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### Quote

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# Panasonic

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**PRICE CRASH**



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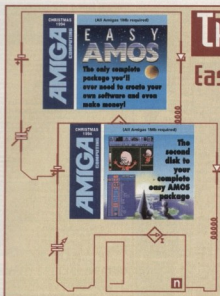
Will you be playing with the computer instead of yourself in the future?

### INSTALLER

Install your software with ease in Steve White's series on the Installer language

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15 December

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Now you can create your own applications and games with ease using the complete Easy AMOS package free with this issue. Easy AMOS is the number one programming language for the Amiga and will give you the power to turn your dreams into reality!



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## Subscriptions



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





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the squirrel can suss it  
... can you?

## Win a Quad-speed CD-ROM system for your A600/A1200 worth over £400!

We're about to release an exciting new hardware product for the A1200 and A600 computers ... but we're not going to tell you about it until next month.

If you can work out, from the two clues on this page, what our brand-new package is and you tell us, on a postcard, before the end of November, we will enter your name in a prize draw to win a Quad-speed CD-ROM package for your A600/A1200, worth over £400.

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why not have a go.

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The Old School, Greenfield,  
Bedford MK45 5DE UK  
Tel: +44 (0) 1525 718181  
Fax: +44 (0) 1525 713716

Another exciting new  
Amiga product from

**HiSoft**  
High Quality Software

Competition draw will take place at the World of Amiga Show at Wembley on 30 December. Competition not open to HiSoft employees or their friends or relatives.



Aura is a brilliant new concept in high-performance, yet affordable sound sampling for your Amiga A600 or A1200 computer. This breakthrough is brought about by revolutionary hardware which plugs into the PCMCIA slot to achieve extraordinary sampling performance in glorious 12-bit stereo, with optional direct-to-disk recording.



A screenshot of the powerful sample editing suite contained within Aura

### The Hardware

- Achieves a signal-to-noise ratio of 72db - equivalent to expensive 16-bit systems.
- PCMCIA credit card connection for maximum performance and expandability.
- Quality phono outputs with Amiga audio mixed.
- Very high sample recording and playback speeds.

### The Software

The Aura audio/sampling suite is probably the world's most powerful, flexible and easiest-to-use Amiga sound software package to date! This is no idle claim, just look at some of the features of this superb sound sampler:

- Record/Play/Edit 16- or 8-bit, mono or stereo sounds to memory or direct-to-disk.
- Real-time monitor of input with moving spectrum analyser and oscilloscope.
- Amazing range of editing facilities include cut, paste, insert, delete, fade and volume. Editing controls work on both samples in memory and on hard disk.
- Record samples into memory at rates in excess of 60 kHz (A1200, 12-bit stereo) and direct-to-hard disk recording at rates in excess of 40kHz (A1200 12-bit stereo with fast RAM).
- 15 fully programmable, single source sound effects can be used in real-time and on samples held in memory or even on hard disk, plus effect preview.
- Block-oriented Sample Sequencer built in.
- Advanced digital filtering with 3-dimensional Fast Fourier Transform interactive display.
- Real-time playback of samples under MIDI control (requires extra MIDI interface & keyboard).
- Load and save IFF, RAW and AIFF sample formats.
- Over 60 fully programmable, multi-source, sound effects on samples in memory, in real-time to memory or hard disk (with effect preview), a unique feature.

### Octamed Compatible

Octamed is the leading Amiga sample sequencer; now, version 5.02 and above include a dedicated 16-bit sample editor which is 100% Aura compatible and can play 16-bit samples through the Aura hardware while sequencing MIDI and normal Amiga 8-bit sounds.

This powerful combination provides stunning performance and sound quality for maximum impact.

## Audible Reality

Package includes: Aura hardware, complete software, comprehensive 148-page manual, stereo phono-to-phono lead and registration card.

Aura costs only £99.95 inclusive and is available from all good computer shops ... now. Alternatively, phone our order line on 01525 718181, armed with your credit/debit card.



Aura is another quality music product for your Amiga from HiSoft/Microdeal

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# Can I have your bids please

After the rumours, speculation and hot air floating around over the last several months, it would appear that a conclusion to the Commodore crisis is about to be reached. Fanklyn Wilson, the liquidator in the Bahamas and the management buyout group headed by David Pleasance have at last come to an agreement.

The final papers were all set to have been signed on October 15th but due to last minute legal details, the official signing has been delayed until November 4th.

One of the thorns in the side of this whole affair has been the reluctance of some creditors such as Prudential Insurance in the States to allow a Bahamian court to decide how much money they receive through the buyout. They have threatened to have the sale of Commodore assets owned by American companies determined by an American court.

Unfortunately, one of these American-owned assets happened to be the Amiga computer technology, the very hub of Commodore. If a compromise had not been reached, people feared that the American judicial system would have caused massive delays to the already lengthy proceedings. To

sort this problem out, it has been decided that an auction will be held to maximise the amount of money the creditors are owed.

The procedure is simple. Now that the trustee and the Pleasance group have nearly signed an agreement, it will be presented to the Bahamian Supreme Court on or before November 4th. Hopefully, within the following week, the Bahamian Supreme Court will open the auction and make the value of Pleasance's bid known to the other potential buyers. That means CEI and Escom at this point - others may well appear.

These interested parties will then have the option to make their bids higher than Commodore UKs. This procedure should be finished within two days and, if Pleasance's bid has been exceeded, then C=UK have a final chance for one more bid.

Once the auction has ended and, if Pleasance's offer still remains the highest, the Bahamian court will accept the agreement made with the trustee. If not, the court will throw out the agreement and award the assets to the winning bid.

In theory at least, we should know the result of this auction next month.

## Pleasance words

The celebration party planned for October 13th to launch Amiga International was postponed. David Pleasance is confident though that it will happen at some point in the near future. As for the future plans of the company if the bid does go through, Pleasance is sure that with the continual delayed buyout, there won't be much stock available for Christmas.

CD32 units on the other hand have been pulled in from subsidiaries throughout the world and will be in ample supply

for the Yuletide season. Any doubts that the Amiga can survive such delays are firmly refuted by Pleasance: "We have huge back orders from round the world. As long as the Amiga is known as an ongoing product, it will be okay."

If successful with their bid, the CD1200, FMV cartridge and CD32 expansion kit will all be making an appearance at some point during the spring. As for the CD64, Pleasance firmly denied the rumour, calling it "complete and utter nonsense."



**Pleasance:**  
"As long as the Amiga is known as an ongoing product, it will be okay."



## Telephone fraud crushed by ELSPA and US Feds

With the aid of the US Secret Service, ELSPA (European Leisure Software Publishers Association) has cracked an international telephone fraud ring. Following a raid linked to the Northumbrian 'Living Chaos' Bulletin Board in June, ELSPA found a large number of 14 digit AT&T calling card numbers.

These let pirates make as many transatlantic calls to US software bases as they liked without being charged. Down and uploading pirated material can take hours of modem time, producing bills that the States leading phone company, AT&T, have to foot.

After making their own joint enquiries with AT&T, the US Secret Service was brought in to aid ELSPA and made six arrests in both the US and UK. John Loader, chief investigator of ELSPA's Crime Unit, believes that they have taken a vital step forward in telephone fraud.

"It is hoped that by cutting off [pirates] free call capability, the BBs will die from within," commented Loader to the industry's newspaper, Computer Trade Weekly, "since without the ability to call the USA for hours at a time the UK pirates will have no access to the latest stolen software."

Another success story for ELSPA was the raid carried out by the Crime Unit and West Yorkshire police on 14 stalls at Cross Green car boot sale in Leeds. They seized over 7,000 disks with a quantity of computer hardware that had an overall estimated value of £100,000.

If you have any information that you feel should reach the attention of the Crime Unit, please in confidence on 0386 833810.

## NEWS BRIEFS

## Imagine upgraded

The highly popular and critically acclaimed package, Imagine has recently been updated to 3.1. The 3D rendering software features a host of new and improved features – new textures and global F/X, scene morphing, full DXF saving, smart bones, backdrop image loading and more.

For more details, phone Impulse Graphics on 0101 612 425 0557.

## Creating a role

As a supplement for Amos, the popular programming system, Kuma Books is releasing "Writing Role Playing Games in AMOS". The book gives ideas, tips and inside information on the ever-growing genre. Also provided in the pack are two disks that include a sample game called "The Black Tarot", a program to generate large maps and screens of graphics to cut out and use in your own software.

Contact Kuma Books on 0734 844335 for ordering information.

## Shopping

Any doubts that confidence in computer technology sales was beginning to affect the stocking decisions of major retailers have been quelled for the time being with the announcement of two new stores from Virgin and Dixons.

Virgin opened the first stage of the world's largest entertainment store called the Videodrome in London on the 15th November. As well as a vast stock of films, music and comics, there will be a floor dedicated to games software by the end of November. The full completion date of the Oxford Street-based £10 million project is set for Easter '95.

Dixons plans are aimed at providing a new shopping format branded "The Link". They are promising that the new approach will be "a radical and innovative approach" to retailing.

"The Link" will sell mobile telephone services, satellite, on-line computer services such as CompuServe and a host of other goods. The company hopes to have eight "Link" stores open by February 1995 based mainly round the London area.

## Dops

In our review of Image Master last month, we forgot to include a product box for eager purchasers. The package costs £69.95 and is available from Ramiga International on 0690 770 304.

## A touch of Stylus

With inkjet printers coming in to the affordable reach of most computer users, Epson has upped the stakes with the release of the Stylus 400, a mono inkjet retailing for £225. The printer features the Piezo print-head technology that Epson says is normally associated with high-end products.

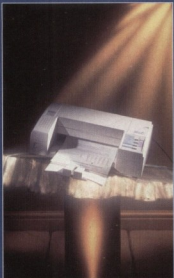
The head enables more precisely formed ink droplets which can be fired accurately at high speed to produce sharper printed pixels at 360 dpi claim the company.

"We expect to shake up the market with this announcement," said product manager, Robert Clark. "By introducing Piezo quality to a low-end product we anticipate gaining significant market share from our rivals. We promise high reliability and low running costs."

Also making its debut on the Amiga is the EPL-3000, a laser printer retailing for £399. The printer offers 300 dpi, Lj4, a base memory of 1Mb and various upgrade options such as additional language emulations and interfacing to allow the printer to be used as a shared resource.

For further information, call Epson on 0442 303681.

Stylus 400: Hoping to take the wind off Hewlett Packard DeskJet sales



## Riding the LightWave

Any serious user of the premier 3D animation package, LightWave, should be interested in the US magazine, LightWave Pro, a monthly publication that deals solely with how to get the best from the rendering package.

Now available from Phosphor Productions, users can subscribe to the mag on 0843 292150. For those wanting to purchase the actual package, there are five official UK dealers at present – Premier Vision 071 721 7050, Alternative Image 0533 440041, Ramiga 0690 770304, Zen Computer 061-793 1931 and the 24 Bit Club 041-946 2191.

## Peace of mind

After the introduction of the rating system for games, ELSPA has launched the Games Player's Charter in a bid to help parents make informed buying choices suitable for their children. The Charter has been incorporated into a leaflet which is split into three sections – commitments to parents and gameplayers from the members of ELSPA; advice to parents, and a checklist of guidelines for games players themselves.

"Sadly, unlike previous generation's toys such as model trains or dolls, parents tend to find computer and video games complex and inaccessible," said Mark Strachan, chairman of ELSA. "As a consequence they have tended to view them with a certain amount of unwarranted suspicion. This is why we are introducing the Charter and the Parent's Guide – as further reassurances to parents."

For all parents wishing to obtain a leaflet, pop in to your local computer retail store to pick up a copy.

Parent's Guide:  
Aligning parental  
fears about the use of  
computer games



## Sounds are us

After the successful launch of its budget-priced sound disks, Mediatrix has been inundated with callers asking for specific samples.

While not being able to afford the necessary hardware to produce the in-demand sounds, the company has set up the Independent Association Of Sound Developers.

The group's aim is to produce a catalogue of affordable sounds where synth owners or programmers can market their efforts through Mediatrix on a royalty basis. Registration costs £5 and any amount of patches can be sent in.

For more details, contact Roy Ward-Baker on 0242 227379.

## Wordworth 3.1

With the arrival of Final Writer release 3.1 this month, the other giant of the Amiga word processor scene, Wordworth is set for an upgrade in the shape of release 3.1. Released at the recent Future Entertainment Show, the latest version is faster, features a set of new commands, better text filters and enhanced PostScript support.

For A1200 owners with one disk drive and 2MB of memory, the 3.1 SE edition has also been unveiled to bring the powerful word processor in to the grasp of low-end users and retails at £49.99.

The full 3.1 version costs £149.99 and Digital can be contacted on 01395 270 273.





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## World of Amiga keeps on turning

Everything would appear to be in place for a successful World of Amiga show come the 9th December. Apparently, according to the organisers, there have been numerous enquiries in both ticket sales and space booking.

"The interest has been incredible", commented David Pleasance, joint-managing director of Commodore. "Although the show is still two months away, we've sold two thirds of the space already. That's as good or better than in past years."

For ticket orders, phone the show hotline on 01369 7711.

## CD Vision rolls out

To headline the recent announcement of FMV films and TV programmes for the CD32, CD Vision has released three episodes of the award-winning Eyewitness series. Each costing £9.99, the viewer has access to 30 minutes worth of material on each CD.

Cartoon fans can also snap up a selection of animated classics with 60 minute CDs featuring Bugs Bunny, Popeye and Superman among others. These are also retailing for £9.99.

## Keeping track

For those who need to keep a track on time while using their Amiga, an external clock cartridge has been released by Siren Software costing £19.99. Working across the whole Amiga range, the clock comes with full installation software and the device itself fits into the disk drive socket.

For more details, phone Siren Software on 0161-796 5279.

## Painting by computer

To coincide with the World of Amiga exhibition in December, Almathera is releasing Photogenics, a package aimed at both graphic designers and painters alike. Offering image manipulation (Jpeg, GIF, IFF and so on) to change formats, the title also allows the user to paint the images with a variety of different brushes.

The makers claim that the package offers many facilities not available to Mac and PC owners and costs £54.95. For more information, contact J Bruno on 081 687 0040.



IN THIS COMPUTER AGE  
EVERYTHING IS DRIVEN  
BY MICRO-CHIPS!

## Christmas is here again

Described as "humorous", Visual Promotions has released a series of Christmas cards featuring computer-related covers. There are four available that can be bought individually for £1.65 or £6 for the entire set.

The cards can be ordered on 01303 245378.

**Computer Xmas cards:**  
An alternative to the usual Yuletide offerings

## Indi drives

Indi Direct Mail has reduced the price of its Smart Stor plus Amiga 600/1200 external hard drives and increased the capacity. The 214 Mb Smart Stor plus, previously selling for £249.99, has been replaced by a new model selling for £199.99.

The 428 Mb version has been replaced by a 528Mb model while remaining at the same price, £314.99. For more details, phone Indi Direct Mail on 0543 419999.

## Minimum money for mice

For those in search of a new mouse for their Amigas, Wizard Developments has released two new mice for the machine. Priced at £9.99 for a 400 dpi mouse and £19.99 for the optical rodent, they come with microswitched buttons and the optical version also includes a free mouse mat.

The company is also releasing the Saturn Amiga floppy drive for just under £50. Featuring a Sony drive, enable/disable switch and anti-click as standard, this and the mice can be ordered on 0322 272908.

## Animated effects

For video users who need to expand their DTV software, Chroma are on the verge of releasing the DTV Toolkit Volume One. Featuring various television-style effects such as low-res and interlace wipe anims, the package costs £22.99 and comes in a video case with a fully illustrated user guide to aid operation.

The pack works in conjunction with any Amiga-based paint/animation program and can be ordered from Chroma on 01328 862693.

## New CD32 Xmas pack

Even with the buyout in the Bahamas dragging its heels at an embarrassingly slow rate, SDL has brought together what looks to be one of the most tempting bundle packs for potential buyers of the Commodore console.

Featuring the system itself and one joystick, purchasers are also provided with seven games to play into the early hours. Cannon Fodder, Liberation, Microcosm and Ultimate Body Blows are some of the titles that make up the new bundle called Critical Zone.

Priced at £249, SDL can be contacted on 081-309 1111.

## AC joins IDG

Amiga Computing has been part of the Europress magazine empire for the last six years. Along with 10 other magazines published by the group, it has been sold to IDG, the US-controlled multinational that forms the world's largest computer magazine publisher.

"IDG is pre-eminent all round the world, with more than 220 publications in 64 countries," commented the founder of the Europress Group, Derek Meakin. "One significant gap in this global network has been the UK. With the acquisition of the Europress titles, IDG now has a core business with which it can expand to become the major player here as it already is in so many other countries."

To our readers, the deal means the continued success of Britain's most informed and concise magazine for the Amiga - Amiga Computing.

## Heard the latest?

Have you heard any interesting Amiga news recently? If you've picked up some hot gossip that you think we could be interested in give Adam Phillips a call now on 0625 878888.



# Running out of patience

**I**t's a pretty slow news this month on this side of the Pond. As the US watches the long, over-drawn-out bidding process for the remains of Commodore, US companies seem to be taking a wait-and-see attitude when it comes to new releases for our favourite computer.

There's still work going on, for sure, but many companies have reported that their major development projects have been put on hold until the Amiga's future is a little more clearly spelled-out.

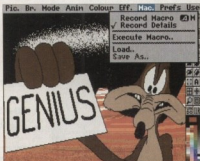
Utilities Unlimited is nearing completion on its MS-DOS PC emulator module for Emplant. All work on other projects, such as the company's video board and 68060 accelerator, has been put on hold to concentrate resources on getting the long-delayed PC emulation out the door.

One of the reasons it has taken longer than expected is that it's no longer a 486 emulation. The module now emulates a Pentium processor instead. That doesn't mean it will be any faster, but if a program utilizes any of the enhanced instructions of Intel's newest processor, the Emplant PC emulation will be able to take advantage of them.

Another update in the works comes from Intangible Assets Manufacturing - Dave Haynie's DiskSav 3.0. Previous versions of this amazing data-recovery program have been shareware, and utilized a command-line interface. This life-saving program has been updated to



There are many new features to give Deluxe a needed boost



Deluxe Paint V is a direct rival to brilliance

include a full graphical interface, as well as even better data-recovery abilities. Watch out for a hands-on look in next month's USA News.

A couple of months ago we premiered the fact that a new version of the venerable Deluxe Paint - version V, to be exact - was in the works. It's nearing release, and promises to give Brilliance a run for its money.

Among the new features are ARexx macro capability (including the ability to record any painting or effect actions), support for 24-bit loading and saving, palette changes during animation frames, variable animation rates (you can speed or slow an animation during different sections), camera moves for scrolling backgrounds and zooms, textures, animation storyboarding, and a much-improved Move requester. Look out for it any day now from your local Electronic Arts retailer.

# USA news

*With Commodore's future still undecided, Denny Atkins reports on what progression there has been in the hampered Amiga market*

## Termite attack



Oregon Research has released a new program that, despite the name, is not ridden with bugs. Termite is a new Amiga terminal program designed to make telecommunications easier on the Information Superhighway, but that's got enough power-user features to satisfy even old-time comms road-warriors. It's a welcome addition to the Amiga's software stable, because all the other commercial terminal programs were off the market.

Termite requires 1MB and AmigaDOS 2.04 or higher, and is fully style-guide compliant. Among the program's features are support for communications at speeds up to 115,200 bits per second, a phone book that lets you set up unique configurations for every BBS you call, text macros, a button bar, font- and screen-sensitive displays, full ARexx support, and AmigaGuide online help.

If you tend to regret the amount of time you've spent online when you

get your phone or credit-card bill at the end of the month, you'll appreciate Termite's call-logging feature, which will let you know just how much time you've spent online. You can even have it calculate how much currency you have spent.

Termite's handiest feature is its button bar. You can assign any program function or any ARexx macro to the bar, making common operations a mouse click away. Set up one icon to log you on, another to view a list of new files, and another to download. You can even create your own icon images with any paint program that supports IFF format.

Termite is priced at \$49.95. It's available from Oregon Research, 16200 S.W. Pacific Hwy., Suite 162, Tigard, Oregon 97224; Tel: (503) 620-4919; fax (503) 624-2940. You can also contact them via e-mail at orres@teleport.com.

If you've been wanting to craft a masterpiece Amiga game but you feel as if you're reinventing the wheel by figuring out how to implement things like parallax scrolling and double-buffered animation, Oregon Research has a tool that will let you dive into game development without having to worry about the nitty-gritty details.

The GameSmith Development System is a series of routines for Amiga C compilers and assemblers (support for Pascal and HiSoft BASIC 2 is coming soon) that will let you create everything from fast-action scrolling shooters to graphic adventures.

The \$129.95 development package features routines that provide a complete animation system

## Game craft

with double-buffering, prioritized object display, object and background collision detection and response, and dynamic animation control.

You can chain objects, so animating one will animate the entire chain. If you don't want a hacker reverse-engineering your game or scamming your valuable graphics and sounds, GameSmith features custom encryption to protect those files.

Hardware-level smooth scrolling, independently scrolling dual playfields, parallax scrolling, and full AGA support round out the package. Of course, you'll find plenty of other basic game tools, such

as joystick polling routines and an ILBM picture loader. GameSmith also features CITAS, an interactive character animator that lets you customise all aspects of your game objects, including sequence, placement, speed, display method and priority, and collision detection parameters.

Over 350 pages of documentation explain the system and utilities in detail, and the over 130 library functions are explained in a detailed tutorial that's packed with examples.

Beginning and advanced programmers alike should find that GameSmith allows them to concentrate on gameplay instead of the technical details, saving them headaches and providing a better end product for the gaming customer.



# Amiga Frame Grabbing has just taken a Fall... in Price but definitely not in quality!



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## STAGE 3...

Use the saved image in your favourite Amiga Word Processing, Desk Top Publishing or Graphics software packages.

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From day one in the history of home computing, people talked enthusiastically about the educational possibilities. Certainly, those pushing the new technology were forecasting nothing short of a revolution in teaching; it was as if buying a BBC micro would have kids running home to supplement their education.

Well we all know what really happened. Whatever Mum and Dad thought was being accomplished in the bedroom, 99 per cent of the time we were striving for level 10 of the latest arcade hit rather than any academic achievement.

To be fair, computers are useful in school where children are supervised. However, what parents – and to a certain extent teachers – hoped and prayed for was a tutor that would keep children absorbed in the learning process without a beady-eyed adult watching over them.

That's why it's so important that these packages provide pleasure as well as exercises so that there is an incentive to pass the milestones of learning set up by a program.

There are plenty of Amiga teaching tools out there that are admirable in many respects. The software available today has certainly come on, with many packages offering a step-by-step series of valuable lessons.

The problem is getting kids to come back to their exercises time and again of their own free will. There's still a long way to go as far as making learning fun is concerned, and computers are not being used to their full potential on this count.

Though good quality educational software has been well researched from the teacher's point of view, they rarely show an understanding of what appeals to children. The graphics and sound, for example, are just not acceptable in comparison to the sort of games that children really want to play.

Educational software houses could learn a lot from the efforts made by game programmers. The likes of Sonic the Hedgehog were successful because they combined cartoon characteristics with appealing animation and quirky sound effects, not to mention entertaining game-play.

Admittedly, there are problems in combining, say, a maths exercise with the popular style of arcade action. On the other hand, there's no reason why catchy tunes, sampled sound effects and more lively characters can't

# Lessons to learn

*Every teacher will tell you that if you make a subject enjoyable it's easier to learn.*

*Gareth Lofthouse asks why it's so hard to find software that makes homework fun*



be incorporated. Given that the young are more demanding about quality in these respects than many adults, the educators should stop acting as if second best will do. Disney films are so phenomenally successful because old Walt knew children's standards are at least as high as anyone else's.

## SUPERKID

With the growth of the vaguely named medium, 'Multimedia', we are now on the threshold of a new technology that again promises a lot in the field of education. Once again we're dreaming about bright-eyed superchildren absorbing tomes of information while Ma and Pa are left in peace.

Unfortunately, while multimedia has great potential, too many of the current offerings offer only token advantages over encyclopaedias. It is to be hoped that these are the inevitable shortcomings of a communication medium that is still in its infancy.

It would be wrong to be overcritical

because I don't envy the teacher's job. Making exercises fun for the young has always been a very difficult challenge, and there's probably nothing on earth that can make sums and grammar as much fun as zapping aliens.

Even so, it cannot be doubted that if developers put as much effort into the entertainment side of things as they do into the actual lessons, their software would hold a child's interest for longer.

While we're waiting for these improvements, the better quality products in this field are still going to be more fun than standard homework assignments. My advice is to choose carefully and don't necessarily trust the packaging as far as its claims for age suitability are concerned.

As for the future, let's hope the developers take advantage of the technology's capabilities. Small independent game makers have shown that you don't need the resources of Sega to make software exciting. It's time for the educators to do the same thing.

## The AC team

**EDITOR** Paul Austin  
**TECHNICAL EDITOR** Steve White  
**AD EDITORS** Lyn Tedy  
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Adam Phillips  
**NEWS EDITOR** Judith Chapman  
**PRODUCTION EDITOR** Jonathan Maddock  
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**CHAIRMAN** Derek Meakin  
**MANAGING DIRECTOR** Ian Bloomfield

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## Installation

In order to use Easy AMOS you will need three blank disks. Take the disk marked Easy AMOS Master Disk 1 and write-enable it by pushing the disk tab down so that it covers the hole.

Insert this disk into your internal floppy drive and then reboot your Amiga. After a short while the Welcome Screen will appear. Press the mouse button and a new screen will appear with these words:

Easy AMOS work Disk Creator

Before proceeding, you need to select the nationality of your Amiga's keyboard.

Look at the selection of nationality panels on this screen page and use the mouse to click on the one that suits your machine. This will be English in most cases.

After you have entered the nationality you are required to enter your name in the two box es. Type your first name in the first box and your surname in the second. This data will be saved to your disk.

You will now be asked to write protect your Master disks, so make sure that the plastic tab on the disk is pushed up so that you can see clearly through the hole.

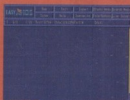
When you are satisfied that the disks are write protected, click on the OK panel. Your own unique registration number will appear on the screen. Ignore this by simply clicking on OK again which will take you to a screen with three control panels entitled:

[Install on floppy]  
[Install on hard drive]  
[EXIT]

You now have the choice of installing Easy AMOS onto floppy disks, which you should have in your possession, or onto a hard drive if you have one.

If you are installing onto floppy drive, move the pointer over Install on Floppy and click. When you've read the following introduction click on OK to proceed.

At the Let Me Install your Software prompt, insert a



The Edit Window is where you type in your Easy AMOS programs



blank disk and click the left mouse button. The disk will be formatted and given the name Easy\_AMOS. From now on simply follow the instructions as they appear on your screen.

If you feel that something is not right in the installation process simply press Esc to abort, after which you will be allowed to try again. Once you have finished installing the first disk you will be required to install the AMOS Examples disk.

Follow this procedure exactly as the first disk, following the AMOS messages as they appear. When that disk is completed all that is left for you to do is install the AMOS Tutorials on the third and final disk.

It is advisable for you to now create an extra disk so that you can save your own programs to it. It is not advised that you save over your AMOS disks.

To do this, click on Format and enter a suitable name before pressing Return. Click on the left mouse button to actually format it.

To create a program with Easy AMOS you are given a working area called the Edit Screen. Press a mouse button or any key on your keyboard to reveal it now or simply do nothing. It will appear automatically.

Instead of explaining what everything does, just identify the bits that you need for making contact with Easy AMOS immediately. At the top of the screen is an assortment of control panels that are triggered using the mouse.

Below that is an Information Line where Easy AMOS keeps you up to date with exactly what's going on in your programming efforts. The main part of the Edit Screen is the working area. This is the Edit Window where you actually write your programs, and there is a little flashing bar waiting to act as your Edit Cursor.

Press the 'A' key on your keyboard and a little 'a' will appear in the Edit Window. Now hold down one of the Shift keys and press 'A' again. There should be a capital 'A' alongside the little 'a' on screen.

Likewise, all the other keys on your keyboard respond to Easy AMOS as a type-writer would.

So, if you're ready to begin, copy the following lines of program exactly as they appear into the Edit Window. Don't worry if you make a mistake because Easy AMOS



The Save and Load requesters in Easy AMOS are very similar to Workbench requesters

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# to create

is ready and able to help. Start typing now.  
Good luck.

```

Track Load "Easy_Examples:Songs/mod_laugh",0
Load "Easy_Examples:Bobo/Print_Bobo_Ask"
Flash Off
Input "Tell me your name...";NAME$
IF NAME$=""
  Print ITS
  Say ITS+NAME$+""
  Say "Let's have some fun with Easy AMOS."
  Print ITS
  Say ITS
  Wait 100
  Double Buffer
  Get Bob Palette
  Clo 0
  Sub 0
  Plot 0,100
  Draw To 320,150
  Paint 0,110
  Sub 1
  Circle 250,50,20
  Paint 250,52
  Track Play
  Wait 112
  Go
  S=50 : E=220 : ST=1 : AN=2
  Gosub MOVE
  S=220 : E=50 : ST=-1 : AN=3
  Gosub MOVE

Loop
MOVE:
B=0
For #45 to 6 Step 51
  Sub 1,X,7,1K
  Wait 100
  B=B+1
  If B=6
    If #ST
      B=3
End If

Next A
Return
  
```

Once you get this program running you can stop it operating by pressing the Control and C keys. If you think every character in that program is now faithfully reproduced in the Edit Window, move the mouse pointer up to the centre of the top line of little panels and click on the one that reads Test with the left mouse button.

Easy AMOS reads through your work instantly and can spot any mistakes. If all is well, the magic words No errors have just appeared in the information line, although

the chances are you have put in the wrong character somewhere, or left something out.

This is where Easy AMOS starts getting friendly, by displaying a little help message in the information line as well as moving the flashing Edit cursor to the nearest point in your lines of program where it knows the mistake is lurking.

So you can put any mistakes right until your Test selection delivers the No errors message. You should then insert your Easy AMOS Examples disk into the internal drive.

Now get ready to see and hear the results of your first effort. Move the mouse pointer to the box that says Run and click the left mouse button. When your Amiga asks you for your name, type it in and press the Return key.

You've already realised that writing programs with Easy AMOS is not only simple, it's fun. If some of those lines in your program seemed to make sense as you were typing them in, you are well on the way to being a programmer.

Easy AMOS is a very sensible and direct language that allows your Amiga to understand anything and everything you want to make it do.

If you copied the example above you will already have written your first program. This next one should be easy in comparison. Type in the following line exactly as it is

## INSTALLING EASY AMOS PRO

It couldn't be simpler. Just put disk 1 into your drive and reset your machine. The installation program will then load. After the initial animation of the strange little chap with the unlikely mustache, and if you are not interested in the message scroller, click any button to continue. You will then be presented with a choice of nationalities for your keyboard. This is most likely English, so simply click on the English box. Next, you will be requested to enter your name so that the copy of your installation disk can be registered in your name. Be sure to have disk 1 write enabled (the hole at the top of the disk is closed) because the information you enter will be written to the disk. Clicking on OK once you have entered your name will take you to a display showing your unique registration number. It may be a good idea to write this down. Finally, you should now be at the main installation menu. Here you have a choice of either installing Easy Amos to floppy disks or to a hard disk. Just click on the appropriate button and the installation program will take over. Keep an eye on the bottom text line which should tell you when to swap disks. Have fun.

printed and leave it at the top-left corner of the Edit Window. Don't press Return yet.

```
Print "Hello"
```

Easy AMOS programs use all sorts of instructions to tell the Amiga what to do. Many of these instructions take the form of special keywords and Easy AMOS recognises them instantly.

Now press the Return key and look at the line you typed in. Easy AMOS has already examined it and spotted a keyword. The keyword has automatically been given a capital letter and separated from what follows it by a space, so your line now looks like this:

```
Print "Hello"
```

Wherever possible, Easy AMOS will look at what you type in and try to make sense of it, even if it's not typed in perfectly. But if you use the wrong keyword or make an error in the spelling, you will be informed that there

## Hard drive users

To install the program to your hard drive, simply boot your Amiga with the hard drive and then insert the Easy AMOS Master Disc 1 into DFD; and double-click on the Easy AMOS disk icon.

Locate the Easyinstall icon and double-click on this also. Select the nationality of your keyboard, follow the prompts to enter your name and then write protect the Master Disc and click on OK.

Move the mouse pointer to the Install on Hard Drive option and click the left mouse button. You are presented with 12

option panels, each one representing a different device name. Select the device you want to install Easy AMOS to and simply follow the on-screen instructions.

Once the installation procedure has finished, add the assign by clicking OK and then on Exit.

You will now have a complete working version of Easy AMOS on your hard drive. To load the program from either floppy or hard drive, simply click on the EasyAMOS icon. You can alternatively boot straight into Easy AMOS by booting from your new disks.



is a mistake. Now add another two lines to your program and press the Return key after each line so that it looks like this:

```
Print "Hello"
Wait 50
Print "I am your program."
```

There are two keywords used here, and they have the same sort of meaning as in normal English.

● **Print** – This is an instruction that tells the computer to print some information on the screen. In this case the information is a list of characters that make up words. You have put the words inside speech marks to tell the computer what to print on screen.

● **Wait** – This keyword is a command that tells the computer to stop the program and wait for as long as you want before moving onto the next instruction. The number that follows it is the number of 50ths of a second to wait. So, in your example the program will wait for one second.

Now move your mouse pointer up to the Run option at the top of the screen and click on the left mouse button to see the results of your work. As soon as you Run your program the blue Edit Screen disappears and a new screen takes its place ready to display the current program.

In the case of your example, the word Hello should appear on screen in the top-left corner and after a one second wait "I am your program" appears below it. When the

program has been completed, Easy AMOS gives you a report which is automatically displayed outside the working area, at the bottom of the screen.

There should be a flashing message telling you at which line your program ended, and below that you are told how to get back to the editing process. If all is well, the following report is now sitting centrally at the bottom of your screen:

```
End of program at line 3
(ESCAPE) to direct mode, (SPACE) to edit
```

## Editing

To adapt or change your work, return to the Edit Screen by pressing the Spacebar. Change the characters to be printed and the value that controls the waiting time and then Run your program. You can alter your program to something like this:

```
Print "Hello again!"
Wait 150
Print "I am your edited program."
```

That little program will now stay in your computer's memory all the time you leave it switched on, but as soon as the power is turned off the machine will forget all about it and your work will disappear down the electronic wastepipe. The best way to avoid such catastrophes is to save your work regularly.

Take the blank disk that you were asked to format earlier and get ready to use it. Reboot Easy AMOS, go to the Edit Screen and type in and Run this program:

```
Print "I am test number one"
```

After checking that your example works, return to the Edit Screen, remove your Easy AMOS Programs disk and insert the new disk that you've actually prepared for storing your programs.

## Saving a program

Saving an Easy AMOS program is very simple. Press the Amiga key and the S key together and a file requester automatically pops up on the screen. The little flashing

cursor at the bottom of the file requester panel is waiting for you to give a name to the program you want to save.

Type in the name below and then press Return:

```
Test1.AMOS
```

That's it! Your test program has been saved onto the disk and you will have been returned back to the Edit Screen.

## Keyboard short-cuts

Make sure that the edit cursor is in your line of program and press Shift and Del together. Your program has just been wiped off the screen. This is a good illustration of how Easy AMOS uses certain keys acting together to produce short-cuts in your editing.

For example, pressing Del on its own will delete the character at the current location of the edit cursor. But if you press Shift and Del together the whole line in which the cursor is sitting will be erased. We will be providing you with a full list of keyboard short-cuts at a later date.

At the moment, there should be nothing in your Edit Window except the edit cursor. Let's prove that your program has gone by trying to Run it. Nothing? Good. Now press the Spacebar to return to the Edit Screen and look at the information line below the panel of options. At the right-hand side the following report is given:

```
Edit: Test1.AMOS
```

This means that Easy AMOS is still expecting you to edit the program you have just saved, named Test1.AMOS. But let's forget about this program for a while and write another one.

## Deleting programs

Hold down the Shift key and look for a new option that has appeared called New. This option vaporises your current program from the computer's memory altogether. Trigger it by moving the mouse pointer to New and

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press the left mouse button. A message appears in the Information Line which reads:

Please confirm ( Yes or No )

Press Y. The Information Line will ask you if you want to save your program. Press N and it should now report that your last program has gone and that your next program has yet to be given a name. Type in the following:

Print "and I am test number two"

This time don't run your new program by selecting the Run option with your mouse but press the F1 key instead. This function key has been pre-programmed to run the current program and you have just been introduced to another range of Easy AMOS short-cuts which use the function keys at the top of your keyboard to perform special tasks. We'll take a look at what all these keys can do later on.

If you are satisfied that your Test Number Two program is all in order, get ready to save it, but do not press Amiga or S. Instead, hold down the Shift key and look at the top of the Edit Screen.

A Save option has appeared where the Test option normally sits. Use your left mouse button to click on the Save option and the file selector pops up again. Now name this program:

Test2.AMOS

and press Return

This is your final introduction to the way Easy AMOS allows you to carry out your wishes. Wherever possible, you can choose between using the mouse to trigger options from the screen menus, or type in instructions via the keyboard. You can also use

the right mouse button to act as a Shift key. It can be easier and faster to operate in this way. Get rid of your current program with New followed by Y to confirm your action.

## The Edit window

You have already used the main Edit window for short home-grown programs that only use a few lines, but most program listings will take up several screens or pages.

If you remember how you scrolled through the File Selector window you will recognise exactly the same facility here. The right-hand side of the Edit window features a vertical scroll bar with a pair of Up/Down options, and at the bottom of the screen is a horizontal scroll bar with Left/Right icons in the corner. Use your mouse to scroll through program listings.

## Direct Mode

Easy AMOS is designed to allow you to test out ideas without interfering with your program listings in the main Edit window. While editing you can press Esc at any time and jump to Direct Mode. This provides you with a special screen that appears at the bottom of your display and you can move it vertical-

All program instructions are written in the Edit Window



Just take a look at this. A complete directory manager - written completely in Easy AMOS

## Edit Screen - a guided tour

- **Default Menu** - At the top of the screen, the Menu window displays all the commands that are currently available. This is your entry to the Easy AMOS editing features and it's the menu that always appears when you first enter the Edit Screen. We call it the Default Menu. You have already used some of the items on there.
- **Blocks Menu** - Hold down the Ctrl key and you will see that the Default Menu has been replaced by a new set of options. This is the Blocks Menu and it provides everything you need for manipulating blocks of computer program.
- **System Menu** - This is called up from the Default Menu by holding down one of the Shift keys, and it contains a selection of important commands for handling complete programs.
- **Search Menu** - When you hold down the Alt key the Search Menu is called up. Its various options are used to handle text.
- **Information Line** - This line, below the Menu options panel, is where Easy AMOS gives a running report on the editing process. The report on the left-hand side of the Information Line is a single letter that tells you what editing mode you are using. Below is a list of all editing modes and their corresponding letter:
- **I** - Means that new characters will be inserted wherever the edit cursor is on the screen. That's the normal state of affairs. An O can also appear here.
- **O** - Means that new characters will overwrite characters that are already displayed in the Edit window.
- **L** - Tells you which Line you are currently editing.
- **C** - Shows the number of the Column the edit cursor is in.
- **Text: Chip: Fast** - These report how much memory is available for various tasks.
- **Edit** - Displays the name of the program that you are editing.

ly with the arrow keys on your keyboard. Press Esc now, and move the blue panel up and down, then position it in the lower half of your screen. Now give Easy AMOS a direct command like this:

Print "I am in Direct Mode!"

Try another one. For example:

wait 250 : Print "A five second wait."

When you enter Direct Mode a list of special pre-set functions is displayed in the blue panel. These functions can be called up by various key-presses to perform special tasks.

At the bottom of the blue panel there is a prompt where your typed commands will be displayed one after the other. Every time you press the Return key to test out one line of direct commands a new prompt will appear and the list of functions moves up one line in the panel's display.

## Next month

In next month's Easy AMOS tutorial we will be explaining the interface in more detail and providing you with more examples that show off the power of Easy AMOS.

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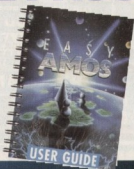
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|---|---------|
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# Work and play

*10 out of 10 adds another title to its well received educational range. Gareth Lofthouse goes back to school to set a test*

I t were nowt like that when I were a young'un, I thought in a supposedly Yorkshire accent, "By 'eck, when we did spelling the teacher would beat the living daylight out of us to make sure we remembered. And that was if we were lucky!"

Well, nowadays, people are trying to use computers to make learning a fun experience, and the Amiga is better catered for than most. Rated by *Amiga Computing* as one of the best software developers for education, 10 out of 10 now brings us *Structured Spelling*.

The package follows the same formula that can be found in the rest of the 10/10 range. There are six games to choose from, giving the learning process variety.

From the teacher's point of view there's a lot to recommend it. *Structured Spelling* is designed to cover the basic rules, helping children to discover, for example, that most words that rhyme are spelled in a similar way.

There are six grades to cover in the game, with the first three being suitable for the majority of infants and the last three being aimed mainly for juniors.

As there are lots of options for altering the difficulty of the games in terms of both word difficulty and coordination challenge, it should also be possible to cater for the needs of many children with special learning difficulties.

## SUCCESSSES

The achievement record is particularly good because it acts both as a progress record for the parent/teacher and as an incentive for the child. Depending on their level of success, a student is rewarded with a varying number of stars for each exercise.

To gain three stars they must get 100 percent. To encourage them to reinforce the lesson, they can then go on to get a gold medal by completing the exercise properly twice more.

Achievement records can be kept for up to 64 children, while there is a four-player option for each game allowing group involvement; hence the program can justifiably claim to be a powerful classroom aid as well as a home user's tool.

Also to be admired are the separate instruction guides that 10/10 has supplied. One is for the game players, kept clear and simple so that a child should be able to get started with little or no supervision.

The teacher/parent guide on the other hand gives advice on how to use the product to suit the individual's needs. Most importantly, there is information on customising the program in a variety of ways so that, for



Better than many other educational games, *Diver* still doesn't compete too well with the *Sonic the Hedgehog* of the software world

| Grader | Letter | Letter | Letter | Letter | Letter | Letter |
|--------|--------|--------|--------|--------|--------|--------|
| 1      |        |        |        |        |        |        |
| 2      |        |        |        |        |        |        |
| 3      |        |        |        |        |        |        |
| 4      |        |        |        |        |        |        |
| 5      |        |        |        |        |        |        |
| 6      |        |        |        |        |        |        |

Two yellow stars means I'm doing quite well, but I'm aiming to turn the squares green by getting full marks

example, older children can start off on a higher grade.

As far as the actual games are concerned, they will probably provide adequate entertainment for younger children while being of less interest to the older juniors.

Typically for the genre, the graphics are colourful but very basic. Simplicity is to be respected but poor quality is not excusable – children are probably more fussy on this point than anyone else.

The activities are based on different themes such as diving, football or painting. A problem is that the game context often fails to disguise the fact that the child is actually performing an exercise.

The object in *Diver*, for example, is to click on the correct letters as they roll down the screen on conveyor belts. In the middle is a motionless picture of an aquatic bear with a

10/10's system remains an admirable teaching tool that is flexible enough to be tailored to a wide range of needs. At the same time, the interface is simple enough so that most children can be left to learn on their own.

Though it is a good program for use at home, the way the achievement record has been implemented makes it a worthy and economical choice for the classroom as well.

My criticisms of the games may seem incongruous, with the overall mark given to the product. However, though educational software has a long way to go, 10/10 deserves credit for attempting to combine appealing gameplay with the process of learning.

## Verdict

## SYSTEM ESSENTIALS

RED = Essential BLACK = Recommended



Hard drive



RAM

## The bottom line

Product: *Structured Spelling*

Price: £25.95

Software House: 10 out of 10.

Tel: 0742 780370

|                 |   |
|-----------------|---|
| Ease of use     | 9 |
| Implementation  | 7 |
| Value for money | 8 |
| Overall         | 8 |

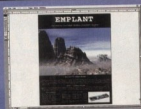


Not quite Lotus racing, but one of the most successful games anyway.



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| 586DX+ MODULE    | For all versions      | £ 99.95 |

All emulation modules require an Amiga with Zero II slots, and a 68020 (or better) CPU.

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# The hit parade

*Remember, an Amiga's not just for Christmas, it's for life. Gareth Lofthouse suggests 20 ways to show you care*



## The stars of software

### Mini Office

Price: £38.99  
Supplier: First Computer Centre  
Tel: 0532 319444

Lots of home-users would find a word-processor, a spreadsheet and a database utility useful, but at the same time they may feel that their needs aren't serious enough to justify spending lots of cash on separate packages.

Surprisingly, it's possible to get packages combining all these utilities and more at less than half the price of, say, well known Amiga word processors. One of the best of these all-in packages is Europress's Mini Office.

The package includes a spreadsheet allowing you to prepare tables, alter column width, cut and paste data, lock blocks and choose from over 50 functions. There's also a database with which a card index can be created with up to 50 fields.

A graphics utility allows you to enhance documents with various types of chart,



### Octamed v5.0

Price: £19.95  
Supplier: Seasoft  
Tel: 0903 850378



A good introduction to the fascinating world of Amiga music, this versatile composer and editor is both extremely capable but also very simple in use.

Featuring full midi support, real time editing with synthetic sounds and sample editor, this package puts music creation into the hands of the beginner and amateur.

To guide the user through this host of features there's a ring-bound manual broken down into step-by-step tutorials, and although version 5 is printed in dot-matrix it is easy to follow.

For many, the cheaper version 5.0 will be fine as it is exactly the same as the latest version except that it won't support Microdeal's 16-bit sampler. If you want this facility you can get the latest version for £42.

incorporating colours and 3D views and it's also possible to import IFF pictures to make backgrounds.

Word processing functions are also well catered for as far as the average home user is concerned. It's possible to mailmerge details from a database file, add graphics and perform the basic functions you'd expect from such a package.

The addition of a Disk Utility should help you keep all your files from the various packages in good order, with options for creating directories, copying files and so on.

What makes it an ideal item for beginners and the not-too-serious user is the fact that each utility uses the same basic interface. This means that once the user has used one of the modules, they'll have a good idea of how to operate all the others.

Considering how cheap this package is, people should consider it carefully before buying expensive separates. True, it doesn't have some of the advanced features that more expensive software boasts, but in practice lots of people just don't need the frills.

## The stars of software

### Disk Expander

Price: £29.95  
Supplier: Gastineer  
Tel: 081-345 6000

If you're running out of space on your hard drive, there are two main options open to you. Buying a second HD would be nice but it's too expensive for most people, so the best thing unless money is no object is to buy a Disk Expander.



This rather useful little package can double the capacity of your hard disk or floppy disks and has been designed to do so at a high compression speed without messing your data up in the process.

With its graphical user interface it can be installed within a few seconds with full control over the functions supplied. Since most Amiga users face problems with memory space sooner or later, this package is well worth the asking price.

If more powerful financial analysis than Mini Office can offer is needed, the Amiga accountant need look no further than this classic spreadsheet program, now available at a very reasonable price.

In fact, MaxiPlan also includes a database program capable of undertaking simultaneous ascending and descending sorts on any number of fields.

The spreadsheet utility itself has 512 columns by 32,760 rows, more than enough for the average user. It features the ability to import and export Lotus 1-2-3 data, password protection for confidential data and over 70 functions. Documents can be enhanced using a choice of 12 chart styles. Up to 16 colours can be used and there is the option to include text using any standard Amiga fonts.



With Macro features such as automatic record mode and 95 in-built macro commands, this is a remarkably powerful system. You won't find a more powerful utility of this type at this price.

### MaxiPlan 4

Price: £24.99  
Supplier: First Computer Centre  
Tel: 0532 319444



### Amnet Feb 94 Edition

Price: £19.99 + 75p&p  
Supplier: 17th Bit Software  
Tel: 0924 366982

As we discovered in our CD-ROM Round-up in the last issue, CD utility software is often hard to beat when it comes to good value, and one of the best all-rounders available has just got to be the Amnet collection.

A top seller, this archive from the Internet contains over 3200 programs covering a vast range of Amiga applications – it'll take longer than the Christmas holiday to glance over half the stuff on offer. Choose from demos, utilities, technical documents, 3D objects, games and more – in fact there's so much it can be mind-boggling.

## Hot hardware

### Multimedia Speakers

Price £29.95  
Supplier: Golden Image  
Tel: 081-345 1102

Your monitor's speakers are OK for most jobs, but occasionally you must have wished for a better source of sound for your Amiga. Our Technosound Coverdisk is just one piece of software that could benefit from quality stereo sound.

GoldenIMAGE's speakers make a good impression as soon as you open the box, with a simple styling that shows up the tackiness of some of its rivals. There are only a few basic controls but then this is how it should be.

More importantly, the quality of sound they produce is much better than you might expect for the price. The sound from most cheap speakers becomes distorted at high volumes, but there was no such problem in this case even at high volumes.

Of course, there's only so much you can expect at this price. Speakers of this size, for example, are almost always going to be rather weak with the bass.

It should be that connecting them to the Amiga is done via a stereo mini-jack which means you'll probably have to buy an additional cable to get them working. Still, they're worth a little extra expense.



A poorly made mouse can defeat its own object – that being to make moving round your electronic desktop a quick and instinctive affair. Unfortunately, some designs are troublesome enough to leave you dreaming of pre-mouse times as if they were the good old days.



### 400 dpi Mouse

Price: £14.95  
Supplier: Gastineer  
Tel: 081-345 6000

This Gastineer mouse has a good dots per inch speed, which in practice pays off with pin-point accuracy and soothing control. Ergonomically, it's hard to beat and the micro-switches are consistently responsive and reliable.

Not too long ago this sort of mouse would have cost a fair bit of cash, but fortunately Gastineer's rodent has a price to suit its size.

### A1200 Beginner Pack

Price: £39.95  
Supplier: Bruce Smith Books  
Tel: 0923 894355

earned the respect of reviewers thanks to the clarity and helpfulness of their advice. The A1200 Insider Guide and its sequel, Next Steps, are both included in the pack which also contains an instructional video. This 60 minute visual guide may at times seem amateurishly produced, but it is undoubtedly useful nevertheless.

The first book gives practical advice about the Workbench, AmigaDOS, the shell, utilities, icons and printers. Informative screen-shots are interspersed with the text, giving the reader a visual guide as to what should be happening. The second book leads the beginner into more advanced computing territory with, for example, tutorials on using the supplied Multiview program to write your own adventure game.

On top of the educational material they've also thrown a selection of software into the bargain. Four 800k disks include a wordprocessor, database, recording studio, virus checker – in fact, all the things a beginner ought to get their Amiga equipped with.



### Vistalite 3

Price: £19.99 + 75p & p  
Supplier: 17th Bit Software  
Tel: 0924 366982

Dreaming of a white Christmas? Well forget it, because you know all too well that as we're shovelling our turkey dinners into our stodge-laden stomachs, outside will be the usual muggy drizzle we get all the rest of the year.

Excuse the particularly bitter moan about the British weather, but it's actually in preparation for some good news. Even if our climate does let us down again, it doesn't matter because Amiga users

can now spend Xmas on Mars.

Or at least they can pretend with Vistalite, the landscape designer. A scaled-down version of VistaPro 3.0, this product is designed to work with 2Mb of Ram and can create topographical views using either real world data or fractals for fantasy worlds.

A user friendly point and click interface, a wire frame preview option, the ability to alter camera positioning and a choice of natural phenomena to add to the picture makes Vistalite a highly desirable piece of software.

It should be noted that the makers strongly recommend using Vistalite on an accelerated Amiga. Even with faster machines a complicated ten million

polygon image will take three hours to render, but without one you could be waiting days.

That said, if you have got an accelerated machine it's well worth the wait. For a very reasonable price, beautiful images can be rendered and used either for pure entertainment or by artists, geography teachers and surveyors.



### Turbotext

Price: £39  
Supplier: Digital Direct  
Tel: 0525 718271

For those brave enough to attempt such daunting feats as creating AmigaDOS scripts, here's a package that should help to increase their productivity.

Allowing for wide-ranging customisation, TurboText lets the user emulate any other text editor or create their own environment. Flexibility is aided by the complete window support providing multiple views of one

or more documents, and the number of windows that are open is limited only by computer memory.

Cut, copy and paste functions can be used on vertical blocks and there are advanced features like Correct Case and Correct Word. There's also an extensive ARexx macro interface including recorded macros.

Other facilities include a powerful hexadecimal editing window, complete outlining capabilities, and full text template support. What's more, despite a very reasonable price there's a large good quality manual, so this one is a good bet for the more technically minded Amiga user.



### Migraph OCR software

Price: £49.95  
Supplier: GoldenImage  
Tel: 081-900 9291

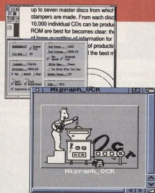
Optical Character Recognition software is designed to teach your computer to read – no mean feat for under £50. Using a scanner, hard-copy text is scanned into your Amiga, and OCR will interpret it and transform it into ASCII text that can be used in wordprocessing and DTP.

Admittedly, this product can't be used without a scanner, with higher quality ones giving better results, but considering this software used to cost hundreds of pounds it clearly represents good value if you do have the required equipment.

MiGraph's product is particularly useful because it can process text with pictures and layouts with columns. Using the supplied selection of drawing tools, sections, legs and box outs can be isolated to be processed and compiled in the correct sequence.

Other OCR software used to require huge databases to identify letters, a method which had obvious disadvantages as far as memory space was concerned. Fortunately, MiGraph has used Omnifont mathematical definitions which dispense with the need for a database while making improvements in accuracy and flexibility.

The interactive learning facility allows you to train the software to spot any irregular words and append them to its dictionary. If



you can't be bothered editing the text manually, it's also possible to let the software automatically scan the data and correct any obvious mistakes.

Of course it doesn't always work perfectly. Failure to spot capitals or mistakes with punctuation are common errors, but if you use particular fonts regularly even these problems can be resolved.

An impressive piece of work, MiGraph OCR is very useful for anyone with a lot of text to convert and is lacking when it comes to fast typing speed.

Before anyone rushes out to buy, however, they should realise that it's a good idea to have at least 3-4Mb of RAM. Though the software doesn't require much memory itself, unless you can process a large area of text at once the object of using OCR is defeated.

### X-Backup Pro

Price: £39.99  
Supplier: Siren  
Tel: 0500 340548

can disappear down the toilet.

Siren's product is an economical and speedy way of protecting your-

self against such a disaster. The Autoswitch Cyclone Cartridge (boy, does that sound exciting) plugs into the disk drive port and does the job both for floppy and hard drive backup.

As a bonus, the software supplied as part of the package includes a file management program, a text editor and a utility allowing you to copy protected programs.



Few things can be worse than losing information on a disk when you've not backed it up. If your hard drive breaks down, for example, without a backup, months and months of hard work

### Turbotech clock

Price: £19.99  
Supplier: Siren  
Tel: 0500 340548

ularly when it comes to date and time stamping your programs.

The Turbotech package combines a cartridge and software to let your Amiga use it. Simply plug the cartridge into the disk drive socket and install the relevant program from your floppy. It's all very simple but handy nonetheless.

An Amiga's internal clock has never been very impressive. Turn your computer off for a brief amount of time and it will reset. This means that a clock back-up would be useful, particu-



## Hot hardware

### Megalosound

Price: £25  
Supplier: Digital Direct  
Tel: 0525 718271

An 8-bit stereo sampler, Megalosound is an affordable package allowing the user to copy sound effects and music directly onto disk. Combining the required hardware and software, everything is there to get you started on ripping bits and pieces of other people's musical work.

Megalosound allows for sampling at a rate of up to 70KHz mono and 39KHz on an A500 and 56KHz on an A1200, which makes for pretty good sound quality for your money.

There are a number of special effects available to give your samples more individuality, such as variable low-pass and high-pass filters, echo, reverb, flange, phaser and distortion. These can all be applied in real time.

Extras include comprehensive print facilities allowing for waveform print-outs, a real time frequency analyser and copy/cut/paste options. A nice touch is that Megalosound is fully configurable and all preferences can be saved.

With a 144 page manual including tutorials for the beginner, Megalosound should be a bundle of fun for anyone slightly interested in the audio side of the Amiga.



## Tools of the trade

### Wrist Rest

Price: SRP £2.4  
Contact below\*

Holding your hands in the right position when working on a keyboard is more than a matter of typing school dogma. Tapping away on your computer hardly sounds like dangerous work, but evidence suggests that it can be a health risk.

Repetitive Strain Injury (RSI) has been in the news a lot over the past few years, and typing is one of the most common causes of the condition. However, using a wrist support will help to prevent any such problem.

The Omega wrist pad does the job perfectly well, keeping your hands at the same level as the keyboard and thus reducing the strain on the tendons in your wrist.



### Cleaning Kit

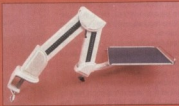
Price: SRP £17.99

A dusty environment can cause havoc with computers and disks, so it may be worth your while investing in a cleaning kit to keep them looking shiny and new.

If you just want to keep your floppy drive in good order, your best bet is a cleaning disk. These are cheap and widely available from any computer shop.

If, however, dust and grime is a more serious problem, then Omega's cleaning kit would come in very handy. The package includes a cleaning disk, head cleaning fluid, five swabs, a computer cleaning solution and a lint free cloth.

The best thing, however, is the mini vacuum cleaner gismo supplied with the package. It's actually just a battery operated blower, but it comes with lots of different attachments just like a real Hoover. It's ideal for cleaning your keyboard out.



### Monitor Arm

Price: SRP £39.99  
Contact below\*

Omega's screen arm, suitable for 12in to 14in monitors, is a sturdily made product that can either be wall mounted or secured to your desk by a clamp. It's highly flexible, allowing different users to position the monitor at a level giving them the most comfort, and with a safety brake and an anti-slip monitor pad, it's made to support your valuable equipment securely.

### Computer Toolkit

Price: SRP £17.99  
Contact below\*

Despite the fact that we at Amiga Computing are constantly having to open our Amigas up and connect various bits of hardware, we've only had one screwdriver to go between us.

As soon as the toolkit arrived, therefore, it was being eagerly eyed by the technical guys. With thirteen tools designed for a wide range of jobs, all contained within a smart vinyl pouch, this product will be invaluable for all sorts of computer DIY.

As well as the various screwdrivers (including Allen nutdrivers), there are some items that left me mystified but which, those in the know assured me, are very useful. The chip extractor is unusual because it features spring-loaded securers. The normal extractors sometimes allow chips to skip out of your grip, a problem which this new design



should help to overcome. There's also a chip inserter, and both of these parts can be used on DIP chips of eight to 28 pins.

The three-prong part retriever may look like an elaborate nose picker, but its V-slotted edge gives its steel wires a greater grasping capability than conventional versions of this tool.

All the tools are demagnetized, antistatic and are made of durable materials. As far as gifts for the handy-man are concerned, they'll make a nice change from Black and Decker.

\*Details of your nearest local dealer for Omega products are available from ABS on 0925 234300. Retailers actual prices are often considerably lower than the S.R.P.



## Stocking fillers and novelties



### Mouse Mats

Price: £6.99  
Supplier: Data Business  
Tel: 0865 842224

Convince colleagues you're not the boring old git they think you are by buying one of 24 wacky designs from Data Business' mat collection. Designed to put the FUN back into FUNctional, at least they'll add a touch of colour to your desktop.

There's something for everyone, with cartoon animals and classic cars, saucy close-ups (both sexes) and sporty snapshots. Strangely, there's even a mat for Oscar Wilde fans – perhaps

aimed at those trying to pull office hunks and babes via the sensitive soul approach.

They're all well made and include such features as wipe-clean surfaces, which will help keep your mouse unclogged, and 'matrex 90° backs – ie. grippy bottoms.

They also prove that mats don't have to be square, with lots of novelty shapes to choose from. And when you put your order in, make sure you get more than one because apparently they're suitable for lots of other uses like...well, you know, just hundreds of things I can't think of right now.

With the likes of After Dark and Bliss, PC and Mac owners have had quality commercial screensavers while Amiga users have had to resort to hit and miss PD options. But thanks to this offering from HiSoft, now you can be the proud owner of the ultimate yuppie accessory for the computer.

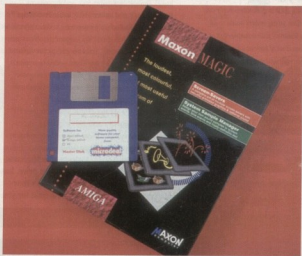
Screensavers are little animations designed to protect your monitor from burn-in while providing a bit of amusement at the same time. Maxon provides a choice of 18 including eyeballs blinking in the dark, firework displays and flying food.

Sound samples can also be added to the animations which, apart from being a bit of fun, can be used as audible reminders. You could leave your computer to deal with time-consuming tasks until it calls 'I've finished' for example.

Mainly, though, it's a light-hearted product that improves on its PD counterparts, a piece of silliness that's ideal for a Christmas present.

### Maxon Magic

Price: £22  
Supplier: Digital Direct  
Tel: 0525 718271



## Could have been a contender

Below are some products that are of good quality at a reasonable price, but didn't quite manage to crawl under the £50 barrier. So what's a few extra quid among friends?

### Disk Opus 4

Price: £51.50  
Supplier: First Computing  
Tel: 0532 319444

Available from large distributors at just over £50, some would say this is worth twice the price. An invaluable tool for organising and utilising files on your Amiga, it is one of the most acclaimed pieces of software around.

### Tabby

Price: £9.95  
Supplier: First Computing  
Tel: 0532 319444

For those of you that are artistically inclined, a tabby allows for much more natural control than can be attained using a mouse, and they don't come better than this.

### Video Back-up

Price £60  
Supplier: Power Computing  
Tel: 0234 273000

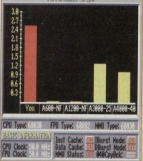
An alternative method of backing up your hard drive, video is a reliable storage medium equivalent to 200 floppies.

### TurboCalc

Price: £59  
Supplier: Power Computing  
Tel: 0234 273000

An outstanding spreadsheet utility that stops the myth of the Amiga being just a games machine. Not only does it offer exceptional number-juggling power, but it also has facilities for presentation that are unparalleled by its rivals.

Amiga Initiative Speed Analysis - Version 2.0.95  
Performance Graph



# At SoftWood we have

## ...we don't just rest on them!

When your software repeatedly wins the highest accolades in reviews worldwide, what do you do?

Work even harder to stay ahead of course! Final Writer Release 2 is the latest result of our intensive development - it's even easier to use, and even more powerful. It's the best there is, and it's designed for those who expect the most from their Amigas. But, if you don't have a hard drive system, don't despair, we can still help.

At SoftWood we offer you a choice of two Word Processor/Page Publishing packages. But why TWO?

Well, this means that whatever specification Amiga you have, SoftWood has the perfect solution for your requirements - and always the most powerful possible for your system. Final Copy II is at the peak of what can be achieved when running with twin floppies, it's not possible to offer more without losing performance. Final Writer is the first and only hard drive compulsory Amiga word processor, the only package that doesn't make compromises to be floppy compatible!

### The SoftWood Advantage...

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 II scalable outline fonts direct to any printer (even dot matrix and dot 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.

### What the Papers Say...

**Amiga Shopper...** "Final Writer is the closest thing to Microsoft Word to appear on the Amiga." **Amiga Computing...** "Final Copy II rated 'best DTP Package'." **Amiga Shopper...** "If ever there was a good reason to buy a hard drive for your Amiga, Final Writer's that reason." **Amiga World...** "Pressing has come of age with Final Writer." **Amiga Format...** "Final Copy II is 'the best Word Publisher'." **Amiga Pro...** "The computer of the month." **Amiga User International...** "Final Writer is a powerful program that produces excellent results." **Amiga Computing...** "Final Writer is 'undoubtedly the most comfortable Amiga WPP ever'." **CJ Amiga...** "Final Writer is 'the most powerful WPP ever to grace the Amiga'." **Amiga Format...** "If you go for Final Writer over Wordworth (3.5) - Final Writer is a joy to use!"

### 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...

### The Highest Accolades...



### 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. Final Copy II offers the perfect balance between the

two requirements... Ease and speed of use, with total control over the perfect printed presentation.

Complete control over how documents look, now you have it at your finger tips on your Amiga! Features include:

**FastDraw™** (on-screen drawing tools for use with the generation of borders, boxes and lines or arrows at any angle). Multiple Newspaper Style striking 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

**SoftWood Direct Price: £49.95**

## SoftWood Direct...the best software at the best price...Order

HELP ON MEMORY: Our products are the most economical in their use of memory. Like others, we quote the minimum memory required to load our software but we also like to make it clear that all

# our Laurels...



100 Clip  
Art files and  
120  
Fonts...

Free



## Final Writer Release 2

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 **Textlocks™** 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 *g*, Final Writer also includes **PerfectPrint™** and has a set of tools to create structured graphics with **FastDraw Plus™** (now with additional

functionality that includes new options like rotation). And... you can also access features unique to SoftWood with both the **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 (>2mb 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 half-toning. Combine features like **AltoMacros** and **Text Clips™**, with others new to Final Writer, including floating pictures and UNDO/REDO (on text, formatting and graphics actions) - and you have... **Final Writer Release 2.**

SoftWood Direct Price: £74.95

Hotline 01 773 521606

graphical software requires more memory - dependent on the functions being used.

New Street Alfreton Derbyshire  
Telephone: 01 773 521606

## Introducing - SoftWood

Direct

We recently surveyed a sample group from our tens of thousands of users asking for their opinions or comments about our software. The results were overwhelmingly positive with many users saying that **they regretted not buying Final Copy *g* or Final Writer much sooner!**

When we asked them why they hadn't, the most common answers were price and availability, combined with the fact that they often had another word processor they'd owned for some time - or had received free. They couldn't see the need to upgrade! Once they had however, and found just how much more easily and more productively they could work, and how much better

output could be from their own printer... **they couldn't believe what they'd been missing!**

When you can buy a brand new Amiga for under £300, it's obvious that software has got to be priced competitively. Even now though, some Amiga software vendors are raising their prices to counter falling sales. Some even charge you, again and again, each time you call them for support. Our increasing sales mean we can now lower our prices to the best we've ever charged! **Price!**

But... don't just take our word for it, magazine reviews of Amiga word processors in the UK, and worldwide, have bestowed higher marks and more awards on Final Copy *g* and Final Writer than any others. We prefer not to say we're number one - the experts do it for us! Our packages have consistently been acclaimed for their "bullet-proof" reliability right from the day of launch. SoftWood software **works first time, every time!**

We listen to feedback from our users... and we act on it! We're so confident you'll be delighted with our programs, we now offer a no-risk chance to find out. SoftWood Direct's promise to you is that if you find we don't live up to any of our claims... **We'll give you your money back!** When you've decided you're completely happy, by simply returning your registration card you'll qualify for **free lifetime technical support**. And... Final Writer owners will also receive **50 additional outline fonts, completely free of charge!** Fonts that others may charge £45 for.

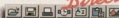
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Daytime telephone: \_\_\_\_\_ Evening telephone: \_\_\_\_\_

Please charge my credit/debit card as detailed below (Please Tick)...  
Final Copy *g* UK & Overseas: £49.95 Final Copy *g* Non UK £59.95  
Final Writer UK & Overseas: £74.95 Final Writer Non UK £84.95

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PLEASE RETURN TO: SoftWood Products Europe, New Street, Alfreton, Derbyshire DE53 7BP

ORDER FORM

**W**ith the arrival of the Personal Animation Recorder – alias the PAR card – the Amiga finally bridged the void between the digital world and the formally analog-only environment of video.

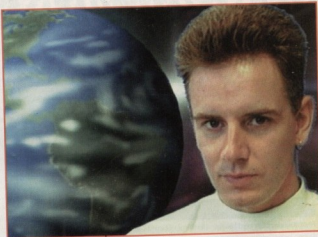
Now, thanks to the power of DV systems, single frame recording of animation and broadcast quality special effects is now within the reach of us all. However, even with PAR the process of recording and playing back 24-bit video and 16-bit CD quality audio is still an expensive business, costing around £3500 for the complete AV system.

With the arrival of VLab Motion the price performance barrier has been shattered. Courtesy of this amazing release from Macro Systems, you can have a PAR equivalent for roughly a third of the price – with little if any sacrifice of image quality.

Aside from the obvious appeal of price, VLab Motion also offers some very appealing extras, not least of which is a combination of real-time frame grabbing and playback on a single card. In the case of the PAR system, real-time frame grabbing requires an additional capture card which connects to the PAR via a ribbon connector and unfortunately eats yet another all important Zorro slot in the process.

If you then decide to go the whole hog and add audio to the PAR via the AD516 8 track digital record, yet another Zorro is taken,

*Instant Chroma keying with the aid of the VLab Motions built-in colour correction and live signal processing. All as standard of course...*



leaving only one Zorro on most machines.

It's true that adding 16-bit sound to VLab Motion via the Toccata direct-to-disk recorder also scoffs a Zorro. But even so, using only two slots for 24-bit video capture, playback and CD quality audio is still a remarkable achievement.

## FOOTAGE

OK, you now know what it does, but how does it do it? Again this is another area riddled with plus points for the board. Just like the PAR card, VLabM records and plays its footage directly to and from hard disk. However, unlike the PAR, VLabM does not require a dedicated drive. In fact, any hard

disk with sufficient speed will do the job, whether internal or external. As a result, the system also sidesteps another shortfall of the PAR system. At best a PAR card will store around nine minutes of video on a 1.7 Gb drive – with a maximum of two drives on a single system.

However, when it comes to VLabM the potential recording time is quite literally enormous, thanks to a combination of the aforementioned option to employ either a SCSI or IDE drive in the size of your choice.

During testing I found a compression ratio of 50 per cent allowed a second of video storage per Megabyte. Therefore a single

## Classy chroma keying

As if the price and performance weren't enough, MacroSystems has also added an excellent chroma keying option which, as you can see from the example, offers some wonderful opportunities as a special effects tool.

Basically, you either record or import the background footage you require, pop your subject in front of a blue screen, set up the colouring keying to produce the desired effect and there you have it – a near instant weather man effect.



*A sequence exported from the PAR card and re-imported into VLab Motion. As you can see even with a certain amount of re-scaling image quality remains excellent*



# The wait



2Gb external drive would provide 33 minutes of digital video. If the quality was pushed up to 65 per cent, storage only went up by between 100/200k per second.

I chose this as my final default as it provided very little perceivable loss in quality, while retaining glitch-free record and playback on both audio and video.

Having said that, any setting above or around 50 per cent invariably produced impressive results. Of course you can go much lower, with 40 per cent providing image quality roughly equivalent to composite/VHS video.

Alternatively go to around 80 - 85 per cent, at which point imported images and live footage appears indistinguishable when viewed against the original data/video footage.

However, to maintain reliability at such settings, especially when capturing audio simultaneously, a SCSI II drive is essential.

As you may have guessed, VLabM shares another trait of the PAR system in that it offers both Composite and S-VHS/YC input and output. Unlike the PAR, the card does not provide a component option, a factor which may limit its appeal in the pro market - as a component signal is usually the preferred medium for those working on BetaCam SP and above.

Assuming you've actually installed the board and connected the appropriate cabling to your chosen source and output - whether it be a monitor or VCR - the next logical step is to configure the software.

For anyone who's spent any time at the controls of the original VLab or VLabY/C, the VLabM interface will be home from home. Just like its predecessors, the control software entitled MovieShop follows the

## Import/Export

Recording live video direct to disk is a major feature, however for many Amiga videographers the ability to frame accurately record rendered and general Amiga art is just as important.

Fortunately, this aspect of the system has been as well designed as the rest of the system. Support has been added for both frame and field imports of 24-bit IFF's, plus there's also direct import of Jpeg images. The only limitation is that the Jpegs to be imported directly must share the same resolution and compression settings as your existing presets.

The aforementioned IFF import also offers the added bonus of automatic size handling. As a result, if the files to be imported are of the wrong size you can specify that the software should either auto-scale, centre, repeat or

cut and scale the incoming data to suit your existing image dimensions.

As for output, you're provided with a choice between IFF Deep, IFF, PPM and Sunraster formats, as either frames or fields - all in full 24-bit of course. And just to tidy things up, the software will even de-interlace the images for you if you wish.

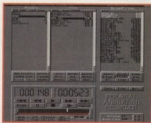
As far as import speed is concerned, there's little to complain about, with the average frame import taking between 10 and 30 seconds, depending on the scaling and conversion the file may require. My only complaint is that there appears to be no way to render direct as you can with the PAR system, but putting that aside, the process appears faultless and, better still, flexible.

same tried and tested MacroSystems' formula of independent pop-up requesters for all the boards primary functions.

However, before you start fine tuning, the first task is to define the target hard drive or hard drive partition for storage. Once selected, the partition becomes a dedicated MovieShop volume which cannot be accessed via AmigaDos.

This is perhaps the only limitation of the VLabM approach to DV. As a result, even though you may only be using 50Mb on the drive the remainder is rendered out of bounds as far as the Amiga is concerned.

On the plus side, reclaiming the drive after you've finished your production is simply a matter of selecting its icon and performing a quick format via the Workbench - at which point the drive will reappear in a matter of seconds. As you've probably



The front-end of the opposition. Much simpler perhaps, but certainly more expensive

guessed, selecting a relatively fast hard drive is vital. If the selected drive is fairly slow, VLabM will still work but you'll be limited when it comes to image quality, simply due to the read/write time of the drive.

The actual card can process an astonishing 25Mb a second through it's I/O and

# is over

Paul Austin explores the amazing VLab Motion. At last, an affordable solution to the problem of broadcast quality digital audio & video on the Amiga



chipset – either to or from the board. This is even more impressive when you remember that the card uses jpeg compression to do it.

Next time you boot-up an image processor and import a video res.jpeg file, make a note of how long the process takes and you'll have an idea just how impressive VLabM really is – especially when you remember that the card is pumping out 25 frames/50 fields of this kind of data per second.

Although I've stressed the importance of speed, it's perhaps worth mentioning that our review unit was using a 600Mb partition on a standard 1.2Gb external SCSI drive.

Admittedly, SCSI II would be ideal, but even with the limitations of a standard SCSI interface the system worked admirably with the 1.7Mb transfer time offered by the aforementioned drive.

To smooth bottlenecks often encountered during sudden and large scale transitions in the image data, user definable Ram buffering is provided with a variety of settings with which to fine tune the system to get the very best image quality and drive performance.

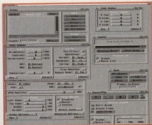
I must admit, given the lack of a SCSI II drive I was fully expecting to use a massive buffer to make up for the shortfall in speed. However, after much tinkering I discovered that a 2Mb buffer was more than adequate for most productions. Aside from configuring

## Late news

Just as this particular feature was being put to bed I received news that an update to the software on-test is already shipping and boasts both digital effects and timeline control.

Better still, MacroSystems is presently putting the finishing touches to yet another update which will provide an audio cut facility which will link and automate audio/video editing.

When this version ships, VLabM will be the only system on the market to provide a fully integrated digital audio/video editing environment. And just to top things off, by the time you read this article The Amiga Centre Scotland should be shipping a YUV component module which will then allow VLabM to match available I/O options available on the PAR system.



All the basics you need for colour control, cut and paste and of course recording

result you can reduce the frame to fit perfectly within the screen, therefore your not wasting valuable storage space on the elements within the image that will never appear on-screen.

During testing I used a variety of clip settings and centering offsets, but of course if you or your client want to use maximum over-scan the clip size can be set accordingly.

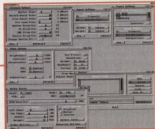
Aside from the price and image quality of the board, there's a third factor which makes VLabM unique. Unlike the PAR system, the MacroSystems card is the first Amiga DV product to offer usable off-line non-linear editing.

Although the PAR offers a variety of special effects and unsurpassed image quality, it's very difficult to use as an editing environment. If you simply want to import 24-bit animation of compiled pre-edited material, it's excellent. However, when you start to cut copy and paste a variety of scenes together, life becomes much more difficult.

Due to the PAR approach to DV it's forced to actually move data around the drive during editing, which invariably causes long delays as files are transferred and the drive re-calibrated.

VLabM on the other hand uses a non-destructive editing process which means edits happen instantaneously. In fact, the data isn't touched. Instead, the drive simply hops around the sequence of images as if it was playing samples from a sequence.

Obviously you can delete scenes entirely when the need arises but due to the approach taken, large scale editing, whether it be entire scenes or just single frame strobe



Yet more fine tuning control requesters, plus the all important import and export requesters

the buffer, defining your preferred compression ratio and selecting the drive, the only other essential is to define the source – assuming your planning to record live action.

If that's the plan the video options requester enables selection between a Composite or Y/C source in either PAL or NTSC. In addition, video correction is also on offer with software control of brightness, contrast and chrominance.

In fact, due to what is in affect a built-in TBC, colour correction and signal stability is excellent – yet another all important Zorro saved as a stand-alone TBC isn't required.

Another well thought out addition is the ability to crop the incoming video image. As a

## On a PAR

The big question is, isVLabM better than the PAR card? Well, when it comes to pure image quality the answer has to be no. However, if it was given a suitably fast SCSI II drive and a high compression of around %80 or above, I'd say it could match but not surpass the PAR system.

As far as off-line editing goes, it's well ahead of anything else on the market. The simplicity and speed of the editing process is quite simply excellent. If you want more from your DV system than just an alternative to single frame recording, it's easily the best buy on offer.

An example of VLab Motion's real time frame grabbing in action. As you can see there's a certain amount of image blur which could have been removed automatically by the software. However if you're planning to re-import it, better left as is...



effects, are instantaneousness and blissfully simple.

The actual approach to editing is also wonderfully simple and efficient, in fact it's more akin to word processing than video editing. Basically the process works on a directory structure basis.

Perhaps the best analogy is provided in the manual, where it describes individual shots or scenes as words which can then be strung together in a chosen sequence to form paragraphs or groups. These groups can then be combined within parent groups to form chapters, and in time an entire movie or book is compiled.

Although this may sound confusing in the video sense, after a few minutes of experimentation it becomes second nature. However, editing can be even more subtle.

For example, you can record a scene, cut a section out – using the jog shuttle in combination with the mark, cut, copy and paste commands – then select an existing scene, move to the desired frame and insert the block of video from its counterpart.

Using this approach, it's possible to generate an entire movie using a single giant scene file which is appended to as each element is imported or grabbed – flexible stuff...

Like its counterpart, VLabM also boasts the support of 16-bit audio via MacroSystems very own Toccata direct to disk sampler. However, it must be stressed that as it stands, the link between the two is slightly

As you've probably gather I'm pretty impressed. What the system lacks in comparison to the PAR in certain areas – such as sound – it makes up in others, so I can't really complain.

In fact, the only aspect of the system which may cause some confusion is the set-up procedure, which in my experience is worth taking some time over.

I'd suggest a new user should spend at least two to three days experimenting with the various compression settings and general config. The reason for this is that once you've started a project with a particular set-up it cannot be changed until you start a new one – thereby clearing all the data from the drive.

This sounds dramatic, and if you run into record or

playback problems half way through a project it can be. As a result, thorough testing is essential to ensure you get the best possible image quality, audio reproduction and reliability.

The reference to having one project at a time may scare some into thinking the system will limit them to just one job at a time – in fact you can be in production on a number of movies at any one time. It's simply that all will share the present resolution and compression settings in their particular project. However, even with the odd inconvenience, VLab Motion still stands head and shoulders above the opposition when it comes to a combination of price and performance. In short, by far the most impressive hardware release of the year.

## Verdict

tenuous. In practise, linking the two is very simple, you just select the Toccata control panel as a plug in module, define the source and assorted I/O settings, select a drawer in which to store the sampled sound and finally select both play and record in the MovieShop audio control screen.

When you record your next segment of video, the accompanying audio track is sampled automatically. If you then play back the scene it will be accompanied by its associated audio track.

Although this is great when you compile movies from pre-edited material, it does fall down if you decide to start editing. Unfortunately, the audio link is based around giving the sample the identical name as its

accompanying video. However, if the sequence is split, or perhaps a section is incorporated into another sequence, the naming link is lost and with it any semblance of lip sync disappears.

You could manually reconstruct the audio track separately and reconstruct the link, however this is far from ideal.



## SYSTEM ESSENTIALS

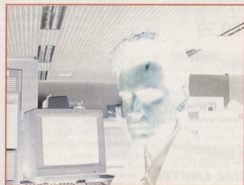
RED = Essential BLACK = Recommended



## The bottom line

Product: VLab Motion  
Supplier: The Amiga  
Centre Scotland  
Tel: 0896 870583  
Price: £999.95

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



A classic example of the import/export power on offer. Grabbed direct, imported into ADPro, exported and re-compiled frame accurately into the original sequence



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**T**he list of things you can't do with Lightwave 3D wouldn't take a long time to write down, and in terms of paper usage it would be very ecologically friendly. However, with the absence of such cutting edge techniques as dynamics and particle animation, there are one or two glaring omissions.

Packages such as Dynamic Motion Module and the soon to be released Newton's Law take care of most shortfalls found in the current version of Lightwave, PAL, but particle animation is one thing we've not been able to do until the release of Sparks.

Particle animation refers to the use of pre-set rules to make a large number of identical objects perform in a more or less similar fashion without the user having to move and reposition every object by hand, and is ideal for everything from a shower of sparks (hence the program's name) to a flock of sparrows flying overhead.

Individual "particles" don't have to be single point polygons such as those used in modeller to create pseudo-fireworks effects - they can be any kind of object you like. The name merely applies to the fact that each object acts individually but within a framework the user sets up for the group as a whole.

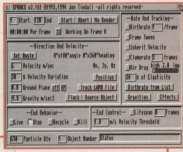
In use, Sparks operates as an ARexx control for Lightwave. The rather basic front-end hides a powerful system which offers control over just about every aspect of particle movement. The number of particles used, how many are added per frame, initial velocity, whether they will follow a pre-designed Lightwave motion path, gravity, wind, and many other factors can be altered to achieve a myriad of different effects.

For example, setting the angle and spread for the "nozzle" from which particles are emitted is easy, and with gravity turned on it is a doddle to simulate the stream of sparks from an arc welding torch. What's more, particles can be set to react to gusts of wind, bounce on the ground object (though they won't bounce off any other object in the scene), and recycle themselves.

Once a particle has reached the end of its lifespan, it will be emitted from the nozzle again so that continuously running fountains and so on can be created without having to use hundreds of objects. Making them follow the track of a motion path which corresponds



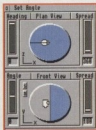
A Sparks scene when loaded into Lightwave - these bats will now move in a huge flock



Sparks has a basic interface, but packs a lot of hidden power

# Herd instinct

Stevie Kennedy joins the flock with Sparks, Lightwave's add-on particle animation system



Set the angle and spray cone for any stream of particles with ease

to the end of a snaking garden hose can also give the effect of a convincing stream of water in Lightwave.

Individual particles will move in more or less the same way as each other for the most part, but a variable percentile effect can be added to alter the speed of each particle. When this is combined with wind effects such as gusting and the use of flakes, a nice little snowstorm can be created in minutes.

## EXPLOSION

Even better, it is possible to specify a source object from Lightwave and have the object's surface explode as a shower of particles. The control one has over the behaviour of the particles means that it is possible to create an object, save it out, cut away the faces you don't want to turn into particle merge this with the saved version, and complete the animation by rendering the particles.

By working with objects which are substituted for the particles, a simple motion path and the Sparks treatment, setting up complex scenes is made much easier. A flight of Stuka dive-bombers peeling off into an attack can be simulated with a single model and a motion path, as can the sort of effect you see on corporate logos where a line of stars rushes into the screen and forms up in a circle around a central image.

Sparks also enables the setting up of gravity wells which can affect the way a flock of particles moves during a scene. With a

negative gravity positioned invisibly around another object such as a rock on the seabed, a shoal of fish can be made to flow over and around the object and automatically fall back into the shoal once past the obstacle.

If you want the particles to rush towards something, such as a magnet, just set up a target object and no matter where this is moved in the Lightwave scene, the particle stream will aim towards it. To create a stream of iron filings which drift down a piece of paper, round a magnet which repels them, and then towards one which attracts them, you need only two objects and a motion path.

## All in good time

Most things are possible, but the downside is that experimentation can take time, and as each particle is an object, you can run out of memory very quickly. Not for the low-end user, Sparks is nevertheless an invaluable add-on for the serious animator who has seen these kind of effects and never been able to recreate them on the Amiga.

As Sparks does a very good job of a task which no other Amiga package covers, it falls neatly into the 3D fan's "must-have" category.

## The bottom line

Product: Sparks  
Supplier: Premier Vision  
Price: £139.95  
Tel: (0101) 071 7217050

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

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# R&D CD special

Amiga Computing continues  
its search for the ultimate  
in serious Amiga CD



Although Amiga Computing brought you a breakdown of the serious CD-ROM on offer during the last issue, a couple of CD-ROM essentials just missed the deadline. As a result, what follows is dedicated to a brand new CD duet from Micro R&D Inc.

Although the two are entitled volume #1 and #2 – in what I can only assume will be an ongoing series – the twosome take a very different approach when it comes to content. As a result we'll look at each in turn.

Logically enough we'll open with volume #1, which in my opinion is the stronger of the two and could well challenge for the best general purpose compilation CD I've come across.

In addition to the general interest stuff – which we'll look at later – one of the real highlights has to be the inclusion of Transition, which as the name suggests is an impressive graphic conversion and processing program which also offers the added bonus of batch processing.

Although not in the same league as ADPro or ImageFX, it's nevertheless an impressive addition to the CD and is ideal accompaniment for the assorted graphics, which in many cases require conversion from their native formats.

Yet another excellent addition to the CD is a collection of 79 Lightwave objects which come complete with their associated surfaces and reflection maps.

Unlike the vast majority of CD model collections, the R&D range is not just another download from the Internet or wherever else. In fact, all 79 are Professionally generated and supplied exclusively by Gateway Productions.

If DTP is more to your fancy you're also provided with no less than 500 fonts in both PostScript and Compugraphic formats, the latter being directly compatible with both Workbench

2/3. A particularly interesting and, dare I say it, fairly unique addition is a library of books encompassing the works of no less than 18 authors, such as Wilde, Stoker, Kipling, Longfellow and so on.

Quite what the legal implications are of publishing such well-known authors works as ASCII files on a CD is something I'm not entirely sure about, but whatever the legal position their inclusion does add a little intellectual depth amidst a sea of utilities, sounds and assorted scanned images.

On a slightly more obscure note, the creators have also added a comprehensive collection of



both diesel and steam trains – ideal for hours of fun at the AGM of the furry collar club.

In addition to the locomotives, there's also a huge collection of assorted IFFs as both 24-bit and colour mapped images. Add to that an equally varied collection of GIFs and JPEGs and there's no shortage of general imagery focusing on a vast array of subject matter.

Quite how useful the vast will be is another matter, but there are no complaints about overall quality. However, it must be stressed that the images are in a variety of sizes, with little if any being in PAL video resolutions. Which leads us nicely on to volume #2 of the R&D Inc duet.

A sample image showing a small selection of some of the excellent Lightwave objects on offer in volume #1 of the R&D CD collection

A small selection of some of the impressive backdrops in volume #2 of the R&D CD series

## The pro video volume?

In comparison to its predecessor, it must be said volume #2 is a much more conservative offering. It's true that all the files share the same overall quality you'd expect from a CD dedicated towards the serious video market, but it must be said there are one or two things that could impair its progress into the list of essential CDs.

Firstly, the authors have taken an all too familiar approach to the often tricky problem of filling the 640Mb of storage the CD provides. Like many others, the solution has been to replicate the assorted 24-bit backdrops as Framestores, Jpegs, GIFs, TIFFs and IFFs.

To be fair, this is a space-filling technique employed by countless CDs, but given the fact that R&D has already given away Transition on its first release there seems little excuse – why not add a wider variety of images and include Transition to do the conversion.

Leaving the question of duplication aside, their is another slightly curious aspect to what claims to be a "must have" video product. Although perhaps true in the US, it isn't quite the case on this side of the pond.

As you've probably guessed, all the images are in the NTSC video resolution of 752 x 480, which of course will require rescaling if they're to be used as full screen backdrops in PAL productions.

To be fair, rescaling does very little damage to the vast majority as most consist of assorted stones, marbles, paper and brickwork. In total you receive 72, 24-bit textures split into six individual sub-directories.

In addition, you also receive a massive collection of space and NASA images, the vast majority of which are in GIF format – which of course will require some kind of conversion.

As a final giveaway, a demo of Broadcast Titr 2 has also been included alongside some example images from Montage. Basically a pretty good CD, but not really in the same league as volume #1.

## The bottom line

Supplier: First Computer Centre  
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Tel: 0532 319444

Overall R&D vol #1 10

Overall R&D vol #2 8

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# The language of

**E**spanto was going to be the panacea of all our communication problems. A mish-mash of several tongues, all brought together to provide some sense of ownership, yet offering a common language that everyone could learn, without totally sacrificing their native tongue.

Sadly, apart from a few stalwarts, this dream has not been the case, and we are still faced with the problem that foreign travel can present awful problems, surmountable only by learning to speak as they do.

It has to be said that the English are the worst European nation when it comes to learning other languages. Every European country features English in their school curricula, and as most of us know from experience, the English are the most embarrassing of nations when abroad, usually presuming that shouting is the best means of making some foreigner understand what really is the simplest of commands.

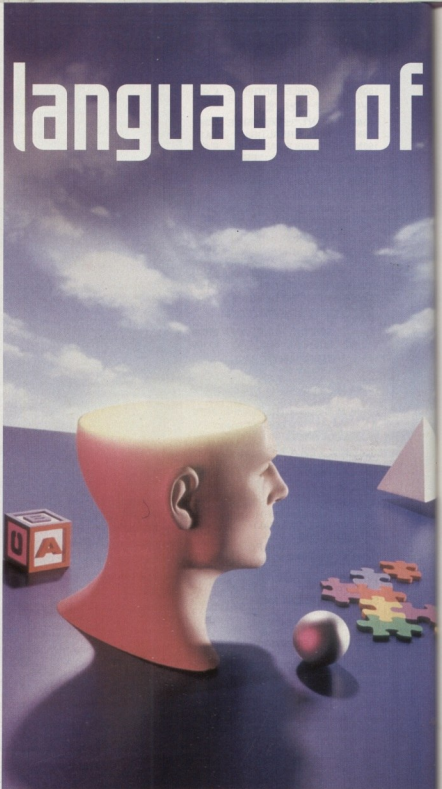
Fortunately, this situation is slowly changing. Most students in this country study at least one foreign language, and very often two, during their school life. The advent of the open European market in 1992 meant that any European citizen could travel, live and work anywhere within the Community, and this fact alone makes the requirement for speaking other tongues even more important if we are to ensure our future economic and social development.

## CONTRIBUTION

What has changed even more dramatically is the extent to which technology is playing a part in contributing to this learning process, both at school and in the home.

CALL, or Computer Assisted Language Learning, is the buzz-word in educational circles, and the Amiga has enjoyed the benefit of this revolution as much as any platform. With its inbuilt sound proficiency and excellent graphical capabilities, the Amiga has a head start.

It took no time to identify 22 different titles, all aimed at introducing or improving language skills, and from these I have selected a few to introduce as possible choices for your use. By enlarge I have stuck to European languages, but some of the software houses offer alternatives from further afield. However, these are invariably of the same structure as their European counterparts, but with different databases of language content.



# learning

*Fancy starting from scratch, or polishing up on a foreign language? Wilf Rees looks at the offerings, and gives advice on how to go about it.*

## little title, big change.

LCL has produced its Micro French, German and Spanish for some time now, and until recently these all came with an audio cassette to play alongside the software. All this has changed now, as LCL has brought the titles up to date by adding digitised speech to the suite of programs.

All of LCL's range of language software share the same format, addressing learning from a fairly conventional approach. Emphasis is placed on a collection of 24 structured lessons, which are undeniably geared towards GCSE, yet offer an additional broad spectrum of other topics. All of the range will work on any Amiga, and the lessons are divided between two disks, a choice required at boot up.

Looking at Micro Spanish as a sample, the box contains two disks, a manual and a 6000 word Spanish/English dictionary. On loading, we are presented with a menu-screen, displaying the contents of the first disk.

Pronunciation is the first program on the list, and this is a combination of written and digitised words which are presented and require repeating. A gadget in the top right-hand corner translates each word on request. Colours is a short routine for teaching appropriate words for coloured boxes displayed. All nouns in Spanish have gender, and Article attempts to give clues

which might help in guessing the gender of a noun. Conversation presents a questionnaire which asks about your name, age, family and weather. The program then goes on to ask questions in both spoken and written form, regarding your reply. Three choices are offered as replies on each.

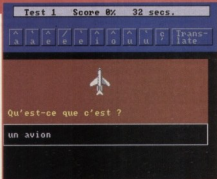
Big Picture Vocabulary presents a large illustration of a lounge in a typical house. Twenty six objects are identified with letters and lines, and the objective is to type in the correct Spanish name for each object.

In Listening, a word or phrase is pronounced, then a sentence is displayed with a dash indicating the location of the spoken word or phrase. All you are required to do is type in the Spanish element which is missing.

### PROCESSES

Ser and Estar handles the complexities of the Spanish verb "to be", differentiating between the temporary and permanent attributes of the verb, using the same process as earlier; typing in the correct response to a written question.

Wordsearch is a typical example of what the title says, in that words are first given with their meaning in English. All are four letter words, and no wisecracks - I'm being serious - then pressing 'C' displays the puzzle. The Translate feature works as a



*This time it's Micro French from LCL, and this shot demonstrates the main working environment common to all of the LCL Micro range. In this particular example the objective is to identify the name of the article displayed and type it in. The are several facilities to help with the written French language, such as accents and circumflexes, and the translate button will always operate as a help facility.*

help facility. Sixteen other topics go to make the Micro Spanish program, along with all of the Micro series - a comprehensive and thorough introduction to a language at a remarkably good value for money price.

I would particularly like to pick out a feature which is common to the German and Spanish courses, but strangely not present in Micro French, and this is the business letter generator. I think this is one of the most admirable features of the whole suite of packages, and a very useful facility.

Multiple phrases can be chained together to compile a letter, and in each of the phrases there exists multiple options to correct gender, date, location, or any relevant factor.

So, have the additions to the Micro series made a lot of difference? Well, the quality of the speech is reasonable, if sometimes rather muddy, and the samples are occasionally clipped a little too tightly, but the changes do add to the programs and I like the balance between entertainment and content.



*This is the living room of a typical Spanish household, or so we are told, by LCL. Micro Spanish has an assortment of exercises, and this one is intended to aid with vocabulary development. Several articles in the room are identified by a line and a letter, and the object of the exercise is to type in the Spanish name, corresponding to said letter.*

*Micro German has this endearing character who speaks to you, and offers ample opportunity for your repeated answer to be compared with his accent. Again, there is the facility to type in the word, reinforcing the written form, and the translate feature will always give assistance.*



## Full marks

10 out of 10 software is a relative newcomer to the education market, and in among its range is 10 out of 10 French. Compared to Micro French from LCL, the whole presentation is much crisper and more in keeping with what we expect to see on our Amigas.

No digitised speech to help with pronunciation, but a whole lot more fun, making the learning process less of a task. Six games are offered to challenge the user, intended to prepare students for Key Stage 3 and 4 of the National Curriculum.

Before commencing the whole ensemble, however, there is the important issue of registration to complete, and this is very important. Inbuilt into every one of 10 out of 10's educational offerings is an achievement record, which charts the progress of each of the registered users.

This is a superb addition, both as a parental check on how well the software is being used, or even by a teacher in class to keep an accurate and up-to-date record of pupil progress. The achievement record starts as a well presented chart describing all of the six games along the top, and down one side are the six progressively difficult grades of each game.

As a game is attempted, the results are recorded by a colour-coding system which

This is one of the outstanding features of all 10 out of 10 software.

The Achievement Record charts the progress of a user all of the way through the software, recording scores, and displaying the results visually. Many of the stages cannot be accessed until certain target scores are reached on the current exercise. Completion of mark boundaries are demonstrated with a range of colours, from red demonstrating less than 50% correct, to Black demonstrating a French genius

| Jim : Achievement Record 10/10 French                 |                       |                       |                       |                       |                       |            |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------|
|   | The Cop               | Tower                 | Word Search           | Link Up               | Rescue                | Stones     |
| 1   | LoR 1                 | LoR 1                 | LoR 1                 | LoR 1                 | LoR 1                 | LoR 1      |
| 2   | LoR 2/6<br>a b c d    | LoR 2/6<br>a b c d    | LoR 2/3               | LoR 2/6<br>a b c d    | LoR 2/6<br>a b c d    | LoR 2/6    |
| 3   | LoR 3/4<br>a b c d    | LoR 3/4<br>a b c d    | LoR 3/4               | LoR 3/4<br>a b c d    | LoR 3/4               | LoR 3/4    |
| 4   | LoR 4/10<br>a b c d   | LoR 5/6<br>a b c d    | LoR 5/6<br>a b c d    | LoR 5/6<br>a b c d    | LoR 5/6<br>a b c d    | LoR 5/6    |
| 5   | LoR 6/7<br>a b c d    | LoR 6/7<br>a b c d    | LoR 6/7<br>a b c d    | LoR 6/7<br>a b c d    | LoR 6/7<br>a b c d    | LoR 6/7    |
| 6   | LoR 8/9/10<br>a b c d | LoR 8/9/10<br>a b c d | LoR 8/9/10<br>a b c d | LoR 8/9/10<br>a b c d | LoR 8/9/10<br>a b c d | LoR 8/9/10 |
| LoR 3/4: Rearrange jumbled phrases (clothes shopping) |                       |                       |                       |                       |                       |            |

gives an instant visual representation of attainment. The three categories of colour are: Red - less than 50%, Yellow - more than 50% (giving access to the next grade) and Green - 100%. Finally get each level of each game correct and the square turns blue, the ultimate accolade!

There is also, for the serious gamer, a separate regular high score table. This adds to the competitive element of the learning, and makes a welcome addition.

The six games feature a combination of arcade action and intellectual challenge, and each can be selected from the main

menu. The Cop is a question and answer, and visual guessing game. Objects initially, then later on phrases, travel up and down either side of the screen, and they represent either the answer to the question in the centre, or the name of an object.

All you have to do is click on the small travelling gadget to respond. You need to be quick, because you are constantly timed, and this affects your score on the league table.

Tower features six insects climbing up the Eiffel Tower, and unless you answer

## French Connection

Europress has a title to enhance its extensive range of packages for education. That friendly and helpful alien by the name of Adi returns to earth again with a program targeted at GCSE French.

As is often the case with Europress' software, an "Environment" front-end, filled with an assortment of activities to occupy time, is used, as in the previous Adi Junior titles.

With this new "Environment" release we are invited into Adi's living room, which contains a

collection of assorted objects. In the centre of the room is an image of a TV, with four click buttons allowing access to some of the environment activities and applications.

This route also provides access to the specific French applications. These are divided into two categories: 14 to 15 and 15 to 16. Along the bottom of the screen are a collection of gadgets which provide additional provision for support. Accrued points in the applications section persuades the program to offer a range of games to play, growing in complexity as the points increase.

Two additional facilities provide means of text recording. A Diary, which is password protected, and a simple letter-writing program, also password protected, allow save and read options.

### EXCELLENT

The French application offers a range of well presented and appropriate tasks for the subject. On line help, increasing complexity, recording achievement and amusement run throughout all of the applications, and the content is excellent.

The two French applications are entered through the centre of the television, and each is commenced by a main menu screen, depicting a picture. From each of these pictures, moving the mouse pointer across the image causes a dialogue box to open and describe the content of the particular exercise. Once the dialogue box is opened, a further picture is presented to describe the contents



From the main menu of the AdiGCSE 14/15 French application, this is one of the sub-routines dealing with money matters. Again, moving over the picture causes dialogue boxes to open, and these will lead into other specific applications. Pointing at the foreign exchange board, for example, will start a task to do with money conversion

of the exercise.

An example of this is the "Spending and Saving your Money" routine, which features a picture of the foyer of a bank. All exercises after this flashy introduction seem a little tame, as we are faced with what are basically multiple choice questions, or "fill in the missing letter exercises." Nevertheless, AdiGCSE is a very well presented package, with superb graphics and sounds.



Moving away from the main Environment of AdiGCSE, we enter the applications. This is the main screen from French 14/15, and as the mouse pointer moves across the picture, dialogue boxes open which describe the different activities available on this half of the package



the translations correctly, causing the insects to be sent back down, they eventually reach the top. Sounds pretty dull, and I suppose it's not the best of offerings.

Wordsearch is exactly what it says it is. Link-up is a matching game, where pictures to words, or anagrams to phrases have to be matched. An open or closed door feature gives restricted vision time, adding a memory element to the ongoing challenge, along with the inevitable timer.

## SEQUENCING

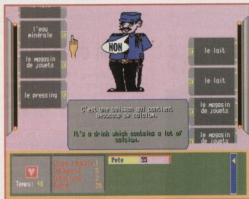
Stones is probably my favourite application, possibly because of the Gaul influence (Sorry ed!). Several pictures of famous French people appear on the screen, the first couple of whom have a word ascribed to them.

These words represent the beginning of

a sequence, such as months of the year or days of the week. At the base of the screen are four boxes, each with a choice, and you must select the correct word to continue the sequence.

Finally, Rescue is an out and out arcade game, with assorted answers floating in space. Your rocket ship flies around collecting the correct ones to answer the question. Simple at first on level one, but the boosters become available on higher levels, and things get a bit hairy! This is really addictive, I love it.

Work your way through the exercises, and at different levels, and 10 out of 10 French will print a certificate of achievement, demonstrating your success. This package is a superb blend of educational value and arcade amusement – great value for money.



Into French from 10 out of 10, and this cop asks you to select the correct answer to a question from the phrases which are travelling up and down on either side. Not as simple as it looks, for two reasons. Firstly it is necessary to click on the tiny box adjacent to the phrase to achieve success, and secondly you are being timed, and the faster you select correctly, the better your high score.



Finally down to the actual learning exercises, and this is the nature of the presentation – a multiple choice offering. It does get better, but while *ADIGCE* is visually excellent and the sound effects amusing, I am not convinced that the content is adequate in relation to the special effects. I think when anyone gets to the age of studying for a public examination, yes appearance is important, but do 16 year-olds like taking to an odd looking over-familiar alien?

## Out of this world

Kosmos has a long tradition of producing Educational software, and its foreign language packages cover several European titles. Like LCL, Kosmos adopts a fairly traditional approach to the learning process, offering 32 lessons on each package which provides a very comprehensive and formal structure.

Inbuilt, and central to the Kosmos range, is the tuition control program. This allows the user to construct personalised lessons, appropriate to a revision programme for an examination or a homework list, or possibly a database of technical words.

The main menu screen offers 10 options, listed A to J, and these allow movement around the contents of the package, such as Basic Principles and Definitions, Vocabulary learning, Creating a lesson, or Listing available lessons.

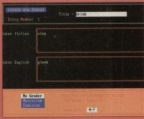
Entering "Listing available lessons" opens up a menu of the 32 options, and these cover topics such as, Family, Foods, Countryside, Parts of the body, and Weather. As we move towards the end of the list, more complex issues are handled, such as Conjunctions and Prepositions, Conditional Tense and Verbs-Future Tense.

Essentially, the lessons are lists of either words or phrases with their English translation, and by either direct input or multiple choice the user works through them. Although the Kosmos range is not particularly flashy when it comes to graphics, it does have a very professional feel about it, and it certainly was one of my favourites.



The Italian Tutor from Kosmos, showing the options available on the menu. Not the flashiest of products, and no digitised speech to aid pronunciation, but a thorough, all-round package which will prove an excellent aid towards any GCSE examination.

With All of the Kosmos Tutor range, the facility to construct one's own lessons as aide memoire is an excellent and very central element to the suite of programs. This example demonstrates my outstanding command of the Italian language, and the subject specific capabilities of the software.



## Visual learning

Last, but by no means least is Audio Gallery from Coombe Valley Software. This is a visual language aid which uses pictures of locations, such as a living room or a supermarket, and numerous articles are ascribed numbers. Pointing and clicking at the object causes the word or relevant phrase to be sounded in whatever tongue you have bought.

There are over 400 key subject words, triggering digitised speech, quizzes to test knowledge, and a comprehensive manual/translation aid accompanying the program.

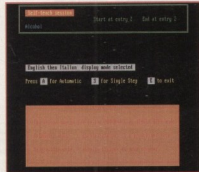
Audio gallery is not a foreign language tutor, more of a vocabulary and phrase extender, and doesn't handle the grammatical or structural sophistication of some of the packages discussed.

What it does offer, however, is such exotic titles as Chinese, Japanese, Russian, Korean, Dutch and Portuguese, as well as the conventional European offerings. There is also a "Signing" edition

on the way, to aid the hearing impaired. It's good fun, and not too heavy – though more appropriate to a holiday preparation routine.



A famous landmark for anyone who has travelled down from Normandy to Brittany. St. Michaels Mount is the leading screen from Audio Gallery French. Did you know that the mutton of this region is famous for its flavour, attributable to the fact that the sheep graze on seaweed



The Italian Tutor from Kosmos features an in-built self-test function which allows the construction of dedicated lessons, and the ability to test oneself on the contents

If you are wanting to learn a foreign language from scratch, then I don't think the Audio Gallery range is an appropriate choice, it is more suitable for extending vocabulary and phrase knowledge in an already familiar tongue. What it does offer is a degree of light-heartedness, and a less serious approach to what can be a real tedious drudgery

## All you need to know

| Title                | Supplier      | Content | Ed. Value | Docs | Ease of use | Overall | Price  |
|----------------------|---------------|---------|-----------|------|-------------|---------|--------|
| Micro French **      | LCL           | 5       | 4         | 6    | 4           | 5       | £24.99 |
| Micro Spanish        | LCL           | 5       | 4         | 6    | 4           | 5       | "      |
| Micro German         | LCL           | 5       | 4         | 6    | 4           | 5       | "      |
| French               | 10 out of 10  | 5       | 5         | 6    | 5           | 5       | £34.99 |
| AdiGCSE French       | Euopress      | 4       | 4         | 3    | 5           | 4       | £25.95 |
| The French Mistress  | Kosmos        | 5       | 5         | 0*   | 4           | 5       | £20.39 |
| The Italian Tutor    | Kosmos        | 5       | 5         | 0*   | 4           | 5       | "      |
| The German Master    | Kosmos        | 5       | 5         | 0*   | 4           | 5       | "      |
| The Spanish Tutor    | Kosmos        | 5       | 5         | 0*   | 4           | 5       | "      |
| The Italian Tutor    | Kosmos        | 5       | 5         | 0*   | 4           | 5       | "      |
| Audio Gallery French | Coombe Valley | 4       | 3         | 6    | 5           | 4       | "      |

\*Read Me file \*\*CD-Rom version available: £34.99

## Au fin de la jour!

Lets face it, learning a language is not simply a case of going out and buying the software. Acquiring the necessary ability to communicate effectively in any foreign language is a combination of two factors; knowledge and skills.

The knowledge component is the learning process involving grammar and words – the most tedious part, but necessary if communication is going to be effective. There really isn't any short-cut to achieving this element, it boils down to contact time, learning capabilities and memory retention.

The second component, and probably the most enjoyable and important, is the skills factor. This is where pronunciation, accent and nuance are developed, and this can only be achieved through speaking.

Using software intended to develop language skills is best value if its use is reinforced with some additional input. This could be in conjunction with an evening class, a local group or a friend or colleague who is either a native of the country or fluent in the tongue. It's very important that confidence is built up by regular use, particularly with someone who can give guidance or correction in a supportive way.

If you are learning a language for an examination, try to get on one of the exchanges which many school or local authorities organise, and if you do, ensure you never speak English while you are there. You will find that Europeans will invariably try to speak to you in English, and this is an easy option, especially when you are stuck, but resist.

Try to think laterally if you encounter a communication problem. For example, if you go to a shop to buy washing-up liquid, and you don't know the words for washing-up liquid, ask for something to go in water to help get plates, or cups – or any other article you do know the word for – clean, after eating. But make sure you don't buy bleach!

## Contacts

|               |              |
|---------------|--------------|
| LCL           | 0491 579345  |
| 10 out of 10  | 01142 780370 |
| Euopress      | 0625 859333  |
| Kosmos        | 0525 873942  |
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With most home users dabbling in the craft of creating moving images or presentations on their Amigas, the likes of Pro-Grab 24RT are valuable tools at a reasonable price. This addition from SoftWood adds to the swelling ranks of digitisers for the beginner to semi-professional.

The package is made up of the digitiser box, cable and a single disk for the software. Once the appropriate composite sender has been set-up (in the shape of a video recorder, camcorder, or satellite), simply slap the disk into the floppy drive and boot up the program.

There are two versions to select – the normal program that will work on machines without FPU's, plus an FPU specific version for those running a maths co-processor. For hard drive users, Pro-Grab is easily installable with no need to make any additional assigns.

Loading in the digitiser presents the user with a Scala-like front-end and, like the multi-media classic, it's very straightforward to use.

There are two basic functions to the Pro-Grab. The first is grabbing a single frame and the second, the ability to grab an "animation" of whatever is being fed into the Amiga.

Single frame grabbing is operated by a control panel that gives the user the option to preview the composite signal via a small window, the action being shown in black and white. With a click of a button, the frame is frozen in memory as a 24-bit image.

By using the extensive screen modes on offer, a healthy amount of different formats for the grabs including HAM 8, HAM 6, in both high and low res with or without overscan can be selected. The user is therefore able to adjust accordingly to suit their particular machine.

## IMAGES

The picture can then be loaded in as a full-screen image which is then decoded for colour. The main problem with this method is that, if you're looking for absolute accuracy in the exact frame you want to grab, it's going to be a long slog.

The image shown in the preview update is by no means 25 frames a second and judders along instead of providing a smooth update. This unfortunately means that the Pro-Grab is not particularly valid for professionals who require exact frame capture.

In addition, decoding of the picture can take considerable time in higher resolutions. Even though 4Mb of fast Ram was on hand, the



Differing effects can be added to your grab – in this case, a low res image is given the touch up treatment



Greyscale anims are the only option available without extra memory. This hi-res laced picture is not even quarter screen size.



# Digitised delights

*SoftWood enter the digitiser arena to hopefully bring us the same high quality as seen in its word processors. Adam Phillips reviews...*



process still took between 40-60 seconds to decode a high res Ham8.

Once the image has been decoded, there are 19 different effects that can be added. Woodcut, laplacian, gaussian, sharpness and a host of others can be applied to the picture. Saturation, contrast and brightness are also fully adjustable and experimenting can yield relatively effective results.

On completion, the finalised grab can be saved in different formats – JPEG, IFF, Clipboard or Pro-Grab's own customised FG24. After that, Deluxe Paint 4, Scala and a catalogue of programs can be used to alter, create and change the image.

The other section, animation, is not as successfully implemented. The ideal is to capture a string of frames to form a moving image to be used in presentations and what-have-you. In practice though, even on a high-end Amiga, the grab rate simply isn't high enough or clever enough to create an effective anim unless you're looking specifically for a "strobed" or almost storybook look. Another potential trouble spot to look out for is the

amount of memory you have. On a normal 1200, you're restricted to a quarter screen greyscale of the captured frames and can't access the colour options.

In all though, while the Pro-Grab 24RT has its shortcomings, this is relatively cheap at £129.99 and the picture quality in the higher resolutions is of a good standard but not up to broadcast level. Recommended for beginners and not-too-serious users. **AD**

## SYSTEM ESSENTIALS

RED = Essential BLACK = Recommended

2.4

Kickstart

1.5 Mb

RAM

2 Mb

Hard drive

RAM or above

## The bottom line

Product: Pro-Grab 24RT digitiser  
Distributor: Gordon Harwoods,  
New Street, Alfreton DE55 7BP  
Tel: 0773 521606

|                 |   |
|-----------------|---|
| Ease of use     | 9 |
| Implementation  | 7 |
| Value for money | 8 |
| Overall         | 8 |

## Teletext-tastic... nearly

As a bonus, a device for grabbing screens off teletext has also been included. Unfortunately, at present, it is only possible to grab off satellite television because the package is not compatible with the UK terrestrial system. SoftWood is hoping that Pro-Grab will be altered to accept all systems in the near future.

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## PAYMENT METHODS



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# It makes me so angry...



Conceptually, I think that the Amiga is superior to both the Macintosh and PC, which is why I paid over £1200 for an A4000/030 last December.

For the £1200 I got a machine with 4Mb of Fast RAM, 120Mb hard drive and a 33MHz 68082.

I know that £1200 was a lot to pay for an 030-based computer with no monitor, but I thought that it would be worth it for the new AGA chip set. But to my dismay, when I looked at the screenmode preferences I saw that the productivity resolution had mysteriously dropped from 640x480 to 636x480 – so Workbench has to scroll two pixels in either direction which I found intensely irritating.

Also I found that the 800x600 resolution described in the Commodore brochure turned out to be 800x300 interlaced – which is pretty useless for Workbench because of the flicker. Bog standard PC video cards costing only £50 or £60 can do this, so why can't AGA?

Another problem I found later on was that there is sometimes a one pixel wide line down the left-hand side of the screen that I cannot reach with the mouse.

It seems to me that Commodore came across these AGA bugs, couldn't fix them, but decided to produce it anyway – perhaps they thought Amiga users didn't expect the same quality as PC or Mac users.

A low-end Power Mac can be bought for around £1300-£1400, which is around the same price as my A4000, plus the multisync monitor that I already had. A low-end Power Mac would have a 60MHz PowerPC processor, a 14in screen and a CD-ROM drive. You could get a 486DX2/66 instead if you wanted.

I can't help feeling that the Amiga is no longer very good value for money when you compare what else you could get for the same price. It's almost as if there is one price standard for the Commodore, and one for everybody else.

D Goodall, Salisbury

To be honest I can only sympathise about the idiosyncrasies of the AGA chipset. Although a fine idea in principle, it never quite achieved its potential in practise.

In fact the huge profusion of screen modes and associated monitor complications have probably done the Amiga more harm than good when it comes to the overall appeal.

However, if you've been keeping an eye on the Amiga news section of late you may have already noticed that Commodore has now dropped the plans for the AAA chipset. As a result, any new machines requiring hi-res screen modes will almost certainly ship with some kind of hardware flickering as standard.

It's unfortunate that Commodore didn't stick with the flicker fixer included approach as used in the A3000, in addition to the assorted AGA options.

As for your comments regarding both the Mac and PC, of course you're absolutely correct about both the pricing and display options. However, it might be worth considering just how long it would take to eat up any initial saving on software and hardware.

For example, would you be willing to spend between £300 and £600 a time for programs like Word, Photoshop, Quark Xpress and all the other power packages which have counterparts on the Amiga at a fraction of the price.

If so, would you then be happy to spend even more cash on upgrading your so-called bargain system with the necessary RAM and hard disk space essential to run and store such software?

I'm certainly not trying to say the Amiga is perfect. But it's often worth looking a little closer than the list price of an alternative system before leaping on the Amiga bashing bandwagon.



## Hello world!

Please could you give a mention for The Third Dimension user group and diskmag. The group is for users of 3D Construction Kit 1 and 2 and produces a monthly diskmag.

The disk includes tutorials, helplines, letters, problem pages and answers, a user group game, 3D environments, 3D data, 3D areas, 3D objects, samples, sample banks in the 3D kit format, beginners through to advanced advice, step-by-step-routines, 3D borders, animation brushes, the very latest information on the 3D kits and anything and everything connected with the 3D Construction Kits.

There is quite a large friendly user base for this disk and all users are invited to exchange ideas, advice, letters etc. if they so wish.

The disk is available at the new low price of only £1.50 each month to anyone who wants it from the following address: The Third Dimension, 19 Kipling Close, Lockwood, Huddersfield, HD4 5HA.

T Hartley (Editor)

Job done...

## Service without a smile

First of all I would like to say that I enjoy your magazine and greatly appreciate you coversdisks. Unfortunately, the point of this letter is to carry a complaint about one of your advertisers, and the poor service I have received.

I sent an order, accompanied by payment, for five disks to Software Expressions on 12 September 94. This was followed by a letter on 25 September requesting either the disks or a refund. I also requested that if the original order had gone astray, could they let me know so that I could reorder.

I have received neither disks, refund or letter. I

think this is very shoddy and as I found their advertisement in your magazine, decided to write to you so that if this is their normal mode of business, then I think people should be made aware of it.

Please understand that I do not blame yourselves in any way for this, and I am quite prepared to put my loss down to experience.

However, although I do not consider my loss very great, I am not sure that this would be the same for a younger person who had parted with savings. Also, with any luck, seeing this letter in print may spur them to get in contact with me.

R L Baskerville-Mansell, Ruislip

Well firstly, can I apologise on the behalf of the aforementioned advertiser. As you suggested, I can only hope that printing your letter will indeed spur them into some form of positive action.

Alas, dubious advertising seems to be becoming a real problem over recent months, and as a result I'd like to make one perfectly clear that any advertiser who doesn't supply the goods, or refuses to give refunds will get the coverage they deserve...

## Advice bureau

Although I consider myself fairly well versed when it comes to the Amiga, I must admit a little advice would not go amiss at the moment. Like many Amiga users out there, I'm a member of the old guard running a none-AGA machine.

In fact, the machine in question is a tried and trusted A3000 which I love dearly. However, the one that could do with improvement is the range and variety of available colours and resolutions.

I've already considered upgrading to an A4000 but after investigating a possible purchase with a number of retailers it appears I've got more chance of winning the pools than finding anyone with one for sale.

The second option is to invest in a retargetable graphics card, but to be perfectly honest I'm unsure about the whole subject – hence the plea for some much needed advice. Which in your opinion is the best buy and why?

Dave Jones, Liverpool

Well firstly you've already got one of the best machines Commodore has ever put out. The A3000 was and still is an excellent machine and I'd advise anyone to add too it rather than exchange it – at least until the mythical A5000 hits on the market; we live in hope...

As you mentioned, the only thing that

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

Ezra Surf's Postbag, Amiga Computing, Adlington Park, Macclesfield SK10 4NP

Please don't enclose snags 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.

the A3000 lacks in colour and resolution – however that's where RTG's come into their own. Although there's a wide range on the market, my advice would be to stick with the most widely supported boards, namely the EGS Spectrum from GVP or the Picasso II from Village Tronic.

Personally I'd opt for the Picasso II as it's well supported, fast, friendly, and rock solid when it comes to reliability. However, regardless of the board you invest in, it would be a very wise move to also upgrade to Workbench 3.1.

Although this may seem a curious move on a none-AGA machine, the upgrade does offer massive benefits for anyone running an RTG board. In the case of the Picasso, running Workbench 3.1 means you can have all the benefits of an AGA machine without investing in new machines.

All the major RTG boards can run Workbench on their own screens – which in the case of Picasso means up to a 256 colour Workbench as well as 256 for any software that uses Public screens.

Therefore, just about any productivity package you can think of will run in 256 exactly as it would on an AGA machine. But even better, screen update and scrolling will be much faster on your rejuvenated machine than it would on a standard A4000. In addition, you'll also have the huge advantage of a true 24-bit display when it comes to image processing, rendering, and all the other jobs that demand 24-bit to be done at their best...

If you're convinced, get in touch with BlitterSoft on 0908 220196. They should be able to supply both the Picasso II and a 3.1 upgrade. If you'd prefer an EGS Spectrum try giving Silica a call on 081-309 1111.

extrusion of EPS files. As luck would have it, I've already tested the process with both Photoshop and Illustrator in an attempt to make a 3D representation of the AC masthead. As you can see the process works perfectly. The only problem I discovered was gradients or vignettes which invariably caused a software failure.

If your planned imports do contain elements which use gradients within the EPS file, I'd suggest you ask the client to replace them with solid colours. Then once you have the model in Lightwave or whatever else, you could replicate the effect of a gradient via a texture map.

Admittedly, you may still encounter memory problems if the EPS files in question are particularly complex. If so, it's worth asking if the client could break the logotype into its component parts which could then be processed individually and re-assembled in the 3D environment.



A direct import and extrusion of an EPS file from Photoshop. As you can see Pixel Pro V2 can be pretty impressive

Hi, I don't usually write in to magazines but under the circumstances there seems little alternative. Being a semi-pro Amiga videographer, I occasionally require 3D elements in my productions.

In most cases this isn't a problem as I'm reasonably well versed when it comes to general modelling. However, I've recently been offered a commission from a client who wants the style of their printed material carrying through into an accompanying video.

Unfortunately, all styling features and logotypes are only available as ESP files produced with Quark Xpress and Photoshop. I've had no problem porting the files over to the Amiga on PC disks and loading them into PageStream. The question is how can I turn these files into 3D objects. I've tried outputting bitmapped versions and then importing these via the import bitmapped option in Imagine3.

Unfortunately, my machine doesn't have enough memory to do the job and if I scale the images first the quality suffers quite dramatically.

Ideally, I then planned to export the new objects as DXF files and re-import them into Lightwave for use within the planned animation.

Paul Kettle, Leeds

Well lucky for you there is a painless solution in the form of Pixel Pro version 2. Unlike its predecessor, this new version supports Import and

## Home help

With reference to the article "Home Video" by Gary Whiteley, September '94 issue, can you or Gary supply me with a phone number or address of a supplier of Lola Electronics genlocks.

R Roache

After a brief chat with Gary, it transpires the chap you need to contact is Tony Banham on: 0658 880 182

## Words of warning

I am writing to you with a cautionary tale about an order I placed with the now defunct company, Hobbyette Computer Centre, which was once a major advertiser in your magazine.

On Tuesday 23 August I placed an order for an FPU and a virtual memory package. I was told that the items were not in stock but could be obtained by the next day and delivered by the end of the week.

After two weeks of being fobbed off on the telephone I cancelled my order. After a third week I wrote to the manager demanding my money back. A week later a relative who was passing the shop went in to assess the situation. After being forced to make a scene to get any response from the staff it turned out that the home computer side of the business had gone into receivership.

Needless to say they had debited my card immediately knowing that the order would not be filled. I am now pursuing the matter with little hope of success with the receivers.

M Teebion, Northampton

As I mentioned in the last letter, the problem of unscrupulous advertising is something we're all going to have to keep a much closer eye on.

Basically, the only advice I can give anyone is to exercise caution when dealing over the phone. If you get the all too common "we're getting some in tomorrow" speech I'd seriously consider trying elsewhere.

If a retailer doesn't have the resources or organisation to manage basic stock control they've not worth doing business with.

All too often smaller companies use the 28 days for delivery clause as a buffer between ordering and delivery. You place the order with them, they place the same order with a distributor.

Obviously, this is great for their cash flow but hardly ideal for you. What if there's a problem? Your money is already spent and if the situation ends in liquidation the retailer has no perceivable assets.

The only safeguard is to deal with larger well-established companies but as your case illustrates, even this can sometimes end in disaster.





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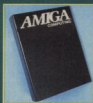
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# acas

AMIGA COMPUTING ADVICE SERVICE


*Yet another mixed bag of computer  
worries comes under the surgeon's  
knife in time for a speedy recovery*

## Wired for sound?

 My set up is an A1200, with 4Mb Fast Ram and an 030 accelerator. Although performance-wise I am extremely pleased, it does seem to corrupt my sound chips.

Ever since I installed the accelerator two of my sound channels, namely the right channels sound, distorted. When I remove the board the sound is fine. How can it be that the addition of an accelerator can affect the Amiga's sound chips? Any ideas would be helpful.


S Reece, Bournemouth

 Several people have reported this problem to me and indeed I also seem to have a problem with my accelerator with regards to the sound.


I really can't understand why this happens. It could possibly be a fault with the A1200 but then it could just as easily be a problem with accelerators. My only advice at this point would be to contact the manufacturer of your board and ask their advice.

If anyone out there has a solution to this problem, myself and several others would be grateful if you could let us know.

## Which keymap?

 I have an A600 2Mb with Workbench 2.1. The problem is installing the keymap. I have all the files correct but as soon as I load up Input I get a request for volume Keymaps. This does not exist and when I cancel it simply loads up the American one. What can I do?

J Green, Norfolk

 I've never come across this one before. There should be a directory in your Devs drawers called Keymaps which in turn holds all your keymap files.

The keymaps themselves should be on the Extras disk and you are required to install one when you boot your Workbench, which I presume you have already done. The only thing I can suggest you try is to load up Ed with the startup-sequence. Open the Shell and type in the following:

```
ed startup-sequence
```

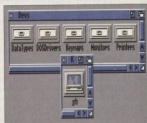
When the startup-sequence has loaded make a blank line below IPrefs and type in:

```
Assign Keymaps: sys:devs/keymaps
```

Save this down by pressing Esc then x and then the Return key. When you have done this get your Extras disk and copy the GB keymap from it into your Devs:Keymaps drawer on your Workbench disk.


If Input is looking for Keymaps it will be directed to sys:devs/keymaps by the assign you made and should find the keymap file GB.

If this doesn't work it would be useful if you could send me a duplicate copy of your Workbench disk so that I can take a closer look at it.



*It's amazing how many people have had problems with installing keymaps - especially on the A500+ and A600*

## Protext solution

 In response to V. Storey, Norfolk, November 94, you do not say what set-up is being used, but when I upgraded from my Amiga 1500 to the 4000/30 I had a similar problem with Protext - it would run from its own disk but not from Workbench 3 (and therefore would not run from my hard drive).

The machine would crash leaving a message on the screen saying Failed to open window 1265 x 256.

The way I finally got Protext to work was to copy my original program disk, boot from the copy and then alter the configuration file.


1. Run from copy
2. Go to Edit Config
3. Go to Main Configuration Menu
4. Go to Display Options
5. Change Screen Mode to NEW SCREEN / STANDARD DISPLAY
6. Save New Configuration to Floppy
7. Quit

Protext should now load from your own Workbench. If this is the case re-install it to your hard drive.

S N Semley, S. Yorks

Thanks very much for your help - I hope it works.

## Faulty supply

 In response to P. Mense's hard drive problem (Dec issue) I too had exactly the same problem you described and suspected the power supply as the cause of this extremely annoying fault.


I borrowed a power supply from a friend which confirmed my suspicions that it was my supply that was causing the problems.

One quick phone call to Wang and two days later it was replaced with a new unit which has worked perfectly ever since. Hope this helps.

P Kerrison, Lincoln

I feel rather redundant here. Thanks ever so much for your help - this is what ACAS is really all about.

## Be very afraid

 I have owned an A1200 for approximately six months and am very pleased with it. I recently decided it was time to upgrade to a hard drive, so I purchased a 120Mb IDE hard drive.

The drive has changed my life and has proved indispensable. Unfortunately, it now looks like I may have knackered the whole thing. To maximise the storage space of



You got problems too? Then drop a line to Amiga Computing Advice Service, Europa House, Adlington Park, Marlesfield S43 0 4NP and we'll move heaven and earth to help in these columns. But sorry, we cannot reply personally, so save those SAs!

my hard drive I purchased DiskExpander and installed it without any problems. In fact, it did exactly what it promised and literally doubled the capacity of my hard drive.

The problem now is that the hard drive won't boot and comes up with a message in a window saying 'X unknown command. Have you any suggestions before I reformat my hard drive?'

D Gooden, Brighton

## Any questions?



Yes. Do not format your hard drive yet, there may be a solution.

DiskExpander places its commands right at the beginning of the startup-sequence located in the S directory. They have to be there so that the system can be set up to understand all the crunched data.

If another program installs a command before DiskExpander's commands the whole process will fail. What you need to do is to copy your original startup-sequence on your Workbench disk over the previous one. You will then need to run DiskExpander from disk and re-install it to your partitions.

If this works I would advise you create a salvage disk that will copy a duplicate of your startup-sequence with DiskExpander commands, so that if this problem happens again all you need to do is copy that startup-sequence on the salvage disk across.

## Alias mystery



When I first bought my A1200 I steered well away from the Shell, concentrating my efforts more on the workings of Workbench.

Since that time I have become proficient with Workbench and have now turned my attention to the Shell, realising that it is vitally important for certain functions.

I read somewhere about Aliases but have little idea how they work. As I understand it, they allow you to assign keyboard shortcuts to certain DOS commands.

I have scoured my C directory but cannot find any Alias command and when I try and run Alias from the Shell I get a message saying 'Clear and XCopy, with some strange symbols to the right. How do I get these Aliases to work?'

R Quinn, Belfast



It's good to see that you are paying serious attention to the Shell as it can prove a life saver at times. I think you have misunderstood the Alias command. You

won't find it in the C directory as it is not a command as such. Also, Aliases cannot assign keyboard short-cuts but rather command short-cuts. I'll give you an example that will allow you to assign q to endll. Type in the following in the Shell:

```
ed scshell-startup
```

This will load up the Shell-startup file that is run every time Shell is run. This file also contains all Alias commands. Create a new line below the XCopy Alias and then type in the following:

```
alias q endll
```

Press Esc, then x and finally return. This will save down your new alias and return control to the Shell.

Close down the Shell and then run it again. You need to do this so that Shell can load in your Shell-startup file. Now type q and then

## Icon borders



I am trying to create my own Workbench icons so that I can write a package similar to MagicWB. Similar that is in function, not in design.

However, IconEdit very often leaves my icons with a huge border around them, the same size it would appear as the IconEdit window.

It doesn't happen all the time but enough to prove annoying. Is there any particular reason why IconEdit is doing this to my icons? I have read the Workbench manuals but they don't seem to mention this problem at all.

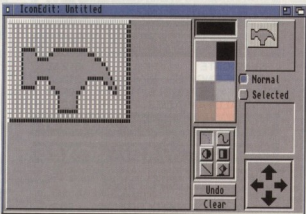
J Torves, Cambridge



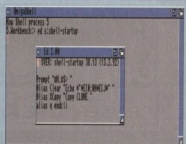
The first thing you have to realise is that IconEdit is pretty naff. With Workbench 3 this ageing program should have been seriously upgraded but Commodore cocked it up - again.

I was once told that selecting the auto-topleft feature in the Extras menu would stop the large border from appearing, but this didn't eradicate the problem completely.

My only advice is to get yourself a new icon editor. Iconian is one we featured on a previous CoverDisk and for a small registration fee the author will send a complete, registered version. Check out back issues for more details.



IconEdit should have been majorly upgraded with Workbench 3.0 but is still severely limited and buggy



Aliases can help take the sweat out of typing in long DOS commands in the Shell

press return. The Shell should close down.

This is because it checks its Shell-startup file for q and when it finds it it looks at the linked DOS command endll. It then runs this command and appropriately closes down the Shell as endll would.

# WE MUST BE MAD !!!

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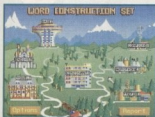
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On the surface it looks like fun's in store, but when you see what the buildings are called things start to look daunting.



Get the answer right and part of the building will be constructed. Exciting or what?

# Bring in the builders

Considering it was designed primarily as a games console, the dearth of educational titles for the CD32 is hardly surprising. Thanks to Lascelle, however, parents can now introduce learning into their kid's normal diet of arcade action.

Word Construction Set teaches word recognition and vocabulary skills. Aimed at five to 13 year olds, Lascelle also claims it's, an ideal aid for remedial reading and ESL work.

The method of learning allows children to recognise the building bricks of words, with each phoneme being individually sounded by one of the five narrators. This combination of visual and aural aids should provide an effective support to classroom work.

Subjects covered include Greek and Latin bases, compounds, vowels, prefixes and consonants. There's also homophones and 90 word endings using plural, verbal and other stems.

The main control screen represents each topic area as a building on a picturesque map, similar to those found in SuperMario games. To choose a subject, simply move the pointer to the relevant place and click.

## Glossary

**ESL:** English as a Second Language.

**Diphthong:** A mono-syllabic speech sound in which the vowel sound changes, e.g. Coin, loud and side.

**Phoneme:** A unit of sound that distinguishes one from another, e.g. 'p' in pad and 'b' in bad.

**Homophone:** A word having the same sound as another but different meaning.

**Digraph:** A group of two letters representing one sound, e.g. "Ph".

Pretty though the castles and futuristic towers are, the titles that accompany them may be off putting. The "homophone" placard is unlikely to fill the average seven year old with much enthusiasm.

Despite the range of subjects available, all the exercises follow a standard pattern. The student aims to construct a building around the bare scaffolding with which they begin the game.

During the exercise, they must construct words from the sound building blocks. A correct answer is rewarded by a piece of the building being lowered by crane into the structure.

## INTEREST

If the child gets an exercise wrong a little girl's voice will say something like "nearly" or "try again" and they can continue experimenting until they are successful.

Overall, the CD could be a very useful teaching tool for younger children. The question that now remains is whether it is entertaining enough to maintain interest.

A more important element is the quality of the speech sounds. Half expecting the American synthetic talk you used to get with a Texas Instrument's Speak and Spell, it was a relief to hear normal human speech.

## Verdict

The importance of hearing and experimenting with language cannot be overrated in education, and if a student perseveres with this CD, it can only benefit language skills. Unfortunately, the hardest battle is making kids think they're having fun rather than just doing extra homework.

Though this CD will initially hold some attraction, not enough attention has been paid to making assignments varied and enjoyable, leaving me with the suspicion that it would be quickly neglected.

Bearing in mind that many ESL and Remedial Reading students are adults, Lascelle's claim to cater for this area is rather cheeky. Word Construction Set is obviously designed for children. Since there's not a lot of choice available as far as education is concerned on the CD32, concerned parents may find this worthy of consideration. But then if you're that concerned, it's best to buy a normal Amiga rather than a games console.

*Gareth Lofthouse assesses Lascelle's*

*Word Construction Set to see if it's*

*well made enough to do the job.*

The lack of visual variety reflects the main problem with Word Construction Set – the fact is, there's only one game to play. Whether your child is learning about prefixes or vowels, the aim is always to keep adding pieces to the building until it is completed.

Unlike some education packages, there is virtually no animation or actual gameplay, nor are there cartoon characters to add appeal. To have your efforts rewarded with a block of concrete is about as exciting as getting a tick – it's not much of an incentive.

## SYSTEM ESSENTIALS

RED = Essential BLACK = Recommended



## The bottom line

Product: Word Construction Set

Price: £29.95

Developers: Lascelles Productions

Tel: New Zealand 64 878 9652

UK Outlet: To be secured soon.

|                 |   |
|-----------------|---|
| Ease of use     | 8 |
| Implementation  | 6 |
| Value for money | 5 |
| Overall         | 6 |



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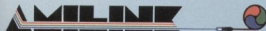
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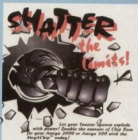
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Amiga Version: Amiga computer, 2mb RAM, AmigaDOS version 2.0 or higher, 3.5" floppy drive, system hard drive. (If using the Video toaster, you will need 9 mb RAM. VT4000 users will need 2 mb chip RAM. When integrating other video equipment, consult manufacturer's documentation.)

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## Eye

## to Eye

With early home computers, basic graphics meant that for most people a monitor was an unnecessary luxury. The fact was that a TV was perfectly adequate for playing Jet Pack or Chuckie Egg.

As technology has become more sophisticated, the requirements for high quality visual displays have far outstripped the capabilities of a normal TV. And if, for example, you have an AGA machine, without a decent monitor you're not doing your Amiga any justice at all.

The monitors included in the round up have been tested in a variety of resolution modes to assess their suitability for a range of tasks. All products were checked with Double Pal HiRes No Flicker and Productivity modes.

They have also been tested in low resolution modes, an important requirement if you want to use the monitor with most games.

## So how do they work?

The RGB colour monitor works very similarly to a television. Three electron guns fire red, green and blue beams at a phosphorescent screen which then emits a visible light. By combining the three primary colours of these beams, any colour can be achieved.

Your picture is formed in the following way. A dot swiftly scans across the screen developing the picture line after line, varying in intensity and colour as it goes. The phosphor screen continues to glow for a short time after the dot has moved on, giving the illusion of a complete screen as opposed to a moving dot.

Having reached the bottom the dot starts again at the top, scanning the screen at a rate of approximately 60 times a second.





*Poor monitors ruin well-drawn graphics  
with flickery, poorly-coloured displays.  
Gareth Lofthouse reports on where to  
turn if you want to improve your view.*



## Hyundai HL 4860

Price: £209  
Supplier: Ladbroke Computing  
Tel: 0772 203166

Another one for DTP purposes rather than games, this is a multiscan monitor with a range of 30-60 Hz. This makes it ideal for using modes such as Hi-res No Flicker.

It has a good range of controls with which to make adjustments, although the front-mounted facia is rather fiddly. The controls seemed insubstantial and left me

with some doubts as to their durability.

The Hyundai has the standard 14in screen and would require external speakers for sound. It includes a Power Management facility and meets MPRII standards, but on the other hand it doesn't have the ports which are available on the classic Philips.

Picture quality seemed exceptionally high, deceiving us into thinking that the monitor had a lower dot pitch than .28.

Its range of uses may not be as wide as is possible with the Microvitec monitors, but if you're not interested in games and your budget is limited, this one could well be your best bet.

## Jargon Buster

**RGB:** Simply an abbreviation for red, green and blue, the primary colours which can be mixed to make any other colour in the monitors picture.

**AGA:** Advanced Graphics Architecture. These are the most advanced Commodore chips which handle graphics and modes.

**Multiscan/multisync:** Such a monitor is able to work with many different vertical and horizontal refresh rates, as it will scan within their frequency limits until they are able to lock on to a signal.

**Dual/tri/quadsyncs:** Monitors similar to multisyncs but with preset frequencies with which they can work.

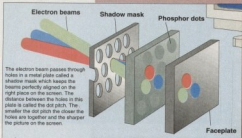
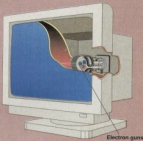
**Composite Video:** A signal for picture transfer often used by video players and cameras.

**Refresh Rate:** The time it takes for the picture to be completely updated.

**PAL:** The television standard for the UK and Amiga computers.

**NTSC:** This stands for North American Television Standards Council, and as the name suggests it is the American television standard.

**CRT:** The Cathode Ray Tube consists of a sealed glass chamber containing a vacuum. It creates the cathode ray, an accelerated stream of electrons which strike a phosphor screen to create your picture.



## Philips (M8833/1)

Price: £229 Supplier: First Computers  
Tel: 0532 319444.

An old classic, this monitor has been a favourite with Amiga enthusiasts for many years. This isn't surprising, because despite its age it might still be the best bet for some users.

Certainly it has everything the game-player could ask for. Its 14in screen is perfectly adequate, it produces a high quality picture, and it has excellent stereo sound built in for a change.

Its rugged build quality has been proven by years of use in the Amiga Computing office, a tough test by any standards. The controls are basic but fine for most purposes, and they're front mounted for ease of use.

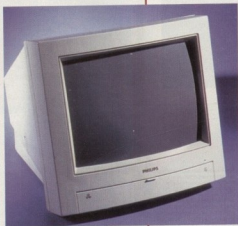
## STRANGENESS

The Philips rests on its base rather than a stand and has an odd curvaceous and tilted appearance. Despite its strangeness, however, the upwards tilt of the screen is easy on the neck and goes some way to making up for the lack of a swivel stand.

It's pretty well provided for with ports as well, especially since it includes a composite connection for use with video output. The back is also the site of less commonly needed adjusters such as V-hold.

Having said this, its age limits it as it can't use the new AGA screen modes. It will work with an A1200 but it can't manage Hi-res No Flicker or Productivity.

Nevertheless, its horses for courses and this remains a good all in product for the less serious user. There's one more quibble though: Considering the VDUs age, isn't it about time the price began to fall?



As technology has become more sophisticated, the requirements for high quality visual displays have far outstripped the capabilities of a normal TV

## Idek Vision Master MF 8617A

Price: £667 RRP Supplier: Liyama Tel: 0438 745482.

Idek are not a particularly well known name in the Britain, but if you're a serious user that needs better than usual display capabilities, it's one of the best firms you can turn to.

This 17 inch is a big, hefty hunk of monitor, so it's going to take up a large chunk of desk space. In fact, it's too large to be aesthetically pleasing in my opinion, although it is otherwise perfectly smart.

It boasts an FST screen, plus an anti-static and reflection coating that improves the overall clarity of the picture. There are no internal speakers but then it obviously wasn't designed with games and sound samples in mind.

Idek has avoided using banks of fiddly control buttons in favour of a menu system that shows up on the little LCD screen mounted on the front. In fact, there are only three buttons to mess with, a blessing in comparison to some other expensive VDUs.

This innovation by no means reduces the number of controls available, since there is an impressive range of adjustments available. In addition to the usual options, the screen can alter Trapezoid (picture slant), Pin-cushioning and Raster Rotation (tilt), a function which centres automatically.

A Power Management System is incorporated to save electricity and minimize heat generation. After a certain time of non-use, the monitor will automatically reduce power consumption, a feature which is fully adjustable.

The Vision Master has a scan range of 23.5 to 60Hz, a band which is impressively wide. Game-playing is out since it won't sync down to 15Hz, but Hi-res No Flicker and Productivity look good enough to meet high professional standards.

With a higher than average dot pitch (.26) and Hitachi's best quality tube, the picture quality boasts extreme clarity and fullness of colour. As far as ports are concerned, with 15 pin D-Sub and five BNC connectors it is well-endowed.

It's price tag is bound to be daunting to many users, although it's average street price is £585, considerably lower than the RRP. However, quality costs, and for any serious users such as DTP, this is highly recommended.



## Interlaced refresh.

Modes on the Amiga like Hi-res Interlaced create a picture of very high definition. The chief advantage of such a mode is the increase in working space on the screen, because your workbench icons are more compact while they retain full pixel detail.

In fact the Amiga icons were designed to look like they do in this mode, which is ironic since many users are unable to use it.

The term interlaced is concerned with the way the monitor picture is refreshed. In this screen mode the cycle is broken into two fields, each lasting 1/60 of a second; thus a full refresh lasts 1/30 of a second.

The monitor displays odd-numbered scan lines in the first field and then even numbered lines in the second field. The

purpose of the interlaced scan is to place some new information in all areas of the screen, refreshing the picture at a quicker rate than scanning across the lines one by one.

Unfortunately, though interlace would be a good mode to work in, Amiga owners can only use it in conjunction with some flicker-fixing hardware.

The Amiga 3000 actually has a flicker fixer built in, and they can also be bought for A1500s and A2000s. Some monitors also include de-interlacing hardware.

To make things more complicated, a flicker fixer can't be added to the A4000 or the A1200. On the other hand, they possess new screen modes like Hi-Res No Flicker which creates a similar picture to an interlace mode without the flickering.

## Microviter Cubscan 1440

Price: £489 Supplier: Microvitec  
Tel: 0244 377566.

An older and more expensive alternative to the 1438, this has one major advantage. A multi-sync monitor covering the same frequencies as the cheaper model, this VDU has a DMS system.

DMS stands for Digital Memory Sizing, a function which should automatically fit the picture to the size of the screen, thus avoiding the unsightly margins that undermined the appeal of the 1438. Once you could

## At a glance

| Product   | Microvitec 1438 | Microvitec 1440 | Hyundai 4860 | Idek MF 8617A | Philips Pro 2000 | Philips 8833 |
|-----------|-----------------|-----------------|--------------|---------------|------------------|--------------|
| Dot Pitch | .28             | .28             | .28          | .26           | .39              | N/A.         |
| Display   | 7               | 8               | 8            | 9             | 7                | 7            |
| Features  | 6               | 8               | 9            | 9             | 9                | 8            |
| Value     | 8               | 7               | 8            | 8             | 9                | 8            |
| Price     | £299            | £399            | £209         | £585 Av.      | £234.95          | £229.99      |

pick one of these up for £400, and in our view it merited the extra expense. Unfortunately, its new price will make it less affordable.

## Microviter 1438

Price: £299 Supplier: ZCL  
Tel: 01543 419999.

The problem with some Hi-res monitors is that they are not flexible enough to suit everybody's needs. A user may want to use their monitor with games, for example, but they will be barred from doing so if their monitor won't support a low resolution.

The best solution to this dilemma is a Multiscan monitor. These support a range of screen modes and will automatically sync to the signal put out by your Amiga, providing the screen mode is within the monitor's kHz range.

Designed with simple but attractive styling, it has a sturdy build quality that you would hope for at £300. The control cogs are thick enough so that adjusting the picture isn't too fiddly a process, and the fact that they are front mounted makes for convenience.

The unit swivels on its base vertically as well as horizontally. This allows the user to find a comfortable angle for viewing, but the base at the same time seems secure enough to avoid any fear of the monitor toppling off your desk station.

With the .28 dot pitch that has become fairly standard for monitors these days, the Microvitec produces a well-defined picture on its 14in screen.

The monitor meets MRPII standards, which set a limit on low frequency emissions of radiation. Such radiation has been blamed as a factor causing miscarriages for pregnant women, and though no link between VDU usage and such dangers has ever been proven, it's good to see manufacturers taking precautionary measures.

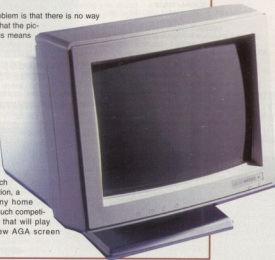
The multiscan's frequency range of 15-40 kHz means that the monitor can work with the most popularly used modes like Hi-Res No Flicker and Productivity, but it can sync down to 15kHz allowing those lo-res games to be played as well.

Laced modes are unusable unless your machine has a flicker fixer. This means that Hi-res Interlaced is unusable on A4000 or A1200, but this is not a fault that Microvitec can be blamed for.

What does create a big problem is that there is no way of adjusting the overscan so that the picture fits your screen size. This means that you are left with a messy looking alignment, with black margins taking up part of your screen space.

The omission of a control for adjusting the overscan has obviously been made with price considerations in mind, but when tested with our A4000 it really did undermine an otherwise good display.

This basic approach has also led to a lack of ports such as a composite video connection, a feature that is useful for any home video work. Still, there's not much competition if you want a multiscan that will play games and manage the new AGA screen modes at this price.



## Philips Pro 2000

Price: £239 Supplier: Harwoods  
Tel: 01773 836781.

A hybrid product for those who want to have their cake and eat it, the Philips 2000 is a TV and a Monitor in one with a highly competitive price tag for good measure.

The danger with this sort of package is that the combination of the two functions within one unit will compromise quality. It's a pleasant surprise therefore to find that this unit works well for both purposes.

People seemed to be divided as far as its appearance is concerned, but if you're bothered about your monitor



colour matching the Amiga then you won't like the fact that it's black.

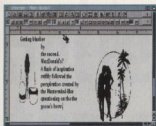
The 17in screen is a very respectable size for a bedroom TV and its extra large size makes games that bit more engaging. As a monitor it has good picture quality and boasts a 2000 character resolution - by no means bad.

Being a TV, it obviously includes internal speakers, saving extra expense in the audio department. It also boasts a flat screen, an uncommon feature on dedicated monitors of a similar price.

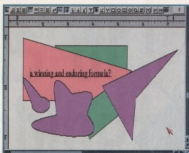
Remote control, FastText Teletext and 60 channels are features making it capable as a telly too. If your looking for this type of hybrid, the 2000 represents excellent value without compromising too much on quality.







Final Writer release 3 has been given a slight face lift and a range of new and improved options



Using the special shapes facility, all kinds of boxes and frames can be created for your DTP presentations

*The eternal struggle of the word processing giants continues with the release of Final Writer version 3.*  
Adam Phillips reviews

# Writer's revenge

Even Sir John Harvey Jones would be proud of the competitiveness between Wordworth and Final Writer, the two high ranking word processors that even have PC owners looking over their shoulders from the cosy screens of AmPro.

The time for confrontation has come yet again, with the update of Final Writer appearing only a few weeks before Wordworth 3.1 rolls onto the scene. The general consensus has always been that Final Writer is ideal for DTP-style documents but lacks the word crunching powers of its rival.

Wordworth 3, on the other hand, lacks the style tags and other assorted goodies that makes Final Writer such a success in the DTP department. The gap has begun to close up with each subsequent release of Wordworth.

Now, with the latest version of Final Writer, can one of the combatants bridge both gaps and produce a winning and enduring formula?

Numerous new features have been added to meet Wordworth 3 head-on in the word-processing stakes. One of the most enthusiastically received facilities on Wordworth was the drag and drop text editing.

This feature allows the user, without having to fiddle about with menus, to simply highlight the area to be moved and then, while keeping the mouse button pressed down, simply move the text to the new position. The same system has now been implemented in Final Writer v3, which speeds up text editing no end and is an extremely useful device.

Type and Spell is a new facility that enables the user to type away while the computer keeps a check on the spelling. Making a slip-up results in the screen flashing briefly to alert you that a mistake has been made.

While not actively changing the inaccuracy automatically like Wordworth 3, Final Writer's method is sufficient enough to cope with the common occurrence that most mistakes are made out of careless typing rather than

through a lack of spelling expertise.

Text selection has also been given a boost with the ability to select a word, sentence and paragraph with a series of button clicks.

There have been numerous changes to the handling of master pages, headers, footers and page numbering, with the accent on user friendliness. Master pages can now be shown on the first page only, on all pages or on all except the first page.

To create headers and footers simply requires the click of a mouse button to bring up a comprehensive menu. Text for left, centre and right alignment is entered and then automatically placed in the relevant positions at the top or bottom of the screen.

## STRENGTHS

Final Writer's main strengths – desk top publishing and speed – are still better than Wordworth 3 on AGA machines. A polygon creator has been added to the list of comprehensive drawing tools and is ideal for creating diamonds, stars and octagons.

The special shape creator allows the user to take a basic shape such as an oval and then manipulate it by changing its control points. The Snap To feature has also been improved to make alignment procedures more accurate.

Unfortunately, some of the criticisms made about the last release have not been addressed yet, such as the Show Codes option – vital for any reformatting of alien

documents – or the highly useful Bookmark feature which has yet to make an appearance.

This may seem like harsh criticism for such a high calibre package, but it is frustrating to see that Final Writer's true potential has yet to be exploited to the full and, at present, any purchaser's decision will still have to be based on what functions they want to perform on their machine – either DTP or word-processing – because there still isn't a near-perfect fit for all needs.

What may be more worrying for SoftWood is that Wordworth 3.1 is primed for release and last time round, Wordworth 3's DTP powers were given a threatening boost. However, we have yet to see how Digita has addressed its own past criticisms. For SoftWood's sake, some may hope that Digita hasn't.



Beta  
claimant

Page numbering is easy to use. A menu allows the placing of numbers either left, right or centre at the top or bottom of the page. A glitch in the option though leads to a small but frustrating problem.

In the Beta version I tested, selecting a page number to be placed at the bottom centre of each sheet is simple in itself. Placing the number, let's say, to the left at the bottom, though, produces two page numbers – one centre and one on the left for no apparent reason. This is hardly the most detrimental of bugs, but is annoying all the same.

## SYSTEM ESSENTIALS

RED = Essential BLACK = Recommended

|            |      |      |
|------------|------|------|
| Hard drive | 2.04 | 2 Mb |
| Workbench  | 4 Mb | RAM  |
| RAM        |      |      |

## The bottom line

Product: Final Writer release 3  
Supplier: SoftWood Products Europe,  
New Street, Alfreton, DE55 7BP  
Price: £74.95

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

# Wordworth



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For more information call

01 395 270 273 or write to Digita,<sup>®</sup>

FREEPOST, Exmouth EX8 2YZ.

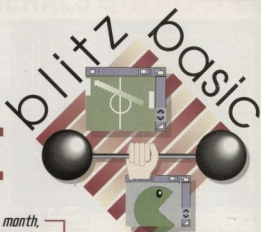
So, now everybody can find out for themselves why Wordworth is used by more people than any other Amiga word processor in the world, bar none.



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# Secrets of the cabinet



## Part 5

*Following on from last month,  
Michael Milne opens up the world  
of file accessing in Blitz*

Ho ho ho, as a good friend once said. Yes Christmas is nearly upon us and although we already have all we want in Blitz, we still wait with bated breath for the day when we can unwrap all those knitted jumpers from Granny and new shoes from our parents.

But seriously, in last month's article I took you through the motions of setting up a basic interface for entering records of names. This month we will put in the load and save routines.

I'll start with saving first because dictating the way in which you save a file is, in its self, dictating the way you load it up again. With me so far? It's a simple rule to grasp.

Let's say, for example, you save a set of coordinates to a file in the order X, Y, Z. It would seem silly to load them back again in the order Y, X, Z. There are two basic rules I try to stick to when saving info to a file.

The first rule affects the way we save numbers to a file which is described in the box labelled 'MkIs and Cvi'. The other rule affects the way we save strings to a file and is more relevant now as we are only dealing with strings in our program.

The main problem with strings is that in their most basic form they are a very loose subject. This is because their lengths can change from one minute to the next and can sometimes be difficult to keep track of.

Normally this wouldn't matter when writing programs in Blitz as we would have to do it call them by their variable names. But, when

doing file access we need to make sure we are clear about how many characters each record should have so that our loading and saving can be efficient.

Once we have decided on this there are two paths we can take to achieve an efficient load and save program. We can use a "Sequential" file type or a "Random Access" file type. Sequential files are files whose contents are written in order from start to end. Random access files are also written in order but, because of the method in which these files are set up, you can access any file at any given point in the file.

Random Access is ideal for databases and the like; Sequential files are ideal for storing unique information which is not repeated hundreds of times from file to file. Consequently, we will use Random Access filing as it is ideally suited for our needs.

Before we can use a Random Access file routine we need to know what our information is going to consist of and how long each record is likely to be. Strings need special attention - they cannot just be stored in a file

Here is our new looking interface with load and save

## MkIs and Cvi

When saving numbers to a file we want to make sure that what we write to the file is of equal length for each record, otherwise we will have some serious problems when we try to load them up again.

There are two useful commands that allow us to ensure that any numbers we write to a file are of equal length. They are MkIs and Cvi. MkIs is used to create a two byte character string out of an integer value up to a word long, and Cvi is used to convert the two byte string back again into an integer.

For example, the hex value \$4141, when passed to MkIs, returns the two byte character string "AA". This result can then be written to a file using the FileOutput and Print commands.

To read the value in again we set the FileInput and then use the EditS command to get the two characters, which we then pass to Cvi which will return our value of \$4141 (16705 in decimal). The documentation for these and other related commands can be found in the big Reference Manual Ch.6-4 and 6-5.

straight from our array, because our array has no limit on the amount of text each record holds.

As mentioned above this is very important, especially for Random Access files, so we need to have a few extra strings which are limited in size.

This is done via the MaxLen command, and when used with Random Access files it sets the length of each record in the file, thus allowing us to jump to any record in the file.

In our example program from last month, you will see that we have six strings (0-5) for each record in our array. Thus we need six limited strings to use as temporary storage space for our Random Access filing. These are defined as follows:

```
MaxLen temp0=30
MaxLen temp1=30
MaxLen temp2=30
MaxLen temp3=30
MaxLen temp4=30
MaxLen temp5=9
```

As you might have noticed, the lengths correspond with the maximum characters allowed in each GTString. After this, all we need to do is set up our fields for the file whenever we access it. This is done via the Fields command. For our example, the syntax to do this would be as follows:

```
If WriteFile(0, filename)=True
```

Notice we use an extra field to hold the total records to use when loading back in again:

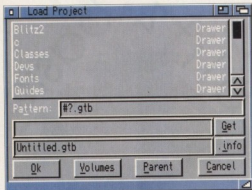
```
Fields 0,temp0,temp1,temp2,temp3,temp4,temp5,
number_of_records
```

Then our saving bit:

```
For temp=0 to number_of_records
```

Store the details in temp strings ready for transfer:

```
temp0records$(temp,0) = temp0records$(temp,1)
temp2records$(temp,2) = temp3records$(temp,3)
temp4records$(temp,4) = temp5records$(temp,5)
```



The ASL File Requester.  
A programmers best friend!

Transfer info from temp strings to file:

```
Put 0,temp
Next
ClassFile 0
EndIf
```

The Fields command sets up the order for the saving of each record. The only thing that we haven't done is to find out what the

user wishes to call our save file. We do this by using a file requester. I choose to use the ASLFileRequester which requires the path and filename to be two strings of 192 characters in length.

Again we use the MaxLen function to do this. (If you are using an A500 then use the standard FileRequest which requires the path to be 64 characters and the filename to be 128 characters).

On top of this you will need a string to hold the full path name for the file, so I normally set up another string with a MaxLen equal to the path and file MaxLens added together. Here is what it all looks like:

```
MaxLen path=192
MaxLen filename=192
MaxLen filenames=192+192
```

and the file requester is used as follows:

```
filenames=ASLFileRequest$1"Choose a SAVE
file",path,filename
```

If you look at the full listing in the box you will see that putting in extra code after the

## Having problems?



If you are experiencing problems with Blitz then please write to me, Michael Milne, at: 39 The Drive, Earley, Reading, Berkshire RG6 1EQ. All questions will be answered personally.

basic program is done is quite simple. All the new strings are defined at the beginning as well as the new gadgets. Then we put in our Gosub for saving and then our sub-routine itself.

Loading is pretty much the same as saving except that now we are loading in a file. Therefore we check first to make sure the file exists before trying to load it in.

Then we set up our fields as before, read in the first record to find out the total records held, then go from record two to the last records, reading each record from the file to the temp strings and then putting them in the records array. Painless isn't it?

## My mistake!

Sorry, sorry and sorry. I failed to make my program coherent in the last issue and most of you probably realised that I failed to keep my array name consistent throughout the program. If you have had problems compiling the last program then here is the whole program (complete) with all of its issues updates as well!

```

WBStartUp
WBtoScreen 0
WBToFront_
Use Screen 0
F_max=200
Dim records$[F_max,5]
current_record:=0
number_of_records:=0
MaxLen temp=30
MaxLen temp10=30
MaxLen temp20=30
MaxLen temp30=30
MaxLen temp40=30
MaxLen temp50=30
MaxLen path=192
MaxLen filename=192+192
GString 1,1,80,5,248,12,"NAME",1,30
GString 1,2,80,16,248,12,"ADDRESS",1,30
GString 1,3,80,31,248,12,"",1,30
GString 1,4,80,50,248,12,"",1,30
GString 1,5,80,66,248,12,"",1,30
GString 1,6,80,81,80,12,"POSTCODE",1,9
GButton 1,7,340,5,64,12,"<<PREV",16
GButton 1,9,340,19,72,12,"<<NEXT>>",16
GButton 1,10,340,31,104,12,"<<PREV",16
GButton 1,11,340,49,72,12,"<<LAST>>",16
GButton 1,12,340,64,72,12,"<<LAST>>",16
ClassFields 350,15,350,116
Window 0,46,44,350,116,81000(8)1,1,"Blitz Base",1,2,1
AttachGList 1,0
Repeat
  If WaitEvent=8200 Then nd.bf Else FlushEvents
  Select GadgetHit
    Case 7
      If current_record < >1 Then Gosub
        _previous Else keepScreen 0
    Case 11
      Gosub _load
    Case 12
      Gosub _save
  End Select
  _next:
    current_record=1
    Gosub draw_gads
    Return
  _previous:
    current_record=1
    Gosub draw_gads
    Return
  _wait_gad:
    While Event<840 : Wait : Wend
    Return
  _clear_gads:
    For temp.bf 1 To 6
      GString 1,temp,records$[current_record,temp-1]
    Next
    Return
  _draw_gads:
    Gosub clear_gads
    For temp.bf 1 To 6
      GString 1,temp,records$[current_record,temp-1]
    Next
    Return

```

```

End Select
Until nd=1
End
_add:
  number_of_records+=1
  current_record=number_of_records
  Gosub clear_gads
  ActivatedString 0,1
  Gosub wait_gad
  ActivatedString 0,2
  Gosub wait_gad
  ActivatedString 0,3
  Gosub wait_gad
  ActivatedString 0,4
  Gosub wait_gad
  ActivatedString 0,5
  Gosub wait_gad
  ActivatedString 0,6
  Gosub wait_gad
  For temp.bf 1 To 6
    records$[current_record,temp-1]=GString(1,temp)
  Next
  Return
  _next:
    current_record=1
    Gosub draw_gads
    Return
  _previous:
    current_record=1
    Gosub draw_gads
    Return
  _wait_gad:
    While Event<840 : Wait : Wend
    Return
  _clear_gads:
    For temp.bf 1 To 6
      GString 1,temp,""
    Next
    Return
  _draw_gads:
    Gosub clear_gads
    For temp.bf 1 To 6
      GString 1,temp,records$[current_record,temp-1]
    Next
    Return

```

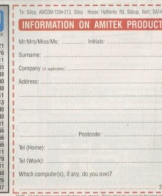
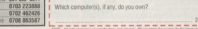
```

_save:
  filenames=ASLFileRequest$1"Choose SAVE
file",path,filename
  If Exists(filenames) Then KillFile filenames
  If WriteFile(0,filenames)=True
    Fields
    0,temp0,temp1,temp2,temp3,temp4,temp5,number_of_records
    For temp.bf 1 to number_of_records
      temp0=records$(temp,1) : temp1=records$(temp,2) : temp2=records$(temp,3) : temp3=records$(temp,4) : temp4=records$(temp,5)
      Put 0,temp=1
    Next
    ClassFile 0
    Wait 20
    EndIf
    FlushEvents
    Return
  _load:
    filenames=ASLFileRequest$1"Choose a file to
LOAD",path,filename
    If ReadFile(0,filenames)=True
      Fields
      0,temp0,temp1,temp2,temp3,temp4,temp5,number_of_records
      Get 0,0
      records$(1,1)=temp0 : records$(1,2)=temp1 : records$(1,3)=temp2 : records$(1,4)=temp3 : records$(1,5)=temp4
      For temp.bf 2 to number_of_records
        Get 0,temp=1
        records$(temp,1)=temp0 : records$(temp,2)=temp1 : records$(temp,3)=temp2 : records$(temp,4)=temp3 : records$(temp,5)=temp4
      Next
      ClassFile 0
      Wait 20
      current_record=1
      Gosub draw_gads
      EndIf
      FlushEvents
      Return

```

In case you are wondering why there are several FlushEvents commands lying around, it's because otherwise the program gets stuck into a continuous loop with the gadget that was last hit. Try removing one and you will see what I mean.





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assembler language

Part 5

# Under your own devices

*This month Paul Overaa gets to grips with the job of displaying text files in intuition windows*

**T**he setting up and use of the console device fills the bulk of the techy discussions this month. This entity acts like a traditional "control-string oriented VDU terminal." It all sounds very involved, but the basic idea is that by linking the console device to our program's window we'll not only be able to get text printed in the window but will be able to send strings of control characters to specify text positioning and so on.

Before looking at how the console device is controlled there are a few general ideas that need to be aired concerning Exec devices. One of the many purposes of the Exec device arrangements is to provide a standardised form of device I/O (input/output) which makes the operations as uniform and as device independent as possible, given the differing physical and electronic characteristics of the various bits of hardware involved.

Device commands fall into two categories. Firstly, there are the standard commands, i.e. those which are designated as being common to all devices. Secondly come the commands which are device-specific.

All device I/O requests are handled by setting up a data block which contains information relative to the request. A number of devices, including the console device, use an expanded request structure called a "standard" request or, more properly, an IOSDFReq structure.

Most of the fields in this structure are of limited interest for our purposes, so I'll just mention the points which are relevant to the program we're developing.

## FUNCTIONS

Firstly the `io_Command` field must be set to one of the allowable device commands. Neither this, nor the `ReplyPort` which the device uses to communicate with your program, are changed by the servicing of an I/O request, so this means that in our case, since only write operations will be done, we can set up the command field immediately the I/O request block has been allocated.

There are, incidentally, a number of Exec functions responsible for interfacing I/O requests and these operate independently of the particular device in question. Essentially, they deal with the request block as a whole and ignore the contents of the block.

Exec devices do, in fact, respond to a variety of commands for reading, writing, resetting the device and so on. The only one I'll be using is the `CMD_WRITE` command which tries to write a number of bytes (specified in the request block's `io_Length` field) from a

specified data buffer. The number of bytes actually written will be returned in the `io_Actual` field.

As mentioned, Exec I/O is always performed using I/O request blocks. Before I/O can be successfully achieved however, the blocks must be properly initialised (by both the system and the user).

Providing this has been done, the device can be opened and this is done in much the same way as one would open a library. You'll find details of the `OpenDevice()` system function and the corresponding `CloseDevice()` among this month's function boxouts.

During the time that the device is open, commands may be executed. Using the synchronous `DoIO()` function to perform a write operation, for instance, would involve setting the `io_Command` field to `CMD_WRITE`, specifying the amount of data to be written by loading an appropriate value in the request block's `io_Length` field, and then using `DoIO()`.

The usual approach is to load an address register with the base of the I/O request structure and then use indirect addressing with displacement to set up the various fields like this:

```
move.l  io_request,a1      ;io request
move.l  a1,address         ;
move.w  #CMD_WRITE,(a0+0) ;actually set up during initialisation
move.l  d7,(a0+0)          ;
move.l  d7,(a0+0)          ;
move.l  d7,(a0+0)          ;
CALLDS  io_request+0,base perform the I/O
function
```

The basic ideas of opening a device, using it via a combined set of standard and non-standard commands, and closing it when you've finished using it, is simple enough. In practice, the issues are complicated by the fact that a fair amount of initialisation has to be done, and that includes setting up a reply port so that the device has somewhere to deliver its messages.

For a long time, four functions have been provided in the `amiga.lib` library to simplify these tasks - `CreatePort()` and `DeletePort()`

create and delete message ports, while `CreateExtIO()` and `DeleteExtIO()` create and delete extended I/O request structures.

Nowadays equivalent functions are available from within the Exec library and it is these alternative functions, called `CreateMsgPort()`, `DeleteMsgPort()`, `CreateIORequest()` and `DeleteIORequest()`, that I've chosen to use. Here are a couple of fragments from this month's code:

```
CALLDS  CreateMsgPort,&abscbase
move.l  d0,io_port+base returned pointer
move.w  #IOSTD_SIZE,d0      size of std i/o
structure
move.l  io_port+0,reply port for messages
CALLDS  CreateIORequest,&abscbase
move.l  d0,io_request+0     base returned
pointer
```

Of course the difficult thing is tying up all the fragments into a general scheme for device usage. The operations we've got to perform fall into this sort of general pattern:

1. Create a reply port for the device to send its messages to.
2. Allocate and initialise a suitable device I/O request structure.
3. Open the device using the `OpenDevice()` function.
4. Use the device for as long as required.
5. If necessary, remove any outstanding results (will not concern us).
6. Close the device using the `CloseDevice()` function.
7. Delete the I/O request structure.
8. Delete the reply port.

This is yet another of those Amiga areas



Text files displayed at last - thanks to the Amiga's console device

where it is important to make sure that things are done in the right order during program startup and shutdown, so – as you should now know without hesitation – this means that the above list of operations are going to be coded as pairs of allocation/deallocation routines and incorporated into the error/closure-down handling scheme mentioned earlier in the series.

Listing 1 shows one pair of routines – you'll find the others in the source code on the Cover Disk.

```
ClearConsole dc.l 1
            dc.b 0
GetToTop    dc.l 0
            dc.b 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
```

By doing this I've been able to create a generally useful control string sub-routine that, given the address of the control string in `a0`, writes the appropriate string to the console device:

```
ConsoleCommand move.l a0-a1/d0-d1, preserve regs
(a7)           move.l io_request_p,a1 i/o
request address move.l (a0)+,io_length(a1)
               move.l a0,io_base(a1)
               CALLSTS devIo_WriteBase
               move.l (a7)+,a0-a1/d0-d1
restore regs    rts
```

You'll see references to this routine, using some other control strings that I've defined, in the code given in Listing 1.

## Detecting KeyPress events

Our main `IntMessage` event collection loop to-date has been called `MenuHandler()` simply because menu events were the only ones being dealt with.

By adding an additional `IDCMP_RAWKEY` flag to the program's window tag list, we tell `Intuition` to start sending both menu events and raw key press information back to the program. In this situation the name `MenuHandler()` is inappropriate, so this month the routine has been renamed `EventHandler()` to reflect its new status!

Changing the name of the routine, however, is obviously not enough – the code has to be extended so that the incoming raw keypress information actually gets used.

The way I've done this is to extend the message class testing to include `IDCMP_RAWKEY` events and call a `KeyHandler()` routine whenever such events are found. Here's the corresponding decision test fragment from the code you'll find on the cover disk:

```
copl.l #IDCMP_RAWKEY,d5 check message
class    GetMessage ignore anything else
jsr      KeyHandler use raw keypress data
bra.s    GetMessage
```

The key handling routine itself has only two types of jobs to do. It must detect cursor up keypresses and take the appropriate actions, and do likewise with cursor down key-

presses. The scheme I've used has been kept deliberately simple: If a cursor up key is sensed I check to see if we are displaying the top line of the file. If not, we go to the bottom of the display, detect a line, move to the top of the display, send an insert line control sequence, adjust the line counters, and then write the new top line.

Cursor down keypresses do a similar sort of jiggery-pokery at the bottom of the display. Again you'll find the full code on disk, and within the routine you'll see further calls from within `GetMessage()` and `KeyHandler()` code that prints lines of text from the loaded file.

Now you are probably wondering how, since the file was originally loaded as a single block directly into memory with a `DOS Read()` command, I'm able to identify the positions of individual text lines within the file. If you aren't, then you should be –

because there is one last piece of the story that needs to be mentioned.

With the way that I am writing data using the console device, I have to specify the number of bytes to write in the `io_Length` field of the `IO request structure`.

Obviously it is impractical to keep continually scanning the file from start to finish looking for particular lines. A better solution is needed and the approach I've adopted is to scan the file as soon as it has been loaded so that a list of line pointers can be built up.

To do this I actually scan the file twice, the first time counting linefeeds so that I know how many lines are in the file. After allocating memory for a suitably sized set of "line pointers" the file is scanned again – only this time the addresses of the starts of all the text lines are stored into the line pointer list.

Listing 1: Routines for bringing the console device to life and closing it after use

**Function Name:** `OpenDevice()`  
**Description:** Opens the specified device  
**Call Format:** `error=OpenDevice(name_p, unit, io_request_p, flags);`  
**Registers:** `a0 OpenDevice(a0, a1, a1)`  
**Arguments:** `name_p` – pointer to device name  
                   `unit` – unit number of the device to open  
                   `io_request_p` – pointer to a request block  
                   `flags` – additional info (device specific)  
**Return Value:** `error` – success/failure indicator

**Function Name:** `CloseDevice()`  
**Description:** This function closes a specified device unit.  
**Call Format:** `CloseDevice(io_request_p);`  
**Registers:** `CloseDevice(a1)`  
**Arguments:** `io_request_p` – pointer to a request block  
**Return Value:** `None`  
**Notes:** All outstanding I/O requests must have been completed for `abort()` BEFORE closing the device.

**Function Name:** `Boo()`  
**Description:** This initiates an I/O request and waits for it to complete.  
**Call Format:** `error=Boo(io_request_p);`  
**Registers:** `Boo(a0/a1)`  
**Arguments:** `io_request_p` – pointer to an initialized I/O request block  
**Return Value:** `error` – `NULL` if operation was successful otherwise the returned value is a (device specific) error number.

```
OpenDev      move.l a0-a1/d0-d1, preserve regs
             moveq #0,d0 unit number 0
             moveq #IDCMP_RAWKEY,d1 default flags
             move.l io_request_p,a1 device name
             move.l #IDCMP_RAWKEY,io_Command(a1) ALL commands will be written!
             moveq #OpenDevice,io_AbsExecBase
             tst.l d0 test for success
             bne.s -error
             move.l #CloseDev,(a5) push deallocation routine address
             lea AutoKrapOff,a0
             jsr ConsoleCommand
             lea TurnCursorOff,a0
             jsr ConsoleCommand
             lea SetColours,a0
             jsr ConsoleCommand
             lea ClearConsole,a0
             jsr ConsoleCommand

             moveq #1,d0 clear zero flag
             move.l (a7)+,a0-a1/d0-d1 restore regs
             rts

.error       moveq #0,d0 set zero flag
             move.l (a7)+,a0-a1/d0-d1 restore regs
             rts

CloseDev     move.l a0-a1/d0-d1, preserve regs
             move.l io_request_p,a1 i/o request address
             CALLSTS CloseDevice
             move.l (a7)+,a0-a1/d0-d1 restore regs
             rts
```



## public



*Penny-pinching Dave Cusick mumbles*

*"Bah, humbug" a bit, before bringing you  
the pick of this month's Public Domain,*

*Licenceware and Shareware releases*

**A** rummage through the healthy large PD mailbox this month produced a typically diverse selection of games, utilities and demos. What better way to fill your loved one's stocking than with a few top notch, low price lovelets? Think of the look on their face when they eagerly tear off the wrapping paper to uncover the latest three-quid wonder.

Perhaps it's not the most extravagant of seasonal gifts, but there are plenty of excellent pieces of PD knocking about and after all, it's the thought that counts, eh? I'm sure they'll understand that in these financially difficult times the latest all-singing, all-dancing, 45-bit wonder machine is a little beyond your resources. With that thought at the forefront of our minds, it's now time to take a festive walk through the snow-sprinkled streets of PDville...

## Tee To Green

Programmed by: Garry Knott  
Available from: Roberta Smith DTP  
Disk No. OS094

Seemingly, everywhere I looked this month was the golf enthusiast's godsend, Tee To Green, which must have been sent by at least five different PD libraries. It would have warmed its way into the Public Sector even if it were not of an exceptionally high calibre, simply to stop

the seemingly endless torrent of Tee To Green disks. Thankfully though, it is a fine product, providing an excellent way of keeping track of all your golf scores for a selection of courses, and even offering some basic analytical functions.

Despite shelling out a hefty sum on golf clubs and membership fees, I didn't find golf to be my cup of tea. This was, perhaps, unusual given the enormous popularity of the sport these days and the practically boundless devotion my father has for it.

Keen golfers – and he could certainly be classed as one – seem prepared to brave any weather ("it's not fair, the course is closed and it's only a small hurricane") to tow a half-hundredweight of clubs around some hilly fields, vainly hacking at a ball which frequently seems determined to bury itself in the nearest clump of long grass. This is even more baffling, since many of golf's greatest admirers actually seem to spend a good proportion of their time cursing the game.

Although the game may at times prove too frustrating for words (at least of the non-expetive kind), Tee To Green will bring you no such annoyance.

Since telling the program the details about any given course is a simple matter of keying in the hole pars, distances and stroke index numbers from your real scorecard, it's possible to have things up and running in a surprisingly short time.

It is possible to view statistics such as best and worst ever rounds, best and worst scores put together hole by hole, number of birdies, eagles and so on for all time, average scores on each hole, and so on.

Normal and Stableford scoring are available and each round is stored with your handicap at that time. A couple of features are disabled in the unregistered shareware version, but if you register it is possible to store loads of courses and rounds, the number being limited only by disk space. For the true golf devotee, there is no similar program which can offer so many features.

*With the aid of Tee To Green, you can record all those embarrassingly high scores for posterity... if you've got a masochistic streak, that is*

| Davenport Golf Club                 |      |      |      |        |     |      |      |          |      |       |     |
|-------------------------------------|------|------|------|--------|-----|------|------|----------|------|-------|-----|
| Hole                                | Yds  | Pars | S.I. | Score  | Pts | Hole | Yds  | Pars     | S.I. | Score | Pts |
| 1                                   | 388  | 4    | 2    | 17     |     | 18   | 482  | 4        | 17   |       |     |
| 2                                   | 488  | 4    | 16   | 12     |     | 11   | 316  | 4        | 3    |       |     |
| 3                                   | 543  | 5    | 18   | 13     |     | 12   | 188  | 3        | 15   |       |     |
| 4                                   | 192  | 3    | 12   | 12     |     | 13   | 367  | 4        | 6    |       |     |
| 5                                   | 417  | 4    | 11   | 2      |     | 14   | 497  | 5        | 4    |       |     |
| 6                                   | 387  | 4    | 6    | 5      |     | 15   | 417  | 4        | 1    |       |     |
| 7                                   | 442  | 5    | 18   | 12     |     | 16   | 215  | 3        | 14   |       |     |
| 8                                   | 242  | 3    | 7    | 20     |     | 17   | 387  | 4        | 9    |       |     |
| 9                                   | 382  | 4    | 8    | 20     |     | 18   | 331  | 4        | 13   |       |     |
| Out                                 | 3225 | 36   |      | 113    |     | In   | 3832 | 35       |      |       |     |
| 17-18-94<br>score for<br>hole 18 .. |      |      |      | TOTALS |     |      |      | 6257     | 71   |       |     |
|                                     |      |      |      |        |     |      |      | Handicap | 16   |       |     |

## Super Obliteration

Programmed by: David Papworth  
Available from: PD Soft  
Disk No. 3979

Originality may not have been a consideration when this fine Pong clone was created, but playability definitely was. Featuring a main sprite which looks suspiciously like that in Turrican 2, complete with multi-directional gun, Super Obliteration pits you against bouncing asteroids. Blast them a couple of times and they split into two smaller asteroids; only after four or five splits will they finally be destroyed.

Once all the asteroids have been cleared from the screen, a new screen will appear with more asteroids, various platforms to leap upon or shelter underneath, and so on.

As was Pong before it, Super Obliteration is one of those games that hooks you from the moment you start



*A fascinating insight into ancient Egypt. Tutankhamun communicates all sorts of information through an attractive and effective interface*

## Tutankhamun

Programmed by: Paul Thompson  
Available from: Central Licenceware  
Register

I have to admit that in my experience, a good proportion of educational software is of disappointingly low quality. Sloppily designed interfaces or poor programming often mar otherwise potentially useful software.

Fortunately, that's not the case with Tutankhamun, which combines an attractive and intuitive interface with an informative and interesting collection of information. As well as details on the discovery of the infamous Egyptian king's tomb in 1922, there is a selection of fascinating material relating to many aspects of life in Egypt when it was at its height.

From an attractively designed main menu screen, it is possible to access all manner of facts and figures. While you are discovering this information through the well-written scrolling text, effective diagrams and colourful high-quality digitised pictures, you'll even be treated to an appropriately Discovery Channel-type





## GAME OF the MONTH

*Unoriginality strikes again - but if it worked for the Bitmap Brothers, it can't be all bad. Distillation (or should that be Pango?) is a worryingly addictive arcade blast*

playing. Admittedly, there's very little variation in the gameplay but to be honest, this goes largely unnoticed in the thick of the action, and when it's this enjoyable who needs variety anyway?

The whole package is topped off nicely

musical accompaniment.

Despite the fact that when I first loaded this up I wasn't particularly eager to learn more about Tutankhamun, after a few minutes of playing around with it I was thoroughly engrossed. Admittedly, it's not the sort of program that will appeal to children of primary school age, but for the older reader it communicates the information effectively and interestingly.

## Pengo 2

Programmed by: Fredrik Fildberg

Available from: PD Soft

Disk No. 3981



*Another blast from the past in the form of Pango, which bears a striking resemblance to 8-bit wonder Pango!*

Another less than original, but nevertheless very enjoyable game, Pango brought back memories of Acorn Electron cheapy Pengi. The unfortunate situation is that Pango, who is perhaps unsurprisingly a penguin, has managed to get lost at the north pole. He has to negotiate 50 levels, all inhabited by nasties. On each level, Pango has to arrange diamonds in lines by pushing them around the screen. He can also push blocks of ice, and by pushing them into nasties he can knock them off, making his

task a little easier. Fairly hectic arcade excitement is the order of the day here, something that is sadly often lacking in today's commercial software. The graphics may be functional rather than spectacular, and some of the sound effects are a little irritating, but overall Pango 2 is a decent piece of software which demands a little logical thought as well as a reasonable amount of joystick prowess.

The plentitude of levels it possesses ought to guarantee long-term interest and it can be quite an addictive game.

## Snoopdos v3.0

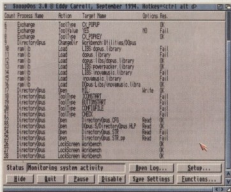
Programmed by: Eddy Carroll

Available from: Scribble PD

Disk No. U406

When a program mysteriously refuses to work, there's no better utility to have knocking about on your hard drive than Snoopdos. It lets you know exactly what your machine is up to and it's possible to

*Snoopdos, one of those indispensable programs that will fit up your entire hard drive*



## Calling all PD libraries...

...and individuals with absolutely any program, whatever its purpose, which you consider worthy of review. Whether it will be freely distributable public domain, shareware or licenceware, if it's of sufficient quality to merit coverage then stick it in a jiffy bag or padded envelope and send it in with all haste. I promise I'll at least look at your work. Please clearly label the disk, and include a cover letter supplying a description of the disk contents and some basic instructions. The address to send the disks to is:

Dave Cusick  
PD submissions  
Amiga Computing  
Europa House  
Adlington Park  
Macclesfield SK10 4NP

trace, for example, which missing libraries are preventing the program's normal operation.

Snoopdos 3 is an interesting little chestnut really. Since Snoopdos tends to be running in the background, the small size of the original program was a real asset. With this rewrite the author has attempted to make the program far more powerful and user-friendly - but in doing so he might just have defeated the objective to some extent.

The extra features include a spanking new Graphical User Interface, a scrollable main window so that you can see more than simply the last few operations, the facility to run Snoopdos as a commodity accessible via its own hotkey or the Exchange commodity, on-line AmigaGuide help, and the facility to export the Snoopdos output to a word processor.

The trade-off is in memory usage, with an expanded Amiga probably being necessary for Snoopdos 3 to be running while other programs are being used. Let's face it, since this is what Snoopdos is used for, there will be those who feel that Snoopdos 1.7 (with snoop enable and disable as pretty much the only commands available) will better suit the task. Of course, if you have the memory for Snoopdos 3 then none of this will concern you in the least, and you should rest assured that it will perform the job admirably.

## Backdoor v2.81

Compiled by: Stephen Birmingham

Available from: Online PD

Public domain cheat disks are common enough beasts, but Backdoor stands out because it features many more recent games than most of its rivals. Tips and cheats for nearly 300 games are included, which are accessed via the Multiview interface as you would access a normal







A suggested line-up of the hardware necessary for the most basic of teledildonic experiences

*As VR continues its steady rise through all avenues of society, it was only a matter of time before sex became part of the virtual agenda. Adam Phillips reports*

# CYBERSEX

Sex has been with us since the beginning. Celebrated, repressed, enjoyed, frowned upon, analysed, suppressed and loved – the subject matter has always had a wide ranging effect on all people throughout the ages.

With each new medium created in society, the sexual act has always found a platform to help express itself – the printing press introduced erotic literature to the masses, photography gave birth to erotic pictures, film moved these images and now, with the coming of the computer age and more specifically, virtual reality, the normally hands-off, voyeuristic experience is going interactive with full blown 32-bit colour, photo-realistic graphics, digital sound...and teledildonics.

Over the last few years, the availability of sex-related material for computers has increased in leaps and bounds all over the world. Explicit images and video footage can be pulled off bulletin boards at the touch of a button now, causing an upheaval of moral panic in Britain.

## erotronics

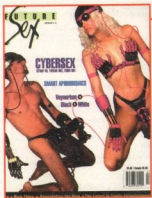
With new technology beginning to enable the user to involve their bodies as well as their minds, the scoffing hilarity of making love to a computer is becoming a reality.

Teledildonics, erotronics, cybersex, or whatever name you want to give it, is simply a means whereby the user can involve themselves fully in a computerised, interactive world and, ideally, act out any sexual fantasy they wish.

The main components required to produce the experience are a head-mounted display unit for the visuals and a full-sensory body data suit.

With Aids and other sex-related diseases scaring people away from promiscuity, cybersex is seen as the ultimate in safe sex.

Others see the benefits as more than that – people with disabilities who have little opportunity of sexual contact, could enjoy some semblance of a normal sex life. Teledildonics could also be used in sex therapy to aid patients to overcome their fears



Cybersex – the downfall of the most intimate of human communications or a genuinely useful and important technological development? Time will tell

and psychoses towards the sexual act.

American magazine Future Sex believes like many others that teledildonics will eventually end up as a full blown reality and better than the real thing.

Indeed, the virtual reality industry is taking teledildonics seriously – Sadie Plant, a cyber-feminist, wrote a report on teledildonics for a VR conference held at Warwick University. In an interview with Loaded Magazine, she says: "The wonderful thing about cybersex is that everybody who has been marginalised or oppressed will have the chance to realise their desires."

"I think women will become far more confident once they've been able to experiment in cyberspace and, as a consequence, they'll be far more demanding of real life sexual partners. Mr 15-pints-a-night doesn't stand a chance." With all this conceptual discussion, the only thing holding humankind back from disappearing from reality all together is the technology.

While graphic capabilities are advancing at lightning speed, the suit is a harder problem to resolve altogether – the basic principle is to

use tiny sensors to let off heat and vibrations and air bladders that apply pressure to the skin as a form of tactile response.

The pictures shown here are of a basic kit that cover the main erogenous zones of both female and male. Although these are merely speculative works produced on a computer, this kind of equipment is well on the way to completion. Meanwhile back on earth, one has to wonder where all this will lead. Future Sex predicts that over the next 200 years, the system will develop into either a multi-user or a solo environment with a seamless physical interface and full visual and audio capabilities.

They believe that way off in the future, these systems will be surgically implanted to include brain-enhancing chemicals and ultimately, the virtual experience will be better than the real thing.

## Isolated

All this excitement and debate just leaves one burning question – is this really going to improve people's lives or simply isolate people from each other even more?

According to Mike Saenz, publisher of the infamous erotic software package Virtual Valerie for the Apple Mac, we may have to become more cut off from each other.

In Future Sex, he says: "People want to remove excess human contact. Especially as the planet becomes overpopulated. They want that distance, and I think that VR sex could actually give them that."

Hearing a statement like that may sound depressing but with the one-on-one relationship becoming more and more popular, it may well be a valid, if sad, point of view.

What we do know for certain is that if you think the press and public outcry concerning sex issues is loud now, wait till cybersex blooms into a full blown industry, then the talking will turn to shouting and, as usual, the enticement of ever more exciting technology will probably win the day.

- We would like to hear your opinions on the issues raised in this feature. Send any thoughts and comments to the usual address for the attention of Adam Phillips
- Special thanks to Future Sex, a magazine specialising in all things cyber and erotic, and Reactor Inc, creators of the best selling Virtual Valerie and Donna Matrix titles, for the use of their concept pictures



A mock-up of the graphics that would be displayed in the head-mounted display unit



# mini Office

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- A flexible **SPREADSHEET** with more than 50 functions, simplifying the most complex domestic monthly budgets or commercial cash flow forecasts.
- A versatile **DATABASE** which is simple to use and powerful enough to deal with anything from basic address book functions to club membership lists and business records.
- A supremely friendly **DISC MANAGER** to make using your Amiga as painless a task as possible.
- Incredible **GRAPHICS** with more than 18 types of graphs and charts available to brighten up your presentations or make your month by month financial situation as easy to appreciate as possible. You can even make use of eye-catching 3D effects!



**Wordprocessor:** Compose a letter, check your spelling with the 50,000 word dictionary, mailmerge details from a database file, add graphics, wrap text around it, load ASCII text, highlight with bold, italic and underline... and more!



**Database:** Build up a versatile card index, incorporate up to 50 fields with 70 characters each, use search and replace to modify data, do powerful multi-field sorting, perform arithmetic functions... and more!



**Spreadsheet:** Prepare budgets or tables, alter column widths, insert or delete columns, cut and paste data, lock blocks, choose from over 50 functions... and more!



**Graphics:** Enter data directly or load from the spreadsheet or database; produce pie charts with exploded segments; display bar charts side by side or stacked; overlay your graphs on an imported IFF picture; add a 3D view; add text or lines... and more!



**Disc Utilities:** Avoid the confusion of Workbench, create bootable files, format discs, copy files from disc to disc; make directories; delete and rename files; make multiple copies of your disc... and more!

**EUROPRESS**  
SOFTWARE

Europa House, Adlington Park, Macclesfield, Cheshire SK10 4NP, Tel: 0625 859333

Mini Office works on all Amigas with 1 megabyte RAM, can read Amiga IFF files and for US users, fully supports the NTSC standard.



# Help yourself

amiga



## Part 3

**W**ith the example script shown in the last episode of this series you should now have a good impression of how Installer scripts are actually constructed.

If you understood the script then you have mastered practically 90% of the language. What I will attempt to do in this instalment is to explain how you can create your own help text, manipulate variables and an assortment of other various tasks that can be performed by Installer, including creating text files.

Take a look at the script marked Figure 1a. This is taken from last month's demonstration script — lines 17 to 28. You will notice that it contains a Copyfiles routine and an appropriate Help file — @copyfiles-help.

However, what if you didn't want to use Installer's built-in Help files or if a dedicated Help file wasn't available? You can easily create your own just by typing the text you want to appear alongside the Help command.

If you take a look at Figure 1b you will see that I have changed the Help file and added my own help text. When the Help button is pressed at that point, the following text will be displayed:

This is my own Help file

You can easily write your own Help text to Installer but you must make sure that the format is correct.

Wow! Creating Help text is really simple...

Let's take a closer look at how Help text works. The first thing to remember, as with all functions in Installer, is to surround the routine with parenthesis. The open bracket starts at the beginning of the Help command. The close bracket ends the routine after simple...

You will also notice the \n text. This tells Installer to insert a carriage return at the specified location in the text. This is made clearer by comparing the actual script and results shown above.

There are various other text formatting commands that can be used and these are described below:

```
\n    newline character
\r    return character
\t    tab character
\0    a NUL character
\"    a double quote
\\    a backslash
```

And that's it. That's all there is to creating your own Help text — just remember the parenthesis.

*Steve White opens the door to  
creating your own installation scripts  
and explains variable handling and  
creating your own help text*



Using variables with  
Installer you can control  
and manipulate  
environmental settings

## Special symbols

Specials are created by Installer before the script is actually executed and are used to tell the script certain things about the environment it is running in. These symbols always begin with an @ sign. @default-dest is one such special symbol and stores the default directory that was selected by Installer, or you if you have the option to change the installation directory.

Assigning variables or symbols couldn't be simpler. Imagine you wanted to assign the value 10 to the variable y. You would type;

```
(set y 10)
```

This is read as set y to 10. You can

Variables, or symbols as they are commonly known in the Installer language allow you to test for certain parameters and also to store and manipulate information. The following are all valid symbols:

```
y
total
this-is-a-symbol
**xxxx**
05_00
```

Installer implements three different types of symbol which can be used for a variety of purposes:

User-defined symbolsBuilt-in function names these symbols are made up of things like + and \* as well as textual names such as Delete or Rename.

combine statements easily enough and perform all the normal arithmetic functions associated with professional programming languages:

```
(set var (+ 3 5))
```

The above statement would evaluate the + 3 5 argument first, the result being 8, and then assign it to the variable var.

One important factor regarding variables is that they do not need any type of identifier such as \$ which would normally be used for a string variable.

Installer automatically checks the contents of the variable and converts the variable to the proper type automatically.

## Making text

The Installer program is capable of many things, most of which you will now be aware. But it also has the ability to create text files and add instructions, usually assigns, to the User-Startup file located in the S directory.

Figure 1c shows a simple example of a routine to create a script file. The numbers have been added by myself so that I can explain each line individually.

**01** This line opens a routine called Textfile which, as its name implies, uses the following commands to create an ASCII text file.

**02** A simple message just to tell the user what's going on.

**03** The Help text. There is no pre-defined Help text for the Textfile routine so I have had to add my own.

04

This is the ASCII file we want to create – the destination.

05

The Append command inserts the text after it into the file specified by line 04. You can type in as much text as you like and are free to use the text formatting symbols described above.

06

The Include command allows you to add other ASCII files to the one you have created – in this case the Startup-Sequence in the S directory. This is great for adding commands to the Startup-Sequence or Mountlist found in DEVS.

07

This command simply asks the user to confirm the entire routine to create the text file.

08

The close bracket ends the routine opened in line 01.

You now know how to create text files from within Installer. Simple, isn't it?

As well as adding text you can also add commands to the User-Startup file in the S directory. This is useful if the program you are installing needs to have assigns made every time you re-boot your Amiga.

If you look at Figure 1d you will see an example of a script that will add commands to the User-Startup file. Like before, each line has been numbered so that I can explain them one at a time.

01

This line starts the routine Startup – a routine that will allow you to add commands to

## Fig 1a

```
(complete 30)
(
  (working "Installing MyProg program...")
  (copyfiles
    (prompt "")
    (help $copyfiles-help)
    (source "ScanMyProg")
    (dest $default-dest)
    (info)
    (nogoage)
  )
)
```

## Fig 1c

```
01 (textfile
02 (prompt "Creating a text file...")
03 (help "Hello")
04 (dest "S:MyTextFile")
05 (append "Wow! I have just become a line of text in an ASCII text file, isn't it")
06 (include "S:Startup-Sequence")
07 (confirm)
08 )
```

## Fig 1d

```
01 (startup "Scala"
02 (prompt "I will now add an Assign for Scala in your User-Startup file so that the program will run correctly.")
03 (help "No help unfortunately. Why not add your own?")
04 (command "Assign Scala: $AG:MultiMedia$Scala")
05 (confirm)
06 )
```

If you need to add an assign or command to the User-Startup file, Installer also has the ability to append text to an ASCII file. This proves extremely useful for adding information to Mountlist.

the User-Startup file in the S directory. The text after the Startup command will be added before and after the actual command in the User-Startup file. It will be ignored because Installer will automatically precede it with ; which tells DOS to ignore that line.

02

A message to tell the user what is going on.

03

The Help text. Startup does not have an associated Help file.

04

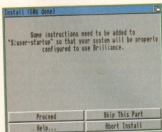
Command allows you to specify the text that will be added to the User-Startup.

05

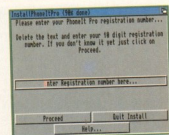
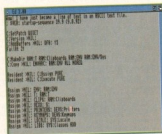
This command simply asks the user to confirm the entire routine of adding the command in line 04 to the User-Startup file.

06

The close bracket ends the routine started in line 01.



Most routines have dedicated Help files but if not you can create your own easily enough



In next month's article I will be demonstrating how you can check for a registration number

## Next month


Unfortunately, that's all I've got room for this month. In the fourth and last Installer tutorial I will be discussing variables and adding assigns in more depth, explaining how you can check for a registration number and giving away the complete Installer language syntax. Until then...







# SYSTEM



Your essential guide to the world of Amiga gaming

## Having a blast

*Team 17's  
Super  
Stardust  
arrives with  
a bang on  
the A1200*

Under the System  
spotlight this month

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## Mindscape over matter

Publishers Mindscape are planning to release a whole host of new games for the Amiga and CD32 in the not so distant future. This Winter you can expect to see Alien Olympics, for both the Amiga and CD32. The idea behind it is a bizarre variation on the Olympic theme with crazy sporting competitions between, well, aliens, I suppose!

3D isometric action finds its way onto the Amiga via Space Academy, a puzzle game where you play a Space Cadet on his last mission from the, err, Space Academy!

More serious gamers can get their hands on Evasive Action, a flight combat sim. The game



*Flight Combat Sim, Evasive Action intends "to make one-on-one combat more entertaining"*

simulates aerial dogfighting between two opponents and promises to appeal to both games players and flight-sim fans alike.

Smash hit MegaRace, which reached top spot in the Gallup CD chart when it was released on PC CD-ROM, is set to take the CD32 by storm. Set in the 21st century, the idea of entertainment takes the form of a virtual reality game show where contestants attempt to obliterate each other and use their skills to get around the 16 taxing racetracks. Employing 3D graphics and digitised animations, Mindscape promises it will be "a one-of-a-kind gaming experience."

Set for release at the beginning of next year is an Arcade/Strategy game called Baldy. The idea is to

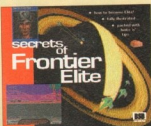
## system online

Tina Mackett brings you the latest news from the Amiga games world, guaranteed to brighten up those gloomy Winter evenings!

## A book at playtime

Bruce Smith Books, publishers of some of the best selling Amiga books, offers salvation for Elite fans everywhere! They are bringing out "Secrets of Frontier Elite", a hints and tips guide for Gamedek's popular space game.

The book forms part of the collection of the Gamer's Guide series and can be bought directly from BSB or found in bookshops such as WH Smiths priced £9.95.



*Help is at hand for Frontier Elite*

## Football legend

Football Glory, the new footy sim from Black Legend, is to have a sequel. At the moment details are quite sketchy as it is only in the planning stages, but it is likely to take the form of an indoor game because as Black Legend boast, its game uses real-time calculation on ball bounces.

This means a realistic deflection off the post etc., and it claims that it is logical now to add walls to the game as it is the only one to have worked out the complexity of the routines. It will also have different rule versions such as five-a-side, and will employ different pitch shapes. Don't expect anything until the first quarter of next year though.

Football Glory will also be appearing on CD32 and Black Legend intends to bring out other CD titles including Embryo and Spherical Worlds.



*Valhalla, Before the War, will give you the opportunity to play from Infinity's point of view*

## It's good to talk

Vulcan Software, the team behind the loved and loathed speech adventure Valhalla and the Lord of Infinity, is set for another dose of verbal action in the very near future. With the sequel not due until sometime in Easter, it is bringing out another offering in the meantime.

Again the setting is Valhalla but the action centres on the Lord of Infinity's evil doings before the war. This time you will play from Infinity's point of view over four levels.

Also from Vulcan is Timeslip, a puzzler game set for release around March next year. You take control of 112 humans from the future who have been thrown back in history. They must learn to use resources and adapt to suit the different environments in a race against time. Digital speech is included and a fully spoken experiment co-ordinator encourages the expedition. The game takes place over such time zones as Vietnam, Jurassic and Roman.



*Timeslip uses a similar graphical style to Valhalla but will be a totally different concept*

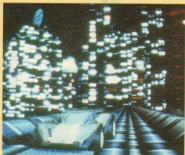


MegaRace on the CD32 this Winter

take the community of Baldies and the aim is to make them prosper through inventing, fighting and the like.

Other news from Mindscape this month is that it has acquired Strategic Simulations, Inc. the California-based developers renowned for its wargames, fantasy RPGs and (together with TSR, Inc.) Advanced Dungeons & Dragons game system.

Joel Billings, president of SSI comments: "As entertainment software has evolved, development efforts have become more and more complex. We believe Mindscape is a strong partner who can help us realise our product plans."



## Armed and dangerous

Yes, it's finally happening. Mortal Kombat 2. The eagerly anticipated sequel to one of the finest (and grisliest) beat-'em-ups ever is going to make its appearance on the Amiga. Acclaim's first move into floppy publishing will be marked with this release due out soon.

Probe Software, the same team that converted the original, has been signed to do the conversion for the sequel, so there's no reason to doubt that this will be as good as its console counterparts.



A real Gore-fest in Mortal Kombat 2 - we can't wait!

## War monger

Fans of the film the Lawnmower Man can look forward to Cyberwar, which is set for the CD32 at the beginning of next year.

Cyberwar is the follow-up to the Lawnmower Man game (which incidentally didn't appear on the Amiga) and is based on the original film.

## Empire get 'spaced out'!

Licensed from Iron Crown Enterprises, Empire is to bring out CyberSpace - a sci-fi RPG. Set in 2090AD, on the verge of a future dark age, the game is based around the scenario of street rebellion against Megacorporation repression - (cor, heavy).

You will be able to create characters, get involved in espionage, try your hand at combat and travel the CyberSpace. A combination of vector and 3D bitmapped graphics will create the environment.

Sci-fi fanatics can look forward to CyberSpace soon, priced at £34.99.

## Glory, glory, Man Utd

A 1994 data disk will be available any time for Krisalis' spectacular Manchester United Premier League Champions game. The disk will have all the bang-up-to-date info included.

Also from Krisalis is another licence, PFA Player of the Year, a footy sim which will use the same engine as Man Utd but will be viewed from a FIFA angle and from higher up in the stands.



## Crystal clear

Magnetic Fields, the team behind the platformer Kid Chaos and the classic Lotus Trilogy, has gone for a complete change in direction by bringing out an RPG. Publishers Kompart will bring out its new game entitled Crystal Dragon, which is intended to go right back to basics, ditching fancy graphics in favour of top playability.



RPG fans can look forward to Crystal Dragon sometime in the New Year

## On your marques

Terramarque, the developer behind the chirpy beat-'em-up, Elfmania, is working on an overhead race-'em-up called P.I.D. which stands for Private Investigator Dollarsally.

## Now there's whales for you

Neo are bringing out Whale's Voyage 2, the sequel to its popular space RPG. It promises a more involving plot and improved graphics. Characters generated from the previous game can be carried through to the sequel.

## Pond life

Millennium are putting its James Pond platform frolics together in a bargain bundle. The compilation will house James Pond 2 and 3 and will be available for both the CD32 and A1200, priced £19.99.



# SYSTEM Selections

## 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.

Wondering which games to put on your list to Santa? We give you the lowdown on some of the best releases we've seen over the past few months...



## 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.



## Dreamweb

Imagine an interactive version of Blade Runner directed by Quentin Tarantino 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 to good to be true. Dreamweb literally roars across your monitor screen and growls at you like a vicious beast from the pits of hell.



## Guardian CD32

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. If you're out for plain old-fashioned action, buy Guardian and invigorate your spare time. This one shouldn't be missed.

## The scores on the doors

Come on regular readers, you must know how it works by now. New readers, welcome 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; so 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.







# Star

00000

## beat the system



Perhaps the hardest Amiga shoot-'em-up in the world and many gamers have been suffering badly. Here is a complete guide to the five extremely tough worlds in *StarDust*. Get those trigger fingers ready...



Slowly make your way around the war plan. Each level defeated means you're that one step closer to completing the game

### World 1

If you follow these steps carefully then clearing the first world shouldn't be too much of a problem. Begin at level one, in the top left-hand corner of the war plan.

Tackle one meteor at a time and don't shoot at all the big boulders at once as the screen will become filled with hundreds of smaller ones, which are a lot harder to shoot or avoid.

In level one, try to pick up a gun power-up (represented by a "G"), then go to the bottom centre level and collect another. Your three-way shooter will now be at full power. Destroy the small ship that enters from the left and get the bounce. Clear the other levels, finishing with the level in the bottom-left of the plan, with the bounce powered up.

The first end-of-level guardian is best tackled by flying your ship from left to right, so you can shoot the boss as well as the shots that fly towards you. Try to stay at the same vertical position as the guardian.

As it closes its doors, rotate 90 degrees and fly slowly away, so that you enter on the other side of the screen. Repeat the same manoeuvre until you have defeated the guardian. If something goes wrong, hide behind the open doors of the ship because the shots can't penetrate them.

You'll now enter the first warp tunnel. The mines are indestructible and a lot smaller than the rocks. Because of this, the rocks will sometimes block your vision. It's best to move around instead of staying in one place. Focus your eyes on the centre of the tunnel and this will give you more time to react.

### World 2

You'll encounter a wave of Stellar Blades. When they appear, they will home in on you and attack. Your best defence here is to keep moving around, so they don't get a chance to locate you.

In the top-centre level, a couple of bombers await you. Beware of the exploding mines they leave behind, they can be destroyed with a couple of well placed shots. In the bottom right level you must tackle four huge Space Balls. Destroy one to break their formation and this will make it easier to take out the rest.

In the bottom-left level you will find a squadron of Trilons. You'll need shields to deal with these. Put your shields up and fly straight towards them as soon as they appear.

When you face the end-of-level guardian, shoot its appendages while evading the tailed eye. When all the appendages are destroyed your shots can penetrate the main body. To defeat the eye, fly backwards and forwards at the edge of the screen and this way it won't be able to home in on you.

The special mission, should you accept it, is a tough one. Firstly, your ship is constantly being pulled to the ground. Secondly, you must keep an eye on your fuel gauge. Remember, when you fly through tight spots use your break by pressing fire.

For the warp tunnel, use the same tactics as you did in the first.



Down one of the amazing warp tunnels and this time you've got a cluster of spinning heads to deal with



# dust

## World 3

The bombers you face in the top-centre levels leave spinning morph heads behind instead of mines. The heads rotate and breath fire. When they shape to morph from the ball shape, do a runner or you'll wind up dead.

In the bottom-right level you'll have to deal with the Thorn Balls. They spin around, bouncing from the edges of the screen. Stay in the centre of the screen and fire where you want by rotating your ship.

In the bottom-left level an Orbit Plate awaits you and you'll definitely need your shields to face it. The Space Worm is best taken out with missiles. Fly your ship around it and try to hit its body parts. If all else fails, put your shields up and make a



Kamikaze attack.

The guardian is quite easy to defeat. Fly behind it (not too close) and shoot. When it stops, keep your distance and hit it with everything you've got.

The third tunnel sequence features a lot of Thorn Balls on a collision course with your ship. They bounce off the tunnel walls, are much bigger than the mines and are indestructible, so avoid them like the plague.



The very first warp tunnel is relatively easy to complete. Look at the centre of the tunnel to give yourself more time to react to the asteroids.



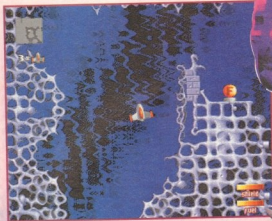
On this level try to keep on the look out for the mines. Watch out because they're quite hard to spot while you're happily blasting away.



While the city beneath you burns away, you must concentrate on destroying these rampant asteroids.



The weapon selector plays an important part in Stardust. Always make sure you've got your power-ups going to the right weapon.



The special mission, should you choose to accept it, is a lot like playing *Thrust* and patience is the key to success



The very last warp tunnel sequence. The Thorn walls are hard to beat as they're indestructible

## World 4

This level introduces two new threats: the Speeders and the Beetles. The Speeders try to home in on you just like the Stellar Blades, but they take more hits to destroy and are affected by inertia. Make sure you keep moving around the screen while you shoot them.

The Beetles attack in groups and the best time to shoot at them is when they begin to rotate.

The end-of-level guardian has three phases. To deal with it, you must wait until it spins around, then you must accelerate, fly away and turn around to shoot at it. When it stops it either morphs into a plate or a ball.

If it takes the form of a plate you can expect a burst of shots. If it turns itself into a ball, look out for the homing missiles. The best weapon you can use against this guardian is the flamer.

Enter the fourth tunnel and make sure you get every energy power-up that you can see because you're going to need your strength for the final world.

## World 5

This world is what your shoot-'em-up nightmares are made of. This is where you will face everything the professor throws at you, before he finally has a go.

In the top-centre level you will encounter waves of Orbit Plates flying from the bottom of the screen to the top. Shooting them won't help, so concentrate on avoiding them and use your shields when you get yourself into a tight spot.

The guardian of this level is the professor himself. He will attack you with an egg-shaped machine which is armed to the teeth. The egg will try to crush you, so keep moving and shooting.

When the egg stops, a hatch will open revealing a flame-thrower or, maybe, a cannon. The flame-thrower has a limited range and it only comes out of the top of the egg.

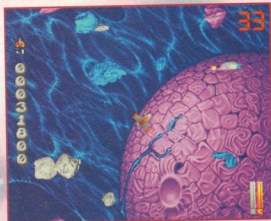
The other weapons include a missile launcher and a rapid fire plasma rifle. When the egg is destroyed Professor Schaumund himself will appear, shooting at the sides of the screen at an incredible rate.

He is immune to your weapons so concentrate on avoiding his shots and attacks by moving up and down in the top and bottom edges of the screen.

Defeat him and the "I'm really quite good at the really rather hard shoot-'em-up Stardust" award will be yours.



World 5 and you have to contend with the kind of enemies that you definitely wouldn't want to meet on a dark night



Shooting the weapon transporter will enable you to gain some extra fire-power, but keep an eye on those hazardous asteroids



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**D**uring the run up to Christmas 1993, a game created by Bloodhouse, a then unknown software developer from Finland, arrived on the Amiga games scene. It was a shoot-'em-up of epic proportions and its name was Stardust.

Bloodhouse had taken the good old classic theme of asteroids and tweaked it beyond belief in the graphic and sound departments. Stardust, although hard, soon became a firm favourite with Amiga games-players everywhere and slowly climbed to the top of the software charts.

When System previewed Stardust back in late 1993, we mentioned that Bloodhouse was the only, potential, contender to beat Team 17 for sheer quality. Now in 1994, Bloodhouse has returned with an enhanced version of its classic shoot-'em-up for A1200 and CD32 owners. The odd thing now is the fact that Bloodhouse has switched publishers. The latest incarnation of Stardust is being handled by Team 17, which when you look at it, is one of the licence deals of the year.

Bloodhouse really tested the A500 to the limits

## INTRODUCTION

with Stardust and gamers were genuinely shocked at just how good it was. Some people wouldn't or couldn't believe that the infamous "warp tunnel" sequence was created on the Amiga.

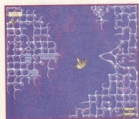
The A1200, launched after Stardust, is ten times better than its A500 counterpart, so no-one was more interested in how Super Stardust was going to turn out than myself.



Words don't really tend to do the warp tunnel sequence any justice at all, it's simply one of those things that has to be played to be believed

# Super

**The return of the deadly, drop-dead gorgeous shoot-'em-up from hell! Jonathan Maddock primes his trigger-finger and prepares to take on the might of Professor Schamund once more.**



Just like the original, Super Stardust contains a few special missions which present you with the golden opportunity to get lost lives back



The end-of-level guardian from level one can be defeated quite easily if you move horizontally and use your shields intelligently

## STORYLINE

One year has passed since Stardusters defeated the evil Professor Schamund. Little did anyone know that the mad Professor had only departed on a temporary basis and was busy patching up his wounds.

As expected, Professor Schamund has returned, but this time he's being backed up by an even more evil army of destruction. He is making another attempt to recapture Princess Vol Levi, but with one major difference this time around. The evil one is intent on getting revenge and getting even with you, as you spoiled his plans for galaxy domination last time. Thus, it is time for you to jump into your space-craft and get back to business. The business of some serious shoot-'em-up action.



The first warp tunnel sequence features a Bomber which chucks a load of indestructible, ahem, balls at you

## SOUND

I do whinge rather a lot about everything and anything, but when it comes to games nothing gets my goat more than the low standards of music contained within them.

Super Stardust is a fast frenetic blaster, so it needed an apt soundtrack to accompany the action. Cue the most outrageous rave/dance tunes ever to appear on the Amiga.

A plethora of hardcore breakbeats and some of the hardest and nastiest noises pound at your ear-drums while you maniacally bash away at your fire-button. The tunes are diverse and range from the soft (played between levels) to

the seriously harsh (belted out while you fight the end-of-level guardian). It's hard to put into words what the actual tunes sound like, but imagine a dangerous concoction of the Prodigy, Underworld and Orbital and you're getting close.

A handy tip for the sound is to put your Amiga through a Hi-Fi and then pump up the volume as loud as you like. If you haven't got a decent stereo, then plug a pair of headphones into your monitor and once more whack the volume up. The various tunes and effects are simply not done any justice if you let them play through ordinary TV or monitor speakers.

**88%**





The most useful thing that you can blow up is the weapon transporter which carries all kinds of destructive goodies



In a desperate and greedy attempt to grab those power-ups, our Stardust pilot meets death with a couple of asteroids



The first warp tunnel sequence. Remember to try and shoot those golden asteroids and pick up the following energy pick-up



Another shot of the brilliant tunnel sequence featuring a series of superbly ray-traced flying heads

# Stardust

Publisher: Team 17  
Developer: Bloodhouse  
Disk: 5  
Price: £29.99  
Genre: Shoot 'em up  
Hard disk install: Yes  
Control system: Joystick/keyboard  
Supports: A1200  
Recommended: 88120

## GRAPHICS

Do I really even need to write anything in this box?

Sit back in a comfy chair and admire all those magic graphics. Beautiful just doesn't seem an adequate enough word to describe them.

Show me a shoot-'em-up game that looks better than this one and I'll laugh in your face because nothing looks as good as Super Stardust. Utilising the new AGA technology, Bloodhouse has rendered all the ray-traced sprites to perfection.

The backdrops are also a sight to behold and although they're immensely detailed, they don't interfere with the game, meaning all the asteroids



and enemies are easy to pick out.

While the main graphics are amazing, you will go seriously nuts when you see the new and improved warp tunnel sequence. It's hard to put into words just how good this looks when it's moving along at a rapid pace, but you can't fail to be impressed by it.

The warp tunnel sequence could be made into a game on its own rather than just a sub-section that links the five levels together. Super Stardust is the best looking shoot-'em-up ever created on the Amiga, what more do you need to know that?

90%

## OPINION 87%

When a game has got graphics, sound and playability as good as this, shouldn't Super Stardust get 100%. Yes it should, but there is a fatal flaw in Team 17's plan.

Firstly, the game is virtually identical to the original. Admittedly, the presentation is far far better, but that's because the game is utilising the power of the AGA chipset.

Secondly, the game costs £30. This means that if you've got an A1200 and haven't got Stardust, then Bloodhouse's shoot-'em-up is an essential purchase. For those people who have already got Stardust, then I suspect you might only splash out £30 if you're a Stardust fan.

Apart from that minor indiscretion, Super Stardust is, in my book, the shoot-'em-up of 1994. Some people complained that Stardust's difficulty level was far too high. Super Stardust isn't any easier than the original, but if you spend lots of time playing the actual game then I guarantee that you will get a lot of long-term satisfaction and enjoyment out of it. Me? I'm off for another serious bout of blasting with the volume turned full up.

AMIGA  
GOLD  
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**I**t's been mentioned that football is the greatest game ever invented. Judging by the amount of people who go to matches, watch it on TV and actually play the game, I tend to be in agreement with whoever uttered those words.

It's not surprising that the computer football game is far more popular than any other genre. The arcade games sell well, but it is the management simulation that has been top of the league for the last few years.

You can thank Gremlin for this because when it released the original Premier Manager a few years ago it created a game that was as close to football

management as you could possibly get.

The Sheffield-based software house then created a sequel which surpassed the original and now Gremlin Interactive is hoping that the third game in the series will do just as well.

Looking back at Gremlin's track record, I can't see anything but success for the latest Premier Manager offering.

A bit of a bold thing to say in the introduction, but I've already played it you see and it's rather good.

## INTRODUCTION



The main menu looks very similar to the one found in Premier Manager 2, but somehow looks slightly more polished



The sponsor boards provide a vital source of income for your club, but do you go for the big money or a slower more steady form of income?



The new tactics options give a whole new slant to the game because now your decisions directly affect the game you're watching

## FLASHBACK

Obviously you only have to look back at the previous Premier Manager games to find a game of the football management simulation variety. Ignoring these though, there are a whole wealth of management games out in the shops and most of them are pretty damn good.

A firm favourite and Premier Manager's closest competitor is Championship Manager which has sold incredibly well over the last couple of years plus it's been faithfully supported by a whole range of data disks.

On the Ball: World Cup and League Editions have been the latest additions to the football management fold and with their fancy TV style graphics they're sure to put up a lot of competition.

Even Sensible World of Soccer has got a new management aspect to it and no doubt this will be a big seller, but in my opinion nothing compares to Gremlin's Premier Manager series

Even your phone which is now used to keep in contact with players and other clubs has been given a brand new lick of paint



## SOUND

There really isn't a need for superb sound effects and music in a game of this type. That said, Premier Manager 3 does contain a fair smattering of sound.

The match sequence comes complete with crowd effects and you're even treated to a selection of sampled speech when something happens within the game.

The introduction tune is quite good, but I'm sure dedicated gamers will skip past it to simply get to playing the game. However, if it didn't have a piece of introduction music I'm sure you'd get people whinging and complaining.

What sound is in the simulation is good, but you don't really need any sound whatsoever to make this type of game a success.

68%



## ADDITIONAL INFO

Although graphics and sound are quite important in a piece of software, I'm sure fans of the game would much rather know about all the new features that have been included.

One of the major new features is the introduction of an Assistant Manager. This person can help with the day-to-day running of the club, leaving you to sort out the running of the team. He/she can do the training schedules, treat injured players, check sponsor boards, hire and fire employees and negotiate player contracts.

All these tedious jobs which were a pain in the previous games are now a thing of the past, although it depends on how good your Assistant is as to how much he/she does.

A new transfer system has been incorporated which lets you see other club's bids, allowing you to raise yours accordingly at the right moment. This time around you haven't got as much money to start with and you must try to get the money off your tight-fisted directors to buy players.

The most interesting feature of all is the new tactics editor. You can now change what each player does and where he plays on the pitch. For example, you can decide how far out from goal each player shoots from or you can tell each of your defenders to clear the ball whenever they receive it, and so it goes on.

What you get is a far more in-depth game and your decisions really do affect how your team performs. A feature which you should be very wary of is the fact that you can now be sacked immediately in mid-season if your management performance isn't up to scratch.



## GRAPHICS

This latest version has been given a good lick of paint in several areas. First is the actual backdrop to the main menu which can now be user-defined. All the colours of the rainbow are in there and it's all down to you how good the game looks.

The ground improvements screen now features a full stadium and although it's a superficial change, it does look rather nice. The biggest change appears when you finally get around to playing a match.

Gremlin Interactive has scrapped the animations from Premier Manager 2 and introduced a full stadium that comes complete with players in correct strips into the management fray.

This means you get to know exactly where the

bali is at all times and it's a lot clearer to know exactly where you're going wrong. The players can even be changed into shirts' numbers so that the screen isn't so cluttered, and if you don't fancy any of these new graphics then they can be simply turned off.

The rest of the menus and screens are very similar to the ones found in the first sequel, but on the whole Premier Manager 3 looks a lot more polished and better presented than its predecessors.



80%

# Premier Manager 3

You asked for it, now you've got it! Gremlin Interactive are proud to present the third and last (?) Premier Manager game in the series.

Jonathan Maddock cheers from the terraces...

## OPINION 80%

With the introduction of loads of new and innovative features, there wasn't any question that this third game in the series wouldn't be good. Even though it's about a year since I played around on the last one, I picked up the Premier Manager swing of things almost immediately.

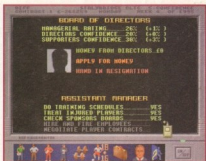
The new graphical inclusions really do set Gremlin Interactive's management simulation apart from the rest. The game is now just about perfect and Realms of Fantasy has included everything that you could possibly want in a football management game.

I suppose if you bought the first and second games then you might want to, for financial reasons, steer clear of the product, but then again, by buying both those games you must be a bit of a fan and I expect that this third game is already on your shopping list.

As far as gameplay goes, Premier Manager 3 is in a class of its own, but where it really scores is in the addition stakes. I raise my hand now and admit that I did play Premier Manager 2 into the early hours when I should have gone out and had a life. I fear that Premier Manager 3 will have the same effect on me, so I'm locking it away, such is its addictive power.

If you loved the previous instalments then you'll want Premier Manager 3. For football management beginners there isn't a better game on the planet to get you started. A better layout for this page would have been the headline 'Premier Manager 3' with the words 'Buy it' underneath. So what are you waiting for?

AMIGA  
GOLD  
AWARD



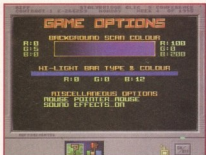
One of the best new features is the introduction of an Assistant Manager who you can get to do all the tedious jobs like training and sponsorship selection



Now isn't that much better? Marvel at the new look match sequences, most of which can be turned off if you don't like it



The transfer market has undergone some changes and you're able to outbid the other competing clubs to get your player to sign on the dotted line



If you don't like the background colours, you can change them. Every single colour in the rainbow is available for you to use...

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**A**rcher Maclean's Pool was, for a long time, the only decent Amiga pool game. Although excellent in almost every way, it tended to lean towards the simulation side of things. This factor, unfortunately, made it quite slow to play a whole game, unless you were some kind of an ambidextrous mouse-controlling hero.

Six months ago, Team 17 took another game genre under their wing and once again created a

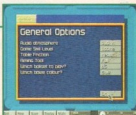
## INTRODUCTION

classic piece of Amiga software. Its name was Arcade Pool and it was and still is a fully fledged, fast and frenetic pool game of epic proportions.

With the advent of CD technology, the "budget" game that took over two years to develop is making a star appearance on the CD32, complete with sonic and graphical enhancements.



There are a number of different game styles. In Speed Pool you have to clear the table as fast as you can, which is not quite as easy as it sounds



In Arcade Pool you can customise rules, change between the UK and USA ball sets and even the colour of the baize can be changed

# Arcade Pool CD32



If that three-ball plant ever comes off, then you can quite happily watch it over and over again via the replay option

Chalk your tip and prepare to break off into pool heaven.

Jonathan Maddock has a look at Team 17's excellent

Arcade Pool, this time making an appearance on the CD32

## GRAPHICS

Arcade Pool is viewed from an overhead perspective rather than a number of angles. The balls (UK or a USA set) on the table are brilliant and move about and click into each other just like the real thing. The screen display is minimal but this isn't such a bad thing as you tend to concentrate on the action rather than some superfluous and flash graphics.

A superb ray-traced introduction was talked about, but it seems like that particular idea was shelved. Graphically, there is virtually no difference between the floppy and CD version of Arcade Pool, but this isn't too much of a worry as the graphics were so good in the original version anyway.

75%

## SOUND

When developing the original, Team 17 thought about sampling a pub atmosphere which would play while you were clacking your balls around the table (although this was probably just a very good excuse to drink copious amounts of alcohol in work time). The idea couldn't be implemented into the floppy disk version, but it wasn't forgotten about and has been included in this CD32 version.

There are six different atmospheres/tunes to choose from. The first two sound like pubs with people talking and, supposedly, drinking. They don't sound like the pubs I go in, but they do the job adequately enough. The next is a pool hall atmosphere which, when turned on, instantly transforms you into Paul Newman from the Hustler.

There are a couple of Blues tunes which are more or less bog-standard computer game music. The best tune to play to though is entitled Tang and simply consists of some quality drumming and some minimal piano playing.

If none of these tunes or atmospheres appeal to you, there is always the silence option, so you can enjoy the superb sound effects all on their own.

80%

## OPINION

85%

Arcade Pool shines in almost every department and although it looks and sounds nice, the most important thing is that it plays like a complete dream.

The control method, whether you're using a joystick or a mouse, is spot-on and very easy to use and this means anyone of any age can play and enjoy the game.

Thanks to the many different pool styles, you'll find it almost impossible to get bored with the game. The computer opponents are tough, so this means you're in for a long-term challenge.

Arcade Pool is also incredibly addictive,

almost as addictive as the real thing, but considerably cheaper. You always feel inclined to have "just one more" go whatever the result of the last game you played.

I highly recommend Team 17's brilliant Arcade Pool to every CD32 owner on the planet, and if that doesn't convince you then maybe the incredibly low price of £14.99 might.



Publisher: Team 17  
Developer: Team 17  
Dicks: 1  
Price: £14.99  
Genre: Sports  
Hard disk install: N/A  
Control: Joystick/mouse  
Supports: CD32  
Recommended: N/A







S

There's nothing like going back to a second childhood and for many, Disney is the perfect excuse. Millions of adults flock to the Cinema the moment a new Disney film is released, with the questionable motive of "just taking the children."

The Disney name though is synonymous with quality and has a long history of great products. From its earliest cartoons, such as the start of Mickey Mouse way back in 1928, its human feature films, for instance *Mary Poppins*, to its theme parks in America and now in France.

But what has won the hearts of many

## INTRODUCTION

are the animated films such as *Dumbo*, *Snow White* and the like. More recently though, a popular route for the films and Disney characters has been as a license for computer games, and Virgin certainly has its eye on the main chance this *Winter* with two Disney releases imminent.

The first is *Aladdin* followed soon after by *The Lion King*. We take a look at *Aladdin*, its initial offering, and see whether it matches up to its cinematic counterpart.

Make a sneaky escape across the washing lines



Tina Hackett shouts  
"Alakazam", "Open Sesame"  
and all that as she enters the  
magical world of *Aladdin*.

# Aladdin

Market stalls pop up all over the place  
— trade your gems for an extra life



The camel proves a  
useful ally — jump  
on his back to kill  
off a baddy



The backdrops  
are all vastly  
different,  
providing  
great variety

## SOUND

Hmm, clever bit of marketing this, using a film licence thing because it comes complete with sound track. And in this case, a Disney sound track at that! All those who have seen the film will be instantly whisked back in to the plot and for those who haven't — well, the tune isn't one of those horrible grating ones — you will soon be humming along in no time!

The intro tune "A whole new world" sets the mood brilliantly and is from one of the more sentimental parts of the film with its melodic tone — creating that magical atmosphere that Disney does so well.

The rest of the in-game tunes are taken from the film and change with each new level. This gives variety and means if you don't like one of the tunes then all is not lost! They all fit in nicely with the speed of the game and the setting.

It's also crammed full of sound effects, from sword blows and yelps to a goading baddy urging you to take him on! In fact, most actions have their appropriate sounds, with a good range of realistic and some almost mystical effects.

75%

## STORYLINE

Okay, who honestly doesn't know this tale? Well, me for starters! So after a brief storytelling from those here in the office, this is a quick recap.

The sultan's advisor Jafar is plotting to take over the kingdom. He wants to steal the magic lamp from the perilous Cave of Wonders. Aladdin is a street rat who must steal to survive. Jafar sees Aladdin and realises a plan to get Aladdin to steal the lamp for him. And in true "scene-setting" style, that's where you come in!



Earn yourself some extra bonuses

Publisher: Virgin  
Developer: John Twedy  
Date: N/A  
Price: £29.99  
Genre: Platformer  
Hard disk install: No  
Control: Joystick  
Supports: 1/2/3/4  
Recommend: 80/20



Leave the character standing and he starts off all sorts of tricks

The amount of detail packed into the graphics does an excellent job of recreating the film



## ADDITIONAL INFO

Many know the tale of Aladdin but it's origins are not quite so familiar. The story is part of the Arabian Nights, tales from the 10th century, originally coming from India. Also known as The Thousand and One Nights, the other stories include Ali Baba, Sinbad the Sailor and The Old Man of the Sea.

Legend has it that they were told to the Sultan by his bride Scheherazade who told the stories to avoid execution. The previous brides were executed after the wedding night to prevent them being unfaithful so she began a different tale each night, promising to finish it the next evening.

The stories were first translated into European in 1704 by the French writer Antoine Galland.



The game is full of different objectives to complete



The animation on all the characters is spectacular

## FLASHBACK

Hmm, Amiga platformers – well, we're not exactly short of comparisons there. But good ones – that's a different story. As far as animation goes, Aladdin is in a class of its own. Consoles have somewhat ruled the roost as far as good looking platformers go, but with this being converted over to the Amiga in such a fine fashion it should keep even the most disgruntled Amiga platform fan more than happy.

## GRAPHICS

We're normally a pretty cynical bunch in the Amiga Computing office, but Aladdin really did impress with its superb graphics and attention to detail.

The animation is smooth and flowing, with each character having personality packed into every pixel. The main character of Aladdin has many different expressions and movements. Every action really works like a cartoon. For example, when he leaps across something his baggy pants move with the air, or if you leave him standing he leans on his sword or juggles apples.

Other characters have just as much detail. For instance, the knife throwers, whose jaws drop in horror when you throw something at them resulting in their trousers falling down, or the comical snakes who slither towards you.

The backdrops create the many settings, brilliantly using different levels to make it all the more interesting as you pit your skills against the terrain. Foreground detail makes the whole thing more realistic, making for some interesting gameplay – for example, the rocks are built up in stages.

Each level creates a different atmosphere, from the dusty marketplace streets to the mysterious caves with its deadly spiked roofs.

80%

## OPINION

85%

I dread to use the phrase "interactive cartoon" but this is pretty damn close. All the elements are top notch and could quite easily pass for cartoon quality.

However one thing does worry me – it is rather too easy. I imagine this game wouldn't last some of the more advanced games players all that long. As the title is geared at the younger end of the market this is understandable, and with the addition of a difficult setting it will prolong the game to some extent.

Action is varied and the many requirements of the levels will demand different skills. One minute you'll need your best swashbuckling talents to keep the enemies at bay, the next, timing your jumps across trees to reach bonuses.

There is a temptation with licensed games to release a sub-standard product, thinking that it will sell anyway. Thankfully, Virgin/Disney have done the decent thing and released a title of exceptional quality that is a more-than-fitting successor to the original film.

For platformer fans everywhere I'd definitely recommend this. For those who prefer a more cerebral type of game, then Aladdin won't really fit the bill, but what the game does have is an abundance of gorgeous graphics, superb sound tracks and stacks of playability. A wonderful addition to the platform genre.









## Mission 1 - Objectives

Also, seek out and destroy all enemy ground units.  
There are 3 Bears: destroy all 3.



Before you start your mission, you get a detailed map of the area and information on each of your objectives



If you want some decent explosions then Zeewolf is your dream game. It's got bags of them depending on how good at shooting you are



The map screen gives you various bits of information plus a smaller and ever-so-helpful representation of the main screen



**B**inary Asylum may not be a name that's familiar to a lot of you, but anyone who has been reading the computer press with any interest whatsoever will, or should know, about Zeewolf.

A quick glance at Binary Asylum's debut and my mind wandered back to the good old days when the only piece of software that ever mattered to anyone was a beautiful little 3D game entitled *Virus*. A classic game of original and epic proportions that will forever be remembered by gamers old enough

# Zeewolf

## STORYLINE

Zeewolf is set in the future and due to the Polar ice caps melting, the world is now a sorry and very damp place. Ecliptico, a huge corporation, contributed to the disaster by cutting corners simply to make a fast buck.

The company hacked down forests, polluted rivers and dumped toxins all over the place. Ecliptico profited from every global disaster and channelled the profit into building a corporation with more military power and global influence than any superpower.

Zenith Research, a rival but smaller corporation, has cracked the secret of fusion power and created a reactor that produces plentiful, cheap energy with no harmful by-products. With this power, the world could be put back to rights once more, but Ecliptico has stolen the plans and is intent on monopolising fusion power for itself.

The only chance for Zenith to get its plans back is to use its new helicopter gunship, code named Zeewolf. There are only a few prototype units of the Zeewolf and the only available pilots are highly paid mercenaries prepared to risk their lives for huge amounts of cash.

For Earth's sake, and for the good of your bank balance, you play the part of one of these mercenaries and it's your job to fly the Zeewolf into battle against Ecliptico.



## GRAPHICS

The game is viewed from the one angle, placed just in front of the helicopter. This enables you to see the whole of your gunship, plus you get a good picture of what's going on around you.

Zeewolf is a 3D polygon game and, more often than not, these types of game suffer in the graphics department, but Binary Asylum's Amiga debut is more than a notch above your average kind of game.

The helicopter is beautifully done and moves almost like the real thing. You

won't notice this in the screenshots, obviously, but it really is a sight to behold.

The surrounding graphics are just as good and things like the huge aircraft carrier are worth a special mention. The backgrounds don't consist of much more than a few trees, but that's just fine with me as you can concentrate on the action instead.

One thing that will impress you is the explosions. They look fantastic and really add to the game because after a vehicle or building has been destroyed, a wave of black smoke bellows into the sky. This looks brilliant when you fly over the

war-zone later on in the mission and you can admire your destructive handiwork.

There are other nice touches such as the map and mission objective screen. When selected, you find that a quarter of the screen has a scaled down version of the main screen inside it.

Overall, the graphics are of a very high standard, but aren't too fantastic as they might distract you from the job in hand. If Zeewolf did have 256 colour graphics and ray-traced objects everywhere, then I get the feeling that the game just wouldn't perform as well as it does now.

**80%**

## INTRODUCTION

to know better.

Zeewolf looks a lot like Virus, but Binary Asylum has made the genius introduction of a state-of-the-art prototype helicopter gunship. Cue plenty of hot-blooded shoot-'em-up action, coupled with a healthy amount of tactics and strategy.

If Zeewolf has got half of what Virus had, then this could be what the Amiga games-playing world has been waiting for.



Hostages and scientists must be dropped off to safety. An aircraft carrier is your best bet for a drop-off point

Grab that helmet, jump in your chopper, start those rotor blades and be a co-pilot to Jonathan Maddock as he admires Binary Asylum's Amiga debut.

## SOUND

Zeewolf isn't spectacular in the sound department, but all the various beeps, bangs and crashes do their job to perfection. The chugging of your rotor blades as you fly over the landscape is basically the only noise you need.

Zeewolf is one of those games which must be played with the volume turned full up at levels loud enough to make your neighbours think you've got a full scale war-zone in your house.

The tune in the game isn't brilliant, but you only hear it at the beginning of the game and after you've completed one of the missions anyway.

I'm sure games would be improved ten-fold if software companies would spend more time on the music side of things, because it tends to get forgotten about and that is a real shame. Films have really good themes and soundtracks and the same should really apply to games, but that's enough of my soap-box ranting.

Zeewolf has some nice sound effects that do the job they're supposed to and a rather bog-standard tune. Overall you'd have to say that the sound is good, but it's not great.

67%



As well as ground targets, you can get attacked from the air allowing you to re-live those Blue Thunder/Airwolf moments



Escort duty is one of the tougher missions to complete

## OPINION

90%

Let's not beat around the bush, Binary Asylum has created one of the best Amiga debut games I have ever seen. OK, so it may be very similar in looks and style to Virus, but that isn't such a bad thing, in fact it's a very good thing.

Do you remember Airwolf? I do because, more than anything in the world, when I was a kid I wanted to sit next to Ernest Borgnine and fly that super-powered helicopter. Zeewolf is the nearest I'm ever going to get to achieving that childhood fantasy and that could be

one reason why I like it so much.

Another, far better reason could be that the game plays like a dream. Once you've mastered the controls, which to someone with a bit of intelligence is fairly easy, you're away in a shoot-'em-up world packed full of action and excitement.

Control via the mouse is a lot harder to master and I have to admit I haven't tried playing the game with it a lot, but that's because I've been quite happy using the joystick and have had no problems at all.

It is a highly addictive piece of software and there are so many good things about it that I couldn't possibly list them all, but even better is that there aren't many, if



any.

bad points to Zeewolf.

Binary Asylum can slap themselves on the back because Zeewolf is, in my eyes at least, a tremendous success. It's a game that doesn't rely on heavy advertising or publicity to sell it, but simply lets the gameplay do the talking. I have nothing but high praise for Binary Asylum's debut and it is, quite simply, one of the gaming highlights of 1994.

Publisher: Binary Asylum

Developer: Binary Asylum

Price: £29.99

Genre: Shoot-'em-up/simulation

Hard disk install: No

Control system: Mouse/Joystick

Supports: 6500/6800/61200/64000

Recommended: 68020 upwards

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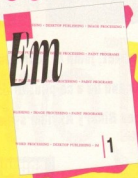
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W

hat is so special about the platform game? What can be so exciting about hopping from platform to platform while killing various evil hordes? Why when each platformer is virtually identical to the next one do gamers continue to buy the genre in their thousands?

To be perfectly honest with you, I don't know or have any answers. All I can do is present the next Amiga platform offering to you.

Renegade is one of the best software houses at producing high-quality games. Have a peek through their back catalogue and you'll find classic titles such as

## INTRODUCTION

Speedball 2, Magic Pockets, Uridium 2, Fire & Ice and Sensible Soccer.

There is a reason why the games are so good. It's simply because Renegade has had the foresight to sign up some of the best Amiga developers in the country. The Bitmap Brothers, Graftgold and Sensible Software are just a few examples.

Renegade together with developers, Wunderkind have created Ruff 'n' Tumble and it's a game that might make you think twice before dismissing the platform genre.



Rescuing your marble collection can be a risky business. That buzzsaw could prove to be a pain if Ruff lands badly



The start of Ruff's adventure and the little blonde-haired hero is tooled up and ready to rock.



Nice explosion! Ruff destroys one of Dr. Destiny's Tinhead Army and carries on the search for the missing marbles



Hey, I spot a puzzle element to the game. Pick up that key and you'll get past the fatal laser beams

# Ruff 'n'

Do you fancy a bit of rough, perhaps with a side-order of tumble.

Jonathan Maddock leaps, bounces, shoots, flicks back his quiff and admires Renegade's latest addition to the platform genre.

## STORYLINE

The hero of the game is a blonde-haired, gun-toting, cutesy kid called Ruff. While playing marbles near a mysterious rabbit warren, Ruff loses one of his precious collection when it rolls down a tunnel.

Ruff decides to get his marble back, but little does he know that down the tunnel is a teleport to another world. Ruff, dazed and confused, finds himself on an alien planet. He later discovers that the world is run by the evil Dr. Destiny. The mad doctor controls a fearsome army made up of robots called the Tinheads.

Our hero, to his surprise, also spots his marble collection lying strewn throughout the planet. Armed with a variety of weapons, including flame-throwers and laser-guns, Ruff must battle through four worlds and 16 levels to recover his marbles, and while he's at it he must also save the planet from the evil clutches of Dr. Destiny and his Tinhead Army.



On his travels, Ruff spots some extra-weaponry which is dotted all over the various levels. Good work fella!

## GRAPHICS

The words "exquisite", "superb" and "gorgeous" do not even come close to describing the graphics in Ruff 'n' Tumble. I haven't seen a platformer look as good as this in quite a while, only Magic Pockets and Gods could challenge it for graphics supremacy.

There isn't an introduction sequence for the game, surprising as they come fitted as standard for most games of this genre, but that's a good thing rather than bad as your whole attention goes on the in-game graphics.

The attention to detail in Wunderkind's platformer is very impressive. Things like the background graphics and the various explosions have had a lot of time and effort spent of them and it's paid off. The animation is

top-notch throughout, but the main "Ruff" sprite is totally brilliant and although he looks quite nice in the screenshots, Ruff comes to life when you're playing the game.

Details such as Ruff's quiff which flicks about when he runs around the screen are nice inclusions. Although these small factors alone won't make you want to buy the game outright, they do go a long way to making the game, as a whole, a more impressive product.

Put it this way. If the graphics in Ruff 'n' Tumble could be represented by a meal they would be a Sunday Roast dinner complete with all the trimmings, plus you'd also have apple pie and cream for afters.



90%

## SOUND

Most games of this ilk do make the unfortunate mistake of ruining the whole package by adding a cutesy, plinky-plonky soundtrack – the kind of tune a six year old might appreciate.

Luckily, Ruff 'n' Tumble hasn't made this mistake and although it's by no means a classic, the music is adequate enough to keep you leaping and shooting at a rampant frenetic pace.

The sound effects also do their job with plenty of bleeps and bloops when you collect one of the pick-ups. Explosions are abundant and they make enough noise to keep your attention.

In this case, the sound and effects are quite good, but during the fast-paced action you don't tend to take any notice of them. If they were missing though, I'm sure the game would suffer.

78%

# Tumble



After collecting all the necessary marbles, Ruff makes his way to the exit, only to find it guarded by a flying member of the Tinhead Army



With a bit of help, Ruff is catapulted into the sky. Grab that gun and waste those enemies before you lose your marbles forever



The hero of the game stumbles across a secret room, stuffed full of bonuses including a cool pint of Guinness

## ADDITIONAL INFO

There are four worlds in Ruff 'n' Tumble, all with their own distinct theme. The first is Fantasy Forest and Ruff must race around the woods and tunnels to rescue his marbles. There are plenty of underground sections to the game and the graphics darken accordingly.

World two is the Underground Mine. This has lots of slippery crystal surfaces and pools of molten lava dotted around the place. Keep a careful eye out for the Miner and the Drillbot.

The third world is entitled Tinhead Factory. The metallic levels feature lots of flickering lights and fatal electric fields. It's best to steer clear of the masked Docker and watch out for the rockets which will launch themselves at you, if you get too close.

The fourth and final world is Dr Destiny's Castle. The floors are littered with concealed traps and various metallic beasts. There are Knights armed with swords and shields, plus it's worth keeping tabs on the Wizard. Defeat the end of game baddie and you'll have completed Ruff 'n' Tumble.

Publisher: Renegade  
Developer: Wunderkind  
Issues: 2  
Price: £25.99  
Genre: Platformer  
Hard disk install: No  
Control: Joystick  
Supports: 640x/600, 640x/480, 640x/400  
Recommended: 9600 ops/sec



## OPINION

89%

Ruff 'n' Tumble is one of the best platformers I've played in ages. Not since the days of the Bitmap Brother's Magic Pockets have I seen a more graphically fantastic and enormously playable platform game.

What really appeals, despite the success in the graphics department, is the difficulty level. This level is set high so that even the most experienced gamer will have to spend plenty of time mastering the various levels.

Even though you're surrounded by cuteness, don't think for one minute that

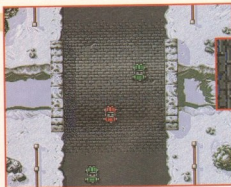
Ruff 'n' Tumble is for kids only. Older gamers will revel in the tough platform challenge.

Wunderkind has done an amazing job and seems to have got every single element of the game just right. The graphics are superb, the sound is good, the gameplay is amazing and it has an uncanny level of addiction that'll keep you playing it again and again.

Ruff 'n' Tumble is, quite simply, the cutest platformer of the year.



## Turbo Trax • Arcane Entertainment



Turbo Trax has been in development for one year and Arcane is hoping to take its overhead racing game to the very top

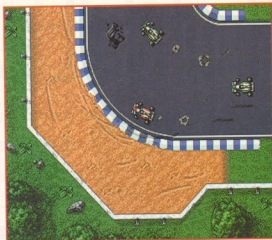
Nitro, an overhead racing game from the dark and distant past, was, as far as I am concerned, the only game of its genre that ever mattered, but all this could be about to change courtesy of Arcane Entertainment and its latest Amiga offering entitled Turbo Trax.

Turbo Trax is an overhead racing game, but it features five different types of car, 25 tracks, realistic collision detection, a shop where you can purchase spare parts and graphically it looks completely brilliant.

There will be five scenarios in which you race, including a forest, racetrack and even the ubiquitous icy track. The cars will include a sports car, a jeep, a 4x4 off-road vehicle, a dune buggy and an Indy car. Each will handle differently and will have their own advantages and disadvantages.

Arcane has been working on the game for about a year and although its not a name familiar to many, its been responsible for the graphics in games such as Syndicate and Populous 2.

Turbo Trax might receive some serious competition from Team 17's ATR, but from what we've seen and heard, Arcane may have created a racer that's already prepared to take the chequered flag this Christmas.



Packed with 25 tracks and five different vehicles to race in, Turbo Trax is going to be in hot competition with Team 17's ATR

# system preview

Sorry to remind you of it, but

Christmas is almost here. As per usual there are a whole load of Amiga games coming your way over the festive period and here is a low-down on just a couple of them...

## Valhalla: Before The War • Vulcan Software

When Valhalla was released in the middle of this year it received a whole band of mixed reviews from the computer press. The percentages ranged from the high 90's to the lowest of the low, but thankfully, Amiga gamers didn't take a blind bit of notice and went out and bought it anyway. Due to immense public demand for another speech adventure after



Similar in many ways to Valhalla, Timeslip is coming your way in March 1995 and is one to keep a careful eye on



the release of Valhalla: The Lord of Infinity, Vulcan Software decided to start work on a special edition budget version of the game entitled Valhalla: Before The War.

This prequel uses the same game engine as the original game and it is based on the Lord of Infinity's exploits before the war. It's spread over two levels of manic puzzle solving and features more speech than your ears can handle.

The game boasts a 500 word vocabulary, loads of interactive characters, plenty of atmospheric soundtracks and you get to play it all from the Lord of Infinity's point of view.

At the highly reasonable price of £14.99, this is a perfect game to ease your Valhalla hunger, at least until the proper sequel is ready which is due around Easter time next year. Another Vulcan Software title

you might want to keep an eye on is Timeslip, which will be available in March 1995, and hopefully we should have a preview of it sometime in the very near future.



The title screen from Before The War, but don't worry, you can expect this prequel to look almost identical to the original game



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## Super Stardust

Odds...  
9/2

Slick graphics are in abundance in this Team 17 shoot-'em-up. The ever-popular game play of Asteroids is employed here, combined with a mixture of superb graphics and some spectacular technical effects like speeding through tunnels.

It could be one of the best shoot-'em-ups of the year but it's up against a sports game (SWOS) and it might be at a disadvantage not having the same amount of publicity as maybe Rise of the Robots or Cannon Fodder 2. When all said and done it is A1200 and CD32 only - plus many will already have the original and wonder if it is worth upgrading to.



Technically superb graphics will ensure Super Stardust is one of the most popular shoot-'em-ups this year

## Sim City 2000

This excellent "god" game from Maxis will be converted to the Amiga for megalomaniacs everywhere. This in-depth strategy game is based on building your own city and should go down well this Christmas, especially as Maxis has already built a strong reputation for its other titles with "SIM" offerings, for example, Sim Earth and Sim Life to name but two.

Its appeal may be limited to an older gamesplayer though as it is quite a complex game, and to get the most out of it you may need 3Mb of RAM and a hard drive which could also make a big difference.

Odds...  
4/1

# system analysis

# System

Arguments broke out in the Amiga Computing office. The subject: which game will make the Christmas number one? System takes a light-hearted look at some of the games that could make it to the top spot over the festive season...



Sex and Violence make it to the computer! But it's not to everyone's taste!

## Jungle Strike

Sequel-time again. This follow-up to the immensely popular Desert Strike will follow the exploits of the madman's son, Kilbaba Jr. The setting changes to a jungle terrain but the terror continues with Kilbaba assisted by a South American Drug Lord.



But it does have some hefty competition to live up to, with Zeewolf just being released and already looking pretty spectacular. And with another war-based game, Cannon Fodder 2, on release, will it match up to the competition?

Jungle Strike, the sequel to Desert Strike, will be a must for action fans everywhere

Odds...  
7/1

## Rise of the Robots

A game backed up by a huge advertising campaign is bound to have raised the interest of many gamers and as a beat-'em-up - a genre that enjoys widespread appeal - it is bound to sell by the truck load. Rise of the Robots has the advantage of being a multi-format launch and 'word of mouth' is a powerful selling tool. So it's unlikely that there is anyone in the games world that won't have heard of this title.



And such futuristic graphics will prove popular. Mirage boasts that Rise is the "first game with a fully rendered, morphing character" and the "first game with film quality controllable 3D graphics."

Okay, with such hype and spectacular graphics it is bound to make it a firm fave with games buyers this Christmas - let's hope it justifies this with top playability as well!

Odds...  
2/1



## The Lion King



The Virgin/Disney collaboration is bringing out two Amiga releases this Winter. One is *Aladdin*, the other is *The Lion King* – Disney's latest animation based around a Lion Cub who is forced into the wilderness and finds refuge with Pumbaa the warthog and Timon the Meerkat.

Already raking it in at the Box Office, Disney's *The Lion King* will have won an receptive audience for Virgin's game license. If we were talking consoles here then quite possibly we'd bill it as a huge hit, but the discerning Amiga owner demands more than just pretty graphics. It is likely to be a favourite with many younger players though, but as a platformer its popularity may be just limited to the younger end of the market.

Odds...  
10/1

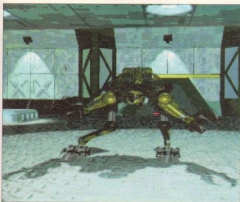
# bookies

## Dreamweb

Odds...  
8/1

Like it or not, sex and violence sell. You only need take a look at the film industry to see this. And now it hits the home computer via Empire's new adventure game. Oh yes, and by slapping an 18 warning sticker on it saying: "contains scenes of sex and graphic violence," what better selling point could you get than that?

Empire's risqué adventure received a storming 90 per cent last issue when System hailed it as "oozing class out of every digital pore." However, we're talking Christmas number ones here, so it's unlikely that any doting parent will go out and buy this for their precious offspring. It's going to be a good game but it's unlikely to make the number one spot because, admittedly, it's not everyone's cup of tea.



Plenty of hype and publicity is bound to make *Rise of the Robots* popular this Christmas

## Cannon Fodder 2

It's a strong favourite this one. It's a sequel, and like it or not they sell – whether justifiably or not. I mean, look at *Jaws* and *Police Academy*! But in this case, after seeing the game, I breathed a sigh of relief to see that it is more than worthy to be a successor of the much loved *Cannon Fodder*.

It is different enough to warrant a sequel, with new locations, new vehicles and missions. Along with the usual tanks, we have Battering Rams, Witches in bubbles, and airships – all of which can be found in their appropriate themed levels such as Medieval, Beirut, Chicago and Alien Ships.

The Sensible Software bunch have built up a good reputation for quality software so with their name stamped on the box and with the original *Cannon Fodder* selling by the bucket load, we could well see this sequel jumping off the shelves and in to the number one slot.

Odds...  
2/1

## FIFA Soccer

Appearing on many major formats, FIFA Soccer was met with great critical acclaim. Now set for the Amiga for the run up to Christmas, will it really be spot on goal this season?

It has been well received on its console counterparts but can it kick it on the Amiga. Let's hope so. Because how much more disappointment can Amiga owners take on the football sim front?

I mean, look at all the build up we had to the World Cup. Plagued by press release after press release, we were told of these new and fantastic games that were soon to hit our shelves... and what happened? They turned out to be emptier than a politician's promise.

Kick Off 3 was a reasonable enough effort but nowhere near as good as console versions, World Cup USA '94 was abysmal, Wembley Soccer was bordering heavily on average, and Sierra Soccer was impressive until you compared it to greats like *Goal!* and *Sensi*, so let's hope FIFA will be a faithful conversion.

FIFA is a strong title but it's up against the son of *Sensi*, so can it really see off the competition?

Odds...  
5/1

## Sensible World of Soccer

To say *Sensible Soccer* was immensely popular would be an understatement. For many, this was the definitive footy sim and now it's spawning a sequel. *Sensible World of Soccer* is widening its appeal by adding a whole new chunk of management action.

Real players add an authentic touch to the game with accurate names, stats and even hair colour. With over 1,400 teams and 22,000 real players, it's every footy fan's dream come true!

And yes, it has the advantage of everyone knowing what to expect from the playability. No nasty surprises there! Just tonnes more gameplay and realism. It also has the advantage of being a sports game – always an immensely popular choice! Some would say a sequel is long over due and there are many *Sensi Soccer* veterans out there anxious to get their hands on the successor to this classic.

Odds...  
evens favourite



After transporting himself into someone else's body, our hero checks out a church in darkest Medieval England

# Leg

## 00000 system preview



**After the success of Sabre Team and Soccer Kid, the world's best Rotherham-based software house returns with an RPG. Jonathan Maddock checks out what Amiga gamers have been waiting for...**

I tend to harp on about this next subject rather a lot, but I feel that it needs to be instilled in people's brains as often as possible. Everyone likes superb ray-traced 3D graphics combined with stereophonic sound, but there is no point in having them if the product doesn't have reasonable amounts of playability, gameplay and, most importantly, originality.

Most software houses tend to forget about the latter features and simply concentrate on presentation, but there is, at least, one company out there which always seems to get the combination just right.

Krisalis, a software house based in Rotherham, has built itself up over the years from small beginnings to compete with the big boys of the software industry. You only have to look through its back catalogue of games to see how many times the aforementioned combination pops up.

Shadow Worlds, Sabre Team, Arabian Knights, Manchester United Premier League Champions and the hugely popular Soccer Kid are just a handful of examples of Krisalis' astute eye for spotting and producing top quality games.

Not surprisingly, Krisalis has got another Amiga product on the way and by the looks of things it could well be its best release to date. The latest offering,

entitled Legends, is unbelievably huge. It contains four quests, loads of characters to interact with and plenty of other fascinating features dotted all over the place. From what System has seen in an early version of the game, it looks like Legends could well be one to watch out for in 1995.

The adventure is played from a forced 3D first-person perspective and yes, it does look very similar in many respects to the enormously popular Zelda, which delighted Nintendo owners everywhere with its superb gameplay and dangerous addition levels.

The comparison is just, but if you look at it properly it isn't such a bad thing. There has never been a game of this genre on the Amiga as far as I can tell, and I don't know why someone didn't think of the idea sooner. The project has been

designed and created by the same developers who were responsible for the truly excellent Sabre Team. The team has worked on it solidly for two years and that means a lot of time has been spent on fine details and the quest to get the playability and gameplay spot-on.

To give you a better grasp of what Legends is about, all you have to do is sit back and listen to the story



Wandering across the lands you stumble across a cottage which comes complete with a bridge and a delightful English country garden...

behind the game.

Set in the future, you find out that Earth has been an alien experiment all along and now the aliens have decided that our planet is too peaceful. They want to alter the course of time and thus disrupt the future.

The best way to do this is to provide inhabitants from key periods of time with sophisticated weaponry. Now tooled up to the teeth, humans from the past are tempted to wreak havoc, death and destruction upon everybody on the planet. This will, hopefully, lead to a more violent society in the future.

The aliens zapped back the hi-tech equipment and weapons to the Ancient Egyptians, the Wild West, the people of Medieval England and the settlers that inhabited China around the time of Confucius.

You play the hero in Legends and it just so happens that you have mistakenly stumbled upon the alien's plot and have decided that you should save the human race. Being a clever kind of geezer, you quickly con-

## Legends?

Where do good games come from? From the minds of the developers, that's where! The geezers responsible for Krisalis' forthcoming RPG, despite being certifiably insane, have all got good backgrounds in the world of computer game creation.

Programmer Richard Teather has previously done work on James Pond and played a major hand in the development of Krisalis' Sabre Team. One of Legends most outstanding features is the quality of the graphics. A three-man team consisting of Phil Hackney, Mark Edwards and Mark Potente are responsible for the pixels and sprites you see in Legends.

Phil takes care of all the character animation, Mark Edwards creates all the level backdrops and has designed the introduction sequence, while Mark Potente handles everything else.

Judging by the answers they gave me (none of them printable) when I asked for a bit of background, Krisalis has got its hands full with a team that belongs in an loony asylum never mind a software house.

Legends? I think it's more than likely.

# ends



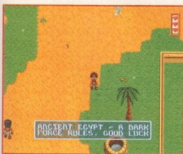
The various buildings dotted around the huge levels in Legends can all be entered and thus you can search for important objects

struct a time-machine which doesn't physically send you back through time, but instead sends your spirit and mind into one of the natives of the time period.

To get anywhere in the game you must first undertake various smaller quests. You must help out the other natives to gain favours in return. These quests can be anything from clearing up weeds to becoming a part-time odd-job man. For every task you complete you will be awarded with a useful object that will be required later on to complete either the level or the game.

## X-HEAD

Each of the levels is well-thought out and the various sub-games and quests are looking good, although a lot of them are still to be added. Legends has got cartoon-like graphics, but don't think for one minute that it's aimed at kids because the various puzzles will tax even the most experienced gamers, but not so



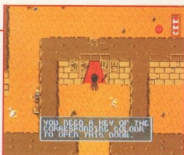
Egypt, one of the levels that is still quite a way off completion, but as you can see it's starting to look quite good

much that you'll slam the game down in disgust.

Graphically, Legends is really rather good and looking at them, these screenshots don't seem to do the game much justice. Considering the size of the product, it almost seems that Krisalis has achieved the impossible by cramming four different distinctive graphical styles into one game. Most people would be happy with a game set in just one scenario, but once more it seems that Krisalis is one step ahead of the rest.

Even at this early stage, Krisalis' RPG looks like being a winner when it arrives sometime early next year. I have whinged and whined over the years that there isn't an Amiga game on the market with the right combination of playability, originality and presentation.

Now, thanks to Krisalis, it looks like I might, at long last, be able to achieve that dream, but I'll find out for sure when the game arrives early next year.



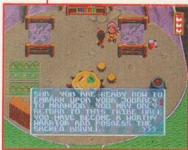
You can enter the various Pyramids, but you'll have to be careful because they're full of enemies, traps and puzzles that'll tax your brain



Have a good look around the graveyard. There might be an item hidden within to help you progress further along on your quest



The Wild West and you start off in front of a tepee. Why? It's because you find yourself trapped inside the body of an Indian



The reason behind your first quest is explained. You are the son of the Indian Chief and you must go on your journey to manhood



Because all the levels are massive, it helps to have a map with you and this is what it looks like when you use it



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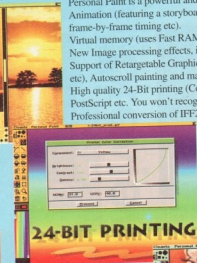
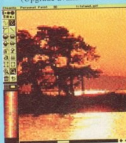
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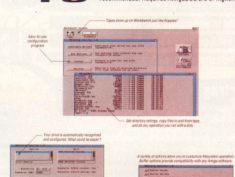
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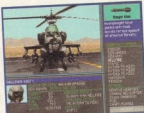
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## 00000 system essentials

Once again, System thinks of your bank balance and checks out the latest bargains. This month, Apache helicopters and Superfrogs haven't much in common, but they're both offering thrills of the cheap variety

### Superfrog

Yes, it's a platformer with a cute frog in the main role. Is there any species of animal they won't get tarted up with cartoon graphics to make the next platformer look different? I just can't wait for Arnie the Amoeba or Mickey Microbe to make their screen debut.

Never mind, because at least Team 17's effort is one of the best in the genre and it's now available for the CD32. It shamelessly follows the evil witch-dangerous

**Publisher:** Team 17

**Developer:** Team 17

**Disk:** 1 CD

**Price:** £14.99

**Genre:** Platform arcade

**Hard disk install:** N/A

**Control system:** CD32 pad

**Supports:** CD32

**Recommended:** N/A



quest-save the princess clichés, but when it comes to gameplay this one's got a lot to offer. All the usual features are there: creatures to squash, power-ups (this time it's bottles of lucozade), fruit bonuses and so on. The graphics are colourful and detailed, and the squelchy sounds as you flatten enemy creatures has a certain charm.

Whereas most platformers require the hero to travel mainly in one direction, the layout of levels in Superfrog are less predictable. Finding the exit often involves negotiating your way through underground caverns or leaping up precarious staircases towards the sky.

Another small but welcome difference is the option to gamble credits

earned during the game on a fruit machine at the end of each level. I was about as lucky on this as I am in real life, but if fortune smiles you can increase your score, win extra lives or get a level password by hitting the jack-pot.

With four levels to clear on each of the five worlds, it's not a game that will be completed too quickly. In fact I had to give myself seven lives before I could get a look in at the later screens. The theme for each world varies, with our fearless frog progressing from woodland scenes through haunted houses and beyond.

For those who have had more than enough of platformers for now, there's not enough new here to entice you back into the genre. But if you're looking for this type of thing, at this price Superfrog could well come to your rescue.



A screen from Eric Schwartz's animation that tells the Superfrog story

Shades of Mario as your frog collects on a hidden store of gold



Shades of Mario as your frog collects on a hidden store of gold

### Gunship 2000

Microprose has always been respected for the playability of its simulators, even when the graphics weren't much to write home about. However, though it's no TFX, Gunship 2000 went a long way to combining sim accuracy with slick graphics.

With a choice of helicopters, including the Apache and the Comanche, Gunship 2000 gives you a taste of what flying the most advanced chopper technology is like. With full-blown war campaigns ahead of you, your tactical and piloting skills will be tested to the limit. Attention to detail in the game doesn't start and stop in the cockpit. Every effort has been made to create an authentic atmosphere, with realistic head-quarter scenes and briefings being important parts of each mission.

As you would expect these days, there are plenty of missions to choose from. What helps to give a greater sense of realism, however, is the fact that mission objectives are often on the move and must be intercepted. This is more satisfying than taking on the traditional static installations. Another good touch is the inclusion of a co-pilot/gunner who, if you wish, will fire your weapons, chaff and flares. This is certainly a bonus for the beginner who will be struggling with umpteen keys as it is.

The 3D landscape is quite well detailed and there are more than the average number of views to choose from, so you can watch yourself disintegrate from just about any angle. As far as the sound is concerned, there's war film-style music and reasonable explosions, gunfire and whirling chopper blades; on the downside, I hope "our boys" don't have to cope with the grating electronic voice that warns you of impending doom in this game.

Gunship 2000 should keep sim enthusiasts absorbed for a long time since you shape a career for your pilots. Incentives for good work include promotion, battlefield commissions and decorations, but if you step out of line you can expect a reprimand on your report that will hold you back.

It's certainly not a game for everyone. Realism is so high that starting the engine looked a dauntingly complicated procedure. But if your looking for a challenge with depth and durability, then this has got to be a good bet.

80%

**Publisher:** Microprose

**Developer:** Microprose

**Disk:** 4

**Price:** £19.99

**Genre:** Flight simulator

**Hard disk install:** Yes

**Control system:** Mouse/Joystick

**Supports:** A500, A600, A1200, A2000, A2500, A3000

**Recommended:** 68020



76%

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# AMIGA

*An essential aid for the enthusiast, our monthly advice section returns to help you take your Amiga to its limits*

## GUIDE



### **AREXX 147**

Paul Overaa gives us the low-down on how to use function libraries for AREXX programming



### **Video 149**

Resident video expert Adam Phillips gives an explanation of some of the more confusing jargon on spec lists



### **Music 151**

This month Paul Overaa takes a look at software that will get you jamming with the minimum amount of fuss



### **Comms 153**

Phil South reflects on the problems of getting drawn into the World Wide Web



### **Amos 155**

Phil South turns psychedelic with a tutorial on coding brain warping programs



### **Publishing 157**

The process of page design is the subject of Ben Pointer's guide this month



### **System Medical 140**

Doctor Nord returns with hints on how to keep your Amiga on-line



### **Home Video 144**

The last of Gary Whiteley's series shows you how to tie the loose ends of your video together



### **Classifieds 160**

Buying, selling or just browsing, all the best Amiga bargains in our dedicated second-hand section

Well, it's that time of year again when Santa drops down your chimney and there is peace and goodwill to all men (with the possible exception of Medhi Ali). And unless Santa has bought heaps of A1200s very early on, not many people will be receiving one of those this Christmas.

But that doesn't stop the flood of Amiga-based peripherals from filling the shelves of computer shops up and down the land. However, even if you don't wake up on Christmas morning to find your stocking filled with a PAR card, 68040 accelerator or 1 GB hard disk, you might want to check out the little pressies your Amiga has for you all year round.

Pressie number one consists of a double-act called Applcons and AppWindows. These little beauties are there to make life much easier for the busy Amiga user about town. And actually quite a lot of Workbench programs make use of them.

For those of you who are reading this and scratching your heads, Applcons and AppWindows are special icons and windows onto which you can drag and

drop other icons. For instance, you can load an icon you want to edit into IconEdit by going to the Project menu, pulling it down, selecting "Open...", choosing the file you want from the file requester and then editing it, or you can simply grab the icon you wish to edit by clicking on it once with the left mouse button, holding the mouse button down and then dragging the icon into IconEdit's main window - voila!

## WINDOWS

What's even better is that IconEdit has actually got three AppWindows - the main one as well as the "normal image view" and "selected image view" - so that if you just want to change your selected icon image simply drag the icon into that window.

However, IconEdit isn't the only program to offer AppWindow support. The ASL file requester, which comes as standard with all Amigas with Workbench 2 or higher, also has an AppWindow. If you drag a drive or drawer icon into the file requester it will automatically use that path.

There are also other bits of PD software that will improve your drag and drop

# Doctor,

## DiskCopy Failure

Disks in devices Workbench and Work are not of the same size and cannot be copied to one another.

Cancel

See what happens when you try to fit a quart into a pint pot! Try opening a window and dragging the icon in there instead

capabilities such as KingCon v1.1.

KingCon replaces the CON: device which the Shell uses with its own far superior version.

KingCon offers drag and drop directory and file manipulation and a command line history that can be scrolled and even saved as a text file and file name completion. Simply type the first letters of your command or directory name and KingCon will either complete the name or give you a requester with a list of files that start with the same characters.

Another useful piece of AppWindow supporting software for Workbench 3 users is SwazInfo which replaces the Workbench Information command.

One of SwazInfo's improvements over the standard Information window is the AppWindow representing the icon which is having information given about it. If you want to change the appearance of this icon you can simply drag a different icon into this window and SwazInfo will save it.

This is very useful if you have old 1.3-style drawers on your system that you want to replace. SwazInfo's tooltipes

area is also an AppWindow and when you drag another icon into this window its tooltipes will be appended to those of the icon that information is being given about.

If you use ToolManager or ToolDaemon you will find it much easier to add new tools if you use their AppWindow facilities to drag new programs into their windows rather than laboriously typing the programs' names into the window.

## LOADING

Some programs such as ADPro or DPaint 4.5 use Applcons. These icons sit on your Workbench screen and when you drag an icon onto them, will load that file into the package. For instance, load DPaint. If you switch back to the Workbench to look for a file that would take you too long to locate using the file requester (because you know what the drawer looks like), you can then drag that file's icon onto the Applcon that DPaint leaves on Workbench.

When you do this two things happen. Firstly, the file will be loaded into DPaint and secondly, you will automatically be put back on DPaint's screen. There are



A merry host of Applcons from various programs. How festive!

Dropping an icon in this window will only replace the normal image.

Dropping an icon in this window will only replace the selected image.

Dropping an icon in this window will replace the icon completely.

AppWindows galore make IconEdit a much easier program to use.

# doctor

Anyone for a game of doctors and nurses?  
Frank Nord takes up the offer and with  
stethoscope in hand, checks out the  
health and wellbeing of the Amiga

## Those who prepare, dare

One precaution I have taken up lately is to use my trusty copy of DOPus to select all the files on a drive with today's date. Even if I have been using my machine that day, it is quite likely I will be able to tell the difference between files newly installed and ones I have been working on.

Once DOPus has selected these files, I use it's comment tool to add a comment to the file such as "This file belongs to TurboProDoodad". This helps me if ever I run out of disk space and want to free some because it means I won't be deleting files I know are used by TurboProDoodad.

Obviously it is unnecessary to tag files in the

TurboProDoodad directory itself, but LIBS, DEVS, L and FONTS are graveyards for files that have no discernible function, but which you are too scared to delete in case they are really important.

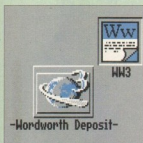
If you don't have DOPus you can do the same thing by searching through the various directories using a different file manager (what do you mean you don't have a file manager, get one immediately!) or even the Shell (using List).

If, once you have installed the software, it isn't working properly (or at all), the first thing to try is renaming your WStartup drawer (remove the W at the start) and reboot. This will ensure you are not running

any Commodities that might interfere with the running of your program.

If it works then it quite probably doesn't like one of your Commodities. So introduce them one at a time, constantly checking to see whether your program is still running. If it isn't the Commodities causing you trouble and the program still doesn't want to run properly, then your first port of call will be SnooDOS. This will tell you exactly what is being loaded when you run your program, and where the program is looking for it.

If all else fails, it might be worth either asking your dealer for advice or an exchange, but hopefully it won't come to that. Good luck and have a great Christmas!



Even word processors can now take advantage of Appleton technology

plenty of other PD, shareware and commercial programs that use AppWindows and AppIcons these days. If, in doubt, just try dragging icons into windows and seeing what happens. You might get a message saying: "This icon cannot be dropped here"

but then again you might find a new and much easier way of working.

Pressie number two: Not quite such a big pressie this one, but in case you didn't know it, if you take a floppy disk icon and drag it onto your hard disk icon you get a message saying it can't be done. However, if you open your hard disk's drawer and then drag your floppy disk's icon into it, AmigaDOS will happily copy the floppy into a drawer on your hard disk with the same name as the floppy disk itself.

It doesn't have to be a floppy disk onto a hard disk either. You can copy RAM disks, floppy disks and hard disks onto each other - size permitting. If you had a large enough hard disk you could even copy a CD-ROM onto it with this method, although it might take a while! (Of course you couldn't go the other way as a CD-ROM is always write protected, so can't have anything written to it.)

Pressie number three: Save money on buying software to optimise your hard

drive or floppies (if you have the space) by moving all the files on the device you wish to optimise onto an empty hard drive partition. Then simply move the files back onto the disk you wanted to optimise. This process reorders all the files on the disk so that they are fully optimised and defragments the remaining space.

So that's some of the nifty little gizmos that your Amiga has in store for you for the coming year, but if you should be lucky enough to hit the jackpot and get something for your Amiga this Christmas, there are a few pointers for hours of happy, trouble-free use.

## Amiga Medical Part 1



## Time spent in reconnaissance...

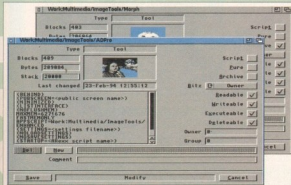
If your present turns out to be a lump of hardware, whether it be a humble mouse or a huge hard drive, don't rush to fit it to your machine. Unfortunately, people who buy technical presents aren't always as au fait with what they are buying as they need to be, and shops don't tend to be happy about exchanging a grubby mouse with no box and a plug that has been hit with a hammer to try and force it to fit onto your Amiga's mouse port.

So, check the box. Check the instructions. Check everything before you rip the parcel open and chuck its contents at your Amiga. Once you have checked that it is well and this mysterious chunk of metal and plastic is really intended for your model Amiga, open your parcel somewhere well lit and preferably unpacked - on a kitchen table perhaps (making sure the turkey's out of the way first).

Next, if it's something that needs to go inside your machine, a RAM board or hard drive controller perhaps, then earth yourself by touching a radiator pipe or one of the screws on your computer itself. When handling expansion cards, try to hold them by the edges, not touching the chips on the board, and don't touch the pins of the chips sticking through the board. That's not to say that all expansion cards are really fragile and prone to failure, but it is better to be safe rather than sorry.

If it's software you've got, the same rules apply initially. Check that the software is for your machine and that it meets your Workbench variation, RAM and disk space requirements before you open it up.

Once you've got all the disks out and the instruction manual propped up against your Uncle Albert, all that remains is to install the software (obviously some software isn't going to need installing so just ignore me, see if I care).



SwazInfo's icon picture AppWindow makes for easy updating of drawer icons





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**T**his is the final instalment of our mini "Home Video" series, the one in which we hopefully be all the loose ends together, get you started on the road to completing your own video projects and distilling the essence of your raw video footage into a viewable, coherent piece of television.

But be warned – even though this is the ultimate chapter in the series it is just another starting point on the long and winding road of video production. In video you never stop learning, even when you're earning. So without more ado, let's get on with the rest of the show.

Now that you've completed the shoot and started preparing the graphics I'd better explain what comes next (if you hadn't already guessed). Yes, that's right, it's time to do the editing.

Before you recoil in horror at the thought of having to cough up megabucks to buy a video edit suite, edit controller, broadcast-quality genlock, high-specification video monitors and so on, take a deep breath and repeat "Home video can be done on the cheap" five times.

Mind you, I'm talking about a fairly slapdash approach with two video decks (VCRs) and one which will hardly approach the quality that you see on TV, but then we're talking home movies here, not TV blockbusters.

If you want to overlay graphics onto video the one essential piece of kit you'll need is a genlock, though a cheap one will do so long as you're not overly precious about the final results.

If you simply want to intercut graphics with your video images then you could get away with using the RF output from an Amiga 1200 (or from a modulator if you don't have an A1200), though you'd be better using the A1200's (or modulator's) composite video output if you can. If you use higher-class equipment like Video8 or S-VHS then you'll obtain better picture quality if you use an S-video compatible genlock or RGB-Video encoder.

The whole point of editing is to tighten up the finished programme, to remove all the rubbish – the fluffed and badly taken shots, substandard footage and so on. There's no shame in this, as even seasoned professionals usually need several attempts to get their takes in the can (to borrow some film-making

# The final



terminology).

Tape logging involves sitting down with a pen and paper and running through all the shot footage, bearing in mind the plot or desired content of the finished programme and the order in which it will finally be edited. If, like most film and video makers, you've shot scenes out of order for the sake

of convenience and to make the most efficient use of your time at each location, you'll need to prepare a rough running order by consulting your script (if you have one) and then noting down the start and finish points of the best shots by using the

VCR's tape counter or timer to indicate the beginning and end times of each good shot.

Make short descriptions to accompany the timings so that you can get an idea of the content and camera angle, therefore helping visualise each shot. For example, you might

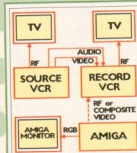
## Nothing fancy required

As for the video hardware, the minimum requirements can be as simple as two video recorders and two TV sets, though to obtain clean edits from such a setup requires patience, timing and a capability to accept that you won't be able to produce entirely accurate cuts – unless you're very lucky!

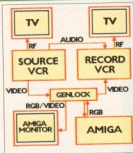
A better setup would include the two VCRs and monitors along with an Amiga-driven edit controller, such as Gold Disk's Video Director or Scala's Echo E100 system (which requires Scala MM300), both of which are quite similar in operation.

Of course, it's possible to keep adding to the list and include a third video machine, vision mixer, audio mixer etc. etc. but let's keep this within the realms of reality as far as domestic video production is concerned.

Regardless of the video setup, much of the process of video editing remains the same. The first essential step is to log your raw footage to pinpoint those sections which will be included and those which will be discarded.



This cheap solution won't give very accurate results, but with two domestic video decks you'll at least be able to get a taste of what editing is all about



By adding a genlock you'll be able to overlay captions and graphics on video to spice up your productions

# curtain call

make an entry for each shot along the following lines:

Tape 1, Shot 5.  
Start: 1358 (if you're using the tape counter)  
End: 1369  
Description: MS (which means Medium Shot) Bride and Groom kissing. Good

When you've logged all the tapes you'll not only have a list of shots but you'll also have become more familiar with the material you've shot, which can be very beneficial, especially if there's been a time gap between the shoot and the edit.

Don't forget to fully rewind the tape/s and zero the counter before you start logging each tape and be aware that the tape counter of a particular VCR will probably not tally with the counter on another VCR (unless you're using professional equipment), so you should always log your tapes on the VCR you will be using as the playback machine (or Source VCR) when you edit.

Tape logging might seem like a chore unrelated to editing video tape, but it will save time when it comes to editing as it will prevent you needlessly searching through miles of tape just to find the shot you need at a particular time.

Once you've done the log it might be a good idea to juggle it around to fit the running order of the programme, especially if you can't get it clear in your head – in other words go through the list and collect the shots into the order they'll finally be edited in.

One good method of doing this is to use "Post-It" notes and write shot information on each one. You could even log your tapes directly onto "Post-It" notes and stick them

## Literary learning

Video editing can be a long, exhausting process which demands attention to detail and a keen eye for continuity. Different kinds of shot can be cut together to evoke various moods, and I'd recommend that you read as many books on video and video editing as possible to get a good grounding in the technical and artistic aspects of shooting and editing. I've only been able to provide the briefest details here, but a trip to your local library or bookshop should soon reap its own rewards.

together into a "paper edit", along with notes about sound and graphics.

Once the tapes are logged it's time to start the editing process. No matter what editing setup you have it is always best to start by blocking a tape.

This is rather like formatting a disk as it prepares the tape for editing onto, particularly if you will be Insert Editing. If you're just going to be using a simple two VCR edit setup with no edit controller this isn't strictly necessary as you'll only be able to Assemble Edit (where each successive shot is recorded straight after the previous one), but it's still good practice to black up the first minute or so of the tape – as this is the most susceptible part to damage – with a signal straight from a video camera with its lens cap on, from a colour bar or video idiom programme (such as Zen Computing's VTClock) or with a black DPAint screen.

If you're just using two VCRs and no

genlock you'll need to either record your graphics to tape before editing or, if you're confident of your editing abilities and want to keep the quality up and don't mind a few cable swaps, edit the graphics straight in as necessary.

With an edit controller you'll need a couple of compatible VCRs which are capable of being externally controlled – using LANC or infra red control ports with the cheaper editors or serial controls with more expensive editors.

Serial control does not come cheap, so I'd advise you to investigate one of the simpler edit controllers if you fancy this method of control. Note that the accuracy of the editing will depend as much on the VCR's frame accuracy as the edit controller, and most ordinary domestic decks won't be able to get better than five frame accuracy with any reliability (that's a fifth of a second in case you're wondering).

Amiga edit controllers usually allow a list of clips to be entered and the edits performed automatically, as long as you bear in mind that source tapes need changing from time to time.

Video editing is basically an electronic copying process (for technical reasons video tape cannot be cut and spliced like film) which transfers information from the source tape to the edit tape.

Unlike film editing though, copying video material from one machine to another inevitably leads to some quality loss, which is why you should use the best quality tape for both shooting and editing and also use good quality connecting leads between the two edit machines.

If you don't have an edit controller then you'll have to perform the cuts manually,

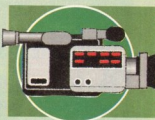
usually by lining up both tapes at the points you wish to start editing from, putting the record VCR in Pause/Record/Play, the source VCR in Pause/Play and then releasing the pause buttons simultaneously.

When the desired video clip has been transferred (or edited) the VCRs are stopped manually. It will be difficult to achieve any degree of consistent accuracy this way but it is definitely the cheapest solution, and with a little practice you should be able to obtain reasonably pleasing results.

By referring to your

The shooting's been done and the extras have been added. Now all you need to do is make it picture perfect. Gary Whiteley shows you how

## Home video Part 6

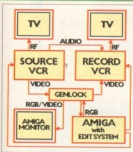


logging sheets and putting the shots together in order, you'll eventually end up with a finished programme. Any required graphics can either be transferred as part of the edit process or genlocked over video as needed.

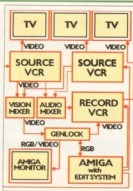
Well, that's it for now. My last advice to you is that planning is everything – planning the shoot, the edit and the graphics. Get organised, work hard, use some intelligence and you'll probably produce something good. Watch TV and learn from the professionals and above all, keep your eyes and ears open and hope that lady luck is on your side. Happy shooting!

## Contact me

Gary Whiteley can be e-mailed as [dr@gaz@cx.computelink.co.uk](mailto:dr@gaz@cx.computelink.co.uk). If you want to learn more about Amiga video why not buy his 'Amiga Desktop Video' book, published by Future Publishing.



With two frame-accurate VCRs and an Amiga-driven edit controller you'll be able to make tighter cuts in your video edit



If you want to wipe and mix between video images and include graphics and edit control, you'll need a three-machine setup with time base correction (not shown, though could be included as part of a vision mixer). This setup costs serious money





**A**lex's function capabilities, as many of you will know, are second to none: Firstly, the language allows the programmer to create their own functions from within a program. Secondly, it allows such definitions to be stored in, and used from, a separate file (as so-called external functions).

The language also provides a variety of 'built-in' AReXX functions but perhaps the most useful facility for extending the power of the language is the well-defined gateway it provides for the use of custom function libraries written in other languages.

One such library, called the rexxsupport library, has always been supplied as part of the AReXX standard environment (nowadays, two others, rexxmathlib and rexxarlib, are also provided).

Before a function library can be used, AReXX must be told that it exists and this is done by adding the name of the library to AReXX's internal library list. One way to get a library name onto the library list is to use the ndlib utility program from a Shell window. This method, however, is not flexible enough for most script use and instead it is normal practice to use AReXX's built-in AddLib() function.

The parameters expected by AddLib() are the library name, a priority value (usually 0), an offset value that specifies the library's entry point, and a version number - so a bare-bones AddLib() function call takes this form:

```
call AddLib('rexxsupport.library',0,-30,0)
```

It is normally a good idea to use the built-in Show() function to find out if the specified library is already in the AReXX library list or not before using AddLib(). Typical code therefore tends to look more like this:

```
if "Show('L','rexxsupport.library')"
```

then call:

```
AddLib('rexxsupport.library',0,-30,0)
```

After the above library adding code has been executed we would be able to use any of the functions available in the specified library.

The offset value defines the library's entry point relative to the base of the library and a lot of people seem to be curious about the magic number -30 that frequently appears. To cut a

# The AReXX librarian

long story short, this stems from the fact that when loaded into memory these AReXX libraries, like the conventional Exec libraries upon which they are built, are set up with a table of addresses called LVO (library vector offset) jump tables.

The entries are all six bytes long and because the table extends downwards from the base of the library in RAM the offsets are always negative displacements relative to the library base.

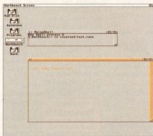
The vectors -6, -12, -18, and -24 are always set aside for special purposes. I won't bore you with the exact details of what functions are associated with these LVO values, but the upshot is that the first vector available for real library function use is the next slot above -24, namely -30.

Now for the crunch. Because of the way the AReXX resident process interacts with AReXX style function libraries, it is necessary for each library to provide a 'query function' entry point. Normally, designers of such libraries make this function the first real function of their library, so the query function's address usually goes into that first -30 LVO slot.

## VALUES

That, to cut a long story short, is why you normally see -30 as the offset parameter. Still none the wiser? Don't worry about it - just make sure you always use whatever value is quoted in the function library's documentation. One of the first things that you should do before using any AReXX library incidentally is to read the associated documentation!

Additional function libraries are also available, both as part of commercial applications packages and from a variety of public domain sources. One such library is the rx\_intui library



Jeff Glatt's rx-intui.lif can give AReXX programmers those much needed intuition links!

written by Jeff Glatt of Dissidents Software. This provides callable routines which allow an AReXX program to open screens and windows, attach gadgets and menus, print text and graphics and do a variety of other tasks. The library does incidentally also provide functions which allow you to set up IDCMP event loops.

In order to use the rx\_intui library it has to be copied to your LIBS\_ directory. The library also requires the use of Dissident's requester library (which therefore also needs to be copied to LIBS\_). A few of the rx\_intui functions, e.g. the IFF file load and save functions, need access to other Dissident libraries, but all this is well explained in the documentation.

Jeff Glatt's rx\_intui library can be obtained from most PD libraries (Fred Fish disk No.463) and it is an extremely useful library for any aspiring AReXX coder to have.

With the rx\_intui library you'll find the functions are both well behaved and easy to use. It is possible, for example, to open a window and print text into a default window on the Workbench screen simply by using the rx\_intui GetWindow() function without any parameters at all.

This month's example listing does just that, and providing a non-null window pointer is returned by the GetWindow() function, another rx\_intui library routine, Text(), is used to print some example text into the window.

You'll see that the script includes a basic 'event loop' which uses another rx\_intui library function, called WaitMsg(), to collect IDCMP intuition messages from a specified window. It works by identifying the message classes, quitting when a class 0 (CLOSEWINDOW) message is detected.

Event collection is an important topic for Amiga coders and I'll have more to say about this subject next month!

**AREXX**



There are a lot of well written function libraries available to the AReXX programmer. Paul Overaa explains the basic ideas of how these libraries are used

## A simple rx\_intui library function test

```
if "Show('L','rx_intui.library')
then call AddLib('rx_intui.library',0,-30,0)
window=GetWindow(,,,,,,) /* open a default window on Workbench screen */
if "window=0" then
do
  x=20; y=40
  call Text('JUST SOME EXAMPLE TEXT', window,x,y)
  class=1 /* force entry into loop */
  do while class#0
    message=WaitMsg(window)
    perror var message class #1 #2 #3
  end
  call EndWindow(window)
end
```



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**U**ideo equipment, just like computers, is based on high-end technology and that usually means there are terms and phrases such as lens thread diameter which may mean the world to a BBC cameraman but very little to the videographer newcomer.

While many camcorders boast their own set of exclusive features and gimmicks, there are a broad range of items that crop up on nearly all of them. These form the basic tools essential to any video-making.

To help you with purchasing decisions or in the understanding of the machine you already have, what follows is a breakdown of the most commonly featured tools.

## Camcorders

**White balance:** Light may appear to be white, but varies widely in colour, from the cold blue of a winter sky to the warm red of a candle. Unlike our brain and eyes that automatically compensate for these differences to give us the correct colours, the camcorder needs to be adjusted to balance all the colours being shot so that the camera "sees" white, no matter what the source of light.

Camcorders "white balance" in a variety of ways – some have manual settings for daylight or tungsten (light), others use white card to get a reading off and some balance automatically via a small white panel built in to the body work.

Once the balance has been done, white objects will indeed appear as white, while the rest of the spectrum is rendered perfectly.

**Auto focus:** While nothing at the moment is as accurate as human judgement when it comes to manual focusing, there are two automated systems in use that have varying degrees of success. First up is the infra-red auto-focus that uses a triangulation system which "bounces" an invisible light beam from the object in frame.

Unfortunately, this system can lead to frustrating sudden focus changes if there is any camera or object movement beyond the user's control and can be limiting to the kind of shots you can do if the camcorder doesn't have a

# View from the inside

manual option. The other system is the TTL (through the lens) image-sensing by a CCD array. Of the two systems, the TTL is less liable to be confused by surfaces such as mirrors and windows.

**Illumination range:** Measured in lux, the illumination range describes the amount, from minimum to maximum, of light a camcorder needs to operate.

Usually starting as low as five lux for a candle and moving all the way up to 97-100,000 lux for pure, sunny daylight, a camcorder, depending on the make and technology used, is happiest with as much lighting to the subject as possible, as long as there isn't too much.

Obviously, when up in the 100,000 range, most will have difficulties coping with that amount and will need the exposure turned down to avoid "burn-out." Some cameras, unfortunately, don't feature a manual exposure – just a pre-set collection of settings to flick between. The solution is to fit a neutral density filter over the lens which reduces the amount of light entering the lens to an acceptable level.

**Resolution 400 lines:** This number dictates the maximum amount of black and white lines the camcorder can distinguish. The larger the number quoted, the greater the detail in the image.

Low-Band cameras using VHS or Video-8 usually begin at 270 lines where as Hi-Band equipment achieves over 400 lines, giving a sharper and more

detailed picture (more so with the use of S-connectors).

**Flying erase head:** Not a David Lynch film (ouch!) but an erase head that is mounted alongside the read/write heads on the spinning head drum. Giving clean cuts, there is no chance of electronic disturbance.

**Synchronisation Internal Only:** An internal clock governs the scan timing of most camcorders. While this is not a problem when the camera is used by itself, if more outputs are to be mixed together as in a multi-camera set-up, the second and subsequent cameras need a genlock facility, indicated via an external sync-in socket.

**LP:** One of the most useful features to appear on camcorders and video recorders alike is Long Play – this effectively doubles the recording time of standard tapes. For best results though, try to always shoot in Standard Play because there is a quality loss in LP.

## It ain't over...

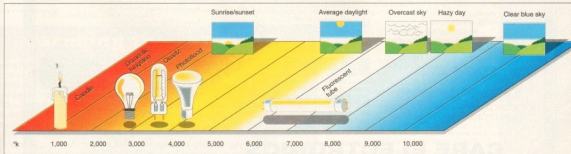
Next month, the spec breakdown continues with a closer look at sound, tape stock, lenses and more. Until then, keep shooting...

VIDEO



With all the technobabble present in video equipment spec lists, Adam Phillips cuts through to the bottom line and asks – what does it all mean?

## COLOUR SPECTRUM CHART



**Colour temperature** is the temperature to which a material must be heated to produce the light of a particular colour. The chart, measured in Kelvin (K), shows the range of differing light sources affecting video and the subsequent colours they produce. This is important when mixing daylight with any source of artificial light.

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M

idi sequencers, by offering multi-track recording and sophisticated editing, make it possible for the would-be musician to build reasonable song arrangements fairly easily. Trouble is, you still need to be able to work out and play melodies, chords, bass line and drum parts and, as many of you have doubtless found out, this is not always plain sailing.

Although working out single finger melodies on a keyboard is usually easy enough, finding suitable chords or creating drum patterns are just two of the areas where things can get tricky.

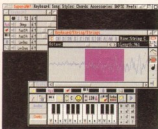
Life does admittedly get easier as you move down the Midi sequencing road because you build up collections of drum patterns and so on that can often be re-used. One option, however, that is available right from the start is to make deliberate use of ready-made song material.

Many companies, for example, provide libraries of drum tracks in Midi file form. Alternatively, drum tracks can be recorded using the built-in pre-set patterns of a drum machine. An even more powerful option became reality for Amiga users when Blue Ribbon Soundworks's SuperJAM program appeared on the scene.

Given a small amount of guidance, this excellent program can create complete musical arrangements for up to six different instruments, including those usually all-important bass, drum and keyboard tracks.

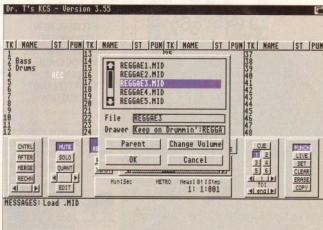
SuperJAM's music styles are composed of a series of stored patterns which define the riffs, fills, variations and breaks for each of the SuperJAM band players.

A large number of different styles ranging from country and pop/rock to classical and jazz compositions are provided and it is also possible to create new styles, although this is a more advanced area that few Amiga musicians seem to have



Blue Ribbon Soundworks's SuperJAM program really can produce excellent song arrangements

# Taking the easy way out



Ready-made drum tracks can be loaded into a sequencer and embellished by recording extra drums over them

experimented with. The mechanics of creating a SuperJAM song arrangement are essentially the same whether you are using Midi or not, although the Midi user does initially have a bit more setting up to do.

Each SuperJAM instrument can be set individually for either internal sound or Midi use and once Midi output for a particular instrument has been selected, the basic assignments for channel number and patch number (program change command) need to be made.

## SELECTION

This simply involves clicking on the appropriate channel or patch gadget and selecting a suitable value. Most Midi users will also need to edit the default drum map because SuperJAM comes set up for a Roland MT-32 drum-note assignment scheme.

SuperJAM works much the same way as a real

musician would in that songs can be created by linking named sections of music together. The first step in creating an arrangement then is to decide on how you wish to split up the song. For popular music, that usually means identifying the verses and choruses that are present and perhaps deciding roughly on an appropriate overall pattern. You might, for instance, decide on this type of format: Intro, Verse, Chorus, Verse, Chorus, Verse, Chorus, Chorus, End.

In this case we'd be looking to create at least four different types of SuperJAM sections – an intro, a verse, a chorus and an end unit (we might in fact create more than one verse or chorus in order to provide some extra variation).

Sketching out and editing sections of chords could not be easier. If you make a mistake and enter a wrong chord, just click on the section window's erase gadget and then touch the chord you want to remove. If you put a chord or a fill directive in the wrong place SuperJAM has a special 'hand' gadget which allows you to pick up the objects and move them around.

You can also change the key of all the work you've put into a section by using the up/down key transposition gadgets. Once sections have been created, SuperJAM's song window allows you to link the individual fragments together to create the finished song.

It is as well to be aware of the two primary options available for transferring SuperJAM compositions to other software packages. Firstly, if you have an Amiga-based sequencer and another Amiga machine then SuperJAM's Midi output can be recorded in real-time. Secondly, SuperJAM provides an option for saving its output data as a Standard Midi File.

MUSIC



If you find creating song arrangements hard work then you might be better off cheating, as Paul Overaa explains

## Jamming the SuperJAM

SuperJAM is of immense value as an arrangement tool but there are also an infinite number of related uses as well. If, for instance, the program was heard to be playing some particularly interesting drum parts, it is possible to mute the other instruments and then write out a few bars of the isolated drum data as a Midi file.

That would give you ready-made drum patterns to use with any other program that can read in Midi file data (e.g. most sequencer programs). Similarly, with SuperJAM generated bass lines or piano riffs, if you like certain riffs then just isolate and export them for re-use.

If you consider this as cheating in the extreme then another possibility is just to cheat a little bit – use ready-made or SuperJAM generated sequences but add your own 'creative embellishments' to them as and when you see fit.

It may surprise you but the results of this type of computer-assisted song arranging can be so good that many perfectly competent, but busy, musicians use the same approaches just in order to save time!



I know I recently told you about World Wide Web and Mosaic, and wised lyrical about how it was the future of Internet access. Well, it takes a big man to admit he made a mistake, but I did.

A lot of people are babbling on about World Wide Web these days, and you know what? I'm getting heartily sick and tired of it all. What are they going on about? I've been talking about WWW for ages and nobody paid a blind bit of notice, and then just when I'm losing interest everyone's talking about it.

Of course now it's trendy, that's why, and WWW client software like Mosaic has made it attractive to use as well as fashionable. Companies are falling over themselves to get WWW pages on Net servers, and other companies are falling over themselves to sell these other companies space on their machines. Something smells fishy, but I can't put my finger on it.

Well, the reasons this is all out of whack are historical. The basic thing is that the Net wasn't designed to be used by normal people like you and I. It was designed originally in the paranoid 70s by the US military to be an atomic bomb-proof computer network.

Later it became a system used by academics

## Line of horror

When communication standards improve, towards the end of this century (the way BT and friends do business) it will be possible to do such things with on-line services. But until then I'm telling anyone who is listening that WWW is not the answer for mere mortals.

Anyone with full Net access, leased lines and a UNIX box the size of a fridge next to their desk, sure go ahead, fill your boots with WWW. But if you're thinking that Mosaic and WWW will be the answer to all your dreams, forget it. WWW is a nightmare. A nightmare with graphics and text.

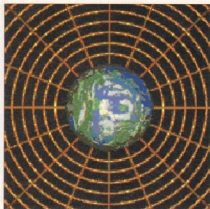
# World wide wubbish

and computer hackers at big Universities to distribute software and discuss issues arising from their work. Then other hackers became interested in gaining access, and the concept of dial-up connections, the system you and I use to access the Net, became prevalent.

But what separates us from the hackers that hackers working at a University, professors of archaeology, and scientists working at CERN don't pay for either their Net access or their phone bill. The fact that WWW is slow and expensive for very little benefit doesn't mean anything in that context, it could take all day if the information was worth it. It's even worth it for a bit of fun. But not if you're paying the bill, as we do.

A lot of ill-informed companies have gained "access" to the Net by taking out WWW pages on various machines, the idea being that you can access goods and services on the Net. What these companies don't yet realise is that people will soon tire of WWW and head off for better ways of accessing the Net.

Gopher, for example, is something which is excellent in this respect, and it is a much underused system, now that WWW has got its claws into the public imagination. Mosaic and WWW is a slow system, even when the USA isn't



Get caught up in the domains of the Web

awake and stealing Net bandwidth from the UK and Europe. Pictures and text take a long time to download into your machine, and even when it's fast, it's still not a patch on a text-only interface.

The Net is a slow beast, mainly because of the mind-bending amount of data it has to crunch every minute of every day. Sometimes it can be almost fast, but no way is it up to routine transfer of formatted pictures and text pages, as yet.

COMMS



Phil South talks about World Wide Web, how to get into it, and why on earth would you want to?

## So what happens now?

If you want to know what you should all be using, it's Gopher. As far as getting to resources which contain text, this is the best interface I can think of. You can access the same sort of servers which offer mind-blowing quantities of text all for the price of a phone call to your local connection point.

It's all a bit silly really. I wish there was a sexy windowing client software for gopher, but there doesn't seem to be one for Amiga. I can use the software on my PC, sure, but I'd prefer to use the Amiga, what with its nice multitasking OS and all that. It would mean, of course, that I could chase URLs all over the world and still use my word processor. Have any of you seen any such software for Amiga? I hope so.

If you run a really good 386 emulation on your Amiga, then the ways you can access the Net obviously double as you can use Windows client software, which by definition is much more widespread. Whether we like it or not, Amiga PD software for certain niche tasks like comms can be fairly limited in scope, appeal and quality, and often so full of bugs it feels like a biker's beard.

PC stuff, due to the larger market for such niche software, is usually more stable (I did say usually) and easier to come by. I hate this, but it's true. I just spent a week working in an office with PCs installed, working on a network with a UNIX server, and some of the comms software you can get for UNIX

and PC is amazing. It makes some of the Net software we have look pretty sick. Are there any coders out there who want to make some really cool Net software, something that works like Mosaic but has an interface like Lightwave? How about Net software which not only looks like Lightwave but uses the Picasso II (or other RTG card) to show jpeg files, and plays back AIJ and AIFF sound files. Now that I would like to see [and hear].

If you have any hints and tips, any URLs you'd recommend, any software you've found particularly beneficial, then why not drop me a line:

Phil South  
Comms Section, Amiga Computing, Europa House, Adlington Park,  
Macclesfield SK10 4NP.

Or better still send me some e-mail on these wonderful on-line services:

|                       |                         |
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| eWorld                | snouty                  |





**E**veryone loves warping and morphing, or at least that's what people who make ads think. If I turn the TV on again and see one more morph on an ad I think I'll lose my lunch. It's a cheap and flashy effect, and it means you don't have to have any ideas, so stick that in your pipe and smoke it. Mr Ad Man. What I'd really like to do is to be able to do warps and morphs in the real world, now that would be impressive.

Well now you can thanks to this skillfully crafted prank, which due to a nice little bug in the human brain-to-eye interface allows you to warp real life using this simple Amos Basic program. Simply stare at the rotating spiral image for about 20 seconds or longer, and then quickly look up at a patterned surface or a wall with some upright lines on it.

The enjoyable effect only lasts for a short while, but obviously you can recharge your eyes with another glance at the screen. (Also obviously, don't do this for too long at a sitting or you will start to strain the muscles in your eyes.)

The program itself is very simple, but most attractive, and the effect... well, you can judge for yourself how good that is. Right, let's get coding. The quicker we do that, the quicker you can get on with Warping your brain.

(Warning: do not attempt this trick if you are an epileptic sufferer, as the strobing effect may cause an attack.)

Okay, so what are we looking at? Firstly, round up the usual suspects with the screen open command:

## Any other business

Amaze me. There are some really cool things you can do with Amos, and it's only down to you thinking up the ideas really. Either come up with a really cool piece of code to demonstrate what you mean, or just send in your idea and we'll open it out to the entire Amos community, and see what they make of it.

Either way, think up something I would never have thought of in a thousand years. An electric toaster simulator, a fish on a bicycle animation, anything. Let's see how creative you are.

### Comms program

Not as hard as it sounds, although not for the squeamish. Using Liberator might be a bonus.

### Picture File Converter

Take a picture from one format and change it to another. Tricky but not impossible.

### Arcade Conversions

An Amos version of a classic arcade game. You can take your inspiration from any number of generations of the computer game, and this includes classics like Tempest, Defender, Robotron, Gauntlet, and any number of

# Amos mind warp

Screen Open 0,320,256,32,Lowres

So we've got a low res screen with 32 colours. Next we set the palette:

```
Palette
$0,$FFF,$FFF,$FFF,$FFF,$FFF,$FFF,$FFF
,$FFF,$FFF,$F,$F,$F,$F,$F,$F,$F,$F,$F
,$F
```

which as you will no doubt notice is pretty sharply divided between colours \$FFFF and \$F. Next we do the usual clear screen and flush off stuff:

```
Clr @ Flush Off Ink 1
```

Okay, fine. As this is the start of a program we need to define some variables:

```
Co=XPOS+10YPOS+123ANGLE1=200ANGLE2=200
```

Once that is done we can start the program proper. The main bit is a loop. What this does is print a polygon on the screen, rotates it, resizes it and prints it again, and this provides us with the basic spiral effect:

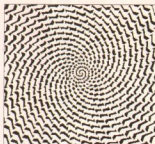
```
for ROT=0 to 2000 Ltr=T*ANGLE1+XPOS
LSP=SP*ANGLE2+YPOS SF=Sin(ROT) TR=Cos(ROT)
```

Then we set the ink colour:

```
Ink CO
```

draw the polygon as it is now:

```
Polygon XPOS,YPOS To T*ANGLE1+XPOS,SP*ANGLE2+YPOS
To LTR,LSA
```



Caption required

increment the colour, check if it goes over 3, and if it does we start again at 1:

```
Add CO,1 If CO>3 CO=1 End If
```

Do the same for the TIM variable, adding to the angle as we go to create the spiral:

```
If TIM=0 Add ANGLE1,-1 Add ANGLE2,-1 TIM=0 End If
Add TIM,1 If TIM=0 TIM=0 End If Next ROT
```

Then we close the loop and start the cycle:

```
Shift Op 1,1,3,1 Bn Loop
```

and then DO-LOOP off into infinity. Once that is done we can stare at the screen and start charging our eyes up for the effect.

Many thanks to Malcolm Lavery for his excellent spiral routine which makes all this brain warping wonderment possible. It wasn't actually what Malcolm had in mind for this program, but I happened to know this was possible from a program I once saw on a University computer - I think it was called AcidWarp.

It's entirely possible that this is exactly what Malcolm had in mind. I can't say, because I've lost his address. (Send it in again if you read this, Matt)

AMOS



Phil South looks at how to turn your brain inside out, using only a clean spatula, a copy of the Independent, and a note from your doctor

## Write a program

We've had some really good Amos programs sent in to the Amos Column, but we're getting a bit thin on the ground now, so it's time for another plea. Below are some Amos ideas for you to be working on. Send in your best shots to the address below, and we'll see about printing them.

others. This is the category I'm most interested in. Try to make a variation on the theme, and if you can cram the idea into as few lines as possible [like Aaron Fothergill's Ten Limer series] then so much the better. Make your graphics simple and your listings printable in a magazine, rather than involving a lot of sound samples and pre-drawn graphics. It sounds a lot harder than it is.

### Graphics Programs

How about a graphics program. Not just a simple paint program, that would be too easy. How about something which takes graphics drawn with other programs and turns them into something completely different?

How about something like an image processing program? Or a 3D program? Not the Amos 3D, but a modeller, which can output files in Imagine, Lightwave and Real 3D formats? That would really be something. It's a really tricky thing to make file converters, but it is possible in Amos, even without the excellent Liberator extension. (If you haven't got your Liberator extension yet, then check back to issue 79 (November) for full details.)

## 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, Ainslie Park, Macleod SK10 4NP.

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Trying out pages is what most casual users think desktop publishing is all about. Actually, it is just the tip of the iceberg, the visible part. Under the surface there is much more, the foundations upon which the visible part sits. But, as with icebergs, it is the visible part which gets judged and the submerged section is all but forgotten. Out of sight, out of mind.

So although page layout is only a small part of the desktop publishing process, it is without a doubt the most important part. That's not to say that most of your time should be spent in page layout. No way.

You always have to spend time building a strong foundation. But ultimately you will be judged by the appearance of your pages, so special care must be taken with page design.

There you go, I've said it again. Design. That's what page layout is all about. Some people have a flair for design, the rest of us have to learn it, and one of the fundamental differences in a design is whether the page layout is symmetrical or asymmetrical. The choice is a profound one.

There is no question of one being better than the other, don't listen to anyone who preaches dogma about symmetry, such people are only trying to impose their preference. The whole feeling of your page will be affected by your choice, and if your document is a book, brochure, magazine – anything that opens and has facing pages – then your "page" as far as symmetry is concerned is the combination of the two pages, or the "spread" as it is known.

The same goes for leaflets. A three-fold leaflet has two thin pages (the front and back panels when folded), and two spreads (the whole front and back when unfolded).

So the inside of the leaflet, the bit you see only after unfolding it, needs to be considered as one page for symmetry, and while two panels of the back of the leaflet can be considered singular for symmetry, when unfolded the third panel comes into play and, for symmetry, must be considered in conjunction with the other two panels.

I give you this example so you can see that the symmetry question is not always as simple as it first appears, so you should always think hard about all the faces your document shows to the world.

Most young designers don't like the symmetrical layout approach because it limits their options. A picture at top left has to be balanced with a picture at top right for vertical symmetry, bottom left for horizontal symmetry, or bottom right for diagonal symmetry. Three options, no argument, it has to be one of them. However,



**Mixing symmetry and asymmetry (left-hand page) doesn't work. Best to use one or the other, as I have here in the asymmetrical layout on the right-hand page**

## Mirror mirror

**Facing pages must be considered as a whole when thinking about symmetry. One of the easiest ways to start an asymmetrical spread layout is to run a graphic or panel across the central gutter with more on one side than the other**



there's a lot to be said for symmetry. Normally a symmetrical layout will produce a static, restful design. If the message you want to get across is of a similar nature, then symmetry is a friend indeed.

### IMAGES

For example, if you were producing a newsletter intended to pacify a situation on a local housing estate, a symmetrical layout might help to promote an image of the producers of

the newsletter being calm and in control.

Symmetrical layouts are inoffensive, innocuous, safe. Also they are always boring, so make sure you know what you are doing if you opt for a symmetrical layout.

Asymmetrical layouts are a free-for-all, which is why most page designers use them most of the time. Asymmetry permits you to express yourself, and the results are normally lively and dynamic – not the kind of image you'd want to promote when trying to pacify people, but the kind of image that gets people going and makes them want to get up and do something.

Properly designed asymmetrical layouts can also be easier to read, especially if the text is complicated or demanding, because signposts can be positioned to help the reader navigate – rules, dropped capitals, panels, pictures, tables, all sorts.

If you are building up your design skills, then concentrate on asymmetry as it will more than likely enable you to achieve the result you want. Symmetry is for experts. Indeed, when the day dawns that you can produce a symmetrical layout that other page designers say looks "different and interesting", you will know that it is time to put up your prices because you will have become a master of your trade.

## Some whites and wrongs

One of the great things about the asymmetrical layout is that it allows for a more dynamic use of white space. You should never be afraid of white space. If a page has a white hole on it, never feel obliged to fill it, simply use it to show the contents of the page to greater advantage.

Not every column has to be filled with text. So what if it runs short? For heaven's sake don't do the amateurish thing and space the lines out, so they fill to the end of that column – all this does is change the 'colour' of the text and will confuse and madden the reader. White space is a tool, just like rules and boxes and pictures and type styles, think about white space in the same way and you will become a better page designer.

Never, ever (on pain of being ridiculed) mix symmetry and asymmetry. If one page of your document is symmetrical, then the whole document should be the same. Don't, for example, produce an asymmetrical document and then slap a symmetric cover or title page on it.



Ben Pointer reflects on the processes involved in page layout and presents the best ways of designing pages

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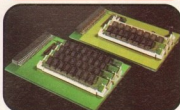
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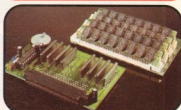
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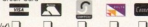
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We can supply SCSI or IDE 3.5"/2.5" hard drives in many different sizes. Including cables and installation software.

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| <b>350MB SCSI/IDE 3.5"</b> | <b>£254.95</b>  |
| <b>520MB SCSI/IDE 3.5"</b> | <b>£329.95</b>  |
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Removable storage systems from Syquest.

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## TANDEM CD-DE



For the Amiga 1500/2000/3000/4000  
Supports Mitsuma CD-ROM drive  
Supports Syquest 3.5" drives  
Supports IDE hard drives  
Play audio CD utility  
Requires Kickstart 2.04 and above  
Includes cable, software and manual

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| <b>TANDEM CD-DE CARD</b>  | <b>£49</b>  |
| <b>CD-DE A1200 CARD</b>   | <b>£69</b>  |
| <b>CD-DE CARD, CD-ROM</b> | <b>£229</b> |
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## DISK EXPANDER

Disk Expander includes the following features:

Can add 50% to your hard drive capacity  
Fast compression and decompression  
Reliable in tests - no data corruption  
Works with all drives, SCSI, IDE, Floppy, etc.  
Works on any Amiga and any Kickstart  
Once installed the program is transparent to the user

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| <b>MEGACHIP RAM</b> | <b>£159</b> |
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## MEMORY

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The high speed O40 board which installs directly into the CPU slot, not a Zorro III slot!

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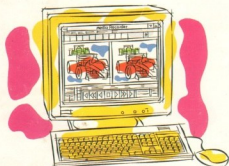
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## 2. Convert it



## 3. Use it

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