

AMIGA

COMPUTING

KNIGHTMARE SCENARIO

**Amigas bring
two top TV
shows to life**

WORTH £50!
**COMPLETE ADVANCED
DATABASE PROGRAM**



REVIEWED: ProPage 4 • Scroller 2
Bars and Pipes Pro 2 • Amiga Updates
Mavis Beacon typing2 • and more!

Award winning innovative products from Po

Scanners

"If you're in the market for a hand scanner then forget the 'rest and get Powerscan'"
Amiga Format

July 1992

Power Scanner v3.0



- 100-400 DPI scanning resolutions
- 64 greyscale
- Thru port for printer
- Award winning editing, image manipulation & scanning software

Power Scanner v3.0	£115
Power Scanner Colour	£239
v3.0 Upgrade (inc. interface)	£49.95
v3.0 Software upgrade for Power Scanner users (send SAE)	£15

Epson GT-6500



- 600 DPI Colour flatbed scanner
- 24-bit colour
- Software included

GT-6500 inc. Powerscan v3.0	£799
GT-6500 inc. ASDG Software	£899
Transparency Adaptor Unit	£499
Document Feeder	£399

Epson GT-8000

- 800 DPI colour flatbed scanner
- 24-bit colour
- 16.7 million colours
- 256 greyscale
- Scan line art images
- Optional automatic document feeder
- Optional transparency adaptor
- Software included

GT-8000 inc. ASDG Software	£1199
Transparency Adaptor Unit	£499
Document Feeder	£399

Floppy Drives

"This drive contains more gadgets than Batman's utility belt"
Amiga Computing Feb 1992

PC880B Power Drive



- Award winning drive manufactured by Power Computing
- Super slim design
- Anti-click (Cures that annoying click)
- Virus blocker (Prevents viruses)
- Built-in backup hardware

PC880B with Blitz Amiga	£60
PC880B with Blitz & XCopy	£75
PC880B (Cyclone compatible)*	£65
PC880B in black case	£65

*This drive is only available to registered owners of XCopy Professional. You must provide proof of purchase of XCopy Professional

Power Drives

PC880E Economy drive	£49.95
PC881 A500 Internal drive	£45.00
PC882 A2000 Internal drive	£45.00

Dual Drive

- Two high quality disk drives built into one compact unit
- Same features as PC880B

Dual drive	£125
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Blitz Amiga

- Backup disks at lightning speeds
- Stops all external drives from clicking
- Contains anti-virus from being written into the bootblocker

Blitz Amiga	£20
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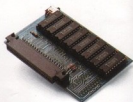
Blizzard Turbo

- For the A500/A500+
- Expand up to 8MB (10K installed)
- Memory and 68000 CPU run at 14.28MHz
- Fast 68000 processor installed on-board
- Fully auto-configuring
- Optical 512K shadow RAM on extra memory bank for shadowing the operating system out of ROM or from disk

Blizzard Turbo	£129
Blizzard Turbo 2MB RAM	£195
B' Turbo 2MB RAM + 256K Shadow RAM	£199

RAM Expansions

A600 Memory Cards



1MB RAM with clock	£39.95
1MB RAM without clock	£34.95

PC501+ RAM Card

Our RAM board is designed especially for the A500+ computer and comes with 1MB of RAM on board to expand your memory to 2MB of chip RAM. Plug-in and go operation (Fits into the trapdoor)

PC501+ RAM card	£35.95
-----------------	--------

8MB Power Board

- Plugs into side slot, fully auto config, full thru port. Expand 2MB-8MB

2MB	£109	4MB	£169	8MB	£289
1 x 421P chips					£14.95

1.5MB RAM Board

- Fully supports 1MB of chip RAM
- Fully compatible with Fatter Agnus (Kickstart 1.3 and above, not compatible with A500+) (Your Amiga needs to be opened, this may affect your warranty)

1.5MB RAM board	£85
-----------------	-----

1MB with Thru'port

- Expand your A500's memory up to a total of 2MB without disposing of your existing 512K upgrade
- Works with 1MB of Chip RAM

(512K RAM must be 4 chip type or not exceeding 8cm in length)
(Your Amiga needs to be opened, this may affect your Warranty)

1MB with thru'port	£49
--------------------	-----

A500 RAM Card

- 512K RAM expansion with clock & free software (A500+ compatible)

512K RAM (4 chip) with clock	£29
512K RAM without clock	£24

PCMCIA Memory

- Ultra slim memory card
- 2MB Memory card
- SRAM Memory
- For the A600/A1200

2MB Memory card	£149
-----------------	------

Award Winning Manufacturers

Power products come with full technical support

"The Power Mouse is my pick of the month"
CU Amiga

PC880B "Well worth spending your hard earned pennies on, an excellent buy" Amiga Computing

Dual Drive "Now this is a bit special" Amiga Computing

Power Scanner
Amiga Shopper Best Buy

Power Scanner
Amiga Format Gold

"Power Scan is quite simply the best Amiga hand scanner available"
Amiga Format

Credit Card Hotline
0234 843388
10 LINES

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Technical 0234 841882

VAT included

(UK mainland only)
48hr delivery £2.50
24hr delivery £4.50
Parcel post delivery £1
(Not for orders over £50)

Power Computing Ltd
Unit 8 Railton Road
Woburn Road Ind. Estate
Kempston Bedford
MK42 7PN



Established 1985

Specifications & prices
subject to change with out notice
All trademarks acknowledged

Auto ROM Sharer



- One of the most advanced kickstart ROM sharers available
- Fits A500, A500+, A1500
- No messing with switches
- No CIA adaptor or other trailing wires
- Simple internal fitting*

*Kick-off requires the lid to be removed from the Amiga. This may invalidate your warranty.

ROM Share	£19.95
ROM Share inc. kickstart v2.04	£55
ROM Share inc. kickstart v1.3	£39
ROM Share for A600	£29
ROM Share for A600 inc. kickstart v1.3	£55

Kickstart v2.04

2.04 Kickstart (chip only)	£32
----------------------------------	-----

Chips

4MB x 8SIMM	£POA
1MB x 8SIMM	£25
256K x 4DRAM	£5.00
1MB x 1DRAM	£4.50
1 x 4 DIP	£14.95
1 x 4 DIP	£19.95
A3000 Static column RAM	£19.95
SIMM 32 x 1MB-60	£59
SIMM 32 x 4MB-60	£179

(These chips cover most memory & hard drives i.e. GVP, Supra, Commodore)

Spares

A500 Power supply	£39.95
v1.3 kickstart ROM	£24
v2.04 kickstart ROM	£32
Fatter Agnus 8372	£44
Big Fat Agnus 8375	£48
Hi-Ries Denise	£29
CIA 8520	£95.95
Data Switches 2 way	£15.99
Data Switches 3 way	£17.99
Data Switches 4 way	£19.99
IDE Cable for A600, A1200	£15.95
(inc. installation software)	
Modem Cable	£9.95
Printer Cable	£6.95
SCSI Cable	£9.95
SCSI Dual Connector 2 way	£15.95
Monitor Cable for Philips 8833	£9.95
PC880B Upgrade, compatible with X-Copy	£15

A500 Hard Drives

GVP A530 Turbo HD



- 40MHz 68030EC accelerator
- Optional 68882 maths co-processor
- Up to 8MB 32-bit FASTRAM on-board
- Award winning

40MB HD 0MB RAM	£499
80MB HD 0MB RAM	£599
160MB HD 0MB RAM	£729
200MB HD 0MB RAM	£829
68882 Upgrade kit	£224

GVP Series 2 HD

- Up to 8MB FASTRAM on board

40MB	£299
80MB	£379
160MB	£529
200MB	£599
Each 1MB x 8SIMM	£25

Video Backup System

- Use VCR as a backup storage device
- Blank video tape is all that is required
- 200 Amiga floppy disks will fit on a 4 hour tape
- Can be used for hard disk backup
- There is room for 175MB of data
- Backup an Amiga diskette in 1 minute
- Restore even to an unformatted disk
- Hard disk backup, software allows you to specify which files and directories to be stored
- Low cost storage, 2 pence per MB
- Menu driven software
- Allows you to watch TV on a 1084s monitor
- Very high reliability
- Log files, contain title and counter position of every backup
- Video connection check, ensures fool proof operation
- Effective error-correction scheme
- Easy to understand manual
- Highly rated

Video Backup System

The Power BBS

- Free technical and buying advice
- Thousands of free files available
- Great discounts on all Power products
- On-line ordering to ensure speed of delivery
- Conferencing with top computer magazines
- Regular bulletins with latest product information

The Power House BBS
0 2 3 4 8 4 1 5 0 3

24 hours
All speeds up to 16.8K

Amiga 600

Amiga 600	£285
Amiga 600 & 40MB HD	£455
Amiga 600 & 60MB HD	£489
Amiga 600 & 80MB HD	£529

Amiga 1200

Amiga 1200	£390
Amiga 1200 & 40MB HD	£560
Amiga 1200 & 60MB HD	£595
Amiga 1200 & 80MB HD	£639

2.5" IDE Internal HD

• A600/A1200 compatible (inc. cable & installation software)	
40MB Internal HD	£179
60MB Internal HD	£205
80MB Internal HD	£229
130MB Internal HD	£359

Commodore CDTV

CDTV multi-media pack	£399
-----------------------------	------

CDTV Software

A Bun for Barney	£29.99
Barney Bear goes camping	£29.99
Battlecheck	£39.99
Case of the Cautious Condor	£34.99
CD Remix v2	£34.99
Fred Fish CDDP Collection	£19.95
Fun School 3 (under 5's)	£24.99
Fun School (5-7yrs)	£24.99
Fun School (Over 7yrs)	£24.99
Guinness CDTV Disc of Records	£34.99
Illustrated Holy Bible	£29.99
Music Maker	£34.99
NASA Heroic Age of Space	£19.99
Power Pinball	£29.99
Sim City	£29.99
Trivial Pursuit	£49.99
World Vista Atlas	£54.99
Xenon 2 Megablast	£29.99

More titles available

Award winning innovative products from Power Computing Ltd

A2000 Hard Cards

GVP Series 2 HD

- Up to 8Mb SIMM RAM on-board
- Supports external SCSI devices
- 14MHz SCSI controller

Bare	£129
40MB	£249
80MB	£319
160MB	£449
200MB	£549

Bare SCSI Hard Drive

- SCSI or IDE 3.5"

80MB	£199
160MB	£329
200MB	£499

(Suitable for GVP G-Force, GVP HD or Nexus HC)
Other sizes of HD available, please call

1Gigabyte HD

- Internal Hard Drive
- A1500/A2000

1GB Hard Drive	£999
----------------------	------

Power Board

- New RAM board from Power
- A1500 / A2000 RAM board

2MB	£99
4MB	£149
8MB	£239

Macintosh Emulator

AMAX-II Plus	£299
--------------------	------

(Mac ROM Chips required)

Commodore Amiga

- Amiga 4000 includes
- 68040 micro processor
- 25MHz clock speed
- 16.8 million colour palette
- Display up to 256,000 colours on screen
- Built-in 3.5" high density disk drive

Amiga 4000 & 120MB HD	£2099
Amiga 3000 & 52MB HD	£1299
Amiga 3000 & 105MB HD	£1499
Amiga 3000T 100MB HD 5MB RAM	£1999
Amiga 3000T 200 MB HD 5MB RAM	£2499

Amiga Accessories

A2300 Genlock	£57
A2065 Ethernet	£245
A2232 Serial Card	£104
A2320 Display Enhancer	£163

OpalVision

- 24-bit graphic card
- 16.8 million colours available
- Equipped with 1.5MB of display RAM
- Opal Paint 24-bit painting
- Opal Presents
- King of Karate

OpalVision	£699
------------------	------

More information available
OpalVision roaster chip available soon

Monitors

Philips CM8833 Mk2

- With cable
- Available with Lotus Turbo Challenge 2
- On-site maintenance

CM8833 Mk2	£239
------------------	------

Other Monitors

Commodore 1084S	£199
Commodore 1960 TRI-SYNC	£479
NEC Multisync 4FG	£549

ICD Flicker Fixer

Flicker Free Video 2

- Stop that annoying flicker
- Fits internally in the A500
- Multi-sync monitor required

Flicker Free Video 2	£199
----------------------------	------

Music



- The complete music kit for the Amiga
- Includes:
- Music Kit package
- Real Time Sound II
- Over 32 special effects
- Can work with MIDI instruments
- Digital Studio III
- Midi interface
- Stereo sound digitiser
- Stereo speakers
- All leads & software

The Music Pack	£69.95
Speakers only	£15.95
Midi interface	£15.95

Optical Hard Drive



- Manufactured by Power Computing
- 128MB on one optical disk
- Read and write optical disks
- 40ms running speed
- Built-in power supply
- High power cooling fan
- 25-way and 50-way SCSI ports
- Thru port built-in
- SCSI ID switch
- Compatible with major SCSI controllers

128MB optical drive (Internal)	£729
128MB optical drive (External)	£999
128MB 3.5" optical disk	£39.95 each
SCSI controller card	
For A1500 / A2000	£129
(Compatible with Amiga, PC, and Mac. A SCSI controller is required on the Amiga and PC)	

Floptical Disk Drive

- Stores 20MB on one 3 1/2" disk
- Cost effective mass storage unit
- Can be used as a 1.44MB floppy with Amiga DOS and AMAX
- AMAX compatible with DMI Mac driver
- Packs an entire back-up onto one floppy
- Additional disks available
- Internal version for A1500/2000/3000
- External version for A500
- SCSI Interface required
- Internal A2000 kit

Internal A2000 kit	£289
Internal A3000 kit	£289
External A500 kit	£389
A1500	£599

Accelerator

GVP G-Force

- 68030 accelerator board
- 68882 Maths co-processor
- 25MHz 1MB RAM

40MHz 4MB RAM	£499
50MHz 4MB RAM	£759
Hard drive mount kit	£35

68040 Fusion 40 inc. 4MB	£999
68040 Pro-Peripherals inc. 4MB	£999

1MB x 8SIMM	£25
SIMM 32 x 4MB-60	£179
SIMM 32 x 1MB-60	£59

Tel 0234 843388

Printers

All printers include cables
and next day delivery

Star Printers

LC20	£139
LC100 colour	£165
LC200 colour	£195
LC 15	£229
LC24-100	£185
LC24-200	£225
LC24-200 colour	£279
Laser LS-5	£699
Laser LS-5EX	£899
Laser LS-5TT	£999
SJ-48	£229

Epson Printers

Laser

EPL-4000	£639
EPL-4300	£799
EPL-8100	£1349

Inkjet

SQ-870	£509
SQ-1170 (132 column printer)	£629

Dot Matrix

LQ-570	£289
LQ-1070 (132 column printer)	£449
LQ-100	£209
LX100	£189

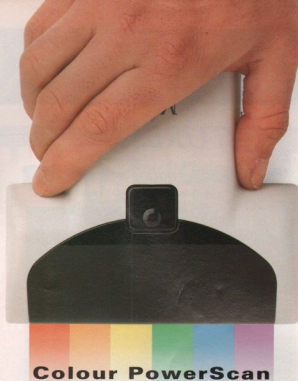
Supra Modems

Supra Fax Modem	£139
(inc. PSU, cable, software)	
Supra Fax Modem 32BIS	£269

Miscellaneous



Power Mouse	£15
Optical Mouse	£29.95
Replacement optical mouse mat	£9.95
100 Branded disks + disk box	£69.99
Quality branded disks (10)	£9.95
A1200 Dust cover	£5
Trackball	£29.95
Crystal Trackball	£34.95
Optical Pen Mouse	£34.95
Brush Mouse	£19.95
Aviator 1 joystick	£35
Intruder 1 joystick	£29.99
Maverick 1 joystick	£15.99
Python 1 joystick	£9.99
Apache 1 joystick	£7.99



Colour PowerScan

The Power Computing colour hand-held scanner for the Amiga is now available. This scanner offers the following features

- 4096 colours
- 50-400 DPI
- 4 Scanning modes
- Text
- Greyscale
- Colour halftone
- Colour

The Amiga interface plugs into an A1500/A2000/A3000/A4000 expansion slot with a separate version which connects to the expansion connector of the A500/A500+. The A500 version has a through-port which is compatible with all Amiga 500 expansion peripherals.

The software supplied with this scanner is the new PowerScan Professional 3, which also supports the greyscale scanner and will be available as an upgrade to existing users of PowerScan for £15.

Colour PowerScan v3.0 features

- Real-time 'True-feel' scan option in colour halftone mode
- Images are stored internally as 12-bit graphics, not HAM. This means that no quality is lost due to the Amiga only being able to display HAM images in 4096 colours

- Images are displayed as HAM pictures
- HAM images may be loaded from disk and edited using PowerScan 3
- Image size that can be handled is limited only by the amount of memory available
- Memory does not have to be chip memory as in many art packages
- Images can be saved in various file formats
- View whole image function
- Scale/rotate/skew image or clipboard by any amount
- Crop image
- Clean up, lighten or darken image
- Variable zoom mode
- Draw freehand, lines, circles, boxes and polygons in various fill patterns, brush sizes, paste modes, or with the clip board image
- Clipboards may be scanned directly, or any shape can be cut from the main image
- The software is compatible with all Amigas
- Supports Workbench 2 and ECS screen modes

Colour PowerScan now available

New v3.0 Scan software

PowerScan Colour v3.0	£239
PowerScan Greyscale v3.0	£115
PowerScan v3.0 software upgrade	£15

The Amiga can only display 16 greyscales

POWER

Award Winning Manufacturers
Power products come with
full technical support

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Description

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Power Computing Ltd
Unit 8 Railton Road
Woburn Road Ind. Estate
Kempston Bedford
MK42 7PN



Established 1985

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KNIGHTMARE SCENARIO

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Plus 3 more great competitions

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COVER DISK



Infofile

A complete, fully working, commercial Amiga database program with many advanced features, including the ability to play sounds and display pictures from within the same record

Scala HVT

Try this exclusive demo of the Amiga's number one productivity package and add a new dimension to tired old wedding videos

Virus Checker v6.22

The latest update of the Amiga's most popular virus killer, offering top notch defences against the viral menace

**Turn to page
26 Now!**

The Best Word Publisher (Amiga Format)

Wildlife **Report**

The Tiger

Large striped cat of Asian jungle and mountain regions. One of the largest of the big cats, the tiger is 3-4 m. (10-13 ft) long, including a tail 1 m. (3 ft) long, and weighs 227-272 kg. (500-600 lb.). Both sexes are immensely strong, enabling them to bring down and overcome animals the size of buffaloes. Their main prey is deer, antelope, wild pigs and bushbucks.

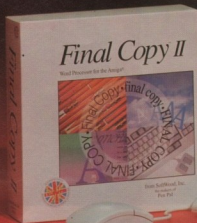
Lacking the stamina for a prolonged chase, tigers rely on their striped markings to conceal their movements as they silently creep up on their victims before making a sudden rush from behind. They kill by first knocking the animal down with a blow of the forepaw, or pulling it down with the claws, then suffocating it with a powerful bite at the neck or throat. Tigers swallow meat in large chunks, using their teeth to cut rather than to chew, and eating up to 22.5 kg. (50 lb.) of meat in a single meal.

Tigers spend the day sleeping or resting and emerge at dusk to hunt. Males are usually solitary animals, except during the breeding season. Each male marks off a territory of from 65-650 sq. km. (25 sq. miles), which contains several females and which he defends against other males, marking the boundaries by spraying a mixture of both his urine and scent.

Tigers once ranged all the way from China to Turkey, but today their range are largely confined to India and South-east Asia, with smaller populations in China, Siberia and Turkistan.

Region of Habitat

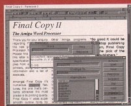
We'd simply call it the best Amiga Word Processor. But if after using it, the experts insist on calling Final Copy II the best Word Publisher as well, we're not complaining!



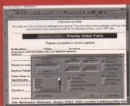
Final Copy coined the phrase "Perfect Printing on any Printer".
We mean it - this document proves it!

Created in Final Copy II and printed on a standard 24-pin Citizen Swift, it shows a small number of Final Copy II's features: Smooth Scalable Outline Fonts, Multiple Columns, Drawing Tools for Boxes, Borders, Shadows, Lines and Arrows, White-Out Text, Text Printed over Graphic Images, Text Obliquing, Auto-Flow Text around Graphics and of course, Import of Colour and Mono Graphics Pictures.

Word Publishers go beyond simply producing normal letters and documents (at which Final Copy II naturally excels) and progress into a world where *how* the document looks is just as important as *what* it says. Admittedly, this can be achieved with Desk Top Publishers, but they can't easily be used as Word Processors, especially when a good looking letter needs creating quickly - they're far too cumbersome. This is where Final Copy II offers the perfect balance between the two requirements. Ease and speed of use, combined with complete control and perfect final printed presentation.



Document creation is so simple with 28 On Screen Buttons for routine formatting and navigating commands, the Auto-Hyphenation. With true WYSIWYG display, you can even edit while your pages are magnified up to 400% for rehearsal. Long documents are supported with TitleMaster Pages, Style Sheets, Left/Right Page Binding Offset and Auto Numbering. Because your text needs to be perfect, the British-English Colours Provisionally specified combined with the Theorem (for that added inspection) help you to produce the precise, printed page.



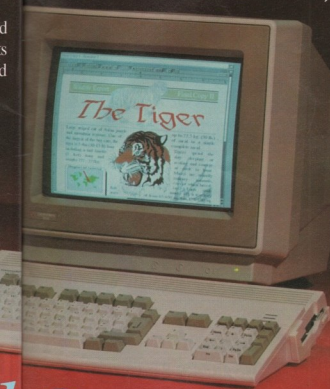
Compugraphic, Adobe Type 1 PostScript or Nimbus Q PostScript? If you want lots of fonts, you can have lots of fonts! Final Copy II can use thousands of superior Adobe Type 1 or Nimbus Q fonts (the same as those used on professional publishing systems). Both these types are PostScript fonts, but unlike all other Word Processors you don't need an expensive PostScript laser to use them! Final Copy II will print them on PostScript lasers, or any graphics capable printer. This includes the dot-matrix or ink-jet you probably already own. Even if you have your own Compugraphic® font library you'd still like to use, Final Copy II is fully compatible, outputting to any graphic printer. Final Copy II is unrivalled in its range of fonts supported, and as you can see here, you have complete control over font formatting. When using the outline typefaces included, or any additional fonts, they'll output perfectly - no matter what size they're scaled to - with absolutely no jaggies! Opening multiple documents also allows editing whilst printing in background mode (free memory dependent).

Compatible with all Amiga from AS50 to the latest A2300/A4000 ranges with either a second floppy or a hard drive. A minimum of 1Mb of available free RAM is required (A4000 hard drive - 1.5Mb), however, as with all advanced graphical programs, extra memory (eg. 1.5/2Mb - the more the better) will be required to exploit all features fully.

Available from all good Amiga Software Dealers,
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Final Copy Program of its Type

(The words not ours)



Final Copy II

Release 2 available now!

Complete control over how your documents look, now you have it! Final Copy II incorporates: On-Screen Drawing Tools for generating boxes, borders, and lines or arrows at any angle, Multiple Newspaper style snaking columns, combined with the unique ability to print the same PostScript quality outline fonts - on absolutely any printer in portrait or landscape. These all mean that no matter what you may have thought, no other Amiga Word Processor has all the capabilities that Final Copy II users now simply take for granted!



The almost endless list of features includes On-Screen Object Drawing Tools (no more importing of borders from drawing packages to frame graphics or reverse-highlight text) with selectable rulers to aid precise positioning. Text Auto-Flows around graphic objects and imported pictures, which can be placed anywhere, scaled and cropped, with no loss of printing quality. Text can also be printed actually over graphics (refer to 'The Tiger' heading on our document). No other Word Processor for the Amiga offers all this. ("Compagraphic fonts require Kickstart 2 and Wordbench 2.1 or later, with Final Copy II. They will not output on PostScript printers from any Word Processor - and would always be our second choice. All fonts used in Final Copy II can print to the highest resolution that the printer will output).

Amiga Format think we have the Best Word Publisher. We'll show you why with a list of features that users tell us are important (below). If you'd like to know who's also chosen Final Copy, Commodore specify it as an option with some of the most powerful Amigas available in the United States. What better recommendation could you have?

	Feature	Wordworth 2	Final Copy II
Fonts and Printing	Compatible with Standard Amiga Wordbench 2 Compagraphic Fonts	YES	YES, But would Suggest use of Better PostScript Fonts
	Compatible with Standard Adobe Type 1 and Member 0 Scalable Postscript Fonts	NONE	YES/YES
	PostScript Font Outlines on all Printers	NO	YES
	Maximum Number of PostScript Fonts	Unlimited to a total of 36	Infinity
	Download Extra Fonts to Postscript Printer	NO, Can't download extra fonts	YES, Automatic
	Landscape (Sideways) Printing on all Printers	NO	YES, Automatic
	Modern Printing Resolution (Quality) of Scaled Reduced and Enlarged Graphic Images	NO	YES, Same High Quality when Reduced and Enlarged
	Print any Text or Graphic in Colour	YES	YES
	No. of Colours Printed in Imported Pictures Graphics Printing (WAM & IFF ILM)	Limited by Screen Mode Used	Output as Original Image
	Text Width Compress and Expand	Good if Graphics not Scaled	Always Best Possible
Graphics	Variable Text Oblique/Glanted Text	NO	YES
	Both Positive and Negative Attributes	NO	YES
	Box, Rounded Box, Circle, Oval, Line, Variable Border & Arrow Drawing Tools	NO	YES
	Crop (Trim) to Size Imported Graphics	NO	YES
	Supports AT200/4000 AGA Chipset	YES, 256 On-Screen Colours	YES, 256 On-Screen Colours
	Create Border around Graphics and Pictures	NO	YES
	British-English Spelling Checker	YES, Colours Proximity with Legal & Medical Supplements	YES, Colours Proximity with Legal & Medical Supplements
	British-English Thesaurus	YES, Colours 62000 Synonyms	YES, Colours 62000 Synonyms
	Page View Magnifications and Reductions	One Fixed Print Preview	7 Variable stages - 25% to 400%
	Edit Document while Magnified or Reduced	NO	YES
Editing and Formatting	Search & Replace (190 words in 3000, 7 types) Index and Table of Contents	YES, Automatic	YES, Automatic
	Multiple Newspaper Style Snaking Columns	YES, 2 to 32	YES, 2 to 6
	Style Sheets, Master Pages, Title Pages	NO	YES
	Use Standard Amiga Clipboard for Cutting & Pasting to and from Different Applications	YES	YES
	Small Caps Typographical feature	NO	YES
	Conforms to Commodore's Amiga Standard Look & Feel Guidelines	NO, Non-Standard User Interface	YES
	On-Screen Maths (Column Addition)	NO	YES
	Import ASCII Text from any Word Processor	YES	YES
	File Migration, Upgrade and Support	YES	YES
	UK Memory Required	198k Minimum	198k Minimum
General Features	Free On-going Technical Phone Support	NO, £28 per year after 60 days	YES, Free of Charge
	Recommended Retail Price	£129.95	£99.95

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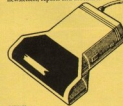
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Kelly Sumner quits



Sumner. Leaving after ten successful months

In a surprise move Kelly Sumner has quit Commodore after spending just ten successful months in the number one UK seat. Two senior executives are taking over in his place as joint general managers.

Sumner took control last summer in his thirteenth year at the company, and since then sales have soared to record levels and a new generation of Amiga has been introduced.

His move takes him to Gametek, a large US-based games company, where he is tasked with opening a UK office and setting up distribution across Europe.

The software house supports a range of consoles and computers including the Amiga, and has plans to move into CD technology.

David Pleasance rejoins Commodore, after spending time working in the US and Greece, as general manager for sales and marketing.

Former finance director Colin Proudfoot heads operations and finance.

"Both general managers are well known to the customer base and their joint roles should significantly enhance the strength of our UK operations," said a Commodore spokesman.

Commodore take tower trail

John Butters reports from Hanover

THE giant CeBIT technology show held in Germany was the launch pad for two new Amiga platforms and announcements on sound and graphics improvements for the range.

Commodore used the exhibition to unveil the 68030-based version of the top-end computer, which has been expected since the release of the A4000/040.

Externally, the A4000/030 looks identical to its older brother, but lift its lid and there are a couple of extra changes to be discovered.

They include slightly less memory, with this machine coming with four megabytes instead of the A4000/040's six, and the maths co-processor is optional.

For a model fitted with an 80 megabyte hard drive it will sell in Britain for £999 including VAT, and a version with a 120Mb drive will cost an extra £100.

The other new Amiga unveiled was the A4000T, a tower version of the 68040 machine.

It has a couple of enhancements over the Desktop version such as a SCSI-II interface and higher capacity hard drives.

Commodore also confirmed a report in last month's *Amiga Computing* that a digital signal processor (DSP) upgrade will be available later this year for their A3000 and A4000 series.

The chip is under development by the American giant AT&T, and the board will have built-in stereo Codec to provide digitising support for the chip.

Fully multi-tasking, in addition to its own two megabytes of memory will manipulate the Amiga's main chip and fast RAM.

It will run DCOs, an operating system licensed from AT&T, and feature microphone in/out for mixing.

Eventually the firm will add DSPs to all Amigas, and have plans for Amiga speech recognition.

Details of completely redesigned Amiga graphics were also revealed, less than six months since the launch of the AGA set.



A4000T: Tower system with SCSI II interface

Two sets are under development, one for high end use and the other for low-end. It is claimed they will be compatible with each other and earlier graphics. According to the manufacturer, the low-end chips have a resolution of 800 x 600 pixels, operate at 72Hz, include 16Mb of chip RAM and have an extended colour mode.

The other version - which is further into development - will have four custom chips, a true colour resolution of 1,000 x 1,000 pixels and multiple blitter support.

CD Amiga denied

A CD-BASED system using the latest Amiga graphics will be launched by Commodore before Christmas, it has been claimed.

According to trade newspaper *Computer Trade Weekly*, software developers around the world have already been given full details of the machine's specifications.

It will be powered by a 68020 processor, have the AA graphics chip set and include expansion ports to enable a keyboard, 3.5in disk drive and other peripherals to be added.

The manufacturer denies the plan, as they did when

Amiga Computing exclusively revealed details of a machine with very similar specifications in January's issue.

Kelly Sumner has, however, confirmed that there will be a new machine later this year which has the potential of lifting Amiga sales higher than last year's record.

There are fewer than 30,000 CDTV's in the UK and Sumner recently said that Commodore got three basics wrong with the machine; price, specification and support.

"I think CDTV's time has been and gone," he said.

News Briefs

CD assistance

CD ROM users can now join a non-profit making group which aims to provide information, technical assistance and a source of discounted multimedia hardware and software.

Each new member is given a free CD title and a bimonthly newsletter for an annual fee of £29.99. CD ROM User Group can be telephoned on 0424 730326.

Learning notes

AMSTRAD NC100 owners can now learn how to get more from their notepad from a new book just published by Kuma Computers (0734 844335).

NC100 Magic covers everything the machine can do including wordprocessing, storing names and addresses, keeping a diary and mail-merging. The 340-page guide costs £14.95.

Drive partner

JUST available for A1200 users is a hard drive installation disk which contains Read Me files and programs to prepare, partition and format.

An install program to copy the Workbench and associated files to the hard drive with a click of the mouse is also included on the disk.

It comes from First Computer Centre (0532 319444), and costs £5.99, but for guaranteed next day delivery the price is £7.99.

Storing more

A HIGH density external floppy disk drive offering Amiga users up to 1.76Mb of storage capacity is now available from Power Computing (0234 843388).

The £129 drive can read all Amiga disks, and works in continuing on an internal version which should be available within a few weeks.

AMOS price down

EUROPRESS Software have cut the price of AMOS Professional and released a free update disk to make the product compatible with the A1200 and A4000.

This means that newcomers can now buy the package for £49.99, a saving of £20 on the original price. EuroPress can be telephoned on 0625 859333.

Citizen go dotty with colour

CITIZEN's Swift range of dot matrix printers has been extended this month with the launch of the Swift 90C, a 9-pin colour model which will sell for £257.

It was shown for the first time at the CeBIT information technology exhibition in Hanover, and will be available in Britain from late spring.

The machine runs at 180 characters per second, and 216cps when printing at 12 characters per inch. Six fonts can be used in near letter quality mode, and two in draft.

The manufacturer claims that it is among the quietest models on the market, and it is Epson FX850-compatible.

"There is a large and continuing consumer demand for a printing solution that offers a low buying price, while maintaining high quality output," said Citizen's Anthony Odhams.

To satisfy this demand, we have built on the strengths of the Swift 9 and incorporated many features of the successful 24-pin Swift 2 series into the Swift 90C.

A monochrome version will be sold with a £233 price tag, with a colour kit available as an extra.



Swift 90C. Satisfying consumer demand

Scanning with OCR

AMIGA publishers are targeted for a new scanning package which contains three programs including optical character recognition software.

Bundled with a 256-greyscale scanner, Migraph's Scan and Save supports a range of formats for importing and exporting files to and from many painting and publishing packages.

Migraph's Junior OCR aims to transform the Amiga into a text reading system, recognising a wide range of typefaces

and fonts and learning new characters automatically. And Merge II enables two images to be joined. The process is claimed to be simple, easy and quick with a portion of each picture being shown on screen, including the overlap area.

The operator uses the computer's arrow keys to move one of the images around until the halves are aligned.

Requiring at least two megabytes of memory and a hard disk, the pack costs £149. Telephone 081-365 1102.

Choose your own drive

DEALERS will soon be able to add hard drives to suit individual A600 buyers' needs following Commodore's decision to stop stocking A600HDs.

At the moment the firm is selling hard disk versions of the machine in their £399 Epic pack, but they now believe it is better for each customer to buy a drive that matches personal requirements.

Kelly Sumner has said that hard drive machines bring confusion, with some people wanting a 40Mb version, whereas others need 80Mb or 120Mb.

Recently some distributors became Commodore-approved A1200 hard drive fitters, and many suppliers are now offering models with a Wang on-site service warranty.

Meanwhile, the number of A600 packs will also be reduced later this year, when the firm will have just one offering. The company is choosing between a standalone model or bundle.

A decision to pack the A1200 with software has already been taken. Commodore hope to sell the bundle across Europe although its contents remain to be fixed.

More bite...

DESIGNED to give the A1200 the performance of a workstation is ICD's new Viper 1230, an accelerator board featuring a battery-backed clock and DMA expansion port.

It runs from Motorola 68030 processor running at either 40 or 50MHz, has a coprocessor socket to enable a 68882 FPU to be added and can accept up to 32Mb of fast RAM.

Viper's DMA port (VDP) gives users the opportunity to add high-speed peripherals such as SCSI-II controllers, DSP board, modem or networking cards.

And Viper S2 is the first peripheral designed for the VDP. A SCSI-II controller, it offers data transfer rates of between five and 10Mb/second.

Included with the controller is a SCSI-II connector which can be used to support a 2.5in SCSI hard drive inside the computer.

Both are supplied with a year's warranty, which can be extended within 90 days of buying. The British distributor is Power Computing, who can be telephoned on 0234 843388.

Prices were unavailable at the time of going to press.

HiSoft move into multimedia

NEW multimedia hardware is promised for Amiga users following Bedford-based HiSoft's recent buy-out of Audio Visual Research (AVR).

The firm will take over all AVR's current and future business and use its name on all new hardware, while keeping the HiSoft name for software packages.

AVR are already a household name in the Amiga market, having produced such products as Stereomaster, Clarity 16, and Videomaster.

Their current range is marketed by Microdeal and this arrangement will continue under the new ownership. Future products will be sold by the parent company.

"This acquisition takes HiSoft into new markets and consolidates its already strong position in the Atari and Amiga marketplace," said HiSoft boss David Link.

"We shall be producing new hardware titles for these machines as well as investigating other platforms and we shall concentrate on multimedia solutions for popular home comput-



Link: Talking HiSoft into new markets

ers." The directors of AVR - Anthony Rachine and David Woodhouse - have joined HiSoft as technical managers for their products.

HiSoft and AVR can be telephoned on (0525 718181).



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News Briefs

Golden upgrade

GOLDEN Gate emulator users can now upgrade their software to give several new features including the ability to use Amiga floppy drives as PC drives under Windows.

The improvements also give better keyboard control and enable the emulation to run as a task in the Amiga environment, giving either more or less speed to Golden Gate.

Existing owners can obtain the update free by sending developer Vortex two Amiga disks and ten international reply coupons. They are at Falterstrasse 51-53, D-7101, Flein, Germany.

Programmers tipped

BUDDING programmers are targeted for The Commercial Games Programmer's Guide, a new addition to Kurma Computers' (0734 844335) range of publications.

It is not designed to teach enthusiasts how to program, but rather to give tips from programming commercial games on all major formats including the Amiga. Price, £9.95.

Joining on CD

TWO public domain libraries have joined forces to produce what's billed as the most comprehensive collection of quality Amiga software on a double CD.

The £39.95 package includes word-processors, home finance programs, games, music demos from groups all over the world, IFF artwork, samples and more. Telephone 081-683 6418.

Fiddle with fonts

MERIDIAN Software Distribution (081-543 2255) have been appointed British distributor of TypeSmith, an Amiga outline font editor.

Using the program, Amiga owners can create and edit PostScript, CompuGraphic and Softlogic outline fonts, and create new fonts with its drawing tools.

It also has the ability to import characters and symbols from structured drawing programs, create custom fonts and include a logo in your favourite fonts. Price, £169.95.

Get more morph for your money

PRICE cuts are the order of the day at Great Valley Products, who have just slashed the cost of two software titles – morphing program CineMorph and graphics manipulator ImageFX.

The recommended price of CineMorph drops to £49.95, a £50 fall. ImageFX which includes CineMorph becomes £249, £20 off the old price.

According to the firm's British distributor Silica Systems (081-309 1111), the move has been made possible because of better than expected sales of both products.

"Both ImageFX and CineMorph have



CineMorph: Costs down after high sales

received a very warm welcome in the UK and sales have soared well above what we initially predicted," said Silica's Andy Leaning.

"As a result the development costs have already been recovered and we are happy to pass on the savings now possible."

Amiga price lowest ever

A SUMMER promotion being run by London dealer Silica Systems has brought Amiga prices to their lowest ever, with standalone A500s selling for just £199.

Also on offer from the firm is the A600 with a price tag of £249, and 2Mb versions of the A500 supplied with Silica's Zool games pack for £229.

The Cartoon Classics bundle is also available under the promotion, also with a £229 price tag. The deals will end in early autumn.

Said Silica's Andy Leaning: "This is a great opportunity for 8-bit users looking to upgrade to get an Amiga for a fantastic price, and one which is unlikely to be beaten for some time."



A500: With Zool games pack for £229

TWO high resolution monitors capable of handling A1200 and A4000 graphics are now available from Herefordshire dealer New Horizon Computers' (0989 750260).

The Vanilla models use flat screen technology and can be bought with either 15-inch or 17-inch screens. They are aimed at people using DTP, graphics and design packages.

User controls on the front panel are horizontal and vertical size, horizontal and vertical position along with contrast and brightness.

Fixed to a swivel base, the screens cost £373.65 for the 15-inch model and £562.59 for the larger version and are supplied with two hi-res boot-up utilities.

Picking up speed...

AVIDEO-YC is an Amiga graphics and animation system due soon from Harrow-based HIQ (081-909 2092).

The package contains a combined 24-bit YUV double-frame buffer, frame grabber and genlock, plus paint, animation and utility software.

The animation hardware is claimed to be better than any other available, with 24-bit animations running at up to 17 frames per second.

For higher speeds a compressed mode allows for frame rates more suited to composite output. They are 12.5fps in 724 x 366 and 25fps in 724 x 288 pixel resolution. The software, AVPaint YV, is a true 24-bit wysiwyg paint package with a range of blending and colour mixing functions.

According to the firm, its most impressive feature is animation editing which allows users to work on their video animations in 24-bit, making it ideal for Imagine and Real 3D.

AVTools, meanwhile, controls the £599 system's advanced features, enabling basic image colour manipulations and conversion between the AVideo formats.

Wider printing

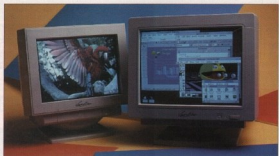
A LOW-cost wide carriage 24-pin printer is the latest addition to Seikosh's range of home and small business machines.

With a choice of nine fonts, the SL-150 is a 136-column model, boasting a print speed of up to 240 characters per second in draft mode.

It has 15k of memory, and other features include quiet mode, paper parking, high speed skip to accelerate printing of charts and tables and a paper-out sensor.

Priced at £349, an optional cut sheet feeder is available for an extra £127 and an year's on site warranty for £10.

Clean display for graphics



Hi-res: Monitors support Amiga graphics

The Best Selling Word Processor and Database just became even better... **VALUE!**

Since its launch, Pen Pal has become the
most popular package of its type

Not surprising when you consider the extensive features at your fingertips, combined with user friendly simplicity, it was bound to be a winner! In a comprehensive Word Processor test, Amiga Format commented "There is little to fault Pen Pal, it deserves to do well" - quite a prediction it seems! Format have since said that it's "Still the best value for money..." If you're not a Pen Pal user yet, we hope you soon will be, because at just £49.95... the best just became better, even better value!

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A superb package, with immense power, to fulfil all your Word Processing needs, and... with an integrated Database too! It's all so easy to use, you'll rarely need to refer to the extensive 250 page lay-flat spiral bound manual. Users frequently tell us that they've never found a program they get on with so well.

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AND... Remember, Pen Pal comes with full support for the new or experienced user completely free! Friendly help for all registered owners is just a phone call away.

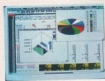
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Pen Pal is available from all good Amiga software Dealers or from SoftWood. Call for your list of stockists.

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For additional information, demonstration disks, or brochures visit your Amiga dealer

Both upgrades require: Amiga 500, 500+, 600, 600 HD, 1000, 2000, or 3000. Workbench 1.3 or 2.0, 1 MB RAM (additional memory recommended). Two disk drives or hard disk recommended.

* Suggested retail price.

Noddy brings education fun

THE sequel to Amiga education program Noddy's Playtime is now well under development by The Jumping Bean Company and is due for release this summer.

Aimed at children up to seven years old, Noddy 2 takes a similar approach to that used in the successful Noddy's Playtime to give a feeling of uniformity between the two.

Eight activities are located around the north west area of Toyland, and each is linked through a driving menu similar to that used in the earlier version.

Noddy can pick up and drop down passengers as he drives around, and the package contains a wordprocessing utility.

This is aimed at helping youngsters to become familiar with serious applications and to teach story telling skills and basic spelling.



Busy days for Noddy in Toyland

Have a great holiday on us!

WITH a £3,000 promotion starting this month, there's never been a better time to take out a regular newsgast's order to Amiga Computing.

Not only does the order guarantee your copy of the complete Amiga magazine and its unrivalled CoverDisk, but also gives you the chance of winning a dream holiday.

The winner can travel alone, or even take the whole family - providing the total cost of the holiday comes to no more than £3,000.

Turn to page 84-85 for an order form and full competition details - but don't waste time, the promotion runs for just two months.

ADPro finds paint links

ANOTHER upgrade has been announced for ASDG's Art Department Professional, this time giving the package closer links with other Amiga applications.

Version 2.3 has complete support for the Video Toaster Framestore file format, and provides a direct link with Deluxe Paint AGA and OpalVision's 24-bit paint program.

It has a loader and saver which can read and write Framestore's, and because it does not require a Video Toaster, it increases the processing options for those using Toaster images.

For example, Framestore's can be directly manipulated by all machines on a network, including non-Toaster equipped machines.

The British supplier is Silica Systems who can be telephoned on 081-309 1111.

Pacman no more

Many of our readers will have noticed the Pacman game on April's CoverDisk and we would like to take this opportunity to state that Pacman is a trademark of Namco Inc. Use of the trademark, which we freely acknowledge, was an oversight which we regret.

Our apologies go to Namco for any confusion this caused between the PD version on our disk and the original console and arcade game.

Software sources

PROGRAMMERS are being sought by a group called the Central Licenceware Register, who are keen to introduce new software to their existing collection of Amiga titles.

With the support of public domain libraries from around the world, the CLR aim to promote high quality software at a price affordable to all Amiga users.

Already programmers who have developed commercial packages have joined, including Len Tucker, Jeff Tullin and Steve Bennett.

It is billed as the most widely supported licenseware scheme in Britain, with 18 authorised outlets. There are others in France, Canada and Australia.

Each title costs between £3.50 and £4.99 depending on how many disks are required, and of this £1 is paid to the programmer.

For more information contact Essex Computer Systems on 0268 553963.

DIARY DATES

16 to 20 September 1993

Live '93

Organiser: News International (071-742 6000)

Venue: Olympia, London

A public consumer electronics show. Commodore plan to attend.

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.

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.

Overseas

3 to 6 June 1993

Summer CES

(010 1 202 457 8728)

Venue: Chicago, USA

A massive consumer electronics show with Commodore presence

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

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

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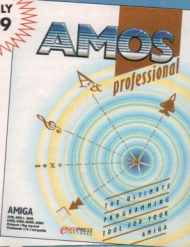
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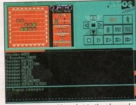
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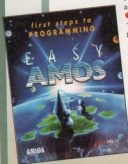
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Not as well known in this country as it deserves to be, Infofile comes to you courtesy of The Disc Company and is a product of the same stable that brought you Pen Pal, Final Copy, and Final Copy II.

It is unique in that it offers not only traditional database record keeping, but also the displaying of picture files and playing of sound samples. Combine this with the program's extreme ease of use and you have a database which offers something special.

The version found on this month's disk is complete in every way and identical to the Infofile found in shops except that there are fewer example databases included on our disk.

Once the main Infofile archive has been unpacked onto another floppy, users will have a complete auto-booting database program with enough space on the disk for a number of their own records.

Start the process by booting from the CoverDisk and double clicking on the AC61 disk icon, then on the Infofile icon. We've archived the contents of the original Infofile disk in order to fit it onto our own disk, so a window will appear and some text will warn you that you require a blank floppy.

Once you have confirmed that you

With this month's free database program, everything from addresses to sound samples and graphics can be brought together under one organising umbrella

the DISK

Information explosion

wish to proceed, the process of formatting a disk then unpacking the archive onto it will begin.

This can take some time, but is the best and most reliable method we have found. It does, unfortunately, require 1Mb RAM, but as no Amiga has been sold with less than this amount for well over a year, there should be few problems. As soon as

the Infofile disk is ready, reboot the Amiga and start the program.

Initially, the screen will be fairly blank, with a completely empty page which looks like a page of A4 ruled paper. We'll start to fill out the database by adding some columns, but first let's consider what kind of data we are going to store.

To keep track of, say, club membership

levels complete with names, addresses, telephone numbers, and subscription paid, we will need six columns with the titles Surname, Forename, Address, Post Code, Phone and Subs.

Creating these one by one is easy, and a matter of simply selecting one of the define options from the Column menu.

Start with Define Data, which is used

Scala HVT From Scala UK

The Scala HVT archive on this month's disk includes a fully functioning version of the package minus Save function and with a built-in limit of ten pages in each script. Within these limits, every reader should be able to set up his or her own presentation scripts and run them or use them with a genlock to overlay live video.

To prepare Scala HVT for use, you must go through the same process as used with Infofile by clicking on the Scala HVT icon and unpacking its contents to a fresh floppy.

Once the disk is ready and you have been given the finished message, reboot with the second floppy. A message concerning the demo will appear, shortly followed by the standard Workbench screen.

For a quick run through of some of Scala HVT's superb features, double click on the disk icon, then on the Scroll.script icon. This will load the player program, whose icon you can see in the disk window, and the Scroll.script itself which is a smooth and well presented set of titles for a typical home video. Once this has played a few times,



Scala's main control screen with a list of the pages in this script.

hit the Esc key to jump back to Workbench and click on the Example script icon. This is a very different script showing a few of Scala's wipes, scrolls, and special effects for use in presentations and rolling information screens.

One viewing of this and its companion script should be enough to whet any user's appetite, so he's quit out of the script and load up Scala HVT proper.

The main control screen is the first to appear, and is simply a list of screens, presently empty, with a number of buttons below it.

By clicking on these buttons, the user can load a script (though not save it in this demo version) run the script presently in memory, change, delete, show, or create a new page. Without a page to start with, we're stuck, so click on New to begin.

A requester appears asking the user to choose background image for the page. This can be any IFF image supported by Scala HVT, but for now we'll stick with those supplied on disk.

Click on the Pictures directory, then on Test Picture, then on OK and our background – the familiar TV test card – should appear.

The bottom quarter of the screen will be obscured by a control panel, but the user can flick to a full screen view and back again by clicking the right mouse button. Here is where most of Scala's easy to use features are accessed, so take a close look at the page control panel.

Buttons exist for a wide variety of text effects, such as outline, 3D, italics and so on, but we must first add some text. Click anywhere in the upper window to act

Amiga Computing June 1993



Virus Checker v6.22

Author: John Veldthuis

One of the most universally recognised virus killers in the business, Virus Checker has made several previous appearances on the Amiga Computing CoverDisk, and we make regular efforts to keep our readers up to date with the best system protection software.

Version 6.22 is the latest version at time of writing, so for those of you who have used this program before, just drag the relevant files from the CoverDisk to your system disk and carry on as usual.

Those new to Virus Checker will need a little more tuition, but not much more.

First, run the program by double clicking on its icon. A thin bar will appear on the Workbench screen and the CoverDisk will be automatically checked for viruses. Please note that if this is the first checker you've ever used, it is highly likely that you already have a virus.

In this case, the CoverDisk may already be infected, which means Virus Checker will alert you. Do not make the mistake, as so many have done in the past, of thinking that the virus originated on our disk! This happens every time we give away a checker and it's becoming tedious.

Right, rant aside, the CoverDisk should check out clean as a whistle and you should be able to access the menus. Click on the Virus Checker bar with the left mouse button, then hold down the right mouse button to reveal menu options to scan a disk for link viruses or damage caused by the Saddam virus, scan memory, and so on.

In addition, users of Workbench 2.04 or greater can click on the window zoom gadget to bring up an intuitive interface with more control over scanning options and default configuration.

For full details on how to use Virus Checker v6.22, see the on-disk documentation.



Faulty disk?

If you subscribe to Amiga Computing and your disk has been damaged in the post, please return it to:

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field. Please note that because the repeat data entry option on the Options menu is selected, pressing the Return key will skip to the next record.

This is a useful feature when inputting a large number of names in the same field over a range of records, but it can be turned off for now if you prefer to use the Return key rather than Tab.

As the form views share the data more or less as it will be printed, it is important that the user is happy with how the fields are organised, and to that end Infolite offers several incredibly easy to use formatting features.

For example, to alter the position of a record, simply click on the name of the field, hold down the mouse button, and drag it to its new position on-screen.

To change the size of the field, just place the mouse pointer on the right edge of the field boundary and drag it in a similar fashion to when we altered the width of columns in the list view.

Field names which are too long to fit in the boxes can be given more room by dragging the line separating them from the data area, but users should be aware that the names of fields will not be printed and are for on-screen use only.

Complete control of the printed area is

possible through the print menu. Choose Print Options from this menu and a requester will appear containing a number of variables which can be set to alter the printed information.

The default setup is for a print area five lines high and 30 characters wide, multiple columns on each page, and no labels, but by changing these values, the user can

produce a wide variety of reports. For now, accept the defaults and click on OK, then select Page Setup from the same menu.

This requester enables the setting of the more usual print options, such as length of page, margins, draft/letter quality, pitch, and lines per inch. It is preset to the best values for an A4 page, so leave it

alone and click OK.

At this point, printing a report is accomplished by selecting Print... To Printer for hard copy or Print... To ASCII File for a copy of the output on disk.

The latter option results in a file containing only those fields covered by Print Options being saved to the same directory as Infolite for later use as, say, a mail merge file.

If you have a printer connected and wish to see the output from Infolite, type a few names and addresses into the database we have just set up and print them. By adding a few extra columns between Address and Post Code, the town and county can be included for a complete address label, and the result is an impressive automatically generated list for printing to sticky labels or envelopes.

That's about all there's room for in this lightning tour of Infolite's basic features, but there are many more ways of using the program and many menu options we haven't covered. For full details on how to get your hands on the complete Infolite manual, see our special offer on page 30.

a bit of flourish. On the extreme left-hand side of the control panel is a blank box. Click on this and the wiper requester appears giving us access to the many effects which can be used to govern how objects are placed in Scala screens.

At the moment there is no designated effect, but we can quickly find one we like by clicking on each icon then choosing the Show option.

Personal favourites will vary from user to user, but some effects are obviously designed to be used on entire screens or very large brushes and so are inappropriate for lines of text. Once a suitable effect has been found, click on OK to return to the control panel.

We will now add a brush to the ensemble, so click on the Brush button and choose the Symbols drawer on your Scala HVT disk. Go into the Sports sub-directory and select the 1stPrize1 brush, then click on OK.

At first, the medal will be represented by a ghosted outline, so place it wherever you think best and click first the left then the right mouse buttons.

If you like, it is possible to add all the outline, shadow, and 3D effects to a brush as well as text, but for now we'll just add a wipe. Click again on the blank box to the



Many a true word spoken, eh?

far left and look in the wipe requester for the slide icons.

These are the bold arrows pointing in eight different directions, and they indicate the direction in which our brush will slide (or scroll) into the screen. Choose any one you like and click on Show.

Nice, eh? To further customise our mini presentation,

we'll add a second page. Go back to the page control panel and click on OK twice to return to the main screen, then on New to create the second page.

This can be any combination of background, text, and brushes, just so long as it comes after the first page. Its real purpose at the moment is to show the transition from one page to another, so experiment and produce your own page.

When the second page is ready and we're back at the main control screen, look carefully at the two columns on the right.

One shows the wipe to be used from one page to the next, the other the time taken between pages.

At the moment, both wipe boxes will show a blank, so click on page 2's box and add a suitably impressive wipe then click on the Run! button.

To vary things a bit, the wait boxes can be set to any number of seconds or to respond to mouse clicks. Experiment with these two columns to generate the best effects and most suitable transitions for your presentation or video titling effort.

After all, now that you know the basics of using Scala HVT, creating all sorts of scripts using brushes and images from a paint package should be child's play.

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!

GETTING STARTED



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

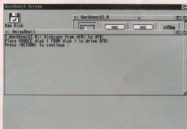
of the first things you must do when get your CoverDisk is make a backup copy, then put the original CoverDisk away for safe keeping. As a rule you should also do this with the majority of your software collection.

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 dFD: TO dFD:
```

When prompted, put your CoverDisk (the source disk) in dFD: 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 program from a CoverDisk to your compilation, Workbench disk or even your hard drive.

To do this you'll need the COPY command. 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) ALL
```

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.

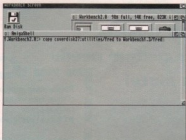
For example, if you wanted to copy a utility called FRED from CoverDisk 27's Utilities drawer to a directory called FRED on your Workbench disk, you'd type:

```
COPY COVERDISK27/UTILITIES/FRED TO WORKBENCH.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 this 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.

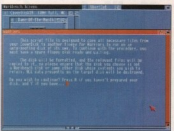
De-archiving programs which are on the CoverDisk is a very simple task. If a program has been archived there you will need a blank disk to dearchive it onto.

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 "y" 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 upword machine you must boot with the CoverDisk write-enabled 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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Jakki Brambles Column

Hi I'm Jakki Brambles and from this month on I'll be writing this column exclusively for INDI.

So knowing that all you folks are Commodore fanatics, I will be aiming to provide you with the best inside information on what's new in the Commodore world together with the latest hints and tips.

Since agreeing to write for INDI, I have been amazed at how big the Commodore market place is. INDI tell me that their sales desk has been swamped with orders for their Amiga 1200 hard disk offers.

Not surprising, when you consider that they are offering a product officially covered by Commodore maintenance through Wang UK.

Of course, you can buy a non standard Amiga with a dealers own warranty but then Commodore do not give their approval with out a great deal of thought, I know what I'd prefer to buy.

Congratulations to David Pleasance on his appointment as General Manager at Commodore as he takes the helm from Kelly Sumner. David has been at Commodore for many years and has most recently been responsible for the development of their business in the States.

Commodore tell me that the A1200 Comic Relief Pack has been a real success, thanks to all you generous Sleepwalker fans. Don't forget Commodore donate £10 on your behalf to the Comic Relief Fund for every Pack sold.

By now you will all know about the new Amiga 4000/030 and it's amazing capabilities but more about that next month, especially if I can get my hands on one before they are all gone!

What I need now is loads of feedback from you. Tell me about your Amiga and if you have any tips that may help others or problems that I can pass on. The best letter will be printed and the winner will receive a suitably excessive prize. All letters to *Jakki Brambles Column C/o INDI Direct Mail, 1 Ringway Ind. Estate, Eastern Ave. Lichfield, Staffs, Ws13 7SF.*

See You Next Month.
Kind Regards

A handwritten signature in black ink that reads 'Jakki Brambles'.

A logo for 'jakki brambles' featuring the name in a stylized, lowercase font. The text is white and set against a dark, rounded rectangular background with orange and blue diagonal stripes. The background is part of a larger graphic element that resembles a stylized leaf or a speech bubble.

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Knightmare

scenario

Can the once lowly games machine make the grade on the big screen? Paul Austin asks the people already answering that question at TV's leading role-playing show, Knightmare

Thanks to the unrivalled success of the Amiga games market, it's been a long hard slog for the Amiga to gain any reputation as a serious machine – even though hardware like the A4000 can literally outperform any PC on the market when it comes to graphics and general multimedia.

You only need to mention the word Amiga to the average technologically-illiterate media pseud to see the bigoted aftermath of the games years seeping from every spritzer-soaked pore.

Thankfully some of the industry's more forward-thinking companies are finally seeing the light and beginning to let the Amiga play a leading role in their productions.

At the forefront of this new wave come Broadword Television Productions, the creators of Knightmare, Cyberzone, and Timebusters – the UK's leading virtual reality and adventure game shows.

Before delving into the technicalities of production I spoke to the creator of Knightmare, and Broadword's leading light, Mr Tim Child.

Although 46 years young, Tim still proudly claims to be a games player at heart, and in fact it's exactly his interest in games and computers in general that inspired the creation of Knightmare and indeed many of the other VR games shows in the Broadword stable.

Although firmly entrenched in the TV establishment, Tim was once a member of the oldest profession in the world – yes folks, a journalist!

And it was during these formative years as a news hound that he first came into contact with the newly emerging games scene.

Way back when the Amiga was merely a twinkle in the eyes of a bunch of Californian hippies, Tim was happily blasting baddies with the best of 'em, courtesy of a com-

plete collection of early micros.

Although I'm painting a classic picture of a games junkie, Tim's interest in the finer things wasn't merely for fun. In fact he was one of the first people ever to grace the small screen as the Dominic Diamond of his day – admittedly a slightly insulting comparison, but thanks to these early exploits as a TV games presenter or reviewer the seed was sown for the VR TV shows of now.

Aside from simply enjoying the newly-emerging games genre as a competitor and presenter, the underlying narrative

within such classics as Manic Miner screamed out to be taken a stage further, thereby providing a whole new strain of TV show for the ever-eager video kids of today.

VR EXPLOSION

Although heading for its seventh season, Knightmare was by no means the first VR show to hit the small screen. Back in 1989 Tim initialised the VR explosion with a forerunner entitled The Satellite Game which appeared on the now defunct BS8 network. Unlike the very latest

Broadword productions, The Satellite Game was almost entirely Amiga generated, taking advantage of an accelerated Amiga 2000 in concert with designer software from Freescape – a duet which combined to complete the illusion of a futuristic version of the familiar Dungeons & Dragons scenario.

Although slightly out-gunned by the more technically advanced shows of today, this now long-forgotten show will always hold the title of the world's first VR games show – and mark Tim's first steps on the road to a virtual success story.

With the history lesson complete, it's safe to move on to the creation of the show itself. As you may have already guessed, the programme is by no means an Amiga-only production – in fact the Amiga element is combined with high-end dedicated graphics hardware such as Matisse and Silicon Graphics machines.

Due to the format of the show, everything involved is very much part of a layering process with the aforementioned dedicated graphics systems providing the 24-bit backdrop while the Amiga produces the live foreground imagery such as scrolls, minor monsters, quest objects and so on. Amid the growing digital chaos comes the travelling human contestant, sandwiched within a sea of computer graphics. Of course in the studio our pre-pubescent hero is merely stumbling around on a plain blue background onto which the various effects are applied via an advanced chromakeying system which can even generate shadows on the imaginary backdrop.

On the Amiga side things are slightly simpler with the resident A2000 being plugged directly into a genlock housed in the studio's edit suite. Then the various

Nothing is Real,
Everything is Permitted





The bottle for the virtual world begins as the Amiga and PC plug it out for supremacy on the small screen

scrolls, trolls and assorted graphics are applied in real-time.

Tim stressed that the game must remain exactly that – a game, in which the contestants can really become immersed – otherwise no matter how much technology was thrown at the screen, the kids would destroy the illusion with indifference when forced to hang around for hours between tasks slowing losing the “Alice in Wonderland” feeling that makes virtual reality so appealing.

Due to this need to maintain the illusion, the Amiga is the perfect tool for real-time changes inspired by the actions of the contenders. If instant alterations are called for they can be edited from existing material on disk or, if necessary, generated afresh by the program's resident Amiga artist Jan Thwaites.

In order to discover more about the Amiga graphics involved, I approached

the voluptuous Miss Thwaites with a few probing questions about her past experience, graphic creations and involvement in the wacky world of broadcast TV.



Game graphics becoming an even more familiar feature on TV



Maps and mazes, all classic elements of the role playing environment

In the best traditions of Amiga graphics, Jan started her career generating game graphics, but this was by no means the beginning of her artistic exploits. Originally she followed the classic artistic route of art school then the Royal College of Art.

On entering the wide world of graphic art, the inevitable letterheads and logos ensued, followed by a chance meeting with the aforementioned Mr Child who through various means convinced her to join the Broadword team as an in-house graphic designer responsible not only for the Amiga elements but also many of the real world props seen in the show.

As is the norm with professional Amiga artists, I was fully expecting a long list of expensive hardware and associated

software to be quoted when the inevitable question of kit was asked. However, much to my surprise there was no mention of Harlequins, ADPro or in fact anything of that ilk.

In fact Jan creates all the Amiga graphics on perhaps the lowliest setup imaginable – just a bog standard A500 along with the inevitable copy of DPaint.

SOLID TALENT

Amazingly enough there isn't even a hard disk on hand, and as a result all the graphics created for the show are ported to the studios on floppies and then installed on the edit suite's resident A2000 ready for incorporation into the action.

Although quaintly old-fashioned, the lack of expensive hardware only goes to

Amigas in the business...

Although *Knightmare* is one of the most innovative applications of the Amiga in television, it's by no means the only one. In fact a whole host of well known shows employ the machine at the heart of their videographic systems.

Catch Phrase

Catch Phrase, the ubiquitous graphical guessing game hosted by Mr genial himself, Roy 'It's good to see you' Walker, is almost certainly the most Amiga-intensive show around, with literally every animation used emanating from the bowels of a bank of networked A2000s.

Due to the number of anims required, all of the animated creations are fairly bog standard DPaint jobs running at around 15 frames per second.

Obviously with hundreds of individual anims going into every series, stretching the machine to its graphic limits

would be too time-consuming and expensive to contemplate within the commercial constraints of broadcast TV.

However even under such restrictions, Catch Phrase still manages to be one of the most popular games shows in the business, once again stamping the Amiga's authority as the most flexible, affordable and creative computing formats around.

Catchword

According to our illustrious editor, the Amiga's influence isn't restricted south of the border, thanks to Catchword, which although similar in name to Catch Phrase, was in fact a slightly more cerebral Celtic game show.

Unlike many of its contemporaries, Catchword employed the Amiga on a much higher graphic level, with ray-traced graphics running in real time with the assistance of a Harlequin 32-bit board, and dedicated tiling to

boot. The titles were all Amiga generated via a custom package while the ray-traced elements appeared courtesy of Real3D. In short, almost the entire graphic output of a commercial TV show from what many still consider a games machine.

The Chart Show

Although a link between *Knightmare* and one of the UK's leading music shows may seem a little tenuous, they both share a similar mixture of dedicated graphics hardware and Amiga imagery.

In a similar vein to *Knightmare*, the Amiga element takes the form of foreground graphics that appear in the form of icons from which specific information on the artist in question is revealed.

Although very reminiscent of the normal Amiga environment, the actual interface is a custom-built software package designed specifically for the show.

prove that no matter how high profile a project may be, nothing – not even state-of-the-art software – can replace solid, no-nonsense talent.

This seemingly idyllic production process may sound pretty straightforward but nothing is ever that simple, and in fact Jan spends the entire four weeks of the Knightmare shoot on hand in the studio ready to generate fitting graphics for the ever-evolving plot.

Obviously much of the groundwork can be done beforehand, such as empty scrolls and assorted treasures, but when needs dictate Jan can be given as little as five minutes to produce a graphic to suit an unforeseen twist in the plot.

After the revelation surrounding the lowly beginnings of many of Knightmare's graphics, the obvious question was when – if at all – will the new AGA graphics available on the A4000/040/030 and 1200 make their way onto the silver screen?

Not surprisingly Tim already has an A1200 and is busy experimenting with its inclusion into Knightmare – and indeed new shows – already in the pipeline, but for now at least, old-style graphics will suffice.

With the apparent profusion of expensive dedicated graphics systems already playing a major role in the show the question had to be asked: Why use the Amiga at all?

Not surprisingly one of the main fac-

tors in the Amiga's favour is cost. With the average Matisse or Silicon Graphics workstation approaching and indeed passing the £70,000 mark, a couple of hundred for a standard Amiga obviously has its benefits.

However it's not merely a question of cost, and in fact there would be little or no advantage in using such expensive hard-

ware for the kind of work the Amiga already does all too easily.

Admittedly there may be a difference in quality but if such a small improvement comes essential, a cheap 24-bit board or AGA machine could eas-

ily make the grade.

Although the once-humble games machine can't as yet match the performance in pure speed terms when compared to dedicated graphics engines, there's no doubt that the gap is closing while the huge price difference continues to advance the Amiga's cause.

The only question is: Can the machine stand up in an ever-more vicious market? In my opinion at least, the answer has got to be a yes – no matter what the cost.

THE ULTIMATE

Considering the increasing popularity of the consoles and a threatened new wave of head-held Nintendos and Segas on the way, the Amiga's future has to be in what it does best – multimedia, static graphics, animation, ray tracing, music –

A question of convenience

With the apparent success of Knightmare, the obvious question was: Why had Broadword chosen the PC as its vehicle to the virtual world for its next creation, Cyberzone?

The choice to plump for PCs was even more strange when you consider that the latest VR arcade games from Virtuality – the company responsible for normally sensible people developing an insatiable urge to sport silly hats – are powered by well-hidden Amiga 3000s deep within the crash bars and polished plastic of the hardware.

After quizzing Tim about this slightly curious choice, he openly admitted that the decision was purely one of convenience, and hinged around availability of suitable software.

By chance, PC software ideal for the Cyberzone concept was literally ready and waiting. All that remained was to network five 486 machines together and the show was in business.

in short, the kind of roles that have made it the ultimate productivity machine.

With the promised arrival of the AGAPlus and AAA chipsets in Autumn of 93 and Spring of 94 respectively, it appears that Commodore have finally learned the lesson that simply sitting back and counting the profits doesn't

make for good business.

And with the new formats promising enhanced graphics and sound – 24-bit standard plus 16-bit stereo sampling – along with an 060 processor, the future is looking better than ever for the serious side of Amiga computing.



Treasures, swords and even monsters in the homes of millions courtesy of good old DPaint



Babylon 5

Although British TV is becoming ever more Amiga-friendly, Blighty is by no means the only place where the machine is making its mark. In fact on the continent – especially in Germany – the Amiga is the premier graphics engine at the heart of countless cable stations.

Such success will no doubt be repeated in the UK as the promised cable explosion takes hold – if it ever happens.

However budget broadcasting isn't the only future for the Amiga. Hollywood has already spotted the potential of the machine thanks primarily to the award-winning MorphPlus morphing package from ASDG which has already played a major role in film and advertising.

Even more exciting is the machine's excursion into science fiction courtesy of Babylon 5. As you may be aware, following the huge success of Star Trek – The Next Generation, there's been something of a sci-fi explosion

over the pond with a whole host of shows springing up in its wake.

At the forefront of these shows comes Babylon 5, one of the most graphically lavish productions ever undertaken for network broadcasting. Literally fit to burst with Amiga graphics including state-of-the-art morphing and 3D modelling generated by the Amiga in concert with NewTek's famous Video Toaster.

With the huge success of the Toaster in the American market, the Amiga has become almost commonplace in both cable and network TV stations. With its position being strengthened by Toaster-specific ray tracing software entitled Lightwave – a program which, alas, isn't available in the Europe.

It has become so popular that in many cases it has proved more attractive than the Toaster itself, resulting in the bizarre situation of a \$17,000 graphics card becoming almost a dongle for the software which comes bundled with it.

Bad Influence

In keeping with the Knightmare tradition of children's television, Bad Influence again uses the Amiga but unlike the other shows the machine's output doesn't play a direct role in the show itself.

Rather than overlaying graphics, the Amiga element appears at the very end of the broadcast in the form of the program's Data Blast section, which when viewed normally appears as a blur of graphics flying by illegibly at the end of the programme.

However, it isn't designed to be seen in real-time. In fact to appreciate Data Blast a VCR is essential, the idea being that the show – or at least the Data Blast part of it – should be recorded and then the played back using the frame advance feature on the VCR. This in effect turns the pages of information contained within the section – all of which are of course generated on the Amiga.



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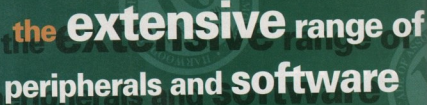
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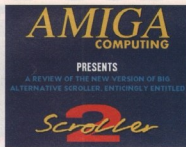
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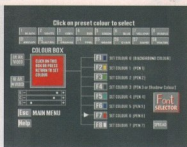
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Scroller 2 loader screen



Scrolling a screen like this is relatively simple with Scroller2



The Colour Palette menu

It's probably fair to say that the original Big Alternative Scroller (BAS to its friends), which was the precursor to Scroller2, made more than a favourable impression on domestic and semi-professional video producers - and perhaps even a few pros.

Who knows how many holiday and wedding videos it has captioned? I expect it is rather more than a few.

Since BAS was launched several years ago a lot of Amigas have flowed under the bridge and Alternative Image rightly felt that a new product was needed to bring an old faithful up to date. So enter Scroller2, along with a host of brand new features.

FLOPPY DISKS

It has been designed with the most popular Amigas in mind. Only a megabyte of memory is required (preferably as Chip RAM), which means that all but the most witless Amigas can use it.

However, hard drive users will be disappointed that Scroller2 can only be used from floppy disk and power users like me may be a little cheesed off that it falls over at the least sniff of an accelerator (at least it did with my normally placid GVP Combo card). Still, not being in the majority I suppose I shouldn't complain too loudly.

So how does Scroller2 shape up in action? The first thing to do is to reboot your Amiga with the supplied Scroller2

Program disk. Being a non-standard DOS disk (and non-copyable, though a backup is provided), Scroller2 cannot be run from either Workbench or Shell, and neither will it multitask.

The reasons for this are both historical and practical, since bypassing AmigaDOS provides an improved scrolling performance and makes better use of those Amigas with limited memory capacity.

Once running, the main menu screen presents a set of choices. The beauty of Scroller2 is that every aspect can be easily accessed using either the keyboard or the mouse. Function keys provide quick access to each of the major sub-menus or operations and clicking the mouse on buttons also gets you to the same places - so the choice is yours.

In fact, once you've learned the ropes you'll very quickly adapt to mixing function keys and mouse action to speed your way around Scroller2.

Furthermore, many of the sub-menu screens include additional sub-items. For instance, the Font Parameters menu contains shadow settings and several spacing

commands, while the Video Parameters menu has settings for the number of colours (four or eight), genlock mode (on/off and Auto) and a test pattern loader. Again, keyboard or mouse commands make every choice simple and efficient.

Helpful as ever, Alternative Image have made sure that a well thought-out demo is included to show you just what Scroller2 can do. And this is an ideal place to start. Simply by pressing the F1 key, a whole scrolling demo springs to life, demonstrating all the features of Scroller2 both effectively and, at times, humorously.

EMBEDDED COSTS

After you've watched it go through its paces a couple of times you'll be itching to have a go yourself. But wait! A little study at this stage could well bear fruit later on.

The demo is also an ideal illustration of how Scroller2 uses embedded control codes. These can easily be seen by exiting the Scroll using the Escape key - which, incidentally, is probably the most useful key in the whole package, as it is used to halt or exit almost every operation and return to the previous or main menu screens.

By subsequently moving into Text Edit

mode (key F3) and pressing the Control key, a horde of strange little boxes appear among the more familiar words and letters.

Just like text, these codes can be inserted or deleted at will and provide a direct way of controlling various aspects

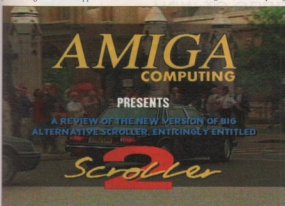
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Making life easier

As a bonus, several extra programs are included on a take-them-as-you-find-them basis to provide a means of converting Amiga fonts into Scroller fonts, standard Ascii text files into Scroller-compatible text and bitmapped graphics into font objects which can be used within Scroller2.

Admittedly, the programs tend towards the rough-and-ready, but they all manage to do their intended jobs without too much hassle.

There are limits, however. Converted fonts should have no letters wider than 64 lines (otherwise they will not display correctly) and graphics can only be eight colours maximum - though in hi-res these certainly look crisp enough.



Here's what can happen when you genlock graphics over video



The rectangles represent control codes which can be embedded into Scroller text for special effects and internal control over speed, fonts and colours



Special characters can be made with a paint program and converted to Scroller fonts with the utilities provided

of playback (such as pause times and fades) and certain text characteristics, such as shadowing, colour and font.

You can learn a lot about Scroller2 just by watching the demo and bearing in mind just where and how the different control codes are used.

But it's all very well watching someone else's work. How do you go about making your own? By first applying a bit of planning. If you can decide in advance what you want to achieve then everything becomes easier. Write out what you want to say on-screen in the order you want to say it.

Perhaps, for example, you need to make a set of end credits; so list who did what, who gets credited first, the size, colour and style of lettering that will be used and then start work in the text editor.

Don't worry if you don't include every-one first time around, because Scroller2 is quite forgiving. Words can be added, deleted and easily changed at any time - and that goes for the font as well.

The editing screen is, somewhat unsurprisingly, where text editing takes place. Entering text is very similar to using a simple wordprocessor and at its most basic involves just typing words onto the screen.

But of course this will probably look rather dull, so there are unpleasant ways of sprucing the text up and turning the really mundane into the relatively marvellous.

Through the use of a simple pop-up

control panel - which is good news for Amiga 600 users who don't have the standard numeric pad on their machines - and function keys, every aspect of Scroller2's text functions can be utilised to make interesting titles and captions.

Font selection, colours, justification, speeds, pauses, dissolves, changes from vertical to horizontal scrolling (and vice versa), shadow placing, graphics symbols, access to "exotic" and foreign characters and several other miscellaneous functions are all at the user's fingertips.

INDIVIDUAL FONTS

In addition, further tweaks can be made to the way the text plays back by changing the spacing and shadowing of each individual font which is loaded into memory.

Once you think you're getting somewhere, it's easy to check your progress by jumping to Scroll mode and seeing how it all looks. This is also a good time to try adjusting the scrolling speed and judge how fast the text may need to go to be easily read.

Speed can be instantly changed by pressing keys on the numeric pad (unless you are an Amiga 600 owner, which means you have to use control codes instead) or stopped altogether by hitting the 0 key. As and when you feel like it, work can be saved to a specially-formatted text disk.

I'm not entirely sure how many fonts

It's easy to check your progress by jumping to the stroll mode and seeing how it works

can be held on the system at a time, as this is governed by the amount of Chip RAM available on the Amiga in use, though a megabyte should hold at least ten.

With some thought, system fonts can be fairly easily managed by making up custom font disks with which to replace the default fonts, something I'm sure many users will be anxious to do. Then its a relatively simple task to load your favourite set when you need it.

CUSTOM FORMAT

Speaking of disks, Scroller2 uses its own format for both text and font disks (which, incidentally, are not interchangeable) and though it is possible to copy these disks through AmigaDOS (though currently only with a copier like X-Copy or D-Copy under WR2.X or greater) there is no way to monitor how full a disk might be or to fix it if something goes wrong.

And if anyone believes that nothing ever goes wrong where computers are concerned then they are very foolish. So some non-DOS disk management program should really be included - unless the data disk format can be changed to DOS, of course.

Let's be clear, Scroller2 is not without its problems, due mainly to its non-AmigaDOS operating system making disk management something of a battle and the Scroller Utilities also contributing to the confusion.

There are also areas of Scroller2 which need completing, particularly the help areas, and a few bugs need fixing, but on

Who needs a titler?

Although programs such as Deluxe Paint IV can fulfil many of the Amiga videographer's titling needs, there are times when it cannot successfully provide functions such as smooth vertical scrolling or horizontal crawling, not to mention special screen effects.

While Scroller2 offers little in the way of wipes and other effects - in contrast to much more expensive programs such as Broadcast Titler - it does provide easy access to scrolls, crawls and several other effects, making it an ideal companion to Deluxe Paint, even for the more accomplished video maker.

the whole the benefits easily outweigh the drawbacks and in any case the Scroller Utilities are included more as tools which users may find useful rather than completely user-friendly programs in their own right.

Alternative Image are the first to admit that Scroller2 requires some tidying up but they report that so far most users have been more than satisfied with the product, warts and all.

To sum up, Scroller2 provides smooth scrolling and crawling text with plenty of speed and other controls, a generous range of presentable fonts and a simple-to-use interface.

It has its idiosyncrasies of course, but on the whole it works well and most purchasers should find it good value for money - especially if they are upgrading from BAS.

And if you think that eight colours isn't enough for a titling package just make a note of how many colours the professionals use next time you watch the box. You might just be surprised!



● Registered BAS owners can upgrade to Scroller2 for only £31.50 (inc p&p), which is considerably less than the £80 retail price. Upgrades are only available direct from Alternative Image, 6 Lothair Road, Aylestone, Leicester LE2 7QB.

SYSTEM ESSENTIALS

RED = Essential YELLOW = Recommended



The bottom line

Ease of use 7/10
Implementation 6/10
Value for money 8/10
Overall 7/10

Supplier: Alternative Image
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Price: £80

Those new features

To whet your appetites, here's a selection of some of the new goodies which are built in to Scroller2:

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Although the title points towards an upgrade rather than a revolutionary new release, don't be deceived. The name may be similar, the graphics familiar and the interface seemingly identical, however it's under the skin where the real beauty of B&PPro2 starts to show.

Before the guided tour begins, now might be a good time to explain the basic concepts of the package before newcomers become hopelessly confused by what can appear to be a combination of music, plumbing and DIY.

Unlike the majority of Amiga sequencers, B&PPro is a true Amiga package – born and bred – as opposed to a simple port-over from the ST and PC market.

Although not necessarily a fatal problem – as Dr T's often prove – porting does mean a lot of the Amiga's natural talents are often overlooked or ignored.

However this particular accusation certainly can't be levelled at B&PPro – no ugly green screens, full multitasking, ARExx, colourful point and click controls, pop-up requesters and mouse control with everything. In short the stuff that makes the Amiga the most flexible and friendly machine on the market.

If you've used sequencing software in the past you've probably already noticed B&PPro2 isn't exactly standard. Rather than assigning a simple track to each Midi

channel the software allocates a separate pipe which sandwiches the track or sequenced section between an input and output pipeline.

The whole idea is that the package works like a sausage factory but rather than processing porkers these same principles are applied to Midi data, internal Amiga sounds and multimedia files.

For now we'll stick to the program's primary concern, which of course is Midi. To set up a pipeline you first pick any one of the 16 default tracks or alternatively create a new one – which of course can be renamed when necessary.

Due to the program's Midi tendencies, every track has a Midi In tool by default – without which you can't even squeeze a solitary note into the sequence courtesy of your keyboard.

TOOL SELECTION

This is a prime example of a tool in action – in this case an input tool. If you were to select the ARExx real-time tool and drop it into a pipeline it would then automatically replace the Midi In as the input and from then on process incoming ARExx rather than Midi data.

Due to the immense potential of tools the whole section will be devoted to a more detailed examination later on, but for now we'll continue into the sequencer itself, bypassing the toggleable play, mute

Piping and friendly with it

Experience state of the art music and multimedia in concert courtesy of Bars & Pipes Professional 2. Paul Austin explores the most exciting software release to hit the Amiga in months

and record buttons in the process. It's within the confines of the sequence window where you can examine and edit the results of the recording process. With the assistance of a well-placed mouse click each sequence opens its own unique editor complete with the entire passage for that particular track.

This can then be view, edited or printed as either classical notation, hybrid notation, piano roll, or using the latest addi-

tional of tablature – notes displayed as fingering positions on a guitar fret board.

If one display mode isn't enough, a combination can be used to suit any taste. In addition, a whole host of less traditional musical information can be added including volume, pitch bend, mono and polyphonic aftertouch, control change, program change, chords, rhythm, lyrics, time signature, key, scale and even dynamics. In short, if you want to view,



The heart of B&PPro2 revealed with a quick bit of plumbing creating completely original sounds plus three methods of transport control all on the same screen



An automated mixing spectrometer. Just sit back and watch the machine do all the hard work for you...

Through the edit window...

In the top right-hand corner sits the only permanent feature of the B&PPro2 interface, namely the 16 edit windows, each of which deal with a completely separate aspect of the editing and production process.

Without this modular design, working with the package would be almost impossible due to the huge variety of available windows.

Even in its present form the screen

can still become very cluttered and as a result a hi-res display, whether it be flicker fixed or productivity, is a real bonus. However Blue Ribbon have done their best to solve the problem by implementing double height and width display on WB2 machines.

The result is that elements can be left out while the screen scrolls around in effect providing a scrollable window on the entire interface.

Accessories



For here you can implement the program's expansion options by in effect plugging additional software into the B&PPro2 interface.

By default 14 basic accessories come as standard allowing connection to both software and hardware, but it's also here where other elements of the Blue Ribbon Patch can be added including SuperJam!, Rangemeister and SyncPro.

Once installed each becomes part of the B&PPro interface sharing its particular talents for the common good with perhaps the perfect example being SuperJam! which

automatically places its musicians in the form of tools directly into the tool box ready to be slotted into your chosen track for recording alongside your original creations.

Flags



Although already briefly mentioned, its within the flag window where loops, key points, punches and in fact all the flags can be set numerically, and like all the timing options the numeric display can be toggled between measures and SMPTE as the preferred timing medium.

hot

print or edit any aspect of the piece it's simply a matter of selecting the option from the pull-down.

Assuming the environment is now to your taste, editing can begin, and to assist the process each window contains a complete set of point-and-click edit modes.

The available options include a magnifying glass allowing access to specific note information, a pencil for note addition, a magic wand for altering existing notes, a hand for dragging notes, an eraser for deletion, a toolize option which applies a specified tool to any selected notes, a bounding box to make the aforementioned multiple selections and finally a step time option allowing note entry via predefined settings.

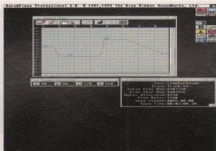
OUTPUT PIPE

The next four icons allow adjustment of the note settings and as a result any note length and volume can be set for additions both in step-time or during free-hand editing.

The final four buttons further enhance display and editing via twin zoom buttons, a playback option - either with or without additional tracks - and finally a toggleable measure-to-SMPTE time display.

Assuming editing is complete, next up comes the tap at the beginning of the output pipe. From here you can either cut the output completely, play pre-recorded notes or select the default thru mode to hear your live input in concert with the existing sequence and any additional tracks.

From here, the pipeline flows out and enters the MIDI Out tool ready for input into the chosen medium or keyboard courtesy of the channel selector at the very end of the pipe. As you can see from the



The tempo map in action plus instant info courtesy of B&BPro2's pop-up information requester

screenshots, the pipeline and sequencer aren't the only elements within the Track window.

Above the tracks themselves come the program's group, playback and multiple edit features.

From left to right: The options start with the solo selection button which toggles the output of the sequence dependent on track selection.

So for example if just one track is selected the sequence will cut and re-connect the valves to either solo the selected or cut the selected completely.

The same situation applies to group selections and as a result it's possible



Cut and paste at its best in the song construction window in addition to the power features supplied in the master parameters

place all the percussion track in a group, select them by their group number and then solo or remove the percussion instruments as required.

The next option takes global editing to

its logical extreme by offering a toolize feature allowing a specified tool to be used across all the tracks in the sequence - quantise being a perfect example.

After toolize comes the aforementioned Group feature allowing up to eight different groups to be defined and then played back or edited as independent units.

EASY EDITING

Yet another organisation option alongside allows the track position to be adjusted meaning individuals can be moved up and down the list thereby producing logical groupings of related tracks for easier editing and cross-track connection.

Next up come the transport controls and tempo option, although in reality the permanent controls offered in the Track window are really only a cut-down version of the full transport options we'll look at a little later. From here all the basics are

Information offering, total control over the metronome plus split second accuracy for flag positioning equals all on offer at the click of a button



If there's a way to look at and indeed print your creations the much improved notation options can supply the goods

Clipboard



In the best traditions of cut and paste recording, B&BPro2 not only edits individual clips but also stores them sequentially in the clipboard, and as a result it's simply easy to share elements between tracks.

A particularly nice touch is the option to specify what aspect of the clip is used. As a result you can paste only, say, the pitch bend information from one track to the next.

In fact all the elements mentioned in the editor section can be included or excluded as required, and to finish the job clips can even be saved to and loaded from disk.

Song construction



In this particular case the title tends to give the game away. In short it's here where the finished verse, chorus and in fact anything else can be knocked into the shape of a complete song by employing the same editing techniques mentioned in the track editor. This time the various cut, paste and duplicate options operate on a bar-by-bar basis.

However, in addition there is one major difference in the form of the A-B-A editing system which when combined with the propagate option in the pull-downs allows any edits which occur within a named section to be automatically copied to all identical passages throughout the song - automation at its best.

Information



Again yet another rather self explanatory feature which simply relays the appropriate information on the select track, plus song position and length, notes allocated and available RAM - whether it be clip or last.

Tempo map



Just as you can edit notes you can also edit time itself, a rather grand concept perhaps but in reality it simply means the tempo of the track can be altered at any point via a selection of four transitions curves which like all the edit options are applied and edited by the same tools found in all the edit windows.

Master parameters



In addition to being the place to add such things as lyrics, chords, key signature and rhythm, the Master Parameters have a more subtle side which provides a reference point for various tools and accessories.

For example the time signature will affect the printing of notation while chords and dynamics directly affect the chord and phrase shaper tools.

Tempo palette



Although overshadowed slightly by the Tempo map, the palette window offers a selection of four preset tempos which selected direct from icons as required.

possible with mouse-driven tempo adjustment plus point and click tape deck controls for playback, record and rewind alongside a counter showing present song position.

Although single track editing has had a brief mention it by no means offers the powerful multitrack cut and paste that sequencers are famous for. As a result it's here where the programs fairly unobtrusively multi-edit options come into their own.

CUT AND PASTE

Admittedly multitrack cut and paste is probably the most important function on offer of the total collection of 12 assorted flags, which allow up to four definable key song positions, definable punch-in and punch-out points, looped sections, edit markers for the aforementioned multiple cut and paste plus a stop button ready to terminate playback at any point.

Even though a rather confusing selection initially, all 12 flags follow exactly the same principles of placement. As a result, a simply click and drag to the appropriate point is all that's required to set up the option of the user's choice whether it be a key position, looped section or a cut and paste area.

Although closely linked to the transport window mentioned earlier, the so called "flags" have their own window allowing numerical adjustment while activation of the specified punch-in and loop sections is

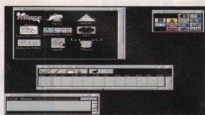


Build your own designer tools in seconds in the excellent macro tool edit window

handled by the main transport.

And of course according to your preferences - again set via the pull-downs - the placement of flags can be automatically aligned with measures, beats, seconds or frames thereby snapping the particular flag to the nearest occurrence of the specified event.

Although rather innocuous we beautes it's the 79 tools supplied with B&P Pro that make it really special. Due to the numbers involved a complete explanation of each is out of the question, however it's pretty safe to say that if there's a specific need either an individual or combination of tools will fit the bill. Obviously with the addition of



Instant access to B&P Pro's 79 play-in accessories plus time-line scoring for multiple song compilation and video, not forgetting the clipboard allowing cross-track cut and paste

Media Madness a fair selection of the supplied tools are related to such things as anims, stills, Scala, genlocks, samples, the IV-24 and many others. However, even with the sizeable multimedia collection the



Just a small selection of the immense number of tools that come as part of the package

vast majority remain musical fitting very roughly into three basic categories.

First comes the fairly familiar special effects such as echo, delay, reverse, harmonise, chord build and so on. In short the sort of effects you'd expect from a signal processor.

Next come the splitter effects which - by reading either the velocity or pitch - filter certain notes to another track or perhaps replace one sound with another after a specific volume.

Alternatively tools such as counterpoint actually use your notes to generate original accompaniments or chords.

Lastly come the pipe-orientated tools such as branch out, merge, transpose, feedback and so on. Although not usually responsible for altering the sound directly, these channelling tools provide an invaluable link to other tracks in the sequence.

As a result it's possible to build huge

A close look at one of the program's real power features, direct control of Scala all set-up via simple note selection



The media madness window in action as anims, stills and song presentations all combine in building a multimedia spectacular

Media madness

In many ways the Media Madness window is almost identical to the track window with the only real difference being that the latter is designed primarily to record and display multimedia events alongside musical ones.

So for example, if an IFF is assigned to a specific key on a track, the event when recorded will appear within the Media Madness window as perhaps "carPic" - assuming that's what you've called it.

The same applies to all the program's multimedia options - you simply assign a key and then while recording any depression of that particular note will activate the event, even though within the track window this "special note" appears just like any other.

By this ingenious approach to multimedia literally anything can be controlled by what appears to be a bog standard bits of MIDI information.

We'll look a little closer at the multimedia side of B&P Pro later but in essence the Media Madness window is merely a multimedia reflection of the track window, complete with all the edit options you'd expect from a MIDI graphic editor - although the edits themselves are usually media rather than MIDI.

Time-line scoring



Although timing keeping appears to have been almost flogged to death elsewhere in the package, time-line scoring offers yet another option, but this time it's whole songs that come under the micro-

scope - or should I say metronome.

Via the now familiar selection of edit tools, complete section can be dragged around in SMPTE time to provide the perfect synchronising environment for DTV and film.

Metronome



Note surprisingly it's here where the human side of the time keeping gets a hand with options for internal and MIDI counts either with or without the flashing assistance of the interface itself. The almost embarrassingly friendly point and click continues with mouse control for everything from selecting the channel and patch for playback, the number of intro bars prior to record and whether or not the count continues after the lead in.

Toolbox



Although the tools themselves will enjoy an entire section to themselves later,

it's from here where they emanate. Depending on how you set up the window the various tools either appear as icons or icons complete with their names appended alongside.

Although the icon-only option may seem slightly stupid it's with good reason as an incredible 79 tools come as part of the B&P Pro package.

As existing users of its predecessor will be well aware this is a huge increase and a major selling point for the new version. Fortunately for both memory and space you're given total control over installing and removing tools as required.

sounds from just a single note which feeds through a network of tools and tracks picking up effects and additional sounds in the process. The final twist in the tool tail is the program's macro option which allows you to build totally new tools by combining existing ones within a special window. Once complete the new tool can be saved and installed just like any other.

The real beauty of the macro tool system is that it provides the opportunity to capture accidental strokes of genius within the track window.

GREAT EFFECT

If by pure chance you create a really great effect the assorted tools and pipework can be duplicated within a macro tool and saved for posterity ready to be re-installed - complete with designer icon - alongside your existing collection.

Just like Midi tools, the program's multimedia options are simply too diverse to cover in the space available but to give you just a taste of the power on hand here's the in-a-nutshell guide to one of the simplest Media Madness options - the IFF viewer.

Once installed as the chosen effect, any number of pics can be appended to a selection of notes. Although pretty impressive in itself, basic on/off display

Bars&Pipes Professional 2.0 © 1991,1993 The Blue Ribbon SoundWorks, Ltd.



The flag requester complete with the various icons. If you don't fancy typing simply dragging the icons on the track window makes editing a dream

is only the tip of the iceberg.

If for example modulation is applied either live or during recording the image appended to the note will fade in and out according to the degree of modulation. As if that's not enough the addition of pitch bend applies colour cycling - amazing!

Believe it or not this is about the simplest Media Madness tool on offer and is literally dwarfed by the more complex control tools such as the Scala tool, the IV24, Panasonic laser disks, the

B&P Pro 2 is without doubt the hottest item in both the sequencer and multimedia markets

SunRize12 and 16-bit boards - the list goes on and on.

In short, although not strictly a presentation package, B&P Pro offers arguably the most comprehensive multimedia environment available on the Amiga - and they even throw in a standalone Media Madness player to round things off.

Although noted for my less than enthusiastic closing paragraphs I must admit I'm at a loss to know what in my opinion is one of the best releases in months, if not years.

NEAR FAULTLESS

On the musical side the package is near faultless and with the much improved printing and of course the incredible Media Madness option B&P Pro 2 is without doubt the hottest item in both the sequencing and multimedia markets.

It's true that you'll need a hell of a machine to run all the elements in tandem but to be fair that's the case with all the

A even closer look at song construction but it's the generic edit options that make mastering the package much easier for the beginner

SYSTEM ESSENTIALS

3.5" 2.88MHz 10MHz 20MHz 40MHz 60MHz 80MHz 100MHz 120MHz 140MHz 160MHz 180MHz 200MHz 220MHz 240MHz 260MHz 280MHz 300MHz 320MHz 340MHz 360MHz 380MHz 400MHz 420MHz 440MHz 460MHz 480MHz 500MHz 520MHz 540MHz 560MHz 580MHz 600MHz 620MHz 640MHz 660MHz 680MHz 700MHz 720MHz 740MHz 760MHz 780MHz 800MHz 820MHz 840MHz 860MHz 880MHz 900MHz 920MHz 940MHz 960MHz 980MHz 1000MHz 1020MHz 1040MHz 1060MHz 1080MHz 1100MHz 1120MHz 1140MHz 1160MHz 1180MHz 1200MHz 1220MHz 1240MHz 1260MHz 1280MHz 1300MHz 1320MHz 1340MHz 1360MHz 1380MHz 1400MHz 1420MHz 1440MHz 1460MHz 1480MHz 1500MHz 1520MHz 1540MHz 1560MHz 1580MHz 1600MHz 1620MHz 1640MHz 1660MHz 1680MHz 1700MHz 1720MHz 1740MHz 1760MHz 1780MHz 1800MHz 1820MHz 1840MHz 1860MHz 1880MHz 1900MHz 1920MHz 1940MHz 1960MHz 1980MHz 2000MHz 2020MHz 2040MHz 2060MHz 2080MHz 2100MHz 2120MHz 2140MHz 2160MHz 2180MHz 2200MHz 2220MHz 2240MHz 2260MHz 2280MHz 2300MHz 2320MHz 2340MHz 2360MHz 2380MHz 2400MHz 2420MHz 2440MHz 2460MHz 2480MHz 2500MHz 2520MHz 2540MHz 2560MHz 2580MHz 2600MHz 2620MHz 2640MHz 2660MHz 2680MHz 2700MHz 2720MHz 2740MHz 2760MHz 2780MHz 2800MHz 2820MHz 2840MHz 2860MHz 2880MHz 2900MHz 2920MHz 2940MHz 2960MHz 2980MHz 3000MHz 3020MHz 3040MHz 3060MHz 3080MHz 3100MHz 3120MHz 3140MHz 3160MHz 3180MHz 3200MHz 3220MHz 3240MHz 3260MHz 3280MHz 3300MHz 3320MHz 3340MHz 3360MHz 3380MHz 3400MHz 3420MHz 3440MHz 3460MHz 3480MHz 3500MHz 3520MHz 3540MHz 3560MHz 3580MHz 3600MHz 3620MHz 3640MHz 3660MHz 3680MHz 3700MHz 3720MHz 3740MHz 3760MHz 3780MHz 3800MHz 3820MHz 3840MHz 3860MHz 3880MHz 3900MHz 3920MHz 3940MHz 3960MHz 3980MHz 4000MHz 4020MHz 4040MHz 4060MHz 4080MHz 4100MHz 4120MHz 4140MHz 4160MHz 4180MHz 4200MHz 4220MHz 4240MHz 4260MHz 4280MHz 4300MHz 4320MHz 4340MHz 4360MHz 4380MHz 4400MHz 4420MHz 4440MHz 4460MHz 4480MHz 4500MHz 4520MHz 4540MHz 4560MHz 4580MHz 4600MHz 4620MHz 4640MHz 4660MHz 4680MHz 4700MHz 4720MHz 4740MHz 4760MHz 4780MHz 4800MHz 4820MHz 4840MHz 4860MHz 4880MHz 4900MHz 4920MHz 4940MHz 4960MHz 4980MHz 5000MHz 5020MHz 5040MHz 5060MHz 5080MHz 5100MHz 5120MHz 5140MHz 5160MHz 5180MHz 5200MHz 5220MHz 5240MHz 5260MHz 5280MHz 5300MHz 5320MHz 5340MHz 5360MHz 5380MHz 5400MHz 5420MHz 5440MHz 5460MHz 5480MHz 5500MHz 5520MHz 5540MHz 5560MHz 5580MHz 5600MHz 5620MHz 5640MHz 5660MHz 5680MHz 5700MHz 5720MHz 5740MHz 5760MHz 5780MHz 5800MHz 5820MHz 5840MHz 5860MHz 5880MHz 5900MHz 5920MHz 5940MHz 5960MHz 5980MHz 6000MHz 6020MHz 6040MHz 6060MHz 6080MHz 6100MHz 6120MHz 6140MHz 6160MHz 6180MHz 6200MHz 6220MHz 6240MHz 6260MHz 6280MHz 6300MHz 6320MHz 6340MHz 6360MHz 6380MHz 6400MHz 6420MHz 6440MHz 6460MHz 6480MHz 6500MHz 6520MHz 6540MHz 6560MHz 6580MHz 6600MHz 6620MHz 6640MHz 6660MHz 6680MHz 6700MHz 6720MHz 6740MHz 6760MHz 6780MHz 6800MHz 6820MHz 6840MHz 6860MHz 6880MHz 6900MHz 6920MHz 6940MHz 6960MHz 6980MHz 7000MHz 7020MHz 7040MHz 7060MHz 7080MHz 7100MHz 7120MHz 7140MHz 7160MHz 7180MHz 7200MHz 7220MHz 7240MHz 7260MHz 7280MHz 7300MHz 7320MHz 7340MHz 7360MHz 7380MHz 7400MHz 7420MHz 7440MHz 7460MHz 7480MHz 7500MHz 7520MHz 7540MHz 7560MHz 7580MHz 7600MHz 7620MHz 7640MHz 7660MHz 7680MHz 7700MHz 7720MHz 7740MHz 7760MHz 7780MHz 7800MHz 7820MHz 7840MHz 7860MHz 7880MHz 7900MHz 7920MHz 7940MHz 7960MHz 7980MHz 8000MHz 8020MHz 8040MHz 8060MHz 8080MHz 8100MHz 8120MHz 8140MHz 8160MHz 8180MHz 8200MHz 8220MHz 8240MHz 8260MHz 8280MHz 8300MHz 8320MHz 8340MHz 8360MHz 8380MHz 8400MHz 8420MHz 8440MHz 8460MHz 8480MHz 8500MHz 8520MHz 8540MHz 8560MHz 8580MHz 8600MHz 8620MHz 8640MHz 8660MHz 8680MHz 8700MHz 8720MHz 8740MHz 8760MHz 8780MHz 8800MHz 8820MHz 8840MHz 8860MHz 8880MHz 8900MHz 8920MHz 8940MHz 8960MHz 8980MHz 9000MHz 9020MHz 9040MHz 9060MHz 9080MHz 9100MHz 9120MHz 9140MHz 9160MHz 9180MHz 9200MHz 9220MHz 9240MHz 9260MHz 9280MHz 9300MHz 9320MHz 9340MHz 9360MHz 9380MHz 9400MHz 9420MHz 9440MHz 9460MHz 9480MHz 9500MHz 9520MHz 9540MHz 9560MHz 9580MHz 9600MHz 9620MHz 9640MHz 9660MHz 9680MHz 9700MHz 9720MHz 9740MHz 9760MHz 9780MHz 9800MHz 9820MHz 9840MHz 9860MHz 9880MHz 9900MHz 9920MHz 9940MHz 9960MHz 9980MHz 10000MHz



The bottom line

Ease of use 10
Implementation 10
Value for money 9
Overall 10

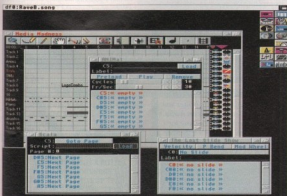
Supplier:

Meridian Software Distribution
Tel: 081 543 3500

Price: £299

(£199.95 as an upgrade or in exchange for any other sequencing software with original manual)

packages in this sort of class. If you're thinking of sinking serious money into a sequencer and fancy the odd adventure into multimedia even the £299 asking price seems more than reasonable.



As you can see from the screen grab things can soon become pretty cluttered and as a result employing interface or productivity mode can become essential

Mix Maestro

Although not a new feature, automated mixing is a sure sign of a modern power sequencing package and as you'd expect power software in the £200+ bracket, B&P Pro 2 isn't found wanting when it comes to the mixdown.

Aside from offering simple control change information within the tracks themselves, Mix Maestro provides real-time pan and volume control which in effect mean the window operates just like a automated mixing desk but on-screen rather than in the studio.

Like any decent mixing desk, track groupings can be assigned to make the process simpler - in this case four, so for example percussion groups, strings, brass

or whatever can be locked together and thereby faded up and down as a complete unit.

In addition panning is again all done via the icon equivalent of a pan-pot, you simply click and move the mouse to send the sound of your choice from left to right.

Footsteps could pan from speaker to speaker while soft strings fade away into a growing crescendo of percussion - during which you simply sit back and watch the automated sliders do all the hard work.

Even better still, various mixes can be saved either to the clipboard or disk for later comparison or the inevitable remix - a feature worth even more than a pair of six-inch platforms on the dance scene.

Tracks



As you'd expect from the title, it's here where the track window is revealed.

This area has already been explained earlier so it's safe to skip it and move on to the last two elements in the window section.

Record



Although recording is well catered for in the track window the Record option offers the useful ability to filter out unwanted or perhaps unnecessary MIDI information by allowing you to toggle note on/off, pitch bend, mono and poly aftertouch, program and control change and finally system exclusive information in or out of the recording equation.

Transport control



Even though transport control is offered within the track window and via a pop-up mini transport, this full-scale version adds all the whistles and bells in the form of icons which automatically jump the sequence to any one of the 12 flag positions while also allowing access to the punch-in and loop options.

In addition you also have full time display in both measures and SMPTE plus the present tempo settings and an invaluable half and three-quarter time playback option which makes tricky recording much easier by temporarily slowing the sequence - and thereby the record process - without the need to adjust the overall tempo of the track.



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+2484	The Money Program
+2483	Clit-Tris & Pacatrac
+2482	Hillbilly Anim
+2481	Bagitman
+2480	Amy PD Review V1.1
+2479	Singalong Nursery Rhymes
+2478	How The Earth Began
+2477	Flashback Demo
+2476	Bomb Jacky
+2475	Create Adv. Games V2.1
+2474 (AB)	Cry For Dawn Vol 2
+2473	Devolutions Slideshow
+2472	Tumpy & The Alphabet
+2471	Zircon Mag Vol 3
+2470	Game Tamer V3.0
+2469	Font Farm 2
+2468	Super Tortoise
+2467	Captain Bonus
+2466	A1200 Pics
+2465	Textengine V4.0
+2464	Giga Tris
+2462	Cinemorph Demo 2
+2461	Cinemorph Demo 1
+2460	Vinorph V1.1
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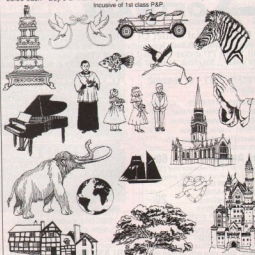
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Hard drive horrors

After being an A500 Plus owner for over a year I decided that it was time to upgrade my system, and have purchased an A1200 with 120Mb hard drive.

Now that I have a hard drive I wish to use the thing, and it is only now that I realise how few Amiga games are not capable of being installed on this much more convenient medium.

The software houses may well reply with the gripe that it is the piracy problem which leaves them no option but to opt for on-disk protection, but this protection has often been accused of damaging floppy drives by forcing them to make very irregular disk accesses.

It is in my view criminal behaviour to distribute a product which they know is likely, with repeated use, to damage the purchaser's computer system.

This is totally unacceptable. Owners of PC compatibles, where piracy is thought to be 50 copies for each original, do not have to put with this sort of treatment and it is about time that software publishing houses were brought to book for this treatment of Amiga owners.

From now on, I will not spend hard-earned cash if the program will not install on hard drive, and if other

Amiga owners were to follow my example the publishing houses would be forced to take notice and change their current policy.

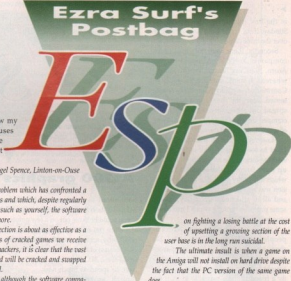
Nigel Spence, Linton-on-Ouse

You have put your finger on a problem which has confronted a growing number of Amiga owners and which, despite regularly attracting criticism from readers such as yourself, the software companies seem determined to ignore.

Let's face it, on-disk copy protection is about as effective as a chocolate teaspoon. From the lists of cracked games we receive now and again from anonymous hackers, it is clear that the vast majority of popular games can and will be cracked and snatched almost as soon as they are released.

It begins to seem strange that although the software companies have sworn by on-disk protection for years as the only effective method for combating piracy, they still suffer as much from the software thieves despite the fact that copy protection is now much more sophisticated than it used to be.

This in itself should be enough to convince them that to carry



on fighting a losing battle at the cost of upsetting a growing section of the user base is in the long run suicidal.

The ultimate insult is when a game on the Amiga will not install on hard drive despite the fact that the PC version of the same game does.

There have been several recent examples of this, and the apparent difference between Amiga and PC owners in the eyes of the games companies - one is a potential thief, the other isn't - is probably the most insulting and patronising aspect of the whole copy protection debate.

Old fogies abandoned

Out of seven or eight Amiga magazines in New Zealand, *Amiga Computing* is the only one which gives value for money, even if it does cost \$16 (about £5.35) a time.

Being a games type person, I found your *Absolute Beginners* section ideal for getting more in depth advice, and found I could "repair" some of my non-booting disks. The CoverDisk is great too, especially Cybernetix (try level 62 and 596,482 points on for size), but my one gripe is that both the disk and the magazine seem to be very biased towards Workbench 2.04 and above.

I only have Workbench 1.3 and was wondering if you could keep it 50/50?

Oh yeah, when you ship out demos such as the Home Accounts 2 disk, maybe an extra month before the timebomb activated would be a good idea.

We pick up our December 1992 issue in mid February 1993, so we can't try programs like this for a full calendar month.

That's it, I've had my moan. Keep up the great magazine.

John & Yvonne House, New Zealand

I'm sorry that you think we're biased against Workbench 1.3, but the fact is that it hasn't been supplied with any Amiga other than the CDTV for about 18 months in our main reader base, the UK and Europe. Since the release of the A500 Plus, Workbench 1.3 has been superseded by versions 2.0, 2.04, 2.1, and 3.0.

Our *Absolute Beginners* series, as you probably know, was pitched at both 1.3 and 2.04 users, but as all new Amiga owners for over a year have been 2.04 or 3.0 users, it is highly unlikely that we or any other Amiga magazine will have the space to cover all three versions of the operating system.

We have never missed an opportunity for urging as many people as possible to upgrade to the latest operating system, especially those with any serious uses for their Amigas, and

Disk helper

Being new to the Amiga, or any other computer come to that, I'm really grateful that your CoverDisks have been including items which help to educate my children, the Fun School programs for example.

Now to help educate me! Could you run a tutorial on how I can get the individual programs off the CoverDisks and on to a spare disk which will self boot?

Richard Nicholls, Newton Abbott

We plan to run an AmigaDOS series for beginners soon which will be aimed at new users and attempt to take them from the first basic steps to creating auto-booting disks and other practical tasks, so keep your eyes peeled.

For the moment, try copying a CoverDisk, detaching everything off it apart from the Fun School module, then dragging the Fun School icon from another disk into the same window as the first module. This might involve you in several disk swaps, but should be the easiest way to gather the three modules together on one disk.

we won't miss it now. Workbench 1.3 is dead, long live Workbench 2/3 (uh, oh - Ed).

Your concern over the timebomb demo is one that we share, which is why export copies of the Home Accounts 2 disk had an extra month of life granted to them. However, we didn't count on our magazines being trans-

ported to New Zealand on some sort of Doolittlean Giant Sea Snail rather than by more conventional - and faster - means.

Poor showing?

I recently visited the 7th International Computer Show in London and have a few comments to make about it.

Firstly, I'm surprised that AC themselves didn't have more of a showing than they did. I think that you should have had all the products you sell on show as some of them were not sold by any other stand in the show.

I don't think you did yourselves justice by having just a few back issues for sale and an advice desk. The game chosen for the challenge wasn't exactly brilliant either, but that's just my opinion. It may be that there were more products available

Name that tune

Having read in the April issue of *Amiga Computing* about your views and recommendations on the music side of the Amiga, I was intrigued to read about the CoverDisk music. The article said that "when you've got some tunes you are truly proud of, why not send them to *Amiga Computing* for the CoverDisk?"

I was wondering what sort of music you accept and what conditions or rules you make for people who send music in. I have spent a large amount of time making music and I would be grateful if you could give me the necessary information.

Damien Warner, Harrow

We will consider any type of music, from acid house to classical, for inclusion on the CoverDisk. The only prerequisite is quality.

Rules we use are the usual music copyright laws, so complete rip-offs of recent songs are out, as are boring sequences of samples from films, videos, or CDs.

Of course, original music is always the best, and though a well-presented and produced but uninspiring piece can sneak on, we always prefer a reader's own work.

This aspect of the CoverDisk is, after all, designed for the thousands of music-making Amiga owners whose creations might otherwise never see the light of day.

in the first two days as I went on the Sunday. If so, you should be consistent over the three days.

Secondly, there were only mail order companies at the show except for the Acorn, Atari, and Virtual Reality stands, whereas I think companies such as Commodore should have been represented. Also, the show could have been spread out a bit more, as it was fairly cramped despite the apparent abundance of space in the rest of the hall.

However, it's not all whinging. It was good to see so many mail order outlets slashing their prices for the show. I picked up some Soundblaster speakers for £25 which was pretty good. The cost of admission was also low at only £4 for students, and all in all I had a good day, seeing some products running which I had never seen before.

I would like to pass on some advice to people considering the next show. Do check your products before coming away from the show if possible. The speakers I bought had a faulty 3.5mm plug, but luckily a friend of mine was able to fix it for me. The headphones were also missing but this wasn't a major problem.

I do have one question. Where can I get the addresses of the stand holders? I would like to contact a company called Connect International and also a stand which was offering a cleaning solution for spectacles which was right in the corner.

Scott Wright, Aberystwyth

The show organisers, Westminster Exhibitions, can be contacted on 081-549 3444. They should be able to provide addresses and phone numbers for any of the exhibitors present at the show.

As for the Eurapress Enterprise stand, we were offering back issues, subscriptions, current magazines, technical advice and a gaming challenge. If there was a stand at the show offering more for the money I for one didn't see it.

I'm sorry you didn't approve of Sensible Soccer as a choice for our Gamer challenge, but we had to have a popular, recent game with the potential for good two-player competition, and we could only choose one game.

Your advice to buyers at computer shows is sound and we would urge anyone to follow it, if only because returning faulty equipment to a company half way across the country is so much more hassle than doing it at the show.

Dird as a dodo?

Missing, presumed "dird". Month after month the CoverDisk starting sequence words remain unchanged, and the DIRD command hasn't appeared since disk 37! Will it ever return?

F Carter, Reigate

The words which come up as the CoverDisk boots are the last thing to be changed and they can sometimes be missed. We'll sort this out. Sorry.

As for DIRD, it's one of those commands which the majority of users don't need much, as they usually boot Workbench when transferring programs from the CoverDisk to another floppy, but we'll include it from now on if there's space for it.



and receiving an instant refund or replacement. You will find companies much easier to deal with face to face.

A1200 graphics

I am about to purchase an A1200, but before I splash the cash I would be grateful if you could help me out on a few points.

Before the A1200 was launched I was, reluctantly, scraping together the cash for a PC (because of the better graphics) in order to do some 3D animations. I don't have to spend as much now though as the A1200 exceeds my graphical needs.

A program on the PC platform called Playmotion was a perfect piece of software for what I'm planning. It included 3D modelling, animation, ray tracing, and morphing. The use of splines in the modelling made it a perfect tool, and at a price of £199 I would have sold my soul to use it.

Is there any software presently available or planned for the A1200 taking advantage of the AGA chipset which performs these functions, and if so what is it and how much does it cost? If not, are there any pieces of software which I could use together to carry out all these tasks?

Simon Brown, Manchester

Where have you been? The Amiga's range of low price ray tracing packages have been unequalled for years and still are. Playmotion is undoubtedly a good product which we may see on the Amiga soon, but it doesn't do anything

not already possible with a copy of Real 3D or Imagine 2.0.

Both these packages output high quality 24-bit images which the A1200 will display as HiRes through the Multivision utility, and both are soon to be released in all new versions offering the latest 3D modelling and animation techniques. Prices for the older ver-

sions can be £150 or less if you shop around, so don't worry about affordability.

The catch is that you should be prepared to add 4MB RAM and a hard drive to your A1200 when considering such high level software, though this should still bring your machine in under the price of a PC. Have a look at our cover feature in the March issue for a comparison of the A1200 and the PC.

Petty picking

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
Addington 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

It struck me while reading your magazine the other day that many of your hardware and software reviews are very picky. I mean, you seem to think a new product should be able to do everything and it always gets a rough ride if it doesn't.

My dog, Major, named after the Prime Minister (because he's grey and barks a lot), fetches the newspaper, will sometimes lie down when told to, and hardly ever chews my slippers. He does, however, shed hair which can be a pain when trying to Hoover.

I fear my otherwise faithful pooch would have a score book looking something like: Hoover essential, Pedigree Chum recommended, Implementation 6, Ease-of-Use 6, Value-for-money 7, Overall 6.

This, by your standards, is a rather poor showing. Should I get rid of him and look for a faster or more colourful model?

J Crackley, Birmingham

Well, Major is probably quite sufficient for the minor household tasks, such as costing the carpet with hair, causing a great deal of unnecessary noise, and walking around with his tongue hanging out, but you might be surprised how much better another model might be if given a try.

We at AC try to ensure that every product is examined from every angle, which means that if there are faults in design or market place, we will find them and highlight them. After all, if we didn't, we wouldn't be doing our duty to the readers.

Double trouble

I have refrained from buying your magazine recently as I object to paying for double CoverDisks which I do not want.

Looking at my present collection, there are hardly any that are in regular use. A lot of them need other files to run or request disks which are not included, or simply fail to load or run, so much so that I have decided to make a stand before the front page breaks up under the strain of all the disks stuck to it.

I did think that Protext was going to be useful, but have found it more hassle than it is worth. I still cannot print out a half page letter without it scrolling to the bottom of the page and tripping the Paper Out switch, despite marking out a block and asking it to print block.

The time taken for me to get to grips with Protext was eating into other activities and as I usually need a wordprocessor only for writing letters, then Ed is perfectly adequate and using aliases from the Shell enables me to quickly set margins, print style, and so on.

If your policy of extra CoverDisks and price rises results in improved sales figures, then good luck to you, but to do that you need to sell an extra two to make up for my lost purchase each month.

G H Jones, Leicester

I'm sorry you don't think our double disk issues are good value for money and that you are having trouble with Protext, but we can't be all things to all men every month.

Indeed, partly because we don't like to hike the price of the magazine too often and partly because double disks are very expensive to publish these days, we are presently putting our special offers on a single disk.

This will please those like you who don't want to pay the extra for another disk, but may annoy people who like to see as many shareware utilities as possible crammed onto our CoverDisk.

We will then receive letters from enraged readers who would rather see the latest virus killer than a commercial spreadsheet package, for instance, and the debate will swing round again.

In the end, whichever approach satisfies the greatest number of readers will win out, so keep those letters coming.

Now in it's third successful year!

JAM

JUST AMIGA MONTHLY



Established in the Autumn of 1990, Just Amiga Monthly was the first UK Amiga magazine to have the foresight to cut out the gloss and the colour and concentrate on the applications and productivity aspect of the Amiga. Our motto from the start has been Guaranteed No Games, our goal being to help Amiga enthusiasts to get the best from their machines, catering for the out-and-out beginner as well as the more experienced user.

Our readers tell us we are achieving this goal admirably month after month, providing them with important information that other magazines miss.

It's impossible to sum up in an advert all that the magazine covers; the best description is probably 'everything except games', including up to date hardware and software reviews, tutorials and programming. But the absolute best way to find out is to buy the magazine and see for yourself.

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Believe it or not, Professional Page has been with us since 1987 in one form or another, and boy has it changed over those five years! But then again, the Amigas that it runs on have changed significantly too.

Now comes Professional Page 4.0 to take advantage of the new AGA chips and put yet more publishing power on your desktop.

But AGA compatibility is just a small part of the new features which have been packed into Professional Page 4.0. There is also support for a wide range of graphics and text formats, improved font and page management, more text styles and Genies, pattern fills, custom magnification and plenty more, all of which justifiably deserve the new program revision number.

FOUR DISKS

Another departure is that Professional Page 4 is now only accessible from hard drive-equipped Amigas, though this was, I suppose, inevitable. With four disks packed full of LHA'd archives there's little chance that floppy disk users would have been very productive (or even happy) continually swapping disks.

Floppy users can always find other solutions, such as sticking with Professional Page 3 or PageSetter 3, but its becoming increasingly evident that hard drives are now a more essential part of serious Amiga life than ever.

I've been using Professional Page 4's

predecessor, Professional Page 3, for quite some time, so I'm very familiar with it, but I'm afraid I can't make any comparisons with Soft Logik's PageStream 2, which is Professional Page's only serious rival, as I've never used it.

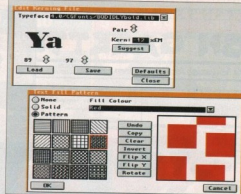
But from conversations with users of both packages it seems that most are polarised either one way or the other, and likely to remain so.

There are quite a few nice touches in Professional Page 4. In addition to supporting AGA graphics (for 256-colour, near photographic quality images on-screen) possibly one of the best additions is its new ability to set up kerning pairs for a font, which means that common letter pairs such as T and o and A and V can be tucked together correctly, instead of relying on the old kerning method to space the letters out according to just one distance setting, which wasn't particularly successful.

Now it is possible to adjust any pair of letters you wish, in any font, and save the new spacings so that they will always be used each time the font is kerned.

What's more, the kerning pair requester is very flexible and easy to use and letters can be aligned simply by dragging them with the mouse. New pairs can be entered simply by typing them in. The result - much more professional-looking text.

Another thing that struck me was that at last Professional Page has the ability to add shadowing to lettering as a style, rather



The Kerning Pair and Pattern Fill editors

than as a duplicate set of text in a different colour.

OK, there's presently no adjustment for where the shadow is placed, but it's a start. And now it's possible to properly outline letters and have their faces filled with a different colour (or even pattern) - something which previously required a fiddly trip to ProDraw.

Two more new styles - Superscript and Subscript - have also been incorporated.

Patterns and shadows are something which PageSetter (Professional Page's little cousin) has had for years, so it's a bit of a relief that Professional Page 4 now has

them as well. Their inclusion is welcome because they add another creative tool to the DTP designer's collection and letters, boxes and drawn shapes can all be pattern-filled.

The only snag is that any modified patterns cannot be directly saved and recalled for later use, though they will be saved with document files (but not pages), so at least they'll return the next time you load the document.

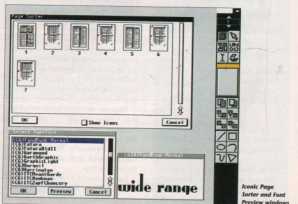
Gold Disk have also finally got around to incorporating irregular text flow around clip art and EPS (Encapsulated PostScript)

World-beating DTP?

A new version of the original Amiga DTP package, Professional Page, is now upon us. Gary Whitley takes a look



Wide colour screen grab



Iconic Page Sorter and Font Preview windows



Shadows, pattern fills, irregular text flow, stick-on notes and AGA support are all part of Professional Page 4

graphics, again another vital addition, which has been far too long in arriving.

Another new feature which may not get the use it deserves is the Paragraph Indent function, making for easy setting of normally indented or hanging paragraphs, or for adjusting the width of the indent itself. All selected text will then be automatically adjusted at every paragraph break.

Previously if you needed to shuffle pages around in a document, Professional Page had you using a numerical requester. Now there's an icon-based Page Sorter which miniaturises each page and displays them all in a window.

Pages can be re-ordered simply by dragging them to a new position, which makes DTP life a lot easier – and you can even get a rough idea of how the final document will balance up.

I'm not sure exactly how the Stick-On Notes feature is aimed it, but I guess it must be useful to someone. It works very simply – click on the yellow bar in the toolbar and a small yellow box appears. Type

some text into it, "glue" it where you want it and *voilà!*, a non-printing note for the boss to berate the DTP artist for retouching his hair with a colour that doesn't match his physique.

Whereas previous versions of

Professional Page required that you had to actually change the font before you could see the results, Gold Disk has thoughtfully provided a Font Preview window which will show a section of text in the new font – so if you don't like what you see you can preview others until you are happy. It's a small touch, but it's a nice one.

The Graphics Editor has some initial promise – especially for AGA users – until you find out that it is only used for editing bitmaps and the maximum number of colours it can manage is just 32, regardless of chip set design!

Certainly, it's useful if you don't have Deluxe Paint or another bitmap graphics program for most users it will probably not last too long on the hard drive, though it does have the hot-link advantage of being able to send and receive images directly to and from Professional Page 4.

There are two other additions which I was unable to use – FAISload and ProSpool. FAISload is described as being able to convert fonts bought directly from Agfa (presumably Intellifonts) into Compugraphic fonts understandable by Professional Page.

Great, I thought, I can convert my Agfa Video fonts to Compugraphic fonts. Wrong! FAISload wouldn't recognise the

disks. So what disks does it work with then? ProSpool is a Print Spooler capable of addressing more than one printer at a time with more than one print job. Since I only have one printer I can only assume it works OK.

A remaining major omission is that Professional Page still has no text squash and stretch abilities – meaning that the width/height ratio is still maintained when text is resized and, short of a visit to Professional Draw, there is as yet no way of making even the most basic of height and width-only changes to text.

If, like me, you customise your User-Startup assigns, then you could be in for an unpleasant shock if you are upgrading to Professional Page 4.

When I first tried installing the program neither the PageGents nor the Text and Graphic Filters were properly installed and the program was not updated from the version of Professional

Page 3 which was already on my hard drive – instead a new drawer was created for the new program.

The installation really caused me a lot of trouble and it took me a couple of days and some detective work to finally figure out what the problem was.

It turned out that the Install program was looking to see if and where PPage was assigned – but as my assigns were slightly different to what the installer wanted it disregarded everything and went its own sweet way. Hence the problems.

Once I had made sure PPage was correctly assigned the installer updated my Professional Page 3 files successfully and I had no further trouble either with Professional Page 4 itself or the strange recoverable gurus and screen corruptions I'd been experiencing every time I quit the program. Gold Disk could easily have made this simple caveat clear in the manuals, but failed to, resulting in a lot of

Fonts aplenty!

Professional Page 4 can make full use of any true Type 1 PostScript font – so long as the supplied Font Manager software is used to convert it to a format which the program can understand.

With hundreds of fonts out there waiting to be converted (and many more already have been) there's no need to be short on style even again.

unnecessary frustration. With the release of v4, Professional Page now has several degrees more power and is somewhat easier to use. This improved efficiency will doubtless benefit serious Amiga DTP producers and in my opinion an upgrade should be well worth it.

Better still, if you add the cumulative cost of all the past upgrades together and the initial cost of the original program the first time buyers are also getting something of a bargain.

● Gary Whitley can be contacted by email at dgw@ix.computlink.co.uk

The Graphics Editor is barely adequate for serious work. Deluxe Paint does a far better job

The improved efficiency will doubtless benefit serious Amiga DTP producers

SYSTEM ESSENTIALS



The bottom line

Ease of use 9/10
Implementation 8/10
Value for money 8/10
Overall 8/10

Supplier: Silica Systems
Phone: 081-309 1111
Price: £199.95
Upgrade (from Professional Page 3): £82.19

Import formats

Professional Page 4 can now load the following formats directly:

Graphics: Aegis Draw, Aegis Draw Plus, Art Expression, BMP, EPS, EPSF, Aldus Freehand3, EPS, GIF, IFF, Adobe Illustrator, PCX, ProDraw Clip and TIFF.

Text: Ascii, excellencel, Kindwords, ProWrite, Scribble, Textcraft, Textcraft Plus, WordPerfect and Wordworth.

This all means less visits to a graphics converter program, no more worries about having to save text in Ascii and easier access to lots more image data.

Words don't come easy

Professional Page 4 now has a simple Text editor for writing or modifying Genios – which are only ASCII programs after all.

But since Article Editor is almost perfectly suited for this kind of work I just wonder why Gold Disk didn't implement a Go To Line Number function in the Article Editor wordprocessor which is supplied gratis (it could do with it anyway) and forget about yet another text editor.

And while we're on the subject, how come Transwrite and Article Editor con-

tinue to have different keyboard shortcuts?

There's now a British dictionary for the spell checker, so there is no longer any excuse to use Americanisms such as "colonize" and "humor".

For some of us this could be a little bit too late – my own addendum dictionary already has 850 extra words in it so I've probably covered most of the major differences and omissions by now. Or course if you're just starting out then this dictionary should be a great help, even if it doesn't contain the word Amiga!

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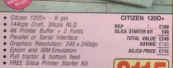
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A white HP LaserJet printer is shown from a front-three-quarter view. It is printing a document titled "CITIZENSHIP" which features a cartoon character. The printer has a control panel on the right side with several buttons and a small display. The background is a light blue gradient.



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

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TVPaint's new hand drawn image courtesy of pencil and chalk

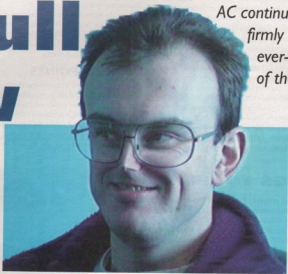


DPaint's style perspective now an offer within TVPaint



Power products in full flow

AC continues to keep its finger firmly on the pulse of the ever-changing world of the Amiga



Say goodbye to old friends with ADPro's new collapse operator

First up comes perhaps the prime example of evolutionary software in the form of TVPaint, a program which still holds the title as the Amiga's premier 24-bit paint package even though it's been around almost as long as the Amiga's very first graphics cards.

Now in v2.0, the quest for the ultimate 24-bit painting environment is almost complete, but as ever it doesn't come cheap - especially if you're the proud owner of a Harlequin.

However there is a slight glimmer of hope for the financially hard pressed Harlequin owners courtesy of a £100 upgrade offer, but alas for any new investors the Harlequin version means a pretty bleak fiscal outlook even though the package has been reduced from a heart-stopping £900 to a miserly £600.

THE ULTIMATE

Although the ACS board is widely regarded as the ultimate in commercial hardware, such a figure is still pretty hard to accept when lesser boards such as the AVideo happily retail at about the same price for the board with TVPaint thrown in at no extra expense.

However it's very unlikely that v2.0 will be part of the aforementioned budget bundle. If we can leave the financial constraints of the Harlequin and TVPaint combination aside, the fact remains that

with the two working together you have arguably the ultimate Amiga-based graphics system.

No doubt the most striking physical change has been the ubiquitous dongle which in this version has thankfully and finally migrated to the joystick port rather than being stuck into the external disk drive port.

This not only makes an external drive accessible but also means compatibility with the A4000.

Yet another AGA-friendly addition is the addition of Workbench 3.0-style multiple windows which means several requests can be left on-screen rather than having to reactivate them every time minor changes become necessary.

Although seemingly unspectacular, this small change can speed up the experimentation process tenfold. On a more

dramatic note, scrollable screens have been added so at last it's not necessary to open a big edit file every time a non-standard file size is required.

For example, you can specify an image

of let's say 1,024 x 1,024 and then select either 740, 832 or 910 x 576 interlaced or otherwise as the working area using the numeric keypad to scroll around the screen at will.

Although this may not seem exactly earth-shattering, the option to scroll can be a real timesaver given that you have sufficient RAM to handle the image, and of course if RAM is a problem the big edit - alias hard disk image storage - still awaits to save the day.

Another dramatic improvement comes in the form of a much-improved magnifier which at last has detached itself from the control panel - in older versions this meant that using the magnifier meant obscuring large sections of the image with either the magnifier window or the control panel,



An Imagine image by Paul Austin under close inspection of the much improved magnifier

MIGA Update

usually requiring one or the other to be shunted off and on screen as and when required. Now however everything has changed and the magnifier appears within its own window which can be moved and resized just like a standard Workbench window. Better still it can be used to zoom right out to show images that are larger than the screen area.

Along with resizing and zoom, placement has been improved with arrow gadgets for minor adjustments or alternatively a small hand icon can be applied to produce a placement rectangle attached to the mouse which when clicked on screen instantly updates the zoom window with the new location.

Aside from the improved interface and therefore speed the organic feel of the software has been enhanced immensely. As any freehand artist will tell you, the major problem with the transition from real world art to computer-generated images is the loss in feel that pen on paper provides.

In an attempt to compensate, TVPaint 2.0 takes full advantage of pressure-sensitive tablets and indeed pressure in general. Obviously not everyone can afford state-of-the-art pressure-sensitive hardware but if the money is available it would be well

spent. Whether or not a tablet is at hand the program can still express the touch of the artist at the controls. For those without a tablet, adding feeling can be pretty basic as the software can only apply preset pressure values at the beginning and end of a stroke, moving between the two levels as the stroke is applied.

This new attention to feel can be enhanced further courtesy of two new air-brush effects entitled chalk and pencil. The names pretty much speak for themselves but the effect when combined with pressure can produce startling results.

DIFFERENT NOZZLES

Both of these new painting options await in the airbrush requester, with all three sharing an improved spline control allowing different nozzles to be fitted to any one of the three brush types.

As before, the size and power of the brush can also be defined in percentages and tested in a small window at the bottom of the requester.

It's fairly obvious that TecSoft, the creators of TVPaint, have had a long hard look over their shoulder during the redesign and picked up a few tips from the other contenders in the 24-bit paint market such as OpalPaint, which offers scrollable display and effects such as chalk and pencil as part of its repertoire for some time.

As well as simply painting with the new brushes, cutting has also been added and as a result defining brush transparency is a dream. Once a brush is cut from the canvas, simply adjusting the power of the airbrush defines the overall density of the brush when stamped – and of course pres-



Multiple windows in action making huge savings on speed

sure control can also be applied. Although a big improvement, better brush management doesn't stop there. In fact TVPaint 2.0 is to the best of my knowledge the only 24-bit paint package to offer classic DPaint perspective to brushes.

Just like its predecessor, the twisting and turning of the brush is all handled by the numeric keypad with a DPaint style bounding box showing the transition of the brushes orientation in real time.

HIGH POINTS

Although packed with improvements, this has to be one of the program's high points which in one stroke will remove hours of tedious image processing from the creative process. In short it's the finishing touch to what is becoming a perfect if slightly overpriced package. As well as

basic artistic modifications, ARexx is also playing a bigger role with much better interaction between the package and the target ARexx scripts with on-screen events actually sending relative data to the target program.

Finally we've arrived at the final two long-awaited improvements, namely a tolerance limit for flood fill operations plus an auto-resize function within the Vlab requester which re-scales the image to fit the screen – something which irritated many professional users in the past.

Well that's about it! All very good news if you can afford the investment. For more information on TVPaint 2.0 for the Harlequin or indeed any of the boards supported contact The Amiga Centre Scotland on 0896 87583/87456 (fax).



ADPro goes rollin' on...

In keeping with this month's trend of expensive software, we'll continue our quest with ADPro 2.2, the latest incarnation of ASDG's world-beating image processing software.

After installing the new version, the biggest surprise on boot-up is the interface itself which has forsaken the old style layout and adopted the MorphPlus look – no doubt in an attempt to standardise operation for those users who are lucky enough to own both MorphPlus and ADPro.

However uniformity isn't the only reason for the new look as many of the features previously only available in MorphPlus are now within the reach of ADPro owners.

The aforementioned additions primarily involve display of the rendered data opening with monitor selection whether it be PAL, NTSC, VGA or DFLT – alias your default Workbench monitor – AGA compatibility in action.

Assuming the correct monitor is in place, the next job is to choose from one of the eight available dithering methods which now include Sm Ord and Lg Ord – each of which were only previously on offer within MorphPlus.

In addition to other selection, both the new modes and the Random dither can be further enhanced thanks to a new dithering amount requester which allows the level of effect to be taken from anything from 0 to 256.

On the load and save side, things are pretty much the same as before with the exceptions being an improved Vlab and loader plus and YUVN import as standard. On the save side only one addition appears in the form of an OpalVision saver.

Moving on to the operators, OpalVision makes another appearance with an OpalPaint operator which auto-loads

the OpalPaint program complete with the Raw image data from ADPro waiting on the OpalPaint edit screen.

After any tweaks and edits are complete, quitting OpalPaint immediately produces a prompt enquiring if the changes should be reflected within ADPro. Next up in the new operators list comes a variation on the warp operator entitled collapse.

As the name suggests, it collapses the image towards the centre of a definable circle with an optional blur effect available to soften the overall effect. The idea is to provide instant caricatures.

Displace Pixel comes next and unlike most operators is only at its best in combination with another ADPro option, namely composition. When the two are brought together truly impressive dissolves await.

Steve Tibbet – an Amiga programmer already famous for his X series of utilities – adds the next operator entitled Intensity Range which generates a 256-level histogram of the image which can then be trimmed to remove erroneous data or perhaps brighten or darken the image – a good tip is to save using the temp saver before you begin to experiment.

Continuing in the special effects vein is a feature inspired by the Collapse operator. Polar Mosaic radiates a tiling effect from the centre of a definable circle, and like the aforementioned Collapse, blurring can be added as



Never, ever leave a picture of yourself in the hands of an ADPro owner

required. The last of the new arrivals offers arguably the most punter friendly operator of them all, namely Simprint. As you may have guessed this particular function allows the simulation of the printed page to be sent to the screen complete with the chosen dithering option.

Obviously this doesn't take into account the idiosyncrasies of your printer but it nevertheless means reams of paper and more importantly large amounts of time can be saved during the usual hit and miss of the printing process.

If you're interested but can't afford to wait a little longer ADPro 2.3 isn't far away and promises direct interaction with DPaint. However, if time is of the essence contact MicroPACE UK on 0753 551888. Price: £179.99.

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Publishing on a shoestring

Ben Pointer demonstrates that for a very reasonable outlay you could be producing desktop-published pages to rival the quality of this one you're reading!

Almost all professional desktop publishers ply their trade on Macintosh computers, and have done since desktop publishing was invented.

Even a small Mac-based DTP system is going to set you back a few thousand pounds. Those who can't quite afford "the best" are almost always directed towards buying PC-based systems, where both the required hardware and the software are cheaper.

Can I tell you a quick story? A publishing firm I know well recently wanted to move from traditional publishing to desktop publishing.

They brought in a firm of consultants who told them what they needed and gave them an estimate for £50,000 based around Macintosh equipment. For that all

they were getting was a couple of computers, a large networked hard disk, a scanner, high resolution laser printer and software.

So they got in another firm of consultants, who got the cost down to £20,000 using PC-based equipment.

Now this publishing firm is also a printer and does a lot of work for me. They knew my stuff was desktop published, so they called me to ask what I used.

"Oh? What's an Amiga?"

Using Amigas, the setup they wanted would have cost about the same as the PC-based system, but I did quickly show them how they could build two high-powered Amiga DTP workstations for under £4,000 each, workstations that could produce publications indistinguishable from

anything produced on the Mac.

This gave them food for thought, and a year later they are still thinking.

But you don't have to spend £4,000 to produce professionally quality publications on the Amiga - it can be done for far less.

Take one cheap Amiga. An A1200 would be an ideal foundation to build upon because it has a faster processor than earlier "low-end" Amigas, but any old Amiga will do.

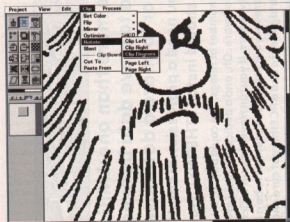
Why is a faster processor better? Because many of the functions performed internally by desktop publishing programs are highly complex and can take a while to complete. A faster processor means you won't have to stare at the clock or "sleepy" pointer for so long. If you are publishing to deadlines, time spent drum-

ming your fingers is money down the drain.

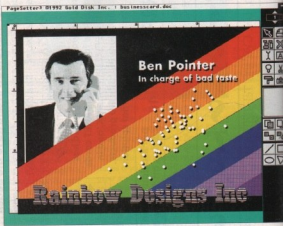
Next, get a hard drive. It doesn't have to be a fast hard drive or a big hard drive although as it is an important piece of equipment it might be better to steer clear of "bargains". Why do you need a hard drive?

For several reasons. Firstly for speed, again. You'll be loading and saving files all the time, and these files can get quite large, so a hard drive will cut down on waiting time. Then there's the question of typesetters.

Having hundreds of them spread across lots of floppy disks could make any particular face difficult to find. Having them all in one place on the hard drive makes life very much easier. Same thing for clip art and the many templates you



For line art scanning you can't beat the facilities in Touch-Up, the software that comes with the AlluScan hand scanner



Despite the fact that it costs just £50, PageStream3 gives you plenty of creative freedom, including full control over colour

may create for often used layouts.

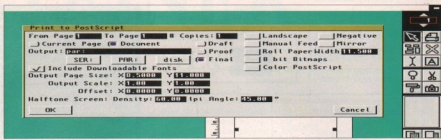
But if you are prepared to sort out a desktop floppy filing system for your various files so that any particular file can be brought to hand quickly, and if you can live with slower loading and saving times, then you can get by without a hard drive.

You can't, however, get by without memory. Just about everything to do with desktop publishing eats memory like it's going out of fashion. The absolute minimum amount you need is 2Mb.

With this you'll be able to produce simple documents of one or two pages, provided you don't go too crazy with graphics and typefaces. A more comfortable figure is 4Mb. The more memory, the better. If you can't afford both a hard drive and lots of memory, the memory is much more important.

The next step is software. Choosing software is a very personal thing. It's a bit like buying clothes - what looks good on someone else might make you look a right nerd.

You have to keep in mind that desktop publishing is not glorified word processing. Desktop publishing programs don't work like word processors, so whatever DTP package you buy you must be pre-



PageSetter3 can even control PostScript devices, including colour ones, although it doesn't cater for colour separations

pared to learn how to use it.

There are a few wordprocessors that come very close to being DTP programs. They work like wordprocessors, which makes them quicker to learn how to use, but they contain many DTP features like the ability to import pictures, draw lines and boxes, use many different scalable typefaces, format text into columns, and so on.

So you don't have to buy a "DTP" program in order to publish from the desktop, one of the so-called "document processors" may be more up

your street.

The two most important features you need to look for are typeface support and graphics support. Typefaces and pictures are the materials with which the desktop publisher "paints", so if the program you choose limits you in any way as to what you can and can't do with typefaces and pictures, your creativity will be caged.

Ideally you want some kind of support for PostScript Type 1 typefaces - either direct support or some means to convert this format of typeface into that used by your program - because Type 1 faces are

the desktop publishing "standard".

Compugraphic Intellifont support is also useful because this is the Amiga's "standard" scalable typeface format. What you don't want is "bitmap" font support. Amiga bitmap fonts are not of a high enough quality for desktop publishing, not even on a shoestring.

As far as pictures are concerned you'll want to be able to import standard IFF-ILBM files. But these are bitmaps, and just like bitmap fonts they will print out with

The essential guide to what to buy

There's not much DTP software and hardware that you can call "cheap", so what follows is a discussion of the least expensive options, keeping in mind that quality is important to desktop publishing. Also, there are no PD solutions for DTP programs, only for typefaces and clip art.

Publishing software

Of the so-called "document processors" on the market, only Wordworth 2 and Final Copy II are worth investigating. But as both of these packages cost twice as much as PageSetter3, which is a dedicated desktop publisher that comes with an integrated wordprocessor and painting program, it doesn't make much sense to consider anything else.

PageSetter3 is essentially a "little brother" to the famous Professional Page. It directly supports Compugraphic scalable typefaces, and comes with a utility that can convert PostScript Type 1 faces into Compugraphic format.

It will import any IFF-ILBM graphic, and also supports the Pro Draw clip format of structured drawing.

Professional Page is being sold for just over twice the price of PageSetter3, but you do need a hard drive. If you don't have a hard drive and you want more power, then you must turn to PageStream, which is more expensive again.

Typefaces and clip art

Just about every PD library has many disks full of clip art and PostScript Type 1

and Compugraphic typefaces. For the most part these disks are poorly compiled, often with corrupt or missing files on them, and you will have to sort out the mess yourself.

A few libraries take more care, for which they generally charge a little bit more.

Almost all the PD typefaces you'll come across started life on the Macintosh and have been converted by various people to MS-DOS format files, after which various other people have collected them on to Amiga formatted disks.

A lot of them have characters missing from the character set, corrupted characters, only upper case characters and numbers, punctuation marks missing, no kerning information, and so on and so forth. Like a lot of other PD material, it isn't up to professional standards, but then it costs peanuts in comparison.

If you want to "fix" any of these dodgy typefaces you'll need TypeSmith, which costs £135.

But there are plenty of typefaces that are good enough to use as they come, and at about £10 per 100 typefaces you can't really complain.

Clip art usually comes in either IFF-ILBM format, which any DTP package can handle, or Illustrator format, which only PageStream (at the time of writing) will import. There are a few PD ProDraw clip art disks, but nothing to get excited about.

On the commercial front there are thousands of professional typefaces available in either PostScript Type 1 or

Compugraphic format, but expect to pay between £30 and £50 per typeface, sometimes more.

And remember, Italic and Bold versions of a typeface are separate typefaces, so a full "type family" could cost you a few hundred pounds.

There are cheaper options, like E M Computergraphic's range of Computer Safari typefaces, which work out to between £3 and £5 each. These are mainly "fancy" typefaces, not the sort you'd publish a long body of text in, but they are of a much higher quality than PD equivalents.

Commercial clip art is thin on the ground and generally quite expensive for what you get. In the end you are probably better off with a hand scanner and a clip art "source" book.

Hand scanners

There are three choices for hand scanners: the DataScan Pro, the Power Scanner and the AlfaScan scanner.

DataScan Pro is the cheapest and easiest to use, but lacks some of the more powerful features that the others have. The AlfaScan scanner comes with the superb Touch-Up software, which, as well as being scanning software, is a sort of black-and-white Paint-Com-ProDraw.

It's brilliant for working with line art scans and produces excellent greyscales from scans of photographs. However, because of its many powerful features, it can take quite a while to learn how to use.

The Power Scanner is a good compro-

mise between performance and price. It produces excellent greyscales and has a fair number of drawing tools for touching-up and working on line art scans.

Printing software

If you want to enhance the graphics output from your printer then the choice of software is between TurboPrint and Studio.

Both will enable you to alter parameters like other patterns, brightness, contrast and gamma, and have whatever program is doing the printing use those settings.

They are about the same price (£50), but the difference is that TurboPrint uses its own type of non-standard printer driver whereas Studio uses 100 per cent Amiga-compatible printer drivers.

Studio can also output in up to 256 greyscales or 16.7 million colours, whereas TurboPrint is limited to the normal Amiga restrictions of 16 greyscales and 4,096 colours.

Studio comes with drivers that enable it to work with all models of DeskJet (and compatibles) including the 500C and 550C, all LaserJets (and compatibles) including the new 400/600dpi models, and most Epson-compatible 24-pin and 48-pin dot-matrix printers, including a special mode for the popular Star SJ-48 bubble jet.

Canon bubblejets and laser printers are not catered for by Studio because there is a separate "CanonStudio" version of the program (actually commissioned by Canon) available at a cheaper price.

jagged curves and diagonals unless scaled down to small sizes.

So for graphics with smooth edges (like the scalable typefaces) you'll want support for some kind of "structured drawing" file format like Pro Draw clips, IFF-DR2 or Adobe Illustrator.

Roll all these needs up in a parcel stamped "I haven't got much money", put it in the oven for 20 mins, and what you pull out will be PageSetter3. From its sub-£50 price you'll guess that it isn't as fully-featured as the more expensive DTP systems, but it's easily as good as, and in some ways better than, Professional Page and PageStream were a couple of years ago.

There are some other bits and bobs that a well-equipped desktop publisher shouldn't be without. A scanner, for a start. The professionals use very expensive A4 flatbed colour scanners, but with planning and ingenuity the shoestring publisher can do marvels with a cheap hand scanner.

Graphics like logos, signatures, diagrams, "clippings" from newspapers and magazines and cartoons (on't require a big flatbed scanner. You can get comparatively inexpensive colour hand scanners as

well as mono ones.

And you need a printer, of course. Which one? Well, 24-pins really aren't good enough for printing your creative masterpieces. Inkjet is better, and there are quite a few small inkjet printers available for about the same price as 24-pin dot-matrix printers.

But beware, the word "inkjet" doesn't mean "high resolution": there are some cheap inkjets that are the same low resolution as 9-pin dot-matrix printers. Look for 300 or 360 dpi resolution, nothing less is good enough.

You want colour? Tch, difficult. You see, the attractively-priced 24-pin colour dot-matrix printers are not all that they are cracked up to be. All of them suffer to some extent from an effect known as "banding" - regular horizontal lines across printouts caused by the way these printers print, and by inaccuracies in the linefeed mechanism.

If you want to produce "finished" colour documents that are good enough to be handed out as they are or photocopied, then you'll either have to consider buying a colour inkjet printer, or use a DTP bureau. Neither option is cheap.

The Amiga's printing capabilities are actually quite limited. The quality of your

Getting outside help

If your pocket can't extend to a high quality inkjet or laser printer, then you can always take your documents to a DTP bureau for printing.

Several options are normally available, from output on various resolutions of laser printer, right up to films or bromides from an imagesetter.

Normally the bureau will want the file in a format that is readable by a Mac or PC, and this means EPS. Unfortunately, PageSetter3 cannot output in this format. But it can create PostScript files that any bureau will be able to handle and print.

First you'll have to get your files on to MS-DOS format disks, and to do this you'll need a commercial package like CrossDOS (which comes with the 1200, 4000 and Release 2.1 upgrade kit), or a PD utility like MultiDOS, which any library will be able to supply you with.

Prices for printing vary. A few pages on a mono laser printer aren't going to cost much at all - about the same price as photocopying - whereas use of the bureau's colour PostScript printer will be expensive.

Time on an imagesetter will empty your pockets very quickly. But whatever it costs, all the prices will be negotiable and will depend on what it is you want printed and how much there is of it.

Most print shops are very friendly and approachable, and if you ask them nicely they may even allow you to bring your Amiga along and hook it up to one of their printers, which will save time messing about with PostScript files and MS-DOS formatted disks.

printouts, particularly if they contain colours or shades of grey, can be enhanced by special printing software.

Keep in mind that no printer software is going to be able to turn a mediocre printer into a good one, but you can turn a good one into a great one - it's certainly possible using special printer software to get better looking output from a cheap inkjet than from an expensive laser printer.

So, adding up the cost of all the hardware and software discussed above, not including the cost of the Amiga (which I assume you already have) we've spent less than £1,000 and have built a DTP workstation from which you can produce documents that will hold their own with the best.

Take away the cost of the hard drive and the hand scanner, which aren't absolutely essential, and it's less than £500 - basically the cost of the software, some memory, a few typefaces, lots of blank floppy disks, and the printer.

The one thing that money can't buy is what you've got between your ears, and arguably the greatest investment you

will have to make is in time - time to learn how to use the software, time to learn about design and typography, time to actually create your work.

The right hardware and software isn't going to turn you into a desktop publisher - time spent at the keyboard will. For fiction advice you can turn to any publication you can lay your hands on. I don't mean you have to read books, I mean you should study magazine, leaflet and advertisement layouts in minute detail.

Remember design techniques that you like and try to copy them and incorporate them into your own overall designs.

Later on you might be able to afford a book or two that will tell you why certain things are done in certain ways, but always remember that the only reason there are desktop publishing "rules" is so that innovative creative artists can break those rules in order to produce designs that turn heads.

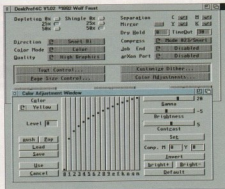
Stick to the so-called rules and you'll produce professional-looking publications that anyone would be proud of - break the rules and you'll knock them cold.

The right hardware and software isn't going to turn you into a desktop publisher...



The mono Power Scanner produces lovely greyscale in 16 or 64 shades

Printer output can be greatly enhanced using software like Studio



Product availability

PageSetter3 is available from Silica Systems, 1-4 The Mews, Hatherley Road, Sidcup DA14 4DX. Tel 081-309 1111.

Studio and CanonStudio are available from JAM, 75 Greatfields Drive, Uxbridge UB8 3QN. Tel 0895 274449.

A good collection of PD clip art and typefaces is available from E M Computergraphic, 8 Edith Road, Clacton on Sea CO15 1JU. Tel 0255 431389.

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UTILITIES

- U1...Games Music Creator
- U2...Bus Stop Music
- U3...The Games Disk
- U4...Raiders Ringer Disk
- U5...The Games Disk
- U6...Punchline
- U7...Punchline
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STOCK



Training for potential cashiers



Racing by letters



Improving techniques in the Workshop

Most journalists can't type properly. No, 'tis true, and it's the case from the lowliest reporter to editors in Fleet Street. Those high enough don't worry or don't care, and those not quite there yet are too busy struggling up the ladder to take lowly typing lessons.

All of which is, of course, pig-headed stupidity. As the majority of us know, once you've used a keyboard for any length of time at all, you speed up considerably and reach a stage where you can easily forget that you're physically typing when you're using a program requiring extensive keyboard use. The trouble is that if you attempt to up your speed, mistakes creep in with alarming regularity.

Which is where the catchily titled Mavis Beacon Teaches Typing comes in. Whether or not the stylish woman on the cover of the box is actually Mavis, she is currently in the homes of over a million people worldwide in her previous incarnation, and this new, updated version looks set to continue this impressive ongoing lesson.

The program has two aims - to increase your typing speed, and to improve your accuracy. It has a myriad of features and options, explained both in the very useful tutorial guide to the package and as you are actually using the lessons.

Indeed, it never asks you to do anything without explaining exactly why - a

Word games

In the Arcade section, you race against a merciless driver, but this is a racing game with a difference. Much like children's education software, Mavis Beacon utilises the "it's fun to play while you learn" ethos.

And judging by the number of grown adults I've seen in this office plinking pseudo-Fuzzy Felt cartoon bears onto backdrops with every happy click of the mouse, the concept indeed is as applicable to adults as to younger people.

Basically you go ahead or behind depending upon - you've guessed it - the speed and accuracy of your typing, speed showing on the speedometer and accuracy represented on the RPM counter on your dashboard.

Gonna use my fingers...

great quasher of bored frustration (your personal level of which you can set, incidentally, depending on your degree of interest and your temper).

Before you can begin, the program starts by asking you for a few preliminaries. As well as the usual name, it wants to know how old you are (presumably for choosing relevant pieces of text for you to practise on) and what your level of expertise is.

Choose Beginner and you'll be taught which fingers are used to type what and generally hand-led into the lessons. I started on Intermediate, which drops the "which keys, which fingers" bit but is still beatably paced.

PRECIOUS TIME

Most of the typing is done in the Classroom. This is represented on-screen by a keyboard, and a piece of "paper" on which some sample text will appear. You must type underneath the sample exactly what is written, including all the correct spacings and so on.

You have access to the usual delete functions should you make any mistakes, but you're looking for a respectable words-per-minute count, so corrections eat away valuable seconds.

At the end of a lesson, you're told words-per-minute, your level of accuracy, and given a comment from Mavis - you can even control how talkative the woman is!

The Workshop is similar to the Classroom, except there are meters and gauges showing you all the time how you're doing. There's also a metronome for stopping yourself getting carried away and making mistakes.

All the text you practice is sourced rather than written by the programmers, and includes what the manual describes as "fascinating passages" from the likes of the Guinness Book of Records.

It also seems to have an alarming tendency to contain letters which send your fingers flying all over the keyboard - not too surprising, really. New for this issue of

Typing correctly will add speed and accuracy to any keyboard user's inputting skills. Phil Morse stretches his pinkies over the latest incarnation of the world-famous Mavis Beacon Teaches Typing tutorial package

the software is the 10-Key (numeric keypad) teacher, which is great for prospective accountants or ambitious cashiers, but not so good for poor A600 owners. There's a game tied into it too - a checkout with goods passing which you have to type in as quickly as you can on the keypad.

As far as monitoring your progress goes, as well as graphs showing exactly how well, key by key, you're getting on, you can get Mavis to take account of past lessons when advising and commenting, and utilise this and more comprehensive statistics to customise your own lessons, really testing where you need practice.


CONCLUSION

This really is an impressive package. It's clean, clear, colourful, intuitive and above all, one does not feel crippled using a computer to teach oneself typing, as you might suspect could happen.

It's a tribute to the programmers that one can easily get lost in practising and come out a damn sight faster and more accurate - a classic case of using your computer as a means to an end.

With the ability to "save" multiple pupils, meaning lots of people can be recognised by the same copy of the pro-

gram on the same computer, and well thought-out touches - the ability to close spacing after full stops, for instance - this tutor deserves to go on and teach another million willing pupils how to type.

Who knows, maybe behind closed doors somewhere there's even a journalist trying to banish his or her self from the dreaded "three-finger typist" syndrome! 

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A600 - Essential V12400W - Recommended

1 Mb	Normal monitor
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The bottom line

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Despite the fact that the AReXX language forms part of the Amiga's operating system software, many Amiga users still do not use it.

Part of the trouble, from the newcomer's viewpoint, has clearly been the lack of beginner-level tutorial documentation, and the purpose of this article is to help you take some important first steps.

It's obviously not possible to deal with everything in a single article, but Amiga Computing does, of course, provide regular more advanced help through its AReXX Insight pages (see page 126).

What do you need to know about in order to jump on the AReXX bandwagon? It is an interpreted high-level programming language which shares with Basic a number of important characteristics, including the fact that it is very easy to learn. AReXX, like Basic, is also a convenient tool as far as program development is concerned.

It is possible to sit down at an Amiga, type a few lines of AReXX code, execute them and see the results, make a few changes, and immediately re-execute the program. If there are any bugs in your code, AReXX will usually stop the program and tell you without the system crashing.

Before you can run an AReXX program you need to have the language installed on your Amiga. This brings us to a piece of software called Rexxmast which is the part of the AReXX system that must be up and running before any AReXX program can be executed. Because of this, the Rexxmast command is usually added to the startup-sequence.

REXXMAST

What fuses a lot of people about Rexxmast is that it runs as a background process so there are no visible indications that the program is active. Rexxmast does, in fact, open a small window to introduce itself as it starts up, but this window disappears after a few seconds.

In reality Rexxmast, despite the absence of any visible signs, hangs around in memory waiting to execute any AReXX programs that come along.

Although Rexxmast acts as AReXX's "master controller" it does not work completely alone. For reasons of efficiency much of AReXX has been implemented as a "shared library" called rexxsyslib, and one of the first things that Rexxmast does is to look in the current LIBS: directory to make sure its library is available.

To create an AReXX program you use a text editor. AReXX doesn't provide a specialist editor because it has been designed to work with ordinary ASCII text files, the ones written by all conventional text editors.

You can use AmigaDOS's ED program, MEMACS, or your favourite wordprocessor providing it can create plain ASCII text files without embedded control characters.

So to create an AReXX program you simply load your favourite text editor, type in the program, and save the text file. From this moment your program will be ready to run.

There are two basic ways in which AReXX may run its programs. Firstly some other application may talk to AReXX and effectively say "please run this AReXX program for me". Such programs could be AReXX scripts you have written or they

AReXX made easy



If you've been tempted to get into AReXX programming but have not known where to start, now is your opportunity, as Paul Overaa provides a lucid introduction to this useful language

could be scripts provided as part of some other package.

Either way, these programs are called AReXX macros and they are used to add new facilities to some main applications program, such as a spreadsheet, database or wordprocessor.

It is, of course, also possible to create standalone AReXX programs, that is ones which can be executed independently. In these cases a separate AReXX system command called RX is needed to kick off the program.

For this reason RX is usually placed in the Amiga's command (C:) directory so that it is available locally to most of the other Amiga system commands. To run a script file from a CLI/Shell window you just type RX followed by the program name. For instance:

```
rx test.rexx
```

would cause AReXX to load and run the program called test.rexx. It is not strictly necessary to type the .rexx filename extension when running AReXX programs via the RX program because RX itself will, if it fails to find the program name as given on the command line, re-try to find the program after automatically adding .rexx to the end of the name.

Standalone AReXX programs are not, incidentally, required to have a .rexx name extension but it is a common practice because it helps such scripts to be identified from AReXX macros and programs written in other languages.

Macros, again by convention, tend to be given names which relate to the applications programs that they are used with.

Let's assume then that you have Rexxmax up and running, have loaded your text editor, and are now ready to start programming. As you read through the following examples try typing them in, saving the text file, and then using the RX program to run them from a CLI/Shell window:

```
/* Example1.rexx */
say 'This is my first AReXX program'
```

AReXX programs must always start with a comment enclosed between /* and */ character pairs. Since a comment must be present, use it for something useful,

Powerful extra features

What else does AReXX offer? Well, for starters it allows you to write functions with their own local variables, offers a whole range of arithmetic/logic operations and provides both simple and compound variables which allow arrays and other data structures to be created.

Error-trapping and in-built interactive tracing via a separate trace window is available (making it possible to keep program trace messages well away from normal program output) as well as interrupt mechanisms, powerful string handling and string parsing functions.

There's no way we can even begin to list all its facilities let alone give examples of the language here's one more snapshot of the language.

AReXX, like Basic, provides easy to

```
/* Example2.rexx */
animals = 'I do not know anything
about these animals'
animals.cat = 'cats have four legs
and they cannot fly'
animals.dog = 'dogs have four legs
and they cannot fly'
animals.horse = 'horses have four legs
and they cannot fly'
animals.human = 'humans have two legs
and they cannot fly'
animals.tiger = 'tigers have four legs
and they cannot fly'
```

```
animals.zebra = 'zebras have four legs
and they cannot fly'
options prompt 'What sort of animal do
you wish to know about?'
say 'Give me the name of an animal and I
will try and tell you'
parse pull item /* get first item */
do while item <> ''
    say animals.item
    parse pull item /* get next
item */
end
```

use loop facilities and the program shown above Example2.rexx, uses a loop to collect input items from the user in order to identify the location of an item stored in a compound variable.

There's not the space to go into detail

about how compound variables work so just run the program and think about the potential benefits of a language that allows you to use text string variables to identify elements in array type structures!

such as the name of the program.

Say is a keyword which is roughly equivalent to Basic's Print statement and in this case I've used it to print some static text (delimited by single or double quotes).

The AReXX equivalent of the Basic Print statement, which can be used to collect some input from a user, is Parse Pull, and so if we wanted the program to ask for, and print, the user's name we would do it like this:

```
/* Example3.rexx - another simple AReXX
program */
say 'What is your name'
parse pull name
say name
```

Despite some general similarities between Basic and AReXX it's obvious that differences do exist. To start with even though we are dealing with text strings we have not had to explicitly indicate that the AReXX variable name is used to hold a text string.

The reason for this is that AReXX variables are essentially typeless and so do not have to be declared. If in fact and you wrote these AReXX statements:

```
x=24
y=22
say x+y
```

AReXX would know that it was dealing

with numbers and would provide 48 as the answer. If therefore you wished to write an AReXX program that converted feet into inches you could do like this:

```
/* Example3.rexx - converts feet to inches
*/
say 'How many feet'
parse pull feet
say 'This is ' feet*12 ' inches'
```

AReXX does not however always react in the way you might expect. Consider these two programs:

```
/* Example4.rexx */
say 'Hello'
/* Example5.rexx */
say Hello
```

Example4.rexx prints the Hello text as written but with Example5.rexx the result is that the uppercase HELLO is produced. Why? It's because quotes were not placed around 'Hello' so AReXX assumed that Hello was a variable rather than a text string.

Now you might think that since AReXX has regarded Hello as a variable, and since this variable was not initialised (ie explicitly set to any initial value) that AReXX would either report some form of error saying that an uninitialised variable had been used, or would possibly print a null string, ie nothing.

In fact AReXX does something com-

pletely different again - it automatically initialises the variable to the name of the variable itself! AReXX uses uppercase characters for its keywords, variables and other labels so the program's Hello variable, as far as AReXX is concerned, is the variable HELLO.

You can easily prove that AReXX is treating Hello as a variable by setting it to another value and re-displaying its contents. For instance, the program:

```
/* Example6.rexx */
say Hello
Hello='A New Text String'
say Hello
```

would produce as output the text "HELLO" followed by "A New Text String".

AReXX always looks at the contents of its variables just prior to using them and, providing those contents are valid for the type of operation being performed AReXX will carry out the specified operation.

It cannot however do the impossible and so if, for example, you attempt to carry out an arithmetic operation on a text string AReXX will stop your program with an "arithmetic conversion" error message.

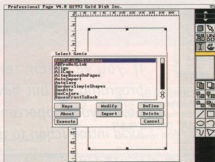
These errors can easily occur if you inadvertently fail to explicitly initialise a variable which is subsequently used to hold a number:

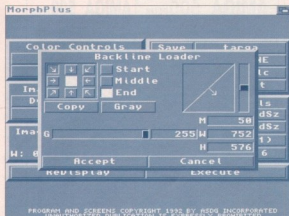
```
/* Example7.rexx - a common slip */
say x+2
```

Because x was not explicitly initialised AReXX set it to the uppercase string X. Since adding two to a text string is not a valid operation AReXX reports an error.

There is of course far more to AReXX than we've mentioned in this article including a whole range of in-built functions. Powerful external function libraries which can add Intuition window links, extra maths functions and so on are also available and the language itself has a whole range of other advanced goodies to offer.

For now though we've just got time to mention the one area where AReXX will be





totally different from any language you've ever seen.

There is, believe it or not, an area of ARExx programming that involves program statements that have no meaning to ARExx itself which has arisen because of the way ARExx behaves when finding such statements.

In short it assumes that they are commands intended for another application and transmits them to a program whose destination has been determined by specifying a current host address (this is a public message port managed by the host application).

All programs that provide ARExx interfaces set up their own, uniquely named, ports and it is through these entities that data gets passed. ARExx contains an Address command that allows the current host address to be specified.

Why is it useful to have this type of inter-program communication? One reason

is that it allows you to create ARExx macro programs for adding extra facilities to other programs (thereby increasing their power).

More to the point you can do it, if you learn how to write your own macros, in a way which suits your needs! Here's a simple example. The SAS text editor provides an ARExx command set.

Some of the commands mimic menu operations; BM for instance selects Block Menu operations and since a UCx command refers to character x, transmitting BM UCL is like selecting End in the Block Menu, and transmitting BM UCB like selecting Beginning.

The commands mentioned above just cause the editor to do a particular job but other commands, such as the GL (get line number) and GT (get text line) produce results that can be sent back to an ARExx macro.

In this case it is the responsibility of the macro code to collect those results and the

SAS editor uses the standard convention of providing results in such a way that ARExx can place them in its RESULT variable (the ARExx OPTIONS RESULTS instruction is used to force ARExx to look for these results).

To ask the editor to send the current line of text to a macro we might use this type of code:

```
options results
'gt'
testresult
```

Used in conjunction with the Block Menu commands even these simple editor commands can achieve a lot. You might for instance use a loop to read lines from a block of text into a variable and add line numbers to them in such a way that empty lines get disregarded.

Such a macro could be tied to an Amiga function key so that, if for example, I had marked out this text block:

```
* This is just a test
to show how a "non null"
line numbering
macro might work
```

I'd just need to hit the appropriate function key in order to intelligently number the text lines of the block like this...

```
1: This is just a test
2: to show how a "non null"
3: line numbering
4: macro might work
```

Packages like Prowrite use similar ideas when tying macros to function keys but the commands themselves are of course totally different to those used by the SAS editor!

In fact it is just this sort of variation that confuses many ARExx newcomers - they think that a package's ARExx interface facilities should somehow follow ARExx's

The mists of time...

Let's get some historical stuff out of the way. ARExx is the Amiga version of REXX a programming language developed a little over ten years ago by a chap called Mike Cowlishaw at IBM.

To cut a long story short Bill Hawes took the REXX language definition and produced an Amiga version called ARExx. Five years later Commodore added their support by including ARExx as part of the Workbench 2 system software.

syntex rules. They don't - the syntax of the commands sent to other programs has little or nothing to do with ARExx itself and in fact all ARExx really needs to know when it encounters commands and decides to transmit them to an external host is where those external commands should be sent.

The important point about all of this is that every ARExx product will in fact have its own specialised set of commands which it only will understand. More to the point, the extent of the facilities offered will depend on what the originator of the product decided to include.

The bottom line is that being told that a piece of software has an ARExx interface means nothing unless you know exactly what facilities the developer has provided. How do you know what types of ARExx goodies will be offered with particular packages?

You have to consult the manuals of the products concerned. Needless to say this information will not mean that much unless you are reasonably ARExx communications literate. This is one very good reason for jumping on the ARExx bandwagon as soon as possible!

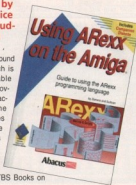
The written word

Using ARExx on The Amiga

By Chris Zamara and Nick Sullivan

Published by Abacus. Price £29.95 (including disk)

This is a good all round ARExx book which is particularly suitable for beginners. It covers the main characteristics of the language, provides a good reference section, and has lots of examples and tutorial discussions. For details contact DTBS Books on 0706 715028.



The ARExx Cookbook

By Merril Callaway

Published by Whitestone. Price: £24.95 (including disk 1 £29.95, including disks 1 and 2 £34.95)

This book is aimed at the more ambitious ARExx programmer and, since you will not find the usual introductory-style lists of ARExx instructions and function definitions, access to other ARExx literature is essential.

Content-wise the book scores highly and there are good accounts of all the standard topics including file handling, the use of ARExx's powerful string functions and the use of ARExx's sophisticated string parsing facilities.

There is also a good chapter on using ARExx and PostScript, and a useful appendix on using ARExx with Art Department Professional. There are a great many examples and as an added bonus the author makes a point of getting across lots of useful programming style tips.

Not for complete beginners but an excellent book for competent coders moving to ARExx: other languages! For details contact PremierVision on 071-274 4407.

Mastering Amiga ARExx

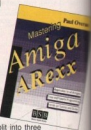
by Paul Overaa

Published by Bruce Smith Books. Price: £21.95 (including disk)

This recently published book is my own ARExx offering and is split into three main sections. Part one provides a tutorial introduction to the language, part two covers the ARExx communications issues from a pure "user's" viewpoint, and part three tackles some of the underlying technical issues.

The first two parts (which constitute the bulk of the book) are aimed at anyone, including the beginner, who wants to learn about ARExx.

Part three, which has been included for the benefit of more experienced programmers, provides details of both how the ARExx communications mechanisms work and how ARExx interfaces can be added to your own programs. For details contact BSB Books on 0923 894355.



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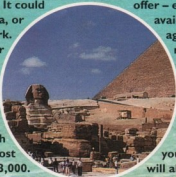
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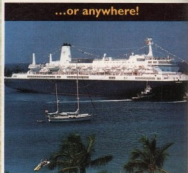
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ATARI – For the Atari ST enthusiast there are three magazines – *ST Action* (£3.95) for gamers, with *Atari ST User* (£3.40) and *Atari ST Review* (£3.50) satisfying the more general ST owner.

NINTENDO – The whole of the ever-expanding Nintendo scene is covered by *N-Force* (£1.95), while dedicated fans of the Super NES have *Super Action* (99p) and for Game Boy freaks there's *G8 Action* (99p).

PC – Most dynamic newcomer on the PC magazine scene is *PC Home* (£3.95), covering both business and leisure interests. *PC Today* (£3.95) is devoted to supplying practical solutions for the small businessman.

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GROUP OF COMPANIES

MR NEWSAGENT: Please confirm this order and return the form to your wholesaler for entry in the prize draw

AIN PARIS FOR YOUR NEWSAGENT TOO!

Before we launch headlong into the selection, some news. You can now get OctaMED v2, the acclaimed Amiga sound-tracker/music composition program, for free. With the new release of OctaMED Pro, this earlier version is now public domain. Please note, though, that apart from versions one and two, all other versions remain commercial, which means you'll have to pay for them. To the Batmobile...

The most life-like animations, the loudest music demos, the fastest games, the best applications – this month's pile of PD has been sorted and selected for you by our in-house quality filter,
Phil Morse



PUBLIC SECTOR



A gallery of early nuclear pioneers

Discovery of the Atom v1.5

Paul Matthews

This multimedia presentation, which comes on two disks and really does need two drives to run with any degree of fluidity, is an educational look at the development of atomic physics, from the early 19th century pioneers who laid down the foundations to the current day, taking in the horrors of Hiroshima – among other things – on the way.

Very well presented, with a couple of atoms spinning around an electron as a tit-

tle piece of "animated clip-art" adorning every contents/index page, this program uses many techniques to involve the user and stave off boredom – none of which are at the expense of a good deal of technical

This month's brace of sit-back-and-watches takes us first to Japan, and the Japanese Motion Picture from Pathfinder PD. After a quite amusing dig at the Amstrad CPC computer range in its opening segment, it moves on to a slideshow/animation featuring the characters from, presumably, a comic or cartoon. They're

accuracy. There are pictures of the pioneers, diagrams, even an animated nuclear explosion, and it's generally extremely well put together.

In some places there are a few too many pages of plain text, but overall this is a bold and successful attempt to bring an involved subject closer to the pupil.

As the program takes no moral stance (something which would be all too easy to do considering the tens of thousands who died at Hiroshima) it couldn't be accused of bias in either direction, so would be a good educational tool for schools and colleges.

Arcade Classics Vol 1

Carl Harper

Look at this list for a who's who of early arcade games – Asteroids, Centipede, Galaxians, Pacman (whoops, I mean Munchman), Missile Command, and, of course, Space Invaders. They're all on one

all well drawn, colourful, and presented originally and engagingly.

The camera moves from one part of a still to another, people turn their heads to look at you, and generally it's been constructed to try and relieve the tedium of watching completely static slide after completely static slide.

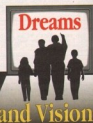
The characters are coherent in

disk, too. However, as with most of these games compilations, the quality does vary quite a bit from game to game.

At the top of the rung we have Centipede, or Centipede as the programmers call it, which – despite its rather off-putting horizontally scrolling starry background – is a fun interpretation of the original, with all the usual mushrooms, bouncing frogs (in space?) and the like, to keep your finely digitized ship right in the thick of it.

At the other end of the scale is Galaxians, or Girl Actions, which is a blocky and jumpy version of the original with laughably out of place sound effects.

The others are in-between these two, and taken as a whole the disk provides a



looks, too, reminding me simultaneously of the Battle of the Planets and Muskeheads cartoon crows! The whole thing kept me happy, and for someone whose knowledge of current comics stretches as far as, and no further than, The Freak Brothers, that's quite a feat.

Next up is an animation in the classic sense of the word – you know, takes absolutely ages to load, turns out to be about a second long...

Actually, this is very good indeed, the best I've seen in a number of months. It's Charley Cat V – Snow Joke, and it comes from Roberts Smith PD on two disks.

With a title from an old Goon show one might have started to worry, but this turns out to be one of the best examples of what the Amiga is capable of. It features the now-familiar (to

Contents

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Part 2 - The Atom

Part 3 - Atom

Part 4 - Atom

Part 5 - Atom

Part 6 - Atom

Part 7 - Atom

Part 8 - Atom

The disk covers a broad spectrum



The Japanese Motion Picture

great many moments for sitting back, smiling a world-weary smile and drifting away into a long-lost youth. Or something like that.

Arcade Classics 2

Carl Harper

Not as prolifically populated with oldies as the first volume, this disk does nevertheless contain some gems. No prizes for guessing what Squamble is, and this version has the added attraction of a musical soundtrack composed by Teijo Kinnunen of OctaMED-authoring fame.

Rather crudely put together despite that, it manages to retain some of the feel of the original horizontal scroller.

The same can be said of Donkey Kong and this disk's version of Frogger – both are actually poorer than the arcade originals (if my memory serves me well) yet both bring back memories of those days when games were, well, simple...

Tables Test

Charles Denison

Hands up if you can guess what this one's about! We all have to learn them at some stage, and this program might just make it easier for any young children in your life to get through those dreaded tables tests.

It's a simple, colourful educational game – the computer asks the child which table is to be tested, and then poses a number of questions – simple "What is 5 x 6?" types, which, depending upon the answer given, elicit a sunny, balloon-filled summer scene, complete with jolly music and sound effects, or alternatively a dark screen peppered with ugly frogs

anyone who's seen any of the first four, anyway) Charlie and his girlfriend on a bit of a winter sports holiday.

Unfortunately, as always seems to be the way in cartoons, Charlie's arch-enemy Tiger has come along too, and is hell-bent on making things decidedly sticky for poor Charlie and girlfriend.

The animation – although limited to an extent by the Amiga's hardware – is great and the scenery is very colourful.

The sound effects and music – appearing for the first time in a Charlie animation – are really atmospheric and add a great deal, and the whole product is a shining example of imagination and practical know-how on the part of Anthony Whitaker, the programmer.

Interestingly, Anthony has retained



The congratulatory screen from Tables Test

and finished off with the "Quack quack!" from Radio 1's "Quack quack oops!" jingle – punishment indeed!

I'm not sure if this would hold a child's attention for long enough to do some real teaching, but it'd certainly be great for last-night revision before a tables test.

A little more variety in what is to be questioned would be nice, as would a slightly more comprehensive statistics, but as it stands it's a useful little tutor.

Bat 'o' Rooms

S S Teague

This is a really clever little game. The best games always tend to be based around a simple idea, and nowhere does this philosophy seem to prove itself more than in

Choosing your tables in Tables Test

the public sector.

Basically there are two baseball bats, made a little cuter by the addition of a pair of eyes on each, which you have to use to hit balls – of which there are plenty dotted around – into nets.

If there is only one player, the computer will take over the spare bat, but this game really should be played with two.

It's akin to the kind of frantic games you see on children's action shows, involving lots of frantic shouting and barrels of laughter – or at least, it was when we played it!

The nets move up and down each side of the screen to makes things a little awkward for you, and there are the usual selection of power-ups and bonuses to help stop you getting bored.

Available as licensware directly from the author at present (address at end), this is one of the best Amos games I've seen in quite a while.



Japanese – pictures of a high graphical standard

copyright on the characters while making the game public domain – a smart move, judging by their quality. If you're going to buy just one of the animations we've covered in the last three months, buy this one

Supersound v3.2

KBE Software

This packed (99 per cent full) disk contains what is claimed to be the very best PD sampling software available for the Amiga. It certainly looks thorough before you've even loaded it, with a proper installation program and documentation.

It continues to be impressive after loading, ditching the polished, sleek but ultimately counter-productive flashiness of programs such as AMAS, and instead presenting a no-nonsense interface packed with useful features and arranged in as uncluttered and functional way as possible.

All the usual features are there – you can sample in mono or stereo, load and save samples in a variety of formats, enjoy full cut and paste editing – even keep track of how many hours you've been hunched over your monitor fine-tuning that elusive sample by virtue of the clock and alarm!

It has not one but two effects menus, positively bristling with goodies such as an effect called Metallic and another (no guesses what this one does) called Bass Boost. There are more effects here that

PD, please!

If you're a library, and individual, hell if you're a director of ICI, I care not – just send me any PD you may have written/acquired/stolen/magicked from nowhere and I'll judge it solely on its quality and who knows, you could be reading about your own program right here next month.

If you do decide to submit work, please state clearly on the disk label exactly what it's called, who it's from and a contact address/phone number. State all the same information on any printed material you send, too.

Do this and your disk will stand a much better chance of being reviewed. Now get those thinking caps on and those fingers a-tapping.



Bat 'o' ball spectacular in Bat 'o' Rooms



Super Pacman has a wide variety of goodies

➤ most commercial packages!
It's a great program, but remember, unless you simply want to mess around with previously recorded samples, you're going to need some sampling hardware to plug into your Amiga.

Still, at this price you're probably best buying a sampler (they always come with their own software) and trying Supersound v3.2 against the software supplied – you might just find yourself switching.

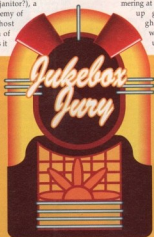
Super Pacman takes Munchland

Deja Vu

Starts impressively, does this Pacman-variant, with a look at Super-Pacman (normally a "mild mannered reporter" – shouldn't that be janitor?), a peek at his arch-enemy of the Munchie ghost world, and a flash of his licence to kill, as it

were. At the start of each screen – and there are 25 to battle through – Super Pacman flies onto the maze, but from then on it's pretty standard Pacman stuff, only more pedestrian, due in part to the small graphics and in part to the slowness of the game.

There's very little arcade tension and the adrenalin doesn't touch much of a hammering at all. Still, you can pick up guns and fill the ghosts full of lead, which is, of course, too unfeasible to be sick,



Two music disks particularly stood out this month, both very different from each other.

Let's start on the mellower side of things, with Quadriga Acoustic Silence from Pathfinder PD. This disk, which is very nicely presented, starts with a menu which – among other mainly superfluous options – allows you to choose which of the six tunes contained therein you wish to listen to.

The quality of presentation shines through in such things as bars to tell you how long until a file is dearchived and ready to play, or the timer telling you, CD-style, how much of the track currently playing is left, and even a cheeky little Garfield whose appearance frankly baffles me, but there you have it.

The sound quality is well up to standard, and the tunes themselves – although far from original – are well put together and pleasant, if decidedly "computer" in their feel.

"Eternal Sensation" is one of my favourites, it only



The pleasing Quadriga interface

because to my ears it bears more than a slight resemblance to the opening minute or so of New Order's "Subculture", but no tune is really bad.

If you're looking for an example of what you should, with some practice and a modicum of talent, be able to achieve on the Amiga using just its internal sounds, this is a typically inspiring collection. It certainly inspired our fine-tuned jury, who voted a big "Yes!"

They'd also have voted "Yes!" for the next demo, and in fact they probably did, but the mechanical onslaught of Continental Tech Dance – Mayday Resistance (Bus Stop PD) droned out all their mumbings good and proper.

Musically this disk contains deep, uncompromising European techno, as fresh as it is exciting, and of an

Where to get 'em

Bus Stop PD, 5 Westbourne Road, Marsh, Huddersfield HD1 4LQ

Charles Denison, The Beeches, 58 Hough Lane, Anderton, Northwich CW9 6AB

Carl Harper, 9 Hale Road, Widnes WA8 8SF

KBE Software, 8 Church Street, Kingsley ST16 2AA

Pathfinder PD, 41 Marion Street, Bingley BD16 4NQ

Paul Matthews, 11 Frewyn Close, St Leonard's on Sea TN38 9RG

Roberta Smith PD, 190 Falloden Way, Hampstead Garden Suburb, London NW11 6JE

S S Teague, 50 Winstan Road, Trevelyan, Pontpool NP4 8E2

but even this gets boring after a while.

On the plus side, there are some amusing weapons and bonuses knocking about, and the music – understated, underground dancey stuff – is certainly listenable.

If you're a Pacman freak, you'll have to have it whatever, though, won't you?

extremely high standard. The author compares his program to Jesus on ES, the now near-legendary dance double-disk demo, and the similarity is certainly there, although this is arguably even better.

The graphics are pretty stunning – all fast-moving, stroboscopic and generally mind-altering stuff. There are touches of humanity in there too (dancers, the way the beat is indicated as being about to change tempo on-screen) – what more do you want?

It's well mixed, the graphics are excellent, so get a copy and get it looping in the corner at your next party. You know it makes sense!

Finally, if you've got something musical and original, send it to me. Oh, and if you think it's good enough for me to pretend I didn't just say "original", send it anyway. Laters!



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The Editor program provides the user with the ultimate in power and sophistication, packed with features which appear for the first time for any home computer. The fully multi-tasking, window styled editor allows individual samples to be loaded into the computer and edited separately.

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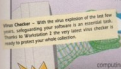
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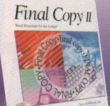
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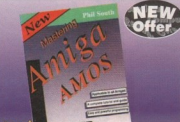
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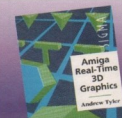


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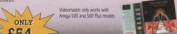
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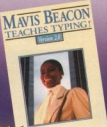
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AMIGA

Drive rip-off

Q Recently, I accidentally damaged the internal floppy drive on my four-month old Amiga A600, and as the damage was caused by myself, repair is not covered by the warranty scheme.

I have telephoned numerous dealers for a replacement but have been informed that one is not available.

My biggest shock was yet to come, however, when I telephoned the Commodore spares desk to be told a replacement was available from them for £181.66 plus VAT. I could not afford this sum and on principle wouldn't pay nearly £214 for a drive when the computer itself is retailed for about £250.

Unless you, your readers, or your advertisers can help, I am stuck with a redundant computer.

K Shaw, Wigan

A You seem to have been told a load of old tosh. The drive fitted to the A600 is usually a standard Chinon 3.5in of exactly the same type as that fitted to the rest of the range with the exception of the A4000.

This means that you can buy a replacement floppy from the usual sources and fit it yourself in five minutes flat.

Total cost should be a lot less than you have been quoted, a typical example being the Power Computing benchmark internal floppy which retails for £45.

Instalment plan

Q After buying issue 58 of your excellent magazine I was very pleased to see Maxiplan 4 was very close to the program which, annoyingly, wouldn't work on my accelerated A500 Plus.

I eagerly booted up ready to install the newer version 4, up came Workbench, in went Maxiplan. What, no install script? "Oh, well," I thought, perhaps it doesn't need one, so I just copied the relevant files across to my hard drive, then ran the program.

Excellent! It runs, but requesters keep coming up asking me to put Maxiplan4 in my drive, and the loading request will not change from the default. Also, the help function doesn't work.

Please tell me how to install the program properly. I've tried everything I can think of, including assigning, paths, and boottypes, and I'm at my wits' end.

Martin Grundy, Farnworth

A Oh, one final sorry to everyone for not putting our own hard drive install script on the Maxiplan 4 disk. We went out of our way to pack as much as possible onto the single disk that there wasn't the room.

To ensure the trouble-free operation of Maxiplan 4 on hard drive, boot first from your normal system partition, insert the Maxiplan

CoverDisk in any drive, double click on the disk icon, then drag the Maxiplan drawer icon to the hard drive partition in which you'd like to store it.

Once this is accomplished, add the following Assign statement to your startup-sequence:

```
ASSIGN MAXIPLAN4: DHD:
```

where we assume that DHD: is the partition into which the Maxiplan drawer has just been dragged. Obviously, if you dragged it into a partition called WORK:, the assign would go something like:

```
ASSIGN MAXIPLAN4: WORK:
```

Just make sure that MAXIPLAN4: is the directory or partition containing the Maxiplan drawer. Next, copy the Explode library from the Maxiplan disk to your LIBS: directory using the command:

```
COPY MAXIPLAN4:LIBS/EXPLODE.LIBRARY TO LIBS:
```

Unfortunately, the Explode library will fail to initialise itself when transferred to hard drives running under any Workbench prior to 2.04, a bug which is both baffling and irritating.

It can be fixed by copying a file found on this month's CoverDisk to the C: directory of your hard drive. To do this, boot from your hard drive, then type:

```
COPY ACAT:C/EXPLODE TO C:
```

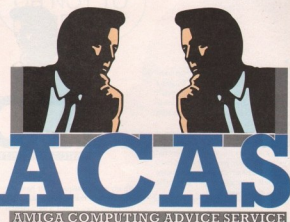
and insert the line:

```
RUN #LIB: #LIB: C/EXPLODE
```

close to the beginning of your startup-sequence. Sorry for the hassle, folks, but this is a problem we didn't spot on the CoverDisk.

Once the above steps have been followed, Maxiplan will work fine, as will the help function, and the program will be able to find its default worksheets directory.

There does not appear to be a way to change the default directory, but by adding a tooltip to the program icon, it is possible to load a default worksheet. So for example, if your



Monitors, broken disk drives and poorly power supplies tax our experts in the definitive Amiga technical clinic

Pounding on the power

Q I have had an A500 for about three years now and over this time I've expanded it with some additional hardware, including two external drives, a RAM expansion, Philips monitor, sound sampler, and so on.

About two months ago I experienced some trouble with my standard PSU. It gave power on turning on, but not enough, I think, because the power light on my computer stayed off and wouldn't go on until I'd pounded or stamped on the

monthly household budget was set out in a worksheet called "budget" and located in DHD:Household, you would add the tooltip:

```
FILENAME=DHD:HOUSEHOLD/BUDGET
```

Maxiplan would from this point on load the worksheet every time it booted.

One other common problem encountered by users of Workbench 2.0x and above is that the palette list supplied with Maxiplan crashes when run.

To change colours on a Workbench 2.0x machine, delete the palette tool and copy your own palette utility from the Workbench prefs drawer to the Maxiplan disk.

Baffled by the PCMCIA cards

Q I'm very confused about the use of PCMCIA cards on the CDTV. After reading your reply to D Madeley in issue 57 I phoned Commodore Germany. I reached their technical hotline and they confirmed your answer – yes, the credit card slot on the CDTV is a standard PCMCIA slot.

This in mind I phoned Silica and ordered a 4Mb card. After receiving the card I did not fit it into my CDTV's slot because it was too thick at the back, so I contacted Silica again and they told me that the CDTV can only use Personal Memory Cards and CDTV software must be specifically written to support them, so they refunded my money.

I phoned Commodore again and this time I reached someone who claimed to be responsible for the technical aspects of the CDTV. She told me that the credit card slot on the CDTV was developed earlier than the PCMCIA slot on the A600 and therefore couldn't use cards developed for the A600.

The only possibility to upgrade to more RAM was an internal expansion from a company in Berlin which costs £250.

However, a few days ago I saw a 256k RAM card in a shop. It had the same connector as a PCMCIA card and the shopkeeper insisted that it would work with CDTV. Sadly, there was no way of

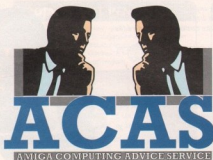
testing it as he didn't have a CDTV. Please tell me if there is any way to get these PCMCIA cards to work on the CDTV. I want to upgrade to more memory and I don't want to pay £250.

Uwe Recknagel, Bochum, Germany

A Having been wrongly informed that new CDTVs were being shipped with standard PCMCIA slots, we braved off a telephonic trek in search of the truth about CDTV. First stop Commodore, who seemed reticent about the whole thing. The technical department scratched their collective heads for a while then confirmed that the CDTV slot is an old pre-PCMCIA Fujitsu slot and has not been changed.

Next it was off to Fujitsu, and after going through two different offices and two of their biggest dealers, the answer was that we were talking about an old format which no one knew anything about. As far as the outside world is concerned, it's not PCMCIA, then it just isn't kosher.

Silica eventually furnished the only positive help, though you might find it a little expensive. The Personal Memory Cards for CDTV come in two flavours, 64k priced at £75 and 256k for a whopping £229.



PSU. After some time the PSU was completely dead so I went out and bought a replacement, also standard. I know you'll say go out and get a heavier duty power supply, but I've never had problems with my standard unit in the past.

My next question is about my printer, a Commodore MPS 1500C. Is there a printer driver available for it, and if so where can I get it? I'm using an Epson driver now, but with some programs I must change the printer settings first or I get double spacing or no colours.

Tom van Nijhoff, Den Haag, Holland

A Probably what happened to your power supply was that it just died of old age. These things happen, and given that it was powering more peripherals than it was designed to, its life expectancy had probably been reduced.

Printer drivers for the MPS1500C must exist somewhere, but I've not been able to locate one in the office. Workbench certainly doesn't have one as standard, but PD libraries or a large bulletin board should be able to supply the driver for a small fee.

Task alerts

Q I have an A500 Plus with GVP hard drive and until recently I have been designing custom pointers, changing default fonts, mucking about with the palette and so on using the Workbench 2.04 prefs programs. However, every time I now load the palette, pointer, or WBPattern programs I get a recoverable alert.

If I boot from the original Workbench floppy I can load all the prefs programs from my hard drive. Do I have a problem

with my startup-sequence, or have the recent changes that I have made to my DH0:Fonts drawer had a detrimental effect?

Oh, and in reply to John Gray of London in issue 58, if he places PP as the line just prior to the Endcli command at the end of the startup-sequence, preceded immediately by the line:

FAILLAT 110

he will find that PP runs quite happily.
K W Thornton, Cussey Island

A We've messed about with one of our machines all morning in an attempt to recreate your problem, doing everything from deleting prefs settings to deliberately corrupting them and getting rid of essential libraries, but no recoverable alerts.

Possibly the only quick remedy would be to copy the Prefs/Exec-Archive drawer across to your hard drive in its entirety, replacing the existing drawer.

This will wipe out any changes you have made, so you might want to keep a copy of the drawer for future use in case this doesn't work.

Fattie returns

Q Further to a letter in the January issue, you say a Fatter Agnus chip is needed for an Amiga to operate in the USA due to the difference between PAL and NTSC.

Does the A500 Plus have a Fatter Agnus fitted and if not how complicated would one be to install? Would there be any advantage in an A500 Plus in fitting the Pro Agnus or Obese Agnus chip? Is the A1200 PAL to NTSC compatible without the need of extra chips?

I have been waiting patiently for months to see this question answered in magazine letters pages.

W Ford, Kim Dunoon

A Your wait appears to be over. The A500 Plus is fitted with Agnus chip number 8372B, which is otherwise called Super Agnus and is superior to the Fatter Agnus chip found in older machines.

There is therefore no need to install one or to bother with the Pro Agnus kit, as the latter type of peripheral simply involves fitting a Super Agnus and an extra wedge of chip RAM.

The advantage in having a Super Agnus is that the A500 Plus can address 2M of chip RAM as opposed to the 1M limit of the Fatter Agnus. Chip RAM is the area which the custom chips store their data. As chip memory is thus the only place in which sound and graphics can be stored, it is always a good idea to have more of it.

The A1200 has an altogether new graphics chip called Alice, which is 32-bit and is responsible for many of the enhanced graphics to be found on AGA machines.

Monitor mayhem

Q I recently bought an A1200, and borrowed a VGA monitor from a friend so that I could try out the screen modes I'd heard so much about. When I finally sorted out a connector, however (and this took long enough), I was disappointed to find that many of the screen modes don't work.

Why? Is it the monitor - an unbadged PC SVGA type - or the A1200? Can my third party monitor adapter be at fault?

Kevin Gruzeck, Norwich

A The VGA monitor you are using probably has a narrow band width and syncs to only a narrow range of signals. The Amiga standard fits this, but many of the Amiga's screen modes - and it has many more than the PC - vary greatly from the 31-35kHz area in which most VGA signals can be found.

For complete compatibility, the expensive Commodore 1960 monitor is a good bet, or you could hang on for one of the third-party monitors which should be appearing soon. Gasteiner, for example, are releasing a range of A1200-specific monitors, and a new range of Commodore multi-syncs is on the way.

If you persist with the VGA monitor for the moment, try experimenting with the different monitor types found in the Extras3.0:5 Storage/Monitors drawer. VGA/Multiscan is a good start, but there are others which might yield better results with a bit of experimenting.

CLI (again)

Q Over the past few years since buying my WB1.3 A500, a few problems seem to crop up regularly, mainly when using the CLI.

First, do the examples in the PD C Manual II compile using North C v1.3? I have the original C Manual and was considering getting the new version, but Amigans state in their catalogue disk that there are difficulties compiling the examples without Lattor/SAS C.

Can you redirect output from a CLI/Shell window to an existing CLI/Shell window?

Is it possible to put two commands on the same line, say, by using:

`Dir DFD: CDir=> (New Line) C DFD:`

This would be very helpful for certain

No room

Q I have an A600 standalone pack and I have a few problems with my Workbench and the Shell on it. When Workbench boots up and tells you how much memory is left, the figures in the manual are totally different to the numbers on mine, which are 870327 graphics memory and zero other memory.

Also, I can't make a new directory on the disk. I type the proper command in the Shell and the computer tells me the Workbench is full. Could you solve my problem?

Daniel Janas, Sheffield

A Your memory problem isn't really a problem at all. The figures in the Workbench manual aren't meant to be taken as a strict guide but as an example of the sort of RAM limit you will have once your disk has booted.

This varies depending on what commands and programs have been run during the Workbench startup-sequence and will certainly differ from those in the example screen grab shown in your manual.

As for your problem creating a directory, you will have to delete a few files from the Workbench disk before going any further. Commodore have developed the Amiga's operating system to a point where it only just fits on floppies, so use the Delete command to get rid of something you don't use much or don't need.

menu systems, but has to be able to be written using a Basic text editor.

Is there any software which allows you to sample the sound output from the same computer by capturing the sound while still playing the original music?

A Eaton, Lomington

A Yes, it should be possible to use many of the examples in the C Manual with North C v1.3, but expect to have to avoid some examples and rewrite others. Lattor C is a clean and very legal compiler, but there will always be compiler-specific commands and other difficulties in such cases.

In reply to your remaining questions, no, no, and why would you want to?

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.

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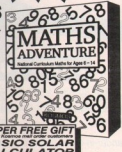
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b. Front-line fighter pilot ☐
c. Navigator ☐

2. Which of the following aircraft do you NOT use in Combat Air Patrol?

- a. F-14 Intercept ☐
b. Spitfire ☐
c. F-18 Strike ☐

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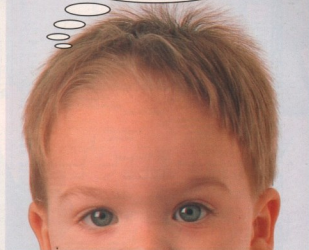
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Gamer GLOBE

The gamer posse check out all that's wild and wonderful from the European Computer Trade Show

We'll breed again...

Alien Breed 2 is on its way, at last. The original was hailed by all as a classic and hundreds of gamers have been drooling over the prospect of a sequel. Well, it's finally being put into full scale production and will be ready around October/November time.

The sequel promises to be bigger and tougher plus it'll have more atmosphere, more action and much more gameplay than the original. Features include many different types of Aliens, lots of different traps, new and more devastating weapons and add-ons. There will also be other features such as

hostage rescue and much more, but Team 17 are remaining firmly tight-lipped and at this moment in time don't want to reveal any more about the game, which is fair enough otherwise you'll get someone ripping off your ideas.

One thing that is quite pleasing is the fact that Alien Breed 2 will be primarily developed for the A1200 and cut-down versions for the A500/600 will be released at a later stage.

This means that the game will be technically amazing, much more so than anything ever previously released by Team 17. This will ultimately mean more colours, more enemies, more graphics, more sound effects and much more action than ever before.

It will be about three to four times bigger than Alien Breed. The screenshots you can see are some mock graphics - they're 128-colour backgrounds



and are just a small taste of what you can expect.

More information and screenshots from Alien Breed 2 will be on their way in the coming months, so if you want to know more about the world's greatest sequel then keep tuned in to Gamer Globe.

Rampant Renegade releases...

The much awaited sequel to the mother of all shoot-'em-ups is approaching completion. Uridium 2 is set to become the definitive game of its type, so say Renegades.

Using the full capabilities of the Amiga, Uridium 2 features the action-filled adventures of a Manta craft, hell-bent on the destruction of the encroaching Dreadnoughts.

Features include 48 frames of animation for the craft, high speed scrolling (50 fps) in 32-colour mode, added vertical scrolling for an

enlarged playing area and layers parallax.

Other features being added include simultaneous two-player mode, different weapons systems and an entirely new end-of-ship section. Uridium 2 is nearing completion and is to be released in September.

Also on the way from Renegade is a cutesy platform game under the title of Ruff & Tumble.

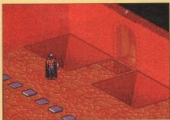
The game is based on the activities of a 12-year-old called Ruff Rogers who gets transported into a fantasy world while playing

around in a rabbit warren.

The world is controlled by the evil Dr Destiny and his minions and Ruff being a hero decides to save the planet. Kids, eh?

The game has been in development for five months and is nearing completion. It will feature fast gameplay, complex puzzles and a huge variety of opponents and levels.

Ruff & Tumble is looking good and should make an appearance on your Amiga in October.



Cyber Scoop

It would be hard for Cyberdreams to equal Dark Seed, their state-of-the-art adventure. One of the main attractions was the artwork from artist and sci-fi guru H R Giger.

Cyberdreams' next release is CyberRace, a revolutionary 3D combat and racing simulation. The game is designed by world renowned industrial designer and futurist Syd Mead. Syd has contributed to feature films including 2010, Aliens, Star Trek and Tron, but is probably best known for his work in designing Blade Runner.

CyberRace utilises VOXELS (the latest in landscape rendering technology, apparently), ray-traced vehicles which you customise, stunning sound effects and an outstanding musical score by an Emmy Award-winning composer.

Cyberdreams boast that CyberRace will set new standards in gaming quality and action. It will be available in November and is well worth looking out for.

Nat a company to sit about twiddling their thumbs, they've also got a release planned for the first quarter for 1994. Probably the most unusually titled game ever, I Have No Mouth... And I Must Scream is currently in development.

The game is based on a story of the same name written by Harlan Ellison. Harlan has many television scripts to his name which include Star Trek and The Twilight Zone.

I Have No Mouth... takes you into the belly of a super computer where you experience a bizarre and ever-changing world. The aim is to defeat the all-powerful computer who has destroyed all of humanity. Game thinks that this game could well be a massive hit. Keep your eyes peeled.



There she blows again...

Team 17, a company not known for resting on their laurels, are putting the final touches to a special edition of Body Blows which after streamlining many of the programming routines has been made even faster than before!

As well as enhanced speed, other features include the ability to play any of the ten main characters in one-player mode. Shadows and other things which had to be dropped from the final version have now also been incorporated.

Owners wishing to upgrade their original Body Blows can now do so by sending Disk 1 (Note: Disk 1 only!) back to Team 17 and by enclosing a meagre amount of £2.50. All versions of Body Blows in the shops will be the latest edition by late April.

Also on the way this summer is the A1200 version which will support 256-colour backdrops, smoother, faster action, better sound/music and an extra character!

By far the biggest news though, is the release of Body Blows 2 which will wear its lovely head in November. This time the scenario will be somewhat different with the prize of "Ultimate Galactic Warrior" up for grabs.

The game design is still in its very early stages, but the final game will see seven planets of the solar system put forward their two best fighters. Expect more unusual characters such as druids, aliens, humanoid and of course humans.

Technically the game will be amazing with large animated fighters and fast moving action. It will be written for both the A1200 and A500/600, but the A1200 version will be faster with enhanced graphics and sound.

For beat-'em-up fans it's going to be a wonderful year. We'll have more news and screenshots for you as we get them.



Empire strikes back!



Empire have returned with some brand new games plus a couple of sequels to some old favourites. The first is the sequel to Campaigns, the Gamer Gold-rated World War sim. Witty named Campaign 2, the game promises to be bigger, better and quite simply the military simulation of the year.

The whole system has been updated to include all the post-war vehicles - over 100 new 3D shapes from Abrams to T72s. All modern weapon systems such as guided missiles, rockets, homing missiles, laser rangefinders, gun stabilisers and night sights have been added.

The game also features animated infantry which can be deployed from personnel carriers into the battlefield. Also, you can now drive all of the vehicles in an improved 3D environment - including helicopters. If you're a military simulation fan then it looks as though Campaign 2 will be the definitive game for you.

The other sequel is Guy Spy 2. The original didn't fare too well in the review stakes, but at least it did better than Dragon's Lair and Space Ace series. The game is subtitled The Terror of the Deep and Empire say that it's destined to become one of the best animated adventure games ever.

Guy Spy 2 combines point and click adventure gaming with smooth animated fight scenes and stunning 3D computer-generated sequences. Technically, Guy Spy 2 boasts more than 100 scenes with over 1,200 frames of animation and almost 20Mb of graphics data. Release date: October.



INNARDS

Come into my house, smirk and admire...

REVIEWS-REVIEWS-REVIEWS

HISTORYLINE.....106

We sent Paul back in time and, umm, left him there...

B17 FLYING Fortress.....108

Now that's original! Fancy Microprose doing a flight sim...

DESERT STRIKE.....110

EA get all dusty while messing about with their choppers

A-TRAIN.....112

Well, not a train, there's quite a few of them actually!

SUPERFROG.....114

It's no croak! The Amiga's best platform game is here. Cheer!

NIGEL MANSELL'S WORLD CHAMPIONSHIP..116

Race around the world with Mr Manstone. Sigh...

HUMANS - THE JURASSIC LEVELS.....116

Unga bung! Enjoy more caveman tamfoolery from Mirage

ALIEN 3.....120

Dark, dense, deep and atmospheric. And that's just the titles!



REGULARS-REGULARS-REGULARS

GAMER GLOBE.....102

We thought we'd put it in innards, just in case you can't find it!

GAMER GLOBE EXTRA.....104

Yes an extra page packed full of hot news from the ECTS

LEMMINGS 2 RAVE RECORD...121

The Bluebells and Shaggy better watch out there's a Lem about.

CHEAT MODE.....122

Ben goes on a three-page trip through the world of Darkseed

Gamer GLOBE

Virgin' on the ridiculous...

Beneath a Steel Sky by Virgin Games is the world's first computer-based animated comic book adventure.

Beneath... features the combined talents of a top comic book author and artist and a leading computer development team responsible for one of last year's biggest adventures.

The author and artist is Dave Gibbons who might not ring any bells with most of our readers, but he was responsible for Watchmen, one of the most fascinating, interesting and highly acclaimed graphic novels of recent times.

The development team is the company Revolution who created the excellent Lure of the Temptress. Keep reading Gamer and hopefully a preview should appear in these hallowed pages very soon. The game will be available in November, so start saving your money.

Virgin also have four games waiting to be released before Christmas. Dino Dini's Goal - which you should already have read about - will be out in June.

The sequel to the highly praised Dune entitled Dune 2 - The Battle for Arrakis will arrive in September and is adapted from Frank Herbert's award-winning series of science fiction novels.

Apocalypse takes you to the skies in a super-helicopter and basically it's an all-out war. The bullets, missiles, rockets and flak fly thick and fast through five full-on levels of blasting and action.

The game features stunning sampled sound effects such as heavy machine gun fire and explosions. Other features include various parallax effects including background and foreground objects to further enhance the unique depth of realism. Apocalypse will land in the Amiga world in June.

The much awaited Cannon Fodder by Sensible Software is almost ready - the finishing touches are being carefully applied and it's due for release in November.

Choose a platoon of cannon troops and send them into battle. Included in the game are 100 phases of action with 30 different missions and five terrain types.

The game features Sensible Soccer-esque graphics (ie the sprites are really uncool) plus there are loads of spot sound effects and spoken words galore.

It's looking great and could be in with a chance of making number one game this Christmas. Virgin look as though they're going to have great year.

Into the core of Amiga games...

One of the busiest games companies this year will be Core Design who have six releases planned. The first will appear in May and is a 3D isometric adventure entitled Darkman.

The hero of the game is called Ebnyn, who as heir to the throne must uncover the mysterious source of Darkman and avenge the people of his village.

It looks really good, particularly on the graphics and sound fronts. Expect a preview or even a review in Gamer very soon.

Blastar is Core's second release and is a multi-directional shoot-'em-up which promises to rewrite the rules - it could even be a Project X beater.

You take controls and steer Blastar through five main stages of exhilaration and firepower. Blastar boasts fantastic graphics and unbeatable gameplay and will be available in June.

Core Design are also bringing out a platform game in June entitled Bubb'n' Stix. It's a horizontally scrolling puzzle adventure which revolves around Bubb'n - an ordinary delivery man - and his desperate attempts to get back to Earth with only his friendly alien stick to help him.

The stick is one of the main parts of the game and can be used in a number of ways. It can kill enemies, be a lever, a snooker cue, a lightpipe balance, a javelin or even a baseball bat. It is used to solve many puzzles in the game.

Levels include an alien forest, a derelict spaceship, a swamp and even inside the planet's alien zoo. A demo of Bubb'n' Stix was playing

at the show and it looked very impressive indeed. Expect it this summer.

Also on the way is Wonder Dog. Originally available for JVC's Wonder Mega CD machine, Wonder Dog received overwhelming applause in the specialist console press both in the States and in the UK.

Wonder Dog is an eight-level horizontally scrolling platform action game that includes multi-layer parallax and stunning graphics. The game is packed full of bonuses, secret rooms and loads of cute enemies. Wonder Dog arrives in the Summer.

The big news from Core Design is that they are producing a couple of sequels. The first is the follow up to the utterly fantastic Curse of Enchantia. The original game was highly acclaimed, received unanimous 90 per cent and over scores from the computer press.

Details are very scarce at the moment, but expect unbelievable graphics and fantastic playability, just like the original. Curse of Enchantia 2 will be available in August and could well be a contender for Game of the Year.

The second sequel is Heimdal 2. Sub-titled Bone of Asgard, it will once more feature Heimdal and his merry band of Nordic warriors. Laki the evil God from the first game is back and this time he's got his evil army to avenge themselves against Heimdal.

The odds are not stacked in Heimdal's favour, but will our Nordic chum prevail? We'll just have to see when the game comes out around December time.

I'd just like to thank...

The ECTS Award winners were announced on Sunday April 4 at the Unlight Club in London. Amiga winners included Monkey Island 2 which scooped Best Soundtrack, Best RPG/Adventure Game and German Game of the Year. US Gold's Indiana Jones and the Fate of Atlantis won the coveted Best Computer Game award.

Best Simulation was no contest and went to Microprose's amazing racing sim Formula One Grand Prix. Electronic Arts grabbed Software Publisher of the Year - and that's basically all the Amiga won. Otherwise the awards were dominated by Street Fighter 2 on the SNES and by Sonic 2 on the Mega Drive.

Despite having three out of the four nominations for Best Hardware Award, the Amiga still lost to the Super Nintendo. Ah well, you can't win them all.

The whole ceremony was hosted by Violet Berlin, presenter of ITV's Bad Invention who Gamer learns did actually drop one of the awards, ho ho.

Also present were various members of Madras. Let's hope next year the Amiga gets one step beyond those consoles in the award stakes.



It's finger lickin' good...

Mindscope are about to dip their toes into the pool of platform fanfare with Alfred Chicken. The game features Alfred who has to rescue his chum Billy Ego and girlfriend Foella who have been kidnapped by the evil Meka-Chickens.

Alfred Chicken is an 11-level platform fantasy created by Twilight and jammed packed full of hidden rooms, power ups and loads of laughs.

Gamer clucked out Alfred Chicken at the ECTS and it's looking good. It's got superb graphics and much challenging and puzzling gameplay. Alfred will be available in September, price is yet to be announced.

Also from the Mindscope stable comes Son of the Empire, the sequel to the highly acclaimed adventure/RPG game Legend. Son of the Empire takes you to Far Eastern lands where your unique



band of adventurer are once more called upon to rid the world of evil.

It uses the same features which made the original a world-wide success. Gamer has seen an early demo and it's looking very good indeed. You'll be able to experience it when it arrives in June.

Following hot on the heels of SimCity and SimEarth is SimLife from Maxis. This time the creators of the aforementioned Sim games take you where you've never been and gives you the power

to create life itself. Pretty mind-blowing stuff, but basically SimLife lets you design your own experiments using simulated environments, ecosystems, genetics, evolution, life and behavior. You can even control time and physics.

You get a chance to create life, but beware because it's up to you to keep your species off the endangered list. Features include six different pre-set scenarios, four world sizes, fires, plagues and other disasters and even an icon editor to customise the look of your creations.

Mindscope are now developing an AI200-specific Amiga version for release in May. The PC and Macintosh versions were very well received by computer magazines, so SimLife could well be the best Sim game yet.



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HISTORYLINE

1914-1918

Pack up your troubles
in your old kit bag and
enter the horror of WW1
with Paul Roundell

If Basing a game of strategy on the terrible First World War is a daring enterprise," claims the instruction manual proudly. Quite a strange statement I thought, not personally being able to depict any particular evidence of derring-do in simply cashing in on one of the bloodiest conflicts the world has ever seen.

Then I realised where developers Blue Byte hail from, and was able to appreciate that a WW1 strategy game by a German company is indeed a risky venture.

The USA is well known for its stout refusal to accept that the Vietnam War was anything but a complete shambles, earning the country nothing more than tens of thousands of pensionable teenagers and world-wide humiliation, and my ini-

tial reaction to Historyline was that it was a similar rebuke from the natives of the Fatherland, intent on justifying their failure in combat as a successful contribution to the great patriotic cause.

But apparently not - it's made perfectly clear right from the start that the game is precisely that, a game, and that no attempt has been made to gloss over the realities of what actually took place.

So what did take place then? Basically, two opposing parties spent the best part of four years killing each other in any manner they saw fit. Great, sounds good - plenty of scope here to integrate a few grisly scenes of carnage, one would have thought. But again, no.

Blue Byte believe - and not unreasonably so - that of utmost impor-

ance in an affair such as this is tactical planning and, above all, enjoyment. It is to this end that they have devised Historyline in such a way as to be instantly accessible, rewarding and educational.

Dwelling not so much on the war, but on the gaming aspect as it does, none of the campaigns in Historyline are exact recreations of what actually took place, although the basic aim obviously remains the same. After a gorgeously presented

but lengthy intro which seems to narrate virtually every event leading up to the war, and having decided as to whether you wish to pit your wits against a friend or the ever-willing computer (and which side you wish to represent), the game screen finally arrives, and it is here where a pleasant surprise occurs.

Unlike most games of this ilk, where the only control option consists of a combination of mouse clicks and keyboard controls, HL can be operated solely by a single joystick, proving Blue Byte's claim regarding its ease of use.

Two multi-scrolling maps make up the game screen - one yours and one your opponent's - which in turn combine to form a larger, overall map of the battle area.

On every map each side has its own strong hold, the idea being to take up occupancy instants

These guys are a bit on the slow side - the UNU factory for the old nag!



The handy miniature map gives an overall view of just how potty your troops are



These animations take time to load and at first are very much alike



the enemy walls to emerge as victor. Of course you can if you wish, but your Norman Schwartzkopf hat and run amok destroying everything in sight it provides the same end result if executed properly, although losses of artillery and troops tend to be heavier.

On the subject of artillery, your army is quite limited at first, since the game closely follows the technological advancements of the war: let me explain...

There are 24 battlefields in all, and game lore has it that a period of two months elapses between each of the 24 individual battles (totalling four years - the length of the war).

Towards the end of the conflict you will be controlling such mechanical pioneers as the legendary Fokker biplanes, Spad fighters and British Mark IV tanks, but initially your weapons will be of a more basic nature, such as mobile cannon, cavalry, and disease-ridden ground troops.

Your controlling cursor is in the form of a hexagon, which when your army is in Movement Mode dictates the positioning of your troops, and it really is very simple to operate.

The range of movement will obviously depend on what unit is involved, and against what kind of artillery you are fighting. The whole scene becomes darkened, leaving only a few light hexagons into which you can move, the process being repeated for every controllable unit.

Since the game spans the entire length of the war, the weather varies with the changing seasons, and your troops will find themselves coping with snow, ice and other conditions, all of which affect their effectiveness. Although the individual battle



maps are quite small, range of movement is extremely limited early on, and it takes many minutes before the game begins to take shape. When the opposing sides finally meet in an animated sequence accompanies each head-on battle, all of which are well drawn, and are accompanied by realistic sound effects.

At first these seem like a nice addition, but as the game progresses I found them to be increasingly more tiresome, particularly for those with single drive machines, which is the vast majority.

The problem is that when in extended battle mode - that is fighting out the whole war - a huge amount of disk swapping is required, and even on an A1200, which is what I used for the most part of the review, a single animated sequence can take three or four minutes to complete.

Not only that, but as the game progresses, a few individual battles may be taking place at once, meaning several minutes of nothing but disk swapping.

The animations can be skipped, once loaded, but there is no option to toggle them off, and the resulting tedium

detracts from the game in a big way.

On some of the battlefields there are factories, in which you can rebuild or repair vehicles and weaponry. Depots can also be built, which on completion become an extra stronghold that doesn't need to be captured.

The depth in, and thought behind

Historyline is undeniable, and it is gamers' claim that it is one of the most accessible games of its type.

It can virtually serve as a history lesson in its own right thanks to the massive intro and occasional in-game snippets. Throughout its course the game concentrates heavily on strategy and tactics and steers purposely away from the bloodshed of the conflict.

A brave step - commendable too, since there are any number of games on the shelves which can easily quench our thirst for gore.

Much of this game is unnecessary though, whereas any bloody scenes in Historyline would simply serve as a stark reminder of reality, and leave the game minus an element with their exclusion.

This is not to say that what we have here is a half-hearted product, far from it. The level of information and depth of gameplay, topped off by excellent graphics and atmospheric tunes make for

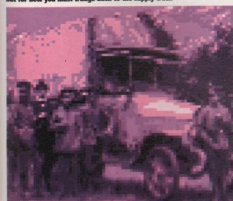
a real value-for-money package.

Due to its slow progression and tedious loading processes though, what could so easily have been an outstanding product instead finds itself standing shoulder to shoulder with the rest.

PAUL ROUNDELL

VISION	
●●●●●●●●	●●●●●●●●
AUDIO	
●●●●●●●●	●●●●●●●●
DIFFICULTY	
●●●●●●●●	●●●●●●●●
LASTABILITY	
●●●●●●●●	●●●●●●●●
The thought and effort that have gone into Historyline are evident in the attention to detail throughout the game. An enjoyable product, but faster playability would have made it shine.	
80%	
Publisher ▶ Blue Byte Developer ▶ In House Disks ▶ 7 Price ▶ \$34.99 HD Install ▶ Yes (almost a necessity) Size ▶ 1 meg	

in later years we learned how to arm vehicles but for now you must trudge back to the supply truck



Since firepower - very slow movement

No it's not the telescope on Clackson prem. It's a large gun and very scary too

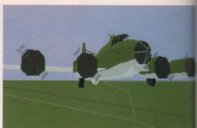




Your crew, very nice but not much use



One of the internal view screens, this is where you can view your character and work in a different section of the aircraft



Your plane, as easy to fly as a breeze block

It's been strange to watch the changes in certain types of games over the last year. Flight sims especially have undergone a drastic shift in the way that the programmers construct the games.

In the middle of last year I made several jokes about the laborious process of getting into a flight sim. It was hopeless if you just wanted to have quick fly about and shoot down a couple of planes.

That aspect or facility no longer exists in this genre. They have become progressively more strategic as the months have gone on. It is not uncommon for you to be able to control ground troops or artillery, and the attributes of the staff with whom you fly the craft have become more and more complex as time has gone on. After a hard day at work you don't want have to listen to your co-pilot's life story!

There are also different ways of getting around the problems encountered when playing such games. Instead of there being a training mode for inexperienced pilots, it is not uncommon for the game to include a simulator - a simulator within a simulator, as it were.

But the evolution of the flight simulator isn't necessarily a bad thing. It's just the fact that we have lost the old style - the flying has become almost peripheral to the game. But enough of my moaning. I shall tell you about B17.

To start with I was most disappointed with the compatibility level. I much prefer to play flight sims on a fast, accelerated machine so I installed it on an A4000 - the software did not like it at all. So I installed it on an A1500 with an 030 accelerator and it flipped out again.

Next I tried an A3000 with an 030 accelerator and once again I had no joy. I finally gave up and ran the game off disks on an A1200, encountering no trouble at all. Still, it was quite slow even on the A1200 which does not bode well for A500/600 users.

You have control of an eight-man team who fly the aircraft. Each different man has a particular

A prime example of being able to choose your own art work and name for your craft



B17

Ben Styles gets all tearful over the changes in flight sims and the state of things to come. Somewhere in there he mentions B17...

job whether it be radio man or bomber. You don't have to control them all at any one time - you just have to assume different roles as and when needs dictate. They will quite happily get on with their jobs at other times.

You can shoot down enemy planes from any of the gun turrets and there is a setting to determine the speed at which the turrets move - obviously planes built in the 40s weren't in the 40s weren't going to have state-of-the-art motorised equipment.

It's a very personal game. Not only do you have to choose your bomber, you

have to choose the artwork which goes on the nose and you have to name it.

After you have the plane sorted you can have a photo taken with you and your crew. Graphically it's very effective but it's not much use!

As with most other flight sims, you have to choose the mission you wish to fly. One very

Flight sequences are slow but rewarding



VISION	●●●●●●●●
AUDIO	●●●●●●●●
DIFFICULTY	●●●●●●●●
LASTABILITY	●●●●●●●●

Good graphics, sound and a fearful level of difficulty don't translate into a coherent, playable game. If you enjoy the realism on offer, though, you won't get bored quickly.

69%

Publisher ▶ MicroProse
Developer ▶ In house
Disks ▶ 1
Price ▶ \$34.99
HD Install ▶ Yes
Size ▶ 1 meg

clever extra feature is a reconnaissance film. It even has the crackly black and white opening sequence which I was most impressed with.

I found that B17 got very irritating at times for a number of reasons. The first is the laborious way you have to get around the craft and change your role - it's very complicated and fiddly.

Reason two is the slowness of the game. Sometimes it almost comes to a standstill.

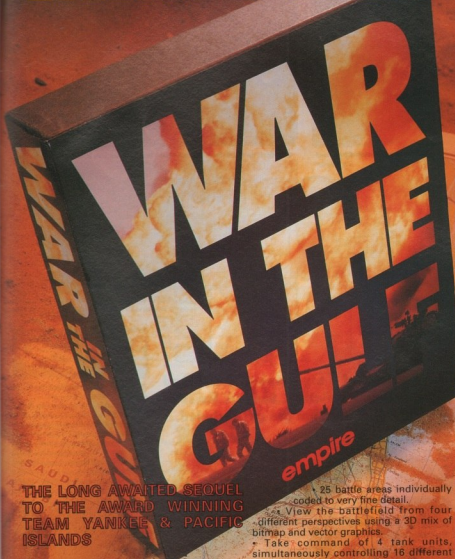
Flight sim purists will have field day with this but it is definitely a question of taste. Personally I wouldn't touch it with barge pole, but decide for yourself.

BEN STYLES

Now which one's the cigarette lighter?



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REALISTIC...GRIPPING...

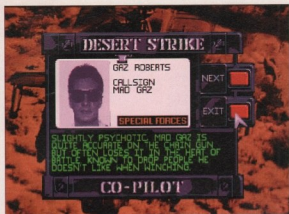
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SOFTWARE



There are some advantages of being a programmer. Like getting your mosh in the game.



"Now this is me and Mabel at Brighton Beach" Norman parades his holidays snaps to the troops.

Electronic Arts are back and this time they're bringing out the big guns. Gary Roberts, the guy responsible for the conversion of John Madden's Football to the Amiga has been beaver away in a dark dungeon to bring you Desert Strike.

A massive hit on the Mega Drive, I can already guarantee Desert Strike is going to take the Amiga games world by storm.

How can I be so sure of this fact? Well, it is just simply brilliant. I could quite literally enthuse about it all day. For starters I'm probably biased because it's my favourite game on the Megadrive, but now it's out on the Amiga I can safely stick little brother's Mega Drive in the cupboard.

Desert Strike is excellent, the best thing since sliced bread, the best, the tops, the best game in the universe. Sililoappo. Phew, I ripped out there for a second.

HERE WE GO...

Right I'll start the review properly now, it's just one of things I had to get out of my system. I'll ask a question. "What particular subject makes a good computer game?"

It's easy. The answer is war. Death and destruction is what the kids want. Everyone loves a good war game. Kill some foreigners and then go and have your tea and go to bed. It's just a bit of fun isn't it?

It's recently been reported that violent computer games influence how kids behave and react. Personally I think it's all a load of rubbish. The thing that influences kids to do what they do is real life.

They see wars between nations, they see people stealing cars and property, people taking and selling drugs, violence on the streets and racism

DESERT STRIKE

Take control of a big chopper in this Gulf War arcade simulation. Saddam Hussein and Stormin' Norman are not included...

and sexism among a whole list of other things I could mention. Kids want to act like adults. This is the example being set to them by others. How do they see all this that is corrupting the world? It's easy - they only have to watch the news on television or read a newspaper. Computer games are just a scapegoat, so that people don't have to accept the truth about the world we live in.

Oh I was getting a bit serious there wasn't I? What was I talking about? Err, I remember it was Desert Strike. Desert Strike is about a return to the

Gulf. Without warning a madman has made himself leader and threatened to start Armageddon.

The madman calls himself General Kilbado and looks nothing like Saddam, honest! Very little is known about him, although he has been known to watch Les Dennis on Family Fortunes and

laugh. As I said before, completely and utterly hot-land. One thing our brave government knows is that loonies and missiles just do not mix. You play the part of an American Apache pilot and because the President doesn't want to cause a fuss, he sends just you (and co-pilot) into the warzone to complete a set number of missions.

The missions vary from blowing up radar sites to rescuing POWs from their camps and even though not strictly a mission, you can play such fun games as exploding canals. Each level, of which there are four, consists of between six to eight of these missions.

PASSWORD HELPS

Desert Strike is a very hard game, not too hard that you can't get anywhere, but hard enough to keep you entertained. For example, after a few days I managed to complete the first level and by this time I'm getting quite proficient at playing it, but it still took me 40 minutes to do it. Thankfully there is a password system otherwise I'd take you ages to complete.

As you can see from the screenshots, the view is very different to what you'd normally expect from a chopper game. Instead of being inside the Apache you actually control it from the outside.

It's very similar to those 3D isometric games, but far better. It's also very easy to control. It works best in joystick mode because you get a better feeling of actually being there.

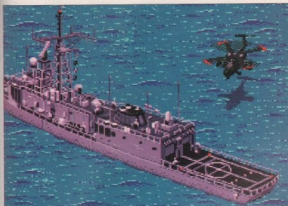
The Apache houses three different types of weapons. The cannon is used to blow up enemy



Him, he looks like a certain Iraqi dictator. What was his name again?



There was a pilot there a minute ago, but I've rescued him, so you can't see him any more. I could be lying, but would I lie to you?



It's dead easy - I've seen it done 100 times on the Krypton Factor



Whoops! OK, so I crashed, but there was this massive sandstorm and I couldn't see a thing. That my excuse and I'm sticking to it



The landing zone. Where the weary pilots rest and have a cuppa, or something...

GAMER GOLD

soldiers and features in comedy duo with Bobby Ball. The Hydras are used for almost everything else except the big buildings.

The Hellfires are particularly impressive and can be used to blow up anything big or if you're a sadist you can use them to obliterate helpless enemy soldiers. You can flick between the weapons via a quick swift stab of the joystick.

One of the most important features when playing Desert Strike is the map option. You use the map to call up information on campaign targets. The map also tells you where the fuel, ammo, MIAs and targets are and keeps a careful check on where the enemy is.

Keeping a eye on how much fuel and ammo you've got is essential if you want to be any good at Desert Strike - although I have to hold my hands up and say when in the midst of battle I did forget about little things such as fuel, and died.

Be careful - the position to kill the enemy might overcome you and it will be the start of your downfall.

MEGA BEATER

The big question on my lips is: "Is Desert Strike as good on the Amiga as it is on the Mega Drive?" The answer is that it is actually better. The graphics have been improved. The Amiga's 64 colour half-brite mode has been utilised and the game features realistic graphics including shadows and smoke.

The sound is a massive improvement on the Mega Drive's lacklustre attempt. Desert Strike features sound effects taken from actual Apache manoeuvres. The sound is also directional and in 3D.

What this means is, for instance, if you see a tank in the distance, as you approach it the sound gets

louder and more defined. The music itself is absolutely incredible. The introduction music is adorned with some of the funkiest sounds you're ever likely to hear on your Amiga and is full of James Brown samples. The music when you complete the level is also amazing and, in the style of the 70s music revival that's happening at the moment, features some excellent, err "wibbly wobbly waw" guitar music. It's the best music I've heard since Thrash Pig which starred in Care

Design's Jaguar XJ220.

The playability is almost faultless. I say almost because at times for some unknown reason the game slows down. But this doesn't happen too often, but I thought I'd better mention it.

It's certainly not a reason to not buy the game.

It's very addictive and I can tell you this with some certainty because everyone in the Gamer office keeps on playing the damn thing and I can't get anywhere near the Amiga.

Desert Strike has always been one of my favourite games and it's nice to see that EA haven't made a mess of the conversion and actually improved the game.

It just goes to show that these consoles aren't everything they're cracked up to be and the Amiga can compete with them.

Desert Strike is probably Electronic Art's finest moment since Populous. You already know how I feel about the game, so what on earth are you waiting for? Go and get it and be enlightened. Just deserts!

JONATHAN MADDOCK



Err, hoorn!

VISION

●●●●●●●●●●

AUDIO

●●●●●●●●●●

DIFFICULTY

●●●●●●●●●●

LASTABILITY

●●●●●●●●●●

Desert Strike is right up my street. It features amazing graphics, unbelievable sound, brilliant playability and the bloomin' office is addicted. It's a wonder how you got this mag at all. EA's finest moment since Populous.

93%

Publisher > Electronic Arts

Developer > In-house

Disks > 3

Price > \$25.99

HD Install > N/A

Size > 1 Meg



Deep in the sprawling metropolis



Time flies by when you're the driver of a train



Night falls and strange things are afoot

I have very mixed feelings about trains. On several occasions, I've been more than happy to sit back in relative comfort, drinking a cup of funny-tasting coffee and munching my way through a suspiciously plastic-like burger while a guy in a blue uniform takes me to London or somewhere similar.

This solves the hassle of driving to a place oneself and takes care of the even larger and more expensive headache of finding a place to park once you arrive – so trains are good, in that respect.

On the downside, I live directly behind what was formerly an industrial railway line, now converted into the so-called "tourist attraction" of the East Lancashire Steam Railway.

At the time of writing this (Sunday afternoon at home, in case anyone important is reading) I can hardly hear myself think, mainly because there are between 80 and 100 people chattering excitedly directly below my window awaiting the arrival of the Flying Scotsman, an apparently very famous train which the management have hired for a month.

This has been the case every weekend for the last three weeks, and I would just like to say that if you are one of those people who stopped your car in the middle of our road, or trampled on my mum's rose bush, or just generally made a nuisance of yourself during this hallowed Flying Scotsman period, then you ought to get yourself a god-damn life. There – I feel better now.

A-Train is brought to us by Maxis – those strategy gurus responsible for the epic Sim games (or "software toys" as they like to call them), and it would be very easy to compare it to any of their previous products, so I won't.

POWER PLAY

The basic aims are pretty much the same though – oops, there I go, a comparison already – the idea being that you must earn yourself as much power and money as possible.

Sporting the name it does, it's a reasonable assumption that A-Train will contain fairly hefty train-like overtones. But it isn't all railroading – in fact this is just one part of what is effectively a multi-challenge game.

Of course it's important to create an efficient and well patronised rail network, but equally important are developments around it – industrial, housing and recreational.

Without these, there would be no point or attraction in people travelling to a destination, so the more attractive a location the better.

Apartments, houses, offices, skyscrapers, golf courses and amusement parks all contribute to the value and attraction of a site, and all give more reason for potential visitors.

But these all need to be built first – therefore factories must be erected,

A-TRAIN

Maxis leave the (Sim) city behind
and let off some steam as they
roll on by. Choo-oo-WOOO!



This is where you register your engine, maybe!

named, and put into operation. All of these projects mean paying with that well-loved wonga, and early delays in finishing could mean bankruptcy, and a pretty little "game over" message.

Bank loans are available (and advisable) for large projects, and your profits and losses are constantly available for checking through one of the easy-to-use icons.

Back to the trains though, since these are the main subject of the game. Having constructed a workable line, with trains carrying supplies for your buildings, it's time to start earning yourself some passengers by enlarging your network.

Trains are required to carry people to and from work, and the schedules must reflect this. Also, additional trains may be

required at the weekend once you have established some leisure complexes.

Laying the tracks themselves is a reasonably simple affair, although – true to life – there are only certain terrains on which a railway can be built, and therefore a line needs to be carefully planned if it isn't to cost loads more than it should.

A problem I frequently had at the beginning was that, keen as I am, I scheduled trains sparsely, only to find myself with several costly tracks to take care of.

Time runs as

quickly or slowly as you want it to, and a financial year is from April to April. An impressive visual touch is the atmospheric dusk and night times – much better than the very lookalike sound.

If you are looking for a go-er... software too that's quick to load and good fun for half an hour, then look elsewhere. If it's a long-term challenge, you come though, then A-Train is the game for you.

There isn't any way to run out winner as such, because the game allows you to continue your powermongering until you're blue in the face, but the beauty of games such as this has always been the fact that they are virtually endless.

Sim City fans will lap this up – it's much more involved (and more fun) than SC, but be warned: although the icons are very clear and the game itself about as visual as can be, the sheer size of the whole affair means that a lot of manual reading and/or frustrating attempts are required before any satisfaction begins to seep through.

PAUL ROUNDELL

VISION

AUDIO

DIFFICULTY

LASTABILITY

it does take some getting into, but once you've mastered the basics and your trains are puffing away, A-Train is the type of game that can quite easily turn into an obsession.

85%

Publisher > maxis

Developer > Artlink

Price > £34.99

HD Install > Yes

Size > 1 Meg

CHUCK ROCK

SON OF CHUCK



Now the successful owner of Chuck Motors, Chuck Rock has been kidnapped by his arch rival in business, Brick Jagger, the shady boss of the Datstone Car Company. Following the arrival of the ransom slab, Ophelia cries as she reads the list of demands to secure Chuck's release. Six month old Chuck Jnr. breaks out of his playpen vowing "I'll be back - with my dad!"

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Team 17 are back again with yet another classic. Look up to the sky! Is it a bird? is it a plane? No, it's Superfrog. Hop, hop and away...

SUPERFROG



It's the fruit machine! Gamble these credits and you might win a level code. Almost as good as £150, I don't think...

Team 17 are quickly gaining a reputation as the best Amiga games company in the business. For starters they've got the right attitude. Quality and not quantity is their motto.

Almost every piece of software they've released has been without a doubt an absolute classic. Team 17 use the best graphic artists, programmers and quite possibly the best music and sound effects men in the world.

Just take a look at their list of releases. There was *Alien Breed*, a classic *Gradius*-style lookalike for the 90s. *Project X* was an amazing shoot-'em-up which blew all of its competitors out of the water. *Assassin* was a platform/action game, but unfortunately it was made out-of-house and suffered some major design faults, but it was still a damn good piece of software.

The boys from Wakefield then returned to form with *Body Blows*, a beat-'em-up that completely battered the pathetic *Streetsfighter 2* to death with its brilliant graphics and sound.

Team 17 have created the almost perfect Amiga shoot and 'beat-'em-ups, but they've always wanted to do a classic Amiga platform game. The platformer in question is

Superfrog and you too will believe a frog can fly... I always get excited about Team 17 software mainly because even before I load it up I know that it's going to be good. The graphics are superb, the sound is brilliant plus and the playability is truly excellent, almost without fail.

Making a piece of software of this type could have been extremely risky for any other company. How many platformers are instantly forgettable? Exactly, almost all of them.

Apart from a select few, good platformers are hard to find. The main problem is the platform game itself. How do you make it so that isn't alike to every other on the market? How do you make a platformer that isn't instantly compared to Mario or Sonic the Hedgehog or Zool? The answer is you can't.

Whatever product a software house releases, it is still going to be compared to another product whether it be a platform or a shoot-'em-up.

For example, any puzzle that involves the use of blocks is going to be compared to Tetris or Columns. Any interactive adventure is not going to escape without bearing some resemblance to Monkey Island 2. It's just the way this harsh comput-

er games industry goes!

What Team 17 decided to do with *Superfrog* was not to make an alternative platformer, but to make a super-playable one done in the classic style of old, making use of the Amiga's superior graphics and sound capabilities.

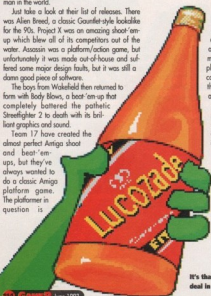
Superfrog starts with a fantastic and very witty animation lovingly crafted and sculptured by Eric Schwartz. Eric, who you may have heard of, is responsible for loads of those cute PD cartoon animations that you see flying around. If you haven't see any then it's definitely worth ringing up a PD library just to enjoy the man's talents.

The animation is top notch and tells the story of a magic Prince and his bride-to-be. The Prince's land was full to the brim with feelings of peace and harmony - that was until the wicked witch arrived on the scene.

The old hag got incredibly jealous of the Prince's bride-to-be and decided to turn the Prince into a slimy frog.

The Prince was now entirely helpless and decided to retire to the river bank to mourn over his lost love. A strange bottle floated past, a strange bottle containing a liquid known as

Lucozade. Yes, I know it's not entirely believable, but it was a good way of getting a bit of advertising, plus Team 17 supreme Martin Brown probably kept a few freebies out of them. At least it kept him off the legal! Where was it? Ah yes, the strange bottle floated past the froggy Prince and he was so dependant he decided to drink it. With a flash of lightning and a gust of wind he had



It's that Lucozade sponsorship deal in all its technicolour glory...



Superfrog is the Spunky Castle level. Keep an eye on those ghosts though...





Life can be very dangerous when you're a Superfrog - those spikes look particularly nasty...



Thus our little froggy friend decided to put wrongs to right and get his beloved Princess back from the clutches of the wicked witch.

Story time is over, now down to business. Superfrog is divided into six major worlds of which there are four sub-worlds. To complete one of these levels you must collect a certain number of coins which acts as a kind of toll fee.

The exact number of coins is shown on a large coin in the bottom right-hand corner of the screen; this number decreases as you run about like mad collecting the golden currency. The exit will only open when you have collected enough coins.

All this mental coin collecting is also against a time limit. When the time runs out so do Superfrog's powers, so placed around the levels are bottles of Lucozade which when collected up will keep his energy topped up.

There are also a number of special powers scattered around each level for you to use. Collect the wings icon and this will enable you to perform great leaps in the air. The destructo-spud is a little green blob with eyes which you can use to chuck at airborne enemies and



Superfrog bites the dust and goes to the big lily pad in the sky

knock them to the ground.

Superfrog can also turn invisible thanks to the invisibility pill which renders our froggy hero invisible for a short period of time. There are plenty of bonus points to be picked up. These come in the form of several different types of fruit. When you complete the level these points are converted into credits. You are given a chance to collect the points or better still gamble it all. The gamble is a chance



Fancy a game of "Spot The Frog"? Our slimy friend turns invisible and invincible at the same time. Very handy for getting through this level.



Raiders of the Lost Frog? Superfrog turns great adventurer in the ancient level...

to play on a fruit machine, and instead of winning lots of cash you get the chance to win level codes, extra lives and thousands of points. The fruit machine is a good little feature and as far as I know it's never been before.

Controlling Superfrog couldn't be easier as the controls are very basic indeed. Although at first our slimy friend is a bit difficult to handle and seems a little bit too fast, after ten minutes of play your worries will be over and you'll be jumping and running through the levels like a newly-born spring lamb.

I don't think I need to tell you how good Superfrog is - you can probably already tell from the score-box and the bloomin' massive Gamer Gold, but hey I'll tell you anyway.

Everything about Superfrog is just so polished. Every aspect has been carefully considered and as far as platform games go they just don't get any better than this.

The graphics are astoundingly good – all the characters are wonderfully drawn and you could almost think that you're watching a cartoon.

Sound is very nice, although the tunes can sometimes get a bit annoying. A bit of funk or metal would have been nice instead of those sugary platform tunes. The sound effects are good, though, with a mere smattering of sampled speech.

It plays like a dream. At first it looks extremely basic, but as you progress it becomes more intricate and increasingly more difficult.

This looked as though it could be aimed at small children and would be very easy, but stick it on the harder level and even the most experienced gamer is



With a smile on his face
Superfrog decides it's
time to save the day.
Hop, hop and away...

The map of Superfrog's home world, but notice the mysterious sixth world is not pictured...

GAMER GOLD

going to have his or her work cut out

Superfrog is quite simply Team17's greatest release to date. It's full to the brim with great graphics, sound, playability and addiction. You'd have to be completely potty or hopping mad to ignore it. 1993 is going to be Team17's year, I can feel it in my bones...

JONATHAN MADDOCK

Category	Score (filled circles)
VISION	10
AUDIO	8
DIFFICULTY	7
LASTABILITY	8
Overall Score	93%

Team 17 have taken a bog-standard platformer and enhanced it with superior graphics and sound and massive dose of unsurpassed playability. This will be the platformer that all others will be judged against.

Publisher ▶ Team 17
 Developer ▶ Team 17
 Disks ▶ 3
 Price ▶ \$26.99
 HD Install ▶ N/A
 Size ▶ 1 MEG

THE HUMAN RACE

The Jurassic Levels

Mirage's Neanderthals are back for another 80 levels of cartoon caveman capers

It doesn't seem two minutes since I was sitting at this very desk outlining the plot to a game which I thought seriously rivalled Lemmings in the addiction stakes.

Humans was released around February, and judging by the response it received (around 75,000 units sold so far), many of you shared my opinion.

Time has moved on a little, and we now find

ourselves with a new tribe of Humans in the Jurassic period (circa 180,000,000 BC, for the curious).

If you already own Humans, or have played it, the only thing you need to know about the data disk is that everything is exactly the same, and all the original discoveries such as the rope, torch and wheel are present from level one - the difficulty level of which is equivalent to the later levels of the first effort.

For newcomers, I will explain further - read on, read on...

Silly gubbins aside, the aim of the game is to take your Humans from one end of a level to the other, minimising fatalities as much as you can.

There are platforms to be reached, gaps to be crossed and everything else you would expect in a puzzler of this nature. You will be provided with various aids to your quest at intervals throughout the game, such as the rope etc as mentioned above. As was the original, The Jurassic Levels are



set in six different landscapes - summer, winter, cave, desert, forest and swamp - the graphical quality of which are excellent.

Tunes or sound effects can be toggled, the in-game animations are great, a password is provided for each of the eighty levels and dinosaurs, rival tribesmen and pterodactyls pop up from time to time to help or hinder.

The expressions and exclamations of the Humans delight me as much now as they did five months ago, although it's a bit too soon for me to sit down and light my way through another 80 levels. The early difficulty may prove daunting for the

uninitiated, but it's worth persevering with - and for those of you who've played it and loved it before, what more need I say?

PAUL ROUNDELL

PS: Watch out for Humans in Space in the summer!

VISION	●●●●●●●●●●●●●●●●
AUDIO	●●●●●●●●●●●●●●●●
DIFFICULTY	●●●●●●●●●●●●●●●●
LASTABILITY	●●●●●●●●●●●●●●●●
Humans was up there with Lemmings in the hilariously addictive stakes, and since this effort is simply another helping, it's right up there too.	86%
Publisher ▶ Mirage Developer ▶ Imagitec Disks ▶ 2 Jordanian Price ▶ \$29.99 Data Disk ▶ \$19.99 HD Install ▶ n/a Size ▶ 1 meg	



NIGEL MANSELL'S

WORLD CHAMPIONSHIP



Mansell's scored 79 per cent in February's Gamer - not bad by any means, but certainly not indicative of the type of product we've come to expect of Gremlin over the last couple of years.

The main reason for this relatively low mark was the speed and smoothness of the racing - always an important factor in a racing game - or

rather, the lack thereof. With the difficulty set as it was, the updates were too slow, and therefore too jerky, to present an accurate simulation of high speed racing, and consequently Mansell found itself lacking in the excitement department.

Now though, with the full power of the A1200 at its disposal, there surely can be no excuse for anything less than a fast, smooth ride!

The first noticeable improvement is the speed of loading, which is only to be expected when you consider the capabilities of the A1200.

Once loaded the game offers exactly the same as did its multi-compatible counterpart, as it is of course nothing more than an enhanced version.

Somewhat there is no change - or at least, not in the way it looks. The speed it zips by at though has changed dramatically. Gone are the

Nigel's done a runner, but his memory lives on for the Amiga aristocracy

jerky updates, replaced by moderately fast, smooth 3D scrolling, improving control over the car a great deal.

Difficultly in overtaking other racers is still there, but now instead of being frustrating it makes play more challenging due to the overall improvements in gameplay.

Disk swapping is minimised thanks to your 2Mb of RAM, and even the winning sequence I complained about originally takes much less time to appear at the end of the race.

Whereas the mass market version of NMWC is nothing more than a good quality racer in a large field, the A1200 promotes this attempt to the front line of the starting grid with the likes of Lotus 3 and Jaguar XJ220.

I still don't believe Gremlin have gone as far as they can with the A1200 however, and look for-



ward to testing out the first specific race game for the machine.

PAUL ROUNDELL



ORIGINAL SCORE	85%	79%
A1200 SCORE	85%	79%

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Amiga 500, 600, 600HD, 1000, 1500, 2000, Workbench 1.2 or above. Mouse and keyboard control required.



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ON THE
Drawingboard

WOODY'S WORLD

Vision Software claims this is the largest platformer ever developed for the Amiga. Jonathan Maddock takes charge of the lie detector and investigates



Woody's World – definitely a game with its head in the clouds!



Watch out Woody! Here we are in the outside stage. Just one of the 60 levels

Vision Software are relatively unknown by anyone's standards, but are already making big waves in the sea of Amiga gaming. Cast your minds back to November 1992 and Amiga Computing's CoverDisk.

What was on that fabled CoverDisk I hear you cry? Well, it was nothing more than Cybernetix, quite simply the world's greatest shareware shoot-'em-up.

Vision Software had created a modern day masterpiece – a Defender clone with visually stunning graphics and marvellous gameplay. Cybernetix could easily have been released at full-price and made pots of cash.

The year is now 1993 and some clever person at Digital Marketing International (DMI for short) snapped up the boys at Vision Software. Locked in a cupboard for seven months, they re-appeared, some disks clutched in their hands. Woody's

World had been born.

The lads at Vision had noticed that there were loads of platform games around, and that unfortunately many of them were rubbish.

They decided to make the best platformer the Amiga world had ever seen. The ingredients were to be amazing graphics, brilliant sound, but most of all unmatched playability.

One thing you notice about Woody's World is that it's 1Mb only, an increasingly popular move. Paul and Rod, the game's programmers and designers, commented on the decision to make Woody's World 1Mb:

"We've decided to take the 1Mb Amiga standard and fit as much game into this configuration as possible."

They go on to say that: "Without paying too much attention to the current batch of Amiga platform games, we've tried to develop a unique style in Woody's World."

"From the graphics and music through to the

layout of the levels, all of our design decisions were aimed at creating an expansive unique game environment to challenge the Amiga game player."

Woody's World features more than 60 levels to explore and each takes up 64 screens. It also features over 20 graphical styles, more than one hour of background music, super smooth scrolling and masses of secret rooms and hidden bonuses.

The platform adventure is set in a mysterious land where six castles have been overrun by menacing baddies.

Woody, the hero, must rid each castle of its evil inhabitants and free the land of all evil.

Woody is not normal. During the platform fun and action he changes his identity more often than I've had hot dinners. Woody can change into Prince Woody who has the ability to slide through gaps and kick baddies or he can change into King Woody who can enter special rooms and access even more levels.

We received a preview version of Woody's World and it's almost finished except that it still has a couple of bugs and elements of gameplay to tidy up before DMI release the product.

Even though it's the preview version I can tell that Woody's World is going to be an Amiga chart topper.

The reason is simple. Ben, Gerner stuff writer and boy genius, is not that fond of platform games, but Woody's World has kept him captivated for almost a full week!

This is unheard of in Gerner circles – the words Ben and platform just do not go together. I was so shocked I had to go and lie down in a darkened room, so you can see why I'm so sure it's going to be a classic.

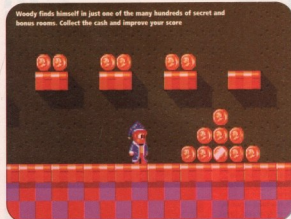
Woody's World not only plays like a dream, but also looks like one with delightful cartoon-like quality graphics displayed in 32 colours. The music



With a flash of stars Woody changes into the prince. He can now slide through gaps and kick the baddies



Steam Castle – the first level. Find those chests and progress in the world's biggest Amiga platform game... allegedly

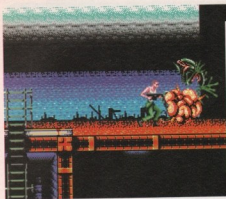


Woody finds himself in just one of the many hundreds of secret and bonus rooms. Collect the cash and improve your score

is also of a very high standard and gently bops around in the background while you waggle your joystick furiously.

Rod and Paul say they have created the biggest and best Amiga platformer to date and I believe them. Vision have already made a name for themselves via Cybernetix, but Woody's World is guaranteed to shoot them up into the big time.

It will be available on DMI's Global label in the next month or so and will cost you £25.99. Not much to ask for the world's greatest Amiga platformer.



Sound FX No.230: Blam, squish, drip, drip, splash.



Ripley says "Get off my cakes!" The fat porker gets mean and angry in this platform runaround and blast-'em-up...



A nasty, dribbling, smelly and downright stinky alien - and he's got bad breath as well

ALIEN 3

Ellen Ripley is back, but so is the bitch, and something tells me it's going to get very bloody. Hudson, we are leaving...

When I first heard about Alien3 I was as excited as a perversity in a whipped cream factory. The battle between Ripley and the alien has raged on for over 14 years now. You would have thought that a software house such as Ocean or US Gold would have signed up the licence.

The only piece of software I can remember is a

disappointing and very sad attempt which appeared on the good old Spectrum. Thanks to Probe Software Alien3 is now on the Amiga, so sit back, absorb the atmosphere and enjoy.

It does not follow the exact plot, the reason being that the film would not make an entertaining bit of software. As fans will I know, Alien3 doesn't feature any weapons because it is set in a prison colony and that in itself would make the game a bit boring.

A second reason is the fact that Alien3 only features one alien and even a super alien wouldn't last long against Ripley. What Probe have done is added loads of weapons - pulse rifle, flame thrower, and so on - and loads of

aliens. The game is actually more like the original Aliens than Alien3.

The plot is very simple indeed; the aliens have taken over the colony and turned it into a breeding ground by using the prisoners as hosts for alien eggs.

Ripley has to rescue the prisoners - by putting them out of their pain and misery - and waste all the aliens.

This is basically a simple platform and blast-'em-up, but it works much better than the average simply because you can already relate to it. What Alien3 has which most do not is atmosphere - and bags of it to boot.

Ripley can flick between four sets of weapons (see below for details) but unfortunately they are all rather limited. This means you have to be careful otherwise you'll be weaponless and helpless. You can replenish your armoury if you're lucky enough to find the appropriate icons.

Alien3 is a complete and utter gore-fest with blood and, in the aliens' cases, acid flying all over the place. Graphically it is quite impressive. The main Ripley sprite actually does look like the heroine of the films, but unfortunately she could also easily be mistaken for Irish popstar Sinéad O'Connor.

The alien sprites are just as impressive, very mean and menacing. The backdrops are well drawn and add to the dark and intense atmosphere.

There is a choice to be made on the sound front between music and sound effects - you can't have both! The sound effects are fairly noisy

apart from a nice squishing when you blow an alien to bits. The controls are easy enough, apart from the annoying fact that you have to press the spacebar to change your weapon.

It's not original by any means, but other platformers pale in comparison thanks to the dark, moody graphics that generate such a spooky atmosphere.

Alien3 is as good as the Mega Drive version and any Amiga-owning Aliens fan is going to want to rush out to buy it.

I would heartily recommend it to anyone, but as it's basically a bog-standard platformer it comes down to personal preference. If you want a cutesy platform game take a peek at Superfrog, but if you want a violent, dark and moody one, then Alien3 is definitely your cup of tea. Hudson, we are leaving...

JONATHAN MADDOCK



Nothing compares 2 U. Ripley starts off a less than successful pop career

Weapons detail



● **Pulse rifle** - A machine gun type thingy. It's not very hard, but shoots a lot of bullets.



● **Flame thrower** - Good for lighting ciggies and even better for torching smelly aliens. A good close range weapon.



● **Hand grenades** - A good ol' couple of explosive eggs rammed down the alien's throat and Bob's your uncle. Excellent for total destruction.



● **Grenade launcher** - Sort of like the hand grenades, but you shove them down the barrel of a gun. Very lethal, but slow to reload for a second shot - although get 'em on target and you won't need one.

VISION

■■■■■■■■■■

AUDIO

■■■■■■■■■■

DIFFICULTY

■■■■■■■■■■

LASTABILITY

■■■■■■■■■■

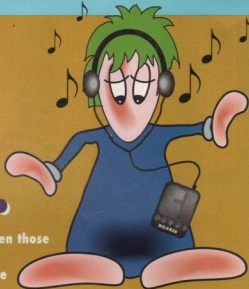
Alien3 is my kind of game. It features great atmospheric graphics, really decent sound, good playability and is packed with tons of violence. A bog-standard platformer, but it quite literally oozes atmosphere.

85%

Publisher ▶ Acclaim
Developer ▶ Probe Software
Disks ▶ 1
Price ▶ £25.99
HD Install ▶ N/A
Size ▶ 1 meg

They're justified and ancient...

...and they like to walk off cliffs. A bizarre tie-in between those suicidal lemmings and the producers behind the KLF is about to yield a record. Ben Styles went to find out more



Tie-ins between software firms and record companies are the in-thing these days. Mario, Tetris, Mega-Mania and Sonic the Hedgehog all have records on sale or well on the way.

Latest in the long line of computer-generated music makers is Lemmings 2, so we went down to Food Records in London to see what's cooking there.

Behind the production are Ian Richardson and Nick Coler, whose company is famous mainly for the discovery of Jesus Jones,

whose lead singer incidentally owns half of the studio.

The person mostly responsible for their involvement in the Lemmings record is the games-playing A&R man Miles who was approached by Psygnosis and decided it would be a bit of fun. Money is definitely not their motivation for the record - they don't expect to make much out of it at all.

The studio itself is quite small, and not really knowing the workings of such a place, I was baffled by the presence of a large TV which was suspended above the mixing desk.

"What's that for?" I asked innocently, thinking it was going to be a key part of some technical video-making process.

"I'll show you," and so Nick turns on the TV showing me today's edition of Yogi Bear, "and the horse racing's pretty important," he says.

So much for the high-powered world of pop! This is not the first

record that Ian and Nick have been involved in. Remember the fun but nevertheless ridiculous Doctorin' the Tardis that got to No 1 a few years ago? You will be relieved to know that it was produced by the KLF team under another name.

Those early successes got Nick and Ian on Top of The Pops wearing silly costumes and the like. Possibly the most remarkable thing about the fame was the acquisition of a brand new Jaguar XJS from Freddie Starr (honest) following a bet on the record.

About the only thing Ian and Nick had in common in the first place was that they both had an interest in music and had worked in mental institutions at some point in their life. They didn't reveal whether that was a help or a hindrance!

The record itself will not just be something you listen to, for on the 12in mixes will be solutions to various levels of the game. We are not entirely sure how they plan to incorporate them onto the vinyl - let's hope it's not

a backwards message or they will probably end up being blamed for another teenage suicide!

● Lemmings 2 - The Record will be available on the 4th May at the usual price. The company's new dance label, Synthetic, will be dealing with distribution.

Ian Richardson even looks like he knows what he's doing



Miles, the man who gets paid for listening to people



Nick Coler: hard at work as always. It's non-stop in the world of pop.



DARK SEED

Welcome once more to Cheat Mode, the part of the map designed to help you in your hour of need



Just one of the brilliant nightmare sequences

This month's cheat is a walk-through solution to Dark Seed. Funny enough it's from the lofty mind of Ben, who doesn't usually do any work but liked the game so much that he decided to have a go...

Dawson will wake up in the morning with an immense headache. This you have got to get rid of or you won't be able to do anything with him. Go to the bathroom and click on the cupboard. This will make him take an aspirin.

Then you must take a shower or else no-one will talk to you when you go into town. You should repeat this process every morning. Next

go into the spare room and use the exclamation mark icon on the old coat. After a few clicks you will discover there is an old library ticket in the coat.

Go downstairs and into the study, read the blueprint and find the secret room. Open the bookcase on the right and go to Secret Room 1. Once you have gone through the door it is important to leave the door open - if you don't you won't be able to use the turbo lift in the Dark World.

Climb the ladder and get the rope, and exit into your bedroom. Go and wait for the postman to call. Remember if you want to pass time quick-

ly, just press "I". Take the package from the postman and head up to the attic. Push the large trunk on the left-hand side a few times which will reveal the watch and the exit to the balcony. Remember the watch must be wound regularly for it to work.

Go on to the balcony and tie the rope to the gargyle. This gives you a back door as it were, but don't use it yet.

Go to the garage and get the crowbar from the car boot and the gloves from the glove compartment. On your way back to the house, read the paper that is lying on the pavement.

Eventually the phone will ring in your bed-

room. Answer it - you have to hurry or it will stop. It's the librarian telling you to come and pick up a book. Before you do so go into the attic and use the crowbar to open the trunk and get the

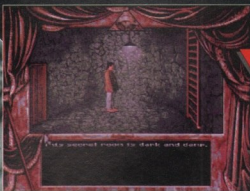


A tasteful view of the alien landscape through binoculars

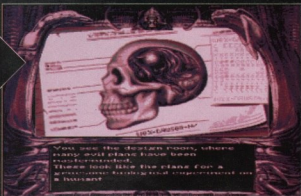


An unpleasant room on the Dark Side

cheat mode



One of the not-so-secret rooms



A diagram explaining what is going on inside your head

and read. Go back to her and give her the library card. She will tell you to go put it back in one of the books, inside which is a piece of the missing diary.

On your way back, take time to go to the store. You need to buy Scotch – pay the shopkeeper first. When Delbert now makes an appearance, give him the Scotch and he will give you a Get Out of Jail Free card which will come in very handy in Day Two.

Go past the house and take a trip to the graveyard and beyond that the Tuttle crypt. Enter the crypt by following the instructions in the diary. Go into the urn room where you will find

the key to the clock case in the urn on the far left on the bottom shelf. Take it and head back out.

Once home, use the key to open the clock case in the front room and admire the John McKeegan name plate. Take time to examine the mirror and the picture above the mantelpiece.

Then put Dawson to bed. After the gruesome dream you wake up and shower and take the aspirin as before. Before the postman arrives, go listen to the car radio. This will help Dawson discover that what happens in one world is reflected

diary. Have a good read.

Go to the library, take the bobby pin from the floor and approach the librarian. She will direct you to your book which you should take



The final resting place of old man Tuttle

Item Location

Item	Location
Aspirin	Bathroom cabinet
Library card	Rain coat pocket in spare bedroom
House plan	On desk in study
Rope	On the floor in secret room number two
Watch	Under the big trunk in attic
Crowbar	In the boot of the car
Gloves	In glove box
Diary	In big trunk in attic
Bobby pin	Library floor
Scotch	In the store
Clock case key	Tuttle tomb urn room
Mirror fragment	Delivered by postman
Shovel	Entrance to catacombs
Diary fragment	Grave of John McKeegan
Gun	Police station
Stick	Delbert's back yard
Head band	From Sago in prison corridor.
Microfiche	From the keeper of the scrolls
Axe handle	Delivered by postman
Scotch	In the store
Car Keys	In cellar under the stone

in the other.

Go back into the house through the front. From now on you should use the rope at the back to get in and out of the house. Press "I" a few times and the postman will come.

Take the mirror fragment and use it on the mirror. This completes the passage to the dark world and you can now step through the mirror. Once through, take the right-hand door in the nursery to the room of skulls, then take the room on your left. This room contains the plans for embryo implantation.

The plans can't be picked up, so just read them. Take the right-hand door into the turbo lift Room 1 and step into the lift on the far wall. This will take you up to the second, teleport room from which you should exit left onto the observation deck.

Use your gloves to activate the switch between the two exits this will open a previously unopened door in the skull room return and go through the new door. Keep going left and you will find a shovel, save this for later.

Leave the Dark World, go to the graveyard and dig up the body of John McKee. Read the last part of his diary - it advises you to start the car and break the mirror.

When you get home you will find yourself under arrest for digging up the grave. The Get Out of Jail Card will get you out, but first you must put the bobby pin the gloves and the money under the pillow in the cell.

Get out by rattling the tin cup against the bars and give the card to the policeman. You will have enough time to steal the gun which is just above the desk in the office.

Go and meet Delbert as arranged. He'll meet you in your backyard, not his, but follow him next door. He will ignore you until you give him

the scotch. He will then leave you, but take the stick that the dog leaves behind.

Return to the Dark World and take the right-hand door into the skull's room and go through the door that the lever opened. Keep going right until you meet Dark Fido.

To get past him simply throw the stick over the side into the abyss. You are now free to continue right to the dark police station, although you find your gun confiscated and you are put in a cell. Test the Synchronicity theory and take the

pin the money and the gloves from under the pillow. Use the pin to pick the lock, once out you will meet a fellow prisoner by the name of Sogo who offers you an invisibility-inducing headband in exchange for the pin. Don't use it yet.

Walk out of the passage and pass the Drakketh factory you will find yourself at the front of the archive building and now is the time to use the headband. You can now walk past the guard to the chamber of the Keeper of the Scrolls.

Turn the machine on and you will see an image of the Keeper. She will then give you a role of microfiche which you will need tomorrow. Now go home and go to bed.

Take your morning aspirin and shower as usual. Go and wait for the postman to arrive - he will bring you a package which contains the axe handle. Now take a trip to town using the rope from the balcony. Always use this to enter and leave the house as the police are waiting for you.

Go into the Periodicals room in the library and turn on the microfiche reader pop in the rail of film and read the section about home improvements.

Next you need keys to the car which are in the cellar so hurry there and pick up another bottle of scotch on the way. Go into the cellar where you will find a loose stone in the middle of the cellar pick up the stone and the keys will be underneath them, keep the stone as well.

Now cross to the Dark World once again and take the stone to the power Nexus use the machine on the left to energize the stone, and fit the stone and axe handle together to make a hammer.

Go back to the normal world and enter the garage. Fill the petrol tank with scotch and get into the car using the key. Turn on the engine, leave it running and cross into the Dark World.

Enter the spaceship and use the gloves on the lever to the right of the console. This starts the launch sequence so get out of there sharpish.

Once the craft has taken off you will find yourself back in front of the mirror in the real world. Smash the mirror with the hammer and you have completed the game.



Mike spends a lot of his time here, usually digging people



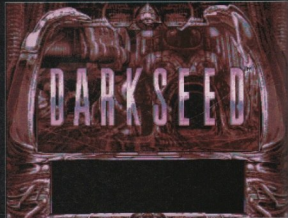
Mike get arrested for graverobbing - not surprising really



Delbert takes a well deserved swig of scotch



The keeper of the scrolls, strange, helpful, and unmergingly similar to the librarian



I think this is where we came in...

Loops – sections of code which are repeated until some exit condition is satisfied – are extremely common in computer programs.

HiSoft Basic provides a number of loop-related statements but the particular one used this month is the For/Next loop because it goes hand in hand with the use of a multi-container type of Basic variable known as the array.

The variables we've talked about in the series so far have all stored single values. It is often useful however to be able to work with whole sets of related values.

Suppose for example that we wanted to use collections of x and y variables to hold the x and y axis components of three points on a graph. One approach would be to name the variables as x0, y0, x1, y1, x2 and y2.

If, for example, we then wanted to initialise each of them to a value of 20, we could do it like this:

```
x0=20
y0=20
x1=20
y1=20
x2=20
y2=20
```

Three values are easy enough to code but try this approach with 100 such statements and you'll realise that there must be a better way of handling these situations.

What is needed is a way of declaring collections of items in a way that allows us to uniquely identify an item by virtue of its position, because in that case we could

write loops like:

```
FOR i=0 TO n
  DO something with the i'th x item
NEXT i
```

This need was solved many years ago by developing the idea of an indexed or subscripted variable. With HiSoft Basic, as with most high-level languages, these entities are called arrays and each item in the array is known as an element.

An array then is a collection of objects of the same type arranged in such a way that we can access any element of the array by specifying its index position.

Array names follow the same rules as those for ordinary variables but arrays which contain more than ten elements need to be pre-declared using Basic's DIM statement.

To dimension a string array called x\$(0) and set all of the elements from x\$(0) to x\$(99) to the string "Empty" we would therefore use this code:

```
DIM x$(99)
FOR i=0 TO 99
  x$(i)="Empty"
NEXT i
```

Similarly to print the contents of the above array we could use this loop:

```
FOR i=0 TO 99
  PRINT x$(i)
NEXT i
```

I've used subscripts that start from zero so the string array shown above contains one hundred elements, ie x\$(0) up to x\$(99). Some people find working with zero indices awkward and it is worth mentioning that HiSoft Basic provides an Option Base statement which allows the programmer to force array index values to always start from one.

Multi-dimensional arrays or tables, eg x\$(20,20) are easy to set up and with HiSoft Basic it is even possible to use arrays which

A loop allows the 60 second-hand positions to be drawn with just three lines of Basic

Hip Hip ARRAY!

Going loopy with arrays

HiSoft BASIC
PART 4

We return to recursive HiSoft Basic oriented instruction in Paul Overaa's continuing tutorial series

are local to subprograms. Another powerful HiSoft extension is the ability to redimension an array without losing existing data.

You do not incidentally have to use simple array subscripts. Expressions can be used and the clock program that I provided last month is a good example.

The second-hand had to be able to be displayed in any one of 60 positions and since a complete sweep of a circular clock face involves 360 degrees it was not hard to figure out that each new second hand position was six degrees further on from the last.

By using a bit of high school trigonometry I was able to pre-calculate the locations on the circumference representing those second-hand positions. Here's the x() and y() array-based loop which did the trick:

```
FOR i=-90 TO 270 STEP 6
  x((i+90)/6)=2*PI*COS((%DEGREES_TO_RADS)
  y((i+90)/6)=2*PI*SIN((%DEGREES_TO_RADS)
NEXT i
```

A bit frightening I know, but if you work out the (i+90)/6 expressions using steps of six within the -90 to 270 degree

loop range you'll see that they just correspond to the numbers 0, 1, 2, 3, 4, ..., 60.

In other words, the right-hand side terms provide a way of specifying the x() and y() array subscripts whilst the left-hand-side expressions produce the second-hand position co-ordinates which get stored in the array.

The result is that for any value of i from 0 to 60 the array elements x(i) and y(i) end up holding the x/y co-ordinate data for the outer-most point of the i'th second-hand position.

It is because I pre-calculated these second-hand position point values that I was able to set up the initial clock display by using a loop which plotted all 60 second-hand positions using Basic's Pset instruction. The loop added the x() and y() co-ordinates for each second hand position to an arbitrary:

```
FOR i=0 TO 60 ' for each second
  PSET(x((i+90)/6),y((i+90)/6))
NEXT i
```

The same pre-calculated x() and y() data was of course also used in the routine that updated the position of the second-hand!

Trying to write a similar program without using array-based code would be a nightmare and the moral of this story is simple: Loop-based array constructs are well worth learning about because, one you are used to the underlying ideas, they can make your life as a programmer significantly easier!

● Next month we will be looking at the art of using control structures

BACK ISSUES

Missed some of the first three parts of Paul Overaa's excellent HiSoft Basic tutorial? Worry not, you can retrieve the situation by ordering the relevant copies from our Back Issues Department.

Know your commands

Command: DIM

Syntax: DIM (SHARED) variable [(subscripts...)]
[variable [subscripts...]]

Purpose: Defines the maximum values for array variable subscripts and reserves the appropriate storage. The minimum value for each subscript may be set using the Option Base statement. The DIM SHARED form is used to declare arrays and ordinary variables that can be accessed from within subprograms without the need for a shared statement in each sub program.

Command: FOR...NEXT

Syntax: FOR counter_variable = start TO end [STEP increment] NEXT counter_variable

Purpose: The counter_variable is set to the specified start value and the statements within the FOR/NEXT loop executed. The counter variable is then incremented by one (or by the value specified by a STEP value) and the result compared to the end value.

If the counter variable does not exceed the end value, the loop code is repeated.

Command: OPTION BASE

Syntax: OPTION BASE [0 | 1]

Purpose: Defines the lowest subscript value to be used with arrays.

Command: PSET

Syntax: PSET [STEP] (x_position, y_position), [colour]

Purpose: This statement plots a pixel of a given colour in the current window at the given x_position and y_position. Drawing is relative to the top left of the window unless the STEP keyword is used.

AMIGA insight

Expert views
on the latest
applications



Sometimes, something reaffirms your faith in the human condition. Alex Giam finds a coded example of humanity's true potential

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Gemlocks, desirable as they are, are out of the reach of most pockets – until now. Paul Austin looks at some German newcomers

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Getting graphics and text into intuition windows using C is not as hard as it sounds. Margaret Stenger demonstrates how it's done

131



The Dream GMX-1 claims to be the cheapest General MIDI sound module. But does her price mean her quality? Vic Lemnard finds out

133



Ever considered setting up your own bulletin board? It's not as hard as it might sound, and Phil South has some pointers

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If you've ever wanted to program your own "bar meters" for games or applications, Phil South shows you how to do it

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Ben Pointer offers some sound instructions on how to remedy the bug which disables the AutoSave feature in ProPage

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News regarding the latest PCMCIA card technology, and a CD-ROM drive that operates even faster, from Julius Alexander

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Do you know that feeling you get once in a while, when you see a really excellent piece of software, or for that matter any really well thought out and effective product?

You know the feeling I'm talking about – it is like a big grin inside you, a reassuring feeling that there are still people out there who love what they do. Someone, somewhere, has actually taken the trouble not to dish out just any old slop.

For me these moments reaffirm the fun philosophy of computing, so often obscured by today's commercial considerations.

Now when programs like these are shareware, with registration costs so low that they are practically free, I think we should all really take notice and support them. After all, it doesn't take only expensive packages to draw our attention any more, does it? At least, I hope not.

Yes, the package I am talking about is really that good. It is a cel animation engine called XI from Software on a Shoestring (it really is!) in the USA, and costs only \$30.

If you do any animation at all, and it's been some time since you experienced the feeling we mentioned above, this package could well make your day...

For those who haven't come across it, cel animation is the process by which drawings are produced on successive layers of transparent material (cels), so that the eye can see the whole sequence of movements at a glance.

XI simulates the transparent cels by using successive shades of grey, so that the more recent frames are darker, and the older ones are paler.

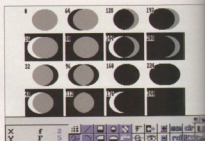
This is a fairly standard technique and is used in many animation programs, including Disney Animation Studio. It should be obvious that the animated cels are in black and white (line drawing) only; if you want to paint them in between, you must import them into a paint package.

When a scripting language is added to any drawing program, it automatically adds a new dimension to it, giving it some of the qualities of a mini-CAD package.

This kind of automating power is invaluable where a lot of precision is necessary, and would come into its own when animating such things as machines, moving components and so on.

All this is usable directly from AReXX. In fact, you could create a whole animation without as much as touching your mouse or graphics tablet, simply by programming it.

By using the programming side of AReXX for calculations, a lot of possibilities are opened. With a bit of work you could accomplish goal-directed animation, ie repre-



XI has offers variety of features, including control of the blitter (minterms)

senting the movement of linked or articulated objects.

Alternatively you could take 3D (x,y,z) co-ordinates, perhaps from a modelling program, and convert them to 2D screen representations, either isometric, or even perspective. Program the change needed in each cel, and let your machine do the animation for you.

The AReXX interface is very simple. It is invoked with a mouse click which prompts you for your pre-written program. You can also enter single line commands directly at the requester. Naturally, XI can be linked to any other AReXX compatible program.

The program proved itself extremely quick to use and get on with. There are intelligent keyboard short-cuts for everything – a feature often neglected on the Amiga.

The following snippet of code shows one approach to creating an animation sequence, making use of the turtle:

```
angle = 270
pen = 0
x = 320 ; y = 100
TURTLE x y angle pen
do 1 = 1 to 20
  phase = i // 5
  GOTO i
  call draw_pict(phase)
  call new_pos(i)
end
```

The picture is drawn every time the draw_pict() function is



Many Amiga users are drawn to learning AReXX, so as to get the most out of multitasking, but a few shy away from its "minority language" image. No point in putting a lot of investment into something that won't be very useful in the future.

Don't worry, if you learn AReXX you probably won't have to learn any other macro language, at least not on the Amiga. All major software packages are now using AReXX as their automation language. The AReXX core is the same regardless of which software uses it.

AReXX is also simple enough to be picked up very quickly if you already know another language, like Basic, and not too difficult even if you know no other programming language.

The most interesting item of news that I got this month, however, is that IBM will be releasing something

called VISUAL REXX with the latest version of its new OS/2 2.0 operating system. This appears to be REXX with a graphic interface to OS/2.

Now REXX (the language on which AReXX is based), has been around for some time on large computers, and it is even available under MS-DOS. There it enjoys a small following of users who like its excellent parsing facilities, and use it as a utility language.

Of course, you get nothing like the multitasking control that AReXX gives, but since PCs have never had true multitasking in the first place, this has been irrelevant.

With the appearance of modern multitasking systems like OS/2 2.0 and Microsoft's Windows NT, it won't take long for someone to realise that all these tasks could be usefully linked. All they have to do is look at the Amiga.

called. It can contain a mix of turtle and conventional graphics commands. The new_pos() function then moves our turtle to a new position and heading. Basically it would describe a path of movement.

The phase variable is used if the object to be drawn is not exactly the same in each frame. For instance, legs may be walking, gears may be turning, and so on. In the accompanying illustration, you may notice that the little animal is wagging its tail as it is turning.

The more I played with this demo the more I liked it. It is as solid, versatile and - very importantly - bug free, as any commercial offering. Above all it has a great feel of practical usability. It is small enough to run easily on a 1Mb machine, and would probably even run on an old unexpanded Amiga. First class work. Software on a Shoestring!

I found myself wondering what language it was programmed in. By a chance bit of snooping, I discovered that it is written with the popular American package JForth, which does not show itself much on this side of the waters.

The only real fault that I could find with this program is that it only comes in the US NTSC mode. This means that you have a maximum of 400 vertical pixels, rather than 512. Perhaps if there is enough interest the author will recompile a full-size European PAL version.

Yes, I certainly recommend you check this product out. In my opinion it would still be fair value at three times the price. I have written to the author to confirm the address, and I will let you know in the next issue.

As always, I suggest you contact the author first before sending off any money, just to make sure that you are not posting to an invalid destination. The demo (save-disabled) version of XI can be found on Fred Fish disk number 516, and the address is Software on a Shoestring, 1116 Road 68, Pasco, WA 99301

XI stands for excellence



Take a trip with turtle power

One of the most well thought-out features of XI is the inclusion of so-called "turtle graphics" as found in the educational language, LOGO.

Turtle graphics is a way of drawing by specifying a direction and a heading from your current position on the screen, rather than using the traditional (x,y) co-ordinate system.

The name is historically derived from a little pen-carrying mechanical buggy, or turtle, which was used to create drawings in the early versions of LOGO. On-screen the "turtle" is only notional - a pixel that moves and draws as you instruct it.

The program control flow is provided by AREXX. XI provides only the graphics commands, such as FW x (forward x pixels), RT y (turn right y degrees), PENUP, PENDOWN, SETPOS x y (set the position of the turtle), GETH (get the direction the turtle is heading) and so on.

The conventional graphics commands like BOX, CIRCLE, POLYGON and the like can be freely mixed with turtle commands.

For instance, to draw a square in LOGO you go forward and turn right a total of four times. This is what it looks like in XI,

using AREXX.

```
x = 10
do for 4
  FW x ; RT 90
end
```

For the purposes of this article I have adopted the convention of having all the AREXX commands in lowercase, and all the XI commands in capitals. This is not necessary, it is only done for the sake of readability.

Here's another example, that gets and stores the current turtle position and heading - useful if we want to return to our original position.

```
/* We will need results from XI */
options results
GETH
turtle_heading = result
SETPOS
/* Result is string with 2 nums */
/* Extract co-ordinates: */
parse var result turtle_pos turtle_pos
```

Just like LOGO, complete drawings can be described by a function or procedure, and can be called whenever needed.

The importance of the turtle graphics is

that they can describe a drawing fully, independently of the direction in which it is facing. This is a very elegant solution and spares us the effort of recalculating the co-ordinates.

The turtle graphics built into XI, together with AREXX, combine to form an interesting version of LOGO. I can easily see it being used to teach kids; the animation bonus will certainly live up any class.

Regular LOGO does not have anything like the facilities or speed required to display animations, so XI provides a really good - perhaps a better, alternative. Ideas can be visualised very quickly, and errors are spotted instantly and can be corrected interactively. This is a vital part of the learning process.

Believe me, this product is full of schoolroom potential. It has that special ability to capture the imagination instantly, and the quick and visible results are great for motivation.

Whether it will actually ever be used in this way is another matter. Call me a cynic if you will, but I suspect it won't. Oh well, at least the smart hobbyists and keen amateurs will benefit...

Alex Gian finds an AREXX package that reaffirms his faith in computers, dedication, shareware and life in general!

With the Amiga now well established as the premier video engine, a genlock has become an essential to many home studios. As a result, two new units from Electronic Design are hot news – especially as they seem to be affordable while retaining quality results. You can choose from the cheaper composite version or the pricier Y/C and S-VHS unit.

As you can see from the photography, they aren't exactly contenders for the Miss Genlock awards, but if you can overlook the less than spectacular aesthetics and cast the Volvo-esque styling aside the interior hides the old pleasant surprise.

Although not pretty, both units certainly score well on the functionality side with the sort of robust design and build quality which epitomises German attention to detail.

Although each serves a different sector of the market the basic design is all but identical, with the only difference appearing on the rear of the units.

As you'd expect from an S-VHS genlock, both Y/C in and out are there, plus the added attraction of their composite alter egos. A particularly pleasant aspect of the Y/C option are the standard S-VHS mini DINs as opposed to the split male phono sockets offered on S-VHS gear – a form of connection which all too often needs additional cabling to assimilate the hardware into certain setups.

Although pretty self explanatory – courtesy of the photography – there's very little physical difference between the two. As a result there's not much point in dealing with their basic photography separately.

On the front of the near bomb-proof casing sits the ubiquitous control panel complete with a fairly standard array of control knobs plus a single invert switch ready to generate a keyhole effect – colour zero as foreground, video as the background – when necessary.

Of course this can be toggled to the standard setting of video as a replacement for colour zero as required. Aside the aforementioned flick switch await a total of no less than five knobs, each controlling their own element of the final output.

The first three deal specifically with the overall image quality by allowing adjustment of colour, contrast and brightness respectively.

The penultimate knob adds the essential fade allowing control over the introduction and fading of the overlaid Amiga graphics while the fifth and final defines the degree of superimpose applied to the video signal.

All pretty standard stuff, however it must be said that the knobs themselves do leave a bit to be desired. Although as sturdy as they come, they feel a bit slack which in practice means that silky smooth fades can become a little jerky.

There's yet another irritating aspect to the control panel, namely available space. Being a fairly sizeable chap, I like many others suffer from unfeasibly big mitts and as a result actually turning the knobs under the cramped conditions can cause real problems on both units.

Moving to the rear of the units things are again pretty standard with the necessary I/O options mentioned earlier plus the essential RGB Thru enabling connection of a monitor.

Although a fairly standard feature on most modern genlocks, its importance can't be stressed enough. If you're toying with the idea of a cheaper genlock, think very carefully if this particular feature isn't implemented, as an apparent initial saving can prove costly in the long term.

In addition to I/O and the thru-port, both units also offer an

Get connected

In the classic tradition of almost every genlock on the market, both Electronic Design models connect up to RGB Out on the Amiga by a suitably lengthy cable while the actual power is supplied via a joystick connector.

Although seemingly the ideal answer to the power problem, the aforesaid connector can be tricky when connected to an A1500/A2000.

Admittedly the connection can be made but it's a pretty close call and if constant removal and reconnection is required the wear and tear could cause problems in time.

VIDEO

optional 12v power input plus mono-only Video Out. When connected to the composite input on a monitor you can then access a rough and ready version of the output heading for the VCR – useful if you can't be bothered connecting a TV to the target recorder.

Although not exactly perfect in certain areas, it must be said that the output quality of both units is on a par with anything in their respective price ranges – although the composite unit is uncomfortably close to the upper limit of the composite price bracket.

Given the choice, and of course the need, the S-VHS unit has to be the more attractive of the two, primarily because unlike its composite counterpart it comes in at the cheaper end of the market in respect to units such as the Hama 290, while offering enhanced flexibility when compared to GVP's G-Lock.

Composite £349.95 ● Y/C & S-VHS £519.95
Available from Micro-PAGE on 0753 551888



Double vision

Paul Austin plugs in two new arrivals which are designed to suit both the composite output of the amateur and the semi-pro efforts of the S-VHS brigade



STRICTLY PUBLIC DOMAIN

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Keeping Public Domain at Strictly Public Domain Prices

NOW ALSO AVAILABLE FROM HARGRAVE IN AUSTRALIA

All disks are compatible with the A500, those marked with * are also compatible with the A500+ and A600

LATEST DISKS

- U0404 A/CSS DISASSEMBLER - Makes some A/CSS accessible otherwise operational
- U0405 C/PROMAL - A/CSS - Handbook of queries and answers (only on 5)
- U0406 BASIC TUTOR - The first steps to learning how to program using BASIC
- U0407 TUTORING TUTOR - The basic version of this commercial style word processor
- U0408 COMPAILER TUTOR - Includes the C/A pathfinder
- U0409 C/PROMAL - Makes some complete with C/PROMAL
- U0410 POWERDOG V1.2 - The best long version in PD
- U0411 ANAGRAM - Long your address into an anagram
- U0412 ROMAN NUMERAL UNREADER - Create your own letters, names etc
- U0413 COMPOSER V1.0 - Create your own musical notations with notes + rests
- U0414 CAPTIONATOR - Produces scrolling messages for video

LMC CELEBRITY IMPERSONATIONS - Ever had problems viewing a movie on your own picture, this 4 disk version makes it possible to view movies from Deanna Dine, Greg Goldstein, Tom Connors, Robin Day, Ernie Resnick and some D&B

- U0415 TRIMM TESTS - Tests to check your typing capability
- U0416 SODA-BOTTLE - Causes a brilliant disk storage loss
- U0417 D&B GAMES - Makes available hard version tapes and hard disks by following the damaged tracks
- U0418 L&B GAMES - A huge dossier said to be one of the best chess programs around. Make names your phone calls when using
- U0419 BOB ARTHUR - A series of your replies - some included
- U0420 DUCK BUCKER - A huge video in Resnick on the money movie

LMC THE FINAL FRONTIER - Having recently received a 1981 rating this superb Star Trek Finale is now Resnick version and costs just £4.00 for the 4 disk set

CLIP ART

- The clip art in this collection is a high quality
- Huge library, many more than any other PD disk
- Each disk contains a 1000 illustrations allowing you to view the screen library by moving the mouse

- ART01 Wedding clip art (1 disk)
- ART02 Animals - various of mammals (2 disks)
- ART03 Religions - full of clip art (2 disks)
- ART04 WEIRD (2 disks)
- ART05 Fish - 2 disk full of sea and water
- ART06 Animals - 2 disk full of mammals
- ART07 Flowers - clip art (2 disks)
- ART08 Fish - clip art (2 disks)
- ART09 Office - more of the same
- ART10 Sweets - clip art
- ART11 Animals - useful clip art, legs
- ART12 Animals - clip art of those other (2 disks)
- ART13 Punks - cartoon etc (3 disks)
- ART14 Animals - high quality clip art
- ART15 Cats - 10 disks plus
- ART16 Flowers - clip art
- ART17 Sweets (2 disks)
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- ART595 Animals - useful clip art, legs
- ART596 Animals - clip art of those other (2 disks)
- ART597 Fish - 2 disk full of sea and water
- ART598 Animals - 2 disk full of mammals
- ART599 Flowers - clip art (2 disks)
- ART600 Fish - clip art (2 disks)
- ART601 Office - more of the same
- ART602 Sweets - clip art
- ART603 Animals - useful clip art, legs
- ART604 Animals - clip art of those other (2 disks)
- ART605 Punks - cartoon etc (3 disks)
- ART606 Animals - high quality clip art
- ART607 Cats - 10 disks plus
- ART608 Flowers - clip art
- ART609 Sweets (2 disks)
- ART610 Sweets (2 disks)
- ART611 Animals - useful clip art, legs
- ART612 Animals - clip art of those other (2 disks)
- ART613 Fish - 2 disk full of sea and water
- ART614 Animals - 2 disk full of mammals
- ART615 Flowers - clip art (2 disks)
- ART616 Fish - clip art (2 disks)
- ART617 Office - more of the same
- ART618 Sweets - clip art
- ART619 Animals - useful clip art, legs
- ART620 Animals - clip art of those other (2 disks)
- ART621 Punks - cartoon etc (3 disks)
- ART622 Animals - high quality clip art
- ART623 Cats - 10 disks plus
- ART624 Flowers - clip art
- ART625 Sweets (2 disks)
- ART626 Sweets (2 disks)
- ART627 Animals - useful clip art, legs
- ART628 Animals - clip art of those other (2 disks)
- ART629 Fish - 2 disk full of sea and water
- ART630 Animals - 2 disk full of mammals
- ART631 Flowers - clip art (2 disks)
- ART632 Fish - clip art (2 disks)
- ART633 Office - more of the same
- ART634 Sweets - clip art
- ART635 Animals - useful clip art, legs
- ART636 Animals - clip art of those other (2 disks)
- ART637 Punks - cartoon etc (3 disks)
- ART638 Animals - high quality clip art
- ART639 Cats - 10 disks plus
- ART640 Flowers - clip art
- ART641 Sweets (2 disks)
- ART642 Sweets (2 disks)
- ART643 Animals - useful clip art, legs
- ART644 Animals - clip art of those other (2 disks)
- ART645 Fish - 2 disk full of sea and water
- ART646 Animals - 2 disk full of mammals
- ART647 Flowers - clip art (2 disks)
- ART648 Fish - clip art (2 disks)
- ART649 Office - more of the same
- ART650 Sweets - clip art
- ART651 Animals - useful clip art, legs
- ART652 Animals - clip art of those other (2 disks)
- ART653 Punks - cartoon etc (3 disks)
- ART654 Animals - high quality clip art
- ART655 Cats - 10 disks plus
- ART656 Flowers - clip art
- ART657 Sweets (2 disks)
- ART658 Sweets (2 disks)
- ART659 Animals - useful clip art, legs
- ART660 Animals - clip art of those other

Each IDCMP flag in the NewWindow data structure represents an event that a program could be informed about, by a message in the Window's UserPort.

The polling loop in the demo program waits for a RAWKEY, MOUSEBUTTONS, WINDOWCLOSE or INTUITICKS event to occur, stores the class and code in its own variables and releases the memory for the next incoming message.

For more details on Intuition Window event handling, see last month's column.

Think of a low resolution screen as a page with 256 narrow lines, and 320 dots (pixels) on each line. Each pixel can be clear (logical colour 0) or set in logical colour 1. Each logical colour is allocated a physical colour, made up of differing proportions of red, green and blue. If more than one page (or bit-plane) is used, more logical colours are available.

The Amiga graphics library commands can draw lines and shapes, paint large areas, or write on the screen.

Last month the demonstration program used graphics library commands, WritePixel() to change the colour of a screen pixel, and SetRast() to fill the whole window with the given logical colour. Both commands used the address of the Window's RastPort which can be obtained from the Window structure.

The RastPort is a structure containing all the Window's options for drawing shapes or producing letters on the screen. The full structure, with any flags used, is found in the Amiga include header file include/graphics/rastport.h. Some of the

PROGRAMMING

the graphics cursor. The cursor's x (or horizontal) position gives the left-hand edge, and the y (or vertical) position the baseline of the first letter. The baseline is the lowest position of each letter, ignoring its descender (imagine the text written on lined paper, for the position of the letters relative to the baseline).

The text written by the demo program uses the default font, or set of letter shapes. More exotic lettering can be created by loading details from disk - this topic will be covered in a later issue of *Amiga Computing*.

The command SetRGB4() changes a logical screen colour to new (improved) red, green and blue values. The command needs the screen's ViewPort address which can be obtained from the Screen structure, or from an Amiga library routine. The screen can consist of several



Picture frames

RastPort's structure members can be changed directly, others are usually changed using Graphics Library routines.

The routine SetAPen() can be used to change the foreground pen, SetDrMd() can be used to change the way the foreground pen is used, relative to the background.

The Draw() command will draw a line between two given sets of co-ordinates, and the RectFill() command will fill a given rectangle in the current foreground colour.

Note that if at any time an attempt is made to colour a pixel that is not on the screen, the software will not trap the error, other memory is overwritten, and the results unpredictable.

The Move() command will move the graphics cursor to specific pixel on the screen. The Text() routine can be used to display a given string of Ascii characters, from a starting point at

bitplanes, the information being held in consecutive areas of memory. Screen memory is allocated with the AllocRastPort() command.

The addresses of these bitplanes, and details of their height, width, and depth (or number of planes) is held in a BitMap structure - each RastPort has a pointer to a BitMap.

A Window can be allocated a default BitMap, or a custom BitMap can be defined, using the InitBitMap() command, and attached to the NewWindow structure before the Window is opened.

The demo program Window has its own BitMap defined, but the address could be obtained from the RastPort structure member.

In addition to the screen memory, other bitplanes can be allocated and BitMaps initialised. Pictures can be copied

Margaret Stanger explains how to get graphics and text into Intuition windows within C, and a sliding tile puzzle is explored and explained

On the CoverDisk...

The support disk contains the program source code listing (block.c) and the object code (block). The source code includes the file (block.h): its own header file containing global variables, definitions and data structures.

This header file includes, in its turn, any Amiga header files needed for Intuition window and screen structures and definitions used in the program source.

When the object program (block) is run, the program opens the Intuition and Graphics libraries, and opens a low resolution custom screen. A window called the main window will open, which recognises four classes of events.

When a mouse button or key is pressed, the event will be marked by a message on

the screen in the current foreground colour. When the Escape key is pressed, or the window closed, the program closes the screen, and exits.

The fourth event occurs after the elapse of one-third of a second, and the program draws a line somewhere on the screen (just for something to do).

If no key or button has been pressed for 30 seconds, the program starts to amuse itself with a pretentious (bordering on silly) screen saver.

The screen display is turned into a six by five sliding block puzzle, and the blocks start to move about. As soon as a key or mouse button is pressed, the original screen contents are restored and the main program continues as if nothing has happened.

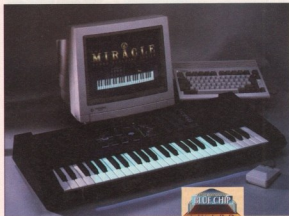
PRIZES
WORTH £750



THE
MIRACLE
PIANO TEACHING SYSTEM

More Miracles!

30 sets of Song Collections for the Miracle keyboard to be won



In our March issue we gave away ten fabulous Miracle keyboard tutors worth a whopping £3,000. And now we follow that up by offering all Miracle Keyboard enthusiasts the chance to win one of 30 sets of Song Collections you can play along to, adding to your enjoyment and improving your skill.

Each collection offers 40 great songs specially chosen to provide a wide variety of music styles, including Pop, Rock & Roll, Country, and Rhythm & Blues. Just pick the tune, and in no time you'll be playing it like a pro! Each song is fully arranged so that your performance has a lively accompaniment. All the features that make The Miracle the most popular keyboard learning

method available are fully functional when you use the songs in these collections.

And, best of all, each song is arranged for two levels of playing ability, Novice and Expert.

So not only do you enjoy the benefits of the world's most exciting piano teaching system, with The Miracle Song Collections you get an educational jukebox with 40 more ways to playing to learn, instead of just learning to play!



To enter simply circle your answers to the two questions, complete the entry form and post it to Amiga Computing June Song Comp, Europress Direct, PO Box 2, Ellesmere Port L65 3EA

1. How many songs are there in each collection?

- a. 15
- b. 25
- c. 40

2. How many levels of playing ability are catered for?

- a. 0
- b. 1
- c. 2

Name _____

Address _____

Postcode _____ Daytime phone _____

☐ Tick this box if you do not wish to receive promotional material from other companies

The Miracle keyboard winners...

Here are the ten lucky people soon to be the proud owners of their own Blue Chip Award-winning Miracle keyboard tutor from Mindscape:

Mrs L Chawner of Manchester, A Ross of Swindon, A D Caldwell of Kent, D J G Harvey of Northampton, S Dacre of Wolverhampton, J P Bennet of Cheshire, D Booth of Kent, R Roberts of Cilydd, P Selwood of Warrington and N M Parker of Blackburn.

Most General Midi (GM) sound modules sport the Roland name and GS logo with the latter signifying that the module conforms to Roland's super-set of General Midi.

While both Yamaha and Korg have released GM products (TG100 and 03R/W respectively), no other manufacturer has made any movements in this direction. From looking at the front panel of the GMX-1, you'd be forgiven for thinking that this is the exception, but the GM logo is misplaced as you'll see later.

Designed and built in France by Dream, the control side of the GMX-1 couldn't be much simpler with only three items on the front panel – on/off switch, volume slider and headphone socket.

The mapping of the internal sounds conforms to the GM Sound Set which means that the basic 128 timbres are the same as for any other GM module and are called up by the relevant Midi Program Change message from a synth keyboard or sequencer.

Also included are various drumkits and sound effects; in effect, Dream have looked closely at Roland's Sound Canvas and created an identical product in terms of architecture including the mistake Roland made with Bank Select messages which precludes most sequencers from easily accessing tones beyond the basic 128.

The comparison ends the moment you hear the sounds. While all of the Sound Canvas tones are based on good quality samples, the GMX-1 uses a mixture of samples and digital synthesis.

This is fine, but although Dream state that these samples are of 16-bit quality, the graininess and digital noise on the tail end of many sounds shows that the resolution is only one factor.

The unsatisfactory tonal character may be due to a low sampling rate, poor quality analogue to digital conversion or some other factor, but in six years of reviewing sound modules I cannot recall one whose sound quality was inferior to the GMX-1.

Perhaps this is a case of getting what you pay for – to keep the price down, Dream have left out the Chorus and Reverb that makes many of the Sound Canvas tones what they are.

For computers other than the ST, the rear panel includes an RS-232 connector to provide a direct computer link without the

need for a Midi interface, much in the same manner as Yamaha's TG100. A stereo pair of phonos for the audio outputs and the external PSU socket complete the rear panel.

Is the GMX-1 a GM module? Not really. While it conforms to the Sound Set, it only has 16-voice polyphony; any GM sound module must support a minimum of 16 voices. However, the issue is clouded by the fact that each voice can be used for either a single instrument (such as piano, strings and so on) or three percussion sounds. So the polyphony depends on the content of the music – for instance, you

MUSIC



Just a pipe dream?

might have 14 instrument voices and 6 drum sounds but you cannot guarantee 24 voices. Whichever way you view it, the GMX-1 does not conform to GM in this area.

Politics aside, comparing playback of a Midi File on the GMX-1 and a Sound Canvas shows that Dream appear to have incorrectly set the initial levels of the 128 basic sounds – the mix balance is poor. Additionally, long sounds tend to be cut off due to the lack of sufficient polyphony. Inability to edit sounds, no effects, insufficient polyphony, and poor sound quality...

If you're a games player who wants to improve on the innate quality of the your Amiga and who owns games that support playback on a GM module, then the GMX-1 might be worthy of consideration. If you're after a multi-timbral sound module that will help you to create music, you'll probably want to look elsewhere – possibly at Roland's SC-7, a cut-down Sound Canvas for £259.

The Dream GMX-1 is one of the cheapest multi-timbral sound modules on the market – but does it live up to its name? Vic Lennard has his reservations...

What is General Midi?

A General Midi (GM) module has to conform to a specific set of Midi functions. For instance, all GM modules must be 16-part multi-timbral and play back keyboard-based drums on Midi channel 10 according to the GM Percussion Map.

They have to have a minimum of 24 simultaneously available voices and 128 presets, each assigned to the Midi Program Change number in the GM Sound Set. Finally, they must recognise certain Midi Control Changes including Modulation, Volume, Pan, Expression and Sustain Pedal along with Channel Aftertouch and Pitch Bend.

Consequently, using any GM sound module should mean compatibility – no notes cutting out due to different polyphonies, no incorrectly selected sounds via Midi Program Changes, no incoherent drums due to the wrong mapping, and so on.

Dream GMX-1 • Zone Distribution
071-738 5444 • £269



It says General Midi on the case – but does it live up to its name

Journey into the Nightmare!



If you've read this month's cover feature you'll know all about Nightmare, the virtual reality adventure game show that uses Amiga-generated graphics.

Now **Amiga Computing** and **Broadword Television Productions** have dreamed up a competition giving the winner a day at Broadword's television studio in Norwich.

He or she will be taken on a guided tour as production proceeds and see how an Amiga is used to generate the graphics – as well as receiving a bag of Nightmare goodies including a sweatshirt, mug, badges and puzzles.



MINDSCAPE

And on top of that, Mindscape are giving the ten runners-up a copy of the Nightmare game. Worth £14.99, it is a re-creation of the series in which you are in control of the mystical adventure.

In it you are challenged to solve complex puzzles, logic problems and riddles. Superlative graphics are complemented throughout by sound effects created in a full TV audio studio.

First of all you choose the characters for your team, and then select your first quest. Along the way you arm your team with the weapons and attributes you think they will need.

Ultimately you'll meet Lord Fear and his lieutenant, the Frightknight, and it's up to you whether or not the meeting is terminal...



To enter just complete the form below and send it to: Nightmare Competition, Europress Direct, PO Box 2, Ellesmere Port, South Wirral, Ellesmere Port L65 3EB before 30 June 1993. Good luck!

ENTRY FORM

1. Name one of the characters from Nightmare
2. Name one other virtual reality game show produced by Broadword (the Nightmare feature will help you)

Answer 1.....

Answer 2.....

Name.....

Address.....

Postcode.....

Daytime phone.....

☐ Tick this box if you do not wish to receive promotional material from other companies

If there's one thing which is more fun than logging on to other BBSs and using them it's running your own system. Setting up your own BBS need not be expensive, and just think how much money you'll save having people dial up your BBS rather than calling theirs.

If you're into setting up your own BBS, try the Rapport system (Big Bang Enterprises, £50), which is one of the fastest and cheapest ways around to end up with a fully-featured colourful ANSI BBS from scratch in an afternoon.

Few things are as much fun as the Big Bang Burger Bar, the BBS running under the Rapport system. It's fun value is due in no small part to the slick and colourful software that the system runs on.

It comes on a single disk and is easy to install on your system. Be warned if you want to set up a BBS of your own you will need a hard disk.

The software is a snap at £50, and upgrades are in the offing like the facility to take feeds for Internet, Usenet and FidoNet. Log on to the Big Bang Burger Bar for more information and a live demo. Users of this BBS have been unwittingly beta testing the software ever since it's been online, and very good software it is.



Accessing Rapport's local screen

The name comes from the Hitch-hiker's Guide To The Galaxy, in case you hadn't guessed, and the Sysops are Slartibartfast and Gangravar. The board is liberally seasoned with references to the radio series and books, and recognising the quotes and all that is almost the most entertaining thing about it.

There is even The Guide, an on-line magazine for BBS travellers to get their bearings in the Galaxy. On-line games, files to up and download, it's all there, and all in professional machine code. Fast and stable.

The system practically installs itself and even lets you log onto your own board from the computer it's running on, meaning you can test out the system without having to log on using a phone.

If there was just one thing I'd change I'd say the documentation isn't comprehensive enough, but apparently this is all due to change. Rapport is very good stuff at the price but personally I think they should have made it £42.

Rapport is available for £50 incl p&p from: Big Bang Enterprises, 188 Kenmore Avenue, Kenton, Harrow HA3 8PR. BBS on 081-909-2064 (24 hours) 8N1.

Good BBS guide

01 For Amiga

BBS 071-377 1358
(24 hours)

Friendly Amiga board
with CD ROM of Fred Fish
disks.

Cheam Amiga

BBS 081-644 8714
(24 hours)

Fidonet mail echoes and
very good up to date file
areas. The system runs
using DLG Pro.

CliffNet

BBS 0642 467324
(24 hours)

Fidonet mail areas also

on-line games, Drag
Racing, Blackjack and
Scrabble.

Essex Amiga

BBS 0277 23354
(24 hours)

Fidonet echo mail, and a
lot of software. Run using
TransAmiga BBS.

Test Drive

BBS 081-395 5096
(24 hours)

Fidonet mail echoes are
here, plus on-line games
like ANSI Warriors, Never
Ending Story, Space
Empire, plus many more.

BBS that goes with a bang



Why error beep went wild

Something was driving me absolutely insane the other day, and I couldn't trace it. Complete screaming billy bonkers I was. And finally, finally, Gary Whiteley (video head and sometime contributor to this august tome) remembered he'd had the problem himself and sorted it out for me.

My system has been all over the place for so long. After years of installing and de-installing software I have for review my hard disks were fragged and running slow. What was needed was a complete re-format and re-install, something which I wasn't really looking forward to as you can imagine.

I installed Workbench 2.1 (hooray) and everything was deeply groovy. My error beep was changed for a jazzy guitar riff, and all was well with the world. Until I tried to use my modem and NCom, and everything went horribly wrong.

It was untraceable and intermittent. My copy of NCom sent bananas sending data all over the shop, and uploads and downloads with MNP and ZModem were out of the question. Text repeated itself all over the screen randomly. I was not a happy camper. After finally fixing my system I had caused some terminal software problem. I reformatted the hard disks and checked all the library versions. I used SnoopDops to find out what was going wrong and it said there wasn't anything wrong.

I told all this to Gary Whiteley just before I blew my brains out with a .44 Magnum and he said don't do that, just turn off the CPU monitor on your Directory Opus. Say what?

Yes it's true. Turns out it's not so much either a bug in DOpus or NCom, more of a clash. If you use a modem, the CPU monitor on DOpus messes up the timing etc, which explains the intermittent nature of the problem.

I sometimes have DOpus konfied on my WB when I'm working, it's handier that way. And that was everything went crazy. I haven't seen v4 of DOpus as yet, but HQ are rushing me one as we speak to try out this problem on the new rev. I'll let you know what happens.

True but strange, as Gaz would say.

Phil South looks
out over the
frozen wastes of
the world's
computer
networks and
says "One day,
all this could
be yours"

Missed a great opportunity?



Vidi Amiga 12

Digitiser, grab function and manual

This superb package offers...

1. The new improved version of the original award-winning digitiser, which enables you to load and capture images from live video and digitise your own to the quality demonstrated on the CoverDisk.
2. The grab function allowing existing Vidi Amiga 12 owners to upgrade to the fully functional v2 software.
3. The manual that clearly explains everything you will need to know.

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- save £31

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Or you can simply buy the manual for only £4.95

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If you've got March's Stereo Master CoverDisk, the Mastersound cartridge and accompanying manual will enable you to capture real life sounds from record, tape, CD or even a microphone with ease.

You can try out one of the Amiga's most popular home uses and save £25!

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- ☐ PFM manual £4.95
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Allow 28 days for delivery

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Vidi Amiga 12

Fill in this form and send it to Amiga Computing Offer, Rambo Productions Ltd, Bard Road, Kintyre Campus, Livingston EH54 2JZ

- Please send me...
- ☐ New Vidi Amiga 12 manual £4.95
 - ☐ Manual and full software inclusive of grab function £15.95
 - ☐ Manual, full software inclusive of grab function and digitiser £39.95

I wish to pay by...

- ☐ Cheque / postal order payable to Rambo Productions Ltd
- ☐ Credit card Expiry Date

Card No

Name

Address

Postcode Daytime phone

Allow 28 days for delivery

☐ Tick this box if you do not wish to receive promotional material from other companies

I don't know about you, but I've always liked those horizontal meters you find in games or application programs which scroll across the screen smoothly to indicate the amount of a task which is completed.

Also in game programs you can have a bar reading of air in your tanks, ammo in your gun, or energy in your role-playing characters.

As well as being just a meter which goes up and stops at the end, you can do stuff to it to make it go up and down at will, simply by reversing the process with drawing in black ink.

I thought it would be a challenge to try and implement one of these in a short Amos routine, and here it is.

The first step is to title the program, which I wrote, using these words:

```
Ren ** AMOS Meter **
Ren ** 1993 Shout **
```

OK, substitute your own name if you want, I'm not proud, I'm no prima donna. Next we add all the usual guff to clean up the screen and make it ready to use:

```
Cur Off : Hide : Paper 0 : Cls 0
```

Turn off the cursor and the pointer, set the paper to black (colour 0) and clear the screen.

Next, by way of explanation of what's going on in this program, we put a title up there at the top of the screen:

```
Centre *- FILL 'er up! -*
```

Nothing fancy. We'll be overwriting this with other titles as the bar progresses across the screen. Next a bounding box to surround the bar to show roughly where it is in its path:

```
Ink 5 : Box 10,10 To 242,32
```

leaving a one-pixel gap around where the bar will be. Next we set the colour of the ink for the bar, in this case red:

```
Ink 4
```

Any plotted points will be red. Now we set up the initial plot point. This is the dot on-screen where the top left part bar will begin:

```
A=0 : B=20
```

Right that's all the setting up, so let's draw our bar. We do this using a pair of nested loops, one going from 0 to 200 the length of the bar, and one going from 0 to 10, the height of the bar.

The bar is drawn one dot at a time from 40,20 down ten dots, then we start again at 41,20 and draw it again. As we progress across the screen the dots all merge producing a solid bar:

```
For J=0 To 200
  If J=50 Then Bell : Centre *- Quarter Full! -*
  If J=100 Then Bell : Centre *- Halfway there! -*
  If J=150 Then Bell : Centre *- Three Quarters! -*
  For I=0 To 10
    Plot A,B+I
    Inc A
    Wait 3
  Next I
Next J
```

```
< FILL 'er up! >
```

The finished meter in all its (ahem) glory

After 50 little lines the bell sounds and the message Quarter Full is printed over the title. At the halfway point, or 100 lines,

AMOS

the title reads half full. At the three quarter stage, 150 lines, the title reads Three Quarters. When the bar is finished we get a final bell and:

```
Centre *-
Bell
Wait Key
```

The program then waits to be terminated by pressing any key on the Amiga keyboard. This is a classic routine and one which I've used on almost every Basic interpreter I've ever encountered.

You can adapt this routine to do a vertical bar by simply changing the order of the loops and reversing the co-ordinates so the rather than drawing the bar from left to right you fill 'er up from the bottom to the top, or even right to left. You could even accompany the drawing with a little calculation to see



Pleased to meter

how much of a thing is actually left. Also you can do a reverse drawing of the line in black, erasing it as something in your game runs out, like oxygen or time, or even allowing it to go up and down as you need it to.

The beauty of this routine is that it is totally independent of any other routines and will quite happily whizz the bar along at any speed. If unchecked by the WAIT 3 command you will see it all happens very quickly, so if you have some complex calculations to do at the same time you'll still be able to inc and dec the bar up and down and maintain a respectable speed.

Phil South looks at on-screen meters and tosses in a few hints and tips about using sprites and bobs

Amos Pro heralds a new phase

Although Amos Pro is said by some to be 99 per cent bug free I figure that this means that in a 100k program only 1k of it is buggy.

In any event we are inexorably being drawn down the Amos Pro road, as the very final version of Amos Classic is 1.35, due out as update disks and files on your friendly neighbourhood BBS by the time you read this.

The Amos Pro Compiler is rumoured to be ready around now too, which finally makes Pro usable for more than just programming exercises.

Some see this as the end of an era, but I see it being the start of a new phase. I can

foresee Amos use being polarised into two camps in the near future, with people using the Amos Classic program for serious program development and building their own extensions to make up for any shortfalls, like the Intuition and ARexx ideas I've heard about recently, and Amos Pro being the public's introduction to the sport, as it were.

What with PCOS only a few miles down the road now, I can see program support being stretched as a flood of new PC users come into the frame, so support will be more reliant upon the old Amos users and the Amos Club. In any event Amos Classic is dead. Long live Classic Amos.

Most ProPage and ProDraw users will have played with them. Many will have scratched their heads and wondered what all the fuss is about. Some will adore them but will have got a bit hot under the collar after discovering that a few of them don't appear to work properly.

I fall into that last class of user, and the "broken" ProPage Genie that really upset me was AutoSave, the one that prompts you every so often to save your work.

Rather than wait for Gold Disk to fix it (fat chance!) I decided to have a go myself.

The first job was to find out exactly what the program was supposed to do, and this I did by "reading" the program. With the Commodore ARExx manual and the ProPage 3.0 Supplement Manual by my side I followed the logic of the program line by line, immediately discovering that the "AutoSave.pprx" program calls a second program named "PPageAutoSave.rexx".

This second program is the meat of the AutoSave Genie, the code that actually puts up the prompts and saves the file, and because the ARExx language is so English-like I very quickly worked out that the program puts up a file requester if the document is still untitled, otherwise it simply saves the file with the existing filename.

To work properly the program has to strip the actual name of the document away from the path. So, for instance, the string "Work:DTP/PPage/Docs/MyDoc" has to be turned into just "MyDoc".

By experimenting with the Genie I discovered that if the path and file name of the document was just "Device:Filename" or "Device:Directory/Filename" - "Work:MyDoc" or "Work:PPage/MyDoc" for example - then the Genie worked perfectly.

Bug located

But if there was more than one directory between the device and the filename, the "AutoSave?" prompt would come up after the first waiting period, but clicking Yes didn't save it and the prompt would never return.

Aha! I'd found the bug. It must be in the code that strips the filename away from the path.

Luckily this code was easy to find as it is a separate procedure called `splitpath()`. Little clue there in the procedure name. The first thing this procedure does is use the `pos()` command to look for the first occurrence of a backslash in the complete path and filename string.

If it finds one, it remembers where it is in the string in the `spos` variable. If there's no backslash it sets `spos` to zero, and goes to look for a colon (in order to strip the filename away from the device name) and remembers the colon's position in the `vpas` variable.

If both variables end up being set to zero, it already has a filename without a path, so there's no splitting required, and the procedure sends the same string that was passed to it back

```
splitpath: procedure expose dname
do
  spos = 0
  - spos = lastpos('/', dname)

  if spos = 0 then
  do
    spos = pos(':', dname)
    if spos = 0 & spos = 0 then
      return dname
    end

    file = substr(dname, max(spos, spos) + 1)
    return file
  end
```

Listing 1, showing the changes made

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to the main program.

Otherwise it uses the larger of the two numbers held in `spos` and `vpas` to strip the name away from the path.

The problem lied in the very first line of the procedure, which was looking for the first occurrence of a backslash in the path and filename string. If there was more than one directory, the routine passed on a filename that was headed by one or more directory names.

Thus, when the file came to be saved, the directories in that string didn't actually exist within the current directory, so AmigaDOS could not save the file as requested.

What the procedure needed to do was look for and remember the position of the last backslash in the string, and a quick flick through the ARExx manual



Magic in the air

revealed that there was a `lastpos()` command which did just this. I altered the code, rebooted and ran the AutoSave Genie. It didn't work.

I stared at the code on the screen. The logic was perfect right up to the actual `substr()` command that did the string splitting. This command first looked to see which of the variables, `spos` and `vpas`, held the largest value, added one to that and used that number as the starting position in the whole string from which to start stripping.

Ah. But would it? If `spos` is non-zero the code which looks for and assigns a value to `vpas` is never executed. And the `max()` command, which returns the largest value from a list of values, according to the ARExx manual, must be supplied with a list of values of the same type. If `vpas` was not being assigned a value it had no type, so the `max()` command was not executing properly.

I added a line to the start of the procedure that assigned a value of zero to `vpas`. If there was no backslash in the string then the code that looked for a colon would be executed and the value of `vpas` would be changed accordingly, or set again to zero if no colon was found.

If the code that sets `vpas` is not executed this means that `spos` is non-zero (a backslash has been found) so setting the value of `vpas` to zero at the start won't matter because `spos` will be a higher value than this anyway.

So now, when the `max()` command was executed `vpas` always had a numerical value, and therefore was of the same type of variable as `spos`, and so the command would work properly.

I tried again. It worked. And it works perfectly every time. Bliss! I now have an AutoSave feature in ProPage.

Ben Pointer waves his logical wand and brings the Gold Disk AutoSave Genie back from the dead

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Next month

Amiga Computing exclusively reports on the world famous deaf orchestral percussionist, Evelyn Glennie, who uses a state-of-the-art Amiga-based digital sound studio

We reveal Real 3D v2, arguably the most powerful ray-tracing and animation program ever

Our new series, Amiga Beginners, continues for novices and old hands alike

Plus

- Avideo Y/C - a powerful and affordable new 24-bit video graphics card
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This month we're looking at a rapidly growing new technology that will have a dramatic impact on the future of Amiga multimedia development. Not stopping, I'll be looking at two new developments in CD-ROM drive technology and the possible future of Amiga CD systems.

With the coming of the A600 and later the A1200, Amiga owners have a new interface medium, PCMCIA. This provides a low cost, compact interface that can be used for a wide variety of input mediums and will thus have a considerable effect on not just Amiga, but industry-wide multimedia applications.

But just what is this new interface and what will it offer to you and me? In short, it is a set of standards, laid down in August 1990, which cover the physical aspects of a range of credit card sized devices which bring new levels of power to us.

All PCMCIA cards feature a 68-pin connector. There are different heights for the cards, with the various PCMCIA version numbers determining the height.

Thus Version 1 cards are 3.3mm thick, Version 2 (as found on the Amiga) 5mm, while Version 3 are 10.5mm. The recently announced Version 4 are 16mm thick.

The need for different heights comes from the ever-increasing need to cram more into PCMCIA cards.

The earliest cards were designed simply for memory upgrades. The latest release (16mm) was implemented to facilitate, and I jest not, the emerging range of credit card sized hard drives. Other developments on the format include modems, adapters and fax modems.

More interesting however, for us at least, is the range of interfaces now appearing on PCMCIA cards. One of the problems of the lower end Amigas for development of multimedia applications is that they are limited in the what peripherals you can use.

While you can get hardware upgrades to provide different types of input, many go inside, and you can only fit one or possibly two at once.

Still, it's not so bad, you can unplug then, but do you fancy constantly having to open your Amiga just to "grab" a different type of data?

With PCMCIA you'll be able to chop and change between

say a frame grabber, SCSI-based scanner and sound sampler simply by dropping in a different card - what could be simpler. These and other cards are already on their way. They are also scheduled to be fairly low cost.

The long and short of this is that PCMCIA should spur on a whole new generation of Amiga multimedia software. If you're an Amiga owner PCMCIA will bring you immense benefits. But there are problems.

There are already some developers releasing upgrades that are not compatible with the PCMCIA slot, and even worse require you to disable this expansion card first!

The Amiga has enough problems as it is without the hindrances from developers who take short-cuts. The message is clear - check when buying an Amiga peripheral or upgrade. If it isn't fully compatible with the PCMCIA interface don't buy it!



Julius Alexander reports on the latest PCMCIA technology and even faster CD-ROM drives

Bright future on the cards

CD-ROM gets a dose of speed

As Amiga users, we are more than aware of the speed at which computer technology develops. Look at how, for instance, the shape of home computing has changed in just six months with the advent of 32-bit systems from both Commodore and Atari.

But what can you do with CD-ROM drives? How can you make them faster? You can't increase the speed of a CD-ROM drive can you? After all, how fast can you make a sliver of plastic spin?

Well, several of the world's leading CD-ROM drive manufacturers have announced new CD-ROM mechanisms which do just this, and in the process slash access time by half.

Last year NEC announced a CD-ROM drive that spins twice as fast as normal. Pioneer have announced a mechanism which can spin CD

discs at four times faster than normal speed! This generates a sensational transfer rate of over 1Mb/second at times, compared to the measly 153Kb/second of the existing A570.

Obviously these high speed drives have to slow down for normal audio data, which requires a rate of 153Kb, but for interactive movies...

And there's more! New developments from Nimbus means that the amount of data that can be stored on a single CD disc has been almost doubled.

Currently the maximum length of movie that can be stored on a CD (as set by Sony/Philips ruled Red Book) is just 75 minutes - nothing given an average cinema film is now around 120 minutes. But by mid-summer, a suitable MPEG compression chipset should also be widely available - see previous columns. Combine the above

three, and you can easily get a full length interactive movie, with CD quality, stereo sound on a single disc!

Thus the biggest problems that have prevented such movies appearing on CDs have been over come. So how does all this affect Amiga CD technology?

Well, Commodore are rumoured to be working on new Amiga CD systems and I predict you'll see at least one of these new technologies incorporated into these new products.

The only question remaining is whether Philips or 3DO, which I'll be looking at next month, get there first.

Philips have already put back their FMV release date until Autumn 93, so they are unlikely to make it - but 3DO with its mid-93 launch is more of a threat.

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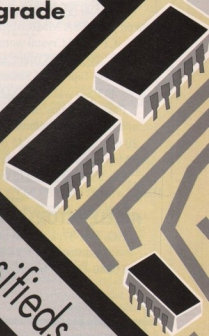
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Shop Window

A sweeping vista encompassing the most salubrious and meritorious debutantes on the Amiga hardware and software social scene, including Power Computing's A1200 RAM/FPU card, ADI Junior and several noteworthy educational packages

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Spotlight

Pinned to the petri dish in this month's microscopic examination of one of the Amiga's fields of excellence, the enquiring reader will no doubt be delighted to find a clutch of the very best music programs

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Hard times

Our latest foray into the hardware jungle returns, bringing a full reconnaissance report on the strengths and weaknesses of the ever more popular hard drive

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Find any product sold by our advertisers, anywhere, at a glance, with the Amiga Market product Locator - a new concept in home shopping

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Since the A4000 was released last year, we've been waiting for the machine to make the AGA Amiga line-up complete, the mid-level machine to fill the gap between the corporate A4000 and the base level A1200.

We finally got it this month with the A4000/030 and, though much more realistically priced than the A4000, it is still more expensive than its competitors, the cheap 486 clone and the Mac LCII.

The question this raises is that although confirmed Amiga enthusiasts and serious users will no doubt see it as an affordable AGA platform for multimedia, DTP and video work, the A4000/030 could find convincing the rest of the world a somewhat more difficult task.

Competition for sales of any machine is intense in every market from games to education, and for Commodore to succeed with a non-mass market machine they must price it aggressively.

Arguments put forward by Commodore to support their marketing strategies for the A3000 and A4000/040 are that the machines are designed to appeal to a corporate market which is more interested in results and quality than cutting costs, a sort of "no-one ever got fired for buying an A4000" approach.

To a certain extent, this is a sensible policy as it allows dealers and consultants to hike an impressive mark-up with the more expensive products, taking more money from the same percentage margin.

However, the cheaper 68030 version of the top level Amiga is unlikely to reach this strata of big-spending multimedia men, at least not in its basic configuration with 80Mb hard drive and 4Mb RAM.

In this machine's case, expansion through the CPU slot, by adding either a 68040 or 68040 with DSP, gives it extra appeal with its upward expandability, but for the average enthusiast user the price of the base level machine will be the vital statistic.

Predictions as to the nature of the A2400, a machine which will now never appear, were for an AGA machine running a 68030 in a pizza-style box containing perhaps two Zorro slots with one doubling as a video slot.

In addition, the inclusion of a PCMCIA card would have given such a machine more upgrade options for the aspi-

New Amigas, same old story

A high end Amiga, the A4000/030, has finally dragged its weary body below the £1,000 mark, but is it still overpriced and under-powered?

rant A1200 user. What eventually marched through the gates of Commodore Towers was a cut down version of the A4000 with a 68030, full desktop case with four Zorro slots, and no PCMCIA.

Basic specification for hard drives seems to have been sensibly raised to the 80Mb level, but RAM has been reduced to 2Mb chip and 2Mb fast, figures which will be strained quite quickly given the nature of Workbench 3.0 and 24-bit or Ham8 graphics.

Commodore's policy of never supplying a monitor as part of the standard package, a policy which - funnily enough - they don't apply to their PC division, is continued, so the cost of the A4000/030 system is really something around £1,250 when a cheap VGA-only monitor is added, or £1,400 with a Commodore multisync.

At this price, many will decide that a PC clone or one of the 68030-based Macintoshes is a better all-round buy.

Of course, we all know that the PC clone is a dinosaur barely disguised by a few tacky go-faster stripes and that the Mac is restricted in the tasks to which it can be put without access to funds of almost defence budget propor-

tions, but preaching to the converted will never expand the Amiga's user base.

We cannot afford to let the Amiga become the domain of a tightly huddled and anoraked group of fanatics who communicate only between themselves, nor can we expect the machine to succeed when other platforms offer perfectly good solutions to productivity requirements for less outlay.

This magazine has never faltered in its assertion that for long term survival the Amiga must not only succeed in the rarified high-end multimedia field, but must also compete in the ultra-vicious middle market where the cheap PC clone has gained the high ground and the Macintosh has become increasingly entrenched.

The A4000/030 meets most of the requirements for such a machine with one important exception: Price.

An A4000/030 with VGA monitor for £999.99 rather than the same machine on its lonesome would present to the non-Amiga world (much the greater part of it, in other words) a machine which for value and power simply could not be matched by either the PC or the Mac.



PC 1204 4Mb RAM expansion with
optional 68882 FPU
Supplier: Power Computing
Phone: 0234 843388
Price: £185.95

**The latest A1200 peripheral
is superb value for money**

Shop Window

It doesn't take long for the computing companies at large to start knocking out bolt-on goodies for new machines but Power Computing seem to have a knack for bringing out hardware that is a cut above the rest.

This particular piece is a 4Mb RAM expansion for the A1200, and for a change the features that it boasts are for real and not just marketing blarf.

Crammed on to the neat little card which slots into the A1200's CPU trapdoor are a row of fast ZIP chips giving the user that all-important extra fast RAM, a battery-backed clock and a socket for the addition of anything up to a 50MHz 68882 floating point unit (FPU). A separate oscillator socket stands ready to accept the timing chip supplied with each FPU.

In its standard configuration with 4Mb RAM but no FPU, the PC1204 gave the office A1200 a surprising little speed boost, a result no doubt of the fast zero wait state design of the board and the availability to the system of its 70ns fast RAM.

Screen refreshes in particular were faster and the general operation of the machine as a whole was improved by the addition of the board. One gratifying area in which performance was bettered was when playing huge and memory-hungry games such as Wing Commander or B17.

When a 68882 FPU chip is installed, the speed improvement is more marked, but users will really see some action when a maths-intensive application such as Imagine is used. All such operations become smoother and faster, especially where a version of a package exists which is designed specifically to use the

68882, and the addition of one of the faster chips on offer - 33MHz or above - turns the unassuming A1200 into a powerful rendering engine. Beyond the RAM and FPU options, the PC1204 offers - as mentioned - a battery-backed clock; a feature maybe not appreciated by games players but which any serious user of wouldn't be without. Calendar programs, diaries, organisers, spreadsheets, wordprocessors - you name it, they all benefit from the existence of a permanent system clock which is always set to the correct time.

At £184.95 for 4Mb RAM and anything from £74 upwards for a 68882, the Power Computing PC1204 is easily the best peripheral of the bunch this month.



Power
Computing's
excellent
PC1204 RAM
expansion

Gasteiner Scan-King 64 greyscale mono hand scanner

Supplier: Gasteiner
Phone: 081-365 1151
Price: £89.99

As soon as you clap eyes on Scan-King you think it's going to be a real waste of time. The scanner itself is packaged in one of those really naff shrink wrap-type hard plastic covers, the kind you would expect on really cheap child's toys made in Taiwan.

And the name doesn't really instil you with confidence. I mean come on, Scan King? What next, Monster Modem?

Aside from that, the actual gear itself seems to be very sturdy if a bit bog standard and software is only on one disk which is a bit of a relief, but the packaging really does leave a lot to be desired.

I couldn't read the manual because we were sent the German one by mistake. Luckily the software was in English so I struggled on. On loading the package you

are presented with a list of icon tools down the left-hand side of the screen - just your average art package tools, spray can and pencil facilities but it stuck me as being very jerky and inaccurate. Also, the icons are very big and clumsy.

To remedy this I went to Screen Format, put the screen into interlace and made the bitplane value higher. This had a dramatic effect - it made all the different gradients of shading smooth instead of half tone dots and the tools looked much better. Why the programmers didn't set the program to run in interlace in the first place is beyond me.

Actually making a scan is really easy - don't worry about all the buttons and switches on the scanner, as the only one you really need to bother with is the brightness control. You can control what DPI you will be scanning at, but it's best to just get yourself started first and concentrate on such things later.

When you choose Scan from the menu bars you will be asked how wide and how long you want to make the scan. This is fine but the software doesn't

limit you to the width of the scan. This is a bit silly really because the scanner is only 100mm or so wide.

To scan, you must place the scanner at the top of the piece of artwork and slowly pull down. Once I had an image in RAM I was most pleased with the variety of effects and tools that were available. There were various flips and image filters - but they do take a hell of a long time to work.

The most handy were the 90 degree and 180 degree flips which you use quite often because it is not always possible to scan your image the right way up.

Bear in mind that this equipment is designed especially for the A500 - there is no way you can run it on any other Amiga. Also you will have to put up with the sometimes painfully slow screen updates and be prepared to wait a long time for some of the tools to work.

For scans up to 400dpi which is good enough for any sort of work you would be doing at home unless you wish to scan transparencies, in which you're looking at spending no less than £1,000.



Mickeys 123's

Educational software

Supplier: Infogrames

Phone: 071-738 8199

Price: £25.99 per product

Mickeys 123's is one of a series of American releases developed by Disney Software. As you've probably already guessed this is the same Disney cartoon fame so all the characters in the programmes are the more famous cartoon stars like Mickey Mouse, Goofy and so on.

The package oozes quality – it is the type of program you could quite happily take off the shelf and thinking you would be all right in buying. It looks wonderful, complete with jaunty Mickey stuck on the cover. But as the program unfolds it seems that more time has been spent on the box than on the game.

For starters, it comes on two disks and is not hard drive installable. As a colleague of mine pointed out, if this program had been on the PC no-one would have touched it because it is not hard drive installable so why should we have to put up with programs such as these which boot from floppy!

When it opens Mickey is asleep in his living room chair. First you must wake him up and choose where he must go and what he will do. At this point I was seconds into the package and alarm bells were already ringing.

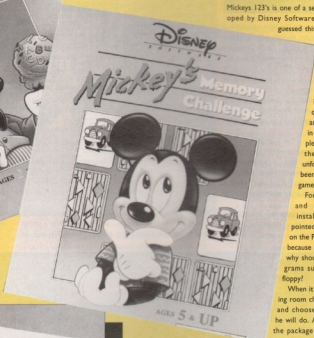
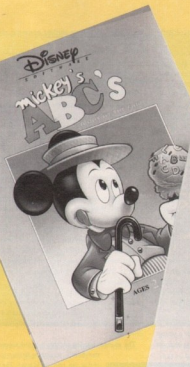
I was working with the manual beside me and following it to the letter but the action was incredibly slow. The machine tends to access the disk for some length of time then the screen will burst into frantic movement for a second or two then it will go dead again while it's accessing the disk.

In any other type of software this would be tolerable but because it's children's software you can't afford to have long gaps where the child is not entertained. Everybody knows that children as a rule have an attention span of about half a second and they must be kept engaged. I really don't think that Mickey's ABC would stand up in a classroom.

Another thing which I found very unusual is the lack of educational content. Most of the sub-applications don't actually demand anything from the pupil.

To me the program is directed at pre-school children because a lot of the time it is dealing with concepts instead of actual numbers. It tries to introduce the child the ideas of more or less and quantities.

There are some nice reward sequences when you finish levels and some good sound effects to keep the children engaged but there is no long lasting appeal.



The Disney packages – all style and no content



The Scan King scanning package



ADI Junior – Reading and Counting

Supplier: Europsych Software
Phone: 0625 859333
Price: £19.95 each

Following on from the highly successful Fun School educational software range (with which regular readers will be familiar thanks to modules given away on recent Amiga Computing CoverDisks) are ADI and ADI Junior from Europsych Software.

Four packages arrived for review – ADI Junior Reading for age groups four to five and six to seven, and ADI Junior Counting, for the same two age groups.

The ADI packages contain a number of features – many of them unique – which stand them apart from much educational software, and help the child using them to do so more easily and successfully.

The ADI character himself is a prime example. Inherited (downwardly) from the ADI packages aimed at older children, ADI Junior is a cute and cuddly alien who will guide your child through the package, popping up at relevant points to scold or smile and generally poking his nose in to find out what's going on just at those moments when a child might appreciate his being there.

For instance, click on Quit from something and ADI will appear, nodding his head at the "Yes" icon and shaking it at the "No". His presence adds a comfortable coherence to the pro-

ceedings and will make the package feel far more user-friendly to a computer-shy child (does such a thing exist!).

For your money you get three disks, a manual, some colour-coded copy protection booklets, a concise list of the games and exercises contained in the package, and a registration card, which as always is worth sending back to the manufacturer in order to ensure information regarding upgrades and the like.

Loading the program is simply a case of slipping the disk marked "EI" (for "environment") into your drive and turning the machine on. The program will load automatically, asking you for some identification from one of the copy protection booklets at some point in the procedure.

Correctly input and you are led into ADI's Environment – a unique land which forms the centre of ADI's world for the duration of any playing session.

The Environment is best described as a kind of pictorial, child-optimised Workbench, from where you can access any number of functions.

When the mouse pointer changes into a beige pointing hand, whatever object it is positioned over will, when clicked upon, perform some kind of animation. For instance, the tortoise will roll over and laugh, before running off, when "tickled".

When the mouse pointer is a red hand pointing, clicking on the object concerned will initialise an activity of some kind. This could be a tile puzzle or a simple racing game, an infants' paint package or a time-telling exercise. Whatever is selected, though, is simply for the child's amusement, and does not "score" anything measurable.

The idea is that the child gets comfortable with the use of the machine and the software – what better way for a youngster to become initiated than through an appealing pictorial

world where clicking on anything interesting elicits some kind of response!

The place where the packages differ, however, and the part where the "real" learning and assessing goes on, is in the Applications. Each package comes with two unique disks containing its Applications.

These are the bits that are tailored to suit the age groups mentioned, and each contains well over a dozen activities which are assessable by the parent.

To use the Applications, the user puts the correct Application disk into the drive and clicks on the door in the Environment. Then a "book" showing what is available for loading appears, and you simply select the chosen Application.

Here is where I have a gripe with the packages. The manuals are shared between PC and Amiga users, which I can put up with, even if they do become unclear in places (why do I need a Microsoft mouse!). What I don't like is the fact that – as far as I could tell – there is no way of installing the Amiga version of the program to hard disk.

Not only is this a pain for the increasing number of Amiga owners who have hard disks, but we are snubbed further in the instruction book when it boasts about how, if you put all your applications in the same place on your hard drive, you can choose from a huge library every time you go to the Applications selection sheet.

As it is, we Amigans are limited by the number of activities which can be held on one floppy disk, with all the waiting and disk switching which this entails for the serious education-package user. Come on Europsych, we buy hard drives too!

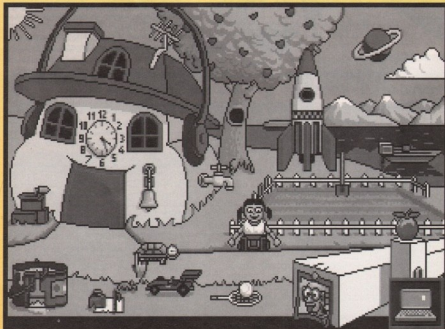
The younger Reading package is based around the idea of a storybook – something familiar to most children of that age, one would hope. The child's vocabulary is strengthened in key areas such as the home, food, animals and so on.

There are games to be discovered and exercises to be completed – I particularly liked ADI Junior's Gymnastics, which is similar to the Simon Says games I remember from my childhood.

In this variant, the child is encouraged to copy what ADI Junior is doing, by making a robot do the same things – a fun activity requiring a lot of thought. This is something I can personally testify to!

This particular set of Applications cover a good deal of National Curriculum Attainment Target Level 1's requirements, touching upon the requirements for Level 2 as well. However, ADI Junior Reading for six and seven-year-olds – being naturally more complicated and advanced – completely fulfils level 1, touching on all areas of Levels 2 and 3 too.

Here, the Applications are based in a farmyard, and the package aims to improve reading and writing skills. Using difficulty levels which can be changed by the child as well as the parent or guardian, it is possible for children of varying



The ADI Environment –
A workbench
for children



Nice piece, bunny!

right sums to given answers – exercise skills to the standard of SAT Level 3. Set in a fairground, the package develops observation, memory, size and shape comparisons, and how shapes take up space.

Overall, the ADI packages are as useful as they are fun. From a child's point of view, they're colourful, noisy and compelling, and from the parent or guardian's viewpoint, highly accessible by means of a function key-activated "scorecard" containing detailed results which allow the parent to advise the child's teachers as to which areas he or she may be in need of extra help – or the opposite.

There are gripes. As mentioned, the inability to install to hard disk is a frustrating decision by the programmers, and also the password protection – which feels like one of the exercises when you're playing it – could have been far more user friendly.

Personally I do not agree with distracting the user from what he or she has bought in order to access an obscure code from a booklet, but some say this is a necessary evil. Still, it would have been nice if the colours asked for on-screen matched those in the printed booklet!

But on the plus side, the programs are able to save to disk details of a child's progress, meaning that the use of ADI is an intelligent, developing set of lessons rather than a simple load-from-scratch affair.

This ability, tied in with the intrinsic learning value present in a well presented and thought-through package of this type, adds up to a set of programs of immeasurable value to the diligent parent.

abilities to extract an equal amount of use from this and, indeed, all the other Applications.

Exercises fine-tune and develop essential skills such as recognition of common letter groups, reading with understanding and vocabulary, while still working on more general development of skills such as observation, logic and judgement.

Judicious use of digitised speech from ADI as well as sound effects and the user-friendliness described earlier ensure that, if the child needs help at the beginning, he or she will soon be happily bashing away at the keyboard unattended.

The younger of the two Counting packages is set in the rather cosy environment of a rabbit's den. The rabbit – who bears more than a slight resemblance to Bugs Bunny – is as cartoony and appealing as the rest of the characters who appear in the packages.

Spatial, number and algebra skills are all developed as is, of course, the ability to count. When the child is confident at counting pictures, they can be replaced with real numbers, and a calculator helps to develop practical number usage.

The use of everyday objects such as marbles, seeds and clowns in the 15 activities present help to make the child comfortable, and any child who scores well on all of these will have fully satisfied Attainment Target Level 1 and a sizeable chunk of Level 2 in the National Curriculum. The more senior counting package expands

upon these skills to the point where a parent could expect a child to be fully up to the standard of the contentious Key Stage 1 Standard Assessment Test (SAT) and realistically to be able to pass Stage 2. The more advanced exercises – such as The Candle Game, where the child is encouraged to match the



Run, rabbit, run...



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Amiga demos wanted: Piazza Giorgio, 21

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Wanted working copy Diplomacy with Computer Player for 2Mb 500 plus I have writers source code. Tel David, 0732 356776.

Wanted Subotic Fight: Simulation, 2 books, prices. Tel 081 754 0079.

Wanted A1000 Tool Box Expansion box and A1000 Kwikstart V2.04. Tel 0275 375488.

Wanted Amiga A3000 £700. Cash waiting Tel 0325 362139.

Wanted any Amiga books. State price. Tel Peter, 0294 72768.

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Some hard facts

Using a sequencer needn't be a hardware nightmare on the Amiga side, but it will be on the music side. Two megabytes of RAM should be enough for most uses unless the user is planning on using lots of gigantic samples, and a hard drive would be best, but the Midi equipment requirements are as expensive as your budget and ambitions will allow.

For any kind of serious work, a Midi interface and Midi compatible keyboard with its own built-in voices are essential. After this initial investment the user can start to look at mixers, four-tracks, monitors, microphones and so on, right up to 16-bit sampling equipment and near-studio quality modules such as the Roland CM range.

A member of the AC staff, who shall remain nameless, recently spent £650 in one hour at an Amiga show on just this sort of kit, so don't say we didn't warn you.

Bars and Pipes Pro 2

Bars and Pipes Pro (BPP) is easily the most modern and easy to use Amiga sampler around. It's interface is designed to take the software hassles out of the music creation process and leave the composer to get on with the job at hand.

With release 2 and the inclusion of direct control over multimedia events, BPP is now also the most powerful and flexible Amiga sequencer.

As the name of the package suggests, the BPP interface is controlled via bars and pipes which represent the channels going into and out of the sequencer through which all Midi data passes.

To alter the Midi data as it passes through, the user simply selects one of the tools available and drops it into the pipeline rather like adding an ingredient to a recipe. Unlike most recipes, however, these ingredients can be shuffled around or dispensed with at the user's discretion, encouraging experimentation more than any other sequencer.

Under the colourful interface, BPP is a powerful sequencer with a full range of SMPTE options and system exclusive commands, so it is ideal both for the inexperienced composer looking for a "suck it and see" sequencer and the seasoned user alike.

Supplier: Meridian Software Distribution
Phone: 081-543 3500
Price: £299

KCS Sequencer 3.5

One of the most powerful sequencers available on the Amiga, KCS (from Dr T's, one of the oldest music companies in the Amiga market) does just about everything, and in a very professional way.

The program is not ideal for the beginner, however, as both the software and the manual make assumptions about the user's knowledge of Midi and music in general.

The package has a modular approach which it calls the Multi Program Environment (MPE), including the Tiger software for graphical editing, the Automix mixing program, and Quickscore for generating traditional sheet music. On the ST side, over 30

Software spotlight

Making music the modern way is a doddle with an Amiga. We look at some packages designed to help you

such modules exist, though the package has enough to be getting on with, so we could see many more additions to MPE appear in the future.

Overall, KCS is ideal for the professional or very serious home Midi enthusiast: as it packs in a vast array of powerful Midi features, but is not recommended for the beginner or occasional songster. It could use some friendly front-end graphics, but apart from this there's very little that the package lacks.

Zone Distribution
Phone: 081-738 5444
Price: £279

SuperJam!

SuperJam, from Blue Ribbon Soundworks (makers of Bars and Pipes) is the ultimate beginner's package because it is designed almost to write the music by itself.

Based heavily on the same graphical front end as Bars and Pipes, SuperJam! is extremely easy to use and capable of producing some excellent output.

SuperJam! isn't nearly as powerful as the traditional high-end sequencers, but as it has been designed to carry out a different function, this isn't a big problem. In basic terms, SuperJam! is a hand-in-a-box containing six built-in musicians who can be told to play variations on certain chords in any style the user desires.

For instance, if requiring a blues number in C, G, and D, the user need only supply the chords and select a style from the style list, and the musicians tiddle off on their own as the ultimate dedicated backing band.

To avoid repetition, each musician can play up to 16 variations in any one section of the song, which means there is a

total of 16 million potential backing tunes. When the user is ready, he or she just jumps in with the selected instrument. Not best looked upon as a full-blown sequencer, SuperJam! is great fun and a handy tool for those in need of a little inspiration.

As a standalone music package, however, it has its limitations, and can't offer the more advanced features found in the dedicated sequencers.

Supplier: Meridian Software
Phone: 081-534 3500
Price: £99

Sequencer One Plus

The Gadgets sequencer is a fairly new product, and the Plus version a major revision, so it's not surprisingly one of the most modern, easy to use sequencers. Fortunately, Sequencer One Plus is also one of the most powerful.

The "Diamond Drag" editing system used in the package is probably the easiest graphical editing feature around, and gives the user total control over the finished sound.

Using it, the novice or seasoned user can simply drag a point on screen with the mouse to alter existing sounds or create new ones.

There are plenty of powerful Midi features packed in under the surface as with the other modern glitzy sequencers, such as Midi system exclusive commands, very flexible Midi timing and pan/volume controls, and a track and cue sheet screen with 32 tracks.

Allied to the tape deck-style controls provided for many standard operations, the Sequencer One Plus combination of power and ease of use is hard to beat.

Supplier: Gadgets Music Software
Phone: 061-236 2515
Price: £159.90

OctaMED Pro 4

Having been spawned by a shareware program known and loved by thousands of Amiga musos, OctaMED should need little introduction. It is an eight-channel sequencer with basic graphics and lots of powerful features given the price, and the first step for anyone thinking of making a start in Midi.

Buying OctaMED won't break the budget, but it will give the user some idea of whether or not they have the talent to produce original music.

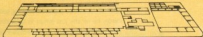
OctaMED does everything a beginner muso could ask for. It supports Midi, can be used as sampling software with sampling hardware, there's a built-in sample editor, synth sounds can be created from scratch.

The program is good enough to keep the beginner going for a long time while the exorbitant asking price for the power sequencers is saved up, and is a very cheap way to find out if you have it in you. Look out for earlier versions which are now available in the public domain.

Supplier: Amiganuts UK
Fax: 0703 785480
Price: £29.95

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GVP A500 HD8+

As is usually the case with GVP hardware, their HD+ series is fast, reliable, flexible and thanks to a recent slash in price is lot more affordable than you might imagine.

If quality counts you can't go far wrong with a drive that's not only one of the fastest on the market but also boasts the option of an additional 8Mb of fast RAM, a SCSI port and a game switch which unlike some doesn't disable the on-board RAM.

As with almost all hard disks there's a whole range of sizes available starting from 42Mb stretching right up to 213Mb. If you're interested in the basic version it will set you back a very reasonable £299.

Supplier: Silica Systems
Phone: 081-309 1111
Price £299 (42Mb unpopulated)

Ashcom ADD-Hard 42Mb

Last but not least we arrive at a real punter product in the form of Ashcom's ADDHard 42Mb. Not perhaps the most inspiring title ever to adorn a drive but if it's value you're after, who cares what it's called?

The drive itself is the ultimate in simplicity, no SCSI port - although the drive itself is a quantum, no RAM expansion, no PSU, just a bargain basement price tag which suits the basic do-the-job design.

It's small and rather unassuming in comparison to the style of the GVP and AT drives, but still retains a modicum of minimalist dignity.

It comes completely formatted with either Workbench 1.3 or 2 so installation is a simple case of plug in and you're off. If you're after a cheap and cheerful introduction to hard disk use without any of the frills offered by the opposition, the Ashcom is just about ideal, especially if you're on a tight budget.

Supplier: Ashcom Design and Developments Ltd
Phone: 0530 411485
Price: £265 (42Mb drive)

In the best tradition of capitalism, Gasteiner have joined the fray with their new AlfaPower drive which offers all the basics at a very reasonable price. The unit can vary between 40 and 120Mb while housing up to 8Mb of RAM courtesy of cheap and cheerful Zip chips.

In order to keep costs down to a minimum the AlfaPower comes with an IDE as standard with the option to go for either a full size or 2.5in drive. The advantage of the 2.5in is that it's ideal if you decide

AlfaPower

to invest in an A1200 later on.

Although fairly basic with simple on/off for the drive and any additional RAM, a DMA thru-port has been provided plus a ribbon cable pass-thru on the rear allowing additional drives to be appended to the controller. Like most of the drives on offer, power is supplied by the Amiga, however an input for an external PSU is available if required

HARD
TIMES

The shopper's guide to buying a hard disk, so if you're thinking about that big investment, this is the place to start looking

IVS Trumpcard 500AT

The AT comes in a very pleasing Amiga-esque moulded plastic case complete with power and access lights.

It arrives minus a PSU, but it doesn't appear to suffer from any power problems, even when equipped with a full complement of 8Mb of RAM.

Both the drive and RAM are extremely economic concerning power but even so an option for an external PSU has been added. The reason for this seemingly unnecessary option is the drive's DMA-through port.

This option allows the connection of CD-ROMs and other data slot peripherals without the need to remove your drive - a problem which haunts a lot of the opposition.

With a reasonably quick 42Mb Quantum, up to 8Mb of RAM, DMA pass-through and arguably the best and certainly the easiest installation software on the market, the AT is one of the

in our tests it wasn't. As for speed, the AlfaPower is quite respectable and matches up well to the other IDEs in the roundup.

All in all this is probably the best basic hard drive on the market with all the essentials, reasonable speed and a price that puts it at the top of the budget buyers shopping list.

Supplier: Gasteiner
Phone: 081-365 1151
Price: £199 plus £69 per 2Mb of RAM

most attractive options around.

The only problem with a 42Mb AT interface as opposed to the equally spacious SCSI drives offered by the opposition is that of speed and expandability.

Although about average for speed transferring 530k per second, its main downfall is its inability to daisy-chain extra drives, à la SCSI.

If however one drive will be more than enough and you find that DMA access is essential to you, the AT is a very attractive option.

Supplier: MicroPACE Distribution
Phone: 0753 551888
Price: £299 (unpopulated 42Mb drive)

A530 Turbo

As a logical progression to the HD+, the A530 Turbo is an obvious choice. Although physically identical to the aforesaid HD+ the A530 is a different kettle of fish altogether.

Although not strictly just a hard disk it's well worth a mention especially for those who take computing seriously.

As you may have guessed thanks to the reference to 32-bit RAM, the unit also boasts a 40MHz 68030 which can be fitted with an optional 68882 co-processor.

When the combination of hard disk, accelerator, FPU and RAM are put together you're dealing with a powerful beast which on pure speed will easily outgun a standard Amiga 3000.

On top of all of this, both the HD+ and A530 will accept the services of a plug-in Vortex 286 PC emulator which somehow manages to squeeze in among the growing band of components.

Supplier: Silica Systems
Price: £699 (Basic unit - 42Mb hdrive)
Phone: 081-309 1111

Rössmoller
Hard Disk

Or to give it its full title, the Rössmoller 52Mb Quantum. Although the word Quantum is synonymous with quality it must be said that the hardware around it doesn't quite match up.

Unlike the majority of drives mentioned, the Rössmoller doesn't have the option of adding any additional RAM. In addition power is provided solely by the Amiga.

Another minor irritation is that although the drive is a SCSI there's no way of daisy-chaining additional drives to your existing Quantum. However the unit does offer a DMA pass-through allowing you to exploit the services of scanners and the like...

The drive arrives pre-formatted, so all you have to do is add the software of your choice. If you don't want whistles and bells and can live without LEDs, the Rössmoller is a respectable bargain basement investment.

Supplier: Sysons Associates
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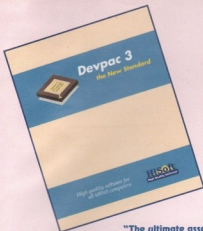
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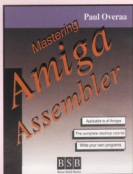
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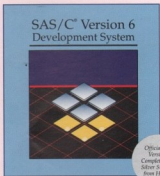
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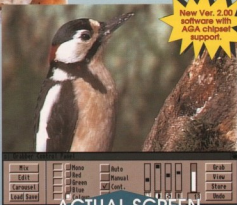
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