

COMPUTING

VIDEO SHOOT-OUT

WORTH £50!

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Three of Mesmost exciting Amiga video add-ons slug it out for supremacy

VideoPilot V330
AVideo y/c
IV24 v2.0

<u>Curopress</u>



REVIEWED: Ami-Back tools 2.0

KidPix
Survival guide to printers

Education on a shoestring
Cycleman for Imagine

Proper Grammar II and more!



DIRECT MAIL

DMA ENSURES HIGHEST PRACTICE

As with most industries, the UK's personal computer industry has its share of cowboys operating in the mail order sector and at the receiving end a line up of despairing consumers who have suffered at their hands.

A personal computer is a sophisticated and expensive item and provided the purchaser is dealing with a reputable and accredited supplier, buying a computer by mail order can be a perfectly safe and cost effective exercise. The Direct Marketing Association (DMA) was set up in April 92 to set and main tain high standards for the sake of the industry and society at large, and to ensure that we can continue to regulate our own activities on the basis of

ferred lightly - it is a privilege which entails responsibilities, to the consumer as well as to the industry. The foundation for this must be good practice. DMA members are required to abide by the highest standards as laid down in the DMA's code, enforced on members by The Authority of the DMA a separate body with an independent Chairman, and which is an assurance of vigorous self - regulation and profesonal responsibility

DMA members also agree, as a condition of membership, to abide by The British Code of Advertising Practice and The British Code of Sales Promotion Practice: to apply the Mailing Preference Service file when appropriate: and to subscribe to the Advertising Standards Board of Finance (ASBOF) and to the Mailing Standards Levy as applicable

The DMA symbol can only be used by members. Printed on stationary, advertising and other promotional material it demonstrates that these companies conform to the Association's high standards and are subject to the DMA's Code of Practice, thus enhancing the companies credibility with customers, suppliers and of greatest importance, the

Since the symbol was introduced last June, it has become synonymous with quality , professionalism and and responsibility. While it cannot be shown in any way which will become a sign of best industry practice and of strict adherence to DMA codes of conduct. The symbol represents authority for members and reassurance for consumers. It has been a high valued mark of confidence signifying to the consumer the truly professional edge of the

(Director of Public Relations, DMA)

INDI DIRECT MAIL Proudly Presents THE JAKKI BRAMBLES COLUMN

Hi.

Commodores decision to reduce the price of the Amiga 600 took everyone by surprise and really positions the A600 as the perfect entry level computer.

Of course the problem with new technology is that something has to be left behind and in Commodores case it's the poor old 500.

Now Indi tell me that Commodore are taking back all old A500's when you buy a new state of the art Amiga 1200. So dust off that old A500 make sure that it is in full working order and you still have the mouse, modulator, manuals and power pack. Give Indi a call on 0543 419999 and ask for "Amiga 500 Trade in Desk", Indi will send Securicor to your home and pick up your A500 at their cost and then deliver a superb new Amiga 1200 with £100 off the advertised price. Remember this is a limited offer What's a PCMCIA slot I ask? Indi explained to me that its Commodores way of ensuring that both the Amiga 600 and 1200 can remain future proof. Credit card style memory cards are already available from Indi but thats just the beginning, faxes, modems and network cards are on their way and who knows what else. If you need to know more about PCMCIA why not drop me a line.

On the subject of letters I have been swamped. It's absolutely great and I promise each one will be responded to and get a signed photograph so keep them coming! Last months winning letter came from Adrian Simpson of County Down Northern Ireland who gave a very well informed comparison

between Amiga and less useful consoles. I was absolutely knocked out with all the details he

sent me concerning the music capabilities of the Amiga. Adrians letter was far too detailed to reprint but a big thankyou to him for writing it. Adrian the prize is on its way.

WHAT DOES THIS SYMBOL MEAN



Finally I received a few important letters asking what is the DMA and why is it important to consumers that Indi is part of it. On thais page you will find a letter from the Chairman of the DMA, it's

well worth a read. la Ban Bes Alion Slam

NEW MEGA A1200!

Due to the shortage of A4000 / 030 INDI are nowoffering a mega A1200 configuration. Just look at this spec A1200 * 4 MEG RAM * 80 Meg HD * M1230 XA 50 Meg HZ .Runs @ 1.5 times faster than a standard A4000 / 030, Now look at the price £939.99 (save £100 with A500 trade in) Credit terms available.

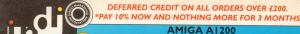
PHONE 0543 419999 FOR DETAILS

> Performance Comparison RING 0543 419999 FOR MORE AMIGA AMIGA 400/040 1200 with MI230XA Performance Index AMIGA AMIGA 1200

INDI LAUNCH NEW MULTI MEDIA CLUB

Indi have just launched "The Indi Multi media Club", Members will be offered a complete range of Amiga Software covering Professional, Games, Utilities, CDTV, and CD Audio and video and selected PD. Membership costs £10 per annum

with a free offer on joining. Members will then receive a monthly catalogue giving incredible discounts on all products



DIRECT MAIL CUSTOMER CHARTER

mail order purchase from INDI is a safe an cure decision, and here's why. DI is a wholly owned subsidiary of a publi mpany now in it's tenth year of trading an ecialising in the supply of computer prod

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Prices are valid for month of publication only

NEW _AMIGA_1200 32 - BIT 118

A300 I RADE IN!!

6100 for your old Arniga 500 against any A1200 from Indi Direct.

Must be in full working order, complete with mouse, manuals and

COMIC RELIEF PACK he event may be over but the fund raising still goes on. If you're looking for the latest Amiga technology then this is the starter pack for you. Based around the outstands A1200, this pack also gives you sleepwalker, a most addictive platform game from oce software. You'll be pleased to know that every one of these packs purchased rais another £10 for Comic Relief

A1200 STANDARD FEATURES. 68020 Processor ★ PCMCIA Slot. ★ 2MB Chip RAM. ★ 3.5" Intern
 Drive ★ AA Chipset. ★ Built in TV modulator. ★ Alpha numeric keypad.

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A1200 60 MEG HD INDI PRICE £569,99 A1200 80 MEG HD INDI PRICE £599.99 A1200 120 MEG HD INDI PRICE £679,99 INDI A1200 ACCESSORY PACKS

Pack Contains: International Games Challenge, o The Cool Croc. * Paradroid 90. * Zapsac and Zappo T - shirt

INDI PRICE £19.99 60 / 80 Hard Disk upgrades available on any A1200. Upgrade includes full Wang warranty on A1200 and Hard Disks. Phone for a quote

AMIGA A4000

NEW MONITOR RANGE THE NEW DUAL SYNC1942 Monitors

have been specially designed for the New Amiga 1200 and 4000 computers. Both monitors feature built - in stereo speakers.

INDI PRICE

1940 Monitor £279.99

INDI PRICE

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Parnet Adaptor for CDTV

The CDTV player offers excellent value for money wh compared with a standard CD - ROM drive and interfect Most CD - ROM drives will set you back over £400 who

ect a CDTV player to any Amiga, and access

CDTV + PARNET.

AMIGA A600 PRICE CRASH



It's here - The new Amiga 4000/030

The NEW Amiga 4000/030 features a EC68030 procession

running at an incredible 25Mhz, and uperadable at a later

with the Amigs Flagship 4000/040 the 4000/030 features the now AGA graphics chipset, giving you a massive pallet of

6.8 million colours. A range of hard drive options are avail-80 - 240 Mb and includes a SCSI option. 4000/030 80 Mb HD INDI PRICE £939.99

Other Drive Options 4000030 120 Mb HD INDI PRICE £1039.99 4000030 240 Mb HD (sodzieto ND)

A full range of approved ungrades are available for the including additional memory modules, hard dri-

ves, PC bridge boards, FPU's (68881 &68882)and the 24 -

4000030 120 Mb SCSI HD (address ND)

bit Opal Vision graphics and video syste

ite to a faster processor. The 4000/030 has a powerful 4 Mb of 32 - bit RAM (2Mb chip & 2 Mb fast) expandable to

PACK CONTAINS:

A600 Single Drive Built in TV Modulator Pushover: Grandprix Silly Putty: Deluxe Paint III Mouse and Manuals

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ck Off 2 # Poemania * Space Ace # Populous # Zapsac Carry Case # Zapsa

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NEW FROM MICROBOTICS!!! M1230XA ACCELERATOR LAUNCH!!

Microbotics beats the competition in price/ performance/ features and config urations. INDI is very pleased to announce the availability of the new 68030 accelerator product for the A1200: the microbotics M1230 XA (call it the "XA" for short), 50 Mhz as standard! Huge 128 MB memory design is standard (the biggest memory space in any A1200 peripheral) just look at these

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M1230 XA W/50 MHZ MMU 030 8MB INDI PRICE £599.99 MEMORY UPGRADES AND ACCESSORIES

M501 The original 0.5MB battery backed upgrade for

the A500. INDI PRICE £29.99

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the A500. INDI PRICE £49.99

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AMIGA PERIPHERALS



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Aladdin 4D, Amiliak Video Editing Products, Art Departm Professional, Caligari 24, Cine Morph, Fractal Pro, Image FX, Imagemaster, Imagine, Michtron Entertainment Products Mo Libraries, 3D Professional, Transporter, Tv Paint, Vista Pro, Video

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OpalVision Video Suite - An advanced external rack mou 9 video and 10 audio inputs, 24 - Bit frame store and a host of sp effects triggered manually or automatically. Full specification avail

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KX - P4410 LASER PRINTER



KX - P4430 LASER PRINTE



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5 pages per minute 28 resident fonts

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This price while stocks last # HP laserjet II Emulation

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HP Laserjet III Emulation, PCL 5 8 Scalable fonts & 28 bitmap

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2) PRINT DUST COVER Specially tailored quality dust cover for Parasonic KXP 2180' KXP 2123 printer. INDI PRICE 68.99

3) PRINTER STAND 2 piece printer stand. INDI PRICE (9.99 4) PAPER PACK 500 sheets quality A4 paper. INDI PRICE £9.99 5) CONTINUOUS PAPER

t listing paper. INDI PRICE £19.99 6) PARALLEL PRINTER CABLE
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INDI PRICE £8.99 (£3.99 i purchased with a printer)

8) PANASONIC BLACK RIBBON Black ribbon for KXP2180/ KXP2123, INDI PRICE (9.99 SAVE LLLL'S ON THE FOLLOWING ACCESSORY PACKS

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PANASONIC DELUXE ACCESSORY PACK ntains automatic sheet feeder, 2 black ribbons colour ribbons, I dust cover, 2 piece printer sta RRP £169.99 INDI PRICE £139.99 SAVE £30

THE MULTIMEDIA COMPUTER TOTAL HOME AMIGA CDTV



ENTERTAINMENT SYSTEM

The problem with any new product is that it always takes time for 0

vone to realise its full potential. CDTV is no exception and in our opinion everything we have read does a pretty poor job of explaining just what CDTV can do and

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tion in superb high quality stereo, with infra red remote control. IT' AN AMIGA - Plug in the keyboard, switch on the external disk drive and the colossal range of inexpensive Amiga Software can be used on CDTV.

IT'S A MULTIMEDIA SYSTEM - Just imagins, stereo sound, images and text all on screen. It asks a question, you respond, it responds - truly interactive! Each CD disk holds hundreds of megabytes of data with instant optical access. The whole of Hutchinsons encyclopeadia fits on to one disk. This interactive system is a unique aid for Education, Business or Leisure. The future is here! PACK CONTENTS AS STANDARD * Amiga CDTV Player * CDTV Keyboard * CDTV 1411 3.5* Disk Drive * CDTV Infra Red Remote

ntroller * CDTV Wired Mouse * CDTV Welcome Disk * Manuals * Fred Fish CDTV Disk INDI VALUE ADDED FREE & Lemmings CDTV (£34.99) Blues Brothers (£12.99)

· Pipemania, Populous, Kickoff 2, Space Ace. PRICE CRASH £399.99

THE BRICK - ETTE

PACK AS SHOWN £329.99

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CDTV CONNECTS DIRECTLY TO YOUR TV SET **AMIGA CDTV ACCESSORIES**



port and it is ready to go with real time mouse or joy-sitick movement, on your No loading of driver programs or software. No if for mouse or joystick, Special settings (with allow you to blast away with with three rapid for its dwarf re-butters. Comes complete with one you'll be pleased to know that INDI stock all CDTV accessories and software that are available

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INDI PRICE £189.99

L to B CDTV Encore SCSI Controller + Internal Mount £109.95 When purchased with CDTV Multi - Media Pack) Hegatip - IMb Upgrade Olip RAH Upgrade for CDTV £159.99 669.99



from manufactures. We believe in CDTV and we

therefore continue to support this exciting product. CDTV from INDI

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language system"

Amiga Format

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Special

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The most authoritative monthly columns in the husiness, covering all areas of specialised Amiga activity

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Not as messy as finger painting, more fun than DPaint; it has to be Kid Pis

GAMER

Dron that wordprocessor and pick up a stick with the hottest games section in the husiness

Gamer Globe eames industry

Drawing Board Global Gladiators and Stardust

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GAME REVIEWS

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Amiga Market

The monthly round-up of the latest hardware and software on the market, advice on spending those hard-earned pennies, Software Spotlight and much more...

Shop Window

Proper Grammar II Award Construction Kit

New Canon printer

Classifieds Spotlight **Hard Times**

76

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NEXT MONTH ON SALE JULY 29th COVER STORY

COVERDISK





Crazy Sue Goes On

Easily the best platform game we've seen in a long time!

Minisola

A mind-bending technical challenge of man vs machine

Poing

Excellent new variant on the classic Breakout

Turn to page 24

CineMorph jr

Now you too can attempt those morphing tricks as seen in TV ads and Hollywood films with this superb power package

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More tricks of the trade and hot hints doled out to the technically challeng	ged
Public Sector	100

All the best PD and shareware releases to have landed in the office this month

COMPETITION

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Turn to page 96 now!



VIDEO SHOOTOUT

Amiga video reaches new professional heights with the three latest addons. Find out which wins the shootin' match!

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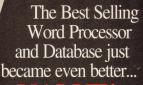
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Huge loss forces CBM cost-cutting

A THIRD quarter loss of more than \$177.6 million has forced Commodore to announce a massive restructuring plan aimed at slashing the company's overheads.

The latest loss includes a \$65 million writedown on inventory and a provision of \$70 million for special pricing and promotional allowances, restructuring costs and asset write-down.

But at \$42 million, the firm's operating ond quarter running and the total loss for the nine months ending March 31 was \$273.6

During the quarter Amiga sales were down 25 per cent, and combined with price-outting the computer gave a revenue drop of more than 45 per cent.

"We are extremely disappointed with our results for the first nine months of this fiscal year," said Commodore chairman and chief

"We believe that Commodore's technology, brand name and distribution network continue to have significant value and we are exerting all of our efforts to restructure the company." As part of the cost-cutting Commodore UK will shed up to eight after-sales staff, but facing



Several offices will be shut, including Austria, the Netherlands, Belgium, Spain and Portugal. Each will have support staff based in

Sweden and Norway's operation will soon be controlled from Denmark and in the US five distribution companies will be employed. The large West Chester site will stay. "We could have reported a \$42 million

loss," said Commodore UK's David Pleasance. "But we've made the right provisions for a company of our size - we are not a \$1 billion

The firm's major investor have offered a vote of confidence in the plan, including waving convents until the end of July in order to

allow the changes to take place. "This has been nice because we can restructure how we want to, rather than go into Chapter 11 and have someone else do it for us," said David. "We are predicting a further loss for the next quarter but expect to be back into the black by Christmas."

000

NEWS

Graphics bower for Amiga PC

Commodore Commodore opens up to John Butters

RISC: How AC revenied CRM's plan two years

COMMODORE have an ambitious plan to springboard the firm into the mass business market. Amiga Computing can exclusively

1,000 pixels and multiple blitter support.

the A1200 and A4000.

According to the manufacturer's joint general manager David

He says the "A5000" will build on existing technology with graphics ten times more powerful than the AGA chips found in

will include four custom chips, a true colour resolution of 1,000 x

RISC - standing for Reduced Instruction Set Chip - processing

mer and will combine an Amiga and a PC inside a single case.

WORLD EXCLUSIVE by John Butters

will make the machine five times faster than current models and PC compatibility will

come through Windows NT software can be run without DOS and be

taken onto platforms other than traditional 80x86-based PCs. Marketing details are vet to be fixed but according to David its price will be competitive with Pentium (586) PCs and it will target

He added that the machine will be all things to all men and

Asked whether the machine would include a DSP and SCSI-II David said: "It's unlikely that we will leave out any spec that is currently available. We would never go backwards."

Golden memory boost UP TO 9Mb of 32-bit RAM can now be

added to A1200s through a new internal card available from London dealer Golden Image (081-365 1102)

When fitted, the card gives the Amiga a maximum memory capacity of 11Mb and an optional maths co-processor and oscillator increase the computer's perfor-

mance. A battery-backed clock comes as standard and the dealer claim it is easy to install. Prices start at £115 for a board

For a version fitted with 5Mb, an oscillator and 16MHz maths co-processor, the cost is £285. With 9Mb, the same board costs £415.

populated with 1Mb

CDTV finds a new home CDTV owners can now buy all titles available for the machine from one source, Capri CD

Capri is run by Richard Gandy, who is also chairman of the National Association of Specialist Computer Retailers, the dealers' trade body. It has been building its range since last Christmas and can now offer new discs such as

Pandora's CD and Alistair in Outer Space, plus a back catalogue of titles. Gandy: "We became aware that there are a considerable number of CDTV and A570 users out there who need a reliable source of software. We aim to meet that need "

A1200 upgrade deal

COMMODORE knocked £100 off the price of an A1200 during a recent trade-in promotion aimed at encourag-ing A500 and A500P owners to upgrade their computers.

The deal was available through independent dealers during June when in addition to the £259, buyers handed over a fully-working Amiga with its mouse, power supply and

thousands of enthusiasts" and claim that the 32-bit computer already has 70,000 owners in Brita Commodore boss David Pleasance

id: "Even though we launched the niga 1200 as an extremely advanced. rable machine, we always saw it as a mass market computer offer was aimed at speeding that pro cess up

Amiga Computing August 1993

News Briefs

OpalVision savings

INDI Direct (0543 419999) are offering Amiga users savings on the price of 24-bit graphics system OpalVision 2. The main board and software OpalPaint II costs £549.99, £50 off its

OpalVision II supplied with Imagine Il software and OpalPaint II has its price tag cut by £100 to £599. A free mounting bracket is available for A4000 owners.

Meanwhile, the firm have announced that an external expansion box will enable A1200 users to use the system within the next few weeks.

ITV retune in to games

GAMERS will be able to tune into Yorkshire TV's Bad Influence this September when the top computer and consoles show returns to the ITV

Producer Patrick Titley says the programme will keep its old format and promises to give the Amiga large coverage. Andy Crane and Violet Berlin have been retained as presenters.

Thursday September 9 at 4.45pm. **ADPro** upgrades

ART Department Professional users should now contact Meridian Software Distribution (081-543 3500) if they wish to upgrade their software to the latest version.

The firm say that some people who applied to the package's former distributor DMI might have a short wait before they receive their upgrades

CompuServe cuts costs

COMMS giant CompuServe have introduced local dial-up access points in Birmingham and Manchester supporting data speeds up to 9,600 bits

per second. The firm say they have been introduced as part of their effort to offer easier, reduced cost access to members in the UK. There are about 370 local-dial access points

Printing at high speed...

SPEEDIET 300 is the name of Seikosha's new inkjet printer, a model the manufacturer claims offers high quality and low noise printing at up to 300 characters per second.

The firm say high speed printing is available on plain paper, transparencies or envelopes, and is achieved by using a new high capacity print head.

Its 16k printer buffer can be expanded with optional 128k and 256k expansions, and a single-sheet feeder capable of holding up to 100 sheets of paper is supplied

SpeedJET's fonts include letter quality Dutch 801, Letter Gothic and Courier in ♥arious styles. They can be printed in verti-

cally or horizontally at up to 300

It includes HP Desklet 500 emulation and costs £359.



Subtitles for video work

A SUBTITLING system suitable for off and on-line production has just been released for the Amina by Manchester-based Zen Computer Services (061-793 1931). Many of Euro-Titler's features have been developed for requirements in a broadcast

environment and have led to the system being chosen by Granada TV A video overlay card enables near-broadcast quality subtitles to be previewed over

the source video for off-line work On-line the output can be direct from the Amiga or downloaded to an Aston 4 caption

Timing comes from external VITC, LTC or Midi timecode via an external reader or internal VITC/LTC card. Alternatively, the Amiga can generate the timing reference. It features Ascii support, one or two-line subtitles, boxed or unboxed, anti-aliased font support, cue setting and editing facilities, script printout and several timecode reader

A broadcast version is also available boasting Aston 4 support and external keyer

It costs £180 for the standard version, £380 for Euro-Titler Broadcast, £450 for a VITC internal reader card and £530 for an LTC option The manufacturer can supply and install fully-configured systems or individual items

for existing Amiga users. Complete system prices excluding VCRs

options

Peripheral prices are slashed

orice of several Amiga peripherals: G-Lock, the A530 Turbo, HD8+ hard drive and IV24 graphic card. Britain's distributor Silica S developer's huge buying power is enabled them to reduce produc-on costs and pass the savings or

HD8+ hard drives cost £249 for a 42Mb model and range up to £399 for a massive 120Mb of storage capac ity, G-Lock, meanwhile, comes down

"The lower prices help make GVF roducts available to all Amiga sers. Even those with small bud ward-winning peripherals," said : ilica spokesman.



Bigger Harlequin targets animators

ANIMATORS and multimedia users are among those targeted for Harlequin Plus, a new version of the original 32-bit framebuffer from Amiga Centre Scotland (089 687 583).

The board contains a line up of new features including a full screen 4-bit overlay - 16 colours from a palette of 16.8m - which is fully independent of the main 24-bit display. The Harlequin standard 24-bit output can now be fed through

a colour look-up table for real-time gamma correction, colour And it also has a true colour 15-bit mode with 32,768 colours and an 8-bit mode with 256 colours, as well as a pseudo-colour

8-bit mode with colour cycling. Other new functions are a built-in genlock, broadcast standard output synchronisation and signal levels, revised screen



Harlequin: Now features more

resolutions and faster screen updates.

The board costs £1,598 for the A4000 and £1,498 for the A2000. Upgrades are available, although at the time of going to press

WIDI-AMIGA 12 *Vo. 2*







but when you look closely at our newly designed ergonomic interface and interactive menu system you will surely agree that the impossible has been achieved 1.

is now faster, smoother and even easier to use than before. It has specification levels unmatched by any other product. at any price 1. With full A1200 and AGA chipset support. A summary of the specification is listed below ... Many improvements

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*NEGATIVE SHARPEN QUANTISE *SOFTFOCUS *MOSAIC *THRESHOLD SMOOTH EDGE DETECT PSYCHEDELIC *FMBOSS *BLUR *PASTE

*FRAME SELECT











DIARY DATES

5 to 7 September 1993 European Computer Trade Show Organiser: Blenheim

(081-742 2828) Venue: Business Design Centre, London A trade-only event where new games will be unveiled.

16 to 20 September 1993

Organiser: News International (071-782 6000) Venue: Olympia, London A public consumer electronics show. Commodore plan to attend.

11 to 14 November 1993 Future Entertainment Show (0225 442244) Venue: Olympia, London A multi-format computer and console show.

19 to 21 November 1993 International Computer Show Organiser: Westminster Exhibitions (081-549 3444)

Venue: Wembley, London Discounted software and hardware plus product releases.

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

Showing off CD talents

THE latest compact disc from Optonica uses some of the latest techniques including motion video to show off the capabilities of CDTV and Amigas fitted with A570

Pandora's CD was produced using Optonica's own Interplay authoring system and Videostream digital motion video production system - both of which will soon be sold

The disc contains 2,000 clip art items, photograph, sound effects and textures and backgrounds libraries plus a range of other demos. Cost: £4.99 from Optonica (0455



commercially

Fishing for clip art

NEW clip art from Artworks gives Amiga users a set of images of interest to fishing enthusiasts and another disk targets those who compose title screens for video

Fishing and Freshwater Life and Signs & Symbols 3 each contain over 100 images claimed to be drawn by professional artists and designed to give a clear finish when printed

An accompanying poster shows the images at a glance and a slide show facility enables the artwork to be viewed without the aid of another program. Each disk costs £6.99, or £6 if three of more are bought from the library of ten. Telephone Artworks on 0469 588138.

Kuma are helping out with DTP

STUDENTS who need to learn desktop publishing skills as part of a short course 844335) latest publication Student's Guide to Desktop Publishing,

was written by teacher and freelance journalist Terry Freedman and covers a wide range of topics.

They include basic skills, preparing text and artwork, principles of design, scanners, printing, proof reading markets and typography.

There are also sections on wider requirements such as health and safety, maintenance and data security while questions test students on a continuous

Thorn/EMI in Scala sales push

SCALA UK have just signed a dea with Thorn/EMI under which the latter will push the Amiga-based information system InfoChannel further into industry as part of their product

ome large companies are already using the system, an information and advertising tool that can schedule transmissions and update informa-

At its centre an Amiga uses a combination of high quality graphics und and interactivity to transmit and control information

Barry Thurston, director of Scala UK, said: "Thorn/EMI have considerlarly in the corporate and hotel

strong foundation for establishing itself as the number one multimedia communications and information sys-tem available on the market today." Meanwhile, Scala have announced

details of companies who have just employed InfoChannel for the first At Denmark's Aalborg Airport it is

used to update flight information and promote airport services while Hiltor Hotels have installed systems around Other newcomers include the Bank of Scotland, Co-op supermarkets, the

Gleneagles Hotel in Scotland and And even computer manufacture IBM turned to Scala on the Amigi when they needed to make a presen

chnology show in Germany. But the package has also taken to sea on board several cruise ship ports, tourist attractions and shop

rips using the system include th MS Statendem travelling between Sa Francisco and Fort Lauderdale an DFDS/ Scandinavian ferries sailing between Harwich and Denmark.

KNOW SOMETHING WE DON'T?

Although Amiga Computing has scores of contacts in the Amiga world we need you. If you have some ho news ring John Butters on the news desk now on 0625 878888 or fax to 0625 850652. All sources will be treated in the strictest of confidence.

Supra speed accelerator

SUPRATURBO 28 is a new accelerator that increases the speed of A500 and A2000s from 7MHz to 28MHz, without requiring the existing processor to be replaced.

According to developer Supra Corporation, tests have shown that the board significantly enhances disk-intensive processes, animations, compiling programs and displaying graphics.

It is compatible with the Amiga's 68000 processor and although most software works alongside the accelerator an external switch slows the computer for trouble-

some applications "The SupraTurbo 28 grew out of customer demand," said Supra boss John "Amiga customers have been telling us they want their existing computers to run

faster without compromising either their already-installed peripherals or their pocketbooks. The A500 version plugs into the external expansion bus and a pass-through slot

allows users to connect expansions such as hard drives and memory. A2000 owners plug their accelerator into the computer's 86-pin expansion slot.

Additional internal peripherals can be also be added. Supra's British distributor is Leeds-based First Computer Centre (0532 319057). Price: £129.99.

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Slow times at

his month I'd hoped to have a

Denny Atkin on the latest realignments in the LIS Commodors realist

report for you on all the neat Amiga titles shown at the Consumer Electronics Show in Chicago,

Unfortunately, although PC, Mega Drive, SuperNES, and 3DO titles filled an entire building, there was only a single booth that even had Amigas in it - and the nameplates were all covered up by Video Toaster 4000 labels.

A few US games companies did acknowledge that they still have some Amiga titles in the works, but almost all of those were being developed in

A notable exception were Interplay, who are developing the Amiga port of Star Trek: 25th Anniversary in the US. Electronic Arts mentioned Desert Strike and an AGA version of Syndicate, and Psygnosis said their recent acquisition by Sony wouldn't affect the 11 Amiga titles currently under development.

NewTek's Video Toaster 4000 booth was actually one of the most crowded at the show, although how much of that is attributable to the Toaster 4000's incredible capabilities compared to how much could be credited to fascination with NewTek demo megababe Kiki Stockhammer could be debated.

The Toaster 4000 has things like realtime 24-bit (OK, Ham8, but who can tell) animated wipes, an incredible new revision of LightWave 3D, and more. However, since it still only works on NTSC machines, I won't tantalise you any further.

For American Amiga gamers, CES was a truly depressing experience. The American games market for the Amiga seems to have taken its last steps (mostly due to stores not wanting to carry lowervolume Amiga titles when they can devote the space to PC and console games). Almost all our titles come from the UK, and that doesn't look likely to change.

SHOW STOPPER

The Amiga's spiritual heir, the 3DO "Interactive Multiplayer" designed by Amiga Inc alumni R J Mical and Dave

This CD-ROM based console has fast full-colour graphics, and texture-mapped 3DO games were on display at about half of the booths. It's a hot little machine. and is probably what the Amiga would be had it been designed 10 years later. remains to be seen if there's a market for

3DO was adamant that it was an Interactive Multiplayer, not a games console, but 90 per cent of the titles on display were games.

Commodore were at the show, but they didn't have a public display. Instead, there was a small private room with a darkened window. Of course, this investigative reporter snuck a peek Engineering's left Porter talking to a businessman with an Amiga 1200 against

the wall. Commodore were probably using the opportunity to try to find retail outlets to carry its uncoming \$300 (£197) CD-ROM games machine. The machine has lots of MPEG video decompression, but with Commodore's recent \$177 million loss unlikely they can mount a marketing effort to compete with 3DO, even though their machine is only half the

Pegged picture

You have a brand-new Amiga 1200 and you've been using a raytracer to create awesome AGA pictures. But now your 80Mb hard drive is crammed full of pictures.

What do you do? You could use JPEG compression to shrink your pictures, but your

rendering program doesn't support JPEG, and neither does DPaint. Heifner Communications has a solution in PEGGER, an automated JPEG compression program. If you create AGA or 24-bit graphics on your Amiga and you're not familiar with JPEG. you should be. This format can shrink graphics files by a factor of ten or more, storing

800k 24-bit files in only 80k. Now you can store 1,000 pictures on a 50Mb drive instead of 60 or 70. JPEG is a "lossy" compression, and does lose a bit of picture resolution, but the results are rarely

PEGGER runs in the background and automatically compresses and decompresses pictures, so you can use it with program like DPaint IV AGA or VistaPro that don't have built-in JPEG support. If you're ARexx-savvy, you can use PEGGER's ARexx port to con-

trol compression from other applications. PEGGER uses highly-optimised code, so it can handle the compression quickly without bogging down your other processes. Best of all. PEGGER works on small portions of pictures, so you can process huge pictures with on an unexpanded A1200 - something that's impossible with image processing

programs like ADPro and ImageMaster. Pegger requires AmigaDOS 2 or 3, and will support Commodore's DSP for even faster processing when the chip is finally shipped. It lists for \$95 and is available from Heifner Communications, 4451 I-70 Drive NW, Columbia, MO 65202 USA; phone (314) 445-6163; foy (314) 445-0757

Mr Sulu, you have the helm

With all the multimedia software creation tools out there -CanDo, AmigaVision, HyperBook, Director 2, and others - is there really room for another one? When it's one as sophisticated as Helm, absolutely, Helm combines draw, paint, and image-processing

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Create a calculator program using Helm.

tools with a scripting language, a hypertext database manager, and an incredible assortment of objects you can use to create user-interfaces for your programs. Among the objects you can use in your files are pages (which can be turned and browsed through like the real paper ones), forms, buttons, charts (bar, pie, line - you

name it), paintable fields, ARexx "action" objects, and Amiga-style gadgets. The included tools aren't just basic, barely useable hacks. The paint-program is full-featured, for instance,

with features like Bezier curves and even chaos fills. Image-processing filters such as the ones included in ADPro are available for use when creating your presentations - this is one versatile package. It fully supports IFF 8SVX, ANIMS, ILBM, and even

modes, and includes a very complete, well-written You'll learn lots, though, from looking at the megabytes of included demo applications. Helm ships on

SMUS music files. It works well in PAL as well as NTSC

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seven disks, and most of those are packed with

If you want to create "multimedia" applications (rather than shoot-'em-ups), you'll find Helm a wonderful tool. It's a bargain at \$129 (£83). Contact Eagle Tree Software, P.O. Box 164, Hopewell, VA 23860 USA;

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A marriage made in hell

s this is the August issue of Amiga Computing, you should be reading it some time in the middle of July, by which time the news of Commodore's latest plans for the Amiga should be at least as hot as the weather. So will you like what they have in store for us? Leaked exclusively to this magazine. Commodore's

stated plans involve what looks to be the AAA chip set allied to a RISC chip with, presumably, 68000 compatibility to provide a machine which is both a super-fast, supergraphics Amiga and a "Pentium" 586 PC into the bargain. The fact that Windows NT does not depend on existing PC hardware and can be used across a variety of machines

means that it should theoretically be possible to write software entirely for an operating system rather than a For the industry as a whole, this could mean increased

flexibility, new sales opportunities, and a welcome move towards standardisation. PC ASCENDANCY

On the other hand, it could see the death of the Amiga and other platforms as distinct operating environments, and the ascendancy of the PC. An Amiga with a PC built-in might quickly be looked upon as a PC with an Amiga built-

Can this affect the ordinary user? Probably not. The A5000, as it is currently being called, is unlikely to be anything other than a very high end machine, and if as thought it is based on RISC architecture, the new Workbench will be radically different to its predecessors in any case.

The most interesting aspect of this development is that it might drag the inexpensive Amiga into a more corporate sphere, taking with it its knack for video, multimedia, and presentations. We have already seen a willingness on the part of the PC world to use the Amiga where its talents are best employed.

When IBM launched its multimedia extensions for OS/2 (IBM's own Windows lookalike), they used an Amiga running Scala MM210 to control a video wall and various audio-visual sources. This sort of multimedia extravaganza,

Can Commodore unite the PC and Amiga in one box and expect them to co-exist in marital bliss?

now an established fact on the Amiga, is quite new to the PC world, though they are catching up fast.

There is no reason to believe that Commodore can't recover from their recent losses so long as the much-vaunted in the PC market and, of course, the Amiga, they should be in the ideal position to make the most of the two machines. Theoretically, the marriage might work, but there are serious practical difficulties.

Companies which work in the massive PC market and develop products, especially software, depend on a wide base of compatible hardware

Microsoft, for example, know that if Word For Windows 2 runs on the 4Mb 386 in one office, it should work on just about every one of the millions of other such machines in existence.

However, give Microsoft a weird hybrid based on RISC architecture starting from an initially very low market base and they might decide that their development resources can be better applied elsewhere.

In this situation, the portability of the operating system, be it Windows NT, Workbench 4.0, or a combination of both, will be enucial

Manufacturers around the world are developing ways of making the computer below the operating system more transparent to the software. Workbench 4.0's retargetable graphics being a good example, so the portability should eventually arrive. The downside is that even if this marriage goes ahead, it will not be an equal partnership.

made it fairly clear that he was aiming to give the Amiga a free ride on the back of Windows NT into the PC business market, and if this is the way the A5000 works out, it will cease to be an Amiga. Put another way, why should it matter to the corporate user which machine is running his copy of Quattro Pro so long as the interface, operating system, and software itself is identical to all the other

Only if the Amiga's multitasking capabilities can be but for this a separate version of Windows NT will be

Our problem is that at the moment, all thoughts on the future of the Amiga are purely speculative. Commodore's plans are still only on record as unguarded comments by various officials and no long term strategy

has been revealed. We know that exciting new technology is only a year or so away, with the 68060, possible RISC developments. and fast 24-bit graphics, but many in the market are

unwilling to wait for another year If Commodore think that third-party manufacturers and the huge base of expectant end users can be fobbed off with vague promises of what may or may not end up on the production line, they have a rude awakening in

It is a good sign that many top company men seem much more open about plans than used to be the case, but we will need much more concrete assuran

Any information Commodore release about their marketing plans and where they intend to take the Amiga instantly stimulates debate from individuals, user groups, and developers alike, generating feedback from those who will be expected to buy new products. Surely it makes commercial sense to encourage this feedback and listen to it?

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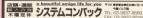
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K, so you've got the disk and now you want to create those fabulous morphs you've seen in Terminator 2. What do you do now? Well, starting up the program's a good idea. Here's how to go about it.

Start your Amiga and put the disk into your floppy drive. Double click on the CoverDisk icon, then take a look at the window which opens on your Workbench

There should be a single CineMorph in icon labelled MakeCineMorphir which, when double-clicked upon, starts a dearchiving process designed to produce an auto-booting disk containing CineMorph jr and a couple of sample images. Anyone in doubt as to what is happening during the de-archiving process should take a quick look at our Getting Started page

Once the CineMorph ir disk has been created, restart your Amiga and boot from the new disk. Double-click on the CineMorph ir icon and after a brief spell of disk whirring the main screen will appear.

Two large blank windows dominate most of the screen, and it is into these that we will load our images for a quick warping tutorial. First of all, we must decide what sort of project we want to work on and, as memory is tight, which is the most economic. Move to the Settings menu and

select the Mode item. Three selections should be on offer:

If Hollywood can do it, so can you! With our fabulous freebie. CineMorph ir. Terminator 2 is only a short morph from home

Single Image, Dual Image, and Sequence, We will choose Single Image, as this is very efficient on system resources, so highlight the item and release the mouse button. Next, go to the Cell menu and select Load Image. A file requester will appear showing the contents of the disk, so click on the samples drawer in which you will find two small compressed Ipeg. files. Click on the filed called TinyGal.ipg then on OK

After decompressing, the face of a young woman superimposed by a grid will appear in both of the windows. This grid is where all the action takes place as it is by moving the points on the grid that warping is achieved, and where we'll now carry out a quick test of the technique.

Start by clicking on one of the points around the woman's nose in the right hand (destination) window. The point will turn vellow and can be dragged to a new position if you hold down the right mouse button. Let's make her nose a bit larger, so pull out the points on either side of the nose until they are half way towards the next point in the grid.

For a quick look at how this affects the shape of the face, go to the Morph menu and choose Preview Single. A window will appear in the bottom left corner of the

the DISK

Fantasy becomes reality

screen and a requester will pop up with a generate button and a slider which controls which frame of the animation we will

As we wish to see the final result, you should drag the slider all the way to the right (it should go to frame 25) and click on generate. CineMorph ir will now interpret the new grid positions and warp the

source image to fit, a process which will take a while on standard A500 Plus or A600 machines, but which will be quite a bit faster on the A1200.

Once generation is complete we should have a much more puggish-looking young lady on screen. This is a very unflattering warp, however, so we'll try something a little less ugly

Make sure that the destination window is active by clicking on it, then go to the Point menu and choose Reset Points to restore the original square grid. Now we'll try a bit of multiple selection, a vital tool

when manipulating lots of points. Hold down the left mouse button and the Shift key at the same time, then drag a box around the four points lying in a vertical line over the region of the woman's left ear. The points will all turn yellow to indicate that they have been selected, and if the shift button is still held down you

should be abe to move them as one. To slim down our subject, move the four points slightly towards the middle of the screen, then repeat the operation for the points on the other side of the face. Now try a quick sneak preview by clicking on the generation button, at which CineMorph ir can be when making slight

Crazy Sue Goes On... Authors: Hironymous Jumpshoe, MC Madbrush, DJ Braincrack

This has to be one of the best PD platform games ever, if not the best. It is more playable than the original Crazy Sue in which Sue defeated the evil Wizard of Doom.

Now his wife, the Mistress of Death, has bewitched the land of Ereanor and its inhabitants. Strange things are going on but that's not all, as the wicked woman has also done the most terrible deed to our heroine by stealing her teddy bear. Thus, the scenario is set and your task is to help Susi in her fight against the Mistress of Death.

As the game begins, a message appears instructing you to visit all the doors. There are at least three huge levels, (we couldn't get

past the third one), and we found that it is not necessary to collect all of the objects or visit all the doors in order to complete each of these. Most of the doors are locked and require a key or magic spell to open them. Assuming that you have access to one of these, pulling down

on the joystick will allow entry to new rooms. lives and the ability to jump extra high. Once a scroll has been collected it must be taken to the high altar where the spell may be cast by

moving the loystick down. During long sessions, press P to toggle the pause, but before taking a break, be sure to test that the game has stopped otherwise



There are plenty of nasties including giant

spiders, snakes, armour-clad knights and escaped lack-in-the-boxes. Even tame objects such as books are decidedly deadly! Like all good games, this one is highly addictive and sufficiently large to keep everyone occupied for months.

Memory muncher

will only run on Amigas with Workbench 2 or higher. It is memory mensive so some facilities will not We recommend two megabytes and a hard drive although it is possible to morph or plandard 1 meg Amigas as well as

ROM sharer or a more recent inger supported by the majority of rogrammers so you know what to o if you own one of these changes to an image.

Now to finish off the effect by stretching the woman's chin a little. Select the two points immediately below the bottom of the chin and pull them slightly down and inwards to sharpen things off. Don't go overboard with this one, as excessive movement can lead to grotesque

A quick stab at the generate button should confirm that our subject is begin-

ning to look decidedly different. Now to create the movie! Hold down the right mouse button

again and check out the morph menu. It has five items other than the preview single options we have already used, including two options each for rendering and generating images.

The difference between these two is simply that a generated image will be saved as a 24-bit file, whereas a rendered image will be saved out in the format selected by the user through the Render menu. Leave these settings at the default for now (HAM lo-res) and select the Render Animation option

A file requester will appear to enable you to choose where the animation is stored and what it will be called. Feel free to save direct to the CineMorph ir disk, as

(testurp) Juntor 1.62 (24-8ay-93) (1/1) Surger: Timplet. 176 (15 (15) (2) (1/1) Just: Timber, 176 (196 (15)) Cenerate | 2| full | Exit It is easy to

change the speed at which changes takes take place

the resulting 25 frame animation should be less than 50k in size and should load into DPaint IV for later viewing. If you doesn't support HAM images, try the EHB (Extra Half-Brite, or 64-colour) option

Before rendering, notice that CineMorph jr asks you which should be the first and last images in the sequence. take of generating any unecessary frames in a long sequence when a short section is required for preview.

Of course, you needn't stop with this simple warp. Those with access to a hand scanner or video digitiser can upset all their friends and relations with a few choice morphs and warps, or can opt to carry out more complex jobs if memory

Experiment with larger images, by all means, especially if you have 2Mh or particularly well suited to the morphing and the additional firepower of a 68020

To test the package's other talents, try morphing from the TinyGal image to the

speeded up making it extremely difficult to catch the ball. Ultimately, if the first level is re-encountered and the player fails to hit the ball a life is

The game can be played by one or two players who may be either human or the Amiga itself. It is even possible to select two computer players who battle it out while allowing you the chance to pick up some tips. There are five skill levels adjustable for each player so there is no reason for games against family and friends to become one-sided.

In order to take a break during a long game, press the spacebar. When suitably refreshed, press it again and the game will continue.

TinyGuy image. This will not work on machines with only 1Mb RAM, but for 2Mb owners it is simply a matter of choosing Dual Image from the Settings ... Mode menu item, then loading an image into

You can simply generate the animation as it stands or experiment with tweaking it through moving points on the grid, a particularly useful technique to force the woman's hair to morph down to the man's much tighter outline.

If at any time it is felt that there are too few points to the grid and that more precise control is needed, say to make a face twitch its eyebrow, there are a couple of tricks we can pull to improve close control. Holding down the right mouse button, take a long look at the Point requester, where most of the editing action takes place.

There are two important options in the middle of this menu, Add Row and Add Column. By highlighting a poit and choosing either of these options, it is possible to insert a new row or column of points to effectively double the number of editing points available in the area where detail is

Try a quick test on your own by adding these extra points around the area of an eyebrow - this has been a common trick in TV dog food adverts recently. With a little practice the user can make a small section of a face move, a technique which is often far more effective than huge changes.

When such close work is required, choosing Zoom In from the Window menu and scrolling around with the cursor keys helps immensely. Hairlines are good places to play "tricks" with, because the motion and changes of hairstyles can be dramatic, yet it doesn't take as much effort to make them morph in an interesting fashion.

Once the points are set in the mesh, you

2"



Poing Author: Paul Van Der Valk

Breakout has been around in one form or another for absolutely yonks for the simple reason that it's an absolute classic Amaninders should find this PD yer. sion extremely enjoyable particularly as it can be tailored to suit a variety of skill levels. The pattern of bricks is randomly picked for each stage and some have hidden features including multi-balls, bursts of autoplay and promotion to the

ig a

Traditionally, the object is to destroy all of the bricks before moving on to the next screen. In this version, bouncing the



to crumble. The ball is then free to travel into the next stage. If you fail to move the bat to the ball quickly enough, rather than losing a life, the ball returns to the previous stage. However, the screen will become mono and the gameplay



can choose the way in which morphing takes place. The dissolve curve, which is the process of blending the colour information from one image into the other, is controlled for each individual frame. The of the frames. With these curves you can have steady, even, transitions with a linear curve, or a more surprising morph using sinusoidal, that starts slow then morphs

mouse buutton which starts steeply at first then flattens off towards the end. If the animation is rendered again, it should be obvious that changes take place rapidly in

> warps are very memory-conscious





Minisola is a strategy game played against a competent computer opponent. It is played on a grid and at each turn players move their counter to an adjacent position, then destroy a square. To win, your opponent must be forced into a situation where a move cannot be made.

By default, the game is battled out on an eight by six board but these dimensions may be altered, using the prefs option, to any configuration from four by five up to ten by ten. Winning any strategy game is made

easier by knowing whether the first player to move has an advantage, equal 26 Amiga Computing August 1993

There's more too...

While you can morph and warp to your heart's content, we've kept a few things as Sequence isn't available in this version of CineMorph and it's absolutely crucial to morphing moving images. Purchasers also get quite a nice manual with the purchased version and they can get upgrades of CineMorph from GVP as well. Owners of ImageFX, GVP's image processor/24-bit paint software, will also will find that their copy of CineMorph has all these features and a few extra special additions of it's own.

What is a morph?

Morphing, also known as polymorphing and metamorphing, is a technique pioneered by Tom Brigham of the New York Institute of Technology and demonstrated at the 1982 SIGGRAPH film show. It took until 1987 for Doug Smyth, a programmer/animator working for Industrial Light and Magic, to reinvent and improve on the original work for use in Ron Howard's film Willow.

This software evolved and improved through the years and was used in other films such as Indiana Jones and the Last Crusade and Terminator 2. This exact same Hollywood special effects technique is used in CineMorph jr, the standalone morphing software from GVP and Nova Design, which you now have in your hands. You can turn raw software power, and your imagination and skill, into eye-popping morphs and warps

the first few frames then more slowly as the animation progresses. With a little tampering, the tweening curve can be a

Next Month

Next issue will bring advanced hints and tips for morphing fans. You'll learn about amazingly easy ways to create

a) 11/11 hours | Insept 178 (W. 19. 29 at 11/11 heat) Director of the sp. 2



Author: Philippe Banwarth odds or a disadvantage. The game is

made fair by alternating the first player to move but this can be changed using the program's built in preferences. Of course, you do need to figure out whether to go first or second in order to cheat, as we're not going spoil things by telling you.



Archive problems

gram on the June CoverDisk. Please ensure that your copy of the CoverDisk is write-enabled by more ing the protect thas othat no hole is present. Once this has been done reboot the CoverDisk and follow the on screen messages, taking care to insert the right disk at the right time. Amiga Computing operate a CoverDisk hotline on 0625 859766 to help anyone experiencing problems.
It is only available on Thursdays

between 2-5pm so please do not try to call us at any other time as you won't get an answer

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The Amiga Computing CoverDisk is designed to be as simple to use as possible. Follow these instructions and you'll be up and running in no time!

New readers may have difficulties using our CoverDisk, so we have included this page to help you out.

Below we explain how to copy files from one disk to another, how to copy the entire CoverDisk and how to de-archive programs. none of the first things you must do when get your CoverDisk is make a backup copy, then put the original CoverDisk away for safe keeping. As a rule you should also do this with the majority of your software collection.



How to make a backup

To copy the entire CoverDisk, load up your Workbench disk, then either click once on the CoverDisk icon and select Duplicate, or select Copy from the Workbench menu, or open CLI/Shell and type:

DISKCOPY FROM DEG: TO DEG: When prompted, put your CoverDisk (the source disk) in

df0: and be ready to replace it with your blank disk (the destination disk). Follow the Amiga's on-screen prompts until the disk copy is completed. Now put the original away in a safe place and use your backup.



Copying individual files

You might at some point want to copy a single progra from a CoverDisk to your compilation. Workbench disk or even your hard drive.

To do this you'll need the COPY command. As most CoverDisk programs are stashed away in their own directories, the quickest way to copy a program is to copy the whole directory at once. Use the command:

copy (directory) TO (newdisk) ALI

where (directory) is the full pathname of the directory you wish to copy, and (newdisk) is the name of the disk and directory into which it will be copied. For example, if you wanted to copy a utility called FRED from CoverDisk 27's Utilities drawer to a directory called FRED on your Workbench disk, you'd type:

COPY COVERDISEZ7:UTILITIES/FRED TO WORKBENCH1.3/FRED ALL

Alternatively, you can click once on the FRED directory icon and drag it across to the new disk's window. This has the advantage of creating a new directory for you and copying the icon as well.

Once you have moved a particular program to where you require it you could experience some problems running the program. This is sometimes caused by the program not being able to find files which it needs to run. A good example is the text files on the CoverDisk.

These have been crunched using PowerPacker, so when you try to copy them to another disk and then try to read them you can't unless you have also copied the Powerpacker library into your LIBS drawer.



So if you have copied a program from the CoverDisk to your Work disk or hard drive make sure you also copy any other files the program requires, ie fonts, libraries, device drivers and Ccommands.

De-archiving Occasionally we have so many programs to fit onto the

CoverDisk that we have to archive them. Archiving is where we take the entire contents of a disk and compress them into one file which is much smaller, giving us space to fit more programs onto the disk Dearchiving programs which are on the CoverDisk

is a very simple task. If a program has been archived then you will need a blank disk to dearchive it onto Say we have archived a program called FRED. You

simply double click on FRED's icon, and will be asked if you have a blank disk ready to dearchive to. Type "v" or "n" accordingly.

Your computer will then copy the archived file into its memory and ask you to insert your blank disk. It will proceed to format the disk, and will then de-crunch the archived file onto your blank disk.

Once this has been done you can simply reboot your machine with the disk which contains the dearchived program on it and then use the program as instructed in the CoverDisk pages.

Note that if you have a Workbench 2 or upward machine you must boot with the CoverDisk writeenabled to perform the dearchiving process.



Workbench 3

If you have a Workbench 3 machine, don't worry - most if not all of the programs on the

CoverDisk will work on your machines If the program is specifically designed to work with Workbench 3 then you may have to copy the program to your hard drive or Workbench disk using the process described

earlier on this page.



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nless you've spent the last few years marooned on a remote tropical isle you can't fail to have missed the camcorder explosion mar's give almost anyone the potential to

that's give almost anyone the potential to become the next Polanski. Unfortunately the good intentions of

any would-be movie mogul are all to often destroyed by the end results featuring bours of unadulterated twodels such as set (both walking and static), the lens sop extreme close-up) and let's not forget mile Johnnie doing nothing whatsoever has four solid hours — every moment capmed for posterity, of course.

Worse than the expense in wasted tape is the torture that friends, relations and sometimes clients are put through as the endless dribble goes on, and on and on...

dies dribble goes on, and on and on...

The answer is, of course, editing, that
the thing that's all too often forgotten
then compiling the next sadistic montage

for a forthcoming family get-together.

In short, without good editing your family suffers, your friends suffer and perhaps most important of all – for those

your business will certainly suffer.

As any professional will tell you, good

As any professional will tell you, good editing can make fairly poor material look great whilst the reverse will always make

the best footage look absolutely diabolical. You only need to watch the average 30 second commercial to see the impact that good editing can have on a production, and like it or not, for that degree of professionalism a dedicated editing system is

BLACK BOX

As you can see from the photography,

Videopilot is a fairly impressive piece of equipment that's come a long way from its first incarnation as a plain black box. Those who remember its predecessor

Those who remember its predecess may recall that in the old days everythi was controlled via the Amiza.

Now however that's all changed and not just to improve the aesthetics. After quizzing the user base, the creators of Videopilot discovered that control via the keyboard wasn't allways the best way to exploit the system.

By design most video suites are fairly gloomy and as a result fumbling around for function keys wasen't ideal. As a result the new redesigned mimics the approach employed by pro edit systems offering the case of use and friendly ergonomic design offered by its infinitely more expensive CONFIGURATION TEST



Department of the Control

During the transformation, the bland black box underwent a complete overhaul, which as you can see now boasts large, well defined keys for all major functions plus a new jog shuttle feature for frame by frame advancement.

In addition an assortment of ten mode selectors run along the top of the unit

which again work to consolidate and simplify control of the system. Aside from the somewhat awkward keyboard control of its predecessor, constant shuffling from the keyboard to Videopilot was also highlighted as a problem.

As a result the aforementioned buttons provide a means of controlling almost every aspect of the editing process without any need for intervention via the key-

From the buttons you can automatically switch between any one of the three player units or the target recorder. In addition you can initialise assembly, preview edits before committing them, insert edit, audio dub, reset the counter and even link to external mixing desks equipped with an ICS Bus.

TERRIFYING

Moving to the rear of the unit, ease of use seems to have been forgotten thanks to a terrifying array of connections span-

ning the entire length of the unit.

However looks can be deceptive and in fact the various elements are split into individual sections for each player the target recorder and monitor.

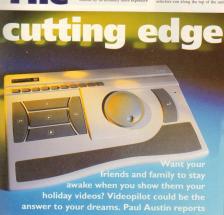
ger recorder and monitor.

As for the players, each of the three allow connection of a Scart for composite in/out, twin Y/C in and outs, a composite monitor out, an LTC – or Linear Time Code-in plus the essential remote control out.

On the record side, the setup is pretty similar with identical composite and Y/C 1/O options plus remote control port. Aside from the player and recorders, the only other posts pertain to the monitor which again boast both composite via a Scart, Y/C plus the essential LTC out—used to strip timecode onto tape where processors.

Due to the complexity of connection, cabling-up any videographic exploit can be tricky especially when up to Four VCRs and a monitor all converging on one point.

However the whole concept of the rear



panel revolves around the fact that once connection is complete there's no need to touch anything again - with the obvious exception being camcorders.

Setting-up

Assuming the appropriate audio/video connections are complete, the next task is to transfer transport control from the VCRs to the Videopilot. To achieve this, some form of remote control is essential which in the case of Videopilot means either infra red or direct connection to the remote edit options found on the better VHS, Hi8 and S-VHS VRCs and cam-

Aside from pulling in the appropriate cable or alternatively placing the infra red sensor, the only other task is to select the necessary VCR and control combination from within the software.

Like the rest of the package, the selection is a simple icon clicking procedure until the appropriate combination pops up

CONFIGURATION SUMMARY

Unlike its predecessor, the new version doesn't provide the full infra red memorisation offered in the past but instead comes with a huge selection of presets covering all the major manufacturers.

Admittedly this may cause occasional compatibility problems with the more obscure makes but this should be extremely rare and can be isolated prior to

Assuming hardware selection, connection and remote control have been set up and of course checked via the program's built-in test facility, the final task is to select the appropriate timecode option for each player/recorder.

Apart from the obvious attraction of the new unit and the ease of use inherent throughout both the software and hardware, it's the unit's timecode options which make it special.

Unlike most editing systems, Videopilot doesn't stick to a single proprietary timecoding system. In fact all the major semi-pro and home formats are



an obvious attempt to bake the perfect cake, the software designers have er a very smooth scroll and crawl in addition to a basic page by page flip. As is the case with most titlers, it's only really at its best in combination with a enlock – which as a matter of interest sits in-line between the recorder out and

are payer.

As mentioned, things are pretty straightforward but you are given the option to ix up to four different forms on a single page, with each being any one of the unravailable colours both withor without drop shadow.

As is the norm, the colours can be adjusted via palette requester, while the txi taelf can be justified either left, right or in the contra of the screen. As you found procts, and the procts, acrost peeds can be adjusted via a palette requester, while the proct, acrost speeds can be adjusted as required providing a useful if not speed, acrost speeds can be adjusted as required providing a useful if not speed.



supported with the only exception being the broadcast standard of SMPTE.

ers, SMPTE may be supported in the future but for now we'll put it aside and concentrate on the four formats directly supported. These include VITC, RCTC,

timecode and as a result isn't particularly accurate. However in the case of the VITC, RCTC

with frame accuracy at or between 1 to 3 fps on better quality VCRs that have been

Once applied the software automatically takes into account the idiosyncrasies of each VRCs mechanism - and thereby

improves performance. In the simplest - and preferred - configuration, the original tape or "rushes" will already be coded during recording either by VITC or RCTC, in which case Videopilot will automatically read the

existing timecode signal and still provide full stereo along with the video. If however the original tape wasn't recorded with timecode but is nevertheless stereo. LTC comes into its own allow-

Excellent software

Although briefly touched on in the main article, the almost forgotten software accompanying the Videopilot is nothing short of excellent, especially for those who aren't particularly au fait with the Amiga - or indeed video As you can see from the screenshots, initial set-up is

ant overview of the complete configuration - and of course everything can be saved to disk

very straightforward with the prompt window at the bottom of the display automatically diagnosing the possible cure for any hitches you may encounter.

In addition, a test screen allows a complete rundown of the control options in order to isolate missing connections or incorrect timecode protocols for each VRC/camcorder

Once everything checks out, the entire configuration can be saved to disk and recalled when necessary allowing instant access to any set-up combination you might

To begin the editing process you simply select the player of your choice and press play - all via the console of course. At this point the software will update its display with the appropriate player while the large counter displays the current frame count. When the chosen in-point appears

simply tapping on the insert key on the console will autoware defaults to the description field to allow any comments to be added. If however you're editing on the fly the



description option can be skipped by simply hitting return on the Amiga keyboard - at which point the software moves to the next edit line ready for a subsequent punch-

And of course you can swap the input player at any time via the console - at which point the software will automati-

To continue simply press Play and hit the insert button

where appropriate - a new edit will the join those from the first tape or alternate player. This process can go on almost infinitely with numerous tapes from up to three players all involved in the production

- regardless of format. Better still, when the rough editing is complete you can go back through the list fine tuning the edit points by typing the exact frame number into the list. In fact if editing on the roll isn't to your taste you can use play, fast forward and pause to locate a specific shot moving to the exact frame with the console's jog shuttle if

Then while still paused the frame can be added to the list just like any other. When edit marking is complete, there's still more fun to be had via the program's cut and

Once an edit list is complete you're provided with full out

ing timecode to be audio dubbed onto the linear mono track while retaining the original inal stereo and of course the video

Now before going any further it's time structure of stereo videotape. Fortunately for the videographer, both the video and stress audio are embedded together in the same area of the tape while the mono runs totally independently along the edge. As a

However, life is never simple and LTC timecoding is no exception. Although it's mono audio track courtesy of the audio and feature and via Videopilot's LTC cenand thereby edit the tape when using an

amecode independently of the stereo sigmal and directly into the player's LTC-in at offer a mono audio out from a stereo player, it's impossible to read the LTC

GENERATIONS

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and

As a consequence, the only option footage on an un-modified machine is to lose a generation by copying the tape and

The same applies to footage shot with a mono camcorder. In this case the tape must be copied with the original audio on one channel and the timecode on the

If, however, you're willing to invest an warranty - assuming you have one - your neturned within a week complete with a new mono phono output either protrudnear according to your requirements.

Obviously resale can sometimes be a problem after modification - hence the

Y/C output for occessory but for

The obvious question has to be: "Is it worth it?" In my opinion the answer is "Yes!"

option to avoid drilling Although the prospect of invalidating often outweighed by the power that LTC can provide in the form of accuracy and digital numbering of your timecoded

As a result, the software can even prompt you to insert the correct source tape when required - something which can only be achieved with RCTC and VITC by manually numbering the tapes and adding comments and control pauses

In short, for those who don't take their DTV that seriously LTC is perhaps something that can wait until your warranty expires as mono audio is still available without the modification for those willing to sacrifice a generation.

However if you take your videography seriously and perhaps more importantly make money in the process LTC is a very tempting option no matter what the implications.

DOWN TO YOU

Even with the problems, Videopilot's distributors claim that LTC modification can barely keep pace with demand, with clamouring for the conversion regardless

As for a conclusion, I'm afraid it's very much down to you. Firstly there's the £1,300 investment in the editor itself, which may demand an extra £100 at least on modified VCRs - potentially invalidating the odd warranty in the process. The obvious question has to be: "Is it

worth it?" In my opinion the answer is "Yes!" After just a few minutes I guarantee even the most cynical videophile will lose any inhibitions about the cash or possible legal implications. However, if your videographic

exploits rarely go further than the living rooms of friends and family I'd advise anyone you to think long and hard before investing in a system that can, and indeed should, earn its keep. AC

SYSTEM ESSENTIALS



and paste allowing any shot selection to be copied, move or pasted as many times as you wish and at any point in Fortunately the software takes control of the changes by

adding or deleting extra edit lines, updating the time and course updating the number of edits and overall running time of the production. In addition each line can have its own special effect

the player or perhaps the availability of an external mixing desk synced to the system via an ICC bus The software can also be instructed to pause at a certain point while you set up either a software or hardware

effect or alternatively bleep a warning when something is imminent - thereby giving you time to set things up in Better still, cut and paste isn't merely limited to single

added attraction of save, so you can not only store the



entire script for later assembly but also the blocks them For the wedding market or other ventures that may regu larly occur at the same venues the option to have a bank of your best "scene setting" material just waiting to be dropped in can save time and money while minimising the risk of

mistakes. Assuming all your edits are perfect and set-up is complete you can preview the production without recording or select assemble and sit back as the software automatically compiles the entire production pausing only when told or if a tape change is required. Absolute unadulterated

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COMMODORE AMIGA

■VIDEO

aunched initially as a 12/24-bit display card, Archeo's AVideo24 was one of the best budget solutions to high quality video graphics until the release of the A1200, at which point the bottom end of the 24-bit market was more or less wiped out.

To attract new sales, the unit had to evolve, in response to which the French designers added a couple of video connectors, a genlock, and a digitiser.

The result is AVideo Y/C, a product aimed much more at video work than standard Amiga display enhancement cards and, with its built-in genlock and digitiser, more a cut-price contender for the IV24 market than anything else. Whether or not the competition is a close one remains to be seen.

AVideo Y/C is an external device which connects to the Amiga's 23-pin RGB video port and provides a through connector for a standard monitor or TV mod-

Unlike its predecessors, which relied upon the user prying the Denise chip from

Taken in 1/25th of a second, AVideo's grabs are excellent. If a little on the red side

its socket, it should work with any Amiga, though upon connection the machine will need four inches of extra desk space at the

The cream coloured plastic box is fairly sturdy and sports a phone composite video and 5-pin mini-DIN socket for 5- VHS (Y/C) connection alongside the 23-pin Amiga video through port. Other openings include five potentiometers for various hardware settings, more on which laber.

Software bundled with the package includes a variety of AVideo utilities and the program AVPaint, a 24-bit paint program supplied in both normal and floating point flavours.

Installation is easy and quick - though it assumes the use of a hard drive - and the user should be eagerly clicking on icons within five minutes of opening the

Of the various programs found on the

forming a general control panel. From here, the user can choose to view picture or animation files, control the genlock, grab a frame from video, swap between lace and non-lace display, alter the video source RCB or YUV components, or con-

struct an animation using AVRemap.

There are no gain controls and the RGB sliders don't really provide as much control over the source video as I would have liked, but given the adjustable poten-

should be able to find a balance of his or her choice.

These tiny pots can be accessed with a miniature screwdriver (not supplied), and offer the user direct control over luminance (light) and saturation (colour)

Another three pots on the top of the box adjust the levels of output video luminance, contrast and saturation, so there's a fair degree of flexibility in the system. software control rather than faffing ab with a screwdriver, but at least the cont is there in some shape or form.

which first drew my attention, promis as it does to produce high quality anir tions in full video overscan.

This is the sort of claim one usual approaches with a healthy cynicism a which is usually blown away within m



seasons

The low cost AVideo board now has a enlock, digitiser, and S-VHS support, but is it a trade-off? Stevie Kennedy

tunes his telly



The amount of movement on this particular anim was, admittedly, far less than a full screen camera movement, but the sight of a true 12-bit image animating in anything like video speed is rare enough to be notable.

Animations utilising more screen movement do not run with a speed or smoothness suitable for video work, but with a certain amount of experimentation,

For work in presentations, the lower speeds achieved by some anims are still acceptable, so in this respect AVideo forms a viable alternative to the disappointing frame rates of most Ham8 efforts.

One difficulty with animations at the moment is that a certain amount of screen clutter is caused by a hardware fault in the early AVideo Y/C units. This manifests itself in the form of ghostly lines in certain areas of the screen, but the board's distributors have assured us that this fault will

LINKING IMAGE A second useful tool is AVBinder.

designed to force other programs to use the AVideo display. This is achieved by loading the image which, say, Scala would "binding" this to a second image which AVideo will display instead.

The user can thus create a 16-colour equivalent of a 12- or 24-bit screen, and when Scala tries to load the 16-colour IFF. AVideo jumps in with its own picture

What impresses most is when the binding requester pops up to offer a selection of eight transitions including dissolve, bloom, fade, and various scrolls

When the mask image is loaded into the user's presentation package, AVBinder will not only show its own image instead. but will also use whichever effect chosen at the binding stage. Speed is controllable gram and a series of bound images, the user can construct a very respectable pre-

AVBinder could work faster and with fewer quirks, but it adds a little something to the package's flexibility. Some presentations will not require the effect, and I but for rolling demos and information screens AVBinder can bring extra colour and some custom flair.

As AVideo works through an ARexxbe controlled from within an ARexx script. enabling the conversant user to build a wide variety of custom effects. Unfortunately, the Opera automatic

ARexx script generation software supplied with AVideo24 is absent from the package, so only those with the requisite ARexx skills will be able to make much use of the available facilities

This is a pity, as there are a number of transition effects, available to AVShow as well as AVBinder, which can go together to make impressive slideshows and the like. The effects are available directly from

Basic paint package AVPaint, the bundled 12/24-bit paint package, is a fairly basic program capable of good

presentation graphics but largely unsuited for complex painting tasks. The program opens after an initial selection screen from which the user can choose

interlace or non-interlace. As video works in interlace or not at all, the choice seems a strange one until it is noted that for interlace mode a whacking 2Mb of chip RAM is required, relegating users of non-ECS Arrigas to non-interlace.

At first, this seems a damaging limitation, but as the AVLace tool (available, as usual,

Informal bitmap sizes are kept at 736 by 566 to correspond with maximum overscan so any images saved will automatically be of the correct type for video work

Painting and drawing tools are the familiar DPaint-style collection, including freehand couple of extras which stand out as nice touches.

The text requester is a good example. It enables the selection of any font, including CompuGraphic Intelifonts if available, and will type the text directly on the screen.

find the best site for a logo or title, then stamp it down. If the anti-alias tool has been selected, any stamped text will assume a smoothed appearance, though this is less useful for graphics which are to be overlaid on live video

It is also possible to control genlocking and grabbing from within the program, making it easy to preview any graphics, be they titles or animations, which will eventually find

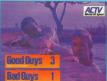
Any videographer will tell you that the facility to check that titles will not disappear into the background when laid over a similarly coloured piece of video is invaluable and a

As AVPaint directly addresses the AVideo hardware, any images grabbed using the

Gradient fills are available for producing backdrops and so on, but they are trickier to

of the colour change. The method is usable, but fusay. Other good features include the use of stencil masks which can work over a soread of

zero to 100 per cent



more raytraced images, select AVRemap, The program then loads each image and adds it in turn to the anim file. As all

but AVideo Y/C makes more of an

AVRemap anims using the custom

they contain less data and thereanimate faster. For example, 30 files



Control of the grobber is good enough for quick shots

CLI using a utility called AVCmd, but some sort of script building utility for the ordinary user would have been a welcome addition. Typing command lines with multiple parameters and tricky syntax just to scroll an image down the page is hardly what the 1990s user expects.

Last of AVTools's handy buttons is the AVGrab control, through which the user can exercise live control of the on-board

Black box blues

Unlike IV24, which now boasts a complete video splitter and switcher in the shape of the VIU black box, AVideo must make its way in the harsh world of video with only its composite and Y/C video inputs for company.

One each of these grace the rear of the unit and through them AVideo receives all its video signals from the out-

In effect, however, the ARexx port from which AVideo is controlled can be used to reproduce some of the functions of a switcher unit. All ARexx commands which address the video ports, such as AVDigit (for grabbing) and AVGenlock can take a parameter to select either of

This enables AVTools to control which video port is used for genlocking and grabbing, so two video sources can be connected at once without the user having to faff about with cables or software settings. Switching between the two is a matter of issuing an ARexx command, so external programs - so long as they speak ARexx - can be used.

Of course, AVideo used in this fashion is nowhere near as flexible as the IV24-VIU combination, and it has the disadvantage of not allowing for an external keyer Amiga's own sync pulse, but users with simple video requirements will not need the GVP card's added power.

digitiser. A small control panel with toggle gadgets to select live video, freeze, plenty of user input on the grabbing front.

Grabs are taken very quickly, in 1/25th of a second, frozen images being stored in the unit's 1.5Mb framebuffer for instant snapping. Quality seems not quite as good as VI ab or IV24, and there is slightly more interlace judder than on either of the other two units, but the finished images are true 24-bit and of a high quality.

At time of going to press, the first prerelease batch of AVideo units suffered from red saturation problems in the grabber circuitry, but this is due for a hardware tweak before the public set eyes on

The screen grabs accompanying this article will look rather red in places and improve provided the proper alterations

For the moment, users will have to fiddle with the AVTool's RGB sliders and the hardware settings, or perhaps reprocess a grab using ADPro to eliminate the red imbalance. Check before buying or keep an eye on our Updates column for the lat-

AVBInder is capable of some very useful effects

est revisions. AVideo's genlock suffers switchable between the composite and Y/C inputs and provides a steady lock for overlaying Amiga animations or titles.

In use, it can offer 12-bit animation from the AVShow utility over the top of live video with clean edges which speak well of the unit's keying abilities.

LOT ON OFFER

Comparing this with the IV24, it is difficult to see which is the better unit, and after several tests including graphic overlay and titling, neither seemed to have a distinct edge, though the GVP unit's con-

This, assuming the minor hardware problems are rectified, is my only real complaint with AVideo. As a package, it has a lot to offer, and as it is fully ARexx. conversant, can offer varying possibilities to videographers and presentation professionals alike. However, the accompanying software hides much of its potential away behind an interface which could be friendlier and is in need of cosmetic



Bits and pieces

rprisingly useful.
When dealing with TV graphics in but cases, the 4,096 colours offered by true 12-bit mode can be a more efficient answer to the problem.

As 12-bit images contain a mucl smaller amount of data, they are easie to store, animate faster, and are generated.

to store, animate taster, and than their ally easier to work with than their

ecorded to videotape.

AVideo's use of a decent 12-bit cus-om animation format and its paint sackage's icon-drive 12/24-bit switch paves it the winner as far as implemen-ation of the format is concerned.

cost multi-purpose video and multimedi tool, but whether it does will depend or where it is taken from this fair but still a li tle shaky start.

If developed in the user-friendlines department and cured of its irritating mine ailments, AVideo Y/C could knock a bi hole for itself in the video peripherals may ket. If it doesn't, the only hole it will ope will be one in which to lie down and die.

SYSTEM ESSENTIALS





VIDEO

what petrol is to cars - with out it the high end of the market would grind to a halt. It was therefore a surprise that when GVP decided to move into the video and multimedia marthan completely successful.

Priced at £1,800 and hampered by some package was given short shrift by reviewwhich v2.0 is presently trying to recover. Reboxed, repackaged and rebundled,

IV24 has shed £800 from its overweight price tag and gained a few lean mean muscles in the form of additional hardware and software as it faces up to the challenge posed by a long list of excellent video cards including the Toaster, Harlequin, and OpalVision.

The result is a much stronger contender for the lucrative fleshpots that are the semi-professional and professional video markets.

To banish from the outset IV24's unfortunate heritage, GVP have made efforts to improve the deficiencies highlighted as those of most concern, leading to ware, speed, and video-friendliness

Taken in combination, the improvements give this particular Lazarus not the bargain. In essence, IV24 is a combina-

Britain's

AVPaint is useful for some Jobs, but still limited



tion of 24-bit display card, framebuffer, a multi-talented act which on the face of things should make it a steal at its new Throw in a video splitter and a copy of

Caligari 24, one of the Amiga's most effective and easy to use modelling/animation packages, and the IV24 begins to become on a very appealing prospect.

to video and multimedia often suffer from compromises and there are now so many this seemingly value-packed peripheral can be guaranteed an instant hit. A thorough look under the bonnet seems in order. Impact Vision 24, to give the board GVP's IV24 has been brought back from the dead, but is it a shining resurrection or a walking corpse? Stevie Kennedy examines

its full title, is a card for the Amiga 1500 and upwards which makes use of the

video slot found in those models. On the A3000 and A4000, the unit fits snugly into the newer full length slots, but when using the more diminutive video with a ribbon cable to talk to the video slot. fore advised that IV24 needs a bit more real

estate than certain other leading brands. Once fitted, the beauty of this card is that at the hardware level it is virtually

Amiga ignores it altogether to any ordinary 1084-like

multiscan monitors. Master mode enables the connection of the monitor and the use of the card as a flicker the middle ground soft-

ofter his trip to Desktop Derkroom be most useful.

When used in this way, the card and it video interface unit can be controlled by for any of the board's video uses, the use will find that non-PAL screens will no open and that the only screen modes avail

able through prefs will be standard PAL.

mode promotion is trying to open them i Doing th

The biggest hardware enhancement offered by the all new IV24 package over the first units to hit the street is the Video Interface Unit (VIU), which is really a RGB splitter and video switcher in a smooth blac

On the outside, the unit sports an impressive array of video inputs, including two composite ports, Y/(S/VHS), component RGB, external reference (for time base correctors and such like) and external

outputs are slightly more restricted at one compo-ite, one V/C, and a key out to pass time code to dow stream devices. A sync pulse is generated on-board no external sync is used. All I/O is controlled via the

A startled Mel Gibson



Productivity and the IV24 is telling Productivity to take a hike. Switching off mode promotion cures the problem. This can be annoying to begin with, but

Amigas with many non-video screen modes are reasonably well explained in the manual, and as most users of the IV24 will be using their Amigas mostly for video work, it's not really a problem. Overall, the extent to which IV24

impinges upon the ordinary workings of its

standard Commodore installer, is painless, Pictures, Macropaint 2.0, and two for



Lazarus

What came as a particularly pleasant

surprise was Caligari's first time successful first release would have been worthy of a

MAIN MENUS Software control of the board is virtually

identical to the original release, using the IVCP (or IVCP2 for Workbench 2/3 users) program to control all aspects of IV24 in sections is the screen controlling the VIU splitter, enabling the user to select video and sync sources, alter red/blue gain, balance, luminance, and even sync timing.

BCB and analogue composite), an RGB to composite encoder, and the VIU splitter for converting composite video to its red, green and blue components, the system can For example, either of the VILI's two



quick and

IV24's

used as an RGB source by IV24, and any of the above can be used as a sync source if the external reference input is not in use. therefore, and prompted on by the man-

ual's excellent troubleshooting Q&A secprovides a rock steady video signal with

> multimedia work composite, one RGB, and one Y/C source allied to outputs for composite or Y/C taping, the IV24-VIU

very flexible semi-professional base of operations. The card itself is a 1.5Mb 24-bit framebuffer with built-in real time includes a good quality composite encoder which also supplies Y/C signals, digital RGB keyer, and analogue composite keyer, so there's a lot crammed in there In use, most of this trickery goes unseen

by the user except when IVCP settings need to be changed. The digitiser is probably the most impressive feature on offer, and works as well as, if not better than, the Grabs are taken in 1/25th second and

there is little of the interlace judder sometimes encountered with other grabbers. In addition, image clarity is crisp and colours appear as they should without imbalances

Desktop Darkroom, used to capture and process images, is rather clunky and not in such as that supplied with G-Lock, but there are a fair number of filters and operations on offer for users to retouch or completely muck about with a grab.

Once a suitable filter has been found and applied, be it a simple averaging filter

Painful painting

MacroPaint 2.0, unlike its predecessor the user risking severe sanity loss. As an upgrade, it is an admirable improvement greatly increased speed, and a distinct lack of bugs. Unfortunately, it still fails to shine when set against its main opposi-

advanced options go. Basic is as basic

grabbed from video when, for example the image would not be a good idea. Few other touches spring to mind, but

effects for the application of paint or text

AIRBRUSH Users can choose on a slide gadget to

apply all new paint in tints from 0 to 100 A choice of tint, shade, smear and

mono is on offer, along with Boolean operations for basic special effects. In addition, the FX icon contains luminance

MacroPaint runs out guite well, with spare

rather than damages the IV24 as a

Without brush gradients and feathering, and a wodge of the now almost standard special effects offered by other paint packages, MacroPaint still has a hill to

heplits elegantly

Rediblue gain and brightness can be controlled separately, and overall control of the video signal's colour

becavers away in the background making possible the #24's video operations – a real backstage star.



Probably the best or a fancy embossed effect, the IV24's general purpose Achilles heel rears its ugly head as the user saves the picture to disk for use in video card for Macropaint. Now at v2.0, Macropaint has progressed quite a way from the unusable rubbish disless than £1,000

> which can be instigated by pressing the relevant key.

Of limited use in some environments, MyLAD would nonetheless be of assistance wishing to edit two source tapes down to one while adding a little something extra. Its key presses will no doubt make it a program whose use has to be mastered with practice, so those with unpredictable or inexpensive VCRs might not find much use for it.

IVPIP Possibly the most talked about feature of

the original IV24 at the time of its release, and still a feature of the second package, is IVPIP, the picture-in-picture display utility. This little program throws a window over the Workbench into which IV24 projects a

The window can be resized, zoomed out to full screen size, or the actual image scaled in the X or Y axis, but though initially a good idea. IVPIP is one of those clever utilities for which it is difficult to find a practical

No doubt a few ingenious owners will

want to monitor a camera input from Workbench or something like that, but most of us will take one look, say "ooh, that's clever", and leave the IVPIP icon to gather

MACE DOS

dust in a quiet corner of a drawer

IVPIp Is very nice to look at, but of how much use? Despite a few minor reservations about

the bundled software, it is difficult to conclude other than that IV24 v2.0 is a vastly improved product with better software, improved hardware performance, and a much better value for money bundle. Had the board been released in this form

from the start, OpalVision and Harlequin might have had more of a fight on their

As it is, IV24 looks set to enjoy a renaissance in its fortunes, especially as it is probably the best general purpose video card for will lose some of the budget video enthusiast market to products like AVideo Y/C, quality of both the grabber and the genlock it should find a home with the upper end of the enthusiast market and the semi-professional video world.







Marvellous modelling

Caligari 24, for long one of the most capable and most under-promoted 3D modelling and animation programs on the Amiga, is by far and away the most exciting piece of software in the IV24's suite.

In its IV24 version it is identical to the latest full release of the package except that rather than use a joystick port dongle, Caligari24-IV24 uses the IV24.

Since its first review in this magazine, Caligari has undergone a great deal of change and now offers what must be the most elegant 3D interface of any package alfied to sev eral new and very powerful features.

The old single object animation system has gone, replaced by a hierarchical system controlled through a simple timeline facility. Using the new features, a user will find animating a number of objects much easier than before, but the ability to pick any part of the object hierarchy and move it independently is a dream

When a complex object made up of several component parts is loaded into a scene the animation module can treat the component parts separately and give each of them

its own timeline, movement and path. The result is that within minutes, very complex animations can be produced with minimal fuss

Other new features include the excellent organic deformation capability, which make the creation of smooth natural objects much easier; vastly improved point editing; and 32-bit rendering, allowing for an 8-bit transparency mask. Using Caligari 24, IV24 users should be able to produce everything from flying logos to space battles with relative

Look out for a full in-depth review of this package next month.



fair old way to go. It will now draw in real

basic paint package with few of the extras

Other software supplied with the pack-

age includes the MyLAD (live action direc-

tor) utility, used to produce transitions

MyLAD to function, one must be connected

to the VIU RGB inputs, but once the hard-



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	STAR LC200	BLACK/COLOUR	£5.95 ZX9	£32.95 ZX9	£12.45 zxxx.	£64.95 zxscı
8	STAR LC24/200	BLACK/COLOUR	£6.95 Z24	£39.95 Z24	£12.95 x240L	£69.95 xxxx.
100	STAR XB RANGE	BLACK/COLOUR	£8.95 Z24	£49.95 Z24	£14.95 x24CL	£74.95 xxxx.
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10	Citizen Accessories:			skard Original Con	sumables	

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printer is something you'll want to last for quite a while, so it is important that you buy the one for your needs. Many's the bundred pounds on impulse only to find out when it's too late that the printer really good enough, or that there chesper or better alternatives

mallish lump of plastic that drowns out the TV when it's working, but that's just the most common type of printer, prop-

You've probably heard of three other more of printer; laser, ink jet and bubble There are probably 50 or so printer manufacturers worldwide, and most make scores of models, leaving us with a few

Your questions answered

Why is the graphics output from Because the print density is set

too high. Lower the print density

Why am I getting horizontal white or black lines across my

Because the paper feed mechapaper a little bit too much or not quite far enough. There's no complete solution this problem, it's a fact of life some printers suffer from it more than

If I can't afford a laser printer.

high quality output? An ink jet or bubble jet printer. better quality you'll get. But keep in mind that these types of printers prosuce the best quality output on special paper that is more expensive than ordi-



those that plug into the serial port and those that plug into the parallel port.

and the parallel port are not complicated. Data sent down the serial port goes one "bit" at a time. One Ascii character is eight bits big - one "byte" - so to print a letter A, for example, the eight bits that make up the Ascii code for that letter have to be sent one after the other.

RAPID TRANSIT If you could send all eight bits of a

quicker, yes? And this is what happens to data sent down the parallel port - all eight bits that make up the Ascii code travel together down eight separate but parallel lines, and all arrive at the printer at the

Most modern printers have a parallel interface, some have both parallel and serial (or the option to fit either), a few still have only serial interfaces. I can't Amiga user should buy a serial printer.

upon beoting if you beot from that disk. Boot

from another disk, and anything could happen

printing

Printers can cause more trouble than any other piece of computer hardware. Ben Pointer shows that with a little understanding, you and your printer can live together in sweet harmony

Next there are the different ways that printers actually make marks on the page. Impact dot matrix printers work by making little pins strike an inked ribbon, thus transferring a pattern of dots on to the paper on the other side of the ribbon. The cheapest type of impact dot matrix

printer has only nine pins in its "print head" and consequently the quality is not high because the characters it produces are made up of only a few, quite large

PRINTERS



this preferences programs. The settings in here must match those of your serial printe

isn't important. Many businesses will their client databases ready to print a few thousand address labels. Or hooked up to

But if you want to write letters that ter quality. The next step up is a 24-pin which means that the dots they produce are smaller, and so the characters they

produce are of a higher quality. These generally come with a few builtin fonts and produce so-called "letter quality" output. If you need a printer mainly for writing letters, a 24-pin impact

dot matrix printer will be good enough. BANDING

again. Every impact dot matrix printer I have ever seen suffers to one degree or another from "banding" when printing graphics.

Because of very small inaccuracies in the paper feeding mechanism, the paper white or dark lines across the printout.

The main problem with all colour impact dot matrix printers is that the ribbons, which are quite expensive, get dirty only a few decent colour pictures before everything starts to look "muddy" because the ink from the black part of the ribbon is beginning to mix with the other

If high quality graphics are important to you then forget impact dot matrix printers and start looking at ink jet, bub-

Ink jet and bubble jet printers use different methods to spray ink from a reservoir or cartridge on to the paper. Both are also dot matrix printers because the char-

Troubleshooters' guide

If you select the Print option from a program and nothing gets printed, there are five basic things that you can check ...

Is the printer broken? Look in your printer manual to find out how to execute the machine's self-test. If the self-test works, obviously the printer is not broken.

Is the printer cable broken or incorrectly wired? The easiest Is the printer cable broken or incorrectly wired? The easiest way to check this properly is to connect another printer to your Amiga using the same cable. It would be best if you got someone who knows how to properly set-up the Arriga for printing

Is the printer's parallel/serial port broken? The easiest way to check this property is to connect the printer to another Amiga, using a different cable if possible.

Is the Amiga's parallel/serial port broken? The easiest way to find out is to connect some equipment to your parallel/serial port which you know works because you've just seen it working on another Amiga. There are three peripherals that commonly use the parallel

port: hand scanners, sound/video digitisers, and printers. A modern is the most common peripheral that uses the serial port. is the software setup correctly? The most common problem people have when printing is that a requester pops up saying that the-program can't print for one reason or another. Almost all of these error requesters get displayed because the Amiga can't find one or more system files that is required for printing.

These files are expected to be in certain directories on the disk from which you booted. If you haven't booted from the Workbench disk as supplied by Commodore - many applications are supplied as "bootable" disks for example - the chances are that there are important files missing, or there might be old or new versions of files on the disk that are not completely compatihis with the older or more modern version of Kickstart in your

No matter how awkward it may seem to you, the Amiga was designed to be booted from the Commodore Workbench disk. not from anyone else's version of a Workbench disk. So if you get an error requester when printing, boot from a proper Workbench disk, leave that disk in the internal drive, run your application from a second floppy drive, and try again. What? You've only got one disk drive? So buy another one

Remember that many printers contain more than one printer emulation, and if the machine is set to IBM mode, for example, and you use an Epson printer driver, you will probably get garbage. The emulation and the printer driver have to be matched

acters they print are constructed from a matrix of dots, just like impact dot matrix printers, except the dots are a lot smaller, which means that the characters are of a higher quality than impact dot matrix, (dpi) resolutions may be the same or

Be warned that some cheap ink jet printers are not high quality, emulating old 9-pin Epson printers. Look for a graphics output resolution of at least 300 or 360 dots per inch. Be warned also that works in exactly the same way as impact dot matrix printers, some of the cheaper

If you need a printer for letters, a 24-pin dot matrix will do...

bubble jet printers also suffer from

The only "jet" printers I have seen that Heselett-Packard Desklets and the Canon BI-200 and BI-230 bubble iets. And even

then you need to use special "coated" paper to get the best results, which is quite a bit more expensive than the ordi-

nary varieties. HIGH QUALITY

For printing colour graphics, the first printer you should consider is the costs about £500-£600. This printer can produce superb results on the proper Hewlett-Packard paper. Nothing cheaper

is able to produce decent printouts of 256-colour, HAM and 24-bit graphics. Believe it or not, laser printers are also dot matrix printers, for exactly the same

Understanding CMD

CMD is one of the most useful tools provided with the Amiga, yet is probably the least understood and used of the Workbench utilities.

According to Commodore the letters stand for Change Main Device, which doesn't describe its function particularly well because the program does nothing more complicated than enable you to direct printer output to a file instead of a printer

Printing to files has various uses. An obvious use is if you don't have a printer, but a friend does, and he says he'll do your printouts for you

So you could format your document in a word processor, set everything up perfectly in whatever fonts and colours you want to use, load and position any pictures you want to include, then, before selecting the Print option, run CMD.

By default, the output from whatever program is doing

the printing will be directed to a file in RAM: called "CMD_file". It will print using the printer driver you have selected in Workbench printer preferences, so before starting you must have selected the correct driver for the printer which will be used.

After copying the CMD_file from RAM: on to a floppy disk, you trot round your friend's house, slip the disk into his drive, open a Shell window and type:

COPY DEC: CND FILE TO PAR:

Note that the file is sent to PAR:, not PRT:, When you originally printed the CMD_file to disk, the output went via the PRT: device, and the printer driver inserted specific printer control codes in the file for the printer(s) that driver was intended to be used with

Recause all those printer-specific codes are in the file we don't need the printer device to do it again, so we can send it straight to the printer down the parallel (PAR:) port.

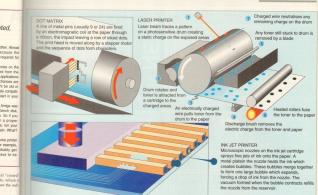
This assumes you are using a printer connected to the parallel port. If it's connected to the serial port simply replace PAR: with SER: CMD works for both text and graphics. You could print a picture to disk from Deluxe Paint, for example, take the CMD_file round your friend's house and print it on his printer by Copying it to the PAR:

device. But remember, before printing at your end you must ensure you have a printer driver selected that works with your friend's printer

The path and filename for the CMD file can be changed via Tool Types. Click once on the CMD icon and select Information from the Icons menu. You'll see five Tool Types in there - DEVICE, FILE, SKIP, MULTIPLE and NOTIFY

DEVICE will be parallel or serial, depending on which port you have your printer plugged into. FILE is the path and filename of the file that gets created. By default it is

ram:CMD_file, but you can change it to anything you like -DE0:Myoicture, Work:Printer/cmdfiles/report, or whatever. SKIP tells CMD to skip any short initial write the software makes to the printer. This is normally a printer reset code, and if you don't want the printer to be reset before



muson that ink jets and bubble jets are. printer can v the same

fine particles of "toner" on to the paper, and because the toner isn't wet (like ink susput from the ink soaking into the edges with laser printers, even on ordi-

By default CMD works with one print job at a time. After you've printed something, if you want the next print job to se directed to a file you need to run CMD again. The MULTIPLE Tool Type set to TRUE enables CMD to redi-Whatever filename you've specified in the FILE Tool upe will be appended with "000", "001", "002" and so on

printing, set this to TRUE, otherwise leave it as FALSE

The NOTIFY Tool Type just tells CMD whether to put up progress messages or not. TRUE means do it, FALSE

NOTORIOUSLY SLOW

CMD is also useful for getting programs that are notoribusly slow at printing to print more quickly. Because print-

ing to a file in RAM: can be done much quicker than printing to the printer, the program doing the printing gives control back to you much more quickly. You can then flip to Workbench, open a Shell, Copy

CMD file to PAR:, flip back to your application and carry on working while GMD_file is printing. I know a lot of Professional Page and Wordworth users who do this all

nary paper. Banding is almost non-existent with laser printers, but like everything you buy, the quality of lasers

Some of the cheaper models use a quite coarse grain of toner, which means the dots produced will be that much larger, and this can sometimes result in

something that looks similar to banding. But there are no bad laser printers, only better ones. If you are thinking about a laser printer, keep in mind that many of them come with only 512k or 1Mb of

300 dpi, like pages from desktop publishing programs for example; you need at least 1.5Mb. If the laser printer has an even higher resolution - like the 400dpi Ricoh LP1200, or the new 600dpi LaserJets - then you'll need more memory still, at

Neither of these amounts of memory is least 4Mb for 400 dpi and enough to produce A4-sized graphics at 6Mb for 600 dpi

M you are still D Information CMD (Tool) Workbench 1.3 your 7688 Information 4896 celled tota one 27-Jul-92 89:44:48 different to this, but the DEVICE=parallel FILE=ram:CMD_file SKIP=FALSE MULTIPLE=FALSE NOTIFY=FALSE Tool Types are still the some New Del Save | Cancel

the time. The file CMD creates is computer independent by that I mean that any computer that is able to send a file direct to its parallel or serial port will be able to print your picture, document or whatever, even though it has been created on an Amiga-

Many people I know who have a PC and a laser printer at the office use this technique to print all their Amiga doc-

Of course, if you want to do this you'll have to comy the file(s) on to a disk that is readable by the computer that will be doing the printing. If it's a PC you can use CrossDOS or the shareware MultiDOS to create MS-DOS format disks which are readable by both PC and Amiga.

uments at their employer's expense!

Amiga Computing August 1993

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	and Nimbus Q Scaleable Postscript Forts PostScript Fort Outlines on all Printers	NO NO	YES
	Maximum Number of PostSoriat Forts	Limited to a total of 35	Infrite
윤	Download Extra Forts to PostSoriot Printer	NO, Can't download extra fonts	YES, Autometic
Fonts and Printing	Landscape (Sideways) Printing on all Printers.	NO NO	YES, Autometic
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	Both Positive and Negative Attributes		
	Box, Rounded Box, Circle, Oval, Line, Variable Ronder & Armow Crawing Tools	NO	YES
죑	Dop (Trimi to Size Imported Graphics	NO NO	YES
Œ.	Supports A1200/6000 AGA Chicard	YES 256 On-Screen Colours	YES, 256 On-Screen Colours
	Onste Border around Graphics and Pictures	NO NO	VES.
	Usee borser around uniprica and results	YES, Colins Provinsly with	YES, Collins Proximity with
	British-English Spelling Checker	Legal & Medical Supplements	Legal & Medical Supplements
	British-English Thesaurus	YES, Collins \$26000 Synonyme	YES, Colline (2000) Synonyme
ã	Page View Magnifications and Reductions	One Fixed Print Preview	T Variable stages - 25% to 400%
2	Edit Document while Magnified or Reduced	NO NO	YES
and Formatting	Soarch & Replace (158 words in 9000, 7 Pages)	61 Seconds (On Amiga A1000)	7 Seconds (On Amiga A1200)
핕	Index and Table of Contents	YES, Automatic	NO, Requires Manual Entry
8	Multiple Newspaper Style Snaking Columns	YES, 2 to 32	YES, 21x 6
Editing	Style Sheets, Master Pages, Title Pages	MO MO	YES
N. S.	Uses Standard Arriga Clipboard for Cutting & Pasting to and from Different Applications	NO	YES
	Small Caps Typographical Control	NO NO	YES
	Conforms to Commodorn's Amiga	NO, Non Standard Uter	
	Standard Look & Feel' Quidelines	Interface	YES
	Co-Screen Maths (Column Addition)	MO	YES
룏	Import ASCII Text from any Word Processor	YES	YES
4	UK Registration, Upgrade and Support	YES	YES
enears	Free Memory Required	15Mb Minimum More Recommended	1Mb. Minimum More Recommended
0	Free Ongoing Technical Phone Support	NO, £38 per year after 60 days	YES, Free of Charge
	Recommended Retail Price	£129.95	£99.95

SoftWood Products Europe

Dream machine

Reference your correspondence regarding wishes for a favourite Amiga, I confess to upgrading to an A500 Plus shortly after its release but was not caught out again by the

I am still waiting for a 32-bit machine with a built-in hard drive (preferably SCSI) and sufficient memory to run my latest upgraded WP and DTP software which at present I cannot use due to waiting for such a machine.

The computer should be complete in one casing and not need endless plug-in items such as power packs, second floppy drives, hard drives, accelerators, and so on to make it a worthwhile combination.

A composite and complete unit seems commonplace in the PC world, yet the Amiga continues to rely on additional plug-in units to achieve its true potential, even though this involves an untidy mess of interconnections which is unreliable and space-

How about a 32-bit Amiga A2400 laptop with choice of CPU and memory size to suit the individual's taste, requirements, and pocket, complete with built-in PSU, floppy, and hard drive to really compete with the PC laptops?

R C Poynter, Worcester Park

Are you listening, Commodore? The users speak! Judging from the number of letters we've had over the past year from those of you who would buy a portable or laptop Amiga, there's a fair-sized market of mobile Amiga users.

Commodore, of course, have a long and proud tradition of listening closely to every suggestion and criticism made by the buying public and acting on them, so we should see some progress on this one soon, shouldn't we? By the way, did I ever tell you about my flying pig?

Good old A2000

Can you tell me how many times I will read about the A4000/030 before someone points out that it's slower than my A2000 with GVP combo, less expandable, incapable (due to its crippled 68EC030 chip) of some of the tasks my "old-fashioned" Amiga can carry out, and useless for ray tracing in its basic form because there's no maths chin?

Call me a traditionalist, but I'm unlikely to give up the joys of using a SCSI drive controlled direct from my 40MHz combo card for a cheapo IDE drive, and the advantages of AGA graphics seem a little less glamorous when I sit smugly before my monitor displaying a high res 24-bit Retina display with no flicker and no faffing about with mode promotion and all that gubbins

Commodore have taken a good chip set and hedged it in with garbage storage. terrible CPU support, a cut down system box with fewer expansion slots, and a Workbench which doesn't know whether it's coming or

I can wait just as long as it takes with my "outdated" machine until the bozos in

Nick Burton, London

I've no doubt there are a lot of A2000, A1500, and A3000 corners out there who corne with

Ezra Surf's Postbaa

Lost treasures Having read a couple of

months ago of Infocom's adventure game collection entitled Lost Treasures of Infocom, I have contacted numerous software distributors with the intent of buying this collection for my Amig

Unfortunately, every single com-pany told me either "it's not been released yet", "we've never heard of

I would be very grateful indeed if you could supply a phone number or an address of a company who can sel me this collection

David Young, Oswaldtwistle

Despair no longer! Lost Treasures of Infocom, a collection of 20 classic text adventure games from the superb and, sadly, now defunct infocom range, is available from Eagle Software (081-885 9172) and costs £29.99

charge decide to release a decent Amiga which offers new technology throughout and doesn't compromise on the extra bits. Jason McGarrigle, Aberdeen

you on the advantages of the older machines if they have already been expanded and had money spent in accelerating them or bumping up their graphics. However, you can't deny that though

flawed in some ways, the A4000/030 is a definite improvement over older Amigas as far as

price to power ratios are concerned True, a beefed-up A2000 will often he far too useful a machine to drop in favour of the A4000/030, but owners of A500s looking to

upgrade won't be rushing to buy older models. **Price hike**

I have been buying Amiga Computing since issue 31 which was around the time I purchased my A500. I think the mag has always been good, and the new look it has been given recently is even better, especially the Gamer Globe part. Please keep up the good work.

Recently I have noticed at the top of



No more demos, please!

(given away by your competitor).

cessor for 96p can't be bad.

I am writing in response to G H Jones's letter on page 56 of your June issue as I have almost a totally opposite view to that forward. At the end of your reply you asked for the letters to keep coming in, so here goes One of the main reasons for buying your magazine as

I have been doing every month since May 1991 has been your CoverDisks.

They have, in my opinion, been vastly superior to those of another magazine I buy in that instead of having the whole disk full of a demo for a new game which only keeps me interested for about five minutes, they have been full of a range of shareware programs from tunes to games. Workbench hacks such as Ameko, and serious

utilities like virus killers. I feel that this style of disk should be kept in every issue, and any extra full programs you choose to add should come on a second disk. While I, like G. H. Jones.

have a full program, then please put it on another disk even if it costs an extra 96p. After all, an £80 wordpro-Your letter reflects a strong current of opinion among find it annoying to pay an extra 96p for a disk containing readers of the magazine who have been with us for a

a program I don't use, I offset this against an excellent

I use this program all the time and it easily out-does

Kindwords 2 which I was using before, and Scribble

I do, however, find it very annoying when I've paid

£2.99 for a magazine with a CoverDisk and there is noth-

ing on it that I'll ever look at again. This month's

CoverDisk (June) was just saved by Virus Checker v6.22.

the CoverDisk with demos or full programs. If you do

The gist of this letter, I guess, is to say please don't fill

program such as Protext which saves me many pounds.

couple of years in that you find our old style of CoverDisk an attractive buy

We appreciate this sentiment shared by

so many readers, and as a result have resisted the temptation to indulge in playable game demos and have, where possible, always tried to squeeze shareware programs onto the disk beside the commercial software.

June's disk had very little space left, which is why only Virus Checker found its way on, but the July disk, containing the superb Bars&Pipes Jr, had three useful extra programs carefully selected to appeal to as broad a base of

readers as possible We have that this formet for the disk - one commercial program accompanied by two or more popular shareware

titles - will be adjudged a happy medium by old and new readers alike, but the possibility of doubling up and going for two disks is still there. Again, we would urge any reader with strong views on this one to drop us a line.

gripe is that I purchased my copy of issue

\$3.25 covered by a price tag for the higher

the answer? I'll just ask the wife! SAC Pardoe, Station Flight, RAF Gibraltar

The magazine distribution business in the UK is greatised such that everyone sells muon-

If a shop decides to add a profit margin of its own, the only thing stopping it is a move

No launch Mr Tony King of Thalion regarding A320

03

Airbus in your May issue. I had a number of problems with the program, most serious of which was inability to save the

I used who knows how many disks

No other program caused these problems and I eventually sold it in disgust. Pity, because like flight simulators.

Which brings me to another point. A while ago I purchased Virgin's Space program would not run with my A500 to buy Shuttle?

At that time it was the only program I had bought which would not run on this combination. I have programs like PageStream, DPaint III, Shuttle? Microprose's B17 Flying Fortress

Maxi cost?

with this data disk.

After purchasing your magazine at £3.95 with "free" Maxiplan4 spreadsheet package. I sent for the manual at £9.95. I now find there is a data disk that I need before I can produce databases and macros. How much is it going to cost me to complete my "free" spreadsheet package?

I am 61 and computing is new and fascinating to me. I can't get the hang of carries - I find they are a waste of time ot for Jimmy White's Snooker - and

Got something to say

through the pages of AC? Ezra Surf is our mailman. dedicated to reading your letters and selecting the most interesting for publication. Drop him a line at:

Ezra Surf's PostBag, Amiga Computing 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 end up getting the chop.

Elusive old floppy

Help! I've been trying to track down a 5.25in disk drive for the past three weeks without success. Trilogic had them, but unfortunately no longer stock them. Do you know of anywhere I can lay my hands on one, even second-hand? Also, is it sensible to change my A500 Plus to an A600 or A1200 so that I can buy one of the cheaper IDE hard drives?

S E Burns, Co Down

You should be able to buy a 5.25in floppy from ZCL (0543 414817) or Silica (081-309 1111), as either of these distributors should still be able to supply the Commodore 5.25in drive

As for upgrading, I wouldn't bother with the A600 unless you're only interested in games. If you really want to upgrade from your A500 Plus, go for an A1200HD. You can either purchase one with a Wang warranty or opt for one of the third-party kits which have less extensive warranties but are cheaper. Most will be advertised in

interested me, so with the benefit of experience I rang Microprose to see if B17 would run with an A530. I was told no so at least I have saved some money, but I would still like to know why it doesn't run. Microprose have other programs which work on my A530, so

why not B17? Could it have something to do with the

I've had a great deal of fun with

Maxiplan4. I'm sure I would have more

You don't need to spend any extra

money on a data disk in order to make

use of Maxiplan4 - simply format a blank

floppy and use it as your data disk onto

which all new worksheets can be saved.

Refer to the manual if in doubt as to how

to do this or what to name the disk

E R Benton, London

programmers started to produce ported programs which are written to the Amiga

To be fair to Microprose, most of their simulation games appear on the PC before the Amiga. and many of them have few machines. True, the first B17 release suffered from a few compatibility problems,

On the other hand, there are far too many software houses which do make enough efforts to ensure that complex sim games work with non-standard accelerated Amigas such as those using GVP boards.

Users of this sort of machine are exactly the B17, so making sure it worked on as many accelerators as possible would be the sensible

Of course, if hardware and software manu-Commodore's ouidelines in the first place.

CD tommyrot

The current argument for games being priced at £25 and in many ases well over goes something like this: Programmers' wages + musi clans' wages + artists' wages + pack-aging + marketing + overheads =

In addition to this there's the dam age done by the chaps (Mr Booth's own words were too picturesque to print - Ed) called pirates, I am not knocking the current prices, as over-all I think it a fair sum in comparison to wasting loads of dosh for a film you'll only watch a couple of times. However, can someone please tell me how CD prices are calculated? If a CD game uses, say, 6Mb of CD space (ie 6/7 normal disks), and the pigger the program the more expensive the costs of programming it hen it'll cost more than a floppy nies make a profit from charging just £20 for CDTV games? There are

 Pirates are blatantly killing their own games scene and that of every-one else who can't afford a CD drive. CD games will make no profit and are really produced by a bunch of software houses doing a lot of good work for "charriddeee" but they don't like to talk about it

3. Present disk-based games which have 4Mb or less of sound and graphics – much less than many cheaper CDTV games – are being produced by a bunch of software houses who are taking the piss and they don't like to talk about it.

I hope I haven't offended anyone as I've no intention of doing so. I just want an answer to this interesting

Darvi Booth, Ramsgate

CDTV games are virtually unpired-able, they often contain a great dea-of coding and information over their floppy-based rivals while remaining in most cases either the same price or cheaper.
No software house which still has all its marbles is going to answer a

that the repeated airing of genuin disillusionment such as this wi prompt the industry to adopt mos alistic pricing. In the opinion of this humble pun-dit, the quicker we can all convert to CD the better. CDs don't suffer from

read/write errors, they can't be irated in the usual way, they negate In infinitely more information.
In short, they make floppies look
the way floppies made tape storage
look – sad and out of date.



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TUTORIAL

n the first part of this series you cremuch the commands. Now let's take a bet-

an arrow, to the right of Del) a few times. the cursor, are deleted.

Now press the left arrow on the cursor anything. Press the right arrow and the cursor moves the other way.

AmigaDOS will dutifully execute the command - hopefully correctly this time. Now let's try a couple of different commands. It doesn't matter at this stage what

erately difficult to enter.

DERMEETASCREE PROCESSOR DELIST STEE (FORMAT: "File is: Isls"

Now let's add an extra argument to the

DALIST SYS: AFREMATE FILE is: IsIs"

arrow and just type the rest of the line? It's Just suppose you wanted to use that ADDBUFFERS command again. Press the entire line - alternatively, you can use Now type the single letter A, then hold

Shift and press the up arrow. Shell nips through its history buffer, locates the first line starting with A and displays it ready to be edited. You can also do this using

Shell reads the entire string from the prompt, so you can narrow the search by in this case. You'll learn more of this as

Press Shift-Down to clear the line and return to the end of the history buffer. Now locate the command LIST... ALL you entered earlier using the Shift-Up shortcut. Now watch what happens when you

Go back through these steps and practise them. You'll soon find they come naturally - especially if you are a poor typist: like most computer programmers for

Now let's shift our attentions to disks and disk formatting. Disk formatting is quite a complex process achieved by some clever electronic trickery - a basic grounding of which is given later in this article. Before proceeding any further though make sure the write-protection notch on your working AmigaDOS disk - the one you booted from - is open. You will also need a fresh blank disk - preferably a new

Delving In the second instalment of his AmigaDOS series, Mark Shell Smiddy looks a little closer

at the workings of the Shell either Shift key and press the left arrow.

get this line right first time, go straight to

typist. Did you get it right? If not,

erties and can remember the

mistakes and make subtle changes to

once. Notice how the command you

want to get to a specific comyou made the mistake and use the Part 2 1>ADDBOFFERS DEG: Press return and

into

one straight out of the box. From the AmigaDOS prompt, enter the following command:

1>FORMAT DRIVE OFO: NAME "Bootdisk" Insert the disk to be formatted in drive

DF0: and press Return. Notice how AmigaDOS loads the format command from disk then the message appears. If you move the AmigaShell window

out of the way you will also note how the disk's icon has changed to DF0:Busy. If you have more than one drive, you can replace this command with:

1>FORMAT DRIVE DF1: MARE "BootDisk"

1>FORMAT DRIVE DF2: MARE "BootDisk" Place the new disk in the internal drive

(second drive if you have one) and press the Return key (Enter does the same on extended keyboards).

displaying some useful progress messages as it goes. If the formatting process finds a dud track the format will be aborted and The Shell



you will be prompted for a different disk. Thankfully, this sort of error is quite rare - even for unbranded disks - but if you get the same error on two or more disks then either change brand or get the machine tested. When the format is completed the icon changes back to say BootDisk.

Disk formatting is a process whereby certain timing information is constructed on the disk's magnetic surface. The Amiga side) each containing 11 sectors of 512

ERS (h) format 2 PRIOREDATIVE/AVAL NAME/AVAL OPS/S. PPS/S. DVID. NOTERNATIONAL/S. NODAL-RODATENATIONAL/S. NOB (W3.0) numb rad (WBS 0:) format drive rad: name RAMEO DIRONOME

bytes. This gives rise to the 880k formatted capacity. A couple of things are worth mentioning at this stage, although they are beyond the scope of what are normally considered "beginner's topics". You do not have to understand a lot of what follows, but it is useful groundwork.

In days gone by, disks had a series of sector holes arranged around the hub ring, As the disk spun, the holes passed over a light sensor - rather like a burglar alarm and triggered a sector pulse for each of the seven or eight sectors. Later systems where a single hole was used to trigger the start of a track

The 3.5in disks used in the machine use an MFM or Modified Frequency Modulation format. Using this system, the start of each track is determined entirely in the format itself. The start of each track is dynamically encoded in the format using a "magic number" that could not normally appear under the MFM coding system.

This makes the disks much faster because an entire cylinder (pair of tracks) having to hang around for the sector marker. This also helps explain why the

The "invisible" data and sector gap is what accounts for the extra 120k of wasted

Now the crunch: You cannot store 880k of user data (your stuff) on a disk. With the traditional Amiga filing system - one of those we'll use - it is only possible to get 837k; and even then, only

A filing system (often abbreviated to PS) is the software which determines the way information is laid down on a formatted disk. As far as a Workbench user is concerned, a disk could use any one of four filing systems and they wouldn't know the difference.

Although the filing system has little to do with the way disks are actually formatted (apart from a single ID byte) it is worth knowing the difference

lar device - other options such as FPS, IFS format takes place. You can change a disk from one FS method to another by simply "quick" formatting it but this will irrevo cably destroy all the information it held.

The sectors have to be separated by a • Next month - how to make a small gap so the machine can determine where one stops and the next one starts.

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With intuition, formatting operations are much more friendly

Amiga can only get 880k of data on a nor-

matted capacity usually quoted.





disk open





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creens are one of the fundamental building blocks of Intuitionbased Amiga displays and with HiSoft Basic screen creation couldn't be

Opening a high-resolution, non-interlaced, 640 x 200 pixel 3-bitplane (eight with this single command:

SCREEN 1,640,200,3,2

Window opening is just as straightforscreen we might use the following

WINDOW 1, "TestWindow", (20,10)-(600,190),1

Screens and windows that are explicitly

The program opens a window in a custom screen and then uses a nested loop HiSoft Basic Circle statement to draw some coloured circles.

When the drawing is complete the window (and underlying screen) are closed and the program terminates. Palette state-

Command: PALETTE

full blue.

Syntax:

Purpose:

ments are used to set up some arbitrary colours for the display:

DEFINT a-z : x=280 : y* 90 : radius=150 PALETTE 0,0,0,0 "black : PALETTE 1,1,1,1

PALETTE 4,0,0,1 'blue : PALETTE 5,0,1,1 7,5,5,5 'grey SCREN 1,640,200,3,2 VINDOW 1,"TestWindow",(20,10)-(600,190),1

(x,y),radius-4*i,(1 M00 2)+j,,,.55 MERT i

WINDOW CLOSE 1

Of course there's an awful lot more to HiSoft Basic's Intuition/graphics links than this. Menu statements allow you to support for sprites and more advanced

graphics (including object collisions). For now though, since this instalment is the last in the current series, it seems fitting to end by briefly outlining some of the areas of the language that will become of interest once you've got over the initial

HiSoft BASIC The sky's the

Paul Overaa finds no boundaries to this powerful language Basic learning curve hurdles. as he winds up his

One of the good things about HiSoft

Basic is that its syntax is closely related to the original Amiga Basic and other Microsoft-style Basics. This means that converting programs to and from these various forms is usually straightforward HiSoft Basic does, however, have its

share of enhancements and, as with most Basics, these include a number of less important language extensions. For example there are Incr and Decr

instructions that provide an alternative way operations. So, instead of writing xux+1. HiSoft Basic allows you to write incr x While this latter shorthand form might

long variable names or expressions it does tend to make code less portable and so is

One of the things however which makes HiSoft Basic stand out from the competition is that most of its enhancements, rather than ety, have centred on the needs of the serious

For example the language supports themselves) and it provides good error trapping and break handling instructions which enable your program to branch to special encountered.

The usual type of machine code calling

facilities are available but as well as this a powerful Calls statement exists which allows sub-programs to be called indirectly (using an address held in a variable).

programming series

HiSoft Basic also provides specialised Amiga goodies including links to the Amiga system libraries and a Systab function which allows access to a range of system variables (Intuition's message port, the WorkBench startup message, screen bitplane data)

The end result is that although the core facilities of HiSoft Basic make it an ideal language for the beginner, advanced Amiga programmers will find that there is little they cannot do with the

ACK ISSUES

Missed some of the first five parts of Paul Oversa's excellent HiSoft Basic tutorial? Why not complete the course by ordering the relevant copies from our Back Issues

and 4. If type is omitted then the mode is specified using one of these 1 low-res non-interlaced

SCREEN Id, width, height, bitplanes, mode[,type]

Know your

commands

Allows the RGB (red, green, blue) values of the specified colour register-

to be set, RGB values should be between 0 and 1.0 thus Palette 0,1,0,0

would set register 0 to full red and Palette 1,0,0,1 would set register 1 to

This statement opens or closes an Amiga screen. The screen Id, which is

used in subsequent Window statements, should be a number between 1

2 high-res non-interlaced 3 low-res interlaced 4 high res interlaced

or SCREEN CLOSE id

PALETTE colour_register, r, g, b

If a type value is given it is expected to signify the screen's ViewMode (see RKM mauals for details) and in this case the mode is ignored.

Command: WINDOW

WINDOW id [,[title]],(x1,y1)-)x2,y2)] [,[type]],screen id]]] WINDOW CLOSE Id

Statements open and close windows. Last form identifies the current output window. (x1,y1) and (x2,y2) identify top left and bottom right of window respectively. Type specifies the gadgets and other window characteristics and for further details of acceptable values you should consult the HiSoft documentation. Command: CIRCLE

CIRCLE [STEP] (x.y), r [.colour][.angle_s][.angle_e][.aspect] Draws a circle, ellipse or arc of the specified colour using the supplied start and end angles.



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In the past, software security was priit came to reviving the dead, while software such as Chopper provides a means of managing, and more importantly back-

Although still excellent, many of the repairs can only be applied to hard disks with a maximum storage of 42Mb.

In an attempt to plug the gap in the fray in the form of Central Coast/New features to the new Ami-Back range with hard disk backup plus repair for both

Mon Ami



 Could you fall in love with this twin collection of hard drive tools and back-up utilities? You might do when your drive next crashes, as Paul Austin discovers...

Ami-Back Tools

Although Ami-Back comes in two forms it's probably the Tools - or maintenance far as hard drive house keeping is con-

that's a fairly sweeping statement but it's

Unlike the opposition Ami-Back Tools is more of a collection of utilities under a generic interface rather than a single

Starting from the top, AB-Tools opens eral practitioner - a program offering disk organises the disks data structure to propossible. Although a pleasant touch, most Administrator - Release vI.61

modern hard disk controllers do a very as a result only when the disk is full will optimising have any major benefits.

Disk Analyst comes next providing a within the disk structure itself. Common errors will be found and fixed - although it's possible to vary the programs operadiately or reported prior to repair.

RESURRECTION

After analysis comes the software's very own resurrection program in the Reviver is designed to restore deleted

theme of reincarnation we have the next utility, namely 911-Recovery which as the dramatic title implies can be the last hope

If the unthinkable happens and your hard disk disappears without a trace, no longer appearing as a valid AmigaDOS age lost data by backing-up the contents of the ailing volume to another, or alterna-

Next comes the curiously-titled

lection has been designed to destroy data rather than recover it.

In certain circumstances deletion of tion you don't want to fall into the wrone hands or perhaps prior to resale of exist-

simply formatting a volume doesn't destroy the data and in fact it's this yery principle that allows the vast majority of

However like all such software the process will only work effectively if the volfor an ailing hard disk ume in question hasn't been rewritten to since the files where deleted. An added bonus is that even a Quick Format can be

AMI-BACK TOOLS



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And Back male steem in all fits glory. The manus it and And Back is standard and Section of Section 1990. Secured Practitionary Section 1990.	Betting Signature Signatur	Humber Heads Blocks Per Track High CVI Blocks Per Track High CVI High CVI Buf Herser Type Creation Date Continue Continue

UTILITIES

recovery software to operate As a result, Antiseptic has been designed to totally eradicate any trace of

free space or visible. Once selected the space selected will be completely over-written and to be really sure up to five passes can be made over the volume which means only very advanced technology would be able to recover the

information - and there's certainly nothing commercially available that in that league. To close the collection, Lab Test offers the chance to generate a CRC database, or simply snapshots all the information pertaining to the volume in question.

Once stored the file can be used to compare the database with what is actually contained on the volume with primary activity.

Ami-Back

Although just as feature-packed as its counterpart. Ami-Back is a much more dedicated package restricting its field of interest to hard drive back-up as opposed to salvage, optimisation or whatever else.

Above all, the program's primary claim to fame is speed and after testing against Quarterback - its main commercial opposition - the seemingly inflated claims of the Ami-Back marketing department seem to hold true. It took just 47 seconds to back up a 910k directory, while Quarterback doddered along at a rather embarrassing 77 seconds for the same operation.

In addition to speed, Ami-Back also offers floopies but HD floopies, hard drives, SCSI tape devices and even DAT - not that you'll

AMI-BACK

Simple but effective with options for back-up and restore plus the handy scheduler

I DESCRIPTION

Better still, the aforementioned SCSI tapes - or tape streamers as they're more often called - don't require any special software in order to be driven. And, tape backups themselves can be stored not only on single tapes but also multiples when necessary. On top of that, multiple fixed and vari-

able block mode adds the finishing touch to tape streamer flexibility

On a more traditional note, the program's back-up options also allow storage direct to a single AmigaDOS file or partition along with a special Image back-up unique to Ami-Back. Thanks to the aforementioned image feature even MSDOS, Amax or Unix

However, such back-ups are restricted to the entire device and as a result it's impossible to selectively restore files as is the case with a standard AmigaDOS file system.

However even with the "all or nothing" approach Ami-Back still remains unique and very attractive to users playing host to

Recardless of what or where you choose password protection for those sensitive files you don't won't anyone else to get their mucky mitts on.

options, the program also shares some similar features to its tool-laden namesake. First up is a version of the 911-Recovery software mentioned above. Although not identical it works in a similar manner by salvaging essential files from the wreckage of even the most terrifying hard drive disaster.

The next option is fairly reminiscent of CRC offered by AB-Tools. However in the case of Ami-Back the option is entitled Compare Mode. This simply checks backedup data with the present system information on the part of your archive. Aside from a good selection of storage options, handling

Asset sharing

Both packages share an extra scheduler program allowing them to become totally automated, and as a result when active the program will fire up and apply the desired procedure at the month, day and hour you chose with accuracy down to five-minute

Obviously for floppy based back-ups this isn't particularly useful as someone still has to be on hand to swap the disk However for the pro user with perhaps a tape streamer or back-up partition the option

is invaluable and vividly illustrates the market that the Ami-Back range has been targeted towards Alongside the scheduler both packages also share a common affinity with ARexx

Arguably the most flexible backup program

on the market...

and archive management can often be just as important and here again Ami-Back scores well with an impressive and often unique range of filters and intelligent file

At the forefront of its intellectual options come the program's exclusion and inclusion filters which can be applied during both back-up and restoration allowing the filterments, protection bits and date stamps.

FILTERING

It's even possible to apply a touch of Boolean logic with AND/OR combinations files heading either to or from the chosen device or file

Continuing in an intellectual vein, the well as advanced individual file handling

potted opinion, for not one but both Ami-Back and Ami-Back Tools. As for overall appear I think the features speak for themselves but as is the case with most power software, there's a price to be paid.

In the case of both packages the price in question is a rather lofty £69.95 which to be frank is quite a bit more than the average

user would be willing to part with considering the proliferation of acceptable if not

Having said that it must be stressed that nothing in the PD comes even remotely close to the power offered by the Ami-Back duet. As a result I can still envisage respectable sales to the pro and semi-pro market. The aforementioned sales will probably

Back Tools which easily out-guns the existing version of Quarterback Tools (although the imminent release of QB Deluxe could alter the situation) but it would have to be a excellent collection of utilities.

As for Ami-Back - the situation is pretty much the same with an array of features that make it are uably the most flexible and gram on the market.

However it must be said it's not all good news for Ami-Back as it will have a very hard fight against the massively popular Quarterback HD back-up system which although slower - has a strong position as the industry standard when it comes to large scale file transfer

Obviously if you plan to use Ami-Back as simply a back-up method for your own files this won't be a problem. However if you need to send large amounts of data to other users Quarterback still has the upper



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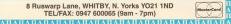
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Kid Div

Painting

painting and now they can do it on the Amiga without having to negotiate a package designed for grownups. The likes of Deluxe Paint are just a bit too youngster unfriendly for the average came into being.

The package was originally designed by the father of a three-year-old as a simfurther developed, on the PC, to become a commercial product suitable for children of all ages. Now it has been transported to the Amiga to fill the gap in the market left

Apart from the disks and user guidethe box contains a sheet of six colourful sticky badges. Rather than being aimed at children, the manual is written for parents. Let's face it, kids will want to get straight into the program and younger

ones won't be able to read anyway. It isn't necessary to look through the user's guide before launching into Kid Pix as discovering how to use the package is

an extremely enjoyable experience The package comes on three disks and hard drive owners will be pleased to hear

by numbers

Electronic Arts set the standard in the nursery with a paint package designed specifically for children. Colin Yarnall turns back the years...

that an install script has been provided. Because the third disk contains the French, German and Italian sound samples, less fortunate users do not need to access all three unless they are language gurus.

boxes, circles and filled areas are present but these have been extended to produce some zany effects. Each tool has an array of attention grabbing styles and options plus an associated sound sample that is played to further retain a child's interest. There is a rubber stamp tool that has a

total of 112 brush pictures that can be doubled in size. Although they follow design your own from

User-generated stamps are saved to disk for use in the next session and can be

restored, at any time, to the the default stamps is that

they have been designed to be used together, to create complete

For example, it would be a simple task to create a complete train carrying zoo animals on their way to a teddy bears' picnic faces. 70s smilies, snowmen, cats, does and

even a wide-eved frog! Sections of a picture can be captured. using the moving van tool, then moved to another position. A variety of rectangles may be used to define the shape of the cut.

Alternatively, the user can elect to use the magnet in order to grab an area of any size they choose. Rather than remove a large chunk, leaving a conspicuous white oblong, screen sections can be copied



using either the edit option of the menu bar or the mouse/control key

Fantastic effects can be produced with the wacky brush tool which has no less than 28 styles. One of these can be used to produce bare trees that would otherwise be beyond the abilities of a child. These are no ordinary trees mind you, they're fractal, which makes them more varied and realistic than pre-drawn ones could possibly be.

Forget complex equations, and overnight rendering times, because these fractals literally take no more than a cou-

Amiga left wanting Sadly, the Amiga version lacks the full complement of routines found on personal com-

puters. With the IBM version it is possible to triple a stamp size as it is pasted. There are also facilities within the editor to rotate and flip pictures. The inability to do the later on the Amiga reduces the number of available stamps by a factor of eight Strangely, an addendum to the manual puts shortcomings down to technical differences between the Amiga and PC

A really glaring omission is the inability to load any files other than those originally reated using KidPix. The special file format used can be read by Deluxe Paint but any permanent changes

to the file will render it unreadable by KidPix. The PC version uses PCX files, which are the standard format on that platform, thereby permitting pictures to be exchanged between packages.

These are not the only features to be omitted. The IBM version has features such as keyboard short-cuts, a toggle between sound effects and playing a song; plus the ability to stop drawing geometric shapes before they are completed

There are no obvious technical reasons for these differences and they could well appear as the product is developed



ple of seconds to produce! They are randomly generated at the click of a mouse deciding whether to make large or small

By default they are little, but, by pressing the Ctrl key at the same time as the mouse button, larger trees can be generated. Adding the finishing touches, in the form of leaves, is a simple matter of select-

Thick 3D lines may be used as just that, can result in striated skies and choppy seas. Pressing the Ctrl key at the same time changes the white 3D highlight to a In fact, pressing the Ctrl key with most

wacky brushes reveals a hidden aspect. The additional paint effects vary from brush to brush but generally involves changing the colour, toggling fill, enlarging the brush or altering the shape of the

A variety of snowflakes are created at a flick

of a button

drippy brush that simulates excessive nts of paint

As a line is drawn, blobs of paint drip down the screen. Similarly, a leaky founallows ink to flow even when the pen has

stopped moving. This results in drip trails

the file options are located, together with and silence the sound feature. Making the program kid-proof is

achieved by entering a special mode of the remaining tool options available

The package doesn't stop at emulating real paint but provides effects that could only be produced on a computer. For example, there is a caterpillar pen which creates a paint trail that follows the mouse pointer around the screen. It is a cross computer game, Snake.

Connect-the-dots plots numbered points as a line is drawn then removes the line when drawing is complete. Lines may sequence continuing from where it left off. The completed series of dots can then be

of Electric Mixer manipulates drawings to create instant patterns and effects. The night and day option inverts the palette; wallpaper extracts a rectangle from the picture and pastes it to create a tiled effect; large triangles, while the outliner draws The weather is almost always a feature

of children's pictures and has been well catered for. A variety of snow flakes are created at the click of a button and, by holding down the Ctrl key at the same

for added effect.

EDUCATION Although the package was intended

that character is heard. The voices are varied and provide a painless introduction to fundamental sounds and symbols.

Experimenting with lots of options can result in a complete mess. Simple mistakes it is time to start again

The task of clearing the screen has been animated in a variety of imaginative ways, from a simple fade to an engulfing black called firecracker which explodes a bomb and sends shock waves across the screen.

Hidden pictures can be revealed using the special mystery eraser. As the rubber is moved across the picture, it slowly disappears to be replaced with a black and tery pictures including a lion, horse, lady-

They are mainly composed of dots. giving them a grainy appearance, so a sion to use this style of clip art was proba-

Unfortunately, there is no facility to import your own clip art so this feature is The Toolbox

likely to lose its appeal quite quickly. Despite the shortcomings, KidPix is an all ages for hours at a time At the moment it is the only commer-

cial art program we know of that is aimed specifically at a youngsters. It will therefore set the standard for its genre and, judging by its inventiveness, will con tinue to do so for some while











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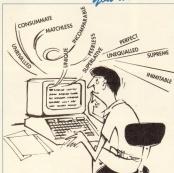
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fter a month of solid tinkering there's a good chance that the hard core have already spotted at least some of the amazing power features within B&Plr.

of sliders, buttons and assorted gadgets, I muso will have overlooked at lot of what's

If you can cast you mind back to the last

deeper with a detailed look at the program's multitrack editing, flags, and group-

ing options.

Before we start, please ensure you make a copy of the demo song on the CoverDisk. ing the tutorial which you may wish to save in its edited form later on - under no cir-

cumstances save over the original Obviously for Midi users the internal sounds offered by the demo aren't exactly ideal. As a result, feel free to replace the

TOOLS

Tools can be removed by simple mouse tion, double-click to open the tools requester - if available - and then adjust

the various parameters where necessary. You may remember from the last issue covered - at least in brief. This month it's

Thanks to the proliferation of flags scattered across the top of the track window, actually spotting the multi-rack edit markers can be a tricky business. If you take a close look you should be able to spot a purple triangle which can be split into two

If you click on either half you should be able to drag it across the top of the track window. Obviously because the two markers form a sandwich it's impossible to

various flags you may have noticed that they tend to snap to a bar or measure automatically. Although confusing at first this offers a very easy way to make clean edits

lota control

Never has a sequencer afforded so much creatively-angled control over composition than Bars&Pipes Ir. AC continues its tutorial to last month's

mega CoverDisk giveaway

move the right-hand marker to the left of its

Before we go any further it would be wise to take a quick trip to the preferences window highlighting the Align With option which should reveal the flag alignment

default settings.

for cut and paste operations For our purposes select the measure option - a check mark should appear alongside. Now return to the track window and try dragging the edit markers and you should see the flags snap into position as

Before we perform the first edit, open the screenshot. You can now either drag the edit markers as described above or alternatively type the figures directly into the flag

For our example, set the markers so that the flag window reads 0001.01.00 for the input and 0008.01.00 in the output thereby selecting the first eight bars of the

Due to the size of the sequence area you can only see a three-bar section at any one time - as a result you'll need the assistance of the sequence drag bar at the bottom of the track window in order to set the appropriate edit points using the mouse. Finally select the cut option. Now rewind the sequencer, hit the play button and - surprise, surprise - the first eight bars are missing. Feel free to experiment with the various generic edit options available in the pull down - but remember the flags stay next eight bars ready for additional editing.

In addition to the edit flags, another ten icons lurk alongside. Assuming the flag window is still open we'll work from top opening with the punch-in and punch-out

As the name suggests these flags are used to temporarily drop the sequencer into record mode and then back out at a predefined point. Punch recording is a popular

A click and drag will place any one of four available markers throughout your production The excellent loop option providing The essential edit flags, perfect for multitrack cut and paste eight attempts at a recording in and out re-recording where necessary

> See exactly where you are in the song courtesy of the position marker

Instant playback termination with a click, drag, and a drop of the stop flag

TUTORIAL

technique in the studio allowing replacement of mistakes without the need to com-

In addition, punching-in can also be used to add extra notes to a section without overwriting the original by simply replacing the red R - record - with a M -

merge on the tracks mode button. To use the feature, simple drag the flags into position or type the appropriate figures metronome - via the windows pull-down or window icon - with the lead-in of you

RED ARROW

Now move back to the track window and select the track of your choice - ensuring that a red arrow appears on the button beside the track name. Make sure the track mode brotton shows either a red R or M and that the appropriate input and output tools are in place. If everything looks correct and you can

hear output, move to the transport control and click once on the in-out control button - shown as a two arrows above a single line. As you do this the sequencer will jump to the IN point minus the lead-in defined by

To record the section simply click on the through the lead-in and automatically drop in and out of record mode as defined. To practice the section follow the same

procedure but make sure that record option is disabled on the target track - or indeed any other.

To review your work simply click on the IN icon within the transport control and the sequencer will automatically rewind to its position - the same applies to all the flag

buttons in the transport. Next in the flag window run-down



markers which, like both of the above, can be dragged or numerically positioned. Although not as dynamic as the punch-

in function, markers can often be invaluable on bigger productions giving instant access to vital sections by simply clicking on the appropriate marker button to auto-locate

any point in the sone

Once selected the sequencer will jump directly to the chosen point - even during playback. If the sequencer isn't playing a marker but also automatically begin playback. Better still if, set up to record - play and record both active - the same double click will not only jump to the marker but also add the metronome lead-in prior to

B&PJr's loop option is a prime example of a real power feature which can so easily be overlooked by simply tinkering rather ture simple drag or type the placement into the flag requester.

The flags themselves are represented by two circular arrows on a red background with the head pointing down for input and up for output. Assuming you've placed



The transport controller makes moving around a song very easy

each flag at the appropriate position for with the rest of the song.

record and move to the transport window. alongside the record button the sequencer the loop and then return with a small requester. To continue simply click on the Play button and the sequencer will begin the first of eight passes over the looped

You now have eight opportunities to either try variations on a theme or perfect a solo. When the final pass is complete the requester will be replaced by another showing each attempt as a number which can be selected and thereby auditioned

When you've picked your favourite, sim ply click OK and that version will be written

Better still, merge can also be used in addition to basic record, so if you only want to add a few embellishments to an existing section, replacing the R with an M in the

track's input will give you the same eight the original notes. Bringing the flag collection to a close are

arguably the least dynamic of the dozen, namely the song position and stop flags. Although both can be dragged just like all the others, it's likely you'll use them more often via the flag window

In the case of the position marker, typing or dragging simply chances the current song point where the sequencer will kick in when the play button is hit.

pler. To use it simply drag it to or type the position where you want to stop the sequencer, whether it be in play or record

Alas that's all that space will allow for this month, however next time we'll take a close look at the various tools and how to menus plus a guide to the finer points of individual track editing.



add at least a one-bar lead-in prior to

Become a groupie! Try clicking on the solo/mute button and you'll see the power of

Just above the flags you'll notice a bar full of assorted icons and buttons, the first of which is the solo/mute button which toggles the selected track or group of tracks between solo performance, a muted state or back to the default with all tracks playing in

The following eight numbered buttons all belong to the group option. To create a group click on any of the number buttons followed by the group button itself. Now click on two or three tracks each should light up in turn

Click on the group button to de-select and then click on a differ-

ent number. Your previous selection will now disappear - however if you now re-select the new group by clicking on its number, it should

Finally we've arrive at the toolize option - which you'll find sandture, drag an appropriate tool into the window, select the track or tracks to be processed and execute the toolize option from the edit pull-down menu. Although generally used for quantising, applying more exotic effects such as echo can produce some unusual and pleasant results.

the grouping options in action. In order to assist grouping and tool

connection the two up/down arrows alongside the group button can

be used to move a selected track up or down the list. To try the

function de-select the group, pick a track at the bottom of the win-

dow and hit the up arrow. Simple but effective.



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Education

Phil Morse looks at a whole host of shareware programs that won't cripple the family budget

shoestring

INFANT

Alphabet Teach

17 Bit, CLE12

Using the infant-friendly mouse as a control method, this program teaches co-ordination, vocabulary and the letters of the alphabet to

There's a useful parent/teacher preferences screen, which allows the setting of the number of spellings per session as well as the ability to toggle the colourful backdrop - great for those with fuzzy TV sets

The preferences screen can be disabled with a password should this be required, after which it will cease to appear on the menu accessible to the child - a nice touch. Preferences can also be saved.

Selecting "teach me" from the clunky, easy-to-use menu displays a crude but recognisable picture of an object, together with its name (van, for instance) and Amiga speech spelling the word out (V... A... N....)

Sampled speech would have been better - the Amiga's dulcit tones have always reminded me of the old Texas Instruments' Speak and Spell games -

I found it hard to escape once I'd entered an exercise; although I specified five questions, they seemed to go on forever. Maybe I did something wrong, but it points to a bit of tuning in the user-friendliness department, or alternatively, a bit of debugging!

The game involves the same pictures you see in the "teach me" practice mode, but with the first letter of each word missing. The child has to enter this letter to move on, or face



miserable when an answer gram, marred a little by its simplicity and the apparent bug. Worth a look.



Silhouette 17 Bit. 2204

A value-for-money double pack on the one disk, the other being fractions (see Junior

Silhouette tests shape recognition abilities, and its six levels are both colourful and intricate - a marked contrast from the simplistic, clunky feel of a lot of such software.

A number of silhouettes of shapes appear around the edge of the screen, with shapes appearing one by one in the middle, which you "grab" with a realistic-looking. mouse-controlled hand and put into the

It's rather like shape puzzles for infants, but this version is timed, with 60 seconds being allowed on each level (the levels get progressively more difficult). It's simple but well written and attractive







JUNIOR





Fractions 17 Bit, 2204

Fractions is an involved but clear and well written program aimed, presumably, at GCSE students. The Help option details clearly and diagramatically what fractions are, explaining such mathematic obscurities as dividends and divisors, and the program itself allows exercises on addition. score chart

It uses the annoving Amiga voice synthesiser again, but you can turn it off (or turn the volume down) and you're left with a well-written, clear, involved and useful program that teaches one of the stickier sides of maths with style and

Monarchs 17 Bit, CLE16 A/B

One of a series documenting the history of England, these two disks actually run independently - the first contains royalty information covering the Saxons, Normans, Plantagenets, Stuarts and Tudors, while the second con-Selecting a period produces a pageful of text with a scroll bar; daunting for

some, maybe, but the medicine is sweetened by a number of additional screens, containing coats of arms, pictures of the kings and gueens in guestion, and the judicious use of well-chosen sound effects. The text is very well written

The problem with trying to bring history alive is that it feels very far away to the virgin student - teachers and teaching aids need to make it "come alive", to emphasise the human angle and to instil the contin-

yous timeline into the student's mind While basically digitising a book doesn't do this, it does allow a greater degree of control over what is read/looked at and in what

with a conventional index. I used to have a kings and queens wallchart on the back of my wardrobe door: this is, I suppose, the wallchart for the older child of the 1990s. A useful little multimedia package.







Let's Learn vl. l 17 Bit, CLE11

Aimed at five to seven-year-olds, this program is gloriously simple to use, thanks to

its reliance for all input on the left-hand mouse button; no keyboard, no remember-It's a large and comprehensive package. Modules include Maths, which covers

plays a tune, encouraging the child to learn how to play it by clicking on the keys. There are 17 pieces of music on the disk, so it would take a new Mozart to speed Moving on, Codes involves the child "decoding" a series of words, based upon the age-

old code of A=1, B=2 and so on up to Z=26, while Opposites invites the child to enter the opposite of a word displayed on-screen, an example being "Good" where the child has to The most interesting part of this program for me was Squares, which presents two grids

on the screen. One contains an assortment of coloured squares, the other is blank for the child to fill in a copy of the first grid, using an easy to use, point-and-click DPaint-style All but one of the subjects have five levels. If the child does well enough (three out of

five) a simple animated farmyard scene, with an animal added each time, is displayed, and the program moves to the next level. Finish all five and you get a "grand finale" -

The package is clear and simple, contains some nice pieces of music, effects and animation, but shines for the reason mentioned at the beginning of this review - easy mouse entry which won't cause confusion like the keyboard frequently can. You can even enter

Pictures and Letters

17 Bit, 2226

After entering your name (the computer speaks to you - unfortunately in the ever-popular Amiga synthesis speech) and selecting keyboard or

gwerty keyboard. Selecting any letter brings up a picture of an object which starts with that letter - U for umbrella, for instance - but the actual word is not dis-

played, so the child must know what an umbrella is already It gets curiouser and curiouser the next section shows you the same key board - although for some inexplicable reason, the mouse cannot be used to

select letters in this part - which plays a sample when you click on a letter The samples and letters are in no way connected - they're things like a stab of electric guitar, a water drop and so on - and the program invites you to "remember where your favourite sounds are"

What's strange about it is that, apart from some basic computer-literacy, the testing, no progress reports; just clicking, watching and listening to digitised

Half-baked and clumsily programmed, this would nevertheless keep a youngster occupied for a while, but it's hard to see much value in it beyond that.



JUNIOR



Zoom in an any country that takes your fancy

The Little Traveller 17 Bit. 2451

After a rather convoluted loading period, this program presents a map of the world, with continents ahosted into boxes for selection.

Not surprisingly, clicking on a continent gives a sub-section - for instance, clicking on the box surrounding North America allows you to choose from the USA as a whole, east and west USA, Canada... or a map of the whole lot. The maps would benefit from an interlaced monitor as the program switches

resolutions quite regularly. Each sub-section contains a description of the area, vital statistics such as area and population, travel information, airports and trivia. There are comprehensive menu options, providing information on currency rates, holidays, ferries and so on,

Obviously good for geography students, this would fascinate any child who's discovered the joys of browsing through an atlas - and come to that, it would help any adult blighted by trying to decide where to go for this year's holiday!

The History Book

Asgard PD

Another of the multimedia-style packages showing just how much a computer can bring to life a lost or mundane subject for an older child. This time it's to the Second World War, and another Hyperbook-created

disk which documents, in all their terrible details, the horrors of wartime. The usual maps, explanatory text and curiosities are there (I for one had never seen the apparently famous picture of Hitler just before he died), as well as hard facts, including grisly details of the casualties in the bombings

As is normal in such programs, topics, keywords and other associated informa tion are all linked, so there is the choice of letting the program guide you logically through itself - or rather, letting your mind instruct the program which path to follow through its database.

The ability to print out information is a godsend too (ever tried typing and reading painless, way to familiarise oneself with a very important period in Europe's history.

Pathfinder PD, 41 Marion Street, Bingley BD16 4NO CLR programs are available from most larger PD libraries.

ADULT

Morse Code Tutor v2.2

Déjà Vu, L/101

Many people still find a vital need for Morse Code. Yachtsmen, an teur radio enthusiasts, phonetics students – all have a use for do and dashes even in the days of ultra-modern sound and visi

This program is highly comprehensive features include control
of the pitch, speed and volume of your code, the ability to select
which combinations of letters you wish to be tested on, and full
programs.

Preferred program configurations can be set and saved so that the pro gram always boots exactly how you like it, and these files can be individu-alised, so a group of people could all learn at their own pace, with the computer keeping track of each of them. A successful and original idea.

Touch Typing Tutor CLR CLU03

Note I would be the whole the state of the s

almost as useful, if not as flashy, Clearly and colourly presented, the tutor has comprehensive menu support, with 16 different serectices to look user master. There are error from the control of the colour services and the colour first to season you had provine present a key. "though not necessarily the right costs, and automatic word highlighting.

For cheaper than custom typing total markeners or the other Amigs soft-ware equivalents, this program is both a novel use of the machine and a successfully implemented practical tool for the budding lysts.

Chess Helper

Pathfinder PD

s the author is an Australian player of some repute, you can trust that com-uter-generated randomness is not the order of the day here? A time limit can be selected, from a five-minute bilitz to a five-hour arathon. There are checkmate tests and other questions and puzzles cov-

ening most aspects of the gam All in all, this disk pre-sents a real chance for the beginner or the chess familia to learn a great deal easily and cheaply from an accom-plished player.









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Execute, Rebooting and KindWords

I have three problems: 1. When using the Workbench 1.3 Execute command to execute a script I get the message "Execute failed. No K directive". I have tried Run executing the script, which works, apart from one problem: the script asks for input using the ask command, but when I run it does not wait for input, but continues with the execution. Please tell me how I can

2. When I boot up my machine, it occasionally loads in NTSC instead of PAL. meaning that the bottom part of my screen is unused, which is very annoying. I cannot see any reason why it does this, nor connect its timing to anything else. Please tell me why this happens, and what I

3. When using KindWords 3 and printing docs with graphics in their headers, I sometimes get an error message when the printer starts printing the graphics on the second time through, on every page: "Printer error: Check paper and cabling". I click retry and it carries on as normal until the next page. Why does this happen and is there an easy way to avoid it?

Michael Ricketts, Chaltenham 1. The problem does not lie with either the execute or run commands, it is to do with your AmigaDOS script or the way in which you

are calling it. Assuming that you do not want to pass parameters to your script, the syntax that you should be using is:

where filename is replaced by the name of your script. To pass parameters, you need to know what are expected. If it is a script that you have written the parameters should be specified (on the first line) using

2. There are two ways to reboot your Amiga: you can either switch it off for 30 keys (one at each end of the spacebar) all at the same time. If you reset too quickly the machine does not always reset properly and can result in an NTSC display instead a PAL one. Also, some games automatically set up an NTSC display so that they will run on both NTSC (American)

3. When the printer runs out of paper it sends a message to the Operating System. A copy of this is sent to KindWords which responds with its own

message, displayed as a requester. Some packages allow you to specify the length of a page. If this is longer than the actual page length the system will receive an unexpected paper-out message. The solution is to adjust the page length from within KindWords, or from Workbench via the preferences editor, to match the physical page length.



Monitors, broken disk drives and boorly power supplies tax our experts in the definitive Amiga technical clinic

Ashcom 210 wootsit

I've got this hard disk drive thingy, bought it from Ashcom a few months back and it works great. But it's getting on for quite full now so that's about 180Mb (210 model) and I would like to do a tidy up of the files

The only thing is the optimiser/reorganiser programs I have are public domain and neither of them work. So I would be silly to buy a commercial program at great expense only to find out it didn't work

I did telephone Ashcom and they said

drive isn't partitioned, as there was no setup software with it when it arrived, so I just charged on and used it as a big

floppy. optimiser from Valley PD, but no good.

When disk space is limited the operating systhem wherever space is available. If this hap-

chunks, thereby improving efficiency. If you want to increase the amount of free space, one way is to delete some of your files you might like to copy them across to floppy

cruncher (file commessor) which will reduce file sizes. These are available both in the public domain and commercially, the most widely

SAY again! I read with amazement your reply to A Clitherow of North Devon that

expert but I was convinced that you were wrong, so I delved into the WB1.3 disk and discovered the answer. You need to copy:

When I open SAY it works perfectly. I

do agree with you on one point though -John D Westwood, Winchester

WB3 machines, it is just a matter of setting up the system correctly. However, an earlier perneed to own two machines to do it legally otherwise copyright will be breached.

type in the following AmigaDOS commands

Nintendo joypad, I found a way to convert it to work with an Amiga. To convert an NES joypad you will need to be fairly competent with a soldering iron and have a joystick (broken?) that

The conversion technique involved pening up the joypad and extracting hip, then inserting wires from the j stick lead into various holes left by the

A O'Connell, Gloucester

Many thanks for sending in details of this mod. A word of warning though, anyone thinking of attempting this project please note that Amiga Computing will not be held respon-sible for any damaged hardware resulting

Nintendo joypad conversion



TECHNICAL HELP

sweek: device:

Where myfile is a standard Ascii file created

Stereo Master I would like to ask for your help on a few problems I am having. The first is that the

COFF 070:StereoMaster#? 080

thing seems OK, but when I did the titlescreen command I received a "bad arguments" message so I added a hash and

This time I got all the way to the end, received a message "Stereo Master requires window had told me that the SMFONT

I have phoned Microdeal about this and was told that I will have to put the

startup-sequence in the ED window, as I



Fancying a game of Cribbage I am writing to find out the programmer of a game of Cribbage which appeared on the

disk which was given away with the magazine in November 1990. Or could you tell me of any PD library to which it was sold? This game was one of the best I have seen. Some time before last Christmas my Amiga developed a severe virus which put two or three disks out of operation. I would be grateful for your help as I need to buy this game.

S Woolan, Stowmarket

Unfortunately, Amiga Computing doesn't keep disks that date that far back and we don't know the programmer's details. If there was an associated document you might still be able to find out. Failing that, try writing to large PD companies - someone is bound to have a copy

of the game that you need or a similar cribbage program.

last installation command and copied the fonts to the wrong destination. Try that line again, making sure that you type it in exactly as it is

what file you want to create/edit. For example: ed df0:startup-sequence

Select the save option from the menubar then seawence files to the demo disk

where mypiccy is the name of an IFF picture created with DPaint (or whatever) and museavence is the name of your sequence. You also

Finally, you need to use the install command

Conner drive

also an 84Mb Conner hard drive (revision

organises the drive OK. I also tried to install WB3 on it with the Install WB3 util-

Workbench partition that was created with the install disks HDSetup utility). Anyway installed - one was the clock utility - but

Hard drive hitch

drive from a company called have ceased trading. I wish to obtain a replacement cartridge for it. Would you know of a supplier and one who

Des Price, Pontypoo

Unfortunately, we don't know of any companies tha could help you out. Perhaps one of our readers may be able to assist - watch this space.

I also tried to format the partitions from

the pull-down menus on WB3 but it would my work partition - I just get a format failure and then I am left with two icons with

partitions as described above and when I double-clicked on the icons they opened up the windows to tell me I had 8Mb for WB3 partition and 73Mb for my work

So then I tried installing Wing icon I got the message: "Checksum Error ON Disk Block 95056" or some similar number. So it seems my partitions are full

I also have QBTools and there is an problems? Also on OBTools is an option to repair bad drawers and files or directories and when I run that option it tells me I have serious root and checksum errors but it seems to fix them. So please could you give me a guide to

have drawn the short straw, You got problems too? Then

drop a line to Amiga Computing Advice Service Europa House, Adlington Park Macclesfield SK10 4NP and we'll move heaven and earth to help in these columns. But sorry, we cannot reply personally, so save those SAEs

Which AGA?

I would like to upgrade the Amiga 500 to either an A1200 or A4000, plus a lanton computer that could "talk" to the main computer

(Prodata). I also use a spreadsheet quite extensively Now to the question. Do I go for an A1200 or an A4000? You see, what puts me off mostly is the lack of a SCSI-2 interface, which means transferring all the files from my A590 to an IDE hard drive. Is this going to be easy?

Do I hang on until the end of the year and go for an A4000, when the price might have dropped? I rather like the idea of having a computer that is hardware upgradable, I have a lot of games and almost as much serious software - would they be compati-

ble on the 1200/4000? Could I use my modern on the new machine? S.F.Mallion, Hove

Transferring your files would involve backing them up to floppy then restoring them to the IDE drive on your new machine. Alternatively, you could buy the mid-range A4000/030, add a controller to your existing drive unit and plug it into a Zorro slot. The latter option would also leave scope for further add-ons.

that did not follow Commodore's programming guidelines. Having said that, the AGA machines have boot options that allow emutation of original and enhanced graphics chips that can be used to solve incompatibility problems. Finally, you should be able to use your modern on the new machines

QA Amiga Computing August 1993



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Wim a printer!

Your favourite Amiga magazine and First Computer Centre bring you the chance to win a Starjet SJ-48 bubblejet mono printer



be yours for a quick phone call which should cost you under £1 at cheap rate. To keep the cost of your call to a minimum try to avoid any background noise, which may necessitate the repetition of answers



HOW TO ENTER

You can enter by phone as many times as you wish. All you have to do is answer the very simple questions below. Please try to avoid background noise. The winner will be drawn from all the correct entries received.

How much does the SJ-48 weigh?

A. six kilos B. four kilos C. two kilos

How many pages does the auto sheet feeder carry?
 A. 15 B. 30 C. 20

How long will an A4 page of text take to print, using one of the printer fonts?
 A. 3 minutes B. 2 minutes, 30 seconds C. 1 minute, 30 seconds

You will be asked to leave your answers together with your name and full postal address, including your postcode. Please speak clearly, spelling out any difficult words.

Please speak clearly, spelling out any difficult words.

Calls are charged at 360 per mirrute cheep rate and 460 per mirrute at all other times.

COMPUTER CENTRE

The Starjet SJ-48 non-impact printer is great value for money, giving crisp, high quality, quiet portable printing. Using the latest ink jet technology the StarJet can produce draft print in economy mode. using less ink which is

ideal for draft printing and the budget-conscious user.

This tightly-designed unit weighs just under two kilos and only needs the same desk space as an A4 folder, so it's easy to slip into a brief-case. In operation the SJ-48 is quiet and fairly quick, turning in a respectable 100 characters per second letter quality text.

Roughly translated, an A4 page of mixed text and graphics will print in around three minutes, though a page of text using one of the built-in printer fonts will appear in half this time. Print quality is superb for internal fonts and almost as good when using scalable fonts

Those with letter writing, business or other correspondence needs can rest assured that the StarJet SJ-48 is an excellent, low cost printer

and a thoroughly good buy.

Amiga Computing July 1993

- Two industry standard emulations including Epson LQ, IBM ProPrinter
- Epson LQ, IBM ProPrinter

 Ni-Cad battery pack for mains free operation
- Two resident fonts; Roman and H Gothic 10, 12, 15, 17, 20 cpi pitch versions with two point sizes
- 48 nozzles in high quality mode
- Sealed easy-to-use front control panel
- 8in print area
 Friction feed for single sheets
- 8-bit parallel interface



his month we'll open with yet another update to the immensely popular Imagine2 Understanding Imagine2 reference manual as well as the equally impressive Essence range of mathematical textures.

This time however the update doesn't concern textures or literal explanation of the software. In fact the update in question is an object, or more accurately several variations on a theme.

With Imagine2's success, the bulletin ations that will cost you no more than the price of a phone call. With that in mind may seem a little hopeful.

UNIQUE

However it must be said that Cycleman is pretty unique. As the title suggests the collection isn't simply a set of inanimate objects but rather a selection of walking and running cycle objects in addition to a single-jointed static that can be given a new cycle of your own design. Alternatively, the aforesaid static can option to redesign any aspect of the figure ready for either commercial or pri-

vate applications. In addition, editing isn't simply limited to the main structure of the figure. In fact, if say the head is isolated, much

enhance realism even more dramatically. in fact any part of the figure - can be mapped with a suitable image or texture

to further enhance the illusion of reality. couldn't be much easier as application is a simply matter of adding the object to the scene, applying the required path and rendering the anim. Thanks to the repeti**Art, animation** and Agfa...

Amiga Updates continues its monthly round-up af the latest software updates and upgrades

object, our hero will never stop jogging or strolling through the scene, pausing only to modified or static counter when

effect is particularly effective as the already impressive figure can be clad in the textures and attributes of your choice

As any ray-tracing enthusiast will tell you, modelling a believable head never mind a complete figure can be difficult enough, as a result even at £39.99 I'm sales - especially to those who need high

impact imagery but don't necessarily have the time to create it from scratch. Keep you eves open for endless corporate videos featuring the shiny men from

· For more details on Cycleman contact Micro-PACE UK on: 0753 551888

Wordworth for Panasonic

For would-be Wordworth investors, there's an added attraction for anyone thinking of investing in a printer at the same time as

of Wordworth have just released a which provides extended support with much improved support over the entire range.

· For more information on any aspect of the Wardsporth range



Digita and Agfa get it together

Imagine2!

After the emergence of WB2 and indeed WB3. I was among the many who expected something of an explosion on the font front. Alas the typographic big bang never really happened - until now.

As regular readers will be aware, Agfa Compugraphic have already lit the fuse with the release of their AgfaType collections which consist of a starter pack of 12 fonts for around £30 with a follow-up video pack of 25 typetaces for a rather pricey £45.

Although of excellent quality, it must be said that when tioned duet do look a little extortionate. The strange thing is that both sets share a very similar

collection of fonts which often provide identical typefaces to those in the initial Agfa release However in the case of the new collection there are fairly dramatic differences in price and variety.

Like the original series the new fonts come in several volumes - in this case three - entitled Pride and Presentation, The Classic Collection and finally The Filtry day by the property of the state of t Futura Bold II Microstyle Bold CG Bodoni Bold Garamond Kursin PEIGNOT DEMI BOILD

Reference Library. In descending order the each volume provide 20, 25 and an impressive 50 fonts respectively which as you'd expect build into an impressive library of 95 publishing-quality typefaces. The only drawback is, of course, cost - if bought as a

job lot, they'd set you back a knee trembling £139.97.

when broken down into its component parts of £29.99, cheap, I think you'll agree there's a fairly dramatic financial improvement on Agfa's initial release

Quite why Agfa have decided to combine with Digita to challenge their own product is a mystery, but if the end result is better value, who cares? With the dominance of Wordworth in the Digita product line an obvious worry

would be compatibility with other products However any worries in that area are totally unfounded as the typefaces are generic and can be used with any package boasting support for the scalable font technology

of WB2 and above Even so. Digita have made their mark on the collection via a special Digita Font Disk Creator which allows the

user to build up their own font libraries specifically for use In addition to these fonts, Digita have also released a collection of clip art designed specifically for Wordworth which build into a library with titles including Cartoons. More Cartoons, Sports and Nature and Geography and

Transport, with each retailing at £14.99 a time.

Amiga Computing August 1993



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THE BEST SELECTION OF PD IN THE UK!



onain Distributors



Most CLR titles ok on A1200!

.. The Central Licenseware Register ..

Most CLR titles



Outries 101AL CONCEPTS DIMPOSATISS hisses pour shiftines were weeked to know about the ancester wood of the dimensor ? If so, than this is for yes - an interactive amonytopedis covering juranesis, Hessic & creataceous periods complete with pictures and information. This program is plus compatible and cemes on 2 Disks. ELSO -

CLERE TOTAL CONCEPTS GEOLOGY Thit title is the second in the series of quality programs by Chris Nit, sing the Globblask Hyperbook system, it will guide you and poor shiften on an interestive guided bour through the incredible world of notizenes, recks and miserals, the programs is very simple to use 1 Globogy is on 2 Clean (4,50 *

CLROS TOTAL COMCEPTS SCLAR SYSTEM Now but most popular tile 1 This can entreles put to learn all about the older system, with intomation on all of the planets & systems with jointers supplied by the planets of systems with jointers supplied by the planets of the planets of the planets of the special tile of the planets of the and in priced at only (4.9).



CLESS INSHIT DKY A superb introduction to the constallations. This program features over 1500 thats, and the sun more stars & plassas can be displayed as seen from any per of the Earth Lage shralling sorrers, mouse or keptivered controlled, class on any displayment object for information. This superior on any displayment object for information. This superior is the Commer on 1 class & is priced at 3,50%. CLEON WORDS & LADDERS An examinat spating program for 5 or 2 piezes, each player has a few seconds to special a word conversely. The piezes has seen extended to the port the ladder is the winner. The program has 10,000 words so some words can be quite long, however you can select the level Will size or the provide printed dupped to a convenience of printer, 3,500-privile printer, 3,500-privile

CLRTD BASICALLY ARROA This is a 3 disa set for to new used his nateristing quick through the use of Amigados. Covaring Hardware, Software, Graphice, Sound, the Workbench, Viruses and much much ministryou will soon wonder how you did without this useful willly pack! For young and old usery silks. 3 d disk and princed at A.99! • 3 d disk and princed at A.99! • 3



by the second of CLE12 ALPHASET TEACH A nice educational program for the young, a very simple to understand a piceling program which above the cities 5, asks for the completion of the appropriate word. This program sides has built in specific, and will run a series of pittures at the same time speaking the asknow of pittures at the same time speaking the asknow of pittures at the same time speaking the asknow of the pitture of pittures at the same time speaking the asknow of the pitture of pittures at the same time speaking the asknowledged displayers.

CLETS HOME BREW This is a super's program for the creation of home made since. It craves all the details of fermanation, butting is storing of the wise. A selection of recipies to many different wises can be found on the disk & there is an option for printing the neighber out to a connected printed This program comes on 1 disk and is priced at 3.50.

OLEY TOTAL CONCEPTS ECOLOGY focal concepts foology will give you and your children an estimating overview of the most important foology for our lives. This internetive way of leasing significant Ecology enables you to fig through pages of leasing citic not words to get more information and countries superior graphics. Supplied on 3 dieta priced 6.99 +

CLETO PART PRET By Kelth Klathocothy, this peopses in a guilar scales takes, the very thing for the building lead guitariet. Nill play the scales through the Analgas around chip with ajustment of speed for every less of skill required. There are stay assertises in many states as you too can become the next next legard. Supplied on end disk priced 3.50. *

CLEIS KHRO's a CUELING A Haboy leave on as or of the Kings & Ouward of England since recorded hallow) Allows the Linguistic service and a examine the eyel tends the & complete with many pictured.
Find out how they lived and died and what combitions they made to seeing it their country.
Supplied on 2 disks priced 4.501 v. CLE17 THRVSAMAJIO. This program is an electronic figure with easy or hard leveled. There are 2d plottures on the disk and you have to jetice the ploces the necessary of the control place on the acresed. There is also a help facility on the disk, a very good estudiental program from Lea Tyudee!

Comes on 1 disk and is priced 3.50. ...



CLE18 WORK & PLEY There are three educations games on this else, CLICK CLOCK is a closk program to halp children learn the few. PLEYTER! TALKS as a program for learning the multiplication tables, and program for learning the multiplication tables, and freely LETS of SHOPPPMS therebes children multiplication and description of the program of the prog

CLE19 FLAY IT SAFE This program traches safety in the home or outdoord Halp Tedly make your home safe as I has been invaded by mishihirons beastes. These sar-6 designers in each location. 5 8 locations. When you make semething safe you are invanied with part of the polium of the beasted Very good to lide of 3 - 10 years! Comes on 1 disk priced 3.50. -

CLE20 BIG TOP FUN Peer good programs on this disk, there is a agreedy report which may be turned on or off WORD SALANCII in a childs reading sal, in MATCHFLEX you must make pairs of cash. SALANCII is a wired recognition program & SALANCII is a spelling program Type of the program of the program of disk & is project 2.50. *

CLEZI JOSMANIA by Len Tucker. There are two programs on the clex, Jamania is a passw noting programs on this keep you it has take amount for agent There is also a passw construction set to above you to create your own held There are several jigaaws previoled on the disk and there are several jigaaws.

CLG16 SKAN 29 This is a first platform game in which you must guide Bid through 200 screams and calesal first like big dhields at the end of each lives, I not game will run fasher if you are body enough to have an Amiga 12001 This game should keep you conquied for a long time! Comes on 1 day proed 2.50.

CLO 20 JUNGLE BUNGLE by Len Tucker. This pame is assentiably an lone driven advanture written major for the possinger parents in midd but ampoine can play. You must catch the reindrigae but because of the bename attailing monkeys! Very addictive with online graphics. Comes or 1 dex 3.50.



CLUSS TYPING TUTOR A program here now for all you broking office stiests, learning to type can be a neal pain, learness cost a former, but not when you have an awdigs 1. This program will take you step by step through a first flygring course, allhowing when the price of the program and the more. Before long over the effect to type as that as I can I first 23.50 -



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AR

disks received this mont has reflected the trend at of these pages

Replacing the Jukebox Jury and reams and Visions sections, which are dedicated to music and ar s respectively, are Music and

Music means anything from mpasses slide shows, cartoon ations, still artwork and so on so there's lots of scope to get those

HDM v1.1

CIR

This is a multitasking menu system, aimed at users with Workbench 1.3 and 2.0 machines. Basically such a system. allows the user to specify a number of programs - say your favourite wordprocessor, spreadsheet, a couple of games and a database plus your favourite utilities - and set them up so that by simple selection from a menu or pressing of a key, the program will load automatically, possibly running concurrently with any other program you're using at the same time (this is where the multitasking bit

This system operates by means of a menu which you can have across the bottom of your Workbench screen, vertically down the side or in a shrunken form at the top. It can display ten possible program choices - selectable via function keys - and as many switchable banks of ten programs as you have the memory for From the most serious utilities to the silliest of demos, it's all happening in

the cut-price world of the public domain, Phil Morse reports back...





but colourful and definitely interesting

(to "tell" HDM about 50 programs uses a mere 2.5k). This type of program is nothing new,

of course, but HDM is particularly well thought-through and programmed, thus making it infinitely more useful than It is happy working in all screen

modes, has keyboard short-cuts for just about everything and even comes with its own bard drive install program, although for some reason Workbench 2.0 owners it up and running. Neat.

The PD concept

Two main types of software are reviewed and available through these pages. PD, or public domain, is software which the author has released for free. Mass copying is encouraged, and the author expects no return - this is written for the love of at PD libraries will send you such stuff for very little more than the price of the disk and postage costs

Shareware follows the same concept, but asks you to send a fee - normally specified in the on-disk documentation - to the author, should you find the disk useful. It's a kind of "try before you buy" concept, although the fee you finally pay is invariably far lower than the cost of just one piece of commercial software.

It is important that users send any fees requested, not only for their own sakes (you'll probably receive a better version of the program, and regular updates) but also for the sake of the author, who'll be unlikely to write further programs if he or she sees their software in use without having ever received a penny for it! It's a case of giving back what you take out, and without this attitude, shareware would die, to the detriment of us all

Licenceware, beenware, charityware and the countiess others you'll no doubt come across are different only in what they ask you to send in return for the program, or where they ask you to send it to. The concept is exactly the same as shareware.

Comic Clipart Highland PD, 593

Here's something that's nice to see some quality clip art, which for those who are perplexed refers to pieces of artwork, usually small and simple, used to brighten up anything from company notepaper to newspaper and magazine

The use of a little diagrammatic telephone instead of the abbreviation "Tel:" when giving a company phone number is a classic example of clip art making infor-

mation easier to ingest. This collection concentrates - as the title might suggest - on cartoons, with superheroes featuring highly. So if you're after Spiderman to brighten up your spreadsheet, the Human Torch (three versions!) for your letter headings, or Thor and Captain America for your new underground magazine, this is the place

A quick peek at some of the artwork in DPaint confirmed the quality of this nice little selection.

Batlog/Simon/ Skeet

Alan Carter Three individual and individualistic games on one disk, all written by the disk's compiler, and all warranting at least a quick peek. Batlog is a worthy little post-Manic Miner platformer, which works mainly due to some imagination put into designing the levels and bonus stages, and a good set of options to keep



The most artistically outstanding piece received this month was the latest Charly Cat animation, Charly Cat VI (Roberta Smith PD, AW107A/B). What a series this one is turning out to be!

After Snow Joke, this latest animation sees Charly Cat - whose bite is "worse than a shark's", so the author informs us, attending the cinema, with some incredibly gory bits. Apologising for his sick mind, the author has awarded it a PG classification!

It's all healthily tongue-in-cheek, however, and technically and artistical this animation is a must. Requiring 2Mb and preferring two disk drives, the movement is smooth and convincing the characters as good as ever (they're

Skeet is clay pigea

picturesque of

shooting in the most

Calling all PD libraries...

and individuals with skill freebie and cheap software. Whether it's a great new utility you've written, a bazzing little arcade game that Gran comes around especially to play, or a left-field political satire animated to the strains of underground German techno music. I'd like to see it.

Just bung your submissions into a Jiffy bag with a note explaining what they are and how to use them, not forgetting to label your disks clearly too, and I'll guarantee to at loast give them a look

Unfortunately, due to the volume of submissions, many don't get reviewed, but if I haven't got your disk, you can be absolutely sure that I won't review it!

The address is: Phil Morse, PD Submissions, Amiga Computing, Europa House, Adlington Park, Macclestield SK10 4NP

boredom low. Before you start, you get to choose - among other things - the inertia of your character and the number of lives game proper, which as well as the usually platformy bits, has great pinball-style bonus stages and lots of cutesy graphics. Do you remember the electronic mem-

ory game Simon? The one shaped like a flying saucer with four coloured segments which flashed a sequence that you then had to copy? Well the picture on this page should remind you, and if it does you'll need no introduction to this computer version.

Retaining the flashing lights/bleeping noises of the original, you use the mouse to "push" the segments in order. There's a strange feeling of satisfaction to be had got for me, anyway) and the PCR-style backdrop to this computer version makes it look attractive as well as addictive. A blast from the past and no

Finally on this disk is Skeet, which is a

the only non-PD bit of the animation. meaning the author claims copyright). and like Snow Joke, it contains good atmospheric sound effects too.

A wonderful addition to your collection, and if you haven't got the other five, order them at the same time.

CHARLEY CAT



Batoog: A platformer with some imaginative levels and bonuses

rather curious but visually very pleasing target game.

Again utilising the mouse/crosshair control method (this is the kind of game which would benefit greatly from a light



After an unobtrusive but neat and stylish opening screen. The J Edgar Hoover (17 Bit) presents you with a menu from which

you can choose to play one of three songs. First up is RavEvil, which is a simple and somewhat typical computer-sounding tune containing nothing offensive or jarring in any way, but with nothing to really grab the attention either

Shallow Bay, the next tune on the list, is a remake of New Order's classic Blue Monday, and highly impressive it is too. It sounds nice, and this is an extra special achievement since it's built from the bottom up from fresh sounds, and still manages to sound like the original.

The final tune, Get the Rolls Royce, is a Thunderbirds remix which most defi-



Remember Simon? He'll test your short-term memory for you...

gun) you have to shoot what I presume to be clay pigeons against a backdrop of blue winter skies.

Every now and then a couple of birds meander across the sky in the distance. but righteously you can't shoot these (I

nitely does use samples - but don't worry, far from being a symptom of musical laziness, they are firmly in the "humorous sampled speech" department. Musically it sounds like it's stuck somewhere between hardcore house and

So if you're after a game that's off-beat as well as off the beaten track, then head for the idyllic mountain cairns of Skeet. Wish I knew what they were doing shooting up there, though.

better for it. An interesting, original and most important of all, highly listenable

number The whole disk is varied and well presented, with bags of enthusiasm and a





AT THE FLIX

Utilitarian utilities

LSD Legal Tools #99 Roberta Smith, UT500

An incredible value compilation of utili ging from the useful and not so agine only about three people in the

owever, 18 utilities on one disk is reat value for £1.50, and you'll no doub d at least one of them useful. Chopper is designed to split large files blocks of data into bite-sized chunks

ing up a hard drive, or maybe for irting information into the Amiga a tape streamer or optical disk. mple and useful, although most hard Simple and useful, almough most have yee owners will have acquired some not of disk utilities package at some int which will probably have a more stomated and user-friendly utility on it istomised purely for that purpose.

ng users. The application of such so ware in the United States has cause mealing and disturbing rumblings fro

he FBI, paranoid that people will be able of ever untangling and so reading.

Anyway, this is one of a later breed of in device, designed to allow a ry" code (to allow the other user to de red channels" from the message nder. Ooh, sounds like mystery and

y unfathomable. uickGrab is the utility for me on this . A reliable, user-friendly, feature-d frame grabber for 2.0 machines? and about time too

rup, and assuit me do.

Totally PD, this grabber can save movng pictures, has up to a 99-second delay

ster activation (go for racing to your

avourite bif in a game) and allows you to

sefine the hotkey combination used to

tartup folder, meaning that it will be tually activated. Definitely the one if onsistently and reliably grab screens.

All in all, this is a crammed, well docuented, no-nonsense disk of well writted useful, if at times pretty obscure, util worth a look

Cycling Mileage Recorder

17 Rit. 2450

One can't help letting one's suppressed cynicism break loose and take over sometimes, and I've got to admit that Cycling Mileage Recorder did just that to me. How in the world could anyone extract any use from such a program?

However, it's a mistake to judge a book by its cover, so just to get some evidence with which to slate this disk, I

Well, it's not that bad really. It's a nicely presented program which allows you to enter lots of statistical information about how far and for how long you've cycled each day, presenting a number of overall statistics at the touch of a button about your cycling activities.

Hang on. I'm sorry, but I can't see anyone past the junior stage of unquestioning-enthusiasm-for-madcap-ideas extracting any use from this whatsoever. A good example of a program that really, really didn't need to be written. Strange.

Entity Chris Swift

This rather seminal arcade game is one of the more original I've seen in recent weeks. The presentation is all sophisticated sci-fi. Aliens-style, and the game sets its scene beautifully with a full description and pictures of all the aliens you're likely to encounter.

Although the playing area is a wellcompelling idea comprising a crosshair controlled by the mouse which leaves

You use these to trap the blob-like aliens before they reach the edge of the screen, by which point they'll have become extra powerful and a graver dan-



ger to your safety.

Should you touch the edges of the playing area, your energy drains at an alarming rate, and so the game becomes a battle between speed and accuracy on the

An ambitious and well-presented cross between Tron and Light Cycles (sort of), limited in the excitement stakes.

Funhouse Roberta Smith, SGA195

A very nicely presented set of three programs, of which two are games and one is a demo. The first of the games is entitled

Enigma, and is a tile game based around varying shapes of board. Your task is to unite similjarly coloured tiles, at which point they disappear. When you've cleared a whole level in this way, you get a more com-

plex board to play on. It's simple, well realised and addictive Thundertron is - yes, you've guessed it - a version of the evergreen arcade "classic". I'm much. I got a disk the other day with five versions of this damned game on it! Say no

Finally Imagine 3 is a demo, which basically constitutes a slideshow of some rather tasteful drawn art, but unless you're comatose or feeling particularly mellow you'll want something a little more interesting than a load of black and white pictures on a monitor





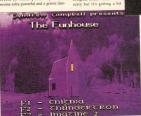
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17 Bit, 1st Floor Offices, 2/8 Market Street, Wakefield WF1 1DH



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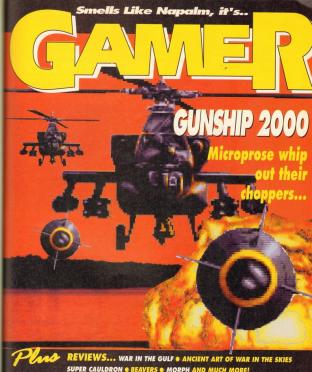
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Watch out. Ocean taste curly! ean are once again delving into a packet

of Quavers for yet another entertaining and Reward will hit the streets at the end of the

The game finds Colin Curly, hero of the Quavers ads, playing his favourite computer game while tucking into his equally favourite snock. As he poos the last Quaver into his mouth, Colin "goes curly" and is suddenly

icked into his computer and digitised This is the cue for a puzzler that offers you, the games player, the chance to run about in a baffing, maze-filled universe. Exiting the Delays (hmm...). Bounce Dawns (eh?) and Ray Shutters (exsqueeze mel).

One Step Beyond combines amazing puzzles, adventure and a loveable character with 12 different platforms containing a total of 99 levels, each with its own wild personality Ocean reckon that this will prove to be one of the most addictive games of the year. I'll helieve it when I see it, but you never on tell.

Small, but perfectly formed...

Micra Machines

sters are out and about on the Amiga

use the vehicles are in miniature th es take place on breakfast tables and in the fit tub. So watch out for hazards such a mpant pieces of toost and particularly nash

odemosters proudly boast that MM is the competitive racing game ever devised taking into account how many con-

orts cars, Formula One cars, pov ones, dune buggles and helicopters we of the webicles featured in M

Dip your toes into the swimming pool of the latest Amiga games. Don't forget there's no running, no dunking and no petting in the shallow end...

What a Lankhor!

Everybody knows that French software companies are famous for making completely weird and downright strange computer games and Lankhor are The game Black Sect is billed as the "first French adventure game to take



place in the depths of the to be released while you you decide to read this in November in which case it'll already be out and It supposedly features a



fascinating script set in the heart of Yorkshire and contains magnificent and realistic graphics full of atmosphere. A brilliant musical background is included along with fontastic

sound effects There are 34 places to discover, animations on every screen, a simple and pleasant icon management system and even an evolution of the atmos-

These are just a small smattering of features included, but the graphics do look especially good as you can see. Look out for a preview or even a review

Sonic Death? ng their announcement of a ground-break

ing deal with DID, Ocean have signed Nik and Mrs Fiend of group Alien Sex Fiend to compose, produce and develop the soundtrack for a game colled Inferno, DID's first release

The soundtrack is being specifically written for the CD-ROM versions of Inferno. Although other publishers/developers have co-operated with the music industry before, notably Tim Simenon (Bomb the Bass) and Betty Bao with Renegade, it is believed this is this the first time that such an endeavour has been undertaken in terms of both writing a complete game soundtrack and transferring that sound track directly to CD audio, by any "name" band

Alien Sex Fiend have released 11 albums over the post decade and have a large and loval cult following. Over the years they've produced



albums such as Here Cum Germs and Open Head Surgery and singles such as Smells like S**1 and Mrs Fiend Goes To Outer Space. What the soundtrack will turn out like is any-

one's quess. I can see the future and I like it. Music and games are becoming more closely linked. What can we expect next? Well my money's on the Manic Street Preachers to provide the soundtrack to Sonic 3 and Suede to secure a deal with Gremlin to do the music for Zool 5 (released 1996). You never know, stranger things have happened!

Gametek and Konami link-up

Gametek are continuing to rise towards the top of the global video and computer games market by signing a worldwide deal with Konami Gametek have secured the US and UK rights to Konani's star-studded range on the Amiga, PC and Apple Mac. At a stroke this adds 25

Listen very carefully...



I shall say this only once, because after the phe nomenal success of Doctor Who, Alternative Software are back on the Amiga games scene

with Allo Allo Their latest small screen fie-in is based on the smash hit BBC TV series, which in my opinion

The Fallen Madorna with the Big Boobier gog just simply wasn't funny after hearing it 157 times, but the boobies pop up once more in this

Rene Artais - the bravest café owner in all of

Acclaim in bed with Virgin

Virgin Comes have just signed a deal with Acclaim Estertainment to publish some of Acclaim's biggest games on the Amiga. The exact details are devously being just quite, but or Virgin positionand de antifem that it would cover at least six lifes: Terminater 2: The Com-Op. Aleast, The Crosh Durmine; Bort vir the World, Krusy's Fun House; and perhaps now of the world's boat both "emusy and which will be also also also also will be also also also also will be also also also will be also also will be also also will be also will be also will be also will be wil

Programming work has already begun on

all six games and as soon as we get more news

we'll let you know all about it.



current titles and two new releases to the Gametek line-up and elevates the firm straight into the ranks of the world's top ten home computer entertainment publishers. Included in the first new releases to be launched and formats through Gametek will be Batman

Meanwhile Gametek have also signed seven new publishing partners in the US market. They will now handle soles and distribution for labels such as Gremlin Graphics and Renegade Software.

France – is trying to escape to England, so he can elope with Yvette and marry her. He needs the Fallen Madonna, though, and it is at the mament carefully locked away in Lt Gruber's

sale.

Allo Allo is a fast action platform game played over five levels featuring Rane attempting to break into the choteou and steel the painting. It will be released in July and have the arraz-

It will be released in July and have the amazing mid-price point of £16.59. In the immortal words of that blake who plays the policeman and pretends he can speak French: "I thunk it is tome for me to be moving onto another nose priss." One conned buighter.



The new and improved

Gamer posse

There have been a few changes in the Gamer personnel over the last month. As mentioned previously, Poul Roundell has non away from home and is currently squatting in the Amigo Action department. Ben Syles has pronced off to pastures new in a desperate bid to become a

Action department. Ben Syles has pranced off to pastures new in a desperate bid to become or "rowk" star.

To replace these two poor unfartunates, we have held extensive interviews. People from all over the world have been curriving and camping

outside Europees Towers just to stand a chance of working on Gener.

After much deliberation we found a blake who could write amazing and furny copy of the yeard of light and play games blindholded with his hands tad behind his back. He didn't want the job, so we get Simon Clays instead. Here's his deliafith falling.

Name: Simon Clays Age: Too old Height: Oooh, about this high Weight: He could change his name to Slim

Jim Eyes: Three

Sex: Err, we're not that close actually Likes: Drinking beer and smaking tabs while listening to The Orb Dislikes: Being told off for doing the above in

Distinguishing marks: None that we can see... yet Motto: You can't lead a horse to water, but you can take it to a club if you want

I'm still here though, you can't rid of me that easily, I'm your worst nightmare. The stelf may have changed, but we'll still be bringing you the hottest reviews, previews, news and game guides that money can buy. The unstappable games machine just livens or rolling.

SHORTS

JONATHAN

 Millenium's aquatic secret agent James Pond is becoming more and more popular. This morth our fully here appears in his own comic strip in "folds" TV magazine Look In!, and also on a range of T-shirts. Sonic and Mario had better with out!

 US Gold are currently working on a game based on the forficoring Wister Olympics. It will feature the events including downhill skiing, the giant slalom and the bobsleigh. The winter games, which are now held every two years instead of four, are due to take place in Lilleharmer in Norway next february.

 Another hot rumour this month concerns Zool
 Apparently our alien platform fieed has got himself a girlfriend who's due to put in a star appearance in the sequel that everyone in the aames world is talking about.

 ITV's first ever computer and video games show Bod Influence is set to return in the Autumn for a second series. The first show mode by Yorkshire TV stars Andy Crane and that tips gay called Nam Road with thinks he is really funny, but all the 'kids' think he's crap.

The show will run for 26 weeks and hopefully will improve an its fantastic audience figures of four and a half million a week.

NNARDS

Hello my name is Jeffrey and I love Gamer, so why don't you check out...

REVIEWS • REVIEWS • REVIEWS

War in the Gulf				٠	
war in the out	• •	• •		4	
Empire come up with yet another tank sim					
while Simon pretends to be Kate Adie					

Ancient Art of War in the Skies112

Ancient it may be, but have Microprose come
up with yet another flight sim classic?

REGULARS • REGULARS • REGULARS

shoot 'em up, in production longer than the Channel Tunnel!

Drawing Board - Global Gladiators - 124

I'll have a Big Mac and fries to go and take a look at the game which could well be spearheading the cutesy platform revival...

way around the world of Ishar inour two-part cheat mode



Are you sure we're on the Magaiuf flight? That's a bloody big beach down there!



don't know what it is, but ever since I've been vending my weary way to AC Towers - which is no mean feat, as it's in the middle of nowhere, seven miles up a pig's colon - I keep getting the war games.

Please, don't get me wrong, I'm not mooning. It's just that until recently I was the type of guy who'd trip through blossomed meadows, and go around preaching love, peace and generally non-violent

Now look at me, they've turned me into a childeating, babe-butchering, war-mongering maniac. But enough of my problems, let's see what's on

today's menu War in the Gulf is a tank sim from the same people who brought you the award-winning Pacific Islands and Team Yankee. Now before you all jump

to the wrong conclusions, I'll put you right. Tanks are not those outdated, large, lumbering nieces of metal. They're no longer the Tony Adoms of the military world. Not if the American Chiefs of Staff are to be believed. In fact, a large proportion of the success of the 1990 Gulf conflict was down to the armoured divisions

This brings me rather neatly on to my second point. This is not - as most of us thought - based on the original flare up in the Middle East Instead, we are swept forward in time to 1995.

As always with this renowned hot spot there's trouble. Following a moelstrom of violence and political unrest, Iraq, fed by Mr personality Saddam Hussein, decides to waltz back into Kuwait, Is it me or have I experienced délà vul

Well, there's no prizes for guessing whose job it is to take control of matters and free Kuwait. Funded by the extremely wealthy Emir, you and

your mouse manipulate the destiny of Team Kuwait. Team Kuwait comprises some of the latest hardware to grace the front drive of the US military,

Ever fancied getting tanked up and kickin' up your own desert storm? Well here's your chance to cause armouredgeddon in Empires' War in the Gulf

including the lethal M-1 Abrams main battle tank You take command of four tank units, simultaneous by controlling a total of 16 vehicles.

Following some nice intro screens, the first task in hand is to set your forces on objective. Empire are boasting 25 battle zones - so there's plenty to choose from. Being a campaign, the action begins on one particular island and moves inland as you

become more adept. Now it's time to deploy your forces. This is where the first element of strategy shows its face. Obviously different vehicles have varying capabilities, but there's more to it than that. Money-bags himself, the Emir of Kuwait, controls the purse

strings, giving you packet money to buy the hardware to do the job. Sounds simple enough? Unfortunately he only coughs up on results and doesn't like it when you blast large hales in ancient manuments or other

Kuwaiti treasures Next aption at your disposal is whether or not to et artillery support. Having pondered that one frough, it's on to the main game screen. I should really have used the plural there because the main screen really consists of four; each one of the tank

units occupies a quarter of the screen All of these areas can be independently access by mouse-driven icons. So it's possible to view all of

your units at the same time However, it's highly unlikely that you'll utilise this action too often, as it's hard to determine what's going on and this manoeuvre generally results in all of your tanks being ripped open like so many tins of

Instead it's a lot more carry to operate from a full screen view. Here, both tank and external graphics gain darity and good old user-friendliness. The tactical aspects of WITG are all decided within the battle map. Clicking on to this screen dis-



KINALTS KUNALTS (KUNALTS (KUNALTS)



anninas

Tanks for the memory



 Large screen display Split screen display

Engine smoke - useful for confusing enemy Thermal imaging icon

Dead stop - halts movement of a unit Zoom icon - magnifies image x6

Rotate turnet and compass control Laser range finder

HEAT high explosive anti-tank round SABOT amour piercing shell

TOW long range anti-tank missile Smoke grenades Machine gun

US/Iraqi strength histograms

FTA iron Pause Quit

Finances available

Tank status icon Play area icon View map icon





again, My tanks take a thorougi

plays the geography and topography of the battle zone. It also displays your vehicles and their intended courses. You're also given options on your speed and a whole range of tactical formations.

"Yeah! Yeah!" I hear you scream.. "This is all very well, but what about the action? Where's the camage? The satisfing of primeval desires that we

All right calm down, I'll talk about that aspect of Gulf now. The main battle sequences give us external views of the Kuwaiti terrain seen from inside the tanks. Again it's down to mighty mouse to control everything. You can practically carry out any action that the real McCoy can, whether it be a simple turret rotation or use of the laser sights to increase your deadliness. Everything's there in reach of your sweaty palms.

In terms of ballistics, you've got more munitions to hand than Amie in Terminator 2. Your choices vary from anti-tank missiles through to smoke grenades. Firing is simple enough, moving the

mouse off the control panel anto the play area - as If by magic - changes the selector icon into a gun-

The play area graphics are courtesy of Empire's award-winning 3D technique. They mix bitmapped, arcade-style effects and vector graphics with great results. The action is fast paced and plenty happens.

11125

Typical Sunday morning. Everyone down my street out burning their tanks

This all adds to the realism which is generated. The enemy are extremely intelligent and show no mercy when it comes to the crunch, Saddam's Republican Guard being particularly ruthless

The sound involved throughout is sportan but effective. But let's face it, when you're crammed into a space the size of a filing cabinet you can hardly

What really grabbed me about Empires' endeavours is the realism. It's not so much the visual quality - which has to be said is excellent - so much as the speed. The game plays at a "real-time" pace. This gives the player little, if no time to react to surprise attacks. There're plenty of occasions I sat there perplexed, pulling my hair out, watching my

vehicles being decimated by unseen foe. The relative cunning of the Iraqi forces makes this an incredibly tough nut to crack. There's little point in sending your forces out willy-nilly. You have to have a strategy. This element of affairs add to the overall addictiveness of War in the Gulf.

I know the Gulf conflict is a bit of a touchy subject in same areas. I also can't help feeling that there's something a mite sad about the marketing strategy employed - riding on the back of a war to However, it's been done before, and no doubt

Split-screen shot of my boys storming **Poynton International Airport**

it'll be done again. So, moralising apart, it has to be said that War in the Gulf is a quality product. It will appeal to both action and strategy punters alike, and is tricky enough to render it both compulsive and

So if you're a budding stormin' Norman, this is definitely the game for you. Should keep the troops amused for months.

SIMON CLAYS



a you remember the days when men done properly? The days when Pinky take a sip on his G & T, glance out of the NAAF

"I say Johnny old sport, isn't that the bally Hun I can see fitting towards our airspace? Dammed impertinent blighters! Better take the old kite up and show that Baron chappie a few

Well I'd be highly surprised if any of you do. But I'm sure there are quite a few of you who wouldn't mind trying your hand at aerial feolics in

The game's tactical roots are lifted from the work of a Chinese geezer called Sun Tzv, who some 2,500 years ago wrote a book which even now is regarded as one of the best texts on military tactics. Not that there's any need to get your self a copy, as War in the Skies comes equipped

with a manual that's in-depth, to say the least, Anyway, on with the game. You're in charge of an airforce full of First World War bombers and fighters. The net result is strategic air conflict, with your successes and failures having an effect on the ensuing land battles. The ultimate objective is to push back the enemy troops by bombarding

their back-up supply lines. There are a wide variety of options to select from whether it be a simple training exercise or some extremely complex conflict from World War I. In fact, the programmers have thrown in a "time tunnel" option enabling you to pit your wits against

the French at Agincourt and a whole host of other foes from the vortex of time. You can also select who you are going to pit your wits against, as the game contains an option



Crickey! I wouldn't mind being the gypsy who seld two million pegs to that lot!



fighter ace Spunky Plusfours caked all over a hills

THE ANCIENT ART of

Fasten your seatbelts and settle down. Microprose are back again with more tally-ho, chocks away strategy/arcade action

which enables you to fight a general - whose too-

tical philosophies vary - of your choice. Having chosen the campaign that tickles your fancy, you are presented with the main game

screen. This is represented using an overhead view of the battlefield. You control an icon which when dragged to the edge of the screen scrolls the game through six screens, enables you to view any feature relevant to the game, as well as plotting the flights of your

So the first thing you're going to want to do is to fetch your Handley-Page from the hangar and

get yourself airborne. This is a simple enough task menu prompts you to select pilots and aircraft. These include such choices as altitude, speed, flight formation and of course the target. It all sounds easy enough and in terms of operation it Ahh! There's nothing quite like it... dropping your load all over the enemy

is; the complications that arise are purely tactical. For example, it's oh-so-easy to set your altitude incorrectly, then come time for the wild blue yander and your brave bays plough into the side

of the Alas So having selected which part of the front you have designs on decimating, it's over to your Anigo, which automatically hardles all of the

action unless you wish to intervene and decide This is really where the game transcends from one genre to another. Having so far being totally strategy-based with little action, the dog lighting

Dog fichting over the skies of France is viewed

from the side. This sounds a very simplistic s tem to employ for a strategy-based game, but it's extremely effective and great fun trying to

blast the brotwurst off the Boron. The graphics are nothing outstanding for the Amiga, but are presented well enough. The animotion technique is pretty clever though, with the

plane able to replicate most of the classic aero batic manoeuvres, from Immelmans to a half Cuban eight - sounds odd stuff that!

The other nice touch is that the expertise of the enemy pilots varies, from the finely-tuned killer instinct of Boron Richthofen through to the relative incompetence of Helmut von Spike.



the mud as the Duke of Dependent upon the outcome of the fracas with your fighters, the next arcade sequence puts you in control of the rear gunner on your bomber, fending off those pesky Fokkers.

This works using the same side view as dog fighting and to all intents and purposes has the same feel to it, the only difference being that your bomber is rather more clumsy and vulnera-

Assurring you've done well enough to fight off the relentless enemy triplanes then it's bombs away. In this sub-game you are presented with the bombardier's view looking down at terra through Your

bomb-sight. This aspect of the action is very tough. Not only are circumstances made difficult by cloud and wind, but also ground-based anti-aircraft

weapons are perpetually peppering your balsa wood bombers. Matters are made worse by the fact that your bombs have a sickening tendency to drift - in my case normally away from the target - making it

tough if not impossible to successfully destroy enemy installations. In most cases during a campaign, if success is

what you'd like to taste, it's probably better to let the computer take charge of your destiny.

However, it's a sweet feeling when you fill the

opposition with bullets from Blighty and see them nose-dive down into no man's land.

well thought-out strategy game. The enemy don't lie down easily, they react with guile and aggression, making for difficult, yet addictively computsive war garning. This is nicely transposed by the arcade sections which are, quite frankly, spiffing

good fun! The downside of all this - like most good things there has to be one - is that the sound is

annoying is the number of disk swaps one is subjected to during loading.

That aside, War in the Skies is a fine foray into aerial strategy and combat. For all would-be tacticians out there it's sure to be a winner, but there's plenty enough within the game to keep us lesser mortals, who like blasting things into small pieces, quite satiated.

SIMON CLAYS



The best laid plans of nice and men. This is where it all happens. or not...

VISION AUDIO

ASTABILITY War in the Skies is a

uccessful moulding If two normally sep arate genres. The strategy is e and the arcade action a blast. If enough to keep the war poets t rather ruefully in their graves

nstoll > Yes Size > 1 me



I know it's Christmas Day and you wanna play fool





CAULDRON

Hubble bubble toil and trouble in Titus' latest platform romparound

f ever a word deserved to be barned from the computer game world then that word must be "cute". Cutesy happy smiling platform games rear their lovely contented heads more often than any other type. I really hate them.

than any other type. I really hate them.

Whatever the subject it is turned into a cutery frolic. I suppose the designers are trying to impress the kids, but if any of them had taken the trouble to ask a few then they might have brought out a bet-

ter class of product.

Consider the facts. Kids like Arnold
Schwarzenegger in Terminator, but they don't like
him in Kindergorten Cop.

Kids don't want bloomin' catesy bunny rabbits, flowers and heroes that fire hearts as weapons. Kids want death and killing! They want musclebound heroes with a gun that fires bullets as big as a house.

They want cliens and monsters that will tear open the hero's stomach and devour his intestines. They besically want everyfring that int't in a cutery hoppy go-lucky platform game. This genre has just about had its day now. I can't readly use anything coming out their is paining to be better than Zool or

ning out that is going to be better than Zool or inbow Islands. The last remately dark platformer I can frink of is Switchblade 2 and even that was a bit wet and it in a game.

nore Sakariac from anyfring else.

Anymory I'm wardering from the point. Clay, "Be era c companie game contained mans silling and plenty of blood "in gats and was well done, stealing between being between the blood between the world go stealing for the top of the clorks. There has been to lar of press hope does in the companie game and the proposal of the contraction of the companie game is in the post of the game in the g

blood platform romp? You're half way there. A cutery siddy happy platform romp? Yen, you got it. Oh dear. You play the part of Zarina, a brave little witch. Now you can sue me it I'm wrong, but ever since I saw the Wizard of Oz I

was brought up to believe that witches were harrible hags with green faces and warts who cackled a lot and were generally not rice to know.

The witch in Super Cauldron is cute. A cute witch? That's like saying Claudia Schiffer (schwing) is ugly! God damn, when will these gama designers ever Oh well, I've got a cutery sickly sweet platformer to review, so I may as well grit my teeth and get on with it. One thing I can guarantee, it certainly won't be the last cutery platform game I'll come across.

I'll summarise the plot for you. Kingdom... happy... evil socceers... discovery... cursed chests... magic formula... entered Haunded Costle... ensiste good people... spreading doors and gloom... Zhiriza... games beroine... has to cross three worlds... free people... look for last magical powers and spells... destroy evil sorcerer... regain peoce and happiness.

Well, you get the general idea of what it's about - it would have taken much larger to explain it all, and in any case you've heard it all before.

Zimire has to discover and conquer four worlds.

— the forest, the fields, the city and ultimately the hoursed costle. The lifts, and durin say it aute, with must battle agree, gobins, both, brits and

just about everything also including the kitcher sink



kids to an out and become criminals, but in fact

they are no more to blame than films and televi-

sion. Kids aren't that stupid! They won't go out and

shoot someone just because they saw someone do

IZZY WIZZY, LET'S GET BUSY!

This is the only spell you possess at the beginning of the game. It never runs out and has ability to turn enemies into frogs.

Spell of medium power only, still it does provide you with straight, rapid fire.

Spell of medium power, fires into the air and burns the ground upon landing. Would come in handy if you ever decided to go to a riot. A powerful, but slow spell. Can be used to neutralize strong enemies and also handy for playing ten pin bowling.

Allows you to create steps. You can thus grab an useful object or find a raised exit. Steps disappear after a few seconds.

Big black thing that goes boom! Weapon of medium strength, but highly important in the game. It will help you to reach places that at first seem totally inaccessible. eportation: Spell depicted by a coin which you throw to the area to which you want to be transported. Good for getting out of difficult situations.

Thing you did in maths, With this spell you can clone yourself and thus gang up on particularly difficult enemies.

You can buy them from B&Q. Once thrown it fol-

You can buy them from B&Q. Once thrown it follows the contours of the scenery and will eliminate everything in its way.

A highly powerful spell that will destroy everything on the screen. Uses up a lot of energy, so use it sparingly.

A weapon with little power which nevertheless allows you to destroy all metal doors. Handy if you're stuck in a room with surrounding metal doors I suppose,

ic bridge: A spell with no power at all, but very useful as it allows you to build a temporary bridge.



times

Zmira must find a key. Each opens the door to a chamber containing a Magic Book and the secret which allows Zmira to pass from one world to the next, and thus approach the sorcerer's castle Zmira is a beginner when it comes to spells, but dated throughout the worlds are a fair number of spells which when collected can be stored in the Book of Spells. The 'stone' spell is unlimited and is the one you start the game with.

When you use it on an enemy they, in true witch tradition, change into a slimy frog. Zmira may change spells as often as she likes, but unfortunately same are limited.

What every decent witch needs is a broomstick, and our heroine is no exception. Placed around various parts of each level is a broomstick icon which when picked up can be used to great effect. This is a neat little idea which stops the game play becoming too similar. The broomstick only lasts for a limited time, but there are plenty of icons to be

That's all there is to the game, because it is only a platformer after all, but I suppose you want to know what I think of this cutesy "play till you puke" platform adventure?

scrolling was fairly jerky and harrible and it seemed incredibly difficult for a platform game. Then after playing it for a couple of hours things did improve

then I was well away. Cute or not, it has a certain addictive quality which left me at the end wanting



cets frystrating. The sound leaves a little to be desired. The tune is OK - and the sound effects are not bad, but you

Titus have come up with a couple of crackers look at Blues Brothers and Titus the Fox - but Super Cauldron is just a fairly standard cutesy platformer and isn't going to set the games world alight. If you like this sort of thing then I'd recommend it, but personally I'd chose Zool or Superfrog.

JONATHAN MADDOCK



book and here is one I prepared earlier...



of a witch's training course!



Blimey it looks just like your average episode of London's Rurning, Whoever left that clearette in that bush is in

big trouble!



con't remember how many moons ago it was that Microprose released the original Gunship. But, I do remember I was only a slip of a lad. I remember halvan days in dougher, music and sunshim.
Menories of mother's dumpling scene flooding how, and now while beat new sensities with low sust sick. Liftle did I have what training of the one-how wall does content from you exclude in

an eine of general general beste deur bestehn bestehn der Scheide bei der Scheide der Bestehn der Scheide der Sche

It's a dirty job but someone's got to do it — or some mocho type one said. So, with a casual rug of the shoulders, I booted up. The first thing

reet me was a sturr

Int.

The first option screen allows you to choose which theate of war you wish to take part in hisse vary between central Europe and the persian Gulf, chhough Microsoft are promising dd-on disks in the near-future to widen the cape further. You can also take the liberty of maisting. Insert a bad idea - before rushing oining - never a bod

ediong into the tray. Having pondered these and other options, it's



wall Five-O hands you your orders

entry moviments. As this is a true simulator, you are also given alreaspheric such as wide page and weather confidence by purise new. There is a declar ensision spilon, but it is used all you sattood, graine-harmed, ben't dishing as marine types wouldn't decan of doing such a line of the state of the such as a such purise things. When you want to the purise the such as a such a line is purposed at the Wholy Birds, it's clown it is in you happing at the critical page to be a such purpose the purpose purpose the such as a such purpose the such were at wore first hood.

ware at your disposal.

The action takes alone in the near future.

del You get to choose from eight of the boots, of having different uses and qualities. From the who modern longbow Apache Granhip, through to the older topers like the Cohor, the choice is yours. Next on the shopping list is a vest arranted of entock and deterine systems. Your choice of destructive toys is wast and plenty enough to keep the craimst of clir-wokes hoppy. Having selected your craft and weeponsy it's

Having selected your craft and weaponry it's me for the crurch. Assertion up into the

After months sitting in the debriefing room, it's finally time to take a firm grip of your helmet and auto-rotate yourself into oblivion!



gies that allow you to alber the majority of the bress likely to diffeel light.

Once in the cocking it's hard not to notice the quality of the graphics. Both the internal and anternal since look very effective. But, but advanted since look very effective, But, but advanted since look very effective, But would have been been also backed? That it to busing genetical.

Now, I'm an aging to been you with the accromates of vertical light. This is because, quite make you with the accromates of vertical light. This is because, quite make you will have a considerable to the control of the properties of the

collective. This return to the origin of attack adopted by the rotters; the strenger the black origin, the protect field for Gunship kin super in deal with via the keyboard. The second part of the version is the cyle which belones exceed part of the requires in the cyle, which belones exceed part of the reality, interest which belones exceed part of the reality, there's the earth torque rotar which opins is keyboard operated. It would fairly completed—that is because in its black or load, the measured is in design and where I state off the down info from.

Once you've mastered the control system,

uch paper and stort the fireworks.
Gunship moves as quirtly and a Gunship moves as quickly and as smoothly as any flight sim I have yet to see on the Amiga. This has not been achieved at the cost of detail

tenter.

The terrain is both interesting and varied. It's not unlikely for you to screech past billboards or even to harous a resting came! — that's on the Chester Zoo mission by the way!

The whole smoothess and variety of the land-scope is thrests to a new system which generates terrain with enductions. All I can say is seeing is full-stated in the control of th

betwing:
In terms of action, there's more than enough.
Everything is controlled in your bird, by state-ofthe-art HUD controls. It's a good job because
when it's that time, you've really got a job on
your hands. The enemy craft are plentiful and







very well defined. They move about the play area quickly and for once there's no noticeable loss of

quickly and for once free's no noticebbe loss of power on screen update. The writely of assolitate is also amezing. So whether it's a lift Dumning or a 175 bonk took, just get on his six, stragel your Helliers and wetch his pinks commy ass fry. The great thing is, you can watch said commy so as fry from loads of angles. For exam-ple, you can worth the action from the missile you've just lounched or even from the enemy's perspective.

emend that everyone rustrue.

finitive helicopter simulater now.

Anyway, I'm off to take to the skies once
one. Blue Thunder out your heart out

SIMON CLAYS

VISION AUDIO 00000000

LASTABILITY

Gunship 2000 has got to be the best simulator ever produced for the Amiga, The for the Amigo. The in the hongor.

Choppers to tickle your fancy!















ver the years we've all become accustomed to an absolute menagerie of heroes from the animal kingdom. Well here's the latest, Jehro the beaver! Apart from havingon extremely soft name for anyone (let alone a beaver), our Jeth is an axe-swinging rock 'n' roller in a band. Now if you were thinking it, you're absolutely right. It's yet another surreal plot for dare I say it, yet anoth-

er platform game. So right now what I'm not going to do is give you a full-blown lecture on the

ups and downs of this particular genre, and how for every classic like Zool and Putty there's a level guardian full of rubbish. Ahl did lecture you? Oh well! On with the "plot" According to the loading

screens, Jethro has a furry female friend who has captured the attention of the game's badass. In this case it's a gun-toting rabbit, who does the dirty and kidnaps Jethro's piece of

Now what the hell this rabbit wants with her I honestly can't imagine. If I remember the birds and bees well enough, rabbits get together with other little bunnies, not strapping great log-eating beavers. But whatever turns you

I suppose you've guessed it by now anyway, but rather than going round to said rabbit's hutch and shoving your carrot. (that's quite enough... Ed) you have to bounce and spin your way through 20-odd levels of platform pranks.

There are four different types of screen that go together to comprise the action. They vary between underwater sections to extremely slippery snowy levels. But by for the hardest are the autoscrolling sections where the slightest hesitation

with the joystick results in the untimely demise of Of course there are other aspects to the game



Ton thrash-racker Jethra performs a rendition of Wishing on a Star(fish)

We all know the bonus hoops in the Sonic games. Well sure enough Beavers follows suit completely. The only difference is that it's starfish rather than hoops that guarantee points for

Apart from that there is the usual variety of frustrating traps, puzzles and nasties. On the subject of nasties, every sixth level sports an extremely

large nasty who pops up to hinder your progress. Overall there isn't a great deal I can comment on regarding the gameplay. It's all fairly straight forward with plenty of jumping around, Ripping the baddies with your tail, pressing the odd switch here and there to operate lifts and searching for Daw Crockett hats (don't ask me why) to complete the stage. The graphics are what

I can only describe as cuddly and are reasonably well animat

The level quardians that crop up from time to time are very large sprites and are fairly well defined. But the backdrops are

Fifty years after the bouncing bomb, Grandslam introduce us to a new kind of dambuster in the furry form of Beavers



Beaver Patrol leader goes into a tail spin to rid the level of yet another phantom teddy!

nothing to write home about, in particular the borders, which are both bland and crude. In the sound department, Beavers rates as rea

sonable. The sound effects are decent enough but the theme tune doesn't seem to tie in too well with the gameplay and ends up being about as useful as a beaver with foom teeth. Overall my main gripe is

the total lack of response especially in the auto scrolling levels, absolute dexterity is imperative and this just doesn't happen. This feel ing of lack control over your destiny has a serious effect on the addiction of this

It becomes, to be frank, bloody frustrating, and I ended up switching off to watch my colleague pick his

To sum up, Beavers is fairly cute, cuddly and in places quite entertaining fun. But once you've set eyes on all Jethro, lead singer of the Damned, opens the show the graphic styles, messed around in the water and generally beavered about, it's all

pretty repetitive stuff I can't help feeling that if gamers are going to be tempted into porting with the very best part of £26 then programmers are going to have to stretch the parameters a mite further up the log fume in this rather exhausted game genre To be honest, in this instance Grandslam are as guilty as the next because Beavers really is run of the water mill!

SIMON CLAYS



Am I seeing things or is that dude wearing a ska sult and pork pie hat?

with their latest hit Furry across the Mersey

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it's Professor Krakenpot t's been quite a while since we've had a decent puzzle game in the office - the last one of note was Lemmings 2. The puzzle game has always been a firm favourite with

gamers. Not all have brilliant graphics and sound and addiction departments. Tetris, Columns and Lemmings are all classic examples of what a puzzler should be like. What makes them so attractive? Why do people put themselves through sheer puzzle hell? Satisfaction is one of the answers. If you complete a level on Lemmings which no-one else you know can do, you get a really warm glow

Beating your high-score on Tetris is a personal

achievement - and achieving things is an impor-

tant part of life. Some may conquer mountains,

others save a human life. However, when you get

to heaven and God asks you what you have

achieved, at least you can say that you completed

the Mayhem level on Lemmings. After releasing the



Morph floating in a gaseous state



Looks can be decieving - this is a bit of a classic

James Pand series of games Millenium are about to enter the puzzle games fray. I say "fray" advisedly because if you make a good puzzler it is adored by everyone. Produce a bad one and you're guaranteed to sell zilch.

Morph is, thankfully, one of the good ones and I have a sneaky suspicion that it could well chal-

The puzzle game of the year? Check out this substance-changing frolic from Millenium lenge Lemmings for that cult puzzle status.

It concerns, not Tony Hort's plasticine friend, but a fat little boy called Morris Rolph, or Morph as he is known to his friends. He unfortunately has a crackpot uncle called Professor Krackenpot. The Professor must have been meddling with drugs because he has built a teleport machine. Morph, being slightly chubby, thought that this

machine would be helpful - he could play lots of pranks and get into football matches for free, as well as escape from school early Being a very eager child, Morph decided that

he wanted a go on it right away. Unluckily for him. it hadn't been tested on humans, and when the lever to start the machine was accidentally moved Morph disappeared leaving behind a trail

A thunderstorm brewing that fateful night, and as Professor Krakerpot went to turn the machine off a bolt of lightning tore through the roof and blew it up, scattering its components around the surrounding countryside. All that remained of Morph was a cloud of twinkling atoms and elec-

trans. Then a voice spake up as if from nowhere. It was Morph, who calmly explained his predicament to the Prof. "I can't regain my body, but I can pull my molecules closer together and change my

"Ill go and find the missing parts and you ca repair the machine and bring me back!" Chubby people are always optimistic, aren't they? Morph can now transform himself into four dif

ferent substance - gas, liquid, flexible and solid all of which are explained in that little panel daw there, so before you continue I suggest you read it. The object of the game is for Morph to reassemble the teleporter engbling him to return to

the form of a small boy To achieve this, he has to collect each of the



Morph gets into some altered states



In this state Morph may float upwards. He may also pass through small holes and grilles. However the gas is very combustible and doesn't mix well with extraction fans. Gas is

Morph in this state becomes very rubbery and bouncy just across gaps and float across water. However, sharp spikes, brambles, braken glass and metal corners will burst him.

Solid



Liquid



Now Morph can seep through small holes, extinguish fires and squeeze around the sides of lifts. He can be killed by drains and dissolve in any other liquid. Keep on eye open for streams and pools.





plete the level within the given number of transformations, and use no more of any individual transformations than allowed. The levels (Garden, Factory, Sewers and

Laboratories) are spread over four different areas. each of which has its own particularly tricky haz ards and puzzles to complete. This is one of those games which on first glance

looks the worst puzzle game in existence, but if a dassic

Changing shape and substance is one heck of



done like this before. Controlling the game is simple. The joystick is used to move Morph around, each state having its own movement characteristics.

To change into another state all you have to do is hold the Fire button down and move the stick left, right, up or down depending on which state you want to be. The layout and design of the dif-

ferent levels is really clover. The first few levels are relatively easy and you feel as though you'll complete Morph in 15 minutes, but as you progress everything gets more complicated and you have to put more thought into the game. It contains some brilliant graphics - chunky and

colourful. The introduction sequence is especially impressive and some of the in-game anims raise a

wry smile.
The Professor looks as though he would fit perfectly into an episode of Mr Benn. On the sound front there is a happy, bouncy little tune which runs throughout with plenty of good sound effects battering from some Amiga games mags, but I liked have done with a few more levels, but perhaps if it's successful, a data disk might appear

Morph is the best puzzler I've played since Lemmings 2 and it will definitely appeal to puzzle fans in a big way. It has got the graphics, sound, playability and is addictive as hell. What more do you want from a computer pame?

JONATHAN MADDOCK

Don't let its deceive you this is a









MICROVALUE/FLAIR - THE SMITHY SIDE - PONTELAND - NEWCASTLE NE20 98D - ENGLAND, TEL: 44-661-860260, FAX: 44-661-860270. SURF NINJAS © NEW LINE CINEMA CORP.

ow for those you out there who have looked at the title of this game and thought "hmm that sounds familiar" Well, for those of you are old enough to remember, Apocalypse was originally aging to be produced and marketed by Mirrorsoft. Well, of course I don't need to tell you any more

because you will already know that Mirrorsoft were ance part of the Mirror Groun You will also in-turn know that the Mirror Group

was run and owned by Robert Maxwell who impressed us all with his twisted (hmm) treble pike into the ocean off his luxurious vacht.

This turn of events eventually brought down the axe on Mirrorsoft and also on their forthcoming releases including one of the biggest and most hyped games ever, Apocalypsa.

Now one day an employee at Virain Games was looking through some "whatever happened to..." files and up papped Apocalypse. Being astute business types, Virgin promptly snapped it up. Hands were shaken and there were smiles all

Apocalypse is almost here. The game will be released this Summer and it is, in my humble but ever accurate opinion, going to be absolutely mas-

The game borrows a lot of its ideas and looks from the film Apocolypse Now, which is regarded by many as the definitive war picture thanks to its

amazing sense of realism and great acting. You take to the skies in a super sleek helicopter and prepare to take everything the enemy can throw at you. In terms of gameplay it's basically a straightforward shoot-'em-up, but in terms of sight

and sound it looks like being heralded as a Project X-beater The story is that lats of heavily armed rebel



remains intact is the lush flora and fauna. There is so much going on that you instantly find yourself in a world of mayhern where you live in seconds, not years. Although you are surrounded by madness and action, the game still com mands a bit of order to make the game playable.

As mentioned before, it is loosely based on Apocalypse Naw which of course was about the Vietnam War. The game isn't what you'd call politically correct and you don't half feel sorry for the little blokes who are running about like mad trying to avoid your big nosty missiles, but hey

It's been in production for longer than the Channel Tunnel, but now Virgin proudly present their ace helicopter shoot-'em-up. Jonathan Maddock gets down in 'nam and investigates...

island of Majipoor. Something is obviously going to happen, but you don't know what. The objective is to rescue as many prisoners of

occur. It won't be easy, you'll have to fly through five levels of bullets. flak, missiles and rackets. What this means for the gamesplayer is the return of the mega violent shoot-'em-up with more action in it than your average-Arnold Sowarzenegger

The chapper has an awesome amount of firepower and is loaded with rackets, heat-seeking missiles and firebombs, all of which are occurred from supply boxes found on the ground.

Unlike some shoot-'em-ups, the weapons can also be used for destroying various bits of the scenery such as the enemy outposts; all that

that's war and it's kill or be killed, right kids? Unlike its competitors, Apocalypse Now isn't a left to right scrolling shooter; it allows you to move vertically as well as horizontally which makes it a lot more interesting, as well as making the playing area that bit more expansive and more realistic.

It comes complete with a whole range of stun ning sound effects such as heavy machine gun fire, multi-layered explosions, rooring flames and It is also littered with parallax effects that

include background and foreground objects to further enhance the unique depth of realism Miracle Games are handling its development

and production, and their aim was to create a product for the Amiga that would be worthy of an arcade machine. Having seen a demo of the game I can confidently say that they have indeed

achieved that aim. Apacalypse will blow you minds when it arrives on the shap shelves in a couple of months. If you're a shoot-'em-up fanatic then Virgin Games are about to provide you with your own personal slice of shoot em up heaven

war as possible while searching for your best forces are amassing on the seemingly insignificant buddy as well as finding out what is about to Kill, back, explode. fire, destroy, arrgh, dribble... I am invincible. A mild form of psychosis had entered the mind and body of Cap'n Jones Pick up those POWs and fly back to base in time for tea and cakes. err probably

What's that burning smell? Your first attempt at a dogfight in m doesn't oo



Smells like... victory

The film Apocalypse Now was made in 1979 and heralded as one of, if not the classic war film. Set amid the modelle of Vietnam, the movie starred Martin Sheen, Robert Duvell, Marlon Francia and Diversion

report.

The second of the sec



leaves to

GLOBAL GLADIATORS

personally think that the cutesy clefform game market is now solurated and soluring rather dated, but I could well be proved wrong by Virgin Games and their hattest platformer yet, Global Globalstons.

Global Gladiators.

Now don't take this the wreter way, I like a good cutery platformer race than anybody, but what happened to big herees with big muscles and big guest the violent game now seems to be lew and lift between.

Computer game cad IV violence is now a major taking point in the tabloid press and they sensationalise and type everything up. This is down to the loct that computers are so very

A few years badk, kids were going age over Smoth IV, an act-and-aut kill-derup, and no-andbettled an eyellid. Another Instance is when Moosstone corne out almost two years ago, a game which - let's be house! - contained more blood than your average abstractir. Everynes! I know wort obsoluty, mad and fell in love with the

Out of all those people I know not one who has turned into a mass murderer. In fact, Moonstone actually raised a few loughs and smiles instead of looks of homer and distante.

But the cutery game has now taken over from the violent game in popularity stakes and if it is done well the product will sell like the provertical

hot cakes.

Sonic the Hedgehog, Mario, Bub and Bob,
Zool, James Pond and Superfrog are merely a
handful of examples taken from the pool of cutesy



One of the Global Gladiators takes out the trash with his goo-shooter while messing about in Texi-town!

Cutesy games! Love 'em or hate 'em, they're here to stay. Virgin delve into the cutesy games world while Jonathan Maddock dreams about death, blood and violence...



Hoorah, it's Ronald McDonald. Mack receives a McDogburger for his achievements

software currently available today.

A lot of plethorners have a cutesy character in them and then the software company try to sell them with that character simply because the actual game is just a lost standard plotnerse. Virgins:

Global Gladiators is here to redress the bolance by having two superb cutesy heroes and the game-play to match.

Mick and Mack are two cool kids with one god which is to rid the planet of all the rubbish, sime and filth. Yep, it's eco-friendly and apparently according to the press release they are the "solution to pollution absolution".

The game is actually tifed McDonald's Global Gladiators, but it doesn't really have that much to do with the multi-actional burger joint open from a guest star appearance from Ronald and the McDonald "M" splashed throughout it. Den't let the McDondó's spomorthip pet you off buying the game, either, because Global Globalers, gamp to be absolutely massee.

I sput it about it is months ago on the Sega Mega Drive and it looked brilliant. It wasn't garge to be released on the Amiga at first, but Virgin decided that it was so good that it should be released on the other Serrats.

Mick and Mack armed with their Goo-Shooters have to social four fractional levels – Slime World, Mystical Forest, Tosi-Town and Arctic World, To complete the level you have to collect as many ordes (McDanaldir "M"s) as possible while doing away with easy monsters such as Slime Pigs, Yockmodifs and Spilater Both.

Global Glodiators features two herces, but alas they can't both be used at the same time. Both characters are the same except they have different

coloured skin. This makes GG the world's first game that makes racial harmony a prominent

You could argue that it still isn't quite politically correct because it is justist in the loct that they aren't any watern or girk, but games would be pretly dull and borning it they were all politically correct. So, in the meanitme, road harmony will

just have to do.

The graphics are just awasome and apart from
the parallas straling the Amigo version of Global
Glodiators is identical to that on the Mago Drive.
Mick and Mack feature 1,250 frames of animo-

Gladators is identical to find on the Macqu Drive. Mick and Mack feature 1,250 frames of animation as they run; jump, sprii, spring, twist, shoot and blow gum. The music and sound effects are also on a par with the Maga Drive. The turner trange from dance

to techno and meat of them are good into starbers which you'll find yourself white lang to. There are look of starpled sound effects from Mick shooting "owestome" to various squishes, splets, fings, brings and dings. The game not only looks like a dream, but doo plays like one and openious humonr, shr and excitement for the whole

Global Glodiators, will be released later this meath for the recommended retail price of \$2.09. Nick and Nock are the convolver game equivalent of \$81 and 1ed. They're way awaren apparently and with a \$81 of good marketing are going to take the world by stome this turners.

I like cutery platform gazes, don't your matel Certainly do made they're platform-testic in a Certainly do made they're platform-testic in a

cutesy kinda way. Not 'art









Drawingboard

Better watch out, there's a brand new software house about. Bloodhouse are here to amaze and enterta<u>in you...</u>

Market Ma

disguised as meteors to clear the galaxy of all human life.
You play the part of the hero with the large anatomy who just happens to own a heavily-

fail everyone they'll come round to your house, beat up your dog and nick your tely. nknown in the world of computer games. Stardust also uses 32 colours in the overscan made and a new six-channel sterea sound routine.

The disk routines have been mode as feat and simple as possible. It's almost as easy as using a console and loading time has been reduced to an absolute minimum. The game has taken a whole year to develop and benefits from

a whole year to develop and benefits from the chief programmer having been involved in developing Real 3D, one of the best ray-tracing process, available, for the with its own set number of areas. In these you play the asteroids lookalike game, but when you complete the level you have to travel to the next. This is perhaps the most impressive thing I have

this is perhaps the most impressive imag i unreyet to see on the Amigo.

If so super fast, separ scrolling abode tem-upwhich left everyone in the office doing impressions of gappies. The screenshots look OK, but when this body moves it is just incredible. You'll see whall mean when the game starts to reach of few CoverDisks and you can check it out for

yourself. Probably the best thing about Stardust is the price – it fill only set you back £14.99. Bloodhouse are stressing that the game is not on budget, but they left that games rove getting a bit of a rough deal at the moment – and what better way to get

sect of the motivative and while better way to get everyone to buy your game? Bloodhouse have got a couple of other games that are still at the development stope. One is an arradia adventure that eleverly combines polygon and binney graphics and the other is a platformer which uses a unique full-screen animation.

former which uses a unique full-screen animation technique.

At the mament they are looking for new distributors, wholesalers and retailors, so I suggest that anyone interested give them a call and down

gaick too.

Bloodhouse are going to be massive I can gearantee it, and Icom 17 are going to have to look over their shoulders now and again because the competition in here. All I need to do now is brush up on my Finnish.





ye are the day year or two is team it;

ye are relatively small company when comto Vergin and Octors, but I bet form I?

if swap places with any other software
or this rement in time. Almost every game
esh herdfeld as a modern day classic.

Seed. Project X, Body Blows and
fog are just the beginning. The question
though, is who on this earth is going to
sage them for the title of all-round top
spreaduring herous.





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isten to the wind when you arrive and look around carefully. When you see a man, walk towards him. about the good pub guide. He can be enrolled in your team, but he is a traitor, so take his gold and place him in the front

Now travel NE and near a pool you will find a young maiden called Kiriela, who will prove an asset to the team, so enlist help and place her in the second row having prepared a fireball rune.

You can now take a trip to Angarant where there are some wandering Orcs for you to gain some experience on and get paid for doing it. You should also visit



The Gamer guide to

Akeer who will give you a due. Travel to the pub and get drunk. While in this state errol a fellow warrior

called Kirian. When sober, assess your weapons and buy accordingly. Remembering that it takes 1,000 coins to

save your adventure! Now head S and you will come to a house with a large amount of gold. You can take the gold because it's free. Take the bridge to Lotharia, where in one of the pubs you will find the Unknown who can be taught the lightning spell; you will need

it later on. Travel S and you will come to what looks like a bridge guarded by a barbarian. It is, in fact, Lake City, so kill him, gain your reward, eat and rest in the pubs. Targhan Remember to take their gold.

Head 5 once more to cross the bridge and then turn 5 to find the lizard's house and the gold in the bushes. From here, head E to Rhudgast

Ishar - Legend of the Fortress has just been rehashed and re-released on the A1200, so all you new computer owners can thank David Wing from Nottingham who sent in this solution...

reach the border turn N. Travel around a bush-type maze and you will encounter the White Kright. Be warned he will take some killing. The fireballs and lightning are useful here. When you have fried him, take his helmet as it will allow you to

detect the Predator later If you look around there is another bag of oold hidden in the bushes. Go 5 from here and you will come across the spirit of Azolghorm, who will tell you about three quests. If you follow the

river S you will find a pedestal with a Runic sort of protection later on.

Tablet on it - take this and it will offer some From here head E, put on the white knights' helmet and enter Fimnuirh Forest

Find the Predator, kill and take the fire rings from him. At this point in the game it may be a good idea to go back to Lotharia to rest and

see what you can learn. Head back to where you killed the white knight, travel E until you reach the river then head N. Eventually you'll find some dwarves who are looking for a fight. Take their gold when you have killed them. If you side step into the woods, in the distance you will see the

entrance to the Dungeon of Rhudgast Forest. In here are four keys, two lots of food, three throwing knives, a flask for mixing potions, a Bask of oil, two treasure chests full of gold and

In here is also a very powerful giant, who is blocking the way to the flask room. It's best to blast him with everything you've got and then go back to Lotharia to recharge your physic energy. The skeletons in the dungeon regener ate, so kill them and collect as fast as you can. Go N to the river and travel E to the bridge. kill the dwarves and then cross the bridge. Hand F to the next river and then N to the next bridge. This is guarded by a large minotaur, so

have plenty of physic energy ready. There is a bag of gold lying around and also a dwarf who will offer to join you.

Going N from this bridge is a merchant who will sell you a potion for 5,000 gold coins. After trading it is a good idea to recharge your energies before crossing the bridge because there are a lot of barbarians hanging around and also a giant called Gato who guards a tortoise, which will be traded with another mer-

chant for a useful potion later on. Cross the bridge and head S to the large city of Urshurak, which is full of orcs, shops spell learning and best of all, plenty of good oubs, Search and listen well.

West of Urshurak is kandomir where Jon the Alchemist lives. If you're intelligent enouyou'll be able to read a scroll that will tell you about the potions you can make from the supolies that can be found and bought in the

It is now time to travel to Halindar which is north east of Urshurak, where you learn that Erwin's daughter has been kidnapped and is held in Elwinail.

You will rescue her, but be warned - one of your party will fall in love with her and you will need to have prepared a "dis-



rupt charm" before you take her back to Erwin's house. If you are successful, Erwin will give you a key to Valathar Duegeon. In Zendoria there is a merchant who requires

Turfle. It will be used for the pig transformation potion. In Baldaron there is a rock containing a magic sword. If you cannot pull it out, kill a few more baddies and try again.

On the way to and from Elwingil are two fireball-throwing wizards for which you will need to distribute the fire rings from the predator.

to distribute the fire rings from the predator.

In Gilaras there is another runic tablet which
you can called, but before you do, you had better have a cure blindness pation because as
soon as you step over the border you will be
struck blind.

North of Halindor is the forbidden house which contains another runic tablet, although Brain Wash potion for all the party will be

In Ehvingil, the orcs regenerate every time you enter, so take your time, go in and out, collect a lot of money and rest in the pubs (ahh, such is life – Fell

such is life – Ed!.

When you have gained enough skills, leave Ehwingil and head for Halindor then head E. In some birth trees you will find a transporter. Take the transporter and it will lake you over the river into another Ehwingil. Do not be confused – keep heading E and you will come to

50

Br.

gh

Phulbrod Forest.

It is here you will find a trader who will give you something for free. If you enter the forest and try to find a clearing you will be attacked by dwarves, then you'll find a pig.

by dwarves, then you'll find a pig.

This is really Morgula, a witch who was transformed, so now you know why you went a "pig transformation" point. The witch has the much needed onth-krogh spell. She has a very low constitution so give her plenty of food. It is a now a good idea to travel to a city.

to strengthen her as much as possible for the task ahead.

That's the first part of Ishar completed, but be sure to tune in again next month where we will guide you through the last stage.

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ne of the more significant uses of ARexx derived from its parent language Rexx - is the ability to extend the system's command language to create custom commands.

Now, you may think that writing your own commands for file management is too difficult, but remember that ARexx can already use the existing AmigaDOS

This combination of AmigaDOS and ARexx allows you to create your own custom utilities to do exactly quite make it.

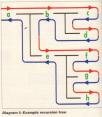
Our example this issue deals with the management of directory trees. This is not a critical issue when you

The kind of jobs that we are most likely to encounter include the locating, searching and identifying of files. I recently used a script similar to the one Our program uses the standard AmigaDOS command

this useful job. In order to be able to traverse (scan) an arbitrary

directory tree to its full "depth" and check for all subdirectories, it is necessary to use the programming technique known as recursion.

Recursion is a method of programming, where funcdition is met. It is useful when exploring structures (like lists and trees) whose size is not known beforehand. We had a brief look at ARexx and recursion in the April issue. If you are familiar with a language like C. Pascal or



Logo, you will already know about recursion. But if you are However, recursion is arguably the single most useful

computing technique, and it is now being supported by sev-

Trees

Read through and run our program, There are a few things to bear in mind:

Our main program calls a second ARexx program(macro) called file total rexx. This macro finds the size of each individual directory and can be used on its own, eg:

ex 'say file.total('libs:')

You should copy it to your rexx: directory. Make sure that there is a valid assignment for rexx. Also make sure that the rexcsupport library is available. The following two lines should he somewhere in your startup:

Now the main program. First the command line is checked to make legal. If no directory is specified, the program assumes we want the current directory. Pragma() gives us its

I have also added a quiet option.

which only prints out the total size

instead of printing the complete sublast minute add-on; but that is the charm of ARexx - it can be as elegant, or as "guick and dirty" as you want. After all the initial stuff, we call our

treesize function. Before it descends to the next level, the function performs the following actions: It prints the name of its current level and then generates a list of all its subdirectories. If there are none, it just gets the sizes of the files at that level, and

If there are subdirectories, it enters a loon, where it processes each one in turn. The names of the directories are placed in a list (subdirs) which is processed by the expression:

PARSE VAR subdirs newdir subdirs

You can see that this expression uses a form of recursion! Each subdirectory from the list is then passed to the function. Also, every time the function is called, a bit of extra tab space is added, to make for prettier

Every time the function returns, the size of the subdirectory is added to the total until there are no more. Then the size of any files at the current level is also added to the total and the loop is exited. Then the total is printed and the

function exits. Simple but very powerful. The Basename() function simply extracts the name we want to print from the full pathname, and highlights Finally, a few words about the

file total macro. All that it does is direct the output of the "list" to a temporary file. This file is then read and all the numbers are added up. That's all there is to it!

The only peculiar thing about it is that we reverse each line before we parse it. This ensures that very long filenames, or names with blanks in them will not upset our parsing. It's weird but it works very well.

eral modern Basics, including Amos. ARexx provides a quite a

To get the basic idea have a look at the example tree in Diagram I. Here is a simplified model of a function that traverses

> TRAVERSE(a directory) Do ACTIONS BEFORE next level LOOP WHILE there are more subdirectories TRAVERSE(next subdirectory) END of LOOP Do ACTIONS AFTER returning RETURN TO PREVIOUS LEVEL

Notice that when the function calls itself, any effects of the "Actions Before" (including the values of any variables) are preserved, and are not affected by the actions at the next level down; once the function returns from that level, it can carry on

The trade-off for this convenience is the size of the memory required. If you are traversing a tree with many levels, you can leave quite a backlog behind you, and it all has to be kent in

Now let's look at our example tree in Diagram 1 again. Suppose that we traverse it, printing the name of each level as soon as we enter it (ie as part of the "Actions Before" in our pseudo code).

following order: a b c d e f g h . On the other hand if the name

was printed as part of the "Actions After", the order would be cdbfghea. Follow the arrows on Diagram I, and you will see that this is so.

If the name was printed both "before" and "after" dealing with would look like this: a b c c d d b efgghhea, or to look at it. more graphically, by adding the



This property is exploited to good effect by our example program. The name of the directories are written on entry, but the size is only written when all the sublevels have been checked



and branches

* recursively; May be adapted to perform *

ARE direase opts IF direase = '' THEM direase = Pragma('01R') IF "Exists(dirname) THEN DO

s . Treesize(dirname, '', opts) THEN SAY 'Total size of files in tree' direase

and a printing flag as arguments */ PARSE ANG (evel, tab, qu If qu "= "ASSET" THEM SAY tab Busename(Level)

If Right (Level.1) "o ':' THEN Level + Level || subdirs = Showdir(Level, 'DIR')

DO FREETER WILLE subdirs ". "

newdir = level || newdir

size = file_total(level) If size "= 0 THEN IF qu "= 'QUIET' THEN SAY tab 'Total size of files is' level

/* Basename(level) get and highlight the level name from a full filespec */

stash = lastpos('/',fullname) PARSE VAR fullnamm des': 'dis If dir = " THEN base = fullname

ELSE PARSE VAR fullmame +slash base

Alex Gian continues his look at the subtleties of the ARexx language. concentrating on customisation

Listing of treesize, rexx

* Amigabos "list" command.

direase = '22'x || Are(1) || '22'x

/* Temporary store for "list" */ doscom = 'list >'store dirname 'files

ADDRESS COMMAND doscom

/* the following line assumes the stan-"list" command. It is "safer" to read PARSE VAR Line time date flacs size name /* filter out non numbers */
If 'Dutatype(size,'Num') THEN size = 0

"correctness", and may slow down the

/* succ = Clase(file) /* ADDRESS COMMAND 'delete' store */ RETURN total

Listing of

grade last month

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Ithough Media Madness has already had a brief mention in AC's four-page Bars & Pipes Pro 2 special in June, it still warrants closer attention especially for the videophile who wants a silky smooth combination of Midi,

For those who missed the June issue, Media Madness - as you may have guessed - is an element within the overall B&PPro2 environment, offering the unique ability to control multimedia

events via Midi information. As you're no doubt aware, B&PPro2 is primarily a Midi sequencing package which in normal circumstances would be much more at home within the Insight music column.

However with the addition of Media Madness the horizons of almost infinite degree.

Like any self-respecting sequencer, B&PPro2 and in turn Media Madness are strictly Midi-literate and as a result take their

Just like normal Midi music, multimedia events can also be interpreted in real-time and as a result images, anims and even hardware control can be fired-up and recorded in real-time.

In the case of normal Midi data, the information is simply read by the sequencer and assigned to as specific channel, which then emerges as a voice whether it be from a synth or

The clever part about Media Madness is that it follows exactly the same principle as the main sequencer but rather than assigning tone and pitch to note data it applies a multimedia event. This is achieved by using a Hit List which simply appends a

specific event to any one of the 128 notes available within each Media Madness tool and then simply defining the event which

Better still, the Midi information used by Media Madness isn't restricted to simple Midi-on/Midi-off information, and nowhere is this better illustrated than within the Last Slide Show - other-

wise known as an IFF picture view.

Aside from simply displaying the image on request, any pitch bend or modulation on the note also affects the image with fading and colour cycling being added live or edited in later via the

Most of the tools listed in the box on this page - with the exception of Scala - don't require any specific software However for hardware the situation is completely reversed

equipment. On the genlock side tools are

ly vein, support has also been included for the IV24 - with a tool designed specifically for the board's PIP option allowing automated freeze frame control from inside the

Better still, even more video-esque tools allow access to the MediaPhile Deskton Video System, the Panasonic Optical Laser Disk Player, The Video Toaster and lastly

When all of the above is added to the incredible power and flexibility of the B&PPro2 sequencing environment you end up with arguable the best multimedia con-

you creations and boast a system that can take advantage of what the new B&PPro2 can provide, even the £299 asking price

seems cheap. For more information on B&PPro2 and Media Madness contact Meridian Software Distribution on 081-543 3500.



Bars, pipes Paul Austin oners a cure to sale audio-video blues as Media Madness comes under the microscope

pictures

to a Midi backing track

For the average Amiga videophile animation. soft tools are one of the most important elements of any production. As a result ANIMal - alias the anim tool - is well blessed with options including preloading, playback and remove. Each can be appended to the note of you choice allowing completely automat-

As for statics, all the essentials have already been mentioned with basic set-up following the same format of opening the requester and assigning the image to the note in question.

ed anim handling - all perfectly synced

With the wide variety of options on hand, manual addition and editing of every event would be a real pain. As

Those soft tools...

a result the Punch Bag tool has been included offering a live recording and testing device which sits on the input to the track ready to instantly translate live input from the keyboard into the multimedia event of your choice.

On a technical note comes the Command Performance tool allowing the software to control other software or hardware via ARexx or text strings.

Next on the techie list comes the MM Recorder which provides an alternative method of recording files that can then be used in conjunction with the stand-alone Media Madness

Player. Although useful - according to the manual - the same effect can be produced by simply using the record option within the interface. Strange but apparently handy on occasion.



SamplePhone offers the unique opportunity to assign a different 8-bit sample to every one of the 128 available notes. As a result a potential production could boast animation with synchronised samples plus of course a Midi sound track.



Scala to produce a link which allows B&PPro2 and in turn Media Madness to control Scala by assigning the loading and playback of pre-defined Scala

This tool above all others shows the one downfall of the Media Madness environment, namely the huge demand on system resources required to run the software. In order to operate the Scala you'd require at least 6Mb of RAM housed inside an 030 or better



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etters of all shapes and sizes can be displayed on the Amiga, either by using the Amiga library routines and stored data, or by using low level graphics facilities.

The program on the CoverDisk uses both techniques, and also MENUPICK events.

Each gadget is part of a linked list, and contains pointers to its

The address of the gadget just pressed or released can be taken handler. Each menu structure normally forms part of a linked list of

which in turn may contain pointers to a linked list of subitems. The menus are attached to the window with a SetMenuStrip() command. The MENUPICK event needs further interpretation by the program. The first menu address and the code are input into

The source code file, gadgets.c, contains the details of each menu and gadget structure used in the demonstration program,

and also their event handler. Letters to be displayed on-screen are stored as a text string in Ascii format, with a code corresponding to each letter or character; code 32 for a space, 48 for number 0, 65 for letter A, and so on, all

In Amiga memory there is a font that contains a dot pattern for all these codes, and information about their height and width. The

PROGRAMMING

low-level graphics routines. The chosen letters can be defined cre-

file, read by the program on to a bitmap in memory, and copied to the screen bitmap BltBitMap() command copies a rectangle

It is necessary to specify the source and tion of the source and destination rectangles in their respective bitmaps, the size of the rectangle in pixels, the minterm or logic function, the combination of planes to be transferred and the buffer used to hold information if source and destination overlap.

The value of the mintern variable defines the way each source data bit is copied to the when the position already contains a desti-



Type casting

Text() routine would look at the first code in the string (say 65), The dot patterns can be displayed normally, or with the double

dots (bold), the baseline drawn (underline), the letters slanting SerSoftStyle(RastPort,styleflags,enable) changes the current style, the flags are listed in the appropriate header file from the "include" directories.

The default font, Topaz 8, is stored in ROM. Topaz is the name of the basic shape of the letters, and their height is eight pixels above the baseline. The other ROM font is Topaz 9. To get a pointer to the Topaz 9 font, we initialise a data structure, with its text

FONT SUB-DIRECTORY

The OpenFont() command returns a pointer to a font with the right name and the nearest size, if it is available. The SetFort(RastPort,FontPtr) command will set the RastPort font pointer to the chosen font. In addition to the ROM fonts there are sever-

and a subdirectory with the dot pattern details for each size. For the gamet font, fonts/gamet.font is the header, fonts/gamet/9 and

To obtain a pointer to one of these fonts, the command OpenDiskFont(TextAttr) is used in a similar way to the command OpenFont for a font stored in ROM. The font can be set, and the

The OpenDiskFont command is in the DiskFont Library, which is usually in the libs directory of the system disk. This library has to

Unfortunately the text routines can be a little slow. They are ideal in a wordprocessor or art program, but too slow for a games scoreboard. When speed is important it is better to make use of source bit only when there is no corresponding bit in the destination. Minterm 32 retains the destination bit only when there is no source bit in the position. Minterm 16 only puts a bit in the desti-Some of these values can be combined to make further minterm

values. Mintern 192 copies the source contents directly into the destination. Minterm 48 copies the inverse of the source straight

Mintern 96 outputs the source bit where there is no destination useful for putting an image on a background after first creating a hole of the correct shape by copying using a minterm with a value

The four-bitplane picture has letters defined in colour 15 - this means that each bit plane contains exactly the same image. In this case, the values used for the combination of planes corresponds to the logical colour number.

A minterm of 192 and a planes value of 1 must be used to copy a letter using logical colour 1. To superimpose a colour 3 letter on with minterm 96 and planes value 3.

Margaret Stanger looks at typeface handling and shows how to make it. even quicker

On the CoverDisk...

the gadgets and menu items, and iffread.c which contains a routine to read an IFF picture from disk on to the screen. The source files are compiled separate-

letters.ink.

After the main libraries are opened, the program looks for the diskfont library, and exits with a message if the diskfont library falls to open (this can happen if the file df0:libs/diskfont.library is absent).



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It can be supplied with a device which will allow you to fade between computer graphics and the video source, and also a mode control unit so that you can move between Amiga only, video only, background mode and keyhole modes 1 & 2

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The Rendale Super-8802 is a development of the basic 8802 unit, it performs the same functions, but has the added capability of also working with Super-VHS signals. The unit will allow the user to cross fade between the Amiga and video signal. In addition, some basic wipe patterns are provided, and also a fade to black option. Mode control is also provided via hardware.

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This is a brand new piece of kit which will improve the capabilities of the popular Rendale 8802 Genlock. This unit allows you to cross fade between the Amiga and video signals, so that you can gently fade computer titles in and out. Also, the ability to switch between the various modes offered by the 8802 is provided. The required mode is selected by a push switch, giving smooth, flicker free transformations.

The FMC unit does need to be soldered into the 8802, we can do this at our factory if required.

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UPGRADE PATHS

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The other upgrade path is the move from a purely composite 8802 to the Super-8802. This can also be done simply, although we do have to perform the upgrade work at our factory. We would only require your unit for around two days.

Fortunately Blue Ribbon have spotted the gap and taken the long-anticipated step to close it with the release of Bars & Pipes that could add the final nail to the lid of the ailing ST coffin.

As far as plug-in bits of plastic are concerned the new Triple not on an aesthetic level. However beneath the bland exterior

On the face of it this unassuming black box simply provides the usual selection of three Midi-outs, one Midi-in and a singular Thru-port all connected to the machine via a generous

MIDI SWITCHING

If used with puckages other than those in the Blue Ribbon stable, the unit's humble appearance is reflected in its performance - operating pretty much along the lines of a bog-stanthe ability to switch between the three available Midi-outs via a

However, when our anonymous-looking peripheral is employed in concert with elements from the Blue Ribbon range, the humble black box takes on a whole new persona. be replaced by an amazing 48 channels all eager for simultane-

By selecting one of three outputs - courtesy of add-on tools - the relative data is sent to the chosen Midi-out on the rear of

older elements in the Blue Ribbon range

For the vast majority, Triple Play will be aren't ignored courtesy of dedicated tools Bars&Pipes program.

tool variations come as standard with the Triple Play support disk. As a result potential upgraders shouldn't be left stranded - if

In the case of both Bars&Pipes Pro and like any other in your collection.

The only real difference is that the original Midi-out tool must be removed to make

Fortunately Blue Ribbon have been as a result once installed the program uses TriplePlay-1 tool as a generic replacement

songs that have been written using the old

MUSIC



Triple

play spectacular

the interface. As a result, set-up is a simple matter of plugging in the interface, adding the hardware of your choice and copying the appropriate driver or tool to your sequencing software.

ware is great for designers and suppliers but not always good being pleasantly surprised as Blue Ribbon have succeeded in

The One Stop connection

Regulars may remember last month's feature on yet another release from those industrious souls at Blue Ribbon, namely The One Stop Marks Chop.

Although fully explained in the last lesue, it's worth mentioning that when used in conjunction with Triple Play, the available Midl channels are boosted eventue.

further. When the hardware and associated software are added to the overall BaraRipas environment, the avail-able laid options expand even further with full access to the Emu-Protess within fone Stop in addition to the 48 channels on other from the Triple 48 channels on other from the Triple 48 And of course, if money is no object you could harrys add the lattent of either the 5 or 12-bit SunRiver Amount of the Stop of the Stop of the Stop of the Stop of the harrys add the lattent of either the 5 or 12-bit SunRiver by 8APProc as standard.

16-channel format. Fortunately the software automatically updates the song to reflect the changes within the new environ ment - again replacing Midi-out with TriplePlay-1 - thereby avoiding a tedious trek through the track list applying the new

With the recent upgrade to SuperJam1.1, it's not a total surprise to find Triple Play support in the form of a special Triple ronment when required.

OUTPUT SWITCHER

However due to SuperJam's limited number of performers Blue Ribbon have side stepped the 48-channel option offered within the Bars & Pipes range and opted for a Superfam replica of the Triple Play output switcher provided for other

Just like its Workbench counterpart, the Superjam accessory simply toggles between the three available Midi outs. Although a thoughtful, add-on Superlam support isn't exactly a strong selling point, which further confirms the unit's appeal to the professional rather than the amateur market.

Obviously with an asking price that hovers ominously close to £170, the Triple Play may be a little rich for the blood of most enthusiasts. However if you take your Midi seriously - or more to the point professionally - it's a relatively small price to pay

For those lucky enough to be heavily burdened with assorted drum machines and sound sources all sharing the same channel presets, it offers a beautifully simple method of combining them all on the same channel while avoiding the inevitable clashing experienced on a standard 16-channel systems.

Paul Austin investigates a revolutionary Midi interface that could finally make the Amiga a studio standard

If you want more information on the Triple Play or in fact any element in the Blue Ribbon range you can contact the newly established UK Blue Ribbon technical support line on 081-332 6959 If you've heard enough, and simply can't wait to invest your £169.95

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nce upon a time there was a magical kingdom, populated by people who lived for adventure. These people lived ordinary lives during the day but at night they became wizards, fighters and monsters, trekking through uncharted territory, meeting interesting people from all walks of life... and killing them.

These people I've mentioned aren't homicdal maniacs, they're just ordinary loes like you or I. But they do use their modems to join others in computer-driven multi-user games, games that bite back because the opponents aren't simulated artificial intelligences, they're real thinking, breathing humans. And like humans, if they don't like you you'd better watch your ass.

Multi-user games used to be called multi-user dungeons, after the first such game which had that name. MUD was written by Richard Bartle and was launched by BT in the mid-80s. Eventually, much like Micronet later, the service was run down and disappeared.

The game then went over to the US where it went crazy under the name of British Legends. The creator of the program continued development to the degree that now we have MUD 2, but

In a time well before the word, let alone the concept, of cyberspace became a fashionable thing to talk about, real people lived an electronic life in addition to their real one.

Late lamented Micronet

BT were the first to really do something about this in the UK. First MUD, then Shades on the late lamented Micronet, closely followed by many others, half as good and a third as short-lived. Then an allied stream of games turned up - online ones, which although not necessarily featuring multiple users, did

enjoin users to use them online Such games only have limited popularity in the UK - unless the call is local you can only really play for a very short time, unlike in the USA where local calls are free and online/multi-user games run riot over the Net.

Now in the 90s we have a lot of more sophisticated games on computers, and multi-user games have had to be more sophisticated to keep up.

One system in the UK which exemplifies this approach is Online. The system operates via the Tymnet and Dialplus networks across Europe, enabling users all over the EC to dial it up via a local phone call. Costs are just £2 per hour network charges, plus Online's charges which are £2 per hour for non-

members or £10 a month all-in if you subscribe to the system. If you're in the London area it's a local call and you don't pay the network so that works out at about 86p per hour instead of the £2 you'd pay if say you called from Europe or other far-flung

places in the UK The games on the Online system are Air Warrior, a multi-user flight/combat simulator; Federation, a multi-user adult space fantasy; MUD 2, the sequel to the original MUD; and finally Internecine, a futuristic battling game run by Email. This is asst

And there's more...

ge: "If you like multi-player games, but are sick of th lay of the ones in the USA, there is now one here a ston, called Magic Moo. "It can be accessed by telnet on dougal.aston.ac.u rt 7777, and although not the busiest in the world, is

COMMS

like the play-by-mail RPG games, but being played by Email it runs that much faster. It is is like a futuristic game show, much like Stephen King's The Running Man. where the contestants fight each other in

an arena using all manner of weapons. Although some of the games are textbased, most these days are graphic. Air Warrior is a graphic simulation of flying in an attack aircraft, and all the other players are seen as other aircraft.

Although Federation is a text-based trading game, originally written by Alan called FedTerm, so it's now more of a graphic role-player

The games, especially the graphic ones. are specially designed to work despite the great distances involved. Air Warrior, for modem upwards, and has been carefully



Glorious MUD

optimised to make sure that the action never stops despite the distance between you and the game.

This works in much the same way as games which operate in twoplayer/two-machine configurations over a serial null modem link. As well as all the games, the Online system also has Forum, its own conference service and Email system. The PC and Amiga are served as far as graphic terminal programs and ways of playing the Phil South looks at the exciting. international world of multi-user games



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T-BAG 1 to 77

lot of attempts to tell you about Dual Playfields has been cropping up in recent magazine articles and books on the subject of Amos, and I thought it was about time we covered this subject in this column

As far as the Amiga's display system is concerned, a dual playfield is where two screens are visible at the same time. overlaid one on the other, where one is clearly visible through the other

This is a handy effect for what they call in the game reviewing business "parallax scrolling", like in the game Shadow of

the Beast. There is an Amos demo which shows off this effect, called "Madness Week" by Syntex (get it from the Amos PD For good parallax scrolling - contrary to what you might

read in other mags - you need to observe certain restrictions and keen your mind on what you want out of your scrolling If what you are looking for is high speed and pure hardware

scrolling, unfortunately you have to figure out ways of making dual playfield work properly.

This is awkward because one of the playfields will always go havwire once you scroll the other one, just like some demos I've seen which supposedly show how it should be done. So this method is only recommended if you care to sit down and experiment with it for a few weeks.

Following this reasoning to its logical conclusion, slower dual playfield is better as long as you don't need a major turn effect is very clean and smooth. The other way of doing it is depicted in the Starblazer clone, also on the TOME disks. The beauty about that is that it's all done with simple screen copy commands, and because SCREEN COPY is so fast, you can do other things and not have it all slow down as soon as you move a sprite.

Bear in mind that you're probably going to compile it all anyway, so it'll go faster than it does when it's interpreted, ie being run by Amos, and keep it simple. If you're going to do parallax scrolling don't use a huge sprite, for example.

Apart from parallax effects, you can also do a number of other effects which require some form of transparency and two effects moving in sync, as shown in

write home about. Yes sir, dual playfield mode is good for any time when you



Flashy scrolling

of speed, or if you scroll single pixels very slowly.

The best way of doing this is to do an overlay from another screen using get and put block. The best parallax scrolling is where you are doing what we call "band parallax" where you're not overlaying.

Moving bitmaps

This is simply a case of setting your screen copies up for scrolling different bands on the screen, which is the simplest and fastest way to do it. You must keep the scrolling itself very simple, so whereas some demos only use half the vertical height of the screen, they scroll the entire screen.

The proper way to do it is only scroll the areas of the screen which have the bitmaps in them. This way you're not wasting processor time scrolling bits which aren't actually part of the

The best examples of this technique that I know of are to be found on the demo disk which comes with TOME 4. The first good example is the Velcro Grub game, where there are two bands of screen scrolling, although the effect is of parallax scrolling only - the bottom two are actually moving, but the

Write a program!

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want to have two screens in motion on the screen at the same time, and obviously the best applications are going to be games and demos.

But I can see an application in video titling with a little bit of thought and imagination. Employ a bit of text scrolling and you can flin text around in two planes at once. Experiment with the possibilities, but always remember to keep it simple if you want to keep it smooth.

```
Screen Open 0,320,48,8,townes
            Screen Display 2,,200,,
Screen Display 3,,200,,
            Screen Display 5,,130,,
Def Scroll 1.0.0 To 320,56.0.-1
                Screen Copy 0,0,0,320,1 to 1,0,1
Listing I
```

Phil South looks at the Dual Playfield command in Amos and savs "never use one field when two will do"



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ostScript is a pleasure that many don't get a chance to experience because of the expense of buying the necessary hardware. The way around this is to use a software

interpreter. One such program is the freely distributable Post. The advantage of using a program like Post is you can take a PostScript file and check for errors that may cause the file to fail. These errors can prove expensive, especially when dealing with

If you hand them a PostScript file that has to be debugged, you are either going to have to pay for the time it takes them to do that, or take it home and do it yourself

Essentially, a PostScript file is an Ascii file which, if you like, can be loaded into a text editor, from where you will suddenly realise that debugging a file in this manner is something best left until you

Luckily, there is another way of reducing the risk of failure. In order to make sure there are no unexpected problems when the code from that file is interpreted, you can take a PostScript file from

a program like ProPage and run it through Post. A common problem, for example, is text that is part of a graphic - a caption perhaps - and at print time the font for that text isn't available. Another one is with graphics that you have loaded from your storage device, but the output device at the print shop can't find the graphics because it doesn't have access to your storage device. After creating a document in your DTP program you would

PUBLISHING

save the pages as PostScript files. These can become large. Sizes of a megabyte are not uncommon, especially if fonts are included in the file, so PostScript files need to be saved to hard disk.

Once saved, you can check for errors. Troubles like files not being found and problem Encapsulated PostScript files (EPS) can be highlighted by Post. Although with experience some prob-

lems can be spotted by glancing at the PostScript file, often glitches are hidden. EPS files, for example, can be a constant source of problems, especially when they originate from many different sources.

With Post it is possible to "run" your file and watch for where it fails. The program interprets and executes each command. eventually displaying a representation of the page. You need to pay close attention because once the file fails the page will be



Keep posted

Options open

In a nutshell. Post enables you to output PostScript files to non-PostScript printers. It does this by taking the place of the PostScript interpreter inside a PostScript output device. Instead of a page being imaged in the printer's memory, it is

created as a bitmap in your Amiga's memory, which can then be printed via Preferences as normal. The great advantage of this is that it enables those who

can't afford a PostScript printers to still take advantage of the enhanced options available to PostScript Although the author of Post, Adrian Aylward, stopped devel-

oping it at v1.7, enthusiast Robert Poole has taken up the challenge and has recently released an enhancement, version 1.86eh, which is still freely distributable, and which you will find on Fish Disk 828.

What is PostScript?

Developed by Adobte Int. PostScript rose to prominence or the Apple Macrinoth, the first computer to provide decent leakApp-publishing software, and is now used by most pub-shing programs on the Amiga in one way or another. PostScript's great advantage is that it is resolution indepen lent By that I mean that no matter what printer you are using I will always output at that unit's highest resolution. PostScript is also platform independent, which means

But before that you will have seen which images have been interpreted correctly, and hopefully part of the one that caused it to

To correct this sort of problem you have a counle of options. When the interpreter can't find a font or graphic you can go through the code and look for the name of the missing file. Once

found, the path to the file can be altered accordingly. For instance, if the file was loaded from the path DH0:Pix/ but is now on a floppy called EPS, then it is merely a matter of changing DHO:Pix/ to EPS: Using the search and replace facilities of your text editor makes this job easy.

If the problem is a graphic that causes the file to fail, you have to make a decision - do you replace the image, or try to repair it? If you want to repair it you will have to ensure you have an illustration program that can load EPS files, something like Soft-Logik's Art Expression. Once corrected it can be saved and then reimported into your document, a new PostScript file created, and

then you go through the whole process again. As you gain experience with Post and PostScript you will get an idea of what types of files will cause trouble, and should then be able to correct them without the time-consuming task of interpreting them



Ben Pointer on

how to avoid

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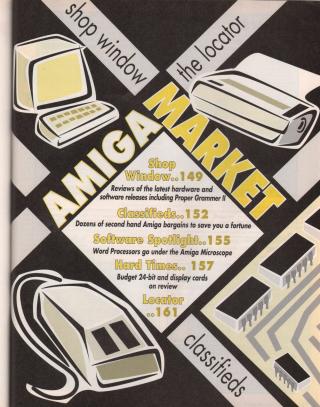
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Checking the interaction between words is a highly complex affair, however, and one which I felt a computer would not be able to handle satisfactorily at all. Still. I was ready to be surprised.

The program comes in a grossly oversized box containing two disks, a very professional ring-bound manual and a registration card - as well as a large non-biodegradable

slab of foam rubber to pad the whole lot out with Installation is easy; clicking on the Install icon on the first disk creates a single folder on your hard drive (a hard drive is essential in order to use this program) in which all of Proper Grammar's bits and pieces are neatly located

Familiar

Once installed, the program's icon can be put out onto the Workbench desktop or left in its folder, depending upon personal preference

without the user having to do a thing.

If you've ever used a spelling checker within a wordprocessor, you'll be instantly familiar with the look and feel of Proper Grammar. On opening, the user is presented with a large window, above which are two smaller windows, and a number of click-on options, about which

more later. The first task is to load a document to be checked. which is achieved using a standard-feel file requester.

Writing proper!

Check your **English** with the latest tetchy

schoolmaster

ates the check. The package comes complete with a 135,000 word dictionary, which in practice covers about 99 per cent of commonly used words. On a 2,000 word article, this would suggest that the program will know all but about 20 words

By adding words it doesn't know to the dictionary (a simple case of clicking on Add, and then specifying whether you wish the computer to "remember" the new word for this session only or permanently) it is possible, in practice, to avoid the computer highlighting peoples' names, common abbreviations and other user-specific anomalies. A major minus point is the program's use of American English, although this is not as large a problem as it sounds, because the chances of mis-spelling a word with the American equivalent are pretty low, and when the program has been told British spellings it will remember them, but it's a minus nonetheless. The two smaller windows above the text window display respectively the offending word or phrase, and an explanation of what the computer thinks is wrong.

In common with straight spelling checkers, rather than automatically changing offending items, Proper Grammar Il instead suggests improvements. This is essential.

Once your document is on screen, clicking on Start inititr John Roberts ts Software Company Main Street Progue, IN 55981 enjoyed meeting with Ns. Stein and the other engineers form the Design Department. Our <u>discussions were so productive</u> that I think we will be able to

emborrassment



because the program's biggest downfall is that it's not particularly good at what it does.

The reason is simply that the English language is an immensely complex beast, and frequently highly illogical, breaking its own rules often and with an irritating degree of inconsistency. Ask any foreign student trying to learn

Also, the program has no way of actually "understanding" what it is "reading". It cannot follow chains of context or meaning throughout a paragraph, as the biggest

unit it can work with is the sentence. Genuine error

So it is constantly suggesting changes where, as the writer and human in the equation, you find yourself thinking: "Yes, but if you'd read the sentence before..." or,

"Yes, but in this case... Don't get me wrong, it does manage to highlight errors which, as ACs sub-editor, I might have missed, but for each genuine error it spots there are a plethora of other you wish it'd have the knowledge to

Its explanations of errors are general, too, and often

over-complex. It would be much better if it could correct your sentence, rather than show you a stock sentence it has in memory, and it's my view that if you know what a "prepositional phrase" is, you certainly don't need a gram-

mar checker to tell you! As well as the basic grammar checking "bits" there is a simple text editor to make the changes necessary to your words, the ability to customise the checking routines so that the program takes account of your own writing style (you might wish to use the word "which" instead of "that" more regularly than the program thinks you should, for instance). ARexx support and article statistics, including readability judged on the accepted Flesch Reading Ease

In conclusion, the program's use of American English and the inherent problems in any computer program attempting to make sense of the English language limit its usefulness, but on the other hand its advice led to me "fine tuning" the article you're currently reading, so it's not totally useless. One for perfectionists with a lot of time on their hands.

Phil Morse

Award Construction Kit

plier: E M Com Phone:0255 431389 Price: £29.99 (two month introductory) £39.99 theres

If you have ever wanted to create award certificates with out needing to master a paint package, your troubles are over thanks to the Award Construction Kit from Sixth Sense Software. The package comes with 50 award styles covering Sports and Pastimes, School and College, Family and Friends and Tongue-in-Cheek. This program can not only produce certificates but also comes with utility styles, including a Beware of the Dog sign. Update disks are on

Canon BJ-230

Supplier: Canon UK Ltd Phone: 0800 252223

The trouble with most printers is that they cannot print wider than about 8in. And the trouble with are normally great hulking beasts that take up

The Canon BI-230 has been designed specifically for desktop office use, where desk space is at a premium, and at just 17in wide by 11in deep it is smaller than most A4 printers. Yet the BJ-230

can print onto A3-sized paper Like all the Canon bubblejets, the BJ-230 contant to select the correct printer driver and

nter emulation for the job in hand This is not as much of a bind as it may seem. By that uses only the fonts that are built in to the

cally this would be output from wordpro cessors like Protext, TransWrite and Scribble Other wordprocessors - Wordworth and Final Copy II for example - use scalable fonts on-screen and print them as graphics.

Desktop publishing programs work in the same way. So the odds are you'll be in just one emulation most of the time, depending on what type of printing you mostly do, only switching to the

Switching emulations is a simple matter of flip-ping one of the DIP switches, which are convelocated under a flap on top of the printer Inside the front panel of the printer, which pulls down to enable you to change the cartridge, is a nmary of what the 12 DIPs do. After changing the DIP switch setting you then select the appro preferences, and away you go

Typefaces

The BI-230 has seven in-built typefaces - eight if you count the draft typeface - and each is avail able in five sizes (10, 12, 15, 17 and 20 characters ble-high/wide, superscript, subscript, underscore, overscore, strike-through, outline and shadow. Multiplying the number of typefaces by the number of sizes by the number of styles and

mixed styles, there are almost 1,000 different type/size/style combinations - surely enough to keep the most ardent wordprocessor happy

Compugraphic fonts can be downloaded using grams for the Amiga, is available free from Canon

The aforementioned plethora of typefaces are available in Epson LQ emulation. In BJ-10 emula tion you have only Prestige at 12 cpi, and Couries at 10 cpi, 12 cpi, 17 cpi and proportionally

n appears so much better. Good question But the Epson LQ emulation prints graphics at a m of 360 by 180 dots per inch (dpi) using 24 of the jets, while the BI-10 emulation does a much better 360 by 360 using 48 jets

The difference in output quality is enormous outs are better than 300dpi laser printouts, if you print in Super High Quality mode on to high qualntouts using the Canon software and drivers is hout equal at this resolution and price

Printout speeds are very fast for text, ranging from 248 characters per second in High Spe characters per second in Super High Quality

rinted an A3 sized, 1Mb 24-bit graphic at 360 dpi in 15 minutes on my Amiga 3000, which



the way to provide even more templates so the package will grow to meet your needs

Award Construction Kit is distributed exclusively by F M Computergraphic who also have rights to the Safari range of fonts. Therefore, it is not surprising to find that ACK is supplied with a nice font selection and that the headline fonts can be toggled between two sizes

Each certificate contains an appropriate clip art picture, to suit the occasion, and up to 15 lines for text entry. Although these are split into logical groups for headlines, body text, signature, name and date, there is nothing to stop you using a text line for another purpose.

Flexibility

They may be moved up or down the page, and even ignored, should you decide that a line is surplus to your needs. By default, the headlines and main text indicate what should be entered so that certificates can be produced quickly by a complete novice.

Flexibility and ease of use are the key design concepts. Every feature of an award, from the border to the seal of

authenticity, can be customised to suit an event. A completed award certificate may then be saved, for future use, as one of five user-defined styles. The controls are truly intuitive and consequently little user documentation is needed or supplied. The main control panel is a point and click affair, while options are selected using

The package will run on any Amiga and install programs are included for hard drive users. The output quality of finished awards will clearly depend upon the print capabilities of the attached printer. There are drivers suitable for most printers although users may like to install their own by copying into the devs/printer directory.

Youth groups, such as the Scouting and Guiding movements who work towards proficiency tests, are likely to find this utility invaluable. Although there is an award category for educational establishments, only schools are likely to find Award Construction Kit useful.

Colleges do not tend to hand out achievement awards unless they are for recognised qualifications, in which case the examination boards use their own designs. Having said that, the package is excellent and should prove popular with anyone who wants to knock out a certificate. Colin Yarnall





is no longer than a 300dpi laser printer would out an hour. This isn't the printer's fault, it's ing graphics as fast as the CPU can throw the data at it. The faster the CPU, the faster graphic

The above example is with a big graphic, of course. A typical page of DTP'd text with a couple of simple graphics will take perhaps 15 to 20 min utes on a slow Amiga, five minutes on a faster

n automatic sheet feeder comes as standard, taking about 100 A4 or 50 A3 sheets, or print on to labels, not even laser printer labels, because these come on shiny-backed pap which slips in the friction feed mechanis

Canon-recommended transparency film can also be used. One of the BJ-230's most special features is its "reduction" mode, where it will automati the original size. This enables you, for example, to print 136-column-wide spreadsheets on to A4 paper fed in sideways, and still get 66

this printer has only one "consumable", the ink cartridge (which also contains the print head) They cost about £20-25 each, depending on how any you buy at once, and last for about 700,000 characters in High Quality mode

While testing the BJ-230 I did very many A4 cheaper A4 version of the BJ-230). I've lost cou of exactly how many printouts I've done, but the ne cartridge is still going stron

The BJ-230 is small, fast, flexible, almost silent in operation, and certainly an odds-on favourite the price range you can afford, you must look at before buying anything else. No dot-matrix can hold a candle to it, and it

produces a higher output quality than the rival Hewlett-Packard Desklet 500 and 510 printers, even on ordinary paper



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Protext 5.5

For long the Amiga's premier wordprocessor, Protext is still the most powerful, though lacking many of the features found in wysiwyg packages.

Protest is fast, contains a powerful built-in macro and command language, can produce invoices using its line drawing mode, and has many of the features you'll only otherwise find in a PC package, such as auton numbering and self-incrementing variables. For business users it is the only choice.

Disadvantages include its limited display (definitely not wysiwrg), its less than completely friendly interface, tack of graphics support, and overall complexity, so it is perhaps not the ideal choice for home users.

choice for home users.

Ideal uses for Protext include invoicing, mail-outs (due to its powerful mail merging options), and the rapid generation of huge amounts of text (its simple display lends it the fastest typing speed of all Amiga WPs).

Supplier: Arnor Phone: 0733 68909 Price: £80

Wordworth v2

Another British-produced program, Wordworth is a smooth, user-friendly wordprocessor with fewer power features than Protext but superb document design options and a finished output that's better than most.

Wordworth is one of the easiest WPs with which to generate PostScript documents, as it has full support for the standard and is supplied with 17 superb Agfa fonts. It also comes complete with support for 140 individual printers, enabling full control of built-in printer fonts from within a document.

The spell checker and thesaurus used is the Collins Linguibase (as used by Protext), so British spellings are the order of the day. Both work very well.

The program's disadvantages are that it can be memory hun-

gry, offers no macro facility, and can sometimes run very slowly when memory is cight. Not the best WP for the office, Wordworth 2 is better suited to the production of high quality PostScript documents including

Ideal uses for Wordworth include letter writing, important documents which have to look just right, such as CVs, simple DTP tasks (its graphic support and PostScript options give it a defirite advantage), and general home correspondence.

> Supplier: Digita Phone: 0395 270273 Price: £129.99

Provvrite 3.3

Having recently been price-slashed, ProWrite is a rather attractive buy for those in need of a general purpose WP. The problem with ProWrite is that it is just that – general purpose, it is

Software spotlight

In the search to separate turkeys from peacocks, this month our piercing gaze falls upon the ever-popular wordprocessing market

similar to Wordworth in that it is a full wyslwyg package with direct PostScript support and a lot of icons for standard functions. However, the PostScript option in it is a ready implemented as the Digita offering, the program doesn't support built-in printer fonts, and it is slower, especially when HamB graphics are included in a document.

Having said all this, ProWrite is a perfectly usable package, and has the advantage of its ten user-definable macros which can be very useful wish a bit of thought on the user's part. Like Wordworth, it has a good, though American, spell checker and word count, but it will also carry out calculations

and automatically sort a list of words in alphabetical order.

ProWrite is best suited to the home user who prefers to save a few bob and isn't too bothered about speed of scrolling. For those people is represents a bargain at its present price and should serve well in its general purpose role.

Supplier: Silica Systems Phone: 081-309 1111 Price: £79.99

excellence: 3.0

excellencel, which for some reason doesn't have a capital letter at the beginning of its title, is a huge sprawling package including a 140,000 more dictionary complete with definitions, a thesaurus, grammar checker, and PostScript support. It sounds like great value for money, and in some ways it is,

but excellencel is in many ways over the top and suffers in the basic areas as a result.

Advanced features include the ability to use multiple

columns of text in a document, PostScript support using its own versions of popular fonts, automatic contents generation (of the others, only Protext does this), and graphic support. However, text scrolling speed is poor and the program uses a .

lot of memory. For users worried about their presentation, excellencel is a good bet as the built-in grammar checker is powerful enough to spot most of the mistakes made by amateur wordsmiths. This feature also makes excellencel a tool many teachers and parents might consider.

Supplier: Silica Phone: 081 309 1111 Price: £49.99

Final Copy II

Probably the most attractive looking wordprocessor around, FCII is fast, colourful, and slock HamB graphics and DTP are the program's forte, and it has a number of features specifically aimed at making good presentation easier.

Like its predecessor, Pen Pal, the program has drawing tools available for designing page elements from within the wordprocessor, but in line with the main competition, all AGA graphics modes are supported.

Uniquely (at time of writing), FC II also displays 256 colour graphics on-screen, making it the best WP for colour printing, particularly PossScript printing.

FCII's main weaknesses are in the power wordprocessing areas, where several of the more advanced features found in some other packages are missing or not as well implemented. For basic wordprocessing and superful colourful pseudo-DTP. Final Copy III is a good but, but don't expect to write a magnum opus with it.

> Supplier: Gordon Harwood Phone: 0773 836781 Price: £99.95

Scribble

Scribble is one of the Amiga's golden oldies and is usually supplied as part of the Works Platinum home office package. It is a balici, non-wysilwyg wordprocessor and has few, if any, whistened when the part of t

Most of the standard options are there, including search/replace, light heteker, and word court, but its feature are usually in the most basic form, its dull looking interface, with no pulgets and all options restricted to measur araber like Protest S.5 doesn't score highly in these days of presettle software, but thousands of stassich users would no doubt agree that this leads to an easy-on-the-eye environment for bashing out text.

There's little to commend Scribble other than this and its

low price, but it's still an attractive buy for those with a need for a basic text engine. If you want to produce documents with lots of text effects and different forts, the print preview mode makes up in part for the lack of a modern display.

> Supplier: Silica Phone: 081 309 1111 Price: £44.95

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Award Construction Kit offers Amiga users the ability to easily create customised awards and certificates. AGK comes complete with 6 different headline fonts, 8 body text fonts, 5 seals and 11 different borders along with 50 pre-defined award styles. All of these can be edited and mixed to suit your individual needs. ACK also offers the

ability to save frequently used user styles The program will work on any Amiga and has an excellent "point and click" user interface which has intentionally been designed to be simple to use. ACK is a modular programme, which gives users the ability to add new fonts and styles easily from additional ACK data disks, which will be available soon. ACK is available exclusively from E.M.C., and for a special introductory period the program is available for:

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ith the amazing quality of the AGA chipset, the question asked by m is: Why bother with 24-bit devices who you can invest in an A1200 for the same

A valid point, as for many potential investors th eyday of the bog standard 24-bit board is long go in still be the only real solu

There's also the question of existing equips have a system based around old but nevertheles fast and effective many to get the AGA isn't a very attractive proposition. As any cases superior alternatives to the AGA

Retina

Just when you thought the budget 24-bit board was dead. Micro Systems' have come up with perhaps the ultimate alternative to the AGA, in the form of Recina.

Rather than a bog standard display system, the board offers a combination of graphics accelerator, painting environment

and retargetable graphics platform. On the acceleration side the improvement is fairly subtle with marked if not spectacular advances on everything from

DPaint to PageStream2. To complement the speed increase the board also offers RTGs - or retargetable graphics which mean that any future software release written with the format in mind will be able

automatically to take advantage of the board and its potential of 16.7 million colours Even without the RTG option the card can still display WB and WB-compatible software via the card - and due to its

The buyers' quide to better budget graphics

rock-solid flicker free output all such programs automatically benefit from the same flicker free display On the down-side games software and other none WB com-

patible programs won't work on a single monitor system which incidentally must be VGA or above In order to run such software a second monitor is essential

connecting to the unaffected RGB 23-pin out in the normal

With the ultimate two monitor set-up you have the basis of a graphics workstation with perhaps the addition of Vlab or TVpaint adding the finishing touch. However it must be said that TruePaint - the board's standard paint package - is respectable but not exactly spectacular. All told Retina is a pretty imprestion to video thanks to its single 15-pin VGA out on the rear of If you're looking for a general purpose 24-bit system with a potentially longer shelf life than most the Retina is well worth consideration - especially if RTGs become popular.

sive combination, if perhaps a little limited concerning connec-

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AVideo24 Like DCTV, AVideo is a compromise of cost and performance

Unlike the DCTV, however, AVideo uses a true 24-bit RGB display which means much sharper images than ever could be achieved via its composite counterpart.

To the credit of the Avideo system it was one of the first boards to attempt full integration into the overall Amiga environment. For example it allows the display of the board to be used as a backdrop into which standard Amiga displays can be

For multimedia applications this can be of vital importance as programs such as Scala can be overlaid over a vastly enhanced backgrounds. Alternatively, animation can benefit as standard Amiga anims can be employed above the backdrop in a similar

manner to OpalVision. In addition, AVideo will accept the services of a perilock to further glamorise your creations. However it's not all good news, as the system's primary assets have been lost with the withdrawal of TVPaint, which in the past was bundled with AVideo at no extra cost

Although still a respectable 24-bit investment at just (269, the removal of TVPaint has dealt a devastating blow - factor that's been compounded by its replacement which, alas, is very much inferior

On the plus side plans are afoot to convert the AVPaint package from AVideoY/C - a product you'll find reviewed in this very issue. If that isn't satisfactory or perhaps doesn't happen you could still cough up £500 for TVPaint - not very likely,

As for animation and painting, the system operates exclusively in its 12-bit mode which means hi-res 4,096 true colours resulting in quality way above that of old style Ham but never-

theless below that of hi-res Ham8. Due to strictly 12-bit anim playback, stepping is inevitable on gradients and this isn't helped by a maximum frame rare of 15

fps in the lowest resolution and a mere 12 fps in the maximum. Although as mentioned 12-bit is the default environment, it's possible to jump into 24-bit for preview when necessary and when this is combined with the board's interaction with standard Amiga graphics it still remains viable for those who require a basic 24-bit display system capable of the odd adventure into multimedia

> Price £269 Available from: Hi-O Tel: 081-909 2092

DCTV

demand. Another huge advan for the those making their first ten tative and invariably expensive steps in serious Amiga art is the file size of DCTV images. As a rule a DCTV image is roughly 1/10 the size of an equivalent 24-bit IFF. For se with limited means and sto age this alone makes DCTV an

On the display side the system again scores well with a maximum ur range around the 4 m more than enough for the average

As far as animation is concerned DCTV again scores well with

nt within each frame. Even with the 3-bit plane com

promise DCTV is still impressive as an animation platform and is still widely regarded as the next best In addition to the hardware

es with one of the better paint packages which includes the abil to make 24-bit frame grabs from freeze framed video. All in all, an ent investment and ideal for the dedicated animators

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It's here where the compron ts' building up the over On the plus side the board's ite output is ideal for the video. Numerous packages ncluding VistaPro3, Imagine2, Rea er an entire animation in it or

The Digital Creations DCTV sys

m is perhaps the ultimate com

of a true 24-bit system and the

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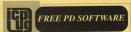
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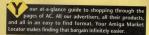
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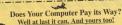
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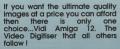


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