unique results

The Water tool is less spectacular, but capable of results none of the other brushes could produce. It's designed to work in the same way as a water-colour artist's brush works, in that it "holds" a certain amount of paint which depletes as you brush across the canvas.

Depending on the flow setting, this will happen faster or slower, but the paint will always blend with whatever colour it is applied over, just as with water-

colours. The results are ideal for pastoral scenes and other soft-focus painting, such as waterfalls and the like.

Overall, the brush section is as comprehensive as any of the 24-bit paint packages we've seen, with the possible exception of TV Paint, and offers options enough to satisfy any owner.

The remaining features - Stencil, Colour and Wells - are a little less exciting, but they all continue DCTV's theme of completeness and attention to detail. Stencil, for example, has a "colour closeness" option which enables the setting of a mask colour within definable tolerances.

This means you can choose a low setting and the mask will include all colours within, say, 33 per cent of the colour you specified. If you're working against a background of a gradient fill, you can thus choose to mask in a picture gradually.

The Colour section gives the user control over the colour chosen and offers four ways of defining new colours. There's RGB, CMY (handy for anything you might want to print to paper), HLS, and HSV, so no matter what equipment your final picture is to be output to, you should find a colour standard to fit your requirements.

The Wells section is a simple colour choosing screen, but has the now obligatory mixing area for the user to experiment on new colour mixes. The mixer defaults to a solid colour airbrush which takes its parameters from

Clever custom formats

DCTV's custom formats are very clever little beasts. When you create a DCTV image and save it as a 24-bit file, it can take up over 1MB of hard drive space. The same image saved in DCTV's display format will occupy only 50k or so, because it is a 16-colour IFF with one ingenious difference.

When saved, the top left-hand corner of a DCTV image contains composite video wave information which, when deciphered by the hardware, provides the information needed by the little black box to display its own much more colourful pictures. This means you must never paint over the top left-hand corner of the screen when messing about with DCTV images in another package, but the restriction is hardly worth talking about when the advantages are weighed up.

Take the process of creating a couple of dozen ray traced 24-bit images using Imagine or Sculpt 4D (both of which now support DCTV). To animate the sequence, you'd normally need either a frame advance video or an Amiga with many megabytes of RAM. With DCTV attached, the 24-bit files can be loaded one at a time and saved in DCTV display format, then loaded into DPaint 3 to be tacked together as an animation.

The finished product, when played through DCTV, will appear in its original form, and can be saved to tape in real time as a continuous composite video signal. The process can be a lengthy one, but it negates the need for lots of RAM, and cuts out the expensive video recorder altogether. The advantages to the semi-pro or video enthusiast are that DCTV thus brings full video colour quality animations down in price by at least fifty percent.

the normal brush size and flow settings, so it's fairly easy to use.

I for one remain unconvinced how useful such mixers are, as most computer artists aren't converts from canvas, but it has been included because DCTV includes just about everything else.

Conclusion

DCTV offers the best chance many video enthusiasts will have of jumping on the 24-bit bandwagon, and is the closest anyone equipped with a wallet of normal proportions will come to his or her own video paint-box system. With its digitising option and excellent software, it is a clear winner over HAM-E, and comes close to being the most amenable pieces of equipment I've ever used.

The only problem DCTV might encounter is that its strength could be its main weakness on a first viewing, due to its reliance on a CVBS display which might look a bit fuzzy to users of sharp RGB monitors. On good monitors, even in composite mode, this is less restricting, but on one old 1084 I tried it on, the fuzziness and flickering made my eyes water.

Apart from this, and as long as the niche market it aims for actually exists (one step forward all you video enthusiasts and small-scale producers), DCTV should sell like hot potatoes in a Russian bread queue.

DCTV is a product of Digital Creation Inc
Phone: 0101 916 344 4825
Distributor: Silica Systems (081-309 1111)
Price: TBA (not more than £500 - could be as low as £399)

Ease of use



Implementation



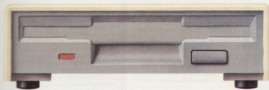
Value for money



Overall



Where you can stick it.



Viruses, disk swapping, clicking drives, disks which won't back up. Is there no end to the whingeing of the Amiga user?

At Power, we want to tell you just where you can stick your disks and worries. In fact we will show you. The slot in this picture belongs to our PC880B, the first intelligent disk drive. Insert a disk.

Now you can back up at lightning speeds using the inbuilt Blitz Amiga hardware*, with free software, (even if the disk is Atari or PC) and if your computer has a virus the PC880B will stop it being written to the bootblock of any of your drives, though you can still save files as normal.

When you do not want these features, switch them off and the PC880B will sit quietly, without clicking, pretending to be simply an extra drive.

The PC880B, the only drive to introduce Blitz Amiga, the Power anti-click device and to combat viruses, is only available direct from Power, priced at just **£69.95**.

We have noticed how pricey unintelligent drives are. Perhaps, it's your turn to tell people where to stick it.



£69.95

* Due to the precision nature of the Blitz copier high density disks may be required with some internal drives.

1988 COPYRIGHT ACT
Power Computing Ltd., neither condones nor authorises the use of its products for the reproduction of copyright material.
The backup facilities of this product are designed to reproduce only software such as Public Domain material, the user's own programs or software where permission has been clearly given.
It is illegal to make copies even for your own use, of copyright material, without the express permission of the copyright owner, or the licensee thereof.



Our latest dual drive uses the slimline, ultra low power NEC drive mechanism. This drive takes less than half the power of a normal floppy drive, so no bulky power supply is needed! The new dual drive includes all the features you would expect from a Power Computing drive.

The NEC drive mechanism is able to access high density 1.44MB disks. While this may not be of use to you at the moment (the Amiga can only access 880K), watch this space for our new "high density" Interface, on the market soon!

- High spec, low power NEC mechanism
- Whisper quiet operation
- Blitz Copier built-in (switchable)
- Virus blocker built-in (switchable)
- Anti-click



New Dual Drive £119

Optional power supply £5.99

Dual Blitz copiers to two destination disks at a time, even if one of them is used as a dummy. Due to the precision nature of the Blitz Copier high density disks may be required with some internal drives.

Only available at

POWER COMPUTING LTD

Unit 8 Railton Road Woburn Road Industrial Estate Kempston Bedford MK42 7PN.

Tel: 0234 843388 Fax: 0234 840234



All prices include VAT, delivery and are subject to change. Specifications are subject to change without notice. Next day delivery £4.50 (UK mainland only). Dealer enquiries welcome.

All trademarks acknowledged



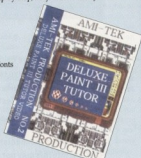
Orders Taken Un

NEW DELUXE PAINT III TUTOR VIDEO

Learn to get the best from NEW Deluxe Paint III. This video shows you how to design and execute your own Animations, Titles and so much more in a Step-by-Step, Easy-to-Follow way.

Subjects covered include:

- ★ Screen Painting
- ★ Zoom
- ★ Colours
- ★ Working with Text and Fonts
- ★ Stencils
- ★ Perspective
- ★ Animation
- ★ Video Titling etc. etc.



RUNNING TIME: NEARLY THREE HOURS!!

Superb Value At

ONLY £18.99 inc Post & Packing

"I was a little sceptical about the chances of taking a complete beginner to such artistic heights but I must admit to being wrong" AMIGA COMPUTING, September 1991.

AMIGA'S

OUR LOWEST AMIGA PRICES EVER!!!
ALL OUR AMIGA PRICES INCLUDE

FREE NEXT MORNING DAY DELIVERY

NEW: Amiga Plus 1 Mega Cartridge Classics Pack
ASB Amiga 512K, Scan Computers, built-in 5MB Disk Drive, Mouse, ASB TV Modulator, Power Supply, Workbooks 2,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100,101,102,103,104,105,106,107,108,109,110,111,112,113,114,115,116,117,118,119,120,121,122,123,124,125,126,127,128,129,130,131,132,133,134,135,136,137,138,139,140,141,142,143,144,145,146,147,148,149,150,151,152,153,154,155,156,157,158,159,160,161,162,163,164,165,166,167,168,169,170,171,172,173,174,175,176,177,178,179,180,181,182,183,184,185,186,187,188,189,190,191,192,193,194,195,196,197,198,199,200,201,202,203,204,205,206,207,208,209,210,211,212,213,214,215,216,217,218,219,220,221,222,223,224,225,226,227,228,229,230,231,232,233,234,235,236,237,238,239,240,241,242,243,244,245,246,247,248,249,250,251,252,253,254,255,256,257,258,259,260,261,262,263,264,265,266,267,268,269,270,271,272,273,274,275,276,277,278,279,280,281,282,283,284,285,286,287,288,289,290,291,292,293,294,295,296,297,298,299,300,301,302,303,304,305,306,307,308,309,310,311,312,313,314,315,316,317,318,319,320,321,322,323,324,325,326,327,328,329,330,331,332,333,334,335,336,337,338,339,340,341,342,343,344,345,346,347,348,349,350,351,352,353,354,355,356,357,358,359,360,361,362,363,364,365,366,367,368,369,370,371,372,373,374,375,376,377,378,379,380,381,382,383,384,385,386,387,388,389,390,391,392,393,394,395,396,397,398,399,400,401,402,403,404,405,406,407,408,409,410,411,412,413,414,415,416,417,418,419,420,421,422,423,424,425,426,427,428,429,430,431,432,433,434,435,436,437,438,439,440,441,442,443,444,445,446,447,448,449,450,451,452,453,454,455,456,457,458,459,460,461,462,463,464,465,466,467,468,469,470,471,472,473,474,475,476,477,478,479,480,481,482,483,484,485,486,487,488,489,490,491,492,493,494,495,496,497,498,499,500,501,502,503,504,505,506,507,508,509,510,511,512,513,514,515,516,517,518,519,520,521,522,523,524,525,526,527,528,529,530,531,532,533,534,535,536,537,538,539,540,541,542,543,544,545,546,547,548,549,550,551,552,553,554,555,556,557,558,559,560,561,562,563,564,565,566,567,568,569,570,571,572,573,574,575,576,577,578,579,580,581,582,583,584,585,586,587,588,589,590,591,592,593,594,595,596,597,598,599,600,601,602,603,604,605,606,607,608,609,610,611,612,613,614,615,616,617,618,619,620,621,622,623,624,625,626,627,628,629,630,631,632,633,634,635,636,637,638,639,640,641,642,643,644,645,646,647,648,649,650,651,652,653,654,655,656,657,658,659,660,661,662,663,664,665,666,667,668,669,670,671,672,673,674,675,676,677,678,679,680,681,682,683,684,685,686,687,688,689,690,691,692,693,694,695,696,697,698,699,700,701,702,703,704,705,706,707,708,709,710,711,712,713,714,715,716,717,718,719,720,721,722,723,724,725,726,727,728,729,730,731,732,733,734,735,736,737,738,739,740,741,742,743,744,745,746,747,748,749,750,751,752,753,754,755,756,757,758,759,760,761,762,763,764,765,766,767,768,769,770,771,772,773,774,775,776,777,778,779,780,781,782,783,784,785,786,787,788,789,790,791,792,793,794,795,796,797,798,799,800,801,802,803,804,805,806,807,808,809,810,811,812,813,814,815,816,817,818,819,820,821,822,823,824,825,826,827,828,829,830,831,832,833,834,835,836,837,838,839,840,841,842,843,844,845,846,847,848,849,850,851,852,853,854,855,856,857,858,859,860,861,862,863,864,865,866,867,868,869,870,871,872,873,874,875,876,877,878,879,880,881,882,883,884,885,886,887,888,889,890,891,892,893,894,895,896,897,898,899,900,901,902,903,904,905,906,907,908,909,910,911,912,913,914,915,916,917,918,919,920,921,922,923,924,925,926,927,928,929,930,931,932,933,934,935,936,937,938,939,940,941,942,943,944,945,946,947,948,949,950,951,952,953,954,955,956,957,958,959,960,961,962,963,964,965,966,967,968,969,970,971,972,973,974,975,976,977,978,979,980,981,982,983,984,985,986,987,988,989,990,991,992,993,994,995,996,997,998,999,1000,1001,1002,1003,1004,1005,1006,1007,1008,1009,1010,1011,1012,1013,1014,1015,1016,1017,1018,1019,1020,1021,1022,1023,1024,1025,1026,1027,1028,1029,1030,1031,1032,1033,1034,1035,1036,1037,1038,1039,1040,1041,1042,1043,1044,1045,1046,1047,1048,1049,1050,1051,1052,1053,1054,1055,1056,1057,1058,1059,1060,1061,1062,1063,1064,1065,1066,1067,1068,1069,1070,1071,1072,1073,1074,1075,1076,1077,1078,1079,1080,1081,1082,1083,1084,1085,1086,1087,1088,1089,1090,1091,1092,1093,1094,1095,1096,1097,1098,1099,1100,1101,1102,1103,1104,1105,1106,1107,1108,1109,1110,1111,1112,1113,1114,1115,1116,1117,1118,1119,1120,1121,1122,1123,1124,1125,1126,1127,1128,1129,1130,1131,1132,1133,1134,1135,1136,1137,1138,1139,1140,1141,1142,1143,1144,1145,1146,1147,1148,1149,1150,1151,1152,1153,1154,1155,1156,1157,1158,1159,1160,1161,1162,1163,1164,1165,1166,1167,1168,1169,1170,1171,1172,1173,1174,1175,1176,1177,1178,1179,1180,1181,1182,1183,1184,1185,1186,1187,1188,1189,1190,1191,1192,1193,1194,1195,1196,1197,1198,1199,1200,1201,1202,1203,1204,1205,1206,1207,1208,1209,1210,1211,1212,1213,1214,1215,1216,1217,1218,1219,1220,1221,1222,1223,1224,1225,1226,1227,1228,1229,1230,1231,1232,1233,1234,1235,1236,1237,1238,1239,1240,1241,1242,1243,1244,1245,1246,1247,1248,1249,1250,1251,1252,1253,1254,1255,1256,1257,1258,1259,1260,1261,1262,1263,1264,1265,1266,1267,1268,1269,1270,1271,1272,1273,1274,1275,1276,1277,1278,1279,1280,1281,1282,1283,1284,1285,1286,1287,1288,1289,1290,1291,1292,1293,1294,1295,1296,1297,1298,1299,1300,1301,1302,1303,1304,1305,1306,1307,1308,1309,1310,1311,1312,1313,1314,1315,1316,1317,1318,1319,1320,1321,1322,1323,1324,1325,1326,1327,1328,1329,1330,1331,1332,1333,1334,1335,1336,1337,1338,1339,1340,1341,1342,1343,1344,1345,1346,1347,1348,1349,1350,1351,1352,1353,1354,1355,1356,1357,1358,1359,1360,1361,1362,1363,1364,1365,1366,1367,1368,1369,1370,1371,1372,1373,1374,1375,1376,1377,1378,1379,1380,1381,1382,1383,1384,1385,1386,1387,1388,1389,1390,1391,1392,1393,1394,1395,1396,1397,1398,1399,1400,1401,1402,1403,1404,1405,1406,1407,1408,1409,1410,1411,1412,1413,1414,1415,1416,1417,1418,1419,1420,1421,1422,1423,1424,1425,1426,1427,1428,1429,1430,1431,1432,1433,1434,1435,1436,1437,1438,1439,1440,1441,1442,1443,1444,1445,1446,1447,1448,1449,1450,1451,1452,1453,1454,1455,1456,1457,1458,1459,1460,1461,1462,1463,1464,1465,1466,1467,1468,1469,1470,1471,1472,1473,1474,1475,1476,1477,1478,1479,1480,1481,1482,1483,1484,1485,1486,1487,1488,1489,1490,1491,1492,1493,1494,1495,1496,1497,1498,1499,1500,1501,1502,1503,1504,1505,1506,1507,1508,1509,1510,1511,1512,1513,1514,1515,1516,1517,1518,1519,1520,1521,1522,1523,1524,1525,1526,1527,1528,1529,1530,1531,1532,1533,1534,1535,1536,1537,1538,1539,1540,1541,1542,1543,1544,1545,1546,1547,1548,1549,1550,1551,1552,1553,1554,1555,1556,1557,1558,1559,1560,1561,1562,1563,1564,1565,1566,1567,1568,1569,1570,1571,1572,1573,1574,1575,1576,1577,1578,1579,1580,1581,1582,1583,1584,1585,1586,1587,1588,1589,1590,1591,1592,1593,1594,1595,1596,1597,1598,1599,1600,1601,1602,1603,1604,1605,1606,1607,1608,1609,1610,1611,1612,1613,1614,1615,1616,1617,1618,1619,1620,1621,1622,1623,1624,1625,1626,1627,1628,1629,1630,1631,1632,1633,1634,1635,1636,1637,1638,1639,1640,1641,1642,1643,1644,1645,1646,1647,1648,1649,1650,1651,1652,1653,1654,1655,1656,1657,1658,1659,1660,1661,1662,1663,1664,1665,1666,1667,1668,1669,1670,1671,1672,1673,1674,1675,1676,1677,1678,1679,1680,1681,1682,1683,1684,1685,1686,1687,1688,1689,1690,1691,1692,1693,1694,1695,1696,1697,1698,1699,1700,1701,1702,1703,1704,1705,1706,1707,1708,1709,1710,1711,1712,1713,1714,1715,1716,1717,1718,1719,1720,1721,1722,1723,1724,1725,1726,1727,1728,1729,1730,1731,1732,1733,1734,1735,1736,1737,1738,1739,1740,1741,1742,1743,1744,1745,1746,1747,1748,1749,1750,1751,1752,1753,1754,1755,1756,1757,1758,1759,1760,1761,1762,1763,1764,1765,1766,1767,1768,1769,1770,1771,1772,1773,1774,1775,1776,1777,1778,1779,1780,1781,1782,1783,1784,1785,1786,1787,1788,1789,1790,1791,1792,1793,1794,1795,1796,1797,1798,1799,1800,1801,1802,1803,1804,1805,1806,1807,1808,1809,1810,1811,1812,1813,1814,1815,1816,1817,1818,1819,1820,1821,1822,1823,1824,1825,1826,1827,1828,1829,1830,1831,1832,1833,1834,1835,1836,1837,1838,1839,1840,1841,1842,1843,1844,1845,1846,1847,1848,1849,1850,1851,1852,1853,1854,1855,1856,1857,1858,1859,1860,1861,1862,1863,1864,1865,1866,1867,1868,1869,1870,1871,1872,1873,1874,1875,1876,1877,1878,1879,1880,1881,1882,1883,1884,1885,1886,1887,1888,1889,1890,1891,1892,1893,1894,1895,1896,1897,1898,1899,1900,1901,1902,1903,1904,1905,1906,1907,1908,1909,1910,1911,1912,1913,1914,1915,1916,1917,1918,1919,1920,1921,1922,1923,1924,1925,1926,1927,1928,1929,1930,1931,1932,1933,1934,1935,1936,1937,1938,1939,1940,1941,1942,1943,1944,1945,1946,1947,1948,1949,1950,1951,1952,1953,1954,1955,1956,1957,1958,1959,1960,1961,1962,1963,1964,1965,1966,1967,1968,1969,1970,1971,1972,1973,1974,1975,1976,1977,1978,1979,1980,1981,1982,1983,1984,1985,1986,1987,1988,1989,1990,1991,1992,1993,1994,1995,1996,1997,1998,1999,2000,2001,2002,2003,2004,2005,2006,2007,2008,2009,2010,2011,2012,2013,2014,2015,2016,2017,2018,2019,2020,2021,2022,2023,2024,2025,2026,2027,2028,2029,2030,2031,2032,2033,2034,2035,2036,2037,2038,2039,2040,2041,2042,2043,2044,2045,2046,2047,2048,2049,2050,2051,2052,2053,2054,2055,2056,2057,2058,2059,2060,2061,2062,2063,2064,2065,2066,2067,2068,2069,2070,2071,2072,2073,2074,2075,2076,2077,2078,2079,2080,2081,2082,2083,2084,2085,2086,2087,2088,2089,2090,2091,2092,2093,2094,2095,2096,2097,2098,2099,2100,2101,2102,2103,2104,2105,2106,2107,2108,2109,2110,2111,2112,2113,2114,2115,2116,2117,2118,2119,2120,2121,2122,2123,2124,2125,2126,2127,2128,2129,2130,2131,2132,2133,2134,2135,2136,2137,2138,2139,2140,2141,2142,2143,2144,2145,2146,2147,2148,2149,2150,2151,2152,2153,2154,2155,2156,2157,2158,2159,2160,2161,2162,2163,2164,2165,2166,2167,2168,2169,2170,2171,2172,2173,2174,2175,2176,2177,2178,2179,2180,2181,2182,2183,2184,2185,2186,2187,2188,2189,2190,2191,2192,2193,2194,2195,2196,2197,2198,2199,2200,2201,2202,2203,2204,2205,2206,2207,2208,2209,2210,2211,2212,2213,2214,2215,2216,2217,2218,2219,2220,2221,2222,2223,2224,2225,2226,2227,2228,2229,2230,2231,2232,2233,2234,2235,2236,2237,2238,2239,2240,2241,2242,2243,2244,2245,2246,2247,2248,2249,2250,2251,2252,2253,2254,2255,2256,2257,2258,2259,2260,2261,2262,2263,2264,2265,2266,2267,2268,2269,2270,2271,2272,2273,2274,2275,2276,2277,2278,2279,2280,2281,2282,2283,2284,2285,2286,2287,2288,2289,2290,2291,2292,2293,2294,2295,2296,2297,2298,2299,2300,2301,2302,2303,2304,2305,2306,2307,2308,2309,2310,2311,2312,2313,2314,2315,2316,2317,2318,2319,2320,2321,2322,2323,2324,2325,2326,2327,2328,2329,2330,2331,2332,2333,2334,2335,2336,2337,2338,2339,2340,2341,2342,2343,2344,2345,2346,2347,2348,2349,2350,2351,2352,2353,2354,2355,2356,2357,2358,2359,2360,2361,2362,2363,2364,2365,2366,2367,2368,2369,2370,2371,2372,2373,2374,2375,2376,2377,2378,2379,2380,2381,2382,2383,2384,2385,2386,2387,2388,2389,2390,2391,2392,2393,2394,2395,2396,2397,2398,2399,2400,2401,2402,2403,2404,2405,2406,2407,2408,2409,2410,2411,2412,2413,2414,2415,2416,2417,2418,2419,2420,2421,2422,2423,2424,2425,2426,2427,2428,2429,2430,2431,2432,2433,2434,2435,2436,2437,2438,2439,2440,2441,2442,2443,2444,2445,2446,2447,2448,2449,2450,2451,2452,2453,2454,2455,2456,2457,2458,2459,2460,2461,2462,2463,2464,2465,2466,2467,2468,2469,2470,2471,2472,2473,2474,2475,2476,2477,2478,2479,2480,2481,2482,2483,2484,2485,2486,2487,2488,2489,2490,2491,2492,2493,2494,2495,2496,2497,2498,2499,2500,2501,2502,2503,2504,2505,2506,2507,2508,2509,2510,2511,2512,2513,2514,2515,2516,2517,2518,2519,2520,2521,25

Special offers Special offers Special offers

UPTO 90% OFF YOUR CURRENT RIBBON PRICES

In 1989 Western Europeans threw away over 128 million printer ribbons. They weighed over 9,000 tonnes in total and would reach **right around the world** if laid end to end. A used ribbon cartridge is being thrown away somewhere in the UK **every second** of every day.

You can help put an end to this environmental waste and save some money at the same time thanks to **RE-INK**, a revolutionary new spray which brings new life to exhausted fabric printer ribbons.

RE-INK is cost effective and simple to use. Simply open up your plastic ribbon cartridge, spray a few squirts of **RE-INK's** special ink and lubricant formula and your ribbon is as good as new – sometimes even better!



**BEST OF ALL,
RE-INK IS
AVAILABLE IN THIS
SPECIAL READER
OFFER FOR ONLY**

£12.95

AVAILABLE FROM MD OFFICE SUPPLIES

- ★ **RE-INK** will save up to **90%** on what you currently spend on new ribbons
- ★ **RE-INK** – treated ribbons give **clearer, blacker** print than new ribbons
- ★ **RE-INK** is a very **high quality ink** – no blotchy or patchy ink
- ★ **RE-INK** is universal – it works with **all** fabric ribbons
- ★ **RE-INK** can extend the life of your printer with its special **lubricant** oils

DISKETTES

Specialists for over 3 years supplying Education, Government, home user, quality, reliability, value for money.

YOU SIMPLY CANNOT BUY BETTER

3.5 DOUBLE SIDED DOUBLE DENSITY 50 DSDO 3.5 Plus deluxe storage box only£29.95 100 DSDO 3.5 Plus deluxe storage box only£44.95 This Month's Special 200 DSDO 3.5 Plus 2 deluxe storage boxes only£74.95	5.25 DOUBLE SIDED DOUBLE DENSITY 50 DSDO 5.25 Plus deluxe storage box only£19.95 100 DSDO 5.25 Plus deluxe storage box only£29.95 200 DSDO 5.25 Plus 2 deluxe storage boxes only£49.95
5.25 DOUBLE SIDED HIGH DENSITY 30 DSHD 5.25 Plus deluxe storage box£16.95 50 DSHD 5.25 Plus deluxe storage box£27.95 100 DSHD 5.25 Plus deluxe storage box only£39.95	3.5 DOUBLE SIDED HIGH DENSITY 10 DSHD 3.5 In Library case£11.95 30 DSHD 3.5 Plus deluxe storage box£34.95 50 DSHD 3.5 Plus deluxe storage box£44.95 100 DSHD 3.5 Plus deluxe storage box only£64.95

MD Office Supplies

**18 Crescent Way, Farnborough,
Kent BR6 9LS Tel: 0689 861400**



Educational & Government orders welcome



BANX STACKABLE BOXES



Features Include Both stack horizontally and vertically

90 Capacity 3.5
 Very high quality manufacture
 Anti-static
 Protective lock
 Colour coded dividers
 only

£9.95

150 Capacity 5.25 or 130 3.5
 Beautiful strong design
 Anti-static
 Protective lock
 Colour coded dividers
 Smooth draw operation
 only

£16.95

From 1st January all orders below £20.00 are subject to £2.95 P/P Charge

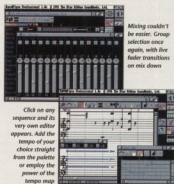
Musical

At last, Bars & Pipes Professional has arrived. Paul Austin looks at a music package that understands the essentials of composing

plumbing



Looks confusing, but it couldn't be simpler. Accessories to communicate with the outside world, flag settings to leap to the vital points, and group selection for speed



Click on any sequence and its very own editor appears. Add the tempo of your choice straight from the palette or employ the power of the tempo map

Mixing couldn't be easier. Group selection once again, with five fader transitions on mix down

Most sequencers are fairly similar, the only difference being the number and variety of extra features. As a result, choosing one is relatively simple – a brief glance down the features list and all the essential questions are answered.

After all, the vast majority of sequencers are little more than musical engineering platforms. In goes the raw material and out pops a multitrack masterpiece. This is just about perfect if you know exactly what you want from your finished piece, but if we're honest... does anyone?

If you're essentially a composer rather than an engineer, you'll be well aware that real music is 90 per cent inspiration and 10 per cent planning. It just happens – you hit a chord, play a riff, and suddenly there's a song in the making. With most sequencers this "suck it and see..."

approach isn't easy, but with Bars & Pipes Pro it couldn't be simpler. If you're a songwriter rather than a producer there simply isn't another sequencer that comes anywhere near. It is stunning, and a pleasure to work with to boot.

The program's primary strength has to be its open-ended and flexible approach. If you want to try something new it actively encourages you to have a bash, and if it doesn't work out everything can go back to where it was without any risk of damaging the original data.

As you may have noticed from the screenshots, the phrase Bars and Pipes doesn't simply refer to measures and instruments. In fact, a pipeline is the soul of the sequencer, through which all the Midi information passes.

On the main track screen the pipelines start on the left, flow through the sequencer and emerge on the right. Once



The big musical decisions are made simple thanks to the friendly song construction window and the useful addition of timeline scoring

there, they enter a final section of pipe, prior to leaving the package and heading for the synths or modules of your choice. The clever bit is what can be added to the pipeline to alter the raw Midi data flowing through it. This is where the Toolbox makes its mark.

As the name suggests, the Toolbox is a collection of gadgets that do all manner of wondrous things to Midi information. The variety is impressive and increasing by the day as more tools are added in the form of expansion modules. These modules contain numerous tools aimed at a specific areas such as multimedia, studio work or simply to enhance creativity.

Using a tool is simple – just select it from the box with the trusty rodent and drop it into the pipeline on either side of the sequencer.

If tools are placed in the pipe on the left of the sequencer, the actual Midi information within RAM is altered to reflect the chosen effect. However, if a tool is

Editing options – what's on offer

As exciting as the tools section can be, it's still only part of the package. Equally important has to be the program's editing options, and here again Bars & Pipes Pro isn't found wanting.

Double clicking on any sequence brings up the edit window which will display its data as either standard musical notation with traditional bass and treble clefs, in the familiar piano roll format, as hybrid notation or even as an event list.

A special pass for real musos is the option to print in notation form, complete with lyrics and chord designations. As you might expect, the actual editing of tracks is much the same as any sequencer with the usual array of cut and paste combinations. Just about every editing option is on hand, so even hardened studio hands shouldn't have any problems.

A song construction window does all of the large scale editing. As a result, building complex multi-sequence songs is easy. This, combined with the master parameters window with its ability to define lyrics, chords, keys, scales, rhythm, global dynamics and time signatures, makes large scale editing and arrangement simple.



A few more tools than came with the package as standard but even with the default collection, windows sounds awful

placed to the right side only, the data leaving the program and bound for the instruments is altered.

You can experiment as much as you like. If a particular effect sounds dreadful you can remove it at any stage, without permanent damage.

Another huge bonus of the Toolbox format is its flexibility. For example, if you were to place an Echo or Delay tool onto several tracks, you effectively get a separate signal processor for each.

This is because a complete copy of the tool is given to each track. Once in place, a simple double click and the tool reveals its very own requester. As a result, each track can be fine tuned to suit your particular taste.

It's even possible to build macro tools from individuals, so you were particularly fond of a harmonised effect with a touch of modulation and a little delay, it won't combine all three into a single tool which would then take its place alongside the others as a permanent resident.

Flexible tools

Tools aren't limited to single tracks – they can be employed on entire songs or just selected sections. They allow complex re-channeling of tracks on both the incoming and outgoing pipelines. It's even possible to apply tools to individual notes. Amazing...

There are a reasonable selection of tools bundled with the software, but I doubt it would be long before anyone could resist the temptation of the additional modules.

The number of tools on a track is limitless, as indeed is the number of tracks themselves – the only restriction is the amount of available memory. Two megabytes is about right – anything less and you could be struggling. Although the program will work with one megabyte, it won't thank you for it. Bars & Pipes Pro is big, and I won't even come close

to explaining many of its features – there simply isn't enough space. Usually such a statement means weeks of misery with a manual the size of a phone book, but that's not the case with Bars & Pipes Pro. In fact it's quite possible to dive straight in and get results.

The entire design, layout and approach of the program is friendly and instinctive. For example, to mute a track you click on a tap until the flow stops. To overdub, click again and two pipes flow from the sequencer. Once more and a single pipe appears, allowing only pre-recorded data to emerge.

This simple and logical approach filters right through the package. Consequently the excellent manual becomes more of a handy reference than a constant companion.

Tracks can be recorded individually or as groups – up to eight groups can be assigned in any song. Selection is simple and from then on all of the component tracks act as one. Tracks can be easily merged or re-recorded and individual parts can be marked and edited with the aid of 12 flag icons which sit along the top of the Track screen.

Up to four auto-locate points can be defined throughout the piece. Automatic punch-in and out icons drop the sequencer into record mode over a pre-selected section. Loop icons allow eight attempts at a specified section, after which you can choose between any of the eight to use in your creation. Edit markers allow you to define sections freehand or via their beat or measure. Even a stop icon is available so the sequencer won't tangle on forever if left unattended.

Like all modern sequencers, Bars & Pipes Pro has adopted the familiar tape deck format to control recording and playback. The usual fast forward and rewind functions await alongside play and record, which can function from the start of the track or from the position last stopped at.

Along with the old standards are buttons to activate the various flag options, plus a useful option to play and record at 3/4 and 1/2 speed – very handy if you're struggling with a tricky bit. It's even possible to assign transport controls to hot keys on your master keyboard.

Tempo – and time keeping in general – are very well catered for, with four definable tempo speeds waiting within the tempo palette, plus a separate tempo map which allows you to add time changes graphically.

All of the above, plus a dual SMPTE and BPM display – in fact a full complement of SMPTE options – are available with the usual

Power players

Underneath the friendly exterior beats the heart of a very serious sequencer, with a full range of system-exclusive commands and SMPTE options. As mentioned earlier, there's also a range of dedicated modules for multimedia and video applications.

To drive the DTV point home, Blue Ribbon Soundworks are presently developing additions which will operate with GVP's N-24 multimedia card. The combination of Bars & Pipes Pro, SMPTE and the N-24's PP (Picture In Picture) could mean that Bars & Pipes Pro may well dominate DTV and musical combinations on the machine.

Support is also planned for the Sunrise Industries 12- and 16-bit sampling boards which could make the package a studio standard within the direct to disk market.

Even if the package isn't adopted by the big boys, your creations can easily make it into the studio thanks to the strangely titled Muffy utility, which converts Bars & Pipes Pro's output into the universal MIDI format that any studio sequencer will be happy to work with.

Other power options include complete Alexx support plus Big Sys, which allows the transmitting and receiving of system-exclusive information. This is ideal for sending and saving patch banks to your sequencer.

For the very serious, there's also an option to use up to five separate MIDI ports, giving a total of 80 MIDI channels to choose from. Obviously you'll have to invest in an appropriate serial expansion port but that's a small price to pay for the almost limitless power of 80 channels.

array of timecodes and with both internal and external configurations.

When you've created a classic, added the effects and edited out the odd mishap, the final job is the mix. As you can see from the screenshots, Bars & Pipes Pro comes complete with its very own onscreen mixing desk. How thoughtful...

Just like its infinitely more expensive hardware relations, it sets both the volume and pan (stereo position) of the sound. The limitless number of faders are controlled by the trusty rodent, and as in the track screen groups of tracks, can be combined and adjusted as a single unit.

Individual faders or groups can be faded up and down on playback. If you're not sure about a particular mix, you can save it to the clipboard and experiment with another. When you're happy, just sit back and watch the faders automatically mix your masterpiece while you guzzle down a well-earned coffee.

As you've probably guessed, you're listening to a man in love... this is the sequencer I've been waiting for. Cute, cuddly, powerful and perfectly formed, what more could a muso want? This is a program written by musicians for musicians.

If you're a composer looking for a sequencer that will inspire rather than restrict, there's quite simply nothing that comes even remotely close to Bars & Pipes Pro. If you're serious about your music and are willing to pay serious money to enhance it, look no further than the best creative package in the business.

Bars and Pipes Professional
Available from Zone distributor
Price £299 incl VAT
Tel 081-766 6564

Zone's usual array of upgrade reductions apply. So if you're the owner of an ageing sequencer, you could save some cash.

Ease of use

Implementation

Value for money

Overall

The standard track and transport combination, where most of the hard work happens. You can have things as clean or cluttered as you like...

You know what you want from your computer, that's why you're choosing AMIGA

*...NOW YOU'VE CHOSEN THE RIGHT
COMPUTER, MAKE SURE YOU CHOOSE
THE RIGHT DEALER*

Anyone can be good at selling Amiga or CDTV, but sadly, that's often where it ends. So, when it's time to choose the **best** computer, it's also time to find the **best** supplier. The one who is not only always competitive, but the one who also gives you the best possible ongoing support for you and your system.

Gordon Harwood Computers, Pioneers of the 'Complete Pack' approach, have specialised in Commodore, from the earliest VIC 20, to the latest Amiga, for almost a decade... In fact, we've supplied so many, if you ask all your friends, the chances are that some of them can tell you already of our excellent service.

Our service means that we'll help you get the most from your new system straight away. But, if you do have problems, and need that extra hand, that's where we have earned our reputation.

If you'd like all this, and more:

- ❑ FRIENDLY AND HELPFUL EXPERT ADVICE
- ❑ UNLIMITED ACCESS TO CALL IN SUPPORT AND EX-DIRECTORY TELEPHONE TECHNICAL HOTLINE
- ❑ ALL ADVERTISED PRICES FULLY VAT INCLUSIVE
- ❑ SHOWROOM DISPLAYS OF OUR EXTENSIVE RANGE OF HARDWARE, SOFTWARE AND PERIPHERALS
- ❑ EXPRESS COMPUTERISED MAIL ORDER, STOCK WARRANTY AND CUSTOMER SUPPORT SYSTEM
- ❑ COMPREHENSIVE INSTRUCTIONS WITH ALL SYSTEMS HARDWARE AND HELP BULLETINS WHERE REQUIRED
- ❑ FREE COLLECTION OF MAJOR HARDWARE ITEMS REQUIRING IN WARRANTY SERVICE
- ❑ NEW PRODUCT 30 DAY REPLACEMENT GUARANTEE
- ❑ EXPERIENCED AND TRAINED SERVICE TECHNICIANS
- ❑ AND OF COURSE, THE MOST COMPREHENSIVE RANGE OF COMPETITIVE PRODUCTS AND PACKS ANYWHERE!

**GORDON
HARWOOD
HARWOOD
HARWOOD**
Computers

COMMODORE AMIGA CENTRE
CDTV CENTRE
PHILIPS APPOINTED DEALER
STAR GOLD DEALER
CITIZEN DEALER PLUS
APPLETM AUTHORISED DEALER

*The Closer you look,
The Better we look.*

CARTOON CLASSICS MEGA 21

NEW GORDON

21 MEGA GAME 1Mb.

HARWOODS POWERPLAY PACK 1 COMES OF AGE WITH 21 GREAT GAMES AND INCLUDES 1Mb. AMIGA CARTOON CLASSICS WITH THE SIMPSONS, LEMMINGS AND CAPTAIN PLANET PLUS 18 EXTRA GAMES ONLY FROM HARWOODS!!!

ALL OUR AMIGAS ARE UNITED KINGDOM SPECIFICATION AND INCLUDE THE FOLLOWING...

- 1 Mb. Disk Drive
- 1Mb Ram Memory
- TV Modulator
- 4096 Colours
- Multi Tasking
- Speech Synthesis
- 4 Channel Digital Stereo Sound
- Amiga Mouse
- Operation Manuals
- Workbench Disks
- ALL Connecting Cables

PLUS... ALL OUR Amigas are backed by Harwoods Great Service

[Please see full details in our Ordering Made Easy panel final page]*



THAT'S RIGHT HARWOODS HAVE PUT TOGETHER THE ULTIMATE AMIGA PACKS YET AGAIN... STARTING WITH POWERPLAY PACK 1 WHICH INCLUDES 21 GREAT GAMES!

Just look at what you get NOW...

- **AMIGA 500 COMPUTER WITH A FULL 1Mb. OF MEMORY!**
- **THE SIMPSONS, BART vs THE SPACE MUTANTS** - That's right man! you can play the computer version of this popular TV cartoon. By Ocean.
- **CAPTAIN PLANET** - created from the award winning TV show, now's your chance to save the earths environment with this ultimate adventure... your Eco-Copter is waiting. By Mindscape.
- **LEMMINGS** - Are you as smart as Lemmings are stupid, match your intelligence against their lack of it as you play the 140 levels of the most original game of '91 (European Computer Leisure Awards Winner). By Psygnosis.
- **EDUCATIONAL BASIC LANGUAGE FOR CREATING YOUR OWN PROGRAMS**
- **DELUXE PAINT III GRAPHICS PACKAGE WITH ANIMATION**
- **TAILORDESIGNED COVER AND MOUSE MAT**
- **AND A SUPERB HIGH QUALITY MICROSWITCH JOYSTICK**
- **PLUS.... 18 MORE GREAT GAMES, THERE'S SOMETHING FOR EVERYONE...**

Our packs always contain Professional Games NOT PD or multi-game disk files

CARTOON CLASSICS MEGA 21

NEW HARWOODS EXCLUSIVE!

...AND HARWOODS ALSO GIVE YOU A SUPERB BROCHURE OFFERING UP TO 16 NIGHTS FREE HOTEL ACCOMMODATION IN AN EXTENSIVE SELECTION OF 400 HOTELS AROUND THE UK PLUS NOW A SPECIAL BUDGET FRANCE SUPPLEMENT IS INCLUDED!

Priced at an INCREDIBLE

£399.95

Including VAT

- **BLOODWITCH** - Fantasy role-playing game, great interaction with your computer created environment
- **BUBBLE** - Help the crawling ghost and the soap bubble, escape from the old deserted minor house
- **CAPTAIN BLOOD** - Astonishing creatures and animated 3D graphics, this is a game you just have to play
- **ELIMINATION** - A progressive multi stage flying shoot 'em up, on a long winding course, survive if you can!
- **HOSTAGES** - You must get your team and hostages out of the terrorist overrun embassy, without loss of life
- **JUMPING JACKSON** - In a deluge of colour and sound save the earth from sadness and melancholy music
- **KRYPTON EGG** - A classic Breakout game, 60 screens, separated by 6 combat sequences
- **LANCASTER** - Your mission is to fly the classic WWII bomber on its dangerous raids over enemy territory
- **LIMBARD RAC RALLY** - You drive your 300 bhp Sierra Cosworth through demanding stages of the rally
- **PURPLE SATURN DAY** - Four arcade games, an exciting high speed trip into total cosmic 3D space
- **SAFARI GUNS** - Live the African experience in an animal sanctuary, track the poachers & ivory traffickers
- **STIR CRAZY** (Featuring Bobo) - Bobo & his inmates are planning a stunning trampoline jump prison escape
- **SKYCHASE** - Airborne combat for every simulation fan. In this one or two player game, battle against your MIG fighting adversary in your F-16 Falcon.
- **SKYFOX II** - Skyfox II, the only ship fast enough to carry on the Skyfox legend. Fight to blow your federation enemies from the Galaxy, at speeds of 9000 kilometres/second!
- **STRIKE FORCE HARRIER** - Puts you in the cockpit of one of Britain's most exiting fighter aircraft. Multiple skill levels let you progress to become an ace pilot!
- **TINKIN ON THE MOON** - We've been captured by Colonel Jorgen and he's bring to cupper the moon mission. Come on Tinkin, you're the only one who can save us, and be the first on the moon
- **TV SPORTS FOOTBALL** - Strap on your helmet for American football simulation that looks like the real thing.
- **XENON 2 MEGABLAST** - This time it's real! The Xenons are back and have thrown time itself into turmoil.

We reserve the right to substitute individual software titles or pack items should the need arise.

DON'T FORGET THAT WHILST YOU CAN OF COURSE PLAY THE GREATEST GAMES, WHEN YOU CHOOSE THE AMIGA YOU ARE ALSO GETTING A VERY POWERFUL PERSONAL COMPUTER. PROJECTS SUCH AS PROGRAMMING, GRAPHIC DESIGN, WORD PROCESSING OR OTHER BUSINESS APPLICATIONS, EDUCATION FOR A WHOLE HOST OF SUBJECTS FROM PRIMARY LEVEL TO 'O'LEVEL ARE ALL A REALITY WITH THE SYSTEM THAT YOU CAN REALLY GROW WITH AS YOUR COMPUTING EXPERIENCE EXPANDS. EUROPEAN COMPUTER OF THE YEAR 1991, EUROPEAN COMPUTER LEISURE AWARDS

Finance terms are available (subject to status) for most products, please see our ordering panel at the end of this advert for full details

HARWOOD

POWERPLAY PACKS

If you're thinking about presents why not buy a Harwoods Gift Voucher (all values available).

Enquiries & Order Line: **0773 836781**

Finance Facilities Available*
Please phone us for information and your personal application pack.

HARWOOD'S BRILLIANT AMIGA 1Mb 'MEGA 21' GAMES PACK 2

That's right you get the fantastic Amiga & ALL THE EXTRAS detailed in Harwoods 'Mega 21' Games Pack 1 (left), plus F19 Stealth Fighter AND you also get...

THE SUPERB PHILIPS CM8833/II STEREO COLOUR MONITOR

Twin Stereo Speakers, Green Screen Switch, Free Lead to Amiga, Tailored Dust Cover 12 Months on-site maintenance warranty (See monitor panel for details)



MONITOR PACK



A SPECIAL PACK FROM HARWOOD'S FOR YOU SEE THOSE GAMES WITH SUPERB CLARITY AND IN FANTASTIC STEREO.

£629.95 including VAT

HARWOOD'S BRILLIANT AMIGA 1Mb 'MEGA 21' GAMES PACK 3

That's right you get the fantastic Amiga & ALL THE EXTRAS detailed in Harwoods 'Mega 21' Games Pack 1 (left), plus F19 Stealth Fighter AND then you also get...

THE SUPERB PHILIPS CM8833/II STEREO COLOUR MONITOR

Twin Stereo Speakers, Green Screen Switch, Free Lead to Amiga, Tailored Dust Cover and 12 Months on-site maintenance warranty (See monitor panel for details)



MONITOR AND PRINTER PACK



Plus... THE BRILLIANT STAR HC2000 COLOUR PRINTER

16M40 cps, Full Colour 9 Pin NLQ Dot Matrix Printer with FREE Dust Cover and cables to your Amiga. (See printer panel for details)



If you wish REPLACE THE LCD WITH A CRYSTAL DISPLAY OR, IF YOU PREFER A SUPER COLOUR PRINTER, JUST CHOOSE YOUR RANGE & ADD THE DIFFERENCE IN PRICE BETWEEN STARS LCD'S & YOUR CHOICE. (See prices 124 and 125)

£829.95 including VAT

"IT'S THE BUSINESS"

A TRULY PROFESSIONAL PACKAGE SPECIFICALLY FOR THE BUSINESS MINDED AMIGA USER. THIS ONE SHOULD FULFIL EVERY AREA OF BUSINESS YOU'RE LIKELY TO NEED!

THE BUSINESS PACK FROM HARWOODS INCLUDES ALL THE FOLLOWING...

AMIGA 500 WITH A FULL 1Mb. MEMORY

SUPERB PHILIPS CM 8833/II STEREO COLOUR MONITOR (See Monitor Panel for Specifications)

STAR LC2000 9 PIN NLQ FULL COLOUR PRINTER (See Printer Panel for Specifications)

A HOST OF BUSINESS SOFTWARE & ACCESSORIES...
PEN PAL V1.3 (Word Processor)...1Mb.
SUPERBASE II PERSONAL (Database)
SPRISPLAN (Spreadsheets)...1Mb.

A GREAT TEN GAMES PACKAGE

Plus... THE SIMPSONS CAPTAIN PLANET LEARNING F19 STEALTH FIGHTER DELUXE PART B NEW 4MB ANIMATION MICROCONTROLLER JOYSTICK 160K BULK 5.25 DISKS TOWN LIBRARY CASE MOUSE MAT 5 TALKED DUST COVERS

ADD A CUMANA CAX 354 SECOND DRIVE FOR JUST £50 TO HELP RUN THOSE BUSINESS PACKS MORE EFFICIENTLY.

WE MEAN BUSINESS AT A GREAT PACKAGE PRICE OF JUST...

£899.95 including VAT



HARWOODS LEARN & PLAY

PRIMARY & JUNIOR PACK A

Get your children off to the right computing start with this software learn and play pack.

PROF. PLAYS A NEW GAME
PROF. LISTS 10 WORDS
PROF. MAKES SENTENCES
PROF. KNOTS FOR WORDS

Active, exciting, easy to use, using the software character called 'Prof' introduce and teach children the range of Prof on the computer. Other learning: Follows National Curriculum C.I. NAVES READER TEACHES TYPIES. A 'hot' way to learn how to type WORDS OF

PRIMARY READER COUSE
Average 10 minutes in this course from 5 yrs old right up to secondary level. Follows C.I. READING & WRITING COUSE
12 modules covers: Reading from the computer and books. For early starters & 1st & 2nd year.

Plus... 10 GREAT GAMES TOO...
Deltatank, Driver Force, Pipe Mania, Dungeon Quest, Rock-A-Roll, 5-Mile, Tower of Babel, Snake, Ruff, Honda, and Grand Monster Slam.

HARWOODS LEARN & PLAY

GCSE/O' LEVEL PACK B

GCSE examination level studies on your Amiga computer that's fun!

WORDS OF LIFE, NICE FRIENDS AND NICE BEERS
A set of three complete self-study courses to GCSE level which can be used for revision work. All programs adhere to the National Curriculum and were designed and tested in schools by professional teachers.

More Friends includes 'word speed' to test your speed! FOR PRO - English Word Processor
A versatile and powerful word with all the tools you need to create effective written work. Ideal for home work, projects or in the business office. Two mega automatically aligned graphics, even as you type!

MAKS READER TEACHES TYPIES
A 'hot' way to learn how to type WORDS OF Life, NICE FRIENDS, and NICE BEERS. Includes 'word speed' to test your speed! Includes 'word speed' to test your speed!

Plus... 10 GREAT GAMES TOO...
Deltatank, Driver Force, Pipe Mania, Dungeon Quest, Rock-A-Roll, 5-Mile, Tower of Babel, Snake, Ruff, Honda, and Grand Monster Slam.

ONLY IF PURCHASED WITH A POWERPLAY OR POWERPRO FROM GORDON HARWOODS.



GORDON HARWOOD HARWOOD Computers

ALFRETON DERBYSHIRE

The Closer you look, The Better we look.

*Finance terms are available (subject to status) for most products, please see our ordering panel at the end of this advert for full details

SOUND AND VISION

Words and Pictures

CDTV



IMAGINE, IF YOU CAN, THE CONCEPT OF A NEW, MORE POWERFUL AMIGA...

...WITH 1 MEGABYTE OF MEMORY, AND A COMPACT DISK DRIVE OF ALMOST INFINITE SIZE, A DISK DRIVE SO FAST, IT CAN STORE HUNDREDS OF MILLIONS OF DIGITS OF DATA. THIS DATA COULD BE, SPEECH, ANIMATED PICTURES, DIGITISED STEREO SOUND, COMPUTER IMAGES OR WHOLE ENCYCLOPAEDIAS... AND MORE.

IMAGINE THIS, AND YOU CAN START TO GRASP THE CONCEPT OF CDTV. THE INTEGRAL COMPACT DISK DRIVE, IS THE KEY TO THE POWER OF CDTV. ITS STORAGE CAPACITY IS EQUIVALENT TO AROUND A QUARTER OF A MILLION FULL PAGES OF TEXT. THIS WHEN INTEGRATED WITH THE 1 MB OF INTERNAL AMIGA CIRCUITRY, CREATES A SYSTEM, WHICH FROM A CD DISK, CAN GIVE YOU ACCESS TO AN UNIMAGINABLE SPECTRUM OF REAL WORLD IMAGES, NEVER SEEN COMBINED BEFORE. THESE VIVID IMAGES, WITH WORDS AND SOUNDS, GIVE YOU A WHOLE NEW DIMENSION IN HOME EDUCATION, ENTERTAINMENT & INFORMATION TECHNOLOGY. AND... DON'T FORGET, THAT CDTV CAN PLAY IN SUPER QUALITY, ANY NORMAL AUDIO MUSIC CD, AND IT CAN ALSO PLAY THE NEW CD+G DISKS, WHICH GIVE DIGITAL SOUND AND ON SCREEN GRAPHICS.

ON CD DISKS NOW AVAILABLE, THERE ARE EDUCATIONAL PACKAGES, ENCYCLOPAEDIAS PACKED WITH REFERENCE INFORMATION, STUNNING GAMES, MUSIC SYSTEMS AND MANY OTHER NEW AND VARIED SUBJECTS, INCLUDING WHOLE WORLD ATLAS OR EVEN THE COMPLETE WORKS OF SHAKESPEARE. EACH ON ONE CD DISK!! CDTV - NOTHING LESS THAN REVOLUTIONARY

FREE CDTV STARTER PACK!!!

WHEN YOU CHOOSE YOUR CDTV FROM GORDON HARWOOD, NOT ONLY DO YOU GET OUR LEGENDARY SERVICE, BUT WE GIVE YOU A CDTV STARTER PACK, TO GET YOU EXPLORING YOUR NEW WORLD - STRAIGHTAWAY. THIS INCLUDES A SUPERB SELECTION OF CD DISK TITLES INCLUDING THE WELCOME TUTORIAL & HERBSCHEIDT ENCYCLOPAEDIA, PLUS ... FOUR GAMES, SHERLOCK HOLMES & THE HOUND OF THE BASKERVILLES, SIM CITY, CHAOS IN ANDROMEDA, AND THE ACCLAIMED LEMMINGS, WORTH IN TOTAL ALMOST £200.00. IN ADDITION IS THE INFRARED REMOTE CONTROLLER, AND ALL THE HARDWARE NEEDED TO GET YOU CONNECTED.

ALL THIS FOR JUST £599.95

CDTV IS THE SAME SIZE, AND STYLE AS MOST VIDEO RECORDERS, SO IT CAN SIT UNOBTRUSIVELY ABOVE OR BELOW YOUR HOME TV AND/OR Hi-Fi. AND WITH ITS INFRARED REMOTE CONTROLLER, IT CAN BE OPERATED FROM YOUR ARMCHAIR. BUT PERHAPS MOST IMPORTANTLY, IF YOU ARE A COMPUTER ENTHUSIAST, REMEMBER THAT INSIDE EVERY CDTV, IS AN AMIGA, JUST WAITING TO BE USED. SO LATER ON, YOU'LL BE ABLE TO BUY THE OPTIONAL KEYBOARD AND DISK DRIVE, TO GET INTO THE WORLD OF AMIGA COMPUTING, PRINTERS, DIGITISERS, FACILITIES, AND ALSO MANY OF THE EXISTING SOFTWARE PACKAGES AVAILABLE FOR THE AMIGA COMPUTER. NEVER BEFORE HAS THERE BEEN SO MUCH POTENTIAL FROM ONE NEW STUNNING SYSTEM, PACKED WITH TODAY'S TECHNOLOGY!

CALL IN AND SEE US FOR YOUR PERSONAL DEMONSTRATION, OR PHONE US FOR YOUR FREE DETAILED CDTV INFORMATION PACK.

CDTV ACCESSORIES

DUE TO BE RELEASED SOON - Please call us for latest availability.

CD 1220 KEYBOARD	AN 8 KEY QWERTY KEYBOARD	£49.95
CD 1252 MOUSE	INFRARED MOUSE WITH BATTERY SAVER	£49.95
CD 1200 TRACKBALL	INFRARED TRACKBALL, WITH THE OPTION OF DIRECT CONNECTION TO EXTEND BATTERY LIFE. DUPLICATES FUNCTIONS OF TWO BUTTON MOUSE AND INCLUDES TWO 5 PIN PORTS FOR STANDARD JOYSTICKS	£79.95
CD 1400 CADDY	FOR HOLDING CD WITHIN DRIVE	£9.95
CD 1401 MEMORY CARD	PERSONAL RAM CARD CONTAINING 64K OF MEMORY FOR STORING DATA OR AS A BOOKMARK FACILITY WITHIN CDTV	£79.95
CD 1405 MEMORY CARD	A LARGER PERSONAL RAM CARD CONTAINING 512K OF MEMORY FOR STORING DATA OR AS A BOOKMARK FACILITY WITHIN CDTV	£249.95
CD 1800 FLOPPY DRIVE	5 1/4" MOUNTABLE FLOPPY DRIVE WITH 800K CAPACITY. CASING ALLOWS ROOM FOR ADDITIONAL HARD DRIVES OR MODEMS ETC.	£99.95
CD 1301 GENLOCK	PAL BASED VIDEO INTERFACE CARD FOR SUPERIMPOSING CDTV IMAGES OVER A VIDEO SIGNAL PROVIDED BY ANY STANDARD VIDEO SOURCE	£149.95
CD 1321 VIDEO CARD	PAL BASED VIDEO INTERFACE CARD TO ALLOW CONNECTION TO TV'S VIDEOS REQUIRING UHF, S-VIDEO OR COMPOSITE INPUTS.	£79.95

Many Amiga Accessories & Peripherals (e.g. Printers, Disk Drives, Software etc.) are compatible with CDTV. Please phone us for compatibility information.

HARWOODS AMIGA PRO-GEN



PROFESSIONAL QUALITY GENLOCK FOR COMPUTER AND VIDEO MIXING, AT A DOWN TO EARTH PRICE!!!

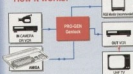
PRO-GEN Amiga Genlock

The Pro-Gen AMIGA Genlock allows you to mix your Amiga display with any PAL video signal whether it is a VCR, Laserdisc player or a Camcorder. In fact any item of video equipment which outputs a PAL composite video signal. Combined with the Amiga computer the Pro-Gen gives you the facilities of a special effects & video tiling table. Take your own time & give them a professional look by OVERLAYING TITLES or by SUPERIMPOSING YOUR OWN GRAPHICS created in packages like Spectralizer or Deluxe Paint. Pro-Gen is supplied with Owen's Spectra-color paint & animation package.

FREE

In Spectralizer every drawing tool and animation control is at your finger tips - over 90 tools in the fast menu Toolset, plus point and click access to all 4096 colours, with independent right and left mouse button controls & modes. Add automatic animation generation easy mouse controls for all functions, and the ability to paint with multi-page animated brushes, and you've got a powerful tool for artistic expression. With animation controls the easy 'F's' simple to put your ideas into motion. Forget co-ordinate systems and reference numbers just move objects with the mouse in this intuitive and friendly graphical environment. Spectralizer supports both ANIM & PFF file formats, and all the video modes of the Amiga, including HAMX (Spectralizer requires min. 1MBs memory)

How it works:



STOP PRESS

PRO-GEN, NOW INCLUDES A VERY VERSATILE MULTI-COMPONENT VIDEO TO GENLOCK CONNECTING CABLE AT THE ADDITIONAL PRO-GEN TO BE USED STRAIGHTAWAY BETWEEN POPULAR VIDEO EQUIPMENT, WITHOUT THE NEED TO HUNT DOWN THE CORRECT CABLE. EVEN BETTER, THIS KIT CAN ALSO BE USED TO CONNECT IN OTHER WAYS, BY VCR TO VCR, OR A KIT TO CONNECT YOURSELF RIGHT FROM THE MOMENT YOU OPEN THE BOX!!

PRO-Gen & Spectralizer ONLY £129.95

Mode Switch-box for Genlocks

Features Include:
Compatible With The Pro-Gen And Rendile 8602
Supplied With Genlock Extender Cable Worth £9.95
Switch-box Switches Between Foreground, Background, Video And Computer Modes

£29.95

AMIGA STORAGE DEVICES

Connections AS10 20Mb HD

- Features Include:
- Connects to sidebar bus on left hand side of Amiga 4000
- Autoboots with Kickstart 1.3
- Sockets For Up to 2 Mb of RAM
- DMA Access
- External SCSI Port
- Complete With Power Supply

AS10 Hard Disk Including
512K RAM Only **£299.95**

AS10 Hard Disk Including
1 Mb. RAM Only **£319.95**

AS10 Hard Disk Including
2 Mb. RAM Only **£349.95**



Cumana CAX354 3.5"

- External 2nd Disk Drive
- Features Include:
- Long connecting cable
- 1Mb, (80K Formatted) Capacity
- Enable/Disable Switch
- Throughport
- Access Light
- Compatible with Amiga 500/1000/1500/2000/3000 and CDTV

£57.95

SUPRA 500XP 52-105Mb HARD DISK DRIVE WITH MEMORY EXPANSION UP TO 8Mb.

- Features Include:
- Capacities of 52/80/105Mb available
- Connects to sidebar bus on LH side of Amiga A500
- Autoboots with Kickstart 1.3, boot enable/disable switch
- Sockets for up to 8 Mb of FASTRAM with enable/disable switch
- Autoboots With Kickstart 1.3
- SCSI Port & Amiga bus pass thru allows other devices to be connected
- Includes Express Copy hard drive Back-up Software
- The 52 Mb version powered by your Amiga (High Current Power Supply is only optional).
- High Current Power Supply is required for 80Mb. and 105 Mb versions.

Only **£49.95**

SUPRA PRICES	RAM SIZE	STORAGE CAPACITY	
		52Mb.	80Mb.
	1Mb.	*£479.95	*£539.95
	2Mb.	*£499.95	*£569.95
	4Mb.	*£699.95	*£749.95
	8Mb.	*£899.95	*£949.95

*Please don't forget to add the cost of Power Supply when calculating price of 80/105Mb. drives



EDUCATION SOFTWARE

DON'T JUST PLAY GAMES WHEN YOU CAN LEARN WITH YOUR AMIGA TOO!

- PRIMARY MATHS COURSE - Ages 3 to 12, Complete **£21.95**
- 24 Programme Courses
- BETTER MATHS - Ages 12 to 16, Higher level to Linear **£21.95**
- 4 Quadratic Equations
- MICRO MATHS - 24 easy to use programs for GCSE (10 Level) revision or self-tuition **£21.95**
- MEGA MATHS - A 9 level step by step tuition course. For mature beginners. 12 Level studies & Mega Maths users **£21.95**
- MICRO FRENCH - GCSE French tuition or revision course **£21.95**
- Covers both spoken & written French
- MICRO ENGLISH - A complete programme of self-tuition up to GCSE standard **£22.95**
- THE THREE BEARS - Ages 5-10, Develops imaginative thinking/reading skills **£17.95**
- SPELL BOOK - Ages 4 to 6, Developed with the help of a Primary School Head Teacher to aid spelling skills **£18.95**
- PLAY AND READ - Ages 4 to 9, The complete reading tutor. Part 2 teaches spelling to the beginner of reading

AMIGA PERIPHERAL PACKS

TWO GREAT PACKAGES THAT SAVE YOU MORE MONEY!

These two packs are aimed at the user who needs to get a great deal from his Amiga. A superb quality monitor, the PHILIPS CM8833/11 has been put with your choice of either the CITIZEN SWIFT 19 or the CITIZEN SWIFT 24 printer. You choose, but whichever combination you have the price has been designed to save YOU MONEY. Buying together will save you £55!!

PERIPHERAL PACK 1-CM8833/11 + Citizen Swift 9
Only **£469.95** With a FREE PEN **£479.95**

PERIPHERAL PACK 2-CM8833 + Citizen Swift 24E
Only **£569.95** With a FREE PEN **£579.95**

AMIGA SOFTWARE

- Musio-X: The ultimate software for professional MIDI sequencing. The software includes a configurable librarian and a synthesizer patch editor. All you need to recreate a song can be recalled from one performance file including sequences, MIDI routing, sync setup, keyboard maps & synthesizer or drum machine patch libraries. NEW LOW PRICES - £54.95 or just £74.95 with multi-instrument **£24.95**
- MIDI INTERFACE (5 Ports): In, Out, Through plus 2 switchable in/out. Includes cable. **£24.95**
- AMIGOS: AMIGOS allows you to access the power of the Amiga with ease. 500 different commands make AMIGOS a sophisticated development language. The AMIGOS animation language allows you to create complex animation sequences. 300 pages manual and over 80 example programs. **£45.95**
- Amos Add on Modules: (BOTH require Amos prog.) **£19.95**
- Amos Compiler: Amos 3D **£29.95**
- SuperBase 4: Most powerful database available for the Amiga. Combines the ease of use of SuperBase 2 with a versatile programming language so that you can tailor your data to your own specific needs for club/business/library records etc. **£229.95**
- Lettion C: An ideal tool for the C programmer whether experienced or a novice. The best way to create applications for the Amiga Fully supports Motorola chipset. Nearly 300 functions optimised to let the user write the lightest possible code. Includes screen editor. Most Amiga C books are based around tattle. (Requires either 2 floppy drives OR a hard disk drive) **£199.95**
- Deluxe Paint IV: Latest version of the Amiga's first and still the best, paint and animation package, now including HAM mode. (1 Mb. minimum memory or more recommended) **£79.95**
- Video: The Complete Colour Solution: Video with RGB Splitter, Frame Grabber & Digitiser. Grabs moving colour video into 16 grey scale frames up to 16 frames in 1Mb. Amiga) and digitises from still colour video source in up to 4096 colours in less than 1 second! Requires home VCR or video camera for grabbing. Requires video camera or VCR with perfect pass for digitising. Now comes with Spectator FREE!! **£179.95**
- MASTERSOUND: High quality "mono" sampler (best for sampling instruments etc.) **£99.95**

THE ABOVE IS JUST A SMALL SAMPLE FROM OUR EXTENSIVE RANGE OF THOUSANDS OF SERIOUS, EDUCATION AND RECREATION TITLES WE CAN'T LIST THEM ALL HERE SO PLEASE CALL US IF YOU CAN'T SEE THE PROGRAM YOU REQUIRE. IT'S PROBABLY IN STOCK!

Pen Pal V.1.3

WORD PROCESSOR/DATABASE With Pen Pal you can make text, 4096 colour graphics & data in word or effect 'wp' can! It's handling of graphics is unsurpassed. Pen Pal is the only word processor I tested that will automatically wrap text round graphics. **£79.95**

Amiga World, July '90

Pen Pal V.1.3 WITH 512K Amiga RAM Expansion only **£99.95!**

ALFRETON DERBYSHIRE

If you're thinking about presents why not buy a Harwoods Gift Voucher (all values available).



GORDON HARWOOD HARWOOD HARWOOD

Computers

ALFRETON DERBYSHIRE

The Closer you look, The Better we look.

FREE
Fully Tailored
Dust Cover with
Dot Matrix Printer

PRINTERS

NEW LOWER
PRICES!!!

All printers in our range include the following standard features...
 All standard Centronics parallel port unless otherwise stated for direct connection to Amiga, PC's, ST etc. and come with a...
 FREE CONNECTOR LEAD & A FREE TAILORED DUST COVER!



When you are comparing our prices to others make sure that the same essential items are included. Our prices include connector leads and VAT etc. Over 10 years experience.

CITIZEN 1200+ 9 PIN MONO - Up to 12025 cpm **£149.95**
 Very reliable low cost printer with interchangeable interfaces for Centronics/RS232C/serial type (C&S etc.) Full 2 Year manufacturers warranty

NEW FASTER STAR LC200 9 PIN MONO - Up to 15038 cpm **£159.95**
 Replacement for our most popular Mono Data-Matrix printer. Multiple port options easily accessible from front panel. Exceptional paper handling facilities

CITIZEN 1240 24 PIN MONO - 12040 cpm **£199.95**
 360 dpi - 24 Pin MONO with 3 Fonts
 8K Buffer, 9 Resident Fonts
 3 Fonts, Superb letter quality

STAR LC 2410 24 PIN MONO - 15050 cpm **£214.95**
 24 Pin version of the Star LC Series with Exceptional letter print quality
 360 x 360 dpi Graphics

STAR LC200 9 PIN COLOUR PRINTER - 18540 cpm **£209.95**
 This is the size in our pocket!
 80 Column Dot Matrix
 240 dpi - 9 Pin COLOUR
 10K Buffer, 9 Resident Fonts
 Push/pull tractor & rear/bottom feeds
 Reverse paper feeds

CITIZEN SWIFT 9 PIN COLOUR - 16040 cpm **£219.95**
 New super high spec 9 pin colour printer
 8K Buffer, 4 Fonts
 Push and pull tractor built-in
 Feed for subminiature port stationery

STAR LC2400 24 PIN MONO - 22055 cpm **£249.95**
 New Star 24 pin that means business!
 80 Column Dot Matrix
 360 dpi - 24 Pin MONO
 7K Buffer expandable to 39K
 10 Resident Fonts
 Front Panel Pitch Selection
 Push/pull tractor & rear/bottom feeds
 Reverse paper feeds

STAR LC2400 24 PIN COLOUR - 22055 cpm **£299.95**
 Colour version of the LC2400 Mono but with expandable 30K Buffer

NEW 24 Pin Citizen 224 COLOUR - 16055 cpm **£259.95**
 Brand New, lowest cost colour 24 Pin printer
 80 Column Dot Matrix with 4 Fonts
 360 dpi - 24 Pin COLOUR
 7K Buffer expandable to 32K
 Easy to use front panel controls

NEW 24 Pin Citizen SWIFT 24E COLOUR - 18070 cpm **£319.95**
 Brand New, superb specification 24 Pin printer
 80 Column Dot Matrix with 7 Fonts
 360 dpi - 24 Pin COLOUR
 10K Buffer expandable to 32K
 Easy to use LCD panel controls

CITIZEN SWIFT 24 PIN COLOUR - 16050 cpm
 The ever popular 'European Printer of the Year 1997' fully featured 24 Pin colour printer which of course comes with Citizens 2 Year Warranty.

NEW FASTER STAR XB 24 PIN COLOUR RANGE XB24-200 & XB24-250 - 27580 cpm **£399.95**
 These NEW top of the range Star replaces the XB24-100 & XB24-150, & offer the best possible quality dot matrix printing

NEW FASTER STAR XB 24 PIN COLOUR RANGE XB24-200 & XB24-250 - 27580 cpm **£499.95**
 These NEW top of the range Star replaces the XB24-100 & XB24-150, & offer the best possible quality dot matrix printing

HEWLETT PACKARD PANTJET COLOUR A4 INKJET **£899.95**
 Our best quality full colour printer at a realistic price

STAR LASERPRINTER 4 - 4ppm MONO LASER **£749.95**
 As Laser Printer, will connect to PC, Amiga, Atari ST etc.

STAR LASERPRINTER 4 - 4ppm MONO LASER **£749.95**
 As Laser Printer, will connect to PC, Amiga, Atari ST etc.

STAR LASERPRINTER 4 - 4ppm MONO LASER **£749.95**
 As Laser Printer, will connect to PC, Amiga, Atari ST etc.

STAR LASERPRINTER 4 - 4ppm MONO LASER **£749.95**
 As Laser Printer, will connect to PC, Amiga, Atari ST etc.

STAR LASERPRINTER 4 - 4ppm MONO LASER **£749.95**
 As Laser Printer, will connect to PC, Amiga, Atari ST etc.

STAR LASERPRINTER 4 - 4ppm MONO LASER **£749.95**
 As Laser Printer, will connect to PC, Amiga, Atari ST etc.

STAR LASERPRINTER 4 - 4ppm MONO LASER **£749.95**
 As Laser Printer, will connect to PC, Amiga, Atari ST etc.

STAR LASERPRINTER 4 - 4ppm MONO LASER **£749.95**
 As Laser Printer, will connect to PC, Amiga, Atari ST etc.

STAR LASERPRINTER 4 - 4ppm MONO LASER **£749.95**
 As Laser Printer, will connect to PC, Amiga, Atari ST etc.

STAR LASERPRINTER 4 - 4ppm MONO LASER **£749.95**
 As Laser Printer, will connect to PC, Amiga, Atari ST etc.

PRINTER ACCESSORIES

CITIZEN PRINTER ACCESSORIES:

Citizen 1200+ Sheet Feeder **£38.95**
 Citizen 1200+ Parallel Interface **£48.95**
 Citizen 1200+ CBM C64 Serial Interface **£48.95**

Citizen 1240 30K Buffer **£13.95**
 Citizen 1240 Semi-Auto Sheet Feeder **£39.95**
 Citizen 1240 Automatic Sheet Feeder **£79.95**
 Citizen 1240 Printer Stand **£24.95**

Citizen Swift 9 Semi-Auto Sheet Feeder **£39.95**
 Citizen Swift 9 Automatic Sheet Feeder **£79.95**
 Citizen Swift 9 Printer Stand **£24.95**

Citizen Swift 9K Printer Stand **£34.95**
 Citizen Swift 9K Automatic Sheet Feeder **£139.95**

Citizen Swift 24 32K Printer Buffer **£13.95**
 Citizen Swift 24 Semi-Auto Sheet Feeder **£79.95**
 Citizen Swift 24 Automatic Sheet Feeder **£79.95**
 Citizen Swift 24 Printer Stand **£24.95**

Citizen Swift 24X Auto Sheet Feeder **£139.95**
 Citizen Swift 24X Printer Stand **£34.95**

HEWLETT PACKARD PANTJET PRINTER ACCESSORIES:

Hewlett Packard Pantjet Black Ink cartridge **£25.95**
 Colour Ink Cartridge **£31.49**
 Single Sheet Printer Paper **£17.95**
 2-Fold Printer Paper **£11.95**
 Transparency Paper **£11.95**
 Pack of 50 Sheets **£25.95**

STAR PRINTER ACCESSORIES:

Star LC-20 Mono Printer Automatic Sheet-Feeder **£74.95**

Star LC24-10 Mono Printer 32K Buffer, £87.95 Automatic Sheet-Feeder **£87.95**
 £74.95

Star LC-200 Colour Printer Automatic Sheet-Feeder **£74.95**

Star LC 24-200 Mono Printer 32K Printer Buffer Automatic Sheet-Feeder **£34.95**
 £74.95

Star LC 24-200 Colour Printer 32K Printer Buffer Automatic Sheet-Feeder **£34.95**
 £74.95

Star XB 24-200 Colour Printer Pull Tractor Font Cartridges - Styles To Be Announced 128K Centronics Printer Buffer Automatic Sheet-Feeder Dual Bin Sheet-Feeder **£34.95**
 £39.95
 £114.95
 £429.95

Star XB 24-250 Colour Printer Pull Tractor Font Cartridges - Styles To Be Announced 128K Centronics Printer Buffer Automatic Sheet-Feeder Dual Bin Sheet-Feeder **£34.95**
 £39.95
 £114.95
 £429.95

Star XB 24-250 Colour Printer Pull Tractor Font Cartridges - Styles To Be Announced 128K Centronics Printer Buffer Automatic Sheet-Feeder Dual Bin Sheet-Feeder **£34.95**
 £39.95
 £114.95
 £429.95



PRINTER	PRINTER TYPE	BLACK RIBBON	BLACK RIBBON 5/8X PACK	COLOUR RIBBON	5/8X PACK
CITIZEN 1200+	BLACK ONLY	£4.95	£24.95	N/A	N/A
CITIZEN 124	BLACK ONLY	£4.95	£24.95	N/A	N/A
CITIZEN SWIFT 9	BLACK/COLOUR	£4.95	£24.95	£16.95	£99.95
SWIFT 24/240/224	BLACK/COLOUR	£4.95	£24.95	£16.95	£99.95
STAR LC100	BLACK/COLOUR	£4.95	£24.95	£16.95	£36.50
STAR LC200	BLACK/COLOUR	£6.95	£24.95	£16.95	£36.50
STAR LC2400	BLACK/COLOUR	£8.95	£24.95	£16.95	£36.50
STAR XB RANGE	BLACK/COLOUR	£8.95	£24.95	£16.95	£36.50

GENUINE CITIZEN & STAR REPLACEMENT PRINTER RIBBONS

BOOK SHOP FOR BEGINNERS & EXPERTS ALIKE



AMIGA FOR BEGINNERS - VOL. 1: ABASIC BOOKS **£12.95**

From unpacking your Amiga to creating your own icons, includes full use of basic and advanced data.

AMIGA BASIC INSIDE AND OUT - VOL. 1: ABASIC BOOKS **£18.95**

Definitive step by step guide to programming Amiga in basic.

AMIGA BASIC LANGUAGE - VOL. 1: ABASIC BOOKS **£14.95**

Practical guide to learning BASIC on Amiga.

AMIGA DOS INSIDE AND OUT - VOL. 1: ABASIC BOOKS **£18.45**

Guide to Amiga DOS & CLI. NEW EDITION. inc. DOS 3.2

AMIGA HARDWARE REFERENCE MANUAL - Andrew Whelan. Written by technical experts at Commodore Amiga Inc. USA. People who designed your Amiga. Hardware - from machine code programming at advanced level.

AMIGA BEST OF TRICKS & TIPS Vol. 1. A complete list of tricks and tips that enable you to do MORE with your Amiga and so simply as possible.

AMIGA BEST OF TRICKS & TIPS Vol. 2. A complete list of tricks and tips that enable you to do MORE with your Amiga and so simply as possible.

AMIGA BEST OF TRICKS & TIPS Vol. 3. A complete list of tricks and tips that enable you to do MORE with your Amiga and so simply as possible.

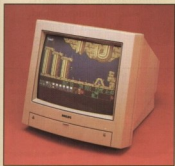
WE ALWAYS CARRY LARGE STOCKS OF THE FULL RANGE OF ABASIC & OTHER BOOKS. Please use this facility!

SEE OUR LIST OF ACCESSORIES FOR BOTH STAR AND CITIZEN PRINTERS. ALL AT COMPETITIVE PRICES!
 All the characters Per Second speeds quoted above are Draft/LD at 100pi

Quoted terms are available (subject to status) for most products; see our ordering panel at the end of this advert for full details

MONITORS & MONITOR TV's

Harwoods stock a complete range of both Monitors & Monitor TV's to give you your perfect solution to the type of display to buy.



PHILIPS CM8833/VI Stereo High Resolution Colour Monitor

NOW WITH FREE... F19 STEALTH FIGHTER!!!
The ever popular 14-inch Philips CM 8833 Model, is the most versatile multipurpose colour monitor available. Its versatility means you not only get excellent colour graphics & text performance with a wide range of personal computers, but when connected to a VCR or optional tuner, you get an amazing 600 pixel TV picture. It's this 600 pixel resolution, that makes the 8833 essential for the serious user who wants to use his computer for text based applications. With the 8833 MKII, Harwoods give you the complete set up, to get you going straight away. Monitor, RGB picture and Stereo Audio Cables, Tailored dust cover, a full 12 months on site service warranty. And inclusive of a FREE Superb F19 Stealth Fighter Game!!!

RGB/AD-TTL Composite Video & stereo audio inputs. Can be used as a TV with VCR or Tuner. Also as a Video Camera display monitor. Retractable stand. 7 Twin Stereo Speakers. Headphone Jack Socket. FREEFAX for your computer. FREE 12 Month on site service warranty.
THE MOST VERSATILE STEREO COLOUR MONITOR AVAILABLE

£249.95

CBM 10645 STEREO COLOUR MONITOR

Commodore's Own Stereo High Resolution Colour Monitor with RGB/AD-TTL Composite Video/Audio inputs. Can be used as a TV with VCR or tuner. Twin Speakers for stereo output. Supplied with cables for A500, GCA PC16-64-128.

£269.95

PHILIPS TV TUNER

ALLOWS ANY MONITOR WITH COMPOSITE VIDEO & AUDIO INPUTS TO BE USED AS A TELEVISION. SUPPLIED COMPLETE WITH AERIAL. FOR USE INCORPORATES ALSO HAS STD EXTERNAL AERIAL SOCKET AND COMPATIBLE WITH MOST MONITORS INC. PHILIPS CM8833 MK I & II, CBM 10614, & 190012.

£79.95

It's important to remember that most TV Monitors, are still fast and foremost televisions, meaning that their average 400 pixel blue display 50% more resolution than a monitor cannot be guaranteed to display 80 column text clearly without risking eye strain. If choosing a Television Monitor ensure it has the latest 2000 character blue capability, meaning it can handle the Amiga 80 characters, by 25 line output clearly.

NEW!!! PHILIPS 15" TELETEXT REMOTE CONTROL 40 CHANNEL MONITOR TV BRAND NEW SUPERB DEFINITION PHILIPS MONITOR TV. IDEAL FOR AMIGA OR CDTV USERS, GIVING FOR THE FIRST TIME MONITOR QUALITY FROM A FULL FEATURE TELETEXT TV AT AN AFFORDABLE PRICE!!! JUST LOOK AT THE FEATURES... Direct Scan Controller for Amiga, CDTV, VCR OR SATELLITE RECEIVER. RGB/AD Composite Video & Audio inputs. FULL TELETEXT FACILITIES (FOR THIS FACILITY EXTERNAL AERIAL SHOULD BE USED). Headphone Jack Socket. FULL TWO YEAR GUARANTEE. 32000 CHARACTER HIGH DEFINITION FST TUBE. SUPPLIED WITH LOOP AERIAL. REMOTE CONTROL. FREEFAX for your computer.

IF YOU WOULD LIKE THE MONITOR TV IN OUR PACKS 2, 3, POWERPRO OR WITH ONE OF OUR PERIPHERAL PACKS TO REPLACE THE 8833, PLEASE SIMPLY ADD £20.00 AND STATE YOUR PREFERENCE WHEN ORDERING.

£279.95

(No F-19)

AMIGA ACCESSORIES

KCS POWERBOARD IBM PC EMULATOR

Supports Both 3.5 inch & 5.25 inch Disquettes. Fits Into A501 RAM Slot, 8088 XT Processor. Clock/Calendar Included. Acts As 512K RAM Exp. When In Amiga Mode. Includes MS-DOS 4.01, Shell & GW-BASIC. Supports A500 Hard Drive, Mouse Driver Software Included.

£219.95

MEMORY EXPANSIONS

HARWOODS PRO-RAMPACK

512K Memory Expansion for Amiga A500 series that simply plugs in. Fully compatible. On/Off switch and real time battery backed clock.

SUPRARAM RK 500 (512K to 8Mb. RAM Expansion)

The RAM expansion giving massive memory WITHOUT dismantling your Amiga, thus avoiding the possibility of invalidating your warranty. Easily connects to sidcar with bus 'pass through' for HD's etc.

512K RAM Version **£129.95** 4Mb. RAM Version **£329.95**
2Mb. RAM Version **£199.95** 8Mb. RAM Version **£349.95**

NAKSHA MICROSWITCHED MOUSE

£24.95

GOLDEN IMAGE OPTICAL MOUSE

£32.95

COMPEITION PRO JOYSTICK 5000 Black £7.95

ZIPSTICK JOYSTICK £12.95

COMPEITION PRO STAR JOYSTICK £14.95

The ONLY video to obtain a 100% rating from a magazine review

3.5" DISK HEAD CLEANER £2.99



BLANK DISKS with labels

10 Genuine Commodore 3.5" branded
10 Unbranded with library case 3.5" certified
200 Unbranded 3.5" certified

Only **£9.95**
Only **£7.95**
Only **£72.50**



Apple™ in Alfreton...

For the professional user, Gordon Harwood provides the outstanding Apple™ Macintosh™ range of computers. These superb systems are available at surprisingly competitive prices starting at under £1000.

As your quality assured Apple™ Authorised Dealer, systems are available through our showrooms only. Please visit us for your personal introduction to this exceptional range of friendly yet powerful graphical computers.

Gordon Harwood
Computers



Authorised Dealer

Easy Ordering

Before you contact from whom to purchase, please phone us. We are always happy to discuss your requirements, and answer any queries you may have... ORDER BY POST: Please send your Order Form with your Address, Name, and or Lombard Creditcard Card number & expiry date (if used). Curny, NASH and other store cards are Lombard Creditcard and are accepted by us. ORDER BY POST: Make your order, include a valid credit card, or postal order payable to GORDON HARWOOD COMPUTERS. (Personal/business cheques take 7 days to clear from any of most sources, your order will be delayed). Please send Name, Address, and most importantly if possible a daytime telephone number along with your order requirements. Please check you are ordering from one of our local showrooms before posting phone if you require confirmation. Please remember that to example any September publication appear during August, therefore order you are now placing will arrive at its date.

FREE PORTAL DELIVERY: Free 14 working days, UK mainland only. COT. COUNTRY SERVICE: Add £3.00 per major item for next working day delivery, UK. **EXPORT ORDERS:** Most items are available at TAX FREE PRICES to non-UK residents when ordering by post. Please contact us for ordering information.

REMEMBER AFTER YOU'VE BOUGHT FROM HARWOODS, WE'LL STILL BE HERE. TECHNICAL SUPPORT: We will give our Exclusive Technical Support Phone Number to you should you require any help or advice on any aspect of the system you have purchased.

12 MONTH WARRANTY: Items proving faulty within 30 days of purchase are replaced with NEW LATEST price of the item. For the whole guarantee period, warranty service will be completely FREE OF CHARGE. **COLLECTION FACILITY:** Any computer or printer requiring warranty service can be collected from your home FREE OF CHARGE during the guarantee period (if mainland only).

FULL LISTING PROCEDURE: All computers are tested prior to dispatch, and all items are supplied with manuals and leads as required - just connect up and use straight away.

REMEMBER WE'RE NOT JUST ANOTHER MAIL ORDER COMPANY...

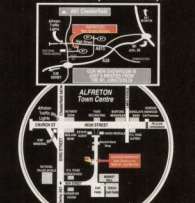
All listed prices are what YOU PAY, and there are NO HIDDEN EXTRAS. VAT and postage are included, and prices are correct at time of going to press (Pack details may vary from time to time). Offers are subject to availability and to the latest advertised prices and prices. Our offers are NOT supplied on a first basis. E&OE.

FINANCE FACILITIES: tailored to suit your needs. Written details on request. Gordon Harwood Computers offer facilities to purchase using our budget account scheme. APR 16.9% (variable). Available interest details of rates, terms, fees, subject to status. Simply phone or write and we will send you written details along with an application form. Applications are made in 48 hours. Finance is provided by Finance UK, who are regulated and licensed by the Financial Services Commission. For the whole guarantee period, warranty service will be completely FREE OF CHARGE. **FINANCE FACILITIES:** tailored to suit your needs. Written details on request.

If you are already the holder of a Lombard Credit Charge Card (see below) you can use this to purchase from us (subject to your personal card limit).

VISIT OUR SPACIOUS SHOWROOM: Please pay us a visit where our full range of advertised products, at the SAME COMPETITIVE PRICES & VALUE, is on sale. ALL UNDER ONE ROOF. In pleasant surroundings at our purpose built showroom (see note below map). There's plenty of FREE parking close by.

If you're thinking about presents why not buy a Harwoods Gift Voucher (all values available). **OPENING TIMES 9.00 until 5.00 Monday to Saturday 9.00 until 1.00 Wednesday. Closed on Sundays**



What we always have specialised systems on permanent display, should you require a 'special' specific product demonstration we will be happy to oblige. Just phone us in advance to make the necessary arrangements.



GORDON HARWOOD COMPUTERS
DEPARTMENT AMC/02, NEW STREET,
ALFRETON, DERBYSHIRE, DE5 7BP
TEL: 0773 636781 FAX: 0773 831040

Pasteiner

TECHNOLOGIES LTD.

AMIGA PACKS

Unit 12A,
Millmead Business Centre,
Millmead Road,
London N17 9QU.
Tel: 081-365 1151
Fax: 081-885 1953

SCREEN GEMS PACK, inc: Shadow/Beast II, Back/Future II, Nightbreed, Days of Thunder, Day II	£359.00
AMIGA A500, mouse, modulator, power supply, Workbench 1.3, Basic Tutorial and manuals	£309.00
CARTOON CLASSICS inc: 1Mb Ram, Lemmings, Simpsons, Captain Planet, Deluxe Paint 3	£369.00
CLASS OF THE 90S FIRST STEPS inc: Extra 512k, ProWrite, Info File, Dypaint + Dypaint II etc.	£616.00
CLASS OF THE 90S inc: Extra 512k, Publishers Choice, MacPaint, BBC Emulator, Midi Int. etc.	£515.00
AMIGA CREATIVITY PACK, with Word Processor, Music & paint packages, 3 games + Tutorial Video	£419.00

All Amiga A500's supplied with mouse, modulator, manuals, workbench, Basic + Tutorial

AT ONCE AMIGA

PC 286 AT EMULATOR
FOR THE A500
ONLY £169.00

PHILIPS 8833 MK II STEREO MONITOR

Including Free Lead
ONLY £229.00

Golden Image Mouse	POA
Gastner Mouse	£14.95
Alfa Data Mouse	£19.95
Golden Image Optical	£20.95
Golden Image Scanner	£149.95
Battle Mouse	£24.95
Track Ball (click and hold)	£39.95
Track Ball	£24.95
Internal Power Supply for ST	£29.00
External 1 Meg Disk Drives	£35.00
10 x Sony Disks	£9.95
ST Clock	£19.95

CDTV

Commodore
Dynamic Total Vision
What is CDTV?

CDTV Combines a professional audio system, advanced Amiga technology and remote control, thus creating a system with superior sound and graphics. We have a large selection of software available at discount prices.

only £559.99

AMIGA A1500/2000 PACKS

Amiga 1500 Base Pack

The Amiga 1500 is an Amiga 2000 with 2 floppy drives instead of the usual one. The big advantage of the 1500/2000 over the A500 is its ability to take expansion internally with ease. The Base Pack comes complete with 2 floppy drives, Workbench 1.3, mouse, manuals, and a separate keyboard.

only £579.99

Amiga 1500 Business and Classic Software Pack

Same as the base pack but with Deluxe Paint 3, Platinum Works (the best integrated pack available for the Amiga), The Finest Hour, Sim City + Terrain Editor, Populous + Fronted Lands, Battle Chess and Amiga Format Disk Book.

only £679.99

Amiga 1500 Base Pack with Commodore 1084SD

Same as the base pack but with the Commodore 1084SD monitor

only £819.99

Amiga 1500 Business and Classic Software Pack with Commodore 1084SD

Same as the 1500 base pack but with Commodore 1084SD and the utility and entertainment pack

only £869.99

VIDI AMIGA

VIDI COLOUR SOLUTION
Vid Colour package including Vid Digitiser, Vidchrome and Photon Paint
PRICE £95.00

RGB SPLITTER - for use with Vidchrome or Digitview, (includes PSU)
PRICE £59.95

COMPLETE COLOUR SOLUTION
Package includes Vidi-Amiga, Vidchrome and the RGB Splitter for a complete colour digitising outfit. NOTE: For best colour pictures you require a video camera or perfect still frame VCR
PRICE £139.95

HARDWARE

COMMODORE A500 20mb HARD DISK UNPOPULATED	£285.00
COMMODORE A500 20mb HARD DISK + 2mb RAM	£379.00
ERAME GRABBER PAL	£449.00
RENDALDE 8802 Genlock, A500/B2000	£185.00
AUDIO ENGINEER Sampling hardware/software	£169.00
SOPHUS S5 Professional Stereo Sampler	£49.00
ECSS POWERBOARD, PC Emulation (A500) with MS DOS	£215.00
AMIGA compatible external disk drive, switch plus thru port	£57.50
GVF 52MB SCSI Hard Drive and 8 MB RAM Board for A500	£499.00
GVF 52 MB SCSI Drive plus 1 Meg Ramboard for 1500/2000	£419.00
GVF 52 MB SCSI Drive plus 1 Meg Ramboard for 1500/2000	£169.00
GOLDEN IMAGE HAND SCANNER with software plus Photon Paint	£199.95
INAKSHA CLONE MOUSE	£19.95

SOFTWARE AND DISKS

3D PROFESSIONAL	£299.00	PIXEL 3D	£49.00
3AMOS + EXTRAS DESK	£32.00	PRO VIDEO POST	£159.00
BROADCAST TITLER II	£169.00	PRO-WRITE V3.1	£85.00
VIDEO EASE	£35.00	EXCELLENCE V2	£89.00
DIGIVIEW GOLD V4	£95.00	TITLE PAGE	£109.00
LATTICE C V5.1	£149.00	PRO PAGE V2	£109.00
PAGESSETTER V2, DTP	£47.00	VIDEO EFFECTS 3D	£109.00
PAGESTREAM New Version 2.1	£129.00	X-CAD DESIGNER (1 Meg)	£99.00
PAGESTREAM FONTS	£49.00	X-CAD PROFESSIONAL	£129.00
TV TEXT PROFESSIONAL	£79.00	WORDWORTH	£85.00
3AMOS COMPILER	£73.00		
CROSS DESK, Multi-format file transfer	£199.00		
HITACHI 720 VIDEO CAMERA. Ideal for DigView	£399.00		
SPEN PAL, Excellent Word Processor (1 Meg)	£169.00		
IMAGINE 3D Animation & Rendering software	£119.00		
ART DEPARTMENT PROFESSIONAL	£119.00		
ALL IN ONE - Art package, Word Pro + Music package	£55.00		
TV SHOW, Video wipes, titling package	£23.00		
PHOTON PAINT II, HAM Art + Animation	£23.00		
3AMOS COMPILER	£73.00		
THE WORKS PLATINUM, Integrated package	£62.00		
AMIGA VISION, Authoring software	£33.00		
TDOS 2 DOS Multi-format file transfer	£55.00		
WALT DISNEY ANIMATION STUDIO (1 Meg)	£69.00		
SPECTRA COLOUR	£34.00		
EX UTILITIES	£34.00		

PRINTERS

STAR LC-10 MONO PRINTER inc. Lead	£159.00
STAR LC-200 COLOUR PRINTER inc. Lead	£299.00
STAR LC 24/200 MONO PRINTER inc. Lead	£249.00
STAR LC 24/280 COLOUR PRINTER inc. Lead	£279.00
CITIZEN SWIFT 24 MONO inc. Lead	£279.00
CITIZEN SWIFT 24 COLOUR inc. Lead	£275.00
CITIZEN 124D 24 Pin Mono inc. Lead	£195.00
CITIZEN 120D Plus 9 Pin Mono inc. Lead	£139.00
CITIZEN SWIFT 9 COLOUR inc. Lead	£269.00
CANON BJ10E bubble jet inc. Lead	£269.00

VISA

ALL PRICES INCLUDE VAT & FIRST CLASS POST



THE DISK

Can you protect your garden from bugs
in Morgan Henry's shoot-'em-up?



Garden guardian

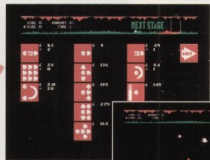
Bugblaster is a game in which you are given control of a small, mobile insect-killer and charged with the task of keeping your garden free of infestation. The bugs are out to ruin your prize roses and only by furious defence will you avert the shame of having your neighbours peer over the back fence with a smugly superior expression on their faces.

The game is quite difficult to master, as your remote bugblaster travels a lot slower than most of the baddies. In addition, its initial firepower is feeble enough to make killing beetles a particular pain in the nether regions. Those T-80s of the insect world can take four or five shots from your peashooter without harm, so before venturing out of doors, it's best to tool up on the armaments screen.

Killing kit

To start with, you have only £200 to spend on armaments, and some of the equipment on offer is too expensive. Your basic peashooter, however, will fire only ten shots before it pauses to reload, and you'll quickly appreciate how limiting this is.

The armaments on offer are, from top to bottom and left to right, faster shots, more peas, long range peas, basic peashooter, three-way



Get your mushy pea shooters here!

Kill those bugs before all the slime leaks out

peashooter, concentrated three-way peashooter, five-way peashooter, mushy peashooter, speed up, better steering, and energy. The exit button takes you to the game.

If you take my advice, you'll invest in

a three-way peashooter at first. It should be just inside your price bracket and should leave enough change to take on an extra ten peas or faster shots. With this armament, the first level - with its single bug - is a doddle. As you progress, however, you'll have to earn enough bug money to buy ever more expensive weaponry until you are to insects what Arnold Schwarzenegger is to scriptwriters.

The bugs

So what of your fearsome foes? The withering worm, the battle-hardened beetle, and the lascivious ladybird? The bugs are the easiest to deal with, but they are tricky to catch if you have no speed or steering power-ups, and can

become tougher if they are allowed to eat one of the mushrooms left behind by the ladybirds.

Ladybirds die with a single shot, but travel across the screen so fast that you're unlikely to hit them in time unless you're lucky enough to be firing in their direction as they appear. When the spores they leave behind begin to grow into mushrooms, be on the lookout for worms: feast on them. A bug fresh from the fungoid flesh-pots will belch rudely and become a lot harder to kill.

Slime!

The beaker at the top right of the screen contains slime which slowly leaks out into the garden, and acts as a time limit. When it has all leaked out, the bugs will turn and head straight for you like cockroaches at a tin of tuna, so have an eye on your speed of eradication.

At the very top of the screen there is a thin line representing your energy. Every time a bug hits you, this is diminished until a gory giggle heralds the end of your insectoidal career. You can stock up on energy at the armaments screen, but this is expensive, and uses precious bug money you'd probably rather spend on military hardware.

Given a sound defence and arms acquisition policy (shoot very fast and with the best kit you can afford), Bugblaster provides a challenging and addictive game. But rush in with little thought for hardware and you won't last more than a level or two. Have fun!

Maniac beetles

No, not the loonies who insist on driving a car designed in the thirties with an exhaust loud enough to wake the dead at thirty paces. Bugblaster's beetles are of a less annoying type, as they travel much slower than ladybirds and mostly in a straight line.

When a beetle comes onscreen, run off to a reasonable distance, then turn and face it, shooting as fast as you can straight at its chops. Six or seven shots should bag the blighter. If you're too slow, and the beetle reaches you, he'll spin round and round, hitting you once on each pass until you put him out of your misery. At times like this, a three- or five-way peashooter is invaluable, as you can hit the beetle several times in one orbit.

STEVE, January Year 1
Value Owned: £445.00 (x2)
Inst Money: £8888
Month Income: £27200
Units Owned: 52
Army Budget: £16800
Money Left: £36700

Ownership Map
Map 1: 1st Year
Map 2: 2nd Year
Map 3: 3rd Year
Map 4: 4th Year
Map 5: 5th Year
Map 6: 6th Year
Map 7: 7th Year
Map 8: 8th Year
Map 9: 9th Year
Map 10: 10th Year

Corp
Pir 1

...but who can I
attack from my
base in
Strathclyde?



Dictator

Author: Steven Pugh

The game Maggie tried to win but couldn't - can you succeed in becoming Dictator of all Britain?

Dictator is a game type should be familiar to many computer users. The idea is to build your strength from lowly beginnings, wage war on your neighbours, humble them into the dust, and then tramp all over them with large air-tread boots. The British, in the past no mean players at the real McCoy, don't call these games empire-builders for nothing.

You kick off as the nominal lord of about half of Britain. Some of your counties are strong in industrial output, some are better for agriculture, but all of them must be defended. To do this, you have to raise an army.

Armies, of course, take a few bob to raise and feed for a year (as the Chancellor recently discovered), and you have only enough cash initially to create a few units. Most counties already have a couple of army units stationed in them, but you'll need more.

Strategy

Dictator is all about strategy; and that means finely balancing all of the factors which affect the outcome. These are the value and income generated from a county, your popularity there, the relative industrial and agricultural strengths of each county, the tax rates you set, and military power.

On the first turn, there's no point in attacking anywhere as the computer will use this turn to build up military force in the counties from which attacks are to be launched. It's up to you to decide which counties are most important to you, then build up units in them to defend them against attack.

Remember that income is generated as a tax, so there is little point in upping the tax rates in poorer counties. Use the handy maps on the main game screen to find out where your strengths lie before making rash decisions.

There are county-by-county maps of

monetary value, income generated, popularity, and military units, so there's enough information on hand to make general decisions before clicking on a particular county and getting down to the nitty gritty.

Once you do, you'll find each county can be developed in several ways. At the top of the screen there is an information line giving the county's name and its owner, and below that is Dictator's equivalent of The Big Red Button. Click on the asterisk beside the WAR button and click on a neighbouring county to instigate hostilities.

Tax rate

Before you do this, of course, you'll have thoroughly analysed the data on offer in the lower two-thirds of the screen. No? And you attacked anyway? Ah well, I don't suppose anyone will miss Essex.

You can set the tax rate for industry and agriculture separately, but note how the income figures change. If you decide you want a certain amount of income from a county, and it has a low level of agriculture, don't inflict high taxes where there's little chance of a high return - you'll only annoy the natives. Instead, it would be better to increase the state burden on industry. They deserve it anyway for making such a mess of our trade deficit.

Judgement

All values are altered by clicking on the \pm boxes beside each of the county's attributes. Tax rates start at ten per cent and military units, where there are any, will usually number only two. You'll need at least four or five units to ensure the defence of a key county, but as each unit costs £5,000 to raise, this can be an expensive exercise.

Dictator calls for a lot of good judgement on the player's part, and the computer is a very difficult opponent to beat. Whether played against a friend or the computer, Dictator is excellent entertainment.

Picturesque

Author: Paul Burkey

NOTE: This program really only works on 1Mb machines. You can load it on an unexpanded Amiga by interrupting the startup sequence (hold down Ctrl and repeatedly tap the D key) and typing:

```
<ctrl>Littles Picturesque Picturesque
<ctrl>
```

but there will only be about 9% of memory available, and you won't be able to cut brushes, load pictures, and so on.

We apologise to 512K Amiga owners for the inconvenience, but it is a sign of the times. The A500 is now seldom sold with less than 1Mb on board, and a reader survey last year indicated that almost 90 per cent of our readers even then had extra memory.

On to the program! As Picturesque is designed mainly as a paint program, I won't dwell on the features common to paint packages. The large and well designed control gadgets speak for themselves. Where Picturesque is a real boon is in the creation of sprites for AMOS games.

To enter sprite creation mode, select Paint Sprites from the Project menu, and a box will appear in the top left corner of the screen. This is your sprite box, and can be expanded by clicking on the bottom right-hand corner of the box and dragging out to any size.

Sprightly performer

The right-hand side of the control panel now holds information on the current sprite, including its size in pixels and its sprite number. You can skip back and forward through your sprite bank by clicking on the arrows.

When the up arrow is clicked, your first sprite is saved as and is replaced by a blank sprite box labelled 'spare'. You can now swap sprites, delete them, copy them, and generally muck them about. When the sprite is complete, click on the PUT button to add the sprite to your bank, then carry on with the next.

Shareware
Picturesque is a shareware program, so if you like it and intend to use it, please send a £5 donation to:
Paul Burkey
32 Cotton Close
Little Nelson
South Wirral

In return, Paul will register you as an official user and you will then be entitled to any upgrades he codes.

Disk functions

One feature of the program you're bound to find useful is its disk management menu. From here you can create a new drawer on a disk, delete unwanted files, and check a disk to find out how much space it has left.

When drawing pictures and designing icons, it's more than likely that you'll go through a number of revisions or variations before settling for a final image.

Brush bonanza

Brush operations are the second area where Picturesque shows its quality. All operations are fast and smooth, and would show up many commercial paint programs. Try the stretch function if you don't believe me. It works just as in Paint and is just as slick.

All in all, Picturesque's only major limitation is that it does not support interlace. This is because AMOS itself doesn't allow interlace, though it soon should.



The sprites options are quite comprehensive

Flexible zoom

When you click on zoom, you are given a three-way split screen with the main magnified image in the middle and two smaller pictures on the right-hand side. The top one is a half-zoom representation of your picture, and the bottom one is a zoomed-out image.

Using these you can see with ease any changes and how they affect the look of the whole picture. The buttons on the zoom control panel will scroll the magnified area in four directions, increase or decrease the magnification, or set sprite hot spots. As yet, the magnify option supports only freehand dotted drawing, but shareware registered users can hope to see this enhanced before long.

You might find the zoom function a little slow when scrolling the area around, but the speed of operation is reasonable considering the program was written in AMOS, and just as good as many a commercial package I can think of.

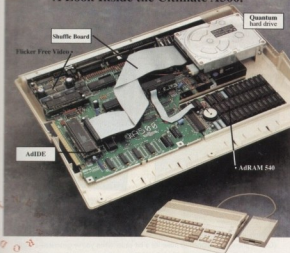




POWER COMPUTING

Prima!

A Look Inside the Ultimate A500.



Prima...the high performance, low cost hard drive for Amiga 500 computers. Prima blends a large capacity, low power Quantum hard drive with the **AdIDE** host adapter for an unbeatable combination.

Prima replaces the internal floppy drive but includes **Shuffle Board** to make your external floppy drive DFD. **Prima** features auto-booting from FastFileSystem partitions, high speed caching, auto-configuring, and A-MaxII support. Formatted capacities of 52 and 105 megabytes are currently available.

Prima comes complete with instructions, software, and all the hardware necessary for a simple, clean, no-solder installation. It does require an A500 with switching power supply, 1 megabyte of RAM, and an external floppy drive for setup and installation.

52MB £299 105MB £399 Requires 1MB of RAM & external floppy drive.

A500 INTERNAL HARD DRIVE

- 20MB formatted
- 2" Hard Drive
- High quality ICD interface
- Simple plug-in fitting
- 40MB, 60MB, 80MB

£199
EPOA

ICD AdRAM 2080

Expand A2000/1500 up to 9MB of RAM	£179
AdRAM with 2MB	£219
AdRAM with 4MB	£329
AdRAM with 8MB	

ICD

ICD AdSpeed	£175
ICD Flicker Free Video	£250
ICD FFV + VGA Monitor	£499

ICD AdRAM 540

8MB (A500 only)	£89
2MB (A500 only)	£159
4MB (A500 only)	£229
ICD AdRAM 560, 2MB Upgrade	£199
ICD 1MB RAM BOARD A500+	£99

Official U.K. ICD distributor. Dealer enquiries welcome

OPTICAL HARD DISK

MADE BY IBM

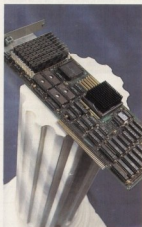


- Internal fitting for A2000 or A1500
- External cased model for fan & PSU (A500*, A2000 or A1500)
- Fully rewritable (At least 1,000,000 Erase/Write operations in any portion of the data area)
- Fits into 5.25" drive bay
- Fast 60ms seek rate
- Up to 1.5MB/s Data transfer rate

128MB Optical Hard Drive (Internal fitting)	£999
128MB Optical Hard Drive (External, cased)	£1199
SCSI Controller Card for A2000/A1500	£199
128MB 3 1/2" Optical Media Cartridge	£36 each

* A500 requires a suitable SCSI Host adaptor, not supplied.

Shrinks hours into minutes



features

- 50MHz clock speed
- Expandable up to 32MB of memory
- 18-25 MIPS
- 68882 Maths Co-processor
- Compatible with Workbench 1-3
- Up to ten times the performance of the A3000
- Installation software disk
- Easy to install
- Hardware select switch to enable or disable 68040 mode and run original processor

£1699 inc. VAT
Comes with 4MB

68040
accelerator board



Amiga 2000 only

All Trademarks Acknowledged

Power Computing Ltd Unit 8 Railton Road Woburn Road Industrial Estate Kempston Bedford MK42 7PN. Tel 0234 843388 Fax 0234 840234

All prices include VAT, delivery and are subject to change. Specifications are subject to change without notice. Next day delivery £450 (U.K. mainland only). Dealer enquiries welcome.



The Directory Manager

Author: Chris Petteit

TDM is a directory utility along the same lines as SID and Disk Master. It has fewer features than either of these programs, but as a consequence it is smaller and easier to use. This makes it a prime candidate for squeezing onto your Workbench system disk, and should present beginners with few problems.

Devious devices

On loading, the program shows a fairly standard directory manager screen, with two large windows and a selection of gadgets to click. The first thing you'll notice is how neat and presentable the program is, with its 3D look, sensible use of colour, and no-mess gadget strip.

The central gadget strip is where all the action takes place, but nothing can be done here until some sort of directory has been loaded. To do this, click on one of the windows to activate it then on the

device you'd like to examine from the list at the top of the strip. If you'd rather go straight to a particular directory, you can click in the strip above the window and type in the path as you would in Shell.

Once your list has appeared you select a file by clicking once on it. The file will be highlighted with a small green arrow to one side. Now that the file is selected, you can apply any of the operations available through the gadgets.

Copy, remove, move, and delete are the most common of all AmigaDOS commands used, but you can also add comments to a file, set its protection bits, make a new directory in the current directory, or print files. You must, of course, be using a disk with the correct print files in situ, and must be attempting to print an ASCII file.

All change

If you don't like the set of devices we've shown on the gadget strip (SYS:, DF0:, DF1:, DF2:, and RAM:), you can add your

own. Click on the thin blank strip above the top gadget and you flip to the other five selectable devices.

These will all be set to SYS: at the moment, but they're easily changed.

Press the D key and a list of device gadgets will appear. You can now set these to any device or logical device set up with an assign statement. Click on OK to go back to the main program and press W to write these device preferences to the config file found in the CoverDisk's directory.

For a fuller explanation of TDM's features, see Chris's documentation on the CoverDisk.



SwapCols

Author: Paul Hammett

SwapCols slashes the price for being the first program received at this office designed specifically to work on the AS500 Plus. As any Plus owner will tell you, Workbench 2.0 icons are annoyingly reversed. The shabby blue and dirge-grey equate roughly to the bright blue and yellow of Workbench 1.3, but white and black have been reversed.

This means Workbench 1.3 icons look decidedly odd when used on a WB2.0 machine. You could go to the lengths of changing the AS500 Plus palette back to the original 1.3 colour scheme or you could retain your new colours and change the old icons instead.

To use SwapCols, click once on the SwapCols icon then twice on the icon to be converted. If you have several to change, just hold down the Shift key while selecting each of them with a single click. Double click on the last icon to start the conversion process. Dead easy.

Think you can do better? Want to be famous?

We are always on the lookout for new, quality Amiga programs for the CoverDisk. If you think you have written something good enough for others to share and enjoy, please send it in and we'll have a look.

The Amiga Computing CoverDisk is used by thousands of Amiga owners every month in places all over the world from New Zealand to the USA, so if your submission finds its way onto the disk, you could be famous!

Please make sure you list ALL Workbench and other files necessary for the program to work. Feel free to design your own icons for programs which run from Workbench, but please don't make them too big.

If you ensure your program is as compatible as possible with a wide range of Amigas, we will also stand a better chance of publication. We are especially interested in programs

designed to work with the A3000, although if they work only with the new machine they'll have to be quite snail.

We are prepared to pay our current rates for original work which hasn't been distributed in any other way and which has not been put in the public domain.

If you wish your program to be released as shareware or freeware we will be happy to publish it, but would, of course, be happier if we'd been given it first!

Your submission MUST be accompanied by the submissions form, a copy of it, or a signed declaration to the same effect. Please supply your full name address and phone number.

Unfortunately we cannot undertake to return disks sent to us as the volume of submissions makes this an impractical exercise.

Name.....Age.....

Address.....

.....

.....

Daytime phone.....Evening phone.....

Submission name.....Submission size.....

Type of program: Game ☐ Utility ☐ Tune ☐ Other.....

You must sign this declaration

The material on this disk is mine. I don't steal it from someone else. It hasn't been published before and I haven't submitted it elsewhere because I want Amiga Computing to publish it. I understand that by submitting my work to Amiga Computing and signing this declaration, I am giving full copyright control to Europress Publications Ltd.

I understand that if my submission is bought by Amiga Computing I will be paid the current applicable rate. I know what copyright means and I will be responsible for any possible litigation arising from breach of it by Europress Publications Ltd as a result of using my submission.

Post your submissions WITH A COPY OF THIS FORM to: Steve Kennedy, Amiga Computing, CoverDisk Submissions, Europa House, Aclington Park, MACCLESFIELD SK10 4NP.

Signed.....

Date.....

GREP

Author: Huzafah Zainon

Primarily for programmers, the Global Regular Expression Search and Print utility (GREP - phew!), is designed to make life a bit easier when you've generated a huge source code file and you need to find a particular expression or variable name.

Using it, the programmer can select a set of text files, specify a search expression complete with GREP's own flexible wild cards, and the program will produce a file containing all instances of the expression it managed to find, complete with the lines in which they occurred. This not only helps in tracking down rogue sections of code, it also enables the coder to see an expression in the context it appears in the listing.



What a year!

1991 has seen the Amiga Computing CoverDisk go from strength to strength. Some of the best new Amiga PD and shareware programs of 1991, many written exclusively for Amiga Computing by our readers, have received their first airing on the disk. Programs which have started include FastDisk 1.2, KDVBII, Amiga Taxis, MED 3.00, FastCat, Lamatron, X.F.I., Defenda, JMenu, ShortCut, Rollerpede, Hunter, Grammar, Amiga title, and you'd like it launched in the best possible way, you know where to find us.

In 1992 we will continue in the same vein, and hope to bring you more of the best available. Watch this space, all you connoisseurs of excellence, and keep an eye on what is quite simply the best CoverDisk in the business.

Our promise

- We will ensure our disk works on as many types of Amiga as possible.
- We won't fill up the disk with five-minute-wonder playable demos of commercial games.
- We will strive to meet the demands of our users for particular types of program. It is your disk, after all.
- We won't give you a virus. All our disks are checked using three of the best killers available, and certain files (including disk-validator) are checked with a hex editor just in case.
- We hope you stay with us and carry on enjoying your Amiga as much as we enjoy ours.

Wordworth

a writer's dream

v1.1

The graphical nature of Wordworth® makes producing documents faster and easier. The WYSIWYG display shows exactly how your printed document will look, different fonts, styles and sizes, headers and footers, graphics and so on.

Commands are grouped under a series of pull-down menus, accessible either by the mouse or keyboard. Frequently used commands have on-screen icons, including Help, should you need it.

Experience the look and feel of the new and exciting WB2 (even if you use WB1.3). Each document is a separate multi-tasking window, which means you could for example, print one document while editing another.

Digita's® innovative Human Interface Protocol® is incorporated setting a new standard in speed, style and elegance. "It HIP® system is intuitive and a pleasure to use." — thank you Amiga Shopper, it's nice to be appreciated.

Graphics have always been the Amiga's strong point. Now it's better than ever. Pictures from Deluxe Paint can be placed in a document, and then sized, scaled and dragged (text automatically reformats around the image).

Wordworth's enhanced fonts will give you the very best printed quality. You can also print special symbols, such as boxes, arrows and so on. Better still, you can mix graphics, Wordworth's enhanced fonts, Amiga fonts, Colorfonts and your printer's own internal fonts, all on the same page. There's even a driver for Postscript printers.

You needn't worry about your existing information — Wordworth will let you open documents from most word processors, including Kindwords, Protext and Wordperfect (you can also mailmerge with Superbase).

When Amiga Format said "a new word processor that will give the rest of the world a run for its money" they weren't joking.



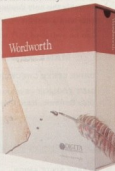
Wordworth is written in the UK by Digita. Which means you'll be using an English Collins spelling checker and thesaurus, and you'll know where to come for professional support.

The only way to really appreciate Wordworth is to use it. Phone 0395 270273 for more information or, write to Digita, FREEPOST, Exmouth EX8 2YZ.

Wordworth costs £129.99, which includes VAT, postage and packing; and when purchased from Digita, comes with a 7 day money-back guarantee.

If you already own a word processor, for a limited period only, you can trade-up for just £89.99 by returning your original disks to Digita with your order.

Summing up, Amiga Shopper said: "Pounds-per-feature no other Amiga word processor comes close. Wordworth is what every owner of Kindwords would wish they had." Dreams become reality with Wordworth.



Machine support
Written specifically for the Amiga
Fully supports WB V1.3 and V2.00
All medium or high resolution modes
(mono and colour)
Requires 1MB of memory

DIGITA®
INTERNATIONAL
software thats right®

Wordworth is available from John Morton, Virgin, W 11 Smith and all good computer retailers or to the trade through Columbia, Gen, HB Marketing, IBC, Laser, Lemmott, Precision and SOL.

Digita International Ltd Black Horse House Exmouth EX8 1JL ENGLAND Tel 0395 270273 Fax 0395 268893

— A member of the Digita group —

Digita, the Digita logo, Wordworth and the Wordworth logo are registered trademarks, and HIP, Human Interface Protocol and software that's right are trademarks of Digita Holdings Ltd.
All other trademarks and their owners are acknowledged. Sold subject to standard conditions of sale E & C.



A WHOLE NEW WORLD OF POWER

NOW WITH THE **NEW**
SYNCRO EXPRESS
MK III

FOR ONLY

£34.99

HIGH SPEED DISK DUPLICATION SYSTEM

THE ANSWER TO YOUR DISK DUPLICATION PROBLEMS

- ☐ SYNCRO EXPRESS IS A HIGH SPEED DISK DUPLICATION SYSTEM THAT WILL PRODUCE COPIES OF YOUR DISK IN AROUND 40 SECONDS!!
- ☐ Syncro Express requires a second drive & works by controlling it as a slave device & ignoring the computer disk drive controller chip whereby high speeds & great data accuracy are achieved.
- ☐ Menu driven selection of Start Track/End Track up to 90 tracks. ☐ Ideal for clubs, user groups or your own disks.
- ☐ Very simple to use, requires no user knowledge. ☐ The most powerful Disk Copier ever conceived.
- ☐ Also duplicates other formats such as IBM, ST etc. ☐ No more waiting around for your disks to copy.
- ☐ Probably the only duplication system you will ever need!
- ☐ Now with a SUPER POWERFUL "SYNCRO" MODE that actually synchronise your Disk Drives for even greater accuracy!!
- ☐ Can be switched OUT when not in use - totally transparent. ☐ Make up to 2 copies simultaneously*.

PLUS MANY NEW FEATURES INCLUDING...

- ☐ DRIVE SPEED CHECKER - now you can check the speed of your drives - DF0-DF3. Easy and very accurate.
- ☐ DISK TOOLKIT - Syncro III now includes a range of Disk Tools - Fast Format, File Copy, Ram Disk, Disk Rename, Hard Drive File Copy etc., etc. Easy to use.

If you don't have a second drive we can supply SYNCRO EXPRESS together with a DIGITAL DISPLAY Drive for ONLY...

£99.99



PLEASE STATE AMIGA
500*/1000*/1500/2000/3000 WHEN
ORDERING

WARNING
1980
COPYRIGHT
ACT

Datel Electronics Ltd., neither condones nor authorises the use of its products for the reproduction of copyright material. The backup facilities of this product are designed to reproduce only software such as Public Domain material, the users own programs or software where permission to make backups has been clearly given. It is illegal to make copies, even for your own use, of copyright material, without the given permission of the copyright owner, or the licensee thereof.



HOW TO GET YOUR ORDER FAST!

TELEPHONE [24Hrs] **0782 744707** CREDIT CARD ORDERS
ORDERS NORMALLY DISPATCHED WITHIN 48 Hrs. ALL CHEQUES/POSTAL ORDERS MADE PAYABLE TO...



DATEL ELECTRONICS



GOVAN ROAD, FENTON INDUSTRIAL ESTATE, FENTON, STOKE-ON-TRENT,
ST4 2RS, ENGLAND. FAX 0782 744292 TECHNICAL/CUSTOMER SERVICE 0782 744324

DATEL LONDON SHOP



222, TOTTENHAM COURT RD,
LONDON, W1. TEL: 071 5805460

With its fast graphics and low price, the Amiga makes a wonderfully inexpensive Computer Aided Design, or Draughting (CAD) platform. For quite a while, CAD was high on Commodore's priority list in its educational strategy. That enthusiasm seems to have waned a little, but some superb systems were helped along by that policy.

Add an accelerator board and a de-interlaced display to your Amiga, and you have a system capable of competing with the very best at a fraction of the price. You don't believe me? The biggest exporter of CAD packages in the UK just happens to have its roots in the Amiga market. Some large companies have Amigas in their drawing offices, because for rapid redraws they cannot be beaten.

So here are four of the top Amiga

CAD packages. None of them are toys, yet they run on what most people think is a games computer. It just goes to show that most people are wrong...

The great contenders

Four CAD systems are reviewed here, ranging from under £100 to over £750. All of them are capable of producing good, accurate drawings on dot matrix printers or pen plotters.

Starting from the high end, DynaCADD offers complex 2D and 3D facilities presented from a graphical shell. DynaCADD is well established in the PC and Atari markets, but we will see how it fares against Amiga-developed programs.

Coming down a notch in price we have X-CAD 3000, a new release from

Of mice and menus

Mouse

All systems use the mouse in some form or another – DynaCADD and Plans use the convention used by AutoCAD, where the right mouse button finishes or cancels a command. The mouse position with these systems is given by full-screen crosshairs, which are very useful for aligning entities by eye.

In contrast, the X-CAD programs use a normal mouse pointer in the shape of a cross. This makes manual alignment difficult, especially on a hi-res screen, as the mouse pointer sprite is always displayed in low resolution.

Menus

There is no standardisation in menu handling, either. DynaCADD uses "icon pads" which change according to the command chosen. For example, to insert text one would activate the Insert icon in the main pad, then activate the Text icon in a subsidiary pad, and then choose one of the text entry modes in a third pad.

There are 60 of these icons arranged in a vertical strip one quarter the width of the screen. Consequently, each icon is very small, requiring extremely good eyesight to tell them apart or even to work out what they represent at all.

DynaCADD does have one great advantage over any of the other packages – a built-in scientific calculator. All of the other systems require you to have a calculator handy for those difficult sums. Calculator output is directed straight into the current command, so mistyped numbers are a

thing of the past. For packages coming from the same publisher, it's strange that X-CAD 2000 and X-CAD 3000 use different menu systems in their 2D editors. 3000 uses a large horizontal text menu, containing every possible command root. Selecting a menu item brings up a smaller menu of subsidiary options and so on, until the command is complete.

X-CAD 2000 has a series of menu "trees" which show all available options in clear type, and other options ghosted. This is an extremely flexible system, especially when combined with user defined vertical menus, which allow a small degree of customisation in the package. X-CAD 3000 can mimic 2000's system through user defined dynamic menu trees – producing these trees is quite complex, however.

Since the same program is used as the basis of the X-CAD 3D editor, the menu system is a straightforward vertical menu. My only criticism is that it can be rather slow to respond to commands – apart from that, its use is self-evident.

All X-CAD modules use a system called IDENTs (Interactive Digitise and Entity Selection) for entity selection. It combines absolute co-ordinates, relative co-ordinates, object snapping and object masking in one very powerful menu, accessible by all commands.

Plans has few of these refinements. It uses standard intuition menus with keyboard short cuts and function key modifiers. Numeric input is placed in a large requester which shows all the current settings at once, and allows any or all of them to be changed. The system seems very strange at first, but with practice becomes quick and flexible.

Other input methods

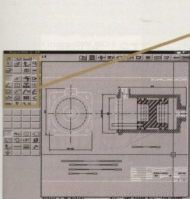
DynaCADD and the X-CADs (sounds like a late seventies punk group) can be driven almost entirely without a mouse by typing abbreviated commands at the keyboard. X-CAD echoes what you type to a small console window at the bottom of the screen, but oddly DynaCADD does not. Very experienced CAD users tend to use keyboard input for most tasks, so DynaCADD isn't doing itself any favours by hiding the commands you type.

X-CAD 3000 supports input by two other means. It directly supports the Cherry and Summagraphics digitising tablets, and comes with an auxiliary utility to design input "buttons" on these tablets. If you can afford a tablet, they are the best input method – by far. Existing drawings can be traced, frequently used commands can be programmed into one puck movement, and all (apart from the magnetic field generated by these pads) is sweetness and light.

If you want to be really non-interactive with X-CAD 3000, you can input commands from a text file. This would be a desperately tedious way to input a whole drawing, but is useful for changing the working colours, or setting up a standard drawing border.

Quick on the DRAW

Computer-Aided Design is an area where the Amiga outshines other machines. In the first of a two-part feature, Stewart C Russell begins his round-up of some powerful software



DynaCADD in 2D mode. Note the large array of tiny icons, and the greened text to speed up screen update



Applied Vector Technology Ltd. X-CAD has been around in various guises for many years, but this is the only version to combine 2D editing with 3D surfacing features.

Originally designed to fit the educational/hobbyist market, X-CAD 2000 is probably the cheapest 3D CAD system available anywhere. Although it doesn't have some of its stablemate's more advanced features, it still offers very solid features at a very attractive price.

Both X-CAD packages use an external 3D editor, with the majority of the work being carried out in 2D and later joined together as 3D entities. This system keeps the size and speed of the 2D editor reasonable, but causes delays when adding that extra dimension.

You may still see the older X-CAD products (X-CAD Designer, Professional and 2D) floating around. They're worthy, but have been fully replaced by the new packages. X-CAD 2000 is basically Designer plus some 3D and a little extra. X-CAD 3000 is essentially X-CAD Professional plus all of the X-CAD 3D system.

Raw speed

Lowest in cost, but certainly not in efficiency, comes Plans. This particular system started off as shareware more than three years ago, but has been revised and expanded into a very competent commercial 2D draughting system. Never before reviewed in a news-stand magazine, Plans has some real surprises in store.

The main reason for the existence of CAD is time saving. Editing traditionally produced drawings is a slow and difficult process, but electronic paper doesn't leave any eraser marks.

Ideally, we would like screen redraw times to be as low as possible, so that the machine does not intrude upon the creative design process.

It would also be nice if the package could do its design calculations as quickly as possible, but this depends more on the computer power, rather than on the cleverness of the CAD author. Basically, you can't change that unless you buy a quicker machine.

Since Plans does not support 3D, a 2D speed test was used. A fairly simple drawing was imported into each package (using DXF with DynaCADD and the X-CAD, HPGL with Plans) and the redraw time noted.

Both the X-CADs turned in the rather impressive redraw time of 3.5 seconds. Next up was Plans at a more pedestrian 6 seconds, and last was DynaCADD at 6.3. All these speeds were taken from a rather wheezy A500 with a plain vanilla processor.

Three-dimensional work is slow, especially where surface calculations are involved. With large models on a 68000-based system, the redraw time can be minutes. My advice would be to stick to simple 3D line entities if you have anything less than an A3000. X-CAD 2000 specifically misses out on 3D surfaces to keep its complexity (and price) down while keeping its speed up.

The conclusion? More money spent doesn't necessarily guarantee more speed, but a fast program will return

much better value in the long term – time is money for everyone.

Text and dimensioning

This is the only entity creation part of the draughting process that will be dealt with in any great detail, for all the systems reviewed have an adequate toolbox of lines, arcs, curves, hatches and whatever else is required to make up a drawing.

Text, however, is much more spe-

cialised. It used to be that CAD people were happy with the default font built in to the plotter, but now more refined fonts such as Times-Roman and TruType are the norm.

DynaCADD has stunning text support. Not merely does it have some beautiful fonts licensed from Compugraphic, but it has a minimal text editor built in. Add to that a good number of text sizing and placing modes, and you have something very, very special.

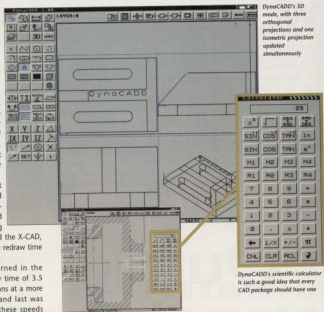
Ditek have even addressed the fact that complex fonts take a while to draw, so are crossed out (or greeked) at small size on screen. In the unlikely occurrence that you get bored with the supplied fonts, a rather neat external vector font editor is supplied.

Dimensions are particularly cute in DynaCADD. All the options are presented in a large graphical requester, which shows small examples of each dimension type. You pick the one you want, add any tolerances, and stick it on to the page. Neat.

X-CAD 3000 supports multiple fonts, although the range is not nearly as nice as DynaCADD's. Fonts can be edited within the program by drawing out a matrix of characters on a page and saving that out as a complete font.

Text handling in X-CAD 3000 is more than adequate for most applications. A particularly neat feature allows numeric labels to be incremented as they are inserted onto a part – perfect for pinout labelling.

X-CAD 3000's dimensioning is every bit as capable as DynaCADD's, but all



DynaCADD's 3D mode, with three orthogonal projections and one isometric projection updated simultaneously

DynaCADD's scientific calculator is such a good idea that every CAD package should have one

Try the tutorials first

The first thing that every CAD user should do is read the introductory notes, and work through the tutorial. Tutorials tend to be very simple, but they do give a valuable grounding in the way a package works.

DynaCADD has an extremely thick (470 pages) AS manual. The first 50 pages are given over to two tutorials, which are well laid out and explained very clearly. Unfortunately though, both contain the same glaring error.

The tutorials claim that entity copying is switched on from an entry in the "Tools" drop down menu, but it is actually toggled from an icon. This error occurs throughout the manual, and is only mentioned in an easily-missed entry on a ReadMe file.

The rest of the DynaCADD manual is given over to command reference and appendices detailing external utilities and support files. Port-over problems are apparent – drivers are mentioned which don't exist, screen displays are based on Gem for the PC, and index entries point to missing features. To be fair, most of the manual is very clear and helpful, but it's the little points that annoy.

The saving grace of DynaCADD's documentation is its excellent context-sensitive online help. It suffices when the

manual is out of reach, although it could use better (key-board) controls rather than just using the mouse.

X-CAD 2000 and 3000 are very new – so new that the manuals weren't complete at time of writing. The new manuals are a mix of the existing Designer, Professional, and 3D documentation. From past form they should be reasonable reference material with short tutorials, but nothing truly bad or deeply marvellous.

X-CAD 3000's online help is called up by prefixing a command with an exclamation mark. It is powerful enough to live with, but not as complete or nicely presented as DynaCADD's help facility.

Plans has the smallest manual of the lot. At under 60 pages in small format it's almost a booklet, but it still manages to explain every function in adequate detail. The tutorial is just over three pages long, giving the very basics of entity input. You may have to experiment a little before you get to know the program, yet the manual is still essential reading.

In summary, DynaCADD's documentation is good but flawed. Plans' is OK if rather short, and the manuals for both X-CAD systems are generally adequate, but not yet finalised.

stereo MASTER

When you are considering purchasing a sound sampler there are plenty to choose from. Why compromise? your choice should be the new full featured STEREO MASTER for the Amiga, with software that is designed from our top selling Amiga sampler AMAS and a package that gives you more extras than a £1 series 86W. By purchasing the state of the art product which combines a quality sampler with the expertise of over 10 years of software programming, you are purchasing a top quality product with the knowledge that it is not only compatible with existing Microdeal products but will also be with future ones.

What Is Stereo Master

Stereo Master is a low cost, high quality sound sampler for the Amiga range of computers. The sampler cartridge included in this package plugs into the printer port at the rear of the computer and allows you to analyze the sound coming in from devices such as Personal Cassette Players, Compact Disc Players etc. or change the way they sound using the Real Time Special Effects or record them. Once in the computer STEREO MASTERS unique editor will enable you to edit the sound in practically any way you can imagine. Once you have the sound sample how you want it, you may incorporate it into your own Demo's or use STEREO MASTERS own built in sample sequencer to play back the sample in sequence with other samples.



MAIN SCREEN

The Sampling Software

Every feature you would expect to find in a professional editing suite including:

- * Real time record/play ghost markers
- * Cut or Delete selected sample area
- * Mix sample with full or half volume
- * Shrink in by 25%/50%/75% by drag or wipe
- * Fade in/out with selectable degree of fade
- * Filter sample with soft/medium/hard filter
- * Selectable trigger volumes
- * Record frequency from 3.0 to 55.9 khz
- * Full editing and control facility for left/right channels
- * Playback volumes
- * Decrease volume
- * Increase volume
- * Bounce sample
- * Paste sample
- * Trigger recording
- * Clear left/right samples
- * Loop sample

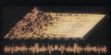


THE SPECIAL EFFECTS CONTROL PANEL

The Special Effects Software

For the first time ever you can emulate special sound effects in real time just like the sound labs can for film studios, normally the hardware to produce these effects would cost 100's of times more than this package. Features on the FX menu include:

- * Built in real time special effects including Echo, Reverb, Rptch up/down, Stereo bounce, Multi echo
- * Chorus, Phaser, Reverse and Pitch bend
- * Fully programmable special effects so that customised effects can be recalled



3D DISPLAY OF SAMPLE FREQUENCIES (FFT)

The Analytical Software

- * A whole host of pro-type analytical functions include:
- * 3D display of sample frequencies (3rd Fourier transform)
- * 3D display also includes 2D envelope display plus sample information
- * Built in Stereo spectrum analyzer
- * Stereo Oscilloscopes with trigger markers



STEREO SPECTRUM ANALYZERS



STEREO OSCILLOSCOPES



THE SEQUENCER CONTROL PANEL

The Sequencing Software

Our built in sample sequencer allows you to take up to 18 samples (memory permitting) and sequence them into your own 'tronic' mixes. Features on the sequencer include:

- * Real time entry of sequences from keypad
- * Step time entry of sequences
- * 2 stereo channels for sequencing
- * Storyboard style editing
- * Digital sequence position display
- * Fast forward/rewind controls
- * Program sample to keypad
- * Stand alone demo player displays IFF picture whilst playing sequence
- * Sequence copy function
- * Loop sample
- * Selectable sequence speed
- * Dump/re-edit function
- * Test function
- * 2 active playback
- * Insert/delete sample in step time



© 1991 MICRODEAL U.K.
ALL RIGHTS RESERVED

Other Innovative features

- * We know this product is years ahead of its time and these additional features justify our boast.
- * New style stereo cartridge
- * Produces stand alone executable sample files
- * Fully multi tasking
- * Saves in IFF/RAW/instrument1/3/5 Octave
- * Includes walkman type cable
- * PAL/NTSC full screen display
- * Can create workbench icons
- * Save customised settings

AMIGA STEREO MASTER ORDER FORM AMIGA

STEREO MASTER IS £39.95 Post & Packing £1 (All prices inc V.A.T.)

BY PHONE
WITH
CREDIT CARD



(0726) 68020



BY POST

Address

Credit Card Type.....
Number

With cheque, Postal Order or Credit Cards.

Name.....

Postcode.....

Expiry Date.....



Please allow 28 days for delivery
SEND TO: Microdeal PO BOX 68 St Austell Cornwall England PL25 4YB



THE WORLDS MOST POWERFUL FREEZER-UTILITY CARTRIDGE

JUST LOOK AT THE UNMATCHED RANGE OF FEATURES

NEW SAVE THE ENTIRE PROGRAM IN MEMORY TO DISK

Special competing techniques enable up to 3 programs to fit on one disk. Now saves directly to disk as Single Disk - retains independently of the cartridge; even transfer to hard drive! Works with up to 3 Mega of Ram - even 1 Mega Chip (Main Pattern Games).

NEW SUPER POWERFUL TRAINER MODE

Now with DEEP trainer. Even better than before - allows you to generate more or even infinite lives, fuel, ammo. Perfect as a Trainer Mode to get you past that "impossible" level. Easy to use.

NEW IMPROVED SPIRITS EDITOR

The full Spirits Editor allows you to view/modify the whole sprite set including any "attached" sprites. PLUS A RANGE OF IMPROVED FEATURES.

NEW VIRUS DETECTION

Comprehensive virus detection and removal features to protect your software investment. Works with all presently known viruses.

NEW BURST NIBBLER

Now this super disk copier program is built into Action Replay Mk III. Just insert a superior, efficient disk copier program all the press of a key - no more waiting.

NEW SAVE PICTURES AND MUSIC TO DISK

Pictures and sound samples can be saved to disk. Files are saved directly in IFF format suitable for use with all the major graphics and music packages. Samples are displayed as screen waveforms.

NEW PAL OR NTSC MODES SELECTABLE

Useful for removing ugly borders when using NTSC software. (Works only with newer Amiga chips).

NEW SLOW MOTION MODE

Now you can slow down the action to your own pace. Easily adjustable from full speed to zero. Ideal to help you through the tricky parts!

NEW MANY MORE INSTANT CLIP COMMANDS

like Rename, Refresh, Copy, etc.

NEW RESTART THE PROGRAM

Simply press a key and the program will continue where you left off.

NEW FULL STATUS REPORTING

Press the press of a key now you can view the Machine Status, including Fast Ram, Chip Ram, Random, Status, etc.

NEW POWERFUL PICTURE EDITOR

Now you can manipulate and search for screens throughout memory. Over 500 commands to edit the pictures plus unique on screen status "viewer" shows all the information you could ever need to work on pictures.

Now other products come close to offering such dynamic screen handling of frozen pictures!

PLUS A MACHINE CODE FREEZER MONITOR WITH EVEN MORE POWER!!

OTHER MORE FEATURES INCLUDING 80 COLUMN DISPLAY AND 2 WAY SCROLLING:

Full MSB000 Assembly Disassembler • Full screen editor • Lead Save block • Write String to memory • Jump to specific address • Show Ram as text • Show frozen picture • Full

instant sample • Show and edit all CPU registers and flags • Calculator • Help command • Full search feature • Unique Custom Chip Editor allows you to see and modify all chip registers.

even write only registers • Notepad • Clock handling - show actual track, disk sync, pattern etc. • Dynamic Breakpoint handling

• Show memory as HEX, ASCII, Assembler, Decimal • Copper Assembler/Disassembler - now with suffix names

• SUBSEQUER AT ALL TIMES YOU ARE INTERROGATING THE PROGRAM IN IT'S "FROZEN" STATE

WITH ALL MEMORY AND REGISTERS INTACT -

UNAVAILABLE FOR THE DE-BUGGER OR JUST THE INQUIRITIVE!

NEW JOYSTICK HANDLER

allows the user to select Joystick instead of Keypresses - very useful for many keyboard programs.

NEW MUSIC SOUND TRACKER

With Sound Tracker you can find the complete music in programs, demos, etc. and save them to disk. Scores in format suitable for most track player programs. Works with loads of programs!

NEW AUTOSAVE MANAGER

From the Action Replay III preference screen you can now set up autosave from 0 to 100%. Just imagine

NEW IMPROVED RAM EXPANSION SUPPORT

Now many more external Ram Expansions will work with all Action Replay III commands.

NEW DISK CORDER

With the new "Diskcorder" option you can now "tag" your disks with a unique code that will prevent the disk from being loaded by anyone else. "Tagged" disks will only reload when you enter this code. Very useful for security.

NEW SET MAP

allows you to Load/Save/Edit a Keymap.

NEW PREFERENCES

Action Replay III now has screen colour preferences with menu setup. Customise your screens to suit your taste. Very simple to use.

NEW DISK MONITOR

Irreversible disk monitor - displays disk information in easy to understand format. Full modify/save options.

NEW IMPROVED POINTER SUPPORT

including compressed/disk character command.

NEW DOS COMMANDS

Now you have a collection of DOS commands available at all times - DIR, FORMAT, COPY, DEVICE, etc.

NEW FILE REQUESTOR

if you enter a command without a filename, then a file

NEW REGISTER IN COMMAND

requester is displayed.

NEW DISK COPY

Disk Copy at the press of a button - faster than Dos Copy. We need to lead Workbench - available at all times.

NEW PLUS IMPROVED DEBUGGER COMMANDS

including Hex Watch Points and Trace.

NEW BOOT SELECTOR

Either DFO or DFI can be selected as the boot drive when working with Amiga Dos disks. Very useful to be able to boot from your external drive.



HOW TO GET YOUR ORDER FAST!

TELEPHONE [24Hrs] **0782 744707** CREDIT CARD ORDERS

ORDERS NORMALLY DISPATCHED WITHIN 48 Hrs. ALL CHECKS/POSTAL ORDERS MADE PAYABLE TO...



DATEL ELECTRONICS LTD.



GOVAN ROAD, FENTON INDUSTRIAL ESTATE, FENTON, STOKE-ON-TRENT, ST4 2RS, ENGLAND.

FAX 0782 744292 TECHNICAL/CUSTOMER SERVICE 0782 744324

WARNING: 1986 COPYRIGHT ACT. WARNING
Datel Electronics Ltd. neither endorses nor warrants the use of its products for the reproduction of copyright material.
The backup facilities of the product are designed to reproduce one software such as Public Domain material.
The users use programs or software where permission to make backup has been clearly given.
It is illegal to make copies, even for your own use, of copyright material, without the express permission of the copyright owner, or the licensee thereof.

Media Direct 0782 208228

AMIGA 500 PACKS



Now includes free 0.5 Mb up-grade

Excellent value at only £399.95

All our Amiga's are UK specification and come complete with the following —

Amiga Pack 1 (Classic Pack)
512K random access memory
Built-in disk drive
4296 colour graphics
4 channel stereo sound
Kickstart 1.3
Workbench 1.3
Extra 1.3 and tutorial disk
Amiga mouse
TV modulator
Power supply unit
A500 keyboard

Bart Simpson
Captain Planet
Deluxe Paint III
and game of the year
Lemmings

We also give you —
Mouse mat and pocket
dust cover, 10 blank disks
and box, Quickshot
Python, 1 joystick.

Plus
10 more Great Games
Football Manager
Hotshot
Las Vegas
Flight Path 737
Fireblaster
Karling Grand Prix
Thai Boxing
Secrets Out
Mouse Trap
Plutos

Amiga Pack 2
(Classic Pack Plus)
As Pack 1 but also
includes the Cumana
CAX354 external disk
drive

£454.95

Amiga Pack 3
(Classic Printer Pack)
As Pack 1 but includes the
Star LC200 full colour
printer

£604.95

Amiga Pack 4
(The Ultimate Pack)
As Pack 1 but includes
Star LC200 colour printer
plus Philips CMB833/11
stereo colour monitor

£834.95

Amiga Pack 5
(Educational Pack)
As Pack 1 but includes a
selection of educational
software —

Spell Book (ages 4-9)
Things to do with numbers
(ages 5-12)
Let's spell at the shops
(ages 4-10)
Let's spell at home
(ages 4-10)
Let's spell out loud about
(ages 4-10)
Puzzle Book 1 (5 to adult)
Puzzle Book 2 (5 to adult)

£499.95

Amiga Pack 6 (Gamers Pack)
As Pack 1 but also
includes some of the
hottest games —
F29 Retaliator,
F19 Stealth Fighter,
Lotus Esprit Turbo
Challenge,
Saw (Silkworm II),
Flight of the Intruder

£479.95

PRINTERS

All our printers are UK
specification and are
covered by a 12 months
warranty. All the prices
include a printer lead and
a tailored dust cover



**Star LC20 A popular low cost
Mono Printer**

Multiple font options from
front panel
Excellent paper handling
facilities
Simultaneous, continuous
and single sheet stationery
240x240 DPI graphics

£149.95

Star LC24-10

24 Pin Version of LC10
Excellent letter quality print
360x360 DPI graphics
8 resident fonts
Additional font cartridges
available

£149.95

Star LC200 Colour Printer
An excellent value for money
Colour Printer

240 DPI 9 pin colour
Front panel pitch selection
Push/pull tractor feeds
Reverse paper feeds
16K buffer
8 resident fonts
Supplied with colour and
mono ribbons
Front panel programmable
Paper park with auto
single sheet loading

£214.95

Star LC24-200 Mono Printer

80 column dot matrix
printer
7K buffer expandable to
39K
10 resident fonts
Paper park with auto
single sheet loading
Supplied with mono ribbon
Faster than LC24-10
Extra font cartridges
available
Front panel pitch selection
Programmable from front
panel

£204.95

Star LC24-300 Colour Printer

360 DPI 24 pin colour
printer
30K buffer expandable to
62K
10 resident fonts
Front panel pitch selection
Reverse paper feed
Paper park with auto
single sheet loading

£249.95

Supplied with colour and
mono ribbons
Front panel programmable
Extra font cartridges
available

Citizen 1200+

A very popular low cost
mono printer electronics
RS232C/BM 64 serial.
Please specify interface
when ordering (two year
warranty)

**Citizen 1240 24 pin Mono
Printer**

8K buffer expandable
Push and pull tractor feeds
3 fonts with excellent
letter quality
(two year warranty)

**Citizen Swift 9 pin Colour
Printer**

8 K buffer
240x240 DPI colour
graphics
Push and pull tractor feeds
Excellent print quality
(two year warranty)

**Citizen Swift 24 pin Colour
Printer**

European Printer of the
Year 1990
24 pin version of the 9 pin
colour printer
360x360 DPI colour
graphics
Push and pull tractor feed

£149.95

£214.95

£204.95

PERIPHERALS

We stock a large
range of peripherals, all of
the highest quality. If you
can't see the one you
require please give us a
call to see if we stock it.



Mouse and Trackballs

Naksha Upgrade Mouse
Amiga/Atari switchable
Simply the best
280 DPI resolution
Ergonomic design
Smooth precise operation
2 years guarantee
Free mouse mat
Free mouse pocket
Now includes
Operation Stealth from US
Gold Only

£249.95

GOVERNMENT, TRADE AND EDUCATIONAL ORDERS WELCOME

Mega Deals. Multi-Choice

Quick Mouse
Low cost Amiga/Atari
replacement mouse
100 DPI resolution
C294 Switch stick operation



C204
Amiga Trackball by Aita
Compatible between Atari
and Amiga with the third
button. Must be the best
value trackball available.

C224
Amiga Scanner
The Amiga A500
compatible, grey shade
external scanner
includes:
Amiga hard scanner
interface.
C314
Amiga supply unit
Amiga professional
series "The Ultimate
Printer Software".

ALS

Amiga Expansion Boards
Amiga A500 0.5 Mb RAM
expansion board
Increases memory to 1 Mt
100% technology
replacement for A501
format.
Amiga A500
100% technology
replacement for A501
format.

Amiga 1.5 Mb RAM
expansion board
Increases memory to 1 Mt
100% technology
replacement for A501
format.

Amiga 1.5 Mb RAM
expansion board
Increases memory to 1 Mt
100% technology
replacement for A501
format.

Amiga 500 RX
memory expansion
2, 4, or 8 Mb fast
Amiga 500
C224

£14.95

£29.95

£89.95

£26.95

£29.95

£79.95

Easy plugs into A500
expansion port
Amiga bus through port
Easy expandable zero
wait states and
hidden refresh lets you run
larger and more
sophisticated programs
Allows creation of large
and very fast RAM disks
Test mode and software
trampy troubleshooting
On/Off switch

Supram 500RX 2Mb
Supram 500RX 4Mb
Supram 500RX 8Mb

£195.00
£270.00
£420.00

External Disk Drives



Cumana CAX354
Very quiet Slimline
design Throughport
connector On/Off switch
on rear Long connecting
cable 800K formatted
capacity Fits all Amigas.

ONLY £54.95

Supradrive for Amiga
A500
Using state of the art
technology, these drives
use the same amount of
power as a floppy disk
drive. These drives are
stripped formatted and
ready to use, so you can
simply plug-in your drive
turn on your computer and
the system is ready to use.
The drive can be
configured as autoboot or
non autoboot, it can have
up to 8Mb of Ram and as
many as six SCSI drives
can be connected
together. The drives also
come with "express
copy", hard disk backup
software, "superboot" and
"supercode", file
management and
formatting programs.

52Mb Hard drive
with 0.5Mb Ram
52Mb Hard drive
with 2Mb Ram
80Mb Hard drive
with 0.5Mb Ram
80Mb Hard drive
with 2Mb Ram
105Mb Hard drive
with 0.5Mb Ram
105Mb Hard drive
with 2Mb Ram

£449.00
£309.00
£349.00
£599.00
£599.00
£659.00

We also stock the range of
Supra modems, phone for
details.

Zydec External Drive
Very quiet
Slimline design
Quality oil-free drive
mechanism
On/Off switch on rear
Long connecting cable
800K formatted capacity
Fits all Amigas. Only



£49.95

Master Sound —
Mono Sound Sampler
A low cost high features
sound sampler package
includes hardware and
software with a host of
features to sample and
edit music live onto your
Amiga. Only

Miscellaneous
Mid Master — Midi
Interface for the Amiga
Midi in — 3X Midi out and
Midi through
Compatible with all leading
midi software
Fully OPTO isolated
Includes two free midi
cables
Please state A500/1000/
2000 when ordering. Only

£34.95

Action Replay MKII by
Data
A whole host of features,
including FreezeFrame,
Boot Selector, Virus
Detection and much much
more. Only

£26.95

Replacement Amiga A500
power supply
Replacement internal disk
drive for Amiga A500
(original Commodore one
— no modification
required)

£57.95

£39.95

£69.95

Soundblaster



The amazing Soundblaster
adds a new dimension to
your games. Busting out
stereo sound at 5 watts
per channel into two high
quality 50 watt 3 way
speakers. The pack comes
complete with an AC
power supply and as an
added bonus there is a
pair of free stereo
headphones.

ONLY £44.95

DISKETTES

Amazing Offers on
3.5" D500 KAO BULK
DISKETTES
25 D500 135 tpi
50 D500 135 tpi
75 D500 135 tpi
100 D500 135 tpi
200 D500 135 tpi
500 D500 135 tpi
1000 D500 135 tpi

£11.95
£21.95
£31.95
£37.95
£71.95
£169.95
£309.95

All 3.5" disks are
supplied with labels and
are 100% error free.
2 for 1 guarantee.

Rainbow Diskettes

Red, green, yellow,
orange, black, white.
Colours and quantity of
your choice.

3.5" D500 Disks

25 D500 135 tpi
50 D500 135 tpi
100 D500 135 tpi
200 D500 135 tpi

£13.75
£26.45
£44.95
£84.95

3.5" D500 SONY BULK DISKETTES

25 D500 135 tpi
50 D500 135 tpi
100 D500 135 tpi
200 D500 135 tpi
500 D500 135 tpi
1000 D500 135 tpi

£13.45
£23.95
£42.95
£81.95
£189.95
£349.95

Remember! Remember! Remember!

We only supply top quality
diskettes. Our 3.5" diskettes are
manufactured by KAO and our
5.25" diskettes are manufactured
by ATHANA.
We do not sell substandard
diskettes from the Far East.

MONITORS



Philips CM88331
Stereo Colour Monitor
All our monitors are of UK
specification, are covered
by a 12 month warranty
and come complete with a
connecting lead

£244.95

MEDIA DIRECT

Media Direct Computer Supplies Ltd
Unit 3 Railway Enterprise Centre
Shelton New Road, Stoke on Trent
Staffordshire ST4 7SH

PHONE NOW 0208 220828

Media Direct 0782 208228

DISKETTE STORAGE BOXES

All our storage boxes come with anti-static lid, two keys and dividers where applicable



- 3.5" 100 capacity box £5.95
- 3.5" 80 capacity box £5.45
- 3.5" 50 capacity box £4.95
- 3.5" 40 capacity box £4.45
- 5.25" 100 capacity box £5.95
- 5.25" 50 capacity box £4.95

Offer
Deduct £1.00 from above box price if purchasing a quantity of diskettes.
(Min 25 disk)



- 5.25" or 3.5" 10 capacity boxes £0.95
- 5 £4.50
- 10 £7.95

Stackable Storage Boxes

These boxes are ideal for the person who requires an alternative to the standard style box or who has a large number of disks to store.



Pocket Box
The Pocket Box holds 150 3.5" diskettes or 70 5.25" diskettes and can be stacked horizontally or vertically.

£16.45

Please state 3.5" or 5.25" version when ordering

Bulk Storage Box
Ideal for bulk storage of diskettes, each box can hold up to 250 3.5" diskettes

- 1 £22.95
- 3+ £21.95
- 5+ £20.95

Beta Box
Stacks horizontally and vertically and can hold upto 90 3.5" diskettes



- 1 £9.00
- 3+ £8.50
- 5+ £8.00

JOYSTICKS

- Speeding Standard £9.95
- Speeding Autofire £10.95
- Speeding Sega £10.95
- Navigator £13.95
- Sing Ray Standard £15.95
- Sing Ray Autofire £
- Manta Ray Standard £12.95
- Manta Ray Autofire £14.95
- Manta Ray Sega £14.95
- Maverick £11.95
- Zapstick Standard £13.95
- Zapstick Autofire £13.95



- Competition Pro 5000 Black £11.95
- Competition Pro 5000 Clear £11.95
- Competition Pro Gie Extra £13.95
- Competition Pro Extra £13.95
- Competition Pro Star £13.95
- Python 3 Turbo III £9.95
- Python 3 £9.95
- Apache 1 (Q5131) £6.95
- Righttop 1 (Q5129f) £8.95
- Maverick 1 (Q5138f) £13.95
- Chimera 3 Sega Megadrive (Q5140) £9.95
- Intruder 1 (Q5149) £9.95
- Intruder 3 Sega Megadrive (Q5150) £9.95
- Aviator 1 (Q5155) £9.95
- Aviator 3 Sega Megadrive (Q5156) £9.95

ACCESSORIES

All our accessories are of the highest quality

- General**
- Mouse mat £2.50
- Mouse pocket £1.50
- 3.5" disk drive cleaner £1.95
- 5.25" disk drive cleaner £1.95

- Atari dust cover £3.95
- Amiga dust cover £3.95
- Star LC10 dust cover £5.95
- Star LC24-10 dust cover £5.95
- Star LC200 dust cover £5.95
- Star LC24-200 dust cover £5.95
- 2 piece printer stand £12.95
- Tilt 'n' turn monitor stand £19.95
- Monitor pynth

Switches and Cables

- Monitor Cables**
- Amiga to CMM 10845 monitor cable £9.95
- Amiga to Philips CM8833 cable £9.95
- Amiga to scan cable £9.95
- Amiga to Hitachi/Graha 7 pin din £9.95
- Amiga to multisync 15 pin 3 row plug £9.95
- Amiga to multisync 15 pin 3 way socket £9.95



- Data/Printer Cables**
- Parallel printer cable £7.95
- 36 way to 36 way centronics cable £7.95
- 25 way D-type male/male cable £7.95
- 25 way D-type male/female cable £7.95
- 25 way D-type fem/fem cable £7.95

Data Switches

- 2 way parallel data switch £12.95
- 2 way serial data switch £12.95
- 3 way parallel data switch £17.95
- 4 way parallel data switch £22.95

Miscellaneous

- Amiga 4 player adapter £6.95
- Atari 4 player adapter £6.95
- Mouse/joystick switcher £12.95
- Mouse/joystick extender cable £5.95

PRINTER RIBBONS

We stock a large range of ribbons. If you can't see your particular type listed then please phone us for a quote.

- | Star | 1 | 5 |
|-----------------|--------|--------|
| LC10 mono | £2.95 | £13.25 |
| LC10 colour | £5.95 | £26.75 |
| LC24-10 mono | £4.95 | £22.25 |
| LC200 colour | £5.50 | £24.75 |
| LC24-200 mono | £10.95 | £49.25 |
| LC24-200 mono | £4.95 | £22.25 |
| LC24-200 colour | £11.95 | £53.75 |

- Citizen 120D Mono**
- Citizen Swift 24 mono £3.29
- Citizen Swift 9 mono £14.80
- Citizen Swift 24 mono £3.29
- Citizen Swift 24 colour £11.95
- Citizen Swift 9 colour £11.95

EDUCATIONAL SOFTWARE



- Spell Book (ages 4-9) £17.95
- Things to do with words (ages 5-12) £17.95
- Things to do with numbers (ages 5-10) £17.95
- Let's spell at the shops (ages 4-10) £17.95
- Let's spell at home (ages 4-10) £17.95
- Let's spell out and about (ages 4-10) £17.95
- Puzzle Book 1 (ages 5-adult) £17.95
- Puzzle Book 2 (ages 5-adult) £17.95

BOOKS

We stock a large range of Abacus books suitable for advanced programmers as well as beginners



- Advanced system programmers guide £32.45
- Amiga 3D graphics basic programming £18.45
- Amiga basic inside and out £18.95
- Amiga C advanced programmers guide £32.45
- Amiga C for beginners £18.45
- Amiga DOS inside and out £18.45
- Amiga DOS quick reference £8.95
- Amiga desktop video guide £18.45
- Amiga disk drives inside and out £27.95
- Amiga for beginners £12.95
- Amiga machine language £14.95
- Amiga printers inside and out £32.95
- Amiga system programmers guide £32.95
- Best Amiga tricks and tips £27.45
- Making music on the Amiga £32.95

PHONE NOW ON 0782 208228

Media Direct Computer Supplies Ltd
Unit 3 Railway Enterprise Centre
Shelton New Road, Stoke on Trent
Staffordshire ST4 7SH

HOW TO GET MORE OUT OF AMIGA COMPUTERS



Eureka RAM Cards for A500:
512KB, 2MB, 4MB

Omni boot Selector for A500 & A2000:
Easy booting from DF0, DF1, DF2/3

Bus Mouse:
Opto-mechanical, 300dpi, 1100mm per second

MIDI Interfaces for A500 & A2000:
Opto-isolated, one MIDI "In", two MIDI "Out" & "Through"

LCD Game:
Sophisticated sound effects

**We look forward to inquiries from OEMs
and Importers!**



OMNI-EUREKA ELECTRONICS CORP.
6F-2 No.5 Wu-Chuan-1 Rd., Hsin-Chuang
City, Taiwan R.O.C.
TEL/886-2-2995724-886-2-2995825
FAX/886-2-2995723

Audio Sculpture

NOW AVAILABLE
AT ALL GOOD RETAILERS



ONLY £49.99

For Further Details Contact

SOFTWARE MANAGEMENT GROUP

150c Main Street, Bingley BD16 2HR
Tel: (0274) 562999

MIGA Update

The update trail continues with a host of 24-bit enhancements, the new Real 3D, plus the latest from the world of wordprocessing

Perhaps the biggest news in ray tracing has to be the release of Real 3D v1.4. With competitors like Imagine, something special was needed to stamp Real's authority on the market.

As a result v1.4 was born, with a huge array of very impressive additions. At the forefront of its expanded repertoire is the stunning selection of free form editing tools.

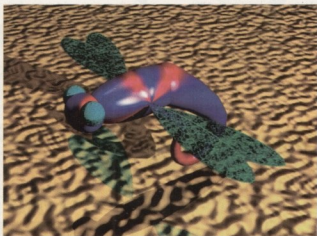
The new tools appear on the pull-downs and within the ever-expanding selection of onscreen icons. Using them makes the creation of irregular objects a dream. But the fun doesn't stop there...

Once created, these new organic shapes can be easily edited thanks to another long-awaited edition - point editing. Now Real can hold its own with Imagine in the only area in which it was previously outgunned.

Within the expanded modelling functions are a selection of up to 24 different ways of bending and twisting free form objects. Perfect smooth curves, hollow spirals, instant mountain ranges extruded from flat surfaces - in fact just about anything a twisted mind can imagine.

As you'd expect, there are two versions of the package. For the economy minded there's the standard version, which doesn't include the more sophisticated features such as the macro functions, Boolean operations and 24-bit output.

The professional package, however, boasts the full complement of features and contains a turbo optimised version that supports power processors such as 68020s, 68030s and 68040s, with or without maths co-processors.



A superb example of 24-bit rendering

All versions require at least 1Mb of memory, but for professional users 3Mb are recommended - which funnily enough is exactly the same amount of space as the beast will occupy on your hard disk.

Apart from the structural differences between the two versions, there's the addition of extra ready-made materials, textures, objects and fonts, all packed onto

the four disks of the Pro version. As the standard package boasts only two disks, the support material has been heavily slashed.

If you're interested in spending your Christmas cash, the professional version will set you back £305, including VAT. For the beginners' version you'll only have to cough up a piddling £110. Cheap at half the price.

For more information get in touch with Alternative Image. Tel 0533 440041, fax 0533 440650.

ProPage bugs sorted out

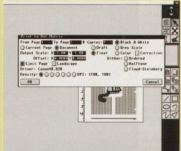
It seems only a short while ago that Gold Disk released ProPage v2.0, which was immediately suffocated by the sheer weight of reviewers desperate to outdo each other in their wholesome praise of the package. So why the new version?

The secret is that ProPage v2.1 hasn't really been upgraded at all. What the legions of wildly enthusiastic reviewers forgot to tell you was that ProPage v2.0 suffered from a few bugs, all of which have now been ironed out.

The new version has a much smoother feel to it, and you no longer feel the need to save a document every two minutes in case there's a glitch or a crash. In addition, the print to dot matrix option is much improved. There is a landscape printing option, and a long-needed page offset control which, in combination, complete the printing options for those with dot matrix printers.

Apart from these changes, there's little to report, other than that possibly the best of the Amiga's DTP packages is now as reliable in operation as it deserves to be. Full marks to Gold Disk for taking a responsible attitude towards their product.

Gold Disk can be contacted on 0101 213 320 5080.



Imagic and the IV-24

As you've probably noticed from reviews of GVP's latest brainchild, the IV-24 graphics card - which will practically walk the dog, do the dishes and collect the kids - has one major failing, which is the lack of a decent paint package.

Macro paint, the package bundled with the IV-24, is a little sad to say the least, and as a result G2 Systems have stepped into the breach and are offering a version of their very own Imagic paint program, which presently resides solely on their own VD2001 24-bit graphics card.

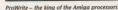
The IV-24 version will follow the same format as it does within VD2001, with two complementary modules. The first is aimed at those interested in the basics of 24-bit art, and the second for the professional user. Of course, G2 will be happy to supply you with both, no doubt complete with a slight discount.

You can contact G2 for further details on 0252 737151.

PostScript, being the language spoken by all self-

A second printing improvement taken on board by v3.2, and already found on Wordworth, is the High quality print option for owners of dot matrix printers. When this is enabled, ProWrite will use a font twice the size of that chosen by the user, then scale it down for printing. The result is text of a higher dot resolution and thus fewer jaggies. The option works as

For details about ProWrite (or any other New Horizons title) phone Silica on 081-309 1111.



For further details contact the Amiga Centre Scotland on 031-557 4242.

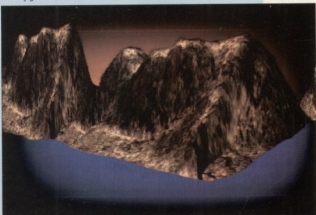


Image information
All of the 24-bit images used in this month's Update section were rendered using Real 3D 1.4 and show some of the new free form and point editing techniques. These primary images were loaded in to the Tvpaint and VD2001 combination for the finishing artistic touches.



ASHCOM

DESIGN & DEVELOPMENTS LIMITED



PRESENTS
**MAC
II
BACK-UP**

FOR ONLY
£39.95

INC. VAT & P/P



THE MOST POWERFUL SOFTWARE BACKUP SYSTEM EVER PRODUCED FOR THE A500 PLUS
THERE IS NO SOFTWARE YET PRODUCED THAT CANNOT BE BACKED UP USING THE MAC II SYSTEM

FEATURES:

- The most comprehensive back-up utility ever!
- Menu driven options which make it easy to use
- backs up other formats: IBM, Atari etc.
- Quick and easy to install (second drive required)
- Also available for A1500/A2000

ORDER MACII BACK-UP NOW AND YOU WILL NEVER HAVE TO PURCHASE ANOTHER BACK-UP UTILITY AGAIN

1988 COPYRIGHT ACT. ASHCOM neither concedes or authorises the use of this package for the reproduction of copyrighted material. The facilities offered by MAC II are designed to reproduce users own software, PD software & other such programs where permission has been clearly given. It is illegal to make copies of copyrighted material without the permission of the copyright holder or the licensee thereof.

THE ULTIMATE AMIGA RAM EXPANSION

AX502 2MEG	£169.00	INC VAT
AX504 4MEG	£235.00	INC VAT
AX508 8MEG	£369.00	INC VAT

NEW

OUTSTANDING FEATURES:

- External Fitting (just plug's in!)
- Auto-configuration for 2MB, 4MB or 8MB
- Bus through port, fully compatible with external hard drives, SCSI etc.
- Ultra low power no external PSU required
- Fully buffered data & address bus
- Latest technology high density dram
- zero wait states - Guru free!!
- Slimline attractive case
- Allows creation of very large & fast RAM Disc's
- Ram Test software
- Will not invalidate warranty

AX501 PLUS RAM EXPANSION

Developed specifically for the A500 plus to take your Amiga up to 2 Mb of chip RAM using latest DRAM technology. Simply fits in trapdoor.
WILL NOT INVALIDATE YOUR WARRANTY.

NEW AMIGA A500 Plus

Cartoon Classics Pack **£374.95**

TAKE YOUR AMIGA A500 PLUS UP TO 1.5MB - £29.95 OR TAKE YOUR AMIGA A500 PLUS UP TO 2.0MB - £49.95

ASHCOM KICKSTART ROM 1.3/2.04 SHARER

SWITCHABLE BETWEEN 1.3 & 2.4 ROM.
GET ALL THE BENEFITS OF THE A500 PLUS WITHOUT SOFTWARE INCOMPATIBILITY!!
WILL WORK WITH OLDER 1.3 COMPUTERS INCLUDING A1500/A2000
KICKSTART ROM 1.3 £29.95
+ ROM SHARER **£39.95**
KICKSTART ROM 2.04 CALL

BEELINE
HIGH QUALITY STEREO SOUND SAMPLER
WORKS WITH ALL SOFTWARE
SOFTWARE INCLUDED
ONLY £29.95

ROCTEC
SLIMLINE DISC DRIVE
ONLY £59.95

ASHCOM MEGA UTILS DISC	£2.95
1 MEG* 9 DISKS	£33.50
256K* 1 DRAM	£1.00
256K* 4 DRAM	£4.50
SQUIK MOUSE	£14.95

AUTOMATIC MOUSE/ JOYSTICK SWITCHER	
ONLY	£14.95
+ SQUIK MOUSE	£24.95

NEW LOW PRICE 512K RAM EXPANSION

WITH CLOCK ONLY **£21.95** WITHOUT CLOCK **ONLY £19.95**

2 YEAR WARRANTY ON ALL PRODUCTS. ALL PRICES INCLUDE VAT & P/P. ORDERS NORMALLY DESPATCHED IN 24 HRS. REGISTERED COMMODORE DEVELOPER.
FOR FURTHER INFORMATION ON ANY PRODUCT PLEASE TELEPHONE OR SEND A S.A.E. TO THE FOLLOWING ADDRESS. TRADE ENQUIRIES WELCOME.

Only from ASHCOM, DEPT AC2,10 The Green, Ashby-De-La-Zouch, Leicestershire LE6 5JU
MON-FRI 9.00-5.30 Telephone: (0530) 411485 (24 hrs) Fax: (0530) 414433 SAT 9.30-4.00

Saturday Night

Jonathan Maddock checks out what's cool and hip in the world of external floppy disk drives



Golden Image 3A-1D

The first thing you notice about the 3A-1D is its unique two-digit LED track display which indicates the position of the magnetic read/write head in the floppy disk drive. The reason for the track display is that, in theory, you can see a virus writing itself to the boot block of your disk.

To the beginner these digits don't mean a thing – they're just pretty nice to look at. But to someone who's got a bit of skill and experience and is always on the lookout for viruses, it's quite a handy gadget – but you should also ensure that you always have your virus checker at the ready and write-protect your disks – this will guarantee that you won't be troubled by the nasty little pests.

Normally size isn't that important, but in the case of external floppy disk drives it is a very important factor indeed. In fact, the smaller the better as far as I'm concerned, because with all the other peripherals on my desk there just isn't the space for any more bulky equipment.

Compared to other drives, the Golden Image 3A-1D is absolutely huge – very long and wide. The only reason I can find for this is that it incorporates the two-digit track display.

Included in the package is a large manual. This might seem strange at first – why does an external floppy need so many instructions? – but it becomes blindingly obvious when you flick through it and find that it's in

three different languages. So from a large manual you only get 14-odd pages of technical information. Who wants to read a book about external drives anyway?

In use, the 3A-1D performs very well. When you pop a disk into the drive, it detects its presence fairly quickly. The drive's noise level is quite low because it has been silenced by some anti-click circuitry. It also has a standard through port and an on/off switch.

It's nice apart from the huge size. It would be perfect for more flashy Amiga owners – you can impress all your chums with the usual "look my drive is better than yours, it's got flashing lights on it" boast.

To be honest, the track display makes it more interesting than most drives on the market, but is it just a gimmick? On the whole a good buy.

Price: £59.99

Supplier: Evesham Micros
Tel: 0386 7655500

Features

Progress bar: 10 segments, 9 filled

Looks

Progress bar: 10 segments, 10 filled

Value

Progress bar: 10 segments, 8 filled

Overall

Progress bar: 10 segments, 7 filled

The thing most people hate about the Amiga is the amount of disk swapping that has to be done. This is most infuriating, especially when you are playing a game and you have to swap disks several times just to get to the next level.

All of these problems could be solved if only you had an external drive, but there are questions to be asked, like which one do I buy? Which is the best? And more importantly, which one gives real value for money?

Many of these drives have extra features like backup utilities (ahem) and anti-clicks which stop the drive clicking when there isn't a disk in it. Are these advantages or disadvantages? Are the drives well designed? If you accidentally spill your drink

and it goes all over it, will it be safe? Also, be wary of the amount of power that some of these drives need. It's not too bad for anyone who owns anything but the A500, but if you do own an A500, then you must pick your external floppy carefully.

When using a program that takes a lot of memory, always remember to take out your external floppy because if you don't, even on a 1Mb A500, your Amiga will crash. Most drives these days have an on/off switch at the back, so you don't have to unplug your external when using a memory-consuming program. Almost every external has a through port built into it. If you have more than one external drive, this handy device let's you 'daisy chain' your drives together.

Drive

Zydec

This disk drive is made by Zydec, a company based in the US. Zydec normally produce good equipment that is well marketed and well packaged. How does their floppy measure up to their own standards?

The drive has a standard Citizen mechanism which more than copes with most situations. It has all the usual fittings, along with a through port and an on/off switch. It doesn't have an anti-click device fitted, but it doesn't click and is remarkably quiet, so that hardly matters.

The metal case is fairly standard and it's got some cooling vents in it, which in the case of external floppies is a big no-no – if you spill that coffee then it's bye-bye floppy. It does have a fine mesh over it to stop any bits getting in and ruining the drive.

It is really easy to use – just take it out of the box, flick the switch to turn it on, plug it in and then boot up the computer. However, it suffers quite badly due to a lack of gimmicks like anti-clicks and anti-viruses.

It doesn't really look that interesting in its rectangular box, but it does get the job done. If you are looking for a nice ordinary drive with no gimmicks then this might be useful to you. Overall, it's pretty average, and there are much better drives on the market.

Price: Around£55

Supplier: Evesham Micros

Tel: 0386 7655500

Features



Looks



Value



Overall



Cumana

I found this drive perched on Amiga Computing's features editor's desk. Cumana have been around for years and years and they've been making disk drives since I was in nappies. If you want a reliable but boring drive then the Cumana CAX354 is for you. You get the two main features – the through port and the lovely little on/off switch.

This reliable drive will last for ever and ever. According to our features editor, his clicks noisily with the best of them. I have been reliably informed that Cumana now make the drive with a handy anti-click device built-in, making it a lot quieter. You could possibly call it an Amiga internal drive that's been ripped out of the machine and used as an external.

It's a tiny bit expensive when compared to other externals, but as my mother used to say, shop around. You can normally get one of these for around £60 to £65 – if you have a good look around.

Boring it may be, but although it doesn't have any other features, it does do what you bought your extra drive for in the first place – be an extra drive – reliably and efficiently. The latest version is quiet (even though our old one isn't!) and is a fairly good buy. *Average.*

Price: £74.00
Supplier: Leadprobe Computing
Tel: 0772 203166

Features



Looks



Value



Overall



Power PC880B

This drive contains more gadgets than Batman's utility belt (well, perhaps not that many). The PC880B has three modes, all of which can be selected with a handy little switch. In normal mode, it behaves like a perfectly normal drive. If you switch to anti-virus mode it automatically write-protects all floppies, including those in other drives.

This means that no data can be written to any floppies, so a virus cannot infect any disks at all. You still need to check for viruses, because the drive doesn't know what a virus is – it only stops a virus writing itself to one of your disks. A very good idea by Power that is well implemented.

The other main feature of the PC880B is the controversial disk backup hardware. This feature is called Blitz, and when used with the supplied software it will attempt to copy any disk and get past many forms of copy protection. It won't crack all protected disks, but it will backup many that can't normally be copied.

Now this is a very dodgy subject indeed. FAST (the Federation Against Software Theft) and games software houses want to see this kind of backup-up controlled. Remember, you are not allowed to back-up any software that isn't your own work. Personally I feel that the drive would be better if Power didn't give away such software.

The drive itself is quite long, but is nice and slim. It features the standard through port and on/off switch. It's very quiet because it uses an anti-click board. Overall the PC880B looks good, is quite cheap and comes with a clear and concise manual. As such it is well worth spending your hard-earned pennies on. An excellent buy.

Price: £69.95
Supplier: Power Computing
Tel: 0234 843388

Features



Looks



Value



Overall



Roclite RF382C

Looking for an ultra-fast, ultra-thin, external floppy disk drive? Maybe you should look at the Roclite RF382C. This baby looks mean in every sense of the word. It's very thin indeed, in fact no thicker than a box of matches. For size you can't get much better than this.

The drive is made by Roclec, a new company who make floppies, hard disks, expansion cards and other such peripherals. A500 owners are in for a bonus because the Roclite doesn't take up much power at all.

If you are looking for a really fast drive, then this one is for you. It is almost twice as fast as your internal drive. There are no nasty holes in the sleek, black casing, so any spillages won't ruin it.

The drive is available in either Amiga ivory or in CDTV black. It has all the standard features such as the through port and the on/off switch. In use it performs very well indeed – it's quiet and fast.

Overall, this is the sleekest drive of all those on test, with its black casing. A good performer and the price isn't going to break your bank balance. Roclite is a name for the future, I think.

Price: £59.99
Supplier: Silica
Tel: 081-309 1111

Features



Looks



Value



Overall



Power Dual Drive

Now this is a bit special. The dual drive from Power gives you the benefit of two external floppy drives in one compact case. It's quite heavy, but for a dual drive is very slim indeed. It has its own 5V DC power supply, so that the power is not drained from your Amiga.

The two external drives are independent and copying operations can be carried out between the computer and either drive or from one drive to another. Both drives possess the unique Power anti-click feature so that they do not click when empty.

It will operate as a standard read/write 880k external floppy drive, but like its single sister, the Power PC880B, it has the anti-virus and Blitz options.

Just as a quick reminder, the anti-virus function prevents write access to the boot block on all drives (including the internal). Remember, this function only prevents viruses from placing themselves on the boot block – it doesn't stop the blighters. So always use a good virus checker and, more

importantly, always write-protect your disks. This drive also has Blitz – the dodgy backup/copy device. I don't really see the point in having this function as it just angers people like FAST. It also has the usual through ports and on/off switch fitted as standard.

Overall it's great. It looks good, it's a sensible size, and although it's a bit on the expensive side, you are getting two drives instead of one. A worthy buy if you can get the dodgy backup software off your conscience.

Price: £120.00
Supplier: Silica
Tel: 081-309 1111

Features



Looks



Value



Overall



Conclusion

There you have it – what's hot and what's not in the world of external floppy disk drives. Whether you want a drive with loads of gadgets (Power PC880B) or you want a fairly cheap model (Zydec), or you want to be really extravagant (Power dual drive, Golden Image 3A-1D), the choice is yours.

I would recommend the Power PC880B because it's fairly small, very cheap and get's the job done. But don't forget that this is just a selection of drives – there are loads more available.

The market for drives, whether they be floppy or hard, is currently flourishing. With more and more development work on floppy drives and with better technology being made available, who knows what is in store for the Amiga external floppy disk drive? Things can only get better...

FIRST CHOICE
1
COMPUTERS

FIRST AMONG EQUALS

Tel. 0532 637988

DEPT. AMC, UNIT 8, ARMLEY PARK COURT, STANNINGLEY ROAD, LEEDS, LS12 2AE

FIRST CHOICE

would like to announce
the most important
development to the **AMIGA**
A500 for over 3 years!

The New Commodore **AMIGA A500 Plus**

The New **AMIGA A500 Plus** Cartoon Classics Pack comes with:

- * New Super Agnes gives 1 Mb of CHIP RAM as standard upgradable to 2 Mb of CHIP RAM (and 8 Mb of FAST RAM), that's 10 Mb of RAM in total!
- * Super Denise and improved Custom Chips allow connection of a VGA or MULTISYNC monitor without the need of expensive Flicker Fixers
- * New "PRODUCTIVITY" video display mode gives screen resolutions up to 1008 * 800
- * Built in Battery backed Real Time Clock
- * KICKSTART ROM version 2.04
- * Latest WORKBENCH 2.04, FONTS 2.04 and EXTRAS 2.04
- * New improved user friendly manuals
- * Software includes The Simpsons, Lemmings, Captain Planet, Deluxe Paint 3 plus Mouse, Modulator, and Manuals

only £359.99 in stock
now!!

A500 Plus RAM Expansion by **Phoenix**

RAM expansions made for the older A500 may not work with the new **A500 Plus**. **Phoenix** have developed a range of RAM expansion units specifically for the **A500 Plus**.

Take your **AMIGA** up to 2 Mb of chip RAM without any soldering or internal modifications whatsoever. Fits simply and easily into the bottom expansion port.

The **Phoenix** RAM will not invalidate your warranty.

Take your **A500 Plus**
up to 1.5 Mb with space to upgrade
to 2 Mb only £34.99
or 2 Mb only £49.99

2 Year Replacement Guarantee

The **Phoenix** Kickstart ROM 1.3/2.04 sharer

Because some older games software will not run on the new Kickstart 2.04 ROM **Phoenix** have designed a sharer for both ROM chip sets.

Switchable between 1.3 and 2.04 ROM you can get all the benefits of the latest **A500 Plus** without the drawback of losing some of your favourite games software. This unit will also fit into older 1.3 machines including the 1500/2000.

only £24.99

Kickstart 1.3 ROM chip only £29.99

E&OE

FIRST CHOICE

1

COMPUTERS

FIRST CHOICE

LEEDS

TEL: 0532 637988

FAX: 0532 637689

OPENING HOURS

OPEN MON - SAT 9.00AM-5.30PM
SUNDAY OPENING 11.00AM-3.00PM
THURSDAY NIGHT LATE 9.30AM-7.30PM

WEST YORKSHIRES PREMIERE
AMIGA AND ATARI COMPUTER STORE

AUTHORISED DEALERS FOR STAR, CITIZEN,
COMMODORE, ACORN, ROMBO & PHOENIX



THE NEW AMIGA A500 PLUS CARTOON CLASSICS PACK

Now complete with:

- * One Mb of chip RAM expandable to 10 Mb of RAM in total
- * The new Kickstart 2.04 * Workbench 2.04
- * Built in battery backed real time clock
- * New improved user friendly manuals

This pack also comes with Lemmings, (the only game ever to get a 100% rating!) The Simpsons, Captain Planet and Deluxe Paint 3 the incredible paint and animation package plus mouse, modulator

only £359.99 or £407.99 for 2 Mb version

NEW AMIGA 500 DELUXE

The A500 Deluxe is an updated version of the A500 Plus incorporating the Phoenix ROM shaver with 1.3 chip because some older software will not run on the new A500 Plus. The A500 Deluxe has been developed with a built in ROM shaver so you can choose to run either Kickstart 1.3 or 2.04 making incompatibility problems a thing of the past! The Deluxe also Comes complete with the Cartoon Classics software pack

only £439.99 or £485.99 for 2 Mb version



Commodore Dynamic Total Vision

Complete with Hutchinsons Encyclopedia, Lemmings and Welcome CD disk. CDTV is a powerful media for both entertainment and education. Capable of handling up to 540 Mb of data, whole encyclopedias can be stored on just one compact disc. The CDTV is also a high quality audio CD player. We also stock a large range of CDTV software all at discount prices

now only £459.99

New CDTV keyboard

Effectively transforms your CDTV into an Amiga so you can get even more out of CDTV. With the aid of a standard 3.5" disc drive the CDTV will take most of the normal Amiga software from word processing to entertainment

only £49.99

AMIGA 1500/2000 PACKS

Amiga 1500 Business & Classic Software pack

With Deluxe Paint 3, Platinum Works (the best integrated package available for the Amiga), Home Accounts, Pazznic, Eli, Toki plus the Amiga Format. Tips book.

now only £559.99

or £789.99

with 1084SDI colour monitor

XMAS PACK

Take the headache out of buying a computer this Christmas with our ever popular FIRST CHOICE Xmas Pack. All the essentials required for the first time buyer. Ideal for any Amiga and great value too!

Comprises:

- * Top quality microswitched Powerplay Cruiser joystick
- * Mouse Mat
- * Dust Cover
- * 10 Blank Disks
- * Plus 3 Extra games!

only £29.99

STAR PRINTERS

All Star printers inc. free std printer cable and 12 month guarantee

The New Star LC20

Our best selling budget 9 pin mono printer is now even better value for money from First Choice. We've dropped our price by another £10.00!

Replacing the famous LC10, the LC20 is faster at 180cps draft and 45 cps NLQ and quieter. The front panel now has push button operation replacing the LC10 membrane panel. Other spec is similar to LC10

now only £139.99!!

Star LC200

Colour 9 pin printer with 8 resident fonts and a high speed of 225cps draft and 45 cps in NLQ. A4 Landscape printing

now only £199.99

Star LC24-200

Mono and colour. 222 cps draft and 67 cps LQ 10 resident fonts. A4 Landscape printing

only £229.99 mono
or £289.99 colour

Star XB24-10 Professional Series Colour

The choice of many professional organisations, this printer comes with one year on-site maintenance. 240 cps draft, 80 cps NLQ. 27% buffer exp to 167%. 4 super LQ fonts and 25 LQ fonts

now only £339.99

Star LC24-10

24 pin quality at the price of many 9 pins. 180 cps draft, 60 cps in NLQ. 8k buffer expandable to 37k

now only £189.99

CITIZEN PRINTERS

All Citizen printers inc. free printer cable and come with a full 2 year warranty!

The New Citizen 224

If you want 24 pin quality, you want to print in colour if necessary and you don't want to spend a fortune, the new 224 is an ideal solution. Using the same technology as the Swift 24, the 224 is basically a cut down version.

192 cps draft and 64 cps letter quality with 3 built in fonts.

only £219.99

£249.99 inc Colour kit

Citizen 124D

(Micro Decision Best Buy)

The 124D brings quality 24 pin output to you at the price of a 9 pin.

only £189.99

The Citizen Swift 9 Colour

Unbeatable value colour printer. 4 resident fonts. 192 cps draft and 48 cps in NLQ. Highly recommended. This printer is also available in a wide carriage (136 column) version

only £199.99 (80 col)

or £289.99 (136 col)

The New Citizen Swift 24e and 24x

(What Micro Best Buy)
The best budget 24 pin printer has just got better!

This must be the best 24 pin colour printer for less than £300. 8k buffer expandable to 40k. 216 cps draft. 72 cps LQ and multilingual too!

only £279.99 (80 col)

or £389.99 (136 col)

THE NEW STAR S148 BUBBLE JET

With Epson LQ and IBM Programmer emulation. The S148 is a revolution in printer technology. The quality is almost as good as an expensive laser printer and costs less than many 24 pin printers. Portable in size, quiet, fast, excellent value for money. Printers at 180 cps in LQ. Printer cable included

only £229.99

Auto sheetfeeder £52.99

THE NEW EPSON 4100

With 512k of RAM in standard form. First Choice expandable to 4 meg. 1 page per minute. HP2, FX, LQ, GQ compatible. 160 x 600 dots/inch. 12 months on-site maintenance and printer cable

only £719.99

Toner cartridge £59.99

HEWLETT PACKARD PRINTERS

The HP Deskjet 500 printer allows you to create laser jet quality without the cost. With 100 page auto sheet feeder. printer cable. 3 page / minute speed and 3 year UK warranty.

only £359.99

The famous HP Paintjet is now available at a great new price. With this printer you can get stunning colour output now only £589.99

The Complete Colour Solution

by ROMBO

As official dealers for Rombo, we are now able to offer this excellent package at a great price. The Complete Colour Solution comes with RGB Splitter, Vidi Amiga, Vidi Chromo. Power supply plus Photon Paint
now only £134.99

VIDI AMIGA

Frame grabber.
High quality digitizing. In Vidi chromo colouring software
only £84.99

RGB SPLITTER

Enables you to Colour Digitize in a second. Replaces red green blue filter set. Can be used with Dig view or Rombo products
only £54.99

THE NEW MICROBOTICS ACCELERATOR BOARDS

The VXL is an advanced 68030 accelerator for the Amiga 500/1500/2000 with space for an optional co-processor (CPI)
VXL30 25MHz EC.....only £239.99
VXL30 40MHz EC.....only £369.99
68881 co-pro for above.....only £134.99
The VXL 30 25MHz EC+CPU differs from the others in running Fast Page Mode. This allows it to accept an optional superfast 32 bit 2 to 8 meg RAM board running at 60ns
2 Mb of 32 Bit RAM (60ns).....only £214.99
8 Mb of 32 Bit RAM (60ns).....only £419.99
ICD Adspeed running at 14.7MHz.....£154.99

PANDAL HAND SCANNER

We are now able to offer you high quality scanning at a fraction of the normal cost with the Pandal scanner. Complete with the latest version of Data-scan software this scanner is able to pick out text and graphics at up to 400 dpi in real time. Data-scan enables you to easily manipulate the image. Ideal for desk top publishing and presentation.

only £109.99

COME IN FOR A DEMO

DISCOUNT SOFTWARE

FINAL COPY WORD PUBLISHER

Superb new easy to use word publisher from the writers of Perfect. With built in outline forms for top quality output, full graphics import capability (EPF and HAM). Features include: Thesaurus, spelling checker and automatic hyphenation, insert date, time, and page number, scale graphics to any size, crop graphics, multiple columns layout, magnified and reduced page view, full post script support and much more.
Highly Recommended
only £42.99

PENPAL

This best selling word publisher in a desktop makes many features found only in a top desk publisher. Also includes an easy to use database.
Highly recommended
now only £54.99

IMAGINE

imagine, the ultimate 3D animation rendering system
now only £144.99!

BROADCAST MILLER

This is the best video editor on the market. However it does require 2 Mb of RAM
only £159.99

PLATINUM WORKS

We believe this to be the best all round integrated business package on the Amiga. It comes with Platinum Scribble with spell checker, thesaurus, Analyser's Lotus 123 compatible spreadsheet with 3D graphics, a database, advanced printing utility and communications software
£54.99

PAGESTREAM V2.1

A powerful DTP package that we recommend. Better than any DTP package on a PC and better than most on a Mac
only £119.99

DELUXE PAINT IV

Simply the best graphics package available on the Amiga. Now with Hold & Modify (HAM) DTP gives you a palette of 40% colours
only £59.99

WORDWORK Version 1.1

The latest version of this highly acclaimed WORDWORK word publisher. Comes with multiple fonts, powerful thesaurus, large spellchecker, speech synthesis
only £76.99

ART DEPARTMENT PRO

Image processing system
only £99.99

OTHER SOFTWARE

3D Text Animator.....£19.99
Aegis Sonic.....£39.99
Amos Compiler.....£24.99
Amos 3D.....£27.99
Audio Engineer.....£169.99
Audio Master version 4.....£39.99
Calligrapher font creator.....£75.99
CrossDraw.....£19.99
Deluxe Paint 3.....now only £19.99
Dig View Gold 4.....£89.99
FlexiDraw printer utility.....£31.99
GB Route Planner.....£29.99
Gold Disk Office.....£104.99
Pagestream 2 DTP.....£45.99
Pro Page Professional DTP.....£129.99
Pro Video Plus.....£141.99
Sequencer One.....£74.99
SuperPlan Spreadsheet.....£29.99
Vista.....£29.99
Video Pro (2 Mb required).....£69.99
Wild Disney Animator.....£68.99
Xcopy Pro inc hardware.....£39.99

HARD DRIVES AND RAM

GVP Hard Drives for the

AMIGA 500, 1500 or 2000 series

Recognised as being probably the best hard drive for the AMIGA, GVP drives come fitted with fast access Quantum drives and 8 Mb of unpopulated RAM. GVP drives are inexpensive 1 Mb by 9 SMD modules at £37.99 per Mb

AMIGA 1500/2000 VERSION

52 meg.....£289.99 105 meg.....£475.99

AMIGA 500 VERSION

52 meg.....£374.99 105 meg.....£569.99

Supra 52 Mb Hard Drive for the A500

Using the super fast Quantum drive, these drives also come with Express copy hard drive backup software
now only £329.99

Amiga A590 20 Meg

for the A500 2 meg of unpopulated RAM
only £274.99

or populated to 2 meg of RAM
now only £329.99

RAM CHIPS

256 * 4 ideal for A590 & 1 Meg by 1 chips suitable for 8 up boards and others:

QTY
4+ (521K).....now only £3.99
8+ (1 Mb).....now only £3.79
16+ (2 Mb).....now only £3.49

1 Mb by 8 or 9 SIMM

boards as used in GVP and Corase boards as well as most IBM compatible

only £37.99

1 Mb by 4 ZIPS

as used in Supra boards

2 1 Mb by 4 ZIPS equal 1 Mb
only £22.99

DISK DRIVES

New Roclite 3.5"

The new super disc Roclite has recently received the best review for disk drives in Amiga format (although many of these reviews are totally misleading)
only £59.99

Zydec 3.5"

1 meg external drive, high quality low noise and high reliability
only £54.99

Cumana 3.5"

1 meg external drive. The best name in disk drives now at a super low price
only £59.99

NAKSHA MOUSE

This famous Hi-mouse mouse now comes with Operation Stealth, mouse mat, holder and 2 year warranty
only £24.99

SQUIK MOUSE

Very similar to the Naksha but without the extra. Operation Stealth
only £18.99

MONITORS

Commodore 1084SDI

Colour stereo monitor, 640/256 line resolution, green screen facility, cable for Amiga included
only £239.99

Philips CM8833 MK2

Colour stereo monitor, 640/256 line resolution, green screen facility, one year on site maintenance, cable for Amiga included
now only £229.99
or £239.99

with F19 Flight Simulator

CF7 Super VGA Colour monitor

The CF7 monitor is a high quality VGA monitor ideal for making your AMIGA into a professional system. 28 dot pitch
1500 VERSION only £369.99
with Flicker Free Video card
A500 VERSION only £499.99

Commodore 1900

multisync only £436.99

DISKS

All our disks 3.5" disks are GUARANTEED FOR A LIFETIME and are CERTIFIED 100% ERROR FREE KAO double sided, double density disks are recognised as being of the highest quality in magnetic media and are extensively used by duplicating houses

KAO BULK	OR	KAO BRANDED
10.....£4.99.....		£6.99
25.....£11.99.....		£13.99
50.....£21.99.....		£25.99
100.....£42.99.....		£44.99
200.....£79.99.....		£84.99
Disk Labels.....500.....now only £6.99		
Disk Labels.....1000.....now only £9.99		

EMULATORS

KCS Power board PC/XT emulator

comes with Dos 4.01.....now only £199.99
Amiga 1500 adaptor only £64.99

New AT Onco emulator turns your

Amiga into an IBM AT compatible
now with 16 Mhz clock speed !!
only £189.99!

SUPRA RAM EXPANSIONS

The ultimate Amiga A500 expansion. Take your A500 up to 9 Mb. Fits onto the side expansion port. Auto configured, no software patching

8 Mb pop to 1 Mb.....£99.99
8 Mb pop to 2 Mb.....£124.99
8 Mb pop to 4 Mb.....£224.99
8 Mb pop to 8 Mb.....£369.99

1.5 MEG RAM EXPANSIONS

1.5 MEG POPULATED
* Gary board supplied with all expansions boards. If you have a Kickstart 1.2 Amiga the board will be incompatible when populated to 1.5 Mb.....only £84.99
Zydec Megaboard populated to 1.5 Mb this board can be used with your existing 4 chip 512K upgrade to take your Amiga up to 2 Mb in total.....only £57.99

512K RAM EXPANSIONS

Top quality Phoenix RAM expansions for the A500 complete with battery backed clock and on/off switch. This RAM expansion will not in any way invalidate your Amiga warranty!!
only £29.99

MAIL ORDER!

Order by telephone quoting your credit card number. If paying by cheque please make payable to FIRST CHOICE. In any correspondence please quote a contact phone number and post code
TEL. 0532 637988

PLEASE ADDRESS ALL CORRESPONDENCE TO:

DEPT AMC, UNIT 8 ARMLEY
PARK COURT, OFF CECIL
STREET, LEEDS, LS12 2AE

WHY FIRST CHOICE?

- * All prices include VAT and fast delivery
- * All products are genuine UK spec.
- * Free postage UK mainland
- * Next day delivery only £3.00 extra!
- * Goods dispatched same day as order unless otherwise stated.

Personal Cheques Will Require Clearance Before We Can Despatch Your Order. All Prices Correct At Time Of Going To Press. All Items Listed In Our Advertisements Are In Stock Ready To Ship Unless We Advise Otherwise. Customers Are Always Tested Before Despatch E&OE.

CRYSTAL COMPUTERS

Have a Crystal

**Crystal's
Toon
Pack**

Amiga A500 Plus

PLUS

Bart Simpson, Captain Planet, Deluxe Paint III, Lemmings (game of the year)

PLUS

FREE 10 games: Dungeon Quest, Kid Gloves, Flight Path 737, E-Motion, Plutos, Artificial Dreams, Space Station, Eye of Horus, Power Play, Tower of Babel

PLUS

FREE Mouse mat,
FREE Crystal gift Voucher
(value £5)

**Only
£399.99**

**Crystal's
Players Dream
Pack**

Amiga A500 Plus

PLUS

FREE 25 games

Bart Simpson, Dungeon Quest, Artificial Dreams, Tower of Babel, Eye of Horus, Monster Slam, Ice Hockey, Jump Jet, E-Motion, Slayer, Starry, Microprose Soccer, Quadralien, 5 Gear, DataStorm, Thai Boxing, RV Honda, Space Station, Shufflepuck, Warzone, Kid Gloves, Battle Valley, Starblaze, Star Goose, Steel.

PLUS

FREE Microswitched joystick,
FREE deluxe mouse mat,
FREE 20 blank disks,
FREE Crystal gift voucher
(value £5)

**Only
£449.99**

DTP / Word Pro/Utils/Video etc.

Complete colour solution including: Vidi Amiga, Vidi Chrome, Vidi RGB (Photon Paint limited offer).	£398.95
Amiga 'New' Vidi Amiga Vidi Amiga, Vidi Chrome (Photon Paint limited offer).	£316.95
Amiga Vidi RGB electronic colour lightbox inc. PSU.	£64.95
Amiga Vision display video	£119.95
Elan Performer V2	£46.95
TV Test Professional	£113.95
Video Effects 3D	£179.95
Showerline	£269.95
Deluxe Paint II	£39.95
Director v.2	£79.95
Image Animation	£164.95
Wall Display animation	£79.95
Planit plans	£25.95
Vista	£106.95
Video Effects 3D v1.2A	£219.95
Modeler 3D	£51.99
X-CAD 3D	£269.95
Cross 4000	£22.95
DOCS 2.00S	£22.95
X-Copy Professional	£32.50
Alt-a-1	£54.00
Sound Master	£164.00
Real 3D beginner	£99.95
Real 3D professional	£280.00
Lattice C++	£221.50
Lattice C v.1	£169.00
Dr. T. HCS v.1	£219.00
Multi-Recording Studio	£61.00
Frame Grabber PNL colour	£490.00
Star-plans	£45.95
Postscript v.1	£52.95
Postscript v.2	£74.95
Professional Page v2	£159.95
Sam Script Professional	£84.95
Sam Publisher Ultimate DTP	£229.95
Kids Type	£21.95
Pen Pal	£74.95

Printer v3	£129.95
Scriptable Platinum	£44.95
Printwrite 3.1	£119.95

Monitors

Vista Stereo 14" colour for use Amiga 800 pins. 285 lines, incl. HSI lead, improved Philips auto-focus.	£239.95
Commodore 10845 stereo frame buffer on-line lead	£259.95
Citizens/Tristram Multi-cyrc	£249.95
Philips Stereo 18220401 incl. HSI & 19" double lightbulb	£249.95
Amiga 101101 lead 17" multi-cyrc 180/180	£249.95
Commodore 1950 14" multi-cyrc 180/180	£249.95
(includes free cable 100/100/200/2000)	

Disks KAO

1.5" 0500 1536p disk. All disks 100% error free. Complete with labels.	
25	£13.95
50	£24.00
100	£41.95
200	£79.95
Rainbow packs	
5 each of six colours (50)	£18.95
10 each of six colours (100)	£33.95
20 each of six colours (200)	£59.95

Amiga Hard drives

Prestar A500 HD 20MB 063 RAM	£265.00
Prestar A500 HD 30MB 063 RAM	£325.00
Extra RAM 1MB	£55.00
Extra RAM 2MB	£109.95
RAM power supply	£39.95
Commodore A500 20MB 063 RAM	£289.95
Commodore A500 20MB 1MB RAM	£309.95
Commodore A500 20MB 2MB RAM (800k)	£349.00
OSVP 320k soft switch 063 RAM	£189.95
OSVP 320k soft switch 1MB RAM	£289.95
OSVP 320k soft switch 2MB RAM	£389.95
Supra 500EP 320k 1MB RAM fixed	£349.95
Supra 500EP 320k 2MB RAM fixed	£409.95

Modems

SupraModem 2400	£439.00
SupraModem 2400 BNP 2.5i	£154.00
SupraModem 2400 Plus BNP V24bis	£179.00
SupraModem 9600 Plus V32 BNP V24bis	£449.95

All modems come with FREE RS232 lead / K-Comm software

Peripherals

Commodore A2088 XT bridgeboard	£289.95
Commodore A288A AT bridgeboard	£266.95
Commodore A2000 1500/2500 internal graphics	£189.95
Commodore 1535 display enhancer 1500/2500 graphics multi-cyrc monitor	£229.95
Commodore external disk drive	£39.95
SupraAM 500RZ (double memory expansion, User expansion port with bus pass, through lead mode software on/off switch)	£274.95
IBM exp with 2MB installed	£194.95
SupraAM 500RZ with 4MB installed	£262.95
SupraAM 500RZ with 8MB installed	£418.00
Prodata 1521 drawing ink pack / pen-carrier	£193.95
External 1.5" disk drive	£145.95
0802 penplot	£274.95
0802 mode switch box	£34.95
0802 extension cable	£39.95
Mingon penplot	£169.00
Nakula mouse	£22.95
Optical mouse	£61.00
High quality Euro mouse STD Amiga	£179.95
Phantom SHPT1 generator	£239.95

Printers

All our printers come with a free Amiga drivers disk. Inks for 2030	£7.95
New Star LC-20	
This is the great new printer to follow that superb classic, the LC-10. New features include 1800cps draft / 45cps rls, memo, 6 fonts, friction / tractor paper, auto lead	
£149.95	
Star LC-200	
Colour / memo, 9 pins, 45cps rls / 1800cps draft / 7.5 speed draft 225cps, 164k buffer, friction / push pull tractor	
£289.95	
Star LC-2430	

Colour / memo, 24 pins, 67cps rls / 2300cps draft / 7.5 speed draft 225cps, 70k buffer, expandable to 280k, 10 fonts, optional test cards, friction push or tractor pull.

£295.95

Star LC-2410

Memo, 24 pins, 45cps rls / 1800cps draft, 8 fonts, optional test cards, paper, excellent 24 pins

£209.95

'New' Star Pro-to-col series

Star ZA-200

Colour / memo, 84cps rls / 135cps draft / 420cps rls speed draft, 128k buffer, 8 resident fonts, friction push tractor, advanced paper park, autolead, 1 year on-site warranty

£349.95

Star ZA-302A-200

Colour / Memo, 24 pins, super letter quality with 48 pins features, 4.50 fonts, 14 LQ fonts, 190cps rls / 135cps draft, 204k buffer

£499.95

Ighone

Starhonda SP-1900 (Amazing price, superb printer, 192 cps draft, 48 cps rls, Paperpuck)

£115.00

Starhonda LC-28 24 pins notebook printer, amazing size

£179.00

Starhonda SP-2000 Parallel, serial, interface, Paperpuck, 21k buffer, 192 cps draft, 48 cps rls

£144.90

Starhonda SP-20 24 pins, 240 cps draft, 44 cps rls, 44k buffer, 160k-240k graphics and a host of features. A superb printer only

£211.99

Citizen 1200x

£133.75

Citizen 1240

£182.95

Citizen Swift-9

£199.99

Citizen Swift-24

£285.95

Free colour ink with Swift printers, worth £39.95

Commodore HP5 1270 inkjet

£189.95

Commodore HP5 1280 9 pins mono

£145.00

Commodore HP5 1530C 9 pins colour

£215.95

SPECIAL OFFER

Printers! comprising of: cable, 200 sheets of paper, printer size 11, normally £295.95, when ordered with any printer only

£149.95

We stock a full range of books, joysticks, ribbon, mouse, software, hardware, disk, storage, bios, cables, etc.
Please call: 04024 384318
Government and trade orders welcome

Crystal Clear New Year



**Crystal's
CDTV
Pack**



Commodore's CD-TV

**Multimedia system for the home.
A new dimension - A new lower price.
The ultimate in home entertainment and education**

INCLUDES

CDTV489.00

- ☆ Welcome. A guide to CDTV (value) 34.99
- ☆ Lemmings (Arcade classic) (value) 34.99
- ☆ Hutchinson's Encyclopedia (value) 49.99
- ☆ Infra-Red Remote Control.

Pack value : £608.97

Other CDTV Titles

Education

- A Bun for Barney (3-5).....29.95
- Barney Bear Goes to School (2-6).....25.95
- Cinderella (6+).....34.95
- Fun School 3 (3-5).....21.95
- LTV English.....29.95
- My Paint (3-9).....25.95
- Paper Bag Princess (6+).....29.95

Music

- CD Remix.....25.95
- Music Maker.....29.95
- Musicolour.....29.95

Arts & Leisure

- Women in Motion.....25.95
- Trees, Shrubs, Conifers.....29.95
- Indoor Plants.....29.95

Entertainment

- Animate Colouring Bk.....16.95
- Battletoads.....25.95
- Classic Board Games.....29.95
- Defender of the Crown.....25.95
- Falcon.....41.99
- Case of Gaudios Condor.....29.95
- Battle Chess.....38.00
- Sim City.....25.95
- Pro Tennis Tour II.....25.95
- Psycho Killer.....25.95
- Sherlock Holmes.....37.95
- Spirit of Excalibur.....29.95
- Team Yankee.....25.95

This is a small list of titles available.

Full list is sent with orders.

**Only
£489.00**

**Crystal's
Spellbinders
Pack**

Amiga A500 computer

**PLUS
512K RAM expansion
PLUS**

- Pro-write 2.5 - word processor
- Deluxe Paint II - art
- Deluxe Print II - pretty!
- Infofile - database

- Music Mouse - at least it doesn't squeak!
- Logo + talking turtle - Childrens art language learning
- Lets spell at home - educational
- BBC emulator - read your old beeb files

PLUS

- 10 blank disks, deluxe mouse mat
- ☆ resource file - curriculum guide
- ☆ introductory video - pop it into the VCR and relax

FREE 10 great games - for when the serious stuff finishes

FREE Crystal gift voucher (value £6)

**total retail value
£1070.00
Crystal price
£499.95**

Amiga A500 & A500+

All our Amigas are UK specified, and unless stated, consist of the following:

1. 3 operating manuals
2. 1Mb built-in disk drive
3. Commodore mouse pointer
4. Built-in Kickstart 1.3 or 2.0
5. TV Modulator
6. Built-in speech synthesis
7. 4096 colours
8. Power supply
9. 512Kb RAM or 1Mb built-in
10. Workbench 1.3 or 2.0
11. Tutorial disk
12. Extras disk 1.3 or 2.0
13. Digital 4 channel stereo
14. Built-in 'notepad' simple w/p
15. Amiga BASIC language
16. Necessary cables

**this months Crystal Ball
'Euromoney' ST/Amiga
switchable.**

£14.00

**Crystal Ball Special
Amiga Half Meg RAM
upgrade with clock...**

£24.95



**Unit 4, 11a Station Lane, Hornchurch, Essex,
RM12 6JL, Tel: 04024 38438, Fax: 04024 44399
Showroom 174 High Street, Hornchurch, Essex.
Showroom prices may differ from those advertised.**

To order
Call telephone our sales hotline
number - 04024 38438. State to
which you wish to order and
address, your Access / Visa /
Credit card number, along with
your requirements. Include your
delivery telephone number. Or,
send your personal / building
society cheque / bankers draft,
with full details, to our mail order
address: Unit 4, 11a Station Lane,
Hornchurch, Essex, RM12 6JL. All
prices are inclusive of VAT.

Vouchers
Our deluxe gift vouchers can be
used to order any of our sales
number - 04024 38438. To
purchase a gift voucher, call our
sales team. If you have received a
free gift voucher from us (1 per

year), it can only be used on goods
whose total value exceeds £20
excluding postage.

Backup service
We honour the warranty/s given
by the manufacturer, subject only
to proof of purchase. Where
Amiga hardware has failed in the
first 28 days, we will exchange that
item with a new replacement.
After 28 days equipment will be
repaired.

Collections
Visitors are welcome at our retail
showrooms and collections can be
arranged with dispatch manager -
phone 04024 38438.

Finance / Credit facilities
All advertised products over £100
can be purchased on our
Credit card store card, subject to

your credit. APR 16.9% (variable).
Full written details available on
request. Subject to status, finance
is for UK mainland residents and
BPO Personal only. You may use
any Lend Lease Credit charge card for
purchase, subject to credit limit.

Delivery. Carriage charges
Please add £3 per order for
post/packing. Software, books,
cassettes £1.20 per item. Larger
items up to 25kg are sent insured
post / courier service. Next
working day 8.50. Orders over
£130 not sent by courier add £5.
Special Saturday delivery can be
arranged. All orders received by
4:30pm will be dispatched same
day subject to availability, or
unless otherwise instructed, i.e.
Birthday present, etc. All above UK
mainland only. Export, BPO,
Channel Isles - details on request.



FERGUSON SMITH

'State of the Art technologies for your Amiga'
QUALITY AND PERFORMANCE AT UNBEATABLE PRICES

KEYBOARD GLOVE NEW



- Protects your keyboard while you type
- Custom made for your Amiga
- Soft, flexible shield
- Fits like a glove, without interfering with keyboard operation
- Antistatic. Puncture, tear & abrasion resistant.
- **TRADE & EDUCATIONAL ENQUIRIES WELCOME**

£28.15

A500 RAM EXPANSION

- Supra A500RX 8Mb Board Incl. 2Mb£149
- Supra A500RX 8Mb Board Incl. 4Mb£229
- Supra A500RX 8Mb Board Incl. 8Mb£369
- CLD 512c - 512K RAM with clock Excellent quality, fully guaranteed£27.95

A500 PLUS RAM EXPANSION

FLOPPY DISK DRIVES

PCA 880c - Compact external drive with through-put, isolating switch, plus anti-click board£54.95

PCA 880b - Incorporates all the features of the PCA 880c PLUS the Blitz Backup System and built-in Virus Blocker£69.95

PCA 880dd - Dual Drive, External. External with anti-click boards in both drives. External power supply in quality compact case£117.95

SEIKOSHA 9-PIN PRINTERS

SP-1900 80 Column, 192cps, 48cps NLO, 1k Buffer, 2 Fonts, Parallel Interface, Graphics Resolution 144 x 72 dpi, Free Printer Starter Kit Worth £29.38£116

SP-2000 80 Column, 192cps, 48cps NLO, 21k Buffer, 2 Fonts, Parallel & Serial, Graphics Resolution 144 x 72 dpi, Free Printer Starter Kit Worth £29.38£151

SP-2415 136 Column, 240cps, 50cps NLO, 17.5k Buffer, 5 Fonts, Parallel & Serial, Graphics Resolution 240 x 144 dpi, Free Printer Starter Kit Worth £29.38£245

ALL PRICES INCLUDE VAT, P&P
Prices subject to change without notice. E&OE

A500 PLUS 1MB CHIP RAM MODULE

Simple to install - no soldering.

Populated with 0.5 Meg£36.99
Fully populated 1 Meg£56.99

NEW MEGAMIX A500/2000 RAM EXPANSION

- RAM Card expandable to 8Mb
 - Autoconfiguring
 - On/Off Switch
 - Zero Wait States
 - Made In Germany
- | | | |
|------------------------|------|-------|
| | A500 | A2000 |
| 2Mb Installed | £149 | £159 |
| 8Mb Installed | £369 | £369 |
| GVP RAM 8.2 Meg Fitted | £169 | |

GVP SERIES 2 HARD DRIVES



- High Speed "FAASTROM" Controller
- Up to 8Mb SIMMs FastRAM On Board
- Autobooting
- Throughput to Six SCSI devices
- "FASTPREP" Installation Software

52Mb + 8Mb RAM Board£369
105Mb + 8Mb RAM Board£585

SEIKOSHA 24-PIN PRINTERS

SL-92 80 Column, 240cps, 80cps NLO, 44k Buffer, 2 Fonts, Parallel Interface, Graphics Resolution 360 x 360 dpi, Free Printer Starter Kit Worth £29.38£222

SL-210 80 Column, 324cps, 108cps NLO, 5k Buffer, 9 Fonts, Parallel & Serial, Graphics Resolution 360 x 360 dpi, Free Printer Starter Kit Worth £29.38£430

PRINTER STARTER KIT

200 Sheets of Quality Continuous Paper
3.5" Disk with Printer Drivers
5 Samples of Continuous Envelopes
1.8m Parallel Cable
100 Address Envelopes£29.38

FERGUSON SMITH

14 Downsides Road,
Glasgow G12 9DA



COLEMAN MASTERPIECE TURBOCARD NEW



- 68030 Processor (16MHz) + 68882 Co-processor (16/33MHz)
- External for A500, Slot for A2000
- 2Mb FastRAM, expandable to 16Mb - Autoconfiguring
- Fallback Mode via Switch

£599

GVP SERIES 2 HARD CARD

- High Speed "FAASTROM" Controller
- Up to 8Mb SIMMs On Board
- Autobooting
- Supports External SCSI Devices
- FASTPREP Installation Software

52Mb£289
105Mb£489
Hard Hard/RAM Card£169

GVP 'Combo' Boards

- 68030 Processor + 68882 Maths co-processor 22MHz, 33MHz or 50MHz
- 22MHz comes with 1Mb RAM installed (SIMMs) exp to 13Mb
- 33MHz comes with 4Mb RAM installed (SIMMs) exp to 16Mb
- 50MHz comes with 4Mb RAM installed (SIMMs) exp to 32Mb
- SCSI 2 Interface connects to 68030

22MHz£549
33MHz£899
50MHz£1659

A2630 TURBO CARD

- 68030/68882 25MHz
- Original Commodore
- Comes with 2Mb 32 Bit RAM exp to 4Mb

£880

AMIGA 1500 PACK

THE ULTIMATE PERSONAL HOME COMPUTER

Package includes Deluxe Paint III, The Works Home Accounts Operating System Software, EtI, Toki, Puznic & much more

£589

Tel: 041 339 3590
10am to 6pm Monday to Friday
10am to 2pm Saturday

A COMPLETE RANGE OF PRODUCTS AVAILABLE FOR THE AMIGA - CALL FOR UNBEATABLE PRICES!

SMELLS LIKE TEEN SPIRIT...

ISSUE FIVE • FEBRUARY 1992

AMIGA **GAMER**

..THE UNSTOPPABLE GAMES MACHINE..

**COME FLY
WITH ME...**

BIRDS OF PREY

PLUS...
ONWARD PREVIEWS
BIFFA'S CHEATS
HNV
TALKING SHOP
CONDITION:
THE SOURCE DAMAGE

MISSILE RADAR

BUDDER LEFT
BUDDER LEFT

X:00268 X:00377
Y:00738 Y:00713

ONword

A quick rub on our crystal ball and the future of Amiga is revealed. Spooky isn't it?

Turbo Charge

Still flushed from the praises lavished upon Last Ninja 3, System 3 are all set to unleash Turbo Charge on the unsuspecting public.

In Turbo Charge you take on the role of the now familiar "cop with a sports car" who finds that to restore justice and peace to the world he must "drive very fast and shoot people". You know the world he's always being told that he's "off the case", or that he's got "24 more hours to crack it".

Apparently, it features a "unique driving control" that makes Turbo Charge startlingly different from every other driving game in the world. It also asks that you "take care, take over, but be sure to take 'em dead or alive". And, no, we don't know what they're on about either.

Turbo Charge should be cutting up the traffic near you now. Price £25.99.

Wild West World

Yeeeee-ha, and all that palaver. Yes, US Gold are all set to take you back to the dusty days of the Wild West, when men were men and Clint Eastwood mumbled a lot.

Taking the rather odd idea of a business simulation, but in a cowboy setting, the objective is to control the destiny of some wintry western dude and make his fortune by far means or foul. You can opt for the "peaceful farmer", but he always gets shot by bandits in the first five minutes of most spaghetti westerns, or you can choose to be a "rooin' tootin' bandit", and get shot by Lee Van Cleef in the first five minutes. It's up to you.

It all sounds quite interesting really, and it should add a new twist to the rather stuffy world of business games. And hopefully plenty of people will get shot.

Wild West World is out early next year. Price TBA.

Die Hard 2

Even more film licensing, this time from Grandstar. Seeing as the original Die Hard game never made it any further than the consoles, we'll have to make do with the sequel.

It's Christmas, and John McClane's wife has done her usual trick of getting mixed up in a terrorist plot. So John (alias Bruce Willis) goes out his gun, roils around, gets mucky with out a sweat, and swears a lot. A sure-fire box office hit if ever I heard of one.

The game looks to be a shoot-'em-up in the vein of Oppello Wolf and Predator 2, with oodles of violence and quips aplenty from the perpetually smirking Bruce. Probably.

Die Hard 2: Die Harder should be out as you read this. Price TBA.

RoboCop 3 breaks the mould

Sod David Bowie, the original Tin Machine returns to our cinema screens in the New Year with a new actor, toned down violence and a rumoured PG rating.

A recipe for disaster? Could be, but the game's shaping up to be a right spanker. Breaking the mould of previous RoboCop tie-ins, the third instalment takes place in polygon 3D, not dissimilar to Driller and Castle Master. Quite how this will affect the gameplay remains to be seen, but there's no denying that it looks a treat. The metal mayhem is, as usual, from Ocean and should be hitting the shops any minute now. Price TBA.

Agony

Once again, those fruity Liverpoolian lovelies at Psygnosis have pushed the graphical capabilities of the Amiga a little bit further. The guilty game? Agony.

In Agony (as you undoubtedly will be), you take the part of an owl remarkably like the one in the Psygnosis logo. Said owl must then flap through full screen, three-level parallax scrolling, 3.5Mb of graphics, 1.5Mb of sound and up to 144 colours onscreen at any time. No idea what all that means of course, but it sounds impressive.

Featuring the usual Psygnosis frills and spills, Agony should be out late December/early January, price TBA.



Humble pie corner

You may have noticed that some Gremis got in the works last month, in more ways than one. As well as bugging up the screenshots for Formula One Grand Prix, Baby Jo and James Pond, those pesky green critters tried to supplant the Alien Breed review. To put the record straight - Alien Breed is not by Gremis at all, it's by Team 17. And it doesn't cost £29.99 a costs £24.99. So now you know.

Team 17's head honcho, Martyn Brown, has already demanded immediate castration for the person responsible so, for no reason whatsoever, we've decided to blame Biffa. And why not? We're sharpening the pliers at this very moment. Sorry about the slip up, normal service will be resumed as soon as we're finished with our unwilling scapegoat. Now, somebody hold him still...

INNER VISION

*Gamer contemplates its navel
after stuffing itself with turkey*

FUZZBALL4
Cuter than Cliff Richard but less likely to be the Crimbo No 1

DEVIOUS DESIGNS6
Conclusive proof that art is bad for you

DOUBLE DRAGON 38
Jimmy and Billy realise they left their wallets in the chippy

CARDIAXX9
A heart-felt Christmas present from outer space

4D SPORTS BOXING12
Big sweaty triangles try to beat each other up

A320 AIRBUS20
Our News Editor gets uncharacteristically excited

VOLFIED24
A dodgy old coin-op gets resurrected on to the Amiga

BARBARIAN II25
Barbie II and still no sign of Ken

LEANDER26
The biggest carving knife in history

WOLFCHILD27
If you think your baby is hairy...

BIRDS OF PREY28
Five years, forty planes and never enough sick bags to go around

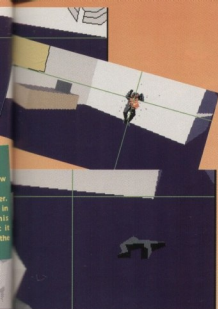
ONWORD2
This month: One and a half pages of info

THE SOURCE15
Psygnosis' up and coming flight sim gets targeted

TALKING SHOP18
This month we get Burtons to talk about Eccles Cakes

LETTUCE PAGE22
We check out this year's crop with the ghost of Percy Thrower

CHEAT MODE30
Biffa's plan for world domination continues, with HakPak papers



Fuzzy Logic?

FUZZBALL

System 3 • £19.99 • 1/2 meg • Joystick • Out now

Drowning under a sea of Midget Gems may be the ultimate childhood fantasy, but if it ever actually came true the shock could be too much for some.

Midget Gems are those fabulous sweets that have been variously described as "like wine gums but harder", "brilliant", and "those things broke my tooth you know". They come in assorted colours and flavours, from liquorice to strawberry, and are shaped something like a cup cake turned upside down, and shrunk a hundred times.

Now this begs an interesting question: how the hell do you know it is upside down? Is there some kind of microscopic message that reads "this way up" that we only become aware of on a subliminal level?

Or is it some kind of primitive instinct that has been handed down through the genes of generations of dedicated Midget Gem eaters that makes us all blissfully aware of exactly which way round the conical confectionery should go? Or some kind of plot by some crooked political faction to subvert the nation's sweet eaters?

Imagine the effect if all of a sudden the people were told that their favourite sweets had been the wrong way up all along - never will a milk carton be opened the same way, people will be forever juggling their bags of Monster Munch in an effort to suss out which end to open.

But what has all this wibble got to do with a game? Probably very little but the dangerous similarity between the antagonists in this game and the afore-men-



tioned Midget Gems is quite disturbing. It made me wonder. Why? Well you see it all started like this...

The Sorcerer's apprentice decided, in a very Mickey Mouse kind of way, that sweeping the floors and learning to cast "Banish Earwax" and "Remove Navel Fluff" spells was no longer enough. Yes, the impatience of youth was beginning to become impossible to bear.

It all came to a head when the Sorcerer had to go on some urgent errand (apparently Spells 'R' Us were having a bulk shift of bat's wings and the guy just couldn't afford to miss out) so he told the apprentice not to touch anything - especially not the big, interesting-looking case which has nothing of interest in it. No sir, not that one.

Curiosity suitably aroused, the apprentice could hardly wait for the old codger - he was at Methusalem's twenty first - to go so he could grab a shufti at the spell book and get the case open.

Minutes later, straining under the weight of the dust which the sorcerer paid

someone to painstakingly apply to the spell book every day for that "authentic" feel, our apprentice carried the book to the lectern. Upon opening this copious tome the aura of magic around it was all-consuming, drawing in, seducing the apprentice.

Soon he found the spell he needed - "How to open a big, interesting-looking case which has nothing of interest in it at all. No sir, not that one". Uncanny.

He recited the spell: "He's 'ere, e's there, e's every flamin' where e's Brian McClair, e's Brian McClair", and soon there was a glowing ball hovering just in front of his nose. He gathered it in his shivering hands and flung the orb at the case. It disappeared into the keyhole.

The case began jumping around the table in that drawing-pin-up-your-behind manner that



The green fuzzballs should never be a problem

schoolteachers the world over are familiar with. Smoke billowed from under the lid. Then it all stopped. The place went quiet. No-one made a sound. Silence, really.

Convinced he had failed in his first meanderings into grown-up magic he went over to the case and stared at it, only to be flung back in surprise as the case's lid flew open and out came millions upon millions (well, quite a few) of Midget Gems. Sorry, Fuzzballs.

"Drat" he thought. Or something. He had to think fast, he had to cast a spell that would put them all back in the case - then no-one would be any the wiser. Obvious really. "Always look on the bright side of life



Early levels shouldn't present a problem



Be careful which pits you fall down



[whistley bit]'. Disaster! The apprentice was a Fuzzball. "Damn," he said.

When the Sorcerer returned the apprentice/Fuzzball was quietly blubbing to himself in a corner. "Blub. I should have listened to me mother and joined the bank like she wanted. Blub, blub."

The air was turned blue as the Sorcerer returned and made some swift mental calculations as to what exactly had gone on - he was clever like that.

The punishment was simple. Clear the 50 chambers of the castle of every single little furry thingy, then maybe the Sorcerer will see fit to return the apprentice to his human form, and let him keep his job.

Cue fifty level platform game. The objective is simple. As a Fuzzball, you must negotiate the intricate one screen levels and collect all the jewels - which are there for no reason that I can fathom out, but they do help the gameplay. Oh, and shoot all the rogue Fuzzballs.

Sounds easy, but there is a lot more to it. If you can do it then it's perfectly acceptable to just take the jewels and forget the Fuzzballs, but in practice this is usually impossible.

There are four different kinds of Fuzzball - green, purple, black and red. Green are the easiest to get rid of, red the worst. The principle of destroying them is quite simple - using the little balls that you can spit you hit them enough times to turn them into mini versions of the next colour up.

This mini ball will bounce for four times giving you the chance to touch it and get rid of it completely. If you don't manage to touch it, then it transfers to the next and more dangerous colour, green to purple, purple to black



and so on. Each colour of Fuzzball has its own behaviour pattern. Green will just move back and forth in a confined space, purple will do the same until you jump onto the same platform when they will race towards you, black will race back and forth over several platforms, turning when you jump onto their route and red will do the same but an awful lot faster.

The Fuzzball you control must jump around, across, up and down the numerous platforms of the level. Often the route around the screen must be planned very carefully because it is impossible to get off certain platforms. Some of them you won't need to go near, but once per level you will find one with a jewel on that must be left until last, and it won't always be particularly obvious.

The later levels need a lot of thought before even moving as to exactly how they are going to be tackled. It will often be a little less than clear as to exactly what you are going to have to do. But that is all part of the challenge.

Graphically it can't be faulted - it possesses that coin-op feel that Parasol Stars has, but goes one better. It gradually progresses through four distinct graphical styles, that provide a variety in the backgrounds to keep the

interest up. With the added bonus of a high class animated intro dramatising the above, it will beguile the player from the start.

The sound is initially a bit lffy as the intro tune sounds as though it would be more at home on the ST, but in game it improves to the point where you can almost fail to notice that there are only about three different sound effects. A game like this needs a lot of unnecessary sounds to liven it up and make it more enjoyable, and to give it a chance of standing up against other games in the genre.

The playability is superb - the levels are all challenging and there are no easy levels to give you a rest. The main Fuzzball is extremely manoeuvrable and provides lots of fun. This, though, also presents a problem - for less

VISION

 Arcade quality and colourful.

AUDIO

 Too few effects masked by a good tune.

PLAYABILITY

 Difficulty means it lasts longer but may prove a turn-off for some.

ADDITION

 You'll keep bouncing 'til the end.

86%

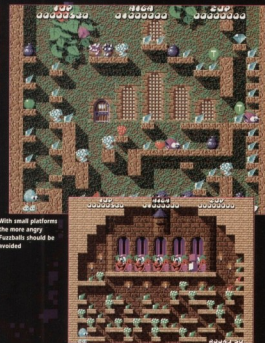
experienced gamers the high difficulty level right from the start will prove to be turn off, but for hardened joystick bashers it will be a godsend.

The biggest thing in its favour is its price - £20 for this kind of game is very keen marketing, but it does mean that it is a very strong game at a very good price.

Jools



The red glitter ball will disperse heat-seeking crows if you take too long



With small platforms the more angry Fuzzballs should be avoided

They may have big ears but they are actually harmless



What do you call
an Elixium's home
without a toilet?
An Ig!



The cube root squared

DEVIOUS DESIGNS

IMAGE WORKS ■ £25.99 ■ 1/2 meg ■ Joystick ■ Out now

There are what you might call some eccentrics writing software these days. It probably comes from some primitive instinct to shake off the worrying stereotype that proclaims that they are all sad men who sit in their bedrooms, at home with Mother, programming for all hours, only taking time off to readjust the Elastoplast that holds their NHS issue glasses together. Then again, maybe they are all just plain mad.

The chapette behind this is clearly no exception, as the scenario for this 'interesting' puzzle game shows. A blighter named Dr Devious - ex-politician, ex-taxman, ex-DPP - has come up with a plot to hold the world to ransom as a revenge for his untimely demise from the forefront of public life.

Using his immense scientific skills, holed and focused in a garden shed, Dr Devious built a weapon. A weapon so powerful and so, well, devious really that it scared the pants off him. While bending down to pull them back up he realised that he would soon be a very rich man.

The weapon was a feat of molecular manipulation, chemical control and physical fondling. Or something. It could turn any object into a cubist representation of itself (he fancied himself as a bit of an art buff) and then juggle it around. It renders the said object/movement/public toilet completely useless. Dr Devious has the power to put them all



Dr Devious
turns up to
give JJ some
aggro in the
Hollywood
Hills



To break the tension every tenth level is a frustration-beating shoot-em-up where you have to blast Dr Devious. Or do you?

back, but it will cost the world's governments big money. This is where JJ Maverick comes in, controlled by your good skills. Only he, the world's best special agent, can save the day. Only he has the talent, the nerve and the dramatic afterglow to do it.

If you want to know what he looks like, pick any guy from a Gillette advert, especially one of the yuppie types, and you've got it.

This is a weird game. The first thing you are presented with as you start is basically a collection of nondescript blocks that need to be moved into a transparent frame. When they are all in the right places, the screen updates to reveal what the object is - essentially an excuse to parade some truly fantastic artwork, and for you to put yourself on the back.

The controls are unusual to say the

least. After the tutorial style of the first seven or eight levels, JJ Maverick becomes fully mobile. This involves the rather disorientating concept of every vertical or horizontal flat surface having its own gravity, so JJ can jump out from a wall, then be attracted by the gravity

of a surface at another angle and land on that. Very strange. To move the pieces, JJ can pull, lift and carry, throw, or drop them into place. As the levels get harder it gets more difficult to work out exactly where you are going to move to and how the hell you are going to get that piece over there. It is all too easy to make one false move and end up in big trouble.

As if this wasn't enough, you get the added problems of infants such as big things that shoot at you, bonuses to try to and to, and the whole thing is against the clock. What a complete nightmare.

It soon becomes one of the most frantic puzzle games this side of Lemmings, but because of the esoteric nature of the thing, and the fly controls, it is definitely an acquired taste. But I've always been into acquiring new and different experiences - just ask my [that's quite enough of that - Mary Whitehouse Dep!]

Enjoyable, more challenging than *Armeda Rice*, and excellent graphics - a worthy reward for struggling through the levels. Yes, it is eccentric, esoteric and some other word beginning with e and ending in ic.

The fifty levels there are will take a lot of playing, the hair-pulling factor is enormous and you won't stop battling with it for hours - if the joystick doesn't go through the monitor first. Fab.

Jools

VISION
GGGG
Loads of cute little bonuses and brilliant artwork.

AUDIO
GGG
Bustling sound effects, but the same tune for every level.

PLAYABILITY
GGGG
Frenzied frolics, but it gets a little too tricky for some tastes.

ADDICTION
GGGG
So frustrating you just have to beat the thing to a pulp.

80%



Venice sees some
maric action as
JJ ducks the
whirlwinds

The Great, Gorgeous GAMER Giveaway II

The Gorgeous Gamer Giveaway moves up a gear this month with some barnstorming Hollywood prizes. At great personal risk, the Gamer team have been glued to their telephones grovelling to various companies for some truly gibber-worthy prizes, often staying up until the early hours to make sure that the prizes are of the utmost quality.

As we said, this month's Giveaway has a distinctly Hollywood feel to it. You name it, we've got it! The glitter, the tinsel, the limousines and the plastic surgery. Prizes? We've got videos of Kevin Costner's *Prince Of Thieves* (courtesy of

Warner Bros), *RoboCop 2* (MCEG Virgin Vision) and *The Simpsons* (Fox Home Video), plus *Robin Hood*, *RoboCop 3* and *Simpsons* games! Some much sought after videos and some much raved about games could be winging their way to you, just for the price of a stamp. Bargain city or what?

You don't have to enter all the sections, so if you only want to win *Robin Hood* then leave the others blank. We won't think any less of you for it. Of course, you've nothing to lose by going for all of them, but you won't be able to win them all. That would be greedy. Oh yes.

An arrow escape

You too could be squeezing into your bright green tights and a-twanging your bow string with a copy of that blockbuster movie, *Robin Hood: Prince Of Thieves* - and when you've watched the film you can relive the excitement in Millennium's *Robin Hood* arcade adventure.

The movie is a highly successful blend of swashbuckling skulduggery and Indiana Jones-style adventuring, and is worth watching just for Alan Rickman's psychotic Sheriff of Nottingham. And the good news is that that Bryan Adam's record doesn't crop up until the end credits, so you don't have to listen to it again.

The game fared equally well, earning a mighty 85 per cent. Picking some juicy quotes at random from the review tells us that "there's no lack of things to do", it's got "plenty of scope and tons of testability" and that the Sheriff of Nottingham is actually Jeremy Beadle.

Prizes worth winning? You're not wrong, matey. We've got five Gamer bundles to give away, containing the *Prince of Thieves* video and the *Robin Hood* game, and all you have to do is answer the *Robin Hood* question on yonder coupon.

Send it to us at the address over the page, and the first five out of our magic wallaby pouch win the goodies.



Robin Hood compo

Just tick the right answers to the following question and send in the coupon:
Who played Robin in the crap British film last year that nobody saw?

- ☐ Patrick Bergin ☐ Patrick Moore ☐ Roger Moore

RoboCop compo

If you want the cracking video and even crackinger (?) game then just answer this question and send us yer address:

In *RoboCop 2*, which sad ex-Coronation Street star puts in an appearance?

- ☐ Hilda Ogden ☐ Brian Tilsley ☐ Ena Sharples

Simpsons compo

Dying to get yer mitts on the *Simpsons* goodies? Then answer this Barmesque question...

Where does Homer Simpson work?

- ☐ The BBC ☐ A power plant ☐ Drive Thru Burgers

Please turn the page and fill in the coupon on the other side

A game does not have to be heavily advertised, based on a film, or a licensed property to be special...

...from time to time something very special comes from the strangest places. Remember "Tetris", if you think back long enough you may even remember the "Rubiks Cube". Now from Budapest in Eastern Europe comes **ABANDONED PLACES**, a game of such size and quality that it is said, will change the way we all play Fantasy Role-Playing Games...

CONTINUED

The Great, Gorgeous **GAMER** Giveaway II

Clunk click

RoboCop. He's a fairly popular sort of chap, isn't he? All that stomping about and shooting the bad guys. What a hero. As if you didn't know, RoboCop 3 is due to hit the cinemas in the near future. RoboCop 2 is currently selling like hot cakes on video and Ocean's ground-breaking interactive 3D RoboCop game is gaining accolades left, right and centre.

Unfortunately, you'll have to wait until next month for the low-down on the game, but we have it on good authority that it's a stonker. RoboCop2 the movie, on the other hand, we do know about and it's great. No messing, plenty of guns, shooting and exploding, and special effects that'll make your eyes pop out.

Naturally, we've got five copies of RoboCop 2 on video and ten copies of the RoboCop 3 game hot off the presses. To be in with a chance of winning these earth-shattering prizes, just answer the RoboCop question on the entry form and send it in to us. The first five get copies of the vid and the game, then five runners up get the game.

Unfortunately, RoboCop 2 is just too squishy for anyone under the age of 18, so no kiddies can enter this part of the giveaway. It's time to start creeping to your older brother...



Aye Carumba



And last, but by no means least, we reach Bart. No introductions needed I presume, so we'll get straight on with the competition.

We've wangled three complete sets of Simpsons videos and ten copies of Ocean's Simpsons game. The video sets contain four videos each, with two episodes of the hit TV series per video.

So that's...er...um...eight episodes. If you want Bart and Co to keep and cherish forever, then you need do no more than answer the question overleaf and send it to us post-haste.

The first three out of "the bag", as we say, will win a complete video set and a copy of the game. Then the next seven will win the game. Generosity just oozes out of every pore.

Rules 'n' stuff

1. Employees of Europress Publications, Ocean Software, Millennium Software, Warner Brothers, Virgin Video and 20th Century Fox may not enter. Cos we're dead mean like that.

2. Our decision is final. Anyone who means well will have their phone number passed on to Biffa. Not a pleasant thought.

3. All entries must be received by 6 February 1991. Any received after that date will be burned to the wall and laughed at by all and sundry.

4. Anyone entering to win RoboCop 2 must sign the legal thingy to state that they are over 18. Any entries for RoboCop 2 without this signature will be passed to the West Midlands Serious Crime Squad.

Answered all the questions you want to answer? Just fill in this boring bit, do a bit of nifty scissor work and send it to us at:

**Gamer Giveaway, Gamer,
Europa House, Adlington Park,
MACCLESFIELD SK10 4NP**

Name:

Address:

Phone Number:

If you entered for RoboCop2 please sign the following legal gubbins.
I am over 18 years of age, honest guv, signed:

This could probably be called a real "pacemaker"

CRASH

Electronic Zoo ■ £25.99 ■ 1/2 meg ■ Joystick ■ Out now



Dodge the snake and miss the asteroids

There are definite downsides to this job. One of them is trying to pad out a six hundred word review of a shoot-em-up when you know full well that everyone in the entire universe knows exactly what the scenario is. Allow me to reproduce the Industry Standard Shoot-Em-Up Scenario Creator, free with Amiga Gamer...

The year is (insert four numbers here, the first one must be higher than 2). The human race is being threatened by the evil (insert name of alien race here, word must have ratio of one vowel to every four consonants to be realistic). You must pilot the new breed of starship (insert name of starship here, must start with an X or a Z or sound like a fifties Ford car), designed to be (insert hyperbole here).

But things go tragically wrong, as you and your fleet fly into the night (hum dramatic music here and make some gratuitous comment about wives weeping as they depart), they are ambushed by the (insert alien name here), and you are the only one left (waffle for a paragraph about how only you can do it and that no-one else is strong enough to face the challenge). Conclude with something along the lines of "Have you the skill, wit and reflexes to do the job?"

That's about it really. Any names you think of or any little nuances can be incorporated into that little template. Brilliant, isn't it? But, fair play to 'em, the Zoo have included a wee novella in the manual to pad it out a bit. Actually, it is the manual. It's reason-

able, but hardly original. Electronic Zoo claim this is the fastest two-way scrolling shoot-em-up game to date. They're not wrong, it does scroll brilliantly fast - the only problem is that most of the time you'd rather just sit there and fire and not have to worry about flying into things.

The majority of the aliens, you see, have very static patterns moving in a formation about a fixed point, so the fast thing you want to be doing is racing back and forth like the proverbial yo-yo.

But if you like needless speed then this could be the thing for you. The gameplay is simplistic - most levels are played against the clock, giving you a set length of time to defeat a series of aliens, or you don't make it on to the next level - and as you defeat each one, the ship is powered up to the next level of fire-power. If you die, you lose one level of power-up. Graph-

ically it is very simple, but it had to be so it could cope with the rate of scrolling without going up in smoke. There are very few sprites onscreen at once, there's only basic landscaping at top and bottom, and nothing in between to give you any idea of speed when you move off the edge of the landscape.

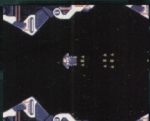
This is often crucial as you may have to move off, turn around and come back on to attack, but if you don't know how fast you are going then it may all go tragically wrong.

The sound relies all too heavily

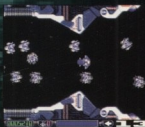
on one Uzi sample for the gun, but the tune is ace, and sounds like a chill-out room at a rave. What more could you want after a heavy blasting session?

Playability isn't as bad as you might think. It's good fun and quite a challenge, but it just doesn't add up to all it should. This is probably because they couldn't animate the sprites as fast as the ship. It will provide a new twist for shoot-em-up fans, but only the real addicts. Ah well, not a bad try lads.

Jools



Three groups of aliens destroyed once you get a really big gun



Those detailed backgrounds make it so atmospheric

Hordes of aliens, but they aren't a problem

VISION

GGG

Scrolls lightning fast but there isn't much to scroll.

AUDIO

GGG

Uzi samples and rare tune between games.

PLAYABILITY

GGG

New twist but it doesn't work too well.

ADDICTION

GGG

Hot brilliant, but a minor diversion.

68%

Mine's a double, barman. Yes, it's...

DOUBLE DRAGON 3

STORM • £25.99 • 1/2 meg • Joystick • Out now

Poor old Jimmy and Billy Dragon. Their lot is not a happy one. Not only do they keep having to nip around all over the world to rescue their "babe", but they've also got the most inappropriate names in a beat-'em-up ever - Jimmy and Billy. Very butch. Might as well just call them Smeg and Bep. Or John and Norma. An unhappy lot indeed.

Well, they ain't out of the fire yet. Despite having finally dumped their kidnap-prone missus, they're still "doing the business" and kicking rear ends all over the globe. The reason? Stones. Yes, it seems that they bumped into some wizened old gypsy dude who told them to risk life and limb and go and fetch some spooky bricks back from various foreign

climes. And being stupid gets, Jimmy and Billy go along with it. Pillocks.

Now this could be my imagination, but aren't there a series of really crap adverts for a certain brand of jolly northern working men's club types travel the world and talk about - gasp - Stones?

Could this be the world's first bitter-'em-up? Is there a bonus level where you have to earn extra lives by making unimaginative semi-racist jokes at the locals' expense and laughing in loud raucous tones? Er, actually, no. Thank God.

It is, pop pickers, merely a beat-'em-up. Plain and simple. Various joystick manoeuvres

twist our heroes into a selection of fighting moves, all of which bring a tear to the eye and a twang to the underwear. Weapons can be purchased from shops, as can extra lives, energy and special moves.

The shop sections try to inject a little bit of novelty into the proceedings, but fail in no uncertain terms. The instructions mention nothing of the shops, so there's no way of knowing what weapons you'll get, or what moves, or anything. It's all hit and miss until you can suss out what you'll get for yer money.

The instructions really are dismal. They tell you how to perform the various moves, but there's no mention of how to get extra coins, or what special actions are available. It seems a bit pointless to include a feature like the shop in the game and then not explain

it. I don't know. Grumble, grumble. That aside, D03 is a competent beat-'em-up. It's nothing we haven't seen a hundred times before, but it's slick and smooth so we'll let that pass. Things have been planned well, so there's none of your Final Fight "finish it in half an hour" malarkey here.

And so we come to those last few "summing up" paragraphs. The graphics could have been better. The backgrounds are detailed and there are plenty of boxes and things to leap about on. The sprites look suitably, er, spunky and they slip about in a jolly, if somewhat mising, fashion. But they lack that extra "shazam" that makes you go "Ooh look at the shazam on those sprites".

Sound is restricted to a rather nice trickling stream/tune at the beginning and some solid FX. As with the graphics, the sound is good but not good enough to leave an impression.

To be fair, Double Dragon 3 is a lot better than most of the lacklustre beat-'em-ups that the software houses churn out. Unfortunately, it's not different enough to make you go "Oh yeah, Double Dragon 3. That's the one with the famous cottage cheese sub-section."

Instead, you'll probably go "Oh yeah, Double Dragon 3. That's another Double Dragon game isn't it?". As well, another day, another beat-'em-up.

Daniel



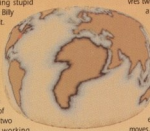
Eating a spicy curry the night before gives you long distance fighting power



Those racist attitudes send the thugs flying



Makes your eyes water just looking at it, doesn't it?



The instructions really are dismal. They tell you how to perform the various moves, but there's no mention of how to get extra coins, or what special actions are available. It seems a bit pointless to include a feature like the shop in the game and then not explain

it. I don't know. Grumble, grumble. That aside, D03 is a competent beat-'em-up. It's nothing we haven't seen a hundred times before, but it's slick and smooth so we'll let that pass. Things have been planned well, so there's none of your Final Fight "finish it in half an hour" malarkey here.



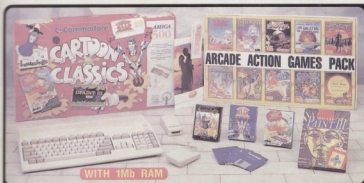
Extra lives come in the guise of different fighters in one-player mode. Meet "Sunny"



Attack of the Mutant Pyjama People

VISION Hardy original, but polished and varied.
AUDIO A nice, watery tune, and some functional FX.
PLAYABILITY Decidedly average. The "shop" adds nothing new.
ADDICTION You'll stick with it, for a while at least.

72%



NEW! CARTOON CLASSICS PACK

HARDWARE:

512K AMIGA 500	£329.99
ASIO TV MODULATOR	FREE
ASIO RAM EXPANSION	£99.99
SOFTWARE - ENTERTAINMENT	
BART SIMPSON	£24.99
CAPT PLANET & PLANETERS	£25.99
LEMMINGS	£25.99

SOFTWARE - PRODUCTIVITY

DELUXE PAINT II	£79.99
PLUS! FREE FROM SILICA	
ARCADE ACTION PACK	£229.78
PHOTON PAINT 2.0	£89.95
TOTAL RRP:	£906.67
YOU SAVE:	£507.67

PLUS! 16 NIGHTS FREE
HOTEL ACCOMMODATION

£399

SILICA PRICE - INC VAT + FREE DELIVERY



AMIGA

STAND-ALONE 500 COMPUTER

● 512K AMIGA	£329.99
● TV MODULATOR	FREE
● MOUSE CONTROLLER	FREE
PLUS! - FREE FROM SILICA	
● ARCADE ACTION PACK	£229.78
● PHOTON PAINT 2.0	£89.95

TOTAL RRP: £649.72
YOU SAVE: £320.72

SILICA PRICE: £329

PLUS! FREE HOLIDAY ACCOMMODATION

£329

SILICA PRICE - INCLUDES VAT + FREE DELIVERY

FREE! FROM SILICA WITH EVERY AMIGA

TOTAL FREE PACKAGE

ARCADE ACTION

The new Arcade Action Games Pack is THE software compendium for Amiga owners, featuring ten top titles with a variety of different types of games for you to enjoy. Each title is packaged in its own plastic case, with a colour sleeve and full instructions. The Arcade Action Pack is FREE! when you buy your Amiga 500 from Silica.

FREE! WORTH: **£219.78**

ARCADE ACTION GAMES PACK

Every Amiga 500 from Silica comes with a FREE 72 page, full colour brochure with accommodation vouchers. These vouchers entitle 2 people to stay up to 16 nights in one hotel (or any number of hotels to a total of 16 nights) with accommodation FREE (you could take up to six nights for two people, or other options). Chosen from the 250 hotels featured in the catalogue. All you have to pay for are your meals (prices are listed in the brochure). Reduced rates in top London hotels and hotels in France are also featured.

FREE! 16 NIGHTS HOLIDAY HOTEL ACCOMMODATION

FREE! PHOTON PAINT 2.0 GRAPHICS PACKAGE

Every Amiga 500 from Silica Systems comes with a FREE Photon Paint 2.0 (RRP £89.95), one of the most advanced art packages available for the Amiga. With it, you will be able to harness the extraordinary graphics power of the Amiga and produce inspirational pictures in minutes. With 4096 colours, your pictures will reach life-like appearance. These can be animated in real-time using a vast range of graphical effects, including blending colours and dithering, stencils, shadowing, worm contour mapping and surface mapping.

£89.95

FREE! 16 NIGHTS HOLIDAY HOTEL ACCOMMODATION

Every Amiga 500 from Silica comes with a FREE 72 page, full colour brochure with accommodation vouchers. These vouchers entitle 2 people to stay up to 16 nights in one hotel (or any number of hotels to a total of 16 nights) with accommodation FREE (you could take up to six nights for two people, or other options). Chosen from the 250 hotels featured in the catalogue. All you have to pay for are your meals (prices are listed in the brochure). Reduced rates in top London hotels and hotels in France are also featured.

ARCADE ACTION PACK - £229.78:

Asterix - By Coktel Vision	£24.99
Chess Player 2150 - By CP Software	£24.95
Drivin' Force - By Digital Magic	£24.95
Live & Let Die - By Elite	£19.99
Onslaught - By Hewson	£24.99
Pipe Mania - By Empire Software	£24.99
Rick Dangerous - By Firebird	£24.99
Rock 'n' Roll - By Rainbow Arts	£19.99
Skweek - By US Gold	£19.99
Trivial Pursuit - By Domark	£19.95

ART PACKAGE - £89.95:

Photon Paint 2.0 - By MicroIllusions	£89.95
TOTAL RRP:	£319.73

FREE! WORTH NEARLY: **£320**

PLUS! FREE HOLIDAY ACCOMMODATION

SILICA SYSTEMS OFFER YOU

- **FREE OVERNIGHT COURIER DELIVERY:** On all hardware orders shipped in the UK.
- **TECHNICAL SUPPORT HELPLINE:** Team of Amiga technical experts at your service.
- **PRICE MATCH:** We normally match competitors on a "Same product - Same price" basis.
- **ESTABLISHED 12 YEARS:** Proven track record in professional computer sales.
- **BUSINESS + EDUCATION + GOVERNMENT:** Volume discounts available for large orders.
- **SHOWROOMS:** Demonstration and training facilities at our London & Sidcup branches.
- **THE FULL STOCK RANGE:** All of your Amiga requirements from one supplier.
- **FREE CATALOGUES:** Will be mailed to you with offers and software/peripheral details.
- **PAYMENT:** By cash, cheque and all major credit cards.

Before you decide when to buy your new Amiga computer, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after buying your Amiga, when you may need additional peripheral software, or help and advice with your new purchase. And, will the company you buy from contact you with details of new products? At Silica Systems, we ensure that you will have nothing to worry about. We have been established for over 12 years and, with our unrivalled experience and expertise, we can now claim to meet our customers requirements with an understanding which is second to none. But don't just take our word for it. Complete and return the coupon now for our latest Free literature and begin to experience the "Silica Systems Service".

MAIL ORDER HOTLINE
081-309 1111

SILICA SYSTEMS

MAIL ORDER:	1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX. Tel: 081-309 1111
	Open: 10am-6pm. Mon-Sat 9.30am-5.30pm. Sun 10am-4pm. Late Night: Thursday and Sat. Fax: 081-309 3000
LONDON SHOP:	52 Tottenham Court Road, London, W1P 0BA. Tel: 071-580 4000
	Open: 10am-6pm. Mon-Sat 9.30am-5.30pm. Sun 10am-4pm. Late Night: Thursday and Sat. Fax: 071-580 4170
LONDON (SELFRIDGES):	1st Floor, 369 Oxford Street, London, W1A 1AB. Tel: 071-429 1234
	Open: 10am-6pm. Mon-Sat 9.30am-5.30pm. Sun 10am-4pm. Late Night: Thursday and Sat. Fax: 071-429 1234
SIDCUP SHOP:	1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX. Tel: 081-309 1111
	Open: 10am-6pm. Mon-Sat 9.30am-5.30pm. Sun 10am-4pm. Late Night: Thursday and Sat. Fax: 081-309 3000

To: Silica Systems, Dept AMCOM-292-60, 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX

PLEASE SEND FREE AMIGA COLOUR CATALOGUE

Mr/Ms/Ms: _____ Initials: _____ Surname: _____

Address: _____

Postcode: _____ Tel: _____

Which computer(s), if any, do you own? _____

NOTE: Advertised prices and specifications may change: please return the coupon for the latest information.

The ancient art of Sma Kin Marf

4D SPORTS BOXING

MINDSCAPE • £25.99 • 1 meg • Joystick • Out now

It's a scary old sport isn't it, boxing? Two men stand in a ring and smack each other about the head repeatedly with cushions strapped to their fists. They keep doing this until one of them falls over and then the one who didn't fall over holds his arms up in the air and tries to pretend that he isn't about to drop dead. Very noble.

So noble in fact that Mindscape, producers of quality spook software, have decided to give boxing the old 4D treatment. Thus, you closet fist-mongers can beat seven bells out of some innocent vectors without alarming elderly relatives. So let's bat ten down the hatches and take a look...

OK, so the screenshots look a bit startling don't they? All trian-



Glenn, Green, Secret, Pant, Herringbone, Etc etc

gles and funny shapes and no-parallax scrolling or anything. It's enough to make your average beat-em-up fan hide under the sofa. That's because vectors and polygons tend to imply (flushed whisper) 'strategy' and 'simulation'. Eek! Grown up games! There's no fun in that, matey, I'm off. But before you run away to play something refreshingly brain dead, hold on a wee while and find out just why a bit of strategy and simulation can spice up your run-of-the-mill boxing game.

To call 4D Sports Boxing a boxing 'game' is perhaps a smidge insulting. It's more of a boxing simulator. You control the creation of up to ten boxers, build up their skills, and then step into their shoes for the fights.

The crux of the game is the fighting, but emphasising the wrong elements of training will mean that your boxer isn't prepared for his opponent and will promptly get his head stomped good and proper. Not the healthiest of positions to be in.

So, you've created a boxer using the remarkably simple 'Create a Boxer' section. Fairly obvious. You now can enter your

boxer - let's call him Susan just for humorous effect - in an exhibition fight. An exhibition fight lets Susan slug it out with a rival of your choice.

This has many advantages: first, one it allows you to get used to the controls. Secondly it lets you suss out the kind of tactics you can expect from your various opponents, and thirdly you can afford to get beaten into the ground without affecting your league rating.

Once you've mastered the moves available, which is pretty easy, then you'll be ready to go for the 'main event', where you can get beaten to death in a professional capacity, rather than as a rank amateur.

Going back to the moves, apparently you can perform a variety of 'showboat' actions. These include jiggling up and down, goading your opponent and generally acting like a right old prima donna. Unfortunately, these only work when you press the second Fire button on your joystick.

That is, of course, assuming you have two separate Fire buttons. As most people will have



Susan the boxer in Dire Straits video shorts

Time to pick an opponent for Susan...

12 GAMER (1992)



There's no turning back now, you're committed to a bloody good licking



The camera zooms in for the blood-curdling finale



And it's a breaker of a right hook from the amazing fish-like boxer!

their fire buttons linked to one microswitch, this renders that rather clever feature a bit redundant. Flipping annoying as well, as I was looking forward to doing all those show-off moves. Gosh, damn it, Mobster!

Anyway, you select your opponent from the league by judging their skills against yours, and then concentrate your training on more aspects you need to firm up on (ah yes, missus). This done, you can slip into some seductive silk shorts, step into the ring and have your brains turned to mush for fun and profit. Now that's entertainment.

In the ring, things start to look more like a simulator. The people don't look like real people, more like Dairylex triangles with attitude. They move like real people though, and that's 'cos all their movements have been copied from real live boxers. Yes indeed.

The most simulator-ish aspect of all, though, is the multitude of definable camera viewpoints. Yep, camera views. Now you may think that the last thing you'd want to do while exchanging blows with a muscle bound hulk called boxer is to fiddle with camera settings viewpoints.

Surprisingly, the idea works quite well. If Susan is being obscured by your beefy opponent, a quick prod on the function keys will switch the view to give you a clearer idea of 'what's going on', as Marvin Gaye would have said.

OK, so things do look a bit confused when the boxers get close, and the animation can

fling around and trying not to get leathersed was quite a wise approach to begin with. And so that you don't spend the whole time waving your fists at thin air, there's a proximity meter that shows how far apart the boxers are. When they're in punching distance, it turns yellow and you can let fly with a flurry of blows.

Well, criticism time I think. The graphics are a bit iffy at times. As you can tell, and the boxers heads have a disturbing habit of switching from little circles to alarming cubes for no obvious reason. This doesn't affect the gameplay really, but it can be disorientating.

Another gripe, being the grouchy git I am, is that at times the game can be very slow. Not during the fights thank God, but selecting options often leads to drawn out disk accessing, which makes the management sections a bit of a chore. And of course, the rather odd 3D approach may make some people think twice about buying it.

An action replay reveals an unsparring 'knee in the dander' move



you're likely to hum in the bath. The presentation is, on the whole, fairly good: Despite the spooky graphics, the little details haven't been ignored. For instance, during training you'll actually see Susan (or whatever you call your boxer) doing 'her' thing. Skipping, punchballs and the speed bag are all there in polygon 3D.

The playability is the sticky bit. I liked it, personally. If you can look beyond the unusual visuals, there's a rewarding game in there. It's perhaps a bit easy, as once you've built up your boxers power it's a cinch to slug your way to the top ten, but the challenge of controlling ten boxers should go some way to make up for it.

On the other hand, a lot of people have 'feared'. It's extremely off-putting and difficult to get to grips with. Hmm. Nash, sod 'em. I liked it and if you like sports games that require a bit more thought than you'll like it too.

Mindscape have taken a risk

with a game like this, and it's almost paid off. Not a perfect game by any means, but if you persevere you'll be rewarded. Give it a go.

Daniel

look biologically unsound at times, but the 3D works well and the freedom of movement gives you plenty of room to develop an individual fighting style. I found that shul-

On a lighter note, the sound effects are really meaty with some bone-crunching 'thud' noises, grunts and groans. The music is bearable, but not the sort of tune

VISION

GGG

A brave 3D approach that occasionally doesn't work as well as it should.

AUDIO

GGG

Above average tone and satisfying thumping noises.

PLAYABILITY

GGGG

Make the effort and you'll get more than your money's worth.

ADDITION

GGGG

Maybe too easy, but enough options to make it stay the distance.

80%

Future Gamer 13

the source

Psygnosis have never been ones for beating about the bush. The latest example of this is *Avenger*, a flight sim based on the F-14 and the F/A-18. While only a working title, the scenario is all too clear—full Desert Storm, get those Iraqis out of Kuwait, torch the Revolutionary Guard and don't get killed.

None of this "might be set in the Gulf. Possibly" business for *Psygnosis*. And after the top notch work that Ed did on *Armour-geddon*, he was the natural choice for a vector-based flight-sim.

The game can be played in two ways—as single missions or as a campaign, but all will be based in one of the planes flown from a carrier. A campaign will be made

With barely a pause for breath following the success of *Armour-Geddon* for *Psygnosis*, Ed Scio is working on a new flight sim for them. Gamer travelled to the industrial North East to get mauled by a large labrador

up of single missions, but their result will affect the outcome of allied activities on the ground.

For example, if you successfully fly a mission to knock out a bridge, then enemy troop movements will be restricted making movement of, say, a tank convoy on the other side of the river a lot easier.

The game will include a number

of mission types that haven't been seen before on computer. No-one could forget those stunning images recorded through the laser bomb-guiding system that stuttered across our TV screens in the spring. Well, this feature has been introduced into *Avenger*.

You can fly in either plane as the laser aimer, using your immense skill as a pilot to place that laser beam right where it should be so that your partner in the other plane can drop the bomb without worrying, or an F-14 will be able to escort a computer-controlled F/A-18 on a bombing mission over enemy territory. You could probably do one over friendly territory as well, but the chaps with the big moustaches might not be overly impressed.

Before all this begins though, Ed has plans to include a line vector mission planning screen, where waypoints can be plotted for the autopilot to follow.

Similar, I'm told, to the system used during the actual conflict.

Accuracy, in equipment at least, has been a big thing with Ed on this project. While accurately reproducing the boredom of long distance flying is not always good on the playability front, Ed wanted as much of the real weaponry and cockpit equipment in there as possible.

Both of the cockpit bitmaps represent reasonably accurately the real thing, but the real accuracy is the equipment found for use in the F/A-18. This includes a Velocity Search that picks up moving objects and something called

a Track While Scan, which allows the radar to lock on to one moving target while looking for others. Not all of this is available to the pilot of the F-14, because he has his own navigator to do all this for him.

Graphically, while being vector based, the little touches will all be there. Fully movable flaps on both planes, animated airbrakes and arrester hooks and more built-in camera angles than you could shake a telephoto lens at. This will make just flying to and fro an almost cinematic experience, with various pre-programmed pans and swoops included to make you look more like Tom Cruise than Tom Cruise.

The real innovation, though Ed can't understand why no-one has done it before because he reckons it is dead easy, is the fully ▶



the source



A selection of shots showing the usefulness of the scrolling cockpit view



scrolling cockpit view. Previously flight simmers have only been able to flick between side view and front views, but now the player can actually turn the view from the cockpit as though he were turning his head.

This makes flying and looking around far easier and a lot less disorientating than flicking between screens. At the moment this only works in the horizontal plane, but Ed is working on getting the pilot to look up as well. I hope he manages it.

Weather features like lightning, rain, and thunder will all be implemented giving the game's atmosphere a real boost. Imagine flying through a thunderstorm at night on the way to bomb a very important target over the border - it would be fantastic. Or flying by radar because of the poor visibility even at low level.

There will also be a completely accurate star map - no use for navigating unless you are really clever, but if you ever have a free moment you can try and figure out what the Big Dipper looks like from Baghdad. Night and day perform correctly - none of this

broad daylight to pitch black in one fell palette change for Ed.

No, from broad daylight to pitch black takes about six palette changes, so you can take off just before dawn in true Desert Storm style to wake up Saddam with a big missile.

Each object will have its own sound, which will react to where the player's view is from. For example, if an outside view is taken of the F-14 flying past the camera, the sound will grow louder to climax in a big woosh as it zooms past and gently fades away into the distance.

The same effect will be found with missiles. Even the cockpit wind noise, I'm told, is accurate. Not that I could distinguish cockpit wind noise from an elephant's fart, but the thought counts, and it does sound different to the engine noise in the cockpit. The only place where accuracy does take a dive is the number of enemy planes in the game. If Ed

had stayed true to real life there would have been approximately three Iraqi jets. So for the sake of gameplay, ie having some, a few more have been added. All of the planes that flew over the border in the real war won't have done, so that you will be able to fly against the MIG-29s with the Soviet-trained pilots, or the French Mirages with Iraqi-trained pilots.

Don't make the mistake of thinking that this is the next *Birds of Prey* - it isn't. The accuracy is there, but the gameplay has been enhanced to make it feel like a game - action and adventure, that kind of thing - but not to the extent where it all gets repetitive in that F-15 II kind of way.

When it appears in early March 1992 *Avenger*, or whatever it ends up being called, will become the definitive "fun" flight sim. Groovy.

Jools

Clockwise from top: flying at dusk; launching dumb ZUNI rockets at a tanker; and a sidewinder racing off into the night



A320

A·I·R·B·U·S

...is on final approach.



GAMER ELSPA Chart

Blimey! Nine new entries, twelve climbers and nine fallers, but the big news is that the entire top five is made up of full price titles, all of which are Gamer Golds (have we got taste or what?). And there are only three budget titles in the whole top ten. Lotus II, at number one, has obviously found the stamina to maintain its climb up the chart, with Mega-Io-Mania not far behind.

But there are still a lot of big titles waiting in the wings to make a huge entry - First Samurai, Pit Fighter and Formula One Grand Prix for example, and of course, Populous II, the same man's tip-for-the-top this Christmas. Don't discount Cliff Richard though, he could do it. Not only that, but Psygnosis have got some three or four titles waiting in the wings, and one of them will surely do the business, won't it?

The top quality of Jimmy White's Snooker ensures that it still hangs in there some three months after its release. It just goes to show that you do appreciate quality after all. And finally, some weeks after the World Cup, Domark's rugby sim is still holding on. What it needs for a boost is a data disk that allows you to drink a lot and leer at women in pubs. That would be good.

Talking Shop is sponsored by HMV and features a software chart compiled by Gallup Ltd. This chart is the copyright of the European Leisure Software Publishers Association

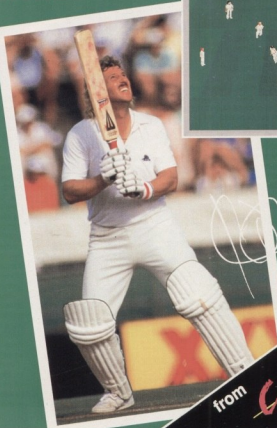
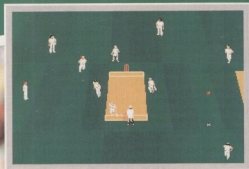
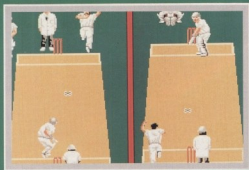
THIS MONTH		LAST MONTH
1	★★ 7 Lotus Turbo Challenge 2 GAMER	Gremlin £25.99
2	★★ 9 Alien Breed GAMER	Team 17 £24.99
3	★★ 14 Mega-Io-Mania GAMER	Image Works £30.99
4	★★ NE Heimdall GAMER	Core Design £34.99
5	★★ NE James Pond 2 - Robocod GAMER	Millennium £25.99
6	★ 1 Return to Europe	Anco £7.99
7	★ 5 Bubble Bobble	Hit Squad £7.99
8	★ 3 Jimmy White's Whirlwind Snooker	Virgin £29.99
9	★★ 10 Shadow of the Beast	Sizzlers £7.99
10	★ 6 Final Fight	US Gold £25.99
11	★★ 12 TV Sports Football	Mirror Image £9.99
12	★★ 28 Fantasy World Dizzy	Code Masters £6.99
13	★★ 15 Rugby - The World Cup	Domark £24.99
14	★★ 19 New Zealand Story	Hit Squad £7.99
15	★★ NE Wacky Races	Hitec Software £7.99
16	★ 2 Terminator 2	Ocean £25.99
17	★★ 23 Lombard RAC Rally	Hit Squad £7.99
18	★★ 21 Altered Beast	Hit Squad £7.99
19	★ 13 Dragon Ninja	Hit Squad £7.99
20	★★ 24 PGA Tour Golf	Electronic Arts £25.99
21	★★ NE Scooby Doo and Scrappy Doo	Hitec Software £7.99
22	★ 8 Head over Heels	Hit Squad £7.99
23	★★ 25 Populous	Star Performers £10.99
24	★ 17 Full Contact	Team 17 £9.99
25	★★ NE Knights of the Sky	Microprose £34.99
26	★★ NE Board Genius	Beau Jolly £29.99
27	★★ NE Little Puff	Code Masters £6.99
28	★ 26 Batman - The Movie	Hit Squad £7.99
29	★★ NE North and South	Digital Int. £7.99
30	★★ NE 4D Sports Boxing	Mindscape £25.99

Ian Botham's CRICKET

AVAILABLE
FOR
ATARI ST
AMIGA
& PC

Test your skills in this superb, action-packed cricket simulation designed by cricket enthusiasts, for cricket enthusiasts.

- Play a one-day Test Match.
Choose the length of game.
- Two player mode or challenge the computer.
- Television camera views with action replay.
- Superb graphics and sound.
- Contend with the effects of wind direction and temperature.
- Features all the current international teams
No two matches ever the same!



from *Celebrity*
SOFTWARE

Celebrity Software International Ltd
Lonsdale House, Woodland Park
Colwyn Bay, LL29 7HA
Tel: 0482 531850
Fax: 0482 533612

High altitude action in an...

A320 AIRBUS

THALION • £34.99 • 1/2 meg • Joystick/mouse/keyboard • Out now



The Met Office supplies the latest weather report. With a cloud base of 600 feet the ILS will be needed for the landing

However exciting it may be, flying is, for most of us, limited to seat 10B on a 20-year-old airliner carrying us to our summer holiday resort.

At a cost of £5,000, give or take a grand, learning to fly even the smallest fixed-wing aircraft is financially out of reach of many and a trip into a multi-million pound simulator used by airlines is limited to spotty little kids writing to Jim'll Fix It or computer programmers on the Kypton Factor.

This is, perhaps, why flight sims on home computers are so popular. The Amiga has already seen its fair share though, with the exception of ProFlight, they are little more than shoot-'em-ups based on fast military jets.

Serious fliers have really been limited to trips in a single-engine Cessna, courtesy of Flight Simulator 2. It used to be the best, but is rather sluggish compared to other software and desperately needs updating.

German software house Thalion have rolled out what can only be described as the best yet in Amiga simulation. Written by a Luftwaffe pilot, A320 Airbus puts you in the left-hand seat of a modern fly-by-wire jet of the same name.

Just like the guy that flew you to Conflu, it starts with a visit to flight briefing. A simple flight plan must be filled with details of the route, number of passengers (PAK), fuel weight and freight. The latest weather at the destination is printed.

During flight, the weather can deteriorate and the odd emergency means that you need to have a diversion airport planned. This happens mainly at the higher levels of the simulation.

Unlike other sims, the view is only from the Captain's side of the plane and so you only use the left side of the instrument panel and windscreen. The view can be moved about though, so

you can look to the left or right of the plane.

There isn't an option to look diagonally across out of the First Officer's window which seems a little strange. With it being an airliner, there is no need for a rear view.

Control is split between the keyboard and mouse or joystick. The mouse appeared to give the best results but it's probably one of those things that's down to an individual's choice. The keyboard commands are easy to remember and well placed.

The medium-sized airliner has one engine on each wing. They have to be started separately and once the power has stopped at 17 per cent they are

increased together to get the plane rolling forward.

It starts with the plane sitting on the nearest taxiway to the runway threshold, and so it's simply a case of turning on to the strip and straightening up on

to the centreline before banging the power up for take off.

Once the speed has reached about 150 knots you should be able to get airborne. Lift the gear and you're on your way. It's as simple as that - nearly.

Finding the destination demands the use of genuine Jeppesen navigation charts, which are supplied in the box. Radio frequencies for beacons along the route must be entered into the navigation system and should be overflown.

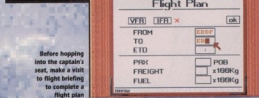
With no instructions from air traffic control, they are a necessity unless the plane is to be flown around in circuits at one aerodrome. Actually, this isn't too much of a bad idea until you get the hang of things.

They say what goes up must come down and so once overhead the airfield you have to prepare to get the plane safely onto the ground. The instrument landing system, known simply as ILS, is an important piece of equipment for this bit of the flight.

Used for guiding aircraft towards the runway they, like beacons, transmit on certain frequencies. These can be found with other approach details in the 240-page manual and are,



The operations room asks whether you're a first time flyer or checking in for duty. By saving information to disk, you can progress from trainee to captain and pick up your wings



Before hopping into the captain's seat, make a visit to flight briefing to complete a flight plan



The instrument landing system frequency has to be entered into the plane's navigation computer via the mouse.



Views can be made to the left or right. These are especially useful when turning on to the final approach for landing.



The autopilot knows exactly how to turn on to the approach and follows the correct path all the way to touchdown.



again, the same as those used by commercial pilots.

Two bars should appear on a dial on the right-hand side of the instrument panel. A perfect approach has these crossing at their centre and if they are not central, they'll indicate which direction to head in to get on course.

All the normal landing procedures have to be carried out. Control the speed using throttle, brakes and flaps and don't forget to lower the landing gear. If the undercarriage is lowered, three red lights on the panel will turn to green – if they don't you better start praying.

As the runway nears, a little light in the cockpit flashes to show that you've overflown the outer marker – a beacon four miles from touch-down. Closer still you'll pass the inner marker.

Providing the landing goes as planned the engines are put into reverse thrust to help out the plane's speed and the jet should be then be taxied off the runway. It sounds easy, but it's not.

Help is available through the autopilot. The A320 will be flown automati-

cally at the correct height, power and direction and can even land itself. This is especially useful if the runway is covered in low cloud or fog.

None of the program's features appears to have been bunged in as an afterthought. Even the clouds have been thought about, flickering between

different shades of grey before the aircraft pops out on the other side.

All major airfields from Southern Europe to Bodo in Norway are available and rivers and towns appear in the correct places. So, for example, if you tilt from Frankfurt Main, within a minute or two you'll be flying over the Rhine. In



As the sun goes down the light is adjusted to give dusk flying. The runway lights stand out much more.



addition to runway lights, every airfield has almost complete approach lighting. The exception is VASI lights which are used by pilots making visual landings to show whether the approach is above or below the correct path.

The only other niggle is that the runway markings are not included, but this is a minor complaint and does little to spoil the simulation. Maybe they can be added in future versions.

The question 'what else can you do other than fly around?' was asked more than once in the office. The answer is: not a lot. While it has plenty of interesting features, A320 is not intended as a action-packed game. This is one for those wanting to see what flying a really like.

As an indication of its realism, A320 Airbus has already been endorsed by Airbus Industries as the most realistic simulator for home computers, and Thales are being supported by Lufthansa, who will supply pilots wings to people who progress from trainee to Captain on the simulator.

Upgrades to the program are already on the cards and will be available for a small price as each is released. Jeppesen have agreed to sell updates to charts at trade price.

At the end of the day, smooth graphics, realistic flying and good effects make this the Amiga simulator which others are going to be judged against.

John Butters

Lettuce page

Got a question? A problem? A grumble? A gnu? We're here to set the record straight...

GONGED

Dear Gamer,

It's nice to see a separate games section in your magazine, as being a "gentleman of leisure" (ie. retired!) I have recently discovered the wonderful world of computer games as a hobby. So I was wondering if you could help explain your ratings system to me, as I'm not at all familiar with how magazines score computer games.

As far as I can tell, the overall percentage has no relation to the individual marks out of five. Just what do each of the scores mean?

Ernest Wood, Southport

This letter was sent to our colleagues at ST Gamer. We feel the point it makes applies equally to Amiga Gamer, so to clarify matters we've put together this rather handy guide to the eerie world of the Gamer Gong!

The overall percentage is not connected to the Gamer Gongs. If that were the case, then a game could get a high mark simply because it had excellent sound and graphics. So to keep things fair, the overall percentage is an all-round summary of the game, with vision, audio, playability and addiction all taken into consideration.

For each review, the Gamer team put their heads together (not a pretty sight with Biffa) and decide just what percentage the game deserves, thus each game gets a completely objective and balanced review.

Hope that sorts out the confusion!

The Rough Guide To Gongs

VISION



The VISION score tells you, generally, how the game looks. This includes graphics, presentation and all-round visual appeal.

AUDIO



How good is the music? Are the sound effects worth pumping up the volume for? The AUDIO score will tell you.

PLAYABILITY



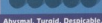
Is the game easy to get into? How much fun is it to play? PLAYABILITY let's you know.

ADDICTION



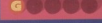
So it might look great, and sound fantastic, but will you still be playing it in a month's time? The ADDICTION score sorts that out.

VISION



Abysmal. Turgid. Despicable.

ADDICTION



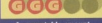
Very poor indeed. Must try harder.

AUDIO



Not very good at all. Below average.

PLAYABILITY



A respectable amount. Middle ground.

VISION



Bordering on excellent. Better than most.

ADDICTION



The business! Something very special indeed.

Are we cheating?

A young gentleman who identifies himself only as 'Chris' from Reading accuses us of cheating by reviewing unfinished software. His proof, it would seem, is the fact that we awarded Terminator 2 only 40 per cent, while another magazine gave it a rather generous 63 per cent.

He also cites the Thunderhawk "incident" from ST Gamer where we marked the game up after the review because changes were made to the program when the game hit the shelves. He demands a response, and never ones to back down, we're prepared to explain.



Firstly, we would never review "unfinished" software. What we sometimes have to do, as do many other magazines, is review "pre-production" versions of a game. This is when the software houses send us the game, without all the fancy packaging and frills, but with the game intact so the review can be published at the same time as the game is released.

If we had to wait for every game to be tarted up and put in a big box, you'd probably have bought the game by the time you read the review. This is not cheating, as it is done with the permission of the software houses who send us the disks for "review purposes".

Nor is it confined to Gamer. Pick any exclusive review from any computer magazine and it's almost guaranteed to have been reviewed from the pre-production version. It wouldn't be exclusive if the game was already released, would it?

Now to answer Chris' comments on Terminator 2 and Thunderhawk. Firstly, the version of Terminator 2 we reviewed was in fact the fully finished, boxed product complete with T-shirt and everything. We did not mark it down because we didn't see

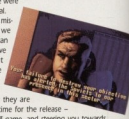
the finished game, but rather because we thought it was crap. That's what a review is - a matter of opinion. Therefore, another magazine may have liked it - but we didn't. You have to decide whose opinion you value most.

The Thunderhawk incident was one of those errors that happens in the fast-moving world of publishing. What had happened was that we were given a pre-production copy to review, by Core Design, and this version did not contain a training option.

We felt that this spoiled an otherwise good game and marked it accordingly. When Core released the game, they included a training option. We were informed of this and we changed the mark accordingly. We were all happy with this arrangement. No big deal.

Surely it is better to acknowledge our mistakes and let you, the punter, know if we change our minds or make an omission, than to be wimpy and hide our errors? So yes, we do review pre-production software, but then so does every other games magazine in the world and if we didn't then all the magazines would be hopelessly out-of-date. We have to review games before they are released so that the reviews appear in time for the release - maybe preventing you from buying a duff game, and steering you towards the ones to look out for.

We're sorry you feel cheated by this system, Chris, but we're sure you'd rather hear about the games early, then have to wait an extra two months for the same review of the "in the shops" version. Any games mag would tell you the same.



ATARI ST BUDGET

F	ST	ST	ST	ST
Schreiber		Section 1	Dele	Shaner
Shaw		Section 2	Dele	
Shaw		Section 3	Dele	
Shaw		Section 4	Dele	
Shaw		Section 5	Dele	
Shaw		Section 6	Dele	
Shaw		Section 7	Dele	
Shaw		Section 8	Dele	
Shaw		Section 9	Dele	
Shaw		Section 10	Dele	
Shaw		Section 11	Dele	
Shaw		Section 12	Dele	
Shaw		Section 13	Dele	
Shaw		Section 14	Dele	
Shaw		Section 15	Dele	
Shaw		Section 16	Dele	
Shaw		Section 17	Dele	
Shaw		Section 18	Dele	
Shaw		Section 19	Dele	
Shaw		Section 20	Dele	
Shaw		Section 21	Dele	
Shaw		Section 22	Dele	
Shaw		Section 23	Dele	
Shaw		Section 24	Dele	
Shaw		Section 25	Dele	
Shaw		Section 26	Dele	
Shaw		Section 27	Dele	
Shaw		Section 28	Dele	
Shaw		Section 29	Dele	
Shaw		Section 30	Dele	
Shaw		Section 31	Dele	
Shaw		Section 32	Dele	
Shaw		Section 33	Dele	
Shaw		Section 34	Dele	
Shaw		Section 35	Dele	
Shaw		Section 36	Dele	
Shaw		Section 37	Dele	
Shaw		Section 38	Dele	
Shaw		Section 39	Dele	
Shaw		Section 40	Dele	
Shaw		Section 41	Dele	
Shaw		Section 42	Dele	
Shaw		Section 43	Dele	
Shaw		Section 44	Dele	
Shaw		Section 45	Dele	
Shaw		Section 46	Dele	
Shaw		Section 47	Dele	
Shaw		Section 48	Dele	
Shaw		Section 49	Dele	
Shaw		Section 50	Dele	
Shaw		Section 51	Dele	
Shaw		Section 52	Dele	
Shaw		Section 53	Dele	
Shaw		Section 54	Dele	
Shaw		Section 55	Dele	
Shaw		Section 56	Dele	
Shaw		Section 57	Dele	
Shaw		Section 58	Dele	
Shaw		Section 59	Dele	
Shaw		Section 60	Dele	
Shaw		Section 61	Dele	
Shaw		Section 62	Dele	
Shaw		Section 63	Dele	
Shaw		Section 64	Dele	
Shaw		Section 65	Dele	
Shaw		Section 66	Dele	
Shaw		Section 67	Dele	
Shaw		Section 68	Dele	
Shaw		Section 69	Dele	
Shaw		Section 70	Dele	
Shaw		Section 71	Dele	
Shaw		Section 72	Dele	
Shaw		Section 73	Dele	
Shaw		Section 74	Dele	
Shaw		Section 75	Dele	
Shaw		Section 76	Dele	
Shaw		Section 77	Dele	
Shaw		Section 78	Dele	
Shaw		Section 79	Dele	
Shaw		Section 80	Dele	
Shaw		Section 81	Dele	
Shaw		Section 82	Dele	
Shaw		Section 83	Dele	
Shaw		Section 84	Dele	
Shaw		Section 85	Dele	
Shaw		Section 86	Dele	
Shaw		Section 87	Dele	
Shaw		Section 88	Dele	
Shaw		Section 89	Dele	
Shaw		Section 90	Dele	
Shaw		Section 91	Dele	
Shaw		Section 92	Dele	
Shaw		Section 93	Dele	
Shaw		Section 94	Dele	
Shaw		Section 95	Dele	
Shaw		Section 96	Dele	
Shaw		Section 97	Dele	
Shaw		Section 98	Dele	
Shaw		Section 99	Dele	
Shaw		Section 100	Dele	

TOP TITLES

TIME	Artist	STATION
7:00	THE BEATLES	10.1
7:05	ROBIN HOOD	16.50
7:10	ROD AND DAVE	16.50
7:15	ROLLIN MONROE	15.50
7:20	THE BEATLES	10.1
7:25	RED BARNON	20.00
7:30	THE BEATLES	10.1
7:35	RUDOLPH THE WORLD CUP	16.46
7:40	DAVID BOWY	16.50
7:45	MARCH FOR THE KING	10.00
7:50	THE BEATLES	10.1
7:55	LIFETIME	19.90
8:00	DOCK OF THE BAY	19.90
8:05	JOHN LENO	16.50
8:10	JOHN LENO	16.50
8:15	THE BEATLES	10.1
8:20	THE BEATLES	10.1
8:25	SPARKY RICE	20.00
8:30	SPARKY RICE	20.00
8:35	SPARKY RICE	20.00
8:40	SPARKY RICE	20.00
8:45	SPARKY RICE	20.00
8:50	SPARKY RICE	20.00
8:55	SPARKY RICE	20.00
9:00	SPARKY RICE	20.00
9:05	SPARKY RICE	20.00
9:10	SPARKY RICE	20.00
9:15	SPARKY RICE	20.00
9:20	SPARKY RICE	20.00
9:25	SPARKY RICE	20.00
9:30	SPARKY RICE	20.00
9:35	SPARKY RICE	20.00
9:40	SPARKY RICE	20.00
9:45	SPARKY RICE	20.00
9:50	SPARKY RICE	20.00
9:55	SPARKY RICE	20.00
10:00	SPARKY RICE	20.00
10:05	SPARKY RICE	20.00
10:10	SPARKY RICE	20.00
10:15	SPARKY RICE	20.00
10:20	SPARKY RICE	20.00
10:25	SPARKY RICE	20.00
10:30	SPARKY RICE	20.00
10:35	SPARKY RICE	20.00
10:40	SPARKY RICE	20.00
10:45	SPARKY RICE	20.00
10:50	SPARKY RICE	20.00
10:55	SPARKY RICE	20.00
11:00	SPARKY RICE	20.00
11:05	SPARKY RICE	20.00
11:10	SPARKY RICE	20.00
11:15	SPARKY RICE	20.00
11:20	SPARKY RICE	20.00
11:25	SPARKY RICE	20.00
11:30	SPARKY RICE	20.00
11:35		
11:40	SPARKY RICE	20.00
11:45	SPARKY RICE	20.00
11:50	SPARKY RICE	20.00
11:55	SPARKY RICE	20.00
12:00	SPARKY RICE	20.00
12:05	SPARKY RICE	20.00
12:10	SPARKY RICE	20.00
12:15	SPARKY RICE	20.00
12:20	SPARKY RICE	20.00
12:25	SPARKY RICE	20.00
12:30	SPARKY RICE	20.00
12:35		
12:40	SPARKY RICE	20.00
12:45	SPARKY RICE	20.00
12:50	SPARKY RICE	20.00
12:55	SPARKY RICE	20.00
1:00	SPARKY RICE	20.00
1:05	SPARKY RICE	20.00
1:10	SPARKY RICE	20.00
1:15	SPARKY RICE	20.00
1:20	SPARKY RICE	20.00
1:25	SPARKY RICE	20.00
1:30	SPARKY RICE	20.00
1:35		
1:40	SPARKY RICE	20.00
1:45	SPARKY RICE	20.00
1:50	SPARKY RICE	20.00
1:55	SPARKY RICE	20.00
2:00	SPARKY RICE	20.00
2:05	SPARKY RICE	20.00
2:10	SPARKY RICE	20.00
2:15	SPARKY RICE	20.00
2:20	SPARKY RICE	20.00
2:25	SPARKY RICE	20.00
2:30	SPARKY RICE	20.00
2:35		
2:40	SPARKY RICE	20.00
2:45	SPARKY RICE	20.00
2:50	SPARKY RICE	20.00
2:55	SPARKY RICE	20.00
3:00	SPARKY RICE	20.00
3:05		

VIRTUAL REALITY 2 - £17.99

Virus, Sentinel, Weird Dreams, Resolution 101 and Thunderstrike

FISTS OF FURY - £16.99

Dynamite Duo, Shimobe, Ninja Warriors, Double Dragon 2

BIG BOX - £15.99

© 2000 Blackwell Science Ltd *Journal of Internal Medicine* 247: 105–112

HEROES - £16.99
 Batman 2, Running Man, Star Wars, L

TNT - £15.99

Hard Drivin, Toobin, Xybots, A.P.B. & Dragon Spirit

Computer	Date	Name
Title	Price	Address
.....	Price
.....	Price
.....	Total	Postcode
Cheque	POS	Tel
		Code AMC F.....

Fairly basic stuff, I'm afraid. Even the in-game plot gives me no material whatsoever to base some entertaining drivel on.

It has something to do with aliens and trapping them, using your force-field-creating ship, in less than 20 per cent of the area they started off with. You move your ship out into the open space, leave a trail of force-field then try and get back to dry land.

If you close off an area, this becomes unusable to the aliens and knocks off a few more per cent in the quest to close them down. Your ship can only move along the exposed edge of the closed area, never within it. Dead simple.

It is complicated slightly by the fact that the big main alien you are trying to trap has lots of attendant little aliens which do their best to harass you. This isn't so bad because you are only vulnerable when trying to close off a new area

of the screen, but these guys move very fast so you have to be quick about closing off the screen area.

Grey squares will appear in the open play area, and sometimes disappear. If you manage to trap one of these while closing off some space then a bonus is

revealed – it may be a speed power-up, or the ability to fire jolly impressive laser bolts – these can be used to kill the annoying little aliens.

You get 1,000 points for each "normal" alien you trap. The bonus for trapping the major alien varies on how little space he is trapped in – the smaller the area, the bigger the bonus.

Trapping the big alien is not the only way of killing him. On some levels, if you collect the bonuses in a certain way you can get a huge gobsmacker of a weapon, which can be used to deci-

mate your adversary. This gives you so many points you could probably drown under the weight of them.

Graphics are all a little boring, looking very much like the kind of uninteresting superfluous detail you get when you have 32 colours but can't think of anything to do with them – my mother would have called it "too busy". The sound follows trends in being surplus to requirements – a nice soundtrack would have done the trick but the lack of effort has resulted in effects that go all over the place and completely miss the point.

The necessarily repetitive gameplay builds tension in a way that frustrates very quickly and makes you want to go and hit something, rather than making you want to try and beat the thing.

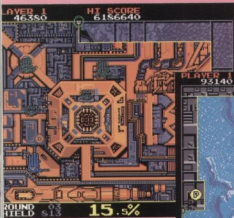
That is about the size of what is really a very basic game. It did well in the arcades, but is less likely to be successful on home formats – there just isn't enough there to warrant spending this kind of money on nothing more than a lot of levels of the same game that get a bit harder every time. Variety does not equate to Volfied.

Jools

Mad, bad and occasionally bad tempered

VOLFIED

EMPIRE ■ £19.99 ■ ½ meg ■ Joystick ■ Out now



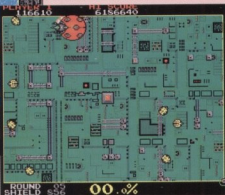
Gaining territory has been a primitive instinct of mankind for thousands of years...



...and the more it involves driving a tiny little spaceship around, the better, it seems.



...of course when big bad aliens turn up to disrupt things, the Rambo comes out in us all...



...no-one can resist the adrenalin rush of hurtling something down and trapping it in a corner



60%

The Beach Boys return - Ba-ba-ba-Barbarian

BARBARIAN II

PSYGNOSIS ■ £25.99 ■ ½ meg ■ Joystick/keyboard ■ Out now

Life as a triumphant adventurer was a happy one for Hegor. After the victory over his evil brother Necron, avenging the murder of his father, he was in line for the throne. The nation's elders were a tad concerned about this possibility - after all, finding a decent mixture of brains and brawn these days is difficult, one generally comes without the other and, well, Hegor was best known for his brawn. Not exactly royal material, therefore, the elders paid him off with a skip-load of gold and sent him away to get smashed for the next few months.

He spent the time drinking a lot and boring the inhabitants of the nation's taverns with tales of how he defeated Necron. But life as an ex-triumphant adventurer was not quite so happy. When some gossiping amazon ruined Hegor's reputation by telling him that Necron had been resurrected, things had to be done. How could Hegor bag a pint or two of mead in the evenings if his story had been discredited? How could he hold his face up in public again? How could he get free silk underpants from the girl in 'Ye Olde Socke Shoppe' if she couldn't fancy him any more?

He knew what he had to do. He had to get kitted out, toiled up and throw in his gauntlet - Necron must be defeated.

It is up to you to control Hegor through the six domains of this game. It starts in the forest as Hegor tries to defeat werewolves, Neanderthals and



Any man with this many ribs deserves to be killed

ogres, then progresses through the caves under the village, through the village itself, into the castle, down into the dungeon, then finally into Necron's temple.

The problem is that Hegor begins with no weapons whatsoever, meaning that the first forest involves him bashing as many people as possible with his bare hands so that he can get together enough gold and stuff to make himself slightly harder.

The screen layout of the forest is a little weird and takes some getting used to. Imagine it as a maze made up of a number of interlinked paths at right angles to each other. The path you are currently on is displayed from the side so that you can clearly see the action as you roll and punch your way to freedom, with the connecting paths going into or coming out of the screen. In-

ally, as you move on to another path, it is a little disorientating - trying to re-establish which way you are facing and so on - but a compass and a bit of mapping paper will see you right.

The gameplay on this level is very simple. Basically, just avoiding being killed by some very thick adversaries. But as you progress through the levels the game expands into more than just a beat-'em-up, requiring you to solve puzzles to find secret doors and reveal traps.

For example, in the castle you are required to pull chains, but not to flush out the bad guys. Usually they will be in a group of three which must be pulled in the right order to open the door to the next room. Something else to watch out for are hidden floor panels which will often counteract the effect of the chains you have just pulled, frequently sending you to oblivion.

As you move into the dungeon you realise that the enemies are beginning to get a lot harder. For the first time you will come face to face with the undead. They can be knocked down for a while but they are completely unkillable, the point being that they are already dead. You really have to work fast on those switches with these attractively dressed chaps around.

Hegor, once he has collected them,



can use different items to help him with his quest. On top of all the usual axes, potions and weapons there are things like grappling hooks, which can be used to hoist you out of tricky situations. Naturally there will be the odd shop around the place, usually in the most bizarre of locations, but only if you've remembered to collect all the gold you can will they be of any use to you.

Graphically the backgrounds are well up to standard, particularly in the later dungeon and temple levels. The sprites usually disintegrate and bleed in a comic book gore kind of way, and that comic book feel is most clearly demonstrated by Hegor himself, looking like something straight from the pages of the Beano as he rolls and tumbles his way about.

A typical Psynosis tune is in evidence, very reminiscent of castles and dungeons and heroes and stuff. The effects, though not brilliant, are just tough enough to make you think that that enemies probably do actually hurt you.

All told, it adds up to a very playable package continuing in the hallowed tradition of the original Barbarian, and goes a little beyond the traditional beat-'em-up gameplay to provide extra depth. Coupled with the difficulty level it makes it quite a challenge. Pretty damn good.

Jools

Baring all before you meet your death



These spidery things display a disturbing penchant for flashing your belly at you

Big red mobs in bouncy bouncy shocker



At last! A word that rhymes with meander

LEANDER

PSYGNOSIS ■ £25.99 ■ 1/2 meg ■ Joystick ■ Out now

Princess Lucanna had just turned 18. In fact today was her birthday. But today was the day that Thanatos decided to rise from his "pit of anguish", depart his prison of torment and take revenge for whoever had trapped him in this interminable prison. He deserved it though – he was officially classed as evil.

The rulers of Honshu, where Lucanna lived, were the nice chaps who had put him away, and it was them that Thanatos, or Thanny for short, was after.

To cut a long story short, one full of needless long words and sentences (see manual), Thanny kidnaps Lucanna and intends to use her life force to feed his own and ultimately destroy Honshu. Leander is the palace guard who's been bonking Lucanna on the quiet. They both reckon it is undying love, but listen to an old hand, it is pure lust.

The emperor summoned Leander and told him he knew about the illicit trysts in the garden but would forgive him if he rescued her. Better to have a live shotgun wedding than a dead daughter. Assuming, of course, that Leander could manage it.

Well it sure sounds like a beat-up to me, and, goth, I'd be right. The game is made up of three worlds each consisting of four levels, where a single quest has to be completed. This will usually involve collecting something from one end of the level and trekking back to the exit point at the other end with it.

Well it isn't quite as simple as that. The levels aren't linear, they go in all directions and need a lot of exploration



The teleport. Not manned by a big Irishman called Scotty

and mapping before they can be conquered with ease on a regular basis.

The game is populated by numerous assorted creatures, from elves to dragons to huge spiders that would put the wilies up any self-respecting arachnophobia. These can be slain with a few swipes of the sword but they are cunning little devils, and it takes a lot of care to get away without being hit at least once as you try and kill them.

Fortunately though, as you leap and bound across the graphically superb backgrounds, there will be a load of chests and trunks littered around. A few sword swipes will open these to reveal

some kind of bonus, be it money, points or armour improvements.

These armour improvements will take you to the next armour strength level. You begin on purple armour which only takes one hit point – take a hit and you die. Green provides two hit points, with the protection climbing one hit point per level through blue, silver, gold and finally black at six hit points.

The money can be used in the shops that you will occasionally stumble into. You could blow it all on a huge weapon but it is worth thinking about building up your armour first – you stand more chance of getting further the stronger your armour is.

Burne bombs can be bought in the shops too, or collected from the chests. These are essential because if you make the mistake of not picking up something that comes out of a chest, after a short period of time it will turn into a skull.

If this is accidentally collected, the ethereal presence of Thanatos will

appear, with thunder and lightning all about. Only rune bombs stand a chance of thwarting him, but it will take six hits to get rid of the ugly little bleeder.

It is fairly slow-paced initially with little frantic action – the emphasis is on exploration, and accuracy with the joystick as you try for the fifth time to catch that moving platform. Skill with the sword is crucial though – you won't be able to get away with auto-fire in Leander. A far more thoughtful game than some.

It takes on a medieval atmosphere almost as soon as you enter the first world. The graphics have an almost musty feel about them that puts you right back in the golden age of virgins and dragons.

The background colour-sitting and all that techy stuff is excellent and some of the foreground stuff occasionally beats First Samurai, but there isn't enough variety to do this on a permanent basis.

The sound is by a team led by one Jon Burton (apparently he's quite famous for this kind of thing), with a typically spooky Psychosis tune, and violent effects that, believe me, go some way to bringing out the armoured aggressor in all of us.

It is definitely a serious beat-up, well implemented, quite gorgeous to look at, and a treat for the ears. Pretty top.

Jools



The panto season begins in earnest: 'Behind you!'



Tiny Jap hero in swinging balls scandal



Never in this kind of game do you find a shop without a buxom wench



VISION
GGGG
A little repetitive but what's there is damn good.

AUDIO
GGGG
Moody tunes and violent effects.

PLAYABILITY
GGGG
Huge levels and tricky enemies combine for a big challenge.

ADDICTION
GGGG
Hoisting will abate your lust for the princess.

86%



Growl at the postman, comb your face and welcome...

WOLFCHILD

CORE DESIGN ■ £25.99 ■ 1/2 meg ■ Joystick ■ Out now

Wolves: brilliant, aren't they? Great big hairy dog things. And werewolves? Even more brilliant. All that prowling around and drooling at people. That's the life. Dracula? A wishy-washy ponce. Frankenstein? A limp-wristed girl's disease. The Mummy? Yawn city. But werewolves? Werewolves are, if you'll pardon the phrase, the gn's gonads.

And Core Design seem to agree with me, for their new release stars a lovable lycanthrope as it's hero. Not your traditional "bitten by a mysterious animal on the moon" werewolf, but a "genetically created futuristic robotmonster" werewolf. Obvious really.

You see, it all began when Kal Morrow, a dead brainy genetic scientist bloke, was kidnapped by Chimera, one of those evil organisations who like nothing better than to kidnap dead brainy scientists. Unfortunately, they reckoned without Saul Morrow, Kal's son.

Saul decided that the game would be a lot more exciting if he got up off his bum and did something about it, and so he injected himself with some of his Dad's Wolfchild fruit cordial. And hey presto! He becomes a werewolf and sets off to dribble a lot and menace lamp posts.

His quest begins as his spaceship descends towards the Chimera base, and Saul must fend off the mutant Bird-men on the hull. This accomplished, he must fight through a jungle infested with, er, jingly things.

Then, without pausing to adjust his breeches, he dives into some dank and spooky caves to fight insect things. No rest for the wicked, and he leaps straight into the Chimera base for the

penultimate showdown, before striding manfully into the main control centre for the obligatory Final Conflict.

Of course, what it all boils down to is a scrolling platform game with a liberal sprinkling of beat-'em-up. It's the sort of gamestyle that's currently setting the consoles alight, so it's likely that we'll see quite a lot of it in the future. Luckily for Core, Wolfchild is the first of these games out of the proverbial gate, so they could be on to a winner here.

And with presentation like this, it's not surprising. The graphics are excellent. Loads and loads of detail, topped off with some of the swiftest parallax you'll

000700 Wolfchild takes this opportunity to show us his new fitness video

Grrr. If you don't leave me alone, I'll hump your leg to death



ever see. Add some decidedly yucky mutants to beat up and you've got a game that's just the thing to stick two fingers up at the Megadrive contingency.

The twist here is that once your energy reaches 75 per cent or higher, a

bolt of power bursts all over the shop and you sprout unsightly hair from places you didn't even know you had places. When in werewolf mode, you're not only twice as 'ard as before, but you can now project magic energy as well as relying on physical prowess to defeat your opponents.

Or to put it another way, you can fire rather than just punch. The bullets are, as always, upgradeable and vary from three-way fire to heat seekers. No surprises in that department, then.

So, Wolfchild is a visually impressive, reasonably playable console buster. If you need any persuasion then I'll tell you that it was written by the bloke responsible for Switchblade.

Nuff said. It lacks that extra depth that it needs to get the coveted Gamer Gold but it looks, sounds, smells, tastes and feels like a "quality game". Surely that must count for something?

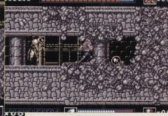
Daniel



002000 Open air confrontations on the spaceship



002600 Time for a quick game of 'tag' with the mutle insects



VISION
GGGGG
Just the thing to annoy the console owners!

AUDIO
GGGG
A fair tune and a great sampled howl!

PLAYABILITY
GGGG
Lacking depth, but pitched just right.

ADDICTION
GGGG
More fun than chasing cars.

86%

Changing in public always was embarrassing for Saul

Time for a quick game of 'tag' with the mutle insects

Pick a plane ... any plane

BIRDS OF PREY

ELECTRONIC ARTS ■ £34.99 ■ 1 meg ■ Joystick/mouse/keyboard ■ Out now

After almost five years of development and speculation, a finished version of Argonaut Software's *Birds of Prey* (BOP) finally landed on my desk today. Surprisingly enough, there were no owls hooting, horses eating each other, and all that stuff you normally expect when something long awaited comes to pass — so I just booted up.

BOP was coded by Jee San and his team, from whence came *Starfighter 2*, one of the all-time Amiga classics. It offers a choice of squadrons of different aircraft depending on whether you decide to be a "good" guy or a "bad" guy. It flies smoothly considering how many other planes the computer controls at the same time, and it makes the tea when you get tired of carpet-bombing little villages in South East Asia.

How does it play? Well, it's a bit like every flight game you ever wanted, but couldn't be bothered with because they're all just boring variations on the theme of "how can we make lots of money from cunning flight algorithms?". BOP is a great game, not a great simulation, so members of the Society for the Appreciation of Differential Calculus (S.A.D.) needn't buy it.

The action is set in a fictional landscape of land, sea, and islands, but all the aircraft are real. You can take off from a main airbase in a B-52, or ski-jump from HMS *Invincible* in a Harrier, and if you get bored with "good" guy planes, it's easy to swap sides and fly in a Mig-29 or Backfire bomber.

After the manual protection is over (you have to answer a question on the technical details of an aircraft or missile) you jump to the pilot screen. Here you can load and save pilots, or create new ones, then it's time to get down to business.

First you select what sort of mission to fly. There are twelve to choose from, including the unusual options to drop parachutists or supplies, and test fly the X-15 or Mig29. Next comes the all-important choice of home base.

There are five of these for each side (Blue and Red — but it's hardly a coinci-





The twelve mission types are so different. There are a few which don't involve killing someone!

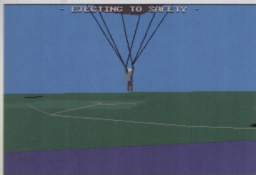
my A-10, complete with oodles of bombs and things dripping from below the wings. Yum!

The rear view of a Hercules is fun when on a drop mission. This initially gives you a black screen because you're actually looking back into the cargo hold. Once the door is opened, however, you can see the parachute drop out the back of the plane and open his canopy. There's a certain amount of sadistic tension involved when you wait for the chute to fall to

open, but it hasn't happened yet in any of my missions.

On the strategy side of things, you can call up an AWACS map of the entire battle area and zip around to spy on what everyone else is doing (hint - they're all trying to kill each other), and when in flight there's a radar map of your immediate surroundings which you can zoom in and out of.

This is great for figuring out where that pesky Mig-25 just went, and for working out which tanks are friendly.



Fail to avoid that AA-8 Aphid, and you've got a long floating scenic trip ahead

Show a friendly target of any kind, and you're labelled a traitor and forced to swap sides, so it pays to check (A-10 pilots please take note).

When you and your comrades have liquidated enough of the enemy's assets, you're treated to a victory screen and you can go on to another scenario. If you don't, you better start getting used to the humiliation of potato queues or revolting daytime TV depending on your original nationality.

With a steady advance through the ranks, so much going on around you, the numerous ways of playing the game, and the vast size of the playing area itself, Birds of Prey is easily the most addictive and playable flight game on the market. Realism buffs will be advised to go for Flight of the Intruder or ProFight, but those of us born with the need to stuff Mavericks down the throats of computer-generated bad guys will lap up this game like a starving cat at a bowl of catnip-flavoured cream.

Anton Black



Stealth fighters are so ugly, they HAD to be made invisible to radar



HAKPAK

The HakPak cheating continues. You've had them on card, now you've got them on paper. What'll they be on next? Watch this space...

GAMER HAKPAK

Toki

Ocean
During the intro sequence, press Escape then type POOMTOKI. Start the game and press Escape once the map screen has appeared. Pressing the function keys during the intro will now allow you to skip levels.



Venus The FlyTrap

Gremlin

Press spacebar on the title page to enter a cheat. Type in JUPITER for infinite time. Type FREEPLAY for infinite credits and type in PLUTO for infinite Ameno.



Prince of Persia

Broderbund

PRINCE OF PERSIA - Broderbund
While playing, press and hold down Caps Shift and press L. You will be transported to the next level. Be warned - this doesn't work on the bonus section.

PLATFORM

HAKPAK

Knightmare



"You are setting forth into another place, another time, another world," said Treguard, The Dungeon Master. "And what makes you think that you four mere mortals will succeed in the Quest, when so many others have failed?"

I understood, at that moment, that our mission was going to take all our endurance, all our collective skill, and, most of all a depth of courage, that I wasn't sure we possessed.

Ever since ITV's award-winning series hit our screens, the world has been waiting for a computer game worthy of the name. The wait is over.

Tony Crowther's amazing re-creation has everything.

Using the same game system that made 'Captive' adventure game of the year for 1990, 'Knightmare' makes dungeons and dragons games seem like neivts splashing around in a muddy puddle.

'Knightmare' is a sophisticated role-playing adventure where you are

challenged to solve complex puzzles, logic problems and riddles that reveal a rich, ever-more rewarding storyline.

Your journey takes you deep into the dungeons of Dunsheim, to a cataclysmic meeting with Lord Fear and the unthinkable horrible FrightKnight.

Whether or not the meeting is terminal is up to you. You will need wisdom, tenacity, alacrity and, above all, courage.

But you have all those things, don't you . ?



Available for Amiga & Atari ST

Knightmare is copyright Anglia Television and Broadsword Television.

Game copyright 1991 Mindscape International Limited.

Captive Copyright 1990, 1991 Mindscape International Limited, all rights reserved.

Written by Tony Crowther.



MINDSCAPE

BROADSWORD



ANGLIA
Television Limited

For your local dealer, contact: **Mindscape International Ltd.** The Coach House, Hooklands Estate, Scaynes Hill, West Sussex RH17 7NG Tel: 0444 831 761

MOONSTONE

A HARD DAYS KNIGHT

FREE
POSTER
IN GAME
PACK



**SO MUCH FUN
-YOU'LL DIE!**

Moonstone - a remarkable combination of fast, aggressive combat action and subtle role-play set in a fantasy world, that uniquely challenges your brain and your reflexes - while covering you in gore.

Oh, by the way, if the sight of so much blood upsets you, don't worry. The blood is an option!

Moonstone features nearly 1,000 frames of incredible animation in 2. Megabytes of monsters and creatures, over 60 beautifully painted backdrops and detailed scenery. Sound effects are high quality digital samples and includes a full musical score and stunning full screen animated introductory and game complete sequences.



Moonstone contains scenes of strong graphic imagery-with particular realism. Although (these scenes are optional), this product is voluntarily rated 12. Parental Guidance is recommended for younger players, however this is not a legal requirement.

©1991 Mindscape International Limited. All rights reserved. Moonstone is a trademark of Mindscape International Limited. Written by Rob Anderson.



MINDSCAPE

For your local dealer, contact: Mindscape International Ltd, The Coach House, Hooklands Estate, Scaynes Hill, West Sussex RH17 7NG. Tel: 0444 831 761

WeServe

of Hampshire Best for service

Visit our showrooms. See before you buy. High quality products. Full technical support

NEW Citizen 224

Enhanced 24pin printer, optional colour
with easy to use control panel
2 year warranty. Price with cable & paper

£229 inc VAT

Optional Colour Kit £26.00 with printer
Amiga printer driver £5.00

NEW HP Deskjet 500 Colour

300dpi colour inkjet printer
Colour laser quality at 1/3 of the cost
3 year warranty. Price with cable & paper

£629 inc VAT

On Site support available phone for details

Swift 24E

Enhanced 24pin. Colour printer
2 year warranty. + cable & paper

£275 inc VAT

Citizen Swift 9

with cable & paper
£175 inc VAT

Citizen 120D+

with cable & paper
£119 inc VAT

Printer Drivers

Citizen Swift Colour£5.00
Canon BJ-10 etc£4.95

Panasonic KXP1123

Probably the best 24pin mono
printer available.
Price with cable & paper

£179 inc VAT

Panasonic/Epson

KXP1170 9pin£134
KXP1124 24pin£227
KXP4420 Laser£761
Epson LX450 9pin£135
Epson LX450 24pin£239
Epson LQ570 24pin£281
Epson 4100 Laser£839

Prices include VAT, cable & paper

Naksha Mouse

for Atari ST & Amiga
with house & mat

£21.50 inc VAT

Squik Mouse

£13.90 inc VAT

Brother HJ-100

360dpi Inkjet printer
with cable & paper

£229 inc VAT

Price includes on-site maintenance

Canon BJ-10ex

360dpi Inkjet printer
with cable & paper

£229 inc VAT

Star SJ-48

360dpi Inkjet printer
with cable & paper

£229 inc VAT

The above 3 printers are all
Canon BJ-10e's

Printer Dust Covers

Most types in stock
from **£4.70** inc VAT

Star

LC20 Mono 9pin£135
LC200 Colour 9pin£169
LC2410 Mono 24pin£182
LC24200 Mono 24pin£219
LC24200 Colour 24pin£275

Prices include VAT, cable & paper

Deskjet 500

H.P. 300dpi Inkjet printer
Laser quality at dot matrix price
3 year warranty

£345 inc VAT

Amiga Printer Driver £5.00

Competition Pro 5000 Sports Joystick

Various Colours. Micro Switched.
Fully guaranteed. Steel shaft

£11.50 inc VAT

Philips CM8833 MK2

Colour monitor with cable

£219 inc VAT

1/2 Meg Ram + Clock

£24.95 inc VAT

Cumana CAX354

External 1M Drive

£54.95 inc VAT

GVP Series 2 52M

for A500

£379 inc VAT

Supra 500XP 52M Hd

£349 inc VAT

Accessories

Joystick/Mouse twin extension£4.70
3M Joystick/Mouse lead£3.75
A500 Printer cable£7.95
Modulator/Disk Extension£10.95
23way Plug or socket£2.95
A500 Dust Cover£4.70
A501 3M Memory + Clock£29.00
Mouse Mat (thick soft type)£4.95
Mouse Houses£2.95
1M Internal 3.5" drive£57.50
A500 replacement PSU£39.00
1/2 Meg Ram NO Clock£23.90
GVP Series 2 52M (A1500)£289.00

Phone for our 56 page catalogue

EDUCATIONAL AND GOVERNMENT ORDERS WELCOME

All products have a 30 day money back & 12 month warranty.

Prices are subject to variation without prior notification.

Established 6 years. 3 minutes from M27 Junction 11.

Free parking. Open 9 to 5.30 Monday to Friday, 9 to 2 Saturday.

Postage 94p (80p + VAT) Securitor £6.46 (£5.50 + VAT)

WeServe

Larger items delivered
by Securitor



Amiga/Comp Dept
40-42 West Street
Portchester Hants.
PO16 9UW
Tel: 0705 325354

Amiga 1500 with Full software pack **£579** inc VAT

CBM 1084SD

Colour monitor with cable
£229 inc VAT

1M Cartoon Classics +

£359 inc VAT

Class of the 90's

£439 inc VAT

SONY

DISKETTES
SONY branded
(Lifetime warranty)

(100% Certified error free)

10 x 3.5" DS/DD 135tpi£7.50
50 x 3.5" DS/DD 135tpi£32.30
100 x 3.5" DS/DD 135tpi£59.93
250 x 3.5" DS/DD 135tpi£141.00
1k x 3.5" DS/DD 135tpi£540.50

DISKETTES

SONY bulk
(Lifetime warranty)

(100% certified error free)

10 x 3.5" DS/DD 135tpi£5.95
50 x 3.5" DS/DD 135tpi£19.80
100 x 3.5" DS/DD 135tpi£37.95
250 x 3.5" DS/DD 135tpi£88.42
1k x 3.5" DS/DD 135tpi£339.58
50 x 3.5" Disk box with lock£5.99
100 x 3.5" Disk box with lock£7.50

OMEGA PROJECTS

14 DERWENT CLOSE,
CULCHETH,
WARRINGTON,
CHESHIRE WA3 5DY

0925-763946
FOR ORDERS & TECHNICAL QUERIES

ALL PRICES INCLUDE VAT

ALL CHEQUES P.O. ETC
SHOULD BE MADE
PAYABLE TO OMEGA
PROJECTS.
WE ALSO TAKE ACCESS,
VISA, MASTERCARD &
EUROCARD.

SOUND ENHANCER

HARDWARE 34.95

100% COMPATIBLE
WITH ALL SOFTWARE

IF YOU THOUGHT THAT THE AMIGA SOUND WAS GOOD THEN YOU ARE IN FOR A REAL SHOCK, AS YOU CAN ENHANCE THE SOUND TO NEW HEIGHTS WITH THE BRAND NEW RELEASE FROM OMEGA PROJECTS. LOOK OUT FOR THE REVIEWS

AMI-BACK

The WORLD'S fastest, most reliable hard disk back-up utility available for the AMIGA. Backs up to 4 floppy drives (not 2 like the competitors) or to TAPE STREAMER without the need for additional software, has a built-in SCHEDULER. Selective Back-up, or Disk Image. Guaranteed, better than any other on the market

49.95

150 Meg SCSI TAPE STREAMER

The ULTIMATE back-up device
+ FREE copy of AMI-BACK

INTERNAL 529.95
EXTERNAL 629.95

AMIGA DOS 2.0
COMPATIBLE

512K Ram

Inc. Clock & Switch

21.95
19.95 no Clock

AMIGA 1500 + SOFTWARE

599.95
NO SOFTWARE
549.95

SUPER CARD-AMI II

The ultimate & genuine disk duplicator.
Full UK support & UK user group set up

A500 **34.95** A1500/2000

ST-506 HARD DISK INTERFACE FOR
A500. FITS IN TRAPDOOR COMPLETE
512K RAM + CLOCK
79.95

Commodores new INTERACTIVE VIDEO SYSTEM

C.D.T.V. 499.95

MICROBOTICS VXL-30

A500/1500/2000 ACCELERATOR CARD

68030 25MHz **289.95** 68030 40MHz **389.95**

BARE SCSI (UPGRADE) DRIVES

Quantum	52 Meg	199.95
Quantum	105 Meg	349.95
A500 Replacement H.D. Drive		99.00
A1500/2000 Internal Drive	210 Meg	419.95
AI500 CDDC Scan Drive (512K)		57.95
80000 8 in. Drive (2 Meg)		62.95
2561 Drums 100K		63.95
1.5 Items		67.95
4 Meg + 8 Sectors (2 Meg) 80K		67.95
4 Meg + 8 Sectors (8 Meg) 80K		67.95
4 Channel Audio Mixer + Mic		67.95
Condenser Mic		67.95
Sound Trap 3 + 80K 80K		67.95
Sound Trap 3 + AudioMaster 2		67.95
4 Meg + 8 Sectors (8 Meg) 80K		67.95
AudioMaster 2		67.95
AudioMaster 3		67.95
3.5" Ext Drive (2 Meg)		67.95
25-way Connector no. 1000		67.95
25-way Connector + 1000		67.95
40 Cops. 25K Bytes		67.95
40 Cops. 25K Bytes		67.95
A500 Dual Cops.		67.95
Mouse Mobs (2000 replacement)		67.95

SUPRA RAM 500 RX
External memory expansion for Amiga
500 & 500 Plus. Adds up to 8 Meg.
1 Meg 149.95 4 Meg 259.95
2 Meg 149.95 8 Meg 379.95

SUPRA

HARD DRIVE SYSTEMS

500XP 52 Meg 349.95
500XP+ 105 Meg 499.95

AT-ONCE A500
PC CARD 189.95

FULLY AUTOMATIC
MOUSE/JOY SHARER
14.95

GVP

52 Meg 399.95
105 Meg 549.95

IMPACT 500 HARD
DRIVE

Expandable to 8 Meg Ram
Add 70.00 per 2 Meg if
ordered at same time as drive

GVP SERIES 2 (A1500/2000) SCSI + UPIO 8 Meg of Ram
52 Meg 299.95 Add 70.00 per 2 Meg
105 Meg 499.95 If ordered at same time
NEXUS (A1500/2000) SCSI + UPIO 8 Meg of Ram
52 Meg 399.95 Add 70.00 per 2 Meg
105 Meg 599.95 If ordered at same time

**A500 PLUS
1 MEG UPGRADE**
TAKES YOUR A500 PLUS
TO 2 MEGABYTES OF CHIP RAM
54.95

GVP SERIES II 68030 COMBO CARD

This affordable ACCELERATOR CARD for the
A1500/2000 gives your Amiga a new outlook on
processing. Complete with CO-PRO, 32 bit RAM, and
SCSI HARD DISK controller. Allowing transfers in
excess of 1.2meg/sec

22MHz + 1Meg 32 bit RAM **599.95**
33MHz + 4Meg 32 bit RAM **1249.95**
50MHz + 4Meg 32 bit RAM **1649.95**

GVP IV24

24 bit professional Video Adapter. Features 16
million colours on screen at once, built in Genlock,
F/BI/TX, Frame buffer, Frame grabber and Digital
keyer. Comes with Calligra 3D, Scala IV24, &
Macro Paint

1799.00

APPLEBYS



**0962
868280**

2 CHESIL ST. WINCHESTER, HANTS

SHOWROOMS
Also In:
BOURNEMOUTH
BASINGSTOKE
ANDOVER



A500 CARTOON CLASSICS



**THE NEW
A500 PLUS**
- Wk bench
- Modulator
- P.S.U.
- Mouse
**DOWN TO
£357**

Includes:
DPAINT III
LEMMINGS
CAPTAIN PLANET
BART SIMPSON

A500 CARTOON XTRA



**INCLUDES
EVERYTHING AS
PREVIOUS PACK**
**PLUS
£399**

DUSTCOVER
MOUSE MAT
10 x 3.5" DISKS
DISK HOLDER
JOYSTICK
10 TOP TITLES (RRP £150)

A500 PUBLISHERS



**INCLUDES
CARTOON
CLASSICS PACK**
**PLUS
£459**

KINDWORDS V2
- THESAURUS
- SPELLCHECKER
- MULTI-FONT
PLUS
RICH CPT DAISYWHEEL
PRINTER - CALL FOR DETAILS

ACCESSORIES

Amiga 500 Console.....	£39.99
Amiga P.S.U.....	£39.99
Amiga Phaser Gun.....	£34.99
Astra Games Pack.....	£29.99
Amiga Stereo Speakers.....	£44.99
Amiga Replacement Mouse.....	£16.99
Amiga Dust Cover.....	£3.99
Amiga Mouse/Mat.....	£3.99
14" Monitor Stand.....	£15.99
Nakasha Mouse.....	£POA
2-Piece Printer Stand.....	£9.99
Parallel Interface.....	£14.99
Parallel Cables.....	£7.99
Amiga Light Pen.....	£34.99
Disk Holder (40).....	£7.99

AMIGA CLASS OF 90's

FIRST STEPS EDUCATION PACK
Includes:
A501 RAM EXP
DELUXE PAINT II
DELUXE PRINT II
INFOFILE
BBC EMULATOR
MUSIC MOUSE
LET'S SPELL
PROWRITE
LOGO
TALKING TURTLE
**TOTAL RRP
£840.79
OUR PRICE
£449!**

WINTER SALE!

A500 SOFTWARE
MEGA-PACK **£14.99**
SPEEDKING JOYSTICK +
- MIG 29 - BMX
- TENNIS - DIZZY
MOUSE MAT
DUSTCOVER
10 BLANK DISKS
DISK HOLDER
JOYSTICK
ONLY £19.99

MONITORS

**PHILIPS
CM8833
MK 2 £229**
- COLOUR
- Hi RES
- STEREO
- GREEN SCREEN
- UK VERSION
- Includes A580 Cable



PERIPHERALS

**CUMANA
354E £59.99**
- On/Off SW
- LED Drive
- Simulink
1 YR'S WARRANTY
HELP LINE
EASY TO FIT
ON/OFF SW

DISKS 3.5"
10.....£7.99 BOXES
20.....£14.99 40.....£7.99
40.....£29.99 80.....£3.99
100.....£39.99 100.....£10.99

**SEGA GAME
GEAR £114.99**
- Console Unit
- Mame Adapter
- Shinobi Game

CDTV



My Paint.....£29.99
World Vista.....£45.99
Music Maker.....£29.99
Sim City.....£24.99
Holy Bible.....£29.99
Garden Fax.....£29.99
Fun School.....£19.99
Bun for Barney.....£29.99
**THE NEW DYNAMIC TOTAL VISION SYSTEM
FOR COMMODORE. PLEASE CALL £475 inc.
FOR BEST PACKS AND ADVICE**

PRINTERS

CITIZEN SEIKOSHA sitair
1200+.....£125.99 SP-1900+.....£115.99 LC20.....£139
SWIFT 9.....£189.99 comes with FREE LC200.....£209
124D.....£189.99 auto sheet feed LC24-10.....£209
SWIFT 224.....£229.99 SP-2000.....£149.99 LC24-15.....£359
SWIFT 24E.....£279.99 SL92-24 pin.....£219.99 LC24-200.....£249

SEGA - THE ULTIMATE CONSOLE



**THE ULTIMATE 16-BIT
GAMES CONSOLE
PLEASE CALL FOR
LESS THAN RETAIL
PRICES AND PACKS**

AMIGA SOFTWARE SUPERPACKS

1	2	3
WIDWINTER DAYS OF THUNDER TURBO OUTRUN GREMLINS 2 KICK-OFF 2 POPULOUS	SWIV TOYOTA CELICA ULTIMATE GOLF GAZZA 2 TEST DRIVE 2 GUNSHIP	SILENT SERVICE ITALIA 90 DOUBLE DRAGON 2 CORPORATION RICK DANGEROUS 2 LOTUS ESPRIT
£29.99	£29.99	£29.99

PRINTER ACCESSORY PACK

Includes:
Parallel Cable
200 Sheets Paper
100 Address Labels
Printer Driver
**ONLY
£19.99**

JOYSTICKS

Quickjoy Topstar.....£14.99
Quickjoy Turbo III.....£9.99
Quickshot Python III.....£12.99
Zipstick Super Pro.....£10.99

**JUST
TELEPHONE
OUR ORDER
HOTLINE AND
WE GUARANTEE
OUR PRICES,
STOCK AND
EXPRESS
DELIVERY TO BE
OF THE HIGHEST
SERVICE
STANDARD**

TO ORDER. ALL PRICES INC. VAT

NAME.....

ADDRESS.....

.....

TEL. NO.

.....

EXP DATE

PLEASE DEBIT MY

ACCESS VISA CARD BY



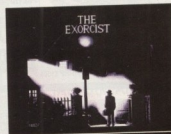
on the
Gallery

Sponsored by

ELECTRONIC ARTS



Judge Anderson



The Exorcist



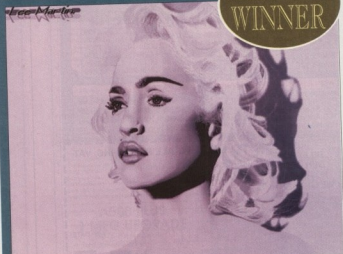
Terminator II

Tails



The Cat

This month's
WINNER



Madonna

Yes folks, it's that Gallery time of the month again and this month we've had a really good selection of pictures sent in.

The first is called *Judge Anderson* and it's by Jeffrey Miranda. As you might have guessed it's a picture of that famous PSI Judge from the pages of 2000AD - well done Jeffrey.

The next budding Picasso is a Mr W Kelling who has drawn quite a few excellent pictures, two of which we thought were particularly good. The first picture is entitled *The Exorcist* and looks really sinister in those dark colours. It sent shivers down my spine, I can tell you.

The second picture is of old Arnie Schwarzenegger in a *Terminator 2* pose. Both pictures are of excellent quality - top marks Mr Kelling.

Deciding the winner of this month's Gallery was very, very difficult indeed, but we got there in the end. In second place is Mr R A Rolph with his excellent fantasy pictures entitled *Tails*. The detail on this one is absolutely stunning.

But the winner is Lee Martin, with his brilliant portrait of Madonna. Done in hi-res, this picture is really one to behold. Lee sent in quite a few pictures - Madonna's the best, but is closely followed by his picture *The Cat*, not of the feline variety, but of Prince's ex-dancer.

Incidentally, Lee wins a copy of Electronic Art's Deluxe Paint IV and a framed copy of his winning picture, so that he can hang it on his wall and impress all his chums.

Do you think you can do better? If you can send your disks to:

Jonathan Maddock, The Gallery, Amiga Computing,
Europa House, Adlington Park, Macclesfield SK10 4NP

Please remember to include details of how you created your picture(s), plus your name, address, telephone number and what format the picture(s) are in. Good luck!



GLOBAL SOFTWARE

3D Soccer	18.99	Crusoe For A Corpse	18.99	J. White Snooker	19.99
688 Attack Sub	17.99	Cyberball 2	17.99	Katakis	18.99
A10 Tank Killer	22.99	Dad Boat	22.99	Kick Off 2	16.99
Accolade Sports	20.99	Disk	17.99	Leisure Suit 3	25.99
Action Stations (1 Meg)	21.99	Dragon Wars	18.99	Life and Death	18.99
Advanced Destroyer Sim	19.99	Dragons Lair 2	27.99	Lotus Esprit	17.99
Armies	17.99	Duck Tales	17.99	Lotus Esprit II	18.99
Armalyte	17.99	Elite	15.99	M1 Tank Platoon	19.99
Armour Geddon	18.99	Encounter	16.99	Manchester United	17.99
Atomino	18.99	Eye Of The Beholder	20.99	Merces	19.99
Backgammon	18.99	F-23	19.99	Midwinter	19.99
Battle Command	17.99	F-15 Strike Eagle 2 (1)	23.99	Mig 29	24.99
Battle Chess	17.99	F-19 Stealth Fighter	19.99	Mighty Bomb Jack	18.99
BIT & Texts Adventure	19.99	Fists Of Fury	19.99	Moon Base	25.99
Billy The Kid	18.99	Flight Sim 2	23.99	Navy S.E.A.L.S.	19.99
Blue Max	20.99	Full Blast	21.99	Ninja Remix	17.99
Brian Cloughs Soccer	17.99	Full Contact	7.99	Nuclear War	18.99
Cadaver	18.99	Gauntlet 3	18.99	Operation Stealth	17.99
Captive	17.99	Gem X	17.99	PGA Tour Golf	18.99
Champion of the Raj	17.99	Giants	19.99	Privates	17.99
Coin-Op Hits 2	20.99	Gods	19.99	Populous	17.99
Chuck Rock	17.99	Golden Axe	16.99	Power Pack	21.99
Chuck Yeager	18.99	Halls Of Montezuma	18.99	PP Hammer	17.99
Cueto Master Detective	18.99	Heroes	21.99	Predator 2	17.99
Coin-Op Hits 2	20.99	Horquest	17.99	Prehistorik	18.99
Conflict In Middle East	20.99	Indianaopolis 500	17.99	Pro Tennis Tour 2	17.99
Corporation	18.99	James Pond	17.99	RBI 2	20.99

GLOBAL SOFTWARE

10 Charterhouse, Great Mistley, Basildon,
Essex, SS16 4BG. Tel: 0268 288434

		BUDGET	
Roadshow Tycoon	23.99	3D Pool	7.99
Risk	18.99	A.P.B.	7.99
Robocop 2	17.99	After Burner	7.99
Scrabble Deluxe	17.99	Barbarian 2	7.99
Secret of Monkey Island	19.99	Blazing Thunder	7.99
Sega Master Mix	20.99	California Games	7.99
Silent Service	18.99	Casual Command	7.99
Sim City	19.99	Conflict	4.99
Sim City/Populous	19.99	Crazy Cars	5.99
Skate or Die	18.99	Double Dragon	7.99
Space Quest 4	25.99	Drum Slugs	4.99
Speedway 2	18.99	Fantasy World Dizzy	7.99
Spirit of Excalibur	19.99	Ferrari Formula 1	8.99
Spy Who Loved Me	18.99	Gauntlet	4.99
Steve Davis Snooker	7.99	Hard Driving	5.99
Squash	18.99	I.K.	7.99
Stratego	18.99	Impossible Mission 2	6.99
Switch Blade 2	18.99	Last Ninja 2	7.99
Tek	17.99	Lionheart To Kill	7.99
Toyota Celica GT Rally	17.99	Combate RAC Rally	7.99
Trivial Pursuit	18.99	Outrun	6.99
Viz	17.99	Populous Data D	8.99
Wheels of Fire	19.99	Pro Tennis	4.99
		R-Type	7.99
		Rambo 3	7.99
		Speedball	7.99
		Strikeforce Harrier	8.99
		Super Hang On	7.99
		Switch Blade	7.99
		Tobin	6.99
		Treasure Island Dizzy	8.99
		Ultimate Darts	6.99
		Wacky Darts	6.99
		World Class Leaderboard	7.99
		Xenon	6.99
		Xenon 2 Megablast	7.99
		Yogi's Great Escape	7.99
		Zork 3	7.99

ALL TITLES ALL FORMATS
AVAILABLE ON REQUEST

Cheques/Postal Orders payable to Global Software

Please add 75p P&P per item for UK customers only. Europe add £2.00 per item. Other add £3.00 per item.

All items subject to availability. All prices subject to change without prior notice. Please allow cheques to clear

Credit Card Hotline
Tel: 0276 676308

Virgo
DEVELOPMENTS

Innovation House,
Albany Park, Frimley,
Surrey, GU15 2PL.
Fax: 0276 676309



Amiga A500 RAM CARDS



V500: 1/2Mbyte expansion.

Upgrade your Amiga A500 to 1Mb.
Chip/fast ram compatible, gold plated
connector, On/Off switch.

V501: 1/2Mbyte expansion + Clock.
As V500 + Battery backed real time
clock

V2000: 2Mbyte expansion + clock.
Upgrade your Amiga A500 to 2.5Mb.
Expandable in 1/2Meg stages,
compatible with Kickstart 1.2 & 1.3,
On/Off switch, gives 1Mb of chip
ram + 1.5 Mb fast ram if required.
Comes complete with Gary connector
& full installation instructions.

V4000: 4Mbyte expansion + clock.
Upgrade your Amiga A500 to 4.5 Mb.
Same as V2000 but gives an additional
4Mb of fast ram or 3.5Mb fast +
1Mb chip ram

ONLY
£23.99

ONLY
£27.99

V2000 bare board
£37.95
V2000 + 2Mbyte
ONLY
£104.95

V4000 bare board
£63.00
V4000 + 4Mbyte
ONLY
£198.00



3 1/2" LOCKABLE DISK BOXES

10 Capacity (not lockable) 89p
40 Capacity £4.47
80 Capacity £5.41
100 Capacity £6.44

3 1/2" DSSD Disks, 2 for 1 guarantee
including disk labels. £4.45 for 10

NEW! For The Amiga A500 Plus
Memory Expansions

V500 + 1/2Mb expansion £23.99
V1000 bare board £16.99
V1000 1/2Mb expansion £39.99
V1000 1Mb expansion £49.99
Kickstart ROM Swapper £24.99
Kickstart 1.3 ROM £34.95

Ram chips 256Kx4, V1000, V2000, V4000 &
A500 compatible. ONLY £17.59 for 1/2Mbyte

Dispatch within 24 hours
12-month guarantee.
Cheques, Postal orders to Virgo
Developments at above address.
Express Courier delivery
(UK mainland only) £6.50
Call 24 hours 7 days a week

All prices
include VAT,
postage &
packaging. No
hidden charges



Please Read Terms of Sale.

Ladbroke Computing are the longest established Atari dealer in the UK. We have developed an extensive customer service policy which means that we test all hardware prior to dispatch to ensure that goods arrive in working order. Although our prices are not always the cheapest we do endeavour to offer consistently good service and backup. This isn't just our opinion, we were voted 'Best Dealer 1989' by the readers of ST World magazine, not for 'the number of boxes shifted', but for quality service.

All prices are correct at copy date 15/11/91 (while stocks last) and are subject to change without prior notice. Please phone for up to date prices. All prices include VAT & delivery/maintenance. There are no hidden extras (WYSIWYG). Next day courier delivery is available for an extra £7 (Mainland UK). All prices available on Mail Order. Shop prices may differ.

GVP II Hard Drives

GVP II A500 Hard drives include injection moulded styling, Internal RAM expansion to 1Mb via SIMM boards, Capacities from 52Mb, 3.5" 11ms Quantum mechanism, Internal Fan, Game switch and mini slot for future expansion.

GVP 12Mb	£389.99
GVP 105Mb	£579.99
GVP 52Mb + 2Mb Simms	£469.99
GVP 105Mb + 2Mb Simms	£659.99
GVP 52Mb + 8Mb Simms	£719.99
GVP 105Mb + 8Mb Simms	£899.99

Amiga Packs

1Mb Cartoon Classics Pack	£359.99
Includes: A500 Plus computer with 1Mb on board RAM, mouse, modulator, Workbook 2, Lemmings, Captain planet, Simpsons, Deluxe Paint III.	
1Mb Cartoon Classic Extra Pack	£399.99
Includes: 1Mb Cartoon Classics (as above), Datastorm, Dungeon Quest, E-Motion, Monster grand slam, Kid games, Powerplay, RFA Honda, Shuffle Puck cafe, Microprose Soccer, Tower of Babel, GFA BASIC, 10 disks + box, Mouse Mat, Dustcover, Apache joystick.	
Inter Word wordprocessor	£39.99
Vidi-Amiga video digitiser	£99.99
250 capacity disk box	£19.99
150 Capacity disk box	£17.99

Printers

Star LC24-200 £229.99 24 Pin printer 222 cps 9 Resident LQ Fonts Accepts font cartridges Bottom feed Push or pull tractor feed Paper parking	Star LC24-200 Colour £389.99 24 Pin printer 222 cps 9 Resident LQ Fonts Accepts font cartridges Bottom feed Push or pull tractor feed Paper parking	Starlet 2-440 £329.99 40 nozzle Substant printer Fully portable 100cps Epson & IBM Compatible 2 resident LQ Fonts New Laser Quality Output Rechargeable pack available
All Star Printers carry 12 months on site warranty/repair in UK. All printers include STAMBA/PC compatible cable. Phone for ribbons, paper and printer stands.		

Cumana drives

- ★ Data enable/disable switch
- ★ Daisy chain "through" connector
- ★ Low power consumption

Now Only £54.99

A4 Scanner

- ★ 200 DPI scanner, thermal printer, and photocopier
- ★ Up to 16 grey scales or B/W mode.
- ★ Compatible with Amiga and ST.

£399.99 while stocks last

Disks & Mice

10 bulk disks	£5	Squik, High quality replacement mouse.	£15
40 Bulk disks	£19		
100 Bulk disks	£415		
10 Sony Branded disks	£7.80		

Atari Lynx 2

Lynx 2 (Console only)	£79.99	Lynx 2 Power supply	£9.99
Lynx soft cases	£11.99	Ninja Gaiden	£24.99
Qix	£31.99	Turbo Sub	£29.99
Gauntlet	£29.99	Paper Boy	£24.99

Many more games in stock, Please phone for details.

FAX/Modem RAM Upgrades

Use your ST or Amiga to send faxes.
Fully featured modem accessories.
bulletin boards/commercial systems.
Fully Hayes compatible.
Auto dial/answer
300/1200/2400 Baud
For ST or Amiga
Cannot receive faxes. Not BT approved.

£224.99

Zydec 512K Board
only £24.99
With clock only £27.99
Phoenix 1Mb Board with
clock (A500 Plus only)
£49.99

Monitors & TV's

Philips 8833 MK II Colour, Stereo monitor	£ 229.99
Cmdr 1084S Colour monitor * limited offer *	£ 269.99
Philips 15" FST CUBE TV	£ 269.99
The Philips 15" FST includes remote control, Sport input, 60 tuner presets, sleep timer and Fastset. All displays include Sport cables.	

CDTV £499.99

Commodore Dynamic Total Vision

From 15 to 20 World Vists, Electronic book, board, Advanced military systems, Classic board games, All ships go to heaven, Fun school 3 (lander 5/10), A bun for barney, Restrainted Holy Bible, Psycho Miler, Defender of the Crown.

CDTV in stock now
includes Welcome disk and voucher for Lemmings, encyclopedia.
Phone for further details.

Software for Amiga From £4.99. Phone for details

Megadrive £124.99
Includes Altered Beast
Keypad controller
Other titles available

(0772) 203166 Fax 561071

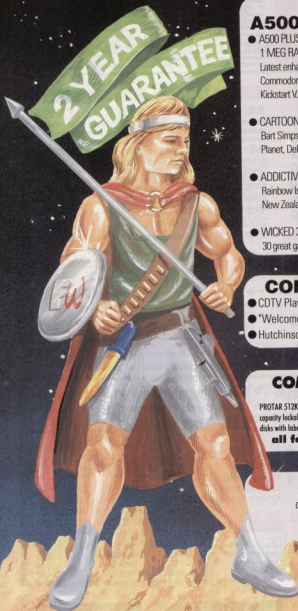
Shop & Mail order premises: 33 Ormskirk Road, Preston, Lancashire, PR1 2DP Open Monday to Saturday 9:30am to 5:00pm. Phones answered from 9:00am. Dealer enquiries welcome. Ladbroke Computing International is a trading name of Ladbroke Computing Limited. All trade marks recognised.



You can phone our Advice or Voucher details on a card in a cheap postcard orders made payable to Ladbroke Computing International. Please allow sufficient clearance time for cheques.



ALL PRICES INCLUDE VAT, COURIER DELIVERY



THE ALL NEW..

A500P GALACTIC PLUS PACK

- A500 PLUS COMPUTER WITH
1 MEG RAM
Latest enhanced Amiga from
Commodore featuring Super Agnes,
Kickstart V2, Workbench V2.04
- 2 QUICKSHOT JOYSTICKS
Not one, but two Quickshot joysticks!!
- 40 CAPACITY LOCKABLE DISK BOX
- 10 DOUBLE SIDED/DOUBLE
DENSITY DISKS
- QUALITY COMPUTER DUSTCOVER
- HIGH QUALITY MOUSEPAD
All this for an unbelievable
- ADDICTIVE HITS SOFTWARE
Rainbow Island, Bubble Bobble
New Zealand Story.
- WICKED 30 GAME PACK
30 great games to get you going!

£399.99

COMMODORE CDTV SCOOP

- CDTV Player With Remote Control Handset
- "Welcome" - A Guide To CDTV Disk with Caddy
- Hutchinsons Encyclopedia
- Lemmings

£449.95

COMPLETE PERIPHERAL PACKS

PACK 1

PROTAR 512K RAM Upgrade with clock • 40
capacity lockable disk box • 20 3.5" DS/DD
disks with labels • 3.5" disk drive cleaner kit
all for just £39.95

PACK 2

PC 800B intelligent disk drive • Protar 512K RAM upgrade
with clock • 40 capacity lockable disk box • 20 3.5" DS/DD
disks with labels • 3.5" disk drive cleaner kit
all for just £99.95

CONSOLE CORNER

ALL PRICES INCLUDE COURIER DELIVERY & 2 YEAR GUARANTEE

CONSOLE SYSTEMS

Sega Master System.....£59.95
Sega Master System Plus.....£79.95
Sega Megadrive.....£129.95

COLOUR PORTABLES

Atari Lynx.....£84.95
Sega Game gear.....£99.95

We stock a wide range of software and peripherals for all of the above ring for details

Future World
computers

PLUS A COMPREHENSIVE 2 YEAR GUARANTEE!

PRINTERS

All printers come with connecting cables free of charge

STAR GOLD STAR DEALER

LC-20 MONO 9 pin Dot Matrix, 180/45 cps.

£149.95

LC-200 COLOUR 9 pin Dot Matrix, 185/45 cps.

£214.95

LC-24/200 MONO 24pin Dot Matrix, 220/55 cps.

£259.95

LC-24/200 COLOUR 24 Pin Dot Matrix, 220/55 cps.

£309.95

CITIZEN PREMIER SUPER DEALER

1200 + MONO 9 pin Dot Matrix, 120/25 cps.

£149.95

SWIFT COLOUR 9 pin Dot Matrix, 160/40 cps.

£214.95

1240 MONO 24pin Dot Matrix, 144/48 cps.

£209.95

SWIFT 24 COLOUR 24 Pin Dot Matrix, 160/50 cps.

£319.95

PRINTER STARTER PACK

• UNIVERSAL PRINTER STAND • QUALITY DUST COVER • 200 SHEETS OF PAPER
All for only £9.95

POWER DISK DRIVE STARTER PACKS

BEGINNERS PACK

- PC880A Disk Drive features Anti-Click, thru port
- Ten 3.5" DS/DD disks
- 40 Capacity lockable disk box
- 3.5" disk drive cleaner kit

£64.95

ADVANCED PACK

- New PC880B Intelligent Drive features Virus hardware, Blitz hardware
- Ten 3.5" DS/DD disks
- 40 Capacity lockable disk box
- 3.5" disk drive cleaner kit

£79.95

STEREO COLOUR MONITORS

PHILIPS 8833/Mk2

£249.95*

*Free F19 Stealth Fighter

CBM 1084S

£269.95*

*Free Silent Service II

ORDERING MADE EASY



BY PHONE

Simply call our Head Office quoting your Access/Visa number on
0234 218060 (5 lines)



BY CALLING PERSONALLY

Simply call into your nearest FutureWorld store where our fully trained personnel will be more than happy to deal with your requirements



BY POST

Make cheques, Building Society drafts or Postal Orders payable



FUTUREWORLD COMPUTERS LTD
UNITS 25-27 SERGEANTS WAY
ELMS INDUSTRIAL ESTATE
BEDFORD MK41 0EH

Please write cheque guarantee card number on reverse of cheque to ensure same day clearance



REMEMBER
ALL PRICES INCLUSIVE OF VAT & COURIER DELIVERY*
* UK MAINLAND ONLY

FINANCE

Finance available to suit your specific needs. Written details on request. Instant credit is available in all FutureWorld stores.

PREMIER GOLD CARD

- 7 day money back guarantee if not completely satisfied
- 30 day exchange for new policy should a fault occur
- 2 year guarantee giving free collection and delivery service should a fault occur
- Exclusive Premier Gold Card with Personal Membership Number entitling you to special offers
- All this for only £19.95 per item purchased

2 YEAR GUARANTEE

For the whole guarantee period, warranty service will be completely free of charge

TECHNICAL SUPPORT/ON SITE ENGINEERS

Being authorised service centres for AMSTRAD, COMMODORE & STAR, we are equipped to deal with the majority of queries

FULLY COMPUTERISED ORDERING SYSTEM

This enables our telesales staff to provide up-to-the-minute stock information coupled with efficient dispatch

FULL TESTING PROCEDURE

All computer hardware is tested prior to dispatch maintaining our motto:

*Simply the
BEST*

YOUR NEAREST **FutureWorld** STORE



BEDFORD

70 High Street Bedford Telephone 0234 217070



NORTHAMPTON

1-7 College Street Northampton Tel: 0604 33996



WELWYN GARDEN CITY

16 Church Road Welwyn Gdn City Tel: 0707 390029



Happy New Year from Phantastic Games

103a St John's Hill, London SW11 1SY
Telephone: 071-738 0617



The first 100 Customers to place an order will receive a poster completely F.O.C. - Quote ref:- WS1

SOFTWARE

4D Boxing	£18.50	F-15 Strike Eagle 2	£24.99	Railroad Tycoon	£24.99
Addicted To Fun	£14.50	Flight Of The Intruder	£24.99	Renegade Interceptor	£25.99
Alien Breed	£18.50	Formula 1 3D	£18.50	Thunderhawk	£22.50
Armalyte	£18.50	Hunter	£21.50	Virtual Reality	£24.99
Battle Chess 2	£18.50	Kings Quest 5	£28.99	Zone Warrior	£18.50
Blade Warrior	£18.50	Life & Death	£18.50	Adv Military - CDTV	£25.50
Brain Blasters	£18.50	Midwinter 2	£24.99	CD Remix - CDTV	£25.50
Cruise For A Corpse	£18.50	Outzone	£18.50	Lemmings - CDTV	£25.50
Cybercon 3	£18.50	PP Hammer	£17.99	Psycho Killer - CDTV	£25.50
Double Double Bill	£25.99	R Type 2	£18.50	Sim City - CDTV	£25.50

HARDWARE & PERIPHERALS

Commodore A500 Cartoon Classics +	£375.00
Commodore A500 Standard Pack	£335.00
Comodore CDTV	£475.00
Amiga 1/2 Meg Memory Upgrades	£35.99
Amiga External Drives	£54.99
Amiga 1 1/2 Meg Mem Upgrades	Special £79.99
Stingray Joysticks Standard & Auto	£10.99
Zipsticks	£13.99
Comp Pro 5000 (Multi)	£9.99
Speedking Standard	£9.99
Speedking Auto	£10.99
Quickjoy Topstars	£18.99
Challenger Cables	£23.99

Phantastic Games would like to take this opportunity to thank all of our customers through 1991. Also to thank: Bob, Steve, Tony, All at Leisuresoft, Centresoft, SDL - A Happy New Year everybody.

Post & Packing: Free on 2 or more Software titles.
At cost on Hardware.

Delivery: Please allow 7-10 days on Software.
10-14 days on Hardware.

**Ask about our
Gold Customer Club
which entitles you to
even better discounts!!**

SCHOOL SOFTWARE LTD.



THE THREE BEARS (5-10) IBM, ST, CPC, AMIGA.

Superbly reviewed educational adventure. Develops reading and imagination.

MAGIC MATHS (4-8) IBM, PCW, ST, AMIGA.

Highly rated primary maths programs. Selection of games. Add and Subtract.

MATHS MANIA (8-12) IBM, PCW, ST, AMIGA.

"The best primary programs I have yet seen." Multiply, Divide, Maths Skills.

BETTER SPELLING (8-18) IBM, ST, PCW, AMIGA, CPC, BBC, CBM(D).

Highly acclaimed tutor. Received excellent reviews. Challenging.

BETTER MATHS (12-16 GCSE) IBM, PCW, ST, AMIGA, CPC, CBM(D).

Very comprehensive coverage of all the major aspects of maths for this age group. Excellent.

JUNIOR TYPIST (4-10) IBM, ST, AMIGA.

Keyboard trainer which helps spelling.

THE BEST IN EDUCATION

HOW TO ORDER

1. Post your order.
2. Fax your order.
3. Ring credit card number.
4. Ring for advice.
5. Ask your dealer to order.

Prices:
IBM 51/4 or 31/2, ST & STE, AMIGA.....£22.95
CPC, PCW, CBM (disks).....£16.95
FREE CATALOGUE

ORDER DIRECT TO:
School Software Ltd., Tait Business Centre,
Dominic Street, Limerick, Ireland.
Tel: (U.K.) 010 353-61-415399.
Fax Orders: 010 353-61-419755.
Credit Card Hotline (U.K.): 010 353-61-415399.
Others Tel: 010 353-61-415399.

Access/Mastercard/Eurocard/Barclaycard Visa No

Expiry Date _____ Cheque/PO ☐

My machine _____

Titles _____

Name _____

Address _____

★ DISKS ★ DISKS ★ DISKS ★ DISKS ★ DISKS ★ Have a Happy New Year with MediaVALUE

BRANDED DISKS - Look at these Low Low Prices

Sony Box Clever	
20 Branded Sony Disks in a sturdy plastic case.....	£12.00
Maxell	
20 Branded Maxell disks in a sturdy plastic case.....	£12.00
Maxell 3.5" DS/DD Disks (10 Disks).....	£6.00
Maxell 3.5" DS/HD Disks (10 Disks).....	£12.00
TDK	
3.5" DS/DD (10 Disks).....	£5.50
3.5" DS/DD In plastic box.....	£6.50
3.5" DS/HD (10 Disks).....	£11.50
3.5" DS/HD In plastic box.....	£12.50

BANK BOX SPECIAL OFFER 3.5" STORAGE SYSTEM

1 BANK BOX	2 BANK BOXES
40 Branded TDK 3.5 DD Disks	80 Branded TDK 3.5 DS/DD Disks
1 3.5" Cleaning Kit	1 3.5" Cleaning Kit
£31.00	£59.95

3.5" DISKS (Free labels with Disks)

Quantity	10	25	50	100
3.5" DS/DD Disks	87p	85p	82p	80p
3.5" DS/HD Disks				

DISK SPECIALS

60 TDK Branded 3.5 DS/DD Plus 120 Capacity Box	£38.00
10 3.5" DS/DD Disks + Library Case	£4.50
10 3.5" DS/HD Disks + Library Case	£8.50

STORAGE BOXES

3.5" 40 Cap Box.....	£4.50
3.5" 80 Cap Box.....	£5.00
3.5" 120 Cap Box.....	£6.50

ACCESSORIES

Mouse Mat.....	£2.00
Mouse Pocket.....	£1.95
Cleaning Kits.....	£1.95

LABELS

100 Labels.....	£1.50
1000 Labels.....	£8.50

MediaVALUE, The Windsor Business Centre, Dept AC02/92, Vansittart Estate Windsor, SL4 1SE.
Phone: 0753 833555 Fax: 0753 832394 Call In Our Showroom Mon-Fri 10am-5pm Sat 10am-4pm

I enclose a Cheque/PO for £ _____ Please charge my Credit Card No. _____

Expiry Date _____ Signature _____

Quantity	Description	Unit Price	Total

Name _____ Telephone _____

Address _____ Postcode _____

Postage & Packing £3.00 Next Day Delivery £10.00



EMOE

BANK BOXES 3.5" Lockable stackable holds 80 disks

1 Box.....	£9.00
2 or more boxes.....	£8.00

We Also Stock A Full Range of 5.25" Products. Please Call For Prices.

All Prices Include VAT. 24 Hour Hotline 0753 833555

Prices Subject To Change Without Notice.

No Quibble Replacement Or Money Back Guarantee.

DIAL-A-TIP

CHEATS, TIPS AND GAME SOLUTIONS

CHEATS GALORE	0891 101 234
FROM IRELAND RING	03000 21244
MEGATIP GAMESLINE	0891 299 388
AMIGA HOTLINE	0891 299 385
AMIGA GAMETIPS	0891 299 386
COMPUTER FUNLINE	0891 299 399

HELPLINES

SHADOW OF THE	
BEAST I AND II	0891 442 022
FIRST SAMURAI	0891 445 926
THE IMMORTAL	0891 445 928
LAST NINJA III	0891 445 920
EYE OF THE BEHOLDER	0891 442 030
MAGIC POCKETS/RODLAND	0891 445 928

For full information on our other

Cheats/Help Line

RING 0891 445 904

All services updated weekly

Proprietor: JACQUELINE WRIGHT, P.O. Box 54, South West Manchester M15 4LS
Calls cost 36p per minute at 'Cheap Rate' and 48p per minute at other times

AMIGA

COMPUTING

NEWSAGENTS ORDER

Please reserve a copy of Amiga Computing magazine every month until further notice

- ☐ I will collect
☐ I would like it delivered to my home

Name.....

Address.....

Postcode

Note to Newsagent: Amiga Computing should be available from your local wholesaler. If not contact David Wren on 0625 878888.

LOWEST PRICES

+ BCS NEW YEAR OFFERS +

CDTV £445

+ OFFER 1 +

Philips CM833 Mill & On-Site Maintenance & F19 Flight Sim & Lead
£228

+ OFFER 2 +

A500 Plus Cartoon Classics Pack & Philips CM833 Mill Lead & F19 & On-Site maintenance: **£575**

+ OFFER 3 +

A500 Cartoon Classics Pack & Cumana External Drive
£400

+ OFFER 4 +

A500 Plus Cartoon Classics Pack, 2Mb Ram & Philips CM833 Mill & F19 & Lead & On-Site Maintenance: **£630**

DISKS DISKS DISKS 100% Certified Error Free

50 3 1/2" DS/DD	£21.75
100 3 1/2" DS/DD	£33.00
150 3 1/2" DS/DD	£49.00
200 3 1/2" DS/DD	£62.00
400 3 1/2" DS/DD	£123.00
500 3 1/2" DS/DD	£139.00

1000+ Call for spot prices
Prices include VAT & Free Delivery & Free Labels

New 100 Capacity 3 1/2" Lockable Boxes & Disks No quibble lifetime guarantee

50 3 1/2" DS/DD & 100 Cap Lockable Box	£24.50
100 3 1/2" DS/DD & 100 Cap Lockable Box	£36.00
150 3 1/2" DS/DD & 100 Cap Lockable Box	£52.50
200 3 1/2" DS/DD & 100 Cap Lockable Box	£66.00
400 3 1/2" DS/DD & 4 100 Cap Lockable Boxes	£130.00
500 3 1/2" DS/DD & 5 100 Cap Lockable Boxes	£158.00

All prices include VAT & Free Delivery & Free Labels

5 1/4" DS/DD Disks	21p Each
5 1/4" DS/HD Disks	39p Each

3 1/2" DS/HD Disks 60p Each

100 3 1/2" DS/HD Disks	£58.00
------------------------	--------

150 Cap 3 1/2" Posso Box	£15.50
60 Cap 3 1/2" Stackable Box	£10.00

3 1/2" 10 Cap Boxes	£0.85 Each
3 1/2" 40 Cap Boxes	£4.10 Each
3 1/2" 100 Cap Boxes	£4.50 Each
5 1/4" 50 Cap Boxes	£5.10 Each
5 1/4" 100 Cap Boxes	£5.90 Each

GENUINE SONY BULK

50 3 1/2" DS/DD	£22.00
100 3 1/2" DS/DD	£40.00
200 3 1/2" DS/DD	£78.00
500 5 1/4" DS/DD	£162.00

Price includes free labels & VAT & Free Delivery

PRINTERS

Star LC-20	£150
Star LC-200 Colour	£205
Star LC-24 200 Colour	£265

AMIGAS

A500 Plus 2Mb Cartoon Pack	£405
A500 1Mb Cartoon Pack	£350
Clubs of the 90's	£450
A1500	£650

ACCESSORIES

Amiga Dantascan Professional	£145.00
1/2 Meg & Clock	£29.00
1000 Labels	£8.00
Cumana Drive	£58.00
1000 Tractor Labels	£10.00
Amiga Mouse	£14.00
Mouse Mat	£2.50
Stingray Joystick	£13.50
A590 Hard Drive	£280.00
Printer Lead	£8.00
A590 & 2Mb Ram	£370.00
Zipstick	£11.00
A500P 1Mb Upgrade	£57.00
A590 Hard Drive	£265.00
1 meg 8500 Plus Upgrade	£39.00

ORDER HOTLINE:

0273 506269/0831 279084

All Prices Include VAT Add £4 Delivery Unless Stated, Add £10 Next Day. Cheques will be held for Clearance

Call or send cheques/postal orders to:

**BCS Ltd,
349 Ditchling Road, Brighton,
East Sussex BN1 6JJ.**

All offers subject to availability, E & OE

Due to shortage of 3 1/2 DSDD disks, prices may change without notice



The learning curve

I never normally write letters if I can get out of them gracefully, but on this occasion I do it happily. I was forced by the very expensive pricing in this country to look elsewhere for hardware and I eventually ordered some goods from the USA (Adspeed/AdRamS40 and a bare Quantum 52Mb hard drive). I also ordered some bits from the UK (Podcat/Techosound/Vidi) plus some software.

The US orders went very wrong. The Quantum money never got to the suppliers and the retailers of the other two boards have not supplied the goods (money sent 31/8/91 and definitely received in the US). However being a regular reader of your magazine I wrote to three of your advertisers, two big and one small (by comparison).

The only firm to reply was Applied Research Kemel. The owners have been terrific – they wrote giving firm quotes and when I phoned they were more than helpful. They knew their subject throughout and if unsure of something found out for me quickly.

I feel that such good service deserves recognition especially if your overseas readers wish to purchase goods and do not know who to trust. I therefore wish you to publish this letter so as many of your readers as possible get the information I had to find out for myself. As you can see the US has failed me badly, so in future I'll be dealing with ARK.

By the way I own an Amiga 500 expanded with a hard drive, genlock, colour Vidi, colour printer, Technosound, four megs of RAM plus 1 meg chip, colour monitor, Podcat (I can't draw). I am into DTV, programming and so on. Are you interested in anything in the way of articles from the bottom of the world?

K H Antoine, Brisbane, Australia

I guess that companies in the USA are just the same as anywhere else – some are good and some bad.

Sorry to hark back to my "I'm a little better" crusade but your experience seems to be the proverbial proof of the pudding.

As for being interested in articles from Australia, Stevie (the new editor) tells me he will consider publishing work from anywhere as long as it's good,



Write away!

Got something to say through the pages of AC?

Ezra Surf is our mailman, dedicated to sitting in a corner reading your letters and selecting the most interesting for publication. Ezra's favourite letters now get rewarded with an exclusive Amiga Computing designer T-shirt.

Drop him a line at:

Ezra Surf's Postbag, Amiga Computing, Europa House, Adlington Park, Macclesfield SK10 4NP.

Please don't enclose saes as Ezra just hasn't got enough paper to reply personally. He might also have to shorten your letters, so don't be offended if you get the chop.

cheap and on time. He also said something about needing someone else to reply to readers' letters...

Is it Adios Amiga?

One of your readers asks if other Amiga owners have experienced slow service from Commodore. You bet I have!

I bought an Amiga 500 in May. It broke down after five weeks, and the national repair centre took six weeks to return it. Two days later it broke down again, and has now been away for another three weeks, with no sign of returning. I have sent the machine for only seven of the 16 weeks since I bought it. My letters to

the centre have not resulted in any meaningful response.

Needless to say, my initial enthusiasm for the Amiga has evaporated, and my opinion of Commodore has taken a nosedive. I am on the point of writing off the Amiga as an expensive mistake. And of course, I will hardly be encouraging anyone else to buy an Amiga.

So whether or not the warranty service is operated by Commodore or by an agent, it cannot be in their interests to be associated with such poor service.

K Gralinger, Dalston, London

Crikey, all these complaints about FMG in a single letters batch! I can't blame you for being a bit disen-

After sales disservice!

First to praise your magazine. It is excellent, easily the most informative, incisive, witty and most of all helpful. I have been reading and enjoying it since issue one (Enough – Ed).

My setup is as follows: Amiga 1500, TV with Scart and a Star 24/10 printer. Next on the shopping list is a hard drive.

This is not your problem really but my gripes with Commodore and FMG. I bought my 1500 in April '91 and sent my registration card to FMG as instructed. In May I moved and had all mail forwarded, but nothing arrived. On the 21 August, 1991 I wrote to FMG asking about the Customer Care pack and card.

A week later I phoned FMG and was given a number for Commodore, who told me to phone FMG. I told them that I just had and been given this number. After speaking to Marketing, I was told that the Customer Care pack was stopped but that something would be in the post within a week. One week later I phoned the same person at Commodore and was told to wait one more week.

Well, not a sausage from Commodore, instead on 9 October I received a letter from FMG telling me what I already knew, that the Customer Care pack was stopped, but still nothing about the wonderful Customer Care card.

I phoned FMG on the 11 October and was told that the Care Card was also stopped "but let me transfer you to Julie". After waiting for an expensive five minutes my patience ran out and this letter took hold.

My gripe is this – after being promised both a Customer Care card and Customer Care pack by the literature that accompanied my lovely computer, both Commodore and FMG had to be pushed to reveal anything. I still do not

know if my computer is registered and I have heard nothing about the extended warranty that I requested.

Thank you for reading this (if you did) and for the great magazine.

M Palmer, Melton, Mowbray

What do you mean "Thank you for reading this (if you did)"! – I read every letter sent to me and I even read some of them twice!

Listen, the Customer Care pack is no great shakes. I got one when I bought my A2000 a year and a half ago. It's basically an A5 plastic folder packed with adverts and order forms for other Commodore bits and bobs.

The mysterious Customer Care card is a credit card-sized bit of plastic with the date you bought your machine etched onto it. It doesn't work in a cash machine, but it does get ice off your windshield.

It seems a shame that you got such a runaround for something that isn't really worth the bother. My guess is that your machine was shipped with an old warranty card, hence the references to Customer Care gumph.

The important thing is to make sure your machine is registered. I think you can rest assured that it is if you have had correspondence from FMG.

I'm surprised that you haven't had any word back about your extended warranty. If your payment has been banked, I would contact FMG to find out what is going on. If not, send another form in.



MJC COMPUTER SUPPLIES

Suppliers of Discount Software since 1984

Educational, Local Authority and government orders welcome. Overseas orders please call or write for quotations. All goods subject to availability, prices subject to change without notice. E&OE. Prices include VAT and delivery by post. Courier delivery available on any item. TO ORDER: Please call the telephone number listed below to place credit card orders - (Access/Visa) or send a cheque/P.O.s made out to MJC Supplies to:

MJC SUPPLIES (AC), Unit 2 The Arches, Icknield Way, Leitchworth, Herts SG6 1UJ. Tel: (0462) 481166 (5 Lines)

PROTAR PRODUCTS

PROTAR A500 HARD DRIVES

- * Optional Ram expansion up to 8Mb
- * Transfer rate greater than M2000
- * Up to FIVE times faster than AG50
- * Drive disable switch
- * External SCSI interface
- PROTAR A500 HD 25Mb version.....£279.00
- PROTAR A500 HD 30 Mb version.....£349.00
- PROTAR A500 HD 50Mb version.....£429.00
- PROTAR A500 Ram Power Supply.....£33.95
- 1Mb Ram Expansion for A500 HD.....£37.95
- 2Mb Ram Expansion for A500 HD.....£115.00
- FREE Courier delivery on Protar Hard Drives

PROTAR VISTO MONITOR

Based on the Philips CM8833 the C141M comes with a variety of inputs and complete with leads.
MJC PRICE £239.95
FREE Courier delivery on Protar Monitors

PROTAR 1/2 Meg Memory Expansions

1/2 meg internal (trapdoor) expansion, latest 4 chip design with battery backed clock.
MJC PRICE £25.95

NEW - A500 PLUS 1Mb EXPANSION

1Mb expansion for the A500 Plus - fits in the trapdoor taking your memory up to 2Mb - no internal fitting.
MJC PRICE £49.95

SUPRA 500RX EXPANSIONS

New memory expansions for the A500 - plugs directly into the HD expansion port - NO INTERNAL CONNECTION REQUIRED.

SUPRA 500RX EXPANSION 1Mb £119.95
SUPRA 500RX EXPANSION 2Mb £159.95
SUPRA 500RX EXPANSION 4Mb £249.95

NAKSHA UPGRADE MOUSE

280 DPI with FREE Mouse House & Mat. Now also includes free Op Stealth game.
MJC PRICE £21.95

CUMANA CAX 354 DISC DRIVE

Quality brand name 3.5" second drive includes thru port, disable switch and No hassle 1 year guarantee. INCLUDES FREE VHS/C-U UTILITY.
MJC PRICE £34.95

NEW ROCLEITE RF332C DISK DRIVE

Super Slimline second drive
MJC PRICE £34.95

A1500/2000 PERIPHERALS

SUPRAMAM - add on Ram cards with space for up to 8 Meg of extra Ram.

SUPRAMAM with 2Mb fitted £159.95
SUPRAMAM with 4Mb fitted £225.00
SUPRAMAM with 6Mb fitted £280.00
SUPRAMAM with 8Mb fitted £349.95

SUPRA HARD DRIVES

Using the fast Wondysinc 2000 controller and quality Quantum drive mechanisms.
(A1500/2000)

SUPRADRIVE 52Mb (11ms) £299.95
SUPRADRIVE 105Mb (11ms) £499.95

GVP SERIES II HARD DRIVES

Quality drives with the ability to add up to 8 Meg of extra Ram on board
(A1500/2000)

52Mb (11ms) version £389.95
105Mb (11ms) version £519.95
SIMMS Modules - £69.95 per 2 meg

QUANTUM DRIVE MECHANISMS

Quality bare SCSI quantum drives
52Mb (11ms) version £199.95
105Mb (11ms) version £299.95

SUPRAMODEM 2400

Fully Hayes compatible modem. Runs at 300, 1200 or 2400 baud rates. Own power supply. Comes complete with FREE PD Commis software.
MJC PRICE £99.95

COURIER DELIVERY AVAILABLE FROM JUST £2.00 - ASK FOR DETAILS

WORDPROCESSORS

Kind Words 2.....£29.95
WordWorth V1.1.....£79.95

NEW PROTEXT Version 5.5

New version of this best selling word processor. Now includes new dictionary files and Thesaurus very fast for serious WP applications. (1 Meg)

MJC PRICE £99.95
(due for release 1st October)

Protext V4.3's price.....£49.95
Protext New - V1.2 Amiga.....£64.95

AMIGA EDUCATIONAL

Fun School 2	Fun School 3
Fun School 2 under 6.....£12.95	Fun School 3 under 5.....£15.95
Fun School 2 6 to 8.....£12.95	Fun School 3 6 to 7.....£15.95
Fun School 2 over 8.....£12.95	Fun School 3 over 7.....£15.95
LCL Software	Kesman Software
Primary Maths Course 19.95	Junior Q&A 6 to 11.....£4.95
Micro Maths GCSE.....£19.95	Maths Adventure 6-14.....£19.95
Micro English GCSE.....£19.95	French Mistrans.....£4.95
Micro French GCSE.....£19.95	German Master.....£4.95
LATEST RELEASE - FUN SCHOOL 4	
The best Fun School yet! Better Sound, better Graphics and conforms to the National Curriculum	
Fun School 4 Under 5's.....£16.95	Fun School 4, 5 to 7's.....£16.95
Fun School 4, 7 to 11's.....£16.95	

DESKTOP PUBLISHING

PAGESITTER 2 - Great value Desktop Publishing program - with FREE Clip Art disk. Requires W8 1.3 and minimum 1Mb
MJC PRICE £44.95

VIDEO TITLING/PRESENTATION

Home Titer	£34.95
Big Alternative Scroller	£42.95
Broadcast Titer II	£159.95
Broadcast Font Pack	£39.95
Broadcast Font Enhancer Pack	£89.95

ZVP VIDEO STUDIO

Great Video production package - Call for details (Requires 1 Meg & 2 Drives)
MJC PRICE £89.95

RENDALD 8802 GENLOCK

Great value Genlock offering both Foreground and Background modes.
MJC PRICE £159.95
8802 MODE SWITCH BOX - £29.95

NEW - ROCCEN PLUS

The latest Genlock from Rocgen featuring Fade controls for both Video and Graphics with RGB and Video through ports.
MJC PRICE £179.95

GRAPHICS

Pictmate	£34.95	Deluxe Paint 4	£59.95
Digi Paint 3	£44.95	Digiview 4 Gold	£94.95
3D Construction Kit	£27.95	Disney Anim. Studio	£74.95

DELUXE PAINT 3 VIDEO TUTORIAL

Nearly 3 hours of "how to" with DPaint 3
MJC PRICE £17.95

AMOS - The Creator

AMOS V1.2 - The Language	£32.95
AMOS COMPILER	£19.95
AMOS 3D	£21.95

SOUND/MUSIC

Stereo Master Amiga	£29.95
Techno Sound Turbo (Stereo)	£29.95
Harmoni - Sequencer	£29.95

THE MIDI CONNECTOR

Featuring Midi In, 2 x Midi Out, Midi Thru and Serial port Thru + 2 cables.
MJC PRICE JUST £14.95

MISCELLANEOUS

INFOFILE	£29.95
MAXIPLAN PLUS	£34.95
PERSONAL FINANCE MANAGER	£22.95
GB ROUTE PLUS (1Mb)	£39.95
HOME ACCOUNTS 2	£39.95

VIDI AMIGA

NEW - TAKE 2 New animation package from Rombo.

VIDI COLOUR SOLUTION

Vidi Colour package - including Vidi Optimiser, Vidichrome and Proton Paint. MJC PRICE £34.95
RGB SPLITTER - For use with Vidichrome or Digiview (includes PSU) MJC PRICE £59.95

COMPLETE COLOUR SOLUTION

Package includes Vidi Amiga, Vidichrome and the RGB Splitter for a complete turnkey system. NOTE: For best colour pictures you require a video camera or perfect still frame VCR. MJC PRICE £129.95
Col Solution + Take 2. MJC PRICE £169.95

VISA

Remember - prices include VAT & delivery

MasterCard

Programming pointers

I would like to learn computer programming in Cobol on my Amiga. It must be possible. The Amiga is capable of anything, or so they say. Can you help me on this matter – what do I need, where can I get the equipment, and how much roughly will it cost?

I've tried asking several companies who do courses in Cobol programming, but all they seem to do is try and sell me an IBM-compatible Amstrad computer and course work for hundreds or even thousands of pounds.

I would appreciate any advice that you can give me.

A S Jobe, Portsmouth

I've published letters like this before, asking for help, with no response.

Come on guys 'n' gals, is there a PD version of Cobol hiding out there?

The first person to locate and send me one will get a prize. There, can't say fairer than that.

chanted about the Amiga. But how do you know how good it is if you have only had one for seven weeks?

Take a look through the rest of this issue of Amiga Computing. The Amiga really is a great machine!

The fact that FMG are getting into such a mess fuddle again and again means that Commodore really do have to take some action, in my opinion at least.

I think the time has come for Commodore to issue some sort of statement. If anyone from FMG or Commodore who reads this page wants to step out and defend the national repair centre please write in. I can feel an ESP Special coming on...

Hard and fast

As one of the rapidly growing number of Amiga hard drive owners, I totally endorse the contents of Stein Erik Giske's letter in the November issue of Amiga Computing.

I feel that it is the responsibility of your magazine to inform potential buyers if a piece of software can be installed on a hard drive, and if it is compatible with faster processors like the 68030.

Contrary to what is commonly stated in the monthly magazines, a large proportion of Amiga games can be installed on a hard drive.

Most adventures and simulations (with the exception of F19 Stealth Fighter) are hard drive compatible, and, in general, it is only arcade type games that

still have irritating on-disk protection.

Let me say that certain companies are particularly guilty of using on-disk protection and therefore are treating Amiga users like children – try that in the PC market or in the USA and see how many sales there are!

All the users I know – including myself – will not buy software from these companies, as loading from floppies is a real pain if you have an alternative. Also, if software has heavy on-disk protection then the AmigaDOS guide-lines are bypassed, and

the software is not compatible with faster processors like the 68030.

So please, let us serious users of our favourite machine know in your reviews if software has on or off disk protection, and if it can be installed on a hard drive. Surely you don't have to be informed by the software company if the product is hard drive compatible – as you state in your reply to Mr Giske's letter – you can easily try for yourself!

I Mackenzie, London.

What a bizarre suggestion, that most Amiga owners who play arcade and action games might be children!

Games companies put protection on their product to protect their investment, not to inconvenience hard disk owners.

Manual protection is an alternative, but with a little time virtually any manual system can be beaten. Books can be copied, charts redrawn and even code wheels "pirated".

The versions of software we get in to review are typically fully functional, apart from the protection which is still being added.

It is for this reason that we can't tell people if games are hard disk friendly or not. If we used our own experience, every game released in the last three months would be hard disk compatible!

Daniel and Eddie are sticking by their tried and tested line: "If games companies tell us, we will tell the readers".

Play it again, maS

I went into the local newsagents today and while looking on the magazine rack, my eye was caught by your magazine Amiga Computing.

It was the first time that it has been stocked so I bought a copy. When I got home I read it from cover to cover and was very impressed. Then I decided to try out the disk, CoverDisk 24.

I played the Tune of the Month, and was even more impressed, as Toccata is one of my many favourite pieces of classical music. I briefly loaded the machine code option, then I decided to load in the utilities.

I started off with Imploder and worked my way round it for later use. I then loaded SoundStudio and loaded in one of the samples included called Bogey, which was a sample of Humphrey Bogart from one of his films which I don't particularly like.

The sample said "I stick my neck out for nobody", but when I got round to reversing the sample, I played it and it turned out to say something very rude.

This is one edition of any magazine that mildly shocked me. But don't worry I will be buying the magazine again (even more if this gets printed).

D Boyce, Leicester

I have omitted to publish what you thought Bogey said backwards, for obvious reasons!

Any reader with a curious disposition, a copy of any decent tracker and a very fertile imagination is welcome to try this experiment.

You might also like to try reading the entire magazine backwards – you can pick up the subliminal satanic messages much more easily that way!

Christmas turkeys

• Our more astute readers may have noticed our, erm, cock up last month, which resulted in some letters being printed twice and one, entitled "CDTV Turkey", being started twice but never actually ended or replied to. The person responsible for this fowl deed has been given a good roasting (don't worry, we plucked him first). Here's "CDTV Turkey" in full...

Why oh why is the structure of my chromosomes (hal, joke).

But seriously, can you answer a couple of little questions about the Amiga? Everyone goes on about the Amiga being the only home computer with the ability to multitask. Now I'm not putting it down – I've owned one for three years and wouldn't part with it – but it is not a fact that true multitasking can only occur on a machine when there are as many processors as

Progress at any cost?

I read with interest the upgrading of the Amiga to the A500P. But at what cost to us \$12k A500 owners? Software is already becoming 1 meg only due to the future A500 being 1 meg standard.

I've already got a few CoverDisks which I've never seen. Yes I know I must upgrade and I know it's cheap, but how will the updated A500P affect software?

Don't get me wrong, I think it's good news that Commodore are still showing the way but it took me two years to save the money for my A500 and months to buy my first game, only being content with your CoverDisks to keep me going (which are fantastic) but I hope we don't get forgotten over the next few years.

I wrote to Commodore about the price of the A500. I paid £411, of which £26 of this was for the games pack which I found is given out free by other shops. Why was I charged for this can you tell me as Commodore did not reply? Can you confirm what I think, that I was ripped off? G Gocke, Port Talbot, Wales

There are very few \$12k Amigas around these days. After all, it costs less than a good game to get a \$12k expansion complete with battery-backed clock.

The real compatibility problem will arise when software starts to be developed that requires the very latest versions of Kickstart and Intuition.

Commodore will be offering an official upgrade path to owners of all machines other than the A1000. It requires the replacement of a number of chips, so don't count on it being cheap. It is a sensible investment though.

The recommended retail price of the A500 Cartoon Classics bundle is £399. This has also been the price for earlier bundles. If you have been charged more, it is over the odds.

There is very little you can do though, as the RRP is only a guideline – retailers can literally charge as much as they think they can get away with.

processes? So would it not be true to say that it only gives virtual multitasking through processor sharing?

Secondly, why did Commodore spend all that cash on developing the CDTV system, only to decide to also release a keyboard for it (soon) turning it into an Amiga, and release a CD-ROM drive for the Amiga turning it into a CDTV system?

Would the money not have been better spent on me (a poor student) or just on the development of a CD-ROM drive for the Amiga? Or a hardware ZX81 emulator? Or an easy way to fit an upgrade on an ST?

A lot of money to create two very similar things. Is that not quite silly?

Finally, I think capital punishment should be re-introduced for software thieves.
I Small, Edinburgh, Scotland.

The Amiga performs more than one task simultaneously – that is my definition of multitasking. Remember it also has a suite of control processors to deal with anything from graphics, animation and sound to bus control. Paula, Agnes, Denise and Buster all do their bit to ease the 68000's load.

Commodore don't want people to see the CDTV as a computer. It doesn't have peripherals, it has "accessories" (I kid you not).

The keyboard has become necessary in order to use things like database programs and reference works. There will still be a distinct line drawn between the CDTV and the Amiga.

Commodore consider the Amiga CD-ROM drive, the A690, to be a storage device, whereas the CDTV is a concept.

The A690 will be a major boost for the Amiga. Think of it, you will have all the power of the Amiga coupled with the storage capacity of CD-ROM. That combination is much more versatile than the CDTV.

As for being a poor student, I wouldn't have it any other way!

Gamer grumbles

As a 63-year-old GCI (Geriatric Computer Illiterate), I subscribe to two computer mags, and usually buy a third. I find that I probably understand about five per cent of what I read in these magazines, and yet they have been written and understood by a large body of the population.

This has formulated in my mind the theory that there is a parallel existence which interfaces with us lesser mortals about five per cent of the time. Does anybody else subscribe to this theory?

Now for the moans. This is another problem with being a GCI, you get irritated very easily!

One of the magazines to which I subscribe is, of course, *Amiga Computing*. The reason I decided to subscribe to this mag is because the games content seemed to be minimal.

Now what do you do? You put a great wad of games info in the mag in such a way that it is a pest when you're trying to read the rest of the mag, and you can't get rid of it unless you destroy the magazine. Renewal of subscription is under very serious consideration.

One last thing, are there any other like-minded GCI's in this area who would like to be together for mutual warmth and comfort?

J Perry, Potters Sandy, Bedfordshire

Good grief! *Gamer* was designed to make it easier for people to find (and ignore if they wish) our

Ezra online

Ezra Surf can be contacted on a whole host of bulletin boards and conferencing systems. If you have anything to say, get it off your chest online!

Amiga Computing also has its own Fidonet echo which is being carried by BBS systems throughout Europe. Any Fido sysops interested in hooking up should collect AMIGA.COMP off the backbone.

If you are experiencing difficulty, please contact Tony Miller, sysop of our home board – 01 for Amiga.

Additionally our mailman with the most, Ezra Surf, hangs out on the following services:

Service	Account number
Prestel	999800263
Telecom Gold	74.MK911
CIX	amigacomputing
CompuServe	74007.4734
The Direct Connection	uad1132
01 for Amiga	Amiga Computing

games coverage. We still have less games coverage than the bulk of Amiga magazines – quality rather than quantity is the operative. We could have removed games coverage completely, but that would deny the existence of the bulk of Amiga owners. Not a wise thing to do in our opinion!

Why not have a read of *Gamer*? Go on – you might like it!

Enchanted melody?

I couldn't help noticing that your October Tune of the Month, *Toccata* by one E Miller, bears more than a passing resemblance to a tune of the same name by my favourite Amiga musician, Alister Brimble. This can be found on 17 Bit's Supreme Sounds Vol 1 disk dated June 1989.

There are minor differences such as additional percussion sounds and a couple of tiny tweaks to the timing in places, but these are easy to do in MED. Alister's overall arrangement and instrumentation is left pretty well as written. Even most of the sounds are the same, even down to the dodgy looping in the opening chords (sorry Alister!).

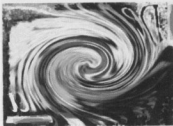
Alister wrote his version in SoundTracker, but again it is quite straightforward to convert a sound-tracker tune to MED format.

Of course it could just be a huge coincidence, but if I'm right, then tut-tut E Miller! Check it out!

R Baxter, Manchester

Yours is one of several letters I have received pointing out the alleged origin of this musical masterpiece.

We included the tune on the disk in good faith.



CONTACTS

It's not what you know – it's
who you know!

TECHNICAL PROBLEMS

We are happy to answer your technical problems in our ACAS section. Send your letters to **ACAS** at the address below.

NEWSDESK

If you have a news story, send it to **John Butters** at the address below. If your story is URGENT call him on **0625 878888** during office hours.

GALLERY

We are always on the look-out for good Amiga art. Send your work [as an FFI] to **Amiga Gallery** at the address below.

EZRA SURF

Got something to tell other Amiga Computing readers? Send your general letters to **Ezra Surf's Postbag (ESP)** at the address below.

COMPETITIONS

Enter competitions using the details on the form. If you have won a competition and not received a prize contact **Jonathan Madcock** on 0625 878888.

PUBLIC DOMAIN SUBMISSIONS

PD libraries are welcome to submit their latest releases. Submissions should include a detailed list of what each disk contains. Jiffy bags to **Stevie Kennedy**.

ALMANAC

Our Almanac authors can be contacted via Amiga Computing. Please mark any correspondence clearly and send it to the address below.

ADVERTISING PROBLEMS

If you have had a problem with one of our advertisers please contact **Martin Fitzgerald** on 0625 878888 or write to him at the address below.

FAULTY COVERDISKS

If your CoverDisk is faulty send it to **Stanley Precision**, Unit F, Cowditch Court, Solihull Road, Walsall North Industrial Estate, Corby, Northants NN17 1JX.

SUBSCRIPTIONS & BACK ISSUES

To subscribe or order back issues please use the form at the back of this issue or call **Europress Direct** on 051-357 1275. Please note we only hold back issues for six months.

THE WORKSTATION

Technical enquiries about the Workstation should be sent IN WRITING to **Workstation Support** at the address below. Please return faulty disks to the supplier.

COMPLAINTS

If you have a serious complaint about the editorial content of *Amiga Computing* please write to the **Editor-in-chief**, **Eddie McKendrick** at the address below.

TELEPHONE CALLS

Except in the situations listed above we cannot accept telephone enquiries. Please write in to one of the departments listed in this panel.

SAVE THOSE SAEs!

Please don't send us SAEs, we can't promise to reply to every letter so it really is a waste of your stamp. Sorry!

AMIGA COMPUTING
EUROPA HOUSE
ADUNTON PARK
MACCLESFIELD
SK10 4NP

* * * * * * Price Busters!! *

* Graphics & General Hardware *

* Advantage	64.99	A1500 CPU Case	169.99
* Art Department		A1500/2000 40Mb	
Pro 2	139.99	Quantum Card	369.99
* Broadcast Titrer 2	169.99	512K Ram with	
* Colourburst	479.99	clock	29.99
* Deluxe Paint IV	54.99	1.5Mb Ram with	
* Digipaint III	34.99	clock	82.99
* Disney Animation		Audio Engineer	
Studio	64.99	Plus	159.99
* Graphics Workshop	44.99	Cameron Colour	
* Flow 3.0	59.99	Scanner	349.99
* Imagine	147.99	Invision Plus/Live	499.99
* Personal Finance		Naksha Mouse	22.99
Manager	19.99	Rendale 8802	
* Pro Draw 2.0	89.99	Genlock	149.99
* Real 3D Beginners	99.99	Mode Switch Box	
* Scenery Animator	49.99	for 8802	29.99
* Spectra Colour	39.99	RGB Splitter	59.99
* Vidi Amiga	89.99	RocGen Genlock	89.99
* Vidi Colour Solution		RocGen Plus	134.99
.....	139.99	RocLite Drive	54.99
* Vista	34.99	Podcast Graphics	
* Vista Pro	64.99	Tablet	189.99
		Zydec Trackball	29.99
		Zydec Amiga Drive	49.99

* Music & Sound *

* Audition 4	34.99
* Deluxe Music Const.	
Set	49.99
* Perfect Sound	39.99
* Sequencer One	64.99
* Stereo Master	29.99
* Soundmaster	84.99
* Techno Sound Turbo	
.....	29.99

* DTP & Wordprocessing *

* Excellence 2.0	59.99
* Keyboards	29.99
* Page Setter 2	39.99
* Page Stream 2.2	139.99
* Pen Pal	54.99
* Protefix v.5.5	59.99
* Professional Page	169.99
* ProWrite 3.2	89.99
* Quickwrite	29.99
* Scribble	29.99
* Transwrite	29.99
* Wordworth 1.1	89.99
* Works Platinum	59.99

* FREEPOST or £5 Securicor 48 hour despatch *

* Cheques should be made payable to Softstore
Access and VISA cards accepted

* Softstore, 410 Bath Road, Slough, SL1 6JA.

* **0628 - 668320** *

* * * * *

Amiga ⁵⁰⁰ 512Kb MEMORY With 2 Years Warranty

Our Incredible TOTAL price includes the clock /drive chip & 5 year easily replaceable battery.

£27.99

! TOTAL PRICE INCLUDING POSTAGE AND VAT !

A refreshing change from the dozens of inferior designed boards on the market - some even 1st second hand, salvaged chipsets! Ours is simply the best. A professional design from makers of professional GEM desktops for more than 12 years. The AMIGA512 uses fast, fast, quality, standard new INTEL i860 RAM chips, and has a super accurate clock. It is smaller, and has higher safety margins than any other product - it price those unimpaired! Having used Gurus knows of plenty of the poor. What's more it is QUALIFIED to accept a further 1Mb low cost UPGRADE module. With this pedigree, of this price, and a two year guarantee, who would consider any other?

- CDTV NOW ON DEMO IN OUR TV SHOWROOM -

Brand New, very latest UK version machines, with FREE Modulator

Amiga Price our A500 price only

Breakthrough **£299.99**

Amiga 3.5" Drives

With all the extra features you need:

Thru' Port Memory Saver Switch Extra long lead

£51.75

INCLUDING POSTAGE & VAT

Inpholink Ltd. front St. West. BEDLINGTON, Northumberland NE22 5UB - Order Line (0670) 827480

Load Crest PD

1-5 Disks £1.50 per disk, 6-10 Disks £1.25 per disk
11+ Disks £1.00 per disk

Prices include P & P in UK. We have over 2000 titles available for the Amiga
SAE for printed list or 70p for Catalogue disk.

LC1 Lunar Capes 1Mb platform game. Licenseware £3.00	
G8481 Operation Learning. Fed up with saving them. Then try this charityware game. £3.00	
51021 Myestes of Ruins	51085 Key's Emulator Disk
51084 Mid-Tide	51089 Landing Sequence 480-4 Disks
51079 Phenomena Music Dream II	51091 WFF Breakers
51095 801 Extra Disk 1	51092 Merged
51096 Woodchuck	51093 Simon & Space Maths
51097 Amos Part V16	51094 Anatomical Metal Melons
51098 PMS: Mid-Orange	51095 Virtual World
51099 Amos Part V16	51096 Amos Music Disk
51100 Amos Part V16	51097 Amos Music Disk 2 Disks
51101 Amos Part V16	51098 Amos Music Disk 2 Disks

Official distributor for Dega Via Licenseware

Load Crest (Dept AC3), 30 Ladbroke Park, Bolton, BL1 8LT.
Tel: (0204) 33367

A selection of disks are also available at:- STAMMER, OLDHAM
INTELLECT CENTRE, BOLTON, SOFTWARE SHOP, HEBWICK,
VEDANTA ARTISTS GALLERY STOCKPORT, RAMBOFT, BOKFORD.

HELP!! To AMIGA Users

Got an Amiga for Christmas, but unsure how to use it?
Recently bought an Amiga, but have unanswered questions?
Want to know more about the Amiga Hardware & Software,

but don't know how to go about it?

THEN CALL IIC!
We can answer your "BUTS" by a training course of 12 Disks, at your leisure in your own home.

Special New Year Discount £50.00 complete course. Alternatively try a month at £5.00 - but we know you'll want more!!

JJC, PO Box 19, High Wycombe,
Bucks, HP11 1UF. Tel: 0494 883347

091 587 1195

START
D HOLMESIDE, SUNDERLAND, SR1 3
091 565 2506

0983 529 594

0535 667 469

With Christmas now receding into a blur of cheap tinsel and even cheaper sherry, the PD companies have been bombarding us with games. For those who loathe to look at games there are some rather interesting utilities and such like, but for those who want to mop up the last of their hard-earned cash on some post festive zapping, then this one's for you...

Neptune Slideshow

AmigaNuts Disk No 1179

After last month's scintillating Mars Slideshow, this month's digitised offering comes from Amiganuts as a two disk set. Yet more digitised pictures of another planet for you to load up and, er, look at.

The quality ranges from crystal clear on some of the close-up shots to fairly indistinct for some shots of the whole planet. The real problem is that Neptune isn't very exciting. With Mars at least you've got all the rumours and mystery of the Planet of War - Neptune just doesn't have much "oomph". This slideshow doesn't even have the informative text overlays of the Mars slideshow.

A bit of a pointless exercise, really. Worth a look if you want to see what can be achieved with a digitiser, but not really different enough to make it worth getting.

The Invisible World

Strictly PD Disk No D462

Another digitised slideshow, but one that's a lot more interesting, especially for the more macabre among you. It's made up of three sections, each one highlighting one aspect of the things we cannot see with the naked eye.

The first section shows, in unflinching detail, all the little bugs and beasts who live in, on and around us. Each picture is accompanied by some suitably skin-crawling text to let us know



BEDBUGS - A single bedbug can live for more than a year. This macro vampire survives by piercing our skin and sucking away a few drops of blood per meal. Map #300

Not while I'm voting, Mother! The spine-chilling world of long-legged beetles revealed for you!

SHAREWARE AND PUBLIC DOMAIN SHOPPER *Selection*

Down Hill Challenge

Strictly PD Disk No G342

First mention of the month goes to this wonderfully nostalgic skiing game. Those who graduated to the Amiga from the humble Spectrum will instantly recognise that cobwebby fave, Horace Goes Skiing. The graphics are different, and the crossing the road section has gone, but the exhilaration of rushing down a pixelated slope and dodging trees at high speed is still there.

There are a few minor problems, such as the way the game is simply over once you've completed the course.

The randomly generated trees and rocks make it different each time you play, and the bonus flags and extra points for leaping over branches add excitement to the battle for a high score.

The longer you stay on your skis the more points you earn, the faster you go and the harder things get. Hit an obstacle and you fall flat on your face and lose one of your five lives.

It's everything that a PD game should be. Simple, well thought out

exactly what these little beggars do to us. Many a shiver passed through the office at the sight of a bed bug magnified 300 times. Not for the squeamish.

The second section focuses on those clever stop motion films, and includes



The swirl of the snow, the wind in your hair and the trees in your teeth. It's a man's life as a downhill skier!

and outrageously addictive. Not the sort of thing that'll keep you glued to the joystick for hours on end, but it's the sort of game that you just want to load up for a quick go in between

more serious matters. A pleasant diversion. And isn't that what PD games are about? Playability and good fun for next to nothing price. Great, undemanding stuff.

shots of bananas being shot, with the picture held at the exact point of impact and the skin of a balloon peeling back in under a millionth of a second as it is burst. Amazing stuff. Again, text accompanies each picture giving information on what it is and, more interestingly, how it was achieved.

The final section reveals what tiny, everyday objects look like when magnified. A crack in an egg becomes a giant crevasse and a pinch of salt looks like a demolished building. The text continues to describe the awesome sights, and you'll be hard pushed to believe it sometimes! Surely that horrendous mass of squirming spaghetti can't really be plaque on a tooth?

The quality of the black and white pictures is very high, so no detail can be missed. Each section is as interesting and eye opening as the last and is guar-

anteed to have everyone gasping and muttering "Well I never...". Compelling stuff, and definitely worth keeping your eyes open for, if you can stomach the thought of all those little monsters swimming around in your armpits.

The Final Frontier

Strictly PD Disk No U314

Here's a treat for all you Trekkies out there. The Final Frontier is a disk magazine dealing exclusively with Star Trek trivia and info. Lively Trek debates rage in the letters section. Is Wil Wheaton rubbish? Is The Next Generation a type of old kingtons? You can air your views here, and also get gripes about dodgy



BATTLEAXE P.D.

SPECIALISTS IN AMIGA PUBLIC DOMAIN AND SHAREWARE

FISH 1-550
DEJA VU 1-57
T-BAG 1-58
POWER

ALL ORDERS DISPATCHED 1st CLASS, SAME DAY ON SAFE GUARANTEED DISKS

LATEST

845 RESQUE (GAME) £3.50
846 JET MEN (GAME) NEW
849 MORE MOUNTAIN 1 DISKS REMIX
850 GULF WAR BY ERIC SHWARTZ
851 IN BED WITH MADONNA
852 PLEASE CHARLIE (MUSIC)
854 BASS MC MEGADEMO
865 PET SHOP BOYS (MUSIC)
UPGRADE TO A500 SPEC WITH NEW
EGS CHIPS. PHONE FOR DETAILS

VIRUS PROTECTING HARDWARE

HAVING PROBLEMS WITH VIRUSES OR MAYBE YOU JUST WANT TO BE ON THE SAFE SIDE OF THINGS, WELL THIS NEW TYPE OF HARDWARE (NO SOFTWARE NEEDED) WILL KEEP YOUR DISKS COMPLETELY BOOT-BLOCK VIRUS FREE! WHAT IF I'M ALREADY INFECTED? WELL YOU GET FREE SOFTWARE WITH THIS PACKAGE THAT WILL KILL VIRTUALLY ANY KNOWN BOOT/BOOTABLE VIRUS ETC AND KEEPS YOUR SYSTEM CLEAN! £12.95

MUSIC PACK

MED
THE GREATEST MUSIC MAKER
+ 4 DISKS
FULL OF INSTRUMENTS, BEATS ETC...
TO GET YOUR REMIKES GOING!!!
£9

CATALOGUE

INFO ON ALL OUR DISKS
FREE SOFTWARE ON THIS DISK
CHANGE TO WIN MIDI & KEYBOARD
AND 2 x 0.5 MEG UPGRADES
£1
FREE WITH ORDERS OVER 10 DISKS

GAMES

848 JET MEN NEW
900 POPEYE (LSD GAME)
901 SEVEN TILES SPEEDBALL 2
902 MASTER OF THE TOWN (1 MEG)
903 SCUM HATERS
904 DRIP (FAMOUS)
905 TENNIS (1 MEG) INC SPEECH
906 FRANTIC FREDDY
907 PSEUDO COP (ED 200)
908 STARTRECK (2 DISKS)
909 TANK (ADDICTIVE)
910 CHESS
911 LLAMATRON
912 MONOPOLY (THE BOARD GAME)
913 WHEEL OF FORTUNE
914 JEOPARDY RISK TYPE GAME
915 MISSILE COMMAND
916 AMOEBA INVADERS
917 ROLLERPEDE INVADERS
918 CUBULUS, PAB PUZZLE
919 ZELB
920 HOLLYWOOD TRIVIA
921 FLASHBIER, NEAT 200 LEVELS
922 H-BALL, ARKANOIDE CLONE
923 SUPER TWINTRIX, BEST

TOP GAMES

843 MANACS OF NOISE BRILL
799 MANIAC RAVES 1 Meg 2 disks
770 CONGAMER & WINDMILL 1 Meg
771 VIRTUAL WORLDS 1 Meg
835 MORE AEROTIONS, ANIM 1 Meg
837 MADONNA ANIM CHRONICS 1 Meg
733 SINGERS BY DECAY 1 Meg
849 MOVE ANY MOUNTAIN 2 disks, REMIX
855 PET SHOP BOYS (MUSIC)
854 BASS MC MEGADEMO
852 PLEASE CHARLIE (MUSIC)
850 GULF WAR BY ERIC SHWARTZ
851 IN BED WITH MADONNA
862 WENDY JAMES SLIDESHOW
863 MORE GLASSY ANIMS 5
854 HARDCORE CHUCK
885 WWF SLIDESHOW 3 disks
886 NON-STOP-MUSIC
867 WHAT CAN YOU DO FOR ME!!
868 ANTI LEMMING DEMO REQUIRES 2
DRIVES & 2 MEG. 2 disks
909 EVIL DEAD DEMO (X) 1 Meg
876 RAZOR MUSIC 20 MINS 1 Meg

856 PRINTER DRIVERS... CAN'T GET THAT DAMN PRINTER TO WORK??? HELP
812 WINDOWS/ENBENCH 2 disks... YOU'VE HEARD OF WINDOWS ON THE P.C. NOW ON AMIGA
757 TRYING TUTOR... MEASURES TYPING SPEED AND ADJUSTS LEVEL OF DIFFICULTY
799 CLERK... FANTASTIC ACCOUNTS PROGRAM FOR BUSINESS OR HOME
830 DESKTOP PUBLISHER... MAKE LEAFLETS etc... WITH GRAPHICS + TEXT... GOOOD
857 PRINTER DRIVERS... RILLS... SADAM... PLUS 171 MORE VIRUS'S LATEST
848 TEXT PLUS V3.0C... WORD-PRO... MENU DRIVER... AREXID SUPPORT... THE BEST
808 P.C. EMULATOR... RUN P.C. SOFTWARE... IT WORKS... COME WITH C.G.A. GFX
807 B46 EMULATOR... PUT YOUR AMIGA BACK IN TIME
808 SPECTRUM EMULATOR & UTILS... EVEN COMES WITH A GAME... SPECTRUM FANS
835 ST EMULATOR... RUNS ATARI ST SOFTWARE... IT WORKS AS WELL
910 PASCAL COMPILER... IF YOU ARE UP THERE WITH THE BIG BOYS GET THIS
710 AMIBASE... POWERFUL EASY TO USE DATABASE WITH A MATHEMATICAL FUNCTIONS
838 JR-COMM 1.02... THE LATEST VERSION OF THIS COMMS PROGRAM... GOOD
714 C-MANUAL V2... 4 DISKS... ALL YOU NEED TO LEARN C CONFINELY
704 MOUTH C... UNPACK ONTO 2 DISKS... COMPLETE C ENVIRONMENT
685 T.V. GRAPHICS... 2 DISK BACKGROUND & FONTS FOR VIDEO ENTHUSIASTS ETC
684 VIDEO APPLICATIONS... 2 DISK VIDEO UTILITIES TO ACCOMPANY TV GRAPHS
731 SMOVIE... AMAZING TITLE AND TEXT SCROLLER FOR VIDEO ETC
858 SOMETHING FOR NOTHING... 2 DISKS... VIDEO UTILITIES - FONTS... SERIOUS
880 N-COMM V1.92... THE LATEST VERSION OF THIS GREAT COMMS PROGRAM
676 SID V1.06... THE LATEST!!! CLI IS A BLAST WITH THIS ONE
688 DISK SALV... MUCH MUCH BETTER THAN DISKDOCTOR ON W.B
681 BATTLEAXE ICON STUDIO... THE TOP ICON MAKERS AND EDITOR WITH SOME ICONS
682 PRINTER DRIVER GENERATOR... YOU WANT A PRINTER YOU NEED A DRIVER
677 M.V. K 2.1... THE LATEST MASTER VIRUS KILLER AND THE BEST
683 O.K.B. TRACE... EXCELLENT RAY TRACE PROGRAM
716 MED V3.00... THE BEST MUSIC CREATOR RAVED ABOUT
711 LEARN & PLAY... 2 DISKS... GOOD YOUNGER TUTOR
700 CLIP ART & A.C.D.E. 5 DISKS... BEST IF PICS FOR FTP ETC
702 KEFFRENS MAGICAL POWERMENU & FONT DESIGNERS... EXCELLENT KIT
650 QUICKBASE, LABELPRINTER, VIDEO-LIBRARY, MENU 1 DISK... GOOD VALUE
703 GRAPHIC UTILITIES... TOTALLY PACKED WITH GRAPHIC STUFF
7812 DYNAMIC GENTS 1 & 2... 2 DISKS FULL OF FONTS TO USE IN PRINT ETC
763 RED SECTOR DEMO MAKER 1 MEG... THE BEST... USE BOBS, VECTORS AND MORE
764 T.S.B. VECTOR DESIGNER... EXCELLENT FOR DEMO MAKERS WORKS WITH THE ABOVE
761 MEGA UTILS... 50+ YES OVER 50 USEFUL UTILITIES
725 ANTIFLICKER... STOPS SCREEN FLICKER IN INTERLUDE MODE
787 HARD DRIVE UTILS... INCLUDES MR. BACKUP AMONG OTHERS IS GOOD

BUSINESS PACK

WORDPROCESSORS
SPELL CHECKERS
DATABASE
SPREADSHEETS
ACCOUNTS & MORE
£5

EDUCATION PACK

ABSOLUTELY FULL OF GREAT TUTOR
PROGRAMS, INCLUDES: FRENCH,
GERMAN, SPANISH, GEOGRAPHY, MATHS
& MUCH, MUCH MORE.
LET YOUR AMIGA BE YOUR TEACHER
£5

GAMES PACK

THE BEST HAVE BEEN PUT TOGETHER INC... DRIP, TANK, AMIGODS, SUPER TWINTRIX, H-BALL, MONOPOLY, BACKSAMGAM, FRANTIC FREDDY, CAVE RUNNER, TRACER, AIR ACE II, YACHTZE, ROLLERPEDE, CHESS & MANY, MANY MORE GREAT P.C. RECORDS...
£5

DEJA VU

PROFESSIONAL SOFTWARE
£3.50 PER TITLE. WE PAY THE ROYALTIES
ALL COME SUPPLIED WITH OFFICIAL
LABEL AND ON A BRANDED DISK!!
LPO 4 TUNGSTUNG - Great Gaming
Style Game for Kids
LPO 5 JUNGLE BUNGLE - Icon Driven
Adventure Game
LPO 8 PARADOX & Sprites - Great Game
+ 600 Ball Sprites
LPO 7 FOUR WAY LYNN - 22 Levels, Full
of PUZZLES??
LPO 11 Go Getter - Good Board Game
LPO 12 HYPOCOTIC LANDS - Catch Them
Beats, Coming from Lanes
LPO 16 REVERSI II - NEW IMPROVED
LPO 17 DOGHOUSE II Shootout!!!, B
Player Game Features
LPO 18 X-17-50 - Shoot-em-up!!!
LPO 21 QUINGO - Brilliant Puz Quiz
LPO 24 Shining Way of Kung-Fu - 2 disks,
Very Good, 5.50
LPO 25 THE MACHINIST - A Great Text
Adventure... Very Good
LPO 26 C.Y.A.D. - BOULDERDASH TYPE
Games, Addictive & Brill... 1mg
LPO 29 MAGICAL FOREST II - Brilliant
Commercial Quality Game...
LPO 41 RESCUE - Reviewed in this
Month's Magazine... Very Neat
LPO 42 ACERZONE - A Very Nice Shoot
em-up Game... Very Good
LPO 44 FORMULA ONE Challenge - NEW
Highly Addictive, Good... 1mg
LPO 47 DIRTY CHICK - NEW! The Best First
Machine Gun I've Seen
!!!REVIEWED LAST MONTH!!!

EXTRAS

UPGRADES
UPGRADE TO 2 MEGS
GUARANTEED WITH FREE 2 MEG DEMO
£79.95
DISKS
BRAND NAMED DATAPULSE
BOXED IN 10's, GUARANTEED £7
L10-RIBBONS, BLACK £2.30
AMIGA CARE PACK
DUST COVER, MOUSE MAT
DISK HEAD CLEANING KIT
£9.99

AM/FM

AM/FM is a recently started disk mag for
Amiga users who are musically interested. It
covers all aspects of using the Amiga for
sound and music production, bringing
News, Reviews, Group, Tutorials as well as
3-4 selected Amiga only songs, 3-4 MIDI
songs and 2-3 selected Music utilities
in each issue. Created by some 20
professional musicians including Bjoern
Lympe and Teiga Kinnunen...
£2.50

NEWSFLASH

We are the Official Distributors of Newsflash,
Europe's first and best disk based
magazine... 2 disks full of Reviews,
Utilities, Graphics & Music. The Buzz!!
£4.95 per issue

CALL FOR A500 PLUS COMPATIBILITY

DISKS £1.25 EACH
DEJA VU £3.50 EACH
NEWSFLASH £4.95 issue

POSTAGE
ALL ORDERS
50p SAME DAY DISPATCH UK
£1.50 EUROPE £3 REST OF THE WORLD

CHEQUES & P.O.s TO: BATTLEAXE P.D. (AMC)
125 KINGSWOOD, THORPE MARRIOTT
NORWICH NR6 6W, NORFOLK
TEL: 0603 261060

merchandise and life in general off your chest.

The whole thing is very well presented, featuring several Tobias Richter pictures inspired by the series. It's fairly obvious that this won't appeal to the "normal" people out there, but for all you Trekkies, it'll go down a treat.

Games Compilation 1

Warpside Disk No 0511

A fairly new PD library are Warpside, having only been around since June. In a blatant bid for free publicity, they've sent us a preview of their first games compilation. And just look at the quality of these games...

You get four games on the disk - *Bip*, *Wizy's Quest*, *Sys*, and (ahem) *Skoda Challenge*. *Bip* is a revamped version of some old arcade machine that no-one can remember the name of, *Wizy's Quest* is a puzzle game in the vein of *Spherical*, *Sys* is really *Pengo* in disguise, and *Skoda Challenge* is, er, well it speaks for itself, really.

Of the four, *Bip* is by far the most fun. It's a two player affair where you



Public domain. The final frontier. These are the continuing voyages of the clichéd captions...

each take control of a little biplane and zip about the skies trying to shoot each other down. The catch is that the planes handle in a strange way. Pushing forward on the joystick speeds you up and then right and left rotate the plane. Fire, as if by magic, fires your machine gun.

The planes have to obey the laws of physics though, and if you try to move intricate twists and turns then your

engine cuts out and you tumble to the ground. The first player to crash or get shot fifteen times loses. It's a simple concept, but it's beautifully programmed and once you've got the hang of the controls, you can have hours of fun looping the loop and dive-bombing your mates.

Wizy's Quest is a German puzzle game, with all the text translated with a wicked sense of humour. All you have to do is guide some ancient wizard bloke out of each level by building blocks to climb up and over obstacles. You get 50 levels so there's no risk of it being too easy. The control is a bit sticky, but this doesn't matter too much as fast reactions aren't that important. It's not brilliant, but it's good for a laugh.

Sys is another puzzly type of game, based on *Pengo*. You control a little round bloke who shuffles round a maze of disks and must destroy the viruses by shunting said disks on top of them. It's been done before, and done better, but as part of a four pack, it's a mildly entertaining way to spend a few minutes. And finally

Nucleus

Amiganuts Disk No N

A cut above the usual PD shoot-em-ups, as there isn't a trace of the stereotypical SEUCK vertical plodding "thrills". Instead we get a very slickly presented horizontal scroller, with highly posh graphics and a professional tune. It all looks very smart indeed.

It plays OK as well. It's a bit slow, and some of the aliens can take a few too many hits to kill, but the polished feel makes it last that little bit longer than most PD shooteramas. If I've got one criticism of *Nucleus*, it's that it becomes much too hard with no warning.

You spend the first level happily blasting the mindless aliens, and then come face to face with a monstrous end-of-level baddie who launches a barrage of heat-seeking missiles at you and kills you stone dead.

This rather unfair surprise does affect the game's long term appeal as personally, I can't see anyone wanting to boot this up only to remain on the first level for ages. Maybe you can develop some skilful tactics to defeat the beast, but you may find yourself inclined to give up.

A pity really, as this silly design spoils an otherwise excellent game. So, as Dennis Norden would say, if you're one of those people who can complete all the games in the top forty blindfolded, then *Nucleus* is probably just the game to bring you down a peg or two. You smug little thing.



Barren-storming action and wildly flapping silk scarves for spelly biplane pilots

Amiganuts update!

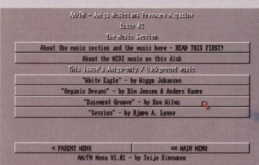
Amiganuts have asked us to make a few statements on their behalf to the PD buying public. First of all, those Amiga nutters would like to make it known that as of now all their disks are fully compatible with the A500 Plus.

They're also proud to announce the latest developments in the wacky and wild world of OctaMED. They are now able to offer a full OctaMED manual, to help you squeeze the best results from Tejo's musical masterpiece.

The manual comes all professionally bound up, like the worksheets you got in school that always smelled of Bostik. Fortunately, this manual doesn't smell even remotely Bostik-like, but it does contain 90 pages of hints, tips and instructions for everyone's favourite PD program.

It's very well laid out, and looks quite daunting to the unconverted, but if you're conversant with the program then this'll sort out any queries you might have. It's nice to see PD libraries becoming more professional in their marketing, isn't it?

Also available from those huggable Amiganuts is a disk magazine, going by the uncanny title of AM/FM. It's described as "a magazine-cum-utilities disk that is aimed strictly for the musical Amiga user". Sounds like your cup of tea? Then get in touch with the 'Nuts and get yourself a copy.



For the musically minded, AM/FM will keep you up to date with all the Amiga music news

Goldstar Computers (EC) Ltd.

P.O. BOX 2, TYLDESLEY, MANCHESTER, M29 7BN

(0942) 895320



OFFICIAL DISTRIBUTORS OF PREMIER SOFTWARE OF THE USA
Two disk catalogues only 75p (Free updates!!!) Premier Catalogue £1.00

UTILITIES

- U01 - Backup V.I. - Brilliant backup utility
- U02 - BackupWin - Easily enhanced V.I.
- U03 - Intro Maker - Will do it by HIM!
- U04 - Kase - Text - Excellent disk
- U05 - Master Virus Killer V.I. - Good
- U06 - Ports & Surfaces - Cut and Paste
- U07 - C-Light - Logical command sheet
- U08 - M.C.A.D. - Computer Added Design pack
- U09 - Diskmaker V.I. - Not 2 in 4
- U10 - Accuscan Disk Utilities - Excellent
- U11 - SIO V.I. - The only directory editor
- U12 - L4V4 - Catalogue Compiler - Rather good
- U13 - Zip Clip V.I. - Was once 20 disks!
- U14 - COMBOS - Good but a little odd
- U15 - Hard Disk Utility - Wonderful
- U16 - TSB Vector Designer - No PC's Jan
- U17 - Memory II - Ultimate in memory
- U18 - PC-Median - An exceptional utility
- U19 - Interval Utility - Brilliant disk
- U20 - Quickcheck V.I. - Incredible BRAD
- U21 - Brilliant Boot V.I. - Hi Boy!
- U22 - Alpha Flight Demo Creator - Gull!
- U23 - Diskmaker V.I. - Very nice
- U24 - Spacemaker - Lovely utility
- U25 - Scapal 3D Scenes - For Scapal users
- U26 - EISA V.I. - Brilliant disk
- U27 - Full Power V.I. 2 - Seventy Utilities
- U28 - Graphics Manager
- U29 - Graphics Manager - Needs 1 meg
- U30 - Spectra pack V.I. - Brilliant disk
- U31 - Opti V.I. - Excellent quality
- U32 - North C - Fusion Compiler V.I. 2
- U33 - 104 High Quality Clip Art
- U34 - C-Max - A little less reading
- U35 - Pexide Europa V.I. - Excellent
- U36 - Interlink V.I. 2 - Directory Utility
- U37 - Spectrum Encoder - Rather good
- U38 - Pascal Compiler - Very popular
- U39 - Amos Multitrack - GPF's V.I.
- U40 - Electronic V.I. 4 - Latest version
- U41 - SuperKiller - BOOTS V.I.
- U42 - Hard Lab - In conversion prog
- U43 - Total V.I. 2 - Utility
- U44 - APC V.I. 2 - Zip, Mod, Info, form
- U45 - Xenon V.I. - Seventy-five utilities
- U46 - HardLab Compiler - Useful utility
- U47 - Art - Publishing Old master
- U48 - REX V.I. - More bits, optics etc
- U49 - Amos V.I. 100 V.I. - Recommended
- U50 - Deflex V.I. 1 - Ultimate collection
- U51 - Sun Magic - Excellent programme
- U52 - DTP - NEW ENGLISH DICTIONARY
- U53 - WindowsWork - By MacMillan Ltd
- U54 - Evaluator - Excellent
- U55 - Programming 1 - Lots of info
- U56 - Night Plover 4 - Excellent disk
- U57 - Opti V.I. 2 - Latest version utility
- U58 - Opti Comm - Ultimate online disk
- U59 - C-Disc Test - Useful old friend
- U60 - NKS V.I. 4 - Latest Release
- U61 - Imploder V.I. - Latest Release
- U62 - Printer Utility - By Microsoft
- U63 - Practical Generation - By J. Richter
- U64 - Dynamic Fontset - More on a paste

EDUCATIONAL & GAMES

- G01 - 244 - Pack
- G02 - Learn & Play - Infant & junior age
- G03 - Game Solutions - Very good
- G04 - Talking Colouring Book - Nicely OK
- G05 - Tutorials II - Games - Playable demo
- G06 - Tennis - 3D game, needs 1 meg
- G07 - Star Trek V.I. - By Tobias Richter
- G08 - Board Games - Includes Monopoly
- G09 - Frankie Freddy - Good arcade fun
- G10 - Flashlight - Excellent game
- G11 - Amos - Chess V.I. 2 - also ship
- G12 - Megaball - Brilliant breakout clone
- G13 - Wacky Jr in Wonderland - Brilliant
- G14 - Seven Tiles - Good space game
- G15 - Wizard's Quest - Very nicely done
- G16 - Shapes - Absolutely brilliant for kids

- G17 - Mrs the Merchants - Excellent
- G18 - Mrs - Very addictive the game
- G19 - PONY V.I. 100 Games - Very Good
- G20 - Hollywood Trivia - Quite good
- G21 - Mental Image I - Best of optical
- G22 - Blacklight - Written with optical art
- G23 - Snake - Excellent game
- G24 - Cuckoo! Suitable for the kids pool
- G25 - Whodunnit - Very nicely done to fit
- G26 - SNUGLES - By Tobias Richter
- G27 - Ready Robot - Educational play school
- G28 - Peter's Quest - Lovely graphics
- G29 - The Mice - Incredible 3D scene
- G30 - Tomtequest - Needs two players
- G31 - Elmer's - Very good by J. Richter
- G32 - Chinese Checkers - Adjective game
- G33 - Mayhem - 3D in 3D
- G34 - The Great Black Magic strategy
- G35 - Super Quito - Excellent game
- G36 - Artista - Nice beautiful close
- G37 - Crowfoot - Very nicely done
- G38 - Johnson's - Super for the kids
- G39 - Wooden Ball - Brilliant!
- G40 - The Tree - Good game
- G41 - Pigeon - Fair - Very good
- G42 - Frog Machine - For the adult
- G43 - Dinosaur - Dinosaur
- G44 - Gosh! Pantomime - Both good
- G45 - Outmaster - Excellent
- G46 - Mastermind - 2nd - Good
- G47 - Dinosaur - Dinosaur
- G48 - Pigeon - Fair - Very good
- G49 - Pigeon - Fair - Very good
- G50 - Black Jack - Rather good
- G51 - Silver Hawk & The Keweenaw
- G52 - Superball - Best of optical
- G53 - Frog Machine - Brilliant game
- G54 - Snake in the Grass - OK

BUSINESS & OFFICE

- B01 - Wordmaster - Wordprocessing
- B02 - Clerk - Accounting
- B03 - E-Edit - Very powerful wordprocessor
- B04 - Flobline - Powerful text to use
- B05 - Amos V.I. 3 - Excellent database
- B06 - Inventory & Message - Very handy
- B07 - Business Card Maker - Pretty good
- B08 - Valsale - Similar to Lotus 1-2-3 in PC
- B09 - Qedit - Super text editor
- B10 - TextPad V.I. 2 - Excellent file
- B11 - 4th Business Letter - Brilliant
- B12 - Wordpad V.I. 2 - Latest version
- B13 - Basso II - Easy to use database
- B14 - Database War - Name & address
- B15 - Forms Really Excellent
- B16 - Electronic Notes V.I. 2
- B17 - Family History Database
- B18 - Spanish Tutor - Pretty good
- B19 - Cactus Labeler - For the labels
- B20 - Amos 3D - Amos 3D

SLIDESHOWS & PICS

- P01 - Pexide Europa Slideshow - V. Good
- P02 - Semble II - Exceptional, good
- P03 - New Slideshow - By Tobias Richter
- P04 - Roger Demo - Excellent slideshow
- P05 - Semble III - Excellent follow up
- P06 - From Tobias Richter
- P07 - Amos 3D - More from Tris stable
- P08 - Mac's Art - Very nicely done
- P09 - Nominat Program - From Hazel
- P10 - Pexide Slideshow - Exceptional artwork
- P11 - Pexide Slideshow - Rather brilliant
- P12 - Pexide Slideshow - More from this group
- P13 - Channel 4 V.I. - Slides - Very good
- P14 - Pexide - 12 - Fantastic quality
- P15 - Pexide - 12 - Fantastic quality
- P16 - Pexide - 12 - Fantastic quality
- P17 - Pexide - 12 - Fantastic quality
- P18 - Pexide - 12 - Fantastic quality
- P19 - Pexide - 12 - Fantastic quality
- P20 - Pexide - 12 - Fantastic quality

- P21 - Pexide - Absolutely superb
- P22 - Pexide - Absolutely superb
- P23 - Pexide - Absolutely superb
- P24 - Pexide - Absolutely superb
- P25 - Pexide - Absolutely superb

ANIMATIONS (most 1mb)

- A01 - More Animations - By Tris stable
- A02 - Animations - By Tris stable
- A03 - Animations - By Tris stable
- A04 - Animations - By Tris stable
- A05 - Animations - By Tris stable
- A06 - Animations - By Tris stable
- A07 - Animations - By Tris stable
- A08 - Animations - By Tris stable
- A09 - Animations - By Tris stable
- A10 - Animations - By Tris stable
- A11 - Animations - By Tris stable
- A12 - Animations - By Tris stable
- A13 - Animations - By Tris stable
- A14 - Animations - By Tris stable
- A15 - Animations - By Tris stable
- A16 - Animations - By Tris stable
- A17 - Animations - By Tris stable
- A18 - Animations - By Tris stable
- A19 - Animations - By Tris stable
- A20 - Animations - By Tris stable
- A21 - Animations - By Tris stable
- A22 - Animations - By Tris stable
- A23 - Animations - By Tris stable
- A24 - Animations - By Tris stable
- A25 - Animations - By Tris stable
- A26 - Animations - By Tris stable
- A27 - Animations - By Tris stable
- A28 - Animations - By Tris stable
- A29 - Animations - By Tris stable
- A30 - Animations - By Tris stable
- A31 - Animations - By Tris stable
- A32 - Animations - By Tris stable
- A33 - Animations - By Tris stable
- A34 - Animations - By Tris stable
- A35 - Animations - By Tris stable
- A36 - Animations - By Tris stable
- A37 - Animations - By Tris stable
- A38 - Animations - By Tris stable
- A39 - Animations - By Tris stable
- A40 - Animations - By Tris stable
- A41 - Animations - By Tris stable
- A42 - Animations - By Tris stable
- A43 - Animations - By Tris stable
- A44 - Animations - By Tris stable
- A45 - Animations - By Tris stable
- A46 - Animations - By Tris stable
- A47 - Animations - By Tris stable
- A48 - Animations - By Tris stable
- A49 - Animations - By Tris stable
- A50 - Animations - By Tris stable
- A51 - Animations - By Tris stable
- A52 - Animations - By Tris stable
- A53 - Animations - By Tris stable
- A54 - Animations - By Tris stable
- A55 - Animations - By Tris stable
- A56 - Animations - By Tris stable
- A57 - Animations - By Tris stable
- A58 - Animations - By Tris stable
- A59 - Animations - By Tris stable
- A60 - Animations - By Tris stable
- A61 - Animations - By Tris stable
- A62 - Animations - By Tris stable
- A63 - Animations - By Tris stable
- A64 - Animations - By Tris stable
- A65 - Animations - By Tris stable
- A66 - Animations - By Tris stable
- A67 - Animations - By Tris stable
- A68 - Animations - By Tris stable
- A69 - Animations - By Tris stable
- A70 - Animations - By Tris stable
- A71 - Animations - By Tris stable
- A72 - Animations - By Tris stable
- A73 - Animations - By Tris stable
- A74 - Animations - By Tris stable
- A75 - Animations - By Tris stable
- A76 - Animations - By Tris stable
- A77 - Animations - By Tris stable
- A78 - Animations - By Tris stable
- A79 - Animations - By Tris stable
- A80 - Animations - By Tris stable
- A81 - Animations - By Tris stable
- A82 - Animations - By Tris stable
- A83 - Animations - By Tris stable
- A84 - Animations - By Tris stable
- A85 - Animations - By Tris stable
- A86 - Animations - By Tris stable
- A87 - Animations - By Tris stable
- A88 - Animations - By Tris stable
- A89 - Animations - By Tris stable
- A90 - Animations - By Tris stable
- A91 - Animations - By Tris stable
- A92 - Animations - By Tris stable
- A93 - Animations - By Tris stable
- A94 - Animations - By Tris stable
- A95 - Animations - By Tris stable
- A96 - Animations - By Tris stable
- A97 - Animations - By Tris stable
- A98 - Animations - By Tris stable
- A99 - Animations - By Tris stable
- A00 - Animations - By Tris stable

MUSIC

- M01 - Sound Samples - Includes perfect sound
- M02 - Sound Samples - Includes perfect sound
- M03 - Sound Samples - Includes perfect sound
- M04 - Sound Samples - Includes perfect sound
- M05 - Sound Samples - Includes perfect sound
- M06 - Sound Samples - Includes perfect sound
- M07 - Sound Samples - Includes perfect sound
- M08 - Sound Samples - Includes perfect sound
- M09 - Sound Samples - Includes perfect sound
- M10 - Sound Samples - Includes perfect sound
- M11 - Sound Samples - Includes perfect sound
- M12 - Sound Samples - Includes perfect sound
- M13 - Sound Samples - Includes perfect sound
- M14 - Sound Samples - Includes perfect sound
- M15 - Sound Samples - Includes perfect sound
- M16 - Sound Samples - Includes perfect sound
- M17 - Sound Samples - Includes perfect sound
- M18 - Sound Samples - Includes perfect sound
- M19 - Sound Samples - Includes perfect sound
- M20 - Sound Samples - Includes perfect sound
- M21 - Sound Samples - Includes perfect sound
- M22 - Sound Samples - Includes perfect sound
- M23 - Sound Samples - Includes perfect sound
- M24 - Sound Samples - Includes perfect sound
- M25 - Sound Samples - Includes perfect sound
- M26 - Sound Samples - Includes perfect sound
- M27 - Sound Samples - Includes perfect sound
- M28 - Sound Samples - Includes perfect sound
- M29 - Sound Samples - Includes perfect sound
- M30 - Sound Samples - Includes perfect sound
- M31 - Sound Samples - Includes perfect sound
- M32 - Sound Samples - Includes perfect sound
- M33 - Sound Samples - Includes perfect sound
- M34 - Sound Samples - Includes perfect sound
- M35 - Sound Samples - Includes perfect sound
- M36 - Sound Samples - Includes perfect sound
- M37 - Sound Samples - Includes perfect sound
- M38 - Sound Samples - Includes perfect sound
- M39 - Sound Samples - Includes perfect sound
- M40 - Sound Samples - Includes perfect sound
- M41 - Sound Samples - Includes perfect sound
- M42 - Sound Samples - Includes perfect sound
- M43 - Sound Samples - Includes perfect sound
- M44 - Sound Samples - Includes perfect sound
- M45 - Sound Samples - Includes perfect sound
- M46 - Sound Samples - Includes perfect sound
- M47 - Sound Samples - Includes perfect sound
- M48 - Sound Samples - Includes perfect sound
- M49 - Sound Samples - Includes perfect sound
- M50 - Sound Samples - Includes perfect sound
- M51 - Sound Samples - Includes perfect sound
- M52 - Sound Samples - Includes perfect sound
- M53 - Sound Samples - Includes perfect sound
- M54 - Sound Samples - Includes perfect sound
- M55 - Sound Samples - Includes perfect sound
- M56 - Sound Samples - Includes perfect sound
- M57 - Sound Samples - Includes perfect sound
- M58 - Sound Samples - Includes perfect sound
- M59 - Sound Samples - Includes perfect sound
- M60 - Sound Samples - Includes perfect sound
- M61 - Sound Samples - Includes perfect sound
- M62 - Sound Samples - Includes perfect sound
- M63 - Sound Samples - Includes perfect sound
- M64 - Sound Samples - Includes perfect sound
- M65 - Sound Samples - Includes perfect sound
- M66 - Sound Samples - Includes perfect sound
- M67 - Sound Samples - Includes perfect sound
- M68 - Sound Samples - Includes perfect sound
- M69 - Sound Samples - Includes perfect sound
- M70 - Sound Samples - Includes perfect sound
- M71 - Sound Samples - Includes perfect sound
- M72 - Sound Samples - Includes perfect sound
- M73 - Sound Samples - Includes perfect sound
- M74 - Sound Samples - Includes perfect sound
- M75 - Sound Samples - Includes perfect sound
- M76 - Sound Samples - Includes perfect sound
- M77 - Sound Samples - Includes perfect sound
- M78 - Sound Samples - Includes perfect sound
- M79 - Sound Samples - Includes perfect sound
- M80 - Sound Samples - Includes perfect sound
- M81 - Sound Samples - Includes perfect sound
- M82 - Sound Samples - Includes perfect sound
- M83 - Sound Samples - Includes perfect sound
- M84 - Sound Samples - Includes perfect sound
- M85 - Sound Samples - Includes perfect sound
- M86 - Sound Samples - Includes perfect sound
- M87 - Sound Samples - Includes perfect sound
- M88 - Sound Samples - Includes perfect sound
- M89 - Sound Samples - Includes perfect sound
- M90 - Sound Samples - Includes perfect sound
- M91 - Sound Samples - Includes perfect sound
- M92 - Sound Samples - Includes perfect sound
- M93 - Sound Samples - Includes perfect sound
- M94 - Sound Samples - Includes perfect sound
- M95 - Sound Samples - Includes perfect sound
- M96 - Sound Samples - Includes perfect sound
- M97 - Sound Samples - Includes perfect sound
- M98 - Sound Samples - Includes perfect sound
- M99 - Sound Samples - Includes perfect sound
- M00 - Sound Samples - Includes perfect sound

DEJA VU (incorporating AMOS licenceware) £3.50

- LD01 - Colouring Book - Simple for school children ages
- LD02 - Star Art Games - Educational games
- LD03 - Galsome - Very effective follow up to the
- LD04 - Juggle Bunch - Superb adventure game
- LD05 - Work & Play - 3 educational games
- LD06 - Play It Safe - About at educating the
- LD07 - Wordly - A very nice, simple to operate
- LD08 - LCH288 Fonts - This enables you to
- LD09 - The Shining Way of King Fe - This
- LD10 - The Shining Way of King Fe - This
- LD11 - The Shining Way of King Fe - This
- LD12 - The Shining Way of King Fe - This
- LD13 - The Shining Way of King Fe - This
- LD14 - The Shining Way of King Fe - This
- LD15 - The Shining Way of King Fe - This
- LD16 - The Shining Way of King Fe - This
- LD17 - The Shining Way of King Fe - This
- LD18 - The Shining Way of King Fe - This
- LD19 - The Shining Way of King Fe - This
- LD20 - The Shining Way of King Fe - This
- LD21 - The Shining Way of King Fe - This
- LD22 - The Shining Way of King Fe - This
- LD23 - The Shining Way of King Fe - This
- LD24 - The Shining Way of King Fe - This
- LD25 - The Shining Way of King Fe - This
- LD26 - The Shining Way of King Fe - This
- LD27 - The Shining Way of King Fe - This
- LD28 - The Shining Way of King Fe - This
- LD29 - The Shining Way of King Fe - This
- LD30 - The Shining Way of King Fe - This
- LD31 - The Shining Way of King Fe - This
- LD32 - The Shining Way of King Fe - This
- LD33 - The Shining Way of King Fe - This
- LD34 - The Shining Way of King Fe - This
- LD35 - The Shining Way of King Fe - This
- LD36 - The Shining Way of King Fe - This
- LD37 - The Shining Way of King Fe - This
- LD38 - The Shining Way of King Fe - This
- LD39 - The Shining Way of King Fe - This
- LD40 - The Shining Way of King Fe - This
- LD41 - The Shining Way of King Fe - This
- LD42 - The Shining Way of King Fe - This
- LD43 - The Shining Way of King Fe - This
- LD44 - The Shining Way of King Fe - This
- LD45 - The Shining Way of King Fe - This
- LD46 - The Shining Way of King Fe - This
- LD47 - The Shining Way of King Fe - This
- LD48 - The Shining Way of King Fe - This
- LD49 - The Shining Way of King Fe - This
- LD50 - The Shining Way of King Fe - This
- LD51 - The Shining Way of King Fe - This
- LD52 - The Shining Way of King Fe - This
- LD53 - The Shining Way of King Fe - This
- LD54 - The Shining Way of King Fe - This
- LD55 - The Shining Way of King Fe - This
- LD56 - The Shining Way of King Fe - This
- LD57 - The Shining Way of King Fe - This
- LD58 - The Shining Way of King Fe - This
- LD59 - The Shining Way of King Fe - This
- LD60 - The Shining Way of King Fe - This
- LD61 - The Shining Way of King Fe - This
- LD62 - The Shining Way of King Fe - This
- LD63 - The Shining Way of King Fe - This
- LD64 - The Shining Way of King Fe - This
- LD65 - The Shining Way of King Fe - This
- LD66 - The Shining Way of King Fe - This
- LD67 - The Shining Way of King Fe - This
- LD68 - The Shining Way of King Fe - This
- LD69 - The Shining Way of King Fe - This
- LD70 - The Shining Way of King Fe - This
- LD71 - The Shining Way of King Fe - This
- LD72 - The Shining Way of King Fe - This
- LD73 - The Shining Way of King Fe - This
- LD74 - The Shining Way of King Fe - This
- LD75 - The Shining Way of King Fe - This
- LD76 - The Shining Way of King Fe - This
- LD77 - The Shining Way of King Fe - This
- LD78 - The Shining Way of King Fe - This
- LD79 - The Shining Way of King Fe - This
- LD80 - The Shining Way of King Fe - This
- LD81 - The Shining Way of King Fe - This
- LD82 - The Shining Way of King Fe - This
- LD83 - The Shining Way of King Fe - This
- LD84 - The Shining Way of King Fe - This
- LD85 - The Shining Way of King Fe - This
- LD86 - The Shining Way of King Fe - This
- LD87 - The Shining Way of King Fe - This
- LD88 - The Shining Way of King Fe - This
- LD89 - The Shining Way of King Fe - This
- LD90 - The Shining Way of King Fe - This
- LD91 - The Shining Way of King Fe - This
- LD92 - The Shining Way of King Fe - This
- LD93 - The Shining Way of King Fe - This
- LD94 - The Shining Way of King Fe - This
- LD95 - The Shining Way of King Fe - This
- LD96 - The Shining Way of King Fe - This
- LD97 - The Shining Way of King Fe - This
- LD98 - The Shining Way of King Fe - This
- LD99 - The Shining Way of King Fe - This
- LD00 - The Shining Way of King Fe - This

FISH 1-550, L.BAG 1-54, SMAUG, PANARAMA, NZAUG, TOPIK, SNAG, AMIGOS, SCOPE & THE PREMIER COLLECTION AVAILABLE

IF YOU ORDER 10 OR MORE, YOU GET A FREE ONE POSTAGE. UK and BEPO: Please add 50p to order. Europe: Please add 20p per disk. World: Please add 40p per disk.

CO-OWNER OF THE PUBLIC DOMAIN STANDARDS FOR COMMODORE UK

Land Builder

Virus Free PD Disk No 2056

At last, a simple to use fractal generator! This is just the thing for all the people who like the idea of fractals but are a bit confused by all the facts and figures.

All you need to do is type in a seed number (there are literally tens of thousands to choose from), and then select a level of detail.

The program then spends the next few millennia drawing your fractal world. Once that's done, you can adjust the picture to suit your tastes and then look at it, say "that's a very nice fractal landscape" before doing another one.

There's really very little else to say about it. It's a fractal designer, it's fairly slow, and you've probably already got it at least another three or four where at home. Still, if you haven't and you're desperate to see some fractal landscapes, then go get it.

Skoda Challenge. Imagine SuperCars slowed right down to a snail's pace. With dodgy steering. That's Skoda Challenge. And oddly enough, that's Skoda cars as well, so it's startlingly realistic.

Even with these deliberate "problems" it's still fun to play. You can have four players at once, and all you have to do is trundle around and shoot each other, with front-mounted Skoda cannons (7). The slow response actually makes confrontations loads more fun as you wobble around each other trying to get the other car in your sights. Sillyness abounds, but it's wonderfully inventive.

All in all, a high quality package. Two barnstormers and two OKs, for the price of a CD. Can't be bad.

QuizMaster

Amiganuts Disk No 876

And to round off our festive selection, a quiz game to keep you huddled over your Amiga in the cold January evenings. Who knows, you might even lure the family technophobes in for a game!

The quiz takes the form of a race, in which each player must advance their car by answering questions correctly. You can have up to four players and the questions are randomly chosen from four categories. And the whole

caboodle was spawned by AMOS.

It's very well laid out, and feels more than a little like the computerised Trivial Pursuit. Unfortunately they've opted for a different answering method, where you must type answers in, which means that you can get an answer wrong for silly reasons.

For instance, when asked "What German city is famous for a scent it produces?" do you answer "Cologne" or "Köln"?

This "knowing the answer but still getting it wrong" situation is more frustrating than debating whether or not the player called out the right answer. At least you can sort that out among yourselves.

There are over 1,000 questions, although we found that some did repeat during our first game. The level of difficulty is pitched very high, so it might take a long time to finish a game. As if this was anticipated, there is an option to save the quiz and carry on at another time.

Apart from these relatively minor niggles, it's a worthwhile product. Of course, it's best with four, but you can play alone and learn all the questions so you win every time.

Either way, it's a fun little game and as long as you don't mind being made to look like a complete thickie, you'll come back to it time and time again.

Opti Utils 2

Virus Free PD Disk No 2057

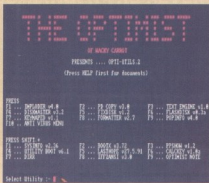
Having had their fingers burned by their ventures into the, shall we say, "fruitier" aspects of public domain, Virus Free have cleaned up their act and are now dealing in respectable utilities disks and other such decidedly normal wares. And apparently the dog is a lot better now.

This Opti Utils disk contains four virus killer, including Nuke, the Saddam virus killer which could come in handy for any AUI readers out there, plus 18 other handy and not so handy programs.

It deserves a mention as it includes the Text Engine, a PD wordprocessor that got the thumbs up last issue. This alone makes the disk worth getting, with the other stuff making a nice bonus.

And what of the stuff? Well, there's your usual selection of disk formatters and repairers, PPShow of course, and a disk copy program that's a good deal faster than the professional X Copy. And, no, it won't copy commercial software, so you can put that wooden leg away right now.

A good selection, with some predictable utilities but with the inspired inclusion of Text Engine. Get it just for that, if needs be.



A nice selection of utilities, plus the Text Engine, completely free!

Amiga Coders Club

Amiganuts

Yes, the Amiga Coders Club are still going from strength to strength. They've now released a special assembler disk to assist all you would be Bitmap Brothers in your quest for the perfect parallax.

The disk-based magazine that they produce is fairly small, but it contains a wealth of tips and hints for beginners and they don't scorn those who don't know the lingo. The feel of the thing is all very "matey", with most of the regular contributors exchanging jokes and zany tales of data processing on the letters page.

If you're a coder, no matter how experienced or inexperienced, then I advise you to get in with these guys. You'll probably learn some new stuff and make loads of friends all over the country in the process. This is the sort of community spirit that keeps PD alive. Cliches R Us, or what?

Who ya gonna call?

If you want to get hold of any of these disks then give the relevant company a shout

Strictly PD,
11 York Place,
BRISTOL
BS1 5UT

AmigaNuts,
169 Dale Valley Road,
Hollybrook,
SOUTHAMPTON
SO1 6QX

Virus Free PD,
23 Elborough Road,
Moredon,
SWINDON SN2 1LS
Tel: 0793 512321

Warpdrive PD,
110 Burton Avenue,
DONCASTER DN4 8BB
Tel: 0302 859715

Looking for scrollers, vectors and sine waves? Jonathan Maddock casts an evil eye over this month's demos

If you're a bit strapped for cash then you could do a lot worse than buying the Kryptic's demo disk. It contains loads of brilliant demos – for the price of a packet of Cornflakes you get the LSD Despair demo (which needs two drives to work) and the uniquely named Definition of Boombastic by those demo geni The Rebels.

Just by buying this disk you get all the scrollers and light-sourced vectors a demo fan could every need. Great graphics and great music – what more could a demophobe ask for?

Now for those of you who hate all this hard-core dance malarkey, there's a disk from Amiganuts which is tailor-made for all you classical music fans out there. It's top raver George Gershwin with his classic Rhapsody in Blue (you know, the tune off the Galaxy adverts). Being a hard-core dance music fan myself, all I can say is that it's well put together and it sure sounds nice on the ol' lugholers.

Now for some real music – hard-core dance music, that is. This disk from 17-Bit software contains two demos, one by The Rebels which is called The Thing (the hard-core dance one) and one by TSB (not the hard-core dance one). The Thing is serious dance stuff and contains starfields galore, while The TSB disk – it stands for The Special Brothers, fact fans – serves as a nice complement and also contains loads of vectors, starfields and other such demo-type things.

What's this? Well, would you believe it – it's a fantabulous Miami Vice remix by HCC. If you like Miami Vice then you'll love this and if you like Don Johnson then you'll be trembling with excitement, because there is a mega digitised picture of the man in question. Nice, very nice indeed.

The next offering is postapocalyptic in more ways than one because it's a great megamix of Harry Enfield's Loadsamoney, which was released a while back. A definite "fans only" disk, this one. All I can say is bosh bosh zoom zoom wallop dollop – get the disk and you'll find out what I'm going on about (I think he's finally flipped – Ed). It's available from the boys at Amiganuts, who

also do a lot of work for charity. More music? Yes, I'm afraid it's true, and even those little Lemmings have managed to get on to this disk.

It's entitled Lemming Curd and it's got five great tunes on it. All are of excellent quality, and check out the tune entitled Dentistry – it's exceptionally good. Also on the disk is the Gods remix – a great rehash of a pretty wonderful game, courtesy of the Bitmap Brothers.

The big Austrian is back, and this time he's appearing on 17-Bit's two disk Terminator 2 slideshow. It features loads of pictures of Arnie in action, plus shots from other scenes in the movie. This is definitely for Arnold Schwarzenegger fans only (so that's just about everyone, then). Every time it was shown in the office there were great cries of "Uzi 9-millimetre" and other such Arnie quotes. For a slideshow the quality of the pictures is very good indeed.

Other recommended disks include 17-Bit's Powerdemos featuring offerings from The Silents and Phenomena, which are both well worth adding to your collection. Also from 17-Bit is yet another Rebel demo – this one's entitled Outland and is probably their best yet.

Divina's Techno Fright has excellent graphics and thunderous music, which combine to make it a truly great example. Also worth a mention is Exile's Fontdisk which contains loads of great fonts all wonderfully drawn (including the very dodgy pornofont). The digitised picture of the Exile team at the beginning shows that these guys aren't even out of their nappies yet! And their mothers think they're such nice lads...

Well that's all for this month – see you next time for more music, demos and animations. Same time, same channel.

Animated animal antics

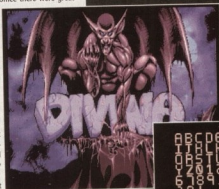
The first of our featured animations is from talented stalwart Eric Schwartz. This beauty is entitled The Dating Game.

In it, Eric breathes life into a frog and a squirrel, who are both getting ready for a date. The anim is very Tex Avery-ish and contains lots of slapstick humour. As usual it is very slick indeed and I can't find fault with it anywhere. It also contains a very, erm, physical ending. From Potteries PD, it's a definite must for anyone's collection. Unfortunately it needs 3Mb to run, so I suggest you buy it and then find a rich friend who has lots and lots of memory – even if it means pretending to be his best mate for a week.

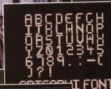
Remember Puggs in Space? Well, the dudes who created the demo that started a revolution are back. Their long-awaited sequel is named Fillet the Fish. Featuring a fish (surprise surprise) this demo is as good as, if not better than, Puggs in Space. The sequel has retained all the humour and great graphics of its predecessor – Jester Brothers International have come up with a cracker.



DEMO round-up



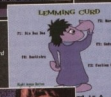
Techno Fright



Fontdisk



Kryptic



Lemming curd



Miami Vice



Rhapsody



32 MAIN PARK
MILSTONE ROAD
CARTERTON
OXON
OX18 3RU

RAW PUBLIC DOMAIN

DEMONSTRATIONS	MUSIC		GAMES		
Critics Total Destruction	0001	Alien Nations	M001	Seven Tiles	G001
Ballroom 2 (2 Disks)	0002/3	Bandiera Remix	M002	Star Trek Next Gen	G004
Ballroom 2	0004	Ten Pin Frenzy	M003	Jeopardy Heist	G006
Fighter Anticipation	0008	Digital Concert A	M014	Tunes (1 Meg)	G007
Avatar v Waller	0030	Barry Bow (2 Disks)	M016/7	2 Player Soccer Game	G009
Intervue in Dry Dock	0011	USD (Don't Panic) (1 Meg)	M018	Destination Moonbase	G019
Harlequin Demo	0006	Live (NOS) (1 Meg)	M019	Scum Hater	G041
Darkness Magazine 2	0015	Vertical Mystical Tunes	M020	Grav Attack	G044
Avatar Demo	0023	E.O.N. Music Disc	M020	Star Trek 1 Meg (E.L.)	G028
Walker 2 Demo (1 Meg)	0020	Prison	M022	Escape from Jail	G020
Alpha Omega Demo	0021	"Queen" Blah (2 Disks)	M020/9	Jeopardy (1 Meg)	G021
Insanity 2 (1 Meg)	0022	Jet Shop Boys	M021	Microgame Tunes	G023
Lockdown	0043	James Bond Remix	M018	Changy 2 (1 Meg)	G018

UTILITIES

Master Virus Killer v2.1	U004
Memo Maker	U009
DTF - English	U007
WRD (Wordbench 2)	U024
Wordright	U026
Avastor Wordbench 1.0	U038
Argentine	U039
Suspension v1	U043
Text Plus v2.20	U046
Iron Maria	U042
Diagnostic Check Disc	U045
TV Graphics	U023
CCOPY	U025

JUST GOT AN AMIGA FOR CHRISTMAS?

Over 20 games to suit all
tastes on four disks

For Only £5.00

Order Number Pack 1

WHY NOT SUBSCRIBE TO THE RAW PD USER CLUB?

Membership includes: Bi-Monthly Magazine, 12 PD Discs per Year,
10% off all PD orders.
Membership cost: £20 per year

SPECIAL OFFER, BUY FIVE DISCS AND ORDER AN EXTRA DISC FREE

Discs cost £1.00 each includes postage and packing - No minimum order
Make cheques and postal orders payable to RAW PD - Send no cash

FRUSTRATED?

Struggling with your Amiga? Problems with the CLI and Workbench?
Can't decide which PD program is right for you? Confused by all that
technical jargon? Don't worry help is at hand with the latest and
greatest 2 Disk Magazine.

SCANNER 5

It contains the very best of Utilities/Animations/Games/Demos/Music
and also topical news/reviews/articles etc, along with our highly
acclaimed down to earth tutorials on the CLI/Workbench which also
includes Workbench 2.0.

"Try it! We guarantee you won't be disappointed"

£2.50 + 50p P&P Brings it direct to your door

HUMDINGER 41

Fifty one quality PD and Shareware games on 2 disks.

"What a Humdinger" New Computer Express.

"Bumper bundle of fun" CU Amiga.

"Many an hours fun for your money here" Amiga Shopper.

And now the sequel...

HUMDINGER THE REVENGE!

Fifty more entertaining games cram packed on two disks for your
entertainment. Contents include:

Zeus	Cliff Hanger	Cue
Boomerang	Galactic Worm	Gold
Paccer	Bunny	Seahaven
Klondike	Bottle Pool	Amigration

Plus twenty eight more knockout games for you to enjoy.

Both Humdingers are priced at £4.99 each inclusive.

Special offer Both Humdingers £8.50; Scanner + Any Humdinger £7;

All three for £10. All postage paid

Please note: All work on the new Amiga Plus

Please make Cheques/PDs payable to: N.Jordan, and post now to:

Telescan Computer Services. (AC)
Handsworth Road, Blackpool FY5 1SB



AQUARIAN PUBLIC DOMAIN 0703 685006

2 MEG OF CHIP IN YOUR

1.2 OR 1.3 A500 OR A2000

YES! NOW FOR THE FAITHFUL OWNERS OF A500/A2000 1-2 and 1-3 WHO FEEL THEY ARE BEING LEFT
BEHIND BY THE A3000 AND A500P. WE CAN NOW SUPPLY YOU WITH A BOARD FROM THE U.S.A.
AS SOLE IMPORTERS OF THIS EXCITING NEW TRIED AND TESTED 'PLUG IN AND GO' BOARD.

A500 Owners start here. MegAChip gives you a possible 10 Meg of memory
MegAChip 500 with Super Angus 2 Chip 0 Fast £198.00

If you haven't got a 1 Meg machine or a half meg upgrade
that is chip configurable then:-

MegAChip 500 with Super Angus 2 Chip 0 Fast £220.00
MultiStart II switch between 1.2 1.3 2.04 w/o Roms from the keyboard! £39.99

A2000/A3000 Owners start here.

MegAChip 2000 with Super Angus 2 Chip 0 Fast £198.00
SecureKey Security board for A2000/A3000 owners £78.99

MultiStart II switch between 1.2 1.3 2.04 w/o Roms from the keyboard! £39.99
Battdisc Static Ram board for A2000/A3000 owners £160.00

A1000 Owners start here

KwikStart II Dual Rom board w/o Roms for A1000 owners £59.99
Insider II 1.5 Meg Internal for A1000 owners w/o K £169.99

QUALITY ADD ONS

DCS Plus 2.04 Roms available	£P.O.A.
A590 + 2 MEG	£380.00
ROTEC H/D 40 to 150 Meg drive	
socketted up to 8 Meg fast	£P.O.A.
Half Meg Expansion A500	£27.00
2 Meg Expansion A500	£104.00
4 Meg Expansion A500	£197.00
3.5 External D Drive	£54.99
8 Meg Expansion A1500/A200	£230.00
68030 Card + 2MB	£999.00
A2032 Video Card	£99.00
A2300 Genlock	£99.00
Display Enhancer	£280.00
Naksha Mouse	£29.99

3.5" Bulk 50 £19.00 100 £34.50
DISKS 10 in a box £5.50 inc VAT & P.P.

5.25" Bulk 50 £16.50 100 £29.50
DISKS 10 in a box £4.00 inc VAT & P.P.

NOTE! When ordering the MegAChip PLEASE state your model and what revision board. All the above prices include
VAT and P.P. unless otherwise stated. Please send your cheques with your delivery address to:
Aquarian Public Domain, 78, Merridale Rd, Peartree Green, Southampton SO2 7AD. Phone 0703 685006.
All cheques will be held until cleared. Please allow up to 14 days delivery. Money back guaranteed if not satisfied.

MEGA BIZ!

THE ONE STOP SHOP FOR AMIGA PD SOFTWARE

PHONE 0782 208228 FAX 0782 281506

THE DISKS BELOW ARE ONLY A SMALL SELECTION FROM OUR VAST LIBRARY OF OVER 2000 DISKS

UTILITIES	DEMOS	ANIMATION	MUSIC
PDU 10 Word Processing+Database PDU 16 Air Tunnel Simulation PDU 31 Fish#144 Analytic spreadsheet PDU 43 Fish#203 Assembler & C prog PDU 44 Fish#215 Mandelbrot V2.0 PDU 45 Fish#210 Scientific calculator PDU 46 Fish#213 Icons(300 in 8 colors) PDU 51 Fish#219 Astronomy program PDU 52 Fish#52 A-Z Text Editor PDU 60 Fish# 237 CLPrint PDU 70 Fish 190 Keymap Editor PDU 72 SID V1.06 The ultimate disk util. PDU 80 Fonts and Surfaces PDU 81 Diskdrive 1.3 PDU 88 Celtics Demomaker PDU 99 Ham Radio util's(5 disks) PDU 101 Menu-Maker PDU 102 Label designer PDU 103 Icon-Maker PDU 104 Icon-Mania PDU 105 Crossword Creator PDU 118 Various CLutils PDU 149 Icon Fun PDU 151 Fixdisk-disk repainer PDU 164 Games Music Creator PDU 168 Vaccine-Booster(Virus killer) PDU 169 QuickBase-Database PDU 185 AN222 (Excellent util's) PDU 186 Flash Bootblock Creator PDU 194 Pann Virus Killer PDU 200 Virus Killer Pro V2.0 PDU 207 PerfectSound V1.93 PDU 227 Fish#449 MED V3.00 PDU 262 MED Modules PDU 318 Red sector demo maker PDU 349 Master virus killer V 2.1 PDU 359 Tetrapoxy PDU 323 Fish#110 ABRK Assembler PDU 24 Fish#114 C Docs PDU 26 Fish#133 Console Handler PDU 27 Fish#136 Create own puzzles PDU 29 Fish#140/141 S88Photog 2 disks PDU 36 Fish#185 Official CBM FFF disk PDU 74 C Manual PDU 78 File Archiver PDU 82 Scale, Wordcriter PDU 146 Grocery-Video list maker PDU 171 Fish#315 Draw-map	PDU 1 Anarchy Demo PDU 4 Deathstar Megademo(2 disks) PDU 7 Elvis Demo PDU 14 RAT Megademo(2 disks) PDU 16 Robocop Demo PDU 20 SAE Demo#25 PDU 21 SAE Demo#31 PDU 31 Anarchy/Ooh its obscene III PDU 51 Hacktick#1 Ansewpe PDU 52 Hacktick#2 Smashing day out PDU 55 Kaffens Megademo (8/2 disks) PDU 62 Norstrand Megademo#2 PDU 70 Rubels Megademo PDU 72 Red Sector Demodisk#4 PDU 73 SAE Demos#23 PDU 74 SAE Demos#36 PDU 75 Scoopex Demos PDU 76 Scoopex Megademo PDU 91 Trilogy Megademo#1 PDU 94 Vortex Megademo PDU 96 Magnetic Fields Demo#36 PDU 97 Predators Megademo(2 disks) PDU 107 Budbrain 1(2 disks) PDU 115 Magnetic Fields Demo#40 PDU 116 Magnetic Fields Demo#41 PDU 130 Chubby Brown PDU 131 Cronics Demo PDU 132 Gients Megademo(2 disks) PDU 134 Magnetic Fields Demo#45 PDU 145 SAE Demo#31 PDU 152 Flash "No Brain No Pain"(2) PDU 153 Betty Connolly Demo(2 disks) PDU 160 Hacktick "Wave-on" PDU 177 Budbrain II PDU 179 Cronics Total Destruction PDU 186 Flash Demo#2 PDU 200 Ruger Demodisk PDU 212 Space Pack#32 PDU 3 Cult Demodisk PDU 17 SAE Demo#12 PDU 18 SAE Demo#19 PDU 19 SAE Demo#21 PDU 62 NitroAC Demos#22 PDU 70 Rubels Megademo PDU 71 Red Sector Demo PDU 80 Trilogy Demos#4 PDU 83 TWH Demo-Virus Killer PDU 90 Semtex Megademo PDU 138 Page One Demo#1	PDA 9 Knight Animation (1 meg) PDA 12 AgeStar Star Trek Anims 2 PDA 13 AgeStar Star Trek Anims 17 PDA 14 Puggs in Space PDA 18 Miller Live Advert PDA 31 Nude Girls Anim PDA 34 BasketBall Anim PDA 35 BFFO Slideshow (18+) PDA 36 BFFO Slideshow (218+) PDA 41 Digiviewer Slideshow PDA 42 Dragons Lair Demo PDA 45 Motorcycle & Sports car (1 meg) PDA 47 Holstein Pkgs Advert PDA 49 Mayfair Vol. 23 ncd(18+) PDA 50 Mega Clean Show V1.7 PDA 54 NASA Graphics PDA 56 Newtek Demos#1(2)(1 meg) PDA 57 Newtek Demos#3(2)(1 meg) PDA 60 Star Trek Anims PDA 68 Walker Demo#1 (2 meg, 2 disks) PDA 70 Walker Demo#2 (1 meg) PDA 73 Westcoast Crackers#1 (18+) PDA 74 Bodeans Bordello#4 (18+) PDA 75 Bodeans Bordello#4 (18+) PDA 76 Playboy (18+) PDA 77 Sam Fox (18+) PDA 78 Upstart (18+) PDA 79 The Final Ecstasy#1 (18+) PDA 80 Walker Demo 2(2 meg, 2 disks) PDA 81 Ray Trace Art.DBW Render util PDA 86 Upstart#4 (18+) PDA 89 Bodeans Bordello#9 (18+) PDA 90 Burner Burner-Jet Fighter anim PDA 92 D.Landers Soft Show#1 PDA 93 D.Landers Soft Show#2 PDA 110 Bruce Lee Enter the Dragon PDA 111 Bruce Lee Slideshow II PDA 112 Dragons Lair II Demo PDA 114 Neighbours Slideshow PDA 116 Terminator	PDM 5 MFElectronic CLU IV PDM 6 Winklers song(2 disks) PDM 9 Ride on time & Balance PDM 19 Bad M Jackson PDM 20 Bad Dance PDM 27 DMCB Megamusic III PDM 29 Hermes Music II PDM 30 Digital Concert II PDM 31 Digital Concert III PDM 33 Halloween/Follow the Sign(2) PDM 35 Think were alone now Tiffany PDM 38 Land of Confusion Genesis PDM 38 Miami Vice Theme (4 disks) PDM 40 MF1 Vangelis Demo PDM 65 Digital Concert IV PDM 72 Popeye meets the Beachboys PDM 80 Digital Concert VI PDM 82 Freddy Kruger PDM 83 Kaffens Jukebox PDM 84 Madonna-Hanky panky PDM 85 Miami Vice-Crochets Theme PDM 87 RSP-Eruption PDM 88 Slab Music PDM 91 100 Most Remembered C64 tunes PDM 95 Hi-Fi Demo PDM 104 BassX#5 Power Remix PDM 105 BassX#5 Sydney Youngblood PDM 106 Betty Boop PDM 109 Despatche Mode PDM 110 DMCB Music I PDM 111 DMCB Music II PDM 112 DMCB Music (W/2 disks) PDM 117 Flash Dragon (2 disks) PDM 118 Hacktick Loadsmanoway PDM 120 Laurel & Hardy (2 disks) PDM 128 NASP V2.0 PDM 131 Peshay Boys Remix#1 PDM 132 Peshay Boys Remix#2

DISK PRICES

1-9	£1.50
10-19	£1.25
20+	£1.00

FREE CATALOGUE DISK

POSTAGE AND PACKING FREE
ON ALL ORDERS OF 5 DISKS
OR MORE UNDER 5 DISKS
PLEASE ADD £1.00 UK MAILING ONLY
EUROPE ADD SUPPLY CHARGE
REST OF WORLD ADD 50P PER DISK
PLEASE NOTE
ALL OUR PUBLIC DISKS ARE
SUPPORTED BY TOP QUALITY
KAD BRANDED DISKETTES

CLIP ART

There is a total of 13 disks in the clip art range. All are in IFF Format & are ideal for DTP. There are loads of images to choose from, ranging from fancy borders to special occasions & from people to animals etc.

All 13 disks for only £15.00

GAMES

PDG 1 Star Trek-Final Frontier(2 disks)
PDG 2 Star trek (3 disks, 2 drives)
PDG 3 Card & Board Games
PDG 18 Marble Slide
PDG 19 Destination Moonbase
PDG 21 Bring the Game (2 disks)
PDG 25 Treasure Search
PDG 31 Moria
PDG 32 Legend of Farghail
PDG 33 Arcadia(Breakout style game)
PDG 34 Dynamic Disk
PDG 35 Pier II
PDG 36 Snakes & ladders/Reversi
PDG 37 Super Quiz

PACK 1

Home Business Pack
The 8 disk pack contains:
Spreadsheet
Word Processor
Amiga Spell
Memo pad
Inventory
Database etc etc
A must for home accounts!
£10-00

PACK 2

Demo Pack (10 disk pack)
Budbrain 1 (2 disks)
Budbrain 2
Scoopex mental hangover
Cronics "newshaver"
Horizon "sleeping bag"
Palace "pulling the trigger"
Quarxes "substance"
Phenomena "Interpocket"
Decay "simplons demo"
A great starter pack
£11-00

PACK 3

Musik Pack (10 disk pack)
Vision music masters
Cruaders "bacteria music"
Crack music disk
Jetset overload music disk
Raf megamix 1
Flash digital concert 6
Flashing bytes "sweet songs one"
Alcatraz "panic voices of energy"
Cruaders music concert
Archais music disk
£11-00

PACK 4

Adult pack (10 disk pack)
Sabrina, Sam Fox (2 disks)
Bodeans Bordello #2
Bodeans Bordello #3
Bodeans Bordello #10
Bodeans Bordello #11
Bodeans Bordello #12
Bodeans Bordello #13
Bodeans Bordello #14
Bodeans Bordello #15
Bodeans Bordello #16
Bodeans Bordello #17
Bodeans Bordello #18
Bodeans Bordello #19
Bodeans Bordello #20
Bodeans Bordello #21
Bodeans Bordello #22
Bodeans Bordello #23
Bodeans Bordello #24
Bodeans Bordello #25
Bodeans Bordello #26
Bodeans Bordello #27
Bodeans Bordello #28
Bodeans Bordello #29
Bodeans Bordello #30
Bodeans Bordello #31
Bodeans Bordello #32
Bodeans Bordello #33
Bodeans Bordello #34
Bodeans Bordello #35
Bodeans Bordello #36
Bodeans Bordello #37
Bodeans Bordello #38
Bodeans Bordello #39
Bodeans Bordello #40
Bodeans Bordello #41
Bodeans Bordello #42
Bodeans Bordello #43
Bodeans Bordello #44
Bodeans Bordello #45
Bodeans Bordello #46
Bodeans Bordello #47
Bodeans Bordello #48
Bodeans Bordello #49
Bodeans Bordello #50
Bodeans Bordello #51
Bodeans Bordello #52
Bodeans Bordello #53
Bodeans Bordello #54
Bodeans Bordello #55
Bodeans Bordello #56
Bodeans Bordello #57
Bodeans Bordello #58
Bodeans Bordello #59
Bodeans Bordello #60
Bodeans Bordello #61
Bodeans Bordello #62
Bodeans Bordello #63
Bodeans Bordello #64
Bodeans Bordello #65
Bodeans Bordello #66
Bodeans Bordello #67
Bodeans Bordello #68
Bodeans Bordello #69
Bodeans Bordello #70
Bodeans Bordello #71
Bodeans Bordello #72
Bodeans Bordello #73
Bodeans Bordello #74
Bodeans Bordello #75
Bodeans Bordello #76
Bodeans Bordello #77
Bodeans Bordello #78
Bodeans Bordello #79
Bodeans Bordello #80
Bodeans Bordello #81
Bodeans Bordello #82
Bodeans Bordello #83
Bodeans Bordello #84
Bodeans Bordello #85
Bodeans Bordello #86
Bodeans Bordello #87
Bodeans Bordello #88
Bodeans Bordello #89
Bodeans Bordello #90
Bodeans Bordello #91
Bodeans Bordello #92
Bodeans Bordello #93
Bodeans Bordello #94
Bodeans Bordello #95
Bodeans Bordello #96
Bodeans Bordello #97
Bodeans Bordello #98
Bodeans Bordello #99
Bodeans Bordello #100
Bodeans Bordello #101
Bodeans Bordello #102
Bodeans Bordello #103
Bodeans Bordello #104
Bodeans Bordello #105
Bodeans Bordello #106
Bodeans Bordello #107
Bodeans Bordello #108
Bodeans Bordello #109
Bodeans Bordello #110
Bodeans Bordello #111
Bodeans Bordello #112
Bodeans Bordello #113
Bodeans Bordello #114
Bodeans Bordello #115
Bodeans Bordello #116
Bodeans Bordello #117
Bodeans Bordello #118
Bodeans Bordello #119
Bodeans Bordello #120
Bodeans Bordello #121
Bodeans Bordello #122
Bodeans Bordello #123
Bodeans Bordello #124
Bodeans Bordello #125
Bodeans Bordello #126
Bodeans Bordello #127
Bodeans Bordello #128
Bodeans Bordello #129
Bodeans Bordello #130
Bodeans Bordello #131
Bodeans Bordello #132
Bodeans Bordello #133
Bodeans Bordello #134
Bodeans Bordello #135
Bodeans Bordello #136
Bodeans Bordello #137
Bodeans Bordello #138
Bodeans Bordello #139
Bodeans Bordello #140
Bodeans Bordello #141
Bodeans Bordello #142
Bodeans Bordello #143
Bodeans Bordello #144
Bodeans Bordello #145
Bodeans Bordello #146
Bodeans Bordello #147
Bodeans Bordello #148
Bodeans Bordello #149
Bodeans Bordello #150
Bodeans Bordello #151
Bodeans Bordello #152
Bodeans Bordello #153
Bodeans Bordello #154
Bodeans Bordello #155
Bodeans Bordello #156
Bodeans Bordello #157
Bodeans Bordello #158
Bodeans Bordello #159
Bodeans Bordello #160
Bodeans Bordello #161
Bodeans Bordello #162
Bodeans Bordello #163
Bodeans Bordello #164
Bodeans Bordello #165
Bodeans Bordello #166
Bodeans Bordello #167
Bodeans Bordello #168
Bodeans Bordello #169
Bodeans Bordello #170
Bodeans Bordello #171
Bodeans Bordello #172
Bodeans Bordello #173
Bodeans Bordello #174
Bodeans Bordello #175
Bodeans Bordello #176
Bodeans Bordello #177
Bodeans Bordello #178
Bodeans Bordello #179
Bodeans Bordello #180
Bodeans Bordello #181
Bodeans Bordello #182
Bodeans Bordello #183
Bodeans Bordello #184
Bodeans Bordello #185
Bodeans Bordello #186
Bodeans Bordello #187
Bodeans Bordello #188
Bodeans Bordello #189
Bodeans Bordello #190
Bodeans Bordello #191
Bodeans Bordello #192
Bodeans Bordello #193
Bodeans Bordello #194
Bodeans Bordello #195
Bodeans Bordello #196
Bodeans Bordello #197
Bodeans Bordello #198
Bodeans Bordello #199
Bodeans Bordello #200
Bodeans Bordello #201
Bodeans Bordello #202
Bodeans Bordello #203
Bodeans Bordello #204
Bodeans Bordello #205
Bodeans Bordello #206
Bodeans Bordello #207
Bodeans Bordello #208
Bodeans Bordello #209
Bodeans Bordello #210
Bodeans Bordello #211
Bodeans Bordello #212
Bodeans Bordello #213
Bodeans Bordello #214
Bodeans Bordello #215
Bodeans Bordello #216
Bodeans Bordello #217
Bodeans Bordello #218
Bodeans Bordello #219
Bodeans Bordello #220
Bodeans Bordello #221
Bodeans Bordello #222
Bodeans Bordello #223
Bodeans Bordello #224
Bodeans Bordello #225
Bodeans Bordello #226
Bodeans Bordello #227
Bodeans Bordello #228
Bodeans Bordello #229
Bodeans Bordello #230
Bodeans Bordello #231
Bodeans Bordello #232
Bodeans Bordello #233
Bodeans Bordello #234
Bodeans Bordello #235
Bodeans Bordello #236
Bodeans Bordello #237
Bodeans Bordello #238
Bodeans Bordello #239
Bodeans Bordello #240
Bodeans Bordello #241
Bodeans Bordello #242
Bodeans Bordello #243
Bodeans Bordello #244
Bodeans Bordello #245
Bodeans Bordello #246
Bodeans Bordello #247
Bodeans Bordello #248
Bodeans Bordello #249
Bodeans Bordello #250
Bodeans Bordello #251
Bodeans Bordello #252
Bodeans Bordello #253
Bodeans Bordello #254
Bodeans Bordello #255
Bodeans Bordello #256
Bodeans Bordello #257
Bodeans Bordello #258
Bodeans Bordello #259
Bodeans Bordello #260
Bodeans Bordello #261
Bodeans Bordello #262
Bodeans Bordello #263
Bodeans Bordello #264
Bodeans Bordello #265
Bodeans Bordello #266
Bodeans Bordello #267
Bodeans Bordello #268
Bodeans Bordello #269
Bodeans Bordello #270
Bodeans Bordello #271
Bodeans Bordello #272
Bodeans Bordello #273
Bodeans Bordello #274
Bodeans Bordello #275
Bodeans Bordello #276
Bodeans Bordello #277
Bodeans Bordello #278
Bodeans Bordello #279
Bodeans Bordello #280
Bodeans Bordello #281
Bodeans Bordello #282
Bodeans Bordello #283
Bodeans Bordello #284
Bodeans Bordello #285
Bodeans Bordello #286
Bodeans Bordello #287
Bodeans Bordello #288
Bodeans Bordello #289
Bodeans Bordello #290
Bodeans Bordello #291
Bodeans Bordello #292
Bodeans Bordello #293
Bodeans Bordello #294
Bodeans Bordello #295
Bodeans Bordello #296
Bodeans Bordello #297
Bodeans Bordello #298
Bodeans Bordello #299
Bodeans Bordello #300
Bodeans Bordello #301
Bodeans Bordello #302
Bodeans Bordello #303
Bodeans Bordello #304
Bodeans Bordello #305
Bodeans Bordello #306
Bodeans Bordello #307
Bodeans Bordello #308
Bodeans Bordello #309
Bodeans Bordello #310
Bodeans Bordello #311
Bodeans Bordello #312
Bodeans Bordello #313
Bodeans Bordello #314
Bodeans Bordello #315
Bodeans Bordello #316
Bodeans Bordello #317
Bodeans Bordello #318
Bodeans Bordello #319
Bodeans Bordello #320
Bodeans Bordello #321
Bodeans Bordello #322
Bodeans Bordello #323
Bodeans Bordello #324
Bodeans Bordello #325
Bodeans Bordello #326
Bodeans Bordello #327
Bodeans Bordello #328
Bodeans Bordello #329
Bodeans Bordello #330
Bodeans Bordello #331
Bodeans Bordello #332
Bodeans Bordello #333
Bodeans Bordello #334
Bodeans Bordello #335
Bodeans Bordello #336
Bodeans Bordello #337
Bodeans Bordello #338
Bodeans Bordello #339
Bodeans Bordello #340
Bodeans Bordello #341
Bodeans Bordello #342
Bodeans Bordello #343
Bodeans Bordello #344
Bodeans Bordello #345
Bodeans Bordello #346
Bodeans Bordello #347
Bodeans Bordello #348
Bodeans Bordello #349
Bodeans Bordello #350
Bodeans Bordello #351
Bodeans Bordello #352
Bodeans Bordello #353
Bodeans Bordello #354
Bodeans Bordello #355
Bodeans Bordello #356
Bodeans Bordello #357
Bodeans Bordello #358
Bodeans Bordello #359
Bodeans Bordello #360
Bodeans Bordello #361
Bodeans Bordello #362
Bodeans Bordello #363
Bodeans Bordello #364
Bodeans Bordello #365
Bodeans Bordello #366
Bodeans Bordello #367
Bodeans Bordello #368
Bodeans Bordello #369
Bodeans Bordello #370
Bodeans Bordello #371
Bodeans Bordello #372
Bodeans Bordello #373
Bodeans Bordello #374
Bodeans Bordello #375
Bodeans Bordello #376
Bodeans Bordello #377
Bodeans Bordello #378
Bodeans Bordello #379
Bodeans Bordello #380
Bodeans Bordello #381
Bodeans Bordello #382
Bodeans Bordello #383
Bodeans Bordello #384
Bodeans Bordello #385
Bodeans Bordello #386
Bodeans Bordello #387
Bodeans Bordello #388
Bodeans Bordello #389
Bodeans Bordello #390
Bodeans Bordello #391
Bodeans Bordello #392
Bodeans Bordello #393
Bodeans Bordello #394
Bodeans Bordello #395
Bodeans Bordello #396
Bodeans Bordello #397
Bodeans Bordello #398
Bodeans Bordello #399
Bodeans Bordello #400
Bodeans Bordello #401
Bodeans Bordello #402
Bodeans Bordello #403
Bodeans Bordello #404
Bodeans Bordello #405
Bodeans Bordello #406
Bodeans Bordello #407
Bodeans Bordello #408
Bodeans Bordello #409
Bodeans Bordello #410
Bodeans Bordello #411
Bodeans Bordello #412
Bodeans Bordello #413
Bodeans Bordello #414
Bodeans Bordello #415
Bodeans Bordello #416
Bodeans Bordello #417
Bodeans Bordello #418
Bodeans Bordello #419
Bodeans Bordello #420
Bodeans Bordello #421
Bodeans Bordello #422
Bodeans Bordello #423
Bodeans Bordello #424
Bodeans Bordello #425
Bodeans Bordello #426
Bodeans Bordello #427
Bodeans Bordello #428
Bodeans Bordello #429
Bodeans Bordello #430
Bodeans Bordello #431
Bodeans Bordello #432
Bodeans Bordello #433
Bodeans Bordello #434
Bodeans Bordello #435
Bodeans Bordello #436
Bodeans Bordello #437
Bodeans Bordello #438
Bodeans Bordello #439
Bodeans Bordello #440
Bodeans Bordello #441
Bodeans Bordello #442
Bodeans Bordello #443
Bodeans Bordello #444
Bodeans Bordello #445
Bodeans Bordello #446
Bodeans Bordello #447
Bodeans Bordello #448
Bodeans Bordello #449
Bodeans Bordello #450
Bodeans Bordello #451
Bodeans Bordello #452
Bodeans Bordello #453
Bodeans Bordello #454
Bodeans Bordello #455
Bodeans Bordello #456
Bodeans Bordello #457
Bodeans Bordello #458
Bodeans Bordello #459
Bodeans Bordello #460
Bodeans Bordello #461
Bodeans Bordello #462
Bodeans Bordello #463
Bodeans Bordello #464
Bodeans Bordello #465
Bodeans Bordello #466
Bodeans Bordello #467
Bodeans Bordello #468
Bodeans Bordello #469
Bodeans Bordello #470
Bodeans Bordello #471
Bodeans Bordello #472
Bodeans Bordello #473
Bodeans Bordello #474
Bodeans Bordello #475
Bodeans Bordello #476
Bodeans Bordello #477
Bodeans Bordello #478
Bodeans Bordello #479
Bodeans Bordello #480
Bodeans Bordello #481
Bodeans Bordello #482
Bodeans Bordello #483
Bodeans Bordello #484
Bodeans Bordello #485
Bodeans Bordello #486
Bodeans Bordello #487
Bodeans Bordello #488
Bodeans Bordello #489
Bodeans Bordello #490
Bodeans Bordello #491
Bodeans Bordello #492
Bodeans Bordello #493
Bodeans Bordello #494
Bodeans Bordello #495
Bodeans Bordello #496
Bodeans Bordello #497
Bodeans Bordello #498
Bodeans Bordello #499
Bodeans Bordello #500
Bodeans Bordello #501
Bodeans Bordello #502
Bodeans Bordello #503
Bodeans Bordello #504
Bodeans Bordello #505
Bodeans Bordello #506
Bodeans Bordello #507
Bodeans Bordello #508
Bodeans Bordello #509
Bodeans Bordello #510
Bodeans Bordello #511
Bodeans Bordello #512
Bodeans Bordello #513
Bodeans Bordello #514
Bodeans Bordello #515
Bodeans Bordello #516
Bodeans Bordello #517
Bodeans Bordello #518
Bodeans Bordello #519
Bodeans Bordello #520
Bodeans Bordello #521
Bodeans Bordello #522
Bodeans Bordello #523
Bodeans Bordello #524
Bodeans Bordello #525
Bodeans Bordello #526
Bodeans Bordello #527
Bodeans Bordello #528
Bodeans Bordello #529
Bodeans Bordello #530
Bodeans Bordello #531
Bodeans Bordello #532
Bodeans Bordello #533
Bodeans Bordello #534
Bodeans Bordello #535
Bodeans Bordello #536
Bodeans Bordello #537
Bodeans Bordello #538
Bodeans Bordello #539
Bodeans Bordello #540
Bodeans Bordello #541
Bodeans Bordello #542
Bodeans Bordello #543
Bodeans Bordello #544
Bodeans Bordello #545
Bodeans Bordello #546
Bodeans Bordello #547
Bodeans Bordello #548
Bodeans Bordello #549
Bodeans Bordello #550
Bodeans Bordello #551
Bodeans Bordello #552
Bodeans Bordello #553
Bodeans Bordello #554
Bodeans Bordello #555
Bodeans Bordello #556
Bodeans Bordello #557
Bodeans Bordello #558
Bodeans Bordello #559
Bodeans Bordello #560
Bodeans Bordello #561
Bodeans Bordello #562
Bodeans Bordello #563
Bodeans Bordello #564
Bodeans Bordello #565
Bodeans Bordello #566
Bodeans Bordello #567
Bodeans Bordello #568
Bodeans Bordello #569
Bodeans Bordello #570
Bodeans Bordello #571
Bodeans Bordello #572
Bodeans Bordello #573
Bodeans Bordello #574
Bodeans Bordello #575
Bodeans Bordello #576
Bodeans Bordello #577
Bodeans Bordello #578
Bodeans Bordello #579
Bodeans Bordello #580
Bodeans Bordello #581
Bodeans Bordello #582
Bodeans Bordello #583
Bodeans Bordello #584
Bodeans Bordello #585
Bodeans Bordello #586
Bodeans Bordello #587
Bodeans Bordello #588
Bodeans Bordello #589
Bodeans Bordello #590
Bodeans Bordello #591
Bodeans Bordello #592
Bodeans Bordello #593
Bodeans Bordello #594
Bodeans Bordello #595
Bodeans Bordello #596
Bodeans Bordello #597
Bodeans Bordello #598
Bodeans Bordello #599
Bodeans Bordello #600
Bodeans Bordello #601
Bodeans Bordello #602
Bodeans Bordello #603
Bodeans Bordello #604
Bodeans Bordello #605
Bodeans Bordello #606
Bodeans Bordello #607
Bodeans Bordello #608
Bodeans Bordello #609
Bodeans Bordello #610
Bodeans Bordello #611
Bodeans Bordello #612
Bodeans Bordello #613
Bodeans Bordello #614
Bodeans Bordello #615
Bodeans Bordello #616
Bodeans Bordello #617
Bodeans Bordello #618
Bodeans Bordello #619
Bodeans Bordello #620
Bodeans Bordello #621
Bodeans Bordello #622
Bodeans Bordello #623
Bodeans Bordello #624
Bodeans Bordello #625
Bodeans Bordello #626
Bodeans Bordello #627
Bodeans Bordello #628
Bodeans Bordello #629
Bodeans Bordello #630
Bodeans Bordello #631
Bodeans Bordello #632
Bodeans Bordello #633
Bodeans Bordello #634
Bodeans Bordello #635
Bodeans Bordello #636
Bodeans Bordello #637
Bodeans Bordello #638
Bodeans Bordello #639
Bodeans Bordello #640
Bodeans Bordello #641
Bodeans Bordello #642
Bodeans Bordello #643
Bodeans Bordello #644
Bodeans Bordello #645
Bodeans Bordello #646
Bodeans Bordello #647
Bodeans Bordello #648
Bodeans Bordello #649
Bodeans Bordello #650
Bodeans Bordello #651
Bodeans Bordello #652
Bodeans Bordello #653
Bodeans Bordello #654
Bodeans Bordello #655
Bodeans Bordello #656
Bodeans Bordello #657
Bodeans Bordello #658
Bodeans Bordello #659
Bodeans Bordello #660
Bodeans Bordello #661
Bodeans Bordello #662
Bodeans Bordello #663
Bodeans Bordello #664
Bodeans Bordello #665
Bodeans Bordello #666
Bodeans Bordello #667
Bodeans Bordello #668
Bodeans Bordello #669
Bodeans Bordello #670
Bodeans Bordello #671
Bodeans Bordello #672
Bodeans Bordello #673
Bodeans Bordello #674
Bodeans Bordello #675
Bodeans Bordello #676
Bodeans Bordello #677
Bodeans Bordello #678
Bodeans Bordello #679
Bodeans Bordello #680
Bodeans Bordello #681
Bodeans Bordello #682
Bodeans Bordello #683
Bodeans Bordello #684
Bodeans Bordello #685
Bodeans Bordello #686
Bodeans Bordello #687
Bodeans Bordello #688
Bodeans Bordello #689
Bodeans Bordello #690
Bodeans Bordello #691
Bodeans Bordello #692
Bodeans Bordello #693
Bodeans Bordello #694
Bodeans Bordello #695
Bodeans Bordello #696
Bodeans Bordello #697
Bodeans Bordello #698
Bodeans Bordello #699
Bodeans Bordello #700
Bodeans Bordello #701
Bodeans Bordello #702
Bodeans Bordello #703
Bodeans Bordello #704
Bodeans Bordello #705
Bodeans Bordello #706
Bodeans Bordello #707
Bodeans Bordello #708
Bodeans Bordello #709
Bodeans Bordello #710
Bodeans Bordello #711
Bodeans Bordello #712
Bodeans Bordello #713
Bodeans Bordello #714
Bodeans Bordello #715
Bodeans Bordello #716
Bodeans Bordello #717
Bodeans Bordello #718
Bodeans Bordello #719
Bodeans Bordello #720
Bodeans Bordello #721
Bodeans Bordello #722
Bodeans Bordello #723
Bodeans Bordello #724
Bodeans Bordello #725
Bodeans Bordello #726
Bodeans Bordello #727
Bodeans Bordello #728
Bodeans Bordello #729
Bodeans Bordello #730
Bodeans Bordello #731
Bodeans Bordello #732
Bodeans Bordello #733
Bodeans Bordello #734
Bodeans Bordello #735
Bodeans Bordello #736
Bodeans Bordello #737
Bodeans Bordello #738
Bodeans Bordello #739
Bodeans Bordello #740
Bodeans Bordello #741

THE COMPLETE FISH COLLECTION ORIGINALS WITH NO CHANGES COURIER DELIVERY DIRECTLY FROM FRED FISH IN AFRICA.

FF-001 DOWATCH: Monitor for calls to Amiga DOS via dos library requires kickstart 1.2 or 1.3.
FF-002 TRACKDOS V1.08: A program that allows easy transfer of data between DOS memory and trackdisk device.

FF-007 LHONG: A program to convert ARC and Zoo formatted archives to LHarc.

FF-513 FF-514 DKBTRAC: A file trace program that takes a text description of a 3D scene and renders it to a 24 bit file which may be converted to HAM or viewed on a 24-bit card.

FF-515 CHECKBOOK ACCOUNTANT: A chequebook recording, balancing, budgeting and analyzing program.

FF-521 TSE: Converts any text programme to an executable with only 94 bytes added for bank structure and display programme.

FF-522 MAK: The mandelbrot adventure kit. A nicely done mandelbrot generator with full source code.

FF-527 ARQ: Replaces the standard system responders with nice animated ones to which you can also attach different sounds. Words under Amiga DOS 1.3 or 2.0.

FF-528 FONTCONV: Converts Macintosh postscript type 1 and 3 fonts to the IBM postscript type 1 and 3 format, also converts Macintosh bitmap fonts to the Adobe binary format.

FF-530 TURBOBLOTTE: A programme created for the purpose of subtitling Japanese animation films and to create a standard Amiga subtitle format. Is perfectly suited for subtitling and foreign film.

FF-532 BOOTPMP: Allows you to install nearly any IFF picture that you like in place of the workbench hand that appears after a reset.

FF-533 TRAINERMAKER: Allows you to modify money, number of lives or high scores of some games. The game to be modified must be capable of multitasking.

FF-534 TERM: A telecommunications program written for Amiga OS release 2X gives total configurability, full ARex control, Xp-transfer-support a fully featured VT100/VT220/ANSI emulation, full overscan and screen resolution support new ECS screen modes included, asynchronous operation and a lot more. Comes with Xp-transfer libraries (ascii, modem, kermit, quick, xmodem, and zmodem) documentation in English and German included.

FF-537 PAULCOPY: A disk copier for single drive owners also works with half meg but requires multiple disk swaps.

FF-540 Browser: A programmers workbench. Allows you to easily and conveniently move, copy, delete and rename files and directories.

FF-541 GIFMACHINE: A program that will convert CompuServe GIF image files into IFF SHAM and 24 bit ILMFs. It offers a number of extra options like dithering, horizontal and vertical flip as well as automatic border removal.

FF-543 PICTSAVER: A small utility that allows you to cut rectangular portions of any screen and store them on disk as IFF-ILBM files.

FF-547 VIDEOIMAGE: A programme to manage one's video tape collection.

FF-549 FFX: A programme for fractals. Lots of features uses an interesting algorithm for extra speed. Source includes modules reading, writing ILM pictures and for using the ARP file requester in media.

FF-551 TOOLMANAGER V1.5: A fully featured program to add other programs (twonchener or CUI) to the tools menu of the 2X workbench.

FF-553 24BITTOOLS: 3 conversion programs to manipulate 24 bit images.

FF-555 FLASHCOPY: A multi tasking friendly disk copier that can make nibble copies as well as the standard DOS copies

DEJA-VU LICENSEWARE

\$3.50 PER DISK

THE DEJA-VU DISKS LISTED ARE COMPATIBLE WITH THE 500+

LPD-004 THINGAMAJIG: Kiddies jigsaw type program with 24 pictures to choose from and a difficulty level 1 meg.

LPD-008 WORK AND PLAY: 3 educational programs for the kids. Click Clock, Fun Times Tables and Lets Go Shopping. 1 meg.

LPD-010 THE WORD FACTORY: A neat spelling game for the kids. 1 meg.

LPD-014 PLAY IT SAFE: Teaches your kids safety in the home, garden, street, car and the park. 1 meg.

LPD-015 ARC ANGELS SHAPES: Fun for the kids, build colourful pictures from predefined shapes. 1 meg.

LPD-028 BUDBASE: An easy to use database specifically designed for the beginner. 1 meg.

LPD-029 BIG TOP FUN: A top quality educational program (three games) based on circus acts. 1 meg.

LPD-039 MAGIC FOREST II: Version 1 was given away free with Amos this program is far superior and continues the story set by version 1. 1 meg.

LPD-041 RESCUE: A 3D adventure in which you must solve a murder. You can click on objects and examine them for clues etc excellent value.

NEW DEJA-VU TITLES ARE:

LPD-057 KIDDIES CLIP ART: 1 meg.

LPD-059 PREHISTORIC FUN: 1 meg.

LPD-060 TECHNO SNAIL: 1 meg.

LPD-061 FINAL CHAPTER: 1 meg.

LPD-062 REVOLUTION: 1 meg.

LPD-064 RESCUE II: 1 meg.

LPD-065 POWER PLANNER & DIARY CHECKER.

LPD-066 HOTEL MANAGER: 1 meg.

LPD-067 CYADONIA (CYAD II): 1 meg.

POLLYSHOPS LICENSEWARE

\$3.00 PER DISK

PS-001 SPACE BLOB: Multi level game where you collect all the glowing items but avoid the beesies like the plague.

PS-002 MR DIG: An Amiga version of the Dig Dig game. Help Mr Dig collect the apples and if you can squash the monsters with the rocks.

PS-003 Q-BOLDS: A tetris variant to test your reflexes.

PS-004 COMPUTER CONFLICT: Try and rescue the planet and set your friends free. Excellent speech and graphics.

PS-005 SUBCULTURE: A shoot em up similar to it-type with extra large creatures at the end of each level.

PS-007 DIZZY LIZZY'S DASH: A boulder dash type game with large graphics.

PS-008 DIZZY LIZZY'S EDUCATIONAL 1: Four games to make learning fun.

PS-009 DIZZY LIZZY'S EDUCATIONAL 2: Three games to continue the theme that learning can be fun.

PS-013 BOUNTY BOBS HIGH NOON: Playing the part of Lucky Luke you have to capture 20 bad guys dead or alive. 1 meg.

PS-014 CLASSROOM MATHS: A selection of Mathematical games so your kids can learn and play at the same time.

PS-015 CRYSTAL CAVERNS: A follow up to space blob with more levels and oh no more monsters.

NEWSFLASH

THE DISK BASED MAGAZINE

ISSUE 21 2 DISKS £4.99

ISSUE 22 3 DISKS £6.99

Full of useful hints and tips, reviews, music, graphics and games. Articles on programming plus lots more. If you want to take your Amiga seriously you want

NEWSFLASH

UT-014 AMIGA SYSTEMS TEST: Tests keyboard, mouse, disk drive, memory - both chip and fast, screen resolutions, clock, sprites and more.

UT-016 AMIBASE V3.76: An easy to use database.

UT-021 RM V5.0: Another more powerful database but you will have to read the docs first.

UT-045 UNIQUE UTILS I: Amiga Mon, KeyMap II, A Test Editor, PCopy, FidDisk, Directory Work and Zero Virus III.

UT-046 UNIQUE UTILS 2: Power Pack V2.3b, Image Diff, Climate, BoxBlock Champion and Disk Optimizer.

UT-064 C MANUAL V2.0: 4 Disks, the latest version of this excellent tutorial.

UT-072 BANK N V1.5: An excellent utility for keeping track of your bank account, produces reports on income and expenditure so you can see where the money is going. Handles multiple accounts.

UT-074 MANDELBROOM: A fast friendly mandelbrot program.

UT-075 MANANIM & MANDELMOUNTAINS: 2 nice variations on the mandelbrot theme.

UT-080 A64 PACKAGE: A Commodore 64 emulator reputedly better than the commercial versions available.

UT-094 AMGAEZER & STARCHART: If you want to know what's up there then these programs will help.

UT-092 NORTH C V1.3: 2 Disks, The very popular C compiler for the Amiga.

UT-108 PRINT STUDIO: Will print text with different options. Will also print/save screens & windows or parts of colour palette can be changed to your requirements.

UT-109 UNIQUE UTILS 3: KeyMapIII, PCopy, JFDIUtil, and SnoopDOS.

UT-110 MED V3.1: 2 Disks the ever popular music program along with some examples.

UT-116 CLIP IT Vol 1: 5 disks of clip art.

UT-121 CLIP IT Vol 2: 5 disks of clip art.

UT-126 CLIP IT Vol 3: 5 disks of clip art.

UT-131 CLIP IT Vol 4: 5 disks of clip art.

UT-145 NCCOM V1.9: 2 disks, this is one of the best communication packages available for the Amiga.

UT-147 TEXT PLUS V3.0: A fairly powerful word processing package.

UT-148 BOOT X V3.80d: An excellent (probably the best) and easy to use virus killer for the Amiga also on this disk is LVD which works alongside Boot X to give even more protection.

UT-149 BOOT X V3.80d: As above but for the Amiga Plus.

GA-036 UNIQUE GAMES 2: Anigoids, Ameoba, Pacer & Girl Actions. Compatible with Plus.

GA-059 UNIQUE GAMES 10: Puz, Sps, MiniBlast, Imperson Romanum. Compatible with Plus.

GA-059 UNIQUE GAMES 16: Drip & Roll On. Compatible with Plus.

GA-063 UNIQUE GAMES 19: Air Ace II, Triangle, Music & World Puzzle. Compatible with Plus.

ALL CHECKS, BANKERS ORDERS PAYABLE IN POUNDS STERLING TO: UNIQUE COMPUTING AND DRAWN ON A BANK IN THE U.K.

2 DISK CATALOGUE £2.00 or £1.00 WITH ORDER
1-4 Disks £2.00 per Disk
5-9 Disks £1.75 per Disk
10+ Disks £1.50 per Disk

Minimum Foreign Order 6 disks
Europe please add £0.50 per Disk
Rest of World add £1.00 per Disk

Above Prices apply to P.D. & Shareware only
Licenseware is as quoted, send orders to:

UNIQUE COMPUTING Dept A/C
114 Salers Road, Gosforth,
Newcastle Upon Tyne NE3 3UP
England
Telephone or Fax 091-284 7976

Daisy, daisy...

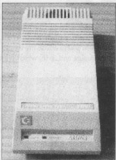
When I bought my standard A590 as it first came onto the market, one of its good points was its ability to accept drives, daisy-chain fashion, through the rear expansion port. Since I have now come close to filling my 20Mb, I would like to make use of this port, but can't find anyone to tell me how.

Can I just connect another bare hard drive straight to it, or do I need another interface of some kind? I

recently saw a hard drive in an electronics shop for the DM equivalent of £100. I know it's a risk, but for that price, as long as it's a SCSI drive, I'll take the chance.

The drive has no docs and no box, just an edge connector, so how do I go about sussing out the connection? Is there a standard format for these things?

L/Cpl Robins, 75 Sqn, 3 ADTR, BOAR



The procedure by which you connect an external SCSI to your A590 is relatively simple as long as the external device is of the proper kind.

First, make sure it is a standard SCSI device, and that it has either the full SCSI 50-pin connector, or the smaller DB25 connector. If there is a 50-pin connector, don't worry, as you should be able to find a 50-to-25 cable quite easily. The next

requirement is that the drive has its own power supply. If the unit you've been looking at has a built-in PSU, great, but if it doesn't, it should at least have a power socket to which you can connect an external PSU.

As there is no documentation with your drive, you'll have to guess at the power requirements. A good estimate would be either +5V/2.0A or +12V/1.5A (both DC). You might have to experi-

ment with your A590's dip switches. Switch 2, in particular, concerns the way your interface addresses Logical Unit Numbers, and may have to be set to ON. If you can suss this lot out, and the SCSI device is terminated with a resistor, connection will be a matter of plugging the 25-pin cable into the back of the A590.

A better way of upgrading the A590 might be to back down the hard drive to floppies, then purchase a 40Mb or 80Mb drive unit to replace the existing 20Mb unit and double or quadruple your storage space.

Plus problem?

I've had an A500 for three years, and am now the proud owner of an A500 Plus.

Reading through other magazines as well as your own, there has been a lot of talk about fitting extra chips to a motherboard making the trapdoor for further expansion. This isn't true!

I fitted a half meg card to my A500 Plus and what do you think I got? 1.5Mb of chip RAM! Correct me if I'm wrong, but the Super Agnus (8375) can handle up to 2Mb of chip RAM just like an A3000. I want to buy a 2Mb expansion board for the Plus so I can use the full 2Mb of chip RAM as well as 1Mb of fast RAM. The question is, how?

There are a lot of 1.5Mb expansion cards around, usually requiring a connection to the Gary chip. Are these only for the 1.3 operating system? On a final note, Date's Action Replay II cartridge doesn't seem to work on my A500 Plus. Joe Wood, Wigan

Tsk! The comments you refer to were in reply to letters on the subject of soldering RAM chips directly onto a rev 6.2 motherboard from a 1.3 A500. Commodore's own engineers faint at the mere mention of such radical measures, and are adamant that the conversion would mean the end of your trapdoor for the purposes of RAM expansion.

As for the A500 Plus, there are, to my knowl-



edge, no 2Mb boards on the horizon, but Commodore and a number of third party manufacturers are already developing 1Mb boards. One or two of these may be available by the time you read this reply.

I'm not sure yet if any of the boards will allow the user to specify which kind of memory the board adds, but let's hope this is the case. Many programs are designed to work with fast RAM, and as there is none on the A500 Plus, we can only pray that an expansion board which offers fast RAM is released soon.

All 1.5Mb boards which connect to the Gary chip will be incompatible with the A500 Plus unless redesigned by the manufacturers.

Saddam again

Firstly, thank you for another great CoverDisk. However, I have a slight problem with Virus Checker 5.26.

In using November's CoverDisk, I have found three viruses. These are Saddam, Byte Bandit, and the Australian Parasite Virus. While I think the virus killer has disabled Byte Bandit, both Saddam and the Parasite Virus appear still to be in memory.

The Saddam virus is proving particularly difficult to kill, as Virus Checker claims that the computer and disks are both infected. I have followed your instructions and still cannot kill the virus, and I'm getting desperate. Can you help?

Christopher Riley, Littlemore

Unfortunately, I don't have a great deal of information on the Australian Parasite virus, save that it is a boot block virus which infects your memory. Any detailed info' from a reader with knowledge of APV would be appreciated.

As long as you have cleared the virus from the suspect boot block, and turned your machine off for 30 seconds, the virus should be no more. Write-protect all your disks until you're sure it's not still active on one.

As for Saddam, you'll have discovered the annoying habit he has of seeming always to be in use once he has been activated. In the inactive form, Saddam is as deletable as any file, but once

the virus is activated he is impossible to remove save by formatting the infected disk.

Proceed by copying all essential files from the infected disk to a new disk, check them with FixSaddam to make sure they haven't been corrupted, then copy a fresh disk-validator to the disk. Format the infected disk, and you should have seen the last of the Red Adair fan club.

Putting the boot in

Is it possible to boot from RRD: on a 1.2 Kickstart machine? I have 1Mb RAM and an extra drive. Christian von Krogh, Trondheim, Norway

No. You'll have to buy the 1.3 Enhancer Software pack and Kickstart ROM to auto-boot from RRD: Sorry!

Multisync without flicker

I own an A500 with 1Mb RAM, an external drive, a colour printer, and Midi keyboard linked via a Midi interface. The weak link in my system, however, is my reliance on a TV set for display purposes, which doesn't do justice to the visual output, be it graphics, MusicX, or Wordworth.

Having read the article on multisync monitors in your November issue, I thought "Great! I must get a multisync", because I'll be upgrading to the A1500 when Workbench 2.0 is shipped, and then I can get an A2320 card for it.

However, when I visited a recent trade show and asked some people for advice, the differences in opinion were rather extreme. Some tried to sell me a multisync on the spot, others told me I would be wasting my money, another said the monitor wouldn't work without a flicker fixer.

I should like to buy a multisync and use it on an un-flicker-fixed A500 in normal mode for the present. Would this work? Next, when Kickstart 2.0 is

available, I would part-exchange my A500 for an A1500 and add an A2320 flicker-fixer card to enable the use of all graphics modes.

Please tell me if I'm taking a sensible upgrade route, or if I should stick with my present system and buy a Philips CM833 or Commodore 10845. Phillip Hawkins, Newbury

The upgrade path you're contemplating would be a sensible, gradual expansion of your system except for the fact that it won't work. Whoever tried to sell you a multisync without a flicker-fixer was trying to make a fast buck and was doing you no favours.

Unless you buy a multisync which can sync down to 15.5kHz, the frequency at which the Amiga's standard video signal is output, you wouldn't be able to use the monitor at all, and even if you did buy one, you'd still have the annoying flicker that comes with interface mode.

For your purposes, possibly the best upgrade path is to wait until official ECS and Kickstart 2.04 kits are available. You should then upgrade

Mystery of error 2/2 revealed

I've just started delving into Workbench after using my Amiga for games over the last year or so. My main problem, apart from terminal confusion, is with icons. I've been copying and moving and renaming them, but there are a few errors I keep running up against.

The first is error 205, which I've now sussed out as being the one that appears when you try to click on an icon which has no file attached. Error 212, however, is causing me a lot of grief.

I've used Iconmaster from your excellent WorkStation disk to create some fantastic icons, and used them for just about everything. My Workbench screen now looks superb, but it keeps causing errors. What can I do?

Jason Samson, Glastonbury

Your problem is as simple as its solution. Error 212 occurs when an icon thinks it's one type of file and the file itself has another idea. In other words, you may have created a smashing icon for your utilities directory, but if you save it from Iconmaster without changing its icon type, it'll think it's a tool.

To change the icons, load them into Iconmaster and select the correct setting from the Icon Type menu. Remember - a tool is an executable program file, and a project is usually a data file.

Projects will be text files, AmigaDOS scripts, or DPaint images, and they must be given the correct default tool type or they won't work when you click them. Try the Tune of the Month or file icons from the CoverDisk for examples of default tool types.



your Amiga and use the new Productivity mode, which gives 640 x 480 non-interlaced in conjunction with a 15.5kHz-capable multisync. Monitors of this type are, unfortunately, rather expensive, but probably less so than buying both a flicker-fixer and one of the cheaper multisyncs.

Dumping Kindwords!

I use Kindwords Home Office and wish to buy a letter quality printer capable of graphics presentation. Ideally, I would like to buy the Canon BJ-10e bubblejet, but I'm unsure whether there is a suitable driver for it.

Can you please advise me if I can run this printer for the Amiga and, if so, which printer driver is correct?

Peter Barton, Adlington

You have two choices. Either buy the Canon and look for the shareware printer driver - you should find it in a PD library which supports the Fred Fix range - or you could dump Kindwords in favour of Wordworth.

Not only is Wordworth a vastly better word-processor than Kindwords, it is also on offer to Kindwords owners at a knock down price. If you send your original disks to Digita, they will sell you a copy of Wordworth for £89.99 instead of the usual £129.99.

Wordworth 1.1 now has direct support for a variety of printers with their built-in fonts. There's a special printer driver for the BJ-10e, and Wordworth enables the easy use of any of the printer's fonts. Digita can be reached on 0395 270273.

Hidden menu revealed

I recently purchased a new A500 Plus, and having a 5.25in floppy from my previous Amiga, I didn't like the idea of opening the machine to install a new boot switch, so breaking my warranty. I looked for an external switch and couldn't find one, and for a while I was stuck.

Then I found out that the new Amiga has a hidden screen! To access this, reboot and at the same time hold down both mouse buttons. The hidden menu will appear after a while with options for DF1, DF2 and so on. It's possible from this screen to choose which floppy to boot from!

Hope this is of some use to the rest of your A500 Plus-owning readers.

A Bage, Middlesbrough

We already knew about the Boot Menu available from boot up, as almost the first thing we tried on the Plus was to hold down the mouse buttons to see if there was a hidden boot option for 1.3 emulation.

Thanks for writing in, though, as we forgot to mention this facility in the A500 Plus review. So many improvements and so little space to write about them.

In fact, there are a couple of things you don't mention. The Boot Menu's advanced options page provides information on device types, their boot priority, the device handlers they use, and unit numbers.

You can choose to disable any device, which will save users of 1Mb machines having to disconnect extra drives when playing large games, and can even decide to disable the startup sequence.

Announcing:

THE 5th International 16 BIT COMPUTER SHOW

The
One &
Only!

Europe's biggest show specialising in everything for the
ST, Amiga and PC - Business, Education and Entertainment

New
Dates:
New
Venue:

14, 15 & 16 February, 1992

Open 10am - 6pm, Friday and Saturday. Open 10am - 4pm, Sunday.

**Hall 1, Wembley Conference
& Exhibition Centre,
London**



WEMBLEY
VENUE OF LEGENDS

Nearest tube station - Wembley Park (Metropolitan & Jubilee Lines)

Easy access - On site parking - Follow the signs to Wembley

Wider gangways and facilities for the disabled

Pre-Purchase
your Fast Lane
tickets before
February 7th.
Save £1 and
enter the
FREE prize
draw if you
apply NOW!
4 Atari Lynx
to be won!

Regular ticket prices -
£6 Adult, £4 Child
(Under 10)
at door or
after
February
7th.
Fast Lane
Ticket
Prices
- £5 Adult,
£3 Child
(Under 10)

Over 150 companies
from all over the world showing
the latest hardware, software,
peripherals and consumables.

**Bring the family
for a great
day out!**

Demonstrations and
hands-on opportunities
including all the latest
products from Atari UK

Competitions!

Lots of prizes to be won
including Atari hardware

Terrific bargains!

You can't find more
products under one
roof specialising in the
ST, Amiga
& PC

**Westminster
EXHIBITIONS**

To: 16 Bit Show, PO Box 68,
St. Austell PL25 4YB

Please send me _____ Adult Fast Lane Tickets @ £5.
_____ Child Fast Lane Tickets @ £3

I enclose a cheque/PO./Credit card details for £ _____ made payable to 16 Bit Show

Name _____

Address _____

Postcode _____

Credit Card No. _____

Expiry date _____

OR phone 0726 68020 to book with credit card



Westminster
Exhibitions Ltd,
Surrey House,
34 Eden Street,
Kingston,
Surrey
KT1 1ER

Telephone
081-549 3444
Fax
081-547 1311

SEE
BELOW FOR
COMPETITION

COURSEMASTER
Our proven horse racing program
for both FLATS or JUMPS £24.95

***NEW**

TRACKMASTER
The Greyhound Racing Tipster £19.95
Coursemaster & Trackmaster Twin Pack £39.95
(Saving £4.95)

Using simple information from the racing card in daily papers
or the racing papers, COURSEMASTER and TRACKMASTER
will predict with consistent accuracy.

The winner is predicted as well as second and third places
for tricasts. The programs also mention attractive long shots,
recommend types of bets and most importantly warn when
not to bet.

Successful betting extends beyond merely picking the
winners and COURSEMASTER and TRACKMASTER will assist
in managing your bets. They work out your winnings on the
most popular types of bet including SINGLES, DOUBLES,
PATENT, YANKEE, CANADIAN, print out your betting slips,
and even maintain your betting bank account.
SYSTEM BETS will regularly provide a system for MAJOR
WINS with small stakes - try it and surprise yourself.

COMPETITION Details and rules

Our company likes to see people winning, which is why we're
running our fabulous 'Win a PC competition'. With every
purchase you make, you will automatically be entered into
the draw. You can also enter for free by sending a postcard
to INTRASET.

- 1st prize - PC NT286 Colour
2nd prize - Complete set of Intraset Business and Gaming
Software 3rd prize - Complete set of Intraset Gaming
Software 5 runners up will each win their choice of one
Intraset title.

Intraset's decision will be final on all matters.

Send an SAE for list of winners.
Draw dates 28/2/92 and 28/9/92

SPECIAL OFFER POOLSMaster and COURSEMASTER
together for £44.95 (Saving £4.95.)

Our complete gaming suite: £110.00
POOLSMaster (British & Australian),
PERM-MASTER, SPOT-THE-BALL,
COURSEMASTER, TRACKMASTER
Saving £22.70



Intraset Ltd

Send an SAE for full catalogue

WITH Intraset Ltd

Our compendium of gaming software uses your
computer's intelligence and logic to predict winners
and advise you on strategy. Whether you're an
experienced punter or a novice, with a little time and
our range of software, you can maximise your
winning potential.

'A licence to print money' Mr FC Hammond of Essex who won nearly
£10,000 in 16 weeks

'We have won many thousands' Mr PE Roberts of Dorset who so far has won
more than £46,000

*Copies of these and other endorsements from actual customers are available on request.

**POOLSMaster British or
Australian £24.95 each.**
Poolsmaster British and Australian
£44.95 (Saving £4.95)

The Football Pools Predictors

Developed after years of detailed study,
POOLSMaster uses a unique scientific
formula to predict Home, Always and Draws.
The FORM PREDICTION option analyzes result
possibilities with amazing accuracy. The
unique indexing system allows for quick entry
of fixtures and results, and updates itself
season after season so there is no need to buy
a new copy each year. Poolsmaster also
contains a unique coupon number sequence
predictor.

Together, both Poolsmaster editions cover all
British league and cup matches and the
Australian league.

PERM-MASTER £19.95
The perfect companion for
Poolsmaster

Designed for users of PERM systems, PERM-
MASTER ends the agony of checking by doing
it for you. It comes complete with several of
the top perms built in but you can also create
your own with the unique PERM EDITOR and
PERM CALCULATOR features. PERM-MASTER
is fast and easy to use and can be used for
most block and single line perms.
Additional discs of top perms are available at
£14.95 each.

All programs available for IBM/PC & compatibles, all Amstrad PCs, Amstrad PCWs, Atari, Amiga and
CPC 6128. Coursemaster, Poolsmaster British and Trackmaster are also available for all Amstrad CPC's,
all Spectrums and C64 & 128.

SPOT-THE-BALL £17.95

There is no more need for counting 'x's or
using messy rubber stamps. Simply tell your
computer where you think the ball is using the
screen template provided. It will give you a
print-out of up to 540 micro-fine crosses in
your chosen shape or it can choose at random
for you. SPOT-THE-BALL learns week after
week and builds up a database of results for
the SEQUENCE PREDICTOR OPTION.

**GUIDE TO POOLS AND
PERMS £14.95**
The definitive guide to Pools
permutations and betting
systems

Written by the experts responsible for our
successful software range. Master the art of
prediction by reading this fascinating
in-depth explanation of betting systems and
perms. Plan a campaign for that elusive big
win and use this book's tips on selecting the
best matches and races and how to use perms
to maximum effect on Pools, Horses and Dogs.

INTEREST-FREE CREDIT

Spend over £80 and spread the cost at no
extra charge! (Cheque purchases only.)
Simply divide your order by 4 and send us 4 cheques
each with your name and address and cheque
guarantee number. Date the first cheque with
today's date and post-date each of the other
cheques by one month i.e. 1/5/91, 1/6/91 etc.
We will then hold each cheque until it is due.

Send cheques or postal orders to INTRASET LTD (Dept AMC) FREEPOST,
10 Woodside Avenue, Clayton-Le-Woods, Chorley, Lancs. PR6 7BR.

Phone or Fax for lightning service. All major credit cards accepted.

Reflections on reality

Paul Austin looks at Videon, the latest method of immortalising still life on the Amiga



A selection of Videon's very own example files, but be warned – you'll have to spend some serious cash on equipment to achieve this sort of quality

igitising is big business on the Amiga, as a brief glance at the glossy folds of any mag will tell you. The question is: Can we mere mortals create the same results at home as the advertisers manage in the studio? The answer is usually no. Most systems only really shine when married to high-end video equipment complete with suitable lighting.

Videon, like some of its competitors, suffers badly in less than perfect conditions, and as a result it's worth looking at what's on offer besides pure digitising skill. It's here where Videon scores well, with a whole range of image manipulation and effects that many of its competitors can't match.

Unlike many recent releases, Videon is a slow scanning digitiser and requires a static subject in all modes. Because of this it's essential that you have a video that can produce a high quality static image, or alternatively a camcorder which can feed a live signal of a static subject.

The manual recommends that if you're using a VCR it must have a minimum of three heads. Particular favourites are Hi-band 8mm, S-VHS or VHS machines with four heads. Again, high-end machines are recommended if you're employing a camera. Once again S-

VHS is on the list, but topping the chart are CCD cameras, primarily due to their quality output and ability to get by with less lighting.

If you're lucky enough to own a machine with separate RGB output it's perfect, as you can then take advantage of Videon's optional triple scan mode which has been included for those who want to employ mono cameras with external filters.

RGB input gives by far the best results, producing sharper and clearer images. As you've probably guessed the digitiser's default mode is full colour, so there's no need to use external filters of any sort. Simply plug in any colour signal and the hardware does the compilation work in a single scan – no swapping bits of coloured plastic and no multiple exposures.

Assuming you have a suitable source, the next question is what can be done with it and what form can your captives take. Well, to start with, there's a full selection of screen modes which expand right up to the Amiga's legal internal limit of 768 x 568 in full hi-res overscan.

Digitising takes place in full 24-bit with its selection

Stylising your digital delights

Straightforward digitising isn't the hardware's sole concern. In fact, stylising your digital prisoners is taken just as seriously as their capture. The package boasts a selection of six separate effects that can be employed singly or in conjunction with others.

The effects screen contains five definable effects. They can be adjusted with click and drag sliders which assign the amount of effect employed. The sixth effect, namely the negative option, has a single button and operates as a simple off/on toggle.

The first effect in the collection is a pixelisation tool which distorts the image into large pixel-style squares – often used in the TV business to protect the identity of interviewees from assorted bad guys.

Next comes the Multiple option which duplicates the image into numerous miniature replicas. Simply moving the slider defines how many segments the screen is divided into.

Solar is the rather curious title of the third effect. It alters the image by making the component colours increasingly similar to the fundamental colours within the image.

Zoom is the fourth effect, and as the name sug-

gests it allows you to close in on any part of the image. Like all the available effects it can be repeated to increase the effect if necessary.

Threshold is the last of the slider-controlled features and works by stripping the colours from the image and replacing them with black and white. The results appear very similar to a negative. These can then have their degree of harshness defined via the slider. The last option is to produce a negative of the image. Not perhaps the most original idea in the business but a useful addition if you're working with animations. Another special effect aimed at animators awaits on the main screen. If you're using live video, one of the biggest problems is the inconsistencies in the colour palette between the various frames. Videon has addressed this particular problem by allowing you to lock the palette in the present image to all incoming frames.

Perhaps the most pleasant part of the effects process is the ability to try an effect before it becomes a permanent feature of the image. Only when the snapshot is applied does the actual image alter permanently.



Videon's built-in special effects adding an original look to an everyday image

of 16.7 million possible colours, which can be enhanced even further by a dithering routine which claims an apparent onscreen resolution of 2,000,000 perceivable colours within any image.

These grandiose claims will no doubt leave you a little confused. As you're probably aware, the only way to see 24-bit images is to invest in a 24-bit display board. Because of this Videon doesn't actually display in 24-bit, but it does convert the raw 24-bit data into the format of your choice.

Besides the obvious advantage of starting with a 24-bit source, the system has the added bonus of being able to save raw 24-bit data which can then be imported into a board at a later date.

A unique display format allows 29,791 colours to be displayed in Ham mode. Other formats include Enhanced Extra Half Bright plus Enhanced Dynamic hires which will display 4,096 colours in hi-res without any interruption to multitasking.

Three scanning options allow you to sacrifice speed for greater definition. This is particularly useful if you're working with dodgy source material.

One of the most pleasing aspects of the Videon system is its design. Unlike some digitisers, the hardware is contained solely within a single, sturdy, steel-encased unit.

On the back of the box are three video-ins in the form of a single composite plus a pair of Luma and Chroma inputs for S-VHS equipment, all three employing standard RF connections. Below these lurk another three ports all linking direct to the Amiga via a selection of pre-supplied cables connecting the monitor, the computer and finally a parallel connection to port the relevant digitised information between the two.

Because Videon takes the RGB signal direct from the Amiga and feeds it to the monitor, it's possible to view the incoming video and Amiga output on the same monitor by simply flicking a switch on the front of the unit.

On the opposite side of the casing lies the aforementioned display switch, plus a second selector that defines either S-VHS or composite input.

Alongside are three knobs which allow you to adjust contrast, colour and brightness prior to importation. Lastly comes the tracking knob which can go a long way towards eradicating interface flicker, noise within the signal and still frame distortion.

Eradicating flicker

Because of the system's 24-bit tastes there's a small price to be paid in the memory department. In fact, three megabytes is what you should be looking towards if you want to get the best from the system.

Although Videon will work with one megabyte setup, severe restrictions will be imposed, as the incoming signal will have to be digitised line by line. As a result, the process will take up to three times longer and the option to save out raw 24-bit is lost.

Videon's most impressive features revolve around mapping images onto a selection of built-in shapes. The available shapes vary from cubes, cylinders, pyramids and cones to frustum pyramids and frustum cones. Each can be sized and rotated in all three dimensions.

As a result, a cone could have its entire area mapped, or perhaps just a single surface as shown in the screenshot of the woman sloping off into the distance.

Controlling the sizing and orientation of the chosen shape is simplicity itself. All that's required is to select the particular rotation or sizing effect and then apply the



Two of Videon's alternative screen modes - Extra Half Bright and a mono Ham example

alteration with a rodent and icon arrow combination. All changes appear in real time so you can sit back and watch as your object tumbles in three dimensional space.

The actually mapping process has two basic formats. Images can either be stretched over the entire shape, giving the effect of wrapping the image in a sheet, or mapped on to each facet of the object. As a result an image can be mapped on to any or all of the object's surfaces.

Unfortunately, it's not possible to map different images onto individual facets, but I suppose that's asking a little much for a system retailing for under £200.

Like the effects, screen mapping operations take place within a custom screen, as opposed to the effects section which only partly obscures the image. Mapping, however, occupies the entire screen during the sizing and orientation stage.

Once defined, the screen clears and is replaced with the gradual rendering of the newly mapped image. As with all of Videon's functions, this can be a rather slow process - especially if you're working with an unaccelerated machine.

Considering the cost, Videon is a relatively impressive product, but there are a few points which do their best to scrape the icing from the cake.

Firstly, there's its reliance on high quality equipment. If you're working with budget kit, don't expect results anything like the quality shown in some of the commercial examples with this article.

Secondly, if you're in a rush, Videon might not be ideal, as some of the more complex digitising processes do take some time. Also, if you're running an accelerator you may have to remove it, as I did.

Videon offers several features which the competition can't compete with, but if you're on a budget it's probably not the best choice - which I admit sounds a little strange considering its bargain basement price tag.

Videon is available from:
Power Computing
Price £199 incl VAT.

Tel 0234 843388
Fax 0234 840234

A.J.P.D.L.
17 WATSON AVENUE
ST ALBANS
HERTS
AL3 5HP
DEP AC

75p
PER DISK
INCLUDING
P&P

Make Cheques and Postal
Orders payable to
A.J.P.D.L. and send them
to:
17 WATSON AVENUE,
ST ALBANS, HERTS
AL3 5HP

DEMOS

D001 Classic Demos
D002 Stealthy 2
D003 Fleet Manoeuvres
D004 Iraq Demo
D007 Safe Sex
D008 Iron Maiden
D009 Lotus Car Chase
D010 Robocop 2 Slideshow
D011 Naughty Cartoons
D012 Robocop 15 seconds
D013 Total Recall
D014 Evil Dead

GAMES

G001 Missile Command
G002 Portloun
G003 Risk
G004 Star Trek d1
G005 Star Trek d2
G006 3d Tetris
G007 Tetris
G008 Pak Man 81
G009 Monopoly
G010 Games Galore
G011 Chess
G012 Games Disc
G013 Flaschier
G014 Video Tennis
D015 Holy Grail

MUSIC

M001 Debbie Gibson - Electric
Youth d1
M002 Debbie Gibson - Electric
Youth d2
M003 Madonna - Spanky
M004 Petshop Boys - Always
On My Mind
M005 Jean M Jarre-Docklands
M006 Music Invention 2
M007 Betty Boo d1
M008 Betty Boo d2
M009 Madonna - Vogue
M010 Badtance Megamix
M011 Madonna - Like A Virgin
M012 Eve Of The War
M013 Yellow Megamix
M014 Queen - Flash d1
M015 Queen - Flash d2
M016 Loadsamoney Rap
M017 Pet Shop Boys
M018 Jean M Jarre - Live
M019 Genesis
M021 Queen and Black Box
M022 Dire Straits
M023 Bomb The Base

UTILITIES

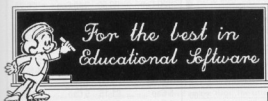
U001 Master Virus Killer
U002 Mega Utility Disc
U003 Ambase
U004 Qbase
U005 Spreadsheet
U006 Journal
U007 Text Plus
U008 CLI Tutor
U009 ZX Spectrum Emulator
U010 Commodore 64
Emulator
U011 Dark Star
U012 Game Music Creator
U013 Sun Dragon Utils
U014 D Copy
U015 Zodiac Compactors
U016 Digi Tech Utils
U017 Wiz Base
U018 C-Light
U019 Jazz Bench
U020 Noise Tracker
U021 Biorhythms
U022 North Sea 1.3
U023 M-Cad

Free Catalogue with every order.

No Minimum Order.

VIRUS FREE

If you cannot see the disc you are looking for,
send us details and we will get it for you for no
extra charge.



Subjects

French, Spanish
German, Italian
Science, History
Geography
English Words
Spelling
Arithmetic
Football, Sport
First Aid
General Knowledge
England, Scotland
Natural History

Kosmos are specialist
producers of Educational
Software designed to help
you enjoy learning from
your computer. Versions
are available for most
popular home & business
computers. Many of our
programs even allow you to
add your own lesson
material.

Write or telephone for a
FREE 20-page BROCHURE
of our Educational & Leisure
software

Please state your computer type

Kosmos Software Ltd, FREEPOST (no stamp needed in UK)
DUNSTABLE, Beds. LU5 6BR
Telephone 05255 3942 or 5406



The Software Store
SOFTWARE



IFF
SAMPLES

KILLER

SOUNDS

IFF
SAMPLES

98 Edgerton Road, Milton of Calstock,
Haverham, Scotland NE 20B. Tel: (0432) 840346

We have thousands of IFF Samples from House to Heavy Metal,
from Footsteps to Tibetan Monks. If it makes a noise we've got it.

£4.99
EACH INC P&P

Make Cheques/PO's payable
to **KILLER SOUNDS**

£4.99
EACH INC P&P

Make Cheques/PO's payable
to **KILLER SOUNDS**

FOR 1 MEG AMIGAS ONLY

CD-TV £499.99

NOW AVAILABLE FOR 1 MEG ONLY

This is just a small part of our sample library, for latest
catalogue, send SAE to above address.

MAKE YOUR AMIGA EARN!

Yes making money with your AMIGA becomes incidental when you know
how! Your AMIGA is, if only you know it, a gold mine. The size and make is
irrelevant. Make the initial effort NOW by starting your own HOME BASED
BUSINESS.

This may be the most important move you will ever make!
REMEMBER: You'll never get rich by digging someone else's "ditch".
Anyone in the country, including YOU, can become very rich in a relatively
short period of time just by doing a few basic things! It's more rewarding than
playing games. The benefits are many and varied. Full or part time.

FOR FREE DETAILS SEND S.A.E. To:

Home Based Business.

51, Pilton Place (AMC35), King & Queen Street,
Waltham, London SE17 1DR

FREE WITH EVERY 5 BOXES OF BRANDED DISCS

"A 50 Capacity Disc Box"

100% ERROR FREE/MITSUBISHI BRANDED DISCS



MITSUBISHI BRAND THE THREE DIAMOND DISKETTES

M-2D	
5 1/4" DSDD	
1 Box	£6.00
2-5 Boxes	£5.50
6-10 Boxes	£5.00

M-2HD	
5 1/4" DSHD	
1 Box	£8.95
2-5 Boxes	£8.15
6-10 Boxes	£7.60

MF-2DD	
3 1/2" DSDD 1 Meg	
1 Box	£8.65
2-5 Boxes	£8.15
6-10 Boxes	£7.10

MF-2HD	
3 1/2" DSHD 2 Meg (1.44)	
1 Box	£15.75
2-5 Boxes	£14.70
6-10 Boxes	£13.65

PROBABLY THE MOST RELIABLE DISKETTES ON THE MARKET
NO QUIBBLE REPLACEMENT. 100% ERROR FREE. MADE IN JAPAN

FREE GIFTS WHEN YOU BUY MITSUBISHI BRANDED DISKETTES!

1 BOX.....FREE MOUSEMAT 5 BOX.....FREE 50 CAP. BOX 10 BOXES.....FREE 100 CAP BOX
COMPUTER MATES - THE FIRST MAIL ORDER SUPPLIER OF MITSUBISHI BRANDED DISKETTES

3.5" MITSUBISHI BULK MEDIA LIFE TIME WARRANTY

3.5"	DSDD	DSHD
50 Disks	£18.50	£32.50
100 Disks	£35.50	£63.50
200 Disks	£68.50	£125.50
500 Disks	£152.50	£295.50
1000 Disks	£295.50	£580.50

INCLUDING LABELS

5.25" BULK DISKS Packed in 25's with envelopes & labels 'Lifetime Warranty'

	48tpi	96tpi	HD
25 Disks	£8.50	£8.75	£12.00
50 Disks	£16.00	£16.25	£23.00
100 Disks	£28.00	£28.25	£43.00

COLOURED DISKS Lifetime Warranty

5.25"	DSDD	DSHD	3.5"	DSDD	DSHD
25 Disks	£9.00	£16.00	10 Disks	£12.00	£20.00
50 Disks	£17.50	£30.00	20 Disks	£20.00	£35.00
100 Disks	£31.00	£51.00	40 Disks	£35.00	£58.00

Includes Labels

For Available Colours Please Call
Normally Red, Green, Yellow, White & Orange

NEW NEW NEW NEW

COMPUTER MATES BRANDED DISKS

2 FOR 1 LIFE TIME WARRANTY

3.5" DISKS

	DSDD	DSHD	DSDD	DSHD
50 Disks	£21.00	£35.00	£24.00	£38.00
100 Disks	£41.00	£69.00	£43.00	£75.00
200 Disks	£80.00	£137.00	£83.00	£143.00
500 Disks	£182.00	£325.00	£185.00	£331.00

COLOURED

GM PC MOUSE.....£15.95

LOOK

VIDEO TAPES LIFE TIME WARRANTY

	E180	E240
1 Tape	£2.50	£3.50
10 Tapes	£20.00	£30.00
50 Tapes	£75.00	£125.00

50p OFF WHEN ORDERING WITH DISKS

MOUSE MATS	£2.50
MOUSE HOLDERS	£2.00
HEAD CLEANERS 3.5" OR 5.25"	£2.00
MINI VACUUM	£6.00
CLEANING SOLUTION	£2.00

STORAGE BOXES

3.5"		5.25"	
120 Cap	£9.50	140 Cap	£8.75
100 Cap	£7.90	120 Cap	£8.25
80 Cap	£7.50	100 Cap	£7.50
50 Cap	£6.50	50 Cap	£6.50
40 Cap	£6.00		

ALL ABOVE BOXES LOCKABLE + 2 KEYS

£2 OFF BOXES WHEN ORDERING 100 DISKS OR MORE

10 Cap	£1.50	10 Cap	£1.50
5 Cap	£1.15	5 Cap	£1.00
1 Cap	£0.50		

Call SAM or PAT Now!
on 0753 631101

SORRY! SORRY! SORRY!

WE DO NOT PRICE MATCH BUT WE DO GIVE QUANTITY DISCOUNT. WITH SERVICE, QUALITY AND BACKING FROM THE LARGEST DISK MANUFACTURERS IN THE WORLD. IN ADDITION OVER 200 LINES OF PERIPHERALS IN STOCK. ASK FOR OUR COLOUR CATALOGUE & PRICE LIST WITH YOUR ORDER OR SEND 22p S.A.E.

CALL 0753 553535

BLUE BOX PRODUCTS

ALL BLUE BOX PRODUCTS ARE COMPLETELY PACKAGED IN PRINTED CARDBOARD BOXES WITH LABELS. 100% GUARANTEED

BAMBI-200	
25 DSDD 3 1/2" IN 25	
CAP STORAGE BOX	
1 BOX	£14.00
2+	£13.00
5+	£11.00

MF-200 30's	
30 DSDD 3 1/2"	
1 BOX	£14.00
2+	£13.00
5+	£11.00

MF-200 10's	
10 3 1/2" DSDD	
1 BOX	£6.00
2+	£5.00
5+	£4.50

M-20 48tpi 10's	
10 DSDD 5 1/4"	
1 BOX	£4.25
2+	£3.75
5+	£3.25

M-200 96tpi 10's	
10 DSDD 5 1/4"	
1 BOX	£4.75
2+	£4.25
5+	£3.75

BAMBI-2HD	
25 DSHD 3 1/2" IN 25	
CAP STORAGE BOX	
1 BOX	£21.00
2+	£20.00
5+	£18.50

MF-2HD 30's	
30 DSHD 3 1/2"	
1 BOX	£21.00
2+	£20.00
5+	£18.50

MF-2HD 10's	
10 3 1/2" DSHD	
1 BOX	£8.50
2+	£8.00
5+	£7.00

M-2HD 10's	
10 DSHD 5 1/4"	
1 BOX	£6.50
2+	£6.00
5+	£5.00

DATA CARTRIDGES	
VERBATIM DATA LIFE	
DC2000	£17.80
DC3000LP	£17.80
DC600A	£19.60
DC6150	£21.50

COMPUTER MATES LTD

TEL: 0753 553535 (3 Lines)
FAX: 0753 553530

CHEQUES/POSTAL ORDERS TO:
COMPUTER MATES LTD.
PINWOOD STUDIOS
IVER HEATH
BUCKS
SL0 0NH



ALL PRICES INCLUDE VAT & CARRIAGE

FED UP WAITING?

WE GUARANTEE 48 HOUR
DELIVERY TO YOUR DOOR
AT NO EXTRA COST!!!
WITH 90% OF PARCELS
ARRIVING NEXT DAY!



"Volume DRR: has a read/write error"

How many hard drive owners have reached for the bottle upon seeing this message for the first time? For peace of mind, therefore, there are two pieces of software you must buy – a backup utility, and a hard drive toolbox with the ability to retrieve lost or corrupted files.

Luckily, there are two distinct choices in both areas, one each from the commercial and public domain sectors, so users should be able to piece together a decent emergency rescue system to suit their budgets.

Two commercial packages stand head and shoulders above the opposition in the data safety market, and both are produced by the same American company. The first is Quarterback Tools, an all-encompassing hard and floppy drive repair package, and the second is QB4, the hard drive backup system from the same stable.

QB Tools, from Central Coast Software, has a number of options for the care of sick hard drives, but the two operations likely to be most useful when disaster strikes are Restore lost/deleted files, and Volume Repair.

Restore lost/deleted files makes a scan of the entire hard drive, which can take some time, though the user can specify the file to be restored if only one has been lost. When the scan is complete, and a list of active and deleted files/drawers has been drawn up, QB will display a full directory listing with the deleted files highlighted.

Lengthy operation

The user then decides which files to save, and can choose to restore them to the same volume or to another device, such as a different hard drive partition or a floppy drive. The operation can be a lengthy one, but QB seldom misses its mark, and has spared my own blushes on several occasions.

QB Tools' Volume Repair menu is the heart of the program. It has options to find unreadable blocks – for example, those areas of the drive which have been physically damaged – then mark them as "out of service", to find but not repair bad files, and finally to find and repair bad files.

By using the find but don't repair option, it is possible to attain a clear picture of exactly which files are causing the problem before repairing the drive with the third option. When this is used, QB Tools really shows its class.

Any number of horrendous accidents can befoul your hard drive, from a simple validation problem, from two or more

Software saviours

When the worst happens, do you have the software to save your precious data? Stevie Kennedy looks at the options

files are trying to occupy the same part of a drive, to totally scrambled files. QB Tools has the intelligence to analyse bad files and inform the user of the precise nature of the problem. When this happens, the problem is categorised as minor, serious, or very serious. Very serious problems usually result in the deletion of the affected file, but the more minor problems can usually be sorted out. QB will recalculate checksums, and will even have a go at making sense of damaged file headers.

Where there is a very serious problem, such as the file header having been lost altogether, QB will offer only to delete the file, but this is quite rare.

QB Tools' close relative, the QB4 backup utility, is as powerful as any backup utility I've seen. Using this utility, I recently backed up a 52Mb quantum onto 33 floppies, which runs out at over 1.5Mb per disk.

Initially, the program takes the simple step of asking which partition you'd like backed up and to which floppy drive. It then constructs a catalogue of the hard drive – a good time to go off for a coffee – and offers the user a variety of backup options.

You can choose from a directory listing of all files on the disk, exclude those you don't need to back up, and decide on whether to include or exclude files with altered archive flags. The latter is an important option, because if a file has been changed since it was last backed up, you'll want to save it. If not, there's no point in including it. By checking the archive flags, QB4 can save a lot of bother.

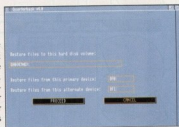
I've used QB4 regularly for some time now, and have never been let down. As long as decent quality floppies are used for

backups, QB4 should be the answer to your data security problems.

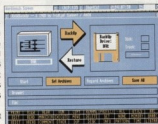
FixDisk works in a similar manner to QB Tools in that it carries out a scan of the drive you wish to repair. However, it has a "directory" mode, which is faster than the complete cylinder by cylinder check and is ideal for validation problems because it checks primarily for bitmap integrity and the more obvious faults.

When the problem is of a trickier nature, FixDisk will carry out a deeper scan, and can then pick up on the sort of faults QB Tools will sometimes miss. To be fair to QB Tools, there are occasions when it is the only resort after FixDisk has failed to sort things out, so I always use the two in tandem.

FixDisk isn't as user-friendly at first sight, but its buttons and scan options shouldn't put you off. You can scan for deleted files or a specified file, just as with QB Tools, delete files, recover deleted files, or rename them.



QB4's deceptively simple interface hides a powerful utility



QuickBackup doesn't look much, but it does the job well

drive owner will ever purchase.

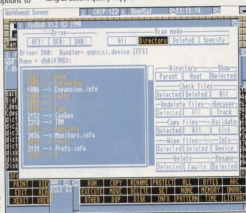
There are loads of shareware and PD hard drive backup programs around, many of which are available initially only in demo form. One, however, which has stood the test of time, and which can't be beaten on its bare bones approach, is QuickBackup. Though not as fast or efficient as QB4, it is easy to use and just as reliable.

Apart from this, and FixDisk's tendency sometimes to be a lot slower than QB Tools, the program is probably one of the most valuable and useful pieces of shareware a hard

Quarterback Tools and Quarterback 4 are both products of Central Coast Software, distributed in the UK by Silica Systems (081-309 1111). Prices: QB4 £54.95, QB Tools £69.95.

FixDisk appeared on the March 1991 Amiga Computing CoverDisk and, with QuickBackup, should be available from all good PD libraries. Please be sure to pay the shareware donations if you use these programs.

FixDisk can be a real saviour in times of need



**Discover for yourself
the ever-expanding
world of shareware**

Hundreds
of new, top-rated
shareware and PD
programs now being
released every month.
They can be yours
for as little as
£1 a disk!

SHAREWARE AND PUBLIC DOMAIN SHOPPER



PLUS!

Detailed guide in every issue to just-arrived PC packages for:

- **WP** ● **Data management**
- **Business** ● **Spreadsheets**
- **Graphics** ● **Leisure** ● **Music**
- **Utilities** ● **Games** ● **Hobbies**
- **Education** – and much more!

PLUS!
*More than
£3,000
worth of
vouchers*

– for the very latest
computers, printers,
disk drives and more
**ONLY in the
February issue**

**ONLY
£1.50**

**SPECIAL
OFFER**

Take out an introductory
8-month subscription
for just **£9**
– by ringing 051-357 1275

Now on sale at your newsagent



AMIGA PUBLIC DOMAIN FROM

**17-BIT SOFTWARE, THE PD LIBRARY
YOU CAN TRUST!
MAKE THE MOST OF THE NEW YEAR
WITH AN ORDER FROM 17-BIT**

'That bit better than the rest'

PLEASE PUT DEPT AMIGA COMP ON ALL POSTAL CORRESPONDENCE

CHEER UP YOUR NEW YEAR WITH SCHEME 17 DISK 12, A KARAOKE
SING ALONG WRITTEN BY MIKE ARCHER CRAMMED WITH ALL YOUR
FAVOURITE CAROLS, YOU WILL BE HOLDING YOUR BELLY
FOREVER FOR THIS ONE... ONLY £1.50
PLEASE ADD 50p TO ALL ORDERS LESS THAN 5 DISKS... THANKS

**£1
A DISK**

LISTED BELOW IS JUST A SMALL
SELECTION OF OUR VAST LIBRARY. WE
ALSO HAVE FRED FISH UP TO 550, ALL
AMOS LPD, TBAG AND SCHEME 17, OUR
AIM IS SIMPLE... TO BRING YOU THE
PUBLIC THE VERY BEST IN PD AT WHAT
WE FEEL IS THE BEST PRICE. MAYBE YOU
CAN BUY IT CHEAPER, BUT CAN YOU BUY
WITH CONFIDENCE FROM OTHER
LIBRARIES WE ARE HERE FOR GOOD!!
SO YOUR ORDER IS GUARANTEED A SAFE
24 TO 48 HOUR TURNAROUND.
OUR FRIENDLY TELEPHONE STAFF WILL
GLADLY POINT YOU IN THE RIGHT
DIRECTION IF YOU ARE NOT SURE WHAT
KIND OF PD WILL MOST SUIT YOUR
NEEDS... SO GIVE US A CALL 0924 366982

HOT UTILS!!!

- 36 ICON DEVELOPMENT
- 66 CLI UTILS
- 75 CALENDAR ORGANIZER
- 151 BANK ORGANIZER
- 174 AM CAT
- 243 DISK SALLY
- 247 DISK X
- 153 MEG V.118 (NEW)
- 178 NOISETRACKER V2.1
- 784 BOWL V2
- 878 OPTI UTILS 2
- 791 JAZZ BENCH
- 199 NOISETRACKER 2
- 947 UTILITY MIX 2
- 961 SPECTRA PAINT
- 1005 AMIGA TOOLS
- 1024 TEXT CRAFT
- 1036 PRINTER DRIVERS
- 1057 SUPER KILLERS
- 1055 MUSIC RIPPERS
- 1068 WORD FRENZY
- 1111 C-LIGHT
- 1133 SLIDESHOW CONSTRUCTION KIT
- 1144 VIRUS BLITZ
- 1152 PERSONAL JOURNAL
- 1197 VECTOR DESIGNER
- 1222 ART OF MED
- 1252 KSI UTILS
- 1255 PICTURE HELPER
- 1275 OPTI COMMS
- 1276 MUSIC CONSTRUCTION KIT
- 1295 ST EMULATOR
- 1338 MESSYSID 2
- 1330 MUSIC RIPPERS
- 1400 VIRUS KILLERS
- 131 MID UTILS
- 353 GHOSTWRITER 2
- 897 KSI DEMO MAKER
- 1252 UTILS FOR ABOVE
- 1390 UTILS FOR ABOVE
- 1391 UTILS FOR ABOVE
- 1391 UTILS FOR ABOVE
- 1365 MPD MODULES
- 466 ARP
- 1369 OPTI UTILS 2
- F162 FENSTER
- P531 FILESHURTER
- F403 TEXDISK
- F194 INPUT LOCK
- F163 LABEL PRINT V3.5
- F455 MEM MON
- F420 MENU WRITER
- F98 GRASE
- P338 SID
- F118 ZOFER
- F440 X-SPILL
- F440 3D PILOT
- F517 AMIBACK
- F691 BRUSH 4D
- F276 CLIP DOS
- F302 DISK TALK
- F472 ICALC
- F284 ICON TOOLS
- F452 IMAGE LAB

GAMES DISKS

- 24 HACK
- 71 MONOPOLY
- 135 BACK GAMMON
- 173 OTHELLO
- 307 AGATRON GAMES
- 370 TENNIS
- 430 GOLDEN FLEECE
- 445 CASTLE OF DOOM
- 1590 POM POM GUNNER
- 492 WERNER GAME
- 556 HOLY GRAIL
- 9928 STAR TREK
- 699 PSEUDO COP
- 759 GAMES GALORE 1
- 774 PROPERTY MARKET
- 781 GAMES GALORE 2
- 795 BATTLEFORCE
- 827 GAMES GALORE 3
- 837 GAMES GALORE 5
- 841 BLACK JACK
- 971 REBOUND
- 988 STAR TREK NEXT GEN
- 981 QUOTE MASTER
- 1046 SHIPAPES
- 1048 EMPIRE
- 1052 A+B TRUCKIN ON
- 1058 ZEUS
- 1069 ATAC ATTACK
- 1113 GAMES GALORE 6
- 1115 GAMES GALORE 7
- 1145 PACMAN
- 1154 WARFARE SIM
- 1155 MASTER OF THE TOWN
- 1159 DARK STAFF
- 1166 STOCK MARKET
- 1174 SCUM BATTERS
- 1281 MEGA BALL
- 1282 JUMPY
- 1284 CHINESE CHICKENS
- 1285 ASTEROIDS
- 1290 CONNECT 4
- 1419 SUPER TWINTURIS
- 1342 CATTLE ADVENTURES
- 1351 WISSYSPY
- 1354 RETURN TO EARTH
- 1373 KARD-GAMES
- 1378 TETRIS 2
- 1407 POOL
- 1423 NO MANS LAND
- 1427 ZONGENE
- 1436 WARGAME

OPERATION LEMMING

A GAME FOR CHARITY
MAKE A SHOOT EM UP
OF THE HIGHEST
ORDER AVAILABLE
NOW AT ONLY £3.50
WITH 2 POUND GOING
TO THE R.N.I.B. GAME
SUPPLIED BY KEN AND
THE BOYS IN LONDON,
HELLO PEEPS.

1 MEG ANIMS

- 31 CAR + UNICYCLE
- 63 JUGGLER
- 148 KNIGHT ANIMATION
- 220 2 MEG WALKER DISK 1
- 221 2 MEG WALKER DISK 2
- 255 WALKER DEMO
- 465 GHOST POOL
- 485 COOL COUGAR
- 591 THE RUN (CAR)
- 684 FRACTAL FLIGHT
- 762 STEALTHY 2
- 802 MAGICIAN 2
- 808 STEALTHY ANIMS
- 901 FFG ANIM
- 911 APPLICUS
- 975 JUGGLER 2
- 990 PIANO ANIM
- 999 TRACK BALL
- 1022 AMY VS WALKER
- 1032 JOGGETTE 2
- 1035 SPIDERMAN
- 1092 MARSHLIGHT
- 1096 CONGA MAN
- 464 SPACE SHEARE
- 329 STAR TREK DRY DOCK
- 1190 PINBALL ANIM
- 1191 TEA CUP ANIM
- 1206 ANTI LEMMIN DISK 1
- 1209 ANTI LEMMIN DISK 2
- PLEASE NOTE ANTI LEMMIN
IS A 2 MEG DEMO
- 1256 HOLIDAY ANIM
- 1305 CORSAIR
- 1337 SHUTTLE COCK ANIM

LATEST PD

- 1481 KIM DATABASE
- 1480 MCAD
- 1479 VISI CALC
- 1478 AMIBASE V3.76
- 1477 GOOD GAME
- 1476 EXILE POINTS
- 1475 OUTLAND REBELS
- 1474 SILENTS FRANCE
- 1473 REBELS THE THING
- 1472 A-GENE FAMILY TREE
- 1471 TECHNO FRIGHT
- 1470 FACE ANOTHER DAY
- 1469 TEXT VIEWER
- 1468 PRINTER UTILS
- 1467 LEMMING CURD
- 1466 TOO SEXY UTILS
- 1465 TERMINATOR 2
- 1464 SILENTS GOW (2 DISK)
- 1463 INTROS.COMP
- 1462 DAVE'S ANIMATIONS
- 1461 UNICOPY
- 1460 ANIM (UTILITY)
- 1459 DEVILS LABYRINTH
- 1458 STATIC BYTES MUSIC
- 1457 KEPRINS GUARDIAN
- 1456 WPMH VECTOR DEMO
- 1455 SONIC BOOM
- 1454 EQUINOX SO WHAT
- 1453 EQUINOX SO WHAT
- 1452 MAGIK 12 HOPE

LATEST PD

- 1453 SOUNDFLASH 4
- 1452 LSD MUSIC DISK
- 1451 TECHNIO TRANCE
- 1450A DIMENSION 4 MUSIC
- 1450B DIMENSION 4 MUSIC
- 1449 SSI DRAGON SLIDES
- 1448 RAMMAM MUSIC
- 1447 DEVILS MEDIA DEMO
- 1446A TOXIC WASTE 1
- 1446B TOXIC WASTE 2
- 1445 LUKE + JOE ART
- 1444 ATLANTIS SLIDES
- 1443 NUMERIC MUSIC
- 1442 PSYGNOSIS AGONY
- 1441 PUMA TRACKER
- 1440 PROTON MUSIC DISK
- 1439 QUARTZ MUSIC DEMO
- 1438 MISC PROGS
- 1437 TRAVEL GAME
- 1436 BATTLE OF BRITAIN
- 1435A KILLERS DEMO 1
- 1435B KILLERS DEMO 2
- 1434 INTROS.COMP
- 1433 LSD MEDIA DEMO
- 1432 CHARLY PRODDY
- 1431 MUSIC WINNERS
- 1430 NANO DEMO
- 1429H HIS MASTERS NOISE
- 1429B HIS MASTERS NOISE
- 1428 CHESS TUTOR
- 1427 JUNGLEONS OF NADRO
- 1426 GAMES FOR MAY
- 1425 ANARCHY INTROS
- 1424 SILENTS MUSIC
- 1423 NO MANS LAND (GAMES)
- 1422 BOT STUFF!!!
- 1421 A BEEB ANIM 1.5 MEG
- 1420 GAMES GALORE 9
- 1419 TWINTURS
- 1418 INSANITY TOOLS
- 1417 GRAPHICS
- CONSTRUCTION KIT
- 1416 RAF VOLUME 1
- 1415 DIGITAL ADDRESS
- 1414 40 VIRUS KILLERS
- 1413 SYSTEM TEST
- 1412 CRYPTIC UTILS
- 1411 CRUISE FOR A CORPSE DEMO
- 1410 CRYPTIC UTILS
- 1409 PETERS QUEST
- 1408 GAMES
- 1407 MOONBASE POOL
- 1406 BACKGAMMON
- 1405 DESKTOP PUBLISHER
- 1404 IN BED MADONNA
- 1403 MADONNA ANIMS
- 1402 RHAPSODY IN BLUE
- 1401 TEXT 2 (1.16 A DISK)
- 1400 SHAMEN MIX DISK 2
- 1399 SHAMEN MIX DISK 1
- 1398 DESKRECH DISK 3
- 1397 AS ABOVE DISK 2

**WARNING IF YOU HAVE
JUST GOT A NEW AMIGA+
BE WARNED A LOT OF PD
WILL NOT RUN!!! ALL NEW
PD WILL BE TESTED FROM
NOW ON, BUT BUY WISELY**

**AMFM
THE RADICAL NEW
DISK MAG BY
BJORN LYNN IS NOW
ON ISSUE 2...
PRICED AT ONLY
£2.50 A DISK OR £5.00
WITH 2 SPECIAL
SAMPLES DISKS. IF
YOU'RE INTO
AMIGA MUSIC THIS
IS THE DISK FOR
YOU. (ISSUE 1 STILL
AVAILABLE AT £2.50)**

ORDERING DISKS
ALL MAJOR CREDIT CARDS ARE
TAKEN. ORDERING TIMES ARE MON
TO THURS. 9.00 WHILE 9.00PM AND
9.00 TO 5.30 FRI AND SAT
PLEASE MAKE CHECKS AND
POSTAL ORDERS PAYABLE TO
17-BIT SOFTWARE
WRITE TO: PO BOX 97
WAKEFIELD WF1 1XN
TELEPHONE: 0924 366982 IF NO
ONE IS THERE OUR
ANSWERPHONE WILL GLADLY
TAKE YOUR ORDER... PLEASE BE
PATIENT IF OUR PHONE HOTLINE IS
VERY BUSY. MOST ORDERS ARE
SENT OUT THE SAME DAY, IF
RECEIVED EARLY ENOUGH.
PLEASE ALLOW AT LEAST A
WEEK FOR YOUR ORDER TO
ARRIVE BEFORE RINGING AND
ASKING WHERE YOUR ORDER IS.
THANKS

AMIGA SPECIALS

TRACK BALL	£26.95
MICE	ONLY £15.99
SECOND DRIVES	£55.95
SECOND DRIVES (TRACK COUNT)	£80.00
AMIGA RAM EXPANSIONS	£24.95
MOUSE MATS	£2.00
ZY-FI SPEAKERS	£35.95

**ALL 17-BIT PD £1
ALL LPD £3.50**

Question: How do you make hit records without even getting out of bed in the morning?

Answer: Sampling.

Everybody does it, half the music world hates it and the other half couldn't survive without it. From George "I'd never use sampling" Michael to the absolute kings of sampling EMF, its use in the music business today is widespread.

Both of the above artists got in tremendous trouble over sampling – George for sampling James Brown's Funky Drummer and EMF for sampling Mark Chapman (the guy who killed John Lennon) reciting the lyrics to Watching the Wheels (a Lennon song).

EMF were told off because not only was their sample deemed to be in bad taste, but the John Lennon estate owns the copyright to Watching the Wheels. George Michael, on the other hand, was told to pay loads of money and give away a share of royalties to the offended. EMF also suffered the same fate and had to remove the sample from further pressings of the record, as well as sending a "sorry we didn't mean to do it" note to Yoko Ono.

So, this is the exciting world of sampling, where you can release hit records and get into loads and loads of trouble. But which sampler should you use?

There are numerous models on the market and the newest to join the family is GVP's 8-bit Digital Sound Studio. Inside the box there's a 3.5in white disk, a competent 175-page manual explaining everything you ever needed to know about sampling – but where's

the sampler? It can't be in that tiny box, surely! It is, though – a midget thing that looks particularly attractive with lights and knobs plastered all over it.

To set it up, you simply plug it into the parallel port and connect a standard shielded audio cable between it and any mono or stereo sound source – I found that a CD player gave the best quality samples.

The best way to use almost any kind of sampling software is to boot it up and tinker around with it. Remember you can't do any damage to the hardware or software – although it is a good idea to read how to install the hardware and software first, or else you might find your toaster attached to the back of your Amiga and a crumplet in your disk drive.

The sampler is split up into three parts – the sampler itself, the editor and the highly useful tracker. Although there do seem to be a lot of functions and a hell of a lot of buttons and icons to confuse you, it is actually quite easy to use.

The sampler part is where you actually sample a sound, and is considerably less complex than the other modes. The input section is where you can determine whether DSS will sample the right, left or both input channels. So you can choose whether to have mono or raz-



The opening screen loads you into a new world of Amiga sound

zama-tastic stereo samples. The monitor controls allow you to select from several different forms of screen display while monitoring and previewing a sound.

The first three options allow you to choose a continuous waveform display

like that produced on an oscilloscope. The buttons allow you to select from three different scales of oscilloscope readout. The other button activates the sonic spectral analysis display and shows you in real time the different frequencies from lowest to highest of the sound you are about to sample.

The rest of the buttons allow you to set the length of the sample to be recorded, the sampling rate, period and note. Trial and error is probably the best method for determining the appropriate settings for the sample rate.

Once you've got all your settings right, it's time to actually record the sample. You first click on the record button to enter the recording mode, then click the left mouse button to begin sampling, clicking it again to stop recording.

As soon as a recording has been completed, a requester will appear asking for a name for your sample. Christen it something and that's it – sampling completed. As you can see, recording is easy and really anyone can do it. Get granny on it right away – she'll love to sample a bit of Pavarotti!

The editor is divided into several sections – the display window, the slider controls, the editor function console and sample playback. These are the main functions, but there are others dotted around the screen as well.

The display window is the principal workspace of DSS. The information presented in this window will depend on the mode that is currently active.

The sample list display screen is the main screen, containing 31 slots for the storage of samples. The samples appear by name in the numbered slots that comprise the list. A small index to the left of each sample name indicates whether the sample is in stereo, is currently loaded into chip memory and whether it is less than 128k in length. This index plays a major role in the tracker mode of DSS.

All manipulations that have to do with increasing and decreasing values are performed using the slider controls on the left edge of the editor screen.

Naughty but nice

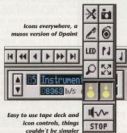


These essential controls at the heart of the system



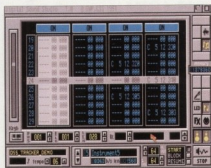
Watch those waveforms and avoid clipping your creations

Icons everywhere, a mouse version of Opalot



Easy to use tape deck and icon controls, things couldn't be simpler

Jonathan Maddock
looks at GVP's
tempting 8-Bit
Digital Studio
Sound sampler



GVP's very own SoundTracker clone in action

The slider works like a typical AmigaDOS scroll bar.

The editor function console is full of gadgets and buttons arranged down the right-hand column and across the bottom of the display window. The buttons allow you to edit or modify your sound samples. The basic functions are Cut, Copy and Paste. There is also a Draw mode which lets you use the mouse to manually modify the waveform onscreen.

Other functions include a low-pass filter which toggles the low-pass filter on and off, Loop, which activates two loop markers allowing you to repeat or loop a specific section of the onscreen sample, and Magnify, which zooms in on the sample to make edit-

ing that tiny bit easier on the eyes.

Sample Playback, believe it or not, lets you play back samples. You can choose whether or not you want the sample played through the left, right or both channels. There are numerous other options, and it would take me forever to explain them all.

DSS's tracker is a four track sequencing program. For those of you who are less musically minded, a sequencer allows you to compose music without using classical notation. Looking rather like MED, the tracker is very easy to use and is ideal for the beginner.

The idea is that you sample an instrument—for example a drum beat—and then place it into the tracker. By using either the computer's keyboard or an external Midi keyboard you can play

the various notes of the sample and, hopefully, compose a stunning hit record.

There are some rules, though, that you have to abide by when using samples. If the sample contains no looping segments, it can be no longer than 128k. The sample must also be mono, it needs to be loaded into chip RAM, and its sampling rate must not exceed 28,867 samples per second. Oh, and never, never feed it after midnight.

You can check that a sample is eligible by looking at its status in the samples list. The yellow marker indicates the chip RAM, the blue marker indicates whether the sample is less than 128k in size and the white marker indicates whether the it is in stereo.

In DSS, a maximum of four sounds can be played simultaneously—one from each of the Amiga's four audio channels. These four channels are represented as parallel vertical columns called tracks. A sample is a sequence of consecutive and simultaneous notes which is what any normal person calls music.

Each individual note or sound occurrence is called an event. Events are grouped into blocks of 64 per track. These blocks can be arranged into a pattern or sequence—a song. The tracker also has lots of extra buttons and gadgets to mess around with. This versatility make DSS a joy to use—even after five minutes of you feel like a

"proper" musician.

The tracker is compatible with SoundTracker, NoiseTracker and Soundfx. Fancy making a demo of your top tunes? Well with DSS it's no problem because you can write

songs which are auto-executable. You can load the song using Workbench or CLI—now you can impress your chums with your mega-mixing!

Overall, the general look and feel of DSS is excellent. It's got so many features and gadgets that you can quite easily find yourself engrossed in it from the moment you load it up.

The sound quality of recorded samples is particularly excellent—if the Pet Shop Boys had an Amiga they'd die for this sampler! Costing an incredible £59.95 including VAT and delivery, this is an

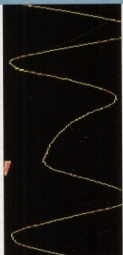
excellent package which won't break your bank balance.

Generally I'm very impressed with

Garbage In, Garbage Out

For successful sampling, you must make sure you have a suitable sound source (like a CD player), because if you buy the product and then use a cheap tape recorder you won't be too impressed with the results.

If you do use a low quality source, you cannot blame the product for performing badly—I managed to achieve very impressive results when I was using it with a high quality source...



this little goody. The only grudge I have against it is that the connecting leads are not supplied, so the absolute beginner would have purchase them separately.

This is a much more classy product than Stereo Master, reviewed last month—it's a "must buy" as far as I'm concerned. With a tracker built in to the package, it makes an ideal buy for anyone just dipping in to the Amiga music market.

Whether you are a seasoned musician or an absolute beginner, this package is definitely one to spend your Christmas money on. Remember, don't cry and write in to us when you get nicked for sampling—blame GVP for making it all so tempting.

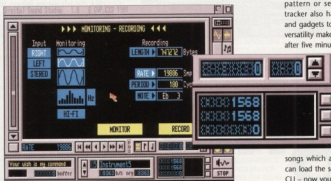
Digital Sound Studio is a product by GVP and is available from Silica Systems (081-309 1111).
Price: £59.95 incl VAT and delivery

Ease of use

Implementation

Value for money

Overall



The heart and soul of the sampling process



Importing your creations with the smooth and simple on screen file requester

ALWAYS A GOOD IDEA

Silica presents some great offers on the award winning range of high quality matrix printers from Citizen. Each Citizen printer is built in the UK to exacting standards, ensuring superb reliability and output. Our confidence in Citizen's quality is such that we are pleased to include a 2 year guarantee with every printer. Plus, if you buy a Citizen printer from us, we will give you the Silica Systems Printer Starter Kit (worth £29.95), FREE OF CHARGE!

FREE DELIVERY
Next Day - Anytime in the UK mainland

FREE STARTER KIT
Worth £29.95 - With every Citizen printer from Silica

2 YEAR WARRANTY
Silica offers a 2 year warranty including the printer itself with every Citizen printer from Silica

WINDOWS 3.0
Included with the Silica Starter Kit

FREE COLOUR KIT
With every Swift 3 and Swift 3hp printer

FREE HELPLINE
Technical support helpline open during office hours

MADE IN THE UK
Citizen printers are manufactured in high standards

DOT MATRIX & NOTEBOOK PRINTERS

NEW! LOW PRICE



9 PIN PRINTER

144 CPS **80 COLUMN**

- Citizen 1200+ - 9 pin - 80 column
- 144cps Draft, 30cps NFO
- 8K Printer Buffer + 2 Fonts
- Parallel Interface as Standard
- Graphics Resolution: 240x240dpi
- Epson and IBM Emulation
- Full tractor & bottom feed
- FREE Silica Printer Starter Kit

SWIFT KIT **SWIFT KIT**

SWIFT KIT £29.95
SWIFT KIT £29.95
SWIFT KIT £29.95

PARALLEL INTERFACE OPTION
The 1200 printer is suitable with a serial interface for £115.00
Ref: PH 1200 £115.00 inc VAT

£115

+VAT-£135.13 ref: PH 1200

9 PIN PRINTERS

192 CPS **80 COLUMN**

192 CPS **136 COLUMN**

FREE! COLOUR KIT

• Citizen Swift 9 - 9 pin - 80 column

• 192cps Draft, 48cps NFO

• 8K Printer Buffer + 3 Fonts

• Parallel Interface

• Graphics Resolution: 240x240dpi

• Epson and IBM Emulation

• FREE Colour Kit

• FREE Silica Printer Starter Kit

£179

+VAT-£214.82 ref: PH 1200

192 CPS **136 COLUMN**

• Citizen Swift 9 - 9 pin - 136 column

• 192cps Draft, 48cps NFO

• 8K Printer Buffer + 3 Fonts

• Parallel Interface

• Graphics Resolution: 240x240dpi

• Epson and IBM Emulation

• AD 3000 dpi printing

• FREE Silica Printer Starter Kit

£249

+VAT-£300.72 ref: PH 1200

24 PIN PRINTERS

216 CPS **80 COLUMN**

216 CPS **136 COLUMN**

FREE! COLOUR KIT

• Citizen Swift 24 - 24 pin - 80 column

• 216cps Draft, 72cps LD

• 8K Printer Buffer + 6 Fonts

• Parallel Interface

• Graphics Resolution: 360x360dpi

• Epson, IBM & NEC PB+ Emulation

• FREE Colour Kit

• FREE Silica Printer Starter Kit

£259

+VAT-£310.83 ref: PH 1204

192 CPS **80 COLUMN**

• Citizen 224 - 24 pin - 80 column

• 192cps Draft, 64cps LD

• 8K Printer Buffer + 2 Fonts

• Parallel Interface

• Graphics Resolution: 360x360dpi

• Colour Output Available

• FREE Silica Printer Starter Kit

£199

+VAT-£239.83 ref: PH 1204

NOTEBOOK PRINTER **24 PIN PRINTER**

64 CPS **80 COLUMN**

192 CPS **136 COLUMN**

FREE! COLOUR KIT

• Citizen P40 Notebook Printer

• New Impact Printing On Plain Paper

• LASER QUALITY - 64cps

• 8K Printer Buffer + 2 Fonts

• Feed and Bottom Paper Loading

• Parallel Interface

• Graphics Resolution: 360x360dpi

• Epson, IBM, NEC PB & A Citizen Emulations

• Power Mirror, Battery or Car Adapter

• FREE Silica Printer Starter Kit

£249

+VAT-£300.72 ref: PH 1207

192 CPS **136 COLUMN**

• Citizen Swift 24 - 24 pin - 136 column

• 192cps Draft, 48cps LD

• 8K Printer Buffer + 4 Fonts

• Parallel Interface

• Graphics Resolution: 360x360dpi

• Epson, IBM & NEC PB Emulation

• AD 3000 dpi printing - FREE Colour Kit

• FREE Silica Printer Starter Kit

£349

+VAT-£420.82 ref: PH 1207

24 PIN PRINTER

144 CPS **80 COLUMN**

144 CPS **136 COLUMN**

FREE! COLOUR KIT

• Citizen 1240 - 24 pin - 80 col

• 144cps Draft, 48cps LD

• 8K Printer Buffer + 2 Fonts

• Parallel Interface

• Graphics Resolution: 360x360dpi

• Epson and IBM Emulation

• FREE Silica Printer Starter Kit

£169

+VAT-£203.82 ref: PH 1208

SILICA SYSTEMS OFFER YOU

- **FREE OVERNIGHT DELIVERY:** On all hardware orders shipped in the UK mainland.
- **TECHNICAL SUPPORT HELPLINE:** Team of technical experts at your service.
- **PRICE MATCH:** We normally match competitors on a "Same product - Same price" basis.
- **ESTABLISHED 12 YEARS:** Proven track record in professional computer sales.
- **BUSINESS + EDUCATION + GOVERNMENT:** Volume discounts available for large orders.
- **SHOWROOMS:** Demonstration and training facilities at our London & Scotland branches.
- **THE FULL STOCK RANGE:** All of your requirements here one supplier.
- **FREE CATALOGUES:** Will be mailed to you with offers and software/peripheral details.
- **PAYMENT:** By cash, cheque and all major credit cards.

Before you decide when to buy your major computer, we suggested you think very carefully about WHERE you buy it. Consider which it will be like a few months after you have made your purchase, when you contact us with details of new products? At Silica Systems, we ensure that you will have nothing to worry about. We have been established for over 12 years and, with our unblemished experience and our services, we can now claim to meet our customers requirements with an understanding which is second to none. But don't just take our word for it. Complete and return the coupon now for our latest Free literature and begin to experience the "Silica Systems Service".

MAIL ORDER HOTLINE
081-309 1111

SILICA SYSTEMS

MAIL ORDER:
1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX. Tel: 081-309 1111
Fax: 081-309 1111

LONDON SHOP:
52 Tottenham Court Road, London, W1P 0SA. Tel: 071-588 4000
Fax: 071-588 4000

LONDON SHOP:
Selfridges (2nd Floor), 400 Oxford Street, London, W1A 1AL. Tel: 071-588 4000
Fax: 071-588 4000

SIDCUP SHOP:
1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX. Tel: 081-309 1111
Fax: 081-309 1111

PLEASE SEND A CITIZEN COLOUR CATALOGUE

Mr/Ms/Ms: Initials: Surname: Tel: () 550

Address: Tel (Work): Postcode: 550

Tel (Home): Company Name (if applicable): Which computer(s), if any, do you own? 550

"The Amiga was made for AMOS"

*K. Sumpster, AMOS user in Swindon



AMOS - The Creator is like nothing you've ever seen before on the Amiga. For the very first time you'll feel really in control of your computer, and able to harness its awesome power to impress yourself and your friends.

AMOS is not a false promise. When AMOS first came out, many Amiga users were sceptical that AMOS could do all that was promised - but these people are now ardent fans. There are now 45,000 AMOS users, and AMOS is still the biggest-selling productivity package for the Amiga, and can be found on the shelves of virtually every good software retailer.

It's so easy to create AMOS programs that almost every **public domain library** in this magazine now has AMOS titles in its collection. These include graphics demos, music demos, disc magazines, arcade-style games, puzzle games, databases, educational software - and lots more.

Many **commercial software packages** are also written in AMOS. In fact most educational publishers use AMOS, especially ourselves with the best-selling Fun School 3 and 4.



AMOS was the perfect choice to create Fun School 4 - the results are first class!

AMOS has also proved to be perfect for producing CDTV packages: The Complete Works of William Shakespeare, The Holy Bible, Mind Run I and II plus many others - all created using AMOS because of its versatility and ease of use.

What is AMOS?

AMOS is a powerful, easy-to-use programming language based around BASIC - the language which is taught in schools and colleges. AMOS contains more than 500 different English-like commands such as MUSIC, VOLUME, SAMPLE,

GET FONT, ELLIPSE, RAINBOW, MENU BAR and CLOSE WORKBENCH - so you can create any result you want both quickly and easily.

AMOS comes with a clearly-written 300-page manual and more than 80 example programs. These will guide you towards creating your first program, making AMOS the ideal introduction to programming on your Amiga.

What AMOS owners have said:

"It's the best piece of software I've bought for the Amiga. Worth twice the price!"

- S Sweet, Herne Bay

"Without doubt the very best Basic available on the Amiga."

- Paul Feazey, Oxford

Unleash your creativity with AMOS
- for just £49.99



Now you can double the speed of your AMOS creations with the

AMOS Compiler - in fact, some commands are up to five times faster! And using it couldn't be simpler - just two mouse clicks and you're away. The AMOS Compiler also includes a cruncher which will compress your programs to half their size - which has enabled AMOS users to get their work on magazine cover discs and earn them money.



It takes just two clicks to compile your AMOS programs - it's that simple

"Compiling programs has never been so easy... Programs are turbocharged beyond recognition"
- Amiga Format

Make your AMOS programs race along
- for only £29.99

Explore the world of virtual reality!



AMOS 3D will enable you to create any 3D object you like using the incredible Object Modeller - you can even add transparent walls. Then you can jump to AMOS and use the 46 new 3D commands to move, stretch and animate up to 20 objects at once in real time for amazing 3D creations!

AMOS 3D provides all the tools you need to create your very own 3D world.



The 3D Object Modeller gives you easy access to the world of virtual reality

"After a little more than a few hours you should be churning out 3D demos at a blistering rate"
- Amiga Format

Super-fast 3D at your fingertips
- for just £34.99

Useful contacts:

AMOS Club

1 Lower Moor, Whiddon Valley, Barnstaple, North Devon EX32 8NW
Bi-monthly newsletter and technical support for a yearly membership fee.

AMOS Public Domain Library

25, Park Road, Wigan WN6 7AA
Telephone 0942 495261
More than 300 AMOS PD discs are available. Ring for a catalogue.

Creditcard order hotline - Tel. 051-357 2961.
Alternatively send a cheque with your choice of products clearly indicated to Europress Direct, FREEPOST, Ellesmere Port, South Wirral L65 3EB.

EUROPRESS
SOFTWARE

AMERICAN FOOTBALL COACH

on the Amiga (1 Meg only)

You have a 5 year contract to take your team, London, to at least one AmosBowl against some of the toughest opponents ever coached by your Amiga. There is an easier 'RADIO' game in Public Domain if you prefer(!) but this version here is for those looking for a difficult but REALISTIC coaching version of this great sport.

There is no magic joystick here to get you out of trouble...as coach you call the plays and then hold your breath while watching the action on our special chalkboard and believe us, watching increases the excitement ten-fold. You will see...

EVERY PLAY...OF EVERY MATCH...OF EVERY SEASON

All the usual plays are available such as KICKOFFS both NORMAL & ONSIDE...PUNTS both DISTANCE & ANGLED...RUNBACKS for TOUCHDOWNS...FUMBLES...INTERCEPTIONS...BLITZES both INSIDE & OUTSIDE...REVERSE RUNS... DROPPED CATCHES...COMPLETIONS & RUNS...SAFETIES...SACKS...BOOTLEGS...SNEAKS...2 MINUTE DRILL...DOUBLE COVER...ETC and all played at a speed that will keep you locked onto your screen so that you do not miss any of the action. HIGHLY ADDICTIVE...

Like all coaches, you do have some help in the form of UPTO DATE skill assessments of your players and the opposition...

Over 100 statistics available at the press of a button at any time during the match...SEASON STATS at the end of the match which show you just who is and isn't doing it for you...and the facility to pick every PLAYER for every PLAY that you call throughout your five year career.

Against you are coaches like no other you have faced...some RUN on 4th & 1...others THROW bombs! but always THE RESULTS ARE REALISTIC. No matter how good you get, you will never be SURE of winning here.

Each match takes about 1 hour to play (we said it was realistic) and every player gets tired during this time especially if you have OVERUSED him by not spreading the workload amongst your squad.

At the end of each season, the name of the AmosBowl winner is inscribed on the plinth of the trophy...then, after the draft, you have a chance to do it again. Your GM takes care of the draft for you as he probably knows the weaknesses better than you but a word of warning...beware of retirements and good opposition drafting for Season 5!! If you can win in this season you should be in the NFL.

WHAT WE DON'T HAVE...
is BIG BOXES...MANUALS... etc

just a policy of supplying you with a terrific game at just £9.75 inc. p&p and a policy of posting within 24 hours of money clearance.

Your name
Address
.....
.....
.....
.....
Postcode

Send Cheque/PO to:
COMPOSER SOFTWARE (AC)
BLENHEIM CHASE, THE NARTH,
NR. MONMOUTH,
GWENT NP5 4QN
TEL: 0600 860706

JUST IN FOR 1 MEG AMIGAS - 40-OVER LEAGUE CRICKET

Up to 18 players. Play head to head or against a computer team. This game is also £9.75 inc

● 1/2 Meg Version available mid February ●

Why buy an ordinary sound sampler - when
you can buy a recording studio?

TECHNOSOUND Turbo

SOUND SAMPLING SYSTEM FOR THE AMIGA + AUDIO LEADS



- * Song sequencer
- * Midi sequencer
- * Variable digital delay
- * Variable cut buffer
- * Full multi tasking
- * 57 recorded samples
- * Sample Library Brochure

- * State of the art true stereo cartridge
- * Over 100 interactive functions
- * Simple to use tutorial and user guide
- * Stunning real time effects include: Echo, Reverb, Hall, Voice Synthesis, Phaser and Vibrato
- * Extensive editing and looping facilities

NEW
DIMENSIONS

Software upgrade available to
existing users for only
£6.00 + £1.00 p&p



BROOKLANDS HOUSE
BRYNKWYN
RAGLAIN
GWENT NP23 2AA
(0291-690933/690901)

£39.95
+ £1.50 POST AND PACKING

A500 plus COMPATIBLE

Are you an A500 plus owner or thinking of upgrading?
Why risk software problems? Buy our Public Domain software.
All checked for viruses and compatibility.

DISCOVERY PACK PLUS (1 meg)
Games: More adventure + compilation disk
full of games.
Utilities: SD, Virus checker and other
useful programmes.
Demos: Pleasures '91 and Phenomena
Wallpapers.
Music: Popstar + Beach Boys.
Slideshows: Movie posters and fraction
future visions.
Animation: Learning and others.
10 Disks £8.50 + FREE BLANK DISK

GAMES PACK (1 meg)
Sequence Sub sim
Air Warrior: Right sim
Completions: Assorted games
Star Trek: (3 disks)
5 Disks £4.55

Single Disk 95p
Blank Disk 50p
Catalogue listing compatibility 75p
POST & PACKING INCLUDED

PATHFINDER PD 2nd Floor, 41 Marion Street,
Bingley, West Yorkshire BD16 4NQ

TOMSOFT P.D.

RSI Demo maker package (6 disks) only £6
Disks for 90p (+ 50p P&P)

New RSI Fonts New RSI Vector Editor

All great titles including...CHUBBY BROWN, JAZZ
BENCH, LUMBERJACK SONG (2 Disks), MASTER
VIRUS KILLER V21

For further information send for free catalogue disk to...

TOMSOFT P.D.

Dept AC, 31 Trevelyan Court, Caerphilly, S. Wales CF8 1RQ
or call 0222 862890
(Cheques & Postal Orders made payable to: G. Callaghan)

Tel: 0543 473131

GLOBAL

Tel: 0543 473131

DISKS

3.5" DS DD 100+	Only £0.33
3.5" DS DD 50+	Only £0.36
3.5" DS DD 1+	Only £0.39

ACCESSORIES

Mouse ST/Amiga Replacement	£14.99
3.5" 40 Cap Lock Box	£3.99
3.5" 80 Cap Lock Box	£5.50
3.5" 100 Cap Lock Box	£6.99
Dust Cover AM/ST	£3.99
Dust Cover Printer/Monitor	£5.99
Disk Head Cleaner Kit	£2.99
Mouse Mats 6mm	£2.50
Mouse Mats 8mm	£3.50

Leads and Ribbons - Most requirements can
be supplied - please telephone for quote

FLOPPY DRIVES

3.5" DS DD External Drive	£51.99
3.5" DS DD Internal replacement	£45.00
Drive	£45.00
Quiet, Slim, High Quality Mechanism	

Unbelievable pricing on:

SIMM MODULES

Upgrade your STE using SIMMS. Also
upgrade your drives using SIMMS.
Take advantage of these amazing prices!

520 STE 12 Mb (2x256k x 69)	£20.00
520/1040 STE 2 Mb (2x1Mb x 69)	£60.00
520/1040 STE 4 Mb (4x1Mb x 69)	£115.00
256k x 69 SIMM	£10.00
1Mb x 69 SIMM	£30.00
4Mb x 9 SIMM	£120.00

ST RAM EXPANSION

To fit all Machines!!!
No Soldering required

512k	£49.99
2 Mb	£99.99
4 Mb	£169.99

CHIPS & BITS

256k x 1 DRAM	£0.90
256k x 4 DRAM	£3.95
1Mb x 1 DRAM	£3.95
4Mb x 1 DRAM	£25.00
MMU	£28.00
DMA	£28.00

SUPRA MODEMS

Call now to take advantage of our best
pricing. Get to those Software Billboards
or anything you want down the phone.
Ready to go on-line.

Supra 2400	£117.00
Supra 2400+	£170.00
2400+ has error correction and data compression. Both include:	
* RS 232 Interface	
* Internal Diagnostics	
* Programmable Number Storage	
* Tone Phase Autodial/Answer	
* 100% Hayes Compatible	

HARD DRIVES

As we supply nearly all makes please
state the make and model on your
enquiry/order, and we will supply at
"The Market Price".
Please call for confirmation of price and
delivery.

SERVICES

Fitting and Repair EPOA

QUALITY GUARANTEE

All products are made using leading edge
technology to the highest standards and
are fully guaranteed.

Prices include VAT. P&P Extra, please enquire when ordering.
Prices and specifications are subject to change without notice.



GLOBAL COMPUTING

Woodhouses, Yoxall, Burton upon Trent, Staffs DE13 8NR

Tel: (0543) 473131



amiga almanac



DTV157

With barely time to get the Christmas decorations back in the cupboard, Paul Austin looks forward to another year of innovation in Amiga DTV



PROGRAMMING159

It's time for a bit of musical mathematics as Margaret Stanger helps you get to grips with the raw power of Amiga sound



MUSIC161

What does 1992 hold for Amiga music fans? Paul Austin reflects on last year's trends and offers a glimpse of things to come



COMMUNICATIONS163

Stewart C Russell presents a detailed look at offline mail readers. They can save you money and help you make the most of every online second



AMOS165

There are ghosts in the machine as Peter Hickman introduces some baddies into your AMOS-based Pacman game



DTP167

Ben Pointer continues his guided tour of Professional Page with another look at the powerful "Define New Style Tag" requester



MULTIMEDIA169

More accessories have been announced for CDTV. Jolyon Ralph reveals them in his column. It's nothing short of revolutionary

1991, the big bang...

As little as 12 months ago the Amiga was still suffering from the ugly sister syndrome as far as serious DTV was concerned. As a result only a handful of professionals were using the Amiga for commercial video work. Now that's all changed...

Over the months our machine has cast off the chains of mediocrity and become an essential piece of hardware in both amateur and professional studios alike.

If you need proof, look no further than the Original Graphics Company, winners of this year's TV animation awards. They clinched the title thanks to their stunning animation sequences which appear weekly on the children's TV series *Motor Mouth*.

From now on, their award-winning creations will be coming straight from the heart of the Harlequin frame buffer, which as I'm sure you're aware is still the premier graphics board on the machine.

Although the Harlequin's position is safe for the moment, it could soon be challenged by a whole bunch of new boards which will soon be bidding for the top spot.

Progressive Peripherals are soon to release their highly acclaimed Rembrandt card in the UK. Likewise, G2 will enter the race at any moment with their VD2020. Both of the above are 32-bit cards as, of course, is the Harlequin.

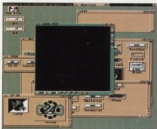
To combat the ever-growing number of contenders, ACS have just announced the Harlequin, which boasts a whole range of extra goodies including four extra screen modes, colour cycling, full screen overlay and increased buffering from two to six. Unfortunately there's still no option for frame grabbing.

The multimedia explosion

Second only to the impact of the 24-bit boards is the sudden proliferation of multimedia packages. At the forefront of these is the long awaited *ShowMaker*, which could be the answer to a DTV fan's dreams – especially if you're lucky enough to own a mountain of laserdiscs and various other high-end devices.

Another must for videophiles interested in a bit of multimedia is the inimitable *Scala*, which even in its present form has revolutionised Amiga presentation. Like *Harlequin*, *Scala* has recently gained a few opponents, primarily *Presentation Master*, which

Read on as Paul Austin looks back at the year when the Amiga came of age and forward to the potential of '92



we reviewed in its Gamma form last month, but which should arrive in its final form any day.

Aside from a software invasion, the world of multimedia is also having its fair share of hardware, primarily in the form of multi-function 24-bit boards such as the IV-24.

Genlocking, frame grabbing, picture in picture, *Caligari*, *Scala* and a paint package all in one bundle. Not bad for a board retailing at under £1,800. But be warned, the attendant software isn't quite as big a bargain as it first appears, because a rather heavy-handed software surgeon has been at work on the nether regions of both *Caligari* and *Scala*.

Editing made easy

Apart from patiently waiting for inspiration, perhaps the most painful part of any video-based creation is the editing. Once again a mixture of hardware and software has come to the rescue in the form of dedicated rock and roll editing systems such as *VideoPilot*, *KRP's* *Timecode Editing System* and the *Editman* system from *Syntronix*.

Thanks to these systems, the bad old days of stopwatch and Stanley knives are long gone. All you need now is a cheque book and a couple of

Improving your image

If there's one thing that's regularly neglected by the average enthusiast, it is the output quality when your creations are recorded on to tape. It can't be stressed enough that if you're serious about quality you need an PAL encoder.

Although it's possible to output direct from the good old modulator, the results are far from perfect. Unfortunately if you've never seen your creations at their best it's easy to carry on in blissful ignorance.

Those friendly folks at *Third Coast Technologies* can supply you with their CP-10 encoder for £149.99 or *Syntronix* systems can offer a whole range of encoders and other display enhancers which will cure almost any video-graphic ailment. For details of the *Editman* systems, telephone 0339 29899.

compatible VCRs and you're away. Both the *KRP* and *VideoPilot* systems are frame accurate and employ their own designer timecodes which are written to the tape and read via the hardware/software combination in order to make the appropriate edits.

The *Editman* system is something of a mystery as far as edit control is concerned as it doesn't use a timecode, but still manages an impressive accuracy of +/- one frame.

All three systems employ remote control in one form or another. They function via programmable remote controls, apart from the *KRP* system, which only works with S-VHS hardware and requires some internal installation within the VCRs themselves. A point worth considering if you're still within your warranty.

I hope to cover both the *KRP* and *Editman* systems soon, so watch this space if you're in the market for easy editing.

Well, that's about it for this month. If there are any aspects of DTP you'd like to see covered in this column, drop me a line and let me know. Until next month, bye for now...



Cheaper alternatives

Although the high-end has blossomed, it's not only the power users who have benefited from the explosion. The once extortionate price of decent genlocks have also tumbled thanks to some cut-throat competition between the major suppliers.

Now even those of use in the cheap and cheerful league have access to near-broadcast quality equipment – and all for the paltry figure of around £100.

Once equipped with the hardware, all that's required is a copy of *Dpaint* for some essential artwork and perhaps a cheap titler. Some prime examples are *Alternative Image's* *Big Alternative Scroller* and *Home Teller*, which HB Marketing will happily supply. Both retail at under £50.

If you're willing to wait, it could be worth holding on for version two of the *Alternative Image* scroller which should be available at any moment and promises to have greatly enhanced effects plus smoother scrolling.

Scala, the presentation system for serious DTV



NEW BOOKS FOR THE AMIGA

Amiga ROM Kernel Ref: Includes & Autodocs 3rd Ed.	£32.95
Amiga ROM Kernel Ref: Devices 3rd Ed.	£24.95
Amiga ROM Kernel Ref: Libraries 3rd Ed.	£24.95
Amiga Hardware Ref: Guide 3rd Ed.	£18.95
Amiga User Interface Style Guide.	£21.95
Amiga DOS Manual 3rd Edition (Romanian)	£29.95
Using AHEAD (Abacus) (inc. disk)	£19.95
Amiga DOS Inside & Out Revised Ed. (inc. disk)	£24.95
Best of Amiga Tricks & Tips (inc. disk)	£24.95
Amiga Desktop Video Power (inc. disk)	£16.95
Amiga Desktop Video 2nd Ed. (Computer)	£14.95
Kids & The Amiga 2nd Ed.	£14.95

SPECIAL OFFER: (U.K. only) for books listed above quoting ref. AC291
Orders over £35 deduct 10%. Orders over £70 deduct 20%.

Amiga ROM Kernel Ref: Includes & Autodocs 2nd Ed. £20 while stocks last.

Software Special Offer:
GB Route Plus (needs 1 Meg memory) £59.95 (RRP £79.95)

CDTV SOFTWARE

Fred Fish Collection (v1.2)	£35	Fred Fish Collection (v1.3)	£45
Illustrated Bible	£29	Illustrated Shakespeare	£29
Illustrated Sherlock Holmes	£29	World Visto	£45
American Visto	£45	New Basics Cookbook	£33
Time Table of Science	£33	Time Table of Business	£33
Peter Rabbit	£35	Benjamin Bunny	£35
Paper Bag Princess	£30	Thomas Snowsuit	£30
Cinderella	£30	Battlestorm	£29
Prehistrick	£35	Battle Chess	£35
Classic Board Games	£29	Case of Cautious Condoir	£30
CD Remax	£29	Psycho Killer	£27
Wrath of Demons	£27	Women in Motion	£27
Hound of Baskervilles	£27	Eyes of the Eagle	£27

Postage is free in U.K. and Europe. Add 25% to book prices for airmail outside Europe (software and surface mail post free).

Detailed book catalogue and/or CDTV product details available on request.
Access and Visa accepted. Tel/Fax: 0706-524304 (customer orders ONLY).

DTBS (Dept AC291), 18 Norwich Avenue, Rochdale, Lancs OL11 5JZ.

AMIGA, ATARI & PC SOFTWARE

SPECIAL OFFER
ES OFF IF YOU QUOTE AMIGA COMPUTING

The Tipster

TIPSTER IS THE NO. 1 SELLING HORSE RACING PROGRAM AND CONTINUES TO OUTPERFORM NOT ONLY ALL OTHER PROGRAMS BUT ALSO THE BOOKIES. USING DATA FROM THE RACING POST, D.MIRROR OR ANY NEWSPAPER, THIS PROGRAM WILL SELECT THE BEST HORSES AND OFFER BETTING ADVICE.

The Punter

LET YOUR COMPUTER TRY TO MAKE SENSE OF THE AUSTRALIAN POOLS. THIS SOFTWARE CAN BE USED FOR ANY POOLS COUPON. THE BRITISH LEAGUES ARE INCLUDED FOR NEXT SEASON.

The Dogs

THE DOGS USES DATA FROM THE RACING POST AND MOST NEWSPAPERS TO RATE GREYHOUND RACES OVER FLAT AND HURDLES. THIS PROGRAM IS VERY EASY TO USE. AN IDEAL GIFT FOR THE MAN WHO HAS EVERYTHING.

League Manager

THIS PROGRAM ENABLES YOU TO MANAGE UP TO 14 TEAMS IN 5 LEAGUES ON ONE DISK. IDEAL FOR SCHOOLS AND ANY SPORT INCLUDING: FOOTBALL, GOLF, SNOOKER, DARTS, BILLIARDS, POOL etc.

The Bookie

THIS NEW RELEASE CALCULATES THE RETURN FROM MULTIPLE BETS, YANKEE, PATENTS etc. A GRAPH DISPLAYS YOUR DAILY BETTING PATTERN. THIS CAN BE USED TO INCREASE YOUR CHANCES OF WINNING.



PHONE FOR DETAILS OF OUR DAILY TIPPING SERVICE



£34.95 each, or any 2 for £49.95

SIDMOUTH SOFTWARE

P.O. BOX 7

SIDMOUTH

DEVON EX10 0TD

TELEPHONE: 0395 67073

Send £9.95
for a DEMO
DISK.

Attention Amiga A500 Owners

As every Amiga A500 owner knows, to back-up software from one disk to another is not the easiest of things to do. Unless you have the right utility.

The trouble is finding one for the right money.

Well you just have. It's called 'Blit-a-copy'. 'Blit-a-copy' is a software and hardware-based intelligent back-up system manufactured and distributed under license here in the UK by Media Direct.

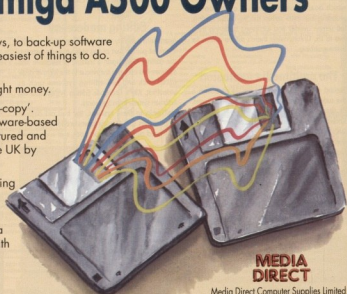
And, at just £34.95 inc VAT, it's being sold at a price that no-one can reproduce!

Alternatively, purchase the Cumana CAX354 external drive together with Blit-a-copy for a combined price of £87.95

Trade enquiries welcome.

Please add £3.35 post and packing or £6.95 for a two day delivery service or £9.00 for a 24hour service.

Media Direct Computer Supplies Limited does not condone or encourage the reproduction of copyrighted software.



**MEDIA
DIRECT**

Media Direct Computer Supplies Limited,
Unit 3, Railway Enterprise Centre,
Shelton New Road,
Stoke-on-Trent ST4 7SH
Tel: 0782 208228
Fax: 0782 281506

Teaching the Amiga to sing

Get to grips with sound programming as Margaret Stanger continues her mini-series

All sound occurs in the form of oscillations in the air, or sound waves. On the Amiga the digital equivalent of a waveform is stored in memory as a series of digitised values or samples. This digitised data can be converted back to analogue form and sent to the amplifier.

The custom chip structure has four AudChannel structures. When they are written with parameters, the sound in the corresponding channel can be controlled. The sound change takes place when the corresponding bit in the DMA controller is enabled.

The `ac_vol` structure member determines the volume, from a minimum of 0 (silence) to a maximum of 64 (loud). The structure member `*ac_ptr` points to the start of the sound samples, and `ac_len` points to their length in words. Last month's Programming altered these two values to vary the timbre of the note. This month we concentrate on `ac_per`, the sample period, and its effect on the pitch of the sound.

Now read on

The frequency of the sound, or number of oscillations per second, determines whether the pitch sounds high or low. With each octave the frequency doubles – if middle C has a frequency of approximately 261.7Hz, the C above has a frequency of approximately 523.3Hz.

For the mathematicians among you, the frequency of each half tone is greater than the previous one by a factor of the twelfth root of two. A value of 440Hz for A was taken as the start for these calculations, so the values for most of the other notes contain rounding errors. The sam-

This programming column is the second in a mini-series on sound. The first part showed how to produce a sound by writing to the Amiga custom chips directly with a pointer to the chosen sound samples. I'll now demonstrate how to vary the pitch of the sound and produce a few musical notes.

The Machine Code page of *Almanac* has been amalgamated with the Code Clinic page under the new title "Programming". Some C source code and some assembler may be shown in the text. The support disk will contain full programs with both C and Assembler source code, fully documented, as before.

pling rate, or number of samples read per second, determines how often a sample is sent to the digital/analogue converter. The frequency of the sound corresponds to the sampling rate divided by the number of samples per cycle.

The DMA controller needs to know the number of bus cycles between the output of two samples – this is known as the sample period. It can be calculated by dividing the inverse of the sample rate by the period of the bus cycle in seconds.

The sample period for the notes from middle C to top C have been calculated (but not by me), and here they are from the Assembler source code:

```
period: period values c-c'
dc.w 428,434,440,447,454,461,468,475,482,489
dc.w 496,503,510,517,524,531,538,545,552,559
```

Mathematicians who like equations – and hard work – could calculate the values using the equations from page 175 in the *Amiga System Programmers' Guide*.

Hitting the high notes

To select a tone from another octave, and get the optimal sound, the same period values are used. The sample values are selected from a list

obtained for that particular octave. The octave above would need half as many sound samples, the one below would need twice as many.

Sound sample files obtained by using a digitiser on a real sound, or from PD disks which contain sound samples, usually contain data for three or four octaves.

I have obtained higher octave data for the sine wave samples by only including one sample in two for the higher octave, and one sample in four for the highest octave. The sample length parameter (`ac_len`) also needs altering when the octave is changed.

When the end of the

data is reached, one sound cycle has been performed, and an interrupt will occur. The Amiga will continue with more sound cycles until the channel is disabled. In this program, each sound is turned off at the end of one second.

The Amiga may be in the middle of a sound cycle when this happens, and the sound will not turn off smoothly. The sound starts and ends smoothly only when the sound is at the beginning or end of a sound cycle, and the current sample is zero.

The system software can detect the generated interrupt, and can be used to turn the sound channel off when the sound cycle is finished, or when the correct number of sound cycles has been completed. The system can inform us when this has happened, and when there is no more sound queuing up for the channel.

This leaves the program free to concentrate on other things, and I will demonstrate this technique in the next Programming.

The program

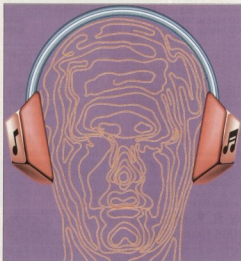
The two programs, `sound2.a` and `sound2.c` are almost identical – one (`sound2.c`) is compiled from C source code, and the other (`sound2.a`) is assembled from assembler source code.

Each program opens the DOS library and allocates chip memory for the sound data. The sound data is copied into chip memory. The sound channel 0 DMA is disabled each time adjustments are made and the parameters for `AudChannel[0]` are altered.

A sound is created based on the sine wave data, with a pitch of middle C. Similar sounds are made with the same samples, and each sound is pitched one semitone higher than the last one. A higher octave is produced using the same series of period values, but using the `waveform_oct2` samples. These samples are constructed from the original by using only alternate samples.

Samples for a third octave are created by only using one in four of the original samples. The program releases the memory, closes the library, and exits gracefully.

COMING SOON: My next two Programming pages will involve sound channel control using a MessagePort, and simple music. Both C and Assembler will be supported.





Be An X-CAD Pro !!!

By Using X-CAD SYMBOL LIBRARIES from COMPUTECH SERVICES.

- ☐ ARCHITECTURAL ☐ HYDRAULIC ☐ ELECTRICAL
☐ ENGINEERING ☐ COMPLETE X-CAD SYSTEMS based on A2000 and A3000
☐ ALL X-CAD PRODUCTS, PROGRAMS & PERIPHERALS



Before you try anyone else ring us for the best price!!

Currently 48 library disks available. We are constantly adding to the libraries. In addition we also sell X-Cad programs, products and peripherals including the latest Imagine 3D Rendering Package. Why not upgrade your current X-Cad system with a digitising tablet Pod Scat P.T. 30/30 or Cherry A.3.

For details write or phone:

Computech Services, 87 Victor Gardens, Hawkwell, Hockley, Essex SS5 4DY. Tel: (0702) 206165 or 523966

Please enquire about range of Sega Consul and Games

BUILD YOUR OWN ROBOT

NEW AMIGA INPUT/OUTPUT PORT £26.95

Now you can use your Amiga to control electric motors, sensors, anything.

- * Cheapest I/O port available.
- * 8 outputs, up to 13 inputs.
- * Includes full instructions.



AMIGA VERSION
JUST ARRIVED

"I used it to control a time lapse cine camera . . . so simple to operate from a basic program" G.R. Turner.

AMAZING SENSOR & CONTROL EXPERIMENTS KIT £24.95

SPECIAL OFFER £5 OFF if purchased with I/O Port.

6 Electronic projects which plug into the I/O port. No soldering required. Includes software and FREE "Guide to Amiga Interfacing". Projects include motor, light bulb, relay & much more.

Please send cheque payable to Switchcraft or ring 0325 464423

Prices include P & P. Overseas add £5

If not satisfied, return within 30 days for refund.
SWITCHCRAFT Dept ACC262, 26 Ridgeway, Darlington, Co. Durham DL3 0SF



A500's ★ FIXED PRICE REPAIRS ★ ST's

£49.95

Includes Parts, Labour, Full Service & Next Day Courier Delivery.
24 Hour Turnaround, 6 Month Warranty
Free Software (Limited Offer)

Should Disc Drive or Keyboard Require Replacing, Extra Amount Payable

ST Power Supply Repair/Exchange £25.00

Repairs to Printers, Monitors & Most Home Computers
£15.00 per Hour Plus Parts & Carriage

Collection Service £15.00 Extra - 20% Dealer Discount

All Repairs Accepted Subject to Our Terms of Trade

GJS COMPUTER SERVICES

37 Bamford Street, Clayton, Manchester, M11 4FE

(Callers welcome by appointment only)

Tel: 061 231 6608 Fax: 061 223 7931

ASTROLOGY

TEACH YOURSELF with our STARTER PACK

Comprises a simple program to calculate a horoscope, an introductory booklet & 2 self-teaching programs (how to interpret the horoscope).

Only £12.50 - No previous knowledge required
Payment by Access/Visa, Cheque, etc.

Or send for free catalogue of our wide range of programs for PROFESSIONAL ASTROLOGERS isae (36p - about 9" x 7").

Progression, transits, harmonics, midpoints, etc.

Superb graphics, 5000 year ephemeris, etc (from £25).

Also GRAPHOLOGY, NUMEROLOGY, etc

ASTROCALC

(DEPT AMC), 67 Peascroft Road, Hemel Hempstead, Herts, HP3 8ER, England. Tel/Fax: 0442 251809

AUTHORISED DEALER FOR ★ AMIGA ★ STAR ★

AMIGA (UK MODELS ONLY)

Amiga 1500 with Twin Floppies + Software. PHONE 148.00
Supra 8Mb RAM Board Pkg 2Mb 219/289/350
Supra 8Mb RAM Board Pkg 4Mb 369.00
A500P Carton Classics 1Mb Pack

PRINTERS

Citizen 1202n (Commodore 64 version available) 135.00
Star LC-20 135.00
Star LC-200 Colour 195.00
Star LC24-10 179.00
Star LC24-200 219.00
Star LC24-200 Colour 269.00
Star XBR24-200 24 pin Colour 399.33
Star Laser Printer 4 751.83
Star Laser Printer 4 Postscript 1086.88
Omatec 30 Ribbons/Heads/Paper PHONE

MONITORS

Commodore 1084S Stereo Colour 249.00
Philips 8633 B + F19 Stealth & On-site Maintenance 249.00

MICROBOTICS 68030 ACCELERATORS

VXL 30 25MHz With/Without 25MHz 68882 CPU 269/399
VXL 30 40MHz With/Without 25MHz 68882 CPU 399/539

DISK DRIVES

Rodite Super Slim Amiga Ext 3.5" (p&p £27.59.95)
A2000 Internal 3.5" (p&p £27.69.95)
A500 Replacement Internal 3.5" (p&p £27.59.95)

MISCELLANEOUS

Golden Image Opto-Mechanical Mouse (p&p £1) 19.95
KCS PC Board for A200 rev. MS2002 4.01 (p&p £2) 189.00
Roditec A500 512K RAM Clock + Disable SW & Lead (FREE p&p) 29.95
RAM Chips for A500/2051 per Megabyte (FREE p&p) 35.00
Kodistart V1.3 ROM for A500/2050 (FREE p&p) 29.00
1Mb Fat Agnus 8372A (FREE p&p) 55.00
CIA Chip 8520 (FREE p&p) 16.00

ALL PRICES INCLUDE 17.5% VAT. CARRIAGE IS (EXPRESS £10)
Prices subject to change without notice & OE

Bargain Buys for Amigas

Supra WordSync 2000 Drives

52Mb Quantum LPS 11mS with 64Kb Cache £279
105Mb Quantum LPS 11mS with 64Kb Cache £429

Amiga 500 Hard Drives

GVP Series II HD8+ 52Mb (11mS) £379
SupraDrive 500RX 52Mb (11mS) £329

(Both drives may be fitted with up to 8Mb RAM)

ICD Internal 52Mb Quantum LPS £299

ICD Internal 105Mb Quantum LPS £459
(Replaces d10. External drive becomes d10)

Interquid Capacitance Monitor £329

0.28mm Dot Pitch Max Res 1024 x 768

Ideal for New A500 PLUS (No F/Fix Req.)

Flicker Fixers: Microway £135 Commodore A2320 £219

SupraRAM 500RX RAM for A500/A500+

2Mb £159 4Mb £249 8Mb £429
(Provides Pass-Thru connector)

Delta Pi Software Ltd

8 Ruswarp Lane, WHITBY, N. Yorks YO21 1ND

TEL/FAX: 0947 600065 (9am - 7pm)



Amiga music in '91

The longest running story of the past year has to be the demise of the long-suffering sequencing package MusicX. Claims and counter-claims bounced across the Atlantic either proclaiming the continuing health of the Amiga's musical monarch or swearing that the king was dead and the truth was being withheld from the people.

In reality, the latter is more accurate. The Amiga's musical messiah has indeed bitten the big one. Even though Micro Illusions are keeping tight-lipped about its untimely end, it is official that the development team has been disbanded.

As any developer will tell you, once the support team are in the bin the software can't be far behind. The real shame about the MusicX story is that if supported by either modules or upgrades the package could still be ruling the roost, not by being the best, but simply via the huge user base it captured in the early days.

Pretenders to the throne

As MusicX drew its final breath, the software vultures wasted no time in grasping their chance. At the forefront of the feeding frenzy were Zone Distribution. They wasted no time and went straight for the throat with their latest version 1.3 of KCS.

Not content to pick the bones of MusicX,

The last year has been an interesting one for the Amiga. Paul Austin looks back at some of the highs and lows and glimpses at what awaits in '92

they're offering across the board reductions on all of the Amiga's sequencing packages, defunct or otherwise. If you're willing to trade in an old version of KCS, MusicX, Sequencer1, Bars and Pipes, Pro 24 or in fact any serious package, Zone will give reductions that in certain cases reach triple figures.

The new age

While we wipe a tear in loving memory of programs of the past, let's console ourselves with what's coming in the new year. The most notable forthcoming event has to be the imminent UK release of the new Sunrise Industries sound card collection.

Like Bars and Pipes Pro, the two Sunrise cards have been on the press release circuit for some time, but at last they've arrived in Europe. As a result you can rest assured that AC will bring you the definitive review as soon as the postman delivers.

The hardware comes in either 12- or 16-bit format. The 12-bit version is aimed squarely at DTV, while its bigger brother takes on the big boys in the CD quality studio market.

As you can imagine, even 16 megabytes of a fully configured A3000 doesn't go too far when you're configured with hardware that can operate at rates of up to 100kHz. As a result, all the information is written direct to hard disk and read back as the sample plays.

Now we in the Amiga world can benefit from

Cheap and cheerful

For the vast majority of users, the prospect of shelling out £200 plus isn't exactly a daily event. As a result, the rise and fall of power packages isn't really earth-shattering news. On the other hand, a brand new sampler or perhaps the latest in editing software is far more interesting. For the low-down on the samplers, dig out the October issue of AC, and if you're after what I consider to be the premier editing program within its glossy folds you'll find Audition4 - a must for serious samplers.

the sound quality that both the ST and Apple Mac have enjoyed for some time. Both boards come with their very own control software and, of course, are compatible with SMPTE timecode.

The only worrying point is whether the boards will work with a stereo signal. Initial reports suggest that the 12-bit board is mono only. If this also applies to the 16-bit version, its studio potential may well be seriously impaired.

A spokesman from Sunrise assured me that both boards will be winning their way across the Atlantic within two weeks, so I should be able to give the answer to this question, and no doubt countless others, in the next issue of AC. Watch this space...

Rising stars

The year started promisingly, thanks primarily to Gajits Music Software's release of Sequencer1. Although considerably underpowered in comparison to the likes of KCS and Bars and Pipes Pro, it did, and still does, fill a niche in the market.

For those Amiga musos who want to get their creations onto disk without the fiddling and complexity of the power programs, it's ideal. Unfortunately, the initial promise of upgrades and further enhancements has not yet been honoured, even though version two of the software was promised before the end of the year.

In defence of Gajits, they have released other products such as the latest version of The Hit Kit composition software which allows you to take the Lego approach to song construction, by building entire songs from a variety of component parts.

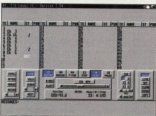
The original version was bundled with Sequencer1 but, no doubt due to its popularity, version two is now sold as a product in its own right, retailing at around £30.

Their second, and latest, release is a series of high quality box set samples which give you access to the sounds of high price synths which can then be used in any Soundtracker clone.

As MusicX suffered its lingering death, Bars and Pipes Pro had the opposite problem. Although widely available in the States, its European releases has been rumoured and argued over for the last six months.

At last it has finally arrived thanks to Zone Distribution, a company which is slowly beginning to dominate the Amiga music scene. For more details on B&P Pro catch the excellent review elsewhere in the mag, plug... plug...

Well, that's about all for this month. Next month's column will feature the Sunrise selection, plus all the news from the world of Amiga music.



3 1/2" DISKS
BENCHMARK
BRAND DS/DD

25	50	100
£17.00	£29.00	£43.00
200	500	1000
£78.00	£168.00	£319.00

3 1/2" DISKS
UNBRANDED
DS/DD

25	50	100
£11.50	£19.50	£37.00
200	500	1000
£68.50	£158.50	£308.50

Special Offer 3 1/2" DS/DD ex Western Digital VGA Drivers all brand new but have been formatted & labelled. Available in Black or IBM Grey.

Price \$25.00 per 100 inc new label, only 10,000 available.

'Don't miss this one'. First come first served

DISK STORAGE BOXES

3 1/2" 10 capacity Qty 5	£4.50
3 1/2" 50 cap Lockable	£3.70
3 1/2" 100 cap Lockable	£4.70
3 1/2" 240 cap stackable	£15.00

THESE PRICES ONLY IF BOUGHT WITH DISKS

M
C
S

ALL PRICES INCLUDE VAT & P&P UK ORDERS ONLY

Cheques and

24 HOUR ORDERLINE 0897 851 784

Manor Court Supplies Ltd

Telephone: 0597 851 792 Fax No: 0597 851 416

C2, Glen Celyn House, Penybont, Llandrindod Wells, Powys, LD1 5SY.

EDUCATION AND GOVERNMENT ORDERS WELCOME

ALL DISKS 100% CERTIFIED ERROR FREE

[illegible]

Reading between the lines

Last month I looked at the Fido mail points, which is the most efficient way of handling large amounts of messages. This month, because several of you asked about it, I'm investigating offline mail readers.

OLRs allow you to use a BBS as normal for file up/downloading, but mail is received as a compressed packet to be digested offline. The next time you log on, you can upload your replies in one shot, without having to wander through all the mail areas.

The main reason for using an OLR is time saving. Cutting your online time not only saves you money, but it allows more users to access the BBS. Additionally, composing messages offline is considerably less stressful than hammering away as the phone bill tots up. Offline messages tend to be neat and, for the most part, intelligible. In short, OLRs are a good idea.

This being real life, there is a snag. Not every bulletin board supports OLRs – most do these days. The main problem is that there are quite a few different file formats for mail packages, depending on the bulletin board. There are at least four different mail formats, and of course they are all incompatible.

The board I use, Alba Maximus (041-880 7863, v22bis, 24 hours), supports several offline reader file formats. Most importantly, it will read and write the QWK Quick Mail format, which is supported by a couple of Amiga OLRs, Amiga-Reader and MessageView.

Setting up an OLR is easy – it's meant to be, in order to encourage users to install them. After dearchiving the program to get it into a runnable state, you may have to create a few directories and make a couple of Assigns, as noted in the documentation.

You'll also have to dig out a selection of dearchiving tools, for some boards offer very few methods of archiving your mail. The most disastrous option is a board which only offers Zip archiving – the Amiga Zip program is very

An offline mail reader can save you money and improve your image! Stewart C Russell is our man with the impeccably-constructed messages

large and doesn't accept command line parameters. More enlightened boards – such as Alba Maximus – will offer Lharc or LHA archives, both of which can be handled by the excellent LZ 1.92 program from Jonathan Forbes. Steer clear of ARJ – although it gives better compression than LHA, there is only a decompress routine for it at time of writing.

Now log on to your board in the usual way, and select the offline reader option from the main menu. The first session will take a while, since you have to tell the BBS the settings you intend to use. These include download protocol, archive method, and of course the mail areas you want to look at.

After that, the mail program will wander off collecting your messages, and then will proceed to archive them. Here you hope that the machine at the other end is quite fast, since file compression can be slow. Alba Maximus runs on a fairly nippy PC, so even LHA compression is done in seconds.

Auto Z-Modem download (as featured in NComm and JR-Comm) is very useful here, as most mailers can be set to send the mail packet, then automatically logoff. Maybe it's just me, but I never feel happy leaving an auto-logoff session to its own devices, for I'm sure the download will fail, or somehow be re-routed via Chiguayante, Chile.

The difficult bit's done. Just point your OLR at the mail archive, and let it grind at it until something sensible appears. Have a browse, reply to a few with your favourite editor, create some messages – take your time, enjoy modern automatic mail reading at its best. Once you're done, let the

program create and archive the mail reply packet, ready for your next call. The best place to look for OLRs is an Amiga-specific board, mainly because they tend to be better cued up on the Amiga's needs than PC-based systems.

I tried both Amiga-Reader and MessageView – both were adequate, but Reader is small and difficult, while MV is huge (over 200K!) and is limited to two message areas in its evaluation release. Other readers for different systems include Bundle OLR and AmigaXRS, both very capable programs for their respective systems.

Ask other users of your local board if they use an OLR – failing that, the sysop should know of one. If that doesn't turn one up, have a dig on Amiga Information (details later) or one of the other large boards. Failing that, you could always ask in the AMIGA UK echo, where someone will definitely know where to look.

Rip off!

To close, I thought I'd just mention something that made me mad. Not so long ago, an advertisement went round some of the UK Fido echoes for a BBS which has (and I quote) "...100 MEGS OF FILES FOR 'YOU' ... FULL MESSAGING FACILITIES FOR 'YOU'".

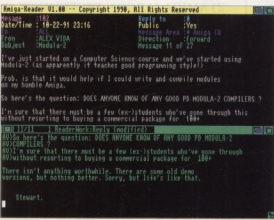
That's not unusual. What was strange and worrying was the phone number, which was phrased something like this: 08 3936 XXXX. Odd number that – bet you're wondering where that one is. Rearrange it, and you get 0839 36XXXX; that's right, a 36p/48p per minute "nice little earner" line.

What really flames me off is that the sysop was trying to make out that the board was especially big, with wonderful messaging services. An 100 meg file area is virtually de rigueur these days, and most boards support private Matrix mail at minimal cost.

If you don't believe me, look up Nick Lello's Amiga Information (0444-441308, HST 24 hours). Nick imports and exports files via the ADS network, a global distribution system for Amiga BBS sysops. Offline reading is supported (via Bundle2) and all the usual mail facilities are there.

Nick and the rest of the sysop breed are the true salt of the earth, giving time and money for an exceptionally generous hobby. Don't let the money-grabbers corrupt the BBS spirit!

Stewart C Russell can be contacted on CIX as scruss, or is available at FidoNet 2:259/2.4 (off Alba Maximus, Glasgow).





A GENIUS FOR ATARI/AMIGA VISION!



Genius Flatbed Color Scanner for AMIGA/ATARI

16.7 million colors can read full color, gray scale, and B/W modes. The fastest scanning speed in full color mode is 90 sec. for A4 size images, SCSI built in to the interface.

Genius Hand-scanner for AMIGA/ATARI (Gray Scale and B/W)

Makes you stand apart from the DTP crowd. With true 256 gray scale, you don't have to be a professional to create high quality graphics.

Genius Triple Mouse for AMIGA, ATARI ST AND AMSTRAD PC 1640

With a DPI of 350, the TRIPLE Mouse increases your productivity in desktop publishing, spreadsheets, and graphic applications.

Genius Tablet for AMIGA/ATARI

9" x 6", 12" x 12", and 18" x 12". No matter if you're a student or a professional user, the Genius range of tablets can meet your needs.



**KUN YING ENTERPRISE
CO., LTD.**

4Fl., No. 146, Sung Chiang Road. Taipei, Taiwan, R.O.C.
Tel: 886-2-5651394 Fax: 886-2-5619658

More on style

Last month we dealt with the Tag Name and Paragraph sections of Professional Page's Define New Style Tag requester – this month we'll deal with the rest of it.

We can skip over the gadgets for colour, font and size because they are self-explanatory. The three line spacing buttons, however, need explanation.

If you choose fixed line spacing, then the distance you enter (in points) will be the space between the baselines of your text, no matter what the point size is. So if your text is 12pt text and specify six points of fixed line spacing, each line of text will overlay the line above it by six points, making it totally unreadable. To get two points of white space between each line you would have to enter 14 as your fixed line spacing distance.

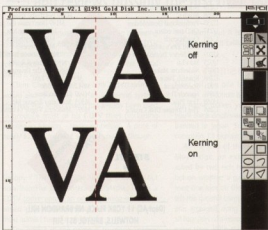
Relative line spacing is the best way to ensure that the space between lines of text is a large enough to make text of that point size readable. It defaults to 120 per cent, so if your text is in 10pt the space between baselines is set to 12pt, and if your text is 15pt the space between baselines is set to 18pt. In general, the larger the point size, the more space is required between lines for good readability, so relative line spacing automates this design decision.

Leading is the amount of white space between the bottom of one line and the top of the line below it. In theory, a distance of zero points of leading – a technique known as "setting solid" – means that the descenders of the line above will touch the ascenders of the line below.

In practice, typefaces are generally designed with a small amount of white space below descenders so you can set your text solid and get away with it – many newspapers do this because it gives the page a "busy" look.

As suggested by the default relative line spacing figure, a leading distance of 20 per cent more than the point size of the text is generally the best distance for good readability – 15pt text with 1pt of leading will look cramped and sometimes cause readers to begin to read the same line twice, while 10pt text with 5pt of leading will

Ben Pointer continues his tour of Professional Page tags



Kerning is something you will almost always want switched on. Notice how the A tucks itself neatly under the V.

be too spaced out causing readers to pause at the end of every line while their eyes and brains travel to the beginning of the next.

So the three line spacing buttons are just three different ways of doing the same thing. Choose whichever one you feel most comfortable with, and stick to it.

In the middle of the requester is the Justify button. This has two settings – on or off. It's impossible to have no justification, so don't fall into the mistake of thinking that this is what "off" means. It doesn't. It means that the style of justification for the text will be copied from the text that directly precedes the text that is being tagged – no change in justification, in other words. If this confuses you, simply switch justification on and click the style of your choice – that way no accidents can happen.

Over to the right of the requester is a column of eight buttons separated into two groups of four. The top two buttons, Tracking and Baseline Shift, are simple on/off toggles and have associated string gadgets into which you enter the amounts of each.

Tracking is specified in hundredths of an em (one em is simply the

width of a lower case "m" in that font) and you can enter a negative number if you like – useful with large point sizes. Baseline Shift is entered in points – a positive number moves the baseline up, a negative number moves it down.

As with the Justify button, if Tracking and Baseline Shift are turned off then the settings are copied from those of the text directly preceding the tagged text.

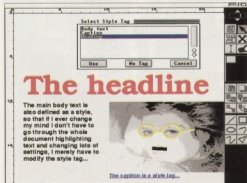
The next two buttons, Kerning and Hyphenation, have three settings – a black square in the button means it is turned on, a cross through the square means it is turned off, an empty white square means no change (that is, copy the settings from the text preceding the tagged text).

Kerning is the feature whereby certain pairs of characters fit snugly together. For instance, in the character pair VA the left-hand upright of the A fits itself neatly into the space created by the right-hand upright of the V.

On the whole kerning is deeply desirable and you should always have this switched on unless you have increased the tracking of some text, in which case trying to kern pairs of characters is pointless. On the other hand, hyphenation is not desirable – from a readability point of view, at least.

The last four buttons are text format toggles – on, off and no change. I advise you to set them to exactly what you want, on or off in other words, otherwise you might find a bold or italic style being carried forward from the preceding text.

Well, that just about wraps up Professional Page style tags. Spend some hours experimenting with all the features – from a design and time point of view, using them is really worthwhile.



The caption in a style tag...



STRICTLY pd

THE FINEST
PUBLIC
DOMAIN
SOFTWARE

Dept AC, 11 YORK PLACE, NR BRANDON HILL, HOTWELLS, BRISTOL BS1 5UT

Pick up your New Year goodies at Bargain Basement Prices

demos

- D434 Black Adder II Samples
- D422 Blind Date Demo
- D519 Bloodsport
- D443 Doctor Who Slideshow
- D317 Evil Dead - Sight and Sound (2 Disks)
- D410 Farts & Belches
- D329 Girls Girls Girls
- D314 Girls on Film X
- D416 Gorgeous Models 2
- D442 Gulf War Slides
- D224 Horror Demos
- D320 Horror Show X
- D488 Mr Potato Head In The Chips Are Up
- D316 Mirth Whisker Anim
- D129 Maria Whisker Slideshow
- D313 Paradise Picture Show X
- D436 PD Animations
- D315 Perverse Slideshow
- D415 Pretty Girls
- D435 Rambo Slides
- D305 Rowan Atkinson
- D303 Saucy Postcards X
- D328 Showering Girls X
- D369 Simpsons Slideshow
- D089 Star Trek Animation
- D121 Star Trek Animation
- D419 Star Trek Mega Demo (2 Disks - 2 Drives 1Mb)
- D112 Stealthy 2
- D321 Strip Slot Machine X
- D444 Terminator II Slideshow
- D214 Twin Peaks
- D445 Vic Reeves
- D451 Virtual Worlds
- D213 Walker v Amy Anim (1Mb)
- D414 Warzone/Sickness Simulator (1Mb)

utilities

- U285 Agatron Utilities
- U072 Agene (1 Meg) Family Tree
- U065 Amigaizer
- U071 Biorhythms (1 Meg)
- U227 Bootbench
- U054 Business Card-Maker
- U079 CAD V
- U059 Carlson Brushes
- U073 CLight
- U289 Communications Disk
- U049 Countach Art Collection (3 disks)
- U292 Database Master
- U211 Digitised sample player
- U056 DTP clip art (2 disks)
- U042 Education 1 - German
- U089 Flexbase v2.0
- U241 Font Logos
- U128 Fractal Scapes
- U051 Future Composer
- U264 Ghost Writer
- U115 Graphic Utils (2 disks)
- U226 Home Business Pack: W/Processor, Spreadsheet, Database (3 disks)
- U233 Icons
- U014 Intromaker
- U096 Label Printer
- U230 Mac clip art
- U017 Mamel mountains
- U066 Mandelbrot Explorer
- U212 Mandelbrot Generator
- U050 Messy Dots

- U214 Mobed v1.0
- U216 Noise Player v3.0
- U058 North C
- U237 Professional DemoMaker
- U217 QED text editor
- U295 Quickbench
- U081 Rabid Rita's utilities
- U209 Red Sector DemoMaker
- U025 Sid v1.6
- U070 Slideshow Maker
- U288 Spanish Trak
- U221 Spectrapaint
- U084 Speech Toy
- U038 Text Plus
- U265 The Ultimate Disk Creator

- M105 Another day in paradise
- M092 Betty Boo
- M200 Bomb the Bass
- M140 Don't miss the party line
- M406 Ennema Mix
- M203 Eurythmics
- M015 Genesis
- M096 Groove Is In The Heart
- M301 Guns & Roses
- M098 Hear the Drummer
- M310 Joe Le Taxi
- M042 Kim Wilde
- M100 London Beat
- M303 Madonna Rescue Me
- M097 Madonna Vogue (4 disks)

- G079 Bullrun
- G039 Breakout
- G077 Cave Runner
- G288 Chainsaw Death
- G006 Colossus
- G008 Eatin'
- G069 Escape from Jowi
- G051 Frantic Freddie
- G012 Gravattack
- G206 Killing Game Show
- G266 Lady Bug
- G307 Leading Larry
- G059 Marathon Mine
- G057 Marble Slide
- G095 Mayhem
- G276 Megaball
- G017 Megagames (2 disks)
- G215 Megagames (4 disks)
- G270 Mental Image Gamepack
- G040 Monopoly
- G019 Pacman
- G500 Pool (+)
- G305 Popeye Game
- G086 Property Market
- G065 Quizmaster
- G088 Rings of Zon (1 Meg)
- G321 Scum Haters
- G292 Sealance
- G217 Shapes
- G060 Snakepit
- G220 Star Trek (3 disks, 2 drives 1 meg)
- G279 The Simpsons
- G041 Trek Trivia
- G273 Trucks! On (2 disks)
- G064 US Star Trek (2 disks, 1 meg)
- G323 Nebuch
- G268 Wheel of Fortune
- G272 Wizzy's Quest
- G314 Wondersoft Games Pack
- G322 Wooden Ball
- G324 Pick Up a Puzzle (2 disks)
- G328 Qbert
- G329 Cabaret Asteroids
- G330 Ballonally
- G331 Demolition Mission
- G332 Crossfire
- G333 The Next Generation
- G335 Ultimate Platform Games
- G337 Insider Club
- G339 Games Bonanza (22 games)
- G340 Zeus
- G341 Napoleonic Wargame
- G342 Downhill Challenge
- G343 Pom Pom Gunner
- G344 Llama Collection
- G345 Short End Up Pack
- G347 Super Quiz
- G346 Ate Attack

GAMES GALORE VOLS 1-8
MEGA GAMES VOLS 1-6

(Dept AC) 11 YORK PLACE, NR BRANDON HILL,
HOTWELLS, BRISTOL BS1 5UT

- ☛ Cheques/P.O's payable to STRICTLY PD
- ☛ Buy 30 or more disks for just 75p each
- ☛ Over 21 disks ONLY 85p EACH
- ☛ Take the 11+... only 99p per disk when you order 11 or more!
- ☛ For orders of less than 10 disks, pay just £1.25 per disk, plus 70p post and packing (Overseas orders add 25p/disk for Europe; Rest of the World add 50p/disk)
- ☛ Catalogue disk available only £1

- U094 Uedit
- U284 Via Clipart
- U082 Voices
- U266 Wordwright
- U061 Wordbench Fun
- U297 Sound Workshop
- U299 Scene Generator
- U300 Vector Designer
- U042 Wild Collection
- U303 Messydis
- U304 Programming Languages
- U305 Word Frezzy
- U306 Golf Recorder
- U308 AMOS Paint
- U310 Paint Spool
- U281 Med v3.1
- U312 Mandelbrot
- U313 Aquarium
- U286 House Sampler 2
- U287 House Sampler 3
- U296 Hamlab

- M304 Me Hammer Cant touch this
- M018 Miami Vice Remix
- M302 Money for Nothing
- M259 Pet Shop Boys (2 disks)
- M307 Poison Sample
- M258 Popstar Selection
- M091 Queen Flash (2 disks)
- M102 Synergy Youngblood
- M094 Technostonic
- M124 The Power remix (1 Meg)
- M031 The Wall
- M097 Vogue (4 disks)
- M032 Walk this way
- M123 What Time is Love
- M317 Charley
- M318 Ush Sains

music

- M061 808 State remixes
- M308 Alice Cooper/Star Trek

Games

- G058 2-player Soccer League
- G278 Air Ace II
- G102 Airwar
- G082 Antiriot (1 Meg)
- G075 Autodesk 3D00
- G205 Back to the Future

We now have
FRED FISH 1-560

We now have
T-BAG 1-58

Order TRANSCRIPT - probably
the best licenceware
wordprocessor around
ONLY £2.00

Send £1.00 now for our superb
catalogue. There is a demo of
the great new D-Paint IV as
well as a game, a CLI help file
and reviews of well over 1,000
PD Disks

Art or pornography?

More CDTV add-ons are now available. Commodore are producing a black keyboard for CDTV (£49.95), a remote trackball (£69.95) with keypad and a cordless infra red mouse (£49.95). These should be available from all CDTV dealers by the time you read this.

Announced but not yet available are the new AVM (Advanced Video Mode) card and the hard disk options.

The AVM card is a CDTV version of the DCTV (not to be confused) add-on for the Amiga which gives 24-bit television quality graphics on the CDTV. The price has not been finalised, but is expected to be under £50.

The hard disk options include the 20 to 100Mb internal drives I reported on last month, and a standard SCSI interface card for external drives. These are only available to developers at the moment - I have one and it works very well - but Commodore say they will probably be selling them to the public eventually.

The CDTV will soon have more support in the authoring system department. Authoring systems, if you don't already know, are multimedia packages that allow people with little or no programming knowledge to put together applications for CDTV. This means faster, easier and eventually cheaper CDTV titles for everyone.

Digital Vision, publishers of InfoChannel and the excellent Scala package have announced Scala for CDTV. This will allow people to produce simple CDTV applications very quickly, and if it is as easy to use as the original Scala, everyone should be able to use it.

Mandarin Software are producing a version of AMOS for CDTV programmers. While AMOS is a

Jolyon Ralph rounds up the latest CDTV offerings, and reviews possibly the first over 18's disk

programming language rather than an authoring system, it is so easy to use that many CDTV developers (including myself) are using it. With full support for CDTV features like 16-bit digital sound it will be excellent.

Clem Chambers at On-Line Entertainment would also like to sell you an authoring system. His Desk Top Video system has already been used to produce most of his CDTV titles (including Women in Motion - reviewed below). A price of nearly £2,000 may put some of you off, though.

Snoopy

Snoopy - The Case of the Missing Blanket is out now from The Edge Interactive Media. This is a CDTV conversion of an original Amiga game. It is aimed at children from four years up, although I must admit I found it quite fun.

The object of the game is to move Snoopy around and find various objects that will help him complete his task, which in this case is finding Linus' blanket, which has been lost. It is the usual sort of run around and collect things type of game, although I use the term "run" loosely, as Snoopy moves tediously slowly.

I found it annoying, but my eight-year-old brother who was testing the game with me didn't mind it too much. The puzzles are not too difficult (although my brother did get so frustrated that he threw the remote control across

the room), but it is still fun. Overall we liked Snoopy. It's not brilliant, but it's quite fun.

Women in Motion

Next off the pile is the suspiciously named Women in Motion by On-Line Entertainment. If the name makes you think "hmmmm" then you'll think doubly so when you hear that it was banned in Japan. So before you all write in to complain, I'll explain a bit more.

At the end of the 19th century, Eadweard Muybridge, an expert in photography, was asked by two rich horse enthusiasts to settle a bet on whether a galloping horse always had at least one foot on the ground, or whether it ever left the ground completely. With a string of cameras arranged along a race track he proved that all four feet of a horse do leave the ground at the same time. With this he invented moving photography and the cinema.

During his later work he spent time photographing nude women in motion (hmmmm...). His pioneering work in documenting human movement was vital to the work of animators like Walt Disney, and is a standard text for art students.

Now, with all his work on CDTV, his pictures can be viewed frame-by-frame, or as an animation. The files are all stored as IFF pictures and anims which can be loaded into Deluxe Paint III or similar programs - assuming you can transfer the files from your CDTV to your Amiga.

The user interface isn't brilliant - you have to move a mouse pointer around the screen with the remote control keys. It's usable, but it could have been a lot better, and it seems to spend a large amount of time loading files.

It's interesting to see titles like this on the market. No doubt some people will buy the disk for the women rather than the motion, but art students in particular will find this very useful.

Eadweard Muybridge's Women in Motion



By Michael Hodges
Clement Chambers
Adrian Turner

START

HOUSING...



SUBSCRIBE TO

AMIGA
COMPUTING

Every month of the year *Amiga Computing* brings you the best news, reviews, features and games coverage.

As an *Amiga Computing* subscriber you could have this complete editorial package delivered direct to your door every month for no extra charge.

Whether you take your computing seriously or prefer to play the best games, there has never been a better time to subscribe!

Take a look at the six unbelievable offers opposite.

Subscribe TODAY for as little as £19.95 and take your pick!... the choice is yours, and remember – these offers are **ONLY** available to subscribers.

IT MAKES SENSE TO SIGN UP!

- **EVERY** issue delivered to your home at no extra charge
- **FREE** Coverdisks packed with quality software
- **GREAT** money saving reader offers
- **FREE** Amiga Gamer supplement with the hottest games
- **FACT-PACKED** pages covering every aspect of the Amiga
- **ALL** this and much much more starts from as little as £19.95

**T
A
K
E

Y
O
U
R

P
I
C
K**



3 FREE GAMES

Not just one, but three classic games from Infogrames when you subscribe to *Amiga Computing* – The Light Corridor, Murders in Space and Mystical

OFFER A
WORTH £60!

SAVE £25

OFFER B

GRAVIS JOYSTICK

This "Rolls-Royce" of joysticks is available in black. It features an 8-position tension control, foam padded grip, six-foot connector cable and microswitched fire buttons.



FOR UNDER £20!

**PLUS
SELECT A FREE GIFT
WORTH UP TO
£60!**

SAVE £33

OFFER D

AMOS The Creator

AMOS is the definitive language for the Amiga. Creating graphics, text, sound and much more is simplicity itself. Over 40,000 users already know the benefits of using AMOS and you can join them at an incredibly low price when you subscribe to *Amiga Computing*.

BLUES BROTHERS

Now you can get rocking and bopping with the Blues Brothers by Titus.

You just can't afford to miss 5 levels of fast and frantic platform fun! With a brilliant soundtrack and great graphics, Blues Brothers is a classic.

OFFER C
WORTH £25.99

FREE BINDER

OFFER F

2 FREE ISSUES & BINDER

Subscribe and we will send you a high quality Amiga Computing binder completely free.

Plus you will receive not only a binder but also Amiga Computing for an extra two months. That's 14 fact-packed issues in all!

AMOS 3D

Generate outstanding 3D effects as seen in many software classics like Elite and

Starglider II. You can create complex objects using building blocks which you can stretch, rotate, resize and glue together. You'll soon be creating your very own 3D world.

• Note: This software cannot be used without Amos The Creator.

OFFER E
SAVE £26

SUBSCRIPTION ORDER FORM (including FREE monthly disk)

Please tick the appropriate box

6 months' subscription - UK Only (including monthly cover disk)

UK only £19.95 New ☐ Renewal ☐

12 months' subscription (including monthly cover disk)

UK	£34.95	New	<input type="checkbox"/>	Renewal	<input type="checkbox"/>
Europe/Eire	£39.95	0908	<input type="checkbox"/>	0908	<input type="checkbox"/>
Rest of World	£54.95	0900	<input type="checkbox"/>	0901	<input type="checkbox"/>

MY CHOICE OF SPECIAL OFFER (UK subscribers ONLY)

OFFER A	Free	0909	OFFER D	£16.99	0917
OFFER B	£14.99	0908	OFFER E	£8.99	0919
OFFER C	Free	0909	OFFER F	Free	0920

Name Surname

Address

Postcode

Daytime telephone number in case of queries

Subscription orders received before January 21 will commence with the February issue

Payment: please indicate method (✓)

☐ Cheque/Eurocheque made payable to Europress Publications Ltd
☐ Access/Mastercard/Eurocard/Barclaycard/Visa/Connect
 Expiry Date

Send to: Europress Direct, FREEPOST, Ellesmere Port, South Wirral L65 3EB (No stamp needed if posted in UK)

**Order at any
time of the
day or night**

By phone: 051-357 1275

By fax: 051-357 2813

General queries: 051-357 2961

Don't forget to give your name, address and credit card number

To order see
form on
Page 167

AMIGA

COMPUTING

SUPER

The WORKSTATION is here!

It's no secret that the Amiga is the most powerful home computer of them all. What has remained a mystery for most newcomers is how to make the most of its immense potential. Now Amiga Computing has produced a floppy disk that is packed with everything you need to take the hassle out of harnessing the inbuilt power of your Amiga.

Many months of research and testing have resulted in a simple-to-use, single disk replacement for Commodore's Workbench which we're calling The WorkStation.

This indispensable collection of utilities, including some outstanding shareware never before assembled together on one disk, is now available for just £3.50.

It's too good to miss!

Putting prices to paper: The WorkStation disk includes a separate test edition. This powerful package has an unmatchably no-frills approach to producing and formatting professional looking text that would be envied by many of the more expensive commercial products.

The WorkStation has a fully configured dynamic removable disk drive which acts like an extra removable drive to your Amiga. It's a real improvement on the standard Amiga drive because it is very flexible and goes easy on memory.

Most of the WorkStation is a powerful shareware package which, when you get it, you can use free of charge to test drive the system. You can also purchase the full version, which gives you more than 100 unique graphics, tables, etc. etc. - all for the price of a small pizza.

Amiga's answer: there's the package price's been waiting for being nothing more than your Amiga drive. You can now have the choice to try the amazingly responsive mouse or the Amiga's keyboard. Grab yours from your favourite PC game and "let" drive high scores using any popular public package.

Get a better floppy? When you get it, you can use free of charge to test drive the system. You can also purchase the full version, which gives you more than 100 unique graphics, tables, etc. etc. - all for the price of a small pizza.

The ability to design custom icons and standard software icons to computers in the Amiga class. The WorkStation turns your Amiga into a computerized design studio, providing a wide range of graphic tools that can make icon creation child's play.

CODE	PRICE
9958	£3.50

STAR PRINTERS NEW

The very latest in 10" budget printers from Star offering excellent Near Letter Quality printing at a very low price. Compact and surprisingly versatile, the LC-20 will take the longest documents in its stride. Ideally suited to small business users as well as the enthusiast, the LC-20 is a natural successor to the best selling, award-winning LC-10.

Add £10 per printer for delivery

CODE	PRODUCT	PRICE
9839	Star LC20	£149.95
9840	Star LC200C	£205.95
9841	Star LC24-200C	£289.95
9845	Centronics Cable	£10.00

WHY LET YOUR FINANCES BE A WORRY? Personal Finance Manager FOR THE AMIGA

Personal Finance Manager provides an easy way of looking after your bank account, building society account, credit cards and so on. Its WORKBENCH interface allows transactions to be entered or altered as easily as filling out a form.

Full mouse control of PFM's window environment means a really user friendly program. PFM for the Amiga appears and runs exactly the same as our top selling PFM program for the Atari ST. Automatic Standing Orders means that regular payments are never forgotten. whilst the graphic display will help you manage your account more effectively. Personal Finance Manager will even attempt to match your statements by automatically identifying transactions that haven't yet been cleared.

- The number of entries is limited only by the size of the memory
- Full Workbench Interface
- Account entries are automatically placed in date order
- Selectable date formats
- Automatic standing orders
- Auto balancing against statement
- Graphic analysis including: Balance plot Budget comparison. Spend pie charts
- Windows are moveable and re-sizeable
- Graphics are self-scaling to fit windows
- All windows can be displayed at the same time
- Account print option
- Full multi tasking - allows multiple account access

MichIron

CODE	PRICE
9942	£24.95

VIDI-AMIGA

Thanks to a breakthrough by Rombo Productions in frame-grabbing technology, you can now produce good colour images quickly and cheaply with Vidi-Amiga and the VidiChrome colour software.

FULL PAL SCREENS

- Take snapshots in 16 shades live from video
- Multiple frame store
- Dynamic cut and paste
- Full palette control
- Hardware and software control of brightness and contrast
- Compatible with all video standards

*Also available - Vidi-RGB Colour Splitter. The splitter is an electronic filter which takes a colour video signal and separates it into the three primary colours, allowing each to be digitised. Replaces the need for a conventional filter set and ideal for use with Vidi-Amiga and VidiChrome Amiga's.



"Vidi must be one of the most exciting peripherals you can buy for your Amiga!"
Amiga Computing, March 1990

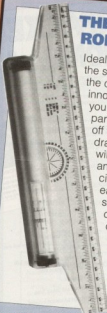


CODE	PRODUCT	PRICE
9891	Vidichrome plus col. upgrade	£119.95
9964	RGB Splitter	£61.95



BARGAIN OFFERS

THE AMAZING ROLLING RULER



Ideal for the house, the office, the school, the workshop or the drawing room, this innovative product allows you to draw vertical and parallel lines without lifting it off the paper. A complete drawing board in one, it will also let you draw any angles from 1 to 359 and circles and arcs with ease. Available in two sizes 22 cm (8") and 30 cm (12"), this great offer gets you **both** rulers for only £6.50 (RRP £9.95)

CODE	PRICE
9965	£6.50

RE-INK SPRAY

Save money and the environment with Re-ink, the revolutionary new spray which brings to life exhausted printer ribbons. Simple and cost effective, open up your ribbons cartridge, spray a few squirts of



Re-ink and the ribbon is as good as new if not better. Re-ink will save you up to 90% on ribbon costs,

give you cleaner, blacker print with no blotches and works for all fabric ribbons. Help reduce the 128 million ribbon throwaways each year and put an end to environmental waste.

CODE	PRICE
9998	£12.95

PLAY IT AGAIN WITH STEREO MASTER!



Stereo Master is the latest full feature STEREO sound sampler for the Amiga. This completely new hardware cartridge contains DUAL analogue to digital converters, ensuring the ultimate in 8-bit sample quality.

The system can record in high quality stereo from its twin phono input sockets, sampling anything from a portable CD player to live radio!

Stereo Master comes complete with powerful editing and special effects software which allows samples to be loaded in 8, 12 or even 16-bit resolutions.



CODE	PRICE
9814	£34.95

LEARNING CAN BE FUN!



A computer is an ideal teaching tool for young children if you have the right software.

Fun School 3 consists of colourful and exciting programs that have been carefully designed by a team of educationalists. The computer itself monitors the child's progress. The skill level - initially set by the parents - is automatically adjusted to suit the child's ability, so children can enjoy learning at their own pace.



With 3 age groups (under 5's, 5-7 years old and 7-11 years old) **Fun School 3** is the ideal way to introduce youngsters to the joys of using a computer.

CODE	PRODUCT	PRICE
9809	Under 5's	£17.95
9810	5-7 yrs	£17.95
9811	7-11 yrs	£17.95
9812	All 3 age groups	£44.95

HUGE PROFESSIONAL

A complete program for producing icons, sprites, brushes and bobs.



Features:

- Supported formats: Image (C & ASM), Sprite (C & ASM), Brush (ILBM), Bob (Amiga Basic) and icons (Workbench)
 - Full conversion ability between all supported formats
 - Icon editor built in, enabling full icon properties modification
 - Functional & user friendly interface, keyboard shortcuts
 - Complete user control over display mode & palette
 - Advanced drawing capabilities, including 6 drawing tools, flood fill & basic dithering technique
 - Font support, palette control & source code palette IO
 - Bitmap editor capabilities, including out/paste, mirror & rotator and 2 pages for drawing
 - Advanced zoom concept, featuring custom magnification trailer zoom & co-ordinates display
- Why use several utilities if one program can do it all?**

CODE	PRICE
9855	£17.95

POWERPACKER PROFESSIONAL v4.0

You can't pump up a disk, but with POWERPACKER you can compress its contents into less than two-thirds of the space otherwise required for storage - on a floppy disc or hard drive.

POWERPACKER uses sophisticated "crunching" algorithms to reduce the sizes of files, allowing an average of 40% more material to be stored on the medium of your choice.

POWERPACKER programs load, "auto-decrunch" and run.

POWERPACKER includes several heavily distributable utilities which access packed files at the click of an icon, so you can get full and quick use of them without decrunching.

PHORE A fully integrated screen text reader with options for string search and sending an on-screen image to a graphics printer.

PRAMP Place a crunched icon file. Tremendous savings possible for storing and playing your animations.

PPTYPE Formats a crunched text file to the printer, including pagination and perforation slips.

Plus DECRUNCH, a utility that restores files to original sizes.

POWERPACKER PROFESSIONAL © 1996 by Nico Pienkips

Features:

- Make your files 70% smaller! Crunch compact executable utilities and make your files to 70% smaller. With the help of the PHoreading utility, which you can install on your hard disk, you now can even crunch libraries and devices.
- Extra Powerpacker utilities
Phoread => Displays packed and files
Phoread => Displays packed FF pictures
Phoread => Displays packed animations
- Comes with 2 new libraries. Powerpacker and a new requester library with even more features and better menus.
- Crunchfactor even better than version 3.0b
- Detects Date or Command files.
- Full Access Support.
- Improved Menus and Colour Table
- Special Kickstart 2.0 version included

Distributed in the U.K. by **Database Direct**

CODE	PRICE
9838	£14.95



KILL DA VIRUS

A professional viruskiller that recognises more than 138 viruses.



Features:

- Three versions included from a title bar clock version through a custom screen 3D gadget version (KDV5).
- Brainfile which is being updated through PD channels and of course on Newsflash so you will always have an updated version.
- Store your bootblocks on disk so you can backup it when your bootblock is destroyed by a nasty boot virus (Saddam etc etc).
- Checks your memory and will kill any virus active to avoid further spreading on healthy disks. Any unknown bootblock will be analysed with a "learn" option so next time it can be identified.
- Userfriendly menus so easy to work with.
- Full support of Kickstart 2.0 and hard disks.

CODE	PRICE
9863	£14.95

POWERMENU V2.0

Features:

- Userfriendly utility to produce your own (hard) disk menu's
- Ideal for floppy and hard disk users
- Full support of mouse, joystick and keyboard
- Multitasking
- IFF picture (background pictures) and Amiga font support
- Big Agnus support
- Built in virus protector
- Comes with PD menu compiler so you can spread your menu
- Several system functions (chipmem on/off, time) included

CODE	PRICE
9862	£17.95





Phazer Gun

Bored with playing those repetitive joystick based games? The advanced light Phaser Gun from Trojan opens up a whole new phase of computer entertainment, presenting the challenge of skill and accuracy for gamers of all ages. Pack includes two free games and other games are available.

E39.95 04/03

ProFlight

ProFlight, the most realistic flight simulator produced for the Amiga, doesn't forget it's primary role as a simulator and its secondary job of being a "shoot-em-up." Achieving accurate simulation by using exact mathematical models of flight equations, you meet the challenges that Tornado pilots face everyday.

£34.95 0870

Spell!

This unique package makes practising spelling loads of fun. Suitable for students from 5-15, SPELL! allows the user to learn at his or her own pace.

101 105 109 113 117 121 125 129 133 137 141 145 149 153 157 161 165 169 173 177 181 185 189 193 197 201 205 209 213 217 221 225 229 233 237 241 245 249 253 257 261 265 269 273 277 281 285 289 293 297 301 305 309 313 317 321 325 329 333 337 341 345 349 353 357 361 365 369 373 377 381 385 389 393 397 401 405 409 413 417 421 425 429 433 437 441 445 449 453 457 461 465 469 473 477 481 485 489 493 497 501 505 509 513 517 521 525 529 533 537 541 545 549 553 557 561 565 569 573 577 581 585 589 593 597 601 605 609 613 617 621 625 629 633 637 641 645 649 653 657 661 665 669 673 677 681 685 689 693 697 701 705 709 713 717 721 725 729 733 737 741 745 749 753 757 761 765 769 773 777 781 785 789 793 797 801 805 809 813 817 821 825 829 833 837 841 845 849 853 857 861 865 869 873 877 881 885 889 893 897 901 905 909 913 917 921 925 929 933 937 941 945 949 953 957 961 965 969 973 977 981 985 989 993 997 1001 1005 1009 1013 1017 1021 1025 1029 1033 1037 1041 1045 1049 1053 1057 1061 1065 1069 1073 1077 1081 1085 1089 1093 1097 1101 1105 1109 1113 1117 1121 1125 1129 1133 1137 1141 1145 1149 1153 1157 1161 1165 1169 1173 1177 1181 1185 1189 1193 1197 1201 1205 1209 1213 1217 1221 1225 1229 1233 1237 1241 1245 1249 1253 1257 1261 1265 1269 1273 1277 1281 1285 1289 1293 1297 1301 1305 1309 1313 1317 1321 1325 1329 1333 1337 1341 1345 1349 1353 1357 1361 1365 1369 1373 1377 1381 1385 1389 1393 1397 1401 1405 1409 1413 1417 1421 1425 1429 1433 1437 1441 1445 1449 1453 1457 1461 1465 1469 1473 1477 1481 1485 1489 1493 1497 1501 1505 1509 1513 1517 1521 1525 1529 1533 1537 1541 1545 1549 1553 1557 1561 1565 1569 1573 1577 1581 1585 1589 1593 1597 1601 1605 1609 1613 1617 1621 1625 1629 1633 1637 1641 1645 1649 1653 1657 1661 1665 1669 1673 1677 1681 1685 1689 1693 1697 1701 1705 1709 1713 1717 1721 1725 1729 1733 1737 1741 1745 1749 1753 1757 1761 1765 1769 1773 1777 1781 1785 1789 1793 1797 1801 1805 1809 1813 1817 1821 1825 1829 1833 1837 1841 1845 1849 1853 1857 1861 1865 1869 1873 1877 1881 1885 1889 1893 1897 1901 1905 1909 1913 1917 1921 1925 1929 1933 1937 1941 1945 1949 1953 1957 1961 1965 1969 1973 1977 1981 1985 1989 1993 1997 2001 2005 2009 2013 2017 2021 2025 2029 2033 2037 2041 2045 2049 2053 2057 2061 2065 2069 2073 2077 2081 2085 2089 2093 2097 2101 2105 2109 2113 2117 2121 2125 2129 2133 2137 2141 2145 2149 2153 2157 2161 2165 2169 2173 2177 2181 2185 2189 2193 2197 2201 2205 2209 2213 2217 2221 2225 2229 2233 2237 2241 2245 2249 2253 2257 2261 2265 2269 2273 2277 2281 2285 2289 2293 2297 2301 2305 2309 2313 2317 2321 2325 2329 2333 2337 2341 2345 2349 2353 2357 2361 2365 2369 2373 2377 2381 2385 2389 2393 2397 2401 2405 2409 2413 2417 2421 2425 2429 2433 2437 2441 2445 2449 2453 2457 2461 2465 2469 2473 2477 2481 2485 2489 2493 2497 2501 2505 2509 2513 2517 2521 2525 2529 2533 2537 2541 2545 2549 2553 2557 2561 2565 2569 2573 2577 2581 2585 2589 2593 2597 2601 2605 2609 2613 2617 2621 2625 2629 2633 2637 2641 2645 2649 2653 2657 2661 2665 2669 2673 2677 2681 2685 2689 2693 2697 2701 2705 2709 2713 2717 2721 2725 2729 2733 2737 2741 2745 2749 2753 2757 2761 2765 2769 2773 2777 2781 2785 2789 2793 2797 2801 2805 2809 2813 2817 2821 2825 2829 2833 2837 2841 2845 2849 2853 2857 2861 2865 2869 2873 2877 2881 2885 2889 2893 2897 2901 2905 2909 2913 2917 2921 2925 2929 2933 2937 2941 2945 2949 2953 2957 2961 2965 2969 2973 2977 2981 2985 2989 2993 2997 3001 3005 3009 3013 3017 3021 3025 3029 3033 3037 3041 3045 3049 3053 3057 3061 3065 3069 3073 3077 3081 3085 3089 3093 3097 3101 3105 3109 3113 3117 3121 3125 3129 3133 3137 3141 3145 3149 3153 3157 3161 3165 3169 3173 3177 3181 3185 3189 3193 3197 3201 3205 3209 3213 3217 3221 3225 3229 3233 3237 3241 3245 3249 3253 3257 3261 3265 3269 3273 3277 3281 3285 3289 3293 3297 3301 3305 3309 3313 3317 3321 3325 3329 3333 3337 3341 3345 3349 3353 3357 3361 3365 3369 3373 3377 3381 3385 3389 3393 3397 3401 3405 3409 3413 3417 3421 3425 3429 3433 3437 3441 3445 3449 3453 3457 3461 3465 3469 3473 3477 3481 3485 3489 3493 3497 3501 3505 3509 3513 3517 3521 3525 3529 3533 3537 3541 3545 3549 3553 3

Mavis Beacon Teaches Typing

Simply the finest typing program in the world, this award winning software takes you step by step through the keyboard. Coaching you at your own speed and skill level, monitoring your progress, the stunning graphics, the help facilities and complete typing textbook makes learning to type interesting and fun.

624.95 3874

Amigados A Dabhand Guide

A comprehensive guide to the Amiga's Disc Operating System, this book takes a new approach to understanding and using the Amiga and contains a wealth of practical hands-on advice, hints and tips.

E14.95 2005

Joysticks

You'll have awesome fire power at your fingertips with these top class joysticks from Dynamics – both feature auto fire and slow motion and are fully microswitched. Each is covered by a 2 year guarantee.

5613-5614

Competition Pro Glo Green

Competition Pro Extra



PRODUCT DESCRIPTION	PRODUCT REF.	PRICE
Please add postage as detailed below		
POSTAGE: Add £4 for EuroEurope, £6 for Overseas unless specified above		
TOTAL	£	

POSTAGE: Add £4 for Euro/Europe, £6 for Overseas unless specified above.

TABLE 1. Summary of the 1997-1998 season

TOTAL	5
-------	---

I wish to pay by:

☐ Cheque/Eurocheque made payable to Eurocash Direct

Book delivery of certain items could take up to 20 days

☐ Amount \$_____
Amount \$_____

Expiry

--	--

By phone: 051-357 1275

By fax: 051-357 2813

Name _____ Signed _____

Address _____

Post Code _____

Don't forget to give your name, address and credit card number

General Enquiries: 051-357 2961

Daytime telephone number in case of queries

We Must be Mad

Due to massive bulk buying and low cost advertising we can offer you **The Best Disks at most Competitive Prices**

3.5" D5DD DISKS 35p INC VAT + LABELS For Qty's of 100+

Qty's below 100 @38p each; 250+@34p each; 500+@33p each. ALL DISKS CERTIFIED 100% ERROR FREE

SONY 3.5" 38p 3.5" D5HD .65p 3.25" D5DD.34p 3.25" D5HD 36p

100 Capacity Disk Box.....	4.25	50 Capacity Disk Box.....	3.50
Mouse Pockets.....	1.75	Mouse Mat.....	2.25
Printer Stand.....	4.25	Amiga/Atari Dust cover.....	2.50
Posso Box.....	15.95	3.5"/5.25" Cleaning Kit.....	1.95

Amiga 512K RAM Expansion with clock.....	24.95
Amiga/Atari External Drive.....	54.99

THIS MONTHS SPECIAL OFFER
200 3.5" D5DD Disks
+ 2 x 100 Cap Boxes **74.95**

Please add £3.35 p&p/next day £8.50. Cheques/P.O.s to PIC COMPUTER SUPPLIES
PIC COMPUTER SUPPLIES (Dept. A.M.C.)
11 Meadon Avenue, Clayton, Newcastle,
Staffs. ST5 4ET.

TELESALES HOTLINE
0782 212970

1066 COMPUTERS

Stockists of AMIGA, ST and PC software and hardware both **SERIOUS** and **GAMES**.

We also stock hardware and cartridges for SEGA 8 and 16 bit, ATARI 2600 consoles.

Also large stock of LYNX/GAMEBOY and GAMEGEAR games.

We are authorised dealers for the VIDEOPILOT editor. Come and see our in-shop demonstration

P.D. Software: -£1.25 per disk

Find us at:

64A Sedlescombe Road North (A21), Hastings, East Sussex
Tel/Fax: (0424) 722297

SOFTWARE FREE COVERDISK TAKES AMIGA PD
SERIOUSLY AMOS PD MUSIC WRITTEN BY
ENTHUSIASTS FREE ONLY £2.25
OS THE MAGAZINE FOR AMIGA FREE FISH
NEWS REVIEWS UTILITIES GRAF
EDUCATION REVIEWS PD UTILITIES
UTILITIES DEMOS WRITTEN BY ENTHUSIASTS
OR ENTHUSIASTS ARTICLES BY ENTHUSIASTS
FISH REVIEWS TAKES AMOS SERIOUSLY
FISH AMOS ONLY £2.25 PD MUSIC
THE MAGAZINE FOR AMIGA FREE COVERDISK
MUSIC AMOS WRITTEN BY ENTHUSIASTS
ENTHUSIASTS EDUCATION REVIEWS LATEST
ED FISH AMIGA ONLY DEMOS UTILITIES FISH
SH OLDSIES SPECIAL ISSUE ONLY £2.25
CLUDING TWO COVER DISKS AMOS UTILITIES
DEMOS THE MAGAZINE FOR AMIGA PD MUSIC
DRIVE AMIGA PD DISKS TAKES AMIGA PD

AmigaWare is available by
single issue or subscription
at £2.25
per issue (£1.95 without
cover disk) or £22 for 12
issues (£18.50
without cover disk).
Cheques/P.O.s payable to
AmigaWare:

AmigaWare (tshC2),
AmigaWare House,
57 Oxford Road,
BANKERS OX16 9AJ
CREDIT CARDS
0295 279001

*** ISSUE 1 STILL
AVAILABLE, WITH 2
PROGRAM-PACKED
COVERDISKS **

OPEN ALL HOURS (WELL, NEARLY!)

9am-10pm Mon-Sat 10am-6pm Sun No Answerphones!

3.5" Disks with labels

KA0 Disks	
1-100.....	38p
100+.....	36p
500+.....	34p
1000+.....	32p

SONY Disks	
1-100.....	45p
100+.....	42p
500+.....	39p
1000+.....	37p

RAINBOW Disks	
1-100.....	44p
100+.....	41p
500+.....	38p
1000+.....	36p

LOOK! LOOK! LOOK!

TRACTORFEED DISK LABELS!

500 Labels plus FREE
software to print your own
professional labels!!
*** ONLY £9.95 ***

DIRECT COMPUTER SUPPLIES
0782 642497 9am-5.30pm Week
0782 311471 Evening/Weekend
0630 653193 Evening/Weekend

DISK STORAGE BOXES

10 Cap.....	95p
Red, Yellow, Green, Blue, Black, Grey - Your Choice	
50 Cap.....	£4.00
100 Cap.....	£4.50

Stackable Disk drawers	
Posso (150 Cap).....	£15.95
250 Cap.....	£18.99

MISCELLANEOUS

512K Ram (No Clock).....	£24.99
512K Ram (+ Clock).....	£27.99
Zydec Ext Disk Drive.....	£54.95
Amiga Dust Covers.....	£3.50

*** SPECIAL OFFER ***

1.5 Meg A500 Ram Expansion
with Clock
Only £79.95!!!

Mousehouse.....	£1.60
Mousemat.....	£2.49
Diskrdrive Cleaner.....	£1.79
Comp. Pro Autofire.....	£12.95

54 Spring Road,
Longton,
Stoke-On-Trent,
Staffs, ST3 2PX.

Prices inc VAT. Postage please add £3.30

We accept cheques/P.O.s/Visa/Access

ALTERNATIVE IMAGE PRODUCTIONS PRESENT THE SOFT ALTERNATIVE

Professional suppliers of Amiga systems, peripherals and software

The Soft Alternative specialise in configuring systems
for video graphics and DTP professionals.

We have years of experience in actually
using the equipment we sell...

So for on-line expert advice or to arrange an
appointment ring YURI on 0533 440041

OFFICIAL UK DISTRIBUTORS OF-

Race Tracer

The ultimate tracing program. Converts 2D bitmapped
images to Real 3D, Sculpt, Imagine, Pro Draw Clip...

The Big Alternative Scroller

Complete, entry level video titling package.

It's making waves...

REAL 3D

Alternative Image Productions,
6 Lothair Road,
Leicester LE2 7QB.

DEALER/TRADE ENQUIRIES WELCOME
(Advert created with PPage2 and Real 3D)

ACCESS



Drop your joystick, switch off your monitor, slip into something more comfortable and relax with some extra entertainment, courtesy of Amiga Computing's very own critic Antony Purvis



MERMAIDS

MCEG Virgin Vision (Out January 8)

Meet Mrs Flax (Cher), an eccentric single parent who has a nasty habit of moving house every time a romantic affair doesn't work out. Say hello to Charlotte, Mrs Flax's eldest daughter who wants to become a nun (despite the family being Jewish) and also to the nine-year-old Kate, the youngest of the family.

Consider the calendar rather helpfully left in shot, proudly displaying the year 1963. Meet Lou Landsky (Bob Hoskins), the owner of a shoe shop, and witness the blossoming love affair between himself and Mrs Flax (Still Cher).

Mermaids as a film is fairly easy going. Very little happens, taking 105 minutes to do so, and it isn't long before you start to wonder exactly what there is about this film that made it the box office smash that it was.

While I gave Mermaids my full attention, it didn't seem to return the compliment. As a film it's not intrinsically bad but it certainly is not overtly entertaining. For my part, I could see the smallest glimmer of something in Mermaids, but as a whole this is a film that comes perilously close to not being worth renting, reinforcing my beliefs that some films succeed more because of publicity inertia than anything else.

SKI SCHOOL

First Independent (Out Now)

It's true to say that there are only so many ideas under the sun. Therefore, when you get an idea that works, you roll with it. Unless you're a Hollywood film producer, in which case you flog the idea to death. Take Police Academy – six films with roughly the same plot.



Rental newbies

The producers of Police Academy produced a film called Ski Patrol, which turned out to be no more than one of the least unfunny Police Academy films set on a mountain.

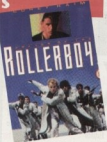
Enter Ski School, a remarkably similar film both in title and content. Just because a film isn't remotely original does not mean it isn't any good, though. Ski School is the traditional story of rival gangs at some form of educational establishment. One group is bad, nasty, evil and despicable and uses every dirty trick in the book. One group is good, incredibly hip and stylish, and by the end of the film comes out best.

Ski School is not the most original film that you'll rent this month, but it has to be said that, unlike Ski Patrol, Ski School is very funny and is definitely worth watching. Lots of humour of the "Parker Lewis Can't Lose" variety, and some stunning photography and stunt action. Original it is not, but enjoyable and worth renting it most definitely is.

PRAYER OF THE ROLLERBOYS

First Independent (Out January 15)

It is the future (again)... America is in a state of ecological and financial collapse. Betrayed by the greed of their parents, the children of America fill the homeless camps to capacity. In this 21st century Max Headroom-type scenario, a powerful new force is emerg-



ing. That force is the Rollerboys, a gang of violent thugs who blaze through the city on skates known as Rollerblades. Ruled by the inspiring Gary Lee (Christopher Collet), they are the force of the future, running protection and drug rackets, with the goal of "buying back America".

Two orphaned survivors of this society are Griffin (Corey Haim) and his younger brother Millie. When he discovers that Millie has been recruited and is selling and using the super-drug "Mist", he agrees to infiltrate the neo-fascist Rollerboys operation when approached by the police.

With just one notable exception, I've always been very impressed with Corey Haim's movies, and Prayer of the Rollerboys is no exception. It, like the others too numerous to mention, is a top-notch wedge of entertainment for the youthful masses.

I can confidently recommend this

film as one of this month's better rental releases – a good 90 minutes of entertainment. I doubt that there'll be many films released in January to beat this and Ski School.

9% NINJAS

MCEG Virgin Vision (Out January 22)

Someone tells you they're releasing a new video.

"Excellent," you tell the company, "kindly forward one review copy of said video cassette in order that it may be reviewed by myself and the results published for the masses to consume." (Uh oh, Mr Logic alert! – Ed) The people on the phone consider your request, and the reply comes forth: "I'm sorry, there are no review copies of this title available."

Only two conclusions can be drawn from Virgin's failure to send anyone a copy of this video to review. Number one is that the video contains vital coded information as to the whereabouts of the Spanish Armada.

Number two is that possibly the video is so earth-shatteringly bad that they're going to let the punters rent the film and find out for themselves how naff it is, instead of letting a reviewer put them off renting it in the first place.

9% Ninjas might be a very good film. But as no-one will let me see it, I can't tell you if it is.

It could be very naff indeed, and you might be advised to think twice before you rent it.

Sky's silver screen selection

The pick of Sky's Movie channels in January

Don Bluth's animated film All Dogs Go To Heaven gets more screenings on The Movie Channel this month, as does Honey, I Shrunk The Kids, and the Kevin Costner movie Revenge. Rutger Hauer makes an appearance in Blind Fury, the tale of a chap who's a bit handy at martial arts yet is as blind as a bat. (Not that bats are blind – this is a fallacy that I do not want to be a part of, thank you very much.)

Madonna keeps up to her usual movie appearance standard in the intensely naff Bloodhounds of Broadway, a film you are advised not to watch unless you enjoy bad films. A rather better film, namely The Fabulous Baker

Boys gets some more screenings in January. Luke out (ha ha a joke!) for Lukas Haas in The Witches on Sky Movies Plus. While primarily for the kids, it has some stunning visual effects from Jim Henson and a small role for Rowan Atkinson. More screenings for Troop Beverly Hills, Uncle Buck, and David Lynch's deeply odd and confusing Wild At Heart. There'll also be some more screenings of Buns On The Run, with Robbie Coltrane and Eric Idle, and Pretty Woman with Richard Gere and Julia Roberts starring will also be one to look out for.

Premieres this month include Clean And Sober, starring Michael Keaton. This did well when it was out on rental video last year, so is likely to be worth a look. Finally, don't miss Arnold Schwarzenegger, the man of a thousand "Steve Wright in the Afternoon" sketches, in the premiere of Total Recall, the tale of a man who has his mind stolen (I know just how he feels...).

Rock Lobster

FINAL THE AMIGA COMPUTING TEAM CHILL OUT ★★ ★★

LATE NEWS EXCLUSIVE

NEW EDITOR SHOCKER!

SENIOR management at leading computer magazine *Amiga Computing* have confirmed exclusively to *Rock Lobster* that a new editor has been appointed.

Stevie Kennedy has taken over from Eddie McKendrick with immediate effect.

This shock move is thought to be the end result of a long running dispute between McKendrick and *Amiga Computing's* letters editor Ezra Surf.

A jubilant Surf commented: "Eddie never really understood me, I have known Stevie for over three years and I'm sure he will do a good job."

Kennedy, 26 was previously technical editor of the magazine and is thought to have a good understanding of the Amiga.

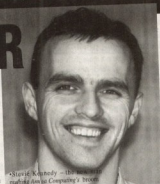
Other changes at *Amiga Computing* include the appointment of a new games

editor and the promotion of Paul Austin to Associate Editor

Daniel Whitehead, a confirmed hit with *Gamer* readers, takes over from Julian Boardman who is leaving the magazine to "pursue other interests" at *ST Action* magazine.

Newly appointed editor-in-chief, Eddie McKendrick commented: "I don't know what all the fuss is about - anybody would think that Ezra Surf runs the magazines."

As we go to press it is unclear what changes Kennedy's new broom will sweep into *Amiga Computing* - although it is thought unlikely that the popular "Ezra Surf" Postbox" column is under any immediate threat. More details as we get them.



Stevie Kennedy - the new editor of Amiga Computing's broom

NEXT MONTH

The next issue of *Amiga Computing* hits the shelves on Thursday 6th February, 1992.

• The next issue of *Amiga Computing* hits the shelves on Thursday 6th February, 1992.



WHOOOPS!

LAST month we experienced a few seasonal production problems with your very own *Lobster*.

In particular an article called "Our survey said" was unreadable in some regional editions.

We have now ironed out these production glitches and apologise for any inconvenience caused to our readers.

• NEXT MONTH: "Those glitches" - the inside story

WIN!

75 Berol disk label pens must be won!

YOU'RE ALWAYS ON A WINNER WITH



THANKS to *Rock Lobster* 75 lucky readers can win an innovative disk pen from Berol.

These special pens allow you to write on disk labels without damaging the disks (hardly a problem with 3.5" disks! - Ed)

To win one, simply estimate how many meters one of these pens can write for. Is it: (a) 250 m (b) 25 m or (c) 2.500 m.

The first 75 lucky readers to send the correct answer will each win one of these superb writing utensils. Send entries to: 2500m Pen Comp, *Rock Lobster*, Amiga Computing, Europa House, Adlington Park, Macclesfield SK10 4NP.

ADVERTISERS' INDEX

1066	168	Cottage Industries	156	JJC	150	Sidmouth Software	116
17 Bit	140	Crystal Dist	42, 43	Killersound	135	Silica Systems	143
3 Amigos	115	D.T.B.S.	150	Kosmos SW	135	Siren Software	18, 19
AJPD	135	Datel	45, 48	KYE Co.	8	SMG	54
Alternative Image	168	Delta PS SW	152	Ladbroke Computing	105	Softmachine	139
Amiganuts	119	Digital International	17, 65	LCL	148	Software	116
Amigaware	168	Direct Computer Supplies	168	Load Crest PD	150	Solid State Leisure	3
Analogic	156	ESP Software	115	Manor Court Supplies	154	Stricly PD	160
Appleby's	101	Europress Direct	164, 165, 166	MD Office	28	Switchsoft	152
Applied Research Kernel	103	Europress SW	144	Media Direct	50-53, 126, 150, 168	Telescan Computers	125
Aquarian PD	57	Evesham	6, 7	Media Value	109	Tornsoft	146
Ashcom	152	Ferguson-Smith	66	Microdeal	47, 131	Unique Computing	127
Astrocalc	158	First Choice Computers	61, 62, 63	MJC Supplies	112	UPD	117
Atlas Computer	26, 27	Futureworld	106, 107	Neural Images	156	Virgo	104
Audition	120	Gasteiner	64	New Dimensions	146	We Serve	99
Battleaxe	110	GJS Computer Services	152	New Image Video	156	Wizard Software	115
BCS	12	Global Computing	146	Omega Projects	100		
Best Prices Mail Order	12, 13	Global SW	104	Omni-Eureka Electronics	54		
Bicon Devices	148	Goldstar	122	Pathfinder PD	146		
Calco Software	23	Gordon Harwood	31-37	PDOM PD	128		
City Beal	143	Guiding Light	110	Phantastic Games	108	Celebrity Software	19
CompuX Computers	20	Hi-Soft	116	Postal PD	119	Eagle Software	14
Composer Software	145	Homebased Business	135	Power Computing	11, 14, 25, 41	Mindscape	IBC, OBC
CompuLink Services	152	Inpholink	116	Raw PD	125	Saturn Software	23
Computer Mates	136	Intrasat	132	Rombo	OBC	Silica Systems	11
Connect International	154			School	109	Thalion	17

GAMER

KCS POWER PC BOARD FOR YOUR AMIGA

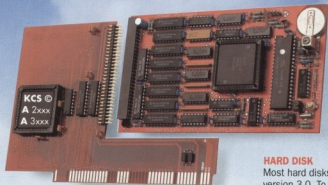
The best of both worlds
in the space of one

PC

AMIGA

Now
available
with or
without
MS-Dos
See below

Adapter + PC Board
for the Amiga 1500/2000/2500/3000



For the Amiga 500

A500P version
now ready and
gives you
total 2Mb Chip
Ram. When
ordering state
which one you
require.

HARD DISK

Most hard disks are supported with
version 3.0. To be sure give us a ring.

The KCS Power PC Board adds 1Mb memory to your Amiga and a real time clock

Think how much 1Mb memory plus a clock costs
Think how much MS-Dos/GW-Basic/Shell/Dos-Help costs

£

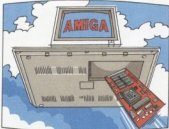
£

Which leaves the cost of an AMIGA/PC just

For so little outlay the Power PC Board turns your Amiga into an up and running powerful PC, with no hidden costs. The cheapest PC in the world?!

£

Run heavyweight professional PC software on your Amiga/PC



EGA

Available (Nov/91) will work from the full EGA colour palette. Both EGA and VGA will work on a standard TV or monitor and in most cases without using interlace.

PRICE

Including MS-Dos 4.01/GW Basic/Shell/DOS-Help and on-board memory.

£219.95 incl. VAT/Carr.

Excluding MS-Dos/GW-Basic/Shell, but including DOS-Help and on-board memory.

£189.95 incl. VAT/Carr.

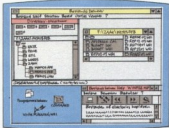
Adaptor for 1500/2000/3000 -

£74.95 incl. VAT/Carr.

Available from your local computer shop (if they haven't got it - Ask them why not!). Or direct from Bitcon Devices

VGA

Version 3.0 of our software (Nov/91) comes with VGA colour and mono option. EGA/VGA will work on all standard Amigas irrespective of which chip set you have.



Microsoft windows



Microsoft flight simulator 4.0

Some extra goodies:

- FLICKER FREE FIXER in PC interface mode. Will work with all Amigas. Software emulated.
- PROCESSOR SPEED can be slowed down from 100% to as low as 10%, so if you have never reached the highest level in a game, now is your chance.
- KCS PC/MOUSE driver will work with your Amiga mouse.
- HALFE can be activated at any time during a game or program, allowing you to continue at your leisure.

Technical Specifications:

- 704Kb memory in MGA/CGA mode
- 640Kb memory in EGA/VGA mode
- 200Kb extra memory ie: MS-DOS RANDISK (reset proof)
- 1/2 Mb extra FAST Ram plus 1/2 Mb Ram Disk for normal Amiga use plus real time clock in all modes
- All future upgrades are software driven
- Processor speed = 11 Mhz
- Video runs faster than most AT/286 computers
- Disk drive -
- Fitted in seconds and does not invalidate your guarantee
- Once fitted forget it - Switch on computer, you have Amiga. Reset and load PC disk and in seconds you have PC. Reset and you have Amiga again.
- Help-Line and excellent Back-up service!

BDL

BITCON DEVICES LTD.

88 BEWICK ROAD, GATESHEAD, TYNE & WEAR,

NE8 1RS ENGLAND

TEL: (091) 490 1919, HELPLINE: (091) 490 0202

FAX: (091) 490 1918

Competibility is excellent but no-one can guarantee every single program available, therefore if your purchase depends on a particular program, please ask us first or send in a copy of the program. (With suitable S.A.E. if to be returned). Price subject to change without notice.

Wholly developed and produced in the Netherlands



Some of our importers Worldwide:

Australia: HPD (Tel) 08 349 6486, Kooric (Tel) 03 879 7098, Spain: Discover Int. (Tel) 957 47 89 38, Sweden: Delikatess-Data (Tel) 31 300590, Canada: Customs Chiqu (Tel) 926 271064, Denmark: Betafon (Tel) 31 31 02 73, Portugal: Softclub (Tel) 01 3528452, Ireland: Computer City/Dublin 745250, N. Zealand: Parac (Tel) 054-82949, All trade enquiries welcome. UK and Overseas (P.M. only)

NEW

THE COMPLETE COLOUR SOLUTION

Vidi ... No 1 in UK & Europe (Leading the way forward)

£179



Get the most out of your Amiga by adding:

"The Complete Colour Solution"

The Worlds ultimate creative leisure product for your Amiga. Capture dynamic high resolution images into your Amiga in less than one second.

And Look No Filters

Images can now be grabbed from either colour video camera, home VCR or in fact any still video source. The traditional method of holding three colour filters in front of your video camera is certainly a thing of the past. Because Vidi splits the RGB colours electronically there are no focussing or movement problems experienced by some of our slower competitors. Lighting is also less of an issue as light is not being shut out by lens filters. Put all this together with an already proven Vidi-Amiga/VidiChrome combination and achieve what is probably the most consistent and accurate high quality 4096 colour images ever seen on the Amiga.

The colour solution is fully compatible with all Amiga's from a standard A500 to the ultimate A3000. No additional RAM is required to get up and running.

You will see from independent review comments that we are undoubtedly their first choice and that was before the complete solution was launched. If you have just purchased your Amiga and are not sure what to buy next, then just read the comments or send for full review and demo disk.



"Actual screenshot digitised"

Features ...

- Grab mono images from any video source
- Capture colour images from any still video source.
- Digitise up to 16 mono frames on a 1meg Amiga.
- Animate 16 shade images at different speeds.
- Create windows in both mono & colour.
- Cut & Paste areas from one frame to another.
- Hardware and software brightness & contrast control.
- Choice of capture resolutions standard & Dynamic interlace.
- Full Palette control.
- Add text or draw within art package.

Amiga Computing: The best Amiga digitiser has had the technicolour treatment. Vidi must be one of the most exciting peripherals you can buy for your Amiga.

Micro Mart: When I first saw Vidi "in the flesh" as it were, at the CES show last September it looked to be the answer to a frustrated Dig View owner's dreams - in fact to see pictures appearing on screen without the customary two minutes wait seemed almost too good to be true. I have consistently produced more good quality pictures in the short time I have had Vidi than I ever did with Digview.

Zero: Now under normal circumstances cheap usually means poor quality but this is not the case with Rombit. Why? cos Vidi-Amiga is the best digitiser for under £500 and I've tried them all.

Amiga Format: Where quality is concerned, Vidi produces some of the best results I've seen on any digitiser at any price

Amiga User International: The latest addition to the Rombit kit is called Vidi-RGB and brings this already impressive package to the realms of totally amazing. **CONCLUSION:** Who will find Vidi-Amiga useful? The answer to this is almost anyone with a video recorder or camera and a passing interest in graphics.



Full colour demonstration disk available for only £1.95 to cover P&P.

6 Fairbairn Road, Livingston, EH54 6TS. Tel: 0506-414631 Fax: 0506-414634

ROMBIT
Limited