

AMIGA

COMPUTING

Jurassic graphics

Raptor exclusive! Amiga
meets RISC, the ultimate
rendering engine on test

FEATURES CD-ROM round-up plus how to install a drive

REVIEWS Image Master RT • Pixel 3D Pro • 2 WaveMaker

DECEMBER 1994

AMIGA COMPUTING

All Amigas - 1 Mb required

TECHNO SOUND

TURBO

Turbo charge your Amiga sampling with this complete package!



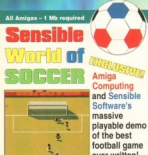
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Sensible World of SOCCER

EXCLUSIVE! Amiga Computing and Sensible Software's massive playable demo of the best football game ever written!



EUROPPRESS PUBLICATIONS



Panasonic

ANNOUNCING THE NEW PANASONIC KX-P2135

A 24 PIN QUIET COLOUR PRINTER, DESIGNED FOR THOSE WHO NEED LOW COST PROFESSIONAL QUALITY OUTPUT, GIVING ALL YOUR DOCUMENTS AND PRESENTATIONS EYE CATCHING COLOUR. THE NEW KX-P2135 INCORPORATES A 20 PAGE BUILT IN SHEETFEEDER, A FLAT BELT PUSH TRACTOR FEED TO FACILITATE EASY LOADING TOGETHER WITH A NOISE LEVEL OF ONLY 46.5DBA (43.5DBA IN SUPER QUIET MODE)

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SPECIFICATION

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- * Quiet Printing 46.5 dba - 43.5 dba Super Quiet Mode
- * Multiple font capabilities including 3 draft and 7 letter quality
- * Push tractor feed
- * Top and rear paper paths
- * 7 Colour printing
- * 250 cps Draft Micron, 83 cps LQ
- * 1 Year Warranty

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Recently reviewed by Amiga Format "A fine 24-pin dot matrix printer at a reasonable price."

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- 5) Parallel Printer Cable: To be used when connecting Amiga to Panasonic printer. INDI PRICE £10.99
- 6) Panasonic Colour Ribbon: 100m ribbon for KX-P2135. INDI PRICE £13.99
- 7) Panasonic Blue Ribbon: 100m ribbon for KX-P2135. INDI PRICE £6.99

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on sale
17 November

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THE COVERDISKS

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TechnoSound Turbo

You can create and edit music and samples just like the professionals with our exclusive TechnoSound Turbo package from New Dimensions. Now you have access to a full music studio in the comfort of your own home.



Sensible World of Soccer



Get a kick out of our exclusive Sensible World of Soccer demo featuring the new and improved Amiga Computing team. This demo is big – don't miss it!



Jurassic graphics

DesktopStation's powerhouse has arrived and it's big, slick and very, very quick. Amiga Computing grabs the Raptor by the tail and lets it rip!

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...for details of Amiga Computing's subscription offers this month.

[illegible]

Deal Direct, with Digital Direct...



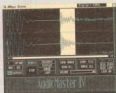
Music Samplers etc.



MegaloSound is the new 8-bit, stereo, direct-to-disk sampler package; the software is packed full of easy-to-use editing features, special effects and extras such as the ability to print waveforms and sample information.

The package allows sampling up to 84KHz mono and 56KHz stereo to memory and up to 21KHz stereo to hard disk on an A1200.

Supplied with a hardware volume control and an extensive 144-page manual, MegaloSound is impressive value and Gold-rated by CU Amiga, with 88% from everybody's favourite magazine, Amiga Format!



AudioMaster IV is regarded as the de-facto standard in sound sampling and editing software. With its incredible range of features and clear, informative displays, it is hard to beat as a sound editing system.

AudioMaster IV is compatible with MegaloSound and any other sound sampling hardware that connects through the Amiga's parallel port. Please call for further information.

ProMIDI Interface

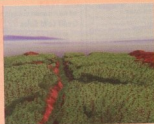
The ideal MIDI interface for all Amigas, this smart-looking device comes with MIDI in, MIDI thru and two MIDI out ports and is complete with manual, software and a flying cable for convenient positioning.



Graphic Design

VistaLite 3.0

Create stunning landscapes with this amazing 3D simulation program. Supports HAM8 and 256 colour mode and requires 2Mb of RAM and Workbench 2.0 or above. A simply superb product from Virtual Reality Labs!



Distant Suns 5.0

Be the star of your own trek through space! Animate the solar system, view the same night sky as the 3 wise men and navigate by the stars with this 3D Desktop Planetarium. Requires 2Mb RAM and Workbench 2.04 or greater.

Pricing & Ordering Details

HiSoft BASIC 2	£59	MegaloSound	£25
HiSoft Desktop 3.04	£49	AudioMaster IV	£39
HiSpeed Pascal 1.10	£49	ProMIDI Interface	£17
Maxon Magic	£22	VistaLite 3.0	£29
TurboText!	£39	Distant Suns 5.0	£29
VideoMaster A500/A500+	£39	SBase Personal 1.3n	£69
VideoMaster A600/A1200	£39	SBase Professional 1.3n	£139
VideoMaster with VideoMaster	£35	Reminders	
ColourMaster separately	£49	Power BASIC Amiga	£10
VideoStage Pro	£99	K-Spread2/3-Data Pack	£10
ProFlight	£10	(A500/A500+ only)	

Simply call 0525 718271 from 9am to 6pm, Monday to Friday, with your credit or debit card number and we will despatch your goods within 3 working days, assuming they are in stock. If there should be any delay we will notify you immediately. Alternatively you can send us a cheque or PO made out to Digital Direct. Please add £3 postage within the UK (£5 for a next working day delivery), £4 within the rest of Europe, £8 elsewhere.

All goods are offered with a no-nonsense 30-day money-back guarantee, if you are not completely satisfied with the product.

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Video/Presentation



The best-value real-time video digitiser you can buy. VideoMaster gives you the ability to record real-time monochrome video with sound at 25 frames per second as well as quality full-screen stills from your camcorder or video recorder. VideoMaster RGB includes our new colour splitter, ColourMaster, and produces amazing quality colour stills.

VideoMaster AGA works on the A1200 and A600, connects via the PCMCIA slot for extra speed and freedom to use other peripherals, allows high-quality stereo sound and supports HAM6 and HAM8 up to 640 x 512 resolution for stills.



ColourMaster is a new electronic colour splitter which works in conjunction with VideoMaster for stunning colour stills.

VideoStage Pro

Spectacular video and on-screen interactive productions are easily created with this brand-new release from Ova. Shores can incorporate text, graphic objects, animated sequences and sound.

The Storyboard features icons for insertion of short events such as graphic images, title screens, sound effects, AReXX calls, genlock events and play loop events. Timeline allows different tracks for each of those.

VideoStage Pro supports the concept of 'clips' allowing animation of any drawn object, button or brush and actions may be overlaid on their motion so that multiple objects move at the same time, for smoothness.

The Grayscale control supports G-Lock and Superion protocols as well as all generic Amiga genlock controls. Sound support for RSXX samples and NoiseTracker, ProTracker and SoundTracker music modules.

Over 60 built-in dazzling Special Effects with wipes, fades, scrolls, cross-fades etc.

VideoStage Pro requires an Amiga with a hard disk and 3Mb RAM (at least 1Mb chip RAM), AmigaDOS 2.0 or higher.



Business Applications



We are pleased to announce that SBase 4 is back in the UK with Digital Direct. SBase 4 Personal and SBase 4 Professional are up to version 1.3n now and we have both in stock, ready for immediate despatch.

These products are renowned for their power and their range of features and have been available on the Amiga platform for many years in earlier versions. Now they have both been brought right up-to-date with support for the very latest Amiga computers.

Both SBase Personal and Professional are full-featured, fully relational and powerful databases with pull-down menus, multiple windows and complete access to your Amiga's multi-tasking environment and they are now compatible with AmigaDOS 3.0 and the AGA chip set.

SBase Professional includes a powerful database management language and supports AReXX. Please call for our data sheets on these superb products.

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Digital Direct is the direct sales division of HiSoft UK.



By ADAM PHILLIPS

The waiting continues

Contrary to what David Pleasance, MD for Commodore UK, said last month, the liquidators in the Bahamas are still accepting bids including CBM UK's.

It would seem that the ten day ultimatum laid down by Pleasance and co. has either been ignored or not upheld by its instigators. The surprise this time round is the appearance of two new bids – the first from Creative Equipment International based in the States and the German-owned computer retail chain, Escom.

The bid being taken most seriously by CBM UK is CEI's. With an advert appearing in the Philadelphia Inquirer looking for accounting, managerial, engineering and production staff for the restart of Commodore in America, their confidence seems to be running as high as Pleasance's whose own celebratory party is still planned for October 13th.

Perhaps more worrying for the UK bid is that Alex Amor, managing director of CEI, told Dan Stets of the Philadelphia Inquirer that he had what amounted to a silent partner, most likely a large technology company that is apparently supporting his bid.



Colin Proudfoot: "We have to accept that we're not the only horse in town"

Little is known about Escom and its attempt at buying Commodore technology. There has been no comment from the company but apparently there are several leading management in Germany who used to be Commodore employees.

With their own range of PCs and 242 stores across Europe, including 24 in the UK, Escom would appear to be another candidate in a financially viable position for the buyout.

Colin Proudfoot, joint MD of Commodore UK, told Computer Trade Weekly, the industry's newspaper, that: "the liquidator knows his back's against the wall in terms of timing. But while we're all frustrated with the process, things are moving as fast as they can. At the moment, we have to accept that we're not the only horse in town."

Despite Proudfoot's words, one thing remains worryingly clear – at the time of going to press, there still is no definite conclusion to the Commodore crisis that began months ago and the chances of a bright Christmas for Amiga stock is starting to look decidedly shaky.

ELSPA step up the pornography fight

Officially released at the recent ECTS show, ELSPA's white paper on the past, present and foreseeable future of pornography has been submitted to the government, brandishing concerns about hardcore material finding its way into the floppy and hard drives of children.

The paper calls on the government to provide greater police resources and increase police training in a bid to curb the ever increasing problem.

"The fight against pornography is not helped by a belief that it is difficult to obtain a conviction in court for all but the most obnoxious material" commented John Loader, chief investigator at ELSPA's Crime Unit.

"Because of the way that computer pornography is particularly accessible by children, we believe that the Home Office should issue guidelines advising courts to interpret the Obscene Publications Act when dealing with computer pornography as if children were the intended audience."

For further information and a copy of the white paper, contact Ben Hill at Firefly Communications on 071 381 4505.



White Paper: Wants stronger laws and more police help

The next generation

Despite the mass of corporate players releasing their own super consoles into a soon-to-be saturated market, Commodore UK, if successful with their bid, has a 64-bit games machine in R&D at present. The intention is to release the CD-based unit within the next year, perhaps even as early as Christmas, to meet the competition head on.

Special offer from Citizen

As part of Citizen's promotional buildup to Christmas, the company is offering a free watch with every ABC Colour printer, between 1st September and 30th November. Looking like a Swatch watch, the time piece is worth £35.99 and the complete package costs £213.99 RRP.

NEWS
BRIEFS

An explanation

Apparently, some Amiga 1200 owners have been calling HiQ, the mail order company, reporting problems with certain genlocks including the YC genlock from Electronic Design.

On contacting Electronic Design, HiQ were told that some UK A1200 models have had a chip design change which has caused the problems with existing YC genlocks. The company has no plans for updating the YC unit and is telling 1200 owners and stockists alike to invest in its Neptune Genlock priced £549 as an alternative.

Savings on Scala

In conjunction with Scala, Silica, the retail shop, is offering the Scala Software Suite for all DTV enthusiasts. Combining the Scala MM300 with the Echo EE100, the user can create business reports, storyboards, company tutorials, presentations and a host of other title-creating demonstrations.

The Scala Echo system allows editing facilities through the use of an infra red sensor. The complete package costs £399 which, Silica claims, saves the customer £79. Silica can be reached on 081-309 1111 for further information.

Recycling for the future

With the huge amount of computers that are thrown away by large companies each year, the Computer Recycling Club has been established to redirect this apparent wastage into a useful resource. The intent is to collect unwanted machines from all over the country and distribute them, for a small fee, to home users and charities.

"I see computers as a necessary tool that empower people to achieve more, particularly those associated with charities, and people interested in getting involved in computers for the first time will benefit from this club" commented Keith Park, founder of the Recycling Club.

For more details, call the enquiries desk on 0685 872389.

With David Pleasance enthusing about the FMV future of the CD32, CD Vision, a recently created company, is on the verge of releasing five interactive CD-ROMS and 40 video CDs. It has access to over 6,000 hours of video programming including material from Tiger Aspect Productions, the company responsible for Mr Bean, and Zenith, makers of Inspector Morse and 99 to 1.

"Our aim is to satisfy the entertainment aspects of both the interactive CD-ROM and Video CD markets" commented Nigel Wood, joint managing director of CD Vision. "Not only do we have immediate access to a massive catalogue of programming, we are also actively pursuing other publishers and TV companies with a view to using their material for development of further multimedia projects."

Among the first crop of releases due in mid October are Halloween, Raquel Welch's *Lose 10lbs in Three Weeks*, *Enjoying Sex* and Chris Tarrant's *Crazy World of Home Movies*. An additional 20

Films for CD32

Video CD titles are planned for November and December that include Ulrika Jonsson's *Extreme Limits* and in the Wild with Anthony Hopkins, Bob Hoskins and Timothy Dalton.

Requiring the FMV cartridge, CD32 owners can now hopefully begin to realise the multimedia potential of their console.



Films: Coming to a CD32 near you courtesy of CD Vision



Workbench
3 Booster:
More help
for Amiga
users

Insiders pack

Following the success of the A1200 Beginners Pack, Bruce Smith Books has released the Workbench 3 Booster Pack that contains intermediate level material on Workbench 3, AmigaDOS and system configuration.

The Disks and Drives Insider Guide section also contains relatively advanced tutorials on data compression, encryption techniques and low level disk operations for AmigaDOS.

Costing £39.95, the pack consists of two books, disks and a video and is suitable for all A1200 and A4000 users. It's also useful for A500, A2000 and A3000 owners upgrading to Workbench 3.1.

The Workbench 3 Booster is only available direct from Bruce Smith Books and credit card orders can be placed on 01923 894355.

Grab the frame

New for the Amiga is the Pro-Grab 24RT, a 24-bit real time colour digitiser. It can capture colour images from any video source providing a composite output claims Softwood Direct, manufacturer of the new hardware.

Also included is the ability to allow the digitiser to be used as a teletext decoder. Softwood Direct can be reached on 0773 836781.

Amiga trek

Continuing from its success on American television, the Amiga, coupled with Lightwave 3D, is being used to create some of the graphics for the new series *Star Trek: Voyager*. Taking up where *Deep Space Nine* and *Star Trek: TNG* left off, the continuing *Trekky* saga details the story of two hostile races having to share the same ship to make their way home from deep space.

The company behind the effects is Amblin Imaging, the same team that produced the graphics for *TNG*. Along with the classic Lightwave, Raptors are installed in the US offices to add their usual punching power to rendering times.

The new series should be arriving on British shores at some point early next year.

Console emulation

With the Zappo CD drive available and the CD1200 to appear in shops after Christmas, some owners of existing drives that are not compatible with CD32 software may well be feeling a little hard done by.

To rectify this, Blittersoft has announced the arrival of the CD32 Emulator software pack for previously unsold CD-ROMs.

Costing £49.95, the package includes the emulator that, like the Zappo CD drive, can't run all titles, but the makers claim the likes of Microcarn, Diggers and Frontier do. To run the software, owners must have an AGA Amiga, a SCSI-2 CD, 2Mb chip RAM and 1Mb Fast RAM.

Also included are three lesser titles that play music, create CD filing systems and aid the mounting of the CD-ROM drive.

Blittersoft can be reached on 0908 220196.

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- **PRICE MATCH:** We match our 18 "Same product - Same price" basis.
- **FREE CATALOGUES:** With special offers and product news.
- **PA-YMENT:** We accept most major credit cards, cash, cheque or money orders (over 20% cash on delivery).
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Address: _____

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Tel (Home): _____

Tel (Work): _____

Which computer(s), if any, do you own? _____

Success for First Computer

First Computer Centre, the Northern retailers of all things Amiga, has set up a bulletin board for Commodore users. Providing technical advice, a selection of PD software and a chance to place orders, the retail store has plans to increase the system and is asking for the uploading of files that Amiga users think may be of interest or use to others.

The BBS number for First Computer Centre is 0113 2 311422 or 0532 311422 (pre-BT phone day).

Primed Prolog

Computer language specialists, Grange Technology Ltd, has announced a new implementation of Prolog for the Amiga. According to the makers, GT-Prolog combines fast execution speed and low memory overheads with an interactive development environment, supporting incremental compilation and debugging of Prolog applications.

"GT-Prolog represents the first in a new generation of software development products for smaller scale computer systems which provide a superior level of performance and functionality at a price which is affordable by professional users and enthusiasts alike," commented Graham Thwaites, Grange Technology's managing director and author of GT-Prolog.

The package retails for £89.95 and for further details contact Thwaites on 01235 851818.

PAR update

For followers of PAR software, version 2.25b is poised for release by the Scotland-based 24Bit Club. New features include an improved system of Importers and Exporters that has been rewritten and apparently optimised.

The Export function now includes the ability to force translate other programs to see PAR animation files as if they are sequences of images instead of single animations. This basically means that any program can load images directly out of PAR animations without having to use ARexx or having to pre-export the files.

The new Import feature allows the user to control how the PAR handles the way it looks at the file numbers before it brings each file into the PAR. This gives access to more control over the incrementing of frames.

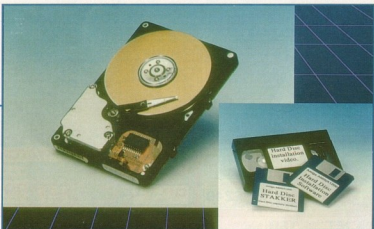
For more details, contact 24Bit Software at 6 Skirsa Square, Floor 1, Glasgow, G23 5DW.

Video aid for users

To help customers not adept in things technical, Siren Software is giving away a free "How To Fit Your Hard Drive" video with every HD unit sold. The programme is a step by step guide to enable anybody to fit an internal 2.5" hard drive into their Amiga, according to Siren Software. The price of

HDs from the company range from £109.99 to £449.99 with a variety of differing sizes - from 30mb to 540 mb, with transfer rates of upto 8.3mb per second.

Contact Siren Software on 0500 340548 for more information.



Siren Software: Providing a video to help the installation of their hard drives

A touch of Pizaz

A new company, Video FX, has joined the increasing ranks of firms producing video specific packages for the Amiga. Its first release, Pizaz, is a modular video titling system which, via object-orientated design, enables extensive scrolling and animation facilities.

By using a scripting board, the title incorporates automatic special effects including rotation, expansion and folding (both horizontally and vertically) of characters. Characters can be scrolled either by character, word, line or page from each of four directions at any predefined speed, both in and out of the screen.

For the first three months of release from the beginning of October, the package will cost £49.99, rising to £59.99 after that period.

For more details, phone Ian Johnson on 0443 674385.

Pad or mat?

Golden Image UK has released the two in one scanner pad and mouse mat that, according to the makers, enables the user to achieve a more accurate scan. Apparently, high quality images that usually require a full page scanner can now be done by hand alone.

Also included is a built-in ruler to help with marking up the picture and a T-Ruler to act as a guide so images may be merged together with the minimum of fuss. Golden Image is also claiming that the device can be used as a mouse mat, a holder for business cards, memos and other uses.

For more information contact Golden Image on 0181 900 9291.

HP: The next generation

Already boasting a catalogue of quality printers, Hewlett Packard is releasing two new models on to the market. The Colour LaserJet printer, retailing for the hefty price of \$7,295 in the US, uses laser beam process to add colour to a document. The LaserJet runs up to 2ppm and black and white documents at 10 ppm.

For those not wanting colour, the LaserJet 4V is

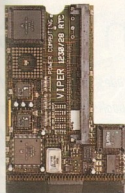
the latest in the HP range that features a 33-MHz RISC processor and a 16ppm output. According to the manufacturers, the printer handles more paper sizes than before and offers a 600dpi output with Resolution Enhancement and microfine toner.

For more details, contact the HP customer information centre on 0344 369 222.



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XL DRIVE A4000 INT.	£55.95



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The Super XL Drive is the only kind of floppy drive of its kind on the Amiga market! The innovative drive can store a massive 3.5MB on one high density floppy disk. (without compressing the file). This drive is available from late November/early December.

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CanDo goes pro

OnovaTronics' CanDo has undergone a major upgrade, both in features and price. Obviously now targeted at the professional rather than the hobbyist user, CanDo 3.0 is retailing at \$399.95. There's now a debugger available for the product as well, which sells separately and costs \$199.95. Not the toolkit for whipping out a PD address book program, that's for sure.

There is plenty new in the upgrade though. A new main panel interface is cleaner and easier to use, with scrolling control icons and configurable hot-keys. The Object Cursor feature has knobs to control the size and location of objects, as well as a snap-to-grid alignment feature and 20 alignment tools. You can now label buttons, fields, documents, and sliders; borders on GUI objects look more professional and you can now set the fonts and colours of text fields – and tab between them.

There is better control over the look of your screens, with discrete control of screen and window attributes, screen palette and font support, and much better public screen support. Genlock support, with border and sprite management as well as 27 palette and genlock effects,

makes CanDo 3.0 better suited to video work than previous releases.

Multimedia users will appreciate the 53 window and screen transition effects added in CanDo 3.0. These feature precise timing control – a three-second effect will take three seconds whether you're running on an A600 or A4000.

Brushes and BrushAnims have been made less quirky, with off-screen brush rendering and more flexible brush placement. Fifty brush effects are included, with real-time scaling and panning.

There are other improvements, such as simpler sub-decks, better documentation, and the return to a free runtime Deckbrowser and library for non-commercial user. The CanDo debugger lets you watch your CanDo scripts execute, stepping through them line-by-line or setting breakpoints. You can change values as your program executes, browse objects and variables, and graph memory usage.

Upgrades from previous versions are \$179.95; the debugger is \$99.95 with the upgrade, or \$199.95 separately.



*Upgrades, video boards and
books in Denny Atkin's
usual visit into the world
of Amiga, USA style*

Moving up a peg

Pegger, the image compression system that adds Jpeg support to programs like Brilliance, Imagine, and PageStream which don't normally handle that format, has been upgraded to version 2.0.

If you missed it the first time, Pegger converts image files on the fly to save hard drive space – it can take a 24-bit IFF image and convert it to Jpeg when saved by Brilliance, then change it back to Jpeg when PageStream attempts to load it.

The biggest improvement in release 2 is in speed – it's roughly twice as fast as the original release, making it one of the fastest Jpeg systems on the Amiga. You can now Snoop files by program, allowing you to change the compression mode for different programs that may save files to the same directory.

New file formats have been added, including Imagine RGB8, IFF 8-bit color and greyscale, Jpeg greyscale, TARGA colour and greyscale, and NewTek VideoToaster Gc Framstore pages. Pegger also now works over networks, such as Parnet, ENLAN-DFS, and Netware.

Registered users can upgrade for \$15 US + shipping and handling. The program retails for \$99.95, but Heifner is offering it for a special introductory price of \$49.95 + shipping and handling.

For more information contact Heifner Communications, 4451 I-70 Drive NW, Columbia, MO 65202, USA; phone (314) 445-6163; fax (314) 445-0757. You can also e-mail Pegger@express-way.com for more info.

On the edge of time

Utilities Unlimited has promised a new video board for the Amiga before Christmas – with the company now working to finish up its Emplant PC module, I'd guess we won't see it until early '95.

Still, it looks like it will be worth the wait. Using the Cirrus Logic Alpine chip set, the board is reported to be able to serve as the first "video board emulator" – UU's Jim Drew claims it will run the software for the Picasso II, Piccolo, and EGS Spectrum graphics boards, effectively emulating them.

Drew claims PowerMacintosh video performance, with 640x480x32-bit (Alpha-Red-Green-Blue) full-screen animations running in real-time. The board will support the usual ridiculously high resolutions – how high and how many colours will depend on how much memory you add to the board. It supports up to 8MB of RAM, using two 1, 2, or 4MB industry-standard 72-pin SIMMs.

Other features will include genlock ability, Alpha channel overlays, and a blitter that can move 80 megapixels a second. Price isn't set yet, but Drew claims it will be very competitive – perhaps as low as \$299 without the necessary RAM.

Capture the Net – read a book!

Connect Your Amiga! is a new 256-page book from former Commodore engineer Dale Larson that tells you everything you'll ever want to know about connecting your Amiga to other computers, whether you're using Ethernet to connect a suite of Amigas for rendering or just reaching out to the Internet using your modem.

The first chapter, "The Networks", is a brilliant introduction which covers the basics of telecommunications, BBS networks, LANs, and the Internet, providing all the basic information a novice will need without sounding condescending. Like most of Larson's book, it's sprinkled with casual, humorous remarks that help keep what could be awfully dry reading interesting and fun.

The remaining chapters go into deep detail on these topics, providing a detailed, knowledgeable overview of the programs and hardware you'll need

to accomplish your network connections – all the techie details on TCP/IP, SLIP, PPP, Envoy, DECnet, SANA-II, and Ethernet, written in plain, understandable English.

New on-line users will appreciate the helpful overviews of terminal programs, compression utilities, offline readers, and fax programs. If you're jumping on the overhyped information superhighway, Larson's 33-page Internet section is a must-read. There's even a section on security and privacy that's a required read for anyone who's ever chosen their girlfriend's name as their BBS password and lived to regret it.

The book is a bargain at \$24.95 plus shipping (\$5 book rate, \$13 Air Mail). It's available from Intangible Assets Manufacturing, 828 Ormond Ave., Drexel Hill, PA 19026-2604 USA. You can fax the company at (610) 853-3733, or email info@iam.com.



Let's get provocative and start with some commonly overheard quotes and their true meanings. 'My Johnny can do anything with a computer!' meaning, he can wiggle a joy-stick and zap a few aliens.

'I don't know anything about computers!' meaning, I want to talk to you for hours, pick your brains, buy nothing then leave - still knowing nothing about computers.

Now let's get provocative and depressed at the same time. I was thinking the other day about what makes me angry? Do customers make me angry? No, I get frustrated by customers sometimes.

You know, customers who ring, insist on talking to the managing director and say: 'Here! I ordered 100 disk labels and one was torn so I only got 99. I want another label and compensation for the cost of this phone call.'

What would he have done if he had got 103 labels? I ask myself. Ah well, send him another 10, just to be on the safe side.

What makes me really angry though is ignorance. I mean, just look to the future. The next generation are going to have some tough questions to face. Questions like 'Should it be real or should it be virtual?'

I'm concerned about the way computers are affecting our lives. We are becoming more insular, less jovial, more politically correct, more boring, more predictable and more machine like as time goes by.

People don't seem to feel even care much these days. What's happening to personality and individuality? It's being zapped by Johnny that's what!

It won't be long before we have standardised responses and standardised procedures for day-to-day living. Woe betide the poor bugged personality whose output responses do not conform to these standards.

An incorrect response could lead to a prison sentence in the years to come! Look at America where so called sexual harassment at work has lead to procedures on how to conduct yourself with colleagues in order to avoid potential million dollar lawsuits.

How awful to have to inhibit our natural self expression, whatever our gender, in order to conform to some intangible,

The retailers revenge

*Strong words from across the counter as
Bryan Copley puts computers in their place!*



impersonal, meaningless and politically correct rubbish.

'It's not computers that are doing this' I hear you say. No. But they are making an enormous contribution to the standardisation of our lives.

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You people interested in computers and buying this magazine; are you not even a little bit concerned? No. I bet you're thinking 'Who is this nut?'

So why are computers so important? Why can't we live without them. More important, are computers addictive, destructive or maybe even evil? We don't even think about it, do we? That's what makes me really angry.

We take things for granted. Faster, more powerful and more productive. Someone asked me the other day: 'What do you use your computer for?' What a daft question. I use it for lots of things. Things like, er, let me think erm.....anyway that's not the point.

The point I am making is that like the guy who gets a job, to earn money, to buy a car to get him to work, to earn money to repair his car, so he can get to work to... I sometimes think we are going around in circles and have lost something fundamental from our lives because we are dizzy.

It is said that a fanatic is a guy who doubles his effort when he has forgotten his aim, and the computer world is getting fanatical about computers.

Slow down guys. Computers aren't important. They're fun-to-use tools of enormous benefit if we didn't take it all so seriously. Well, most of us guys in the business take it all too seriously. How about you?

Bryan Copley
Head honcho
First Computer Centre

If you fancy giving Bryan a taste of his own medicine feel free to write in. We'll print the best of the bunch in the next issue - Ed.

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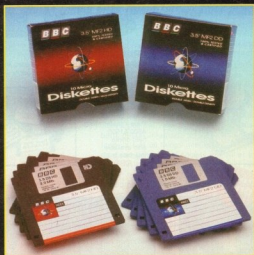
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De-archiving applications - Workbench 2.0 and above

Always boot from your CoverDisk when de-archiving applications. The installer programs can be located via the install icon with the appropriate name in the WB_2&3_Only drawer.

The de-archiving procedure has been much improved and now combines the power of the original Commodore installer program with that of Workbench 2.0 and 3.0.

The installer program is designed to be powerful yet simple for the beginner and features a user-friendly interface allowing you to de-archive programs with a minimum amount of fuss. The installer programs for Workbench 2 and 3 users can be located via the icons named:

Install[Program name]

eg:

InstallIPFM

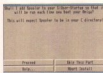
To run, simply double click on the icon which will load up the installer program.

Using the installer

Ignore the buttons that appear when the installer program boots up and simply click on the Proceed button. The program will then copy the necessary files to RAM.

Once this has finished it will inform you that it is about to format a disk in DF0. Click

Don't forget to insert a blank disk at the prompt and before pressing Proceed



Any commands that need to be added to your User-Startup can be done with the press of a button

on Proceed, at which point you will be told to insert a blank disk ready for formatting.

Once you have clicked on Proceed, the installer will indicate that it is formatting the disk in DF0. When this has finished, click on Proceed again to start the de-archiving procedure. When the application has been de-archived you will be told where the de-archived files are. Click once again on Proceed to finish.

If at any time you are unsure as to whether you want to continue installing, you can click on the Abort/Install button.

Occasionally, utilities may need to add instructions to your User-Startup file located in the S directory so that they will function correctly. If you want to add the instructions, click on Proceed when prompted.

The Files drawer contains all the utilities set up so that you can use them from the CoverDisk. A Games drawer is also provided so that you can play these immediately. If you want to install the games make sure you copy all the necessary files across as listed in the CoverDisk pages.

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!

We have now managed to fix the problem with AmigaDOS displaying a "disk is write protected" requester when a write-enabled disk is inserted. Just make sure you insert a blank disk when the installer programs tell you - and not before or after.

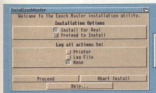
Installing utilities

The procedure for installing utilities is much the same as installing applications, except that you can boot from your hard drive or Workbench disk. As utilities don't need to be de-archived, you are asked to specify a directory on your hard drive or Workbench disk where you would like to install them.

If you don't want to install to the default directory you can change it by clicking on Change Destination. The Show Drives button will allow you to select a new device and directory. You can create a new drawer for your utility to go in by clicking on the Make New Drawer button and typing in the name.

You can also make a utilities disk by running the MakeUtilitiesDisk1.3 program located in the WB_1.3_Only drawer and installing your utilities to here. At times you may be asked if you want to install a utility's documentation. A tick box indicates that the documentation is selected for inclusion, but you can click on the box to ignore it or simply click on the Skip This Button button.

The utility installer programs can be found in the appropriate program drawer in the WB_2&3_Only drawer.



Don't worry about the installer options. Simply click on the Proceed button



The Workbench 2.0 and 3.0 installer icon

De-archiving applications - Workbench 1.3

Always boot from your CoverDisk when de-archiving applications. The installer programs can be located via the install icon with the appropriate name in the WB_1.3_Only drawer.

Install[Program name]_1.3

eg:

InstallIPFM_1.3

When you load up the 1.3 installer the program will first prepare itself ready to de-archive the program to a

After inserting a blank disk press y to continue or "n" to abort



blank disk(s). You will then be asked to insert a disk to be formatted into DF0 and either press y to continue or n to abort.

Provided you answer y, the disk you insert will be formatted and the application de-archived.

Installing utilities

You should first run the MakeUtilitiesDisk_1.3 to format a blank disk called ACUUtilities which will be used to store any utilities you eventually install.

This disk can be used with future CoverDisk utilities until it becomes full. The MakeUtilitiesDisk1.3 program will be a permanent feature of the CoverDisk.

To install any utilities, boot your machine with your CoverDisk inserted in DF0. Utilities can be installed by clicking on their install icon found in the appropriate drawer in the WB_1.3_Only drawer. You cannot specify their destination and any additions to the Startup-Sequence must be done manually.

When installed the utilities are copied to a drawer called ACUUtilities in the ACUUtilities disk.

THE Cover Disks

Sounds



Installing Techno Sound Turbo

Techno Sound Turbo has not been compressed in any way so to load the program all you need to do is insert the disk into the internal drive DF0 and re-boot your Amiga. When the loading screen appears press the left mouse button to continue.

Welcome to Techno Sound Turbo from New Dimensions – not just a sound sampler but a fully working sound studio featuring well over 100 advanced functions only previously available in professional recording studios.

When Techno Sound Turbo has loaded (see Installing Techno Sound Turbo) you will be presented with the main editing interface. When you click the mouse button you will be asked to enter your language and given the option of clearing the sample memory, which you should answer yes (y).

Now that's out of the way we can begin with our first tutorial which will teach you how to negotiate your way around the Techno Turbo Sound interface.

The interface

The Techno Sound Turbo interface is split into three sections – the sample display area, studio options and the signal level indicator.

The sample display is the large black rectangle at the top of the screen and it is here that any changes to samples are reflected. The studio options are the various editing and control buttons that make up the vast majority of the interface and the signal level indicator reflects the input signal coming through the sample box (not included).

The real power behind Techno Sound Turbo comes from the eight buttons positioned to the far-right of the display. By clicking on any of these buttons an appropriate sub-menu scrolls on at the bottom of the screen.

Inside the sub-menu will be a host of different options that will allow you total control over how your samples sound and play. You will find a brief description of all the functions accessible from the main interface in the annotated picture.



Simple samples

As this is the complete version of Techno Sound Turbo, New Dimensions has actually supplied a vast collection of high quality sound samples to get you going.

Click on the Disk button and nine disk-based gadgets will scroll onto the screen at the bottom of the display. Together these offer complete control over the loading and saving of samples and songs.

All loading functions are indicated with an arrow pointing away from the disk image and saving functions with the arrow pointing to the disk image. Click on the first gadget – load IFF sound sample.

Techno Sound Turbo's file requester will gently scroll into view where the signal level indicator previously was. Click on the down arrow until you see the drawer labelled Samples.

Click on this drawer and then select the GameOver sample. When GameOver appears in the file name box press Return or click on the OK button to load it into memory. Now take a close look at the sample display. It

Accurate looping is difficult but possible with Techno Sound Turbo's wide assortment of looping functions. Click on the Loop button and five gadgets will scroll on to the screen at the bottom. They are, from left to right: Forward play, Forward loop, Sweep, Reverse loop and Reverse play.

Let's take a look at each one individually. Forward play will simply play the sample once from left to right. Forward loop will do exactly the same as Forward play but will loop to the beginning when the end is reached.

Sweep will play the sample from left to right, then right to left (backwards) and vice versa. Reverse loop is identical to Forward loop except the sample is played in reverse. Reverse play is identical to Forward play except the sample is played in reverse also. In all looping cases the right mouse button will terminate the operation.

By pressing the Super Loop button you can enter a third pointer into the sample display. The four buttons to the left and

right of Super Loop allow you to move the pointer (which is blue) to a desired location. The single arrow moves the pointer slowly while the double-arrow moves it quickly.

Click and hold the right double-arrow button and you should see the blue pointer moving across the sample display to the right. Move it to the middle of the sample display and then press the Forward loop button.

The GameOver sample will be played in its entirety, at which point it will loop from the beginning of the Super Loop pointer – it will continue to do this until you cancel the operation. Using the Super Loop you can repeat specified sections of a sample as many times as you like. Obviously, the GameOver sample is not the best example so try using the Super Loop option with instrumental samples.

In next month's issue of Amiga Computing we will be discussing the art of special effects and sequencing, so stay tuned.

It will appear that there is no sample loaded but the display is automatically set to the lowest magnification so it won't initially be visible.

If you look to the far left and right edges of the sample display you will notice two lines – one white and the other yellow. These two lines allow you to set a range – the white line being the beginning and the yellow the end.

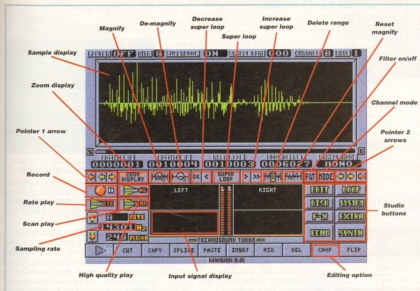
The white line, or pointer as it is correctly termed, is moved by clicking the left mouse button on the appropriate place and the yellow pointer with the right mouse button. Move the yellow pointer approximately 1cm to the right of the white one.

Now locate the magnify button below the sample display (check out the annotated picture if you can't find it) and click on it. This will magnify the area between the two pointers to fit the entire sample display. You should now be able to see the actual GameOver sample.

To get a better impression of the sample, move the

We can't offer you a full recording studio but we
can offer the next best thing - the complete
Techno Sound Turbo package from New Dimensions

fantastic



yellow pointer so that it's at the end of the actual sample wave form. Click on the magnify button again and the sample should be displayed almost entirely in the sample display.

Obviously, you can reduce the magnification by clicking on the de-magnify button directly to the right of the magnify button.

Now that you can see the sample clearly, let's play it to see how it sounds. Locate and click the Play HQ (High Quality). The screen will blank and you will hear the GameOver sample at the highest quality - this is what HQ stands for.

When the Techno Sound Turbo interface reappears, find the pointer arrows. There are two sets - on the left the white pointer arrows and on the right the yellow pointer arrows.

These offer you more control over the positioning of both pointers, allowing for more accuracy when cutting, pasting and creating loops. The red arrows move the

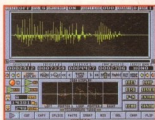
appropriate pointer back to its original location. You can now move the pointers yourself and listen to the results. If you require more information regarding the pointer positions, take a look at the area directly below the sample display.

Pointer 1 and 2 indicate the start and end position in bytes, while Area Size actually shows you how many bytes the current sample occupies.

If you click on the Zoom Display button the signal level indicator will be replaced with a magnified view of each pointer and the sample wave form which will allow for even greater accuracy when looping and editing.

The outside windows show the input wave forms for each channel in real time. The three central windows show the sample wave form underneath pointers 1 and 2 and the Super Loop pointer (explained later on).

If you move one of the pointers in the sample display you will see the zoom view being updated under the appropriate pointer.



Using the Zoom function you can position the range pointers far more accurately



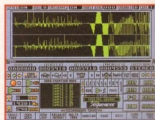
New Dimensions have supplied a vast amount of high quality sound samples to get you started



You can choose to edit your samples in either stereo or mono, although stereo does provide better results



If the effects aren't quite what you desire why not define your own? Echo is one such effect that can be edited manually



Techno Sound Turbo provides excellent sampling functions and a song sequencer too



Kicking off around the World

*Put on your favourite team's shirt,
lace up your boots and get ready for
the action with the best demo yet of
football at its greatest*



Welcome to the Sensible World of Soccer by Sensible Software, destined to kick all other football games into touch. We at Amiga Computing thought it imperative that we offer you a fully playable, exclusive demo of what promises to be the best soccer game ever. And here it is...

After the loading screen has appeared press the fire button and you will be presented with two options - Friendly and Demo League. Friendly allows you to jump straight in the action and play ball, while Demo League promotes you to manager of your favourite team, which we're sure will be Amiga Computing.

If you select Friendly you will notice that only one of the four options is enabled (green). This is because this version of SWOS is a demo - in case you hadn't noticed.

Select Club Teams, Europe, England and finally Division One. Once you have reached this point you will be able to choose your team. You can play as a player/manager or manager only by selecting your team with either blue or purple. The opponent team is selected in red. For a two-player game, make sure two teams are highlighted blue.

When you are ready to proceed click on Play Friendly, at which point you will be taken to the team statistics. From here you change your team make up by simply selecting the players you wish to swap and altering the

Basic Skills

There are a few ball control skills that need to be mastered when playing SWOS. The most important of these is the curved ball. If you are running with the ball you can curve it when you kick by quickly pushing the joystick in the direction you wish the ball to curve.

As you run with the ball your player picks up speed. As speed increases he will have less chance of directing or turning the ball. The best way to progress is to make short but speedy passes - the ball will be passed to another player if one is near enough.

If the opponent has the ball and you have a player near to him you can press the fire button and attempt a sliding tackle. However, try not to foul your opponents as the referee will have no qualms about handing out yellow or red cards.



The greatest element in SWOS is the skill element. The ball can be controlled by adding after touch

formation for which 4-3-3 and 3-4-3 are available. When your team is ready for kick off, click on the OK button.

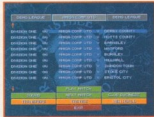
To make substitutions or change tactics during the match wait until the ball is out of play and press the cursor up key or cursor down key, depending on which way you are shooting, on your keyboard. This will bring up the manager's bench, along with an arrow. Move the arrow to point over the coach to change tactics. Move it over the players in order to make substitutions.

To gain information about the best players in your team, select Squad. From here you can also swap players around in order to maximise your team potential.

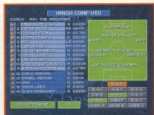
Transfer will allow you to buy and sell players. You select the player you wish to buy and then make an offer. If the offer is substantial enough the manager will agree and the player will be transferred into your squad.

Through Tactics you can program your team to react to different situations during play. This function is disabled on the demo version but you will be able to gain a good impression of how it works.

The key to success in SWOS is knowledge. You can gain a good impression of how opponent teams are performing by selecting View World. By choosing a team (England, Italy or Scotland in this demo) and a division you can find out who the highest goal scorers are, view the way in which their



Not only can you choose to be a player or manager but both



Sensible World of Soccer allows you to pick players, change formation and alter tactics

games are played and check out each team individually. The final element in managing your team is to keep a close eye on money matters - these can be accessed via Club Business.

From here you will gain valuable information about the team's profit over the year, current balance, income from player sales and income from player purchases. A good understanding of all these elements is required if you are to become a championship manager and take your team to the World Cup.

Although this exclusive Amiga Computing demo is packed with features, the full game promises even more. For a full listing of all additions to the full version of SWOS, check out the text on the loading screen - you won't fail to be impressed.



In the full game, players will be able to change their game tactics using the Tactics editor

New Dimensions are offering two exclusive reader offers which will allow you to complete or improve your Techno Sound Turbo package at a reduced cost.



Techno Sound Turbo order form

☐ Tick this box if you do not wish to receive promotional material from other companies

New Dimensions, Brooklands House,
Ryeowyn, Radlan, Gwent NP5 2AA

Courtesy of some ingenious ARexx coding, CineGraphics has managed to add an impressive selection of "wish list" features to Lightwave by simply adding a few extra scripts to the existing Macro selection.

PowerMacros are split between modeler and Layout – the two elements of the Lightwave environment. However as Modeler is the only element which has a direct link to ARexx, it's here where all the macros are initially applied.

The obvious question is how modeler macros can produce scenes and special effects in Layout? The answer is automatic scene generation built directly into the macros themselves.

In total you receive 17 macros split into four categories, namely Energy, Layout, Modeler and Business, as listed on this page.

Macro magic



Can ARexx really make

Lightwave even easier? Paul

Austin explores PowerMacros

Layout

Although slightly more mundane than the energy collection, the Layout offerings still provide some invaluable tools.

Snake is a prime example of painless automation which formerly would have been a tricky animating endeavour. Basically, Snake generates serpentine morph objects using bones, the end result being swimming fish, slithering snakes and so on.

Next comes Render Batch, which not surprisingly offers a similar facility to that provided by the render sequence feature in Wavemaker – see this month's features list.

Courtesy of Render Batch you can automate the generation of an unlimited number of scenes, with the files saved as either Framestore or IFFs.

Move Scene is another, sometimes essential option which allows the transfer of Lightwave scene files between volumes and, in turn, machines.

Not only does the macro alter the scene file to reflect the changes but it will copy all the objects and image maps to new user-defined locations, with the only exception being sequential image maps.

However, the new scene will still reflect the sequential-image selection, so all you have to do is move the sequence manually later on. Although far from glamorous, many professionals may find this the most important macro on offer.

Smooth Velocity is yet another painful task made easy, as it creates a constant velocity for an existing motion path. Again this is a tricky proposition with spline-based motion paths.

The Focal Distance macro puts another nightmare to the sword. Absolute animating depth of field can be an absolute nightmare. Now tracking an object using a depth of field envelope couldn't be simpler.

You simply create an object entitled FDist and place it in the scene. If the macro is applied the camera will track the object, producing a perfect DOF envelope for the scene.

Energy

As the title suggests, the energy collection provides perhaps the most dramatic macros including Shatter BlowUp and Swarm.

Not surprisingly, shatter will randomly slice any object into a user-defined number of pieces. To

achieve the desired effect the macros use Modeler's Boolean operations to not only slice the object but also rename the newly created interiors – ready for texturing in layout.

Hand in glove with Shatter comes the BlowUp macro. When a shatter operation is complete you have the option to then blow-up the newly created pieces by defining the speed of the explosion, the force of gravity, the rotation of the pieces and so on.

In addition, you can specify whether the explosion occurs at ground level, and if so, how much the pieces will bounce on impact with the ground. Fortunately the macro randomises the effect nicely, so the overall effect is pretty impressive.

The final element in the energy collection is the swarm macro which automatically generates swarming motion paths for an unlimited number of objects or lights within a scene – ideal for flies around a candle and other seemingly random events.

Modeler

Now we're entering the real bread and butter department, starting with Load from Scene, which will import an entire scene directly into modeler.

Next comes the Clone object and surfaces, yet another excellent utility macro which automates the renaming of surfaces within cloned objects – surprise, surprise.

Thanks to this useful little number, duplicates of a particular object not only get a number appended to the object but also matching attributes names in ascending order. Therefore it's much quicker to define separate surface attributes for the clones.

Flip Around polygon is yet another handy addition which flips a selected polygon 180 degrees – often useful in conjunction with the Attach Polygon macro. Mirror

using polygon is arguably one of the best modelling time-savers in the collection. This allows you to mirror an object via a selected polygon within the scene – instant duplicates in any direction or angle.

Save Pivot Point is easily my favourite Modeler macro. I find one of the most annoying aspects of importing objects into Layout is the program's habit of piling all the objects into the scene on top of each other. This is particularly infuriating when the objects are all elements of a larger hierarchical structure which then has to be painstakingly rebuilt.

Fortunately, thanks to Save Pivot Point, the nightmare is now over as you can build the hierarchy in modeler and define separate pivot points for each sub-object.

Now when you run the macro all the elements in the hierarchy remain in position and retain their pivot points when imported into layout – absolute bliss.

Business

Finally we arrive at the corporate collection – Pie Charts being high on the agenda – with two formats, one of which generates a single object using multiple surfaces for the individual segments, while the second generates the pie segments as individual objects. The basic set-up for both options is very straightforward. You simply run the macro and a requester appears in which you can add up to eight segments.

Simply supply the figures to be as many segments as you require and the macro does the rest. Instant 3D market research with a couple of mouse clicks. Last of all comes the excellent Chart Legend macro which automatically generates a bevelled 3D plaque using an extruded 3D font of your choice. The macro allows for up to 11 lines of text of unlimited length. Once again everything is done for you, just type in the text and sit back as the macro does the rest.

Verdict

At the risk of being boring, PowerMacros is yet another excellent Lightwave add-on, perfect for anyone who's into the creative rather than purely corporate productions. An indispensable collection for the serious 3Dophile.

Product: PowerMacros
Supplier: Premier vision
Price: £99.95
Tel: 071 721 7050

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The fastest thing four rubber feet

65 million years in the
making - the Amiga
meets RISC with the
Raptor. Amiga
Computing explores
the new union

If you've been monitoring Amiga news of late you may well have spotted Commodore's announcement to skip the planned release of the AAA chipset and opt for RISC based technology for the next generation of machines - liquidators willing.

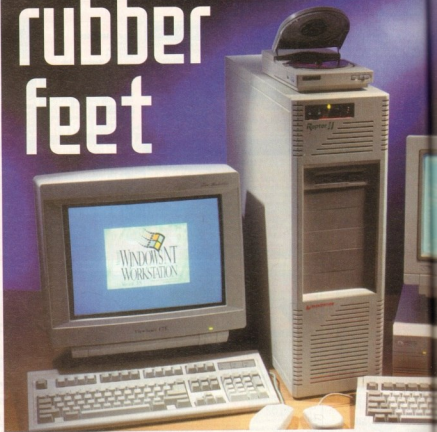
However, as is often the case on the Amiga, a third-party developer has already taken the first step towards RISC via the Raptor rendering engine.

DeskStation Technologies - the creators of the Raptor - were initially commissioned to produce the Screamer rendering engine to accompany Newtek's Toaster, or to be more accurate Lightwave.

However, although a handful of Beta Screamers did make it out into the industry the project never came to full fruition, at which point the partnership dissolved leaving DeskStation with a lot of

development seemingly down the drain. Undaunted, they went on to complete the project under their own steam, the end result being the Raptor II and Raptor Plus Workstations. Not only did the company

complete the project, they in fact improved the original specification by effectively doubling the speed by adding the very latest R4600 RISC chips to the system - the fastest CPU's available in



Featuring some of the most technically impressive visuals to be seen on the Amiga, Super Standoff combines the latest in 3D-rendered sprites coupled with old style gameplay



Operators opinions

Although *Amiga Computing* has had the pleasure of a Raptor II on test, Team 17's John Allardice has been lucky enough to be at the controls of the Raptor Plus for quite some time.

As you can see from the screen shots, John is no stranger to Lightwave. As a result he's the guy to question when it comes to the finer points of the new union.

As any 3D animator will know to their cost, experimentation is the key to quality images and animation. Basically, the more test renders you make the better the end results. And in John's opinion this is the real benefit

of the Raptor. Having the power to experiment makes all the difference. You learn by experience and courtesy of the Raptor - the learning curve is transformed from a mountain into a molehill.

Aside from enhancing mastery of the software, John is also particularly impressed by the Raptors ability to handle some of Lightwave's advanced animating options with ease.

During testing, full video frames which take perhaps 30 seconds to render normally only took between two to four seconds longer when rendered with time consuming extras such as

motion blur and particle blur added. Normally adding such options dramatically increases rendering, but with the Raptor the difference is barely noticeable. In fact to illustrate how fast the system is, John's main complaint was the time taken to save images to disk.

On his existing system the average frame takes around 17 seconds to save - which is often half the time taken to render the actual image itself.

It's a testament to how much impact the Raptor has had on Team 17 that they have already ordered a second Raptor Plus to accompany their existing machine.

twin, CPU set-up, thereby matching the original Screamer speed for approximately half the price.

OK, we've mentioned it's fast, but how does a RISC-based rendering engine link up the Amiga? A good question, with Ethernet connection being the answer. Fortunately there's much more to the Raptor II than simply a super fast CPU.

DISGUISE

In reality, each Raptor II is in fact a fully fledged RISC-based PC workstation, complete with its own monitor, mouse, keyboard, CD-ROM, SCSI II controller, Ethernet and 24-bit video board all running under WindowsNT.

As a result all you need is a compatible Ethernet card in your Amiga - the hydra III being the preferred choice. Once the two are connected all that remains is to install



WITCHWOOD.

A "Zelda" style adventure for the PC, A1200 and CD32 platforms.

Developed by SYNERGY for Team17 S/A.

Witchwood - an eight-way scrolling arcade adventure with elves, fairies and other fantasy oddities

The Dream team

Available within the next few months are selections of games featuring the delights of 3D rendered scenes and action. The two most touted titles are Super Stardust and Alien Breed: Tower Assault, the former being an updated sequel to Asteroids with large and glossy 3D knobs on, and the latter the sequel to the top-down classic that includes a rather impressive introduction, as detailed elsewhere in this article.

King of Thieves, also available on the Amiga, is a blend of risk-style strategy and arcade action where the player must amass as much riches, land and power as possible by planning and invading various castles and strongholds. Again, the game will feature rendered cut aways, intro and ending to add to the atmospherics.

Witchwood, a scrolling adventure game, and a host of other titles are also making an appearance next year. From what we've seen so far of the work in progress, all dispirited and gloom-laden Amiga game players will be pleasantly surprised.



Martin Brown, Creative Director of Team 17

the ScreamerNet software and the Lightwave rendering engine onto the Raptor. The is achieved by actually installing the software on the Amiga which in turn adds the necessary software to the Raptor via the aforementioned Ethernet connection.

After installing these two disks of essential data you're off and running. In fact the floppy duet are the only elements that require installation by the user, as each Raptor ships with its Windows NT operating system pre-installed.

I must admit I find the choice of Windows NT as the preferred OS rather annoying, simply because of the massive amount of system resources it demands. However, that's NewTek's chosen OS for

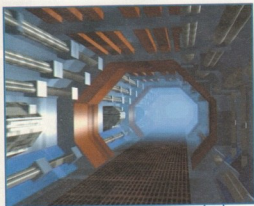


fact on by adding to the ble in the existing range. As a result the Raptor Plus now pumps out rendered images 60 times faster than a standard 25Mhz A4000, while the Raptor II manages roughly half that via its single, rather than



All Terrain Racing is another of Team 17's arcade orientated titles





network rendering and given its prowess in this particular area, I suppose it's a wise move.

But even so, the fact remains that in order to run Windows NT 16Mb of RAM is a minimum – simply to boot the machine. Fortunately the Raptor II ships with 32Mb of 36-bit RAM as standard, which can be expanded to 128Mb if the need arises.

EXPANSION

Its bigger brother, namely the Raptor Plus, ships with a massive 64Mb as standard – which again can be expanded to 128.

When it comes to storage you receive a 500Mb hard drive as standard, split into two partitions, one being dedicated to import and storage of Lightwave scene files and texture maps, while the remaining drive is left to Windows NT and any

other software you see fit to install.

Obviously the NT version of the infamous windows has real appeal to those running the Workstation as a network server, but as a basic OS for a rendering engine it does seem to be a case of overkill. However, it must be stressed the Raptor is sold as a complete computer which, when the need arises, can double up as a rendering engine for other machines.

In fact given the necessary Ethernet connections, customised Amiga software and the installation of the appropriate rendering engine, there's no reason it couldn't turn its hand to just about any application – in theory.

As existing Lightwave 3.5 users will be well aware, the program boasts an SN – alias Screamer Net – button on the layout control panel and it's from here you make the connection with the Raptor.

Thanks to this mysterious addition to the menu bar you have the ability to use up to eight processors connected via a Windows NT network.

As a result, the potential speed of a

Thanks to this mysterious addition to the menu bar you have the ability to use up to eight processors connected via a Windows NT network.

fully populated system is mind numbing – and would theoretically result in rendering times approaching 500 times that of a standard A4000 040.

As mentioned above, the two Raptor variants ship with one and two CPUs respectively, so it's possible to add four Raptor Plus's or eight Raptor IIs to a single Amiga.

SIMPLICITY

Assuming the necessary connections and software are in place, setup is pretty straightforward. Once Lightwave is booted the first task is to initialise the Raptor by clicking on the button provided in the SN menu.

If all's well you then simply Send All

System speed

Although the Raptor system makes a dramatic difference when it comes to Lightwave, it must be stressed fully that it only has any effect on Lightwave rendering.

As a result, the rest of your system will still depend entirely on the speed of your existing CPU. As it stands, the best way to increase processing times across the Amiga in general is by adding a Warp Engine or a similar 040 accelerator to your system.

However, by the time you read this article the first generation of 060 accelerators should be shipping, which if the literature is to be believed will provide speeds around 12 times that of a standard 25Mhz 040 A4000.

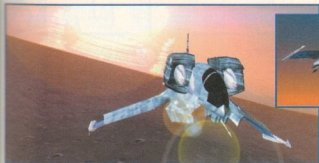


Above and across: The power of the Raptor turns the dreams of Team17 into a 3D reality.



The results of the Raptor Plus and Lightwave will appear throughout the CD32 version of King of Thieves, a work-in-progress, risk-based arcade strategy game. What a mouthful






Files to the Raptor/network. At this point the entire Lightwave scene is copied to the rendering engines hard disk.

If you then select render the power of all the available CPUs on the net are put to work rendering the scene.

If for some reason you don't like the end results, you can simply alter the necessary elements and *Send Scene File*, which updates the Raptor version of your latest alterations – a big time-saver over sending the entire scene via the *Send All Files* button.

It's also possible to update objects and images within the scene via separate buttons, as well as update the Raptor version of the rendering engine when you receive a new revision to Lightwave.

When you've finished a particular scene *Clear All Files* not surprisingly removes the existing scene from the rendering engines hard drive, ensuring there's plenty of space for the next scene. 

Verdict

By now I'm sure you've spotted the price tag for both versions of the Raptor. As a result it goes without saying the system is definitely for the very serious end of the Amiga market.

However, even at such a jaw dropping price the system nevertheless brings the Amiga true workstation performance at and even beyond that of the most powerful Silicon Graphics systems – and all at a fraction of the price.

The Amiga wouldn't be the same without that group of programmers, artists and management in Wakefield, Yorkshire that have consistently produced games of high calibre for the last few years.

Team 17 are synonymous with the image of a small, youth-based bunch of enthusiasts who decided not so long ago that they wanted to do something with the Commodore machine that many other companies were having trouble doing – producing playable games.

Before you begin wondering how much Team 17 may have paid this financially starved writer to write such a glowing report, it does well to bear in mind that the average score for all their games across all magazine formats is above ninety percent. Not a bad track record.

As one of the only software companies remaining that hasn't been bought out yet by the likes of Electronic Arts or Virgin, the independent, old school of thinking Team 17 still have an extremely healthy financial backbone to apply pressure to when the need arises for investing in the future.

The Raptor Plus was one such decision. Costing in the region of £14,000, it was seen as a must-have piece of kit for the graphic artists on site. Martyn Brown, creative director and Mr Firm but Fair guy round the office, explains their predicament: "The Amiga 4000 can only render so much at a time and seemed a waste of John Allardice's [3D animation artist] potential. We came up with two options to resolve the situation – buy a Silicon Graphics machine or use the Amigas we already have."

DeskStation Technology's accelerator was and still is seen as the best choice. "On hearing that it was 60 times faster at rendering than an Amiga 4000, we went out, contacted Bill Owen at RAMiga International and bought one."

But why not an SGI? "There was no point," explains Martyn. "We already had Amigas and we would have to scale down the output of the SGI anyway for whatever machine we're targeting. Two to three platforms at the moment can show the actual output from the Raptor

and Lightwave. The system is highly cost effective."

Indeed, it would seem that DID, the 3D programmers behind Inferno and the classic TFX, have plans to do the same. As one American artist said, unlike an SGI, buying a top-spec 3D Amiga system "is cheaper than a house."

The financial and time saving benefits offered by the newly installed Raptor Plus are already on ample display. "With the Raptor, you can do a minute or two of animation in a couple of days where it might have taken two weeks before. The old cliché 'time is money' is very appropriate," states Martyn. "Instead of having three guys doing an intro sequence, it's just John and the Raptor."

Martyn is sure that the introduction to Microcosm, which took a long time to put together, could be created in two months with their current setup. Unlike the much hyped and overrated Paygnosis title though, Team 17's creative director is adamant that flashy intros featuring glossy 3D graphics will not become the focus of their forthcoming games.

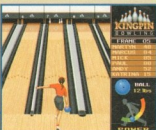
"I'm not into interactive movies. The only reason we're making the investment in the high end kit is to add atmosphere and a movie-like backing," said Martyn. "With this hardware, we can make everything look a lot better. The results add believability to the overall title – we've always concentrated on gameplay."

With the Amiga at the core of all their operations and a substantial catalogue of games to be released on the Commodore machines over the next year or so, there is no fear of Team 17 jumping boat and leaving its fans in the lurch. "People who say that you can't make money out of the Amiga are talking crap – the Amiga games are still at the top of the Gallup charts consistently."

Indeed, Martyn is quite clear on why many companies lose money when they release a product on the 1200. He believes that most releases aren't worth the disk they're stored on and punters just aren't interested in being ripped off.

As for future releases, there are some very promising titles on the way. Product: Raptor II/Plus

A dinosaur in the dales



King Pin - another budget release from Team 17. Featuring both rendered animation and sprites, this will hopefully be the first successful attempt at converting the popular sport to the amall screen

The bottom line

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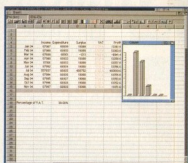
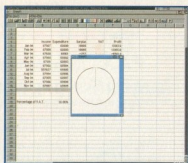


When it comes to spreadsheet programs, Amiga accountants have not had the benefits of industry benchmarks like Excel or Lotus 1-2-3. However, there are some highly capable alternatives available to them.

Though Maxiplan has been at the head of the field for a long time, now the developers of TurboCalc are hoping that their V.2 can seize pole position.

TurboCalc clearly aims to outclass the competition as far as looks go. The attractive interface comes complete with quick-click icons which make accessing commonly needed commands faster and more user-friendly than keyboard shortcuts.

The concentration on appearance, however,



Creating charts is surprisingly easy and including a 3D effect actually makes data exciting! Well, maybe not...

Looking the books is painstaking enough without struggling with slow software. Rev the process up with TurboCalc Version 2.0...

Accountancy accelerator

has not been at the expense of power when it comes to data manipulation and calculation. In fact there are over a hundred functions and 120 Macros available.

All the features you'd expect are there. Selection can be done using the mouse and finding a particular cell is made easier because you can create a grid. Dragging the mouse lets you highlight a range.

Data can be cut, copied or pasted either by using menus or icons, while rows and columns can be inserted without messing up the calculations in the rest of the document.

PROTECTION

If you're using this package at home you might not want the kids poking into your personal finance files, so a protection option is provided in Turbo which should prevent any such problem.

There's also a facility allowing the user to hide rows or columns. This is important because confidential information can be included into the spreadsheet's calculations without revealing it to unauthorised people.

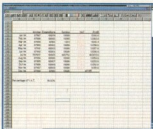
A vital time-saver is the facility to generate a series. Using it you can, for example, automatically generate a row for each day, week or month of the year. It can also be used to create a series with data.

Imagine a set of calculations is based on VAT being fixed at 15 per cent. If the VAT rate changes later, Turbo lets you alter the formula for the entire document without too much trouble by using the edit functions.

The integrated database is a powerful addition with search, sort, copy, extract, delete and other facilities such as number of matches, average and so on.

Column, bar, line, point, step and pie charts are all available. Naturally these can be sized and positioned as required and, better still, colour and 3D effects can be incorporated.

The package allows you to choose different fonts for headings and so on, and these can be enlarged for a more emphatic look. Frames can also be drawn up to highlight



Turbo lets you highlight a block of data using a frame

fields of data. Add to this the ability to change the background colour of sections of the sheet, plus alignment and column/row sizing functions and it becomes obvious that Turbo is a winner on this count.

A final feather in its cap regarding presentation is its integrated graphic print. It transfers the processed sheet as a free scalable graphic to the printer and, thanks to the new scalable character set of OS2.0, produces the best quality print.

Sadly, the documentation supplied was not up to the standards set so far. An attempt has been made to cater for the beginner but the

Small faults aside, TurboCalc is an excellent product. In fact, our accountant was impressed enough to compare it favourably with Excel, with which it has a lot of similarities.

The speed and simplicity offered by the interface has by no means compromised its power as a pure spreadsheet analysis program. What's more, Amiga accounts work has never looked this good before.

To be honest, most home users won't use more than a fifth of the functions available, but its flexibility is commendable all the same. Already popular in Germany, Turbo deserves to be a winner over here.

In charge

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The bottom line

Product: TurboCalc V2.0
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Price: £59.95

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Implementation	8
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Instant ANIGA

Paul Austin explores the ultimate
add-on for 3D couch potatoes

eye



Instant storyboards at the touch of a button

With the flood of Lightwave add-ons pouring in from across the pond, it may seem a little hasty to pick one package as the best of the bunch. However, after spending a few hours in the company of Wavemaker it's a risk I'm more than willing to take.

Unlike the vast majority of third-party offerings, Wavemaker doesn't actually add any new features to the basic Lightwave repertoire. However, what it does provide is nothing short of a dream come true for countless commercial animators.

In short, it brings automation to the sometimes painful process of 3D design and animation. In essence, Wavemaker does for 3D what Scala & Co. have done for 2D images and conventional Amiga animation.

Basically the program is the first to offer point and click 3D design. During installation a huge collection of motion paths, objects and

even the odd texture map is added – all neatly tucked away in the Wavemaker directory.

After the five disks have finished adding their contents to your system, all that remains is to fire-up the software and sit back in amazement as the software goes to work compiling animated scenes in seconds, which normally would take hours of painstaking attention to detail.

Although a slight exaggeration, this is almost exactly what happens when using the software in its simplest form. The only thing required is an existing Lightwave logotype object. This can be anything you like, usually consisting of extruded text.

As you're probably aware Lightwave, or rather modeler, can convert PostScript fonts into 2D polygons which in turn can be extruded into 3D. Assuming you have either a string of text or an existing 3D logo, you simply select it and you're off. At this point the

A fly in the ointment

As you've probably gathered, Wavemaker is impressive, but there is one slight problem. Although designed to work hand in hand with Lightwave, I'm afraid in certain cases it doesn't.

As you can see from the screen shot, certain aspects of the interface are dedicated to interacting directly with Lightwave – the idea being you run both programs simultaneously.

For the most part this option works perfectly. However due to what Axiom Software describe as a bug within Lightwave3.5, the program cannot transfer scenes directly to Lightwave as it can with earlier versions.

The problem is caused because 3.5 demands at least one light in every scene file. In the past this wasn't the case, and as a result Wavemaker doesn't including a light as part of its scene files.

Unfortunately, like many other third-party products it has been caught out by the surprise release of 3.5. According to a spokesman at Axiom they've already contacted Lightwave's designer and he has promised to rectify the problem with the next Lightwave upgrade – due

in November. In practise this means you cannot run both packages simultaneously, as Wavemaker automatically updates the present Lightwave scene whenever you save a newly created script – at which point Lightwave crashes.

Although a seemingly terminal problem, there is a simple solution. You simply create and save your script, at which point a Lightwave scene file is generated automatically.

You then load Lightwave, import the scene manually, save it immediately – at which point a single light is added by Lightwave – then reload it and everything works perfectly.

In practise this is only a minor inconvenience, however it does affect one feature quite dramatically. Unfortunately, due to the problem it's impossible to use the Render Frame feature within Wavemaker, as this demands you save the script with Lightwave running in the background, which of course causes a crash.

Fortunately this is the only feature lost as all others work perfectly, regardless of whether Lightwave is active or otherwise.

object is auto-scaled to fit in with the other elements in the newly created Wavemaker scene. However, this doesn't mean your existing logo will be overwritten. Thankfully the program simply scales the object and saves it out with the same name plus a WM suffix – therefore leaving your original object safe and sound.

Once scaled you have three choices. Firstly, you can let the software apply a little artificial intelligence and build an entire animation automatically using its own selection of objects, motion paths and colour combinations.

The second alternative is to go for one of the 16 Prefab animations. In this case you have a greater degree of control courtesy of a pop-up requester which enables you to define the duration of the logos introduction plus the amount of time – in frames – that it will be held in position.

INTERCHANGE

In addition you're also given the choice to use your existing logo, exchange it for another, or use a null object, which in reality is simply a reference point which denotes the location of a would-be logo in the scene – the idea being that you use Lightwave's replace object feature to interchange the logos of your choice – or perhaps leave it out altogether.

The third, and by far the most flexible option is to build your own animation from all the elements on offer. Although this involves a few extra mouse clicks, the end results are well worth it as layer after layer of animated objects accompany your logo – each with its own designer motion path and surface attributes.

At this point it's perhaps worth explaining what kind of animation, and perhaps more to the point, what kind of animator Wavemaker has been designed for.

Wavemaker is unlikely to win you any prizes as a 3D animator. However it's very likely to secure many a commercial contract.

2 candy



A classic example of instant animation, simply add a few elements and voilà, a corporate classic

As ever it's difficult to envisage animation on the page, but if you've ever watched the interludes during the Super bowl you've seen exactly the kind of animation Wavemaker can create.

In short, fast and glossy American eye candy, the stuff that corporate types kill for. It's glitz and glamour approach may not appeal to your artistic sensibilities but the end results are about as eye catching as anything you'll ever see on-screen.

The basic system revolves around adding a user definable motion path for your logo amidst a sea of what are known as nurmies. Nurmies being a term coined by Ron Thornton, the British animator responsible for the Lightwave sequences in Babylon5.

A numie is simply a generic name for anything and everything that has no real purpose, other than to add a little more excitement to a scene. The phenomena usually

take the form of flying stars, streaks, and all manner of revolving shapes which invariably fly around in all directions.

Take them away and you have a boring bounce-on, bounce-off logo anim, add them and you have what appears to be a massive 3D production number.

Admittedly, Wavemaker offers more than just automated numie generation, but in essence that's what's on offer. Cliché perhaps, but I guarantee the package would pay for itself within days. Obviously, once the novelty of the Smart anim and PreTab options has worn off the vast majority of your time is spent compiling your own designs from the elements on offer. But even in this, the most complex option, a dozen yes/no mouse clicks still completes the entire process.

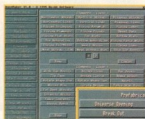
Once the ubiquitous logo is chosen you then pick between one of 75 intro motions, hold positions and outro styles – all shown as miniature graphic push-button selectors.

After specifying motion you move on to defining the pause prior to the introduction, the time taken for the intro itself, its pause in position, the outro, and finally the frame time before the anim concludes.

Next comes background selection. Here you can choose between a solid, a gradient – eight styles are provided with user control over both the light and dark colours – a single image or image sequence.

Following this comes the all important elements, consisting of eight separate layer locations each holding its own animated collection of objects. Once selected, the majority pop-up a second requester enabling you to define its direction, rotation if applicable, speed and colouring.

In total there are 48 separate effects on offer, each of which can be customised. Add



The basic control screens – clean, simple and incredibly effective



all eight layers together and, as you can imagine, the end results can be impressive.

Next comes camera control. Admittedly this is pretty basic stuff with the options ranging from: A little closer, Default and Back a little. However, one of the beauties of WaveMaker anims is the minimal use of key frames, so there's no problem editing object or camera movement when the scene is loaded into Lightwave.

The final element is to decide which resolution and rendering settings your new scene will employ – again all very straightforward.

As you'd expect you can choose between resolutions, but better still, by using the advanced options it's possible to specify whether you require anti-aliasing, the aspect ratio, and whether or not to use field rendering and motion blur.



Verdict



Obviously the problem of direct scene importation is slightly annoying, but to be honest it isn't a major problem. As a whole, Wavemaker is nothing short of a masterpiece, and for anyone who does a lot of corporate videography it's an absolute essential. Quite simply add-on software at its very best.

Whistles and bells

Although Wavemaker generates its own script files and Lightwave scene files, it's also more than happy to operate with standard Lightwave scene files. As a result it can also prove an essential overall production tool.

A particularly pleasant addition is the ability to generate storyboards from any Lightwave scene. To produce a storyboard you simply select a scene file and specify whether you want nine or 16 panels in the storyboard image.

The software then automatically divides the scene by the chosen number and sets about rendering those frames in the resolution of

your choice. Once rendered, it then loads each frame for the storyboard into the supplied scene, mapping the newly created images onto a series of panel objects. This is then rendered separately and you end up with a complete storyboard, ready to use as a reference for yourself and your clients.

Another excellent addition is the Build Sequence option. A click on this button reveals a requester which can hold 15 separate scenes that can be rendered in sequence automatically.

Each scene location has its own output requester, so you can specify individual save locations for each,

with the images saved as either RGB's or Framestores. And of course frame start, stop and step can also be user defined.

Thanks to this excellent addition, you can set-up a huge batch render of multiple scenes and leave the combination of Wavemaker and Lightwave to generate the whole thing automatically over as many hours or days as it takes.

It's also possible to render a single scene using the Start animation button. Quite why you wouldn't quit out and render direct from Lightwave is a mystery, but I suppose it's been added for completeness.

SYSTEM ESSENTIALS

RED = Essential BLACK = Recommended



The bottom line

Product: Wavemaker
Supplier: Radiosity
Tel: 0101 612 787 0855
Fax: 0101 612 787 0856
Price: \$249.99

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

Professional Clipart, Fonts, Objects & Sounds for all Amigas

SOUND FX

- SPF001 VEHICLES
Various existing, running etc.
- SPF002-2 MOVIES
Inc. 2001, Monty Python, Wizard of Oz, Starwars etc.
- SPF004 STAR TREK
A range of Star Trek SFX
- SPF005 HOUSEMUSIC
Samples of Housey effects.
- SPF006 ROMBASS
Bass sound fx.
- SPF007 ALARMS
Car alarms, security alarms, etc.
- SPF008 HUMAN
Human mechanical sounds.
- SPF009 MACHINES
Mechanical machines etc.
- SPF010 EXPLOSIONS
Explosions and breaking effects.
- SPF011-3 CARTOON
Bugs Bunnys and friends.
- SPF012 ALIENS
Creepy things.
- SPF014 WEAPONS
Gun fire, grenades, explosions etc.
- SPF015-2 CREATURES
Large collection of creature sound effects.
Inc. dogs, cats, chickens etc.
- SPF017 NATURE
Wind, thunder, hurricane etc.
- SPF018-2 MUSICAL
High range of musical effects.
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Creaky doors, drips, explosions, beeps etc.

SAMPLES

- V4211-15 HAVE SAMPLES 1-15
Top quality new samples 150s.
- V4065 BASS SAMPLES
V253 IFFF SAMPLES A BRIBBLE
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Huge range of varied vocal effects, ranging from Roars to Choir etc.
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Large collection of very high quality lovable beats. Perfect for track backs.
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IMAGINE

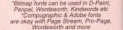
NEWS, TIPS & TUTORIALS



The perfect companion for all Amiga users.
This Amiga guide contains all the information you need to know to get the most out of your Amiga. It covers everything from the basics of using the Amiga to advanced topics like programming and networking. It's a must-have for any Amiga user.

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V264 FONT AND FONT UTILS
V603 FONTS
V807 IFF FONTS
V808 IFF FONT EDITOR
V1502 HEADLINE FONTS
V1503 FONTS
V1715 RSI DEMO-MAKER FONTS
V1721 EXILE COLOUR IFF FONTS
V2058 RSI FONT EDITOR
V2146 IFF FONTS AND LOGOS
V2146 HEFTY FONTS
V2329 FONT FARM
V2529 IFF FONTS
V2530 BITMAP FONTS
V2603 DELGATE COLOUR FONTS
V2674 COSMOPOLITAN FONTS
V2687 MINI FONTS 8
V3007-5 COLOUR FONTS
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V3009-5 PALLETTE FONTS 1-10
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V3381-2 ADOBE FONTS 1
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V3533 FONT FARM 3
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It would seem that all computer packages need a main character – someone or something who's likeable, hopefully individual and that the player wants to control and manipulate.

Games have their ragtag team of heroes – Sonic, Mario and James Pond to name but a few. Edutainment, that ghostly description of "fun" learning titles, has Noddy, also Mario and now Bertie Bunny, the musical white rabbit normally found up a magician's sleeve.

The Canadian-born bucktooth is the presenter of the Making Music package that consists of two disks and a sheet of paper with the briefest instructions summarised on it. The software is aimed at children between two and 12 – the producer boldly claims that Bertie has enough scope to appeal across such a wide range.

If, as a parent, you were hoping to buy the package and then leave the kids alone with it to make themselves busy, you would be sadly mistaken. First up is installing the software to your hard drive, then troubleshooting any problems that should happen to arise, then reading the instructions which unfortunately, although well written – are on screen and not in the form of a printed manual.

Once that has all been sorted, it's onto the main program itself which is easy to use after the first attempt. Split into three distinctive sections, the user is able to journey through each part in two differing ways. For the very young, it's possible to "bang" on the keys which simply chooses whichever instrument or icon that the Bertie is bouncing on at that time.

The mouse comes into play for the more advanced in years whereby they can select what they want to do like any other package. The actual sections that make up the program are the instrument room, the tune room and the studio.

Each segment is displayed with the help of colourful icons and Bertie Bunny who bounces round the screen, following your

Play4bunny



and London Bridge make up part of the repertoire. The melody of the tune is played by the top instrument, the counterpoint by the second and so on. It is possible to just choose a single sound to play the tune as well.

Four more instruments and tunes are available from WindShadow, the makers of the package, if the registration disk is sent to them.

The sound effects that come with the title are relatively effective and can be recognised in relation to their real life counterparts.

My only gripe which would even send a three year old up the wall after awhile, is the incredibly annoying jumping noise that Bertie makes every time he moves anywhere. It grates on the nerves and I was nearly assaulted by the little office after only five minutes of using the little furry fellow.

Graphically, the whole proceedings are rather crude and uninspiring. While there is supposed to be a child-like style to the graphics, it does look shoddy and amateurish.

As far as the edutainment factor of the package goes, while two to seven year olds will enjoy tinkering with the keyboard and hearing the tunes using different instruments, I'm just a little cynical about how interesting your average nine to 12 year old will find Bertie's rather limited set-up.

It would have been nice to see more sections with more options for older children such as special sound FXs like sustain, a basic recording and playback facility and a host of other options.

As Bertie Bunny stands, it's ideal for the very young and absolute and utter beginner but for a child with a few years behind them, he/she is going to find the package lacking in scope.

Oh, and just for a change, Bertie Bunny would appear to be hard drive only.

From out of nowhere comes Making Music With Bertie Bunny, primed and ready to help kids learn how to understand and create their own toons. Adam Phillips reviews

pointer movements. The instrument room consists of several icons representing the different musical sounds – saxophone, piano, trumpet, flute, clarinet, electric guitar, violin and steel drums.

X-HEAD

Using Bertie to grab the instruments and move them, up to four can be selected for use in the studio or tune room. Once done, moving into the studio allows the user to play each instrument individually via the keyboard. On the 1200, only one key can be pressed at a time but on the 4000, up to three can be used simultaneously. The tune room offers eight familiar songs to dabble with – Twinkle Twinkle Little Star, Mary Had A Little Lamb

Select your instruments from the several available



Take a trip into the studio and compose a few tunes

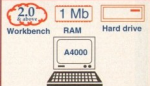


Mary Had a Little Lamb, London Bridge and other nursery classics are available at the click of a bunny hopping button



SYSTEM ESSENTIALS

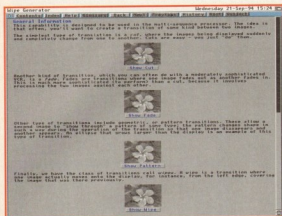
RED = Essential BLACK = Recommended



The bottom line

Product: Making Music with Bertie Bunny
Supplier: WindShadow Software
Phone: 0101 905 836 4400
Price: £24.99

Ease of use	8
Implementation	6
Value for money	6
Overall	6



Clicking on the "Show..." buttons makes the flower transform into a cat in the different ways described.



ImageMaster offers a nice alternative to boring file requesters...

First impressions matter but what's hidden behind the scenes. Frank Nord delves deeper into ImageMaster and finds out

Masterhouse

Well, it's been a long time since I took ImageMaster for a test drive. The copy I bought (v9.23) is ages old now and doesn't even reside on my hard drive any more. Still, I thought to myself, it should be interesting to see what they've come up with for this version.

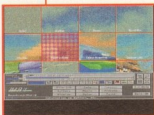
The first shock I got upon opening ImageMaster's box was the fact that the sizeable manual they used to include was gone. I wondered for a second whether there had been some sort of mistake, but out of the corner of my eye I noticed one of the sheets of paper accompanying several disks in an otherwise bare box.

Manual

This sheet went to great lengths to explain that since Black Belt was such an ecologically sound company it would no longer be producing the manual on paper (only later did it say that it's also really rather expensive).

So we have a pirates dream. Software complete with manual on seven disks. But is it a user's dream too? Hmm, well, a manual on a disk sounds odd in theory but there are a couple of problems.

The first is that ImageMaster uses a separate screen for ApAssist, their online manual program, so you have to continually flip screens to go from one to the other. It would make things easier if you could just flip back and forth using the Help key but, unfortunately, that just puts you back at the contents page each time, resulting in the user having to re-find her place all



Reformatable? Amiga High Res? Puh!

the time. The other major problem with online documentation is a lack of portability. Until someone brings out a laptop Amiga you are never going to be able to read this manual on the train.

I would like to be able to go straight into sections detailing special effects, transformations, etc. from the contents page. There are a lot of buttons on it for what seems like introductory stuff that could have all been on one button and then only a couple of buttons where there should be a dozen.

However, there are a lot of good things about this manual. For instance, the little animations playing inside the manual and the interactive tutorials which work by clicking a button on the manual page which takes you back into ImageMaster's interface where you are presented with whichever effect you have chosen demonstrated on an existing buffer, with the option to undo the effect at the end of the demonstration. On now to the program itself.

ImageMaster has always been the leader of the three main image processing packages in terms of effects applicable, and this version still offers more little gizmos to play with than either ImageFX or ADPro.

Uses

Not all of them are very useful, but having a reasonably good morphing package built in to ImageMaster will certainly win it a number of friends straight away.

The stability of ImageMaster also seems much improved (the version I own was prone to frequent crashes) and the interface is a lot more consistent, if still a little overwhelming with the sheer amount of options presented and the names chosen for these options.

As an example, how about cropping an image? Since ImageMaster gives the user such a wide variety of area selection tools, a crop should be a doddle wouldn't you think? But no, try as I might, I couldn't find

a crop command in the interface and I had to resort to the manual which didn't seem to detail a crop command either (even in the index).

Surely some mistake? No, it's just that ImageMaster refers to cropping as "clipping" and hitting the Clip button in the manual brought me to the description of how it is done. Now, this is a trivial example and if it hadn't been about 4am when I was trying to crop this image I probably would have said, "Oh yes, silly me. Black Belt calls the process clipping."

Unfamiliar

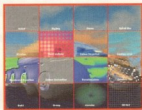
Easy peasy", but it just goes to show that unfamiliarity can breed contempt just as easily as familiarity. (At the time I was even sorely tempted just to load the image into ADPro because it was easier to crop the file in there). Insisting on the user having to type stuff into gadgets is also not in my opinion. If you are going to require AReX scripts for a redraw (why?) then at least

are supposed to be able to relocate your selected area by holding down the right mouse button while drawing the area out - this doesn't work either.

When you get right down to it, what sort of interface doesn't give you any option but to carry on with a process, even if you don't want to, and relies on you being able to hit the cancel gadget while the operation in question is being performed or having an Undo buffer.

Next comes the question of the FilmStrip, ImageMaster's preview window for animation and morphing/warping operations. I don't consider my machine under-specified with 14MB of RAM, but even before I loaded an image there was "No RAM available for FilmStrip". I tried all sorts of things to get it going, but to no avail - if you'll excuse the pun.

Having exhausted all the possibilities I was willing to try to get the FilmStrip up and running, I decided I would have a go at the Wipe tutorial detailed in the manual. After a



Asahi: Image processing at its best.

of the

present the user with a file requester to choose the script from.

While on the topic of niggles with the user interface, why did Black Belt decide to lump absolutely everything in the main executable? The ImageMaster file is over 2MB in size which must make it harder to upgrade than using a modular approach which can be picked apart as necessary.

Other problems include the fact that clicking on the ImageMaster R/I logo in the main interface is supposed to bring up a list of information specific to your computer (it doesn't do anything), and the fact that you

bit of faffing and a crash I eventually got the result you should see somewhere about these pages.

Control

It's really quite good and the stars can be replaced with ellipses, rectangles, etc. There is a large amount of control over these elements including X & Y quantities, rotation and whether or not to have a variable transparency as the wipe occurs. Although it all seems rather horrendous to achieve, after your first couple of wipes you'll wonder what all the head scratching was about.

Are you well supported?

As Black Belt incessantly reminds you through all the literature accompanying ImageMaster, it is probably the finest Amiga software company around in terms of support and updates.

However, I spoke to Ben Williams of Black Belt on the net earlier this year to enquire about the latest revision of ImageMaster (remember, my version is about two years old) and he was very helpful, as long as I had a credit card.

Since I refuse to own one of the Devil's playing cards I was in sthuck. I asked him to check that they had my name and address on their database as I had never received any info about upgrading or news about the many bug fixes that went through from the version of ImageMaster I owned to the present one, and I was somewhat shocked to receive the reply that Black Belt never sends any info out to its registered users, let alone any updates.

If I wanted to buy the latest upgrade it would cost me \$25 plus shipping, regardless of whether it was an upgrade or a bug fix. I don't mind paying for upgrades but I really think that users who loyally support a package should be entitled to receive free corrections of programmers mistakes.

Retargetable? Someone say retargetable?

As those of you who read this rag regularly know, I am the proud owner of a Picasso II graphics card. So it was with delight that I read the blurb on ImageMaster's box saying it was retargetable.

How disappointed can you get? Very. ImageMaster doesn't even use the display database for its preview screen choice and its choices for retargeting are limited to Firecracker (an NTSC frame buffer by Impulse that hasn't been made for a good couple of years), HAM-E (by Black Belt, also no longer in production), Harlequin (and thus Retina) and AGA.

I don't consider being able to run on AGA "retargeting", but I would expect to see an option to choose the screen mode your self rather than a 1.3-type "Do you want HiRes, do you want Lace?" request. Come on, Black Belt get into the Nineties, man.

ImageMaster is certainly one for the serious image processors out there, with its ability to show 1D cross-sectional palette information and spectrum analysis, logarithmic representations and a gorgeous 3D histogram, whose only fault is that it can't be rotated at all.

If you know your Variance Conversions from your Forced Dynamic Ranges then ImageMaster is the package for you.

Offerings

As for the rest of us, well, I'm not sure. ImageMaster doesn't really offer all that much over the ADPro/ImageFX axis other than its price which is much lower than either of the other two.

It doesn't give as many file formats as the other two but does include ones that are fairly abstruse, such as NASA's JPL format which is probably used by about ocooh, five people in this country - this is the type of failing that ImageMaster exhibits.

In summary, while ImageMaster is a superb package in most respects it is let down by its insistence on an esoteric interface, its odd method of retargeting the display and its slow speed.

SYSTEM ESSENTIALS

RED = Essential BLACK = Recommended



Hard drive
1MB Chip RAM
4MB Fast RAM
Workbench 2 or higher



Hard drive
2MB Chip RAM
Lots of RAM
68020/68030/68040
Workbench 3

The bottom line

Ease of Use	4
Implementation	5
Value for Money	9
Overall	6

At SoftWood we have o

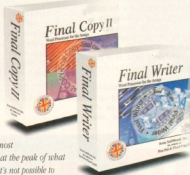
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Final Copy II Release 2

Our word processors go beyond simply producing normal letters and documents, at which they naturally excel, and progress into a world where "how the whole document looks" is just as important as "what it says". Admittedly, this can be achieved with Desk Top Publishers - but they're not



so easily used as word processors, especially when a good looking letter needs creating quickly - they're far too cumbersome.

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Final Copy II (upgradable to Final Writer as your needs grow) and Final Writer are the only word processors that

give you **PerfectPrint™** - a unique printing advantage giving silky smooth industry Standard Adobe™ Type 1 or Nimbus Q scalable outline fonts direct to any printer (even dot matrix and ink jet), in both landscape and portrait. Others use a restrictive and unnecessary jumble of different fonts with complex driver programs for outputting to various printers. The launch of Final Copy II introduced **FastDraw™** - a special set of structured drawing tools for constructing lines, borders, arrows, circles etc. directly on the page.



Final Writer, extending innovation...

Now, as others are just starting to add similar features, saying they're "revolutionary", Final Writer extends the innovation further with **FastDraw Plus™** - adding even faster and more functional options, including a new rotate command. Final Writer Release 2 is again leading the way with the introduction of **TouchTools™** and **PowerUser Bar™** technologies. These features give the user a definable area at the top of each document window where up to eight "one-touch" button strips can be configured. Each strip contains easily customisable sets of functions giving instant access to all the major commands/features - with a simple click of the mouse! There is even a set of buttons allowing "one-touch" selections of font style and size plus variations including Plain, Bold, Italic and Underline! It's no wonder we've received top reviews, ratings and awards from all the leading magazines...

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FastDraw™ (on-screen drawing tools for use with the generation of borders, boxes and lines or arrows at any angle), Multiple Newspaper Style straking columns, **PerfectPrint™** (the unique ability to use **Post Script™** outline fonts on absolutely any printer in either portrait or landscape) and Text Auto Flows around graphic objects and imported pictures (placed anywhere, scaled or



cropped) with the highest print quality. Text can also be printed over graphics. It's features like these that explain why there are some professional magazines, with 200+ pages, that are produced entirely with Final Copy II! Publishers, and many others, have quickly discovered that...

No other Amiga Word Processor in the same category, and at such a competitive price, has all the capabilities Final Copy II users have always taken for granted! Isn't it time for you to take a look too!

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Final Writer was launched last year with the power user in mind. It is the Amiga's only Hard Drive compulsory word processor - neither performance nor features have been compromised to maintain compatibility with floppy drive only systems. As well as having a unique list of features for the author of longer documents and publications - automatic indexing, table of illustrations, table of contents and bibliography generation - Final Writer with its **TextBlocks™** was the first word processor to put a character (or group of characters) anywhere on the page, at any size and any angle. It offers a virtually unlimited ability for effects with graphics and text. Just like Final Copy II, Final Writer also includes **PerfectPrint™** and has a set of tools to create structured graphics with new **FastDraw Plus™** (now with additional functionality that includes new options like rotation). And... you can also access features unique to SoftWood with both the new **Touch Tools™ & PowerUser Bar™** "one-touch" technologies. Simply "clicking" a button, means you can define, change and save such things as the Paragraph Styles (ie. Font, Font Size, Text Position, Bold, Italic, Underline etc.) and Layout Options (left, right, centre or justified, bullets, line spacing, indents etc.). The options you have through single button selections are nothing less than remarkable! Indeed, one magazine heralded these as "the closest thing to Microsoft Word to appear on the Amiga". Also uniquely, Final Writer can import, scale, crop, view on screen and output structured PostScript EPS clip-art images (we supply a hundred free with the package) to any printer (2-mb system RAM required). And... if you own a PostScript printer Final Writer is the only word processor with a set of output options including scaling, crop marks, thumbnails and halftoning. Combine features like Aliex/Macros and **Text Clips™**, with others new to Final Writer, including floating palettes and UNDO: REDO (on text, formatting and graphics actions) - and you have... **Final Writer Release 2**. Available now from SoftWood Direct (and all other good Amiga software stockists) - offering you the... **Perfect Word Processing/Page Publishing Solution.**



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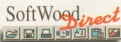
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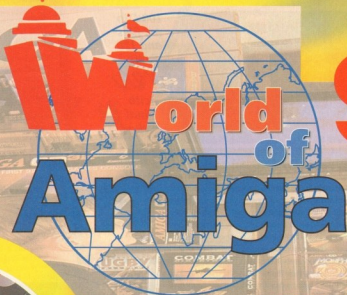
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94

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Dodgy dealings...



Always on the look out for a bargain, my eyes left their sockets when on page 127 of issue 77 of your mag I saw the CompuDeal Multimedia Systems advert. Wow! Four games for thirty quid plus P&P.

Hmm, bankrupt stock, that's why it's so cheap. So in a rush to avoid disappointment I popped my cheque off in the post first thing.

One month passed and I honestly thought I'd lost my money. But worse than that I'd unknowingly bought pirate software. On opening the package I discovered 11 disks which had been very obviously ripped-off from originals.

I can't understand why people use this trash, it's unreliable, buggy and god knows how many viruses they include. I'd much prefer to pay for an original which includes the plot and instructions, which in turn lead you into the game, than receive four or more pirated games which leave me cold.

It's false economy because straight away you're tempted to cheat which shortens the game's life, you get bored quicker, you buy or obtain more pirate software, the software houses stop releasing games, the pirates move on to something else and you're left with an expensive table decoration – plus a load of very dodgy software.

Get rid of the pirates before they rid you of your Amiga. So take my advice and be careful who you order from. Thirty two pounds for 11 blank disks, that could have bought me a full game – false economy or what!

A Jenkins, Crewe

Well, before joining in to flog the pirates, it's worth stressing that the advertisers in question are already being tracked by the police, FAST and indeed *Amiga Computing's* very own advertising department.

Unfortunately it appears CompuDeal Multimedia Systems are a classic hit and run operation – one big score and off into the sunset.

Obviously, with investigations still in progress it wouldn't be wise to go into further detail, however rest assured that everything possible is being done to track down this particular bunch of bad guys.

By the nature of mail order it has obvious appeal to such criminals. The only crumb of advice I can offer is to only ever buy from regular advertisers. If the name's familiar it's fairly safe to say your money will be in good hands.

No matter how glossy an advert or enticing the bargains don't be fooled, the cost of producing an ad is only a tiny fraction of what a professional operation will pull-down from Joe public if the con trick comes.

For all those, who like yourself, have been stung by this particular scam I can only apologise that we were duped into accepting their advert in the first place – which of course will never be paid for.

As for your comments on pirating in general, it's pleasing to see there are still people out there who realise what copying will mean in the long term. No market, no development, no Amiga, it's literally that simple.



Advice line

I am seeking advice on a database purchase. It should be capable of storing a vast number of entries, importing graphics and sound and possibly adaptable to incorporate an initial menu system.

I have thumbed through your pages of PD offers but I'm not sure what the individual software offers. I am not specifically looking for PD, it could be a commercial package if there's anything suitable.

P.A. Newson, Great Yarmouth

Strangely enough we had a fairly similar query in last month's column. In your particular case I'd suggest SuperBase Pro4 as the ideal solution to your database dilemma.

If going commercial isn't a problem it offers the ideal solution with support for both sound and graphics, plus it boasts its own internal programming language which will allow you to customise an existing database or build your own dedicated version from scratch. As you'll soon discover the software ain't cheap, but if you want this kind of power I'm afraid there's no alternative but to pay for it.

Thoughts on Imagine



Being an avid 3D modelling enthusiast I must admit I'm just a little confused. I'm about to upgrade from Imagine 2 but the question is should I go for Imagine 3 or save up and invest in Lightwave 3.5?

I must admit, I wasn't really considering Lightwave until fairly recently, but over the last few months all the Amiga mags seem totally consumed by it. In just about every issue – *Amiga Computing* especially – they seem to come up with a seemingly endless collection of add-ons.

Is it really that good, and if so why? Obviously, with several years of hard slog mastering Imagine behind me, I don't exactly relish the prospect of learning a completely new package without very good reason.

D Silvers Rhyl

I can certainly sympathise with your dilemma. The hype for both programs has been massive and of

course expectations and subsequent editorial have done little to clarify the relative benefits of each.

As you're probably well aware, both programs are very impressive, but due to their release dates and the subsequent scramble for exclusives the two have never really gone head to head.

However, as luck would have it you've come to the right place. Being the first Amiga mag to review both programs, we're in a healthy position to offer a potted opinion on the pros and cons of both.

If your primary interest is static images I'd suggest you stick with Imagine, simply because it still offers the best photo-realistic end results of all the Amiga's ray tracers.

Although a notoriously tricky business,

Imagine's flexibility when it comes to texture mapping is second to none. However, if you're an animator, Lightwave is without doubt the best in the business.

You only need to watch a couple of episodes of Babylon5 and SeaQuest DSV to have this proven beyond any doubt. Unlike Imagine, Lightwave is primarily an animation system which also doubles up as a ray tracing and modelling system.

As a result, its texture mapping features aren't quite as comprehensive as those offered by Imagine, therefore a little more thought is needed if you require photo-realistic end results.

Basically the whole thing boils down to your main interest. If it's static images I'd recommend you stick with Imagine 3, but if animation is for you nothing comes close to the power of Lightwave. It's quite simply in a league of its own.

Hot and bothered

I am asking for advice, as I am worried that I may have a problem with my A600. While I was at work, my small son must have switched on the machine, so it stayed on until I heard the disk drive clicking when I went to bed that night.

I don't know how long it had been left on, and it wouldn't have mattered, except for the fact that I always keep the dust cover on, and because of that the underneath of the casing had become quite hot.

Everything seems to be working fine, except that some loading screens and graphic displays now seem to shimmer – something which I didn't remember them doing before.

Game graphics seem to be OK, and all my software seems to run without a problem. It's just that, as I said, certain loading screens and graphic displays appear to flicker.

Has my "little darling" done some damage? And is it likely to cost a lot to fix? Please help. I'm extremely worried, as I don't have any spare cash and I



need my computer working in tip top order.

I.K. Gee, Bristol

OK, we'll start with the possibility of damage to your machine. Although it may have been running for hours it's highly unlikely this caused any damage.

Basically the only damage done will be to your electricity bill – and even this will be very minimal. In 99.9 per cent of cases leaving a machine on for days or even weeks will do it no harm whatsoever.

In fact the only time you're likely to experience a problem is when you first switch the machine on, it's at this point that the system is put under the most strain as the circuits receive a sudden jolt of electricity on power-up.

As for the dust cover remaining in place, I'd be very surprised if the insulation provided would be enough to overheat the machine to a dangerous degree.

Obviously it's worrying when the casing warms up but if the machine still boots, and your software still runs there's very little to worry about.

As for the sudden screen flicker, I'd suggest this may be a psychosomatic reaction to the exploits of your "little darling." Many programs boot-up using interlaced screen resolutions

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.

and then revert to a normal non-interlaced display when in use. It's possible that until now you didn't pay much attention.

Obviously this is only a possible solution, so I'd suggest you check your monitor connections and ensure that during his little adventure your son didn't accidentally alter your screen mode preference into Hi-res interlaced.

Although this little episode may have been a nasty shock, it's very unlikely your machine has sustained any damage. As for your nerves I'm not so sure.

Hard drive, hard work



I would like to warn other readers against dealing with WTS Electronics Ltd who in their dealings with myself have not been inefficient but downright dishonest. I would urge readers to not be taken in by their glossy adverts and buy elsewhere.

Many months ago I ordered a hard drive from this company who were only too ready to debit my credit card and promise a maximum delivery time of 26 days.

After six weeks and many phone calls to a Customer Services section that rarely answers the phone, I was told that the drive would be delivered in 10-14 days. I decided to cancel the order and buy elsewhere, incidentally receiving an identical model hard drive within two days!

You cannot cancel an order with WTS. You ring the people that take orders who answer the phone within seconds but flatly refuse to deal with cancellations and tell you to contact Customer Services (who never answer the phone).

They refuse point blank to transfer your call to the said department. Eventually I got through to Customer Services and to make sure I confirmed the cancellation in writing.

A few days later I got a letter apologising for the delay but which very carefully avoided mentioning the cancellation. The familiar statement that "your goods will arrive in 10-14 days" appears but no confirmation of the cancellation.

I rang Customer Services – eventually getting through – and made sure that they knew I wanted the order cancelled and quoted the letter reference. They promised a refund would be given to my credit card.

The next credit card statement appeared after a few days but nothing appeared on the next statement. I rang again to find out what they were up to but got no answer from Customer Services. I rang the normal number and was given the brush off, treated rudely and not put through to the correct department.

I eventually got through to the other number, apologies were given and I was promised a refund would be given by the end of the week. Two weeks

later I rang up the credit card company to see if the refund had appeared – you guessed it, no...

That was one and a half months after being told I would get a refund. I have also had to fork out for a hard drive from elsewhere using money that WTS had promised to refund.

I then wrote to them asking where my money was almost three months after my original order and nearly two months after I wrote to cancel the order.

The next day a parcel arrived. It did not say where it came from so I opened the parcel and after such a long time and after making it clear that my order had been cancelled, there was a hard drive from WTS.

I wrote again explaining the situation, asking for my refund for the cancellation I had made and stating that I would return the unwanted and unneeded hard drive when the refund appeared.

After over four months they wrote back saying they have no record of any of my telephone calls or letters and that they will not refund me because I have the hard drive.

As I write I still do not have the refund I was promised so many months ago. Is there any consumer body I can contact to resolve the situation?

W.D. Evans, Calthness

Alas this is an all too familiar tale of woe from WTS. Over recent months we've received an ever growing collection of post from disgruntled punters – all with similar stories to tell.

In fact the situation has become so common that we have now refused to take any further advertising from WTS.

Unfortunately the management of WTS are extremely knowledgeable when it comes to the legal intricacies of the mail order system, so I'm afraid you're right is probably far from over.

However, my advice would be to get in touch with the trading standards as soon as possible and hand the matter over to them. If there's anyone who will get your cash back it's the good old trading standards.

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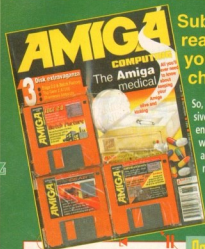
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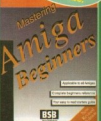


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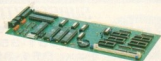
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It seems that Amiga word-processors have all been moving in one direction lately. Packages are offering colourful front-ends, in-built drawing tools and DTP functions, all in an attempt to emulate Microsoft's monolithic Word for Windows.

Bearing this in mind, the latest version of Amor's Protex shows either brave individualism or just plain backwardness in the competitive world of word-processing.

For those who haven't seen the package before, a glance at the screenshots reveals a minimalist approach. The interface is controlled through the old pull-down menus without a single quick-click button in sight.

This doesn't necessarily mean that control of the package is cumbersome. People who are happy learning numerous keyboard short-cuts will be able to get around Protex very quickly.

Take a look at the menus and it becomes clear that the unattractive front-end hides a highly flexible text manipulator. Protex features a powerful text search facility, comprehensive formatting options and the ability to work on two documents simultaneously in a split screen. Files can be managed easily from within the program via the Catalogue option.

The same menu also allows the user to make document settings or to access help. Ten numbered markers can be set while document analysis gives you a word count and all the other statistics you may need to know.

With user friendliness being a main aim of most word-processors, beginners will want to know how Protex rates here. Though visually unappealing, it isn't as difficult to use as

Word up

Protex has commanded the respect of the purists when it comes to word-crunching. Gareth Lofthouse gives an update on the latest improvements.



Protex spurns fancy buttons in favour of this no-nonsense, rather grim looking interface



Here we have the auto-correct editor, a new feature helping to give this WP proofing power that's second to none

example, but because Protex is quicker it seems to work more efficiently in this package.

Print preview is another important addition, allowing you to see what the document will eventually look like. Flicking through different pages is simple using the mouse.

Preview also allows you to view any imported graphics. This is a big improvement because previously you couldn't see how a picture would look in the document without printing it.

Also included is a dictionary editor and the macro editor has a larger edit field for expansion string. Find words/anagrams will search any configured dictionary at a faster rate, which must be good news for crossword fans.

Comparison

Since Protex 6 was reviewed the competition got tougher with the release of Wordsworth 3 and Final Writer 2. Offering icons galore and DTP functions, these packages became benchmarks in this field.

Protex retains some advantages, most notably its greater speed and smaller demands on memory, and the addition of features like the auto-corrector has helped to consolidate its position.

However, the other packages offer many of the same functions and a lot more on top, while at the same time they are less daunting for the inexperienced user.

Verdict

At heart, Protex is a powerful word processor and this update has given it a few useful extras. However, there is a danger that new purchasers will find it lacking in some areas. Having to either sift through lengthy menus or learn a huge combination of keyboard short-cuts will annoy many people. Bank upon bank of icons may not be necessary but a few buttons would be helpful.

Other packages offer tools for drawing or table creation. Since these features can enhance humble newsletters, bulletins or business correspondence, they can no longer be considered as superfluous extras.

Until more fundamental changes are undertaken, however, Protex is going to look dated in comparison to the competition. Amor still has a good product here, but they'd better not rest on their laurels if they want to stay in the game.

it initially appears. Installation couldn't be easier and the documentation provided is of a high standard. The on-line help facility is also good and now includes a full topic list. Despite this, all the pull-down menus make Protex less attractive for the beginner than icon driven packages like Wordsworth.

Having summed up Protex's general capabilities, its time to see what's new in v.6.5. Though not a thorough overhaul, there are some valuable additions, particularly with the auto-corrector.

When enabled, this can correct common spelling mistakes automatically. It can also be used to expand abbreviations or make capitalisation corrections.

The user creates a base of errors or abbreviations using the auto-correct editor. It works like this: if the user types 'recieve' the misspelling will be instantly corrected. This feature is available on Wordsworth 3, for

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CD or not CD?



I am considering upgrading to CD-ROM capability and would like a little advice on the subject. I have decided which drive I will be buying (the Zappo) but am a little sceptical as to the amount of Amiga CD products out there.

My interests are mainly in programming and applications, although I have been known to play with games now and again. Your help would be greatly appreciated.

R. Johnson, Cardiff



If you are expecting to find a multitude of applications on CD then think again. At the moment CD on the Amiga is only being touched upon and you'll find that most CDs contain only data or PD utilities.

By data I mean that CDs are mostly being used to store graphics and sound. However, due to the large capacity of a CD these images and sounds are invariably of an extremely high standard.

As far as programming is concerned the only CD I have come across that



I have just upgraded from the Amiga 600 to an A1200 and I must say that I am extremely pleased with its performance.

Now that I have the power to throw graphics around with ease, I am presently changing my Workbench to suit my own requirements.

I have just registered for the full version of MagicWB but at present I am designing artwork to use as Workbench backgrounds. The problem is that when I drop the background in it is repeated several times and the image looks squashed. Have you any suggestions?

J. Downe, Stoke



The first thing you need to realise is that you will have to create your images in the same screen mode as your Workbench – that way the images won't look squashed. The best way to do this is to check the settings in the ScreenMode

program in Prefs. You also need to know a little about how Workbench 3 fills the background with an image. When Workbench has loaded it takes the image and proceeds to draw it into the background. If there is any space left (which there would have been with using an incompatible screen mode).

Workbench will repeat the picture as best it can in the space provided – this is why the image repeats itself. Once you have the screen mode data and draw the image to scale this will no longer be a problem.

Drawing full screen images can severely slow down the refresh rate of Workbench and they eventually become more of a hindrance than a luxury.

The best way to draw Workbench backgrounds is to create small patterns that will repeat. You only need to draw the pattern once, save it as a brush and assign it as the

Hard drive checker



I have been using Virus Checker in its various forms for the last year or so. I am not by any means an expert in computing but I can understand how Virus Checker works with floppies inserted in floppy drives.

However, I cannot see how it can check hard drives. Does it happen automatically? If not, what do I need to do? I have tried reading the docs but find them too technical and confusing for my limited knowledge.

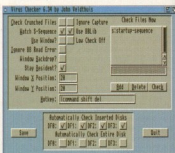
J. Byrne, Gibraltar



Virus Checker is certainly the best step you can take against the virus threat and it is kept up to date by its author – John Veldhuis.

Although Virus Checker will keep your floppies free from viral infection, it will not protect hard drives. The idea is that you run Virus Checker from the hard drive so that it watches any floppy disks that are inserted.

Using this method Virus Checker should be able to eradicate any viruses before they can infect the hard drive, although most attach to floppy disks anyhow. If you think you may have a virus on your hard drive your best bet is to format the drive, re-install the software and then install Virus Checker to the WBStartup drawer so that it is loaded every time you boot your Amiga.

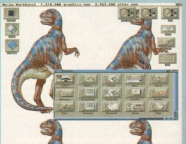


Although Virus Checker won't directly check your hard drive it will neutralise viruses spread from floppy disks

caters for fans of this genre is an Amos CD packed with extensions, graphics, sound effects and Amos specific programming tools.

My advice would be to hold fire for a while to see exactly what happens to Commodore UK and their bid to take control of the company as a whole. Make a decision on this result.

Workbench flavours



Although the A1200 boasts 256 colours on Workbench it does have problems pushing it around

Workbench backdrop. As the image will be fairly small in size Workbench will draw it quickly.

Tasty backdrops

I would very much like to use my own RAM disk icon but am unsure of how to go about this. As the default disk icon is used for RAM, any attempt to change this affects the default disk icon.

Looking at the Workbench screens in the CoverDisk section (lovely backdrops, any chance of getting them on a CoverDisk?) it obviously can be done. Could you please tell me how.

P. L. Walker, Cheshire

I actually explained how to create a RAM disk icon a few months ago so I'll try and make this as quick and concise as I can.

The first thing to do is to create an icon for your RAM disk and make sure that it is a disk icon. You can then copy it to the S directory with a suitable name. You will then need to edit your User-Startup and insert the following line at the top:

```
copy s: to Ram:disk.info
```

This will copy the icon into RAM and rename it disk.info (a disk icon) so that every time you boot your Amiga the RAM disk has your new icon.

The parkie



I am having a great deal of problems with my A1200 IDE hard drive which I personally installed approximately three months ago.

I have followed the installation procedures to the book and am now totally confident that the drive has been installed correctly.

The problem is that while I am working on my Amiga the hard drive occasionally switches off, halting all Workbench processes, and then powers back up, at which point I can resume whatever it is I am doing.

A friend of mine mentioned that it could be the drive parking itself but I am sure this is not a natural event. Could you please help me as the problem appears to be getting worse.

P. Menze, Birmingham

I have checked all the reference manuals I have access to but can find no reason why your hard drive is acting the way it is.

Your IDE drive shouldn't require parking and this sounds to me like you may have a duff drive. My only answer is to back up your important data and take the drive to a local

As for your second question – if readers would like to see a selection of colourful backdrops on the disk they should write in and if the response is great enough I'll do it.

I'm presently hunting down that Brian the Lion fix and as soon as I find it I will send it to you. Famous last words!

Star turn

Please could you help me with a problem I am having with my Star LC200 9 pin colour printer. I would like to print using the full potential of my printer but unfortunately there is no Star printer driver and therefore I am having to use Generic instead.

I have scoured the PD libraries but cannot seem to find a suitable printer driver. Where can I get one and how much would it cost? Your help would be greatly appreciated.

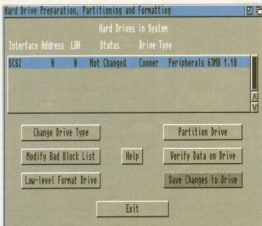
L. Weir, Edinburgh

If you want to maximise the potential of your printer it is best to use a totally dedicated printer driver. Generic will work on almost all printers but provides only basic printouts with little or no control over style and look.

Your best bet is to contact Star Electronics direct and ask them for a printer driver. They should be able to send you Amiga specific drivers for just the price of a disk.

For more information contact Star Electronics on 0494 471111.

specialist and see if the board is faulty. If anyone out there has ever come across this problem before could they please contact ACAS and I will pass the information on.



If your hard drive appears to be acting strangely back it up immediately

Flexible floppies

My Workbench 3.0 manual states that my A1200 has the ability to read and format PC disks. When I insert a PC disk in to drive DF0 the machine starts to read the disk and then displays the disks as DF0.?????

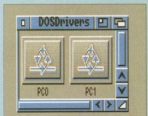
I have tried booting my Amiga with a PC disk as it appears that PC disks are not compatible with Workbench, but this also fails to work. Could you please help out a frustrated A1200 owner? It is important to my work that I be able to read PC disks.

S. Maraclough, Kent

You seem to have been going around this the wrong way. Your A1200 can read and format PC disks, and from the Workbench, but you need to have set up the software correctly.

Open up your Workbench partition and locate the Storage drawer. Open this drawer and then the DOSDrivers drawer at which point you should be able to see two files called PC0 and PC1.

Drag these to the same drawer in Devs, that is Devs/DOSDrivers. Now re-boot your machine. When Workbench has loaded try inserting a PC disk into DF0. After a short while you should see the disk icon and appropriate name appear.



Workbench 3.0 is capable of reading, writing and formatting PC disks, but you must have PC0 and PC1 in the Devs/DOSDrivers drawer

Any questions?

You got problems too? Then drop a line to Amiga Computing Advice Service, Europa House, Adlington Park, Macclesfield SK10 5NP and we'll move heaven and earth to help in these columns. But sorry, we cannot reply personally, so save those SAs!

On next month's CoverDisk

Easy AMOS - your key to creating your own software

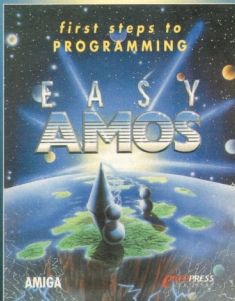
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It's time to Blitz!

After introducing you to all the basics in the previous tutorials, Michael Milne now takes you into the first program



Part 4

Windows, Menus and Gadgets should all be nicely tucked under your belt by now, so I think it is time to put together a program. And, in response to popular demand, our first program will be a standard database program.

To start off with lets set out some basic needs for our program (i.e. what do we need?).

For this example we want our program to hold a name, address and postcode for each record. We know that we will need some way of storing this info, so I choose to use an array as they are very easy to use. I will also need a couple of variables to hold the current record number ('current_record.w') and the current number of records entered ('number_of_records.w'). Now we can get on with it.

Firstly we start with the workbench:

```
WStartUp
WToScreen 0
WBeepToFront
Use Screen 0
```

then a constant to define the maximum amount of records:

```
#max=100
```

an array to hold our records:

```
%a records$(#max,5)
```

and 2 vars for our record handling:

```
current_record.w0
number_of_records.w0
```

Now we define our gadgets (don't forget these are Gadtools and aren't A500 compatible - use string gadgets and text gadgets instead):

```
GString 1,1,30,5,248,12,"NAME",1,30
GString 1,2,80,19,248,12,"ADDRESS",1,30
GString 1,3,80,24,248,12,"",1,30
GString 1,4,80,30,248,12,"",1,30
GString 1,5,80,46,248,12,"",1,30
GString 1,6,80,81,80,12,"POSTCODE",1,9
GButton 1,7,340,5,64,12,"<ADD>",16
GButton 1,8,340,19,12,12,"<NEXT>",16
GButton 1,10,340,34,104,12,"<PREVIOUS>",16
```

This next part has an interesting aspect. To get the min/max windowsizing gadget,

which is next to the windowdepth gadget, to appear, all you have to do is have the windowdepth and windowwidth window flags on an Amiga 1200 and the gadget will magically appear. And on top of this, you can control the default sizes by use of the SizeLimits command:

```
SizeLimits 350,15,530,114
Window 0,46,44,530,114,01000|0|4|1,"Blitz
Base",1,3,1
```

Then you can attach the GTList (A1200 only):

```
AttachGTList 1,0
```

And now for the main loop:

```
Repeat
```

Has the user closed the window (if not then clear the event queue):

```
If WaitEvent=<B200 Then nd.b=1
```

If Else FlushEvents was one of our gadgets hit:

```
Select GadgetHitADD
```

(As long as we haven't reached our maximum):

```
Case 7
If current_record
1 Then Goadb_previous Else BeepScreen 0
End Select
Until !nd=THE END:
End
```

ADD:

```
.add:
```

Add to our maximum record:

```
number_of_records+=1
```

New record will be the latest one:

FlushEvents and Gadgets

There are a few things that you might want to know about the FlushEvents command and its interaction with GadTools. First of all, the FlushEvents command clears the value passed by GadgetHit which determines which gadget the user pressed.

Normally this wouldn't make a blind bit of difference to gadgets, but when it comes to GadTools there is a slight rule which for one reason or another must be obeyed: When a GadTool is pressed it cannot be detected by Event=S20 (GadgetPressed).

What's more the GadgetHit will always return the last GadTool hit until FlushEvents is executed (i.e. every time around a loop, which can cause unnecessary repeating of commands).

Therefore you should always use FlushEvents to clear the GadgetHit command to make sure that only a new GadgetHit is returned and not the one from last time. You must also remember that FlushEvents also clears several other things including Inkey\$, which is why in the line which reads:

```
If WaitEvent=<B200 Then nd=1 Else key_pressed=Inkey$: FlushEvents
```

I read off the value from Inkey\$ before I use FlushEvents to make sure I don't lose any user input through the keyboard.

Blitz Base

NAME

ADDRESS

POSTCODE

<<ADD>>

<<NEXT>>

<<PREVIOUS>>

```
current_record=number_of_records
```

Clear gadgets contents:

```
Gosub clear_gads
```

Get new contents by activating each gadget:

```
Activating 0,1
Gosub wait_gad
Activating 0,2
Gosub wait_gad
Activating 0,3
Gosub wait_gad
Activating 0,4
Gosub wait_gad
Activating 0,5
Gosub wait_gad
Activating 0,6
Gosub wait_gad
```

After all gadgets have been filled we store the info in our array:

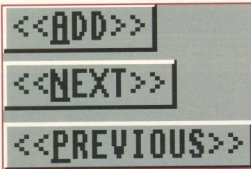
```
For temp=1 to 6
  sub$=current_record+temp-1:GGetString(1,temp)
  Next
  Return
```

NEXT (add number by 1 and display info):

```
.next:
  current_record!
  Gosub draw_gads
  Return
```

PREVIOUS (as above except number minus 1):

Here is what our program should look like after typing in the first set of code! Notice the extra window gadget next to the windowdepth gadget.



See how the '1' character works!

Arrays - inside & out

Arrays are a very old data storage method associated with the very first forms of Basic. Just like all the rest, Blitz is no different in how they are used. The first step to using arrays is to define them with the 'Dim' statement.

'Dim' stands for dimension because an array is with dimensions (i.e. a(0)=dimension 0 of a; a(1)=dimension 1 of a). In this way, arrays are very good for file handling as they store information in a logical, systematic way which allows access to any record at any time just by giving the dimension number.

But there is more at hand! You can also have a multi-dimensional array where each dimension has a set of its own dimensions. For example, 'Dim a(10,2)' would create an array which has 10 dimensions, and each of those dimensions has 2 of its own dimensions.

This array could easily represent an array of X,Y coordinates where each dimension from 1 to 10

has an X and a Y stored in its own two dimensions. So to get the X,Y of dimension five you would do the following:

```
Y=a(5,1)
X=a(5,2)
```

and similarly you would do the following for dimension eight:

```
Y=a(8,1)
X=a(8,2)
```

There is one thing to remember when dimensioning arrays, and that is the type of array that you want to create. In a standard array (without Newtypes) you can only have one form of data, for example Dim a(5,5) = would dim an array of numbers and Dim a\$(5,5) = would dim an array of strings (text) - they cannot be mixed in a normal array

An update to current events

If you are one of those people who are still trying to contact the old London number then I suggest you stop as Benoit Varasse no longer deals with Blitz. All your subscriptions for updates are now handled by Guildhall Leisure Services who can be contacted on 0302 890000 or write to: Blitz User Magazine Subscription, Guildhall Leisure Services, Unit 15 Guildhall Industrial Estate, Kirksandall, Doncaster DN3 1QR

notice anything different? Now let's put a little bit of code in the main loop to handle the reading of the keyboard.

After the line that reads 'Repeat', enter in the following code, replacing only the 'WaitEvent' line with the new one:

```
If WaitEvent=$200 Then n=1 Else
  key_pressed=key$ : FlushEvents
  Select key_pressed
    Case "a"
      1 Then Gosub
        current_record
        previous Use SleepScreen 0
      End Select
```

Now compile and run the program and try pressing the keys underlined in the gadgets. Quite easy to do isn't it.

A helping hand!

If you have any questions that you need addressing from reading this column then you can write to me, Michael Milne, at: Blitzing on the Amiga, c/o 39 The Drive, Earley, Reading, Berkshire RG6 1EG. (NB: Please state what machine you are using and any peripherals you have!)



The window close gadget



The reduce/enlarge window gadget



Window depth gadget



Window size gadget

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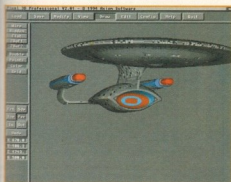
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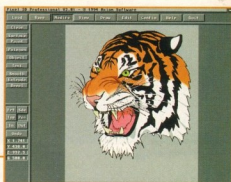
£19.



ZBuffer-rendered
Imagine Enterprise
object



An Encapsulated
PostScript file
loaded into PixPro



Master of the trade

Camping without a Swiss Army Knife is possible, but doing some basic tasks without one can be more trouble than fun. Axiom's Pixel 3D Professional Version 2 is the Swiss Army Knife of 3D programs – you can do 3D without it, but once you've had the tool in hand you won't want to.

Pixel 3D Professional Version 2 (PixPro) is an incredibly flexible utility for creating, converting, and modifying 3D objects and logos. It will load objects in all popular Amiga and PC object formats, opening the door to using thousands of PD and commercial objects in your 3D projects.

You can also load PostScript fonts and EPS files, extruding and shaping them into 3D objects, which can save hours of creation time when working on logo projects.

PixPro even auto-traces bitmapped images and fonts, opening the doors to even more ways to cut down creation time – if you've got to create a 3D object, you can start with an image-processed scan of that object and bring it out into three dimensions.

If you've used earlier versions of PixPro, you'll find plenty in Version 2 to make the upgrade worthwhile. Full AGA graphics support, much better handling of AutoCAD DXF files, real-time 3D painting, PostScript support, an easy-to-use object hierarchy support, support for loading

Got a new logo you want to promote?

*Use Pixel 3D Professional and you'll
create a stunning 3D version.*

Denny Atkins checks it out

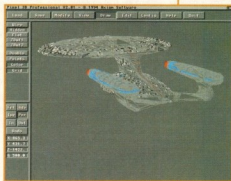
multiple objects, beautiful Z-buffer preview rendering, and a much-improved LightWave-like 3D stage for object manipulation – Interface

ADVANTAGE

PixPro starts up on a high-res screen – interlaced on ECS Amigas – and takes advantage of the extended 24-bit palette on AGA machines. There's no way to select a particular screenmode directly, but the program will sense your Workbench screen's

The program includes an 80-page manual in an easily-browsable three-ring binder. The manual is very well written and completely covers the program's features.

However, it could do with a few tutorials for the more advanced object modification features. The big flaw though is the lack of an index, forcing you to search the table of contents when you're trying to figure out a new feature.



Polygon view of Imagine Enterprise object

settings and open on an accordingly larger screen if, say, you normally work in Super72 mode. The interface is a bit odd by Amiga standards – there are no pull-down menus, only an array of gadgets across the top and left sides of the screen. Some operations will bring up requesters with pop-up menus. The interface won't seem that strange to LightWave 3D users, and is easy to learn even if you're completely new to it.

Another LightWave connection comes with the new LightWave-like single viewing window. Changing your perspective in this window is easy – just hold down a mouse button and move the mouse left, right, up, down, in, or out, and the object moves accordingly.

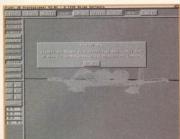
Front, Side, and Top views are available as well. Gone is the Redraw button of earlier versions. When you move an object, the view switches to a bounding-box view until you release the mouse, and then it's automatically redrawn.

Speaking of redrawing, you'll love PixPro's multiple drawing modes. When you're working on an object, you can have it displayed in Wire or Hidden modes for quick redraws.

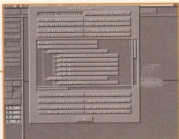
The Flat mode is a flat-polygon preview resembling what you've seen in similar programs. The real fun comes with the two ZBuffer modes. Now you can see your

Manual
labour

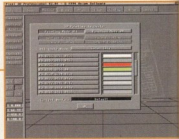




Pixel 3D Pro's help feature



The Object Hierarchy Window



An Amiga 600 EPS clipart file loaded into PixPro

object in full shaded glory. It by an automatically-placed light source.

This is great for checking the final appearance of your object without having to switch to (and wait for) your 3D rendering program. See the USS Enterprise illustration for an example of the quality this feature is capable of.

The USS Enterprise object is a good example of the power and stability of PixPro. Created by artist Carmen Rizzolo, this image object tops 1.2Mb in size. Yet PixPro had no trouble loading it, manipulating or rendering it, or converting it to another format. (In AutoCAD DXF format the object was nearly 8Mb in size! 3D Studio's version came in at a more reasonable but still huge 4.5Mb.)

PixPro loads objects in nearly any imaginable format: 3D Professional, 3D Studio (ASCII and Binary), AutoCAD DXF, IFF Bitmap, Caligari, Draw 4D (regular and Pro formats), Imagine, LightWave (objects and scenes), PostScript (ASCII and EPS), Scenery Animator DEM, Sculpt 3D and 4D, Turbo Silver, VideoScope (ASCII and binary), Vista Pro DEM, and WaveFront.

It saves in all of these formats except DEM, Turbo Silver, bitmap, or PostScript. It's a shame that DEM saving isn't supported — it would be fun to be able to use PixPro to create custom landscapes.

Unlike some early object editing programs I've used, PixPro never seems to get confused about where to place polygons when converting objects. 3D Professional, for instance, will often invert some 3D objects when loading Sculpt files, but the same objects converted with PixPro look perfect when loaded into 3D Pro.

One nice feature in PixPro is the ability to

Wrapping it up

Pixel 3D Professional Version 2 is a fast, powerful program that's a must-have for any 3D artist. The tools for creating objects from outlines and bitmaps blow away those built into programs like Imagine.

You'll find it worth purchasing just as a conversion program, with its ability to flawlessly move objects between formats while retaining as many object characteristics as possible.

Complaints are very minor: Some PostScript fonts wouldn't load into the program, but that's a common problem with programs like these (PixPro did handle fonts that Imagine couldn't) due to flaws in some fonts' PostScript code.

It would be nice to see a ScreenModes requester so you could choose what resolution to run the program in. And I'm amazed that none of these programs ever think to include a print feature so you can keep a hardcopy reference of your objects.

These minor omissions aside though, Axiom has a winner on their hands.



The object painting requester

load more than one object into the workspace. You can use this simply to compare how objects look in a scene, or to combine them into a single object file. PixPro gives you the option when saving them whether to save as single or multiple files.

Unique to PixPro is the ability to load PostScript files and EPS graphics and convert them into outlines which can then be beveled and extruded into 3D objects. It can handle even complex, shaded PostScript files, as is evidenced by the accompanying tiger illustration.

CREATIONS

I had no trouble loading EPS graphics saved by PageStream 3.0, although PixPro choked on actual PostScript output files from that program. The program loads PostScript fonts, which makes creation of fancy text logos a snap.

PixPro can also load and trace bitmapped graphics and fonts. The font feature works very well if you're working with a fairly large typeface — obviously Topaz 8 isn't going to trace into a very smooth font.

When working with images, you'll want to work with simple graphics, such as scanned monochrome logos, or simple images with a few colours; memory won't permit you to load detailed digitized images, and you wouldn't be able to work with the complex results even if it would.

If you do try to load an image with more than 256 colors, PixPro can automatically load ADPro and convert the image into a two-colour bitmap.

If you want to do more than just convert objects, PixPro features a complete suite of object modification tools. You can change the colour and smoothing of a surface, optimize the polygons in an object by reducing vertices or polygons, and smooth and bevel objects.

The 3D Painting Requester is wonderful.

You can paint the surface of your object by simply clicking on individual polygons. When modifying or creating objects, tools include Move, Pick and Unpick, Link, Swap, Subdivide, and Delete.

Note that you'll want to start with some sort of outside object — even if it's a simple bitmap drawn in a paint program — rather than starting from scratch, as Pixel 3D Pro doesn't have features for creation of object primitives.

The Bevel feature is really neat. You can create a standard bevel around the edge of your object, or you can choose a "Router Bit" which lets you use a user-defined polygon to shape your bevel. The edge of your object ends up looking like you've actually used an actual workshop router tool to modify your object.

Working with complex objects couldn't be easier, thanks to PixPro's Object requester. This window shows the various components of an object in an outline form. You can specify parent, child, and orphan relationships, associate other objects, and choose objects individually or by family.

If you want to change the position of the wings, engines, and propellers of a V-22 Osprey VTOL aircraft object, you can simply place them all at the same hierarchy level. Once that's done, just move further down the hierarchy to modify the position of the wings. It's an amazingly intuitive feature.

SYSTEM ESSENTIALS
RED = Essential BLACK = Recommended

2 Mb
Fast RAM

2.04
Workbench

The bottom line

Product: Pixel 3D Professional

Version 2

Supplier: Axiom Software

Price: \$299.99

Tel: 0101 (612) 894-0596

Fax: 0101 (612) 894-1127

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

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Compatibility and caveats

PageStream 3.0 sounds great, and for the most part it is. However, the version I reviewed (3.0a) did have some major problems – there were unimplemented features, occasional lockups, and problems importing some PageStream 2 and Professional Page files.

Because the program was so late, Soft-Logik decided to ship now and offer a free upgrade patch once everything was fixed. In the meantime, the company has been posting updates on online services and the Internet so that modern users can get the latest fixes as they're completed.

It's disappointing to see such a powerful, professional program released with such flaws and omissions, but Soft-Logik has a track record for perfecting their products, and everything will likely be in place by the time this review sees print.

No longer will the PC and Mac dominate the DTP market. Like a breath of fresh air, PageStream 3 breezes in and blows their tools away



Arguably the most important, and certainly the most long awaited release in the history of the Amiga DTP

Something

Back in the glory days of the mid-eighties, the Amiga was one of the most advanced platforms around for desktop publishing, offering colour-separated page output while the other companies were still trying to perfect black-and-white.

As personal computer-based publishing moved into businesses, PC and Mac programs began to grow in power, eventually leaving their Amiga counterparts in the dust.

Until now, that is. Screaming through the dust like the Batmobile comes Soft-Logik's PageStream 3, running competitors PageMaker and Quark XPress clear off the road. It matches both programs in the features department, and blows them away when it comes to ease-of-use and flexibility.

Upgrade

Gold Disk's now-orphaned Professional Page 4.1 isn't even in the same league – luckily PageStream 3.0 includes a Professional Page import module, so users can still upgrade to the latest and greatest.

In fact, the name PageStream 3.0 is a bit of a misnomer since it's actually a completely new program, sharing no code at all with the previous release 2.22. The user-interface is similar to earlier versions, but has been spruced up with pop-up menus, and brought closer in line with the Amiga style guide.

The previous two-column toolbox has been reduced to a single row which uses up less screen real-estate and can now be displayed in vertical or horizontal format, with large or small icons.

Even more useful is a floating, context-sensitive palette that lets you choose common settings without having to open and manipulate requester windows. You can

selectively hide views or documents, which helps keep down screen clutter when you have numerous documents open, and saves on Chip RAM as well. You can run in any system-legal screenmode, including 256 colours if you have AGA or a graphics card. Public and virtual screens are supported as well.

With earlier releases, you needed to purchase Soft-Logik's HotLinks Editions if you wanted to easily edit text and graphics in the program. This package included a cumbersome HotLinks device driver, the BME bitmap editor, and the PageLiner text editor.

Thankfully, the linking mechanism is now built directly into PageStream, and BME and PageLiner are now bundled with the package. Unfortunately, this means you can no longer HotLink to ImageMaster and ProWrite, the only other programs ever to adopt the HotLinks standard.

PageStream now uses the Amiga's clipboard for cut and paste, making it a snap to transfer small amounts of data from other clipboard-savvy software.

PageStream 3.0 uses the Commodore Installer program, like many other recent productivity programs.

Once the install is complete, you'll be

prompted to enter your PageStream serial number and permanent password. If you've upgraded from a previous version of PageStream you'll have the permanent password, so no problem.

If you're upgrading, though, you'll have to type in a temporary password each time you start the program, until Soft-Logik processes your registration card and sends you your password.

Creative

Desktop publishing, of course, boils down to the creative and attractive placement of text and graphics on a page. PageStream 3.0's text-handling features make creating both long and short documents much easier.

Text can be placed on the page in column frames, shape frames, and frameless text objects. Column frames have been enhanced to allow placing more than one column in a frame – this makes it much easier to move multiple columns around a document together.

To create a shape frame, simply use the drawing tools to draw any shape, then set its properties to indicate it's a frame. Some impressive effects can be done this way.

Printing pluses

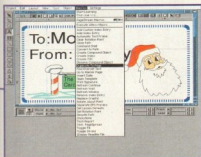
PageStream's printing system has been completely revamped. Custom drivers are included for Hewlett-Packard – and Epson – compatible printers, as well as the Fargo Primer; a Preferences driver is included for other printers; and an IFF driver lets you output your page as an image file. The PostScript driver now uses PPD files for greater compatibility with both laser printers and professional imagers.

For professional output, you'll find a full suite of features such as crop and registration marks, trapping patches, slur

gauges, and grey balance patches.

Pantone colour libraries let you use industry-standard colour values. Trapping lets you choose and spread colours for creating separations, and plate control lets you set colour printing options for each plate in a print job.

Print quality is much better than in earlier versions. The text is extremely crisp, looking as good on an HP DeskJet as the output from Final Writer. Graphics, both outline and bitmap, now look great, having lost the muddiness evident on some printers with earlier versions of PageStream.



Setting new standards of automation with the aid of ARexx and option to record your own macros



Picture handling and on-line image processing are yet another huge improvement over the old version

in the air

For instance, I drew a basic outline of an airplane and spilled the text of the poem "To Fly" into it to create a poster for my office.

Frameless text objects are quite handy when you're just trying to drop a few words onto a page quickly – just click on the page and start typing, no need to draw and move frames around. Also, when you resize a column frame, only the frame changes size; resizing a frameless text object also stretches or shrinks the text – it's great for making headlines fit exactly without having to fiddle with tracking values.

Typing text directly into PageStream 3.0 is excruciatingly slow, even on an A4000/040. Luckily, you can export text to the included PageLiner text editor.

PageLiner is a very basic text editor – sporting not much more than search/replace, a spell checker, and basic editing tools – but it's fast enough that it's a godsend when making more than minor changes to a document's text.

If you're trying to enter an obscure foreign character or graphic dingbat and you can't remember the proper keystroke, the new Insert Character command lets you choose the right character from a scrolling requester – great when you can't remember the key to press to get the trademark symbol.

PageStream 3.0 imports text in a number of formats, including ASCII, excellencel, Final Writer, IFF text, ProWrite, WordPerfect, and WordWorth.

Filters are also provided that are supposed to handle Microsoft Word (Mac, MS-DOS, and Windows) and WordPerfect for DOS and Windows files, but in PageStream 3.0's initial release they wouldn't recognize the files I tried.

If you're moving text from a PC or Mac

desktop publishing program, PageStream can import text files with embedded Quark XPress or PageMaker codes – just use those programs' text export features to save the document.

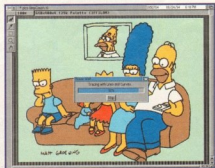
One neat improvement in version 3.0 is that the filters work for both import and export, so you could take formatted text, for instance, and save it as a WordWorth file without losing all the bold, italics, and other attributes.

The Edit Palette makes formatting text a snap. Font, stylesheet, type style, size, width, tracking, leading, indentation, and paragraph formatting values are all a single click away no matter what you're doing.

Formats

Automatic formats are included for making bulleted paragraphs and drop-caps. Chapter and document-level commands make it easy to create long, sectioned documents such as books and manuals.

PageStream supports fonts in Original



Auto-trace as standard. Yet another first for the latest release...

Soft-Logik, Compugraphic (both Gold Disk and AmigaDOS formats), and PostScript formats. Release 3.0 now directly supports Macintosh – and Windows – format PostScript fonts as well as MS-DOS typefaces. Over 60 fonts are included with the program.

PageStream's image facilities are much improved as well. The improvements in the text engine – clipboard support, floating tool palette, export as well as import, and so on – are all there. The biggest improvement, though, is that PageStream finally displays graphics in full colour. No more working with muddy black outlines when trying to precisely place images!

Supported bitmap graphic formats include BMP, GIF, IFF, MacPaint, PCX, and TIFF; outline formats include EPS, Art Expression, Freehand, Illustrator, and ProDraw.

There's also a complete set of drawing tools, including a tool for adding, deleting, and moving individual points, as well as tools for creating polygons and bezier curves.

Add these to powerful tools for rotating, aligning, fencing, and skewing objects and graphics, several types of gradient fills and you'll realize PageStream 3.0 is about as good a structured drawing program as many of its Amiga-based competitors.

If you need to edit bitmapped images, you can send them directly to BME, a bitmap editor that now supports full colour and has a basic set of image-processing capabilities. Unfortunately, neither it nor PageStream support loading jpeg images.

If you're tight on hard disk space and you won't be moving your documents to another Amiga, you can choose Leave External when loading a graphic; this will save only a link to the original image file, making your PageStream document much smaller on your hard drive.

SYSTEM ESSENTIALS

RED = Essential BLACK = Recommended

Hard drive	Hard drive
1MB Chip RAM	RAM
4MB Fast RAM	Amiga DOS 2.1
Workbench 2 or higher	

The bottom line

Product: PageStream 3.0
Supplier: Soft-Logik
Price: \$395
Tel: 314-894-3280

Ease of Use	10
Implementation	7
Value for Money	8
Overall	9

*value will be 9 once all features are implemented



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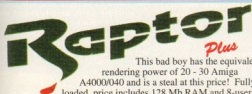
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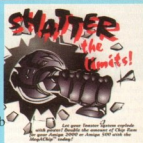
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When you buy a piece of hardware the brief instructions often have you thinking things are going to be easy. But how many times, for example, have you followed the words "just click on the install icon" only to be faced with unforeseen difficulties?

The purpose of this guide is to outline the process of installing a CD-ROM drive and to deal with some of the problems that can arise.

SCSI CD-ROM Installation

One of the most flexible pieces of software for installation is FirstCD-Rom from First Computer Centre. Space willing, we'll be putting this on the front of next month's issue so you can get your hands on it for free.

The advantage of this software is that it works with drives which were not designed with the Amiga primarily in mind. As long as it is SCSI compatible you can use any of the CD-ROM drives that you might find advertised in a PC magazine.

This means that triple or quad speed drives are available to Amiga owners.

Installing the Zappo

We'll deal with this separately because it is purposefully designed for use on an A1200 and therefore the installation software supplied should be used.

In this case the process couldn't be much easier and the instructions provided are, for once, helpful. Insert the floppy, hit the 'install' icon and that should do the trick.

Now you are presented with a menu allowing you to access the CD Rom, emulate the CD32's Workbench 3.1 or just boot the machine as usual. This is well implemented and convenient to use.

However, for anyone who's using a disk expander to decompress crunched hard-drive files, here's a word of warning. Zappo's installation software places the CD-ROM start-up sequence before anything else when you boot the A1200.

The trouble is that unless the disk expander is right at the beginning of the sequence, the 1200 won't be able to find anything because it's all compressed.

To avoid this problem, the user should use Ed to copy and paste sections of the sequence so that the CD-ROM start-up comes after the information telling the 1200 that the files are crunched.

Other difficulties arise when you try to use certain CD32 games. Microcosm or Zool 1 work perfectly, for example, while others do not. It's worth knowing that some games require fast RAM to work on your A1200.

Using external drive with no external port.

As has been said, an external port would be useful. However, there is a way of connecting the CD drive to the Amiga internally, though it's a much less tidy solution.

To do this you'll need a 25/50 pin ribbon connected to a centronics converter. This should be available from any major computer supplier.

Driven

giving them obvious advantages in terms of access time. To allow the Amiga to communicate with the drive a SCSI controller card is required, while an external SCSI port is recommended if using an external drive. FirstCD works with controller cards supporting SCSI Direct (i.e. most of them) along with O.S. 2.4 or above.

When you insert the software into the floppy drive an icon will appear which you should open. Thankfully, FirstCD-Rom gives you a standard Commodore installer system which makes life easier for starters.

The user is immediately given the option of real or pretend installation, the latter option obviously being helpful if you're concerned about where the program is going to place the files.

The next step is configuring the device drivers for your operating system. If necessary you can change the default setting to a different O.S. providing it's 2.4 or higher.

Once this is done the program asks you which controller card you are using. FirstCD-Rom supports most types including all Commodore and GVP cards.

If it's an unlisted card then there is another option which asks for the device driver name, and this can be found in the devs directory. Once a card type has been selected the program checks automatically whether it is resident.

A SCSI card can control up to seven devices so you will have to enter the CD unit's ID number. Though the software's default setting will often be fine, it will be necessary sometimes to define a different target.

The program comes with a number of additional utilities, including JukeBox which allows you to play audio CD and a photo-CD loader for Image FX. You can choose at this point which, if any, you wish to install.

It also allows you to choose where to install the software. Having entered the desired hard drive location it's best to create a separate drawer for the documentation - for

example 'CDRom'.

You will be asked where you intend the additional utilities to go, but as long as you want them as sub-directories within 'CDRom' then it's just a matter of hitting the proceed icon until the magic words appear: "Installation Complete!"

PROBLEMS?

You've installed FirstCD-Rom but for some reason still can't open the device. This could be because you have given the software a unit identity that is not reflected on the drive setup itself.

Remember the SCSI card can control seven devices so each one must have a unit identity. If the ID on the drive does



wild

*Buy a CD-ROM Drive and
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installing it should be easy.
That is, in theory. Gareth
Lofthouse investigates*

not match the ID number you supplied the software with during the setup, the Amiga and drive still can't communicate.

There are two ways to resolve this problem. One is to change the unit ID of the actual drive so it reflects the software - your CD-ROM drive manual should tell you how to do this.

Alternatively, you can overcome the difficulty by editing the CD0 file. Open up the command shell and type: `Ed devs:dosdrivers/cd0` and this will open up an ASCII text file.

This contains a mount-list, in other words a list of commands which tell the Amiga what to expect from the drive. All you have to do is edit the start-up line by supplying it with the drive's unit number. Hey Presto, the problem is solved!...well, hopefully.

AC

Installing the Toshiba 4101B

Unlike the other drives discussed, this CD-ROM is designed to be installed internally. This obviously presents the owner with greater difficulty when making the physical connections.

The procedure is mainly straightforward. However, with a A4000 you'll have to pull the front panel off which can be a fiddly job. The 5 1/4 inch bay must also be removed but this is less troublesome.

As part of the package you get mounting brackets and software designed specifically to install the Toshiba.

Some CD options

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Hints and tips



If you don't have a directory manager, there are certain ways of making your CD-ROM work more efficiently.

When it comes to viewing files it's best to select the "show by name" option from the viewing menu of Workbench. If you display by icons it will waste time generating windows which can be so huge they're virtually unusable.

If you set this option in the root directory it will carry on right through the CD-ROM sub-directories, which saves you a lot of messing about. Also remember that it's possible to move groups of files around by highlighting the desired sections with a drag-box.

Having said this, for the serious CD user, an extra utility or two would be extremely useful. For example, once you realise just how many files are stored on a single CD the desirability of a directory manager becomes obvious. (Directory Opus is one of the best).

Some CDs have archived files so that even more information can be stored. It's an advantage, therefore, that most directory managers have an in-built decompressor. If using Opus, for example, lid files can be expanded by clicking on the ARC EXT button.

They also give you the advantage of search capabilities. This is a great time saver when you're searching through a number of CDs for files matching a particular subject.

Even better in this area is Quaterback Tools Deluxe, because the problem with Directory Opus when you're searching for a lot of files is that it needs constant maintenance.

Tools Deluxe is a hard drive maintenance pattern that caters for many different pattern matches. It can be left to search for hundreds of files without being given the OK everytime it comes up with a possibility. All very useful, really, since the ability to find the material is almost as important as having it in the first place.

More problems?

Simon the Sorcerer also illustrates another problem. With Fast Ram it works perfectly except the speech is garbled, which sadly leaves the game totally unplayable.

This sort of problem is caused because the CD32 programmers are not writing with the A1200 in mind and game data will sometimes go to the wrong memory locations. It would be wrong to blame Zappo for these compatibility problems. If the programs were written to Commodore standards they would be much more system friendly.

As it is, though, the Zappo will soon be supplied with improved emulation software that ZCL claim will reduce the number of difficulties. In fact, the updated software will be considerably larger than the original installer, with two disks now instead of one. Its biggest advance will be the improved compatibility as far as running CDTV software on your A1200 is concerned.

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By the end of the last instalment our program had got to the stage where a menu was available for selecting a file. The first thing we are going to do this month is incorporate an *asl* library file requester and, perhaps surprisingly, this is quite easy to do.

There are in fact two methods available, the most flexible using parameters passed as tag items coupled with the use of three functions.

The tag list approach begins with a call to *AllocAslRequest()* to allocate the main data structure for the requester. Providing this call was successful, a program can then bring up the requester by calling an *AslRequest()* function as many times as is necessary.

Before the program terminates a *FreeAslRequest()* function must be called to hand back the resources allocated by the original *AllocAslRequest()* call.

The requester options are specified using tag items defined in the libraries/*asl* system include file, and these allow size, position, requester text and so on to be explicitly defined.

Although setting up an *asl* parameter tag list is no more difficult than the window list we've already used, there are some alternative *asl* library functions that bring up a default sized requester and I'm going to use these because they make the code a little simpler.

This default parameter scheme involves making a call to an *AllocFileRequest()* function and saving the returned requester pointer (checking the call for a successful, ie non-zero, return value). If all goes well the program can then bring up the requester by calling the *AslRequest()* function mentioned earlier.

Before the program terminates a *FreeFileRequest()* function must be called to hand back the resources allocated by the original *AllocFileRequest()* call.

Now the initial *AllocFileRequest()* allocation and the *FreeFileRequest()* handing back function can obviously be paired together and incorporated into our existing program's general resource allocation scheme.

You should know the format and the philosophy behind these routine pairs by now, so I'll just refer you to listing 10 and earlier instalments rather than repeat the stack function explanations again.

The file requester has to be displayed whenever the user selects the 'Select File' option. You'll remember from last month that I incorporated a dummy file handling routine that was called when this menu option was

*This month Paul Overaa
tackles the use of the
ASL File requester and
DOS file handling
functions*

Make a request

Part 4

assembler language

selected, so all I need to do is load registers *a0* and *a1* with suitable parameters and call the *AslRequest()* function.

The preliminary fragment in listing 1 shows the additional instructions needed to bring the file requester to life along with tasks yet to be tackled.

COMPLEX

Easy code so far, and with this code in place the file requester certainly appears. When we start to tackle the job of extracting the filename and loading the file into memory however, things get a little more complicated and in fact the rest of this month's instalment is devoted purely to this task.

Because the file handling code, taken as a whole, could seem rather daunting, I've decided this month to go through the various steps in detail, identifying the code fragments concerned. This should make it easier to come to grips with the complete routine that you'll find on disk.

If *AslRequest()* returns TRUE then the *rt_File* and *rt_Dir* fields of the requester data structure will contain the name and the

directory of the file selected by the user. I'll be copying these fields to a filename buffer that was defined, along with a label representing its size, as shown in listing 2.

With Devpac and most other assemblers the *dsb* statements result in cleared memory being set aside. As this filename buffer may be used many times (as the user selects further files) we still need to take the precaution of clearing it before adding any new selection.

The *680x0 dbeq* instruction is great for these types of tight clearing loops and the fragment in listing 3 shows the code arrangements used. Notice that the loop stops when either the buffer is full or a NULL byte is found - this prevents the loop from clearing memory that is already clear.

The next step is to copy the *ASL* requester directory entry to our file name buffer using another *dbeq* based loop, as shown in listing 4. Finally we add the filename to the directory path information that was copied to the filename buffer by using the *DOS* library's *AddPart()* function. At this

last words

The various fragments I've discussed will doubtless make more sense when you view them as part of the completed *FileHandler()* routine that's on this month's cover disk.

If you think about how the routine works you'll realise that although any previous file buffer is de-allocated before a new buffer is installed, the routine (if successful) always returns with the file buffer for the latest file still allocated.

This code has been added as part of the higher level *MenuHandler()* function that was discussed last month and it works by again checking the *buffer_p* variable to see if a buffer exists, and then calling the *FreeMem()* if necessary. You'll notice that the source code is growing

nicely and as well as new routines, all the additional system definitions and function LVO values required have been placed in the source.

An assembled version is also on disk but please remember that it should only be run from either a Shell window, or from the Devpac Editor's 'Run' menu option.

If you've got a Workbench 2.04 (or later) machine, try running the program and using the 'Select File' option. This will bring up the *ASL* file requester and from here you'll be able to select and load a file into memory.

You won't see anything at this stage but then, files will be being loaded. Displaying them is the next task, but for details of this you'll have to wait for the next issue!



The *asl* library makes file requester use very easy indeed

```
FileHandler  move.l    d0-d4/d0-d2,-(a7)    preserve some registers
             move.l    file_request_p,a0    ask requester address
             move.l    #NULL,a1            no tags are used
             CALLSYS    AslRequest,-AslBase    bring up the requester
             ; extract filename info and then load file into a buffer area
             move.l    (a7)+,d0-d4/d0-d2    restore some registers
             rts
```

Listing 1

```
filename      ds.b 256
filename_sizeof  equ *-filename
```

Listing 2

```
clear_filename  move.l    filename_sizeof-1,d0    filename buffer size less 1
               move.l    filename,a0            our filename buffer
               move.b    #0,(a0)                have we reached a NULL?
               tst.b     d0
               dbcc      d0,clear_loop
```

Listing 3

```
move.l    filename_sizeof-1,d0    filename buffer size less 1
move.l    file_request_p,a0        file requester address
move.l    rt,(a0),a0              get start of directory entry
move.l    filename,a1             our filename buffer
move.b    (a0)+,(a1)
               tst.b     (a0)            have we reached a NULL?
               dbcc      d0,copy_loop
```

Listing 4

```
move.l    file_request_p,a0        ASL requester address
move.l    filename,d1             our filename buffer
move.l    rt,file(a0),d0          ASL filename entry
move.l    filename_sizeof,d3      filename buffer size
CALLSYS    AddPart,-DOSBase
```

Listing 5

```
.alloc_fib  moveq     #DOS_FIB,d1    object type
             moveq     #NULL,d2      no tags
             CALLSYS    AllocDosObject,-DOSBase
             move.l    d0,d4          save pointer to fib
             beq        -.error0
```

Listing 6

```
.normal_exit  move.l    d5,d1            file handle pointer
              CALLSYS    Close,-DOSBase
              moveq     #DOS_FIB,d1    object type
              move.l    d4,d2            fib pointer
              CALLSYS    FreeDosObject,-DOSBase
              move.l    (a7)+,d0-d5/d0-d1    restore registers
              rts
```

On not so good days, for example when system memory is being heavily used by other programs, many library function calls can fail — hence the need for checking return values.

The various error labels seen in earlier code fragments cause a path to be taken that leads to duplicated sub-sections of the above code that firstly only free/close things that had been successfully acquired or opened, and secondly make a call to the Intuition DisplayBeep() function before returning.

This means that any error conditions that result in the file not loading will cause the screen display to flash, thus indicating that the file could not be loaded.

```
.error2  move.l    d5,d1            close file
         CALLSYS    Close,-DOSBase
.error1  moveq     #DOS_FIB,d1    object type
         move.l    d4,d2            fib pointer
         CALLSYS    FreeDosObject,-DOSBase
.error0  moveq     #NULL,a0        free fib
         CALLSYS    DisplayBeep,-IntuitionBase
         move.l    (a7)+,d0-d5/d0-d1    restore registers
         rts
```

```
move.l    filename,d1            filename start address
move.l    #NULL,d2              ASL buffer size
CALLSYS    Open,-DOSBase
move.l    d0,d5                  save file handle for closing
beq        -.error1
```

Listing 7

```
move.l    d5,d1
move.l    d4,d2
CALLSYS    ExamineFH,-DOSBase
tst.l     d0
beq        -.error2
```

Listing 8

```
move.l    buffer_p,a1
beq.s     no_buffer              is a buffer still allocated?
move.l    buffer_size,d0
CALLSYS    FreeMem,-AslExecBase    free allocated buffer memory
move.l    #NULL,buffer_p        clear buffer pointer
```

Listing 9

```
AllocFileReq  move.l    a0-a1/d0-d1,-(a7)    preserve regs
              CALLSYS    AllocFileRequest,-AslBase
              move.l    d0,file_request_p    save returned pointer
              beq.s     .error                push de-allocation address
              move.l    #FreeFileReq,-(a5)    restore regs
              move.l    (a7)+,a0-a1/d0-d1
              rts
FreeFileReq   move.l    a0-a1/d0-d1,-(a7)    preserve regs
              move.l    file_request_p,a0    requester to close
              CALLSYS    FreeFileRequest,-AslBase
              move.l    (a7)+,a0-a1/d0-d1    restore regs
              rts
```

Listing 10: Preparation and dismantling of the aal file requester is easy and fits nicely into our established resource allocation framework

```
.no_buffer  move.l    d4,d0          file info block address
             move.l    file_size(a0),d0    size of selected file
             move.l    d0,buffer_size    store identified size
             move.l    d0,d3            needed for Read() call
             moveq     #DRENT_ANY,d1    any memory I'll do
             CALLSYS    AllocMem,-AslExecBase
             move.l    d0,buffer_p      did we get any memory?
             beq.s     -.error2
             move.l    d5,d1            file handle pointer
             move.l    d0,d2            buffer_p from AllocMem()
             CALLSYS    Read,-DOSBase    copy file into memory
```

Listing 11: Code which performs memory allocation of the file buffer and file loading

point we will have built a complete path/filename string that can be used to open the file — see listing 5.

Quite a bit of work still needs to be done and the next step is to attempt to open the file and determine its size. To do this we need to allocate some memory for a structure called a FileInBlock (defined in the dos.i system file).

There are a number of ways of doing this but the modern way is to use the dos library's AllocDosObject() function loading the dos.i defined value DOS_FIB into register d1 to signify that we want to create a file info block.

REGISTERS

I've chosen to store the returned pointer in register d4, a non-scratch register (i.e. one that isn't affected by any library calls) so the resulting allocation code looks like listing 6.

File opening uses the dos Open() function and, as with all library functions, it's just a matter of loading the required parameters, using the CALLSYS macro to generate the library call code, and collecting the result (usually in d0).

The file is only going to be kept open long enough to read and copy it into memory, so again I've chosen to store the returned file handle in a register (d5) as shown in listing 7.

The dos library now provides a function

called ExamineFH() that loads information into a file info block for a file specified by a file handle, i.e. the value returned by the Open() function.

The function needs to be called with the file handle and FileInBlock pointer in registers d1 and d2 respectively and, to be safe, the return value should also be tested for success (it should be non-zero) — see listing 8.

At this point a potential snag is looming because we are ready to allocate some buffer memory for loading the file, but a buffer may already have been allocated (if the user had previously selected and loaded some other file).

The way I've tackled this problem is simple — we look at the contents of the variable which holds the address of the file buffer (called buffer_p) and if this is non-zero then a buffer exists and must be de-allocated before the buffer for the new file is created.

For this scheme to work it is necessary to clear the buffer_p variable whenever a buffer is freed. Listing 9 shows part of the routine which does this job.

With this done we can extract the file size from the file info block, use the Exec AllocMem() function to allocate a buffer large enough to hold the specified file, and then use the dos library's Read() function to read the whole file into memory. Listing 11 shows the completed section of code that performs these operations.





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The hype surrounding CD-ROM has often focused on expensive games. Dodgy interactive dramas replete with ham acting and flashy looking arcade action concealing poor game-play has probably left many thinking: "What's the fuss?"

Happily, there's a wide choice of more serious products available that are surprisingly despoite not costing an arm and a leg. The Amiga enthusiast would do well to consider some of the options available.

With its obvious advantages in terms of storage space, serious CD-ROM tends to offer excellent value for money. Each of the disks covered in this feature, for example, contain so many files and applications that initially they can be daunting.

The software covers a wide range of applications. The image and font libraries can store thousands of memory-consuming images that can be used for anything from simple Workbench backdrops to Multimedia presentations.

There are sound libraries which can be used by both the musician or the video-maker who wishes to add sound effects to a film. Networking tools, Amos related files and the Fred Fish collection are just a few of the other possibilities available.

Of course you'll need a CD-ROM drive to run these titles, but with the advent of the Zappo for the A1200 plus various hardware options for the A4000, users can get a good CD drive at a third of the cost of an equivalent 600MB HD.

Weird Science Clip Art/ Fonts

Image formats: B&W IFF Bitmap, Coloured IFF Bitmap, Proclips, EPS, Pagesetter, Pagestream, IMG, Corel DRAw

Font formats: Adobe, CG, Bitmap, IFF & Coloured, Postscript, Pagestream, Prodraw, TrueType, PCX, Calamus, GDOS



More pictures are available on Weird Science's Clip Art collection, with 26,000 files covering hundreds of subjects. In fact, the makers claim it's the most comprehensive collection of Clip art ever.

Black and white bitmap images and coloured images are provided in IFF format. Many of the Bitmap designs are disappointing, not because they are simple but because they are poorly drawn.

Despite this there are others that are useful. The

coloured images are of a better standard, with the nature pictures standing out as some of the best. The maps could also be useful.



There are images in separate directories for Proclips, Pagestream and Pagesetter. What's more, the collection of brushes is a valuable addition for DPaint users to play around with.

Once again, then, it's rather a mixed bag as far as quality is concerned, but considering the price it represents excellent value for money.

As you'll be expecting now, there are thousands of files on offer, and they are arranged in easily accessible subject libraries. All the fonts are ready to use.

Designs range from the standard fonts to the more unusual, including holey swiss cheese characters or horror designs dripping in gore.

Unfortunately, many of the fonts look rough round the edges and are not up to the job of professional presentations. But then at this price there's a limit to what you can expect.

Reams of

Clip Art & Fonts CD

Formats: 600Mb+ of EPS, IFF and PCX
Clip art. Adobe and PSFonts

Targeted for desktop publishing uses on the Amiga, this is an excellent source of material for all sorts of documents. General purpose files include pre-designed borders ranging from simple outlines to ornate patterns.

Specific needs are also catered for. For example, there is a choice of well-drawn menu headers that could be used by café or restaurant owners.

The selection of black and white illustrations is of a higher than average quality, and many of them could be used to give leaflets and newsletters a professional touch.

There is also a huge amount of Adobe and PSFonts available which can be used for professional DTP tasks.



The Professional Fonts and Clip Art

This is an alternative to the two Weird Science CDs, combining fonts and images in one for the benefit of the serious DTP user. It differs in that it offers GIF and Jpeg images.

This makes it more suitable for professional users, but not so useful for making the parish newsletter. Obviously, an expensive printer would be required to produce documents with these high resolution colour images.

Picture subjects covers a reasonable amount of categories and they are generally good quality, but there's not as much to choose from as with Weird Science's Clip Art.

As far as fonts are concerned, there's 320Mb worth of Adobe, Compugraphic and True Type fonts available, so the serious DTP user is again well catered for.

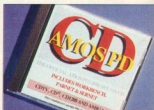


Amos PD

Amos, for anyone that doesn't know, is a dedicated creation system for producing Amiga programs. This CD is the official Public Domain Library of Amos related software.

With the entire PD library available, the disk offers good material for the Amos user and is also a source of help and tuition. Thankfully its all catalogued for easy accessibility. Provided with the CD are Amos source codes, sprite banks, Ctext banks,

sound samples and numerous music banks. Parnet and Semet are also included to allow material to be transferred from the CD32.



Gifs Galore

Image format: GIF

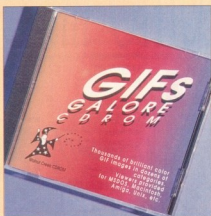
This CD contains over 5000 full color images along with a viewer for the Amiga allowing you to see them. Grouped into dozens of categories, the choices include images of aviation, cartoon, clip art, raytrace and even vietnam.

There is a combination of high definition pictures and basic hand-drawn designs, the latter being more useful to owners of less powerful Amigas and printers.

The quality varies wildly from the impressive to the ludicrously inept – perhaps not surprising considering the breadth of choice offered.

For those looking for a comprehensive source of images, there should be more than enough quality material on this CD to satisfy your needs. There's also a selection of Bay Watch types in swim-suits – not that you'd be interested in that!

Unfortunately, our copy had a fault with the View Tech which meant that as soon as images were rendered they'd vanish from the screen. The problem was resolved by using AD-Pro, but this bug seriously needs fixing.



What does it all mean?



As has already been stated, as there are no instructions to speak of, these CDs make few allowances for the beginner. So here's a brief explanation of the jargon.

To start with the image libraries, different types of images are saved in different types of formats on the Amiga:

IFF: This is the standard format for images on the Amiga. Most will be 24-bit.
GIF: A viewer is needed to look at GIF images. This is not usually a problem since most of the CDs include the right viewing software.

If you don't have the right viewing software, you may need an image processing package such as AD Pro, Image FX or Imagemaster which will convert this sort of image for the Amiga. However, these don't come cheap.

Jpeg: These are 24-bit compressed images, the advantage being they take up less memory space. As far as viewing is concerned, many CDs will provide software such as Fast-Jpeg.

EPS: These images must be loaded into a DTP package (see below) for use. Well known DTP software includes Page Setter, PageStream and Pro Page.

Bitmap: These images are black and white. Some use cross-hatched shading, a form of dithering which gives extra definition.

Adobe Fonts/PS Fonts: These are Postscript fonts that can be converted to other packages such as DTP software. Furthermore, you can import Adobe type 1 fonts into Ray Tracers that will allow you to alter the appearance of characters with effects like extrusion.

DTP: Stands for Desk Top Publishing. DTP software is designed for text and image manipulation, making it possible to create magazine style layouts for documents.

As with the CD image libraries, the sound CDs will often include software that allows the sounds to be heard. Opus Directory includes this facility as well.

Modules: These are whole pieces of music. However, samples can be ripped from them using sound processing software such as Audio Engineer or Audition 4, which is a sample editor. Med and Octamed also include their own "rippers".

Basically, the way these work is that the sounds from the module are stored in RAM. The musician can then order up the sound editor, grab a particular sound from the piece and then edit it together with other samples or music.

Samples: These are snippets of sound extracted from film sound-tracks and music pieces.

ROM

There is now an abundance of CD-ROM titles available containing libraries of images, sounds and utilities. Gareth Lofthouse takes a look at what's on offer.



3D Volume 2/Avallon

Syndesis' second 3D volume received high praise when it was reviewed last month by Stevie Kennedy. Though more expensive than the other products in the round-up, its



high quality images represent great value for Lightwave and Imagine users. With 202 models to choose from, the CD offers an alternative to the laborious process of creating them yourself. Furthermore, they are all easy to use and require only a little editing to fit into any scene.

The Avalon CD, unfortunately, is much less consistent when it comes to quality and will be of little interest to people who don't own InterChange Plus or Pixel Pro.

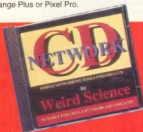
Network CD

Intended as a simple networking tool for the Amiga, this product contains over 35,000 files of freely distributable or shareware software.

Using it you can connect a CD32, CDTV, CD1200 or an A570 to another Amiga and access software on any of your CDs from the other machine.

This is possible because the Network CD disables the automatic reset function on your CD machine. The result of this is that you'll be able to use the CD machine as a remote storage device for your master Amiga.

To connect the machines you'll need



the CD32 cable. This uses the CD32's AUX socket and includes a keyboard pass through, which means that FMV or SXI add-ons can still be connected.

As a bonus, the CD also includes Fish 800 to 975, the latest Amos disks, a collection of images and lots of utilities.

CDPD IV/Aminet III

This is the latest version in the well respected CD public domain series, its aim being to offer the most up-to-date utilities for the Amiga. For starters, it contains the latest Fred Fish disks, an ocean of programs in itself.

The King-Fisher database that comes as part of Fish is a life-saver. Designed for the maintenance and perusal of Fish, it provides brief descriptions helping you find what you need in what might otherwise be an overwhelming choice of utilities.

We can only scratch the surface of the library, but the utilities range from Spreadsheet tools like FHSread to archiving systems and untold numbers of demos.

Other examples of what's on offer are the Five Star betting prediction tool, the popular KCommodity, Mach V, which is a hotkey/macro multi-purpose utility and Fractal generators.

As if this wasn't enough, CDPD has utilities outside the Fish collection such as music modules and Persistence of Vision, a complete raytracing system, along with objects for Imagine. There's also 350 Bitmap and 410 PostScript fonts.

An alternative that's been out for a while now is Aminet 3. Again you get lots of Fish utilities plus pictures and animations, along with over 200 games for when you want to relax.

Overall, both packages are comprehensive all-rounders with lots to offer the enthusiast.



At a glance

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3D Vol 2	Syndesis Corp	9	9	£65
3D Avalon	" "	7	7	£32 approx

Sounds Terrific

Sample Formats: IFF, WAV and VOC

This is a double CD pack that aims to be a vital source of sounds for both the non serious user and the musician. With over 1.2 Gigabytes of music and sound data on offer, there should be something to interest anyone.

One disk is composed entirely of music modules. This source of pre-made music is a mixture of original compositions and rip-offs of well-known tunes and songs.

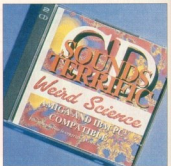
As you might expect, House and Electronic pieces work more convincingly than the attempts at Rock or Classical. Wagner's Ride of the Valkerie stood out as a hilariously feeble imitation and will surely have the composer's corpse turning in his grave.

Despite this, there are plenty of good quality pieces to be used with sound editing systems to create presentations. Musicians can also steal samples from within the modules.

The other disk includes Sonix Scores, Midi Files, and samples in most of the required format, as well as all the converters that are needed to use it with different utilities and applications.

Messing with the sound samples is fun in itself. There are famous snippets of speech from the likes of Top Cat or The Muppets and the inevitable samples from Dr. Who and Star Trek. More useful are the samples of jet and car engines, explosions, gun-fire and so on. Some of these are of a high enough standard to use in video film.

As a package that caters both for simple fun and serious uses at the same time, Sounds Terrific is highly recommended, especially when you consider that even games can cost twice as much.



Using the CDs

A fault of all the CDs in the roundup was that they contained virtually no instructions on how to use the products. This is a serious failing since the beginner doesn't necessarily know how to view the images or hear the samples.

The easiest way of inspecting a file is with a directory manager like Directory Opus which includes facilities for showing pictures and playing sounds. If you don't have such a tool, most of the CDs thankfully include viewing or playing software.

Unless the CD has a good contents guide, a directory manager would also prove invaluable

when it comes to finding particular material. Otherwise, hours could be spent sifting through thousands of files in an attempt to find the right one.

Many of the programs that come with the utility libraries stand on their own. To make the best of the sound and image collections, however, sound processing or image processing software would be useful.



Contacts

17th Bit Software

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Weird Science

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Mini Office works on all Amigas with 1 megabyte RAM, can read Amiga IFF files and for US users, fully supports the NTSC standard.

public



sector

Dave Lusick surveys the latest PD and shareware releases, fresh from the jiffy bag

Cheap doesn't necessarily mean nasty, a statement confirmed by the typically diverse selection of software that has tumbled gently into the PD postbag over the course of the past month. Whatever activity you may engage yourself in with the aid of your Amiga, there will most likely be something to tickle your fancy available for a few quid through the public domain...

ZXAM Spectrum AGA

Programmed by: Antonio J Pomar-Rossello
Available from: KEW-i1 software
Disk No. 01041

The wave of Spectrum nostalgia sweeping the Amiga scene continues with the arrival of another program whose sole purpose is



It still isn't up to full Spectrum speed unless you've got an accelerated Amiga, but ZXAM is at least slightly pacier than the opposition

life is to transform your powerful 16 or 32-bit machine into a vastly inferior computer dinosaur. What, you may ask, is the point of shelling out a few hundred pounds on an Amiga and then using it to play Spectrum games? Well, it would seem that despite the technical excellence of many modern games, today's offerings are often sadly lacking in the playability department.

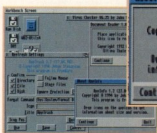
Even though I never owned a Spectrum, having navigated the heady days of the early- and mid-eighties from the bridge of my trusty Acorn Electron, I can see that for some the temptation to experience those monochrome classics one more time could prove to be irresistible.

Although this is certainly not the first such program on the Amiga, in the past such offerings have been let down by an alarming lack of speed. Spectrum software has been known to run inexplicably slowly on even the fairly pacy 14MHz A1200.

Fortunately, in this respect the ZXAM emulator is slightly ahead of its rivals, so at last the oldies can be relieved at something approaching full speed.

The program does require WB3 to run, and features a standard intuition frontend. It can cope with Spectrum games saved by other emulators in a variety of formats, although in some cases you may need to rename the files for them to be recognised.

You can also, of course, load your old software from cassette, although you will need a suitable hardware connection such as a sound sampler to do so.



ImageStudio

Programmed by: Graham and Andy Dean
Available from: Graham Dean

While many people could undoubtedly find uses for an Image Processing package, the two real heavyweights, Image FX and AdPro, both boast price tags large enough to convince the average user that such a program is a luxury they cannot afford.

PD and Shareware authors have, however, been slow to attack the potential market. There was Grinder, which was only slightly less unpleasant to use than its name made it sound, but beyond simple file conversions it came nowhere close to filling the void.

Enter ImageStudio. It can read and write in an impressive range of picture formats, from standard

ART of the MONTH



Never Liked Uno

Programmed by: Lego
Available from: OnLine PD

Slideshows are ten-a-penny these days, so it's refreshing to find one which features decent pictures which have not simply been scanned or digitised. There are plenty of pictures crammed onto this disk, covering a wide variety of themes, although perhaps unsurprisingly fantasy artwork is prevalent.

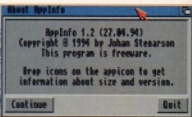
The pictures are colourful and stylish, and can either be viewed in sequence or individually. A couple of the fantasy ones are clearly inspired by Dungeons & Dragons - in fact there's one of a halfling which I'm sure is based on some artwork in a D&D rulebook - but that's no bad thing, especially when the pictures are this well drawn.

There's a pleasant enough tune playing away in the background, and the overall effect is pretty decent. Not bad at all.

WB2/3 Utilities 4

Programmed by: Various
Available from: KEW-i1 software
Disk No. W1114

As a general rule, on disks of this kind there will generally be a few run-of-the-mill programs, the sort that are copied to the



A selection of some of the more useful utilities supplied on the disk

Amiga IFF and Compuserve GIF to the efficient Jpeg compression system. It allows the user to adjust picture brightness and contrast, or apply a large selection of special effects including sharpen, emboss, and even user definable convolves. What's more, it does it all from within a beautiful intuition interface, meaning it is pleasant to use and extremely easy to work with.

It can handle 24-bit pictures with no problem, and as well as displaying them using either the internal viewer or an external user-configurable one such as ViewTek, the resizable preview window can use up to 256 greyscales.

Various effect windows can be left open on the screen so that they are quickly available, and the screen layout can be saved to disk along with other Preferences.

Perhaps the most impressive feature is the option to



A couple of particularly impressive pictures raise this disk slightly above the mundane fare of most slideshows

hard drive, maybe used once or twice, and then deleted next time you become short of storage space.

There will also be a couple of pointless programs which are ignored after you've read the ReadMe, and the odd highly suspect program which either crashes instantly or causes strange things to start happening. Just occasionally there may even be some really useful programs included.

On offer here, fortunately, we don't have any crashers, and there's only a couple of pointless programs. A couple of programs have even been granted positions on my already cluttered Workbench screen, which is surely the highest accolade I can award such utilities. Of particular note are the following gems:

● **DocReader** – At the heart of this Applcon utility is a simple yet clever idea. Drop a program icon onto it and DocReader will search the directory for the appropriate documentation file with a

.doc, .guide, or other similar suffix. If it doesn't find one it will simply open the text viewer with the file you dropped onto it, so you can simply drop the readme onto it if you so choose.

● **AppInfo** – This is an Applcon which simply tells the user a few things about the specified file, including file size and version number, along with a version date if it can find one. This is another nice idea which could make hard drive management much easier.

● **AppTrash** – This is an enhanced version of the Workbench trash can feature. Dropping files and drawers onto it gets rid of them while dropping disks onto it will format them. Files can either be stored so that they can be removed from the trash later, or deleted instantly when dropped onto the trash can.

Oh, and there's also yet another flying toasters screen saver – how original. Still, it's more configurable than most of its ilk and at least it doesn't seem to crash the system. All in all, an interesting disk which won't exactly revolutionise the Amiga world but could be worth a look.



Not just a pretty face, *Star Woids* is a tough Thrust derivative which ought to provide a long-term challenge



A good range of image processing options and file formats make ImageStudio an attractive proposition

use a hard disk as virtual memory. This means that it can run in under one megabyte of memory, a feature that would certainly be welcome in many commercial offerings.

It means that if you apply several effects to a picture and then decide that you don't like any of them, you're not limited to only Undoing the last effect as it is possible to store up to 100 actions in the Undo/Redo buffer.

You'll need one megabyte and WB2 to use ImageStudio, and having an AGA machine is a definite advantage for picture displaying, although it is by no means essential.

The PD demo version has all options enabled but can only handle pictures up to 250x250 pixels. The full version, along with an optimised 68020 version, is available for a very reasonable £10, extremely good value considering the features on offer.

Calling all PD libraries....

...and individuals with anything remotely worth my while having a peek at. If you want something released as PD, or you're a library with stacks of hot new stuff that you haven't seen reviewed yet, why not drop me a line with a copy, full documentation and everything clearly labelled? I promise I'll at least look at your work.

Tina Hackett, PD Submissions,
Amiga Computing, Europa
House, Adlington Park,
Macclesfield, SK10 4NP.

Star Woids

Programmed by: Martin Kift, Rowan
Crawford and Rob Wells
Available from: OnLine PD

One of my favourite 8-bit games was Thrust, since it was not only highly enjoyable but also fairly challenging.

For those who never sampled the delights of Thrust or its Atari ST cousin Oids, the game consisted of guiding your tiny ship around planet surfaces and cave networks.

Your ship was viewed from the side and rotated when the joystick was moved left or right. It could thrust in whichever direction it was facing when the joystick was pushed up. This made simply steering the ship quite tricky and when enemy gun emplacements were added then things could become really tough.

Your objective was to journey to several planets and retrieve from each one a bizarre ball thing that dangled awkwardly beneath the ship, making keeping control even harder, before destroying a nuclear reactor buried in the caves and escaping from the planet within ten seconds.

As a great fan of Thrust I was particularly impressed by this classy derivative. The principle gameplay difference between Star Woids and Thrust is that here you are collecting Rebel Soldiers from the planet surface, instead of strange spherical objects. Rebel Soldiers? Hang on a minute. Star Woids... Rebel Soldiers... Has this game got anything to do with Star Wars?

Well, yes. The authors make no secret of the fact that Star Woids borrows considerably from the Star Wars films. This is particularly notable in terms of presentation, with an impressive rendition of the title tune and some short animated sequences involving X-wings and the like.

I hope this doesn't create difficulties for the creators in terms of copyright problems because in addition to boasting an elegant facade, Star Woids is a playable and challenging game.

One megabyte of memory is required to run Star Woids. This is only a three level demo, and for the full game you'll have to pay a £10 registration fee. That said, however, I'd be surprised if you finish the demo in a hurry because it's not easy.

Quackbusted 2

Programmed by: Rednex
Available from: OnLine PD

Alright, I confess you could justifiably call me a bit cynical. In fact, that's a lie, you could call me very cynical. On the whole I don't really see the point in demos because, while they are very impressive when first watched, they are somewhat lacking in long-term interest.

Wouldn't the programmers (who are clearly quite talented if they can produce these pieces of technical wizardry) be employing their time more productively if they produced some useful software?

Quackbusted, and I must admit to being completely mystified as to the reason why it was so christened, is actually fairly good. There are some nice effects, and you might actually happen across a couple you have not encountered before. Of course, in order not to become bored rapidly you really need to appreciate gently moving spiral effects.

The music especially is worthy of a mention. I have a feeling that had I been five years older or if I frequented the more obscure Stockport music shops I might have been able to recognise it. Anyway, whether it is an original tune or not it is excellently sampled and crisply reproduced, and despite some cheesy electronic organ-style slides it is one of the best Amiga demo tunes I've heard in a while.

Throughout the proceedings, various words of wisdom in the form of song lyrics appear on the screen. Fine, if you happen to be a fan of the Nine Inch Nails or the Dead Kennedys, although if you're into

Genie

Programmed by: John Godley
Available from: John Godley

Genie is quite an impressive family history database program, capable of storing details of the relationships and marriages of up to 9999 people on hard drive systems and 1500 on floppy. While genealogy will not be everybody's cup of tea, Genie will probably prove a great help for those who are interested.

Although Genie was written in AMOS, the author has gone to some trouble to try to provide a Workbench 2 interface. Information is easily entered into the text gadgets and once the data on several people has been input, instructing the program as to the relationships between them is a simple matter of clicking on a few buttons.

Once all the necessary data has been input, Genie can organise and print out tables of information. Family groups, lists of individuals and so on can all be output. Pictures of people and marriages can be linked to the records and to

avoid confusion in families with lots of similarly named people, comments can be added to the records to differentiate between them.

Genie requires one megabyte to run. It comes in two flavours, the full registered version and the freely distributable PD demo which has the printing features disabled. Registration costs £5, and for those interested in charting their pedigree then Genie should be very valuable.

Trace your family history with the aid of the thoughtfully designed Genie

slightly more, erm, mainstream music you may find they spoil the effect of the spiralling patterns. There are also various messages from the programmers. Unfortunately, some of these you probably won't understand because they're not

written in English, whereas some of them you will but may wish you couldn't because they're written in bits of English you wouldn't generally use in polite conversation.

It's a shame that many demo coders are unable to produce a disk without at some point bombarding the audience with a shower of expletives, because in this case it spoils an otherwise quite reasonable production.

AC



Quackbusted.
Why? What does it
mean? What's
going on here? It's
bizarre, occasion-
ally interesting,
but ultimately a
little pointless

Lay your hands
on me

KEW-II software

PO Box 672, South Croydon, Surrey
CR2 9YS
Tel: 081-657 1617

Graham Dean

14 Fielding Avenue, Poynton,
Stockport, Cheshire SK12 1YX

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Rotherham S61 2HJ

ant Avenue, Southend
sea, ESSEX, SS1 2YD
(0702) 46693
Fax 617123

Tel (0702) 466933
Fax 617123



Contains all of our Various (Numbered) disks (1/2 Number 1 up to 1500). Subjects cover the last

[illegible]

2 * 2071 (AGA) BACMAN
This game is an AGA program clone, wh

[illegible]

Install with ease

Steve White opens the door to creating your own installation scripts and explains how to use routines correctly



Part 2

In last month's installer guide I discussed how the language works and provided a few example routines. This month I will attempt to show you a demonstration script using those routines discussed.

You will remember that the Installer language relies heavily on the use of parenthesis, (). The parenthesis basically open and close routines so that they can be

translated by Installer one at a time.

What follows is a script example using the earlier routines with an explanation of each command and what it does. Please remember, this script is for demonstration purposes only and you will need to alter it slightly in accordance with your software.

Please ignore the line numbers when typing this example in as they are for reference purposes only.

Example 1

```

01 ;MyProg test installation script
02 ;Amiga Computing '1994

03 (complete 0)
04 (working "Setting up Installation. Please wait...")
05 (run "cc/copy libcdiskfont.library to ram:")
06 (run "cc/copy libcdiskfont.library to ram:")
07 (run "cc/copy MyProg? to ram:")

08 (complete 10)
09 (set mp-dest
10   (askdir
11     (prompt "Where would you like to install MyProg?")
12     (help @askdir-help)
13     (default @default-dest)
14   )
15 )

16 (set @default-dest mp-dest)

17 (complete 30)
18 (
19   (working "Installing MyProg program...")
20   (copyfiles
21     (prompt "")
22     (help @copyfiles-help)
23     (source "Ram:MyProg")
24     (dest @default-dest)
25     (info%)
26     (nogauge)
27   )
28   (complete 90)
29   (working "Installing needed libraries")
30   (copylib
31     (prompt "Installing
32       diskfont.library")
33     (help @copylib-help)
34     (source "Ram:diskfont.library")
35     (dest "Libs:")
36     (confirm)
37     (nogauge)
38   )
39   (complete 90)
40   (copylib
41     (prompt "Installing xsl.library")
42     (help @copylib-help)
43     (source "Ram:xsl.library")
44     (dest "Libs:")
45     (confirm)
46     (nogauge)
47   )
48   (complete 95)
49   (working "Cleaning up...")
50   (run "cc/delete ram:MyProg")
51   (run "cc/delete ram:?.library")
52   (complete 100)
53   (exit)

```

I will now describe each command so that you understand what the Installer script is actually doing.

01 This, and line 02 are basically notes for the writer of the script. Anything preceded by ; is ignored by Installer so that you can insert information regarding the script.

03 This command displays the number as a percentage in the Installer window bar -

useful for informing users how much of the installation procedure is completed. Consider it good manners.

04 This simply prints a message to the screen so that the user knows what is going on at that time.

05 The Run command allows you to execute AmigaDOS commands within speech marks. In this case, the appropriate data is

being copied from the disk into Ram so that it can be installed quicker.

I will discuss this in more depth when I explain how to set up an installation disk. Note how an AmigaDOS wildcard pattern is used to copy all the files beginning with MyProg at line 07.

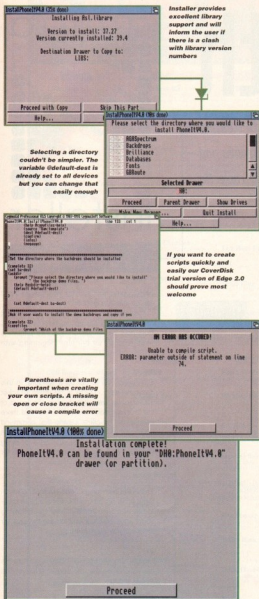
09 Set allows you to set up a variable, in this case mp-dest. There is no close bracket because we want it to contain the result of the following commands. The fact that there is no close brackets means that command 09 is part of the routine 09 to 15. Variables do not need an identifier such as \$ for string variables. Installer automatically sorts this for you.

10 This is the beginning of another routine within the routine set by line 09. It is a routine command that tells Installer that the following commands are to do with asking the user for a directory to install MyProg.

11 Prompt simply displays a message while the Installer is waiting for confirmation of the Askdir routine.

12 This tells Installer that if the Help button is pressed on the interface it should display the help text @askdir-help. Certain routines have dedicated help text built into Installer. You can also create your own help if none is provided, and there will be more on this later.

13 This tells Installer what the default destination is. I have used a pre-defined variable here called @default-dest, and, as I didn't set it to a certain location earlier in the script, it defaults to the current devices.



Installer provides excellent library support and will inform the user if there is a clash with library version numbers.

Selecting a directory couldn't be simpler. The variable `@default-dest` is already set to `all` devices but you can change that easily enough.

If you want to create scripts quickly and easily our CoverDisk trial version of Edge 2.0 should prove most welcome

Parantheses are vitally important when creating your own scripts. A missing open or close bracket will cause a compile error.

At the end of installation the user is shown the installation path. This is retrieved from the pre-defined variable `@default_dest`

In the third instalment of our Installer Guide we will be looking at the individual routines and their associated commands in more depth. We will also be taking a look at variable handling and explaining how you can define your own Help text.

14
Lines 14 and 15 simply shut down the routine opened with lines 09 and 10.

16 This sets the variable `@default-dest` to equal the directory result held in `mp-dest` which we asked for earlier. This means that we can use `@default-dest` to copy the necessary files into the correct destination. `@default-dest` is a pre-defined variable that is used to store destination directories. It is also used at the end of installation when Installer informs the user where they have installed their program to.

18 Line 18 opens up a new routine.

20
Opens up yet another routine which is a copyfiles routine. Installer knows that the following commands will be used to copy a file or files to a destination.

21 We can't use a Prompt here because copy-
files is instant and we won't see it. That is
why there is a Message command at line
19

22 This assigns the help text @copyfiles-help to the Help button on the installer interface. This help text is built into Installer.

23 The Source command allows us to tell Installer which file it is we want to copy. In this case it is MyProg which was copied into Ram earlier.

24 Like Source, Dest sets the destination where the file is to be copied to. In this case it is the location held by the variable @default-dest which we set through lines 09 to 16.

25
Infos instructs Installer to also copy any
.info (icon) files that are associated with the
main file that is being copied – MyProg.

26 When any copying is performed Installer automatically displays a progress bar in blue. Nogaugue turns this off. If you'd like to keep the gauge visible simply remove this line.

27
Lines 27 and 28 simply close the routine
opened by lines 18 and 20.

31 The Copylib command indicates the start of a routine and informs Installer that the following commands will be used to copy a library to a destination.

32
A Prompt to tell the user what is actually
happening.

33 More help for Copylib. This is also built in. Most routine commands such as Copylib, Askdir and Copyfiles all have in-built help text. Installer will expect a Help command within a routine. If it is missing a compile error will occur.

34 This and line 35 are exactly the same as lines 23 and 24 except that I have not used a variable for the destination. Why? Obviously, all libraries are copied into Libs.

36 The Confirm command does just that – asks the user for confirmation of the copying. Where libraries are concerned this is important because they can have the same filename but still be different versions.

Fortunately, the `Confirm` command will force `Installer` to display version information about the library being installed and the one already present in `Libs` directory. You can then decide if you want to continue or skip that part.

38
This closes the routine opened by line 31.

39
Lines 39 to 47 are identical to the above routine but copy `asl.library` rather than `diskfont.library`.

49 This line shows a message telling the user that the installer is cleaning up. Cleaning up? Whenever you copy data to Ram in an installation process it is always good manners to delete it when installation has finished.

50
Lines 50 to 51 basically use AmigaDOS to delete the data that was copied to Ram at the beginning of installation. This keeps things neat and tidy.

53 You made it! Exit tells Installer to inform the user of the location of their program they have just installed, held in @default_dest, and on pressing Proceed to quit.

For the moment, try and adapt the above script to your own programs. Certainly one of the most important aspects of creating an installer disk is to make sure that every thing is copied into Ram first. Imagine installing a large program with lots of files and having to swap between the source and destination disks.

Likewise, it is vitally important that you delete all the data you copied to Ram in the first place. If the files you are installing are large the user's Ram will be severely crippled. Be polite and free it up once installation has finished.

Now you have seen and understood how *Installer* treats scripts, and learned a fairly extensive chunk of the language. I can begin to explain each routine and associated commands individually.

And on the

...Denny Atkins created a world of his own. If you want a better place to live use World Construction Set and create a land of make believe

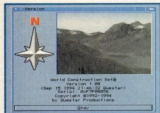
Of You Know Who had been using a copy of World Construction Set to create the Earth, it might have taken a little longer than six days. But the place would probably be a lot better looking. World Construction Set isn't the easiest landscape rendering program out there to learn, but it's certainly the most flexible and powerful.

At \$250, the product isn't priced for the casual user who just wants to create some cool landscape pictures to use as Workbench backdrop images.

World Construction Set uses actual United States Geological Services Digital Elevation Model (DEM) data files to render incredibly authentic and realistic images that aren't just pretty to look at — they're accurate enough to use for mapping purposes (if 90 meter resolution is detailed enough for you), and of high-enough quality to use for commercial animation work.

Of course, few people have a day-to-day need to render beautiful three-dimensional landscapes. But there are many possible uses: Creating backdrops for 3D renderings, overhead views of areas for brochures, and more.

If you're creating a video presentation for an architecture firm, for instance, you might render an animation that zooms across a landscape at high speed until it reaches the new



It's early days, but if version one is anything to go by World Construction Set could be a classic



Total control plus input of data from all platforms

If there was ever a program that cried for online help, it's World Construction Set. Unfortunately there isn't any, so you'll have to refer to the manual. The manual's very complete, but the pre-release copy I previewed didn't have an index. That's a must-have for a program this complex, and hopefully Questar will add one in a future update. The company is very open to feedback, and promises to take all user requests for improvements in the program and manual seriously.

There's so much here to learn to take advantage of that it's hard to imagine requesting much in the way of new features. The only area where World Construction Set is weak is in the display and formatting of its output.

However, the vast majority of folks



On-screen feedback on how the project is progressing

Without a doubt the most complete control system on any scenery generation system

location for a building. Then you'd fade the video to a 3D rendering of that building. You may not need a landscape program, but you'll very likely find one handy if you do any art or animation work.

World Construction Set is an attractive program — it's the first commercial application I've seen that uses the Magic User Interface library, a shareware add-on that adds drop-down menus and a customisable user-interface to MUI-supporting programs. (Note that you'll need the registered shareware version if you're going to customise the interface.)

OPENINGS

The most unique feature of World Construction Set is that it's a non-modal program. That is, you don't jump from a camera mode to a landscape settings mode to a rendering mode. Instead, the program lets you open virtually any window at any point, and you never have to close one to open another.

This can make for a lot of confusion at first,

since there's not an easily followable sequence of events to go through before rendering a landscape.

However, once you learn the program you'll love the lack of modality, as it makes it very easy to quickly make dozens of changes to your projects settings without clicking dozens of windows open and closed.

You can open World Construction Set on any Public screen — a Picasso II running at 1024x768 or an AGA Amiga at 800x600 is great for working on complicated projects.

Unfortunately, that non-modality, combined with an absolutely mind-bending number of options, means that World Construction Set isn't like VistaPro and Scenery Animator — two programs you can just sit down with, click around a few times, and start creating pictures.

World Construction Set features an algorithmic ecosystem mapping setup that you can use to populate your world with rocks, water, grass, and various types of trees.

The algorithmic ecosystem mapping prevents too-regular-looking distributions of trees and plants, making for a more natural looking image. You can choose between Water, Bare, Rock, Conifer, Deciduous, or Grass ecosystems.

The neatest feature of ecosystems, though, is that they can be 'animated' — they change over time — so you could create an animation of a still scene that gradually progresses from summer through fall to winter as leaves change colour and the snow-line moves down the mountains.

Skies and backgrounds can be gradients, or you can use animated bitmap images

Help for the future

who buy this program are already going to have an image-processing program anyway, so why should Questar spend lots of effort supporting different rendering modes and file formats when they could instead spend the time on the landscape portions of the program?

Of course, this is the first release of World Construction Set. Among planned updates for future releases are fractal landscape generation so you can create random worlds, better LightWave support, the aforementioned Vista Pro support, and image scaling.

I can't wait. In the meantime, with a little patience, the results you can get from this program make the steep learning curve worth climbing.

seventh day...



Basic backdrops on a par with anything available from Vista & Co...

backgrounds. Questar hopes to add clouds in a future release. In the meantime, nobody has ever created an algorithmic cloud that looked half as good as a digitized one, so just map a scanned image of real clouds behind your scene.

Of course, the program supports a full 24-bit palette. There are 30 palette registers for various ecosystems and surfaces. You might set one green colour for sage scrub, and a darker one for grass.

CLOURINGS

The remaining 16,777,186 or so colours are created by the program as needed depending on your objects' base colour, the lighting (you can adjust both sunlight and ambient light), and the amount of haze. Preview images are created using a 16-color palette, but saved files contain the full 24-bit palette.

Rendering capabilities are a mixed bag. The program supports the creation of huge images — up to 32,767 x 32,767 pixels in full 24-bit. However, it saves the images as 24-bit files (IFF, Sculpt, or interleaved raw RGB) and doesn't support creating final renders in

various screen modes (you can preview in any screen mode, though).

This means an image-processing program such as ADPro or ImageFX is a must-have to view your final images in their full glory, and to assemble them into animation files.

Setting up your rendering is an absolute joy, thanks to the Camera Window. This is one area of the program that definitely is easy to use — in fact, easier than the competition.

You can render a quick wireframe preview, or choose an elevation or sun-shaded view to get a better idea what your landscape looks like. You can even zoom in on a particular spot on the screen to see what the ecosystem looks like at that spot.

Rendering time varies by complexity of the scene. There are numerous mapping tricks built into the program to allow speedy rendering without having to go overboard on polygons.

The program sports sophisticated animation features. Automatic turn-banking and lookahead features, as well as spline control of all motion parameters, allow you to create landscape overflights with realistic, airplane or helicopter-like motions.

An interactive 3D wireframe layout display lets you preview and tweak your work, real-time (as fast as your screen can update, at any rate) motion previews are supported as well and all spline parameters can be edited using a timeline motion graph.

Professional animators will appreciate the LightWave motion I/O feature. You can create a LightWave scene and import it into World Construction Set, or generate a motion path in World Construction Set (so you can avoid running into terrain) and export it into LightWave so you can add other objects. By

DEM data, dem landscapes

World Construction Set

Set uses actual USGS

DEM data, rather than the custom format shared by VistaPro and Scenery Animator. This means you can obtain actual data from the USGS (which can be a pricey proposition) or, if you have a modem and access to the Internet, FTP data for free.

If you're switching from another Amiga landscape program, Questar says it will be adding support for VistaPro DEM files in the next update.

To terraform a custom landscape (think of how impressive it would be to zoom close over a mountain range and then zoom up above it to find the mountains form a company logo), you can export the file as a greyscale IFF image, touch it up in a paint program, and then re-render it.

World Construction Set includes a layering system and a GUI-based map module that allows you to place vector objects, such as political boundaries, roads, buildings, streams, and coastlines on your image; you can also label images. You can even load AutoCAD DXF vector objects and place them on your image.

merging World Construction Set and LightWave animations, you could zoom over a realistic landscape populated by photorealistic LightWave-rendered objects, creating some amazing effects. Not having LightWave I was unable to try this, but it sounds incredible.

SYSTEM ESSENTIALS

RED = Essential BLACK = Recommended

2.0	4 Mb
Workbench	RAM
8 Mb	RAM
Hard drive	68020 030 040

The bottom line

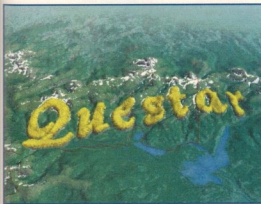
Product: World Construction Set

Supplier: Questar

Price: \$250

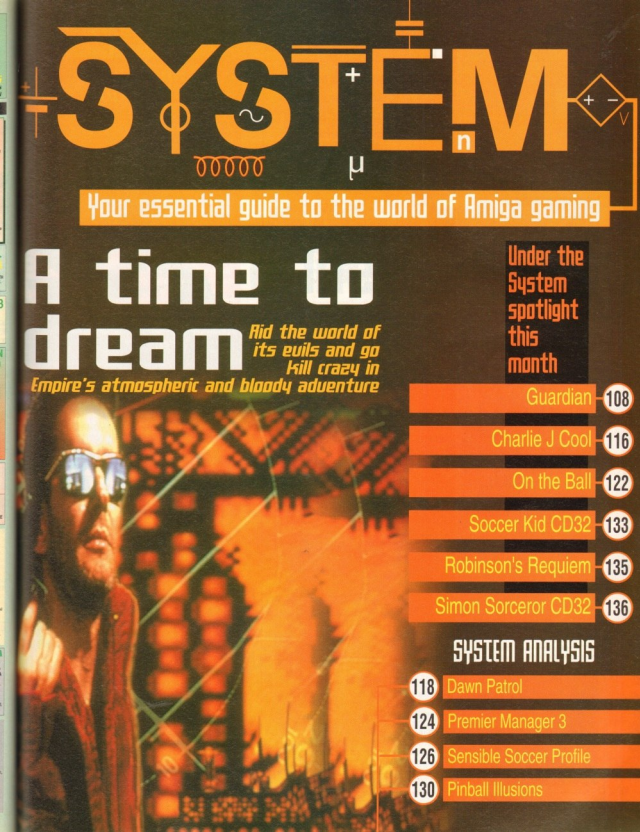
Tel: (303) 659-4028

Ease of use	5
Implementation	7
Value for money	8
Overall	7



Add that designer touch to any image thanks to the power of IFF imports

SYSTEM



Your essential guide to the world of Amiga gaming

A time to dream

Rid the world of its evils and go kill crazy in Empire's atmospheric and bloody adventure

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System Selections

We list some of the best releases we have looked at over the past few months and explain why every gamer should have them.



King's quest 6

Sierra has finally decided to release the sixth adventure in the King's Quest series. As far as adventure games go, they don't get much better than this.

With its brilliant graphics, a fairy tale of a plot, superb playability and a level of addiction that will keep you coming back for more and more, King's Quest 6 is an adventure that should have a place in everyone's games collection.

Pinkie

A cracking little platformer. It looks beautiful with its pastel coloured graphics, it has a nice and cheesy pop-tastic soundtrack and even the gameplay differs from its competitors as it's heavily puzzle-based.

Pinkie, as a concept, isn't anything different and doesn't contain any new surprises, but as a game on its own it works remarkably well. Pinkie is a harmless little platformer that won't hurt anybody.



Universe

Without doubt, Universe is one of the games of the year so far. It has class in copious amounts and is presented outstandingly well. The combined icon and text-control system is intuitive and friendly, making this a simple game to get to grips with.

Universe is the type of adventure game that will be enjoyed by even those normally disinterested in the genre, and must be highly recommended.

Theme Park

The graphics are simply exquisite, the sound is excellent, it is as playable as hell and more addictive than any drug. It oozes sheer class and everyone that has seen it has had nothing but praise for Bullfrog's business simulator.

I could enthuse about Theme Park all day, but I don't want to because right now I want to get back to my A1200 to continue constructing my park.



Putty Squad

The graphics are beautiful and the animation is excellent, especially on the main character.

The control method, considering just what Putty can do, is very easy to use and becomes second nature to you after only a couple of goes. It is extremely addictive and I put hand on heart and recommend it to everyone. Die-hard platform freaks and Putty fans are going to love it to death.

The scores on the doors

Come on regular readers, you must know how it works by now. New readers welcome you to the most exciting part of the magazine, hold on to your hats...

I'm sure many of you are now familiar with our new scoring system, but for those reading Amiga Computing for the first time and those who might have forgotten exactly how it works, here is our guide to the System scoring, err system.

In our opinion, review scores have lost their context as a percentage; some products receiving scores which were only a few percentage short of being the "perfect" game, when in truth they were only marginally above average.

OK, so the scores might seem unnaturally low at first, but that's only because other scoring systems tend to be on the high side and perhaps not as comprehensive or honest as they could be.

In the long run you'll receive a more concise and reader-orientated review that's geared towards the consumer.

0-20 This is given to the lowest of the low

21-30 An all-round poor game that may have a single saving grace

31-40 Just below the average, perhaps let down by a few indiscretions.

41-55 Games of this score are roughly average with 50 being a perfectly average score.

56-66 This is an above average game and is worth buying. For this reason it would be awarded the BRONZE award.



67-77 A game of high quality that you as a reviewer would have no reservation in recommending. Anything of this ilk would be awarded the SILVER award.



78-89 A brilliant title. Definitely worth buying and almost the definitive of its kind. This type of game would receive the GOLD award.



90-100 The best in its genre. This benchmark title receives the PLATINUM title.



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Tel 0114 275 3423.



MicroProse's blaze of glory

The military strategy game, *Fields of Glory* is making its way onto the Amiga recreating the famous Napoleonic battles of Ligny, Quatre Bras, Wavre and Waterloo, with players coming up against characters from history like Blücher, Wellington and Napoleon.

It will feature MicroProse's "Close Quarters Combat System" and an extensive database with accurate orders of battle and biographies of commanders.

In a race against the clock you will control thousands of troops by issuing your orders through a

point-and-click interface. From historical battles to alien warfare, MicroProse have another release in store. *UFO: Enemy Unknown* will require you to defend the earth from an alien invasion.

Combining a mixture of strategy and tactical combat, you will have to control the operation of bases you build and stop the aliens invading with "isometric seek and destroy" play.

Strategy fans can look forward to these two releases very soon and both will be priced at £34.99.



Fields of Glory will recreate the atmosphere of Napoleonic warfare

00000

system online

The recent Autumn ECTS showed that the Amiga games scene is still a hive of activity with plenty of new releases expected.

Tina Hackett brings you the latest

Get ready to tumble

Not only has *Renegade* recently released its shooty type platformer, *Ruff and Tumble*, but its also set to release *The Bitmap Brother's* excellent *Speedball 2* for the CD32.

Together with *Binary Illusions*, *Renegade* will be bringing out its humorous graphic adventure, *The Flight of the Amazon Queen* very soon.

The game is set in 1949 and takes place in the Amazon Jungle. With over 100 different graphic locations and 40 characters to interact with, the game looks to be huge. You play the part of Joe King (hmm!) and must fly film star Faye Russell into the jungle - the location for her new film. You meet the evil Dr. Frank Einstein and must foil his plans for World domination.

Also from *Renegade* we have *Sensible Software's* *Sensible World of Soccer*, the sequel to the excellent *Sensible Soccer*, but chocka full of new features.



Sensible World of Soccer will appeal to everyone, from arcade footy fans to those who prefer a more tactical game



40's adventuring is the subject for Flight of the Amazon Queen

Team tactics

Team 17 have plenty in store to keep Amiga and CD32 owners happy. *Olde England* is the setting for their strategy adventure game due out this Winter. If capturing Kingdoms and rescuing maidens in distress is your kind of thing, then *King of Thieves* is the game for you! The CD version will also contain spoken narratives and extra enhancements.

Looking ahead to next year, Team 17 are planning to bring out *Witchwood*, a "Zelda-esque" adventure game. It will be available for the Amiga around Easter and a CD32 version the following September.

Also sharing these release dates is *Team 17 Pinball*. The game promises all the latest features, including Multi-ball and "incredible special effects."

Racing fans with a CD32 will be able to get *Off Road Racer* for their machines in September '95. It will have texture-mapped graphics and a state-of-the-art 3D engine developed in house.

And if you can't wait that long, Team 17 have plenty coming up in the not-so-distant future. The sequel to *Alien Breed* is imminent as well as *Super Stardust* and *ATR*.

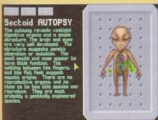
Alien Breed Tower Assault will have over 50 levels, new objectives and features such as a retreat mode which means you can fire behind you while backing off and can also make your fire dangerous to another player.



Go back in history with King Of Thieves for a strategy adventure



Super Stardust looks to be a graphically superb shoot-'em-up



UFO: Enemy Unknown promises to provide a combination of strategy and combat

Lemmings suicide shocker

Yes, those cuddly critters are at it again with another game in the making. All New World of Lemmings will feature three different Lemmings Tribes - Egyptian, Classic and Shadow (all wearing traditional costumes!) - and as well as the usual you will now have bad guys to face and trapped Lemmings to rescue.

The improvements made include larger, enhanced sprites, and the many Lemmings' skills have been reduced to a core of the more essential, making it easier to play.

Winning formula

Domark's successful racer F1 is to have a follow up. F1 World Championship Edition is based on the 1994 season and will feature changing weather conditions and artificial intelligence based around the actual 1993/94 driver and team performance.



There will be two playing views, one from inside the cockpit and a view from behind and air turbulence which may affect the handling of the car is also included.

It's sequel mania from Domark and not only has an end-of-1994-season update disk for their football management game, Championship Manager, been brought out but a sequel is also planned.

This version will have everything from stereo sound with chants from rival fans, to match sequences with full text commentary. There will also be an enhanced player exchange system and will include the Scottish League.

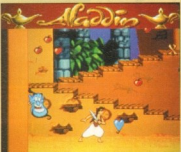


Virgin's magic carpet

Virgin have teamed up once again with Disney to bring their Aladdin game to the Amiga. Promising all the charm of the original film it is set to be released around November.

The Disney/Virgin collaboration will also be bringing out The Lion King, Disney's new film based around a Lion Cub who is forced into the wilderness and finds refuge with Pumbaa the warthog and Timon the Meerkat.

Vice President of Disney Consumer Products, Steve McBeth commented: "Never before have game players been able to participate so fully in the emotional experience of a film. In The Lion King game, players



Fight aim fans can play the part of the D-Day fighter pilot

actually enter the world of the movie, which is brought to life with unparalleled animation, non-stop action and dramatic confrontations."

If flight sims are your cup of tea though you can look forward to Overlord from Virgin and Rowan Software, the creators of Reach for the Skies. The game recreates the experience of the D-Day fighter pilot and will aim to create a highly realistic simulation.

The player takes part in missions that were aimed at gaining air superiority and weakening coastal defences and they will be able to fly Spitfires, Mustangs and Typhoons.

The ground sections involve the player in work back at the base, including briefings and air raids, where he can choose to fight or hide away in the Shelter.



Disney's gorgeous animated adventure brought to the Amiga

Mirage rise to the occasion

One of the stands that attracted rather a lot of attention at the ECTS was Mirage. And why? Because all the versions of their Rise of the Robots game were being shown. Together with Time Warner Interactive, they are bringing out the game on at least ten formats for all Amigas and also for the CD32 sometime in November. Mirage believe it will be "the biggest multi-format launch in games history."

Julia Coombs, Marketing Manager for Mirage said: "The public who have been fed on a diet of Mortal Kombat and Streetfighter 2 will really relish the change that 'Rise' provides."

"Rise" boasts that it is the "first game with a fully rendered, morphing character" and "with film quality controllable 3D graphics." Former Queen guitarist, and rock legend Brian May will be providing music for the game with two tracks from his solo album, "The Dark" and "Resurrection" being used.

They are also venturing onto the coin-op market with Bell-Fruit Manufacturing and a coin-op version of the game will be out soon.

The game will be backed up with a huge pre-launch marketing campaign including TV commercials and bus shelter ads, so look out for the distinctive looking sprites at a bus stop near you!



Rise - "The biggest multi-format launch in games history"

Tough Kompartment-ion

Publishers Kompart are planning quite a few releases for the Amiga, with games from developers such as Croatian Black Legend, NEO, Max Design and Arcane. Among those from Black Legend we can expect to see Embryo, a vector shoot-'em-up, Spherical Worlds, another shoot-'em-up but using a top view instead, similar to that used in Alien Breed.

New UK publishers, Arcane, are working on Turbo Trax, an over-head racing game where you can choose to race 4x4 jeeps, dune buggies, sports cars and 4x4 trucks!

First thing you must do is jump off the disconnected service channel and onto the asteroid below. Search around the asteroid for a bent metal bar and a circuit board. Once you've achieved this you must jump onto the spinning rock.

This is quite tricky, but good timing is the key to success. If you miss it, don't worry, pick yourself up and try again. Once on the spinning rock, you must jump on the bridge which leads you to the next sequence of events.

Insert the bent metal bar into the panel of the satellite dish and then insert the circuit board. Use the panel and a computer read-out will appear on your screen. Select the Gavric Homeworld filtration system.

You'll now be able to link up the service channel with the Gavric Homeworld. All that's left for you to do is walk across the newly created bridge to the next

Universe

scene. You'll find yourself in a mysterious city with many strange creatures wandering around the screen. Move towards the air ducts on the left-hand side of the screen. Push/pull on the air ducts and you will get sucked down to the asteroid with the spinning rock. You'll notice that you weren't the only thing that fell down the ducts. A mirror has fallen down with you - pick it up because it is a highly important object and you can't progress without it.

Once more, jump onto the spinning rock, then jump onto the service channel until you reach the satellite

dish again. Proceed back to the screen with the air ducts on, then walk to the far end of the scene and turn left to exit.

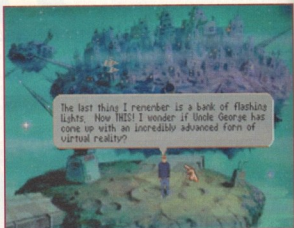
Wait for the robot to pass you by before throwing the mirror at the lasers. The laser bolts will strike the mirror and reflect back towards whatever fired them, leaving the area safe for you to explore.

Go to Silphinaa's house and use the keypad which is situated right next to the door. Once you get inside, attack the door keypad with the bent metal bar. Find the wardrobe, open it and put on the suit which you will find hanging up inside.

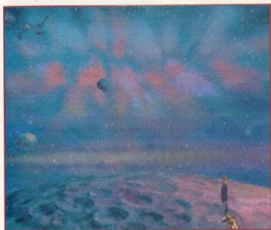
Use the arm computer on the console and then use

beat the system

Here is a guide for gamers having trouble getting started in Core Design's quality point 'n' click futuristic adventure. System's resident adventure guru takes you on a trip around the world of Universe. Enjoy!



The start of the adventure and Boris has got a long way to go before he can get back to Earth



Boris has found the bent metal bar, now all he needs is the circuit board which, thankfully, is quite nearby



Timing is of the essence when trying to leap on top of the asteroid. Miss it and you'll have to wait a while before you can try it again



The air-ducts on the left-hand side, if inspected, will suck Boris down to the planet below, but you'll uncover the all-important mirror

the console to open the window shutter. This now enables you to jump out of the window to safety. Now use the arm computer once more, but this time on the rather flash parked car. Once you've done that, the car will now be safe to enter. Jump in, but you'll find that

it needs to be hot-wired!

To get the car up and running, insert the keycard into the slot on the left of the control panel. Use the console on the right and it will ask you for a code. The code you should type in is "87764". Navigate a course to Balkmos 7 (which is currently third to the left of your existing position).

Descend to the planet and select the top-right quadrant. Pick up the droid and the spray can. Combine the droid and the can together and then use them on the aliens. Jump back in the car and ascend. Punch in a course to Jor-slev 4 (or in other words, the next planet on the map).

Descend once more and this time select the top-left quadrant. Pick up a rock from the floor and throw it at the alien. Use the droid on the blob and then quickly jump back into your futuristic motor vehicle. This time you need to select the bottom-right quadrant.

Talk to the old man in the hut, give him the blobs and he will give you some carvite in return. Jump back into your car and ascend. Lie in a course heading back to the Pallenop asteroids. Offer Snorglat the medicinal herbs. You can now dock with the ship, use the left

mouse button to accelerate and the right mouse button to activate the clamp. Unfortunately that concludes our guide to the first section of Universe, for here on in you're on your own.



Have a chat with Silphina and you'll uncover some interesting facts, but don't hang about because the security droids are on their way!



Wait for the security droid to go past and then chuck the mirror at the door. The lasers will strike and you'll be free to enter the building



After leaving the flat, via the window, you'll find a rather fine and gleaming sports car. Use the control arm and you'll be able to drive away in it

Oi Parkie!

It seems that we've got a bit of extra space in this month's
Beat the System, so just for you I've prepared some hints
and tips for Bullfrog's wonderful Theme Park.



Plough loads of cash into the research of new and exciting rides because nothing can pull in the crowds like a roller coaster can

The key to a successful park is pre-planning. It's best not to rush in and plonk things like rides wherever you damn well please because on the day you're park will suffer. Just use your head and think about the best areas to place your rides. The roller coasters for example, is the star attraction and is always worth a spot in the centre of your park.

The rides are important, but the pathways are what you must concentrate on. Lay these down willy-nilly and you'll find that people will start to wander and will eventually get lost or stuck. Initially, just lay the minimum of paths needed to get people to and from your rides and stalls.

As the park builds, a one-way system is seriously recommended. This will enable you to lead visitors past shops where the majority of people will start to spend their cash. Always make sure that you have plenty of signposts pointing to the exit, the toilets and all your best rides.

Your entertainers are employed to keep your visitors happy, but it is extremely important to keep the entertainers happy too. If an employee's morale is low because of problems with things such as wages then you won't get the best out of

them. It's always a good idea to have plenty of handymen and mechanics working on your park. Keep them well paid and they'll fix and clean things a lot quicker. Always position handymen near your toilets because if they start to smell your park will gain a bad reputation and people will stay away.

If your staff decide to walk out, then give them the cash they want because, financially, strike action will totally cripple your park.

Keep a careful eye on the thought bubbles that appear above visitor's heads as these tell you their current mood. Only respond to a problem if there are a lot of people with the same thought. This is down to the fact that some visitors won't be happy no matter what alterations you make.

The best way to keep your visitors happy is by throwing food and drink down their necks because people are less likely to complain if their tums are full. Watch the price of your goods though.

The visitors will have loads of cash in their pockets, but the problem is trying to get them to spend it. Make sure you've got plenty of novelty and food shops dotted around, especially near the entrance/exit.

There are many strategies to use in Bullfrog's business simulation, but follow these basic rules and they should get you off to a flying start. Remember the golden rule. Plan everything by using your brain, before you click that mouse button.



Keep an eye on the prices at your various food stalls. If they're too high people will keep well away.



The early introduction of a monorail saves people walking everywhere

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No, I said avoid the installations

The previews suggested that this was one worth waiting for. Despite being developed by one man in a single year, claims were being made that Guardian left Starwing on the Super Nintendo looking positively sluggish.

Now it's here looking slick, fast and rather desirable. Still, looks aren't everything and the question remains: behind the flashy surface, does the game have a heart?

INTRODUCTION

Guardian



Might as well take that enemy out now or you'll find throwing it off your trail tough

One of the first CD32-only games, Guardian is billed as a no-nonsense blaster. Gareth Lofthouse leaps into the fray.

STORYLINE

Set in the far, far future (oh God, here we go), the action takes place in a rapidly shrinking universe only a couple of light years in diameter. Millions of life-forms are battling desperately for possession of the few remaining resources. You

are a Guardian, one of an elite troop of pilots with the duty of saving what's left of humanity. Your task is to protect planets against attack from wave after wave of alien invaders.

If you fail the human race is stuffed, but if you succeed they've probably had it anyway thanks to the universe crumpling in on itself. Now that's what I call incentive.



The aliens' code of honour obviously leaves them with no qualms about ganging up on you

GRAPHICS

When your disk first whirrs to life things don't bode well. You look at the title screen and think, 'What hope has the CD32 got with efforts like this?'

Thankfully, it's a case of don't judge the book by its cover. When you take control of the fighter and start sweeping around your planet's installations, you get a radically different view of things. As a 3D polygon game, Guardian immediately strikes you as very fast and smooth. This speed really enlivens the game, allowing you to battle with three, four or more enemies without any slowing of the action.

The detail of the graphics improves with progression through the game. Initially the ground installations are made of simple shapes and some of the ships are run of the mill as far as looks go.

On later levels, however, the landscapes become much more interesting and the developers have obviously aimed for visual variety. Some enemy ships look great, such as the tie fighter design, and again there is a big enough range to maintain player interest.

Dogfights look spectacular as you salem through obstacles evading streams of rapid laser fire. Hit an enemy and it bursts into a cloud of fragments – satisfaction enough for even the biggest appetites for destruction.



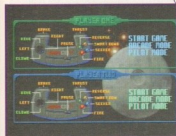
84%



And now for my disintegration trick!



Your best tactic is to head for the mothership and wipe out those Droids before they spread



Two can play, but unfortunately not at the same time



Here's that title screen: not bad compared to Galaxians

GAMEPLAY

Guardian has no pretensions as far as gaining the simulation depth of Elite and the like is concerned. The object is to shaft the enemy good and proper, simple as that.

Levels are cleared by destroying the droinoids dropped in waves by a huge Mothership. Though they themselves are defenseless, enemy fighters and surface craft soon materialise to give you trouble.

The control system is very effective. Moving in horizontal and vertical planes means you have to hone your targeting skills to survive, but fortunately the enemy takes some time to lock on as well.

The fighter slows to a halt unless you hold the thruster button on. That may sound annoying, but it's actually an asset since it allows you to slow down instinctively when you find yourself plunging full-speed into a web of cross-fire.

Best of all though is the back-flip move with which you can instantly get pursuers in your sights and look pretty cool at the same time. Other special weapons include tracking missiles and smart bombs.

Each enemy type of craft follows a different tactic with some, for example, flying doggedly on to your tail while others swoop round to come guns-a-blazing from an unexpected angle. As different craft appear throughout the game there's a compelling challenge in finding the best mode of engagement.

Destroying droinoids can be a way of picking up power-ups such as twin laser fire and shield boosters. Other enticements include taking on the Mothership to defend the planet, a section that is actually rather disappointing.

Make no mistake, the idea behind Guardian is simple, but winning through is very tough. It's a definite downer therefore that no password save is provided – going back to the start for the nth time tends to dampen the enthusiasm somewhat.

Another problem with this type of action is the question of durability. The futuristic combat is exciting but some other style of challenge would have been welcome; even the ancient classic Defender had you rescuing men as a break from pure trigger pumping mayhem.

An unusual feature of the game is the way you can change the viewing angle, for unlike most flight sims this is more than a flash effect. You can pull the camera up and far back and actually play effectively from an overhead view-point. Not bad for novelty value if nothing else.

80%

SOUND

This is nothing short of superb. CD audio quality obviously helps, but it's the mixture of the tunes and effects themselves that really enhance the atmosphere of the game.

There's different pieces of music including the prepare-for-battle pump of the title screen, and the wah-wah guitar driven dance music of level 1 – sorry about the NME spiel there, folks.

Sound effects range from devastating explosions to the energising buzz noise of power-ups. It's all very convincing.

88%

OPINION

83%

Let's face it, as far as pure 3D action is concerned, Guardian is the dog's gonads. Frenetic, mind-numbing combat should absorb you for long enough to leave your eyes so dead your parents will be convinced you're a smack-head.

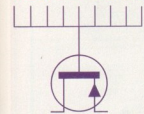
This game is a rarity in that it actually looks and sounds like 32-bit technology. What's more, the attraction is more than skin deep thanks to playability that must have taken a lot of care and attention on the developer's part.

In fact these combined elements could have made it a classic. I say could have, because the lack of a password save system leads to tedious restarts that dull the otherwise addictive nature of the game.

That gripe aside, this title's good enough to have CD32 owners being envied for once. If you're out for plain old-fashioned action, buy Guardian and invigorate your spare time. This one shouldn't be missed.

AMIGA
GOLD
AWARD

Publisher: Sinclair Leisure Services
Developer: Acid Software
Disk(s): N/A
Price: £29.99
Game: 30 short 'on-up'
Hard disk install: N/A
Control system: joystick
Supports: CD32
Recommended: CD32



Once you've wiped out the droinoids, finishing a level shouldn't take much work

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It's dark. It's dangerous. It's definitely not for little kids. It's got a self-imposed 18 certificate. It's definitely not even suitable for adults with weak constitutions. It is Dreamweb and it could, and probably will, change your opinion on computer games overnight.

Sex, drugs, violence and swearing. A lethal combination whichever way you look at it and only a couple of complete loonies would attempt to put them all in a game.

Creative Reality are, at this moment, tied up in straight jackets, dribbling profusely and bouncing around a rubber cell because not only have they attempted to put the above elements into a piece of software, they've succeeded in doing so.

In your dreams you travel to a place called the Dreamweb. Everybody does. It is a plane of subconsciousness which affects your life every day.

It controls the very heart of civilisation.

The forces of evil have discovered the power of the web and have installed evil people to control it. The web is overrun and destined to remain evil forever. Only one person can stop this happening.

You play the part of Ryan, the chosen one. Summoned by the keepers of the web, you must destroy all seven evil controllers of the web to restore equilibrium back to the Dreamweb.

It is a completely mad idea and luckily, one of the best ideas for a computer game that I've ever heard. It's got to be much better than bouncing on platforms trying to rescue a captured cutesy Princess from the clutches of some evil force.

Welcome to the dark, violent world of Dreamweb. Enjoy, it's what the Amiga games world has been waiting for.

INTRODUCTION

Take a trip to hell and have a quick peek in Satan's games cupboard. Look right at the top of his collection and you'll find Creative Reality's adventure. Jonathan Maddock has found the game he's been looking for all his life and he's about to share it with you

Dreamweb



The inventory system in Dreamweb can hold plenty of objects and is relatively simple to use



FLASHBACK

I have been wracking my brains and I can't even recall one game that is remotely like Creative Reality's Dreamweb. Valhalla by Vulcan Software uses a similar overhead perspective, but apart from that there is literally no comparison.

This can only mean that Empire's adventure is, wait for it, an original game. Yes, in these times where platformers, beat-'em-ups, and shoot-'em-ups are becoming alarmingly similar, I can do nothing but stand up and cheer for development teams such as Creative Reality who have such strong and original ideas.

GRAPHICS

The adventure is viewed from an overhead perspective which works incredibly well. You're able to see everything and get a good overall picture of what's going on in the adventure.

The various locations are amazingly detailed. Ryan's flat, for instance, isn't nice and tidy. It's completely littered with objects, all of which can be picked up and used, whether they've got a purpose within the game or not.

The objects, incidentally, are unlike anything you've ever seen before. There are absolutely no restrictions on how you can or can't use them. Every single one can be picked up and then put down, which doesn't sound that significant, but you can put the objects down wherever you damn well please.

The actual animation of the various events and characters is superb, especially when you consider the size of the playing area which could have been a big problem. Creative Reality has got around this though by using a zoom feature. Whenever your mouse wanders over the playing area, you are presented with a close-up of that particular area of the screen, making

it much easier to see the various objects.

Objects such as the pair of shades can be used, for no particular reason except to make Ryan look incredibly hip and things like cigarettes can be smoked, but serve no real purpose within the game. It's these little touches, which have had a lot of time spent on them, that go together to lift Dreamweb high and away from all its adventure competitors.

It's obvious that the day before the graphic artist started work on Dreamweb, he stayed up all night gorging himself on a movie triple bill featuring Blade Runner, Akira and the King of New York while, at the same time, reading a copy of William Gibson's Neuromancer.

Ultimately, the graphics high-spot of the adventure occurs when Ryan has to assassinate one of the seven evil beings who run the Dreamweb. This is a bloody gore-fest that makes Reservoir Dogs look like an episode of Andy Pandy. I won't tell you specifically about any of the deaths because that would totally spoil your enjoyment of the game, but I guarantee you haven't seen anything quite like it in a computer game before.

85%



Once you leave a location, you are presented with this screen and all you have to do is decide where to go next using the mouse

SOUND

As you might have expected, Dreamweb has a soundtrack that fits the overall mood of the game. The dark, moody atmospheric music complements the industrial locations while you wander around and explore.

Although not especially spectacular, the music is just about perfect for this type of game. If more companies took more notice of the various soundtracks within computer games, then I for one would be a happier person.

The sound effects also provide a lot of atmosphere to the proceedings. The clanking of doors and various other noises are nice and clear and to be honest, on the sound side of things, there isn't a lot I can moan about. Dark, melodic and moody, a soundtrack just how I like it.

80%

One of your first tasks is to get to Sparky's bar which is your current place of work. Talk to Sparky to get some important information on your future job prospects



Publisher: Jagged
Developer: Creative Reality
Title: 4
Price: \$24.99
Genre: RPG/Adventure
Art Style: Realistic: Yes
Control System: Mouse
Supported: 16MB/1MB, 422MB/144MB
Recommended: 66000 ops/sec

ADDITIONAL INFO

Open up your Dreamweb box and inside you'll find a book entitled "Diary of a Mad Man." This belongs to Ryan and contains important information which you'll need during the game, and Empire recommend you read it before you start to play Dreamweb.

Over the course of the hand-written diary, the words become scrawled and illegible as Ryan's dreams (nightmares) get worse. Here is a brief extract from the book where Ryan's condition starts to worsen.

"Friday April 6th. Stayed awake. Haven't read library books. Eden rang. Told her to leave it for a few days. No murders. Must sleep. Something's happening to the electricity. Death knocked on my door, but I wouldn't let him in. I'm no fool...

"Saturday April 7th. Slept till mid-day. Dreams getting worse. Coming nearer. No reports on the dealer. Went to St Septimus - didn't go in. Eden didn't call. The lights are turning on and off on their own. I prayed to Angel before I went to bed. She sang me to sleep with an Ave Maria. Deliver us from evil. On, off, On, off.

"Sunday April 8th. Dreams still bad. Not sure I woke up. I watched the light-switch for two hours. It didn't say a word. Spiders everywhere. The Deliverer killed a woman today.

"Monday April 9th. The clock keeps going round. It won't tell me the time. Santa Claus gave a gun to me. Let loose the puppies of war. I died last night.

"Tuesday April 10th. Today was not a good day."

This diary is a perfect insight into the mind of the character you're controlling and it's far better reading this than watching some superb ray-traced introduction animation (even though Dreamweb does have an intro sequence of its own).

The writing is brilliant and just by the feel of it you can tell that Dreamweb would make a brilliant film or book if it was ever turned into one.



In the future, crime is still rife, but the criminals are now pinching trainers (probably worth more than gold now anyway) by using lasers



The network plays an important role in Ryan's life. You can gain loads of important information such as news and weather reports



The sex scene and it's your solemn duty to blow a rock star away. Close your eyes and think of every middle-aged, second-rate pop star that's ever released a record





Take too long assassinating someone and you must suffer the consequences. The consequence being death



As Ryan is confronted by two strange individuals, things start to get even weirder



Another gruesome killing by your fair hand. This time, a well-timed head-shot will put this victim out for the count...permanently



Whenever Ryan kills one of the seven evil beings, he consumes their soul and is then sent into the mysterious Dreamweb

ADDITIONAL INFO

The development team behind Dreamweb consist of just two people. Neil Dodwell is responsible for coding the adventures of Ryan while his partner Dave Dew brings the character to life using his skills at producing top quality graphics.

Creative Reality was formed around four years ago and the duo have completed 15 projects between them. The last Amiga product you'll find their names on was the brilliant slash-'em-up Myth for System 3.

Dreamweb has in itself taken just over four years to complete, but Neil and Dave are hoping to create more games using the same adventure engine. Hopefully, Dreamweb will sell by the truck-load because I am already lusting after a sequel.



OPINION 90%

Imagine an interactive version of Blade Runner directed by Quentin Tarrantino and you might just come close to what it's like to sit, watch and play Dreamweb. This title oozes class out of every digital pore and it almost seems too good to be true.

I may have used far too many superlatives in this review, but I simply can't help myself. Dreamweb is my game and I can't stop playing it. I knew it was good when I first saw it over a year ago, but since then it has just got better and better.

Dreamweb is what I imagined all computer games should and could be like. I never wanted cutesy platformers, I wanted something out of this world and I'm happy to say I've found it.

The graphics, considering the size, are outstanding and the soundtrack throbs

along complimenting the action, but where Dreamweb rules the roost is in the gameplay stakes. The fact that you don't follow a pre-determined path and that you create your character's own destiny has to be a strong reason why it performs so well.

Even the inventory system works like a dream. Clicking on, looking at and using the various objects is so easy that you can concentrate a lot more on playing the actual adventure.

There are no limitations to Dreamweb. You can do what you want, when you want and you don't suffer any consequences. Obviously there is a certain path you must follow, but how you get on that path is entirely up to your adventuring/gaming skills.

I know that cynics among you will look at the screenshots, see the tiny playing screen and dismiss it, but I warn you, ignore this game at your peril. Dreamweb literally roars across your monitor screen and growls at you like a vicious beast from the pits of hell.



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Man Bites Snail. Be nice to the cute ones else you'll receive a 'nasty' rating



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Charlie is for the chop unless he negotiates this part carefully



Killing the cuddly critters will result in you being sent to Pandemonium and you wouldn't want that to happen!

Rasputin Software, renowned for their successful flight sim, Jetstrike, are venturing into the platformer market with Charlie J Cool. However, the games scene is crammed with platformers to say the least, so what's going to make this release different from countless others?

Well, they actually describe it as a 'jump 'n'

INTRODUCTION

run' game, but the premise is still pretty much the same – travel through the levels, negotiate platforms and kill lots of baddies. You play the part of Charlie J Cool, the sprite with attitude, who must decide his fate by completing a quest.

Better to reign in hell, than serve in heaven

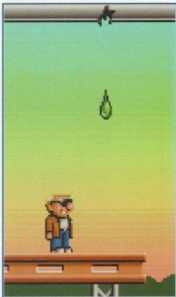
Milton, Paradise Lost

STORYLINE

Slightly strange this one but here goes: Charlie just happens to be walking along the street when he gets stuck in some super glue and a Piano falls on his head (it might happen!) He then sees his own body lying on the pavement and his soul is promptly whisked off to a Netherworld.

Because he's died rather unexpectedly, the records of whether he should go off to Utopia (a heaven-type state) or Pandemonium (hell) aren't complete, so he must go off on a journey to see whether he leans more towards good or bad.

He must travel to a place called Midway, and through all seven lands to complete the journey. Only two forces exist here, that of good and evil, and by the person's actions it is decided which they are. So if you kill lots of fluffy bunnies you're obviously evil, but if you kill the nasties you are good. Straightforward enough, I suppose!



The toxic spot substance is as lethal as it looks, so time your moves well

Charlie

GRAPHICS

The different worlds have been rather nicely based around themes. On his mission he travels around the Seven Lands of Midway and each land is created in an imaginative way to provide variety.

Although the cutesy sprites have been well drawn they are more likely to appeal to a younger audience, but they do look good and fit in with the feel of the game. The main character of Charlie has been nicely animated, for example, if you leave him standing he will tap his foot or start reading his newspaper. The levels look attractive and

have been carefully thought out to ensure the game-play works nicely.

Examples of these are how well the obstacles are set out and the fact that the foreground platforms are distinguishable from background detail.

Graphically it does rate highly and a lot of attention to detail has been paid.

60%

ADDITIONAL INFO

The storyline in *Charlie J Cool* revolves around the idea of there being a concept of heaven and hell, and your actions in life determine which state you spend your eternal life in.

The word Pandemonium as used in this game refers to the hell-like state that Charlie would go to if his actions were bad. The actual word, meaning confusion and uproar, or a scene of this, was used in Milton's *Paradise Lost* to mean a place of Demons. The word comes from the Greek PAN + Daimon (Demon).



A lot of the platforms are placed in such a way to make it quite taxing

SOUND

There are plenty of different tunes in the game to keep it varied and they fit in nicely with the action. The worlds all have appropriate tunes and fortunately don't start to grate on the nerves.

The sound effects are adequate for the job they do but they aren't particularly spellbinding. There are the usual boings and bashes but nothing out of the ordinary.

40%

FLASHBACK

Platformers come and go these days without so much of a second glance – that is of course, unless they're really special – some aspect that makes them different from the norm. Take *Ocean's Kid Chaos* for instance, a brilliant example of everything a platformer should be. Great graphics, tons of playability and highly addictive.

Charlie J Cool takes the same kind of character and concept but it certainly doesn't have the same brilliant gameplay. This doesn't mean it's a bad game by any means – it's just not up to the same standard as the more exceptional platformers.

It is also a lot slower than other games. You can't just whisk your way through the levels as you can with those like *Zool*. You have to stop and plan your moves carefully. This means you have to negotiate your route more carefully which provides a challenge, but on the other hand it was quite fun just to whiz through a level.

Rough 'n' Tumble from *Renegade* was another great game because it combined a good puzzle element. *Charlie J Cool* is certainly playable enough and it is a big game, but somehow it doesn't have enough new features to make the grade.

With the many other platformers that are about to bombard the shops very soon, like *Virgin's Aladdin*, it is going to come up against some tough competition.

Publisher: Rasputin Software
Developer: Le Inez
Disks: 2
Price: £19.99
Game: Platformer
Hard disk install: No
Control system: Joystick
Supports: 1500/4000/1200/4000
Recommended: 8000 upwards



Charlie's so cool he'll read the paper if you keep him waiting around!

J Cool

Cool platform frolics courtesy of Rasputin Software. Tina Hackett dons her shades to take a look...

OPINION

56%

The game has plenty to offer both in presentation playability. It looks pretty, the levels are packed with baddies and the action is fun. However, the gameplay doesn't have enough variety and mainly consists of jumping carefully across platforms and finding the key for the exit to that level – which is more about joystick dexterity than clever thinking.

Interest is added to the game with the different objects you can find scattered around the levels. For instance, the switches which can turn platforms on or off, shields which turn him invincible, eyes which can be collected to reveal the entry point to secret rooms and question marks which may or may not

help! The password system is a nice touch because the game is so big and to start from the beginning each time would be very frustrating.

The different lands he travels through also make the game more interesting. Each one has different themes and obstacles such as Forestia with the Pits Of No Return, Medieval with Rolling Rocks or Ice Lands where you must look out for frozen icicles.

For the younger gamesplayer I would definitely recommend the title. It is simple to get to grips with, looks great, sounds good and is very playable.

The way you're success in the game is shown is unusual and works well. A bar is shown and where Charlie is standing on it indicates whether he is good or bad. This will be nice for a younger player rather than looking at points all the time. The actual objec-

tive to the game is also unusual and gives more of a purpose to the proceedings. But for older players who prefer more mentally challenging games, then *Charlie J Cool* won't be for them.

For platform fans *Charlie J Cool* is a nice addition to the genre but it's up against some tough competition at the moment. Its fairly limited gameplay may let it down a bit against those contenders that have a good puzzle element to them.



Dawn



Grab your yoke and perform all those fancy flying manoeuvres you've always dreamed about in Rowan's forthcoming flight spectacular



The sky starts to fill up and the dog-fighting is about to begin. It looks like the British are about to "kick off" with the opposition

system preview

Rowan Software, in conjunction

with Empire, a state of the art World War 1 flight

simulation is on its way. Jonathan Maddock dons

his goggles and shouts "Checks away!"

One of the most popular genres of game over the last few years must be the wonderful world of flight simulation. Man's conquest to fly in the sky still remains an objective for many. Computer gamers can, almost, experience what it's like to zoom around in the clouds via the help of a joystick and a damn fine piece of software.

There are loads of flight simulators on the market today and some of these are veering towards the new exciting hi-tech planes, which is all well and good, but what about the pilots from World War 1 who had to rely on natural skill rather than million pound super-computer controlled aircraft.

Don't get me wrong. I love to play games like F-19 Stealth Fighter as much as anybody else, but there is something about products like Knights of the Sky which appeal, to me anyway, a lot more than their more hi-tech brothers. Admittedly, Knights of the Sky has more than had its day now and good games from the WW1/WW2 era are hard to find, but I advise you to don your hat and goggles for Empire's forthcoming flight simulation.

Created by Rowan Software, renowned flight sim experts responsible for such titles as Reach for the Skies and Virgin's imminent Overlord, Dawn Patrol is a state

of the art World War 1 flight simulation which firmly focuses on pilot control and natural skill. Rowan Software isn't a company about to create a flight simulator where you sit in a hi-tech jet and blow up your targets from 20 miles away.

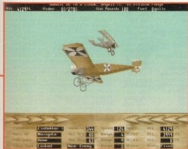
The core of the game is almost entirely based on head-to-head combat in the skies and the only weapon the pilots have is a machine gun. The game concentrates on your actual flying and game-playing skill to out dogfight your opponents in the sky rather than relying on heavy weaponry. As with most of Rowan's

flight simulations, Dawn Patrol is historically accurate, right down to the smallest detail. You get the opportunity to recreate over 100 actual flight sequences and missions of the flying heroes of the era. There are 64 pilot biographies which will help you, eventually, create and customise your own characters.

Historical battle flights featuring such aces as Baron Von Richtenhofen, Immelman, Richenbacher and many more are featured within the simulation. Pilots can choose from 15 aircraft from the



Patrol



Nothing but blue skies ahead which is a bit of a shame because you can't see the amazing image-mapped, gouraud-shaded ground graphics



period, including great aircraft such as the Sopwith Camel, the Fokker Triplane and the SPAD 7. You can even choose which side you wish to fight for - French, American, British or German, the decision is entirely down to you.

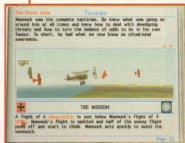
Rowan Software has used the same engine that it used for Virgin's Overlord (still yet to appear on the Amiga), but has enhanced it slightly for Dawn Patrol. All the screenshots you see on this page are from the PC version, but I've had assurances that the Amiga version is going to look really good. At least the team at Rowan Software now have access to the superior A1200 which, of course, they didn't have when they created their last Amiga game, Reach for the Skies.

COMPETENT

The PC version, graphically, looks incredible. The aircraft are built using a polygonal frame in 3D studio, which are then put into the game using Rowan's own conversion program. The image mapping is layered on top then fully light-sourced and gouraud shaded. The Amiga version can't possibly mirror the PC graphics, but expect them to look as good, if not better than the ones seen in Rowan Software's previous games.

There are some very nice graphical touches which might not amaze, at first, but go a long way to making Dawn Patrol a far more in-depth and competent product.

The effects of battle damage on the planes is one such touch that's worthy of a mention - bullets ripped canvas and



Before you hop into your plane there is a wealth of information on the mission and on the other flying aces to read at your leisure

chopped up woodwork on your aircraft, plus if you start to take too many hits, bits of the fuselage and wing section start to peel away from the plane.

The inside look view is a new viewing angle which first featured in the PC version of Overlord, and has been included in Dawn Patrol. This highly useful viewpoint adds a further element of realism to computer dog-fighting. Basically, when you turn the view on it looks itself to a targeted plane. What this all means is that the view moves around the cockpit.

This enables you to know which direction to climb, dive or roll in to get your enemy opponent in your sights, just as a real pilot would've been able to do. This 360° view is strange at first and it takes time to get completely used to it, but you'll find that it makes things a lot easier in the long run.

If you've ever fancied pitting your wits against a bunch of famous World War 1 flying aces with only your natural skill to save you from an untimely death, then I guess you'd better start saving up for Dawn Patrol.

Having seen the PC version in full hot-blooded action at the recent European Computer Trade Show, I am extremely impressed at the sheer quality and in-depth detail of the product. Empire and Rowan Software have joined together to create, what is potentially, the Amiga flight simulation of the year.



Hmm, I'm not too sure about the colour of those German aircraft. I'm sure that British pilot will put them out of their misery!



You can choose from 15 period aircraft including such classics as the Fokker Triplane, the Sopwith Camel or even the trusty SPAD 7



A SPAD 7 takes a hit, and a meeting with the ground is imminent...



Err, excuse me, I can see the enemy from where I'm sitting, so exactly why are you going in the opposite direction away from the action?

S

The football management simulation is now more popular than it's ever been. For proof, you need only look at your local computer store shelves and you'll find plenty of examples of the genre.

The one thing that you could possibly fault in the football management game is its lack of talent in the graphics department. I know most of these products don't often require high-class pixels to make them playable, but why isn't there a game where you've got the graphics to match the gameplay?

Somebody at Daze must have been thinking the same thoughts because their latest licence, signed from German developers, Ascon, could well become the first football management game that looks as good as it plays.

System reviewed *On The Ball: World Cup Edition* last issue and it managed to grab itself a fair score, but it was lacking that certain something to make it a classic. This time with the introduction of the domestic league and cup competitions, *On The Ball: League Edition* might just sneak a winning goal in extra-time, but then again one bad tackle and it could get its marching orders off the field of play.

INTRODUCTION

On the Ball

League Edition



Jonathan Maddock laces up his boots and takes a look at Ascon's World Cup Edition.



Before you start your career as a manager, you must first gain some sponsorship. A mean bit of bartering is essential to your success



A shot of the stadium. On this screen you change the terraces and seating arrangements to your liking, but keep an eye on your cash flow

GRAPHICS

The actual standard of the various static screens within the simulation is unbelievably high, but where the game really scores is when you watch an actual match.

You get a wealth of animations and could be forgiven for thinking that you were watching an episode of *Match of the Day* rather than playing a football management simulation.

The animations are used to show the various high-points within the actual match. You are treated to nerve-racking penalties, 30 yard free-kicks, unbelievable saves and more importantly, a varied amount of goals, both good and bad.

To accompany the animated action there is a running commentary, à la John Motson, which gives you all kinds of information on how the game is going.

At the end of the day, *On The Ball* has got the best graphics ever seen in a football management simulation and far that reason alone it should be applauded. A500/A600 should note that your version of *On The Ball* isn't as colourful as the A1200 version, but apart from that

85%

SOUND

On the musical front, there is a choice between four tunes which can be accessed from the main screen. They're not the most awe-inspiring musical masterpieces you've ever heard, but they do the job adequately enough and there is always the option to turn them off.

The only other sound occurs when

you're watching an actual match and all you hear is the crowd noise. There isn't anything as extravagant as a chant, but the pitch of the noise rises when either team has a shot or scores a goal.

Overall the sound isn't that good, but football management games have never required a decent soundtrack, so I shouldn't worry about it too much.

85%

OPINION

75%

On the whole the *League Edition* of *On The Ball* is far better than the *World Cup Edition*. You're going to get more long-term satisfaction from it simply because you get to do more and, more importantly, you get to play more games of football.

On The Ball isn't quite as in-depth as *Premier Manager* or *Championship Manager*, but it beats them for graphics and it is highly playable. The more you play *On The Ball*, the more you will get into it, but it's not a game that will become the benchmark for the genre.



The *On The Ball* Gazette. A newspaper full of charts displaying just how well you are or aren't doing in the league



Click on the statistics screen and you'll get an in-depth run-down of information for all your players

Publisher: Baze
Developer: Ascon
Boxes: 4
Price: £75.99 (£2.99 AA version)
Genre: Football management
Start disk retail: Yes
Control system: Mouse
Supports: A500/A600/A1200/A4000
Recommended: 66023

1 2 3 4 5 6 7 8 9 10



One of the most popular genres of game these days is, surprisingly, the football management simulation. When the original Premier Manager arrived a couple of years ago, it was adored by just about everyone including non-football fans. In fact, even those people who detest the beautiful game had taken to Gremlin's superb simulation.

Premier Manager was an absolute corker, but you got the feeling, at the time, that something was missing from the simulation. To combat this, Sheffield's finest software house created a sequel which more than surpassed the original. For proof you only have to have a quick peek at Gremlin's sales figures for the game which were well over the 100,000 unit mark.

As far as I'm concerned, Premier Manager 2 is the ultimate football management simulation and I've yet

to see anything that comes even relatively close. There aren't many games I'll play well into the early hours, but Premier Manager 2 is one of them and although it doesn't get played as regularly now, it still has a secure place in my games collection.

Having said all that though, Gremlin are now out to disturb my precious collection because craftily hidden up their sleeves is another helping of Premier Manager.

PROMISES

The imaginatively titled Premier Manager 3 promises to be even better than Gremlin's previous two efforts. Considering just how good Premier Manager 2 was (is?), you might be wondering how on earth do you improve on a game of such high-quality. Like the saying goes though, nobody's perfect.

Realms of Fantasy, the developers behind the trilogy of games, have included a stack of new features into Premier Manager 3 and the first one you notice is the improvement in the graphics department. The actual layout of the screen isn't vastly different, but the standard and overall quality of the graphics is.

The ground improvement screen, for instance, now has a detailed picture of your stadium, whereas last time you could only glance at the various terraces and stands. Graphically, even the telephone has been given a new lick of paint, but the biggest graphical change of all is when it comes to playing an actual match.

You are now presented with a whole game rather than just a few snippets of selected action. You can see the whole football pitch and you now know exactly where every single player is. This new view really helps you get a better overall view



Whenever a match incident occurs, it is accompanied by sampled speech from Martin Tyler and a small animation

of how the match is going, so thus you know what to change if things aren't quite going to plan.

The sound has also had a radical overhaul and the match is now littered with crowd chants/noises. A sampled Martin Tyler (top TV commentator) is also heard whenever something interesting happens in the game, such as when a goal is scored or when your goalkeeper makes a heroic save.

Using a specific grid system on the pitch, you can now determine where and how each player will play, depending on where the ball is on the field of play. This does take time to set-up, but worthwhile in the end as you have a lot more control over your team.

Perhaps, one of the most helpful new features is the introduction of an assistant manager. You'll find one down the job centre and once you've hired him, you can get him to do all those jobs you love to hate. He'll handle all the players contracts, training and a lot of the day-to-day running of the club leaving you to concentrate more on the team.

There are bundles and bundles of new bits to the third game in the Premier Manager series, but I just haven't the space to gab on about them all, but having played a near to completed version of the game I know this one will become the ultimate Amiga football management simulation.

Start saving your cash now because Gremlin Interactive are going for goal yet again and at the moment their striker is just about to complete his hat-trick by cracking one into the top corner.

system preview

Just when you thought it was safe to go back and enter a football management free-world! Jonathan Maddock looks at the third game in Gremlin's Premier Manager series.



The main menu has been given a new lick of paint. The blue screen has been replaced by a green one and the icons have been updated



The ground screen now presents you with a picture of the whole stadium



You now have total control over all your football stars



The match graphics now look superb with 22 players running around the pitch.



Jon proudly shows off his awards



Jon and Chris researching Sensible Pool - perhaps not!



Joel takes us through the latest Golf game

00000

system profile



Gareth Lofthouse and

Tina Hackett take a trip down Essex way to see the team who gave the industry such classics as Cannon Fodder and Sensible Soccer

Now we're sensible

-IS sensible Software. Top hits like Cannon Fodder, Sensible Soccer and Megalomania immediately spring to mind. Now the software developers from Essex have somewhat of a reputation for quality titles and with a clutch of new games in development there seemed like no better time to pay the not so sensible guys a visit.

Deep in the heart of a picturesque little town called Saffron Walden lies one of the top developing teams for the Amiga. In a plush little office, complete with Pool tables, Pinball Machines and MTV (to aid creativity, of course!) we found the chaps hard at work on their new projects. We talked to the guys behind the games and took a sneaky

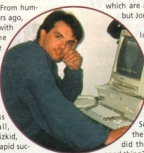
look at what they have in store. The Sensible story is one of those 'rags to riches'

types. Well, pretty close anyway. From humble beginnings just over eight years ago, Jon Hare and Chris Yates started with a meagre £40 a week from the Government's Enterprise Allowance Scheme. They started on the road to game developing stardom with only a handful of releases for the Spectrum and C64, including games like Twister and Parallax.

And then the real success started to happen. Wizball, Megalomania, Sensible Soccer, Wizkid, and Cannon Fodder followed in rapid succession and all shot straight to the top.

Their games have many qualities that have contributed to their success. One of the things that Sensible are renowned for is their miniature sprites

Stoo busily at work on the graphics for Sensible Golf

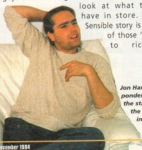


which are a bit of a curiosity in themselves, but Jon explained.

"They originate from Megalomania. The game underwent a massive design change. They were originally Robots in a Factory and then with five or six months to go we ditched the idea. We thought it would be better to humanise it a bit and use human characters." And thus, Megalomania was born...But then Sensible Soccer appeared bearing the very same sprites. Coincidence? Or did the guys realise they were on to a good thing?

Jon points out: "During development we were playing the Kick Off Games a lot. They were bugged so it gave us the inclination to write a good football

Jon Hare pondering the state of the industry



game. We saw the sprites in Megalomania and thought they would work well." And obviously they did. Sensible Soccer reached many formats and became a best seller.

Jon explains their appeal: "The smaller the sprite, the more playing area you can see and the better you can plan the tactics. The same is true for Cannon Fodder. You have adequate graphics but top playability. Symbolic graphics work better than realistic ones, take Chess, for example. You have the horses head - it's not realistic but it's artistically pleasing and does its job. If you want realism, then go and do the real thing!

"A lot of money has been wasted on people trying to make things as realistic as possible. Computers should be used to do things nothing else can do. Like with the Chess games or Scrabble, for example, you can play when no-one else wants to - the Artificial Intelligence is used well.

"But why put an Encyclopaedia on a computer when you can't carry it around? Why spend £80 on an interactive movie when you can go down to the shop and buy the film for £8 - and there's no irritating pauses in it?"

CLASSIC

Sensible Software have obviously found a formula that works, so what makes a best seller and what does it take to turn an idea into a classic game?

"A good design evolves. If it doesn't feel right you chuck it. And that's the hard part - after a few months of working on something it's difficult to admit that it's rubbish and just ditch it.

"The actual idea can take ten minutes to think up but up to two years to carry through. It varies - Cannon Fodder took two years and Sensible Soccer took eight months. Keeping your finger on the idea isn't easy."

They've obviously all been successful but which are Jon's personal favourites? "Firstly Wizball because it established us as original developers and secondly,



The familiar Sensi sprites have almost become a trade mark



Sensible's Megalomania started off as robots in a factory

Sensible Soccer because it made us famous!"

Sensible Software have established themselves as top Amiga developers. But in an industry that is forever changing where do they see the future lying?

Work in progress

On hearing the latest info on games in progress, the Sensible Software name appeared more than a couple of times so, hot on the trail of the latest, we raced down there to get a sneak preview of what they have in store

Sensible Golf preview

Not content to dominate computer football, our favourite mini-sprites are about to make their mark in the world of golfing. The question is, will the game show the same flair for playability that we've come to expect from Sensible Software?

Sensible have deliberately avoided the simulation approach of some other golfing games. As they say themselves, if you want full realism then you should play real golf.

Rather than incorporating a complicated control system, Sensible have opted for an arcade style of game where players can concentrate on the main challenge, which is to conquer the increasingly fiendish courses.

The computer opponents have accessories ranging from golf bags to push buggies indicating their level of skill. With 20 courses made out of a combination of 72 holes, there seems to be plenty of depth to keep the player going.

The visual style of the game is familiar, giving us the simple overhead view the makers seem to prefer. Complete with seventies' hairdos, the little sprites have miles more character than the Nick Faldo types you get in the sim golf games.

As for the courses, a lot of thought has gone into giving the player a wide variety of challenges. Finding a way round the obstacles should give a satisfying learning experience.



A closer look at the mini-golfers as they attempt to sink the ball

Pointing to the state of the console market, Jon admits: "I'm glad we haven't put much into consoles and I'm glad to see the back of it. It's been marketed like a fashion and it has died like a fashion.

"People are sick of buying things that go out of date. Those outside the industry don't understand how the greed of the hardware companies is causing massive problems. No one knows what's going on - the developers don't know what to develop for, the publishers don't know what to back and the Magazine Houses don't know which magazines to produce."

Jon believes the solution to all this lies rather idealistically with just one ultimate machine: "Hopefully all machines will die out except one. Until then you will never get the best. Once you have top quality graphics, CD quality sound, quick loading and as much memory as possible then that is the ultimate machine and we can concentrate on the software."

And Sensible Software's future? Well, we can expect to see a lot from the team in the not so distant future.



Stoo once again hopes to clear the river. The power-gauge automatically appears in the corner that's least obstructive to the view

Strength and accuracy of a shot is controlled by the usual sort of power-gauge. However, on some games making a little tap into the hole is high impossible because it is so easy to overhit. This flaw has been avoided here.

The sound effects include woodland chirpings - thankfully you will be able to turn them off - and convincing crowd applause that should leave you suitably big-headed when you complete a hole under par.

The biggest failing of many golf games arises once the player is putting, because judging the lie of the green is so difficult. This area of Sensi-golf wasn't complete when we saw it, so this will be something to look out for in the full review.

Sensible Software says a reviewable copy will be out soon, so we'll give you the full verdict as soon as possible. For now, though, Sensi-Golf looks very promising.

Cannon Fodder 2 preview

One of the most original games of recent times is Cannon Fodder, a strategy type shoot-'em-up thing. And now Sensible Software are in the process of making the sequel.

They've used the same game engine as the original, same style of objectives with similar sorts of missions and phases and basically the same great gameplay as



The themed levels, like this Chicago setting, have been well thought out to add variety



The levels will be completely different for a new challenge



The unusual graphical style has been kept for a great looking game

the original. So what have they done to the game to warrant a sequel? Well from what we've seen the screenshots look totally different. Don't worry, the same familiar sprites are still there, the overhead view remains the same but now they've added some strange storyline about aliens whisking your troops off to different points in history to prove themselves.

This goes some way to explaining why you end up in these strange scenarios! But this "artistic license" also means lots of great looking and original themed levels.

I mean gone are the usual 'hum-drum' tanks and helicopters – well at least in part anyway – as they have given way to Battering Rams, Witches in bubbles (seriously!) and Airships.

Now we have all sorts of scenarios – Medieval, Beirut, Chicago and Alien Ships indeed. And a lot of the action takes place on top of buildings, keeping the great strategy/shoot-'em-up feel.

So, all in all, from the first impressions we gleaned, the game will have all the appeal and character of the first one, but with totally new levels and more varied settings.



Sensible World of Soccer preview



The original playability has been retained

How do you improve on one of the best soccer sims of all time? You can't, can you? Unless, of course, you add a huge chunk of tactics and a tonne of managerial aspects. And that's just what Sensi have gone and done. So whether you are a Mark Hughes or an Alex Ferguson you're every whim is catered for.

If you're statistically minded or just want the odd 'kick-about' then Sensi's sequel provides the perfect opportunity. They've kept the highly popular gameplay of the original, tweaked it up a bit and added a whole host of new features.

The game will contain things like real players with accurate stats. And get this! The players even

have the right hair colours (a bit unfortunate for Andy Townsend!) Every detail from their individual skills to the player position is accurate. Considering there are 1,400 teams and over 22,000 real players included this isn't to be sniffed at.

The attention to detail looks to be phenomenal and things like the home crowds cheering louder compared to away fans will be included. Even the crowd will be dressed in the appropriate team colours!

The referee comes complete with his black book and red cards and there is a physio who rushes on to treat injured players.



There are a huge amount of tournaments, including the option to set up your own

PSV			NETHERLANDS		
1	MARK VAN BUREN	2' G	FIRST KIT		
2	MARK DE ROON	2' G			
3	MARK VAN NIELE	2' RB			
4	MARK HEIJTZE	2' LB			
5	MARK VAN TIGHELEN	2' D	SECOND KIT		
6	MARK STREUMER	2' D			
7	MARK KUIJERS	2' D F			
8	MARK VAN NIELE	2' RB			
9	MARK VAN NIELE	2' RB	THIRD KIT		
10	MARK VAN NIELE	2' RB			
11	MARK VAN NIELE	2' RB			
12	MARK VAN NIELE	2' RB			
13	MARK VAN NIELE	2' RB	FOURTH KIT		
14	MARK VAN NIELE	2' RB			
15	MARK VAN NIELE	2' RB			
16	MARK VAN NIELE	2' RB			
17	MARK VAN NIELE	2' RB	FIFTH KIT		
18	MARK VAN NIELE	2' RB			
19	MARK VAN NIELE	2' RB			
20	MARK VAN NIELE	2' RB			
21	MARK VAN NIELE	2' RB	SIXTH KIT		
22	MARK VAN NIELE	2' RB			
23	MARK VAN NIELE	2' RB			
24	MARK VAN NIELE	2' RB			
25	MARK VAN NIELE	2' RB	SEVENTH KIT		
26	MARK VAN NIELE	2' RB			
27	MARK VAN NIELE	2' RB			
28	MARK VAN NIELE	2' RB			
29	MARK VAN NIELE	2' RB	EIGHTH KIT		
30	MARK VAN NIELE	2' RB			
31	MARK VAN NIELE	2' RB			
32	MARK VAN NIELE	2' RB			
33	MARK VAN NIELE	2' RB	NINTH KIT		
34	MARK VAN NIELE	2' RB			
35	MARK VAN NIELE	2' RB			
36	MARK VAN NIELE	2' RB			
37	MARK VAN NIELE	2' RB	TENTH KIT		
38	MARK VAN NIELE	2' RB			
39	MARK VAN NIELE	2' RB			
40	MARK VAN NIELE	2' RB			
41	MARK VAN NIELE	2' RB	ELEVENTH KIT		
42	MARK VAN NIELE	2' RB			
43	MARK VAN NIELE	2' RB			
44	MARK VAN NIELE	2' RB			
45	MARK VAN NIELE	2' RB	TWELFTH KIT		
46	MARK VAN NIELE	2' RB			
47	MARK VAN NIELE	2' RB			
48	MARK VAN NIELE	2' RB			
49	MARK VAN NIELE	2' RB	THIRTEENTH KIT		
50	MARK VAN NIELE	2' RB			
51	MARK VAN NIELE	2' RB			
52	MARK VAN NIELE	2' RB			
53	MARK VAN NIELE	2' RB	FOURTEENTH KIT		
54	MARK VAN NIELE	2' RB			
55	MARK VAN NIELE	2' RB			
56	MARK VAN NIELE	2' RB			
57	MARK VAN NIELE	2' RB	FIFTEENTH KIT		
58	MARK VAN NIELE	2' RB			
59	MARK VAN NIELE	2' RB			
60	MARK VAN NIELE	2' RB			
61	MARK VAN NIELE	2' RB	SIXTEENTH KIT		
62	MARK VAN NIELE	2' RB			
63	MARK VAN NIELE	2' RB			
64	MARK VAN NIELE	2' RB			
65	MARK VAN NIELE	2' RB	SEVENTEENTH KIT		
66	MARK VAN NIELE	2' RB			
67	MARK VAN NIELE	2' RB			
68	MARK VAN NIELE	2' RB			
69	MARK VAN NIELE	2' RB	EIGHTEENTH KIT		
70	MARK VAN NIELE	2' RB			
71	MARK VAN NIELE	2' RB			
72	MARK VAN NIELE	2' RB			
73	MARK VAN NIELE	2' RB	NINETEENTH KIT		
74	MARK VAN NIELE	2' RB			
75	MARK VAN NIELE	2' RB			
76	MARK VAN NIELE	2' RB			
77	MARK VAN NIELE	2' RB	TWENTIETH KIT		
78	MARK VAN NIELE	2' RB			
79	MARK VAN NIELE	2' RB			
80	MARK VAN NIELE	2' RB			
81	MARK VAN NIELE	2' RB	TWENTY-FIRST KIT		
82	MARK VAN NIELE	2' RB			
83	MARK VAN NIELE	2' RB			
84	MARK VAN NIELE	2' RB			
85	MARK VAN NIELE	2' RB	TWENTY-SECOND KIT		
86	MARK VAN NIELE	2' RB			
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Real players have been included complete with accurate stats!

As for the management side, you can buy and sell players and if a player is on the bench his value goes down.

The game looks to be absolutely huge and playing Manager for a lower Division side means your career should last for twenty seasons – hours and hours of playing time as you can imagine!

The actual gameplay is having new additions such as being able to tap the ball in a more controlled way and the guys are also looking at including "tap headers" which will allow you to head the ball away a shorter distance.

Look forward to this release around October time.

AMIGA GAMES

[illegible]

Lure of the Temptress 632.9

[illegible]

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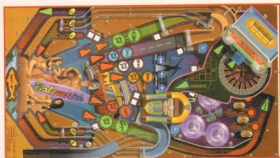
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With a name like "Babewatch", don't you get the feeling that Digital Illusions are a male-only development team



Although static in this screenshot, the rendered objects behind the list of tables are a sight to behold

system preview

Pinball

The Law 'n' Justice table is set in the future and loosely based around a cyberpunk theme



Digital Illusions returns with a brand-new multi-ball feature. Jonathan Maddock, our own pinball wizard, takes an early look at 21st Century Entertainment's third game in the pinball series.

There was one game that arrived on the Amiga scene a couple of years ago that impressed just about everyone that saw or played it. Pinball Dreams, a game that was so addictive it should've been banned by the Government, but hey they were probably all playing it as well!

Pinball, as a game on its own, is one of the most addictive and simple games in modern history. Computer gamers' only real chance of playing "ball" was a trip down to the local arcade or pub (depending on how old you were).

This was mainly due to the lack of decent pinball games, simply because the majority of programming teams couldn't handle the complex realistic ball routines. Then Digital Illusions virtually popped up from nowhere and suddenly the gaming world was, at last, presented with a game that was as good as the real thing.

Digital Illusions, a Swedish amalgamation of ex-demo programmers, graphic artists and musicians, used their considerable talents on a product that should have a home in everyone's games collection.

The success of the first game prompted Digital Illusions to create a sequel, Pinball Fantasies, which also received tremendous critical acclaim. Both games went to the top of the charts, picking up several prestigious awards on the way and clocked up over 500,000 sales between

them. Believe it or not, the Pinball games are still selling like hot cakes, but avid fans of the product are now thirsting for something new after playing the various tables to death. Then, 21st Century Entertainment latched on to this public "need" and once more turned to Digital Illusions to see if the launch of a third pinball game could be possible. Digital Illusions

obviously said "Yes" to 21st Century Entertainment because coming your way in November is Pinball Illusions, which will (that's will, not might) be the ultimate computer pinball game that you've always dreamed about.

After finishing Pinball Fantasies at the end of 1992, Digital Illusions wanted to do something different because let's face it, you'd think that the boys on the development crew would be sick of the sight of pinball by now.

FEVER

They started work on an adventure/shoot-'em-up provisionally titled Malfunxion, but in April 1993 had to put it to one side to start work on Pinball Fantasies for the CD32. It took Digital Illusions four months to complete the task, but by then the boys had got the Pinball fever back and began to think about how to improve their top-selling game.

By January of this year, the whole team had moved to Gothenburg and worked on the new game for about four months. A decision was made to scrap the old code, because the basic structure of Fantasies was far too limited to support all the new features.

There was one feature in the new game that fans of the Pinball series had been yearning for. The programmers decided if they couldn't do it, they wouldn't bother

doing the third Pinball installment. The feature is, of course, the multi-ball.

By the end of February, the hard-working team had managed to get the multi-ball feature working. From then on two months were spent building up the basic scrolling routines, text printing and effect processing. The new effect system was far more complicated than the two previous attempts.

One of the new effects means that scores can be built up around a mode or sub-game system. These are special events where you have to achieve a certain objective. For instance, you might have to shoot the same ramp five times in 60 seconds to gain the bonus. Some of these sub-games involve the new multi-ball feature and they will change depending on which table you are playing on.

As per usual there will be four new tables. The first one



The "multi-ball" is a new feature and one which is sure to test Amiga pinball players everywhere

Illusions

is based around a cyberpunk theme. You are a cybercop and have to cope with the amount of criminal activity in the city of the future. The second table is looking good and has a beach theme. It's provisionally entitled "Babewatch" and the action centres around a backdrop of beach, burgers, surf and sun.

The other two tables are still in development and have yet to gain their own themes. This is because when the table is first created all that you see is a wire-frame version of the graphics. This is so the table can be tested to see if it works adequately enough, without the fancy graphics getting in the way.

It takes the Digital Illusions team five to six weeks to create just one table. Sometimes they don't even use it in the final version and many tables have been scrapped simply because they weren't good enough or were replaced with a superior one.

During the first week the basic layout of the screen is created and is tested extensively. All the possible shots are attempted to see if things work properly and if they do the team move on into the second week of table development.

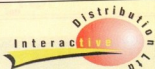
The team now work on basic graphics, ramps and mechanical features. This process lasts for two days and during that time Digital Illusions put their heads together and try to think up a specific theme to use with that table. Ideas are implemented and the team try to decide whether they work or not. If not they scrap the idea and try something else.

Into week three and the themed graphics of the table are drawn so that they know what lights and animations are required. The lights are completed soon after, but the graphics take, at least, another week to finish. While these are being completed, the product is continually tested.

The animations take a while to do and while they're being finished off, the pinball table is bug-tested and fixed. Six weeks later, providing there are no hold-ups in the production process, the team have finally completed the table. All that's left for them is to make a start on the other three tables!

Digital Illusions are frantically finishing off Pinball Illusions so that it can gain a November release, and don't be too surprised if you find it at the top of the software charts by the time Santa pops his head down your chimney.





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D With the World Cup now well and gone, you'd think it'd be a pretty stupid time to release yet another piece of software based on the wonderful game of football. Krisalis aren't that stupid because the game they've got for you is

Soccer Kid, this time putting in a new and enhanced star appearance on the CD32.

First time around, Soccer Kid was acclaimed by punters and reviewers alike for its amazing array of cartoon quality graphics, its superb soundtrack and the fact that it

INTRODUCTION

wasn't just another platform game. Krisalis, keen supporters of the CD32, have now made major improvements in the graphics and sound departments.

Soccer Kid CD32

Krisalis' Soccer Kid, a platformer applauded by just about everybody last year, has been transferred to the CD32. Jonathan Maddock checks out the new signing

SOUND

The soundtrack in the normal Amiga versions of Soccer Kid was fairly spectacular, with a selection of funk guitar samples played against a thumping dance beat. It has to be said that the tune ranks as one of the greatest ever Amiga musical moments.

Krisalis now have access to CD technology and thus have the ability to make their music even sweeter. Having said that, the tune isn't vastly different from the A500/A1200 versions, but the actual quality of sound is far superior.

Another sound introduction is the inclusion of speech into the various animations. The various snippets of speech won't make your ears pop out, but they do add to the whole presentation of the product.

87%



The "kid" shows off his considerable talents in the skill department with a fancy overhead kick. Good work fella!



Throughout the level, Soccer Kid must pick up the various football cards in order to gain a massive bonus at the end of the level

GRAPHICS

The first thing that hits you is the introduction sequence which has been created by Catalyst Pictures. The actual sprites and standard of animation was



almost as close as an actual cartoon when Soccer Kid first exploded on to the Amiga, but now Krisalis have taken the graphics a further step forward.

The introduction animation is an actual cartoon. It tells the story of how the World Cup was taken by aliens and then spread, by accident, throughout the various countries. The animation, at times, is as smooth as anything you'd see on television, but sometimes it does slow down - that's

down to the CD technology rather than the actual animation.

As well as the introduction cartoon, there are several others which happen when something significant occurs. For example, short animations are presented when you complete the level and when you eventually run out of lives. A fantastic end animation is also in there, but I've not been good enough to complete the whole game to see it.

85%

A clip of Soccer Kid taken from the brilliant introduction sequence, lovingly created by Catalyst Pictures

OPINION

88%

Soccer Kid is one of the Amiga's best platform games and the transition to CD has only enhanced the product even further. The graphics are beautiful, the sound is of the highest quality, but remember, just because the presentation aspects of the game are superb this doesn't mean that it plays well. Lucky for you then that Soccer Kid is capable of doing both tasks extremely well.

The main character can do various tricks with the ball and although it'll take you a while to get the hang of all the moves via the joystick, it will at the end of the day

become second nature to you. The only really bad point about Soccer Kid is that the difficulty level is set too high during the beginning stages, but then again people are always complaining that platformers are too easy to complete anyway.

If you're looking for an original platformer with bags of style and class that'll give you hours of entertainment, then I guess this is the essential CD32 purchase for the month.



Publisher: Krisalis
Developer: Krisalis
Disks: 1
Price: £25.99
Genre: Platform
Hard disk install: N/A
Control system: Joypad
Supports: CD32
Recommended: N/A



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Over the last few years the 3D RPG/adventure game scene has been positively pulsating, but now games houses are having trouble coming up with original products. Steering away from dungeons, dragons, wizards and witches, Silmarils, the creator of the Ishtar series of adventures, has come up with a game billed as a survival simulation.

Set many light years into the future, Robinson's Requiem tests your survival skills in an alien world. The game begins after the ship you've been travelling on crash lands. You're equipped with a survival kit which is

INTRODUCTION

minimally packed with various medicines and tools. You've also got a micro-computer secured to your chest to keep you informed of your physiological condition, but apart from that it's up to you to stay alive.

The aim of the game is self-preservation and to survive you must escape from the alien world. Robinson's Requiem certainly looks, on the surface anyway, to be a highly original adventure, but first it has to survive System's critical eye.



The main options screen where the detail level and size of the screen can be altered to suit your machine



Click on the map icon and you can move your character easily around the screen

Use your knife on the trees and you'll obtain leaves which can be used to make a hat

Robinson's Requiem

You've crash-landed on an alien planet with only a medi-kit for survival. What do you do? Jonathan Maddock panics.

GRAPHICS

Before the adventure kicks off you're treated to a short, but beautifully presented ray-traced animation of the crash-landing. This superbly crafted introduction sets the atmosphere for the forthcoming simulation and I was suitably impressed.

Into the game and you have a choice of graphics mode. The detail level can be set between low and high and the screen size can be swapped between small and large. Obviously the game runs faster with a low-detailed small screen, but then you don't get high quality graphics. Users will have to fiddle around with the controls to find the best set-up for your machine.

The icons on the side of the screen are nicely done and this makes the game look a bit more polished on the presentation side. On the whole the graphics aren't too bad, but they suffer badly at times and appear "blocky" when objects on the screen get too close.

66%

SOUND

There are plenty of atmospheric tunes to let your ears peruse over, but if you don't like them you have, at least, got the option to turn them off. In-game sound effects change depending on just where you are in the alien world.

If you find a lake you'll hear the sound of running water and the closer you get the louder it becomes. Prehistoric birds squawk in the distance and other alien animals growl at you, and although these creatures might not be anywhere near you, this gives you a certain amount of anxiety.

The sound works well in Robinson's Requiem, but don't expect it to set your ears alight with grandiose musical scores.

72%

OPINION

75%

Robinson's Requiem is a highly original RPG/adventure and playing it is an entirely new gaming experience. The major problem though is the fact that you must sacrifice the quality of graphics so that the game runs at a reasonable speed. This is a shame, but for users of higher-grade machines this won't be too much of an obstacle.

Silmarils adventure is also one of the toughest games I've played in ages and issues a challenge that'll have you playing it for ages. Pansy gamers might want to steer clear, but adventure game veterans might want to check Robinson's Requiem out.



Publisher: Data
Developer: Silmarils
Blasts: 7
Price: £22.99 (\$22.99 USA machines)
Genre: RPG/Adventure
Hard disk install: Yes
Control system: Mouse
Supports: AS/400/IBM AIX/286/486/68020 upwards
Recommended: 68020 upwards



Just one of the well-drawn screens out of the hundreds you'll encounter.

00000

system essentials

System's here once again to give you the low-down on the latest budget releases and CD32 conversions. This month pick from a superior puzzler or a mind-numbingly violent classic.

Simon the Sorcerer



Back in our May issue, Simon the Sorcerer gained acclaim marking it out as one of the best adventure titles available on the Amiga. Now it's available for the CD32 with the addition of a "full talkie soundtrack".

The background story is very simple. Receiving a note from a wizard named Calypso, Simon becomes involved in a quest to deliver the land of Fleur Del from the evil sorcerer Sordid.

Original, no? Well perhaps not, but from this unpromising start things become more engrossing as your travels through the land unfold increasingly tricky twists and turns.

The appearance hasn't really changed, but Simon remains a visually appealing title. A range of fantastic characters and atmospheric settings are combined with rare attention to detail.

Many adventures try to enliven the proceedings with a touch of humour, but the jokes all too often fall flat. Simon is an exception because, like the classic Monkey Island, it actually is funny.

This aspect of the game is greatly enhanced since the character of Simon is played by Chris Barrie of Red Dwarf fame. Speech in games can be a gimmick but hearing the sarcastic banter of characters in this version creates a fresh appeal.

In fact, it is clear that a lot of work has gone into this area. When talking to a character, you have a large enough choice of responses to give the illusion of real control over a conversation.

Considering that speech has been added, it's a shame they didn't add a greater variety of music, because the tunes you're stuck with really begin to grate after a while. Still, this is more of a gripe than a serious complaint.

Though light-hearted in approach, there's nothing easy about the puzzles in this game. Those strange folk who enjoy the brain-busting frustration of a tough adventure will not be dissatisfied.

Simon the Sorcerer was a good game before. With the inclusion of speech, the game has been significantly improved and should be considered by any CD32 owner who has missed out on the fun before.

80%

Publisher: Adventure Soft
Developer: In-house
Disks: 1
Price: £39.99
Genre: Graphic adventure
Hard disk install: N/A
Control system: Control pad
Supports: CD32
Recommended: N/A

Body Blows AGA

Though it's been around for some time now, this game is still considered by many as the best-em-up for the Amiga. Already superior to the poor conversion of Street Fighter II, Team 17 now offers the game at a bargain price.

Graphics and animation are of a high standard though you'll be disappointed if you're expecting a gore-fest. Fights take place against backdrops ranging from battleships to boxing rings.

Kicks and punches are accompanied by suitably violent sounds and the music is passable. The digital speech on the other hand is often incomprehensible.

Publisher: Team 17
Developer: Blue-Byte
Disks: 3
Price: £14.99
Genre: Beat-'em-up
Hard disk install: Yes
Control system: Joystick
Supports: A1200/A4000
Recommended: 68020

There is a choice of ten fighters to pit against each other, most of them possessing different styles of fighting and individual special moves.

Having said this, there isn't much difference between certain fighters apart from the clothes they're wearing. This fault might have been overcome if they'd introduced a few of the CD32

version's extra characters. In addition to the two player and tournament modes, a new Tag Team option has been imported from the CD32 version. Two humans can play a tag team of up to ten members.

When a team member is defeated the next character enters and so on until all the team has fought. If a fighter wins he gains an extra energy bonus for use in the next fight.

Another welcome addition is the option to install the game onto the hard-drive. This should prove welcome as without it there's a lot of irritating disk-swapping.

So many games in this genre have been released in the last few years that it's going to take something special to overcome that jaded feeling.



Body Blows AGA doesn't pretend to offer much that is new, but it remains one of the best of its type on the Amiga. If you've managed to avoid overdoing on this sort of game so far, then at this price it's a must.

Another one bites the dust!

80%

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AMIGA

An essential aid to the enthusiast, our monthly guide is back helping you to make the most of your Amiga.

GUIDE



ARexx 147

Paul Overaa takes a look at how to transfer and retrieve data from specified memory locations



Video 149

Video work holds many hidden pitfalls, so let Adam Phillips lead you through to safety



Music 151

The next step in sound processing deals with editing operations using a Midi Sequencer



Comms 153

This month Phil South gives you the run down on Internet Mailing Lists



Amos 155

Create fancy guages for your Amiga using this simple tutorial



Publishing 157

Ben Pointer helps you get the right balance between decorative and informative covers



Home video 140

Gary Whiteley shows you how to add those small but all important extras to your work



Amiga guide 145

Steve White completes his AmigaGuide tutorial by showing you how to assign MultiView functions to databases.



Classifieds 160

Buying, selling or just browsing, all the best Amiga bargains in our dedicated second-hand section

Last month we looked at scouting a location, identifying any potential problems and preparing for the shoot. This month I'll concentrate on preparing the graphics and captions for when we come to putting the whole thing together and (briefly) cover the shoot (see boxout).

It's impossible to advise you exactly how to shoot your project in the limited space available here, but if you go to your local library or bookshop you're bound to find several books which cover important details such as what equipment to use, how to light a scene, shot framing, how to get maximum coverage with a single camera, and lots of other essential technical details.

Before you switch on your Amiga, take out a good old-fashioned paper and pencil and prepare a plan of action. Decide exactly what kind of graphics you're going to need and make a list of them.

Then break down the information you need to convey into understandable chunks – for instance, if you're preparing end credits

group the technicians separately from the actors, giving everyone a role as appropriate.

Make sure you have all the information to hand before you start laying it out in your graphics, titling (or even 3D) program. If you have sketches and notes about what you want to achieve, you'll find it much easier to produce your graphics.

But which software should you use? Well, this largely depends on the power of your Amiga and how much you can afford to spend, in addition to personal taste.

There are plenty of different programs which you could use, including paint, titling/presentation, 3D and even DTP software, but most require specific minimum configurations and not all will work on some standard (i.e. unexpanded) Amigas.

The simplest software you could use would be a paint program such as Deluxe Paint, Brilliance, CopalPaint, TV Paint or Personal Paint, though you won't easily be able to produce scrolling or rolling captions with such software.

On the other hand, if you want bold titles

Added

The countdown has started to achieving the final video production. Gary Whiteley leads you that little bit closer and shows you how to start adding a few finishing touches

(which might include an illustration or clip art) then a paint program is the way to go. How many colours, and the resolution of the image, depends on the type of Amiga

you have and the memory it has installed.

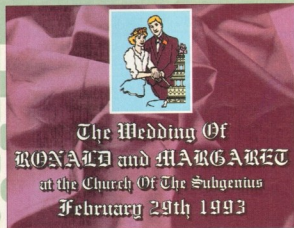
You'll have to play by ear on this one and explore the limitations of your machine yourself, because I can't go into fine details



If you have a powerful Amiga you can make graphics with a 3D program



If you can't draw, why not consider buying some clip art. This selection came from various Artworks disks



Combine clip art, backgrounds and text in a paint program to make your own title screens

Hints and tips

What I would like to do is dispense a few essential tips which you'll find helpful before, during and after the shoot.

1. Ensure you have enough new tape and spare batteries on hand to guarantee that you'll get as much footage as possible during the time available for shooting.

This isn't so important when it comes to 'studio'-based productions (I use the term studio cautiously, because it's more likely that you'll be using a school hall, or even your own front room, than an actual studio) because you won't be as pressurised by the constraints of videoing a live event – be it a wedding, sports day or school pantomime – as you would be shooting performance-based material such as drama.

But if you only have one chance of capturing the moment then it would be foolish to run out of tape half-way through. So plan ahead, find out how many minutes of tape you're likely to need and then double it for safety. You can always use the spare tape later.

2. Go for the best quality tape you can afford. On no account buy cheap tapes with unfamiliar brand names. Chances are they'll be poor quality and your whole production will suffer. Buy shorter tapes (e.g. 60 minute ones) rather than 3 hour tapes because they will be easier to log and edit from.

3. Always white-balance the camera when you change camera position or when there are noticeable changes in lighting level or light sources. White-balancing is especially important when you move from artificial to natural light, because there is usually a colour temperature difference in such situations. If you were to use the same setting in each

extras

here. Just remember that whenever you're producing graphics for video you should take care to use overscan resolutions to ensure that the entire TV screen is completely covered, though this isn't always necessary if your graphics are on a plain background and never reach the edges of the TV screen.

Some paint programs also allow you to produce animations, and if you're clever you can use this facility to flip between several pages of text or graphics to add a bit of fizz to

your production.

Most paint programs don't include many different fonts as standard, so I'd advise you to buy a range of extra fonts (from either PD or commercial sources – there are plenty

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Here are several different ways
of presenting text for credits
and information. You could
unlock them over video or use
them as standalone graphics.
This is just a small sample of
what you can do with even a
little imagination

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location then you'd find that as you moved to natural light the video would take on a false-coloured cast and look very strange indeed – and would certainly be very noticeable when the sequence is edited. You may be able to make colour corrections later but everything you get right during the shoot will save you post-production time. (Post-production is the pro term for the editing and programme-completion process).

4. Run the tape in record for at least ten seconds before actually starting a shot. There are several reasons for this. Firstly, it lets the equipment get up to speed, secondly it gives the video edit decks time to synchronise and roll-up to speed before an edit takes place – providing the maximum possible accuracy – and thirdly, if you're doing a drama, it gives the actors time to compose themselves and for the director to shout 'Action'!

5. If you have one of those cameras which can superimpose captions or time and date over the picture, make sure you have them turned off while you're shooting – unless there's a good reason to have them on, of course.

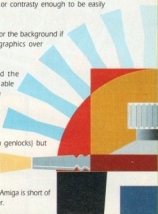
6. Remember to take the lens cap off! This isn't as stupid as it seems and it happens to the best of us. I confess to having a panic one day years ago when I was documenting a large sponsored bike ride from London to Oxford.

Alexi Sayle and the other guest luminaries were waiting to lead out the massed cyclists and I had to stop them while I tried to find out why there was nothing but black in the viewfinder. Then some wag shouted across that it would be better if I took the lens cap off! Talk about embarrassment, I never did it again though.

7. Write down as much relevant information about the happy couple, the actors and technicians and the location, date etc as you possibly can. You'll need this data to prepare the graphics and it's easier to get it at the time than to chase it up later.

Graphical hints & tips

1. Don't use overly bright colours as they will bleed when transferred to video.
2. Keep it simple. Don't cram screens with information. Divide your graphics into easily-digestible chunks, and keep text large or contrasty enough to be easily read from a distance.
3. Remember to use palette Colour 0 for the background if you're going to be genlocking your graphics over video.
4. Give the audience time to read the graphics. A good rule of thumb is to be able to read everything twice and then move onto the next item.
5. Whenever possible use hi-res interlaced screens (D51PAL and other promoted AGA modes don't work with genlocks) but avoid closely-spaced, thin, high contrast horizontal lines because they'll flicker – even on video.
6. Use as few colours as possible if your Amiga is short of memory – this way the files will be smaller.



about to give you access to a wide range of typestyles. One point to note. Small fonts aren't too easy to read on screen, especially when genlocked, so avoid them wherever possible.

A good rule of thumb is to step back from your Amiga and view the graphics from a normal TV viewing distance. If you can't read the graphics or text properly then they aren't going to work when transferred to video.

Remember – if you can't draw for toffee you can still get in on the graphics act by buying commercially available clip art such as that produced by Artworks or other companies.

The same viewing rules apply when using any other graphics software – including tiling packages. There are a range of different tiling packages available, from simple PD software (though I've not seen any which are particularly good) through to commercial offerings like Broadcast Tiler 2, TVText Professional, Montage, MediaPoint, Scala HVT and the top-end Scala MM300.

FREEBIE

Regular readers should have been thrilled to obtain a free copy of Alternative Image's Scroller 2 software on a recent coverdisk and this is also a pretty good, if somewhat restricting, tiling program.

Tiling programs generally allow the construction of rolling [scrolling] and crawling text and sometimes other variations such as captions and subtitles, and often have easy-to-use features for adding drop shadows, outlines and display styles to text, as well as various wipes and other transitions for moving smoothly between one graphics screen and the next.

My personal preference is for Scala MM300 as it is about the best tiling and presentation software you can get, but if it is beyond your budget or your needs, go for a cut-down version such as Scala HVT or use

Home video Part 5



Scroller 2 instead.

If you're feeling really flah [and have the Amiga to prove it], why not do a 3D title screen or animation? Simple things like flying logos may seem old hat in the high-flying world of corporate and broadcast television, but we're talking here about stuff you can do at home.

If your Amiga isn't quite so powerful it's always possible that you could produce a spiky static title screen with reflections and so on which could still wow your audience.

There are several excellent 3D programs around, including Imagine, Real3D and LightWave 3D, and most can load text and turn it into 3D objects, but you could also add other elements of your own making. All you need is some imagination, some perspiration and a fair amount of time.

Next month I'll be wrapping it all together with basic video editing and mixing, so don't miss out on the final showdown.

Gary Whiteley can be e-mailed as drag@cx.compulink.co.uk.



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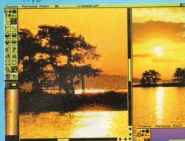
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Loading of files through Amiga DataTypes (JPEG, BMP etc.)

Workbench Application Icon (Drag and Drop).

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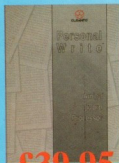


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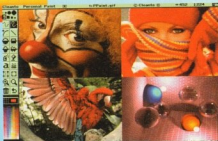
The Personal Fonts Maker is the best bitmapped fonts editor for the Amiga. It is used by enthusiasts and professionals from Scala computer television to Kara Computer Graphics. It is the leading tool for handling fonts in up to 256 colours (no size limit). It can even create printer download fonts (to achieve maximum printer quality and speed) and anti-alias Amiga vector fonts. Numerous other tools are included.



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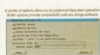
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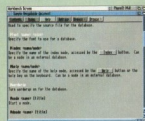
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Okay, I know it's been a long time but popular demand has pressured me into completing my AmigaGuide tutorial, the first part of which can be found in issue 71 (yes, it's been that long).

In the first part I discussed the basic principles of creating an AmigaGuide document for use with MultiView, as well as the more advanced techniques such as creating nodes, buttons and adding formatting commands to text.

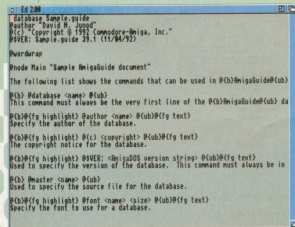
In this, the last AmigaGuide tutorial, I will be explaining how to assign MultiView functions to databases, extra text formatting commands and the ability to load pictures and play sound samples from within your



The actual AmigaGuide program comes complete with an excellent sample guide which demonstrates the many commands



In order to create stunning AmigaGuide databases a good text editor is essential. Cynapse Ed or Edge should do



Most users will resort to Ed when creating AmigaGuides but you will soon find that Ed is far too inadequate

Books with

AmigaGuide document.

First though, users of Workbench 2.0 who are using the actual AmigaGuide program rather than MultiView, and are following this tutorial, should bear in mind that certain MultiView commands do not seem to work in AmigaGuide, contrary to what the AmigaGuide documentation states.

In my experience, word wrapping doesn't work and text formatting commands such as [b], [u] etc. cause the Amiga to crash. The most annoying of these of course is word wrapping.

My only suggestion is that Workbench 2.0 users write to the author of AmigaGuide and tell them to sort these bugs out. However, you may find that you have no problems, in which case you will be able to follow this tutorial with no problems.

There is also a bug in MultiView which you may or may not be aware of. If you have a word that has text formatting commands

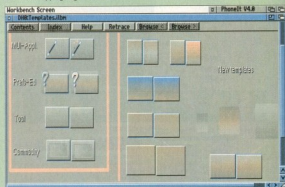
At long last, a complete cure for baldness.

Steve White finally gets round to the last instalment of our AmigaGuide tutorial

attached to it, MultiView will not correctly word wrap it if it needs to be wrapped. Instead it is split across two lines and the character where the split occurred disappears. The following is an example of the word wrapping bug in MultiView:

This is a line of AmigaGuide text to demonstrate the word wrapping bug.

Let's suppose the word demonstrate was in bold [b] and that MultiView happened to word wrap the document on that word. The



Not only can you create buttons in AmigaGuide but also assign buttons to show pictures or play sound samples

AmigaGuide syntax

What follows is a full listing of all the commands available for AmigaGuide, as well as a brief description of what each command does. Therefore, if you need to look up a particular command you only need to check through this reference data.

Database <name>
Must always be the first line in an AmigaGuide document

Author <name>
The author of the database

[c] <copyright>
Copyright notice

OVER: <amigaDOS version string>
Used to specify the version of the database

Master <name>
Specified the source file for the database

[font <name> <size>
Specify the font and size to be used in the

database

[Index <name> <node>
Specify the name of the index node accessed by the Index button. This can be a node in an external database

[Help <name> <node>
Specify the name of the help node accessed by the Help button. This can be a node in an external database

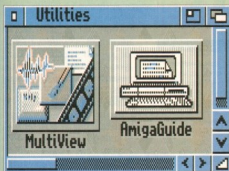
Wordwrap
Turns word wrapping on

[node <name> [title]
Start a node

[&node <name> [title]
Start a dynamic node. The dynamic node hosts are queried for the node data

[break | break <name>]
Allows the user to add information that will be ignored by MultiView

buttons



There are differences between AmigaGuide and MultiView but most, if not all of the commands will work between both programs

result would look like this:

This is a line of AmigaGuide text to demonstrate the word wrapping bug.

The only way around this is to make sure that text formatted words are not forced to word wrap. This is obviously not an ideal solution but the only one.

Bugs aside, let's take a look at the extra commands MultiView provides in the boxset on adding colour.

As mentioned earlier, AmigaGuide documents are also capable of displaying images and playing sound effects. Provided you have the correct datatype, you can view any type of image and play any type of sound

sample. The method of attaching pictures and sounds to an AmigaGuide is slightly different to the way in which links are made. You may imagine that the actual name and path of your picture or sound is treated in the same way as a node.

Below is the syntax of attaching a picture to an AmigaGuide document with a demonstration below that:

```
@("A button" link (asin)
@("Click me for a picture" link
ras:image.brush/main)
```

The /main element has to be included. In order to remove a presented picture you would need to click on the Retrace button on

anywhere in a line and is displayed as a button within the text.

```
@(label> picture> or sound effect etc.
link /main)
Specifies a button to be linked to a picture,
sound effect or any other datatype
```

```
/endnode
Ends a node
```

The following is a list of formatting commands that can be applied to text

```
@(b)
Turns bold text on
```

```
@(sb)
Turns bold text off
```

```
@(i)
Turns italic text on
```

```
@(si)
Turns italic text off
```

```
@(u)
Turns underline on
```

The following commands can be used within a node

```
@title <title>
The title for the node
```

```
@toc <name>
Specify the name of the Contents node. This
can be a node in an external database
```

```
@prev <name>
Specify the name of the node to go to when
the Browse < button is pressed
```

```
@next <name>
Specify the name of the node to go to when
the Browse > button is pressed
```

```
@keywords <keywords>
Assign keywords to a node. Used when
searching for a node
```

```
@font <name> <size>
Specify the font and size to be used
```

```
@(label> link <command>)
Indicates a textual link point. This can be
```

Add colour to text

Apart from the ability to change the style of text in your AmigaGuide document, you can also change the colour in which it is displayed.

There are various commands to add colour effects although many of them are similar in effect. The text colouring commands are:

```
@fg Changes the foreground colour to
@bg Changes the background colour to
```

Colour can be:

```
text
shine
shadow
fill
filltext
background
highlight
```

Using these commands you can present text in a more readable style, with important text highlighted for reference.

the main MultiView interface. You can also apply the above examples to sound effects – just insert the path and name of the file in the appropriate position in the command.

The last command is one which allows you to actually display AmigaGuide commands without them being interpreted by MultiView. In order to print a command, you simply add a reverse slash character in front of the actual command. This character can be located directly to the left of the backspace key.

Below is an example of how you would write a command into an AmigaGuide document without it being processed by MultiView:

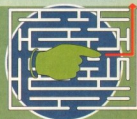
```
\@("This is how you would write a button"
link /main)
```

This basically ends our AmigaGuide tutorial. There are a few extra commands which I have

not covered but the ones I have explained are those you will use most of all.

The extra commands not described can be found in the AmigaGuide Syntax box where you will find all syntax formats for every command, plus a brief explanation.

Amiga Guide Part 2



Editing MultiView

As well as adding your own buttons and links you can also redefine the buttons provided by MultiView. This means that you can create your own help AmigaGuide document and attach it to another, so when the user clicks on the Help button the new database is loaded.

The commands for re-directing the MultiView buttons are explained below:

```
@index
@help
@prev
@next
```

The parameter name allows you to actually assign that particular button to an individual AmigaGuide document. The node parameter specifies the node within that document.

All of the above commands can be present inside previously defined nodes which makes them accessible to all nodes.

- text
- shine
- shadow
- fill
- filltext
- background
- highlight

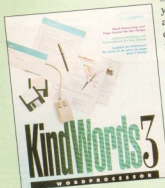
AmigaGuide commands can be displayed in a database by preceding the command with a reverse backslash character to the left of the backspace key. See below

```
\@("Fake command" link /main)
```

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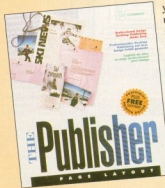
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mentioned last month that ArExx had some functions especially designed for transferring data to, and retrieving data from, explicitly specified memory locations.

The functions, called Export(), Import() and Storage(), are all part of ArExx's built-in function library, with Export() copying data from an (optional) string to some previously allocated memory area using this type of call:

```
count=Export(address,istring),(length),(pad)
```

The length parameter specifies the maximum number of characters to be copied, with the default value being the length of any supplied string. In a case where the specified length is longer than the string, the remaining memory locations are filled with the pad character (or nulls if no pad is provided). Export() returns a count representing the number of bytes transferred.

The Import() function goes the other way. It creates a string by copying a specified amount of data from a given four byte (longword) start address:

```
string=Import(address,(length))
```

If the length field is not provided then the copy terminates when a null byte is found.

The Storage() function has this sort of parameter layout:

```
return_value=Storage(address),(string),(length),(pad)
```

and with no arguments its return value is simply the amount of system memory currently available.

The address argument, if given, must be a four byte string and Storage() then copies data from the string to the specified memory area. As with Export(), if the specified length is longer than the string then the remaining memory locations are filled with pad characters or nulls ('00's).

Note the two important differences between the Export() and Storage() functions. Firstly, Storage() can be used to determine the amount of free memory in the system - Export() can not. Secondly, Storage() returns, as a string, the previous contents of the bytes whose contents

Trading standards

get overwritten - Export() does not.

It is difficult to give a simple example of these functions but there is one use of Import() that you may find useful. The Exec library base pointer (found at the fixed longword location '00000004'x) is most often used as the entry point to the Exec library (accessed as negative displacements called library vector offset or LVO values).

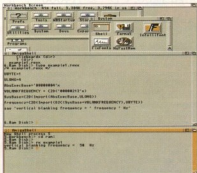
It also has another use because positive offsets from this base take you into the ExecBase system structure which holds a mass of system variables, pointers to system lists and so on.

ExecBase does, for instance, contain details of the vertical blanking and power supply frequencies being used by the machine and in fact, since version 36 there has been an E clock frequency field called ex_EClockFrequency which enables you to tell whether your code is running on an NTSC or PAL machine. Typical values are 715909 for NTSC and 709379 for PAL.

In order to get the address of the Exec library base we need to read the longword location beginning at '00000004'x - you'll often see this done using code such as:

```
ExecBase=Import('00000004'x,4)
```

This works but, to be honest, the code is a little misleading. The confusion arises because the conventional name for the Exec library base is SysBase, not ExecBase. ExecBase is the system structure holding the Exec system information



And just to prove it works here's the script in action!

mentioned earlier.

A value called AbsExecBase is, however, defined as the absolute value 4, that is, the address of the longword memory location that contains the Exec library pointer (SysBase).

Therefore if you want to be pedantic (in an Amiga system sense), then a better way of coding the previous example would be to use something along these lines:

```
AbsExecBase='00000004'x
ULONG=4
SysBase=Import(AbsExecBase,ULONG)
```

It's a small point I know, but given that Commodore/Amiga were kind enough to define standard library base names, the least we can do is try to follow their conventions.

ARExx



Paul Overaa shows you how an ArExx script might be used to access Amiga system information

Good structure

Anyway, once SysBase is available the rest is easy - we just add the structure offset values to the SysBase variable and read the required number of bytes from the ExecBase structure.

Again I'd recommend defining some "pseudo constants" to represent the number of bytes being read:

```
UBYTE=1 /* represents 'unsigned byte' */
ULONG=4 /* represents 'unsigned longword' */
```

As far as the ExecBase structure offset is concerned, here are the values of the three fields I've mentioned:

```
UBYTE VBLANKFREQUENCY='00000212'x
UBYTE POWERSUPPLYFREQUENCY='00000213'x
ULONG EX_ECLOCKFREQUENCY='00000238'x
```

Other field values are available from the RKM manuals or other sources.

You can also calculate the values directly from the Amiga header file definitions.

The only fly in the ointment is that in order to add offsets to SysBase we need to do a little number conversion using C2D() and D2C() to prevent ArExx throwing up numeric conversion errors.

The example below gives the general idea and by altering the added offset value (and using a suitable size value) you can of course access any other ExecBase information field.

```
AbsExecBase='00000004'x
UBYTE=1 /* represents 'unsigned byte' */
ULONG=4 /* represents 'unsigned longword' */
VBLANKFREQUENCY=C2D('00000212'x)
SysBase=C2D(Import(AbsExecBase,ULONG)
frequency=C2D(Import(D2C(SysBase+VBLANKFREQUENCY),UBYTE)
say 'vertical blanking frequency = ' frequency 'Hz'
```

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Everyone at some time or other has made a mistake while shooting which may well seem extremely obvious and embarrassing at the time but, in the heat of taking a shot, slip ups and oversights can happen. Some range from pure absent-mindedness to the more subtle and harder to track down variety.

What follows is a breakdown of problems that in most cases can be solved with relative ease. Happy troubleshooting.

Picture problems



Lack of image: Err, take the lens cap off maybe; power leads not plugged in; battery rundown; switch the camcorder on. All obvious but sometimes overlooked on the spur of the moment.

Bad picture quality with 'snow'-like specks: Dirty video heads that require a cleaning tape. If possible and affordable, far better to let a qualified engineer do them.

Grainy, muddy picture: Lack of sufficient light.

Wobbly image: Bad nerves or something more serious – a servo fault could have developed. Hunt out an engineer.

Burn-out highlights: Over-exposed patches where image is usually whited out. Adjust iris manually if your camcorder will let you.

Auto white balance not operating: Lack of ambient light, increase the lighting level to rectify. If shooting into brightly coloured scenes, the white balance may well be beyond its correction range. Try a colour correction filter to improve the picture.

Stationary lines or marks on picture: If a foreign body has found its way onto the lens, it'll usually move or rotate with any lens action. Get some photographic tissue and clean the lens carefully. If this doesn't remove it, there may well be damage to the sensor face-plate.

Greenish hue to indoor shots: Perhaps due to fluorescent lighting. Use a violet filter to counter balance the interference.

Auto-focus 'confused' or not working: Auto-focus window may be dirty or your fingers are wandering in front of it, blocking its sensor.

Drop-out and 'snow' present on tape: Either tape is worn out or the recorder needs to be booked in for servicing.

Picture instability at edit points: Check that the VCR being used as the edit recorder has an insert edit or a backspace facility to aid smooth transitions.

Growing pains

Sound problems



● **Excessive wind noise when outdoors:** Put a foam rubber shield around the mic and keep it leeward of your body or camcorder. If push comes to shove, slap a woolly sock over the microphone or buy a professional wind-gag for best results.

● **Lens motor whine/rigorous handling picked up on soundtrack:** Moving the camera too much without care where your fingers are wandering can result in creaking and other such delights on the soundtrack. Motor noise can sometimes be picked up in quiet locations when the automatic gain control decides to kick in.

● **High background noise, low muffled sound:** Clean audio heads.

● **Oscillation or howling noise:** When the recording microphone is placed too near a TV loudspeaker, a 'howling' sound makes itself rather apparent. Turn the TV sound down fully.

● **Pitch change at edit points:** One of the more annoying but sometimes inevitable parts of tape-to-tape editing. To minimise the effect, have professional servicing of both the camcorder and VCR.

Operational problems

Camcorder not working: Battery flat; power unit not switched on or even plugged in; no tape present in machine; dew condensation.

Rewind/fast forward inoperative: Tape is already fully rewind or forwarded to the end.

Battery short on power: The bane of any location shooting – more obvious reasons include excessive use of auto-focus, auto-zoom, stop/start controls. Battery may not be fully charged or has worn out. Low ambient temperature: internal presets may need adjusting by an engineer.

Lack of record function: Check that the safety tab on the video cassette has not been removed.

Compartment containing cassette will not open: Power may have rundown, making it impossible to open the compartment on some machines. In the worst case, machine may have eaten the tape and jammed the mechanism. Whatever the circumstances, never try and force the compartment open.



Camcorder turns itself off after only a few minutes on pause or stop: Usually a design feature to conserve battery consumption.

Alternatively, may have run out of power.

Unclear playback picture: Recording was underlit, out of focus or the lens needs a cleaning.

Stopping in same place on cassette for no reason: Tape is damaged at that particular point – throw it in the bin.

Note of caution

When you're using expensive equipment that is being lugged from one location to the next, it's only a matter of time before something decides to give out on you.

It may well be a hiccup as insignificant as dirty heads or a substantial problem such as the computer chips inside the camcorder deciding to take an unexpected permanent vacation.

Whatever the occurrence, it is always vital to have insurance on any equipment you use no matter how well handled and looked after it is. Secondly, whenever possible, use an engineer to sort out any difficulties you may be having – in most cases, they have a well practised knowledge in all things video, so you can be assured that equipment is in safe hands.

VIDEO



Adam Phillips
troubleshoots
some common
mistakes
made by
fledgling and
experienced
videographers
alike

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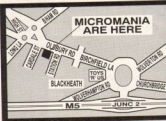
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The massive range of edit functions available on the average Amiga sequencer can seem pretty bewildering at times, but four facilities stand head-and-shoulders above the rest when it comes to making life easy for the would-be musician.

Transposition, changing the key of either all or part of a track, is one particular 'goodie' that comes to mind. If, for example, a piece of music contains a melody that is reused later in different keys it's possible to paste in copies of the melody (at appropriate positions) and transpose them as required.

A lot of people use the key of C for all of their keyboard work and then transpose their songs up or down to the required key – it saves having to work out how to play things in different keys. (Most pieces of music are harder to play in some keys than others but the key of C is invariably the easiest!).

There are even valid reasons for serious musicians opting out in this admittedly easy fashion. Supposing, for instance, you are a trumpet player who is interested only in creating backing tracks to play along with.

You may decide that learning how to play a piano keyboard properly, especially since it's not really the instrument that interests you, is not feasible given the amount of time you have available.

Suppose you want to play a bass line theme which contains four evenly spaced, single beat duration notes per 4/4 bar. You pick a suitable tempo, set the sequencer recording, and then play the bass notes.

The chances are that although your timing might be reasonably accurate it will not be one hundred percent perfect. What you could do now is ask the sequencer to quantize (adjust the timing of) the notes in the track so that they fall exactly on the divisions corresponding to the four beats in a 4/4 bar.

Now this is all very well, but there is a snag. Simple quantising schemes which adjust all notes to some user-defined time partition (4, 6, 8 notes per bar etc) tend to make the music sound 'mechanical'.

Over the last few years a lot of effort has gone into finding suitable compromise schemes based on 'partial quantisation'. One option is to tidy up the notes a bit without making the timings perfect.

Another is to only quantize those notes which lie very near the hypothetical quantisation division lines. The result? Quantisation is nowadays both useful and effective!

By adding program change events to the

Simple solutions



Music X – one of the many powerful sequencers available to the Amiga user

sequences it is possible to get the synthesizer to automatically select appropriate voice settings. You might suspect that the easiest way to add a program change command to a sequence is to manually make the change while you are recording the track (most synthesizers would sense the change and automatically transmit a program change message).

TRICKY

In practice this does work, but it is usually easier to insert the program change messages after you've done the recording because trying to hit the sequencer's record button, selecting a voice, and begin playing (in time) on the first beat of a song can be tricky!

The exact way that program change messages are added is, like most sequencer operations, invariably sequencer specific, although it is always

easy to do. Some sequencers just require a number to be inserted in the track list information; others will require the event to be inserted using an event editor – such things will always be well explained in the sequencer manual.

Most sequencers also allow their event editors to be used to insert program change commands at places other than the start of a track or sequence.

Now you might be asking why one would want to insert a program change command into the middle, or possibly the end, of a sequence. There are several reasons.

Firstly, you might simply wish to change the synthesizer voice settings half way through a song. Secondly, you may be controlling some other piece of equipment that is turned on when the song starts and is turned off just before the song ends (digital reverb units for example are usually program change controllable).

MUSIC



Confused about how a Midi sequencer can help you make better music? Paul Overaa explains the purpose of four important sequence editing operations

Re-channelling

Another useful facility, which can be applied to either whole tracks or ranged parts of a sequence is the conversion of data recorded on one Midi channel to a different Midi channel.

This, not surprisingly, is called re-channelling. Imagine that a three track piano/violin/bass song has been created using Midi channels 1, 2 and 3 respectively but that the multi-timbral synthesizer setting also has a spare channel (set to Midi channel 4) available but not in use.

You might decide to make use of the extra channel/voice slot to include a second violin sound hoping to 'thicken up', i.e. harmonically enrich, the original violin sound.

In the above example this would just involve copying the existing Midi channel 2 to a spare sequencer track and then re-

channelling the new track so that all channel 2 events were converted to channel 4 events.

If the two voices then sounded too similar to be distinguishable, some extra editing could be done – a small time delay (usually called a time shift) could be added to one of the tracks, or the second violin track could be transposed up or down an octave.

Some sequencers will even let you add small random variations to the note timing so that the second track sounds more like a second musician trying to play in unison.

This 'sound layering' trick has been used in studios for years to improve weak sounding voices. Who knows, it might even lead to your own top twenty hit!

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One thing you can do on the Internet if you don't have a dial up, like a Demon account etc., is mailing lists. These are a sort of extension of the conference idea, whereby a list of messages are posted to your mail box address, and contributions are mailed to a mail list server which does all the posting.

Mailing lists are fun, but usually up the level of traffic going into your mailbox by an order of magnitude, and it's fairly common that new users of mailing lists unsubscribe after the first posting to their mailbox.

However, mailing lists can be fun, and to get you started here is a list of the mailing lists you can access.

The protocol for mailing lists is as follows: You normally send a message to a list server at a subscription address (usually different to the one to which you send contributions to the list) with the line:

subscribe

or similar and thereafter you get a load of mail every time you log on. For example, to subscribe to the Lightwave list you send a message:

subscribe lightwave-l amigocomputing@icm-pulltek.co.uk

and you're on. Many list servers carry more than one list, but a few only carry one, so on those systems you can omit the listname. The synopsis will pull you up if you go wrong.

The lists cover a number of diverse topics and the chances are that you will be able to find a mailing list on most of the subjects you are interested in. The only requirement of the system is that you have a mailbox which is capable of being mailed from outside your system over the Internet, which means just about any system, up to and including CompuServe.

The more obscure lists are detailed below:

List Of Lists - The list of Internet Mailing Lists contains a comprehensive (putting it mildly) list of all the mailing lists you can put yourself on. Put yourself on more than one of these and you could get anything up to a book's worth of text every day. To get a copy of the list of lists, you can either FTP to:

ftp.nisc.sri.com

and look in the /netinfo/interest-groups directory, or email:

mail-server@nisc.sri.com

and in the body of the message leave the text:

send netinfo/interest-groups

You will then receive a copy of the biggest list (over 500 pages) of detailed instructions about mailing lists and most of the lists available when the list was compiled.

Mailing List Search - To do a search through the various mailing lists, presumably to find a subject not covered in the list of lists, you can use gopher to access:

nsfn.na.co

Postman Net



Going underground - the Caves network is a simple and popular area to visit

and look under Internet Resources, Mail Lists. There you will find a search engine to navigate you through the various list servers to find what you are looking for.

Exploring Caves - The caving mailing list is for anyone who's happiest underground. The subscription address is:

covers-request@vlist.vu.edu

and the address for postings to the list is:

covers@vlist.vu.edu

Ballooning - For all of you who hate it underground, but quite like being in the air under a hot air balloon. The subscription address is:

balloon-request@ut.ac.uk

and the address for postings to the list is:

balloon@ut.ac.uk

Comics - For the discussion of rare comics, call the comics mail list. The subscription address is:

comix-request@world.std.com

and the address for postings to the list is:

comix@world.std.com

Paganism - For all Net pagans, the pagan mailing list subscription address is:

pagan-request@rycas.club.cc.cmu.edu

and the address for postings to the list is:

pagan@rycas.club.cc.cmu.edu

Photography - The photography list, for all you budding David Baileys out there, is available from the mailing list subscription address:

listserv@buucaa.bitnet

and the address for postings to the list is:

photo-l@buucaa.bitnet

Film Music - For discussion about film music and music for TV and video. Anyone wanting to be John Williams when they grow up should use the subscription address:

listserv@uics.indiana.edu

and the address for postings to the list is:

filmusg-l@uics.indiana.edu

Camel Research - Well, someone has to be interested in Camel rearing and feeding, I'm sure, and also the latest research on camels and camel awareness. It's based at the Camel Research Centre at King Faisal University, Saudi Arabia, of course. The subscription address is:

listserv@askfu00.bitnet

and the address for postings to the list is:

camel-l@askfu00.bitnet

Lightwave - The mailing list devoted to NewTek's Lightwave program. Subscribe to:

listserv@netcom.com

and the address for postings to the list is:

lightwave-l@netcom.com

COMMS



Use the Internet and your letters will never get lost in the post. Phil South shows you how

Regular readers may remember I recently did a meter program for Amos which allows you to show a task in operation by the use of a meter – a gauge which slowly fills up from the left to the right. Well, regular contributor Malcolm Lavery took this to heart and has come up with his own routine along similar lines, and I liked it so much I thought you might like it too.

The program, called 3D Meter, not only shows you the meter, but it shows you how to resize the meter with the mouse as it fills up. It is a nice bunch of routines and nicely coded for the hard of thinking.

The program starts with the title, then of course there is all the set-up stuff:

```

@20
Y=0
_XALISE=0

```

Variables assigned, you then have to open a screen:

```

Screen Open 0,640,256,16,4KHz
Palette
90,10FF,,8CCC,8EEE,8999,8333,888F,8A00,8800,8A0,800,
8A,80
Curs Off : Cls 0 : Flash Off
Limit Mouse 0,0 To 640,500

```

That's the first screen, including a custom palette and a mouse limit too. As we are going to do a fast line redrawing move, we also need a second screen:

```

Screen Open 1,640,256,16,4KHz
Palette
90,10FF,,8CCC,8EEE,8999,8333,888F,8A00,8800,8A0,800,
8A,80
Curs Off : Cls 0 : Flash Off

```

Right. Now if you are doing any fast-flipping, page-based animation-type things you need to turn on Double Buffer, so lets do that next:

```

Double Buffer
Autoback 0
Bob Update Off
Limit Mouse 0,0 To 640,500

```

The Autoback and Bob Update Off commands control the rate at which the screen is updated. Autoback 0 means that the Autoback system is turned off and the graphics are drawn to the logical screen as fast as possible. Bob update off means that automatic screen updates are turned off too.

Okay we're ready to rock'n'roll. Set the screen to screen 0 and set the starting mouse co-ords:

```

Screen 0
X Mouse=200
Y Mouse=100

```

and also set a couple of variables, which control the colours of the bars in the meter:

```

BCL=4
FCOL=9

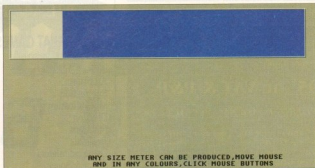
```

This brings us to the loop. The first bit controls the colours of the bars in the meter using the mouse buttons, and the size of the box:

```

Do
  XSIZE=X Screen(0,X Mouse)
  YSIZE=Y Screen(0,Y Mouse)
  IF XSIZE=4 AND YSIZE=1
  IF Mouse Key=1
    FCOL=Xand(16)
  End If
  IF Mouse Key=2
    BCL=Xand(16)
  End If

```



3D Meters

Now we are finally ready to call the 3D Display PROC:

```
_3D_DISPLAY(0,0,639,255,0,43
```

add a little explanatory text, in ink colour 0,6:

```

Ink 0,6
Text 150,240,"ANY SIZE METER CAN BE PRODUCED, MOVE
MOUSE"
Text 150,250,"AND IN ANY COLOURS, CLICK MOUSE BUT-
TONS"

```

and then call the 3D Meter PROC:

```
_3D_METER(X,YSIZE,XSIZE,_VALUE,FCOL,BCL)
```

Then you can copy the contents of screen 0 to 1, swap the screens, wait for a vertical blank and then add to the length of the bar with the _VALUE variable:

```

Screen Copy 0 To 1
Screen Swap
Wait VBL
Add _VALUE,2

```

Then we can end the loop:

```

End If
Loop

```

That's the main program to control the technique, but what about the PROCs? These are very simple and elegant:

Do it yourself

See if you can write a program which automatically senses the size of a screen and produces a 3D meter on that screen in the right size. Or how about a meter with 3D edges but a rainbow bar up the middle? Or a vertical meter with ratings up the side? The possibilities are limited only by your imagination.

```

Procedure
  _3D_METER(X,Y,WIDTH,HEIGHT,_VALUE,FCOL,BCL)
  Local Langs(LANGS)
  X_TEXT=X+WIDTH/2
  Y_TEXT=Y+HEIGHT/2+1
  HILIGHT=5
  SHADOW=7
  Ink HILIGHT
  Draw X,1 To X+WIDTH,Y
  Ink SHADOW
  Draw X+WIDTH,1 To X+WIDTH,Y+HEIGHT
  Draw X+WIDTH,Y+HEIGHT To X,Y+HEIGHT
  HILIGHT=7
  SHADOW=5
  Ink HILIGHT
  Draw X,1 To X+WIDTH-1,Y+1
  Draw X,1 To X,1,Y+HEIGHT-1
  Ink SHADOW
  Draw X+WIDTH-1,Y To X+WIDTH-1,Y+HEIGHT-1
  Draw X+WIDTH-1,Y+HEIGHT-1 To X-1,Y+HEIGHT-1
  Ink BCL
  Draw X+2,X+2 To X+WIDTH-3,Y+HEIGHT-2
  If _VALUE<_Q
    Ink FCOL
    Bar X+2,X+2 To X+2,_VALUE,Y+HEIGHT-2
  Else
    Ink FCOL
    Bar X+2,X+2 To X+WIDTH-3,Y+HEIGHT-2
  End If
  End Proc

```

The values are passed to the PROCs by variables which means you can change the size, and the boxes are drawn to the correct sizes all the time as you go along.

```

Procedure
  _3D_DISPLAY(X,Y,WIDTH,HEIGHT,IN_OUT,_FILL)
  If IN_OUT=0
    HILIGHT=5
    SHADOW=7
  End If
  If IN_OUT=1
    HILIGHT=7
    SHADOW=5
  End If
  Ink HILIGHT
  Draw X,1 To X+WIDTH,Y
  Draw X,1 To X,Y+HEIGHT
  Ink SHADOW
  Draw X+WIDTH,Y To X+WIDTH,Y+HEIGHT
  Draw X+WIDTH,Y+HEIGHT To X,Y+HEIGHT
  Ink _FILL
  Bar X+1,X+1 To X+WIDTH-1,Y+HEIGHT-1
  End Proc

```



With the help of the knowledgeable, Phil South looks at 3D meters

Write stuff

If you have an Amos question, or a routine you'd like to share with the world, then please write to Phil South, Amos Column, Amiga Computing, Europa House, Adlington Park, Macclesfield SK10 4NP.

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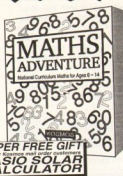


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Father Time has gone out for the day, leaving you to dog sit the Watch Dog. He's easy to look after, just give him his food and water and take him for a walk and he'll be happy. It's a pity the Time Flies have got loose but if you are good at solving time problems, they shouldn't be too much trouble. You set the type of problem and level of difficulty.

CAVE MAZE. Ages 8-13

A first adventure for a slightly older age range. You have befriended a lost, hungry and slightly awkward, baby dragon. All you have to do now is to find his tunic, feed him and then guide him home past the obstacles in a maze of caverns. The game helps develop reading and keyboard skills plus logical thought and planning.

PICTURE FRACTIONS. Ages 7-10

This game is designed for those who have just started fraction work and who are not yet ready to deal with them in purely numerical form. Questions are presented in the form of pictures from which the player must work out a fraction and then answer in either word or number form.

FRACTION GOBLINS. Ages 8-13+

A game which gives practice in fractions. Any or all of the rules of number can be selected, as can the difficulty level and type of fraction. The simplest level will allow the most hesitant novice to succeed while the hardest will probably require pencil and paper no matter how good you are.

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4 Our mother always told you never to judge a book by its cover, and while the metaphor may be true, the reality is that the covers of most publications are specially designed to attract your attention and make you want to read them. At the very least, covers exist to tell you what to expect inside.

How you design your cover depends on the job it has to do. If it's there just to identify the contents and stop the pages wearing out, then a bold title on some stiff card will be good enough. Simple typography is the order of the day for this type of cover.

There are two or three elements to be considered: the title, a few lines expanding on the title (often called "cover lines"), and the author of the work when appropriate.

The title and cover lines are your main design materials. Look hard at the words in the title and write them down in different ways – as a single line, as two lines ("double decked"), three lines, right justified, left justified, centred and so on.

If the title has something like "and the" or "with a" or "to the" in the middle of it, consider setting these words smaller than the others, or in a different font or style. Decide which is the most important word in the title, and consider setting that word larger, or in a different font or style.

Roll the title around your head and get a feel for the mood it arouses in you. Does it make you feel angry or indignant? Then don't set the title small in a wimpish font. Or maybe that's exactly the contrast in emotions you'd like to project?

PERSONAL

Is the title personal? I mean, does it have the word "you" in it? Then set that word big so casual readers can be in no doubt that inside there is information that will be of advantage to them.

Does the title make you feel nothing? Then either you are a Vulcan or you need a new title.

Once decided on the size and shape of the title, step back and look to see if there is any simple design that will "set it off". Would a frame help? Or a rule above and below?

Avoid "funny" cartoons. You might think it is subtly amusing and sums up the title but someone else may see it entirely differently and be put off by it, or even take offence.

And always keep in mind that while too little design will not catch the eye of the casual reader, too much decoration will be confusing. The way you have set the title may be enough decoration on its own.

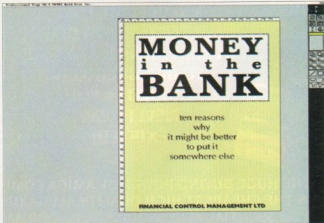
Word wise

Cover lines are meant to be read. They can be set decoratively, but use a decorative font at your peril. Cover lines should be set in a single font and style, smaller than the title, but not so small that they cannot be read easily from a few feet away.

Again, write down the words in different ways – double decked, triple decked, different justifications and so on – and study the shapes that result. Avoid waterfalls or staircases, where each line is a little longer or shorter than the one above. As far as composition goes, cover lines should be a single sentence that sums up the essence of the publication, or of the story which is being advertised on the cover.

Make that an absolute rule – one short sentence containing no more and no fewer words than are necessary to get the message across. If you really must expand further, then either do it inside the front cover (literally on the reverse side of the cover) or on the back cover.

That's a wrap!



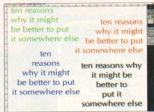
Simple typography has a better chance of catching the casual reader's eye than too much decoration.

If the publication is the work of one person and that person wants their name on it, what you do with the author's name depends on who the author is.

If the author is a recognised authority on the subject, and if there are rival publications on the subject, then it will help your publication if the author's name is prominent – maybe even more prominent than the title itself.

Many, many book covers use this trick. But if the author is not well known, setting his or her name in tall, bulky letters will only serve to remind people that they have never heard of he/she.

Always remember that if you publish many authors' names, giving one of them special



Study the shapes made by the words; waterfalls and staircases are considered poor design.

treatment may very well upset the readers. No way do you want an upset author crying down the phone at you expecting an ego-massage.

For company reports it is often convenient to have a standard cover which can be used to contain different but similar documents.

Overprinting can be used here. Decide on a standard layout that will contain the name of your firm or department, and "holes" in the design where title, cover lines and the author's name go, plus any other variable details that you require on the cover. Any decorations like frames or rules will be on this standard cover.

You can get this printed umpteen times, and then overprint the details for as many copies as are necessary. Thin card can be used with most laser printers – for inkjet printers that won't take thin card you might like to use coloured



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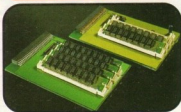
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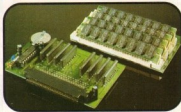
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Standard HP100/300/3000	1.50	2.50	2.50	2.50	1.50	2.50	2.50	2.50
Standard HP100/300/3000	1.50	2.50	2.50	2.50	1.50	2.50	2.50	2.50
Standard HP100/300/3000	1.50	2.50	2.50	2.50	1.50	2.50	2.50	2.50
Standard HP100/300/3000	1.50	2.50	2.50	2.50	1.50	2.50	2.50	2.50
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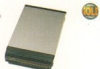
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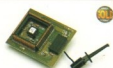
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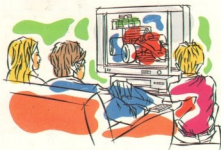
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