



ontents

+SYSTEM+

SYSTEM NEWS

Everthing you want to know about the future of the Amiga games market is here. Check it out now...

CHAOS ENGINE 2

Andy Maddock takes a sneeky peek at the latest offering from the famous brothers



FINAL GATE

In the past, CD32 games have never been the most sucessful but who knows, maybe Final Gate is a first



TOTAL FOOTBALL

Will Championship Manager 2 ever arrive. Let's hope it's going to be of the same quality as Total Football



XP8

I heard about this game late last year but didn't take any notice of it – but now, it's the shoot'-em-up of the year



EVIEWS

NUCLEUS

Neil Mohr takes a look at this new front-end generator, whatever that is

LASER GUIDANCE

This month, resident CD guru, Andy Maddock. looks at Scene Storm, Magic Workbench Enhancer and more

MR MODEM

A corny name, but Neil Mohr thinks he's found comms paradise



20 TURBOPRINT

Neil has also been busy this month playing with his printer and software. See what he thinks



SURF SQUIRREL

Conjuring up images of tree-dwelling rodents in rubber, this review is sure to set your pulse racing

AZ DRIVE 49

Sit back and relax with this essential tool for all you music lovers out there



EATURES

NAB SHOW REPORT 18

Harv Laser visits Vegas and reports on what he found their concerning the Amiga

Web page design 2

Amiga Computing presents a six month tutorial on Web page design, this month starting from scratch

WORLD OF AMIGA 24

Our editor says "excuse me" as he barges through the crowds at the first UK Amiga show for a while



DAILY PLANET

Nail Mohr continues his in-depth tutorial on setting up your own Internet connection



FLOPPY DRIVES

Hey, it's a dirty job, but someone's got to do it and Andy Maddock is just the lad

DATABASE_

Paul Overaa continues his expert C programming series...

AREXX BEGINNERS

...and as if he's not got enough to do already, starts a new one for ARexx

COVERDISKS

IMAGE ENGINEER DEMO V3

The latest version of this shareware image processing package that has a new front-end which gives you real-time previews for all its graphical manipulations



ESSENTIAL SHAREWARE

As usual we bring you the best of this month's Aminet uploads including

VoiceShell; PC Restore; RealDrag; SCSI List; Superview Libraries; System Prefs; Text View; XOpa; YAK; Update Copy



EGULARS

NEWS

VIScorp to buy Amiga Technologies, NewTek to launch LightWave 5, where will it all stop? Tina Hackett finds out

COMMENT

LETTERS

At last we're starting to break away from the Workbench 96 article with more letters about general themes

34

78

80

PUBLIC SECTOR

Diddy Dave Cusick is a big man in the world of PD - people send stuff to him from all over the world

ACAS

Uncle ACAS wants you to sit on his lap. He'll help you with your problem and send you on your way with a fixed Amiga

OVER STORY



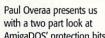
VIScorp. Who are they? What do they do? What do they want with the Amiga? The answers to these questions and more inside

If anyone ever says the Amiga's a games machine to you again, you'll know what to say to them

MIGA GUIDE



Frank Nord shows us the best way to clean our **Amigas**



AmigaDOS' protection bits

An explanation of pseudocode, its uses and purpose by Paul Overaa



The second part of the stationery piece, this time

about corporate letterhead



Phil South gives us part two of his tutorial on planning an Amos project



Steve White tells us how to make the most of text on our pictures



A review, this month, of LOOM, an experimental automatic music generator



Paul Austin puts the finishing touches to his spaceship using texturing



Our favourite man in sunglasses, Gary Whiteley, tells us all about the secrets

SUBSCRIPTIONS

For details of Amiga Computing's subscription turn to page 58





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DKB Releases WildFire 060 Accelerator for the A2000 & RapidFire SCSI-2 Controller

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Please contact Software Hut or your local Amiga dealer to place an order for one of these fantastic new products. Many dealers are accepting trade-ins on your old accelerators. Please call them for more details.

WildFire 060 50Mz Accelerator for the A2000 List Price: \$1699.00

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VIScorp seeks national representatives

n an effort to better organise the input from Amiga developers worldwide, VIScorp CEO Bill Buck has proposed that developer input be channelled through a single national representative chosen from the existing developer base of a country. So far, only a French national contact has been announced. His name is Eric Laffont and he is presently handling the entire workload of user and developer input. However, to better distribute responsibility, VIScorp has asked interested parties to come forward and take up the position.

To enquire as to how to contact your national representative, or to offer your services in this respect, contact VIScorp by phone on (001) +312-655-0903 voice or by fax on (001) +312-655-0910 fax



VIScorp seeking to employ representatives for developer countries

AVAILABLE IMAGES



processing package gets better!

Close on the heels of its acquisition of the Aladdin 4D rendering and animation package, Virginia-based Nova Design has announced that the latest upgrade to the popular ImageFX effects and image processing package will be available immediately. The 2.6 enhanced Video includes upgrade Toaster/Flyer support, a direct driver for the new Fargo FotoFun colour photographic printer, a wire-removal routine for altering wiresuspended images (such as a spaceship model in a video clip), and a set of updated and entirely new effects.

The upgrade is priced at US\$35 for all registered ImageFX 2.0 (or higher) users. Users may order directly from Nova Design at 1-800-IMAGE-69 ((001) +804-282-1157), or can be faxed to the company at (001) +804-282-3768. Nova Design also has a Web site for user support and information at http://www.novadesign.com.

OFTLOGIK GOES LIVE

Following in the much-overdue but quite welcome trend of increasing on-line awareness, PageStream publisher SoftLogik has expanded its on-line presence to include a Web site. The page, at http://www.softlogik.com, offers instant access to upgrade patches for PageStream, as well as ordering information for the entire line of SoftLogik and Digita products, for which it is the exclusive North American distributor. The ordering page includes special 'Powerup' and competitive upgrade options.

SoftLogik continues to offer free on-line and mail technical support. Other support options are explained on its Web site. For more information, check out SoftLogik at the aforementioned Web address or contact its automated mailer at info@softlogik.com. More conventional individuals may phone (001) +314-256-9595 or fax (001) +314-256-7773.



Desktop publishing wizards SoftLogik now grok HTML



by Jason Compton

Choosing a networking package on the Amiga isn't quite as straightforward a decision as it used to be, either for local networks or for getting connected to your local Internet service provider. With the commercial release of AmiTCP 4, the revitalisation of the AS225/I-Net 225 package (as found in the Amiga Surfer), and the forthcoming networking tools from companies such as Oregon Research and HiSoft, one might think the field was already too crowded.

Holger Kruse has found cause to disagree. His new TCP/IP networking system called Miami promises an easy-to-use and attractive application for getting an Amiga quickly connected via SLIP or PPP (the two popular methods of directly dialling your Amiga to an Internet provider), with the most up-to-date networking code for increased compatibility with new server software. Miami will not support SANA-II, the well-established Amiga network driver standard but will rely instead on custom SLIP and PPP drivers to better handle the dialup signals neglected by the SANA standard. As such, it will not be aimed at Amiga users looking to construct a local, Ethernetstyle network.

Miami promises to be mostly compatible with both AmiTCP and AS225/I-Net 225 applications which use the proper library calls, meaning many popular networking clients for e-mail, newsgroups, Web browsing and IRC should work with a minimum of hassle. Miami is slated for release as shareware in the summer of this year. Mr Kruse has previously distinguished himself through the authorship of other Amiga networking tools, including ppp.device, a SANA-II device for PPP connections and AmiWin, a popular implementation of the X windowing system for network connections.

More information on Miami and other programs of interest can be found on Mr Kruse's Web site, http://www.america.com /~kruse/home.html. Alternatively, you can reach him by e-mail at kruse@cs.ucf.edu.



ON THE GRAPEVINE

Following current rumours of redundancies made at Amiga Technologies in Germany, *Amiga Computing* talked to company spokesman Gilles Bourdin about the latest events. Bourdin remarked that restructuring of the company had been necessary but he couldn't say exactly how many had been made redundant. He did comment that it was close to the rumoured figure of 10 to 13.

Bourdin went on to say: "The fact that VIScorp is going to take over the company makes development redundant in Germany because they have engineers in America, many former Commodore engineers. In Germany we will be doing most of the marketing and sales. We have a big market in Europe so that makes sense, and most of the relevant engineers are in America anyway."

He continued: "It's not been decided exactly how the organisation is going to be. We're having a transition time now which, of course, has made it necessary to

shrink the company – make it more reduced to its core. The fact is that the new strategy and organisation can only be made possible at the time when the deal between Escom and VIScorp is concluded."

Amiga Computing asked him whether this meant that development is in the hands of the Americans now. He told us: "Not really, because the development in Germany has been made by external companies so actually much of the development work, both software and hardware, has been made by external people who have been recruited by us to do this. We didn't have here what you'd call a research and development department."

Peter Kittel is still in the same role however, contrary to current rumours. Bourdin finished: "He will be staying until the end of June and then maybe we can find a solution."

J OIN ICPUG

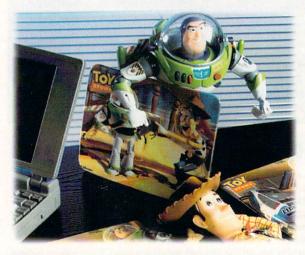
The Independent Computer Products Users Group is offering UK and BFPO members joining for the eight months from 1 May to 31 December 1996 a reduced price subscription of £17 (including 1 share). The rate for Europe (including Eire) and overseas surface mail is £20 and the overseas airmail rate for this offer is £27.50. As a member you will get four issues of the ICPUG Journal, a free PD software library for the Amiga, and all other Commodore computers, plus a free PD library (DOS and Windows) for the PC. You will also be able to use the technical help hot-lines which are available for members only.

ICPUG is a non-profit-making organisation which has been around for 18 years. It was previously known as the Independent Commodore Products Users Group and now supports most home computers, in particular PCs, Amiga, and Apple Mac plus the older machines made by the former Commodore company. Details from the Membership Secretary, Tim Arnot, 17 Colne Drive, Oakfields, Didcot, Oxon OX11 7RZ.



TO INFINITY AND BEYOND

Fans of the brilliant Disney animation, Toy Story, will be pleased to hear of the new mouse mat from Office Data. Choose from the two styles available, either Woody and Buzz or Buzz with his Pulsating Laserlight High pressure Space Vehicle. They cost £5.99 and are available from Office Data who can be contacted on 01925 820997.



Brighten up your computer accessories with this Toy Story mouse mat

LAZARUS ACQUIRES

Ontario-based company, Lazarus Engineering Corporation, has announced that it has bought all the Intellectual Property from Wonder Computers. This means that Lazarus now controls DesignWorks, PowerManager and QuickWrite, plus hardware such as the KB-10 IBM-Amiga keyboard protocol converter. Steve Cockwell, President and CEO of Lazarus commented: "Our strength is in the people around us. From our talented engineers, technical writers, graphic artists and support staff to the customers around the world that have shown their support through e-mails, faxes and letters that we have received in the past few months. It takes an entire community to make a company like this possible and we are proud to say that we are part of the one called Amiga."

MORE FROM BLITTERSOFT

Blittersoft has an assortment of new products this month. First off is its DblScan 4000 which allows the use of regular VGA /SVGA/Multisync monitors with your Amiga 4000. It upgrades the Amiga 4000's PAL/NTSC screenmodes in a way that any regular VGA/SVGA/Multisync monitor is able to show them. Priced at just £149.95 (inc VAT), it will only fit into a computer with a video slot. A standard VGA connector is used for the RGB port and if a graphics card for a pass-through option for Amiga output is being used, you can connect this to the DblScan 4000 output.

Blittersoft has also announced the release of the improved version of its Graphics Card, Picasso II. Called the Picasso II+, it has a newly designed bus-interface which offers improved performance in all resolutions and the on-board monitor switch eliminates the need for a second monitor. You can switch easily between the standard Amiga resolutions and the new Picasso Resolutions.

New features include a Vertical Blank Interrupt for smooth double buffered animation's, faster Zorro-II Bus speed and Pablo Video Encoder brightness control. The Picasso II+ uses the Cirrus Logic CL 5428 graphics chip which has an integrated 32-bit blitter and allows a maximum data transfer of 30Mb. The new version also means that with 2Mb of graphics memory you can display up to 800 x 600 with 16.8 million colours. You can also display the Workbench in 8-bit with 1152 x 900 at 65Hz (maximum non-interlaced resolution), or up to 1600 x 1200 with 60Hz interlace. Picasso II + also supports DPMS Power Save monitors.

Blittersoft also has another offer this month. If you're thinking about upgrading to

a more powerful Amiga, then it is offering a trade-in scheme whereby it will offer either £200 for an A1200 or £100 for an A500 against the purchase of a new A4000T. All it requires is that the machines are complete and working. The A4000T is priced at £1999.95 and is the full 040 version and comes complete with a 1Gb drive, 2Mb Chip, 4Mb Fast RAM plus full software packages

The company is also offering its A4000 TE for £1299.95. The machine is based on the full height Tower and has the basic mother-board, 2Mb Chip and 4Mb fast RAM but you also can decide on the processor, Hard Drive, RAM, CD-ROM (4x to 10x), Flicker Fixer and Graphics Card. This method allows the user to buy a full A4000TE system with CyberStorm 060 and 1Gb IDE Hard drive for £2120 inc VAT. Contact Blittersoft on 01908 261466.

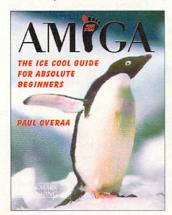
PAXTRON BUYS

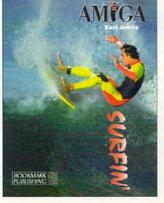
On 15 April, Paxtron Corporation purchased the entire inventory of Amiga parts and chips from Service Management Group (SMG). SMG, the sole distributor for Amiga Technologies, sold its parts inventory to Paxtron to focus on the main thrust of its business - complete Amiga systems. Paxtron is now in a strong position to be a major leader in supplying Amiga spare parts to North America. To handle additional sales a toll free line has been added - 888-Paxtron (888-729-8766). All enquiries should be to Nancy Goodman at the Paxtron Corporation. A new price list will be coming out soon for dealers and service centers.

E ASY SURFING

If you're wondering what all this Internet hype is about and want to get yourself connected but don't know how, then help is at hand. Bookmark Publishing has a new book called First Steps Amiga Surfin' which will help you transform even the most basic Amiga into an Internet surfer's workstation. It shows you what hardware and software to buy, how to configure them and how to Install and use the best Internet applications. It is written by Karl Jeacle and the concept and design is by Jeff Walker.

Also from Bookmark Publishing is First Steps Amiga. Written by Paul Overaa, it guides absolute beginners through all the basics of the Amiga using clear terms without all the jargon. It shows how to operate the Amiga and how to use the Workbench programs. Both books are priced at £6.99 and you can contact Bookmark on 01525 713671 for more info.





If you want to learn the basics of the Amiga or find out how to surf then check out the latest books from Bookmark Publishing



TENUOUS

Virtuality Group, developers of Virtual Reality systems, has licensed the technology of its Head Mounted Displays to Takara and Media Robotics. Takara has set the release date for September 1996 for the Japanese market and has priced the system at only Yen 38,800 which is roughly £230. Dennis Ohryn, Chairman of Virtuality, commented: "The agreement with Takara and Media Robotics is a major step forward. In addition to endorsing our low-cost consumer VR technologies, it significantly strengthens our position in the important Japanese market and provides us with our first exposure to the consumer." Incidentally, Virtuality once used Amiga 3000s.

BUY-OUT FOR LEISURESOFT?

Following the news that distributor, Leisuresoft, has gone into administration, it has now emerged that around 50 firms have expressed an interest in buying the company. The administrators are known to have put Leisuresoft up for sale and will sell if it will benefit the company. One company rumoured to be interested is Anglo Corporation, the same people who saved SDL last year when it also fell into financial troubles.

SAW A

Is your mouse passing on into the twilight of its years? Fear not because Golden Image has an attractive offer to take your old mouse off your hands and exchange it for a brand new one. Even if yours is completely done for they will offer you their Megamouse-Plus for £9.95 (including Post and Packing) instead of the usual price of £15.95. The mouse features an eight foot cable and three active buttons. However, the offer is only available for orders placed in June and July 1996. Phone the enquiry line for more details on 0181-900 9291 (Mon-Fri, 9am-6pm).



Swap your old mouse for new

S HOW OF SUPPORT

The World of Amiga Show which took place at the Hammersmith Novotel last month was hailed as a huge success, attracting a crowd well over the numbers that had been expected.

According to those trading, their turnover during the two days was around £500,000 and on the first day a record number turned up in just three-quarters of an hour, meaning people could only get in when others left.

Following this success, a Christmas show will now be considered. For more details about the World of Amiga show and the exhibitors who were there, see our full report later on in this issue.

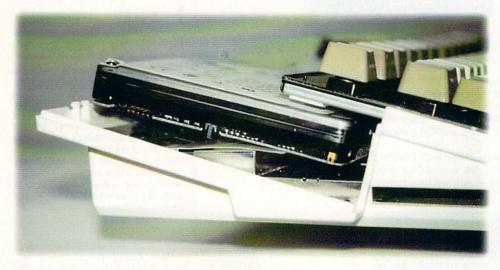


GOING SPARE

Hawkes Technology Limited has been appointed by Amiga Technologies as spare parts distributor for the UK. HTL is stocking the full range of parts for the Amiga and its strategy is to work through Dealers and encourage end users to make contact with their local independent retailer. It wants Dealers to register with the company so that it can refer leads for parts sales to them.

Managing Director Terry Maguire has a long connection with the Amiga, going back to his time at Commodore UK as Head of Customer Services. John Smith, UK General Sales Manager for Amiga Technologies commented: "We are very pleased to introduce this new support arrangement particularly as it is structured to provide the independents with the opportunity of maintaining contact with the user community."

DRIVE IN AN INSTANT



Eyetech's drive can be fitted in less than three minutes

Eyetech has a new package which is designed to make fitting a hard drive quick and easy. Their InstantDrive 1.1/1.3Gb AV hard drive/installation package for the Amiga 600 and 1200 needs no modifications to the case or shielding and requires no drilling of holes to mount the drive. The kit also comes with anti-static protection for the installer and a 36-page booklet of pictorial instructions.

The InstantDrive package with 1.084Mb AV hard drive

is £219.95 inc VAT whilst the package with a 1.283Mb AV hard drive is £249.95. Both come with Workbench 3, utilities, MMe pre-installed, cables, anti-static kit and insulation. Eyetech reckons it has fitted the drive to an A1200 in less than three minutes and regarding warranty implications, it says that as the InstantDrive package does not involve any modifications to the Amiga it will not result in any unexpired warranty being void if fitted according to the supplied instructions.



READ ALL ABOUT IT

The greatest of all Amiga mags, Amiga Computing, is online and jam-packed with all the latest news, views and reviews. We now have an on-line chat area too where you can talk live to the infamous Vost, Maddock, Mohr and myself. Or, if we're not there, chat amongst yourselves.

We'll also be bringing you the latest news updates to keep you informed of the very latest in the Amiga world. Go to http://www.idg.co.uk/amigacomp/ to get the lowdown. Commenting on the site, Editor Ben Vost said: "It's great – I wrote it."

LIKE DRIVING IN MY CAR

With the rush of people all trying to get their driving test through before the new written exam comes in this July, there is now no need to panic if you do have to take the dreaded new test. The Driving School BSM has come up with a Web site designed to build up your confidence before the all-important day. It gives examples of the theory test for you to sit and also tells you if you have passed at the end.

Managing Director for BSM, Richard Glover commented: "Part of the fear of the new theory test is that people don't know what to expect. BSM's new Web site offers users the chance to experience sitting the new exam at the 'Test Centre' and to familiarise themselves with questions similar to the real thing." The site also contains additional information such as driving tips and a forum for users to discuss any motoring issues. It can be found at http://www.bsm.co.uk

NET ADDICTS

New research carried out at a New York university has found that out of 400 Net Surfers, 46 per cent lose sleep because they're too busy on the Web. They confessed to whiling away the small hours surfing and that sometimes they were only getting four hours sleep because of it. Just like Neil.

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ah! The Amiga's just a games machine...", how often have you heard it said? But let's reappraise the situation now, halfway through 1996. Who plays games on their Amigas anymore? And how many of you look on in envy at Rebel Assault II, Duke Nukem, Quake, Lost Eden, etc., etc., etc.... The truth is out there, the fact of the matter is that the PC is the games machine now, not the Amiga.

It's not the Amiga's fault, it's just that games publishers perceive that the PC games market is so much larger than the Amiga market that they are no longer bothering producing Amiga titles. There is also the perception that most Amiga users have the bare minimum in hardware, you know the standard A500(+) or A1200, with no hard drive, and certainly no added RAM.

The truth of the matter, as we have discovered from our survey, is that over 90 per cent of Amiga owners actually have a hard drive, and the average amount of fast RAM is extremely high at just over 7.5Mb! Nearly half our readers have CD-ROM drives, also negating the idea that games that are too large for floppies are too large for the Amiga. There are certain instances, like LucasArts' Day of the Tentacle and Full Throttle, that would lose nothing in conversion to the Amiga, yet our market is ignored. Okay, most of our readers only have a 68020 or 030, but that is still fast enough for the simpler Doom-type games, as has been proved amply by the likes of Breathless and all those other dungeon hashers

The really stupid thing is that with the



graphic adventure games like Full Throttle or Sam & Max Hit The Road, there is very little work that needs doing. The core game engine might need porting over (although SCUMM, the LucasArts' game engine, existed initially on the Amiga anyway), but after that it's just the graphics and sounds that need changing. The AGA Amigas make a large portion of total Amiga ownership and they are all capable of displaying 256 colour screens. As for the sound side of things, well the Amiga has always had reasonable sound, better even than some PC sound cards (even today), and there's certainly nothing in a game like Full Throttle that Paula, the sound chip, can't handle.

Then you can point to the Gallup software charts which still consistently have Amiga games like Worms and all the varieties of Sensible Soccer in the top ten and you just

The **Amiga** was much maligned in the past as a **games** machine, but the tables are turning now

have to ask yourself why these companies aren't putting out Amiga versions of their games. Perhaps they aren't aware of the slightly more pokey status of the average Amiga these days and just assume that all CD sales would be on the CD32, which, let's face it, is not the ideal Amiga. I guess, once again, it's up to us. If you're on the Internet, why not point your browser at www.lucasarts.com and mail them your request at lucasarts 3@aol.com. If you don't have access to a modem, why not send them a postcard asking for the software you want to see. LucasArts' address is: P.O. Box 9367, Canoga Park, CA 91309-0367, USA.







Full throttle could be ported to the Amiga easily, but...

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Before you even think of putting the coverdisks anywhere near your computer you should make sure you write protect them by moving the black tab in the top corner of the disk, so you can see through the hole. Doing this makes sure you cannot damage your disks in any way. There is no reason why the coverdisks need to be written to, so even if the computer asks you to write enable the disks, don't do it.

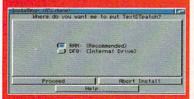
To extract any single archive, simply double-click its icon and follow the on-screen instructions. If you want to quickly extract the program to RAM, select the NOVICE level on the welcome screen and press proceed once on the current screen, and then again on the next. The program can then be found in your RAM disk. Normally most programs need further installing, so read the documents on how to do this.

HARD DRIVE

Hard drive users do not have to boot with the first disk, but you must make sure you have the Amiga's Installer program in your C drawer. To make sure your hard drive has the correct files in place, double-click on the SetupHD icon. This will check if you have the Installer program and if not will copy it across – do not worry as it will not write over any existing files.

All you hard drive owners will find MultiExtract very useful. It is a separate method of extracting the coverdisk files and allows you to extract a number of files in one go, to your hard disk or RAM.

When you run MultiExtract you will be presented with a number of check boxes, each representing one of the programs on that coverdisk. Just de-select all the programs you do not want extracting and then press proceed. All the selected programs can now miraculously be found in the selected destination.



This is MultiExtract for all you sensible people with hard drives



Image Engineer is back. Meaner, leaner and looking quite sharp to boot

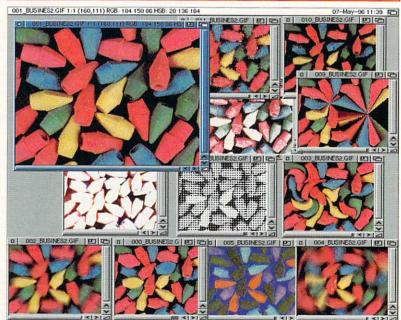
INSTALLING IMAGE ENGINEER

Before you can use Image Engineer you need to have SuperView installed on your machine – if you used Image Engineer from our Christmas issue you do have an old version of SuperView but you should still install the new version from our coverdisk as there are a few bug corrections and more features. SuperView is a set of libraries that allows Image Engineer to load and save a large number of different file types, so toddle off and install SuperView and come back.

To extract the Image Engineer archive off the coverdisk you should boot up your machine as normal. Once Workbench has loaded, put the first coverdisk in your floppy drive and double-click on the 'AC' icon. If you have not used an *Amiga Computing* cover disk before, or you do not have the Installer and Lzx programs on your hard drive, you will need to double-click the *SetUpHD* icon.

Using the normal Amiga Computing installer you can extract the Image Engineer archive to wherever you like, and once this is done you will have to install the program to a permanent location on your hard drive – there is a installer to do this which you should use. This will copy all the files in to a drawer as well as copying the BGUI library and setting up an assign.





With Image Engineer's built-in effect modules and ARexx port a multitude of image processes are at your disposal

SHAREWARE

Many of the programs on the second cover disk are what are commonly known as Shareware. Such well written programs take many hours to write and a lot of hard work and dedication on the part of the programmer.

When a program is called shareware it means the programmer has generously allowed you to try out their program, a lot of the time with no restrictions, and if you then decide you like it you are obliged to send the author the shareware fee.

Normally this is no more than ten pounds and in return the author will usually keep you supplied with the latest version of that program, along with their undying grattitude of course. So please don't forget to send your fee.



IMAGE ENGINEER V3 DEMO

Author: Simon Edwards Workbench 2.04 68020 processor Hard Drive

Image Engineer is one of the most impressive public domain programs I have seen in a long while. An Image processing program in the style of Image Studio, this latest version of Image Engineer takes all the features and functions of the earlier version and adds a new front-end, making the whole program much easier and straightforward to use.

Thanks to the use of BGUI all the effects that Image Engineer performs can now have full colour or greyscale previews, so you can get a very good idea of what the final image will be like without having to go through the whole process. Thanks to the new modular design, new processes can be added at a later date, making Image Engineer even more expandable than ever before, and thanks to its ARexx interface complex multiple processes can be automated, allowing a process that would normally take many steps to be done with a single command.

With the use of BGUI and the new modular design, Image Engineer allows you to define exactly what extra menus you want. As standard you get the normal Project and Image menus that you cannot change, but from the Menus option in the prefs menu you can add as many new menu items or menu sub-item entries as you like. These can then run either a module, ARexx script or internal Image Engineer ARexx command.

If there is a function you use a lot you can

even apply a hot key to it for instant access. An extra function provided by the menus is that if you regularly load/save from/to the same directories these will be added to the load/save menus so you can choose them without having to go through the same directories every time.

Possibly the best new feature for version three is the introduction of previews to just about all the effect modules. When you select to use an effect a scalable window will appear that contains a thumbnail version of the current image, along with a close-up preview of what the final effect will be like. You can select any area of the thumbnail to view and the close up view will be updated. Also, as you change the various values of the effect these will also be displayed in the close-up preview.

Most of the effects have this dual display and if you have one of the faster 030 or 040 accelerators the previews will be in real time. On a 020 you will normally only have to wait a couple of seconds at most, and as a preview is progressively displayed you can get an idea of the finished effect virtually straight away. Colour effects such as gamma and contrast only have the thumbnail preview, and even on a plain A1200 take effect in real time and allow you to make adjustments until you are completely happy before committing to the effect.

FAULTY DISKS

If you should find your Amiga Computing CoverDisk damaged or faulty, please return it to:

TIB Plc, TIB House, 11 Edward Street, Bradford, W. Yorks BD4 7BH.

Please allow 28 days for delivery

IMAGE ENGINEER MODULE FEATURES

Image Engineer has over 30 individual effect here is a selection

AutoCrop – quickly remove background Brightness – change brightness of an image

Bulge – bulge in or out part of an image Composite – create composite images from 2 sources

Convolve – apply a user definable convolve to an image

Displace – move the pixels in an image under the alpha control

Equalisation – optimises the image's histogram to improve clarity

FalseColour – apply false colour to an image

Gamma – adjust the gamma levels of an

image

Halftone – halftone the image under

alpha control

HighBoost – highlight fine details in an

image

HighPass – extract the fine detail from an image

Histograms – display an image's various histograms

LocalStretch – highlight the detail in an image

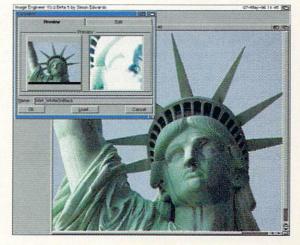
Maximum – filter an image using the greatest pixel value

Posterize – applies a posterize effect by reducing the colour range

Rotate - rotate the image

Twirl - twirl a part of an image

Convolutions are completely user definable



AMIGA COMPUTING

SUPERVIEW LIBRARIES

Author: Andreas Kleinert Workbench: 2.04

Before you can use Image Engineer you need to install the SuperView libraries onto your system. The SuperView libraries are a collection of Amiga run time libraries and modules that allow other programs that support SuperView to easily load, save, convert and process images with the minimum of ease. This allows programmers to concentrate on perfecting their program without having to worry about supporting every different type of picture format out there.

We have been given special permission from the author, Andreas Kleinert, to distribute a cut-down version of the original SuperView library. Please note, the archive found on this month's cover disk is a special version solely for Amiga Computing users and it cannot be re-distributed by any other means, public domain or not. A full version of the SuperView library can be found on Aminet.

Installation of SuperView is very straightforward using the standard Amiga installer program, Even though you must make sure you have the Installer program in your C directory. If you are not sure whether you have or not, double-click the SetUpHD icon on the first coverdisk and this will make sure you have the Installer program and Lzx.

PCRESTORE

Author: Mikael Nordlung Workbench 2.04

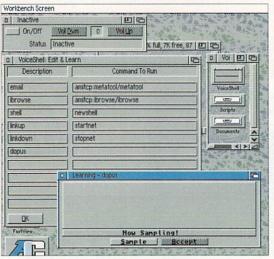
This is a really helpful program for anyone who regularly has to go near the good old PC. Normally, unless you are in the privileged position of having access to a PC and Amiga with a SCSI interface, or something like a spare Zip drive, when transferring programs from the PC to the Amiga you are stuck with the biggest file you can transfer between the two machines being 720k.

What you need is something that allows you to back up a load of files from the PC onto as many PC floppies as it takes. Well, on MS DOS there is a command called Backup that is for backing up your hard drive. PCRestore is an Amiga program that allows you to restore these PC backup files, so you can back up as much as you like and then take your fistful of disks over to your Amiga and get back all the files.

Even if the files you are dealing with are smaller than 720k it is a lot easier to simply save all the files in one go than having to try and fit them all on separate floppies. Unlike the PC command, the PCRestore program comes with an easy to use frontend, so all you have to set up is where you want the programs to be extracted to.

VOICESHELL

Author: Toni Blinnikka Workbench 2.04 Sampler



Using VoiceShell you can make people think you are going mad by talking to your Amiga all day

If you own a sampler this program will be of interest to you. Basically, it allows your Amiga to learn and recognise your voice, allowing you to run programs by saying what program you want.

Unfortunately, VoiceShell does not come with an installer so you will have to set it up yourself. Luckily this is not too bad because you will only have to copy the voice library into your Libs drawer, and if you are Finnish there is a language file that you should copy into the Locale/Catalogue/ Suomi drawer. As standard, VoiceShell has direct support for the Perfect Sound, Audio Master and GVP DSS

8 samplers. If you do not have one of these then there is a generic sampler mode that will work with most other samplers such as the TechnoSound sampler.

To enter a new command, select the Commands from the Edit menu which opens a window into which you can enter new commands. If you type in the command you want VoiceShell to recognise, this opens the learning window and if you hit sample and say the word into your microphone VoiceShell will attempt to learn the word. You are best doing this a few times as this gives VoiceShell a clearer idea of how you say the word.

Due to the learning system, VoiceShell is only going to be able to recognise one person at a time because everyone has their own way of pronouncing words and their own accent. So if there are a couple of people using the same machine you will have to have a separate preference file for each person.

this gives VoiceShell a clearer idea of how Due to the learning system, VoiceShell is time because everyone has their own wa if there are a couple of people using the preference file for each person.

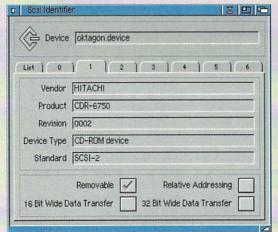
SCSI LIST

Author: Richard Sellens Workbench 2.04, Magic User Interface



To use the following program you need to have the **Magic User Interface v3.2** or higher installed on your system. Without it you will not be able to run any MUI program. MUI is available from any good PD house.

A problem with hooking up new hardware is that once connected, if the thing does not start to work straight away you can never be too sure exactly where the problem is originating. It could be a software problem, an incompatibility problem, a jumper setting or just that you have not connected the damn thing up correctly. This is also true when adding new devices to a SCSI chain, but SCSI List will help you figure out what devices you have connected and



what they are.

Due to the different
SCSI cards and interfaces
out there, SCSI List will
need to be changed to
look at your SCSI interface. Be it a Squirrel,
Oktagon card or whatever,
you will need to alter the
DEVICE tool type in the
SCSI List to the device you
are using.

If you need to check what is on your SCSI chain, SCSI list can help

REALDRAG

Author: Stuart Monteith

RealDrag is a tiny little program that is completely straightforward to use. Just extract it off the coverdisk and double-click on it, and if you now hold down the Ctrl key and select a window with the mouse key you can move the window around without using the title bar. Okay, so it is not exactly going to set the world on fire but it means you can easily move windows without having to shuffle other windows out of the way. One effect of RealDrag is that you can click once in the window and then click again where you want it to appear.

SYSTEM PREFS

Author: Richard Korber Workbench 2.04

Workbench 2 introduced the current preference system along with the, then, new preference program that allowed you to control and tailor all the different parts of your Amiga to your tastes and requirements. One area that was skipped over, however, was some sort of control over the actual hardware such as the CPU, memory and custom chips. You had control via the CPU command but this has to be used from the shell which you would have to run every time you started your machine.

System Prefs does exactly this job and fills the gap left by the current batch of system preference programs. It is really more of use to power users with accelerators or A4000s. You can set which caches should be used



With System Prefs you can now adjust all your CPU caches

and other such things. An installer is provided and will copy the two main System Prefs programs across along with a couple of libraries.

You will, however, still need to add a line to your Startup-Sequence. If you open a shell and type ed s:startup-sequence you need to add the line SysPrefs >NIL: somewhere before the IPrefs command.

XOPA

Author: Axel Dorfler Workbench 2.04

It is one thing that you should not have to do but every now and again it is helpful to have a nosy at just what is going on in the inner workings of the operating system. XOpa is a system monitor very much along the lines of ARTM.

Using XOpa, every private little nook and cranny will be at your finger tips and available for you to play around with. You will be able to find out details of every task and program currently running, every screen and window, libraries, fonts and devices, along with other esoteric details.



Now you can find out loads of stuff you never wanted to know

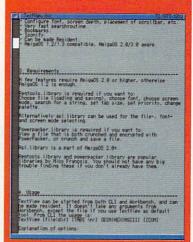


TEXTVIEW

Author: Torbjorn Andersson Workbench 2.04

If you are looking for a replacement for the horrid old More or just an ultra fast text reader, TextView could fulfil all your requirements. It's fairly small and can load and even save large text files in a blink of an eye.

It is all very configurable. You can run TextView on its own screen or as a window on any public screen. Any font can be used and you can even set where you want the scroll bar positioned.



lf you are looking for a darn fast text reader TextView is for you

YAK V2.12

Author: Workbench 2.04

Yak is one of the older system 'enhancers' and has been around for a while now. Instead of taking the MCP or MCX approach of trying do everything, Yak just concentrates on a few main functions but gives you a lot of options. Along with a very configurable mouse cycling section that gives you plenty of control over your windows, you also get a very comprehensive hotkey support that lets you do almost anything you want.

There is a new digital clock and plenty of miscellaneous options that are all adjusted from an easy-to-use preference program. Yak comes with an installer that copies all the correct files across. There is a BGUI version of the preference program that if you have installed Image Engineer you will be able to use.

Preferences : Yak 2,12		
Windows Activation Key Activate MMB Activate	✓ AutoPoint AutoScreens:	#?
RMB Activate	AutoPoint delay:	2
Screens Activation Screens Activation	AutoPopToFront AutoPopToFront PopWindows:	
Mouse Cycling	Blanking	Digital Clock
Edit Hotkeys	Miscellaneous	
Save	Use	Cancel

he National Association of Broadcasters (NAB) annual convention was held in Las Vegas, Nevada, on 13-18 April. Attracting over 93,000 attendees, NAB is a combination of dozens of 'conferences' (industry and insider speeches, panel discussions, seminars and luncheons,) and nearly a million square feet of manufacturer exhibits. It's impossible for any one person to actually see everything at such an exposition, and I didn't even try, not only because of the distances involved, but because NAB tries to cater to so many diverse fields of interest, no one person would even want to see it all. Well, unless you're Ted Turner.

This convention's focus is radio and television broadcasting, so the topics and exhibits really run the gamut from anything and everything even remotely associated with those industries. Some of the conferences included 'Radio Station Management', 'Broadcast Engineering' and 'Broadcasters Law and Regulation'. News crew cameras were present everywhere and NAB daily generated many hours of its own television show with interviews and exhibits coverage. This show was broadcast both on monitors inside the convention halls and on special channels to a couple of dozen of the larger Vegas hotels where attendees stayed.

The NAB exhibits featured nearly 1,000 companies and, for the first time, the immense Las Vegas Convention Center could not contain it all, so it spread into the nearby Sands Expo



LightWave Pro spinoff Alpha Visual FX deals with graphics software for DEC Alpha-based machines

MONEY SPINNER

You'll remember a couple of years ago, some NewTek management, including VP Paul Montgomery, engineers and PR people left Kansas for Sacramento, CA and merged with Digital Creations to form Play, Inc. They've been living off the profits of their incredibly popular Snappy PC video digitizer since then, and Play again showed its 'under \$10,000' Trinity video system, the alleged Toaster-killer. Trinity's real-time ADO effects are truly astonishing, and its new alliances with Microsoft and Softlmage makes for even more impressive publicity, but they showed the Trinity prototypes at last year's NAB and it's still not shipping. When it does, though, the Video Toaster is in for some stiff competition.

Broddast

NAB show and discovers how the **Amiga** is becoming part of the new media of the future

The new trimmer NewTek looks

Center as well. On the exhibits floor, you could see the latest state-of-the-art technology ranging from huge displays of a TV news

helicopter equipped with rotating camera pods, to radio station amplifiers, mics and control boards, motion control film cameras, mobile audio, cellular, the new Digital Video format, computer animation software and hardware, non-linear editing, right down to single table displays of such mundane accoutrements as cable tiedowns, amplifier tubes and labels for tape reels.

As with other recent announcements are anything 'Big Vegas Conventions' (CES,

COMDEX, etc.) the Internet has become a player at NAB and this year it featured a special pavilion hosting some large on-line services, smaller providers, Web vendors and developers, and computer vendors who make the hardware to tie it all together. Many exhibiting companies seemingly have unlimited funds to attend these trade shows. It can easily cost a company up to \$200,000 or more to haul a few dozen employees to Vegas and host a large booth, and many of them might show at ten conventions each year.

After reading a handout in the press room of the security checks a reporter was required to go through to attend a speech by US Vice President Al Gore, I decided to forego that treat and, instead, wandered about the huge exhibit halls, concentrating mainly on the 'NAB Multimedia World' at the Sands Expo Center which contained the exhibits that the readers of this magazine would probably find most interesting.

Between the \$3 cans of Coke and the \$5 hot dogs, there were some technically appetising attractions. Although I had hoped it would be otherwise, the Amiga was not much in evidence at this year's NAB. VIScorp, who by now you know as fourth keeper of the Amiga flame (after Amiga Inc., Commodore, and Escom) had planned

to attend NAB, but its public relations officer sent me e-mail and told me that it had decided instead to ship its executives off

to Europe for the recent WOA show in the UK and to Germany for discussions on its planned purchase of Amiga Technologies GmbH from Escom. Amiga Technologies appeared last year at VTU Expo in Hollywood, and COMDEX in Vegas, but since then has not appeared at any other US-based trade shows. Hopefully, that will change. Perhaps I missed others, but the



Bigger and bigger than ever, NAB 96 wasn't better as the ratio of Amigas to other machines gets smaller



O LightWave 5 was NewTek's shock announcement at NAB, but when will the Amiga version arrive?

only Amigas I noticed were at NewTek's large booth, and the mostly-an-Amiga at Draco Systems' small area. Near the back of the Sands hall, I found AMG Media, (http://www.portal. com/~amg), where the publishers of Video Toaster User and LIGHTWAVEPRO handed out free copies of its newest publication, Alpha Visual FX magazine, a glossy, 42-page periodical whose purpose is to 'focus on 3D animation, graphics and video applications running on high-performance Windows NT systems built around the Digital Alpha microprocessor family.' Since NewTek's products are no longer Amiga-specific, it makes sense for a publisher who mainly covers those products to branch out too. NewTek's area, while large, seemed to contain a lot of empty space.

STAGE SHOW

Ringing the perimeter were individual stands featuring all the computer systems on which one could run LightWave 3D, or into which one could shove a Toaster or a Flyer system. The central area held a small stage, backed by a number of monitors, and a desk at which various NewTek engineers demoed its products to an audience seated on small, uncomfortable stools

NewTek can still give a good demo, and LightWave has really made a name for itself as the 3D rendering tool of choice for many production houses, so the booth was constantly crowded. Off to one side was a bright red phone booth with a direct telephone

connection to NewTek's offices back in Topeka. Kansas. From inside this booth, one could order or upgrade to LightWave 3D version 5.0, the biggest surprise NewTek sprang at NAB. LightWave 3D's new list price for all platforms is now \$1495, upgrades for \$495, and the Amiga version upgrade for \$295. Intel and DEC Alpha versions are shipping now, with the others to

In a somewhat surprising move, NewTek also announced a port of LightWave 5.0 to the PowerMac platform (to ship later this year), and in another press release unveiled a "technology alliance" with Sun Microsystems, with a Sun port of LightWave 5.0 involving Java technology forthcoming. LightWave 5.0 is literally bursting with new features, far too many to list here, including over 50 new plug-ins, so check out NewTek's Web site at http://www.newtek.com, the LightWave Internet mailing list, and LightWave Usenet newsgroup for tons of information and specs.

The most significant new LW features demonstrated at NAB were probably the 'OpenGL' real-time camera and lights preview modes in both Layout and Modeler (unfortunately, not available in the Amiga version), and 'MetaNurbs' in Modeler (for all versions). MetaNurbs is an extremely cool and powerful new modelling addition, effectively turning your polygonal model into a lump of clay. I watched a live demo of this

where a simple cube was pummelled and pounded into both a hair dryer and the head of a rabbit in less than a minute.

Another exciting addition in LW is a more advanced bones feature. The demonstrator added a couple of

bones to a very simple human arm model and when he bent the arm, its muscles flexed! If you haven't guessed by now, many of these new LW features are geared towards better character animation. After all, there's more to life than blowing up spaceships.

Of course it's the job of any expo demonstrator to know his product inside out and make using it look easy. But like any complex program, LightWave has generated a huge amount of third-party training support, and Desktop Images was at NAB, just a stone's throw from NewTek's booth, hawking its line of LW and Toaster training tapes. While the

"Taken as a whole, NAB is a snapshot of the state-of-theart in broadcasting. It's the industry's yearly examination of itself, trying to decide where it is and where it wants to go"

LightWave demos were performed using a new Intergraph TDZ running Windows NT with a very fast processor, the Flyer (NewTek's tapeless, non-linear editing product) demos were done with an Amiga 4000 Tower.

Although I don't do any video editing myself, I couldn't help but be impressed by the Flyer. It's matured to the point where even to a lay-

> man like me, it looks like throwing together a broadcast-quality video of any length, including perfectly synced sound effects and music, would be a cinch. It's still amazing to watch these demos and realise that everything one is seeing is coming directly off a hard drive, with absolutely no video tape used at all. Between demos, NewTek's booth had constantly running 'demo reels' featuring cuts from shows such as Babylon 5 and seaQuest DSV, whose special effects were produced with LightWave 3D. At past NAB conventions, it had become a NewTek tradi-

new product intro at a huge ballroom at Caesar's Palace. This year was different, however, as the apparently leaner and more costconscious NewTek instead held an invite-only party at a Vegas dance club (formerly a casino) called 'The Beach.' The bad dance music on the distorted sound system pretty much drowned out the announcements from where I sat, but I spotted the cream of the LightWave animator community there, including Allen Hastings, Mark Thompson and Steve Worley (who is soon to release his new LightWave plug-ins). Actor and 'Toaster Head' Dick Van Dyke was also reported to be at the party, although I didn't see him myself.





C And finally the Mac gets a decent 3D package; NewTek completes the set of machines that LightWave is available on

NTO THE FUTURE

Taken as a whole, NAB is a snapshot of the state-of-the-art in broadcasting. It's the industry's yearly examination of itself, trying to decide where it is and where it wants to go. The products exhibited there are what the trade is, and will be, using to produce the news and entertainment programming served up to the public over the airwaves on cable, via satellites, in theatres, and more and more on the Internet. This expo keeps growing because the methods of media delivery do. In some fantastic future, (which probably isn't that far off) when we all may have a 500-channel set-top-telephone-internet-movie box sitting atop the telly, it may very well have Amiga guts inside it, and the companies who attended NAB are the ones who will cranking out the programming to fill it.

ucleus is a program that allows you to make graphical interfaces for any purpose you want. It describes itself as a menu designer because it allows you to create anything from a basic program launcher that you can leave on your Workbench to a graphically rich menu for a slide show or presentation.

menu for a slide show or presentation.

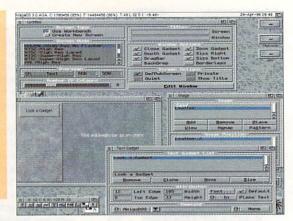
Two aspects in Nucleus' favour are that it's cheap and is unbelievably easy to use. From the main program window you can set how the menu should appear either on the Workbench or its own screen. From here, hitting the edit window button will open a blank window. You can now add buttons, pictures, borders and image buttons just by pointing and clicking where you want them to go. It's as straightforward as that – you could have a test Nucleus menu up and running in a matter of minutes.

Any of the buttons can then be assigned with either an AmigaDOS command or script, an ARexx program, or one of the three internal commands that quit, iconify or flip Workbench to the front. This allows you to easily create program menus or slide shows with a minimum of fuss. To then create a standalone menu you must save it off as an executable program, and if you have added any graphics these are all contained within the executable. A basic menu with just text buttons, the sort of thing you might use as a program launcher, comes in at around 8K, Making colourful menus has never been so easy with

Nucleus, Neil Mohr

takes a

look



 The Nucleus interface is straightforward and simple to use

Buluing blocks

perfect for putting in your WBStartup drawer. The only major draw-

back with Nucleus is that you cannot have menus in menus and, therefore, you cannot have a button linked to another built-in menu. If you want to do this you would have to set up a button to run another Nucleus menu which is not quite so elegant a solution.

Nucleus is a great program. Apart from my small complaint about the colour remapping I cannot fault it. It is so quick and easy to use – all you are left worrying about are the graphics you want to use, if any. Once those are done the actual interface will take a matter of minutes to set up. An absolutely fabulous application.

Botton

GRAPHICALLY SPEAKING

Beyond just allowing you to add boring old buttons, Nucleus has the ability to load IFF graphics which you can then apply to various parts of your window or screen. Images can be used as background patterns, the same sort of thing as Workbench patterns, or standalone images that you can position anywhere on the screen or window.

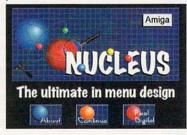
Along with that you can also add image gadgets which allow you to apply images to buttons for both their selected and unselected modes. Using image gadgets allows you to create more impressive looking front-ends for presentations or menus.

This very handy feature of Nucleus is not without its problems. As it allows you to import lots of individual images for use as gadgets or backgrounds, you can go a little mad and end up with lots of different images, all with different palettes. Nucleus does have a remap function that does its best to match the image to the current screen colours, but even on a 256 colour screen you can quite easily run into palette problems.

To get around this you will have to do a little planning before you go ahead and start creating a front-end. Possibly the simplest way would be to design your menu screen in DPaint or Brilliance, drawing the buttons in place so when you import the entire screen you can mark out the buttons that are drawn on the screen with 'invisible' image buttons. If you don't do this you will have to make sure all your buttons have the same palette.

It would be nice to see a little more intelligent remapping of image and screen colours. Currently, Nucleus allows you to 'grab' either the screen's palette or the palette from an imported image. This, however, simply overlays the images palette on the existing palette so you lose all your current colours, and the remap option just tries to match the image colours against the existing screen colours.

This does not stop Nucleus being any less usable – it just means you have to be a little careful when importing graphics. Now if you had a 24-bit display this would not be a problem.



C As long as the palette matches, you can use as many graphics as you like





e're going to take a proper look at Web page design in this series, and we'll start at a point that is often skimmed over in other tutorials of this nature – the planning stage.

Planning is very important in order to bring your site to the attention of the Web powers-that-be, a run-of-the-mill site is going to get lost amongst the myriad numbers of pages on offer, you're going to have to do better! So, an obvious starting point for your planning stage is to determine exactly what will be on offer on your Web page. Will your Web site be informational in intent, requiring constant updates (and will you have the time to ensure that your pages are up to date), or will it simply be a one-tune page like 'The Page O' Buttons', which will require little maintenance.

It's questions like these that really need answering before you even start worrying about your lack of skill at generating a Web page – anyone who has used a text editor can write a Web page with little additional effort – and you should pay careful heed to how you want your Web page to look.

NSPIRATION

It's always a good idea to see what other people have done and get inspiration from their example for your own endeavours, and this can also be the easiest way to learn some of the tricks of the HTML trade, particularly when it comes to decent page layout.

Another consideration has to be given to who your target audience is. If you are aiming particularly at Amiga owners, you will probably already know that the Web browsers available for our machine are not the best around, all currently lacking at least one of the elements of the Grandad of Web browsers - NetScape. If you don't have access to a PC or Mac equipped with NetScape you are going to find it hard to kit out your page with some of the fancier elements seen in modern Web pages, such as frames, but, as long as you don't mind working in the dark, you can always give it a go. If you've checked your code properly it might just work. However, if you really want to make sure that people will bookmark your site for constant reference, it is probably best to steer clear of features you can't be sure of on your originating platform and stick to things the Web browser you use can display.

The most complete Web browser on the



Amiga at the moment is probably ibrowse, which is now available (or should be by the time you read this, anyway) commercially from HiSoft Systems in the UK and Europe, and from Oregon Research in the states. Its current demo release can manage all the features we use on Amiga Computing's Web site, including the WebChat areas, and is probably the closest you are likely to get to NetScape on an Amiga, at least for the time being. It does have its own problems, particularly while you are writing your Web pages,

Starting a new six month tutorial series, **Ben Vost** sets up a Web page from scratch

but more on those later. Okay, so for this project we will actually go the whole hog and set up a real Web page which you will be able to see progress as the tutorial does. We will be starting simply and building up to using some of the more advanced HTML tags and techniques throughout the series.

Let's start with the plot. What do we want for our Web page? I sat down and came up with a list of ideas, some of which may be appropriate for the Web but not for a family magazine, and shortlisted a few. Finally, I decided that since I had such a good response to the Workbench 96 article that was in our January 96 issue, and because I have access to machines like Macs and PCs, I could add a visual element to the article that was missing in the paper version. Eventually, I would like there to be some

W HAT YOU NEED

This tutorial is going to deal with concepts, programming techniques and graphics that are going to need your full attention and a decent machine to boot. Once we start doing stuff to upload to our Web server you will need some knowledge of the dreaded Unix command set, but I will explain all that once we get there. Although we are basing this tutorial around one UK-based internet provider, our American and Canadian readers should be able to easily transpose some of the details to suit providers slightly more local to them.

It goes without saying that you will need a modern machine with MUI and a hard drive to set up your Web page. But to give you some idea of the software used for this project, we will be using a combination of Personal Paint, Photogenics and ImageF/X for the graphics (I might even chuck in a bit of 3D rendering courtesy of LightWave), Turbotext for text editing and IBrowse for the page previewing. You will also need a telnet application and a utility that can create .tar archives.



way of allowing people to add their comments directly to the page and for developers to use the site for trading source code.

So we have an idea for a Web page. Not totally exhilarating as a concept maybe, but a solid base of content with a fairly light maintenance schedule. The first thing to look at is how we want to present the information. We could just leave the text as it stands and run it straight down the page, but I think that might be a little hard to read at a stretch, so perhaps dividing it into the sections it was presented in in the magazine and making them into separate pages would be the best idea. The second question I had to ask myself was whether I wanted to slavishly copy the layout from the magazine or adjust it to better suit the Web's idiom of layout. If you have a copy of the magazine handy, it might be worth your while to take a look at the pages, as I did, to see what changes you think need to be made.

CAPABILITIES

One of the major advantages that a Web site can have over paper is the ability to be able to send people off in other directions, such as links to Apple's site to check out the features of the Mac's OS, or links to some of the shareware programs mentioned in the text so that the reader can download the programs for themselves. The Web site can also be linked to another of Amiga Computing's articles, this time the 'Modus Operandi' piece from last December's issue comparing Workbench with System 7 on the Mac and Windows 95 by Frank Nord. This piece must surely have relevance to the Workbench 96 article and although we could put a note in the Workbench 96 article telling people to also read our December 95 issue, it is only on the Web we can point them straight to it.

Fortunately for me, IDG maintains backups of all past issues so I can easily retrieve the original pictures, DTP files and text for the two articles and recycle them for Web use. The only slight concern I have is based around two potential problems – namely that the two issues have different designs and that the Flash Gordon image in the Workbench 96 piece was paid for just for the It's always a good idea to see what other people have done and get inspiration from their example for your own endeavours

magazine itself. After much thought (well, five minutes and a cup of tea later), I decided to ditch the Flash Gordon shot and just use the headline pretty much as it stands (there will be enough pictures on the site for it to be colourful), and to revamp the Modus Operandi article using our current house style.

So now onto how the Web pages will look. Looking at the layout of the magazine, I do like the little 'future Amiga' graphic and cover feature WOB at the top of the page,

but I can't use the spaceship (copyright again), and the words 'cover feature' aren't really relevant any more. So playing around on a bit of scrap paper I came up with a nice Workbench 96 logo which I can use at the top right of each page on the site.

Background or no background? Should I just specify a colour? Hmm, well since IBrowse can turn off background images I think I will go for a little '96 logo since it will make a nice repeating pattern, but I'll have to make sure it is as unobtrusive as possible, while still being visible. What about the heading for the sections and the crossheads? I'm going to ditch the crossheads (those bits of text that just serve to break up paragraphs) at this stage and just concentrate on getting the page up, besides which, crossheads may be a necessity when you have a mass of unbroken text, but since I am going to break up the article onto separate pages, they will be less useful.

Captions can also be a bit of a problem with HTML so I have decided to incorporate the text into the images themselves so that I can have full control over their typography and the bullet point used.

Building the process

Okay, that's most of the design issues I have to worry about right now out of the way, now we'll have to think more about the remaining content of the pages, what links (if any) we'll have, how people can suggest new ideas for the Workbench 96 topic and so on. In the normal manner of tutorials the world over, we'll start the page using only standard HTML tags that are easy to understand and implement. In the following months we'll build up the complexity gradually until our Web site is an example of the finest, modern, HTML coding there is with gorgeous graphics and superb text to boot. See you next month...

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IMPORTANT NOTICE

On April 15th Paxtron Corporation purchased the entire inventory of chips, parts and manuals from Service Management Group (SMG). SMG was the authorized distributor for Amiga Technologies in North America. Our inventory has increased substantially and our prices have been lowered. Dealers and service centers are welcome to submit their letterheads to receive the latest dealer prices.

SPECIAL PRICED ITEMS

Commodore GmbH Germany, Commodore Philippines (manufacturing) and Commodore U.K. Ltd., has liquidated their entire Amiga inventory. A sizable amount of that inventory was purchased directly by Paxtron U.S. We also are receiving a sizable amount of hardware from Commodore subcontractors. Also included is the entire stock of chips and parts from Service Management Group (SMG).

- A500/A2000 EMERGENCY DIAGNOSTIC/REPAIR KIT (Spare parts of the future) Each kit contains 8372 Agnus, (2) 8520 CIA, 8364 Paula, 5719 Gary, 8362 Denise, 2.04 O/S Rom, pico fuse, Burndy PLCC chip puller, Amiga Troubleshooting Guide, Final Test disk. All chips are new and plug into sockets on the motherboard. A \$159.00 value (save \$59.00) ..\$99.95
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SEED CONVERAL

THX 53IS

ammersmith's Novotel will be a familiar venue for anyone who has visited Amiga shows in the recent past, and the basement suite should be even more familiar for this is where, year after year, the faithful have gathered to pay homage to the Amiga and all its wares.

This year's show was thought to be a muted affair, the concern over the machine's future hanging over-

head like a bad smell but, as it turned out, WOA 96 was a very busy show. Although there wasn't very much that was new on the stands, there was a lot of enthusiasm from punters who were spending money at a rate of knots. In fact, the show proved to be on the small side with people standing five deep at stands (including ours), waving fivers, desperate to donate their cash to worthy causes in return for a bit of software, hardware or the odd magazine or

two. The international contingent was high and although there was only one foreign-owned stand, there were plenty of VIAPs (Very Important Amiga People), if you knew where to look. In fact, the show had a very international feel to it, at least behind the scenes, where there were deals being done and hands being shaken in every nook and cranny of the Novotel bar. So just who was on the show roster? For a start, Amiga Technologies had a cut-down version



Micronik's A1200 tower case looked particularly impressive. We look forward to doing a review

of its monster stand from CeBit, complete with the only working Walkers in existence which, as could be expected, were drawing a lot of

Directly opposite was our stand, replete with issues past to present and our star attraction - Worms on our

A4000. Unfortunately, there was seemingly absolutely nobody at the show selling the game so all our David Link was so publicity was for hoarse by the end of the show, he's buying naught. However, we a controlling stake in a did have Andy Davidson, programmer of Worms, on our stand at one point on the Sunday showing the new Worms+ to the new owner of the Amiga, Bill Buck, CEO of VIScorp. An ideal photo-opportunity, you are

probably thinking and yes, it would have been if it wasn't for the fact our office camera's battery had run down to a point where it couldn't even focus, let alone take any pictures. Magazine's were pretty well represented at

the show as a whole, perhaps something to do with advertising contra deals? CU Amiga had a head-to-head game of Alien Breed 3D2 on their stand, Format had Capital Punishment, and EM magazine had Errol from EMComputergraphic for entertainment value.

HiSoft's stand was constantly busy, so much so that it took me until Sunday to speak to David Link. He said the show

> Do you know me? I used to manage a well-known Amiga company, but now I like to play geetar

OTABLE THEIR ABSENCE ...

There were a few notable exceptions from the companies at the show including Softwood/Gordon Harwoods that meant Digita cleaned up with sales of the new Wordworth 5. Also missing were any games companies, leaving the magazines to fill that end of the market (a bit galling really considering most of us really pride ourselves on the technical side of matters). Almathera was also not there, but with good cause because the team was supposed to be hard at work finishing off

had been a great success, which can only be due to the fact that HiSoft has some great products either coming out or here already, with the likes of the Surf Squirrel and Web and Net Café being particularly sought after at the show. It also had the Jaz Drive in an internal version ready for sale, but additional cartridges were a

bit thin on the ground. The problems surround-

ing the dearth of Zip drives have obviously been

resolved, on the other hand, because practically

every stand I saw had them for sale and the

competition for custom at the show meant better prices than many potential customers

Wizard Developments had a stand

selling its mix of modems and

software including showing

the latest version of

Directory Opus, the one I

promised Greg Perry I

wouldn't call DOpus five

and a half... oops! Still,

the new version looks as

if a lot of the complaints

directed at the very first

release of DOpus 5 have

been sorted out (although

my original complaints about

selecting font directories with their

appropriate .font files, and DOpus'

ability to read two floppies with the same name

haven't been fully resolved). Greg even gave us

some T-shirts to give away, so the first five read-

ers who send a pretty postcard from where they

live to our usual address will get one of these

exclusive garments as modelled by the svelte Mr

renowned demonstrations of Scala's abilities

and also had its own stand showing and selling

MM300 at ridiculously low prices, along with a

collection of Scala merchandise including polo

shirts and a Scala 'executive toy' kind of thing,

Anybody in the market for a CD-ROM or two

would have been well advised to visit the Epic

stand or EMC's where collections of clip art,

fonts and images were being snapped up at a

Scala had a chunk of the AT stand for its

expected.

Perry himself.

based on its ladder logo.

processing program.

Photogenics2, a new version of the best-selling image

Blittersoft was sorely missed since there was no other graphics card reseller we could point our punters in the direction of, and Silica didn't show up either to sell its wide range of Amiga products. All I can say is that Silica must be kicking itself now given the attendance and the amount of money floating around at

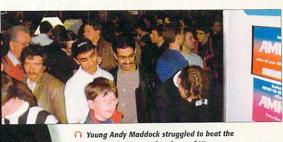


O Bruce Lepper editor of France's leading Amiga mag, and Greg Perry modelling one of the DOpus 5 T-shirts we have to give away

fair old rate of knots. Two things that somewhat surprised me at the show was firstly the fact that people were actually attending the show that didn't yet have any sort of computer, and they were asking whether the Amiga still represented a good purchase. I'm very pleased to say that in all the cases presented to me, I could wholeheartedly recommend an Amiga as being the best choice for the job. The second thing was just how well-informed a lot of Amiga owners are. I mean, I know we're in a limited, close-knit community, but even so. I had dozens of people coming up to the stand asking what I thought of the VIScorp take over, and asking where I was going to the pub that evening so they could grill me further about the press conference that took place after the show had finished on the Saturday.

All in all it was a good show and it was nice to see so many familiar faces (Dan, Ian, Dave, Danny, George, Xavier and all the rest...). I look forward to the next one.





Oh No team in our running demo of Worms







SIFIFF STURM

Woo! How we long for CDs like this. Oh, we love them. They're just the best. If you study the form of the demo directory on Aminet you shouldn't bother thinking about a purchase here.

The CD is crammed full of demo-type productions from 1995/96. The difference this time is the fact that rather than viewing other people's work and usually saying "Ooh that's nice", you can now sit down and make your own as a full programming suite is provided on the CD. Nice.

All the latest slideshows, music disks, magazines and tutorial programs make an appearance, so the whole package is pretty much up to date. The interface is all pleasantly laid out with software ready to run, so there's no need for hefty de-archiving sessions with a lot of CDs. Overall, it all turns out to be quite a nice package, and anybody with a remote interest in mega demos and all things alternative and individual will find this CD good value for money



This is a car demo, featuring a car. A red one. Sports I think. Nice isn't it?

Bottom line

PRODUCT DETAILS

Product:	Scene Storm
Supplier:	Active Software
Price:	£19.99
Phone:	01325 352260

SCORES

Ease of use	87%
Implementation	83%
Value For Money	89%
Overall	89%

Hey you. Look at our **bumper** crop of

CD-ROMs this month.

Our round-up rather surprisingly features no pictures of birds.

Oh no!

Telegnee Tuleance

MAGIC WORKBENCH ENHA



When you use Workbench all the time it can be quite annoying if you have to use it while it's bland. So what can you do?

Well, if you buy this CD for a start you will be able to 'tidy up' your Workbench using small hacks which let you alter the way it looks and feels forever. If you are still using operating systems 2.04 to 3.1 then you really must think about Magic Workbench.

For example, after taking advantage of using this CD on my A1200 I had to test out the compatibility of a piece of software with the A600. When the HD booted up it

looked so bland it was unbelievable. I found I was using quick keyboard shortcuts for programs that weren't even installed. A



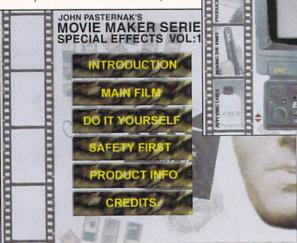
Hang on. When I clicked on the directory 'Birds' I was expecting some swimsuit action. Darn!

MOVIE MAKER: SPECIAL EFFECTS VOL 1



It's usually a childhood dream to be a movie maker, standing in front of an all-star cast ordering them about like slaves. What a life.

You too can be the biggest thing to storm into Hollywood with John Pasternak's special



The main menu is all nicely laid out and shows all the options. There's also a woman who talks all the time. Great

effects which will teach you how to create fake wounds and all things movie-like.

As this is the first volume I assume all the special effects are pretty basic, so you won't be creating any multi-million pound explosions just yet.

The whole interface is designed around an in-car cassette deck (?) which is supposed to be a video – I'm not sure about this. On top of it is a massive television on which you can

This is entitled 'How to use a pencil'. Nah, only kidding – it's about storyboards, so there you go watch certain video clips of various special effect methods. They are as basic as designing storyboards and generating ideas but there is also the more physical side such as making fog and fake blood.

The problem with the CD is that the actual content is not as informative as it could be. I know that if I sat down ready to start a film production it's just common sense. Making films should be a free experience by learning from your errors – if you went by the book you'd never discover anything new.

However, if you are into movie making it is quite handy to see the CD present you with ideas for making props and materials – although there's nothing you wouldn't find in a good movie book.

Bottom line

PRODUCT DETAILS

Product:	Special Effects Vol 1
Supplier:	Epic Marketing
Price:	£29.99
Phone:	0500 131486

SCORES

J CORLS	
Ease of use	85%
Implementation	89%
Value For Money	88%
Overall	88%

NCER

nightmare scenario, I trust you'll agree.

The CD contains new icons, textures, background patterns, games, comms, patches, sounds and everything you can possibly think of involving both the look and feel of Workbench.

Why should you stick with a grey background when you could have leopard skin! Buy it today.

Bottom line

PRODUCT DETAILS

hancer	Product:
rketing	Supplier:
£17.99	Price:
31486	Phone:
=	

SCORES

Ease of use	90%
Implementation	89%
Value For Money	90%
Overall	90%

OOLS UNLIMITED: BLANKERS



Tools Unlimited is a CD which contains an unlimited amount of tools. Well, that's not strictly true as the CD can only hold around 640Mb. So why on Earth is it unlimited? Oh well, never mind.

This edition is based around the pretty much pointless screen blankers for computers using a high screen resolution which, if left continuously on-screen for a certain amount of time, would result in that particular screen burned onto your computer. So basically you would always see that screen faintly in the background.

This CD contains loads of blanker packages to use for blanking your

screen – what else. Each one ranges from just a black background

with some text on to a full scale mega demo-type thing which whirls about with a module, scroller and all sorts.

It doesn't matter how you look at it — each one gets blander and blander every time you leave your Amiga, and if you use it in the office like us, when you return you can guarantee you monitor has either been switched off or the sound is turned down. And that's because screen blankers are bland. Oh, alright, if you're desperate for some kind of blanker I suggest you check out the Aminet series because you

will always find something on there as well as tons of other hacks. In my opinion a CD full of blankers seems to be a waste of money as you only end up using one anyway!

Most of the packages use the same principals behind screen blankers - rarely do we get an original one

Bottom line

PRODUCT DETAILS

Product:	Tools Unlimited: Blankers
Supplier:	GTI
Price:	£tba
Phone:	+49 6171 85937

SCORES

Ease of use	86%
Implementation	84%
Value For Money	N/A
Overall	81%

Are you looking to put more

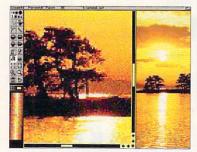
Continue of the put more

into your home life?

Crave a more a decided and the control of the contr

existence?

Or just fancy an all new, sharper image?



then grasp the opportunity firmly by the hand, shake it and take advantage of the latest, fabulous Amiga Computing reader offer

Please rush me a copy of the amazing Personal Paint V6.3 at the unbelievably low price of 17.50 (including package & posting) Deliver to: Name (Mr/Mrs/Ms/Miss) Address Postcode ______ Daytime phone ______ I would like copies of Personal Paint v6.3 at £17.50 each. I wish to pay by: Cheque/postal order payable to IDG Media Credit card Card No. ______ Expiry Date __/ Please allow 28 days for delivery while stocks last Tick this box if you do not wish to receive promotional material from other companies

Personal Paint v6.3

for a ridiculously low offer price of £17.50 (rrp £49.99)

Personal Paint features some of the finest, most comprehensive image processing, painting and animation features of any Amiga art package. With support for multiple file formats, Personal Paint is ideal for creating graphics for the World Wide Web, and its support for any Amiga, including those with RTG graphics cards, means that Personal Paint is a must. Other features include:

Animation storyboarding Virtual memory Stereogram generation

24-bit printing Colour reduction techniques ARexx interface

This offer is strictly limited, whilst stocks last, so make sure you get your order in as quickly as possible to guarantee your copy. Send your completed order form to: Personal Paint 6.3 Offer, IDG Media, Media House, Adlington Park, Macclesfield SK10 4NP.

ewsgroups can be thought of as large discussion groups conducted through people posting questions, ideas, points of view or replying to previous postings. To help things along there are many 'discussion' groups known as newsgroups, the name of the newsgroup describing what it is about. The naming system takes a sort of hierarchical directory scheme, so a rough break down would be:

alt.* Alternative discussions Computer-related groups comp.* rec.* Recreational discussions sci.* Scientific subjects Information that doesn't misc.* go anywhere else Social issues soc.* talk.* General discussions UseNet groups news.*

It is hard to see from this that there are well over 15,000 different newsgroups out there, around a quarter of which are covered under the alt. section which contains newsgroups devoted to every subject under the sun.

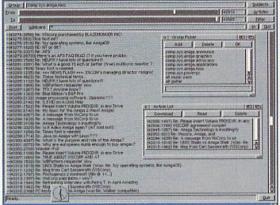
Unfortunately, at the moment there is not a single decent news reader available for the Amiga. The ones that are available tend to do only one thing very well and are then lacking in other areas, so I find the best solution is to use two programs depending on what you want to do. I suppose it should be of some comfort that even Netscape's news browser is not perfect, which is surprising considering all the hundreds of man hours that must have gone into it.

NEWSAGENT

With any program, you want it to be straightforward and easy to set up and use, and NewsAgent is almost that. You can find the NewsAgent1_3.lha archive in the comm/tcp directory on Aminet. When you extract it there is a good old installer script that will copy the main program to the AmiTCP:bin drawer, and a preference file to the UULib: directory. You should start AmiTCP before installing because it will set all these assigns for you.

Before using NewsAgent you need to





configure the preference file to your own

needs. It is only a text file so you can use any

text editor and if you have installe NewsAgent

the preference file is UULib:NewsAgent

Defaults. Most importantly, you need to

change the HOST entry to point to your

Internet provider's news server address - for

example Demon's is news.demon.co.uk, and

you should also add the line XOVER at the

end of the file. This allows NewsAgent to get some extra information about the news For batch
downloading
with Tin and
on-line reading
NewsAgent is a
good choice

articles, but does not work with every news

at newsgroups

series takes a look

In use, NewsAgent can either be an on-line reader or a batch downloader. It is very efficient as an on-line reader – you can quickly select a newsgroup by either entering its name or, as NewsAgent remembers all past visited newsgroups, select one from the newsgroup list. You can then select exactly how many and which article titles it should download, and then scan the list and read the ones you are interested in.

As a batch downloader you select which articles you want to download – there is the option to include or exclude articles using wild cards – and then hit the download button in the articles list. All the articles are then downloaded into a single batch file that you can either process with UUhX to extract UUEncoded files, or with Rnews so Tin can be used for off-line browsing.

MNEWS

There seems to be a MUI version of every major Internet utility and newsgroups are no exception. mNews is the most recent of all the newsgroup software – it is only a few months old and is a very early beta release. However, in its current form it is a very usable on-line reader and has the potential to be a good off-line reader in a future version.

If you would like to try out mNews you can find the mnews0_2.lha archive in the comm/news directory. Once you have extracted the archive, drag the directory into the AmiTCP drawer. Before you run mNews you need to add assign mNews: AmiTCP:mNews to your user-startup, and if you want to run it straight away type it into a Shell.

When first run, mNews needs to know a few

things. Most importantly, for the remote host configuration you have to enter your Domain name, and also that all-important news server address. For the local host configuration, make the news directory mNews: and for the UUDecode command, enter C:UUhX x %s – if you have got UUhX. Once this is all done you are ready to go.

The only really annoying thing with mNews is that before you can add a newsgroup you need to download the entire newsgroup list from your news server. It would be much quicker if you could just enter the group name yourself.

When you join a group, mNews allows you to choose how many of the recent article subjects it should get, and from there you can select which



Worth a look but a new version
 of mNews is not due until July

ones you want to view or save off. There is also the handy option of directly UUDecoding a file and saving to disk. Hopefully, a future release will see mNews becoming a very good news reader.

GRN

GRn is another on-line news reader, but my main complaint is that it is so slow. Once you know what is going on, GRn is not too bad to set up. I'm assuming you are using AmiTCP 3 or above, so you need to give the program GRn.amitcp an icon file. If you are using SwazInfo, pop up its information requester and drag & drop the normal GRn icon across — otherwise you will have to manually copy an icon. Next you need to add these two Tool types to the icon:

NNTP NNTPSERVER=news.demon.co.uk

Before you begin to run GRn you also need to create a drawer in UULib: called News so GRn can save the active newsgroup list into it.

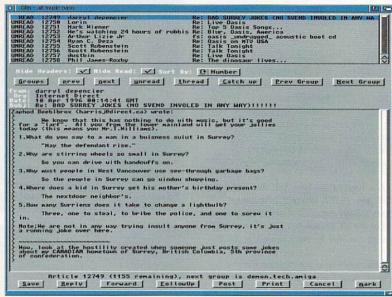
Once this is done you can choose which groups you want to subscribe to – I would suggest that if you only pick one, comp.sys.amiga.announce would be a good choice. If you now quit the newsgroup list and click on Save/Update GRn and then Rescan news, GRn will get the latest posting to the amiga.announce newsgroup.

Even with GRn only having to scan 20 or

30 article headings it takes absolutely ages. In the main article viewer you have to download each article separately and there is no way of knowing how big an article is

beforehand. If you do not suffer the same speed problems as us then GRn would be a reasonable on-line news reader, but as it stands it's just too slow.

It looks all right, but it is just too slow



INTINNABULATION

Tin is one of the older news readers around and is a port of the Unix news reader. As it stands it is not too straightforward to set up but once up and running it does give you a lot of features and is fairly easy to use.

The current version on Aminet is version 1.3 and the archive you want is comm/news/tin130gamma.lha. Along with the Tin archive you will need a couple of other small tools that help Tin look after downloaded news items. You will need to get TrimNews.lha as well which can also be found in comm/news, and Rnews117R4 Hist.lha can be found in the comm/uucp drawer.

Rnews takes a batch file like the one created by NewsAgent and separates all the files

from this into their correct newsgroups directory on your hard drive, in a form that Tin can then read. The TrimNews program removes old news files, so keeping the amount of news on your hard drive under control.

To get Tin up and running you will need to extract all three archives. Copy Tin.exe and Actived from the Tin archive along with the Rnews and TrimNews programs into the AmiTCP:bin directory. As Tin is a Unix program you cannot just go ahead and run it and expect it to work as there are a few things that need to be sorted out beforehand.

These have to be done every time so you need to create a small batch file that you will use to run Tin. Type the following list into a text editor and save it to the AmiTCP:bin

drawer as StartTin:

```
Rnews UUSpool:NABatch; get news
Delete UUSpool:NABatch; remove old batch

SetENV USERNAME SUSER; to make sure it's set
Actived; create a new active file

Delete UULIB:Active quiet; Delete old
active file
Rename UULIB:newsactive UULIB:Active; insert new active file

tin.exe; start tin

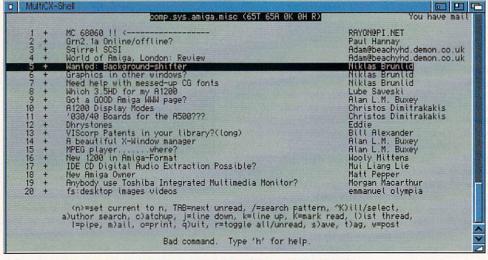
Ask "Do you want to trim news no y/n?"
If warn
TrimNews; remove old news
EndIf

UnSetENV TIN_GROUPS; this is set by Actived
for TIN
```

So that you can then actually use this script to start Tin, you need to type the following line into a Shell:

```
protect amitcp:bin/starttin +s
```

and this tells AmigaDOS that StartTin is a script file and that it should be executed. This allows you to just type StartTin instead of using the execute command every time you run the script. To add new newsgroups to Tin you need to alter the UULib:Newsgroups file. This holds all the newsgroups you want Tin to read, so to add comp.sys.amiga.announce load the newsgroups file into your text editor and at the end type comp.sys.amiga.announce. You can then add a number after it that relates to how many days news should be kept before TrimNews deletes it.



O It might not look much but Tin is the most comprehensive news reader around

JUST SAY NO TO NON-CUSTOM CHIPS!

Why do so many people insist that the next generation of Amigas should ditch the custom chip architecture in favour of some generic PC chipset and retain only the OS because it "...is the only thing the Amiga has going for it when compared to today's PCs...".

Well, excuse me, but I would like to remind those who are urging Amiga Technologies to follow this path that the Amiga is not IBM compatible. The Amiga's OS and chipset, and the integration of the two, while left to stagnate over the past year and a half, are fundamentally superior to the make-shift 'architectures' of other lesser computers.

The Amiga's OS is unique in desktop PCs in that it is a multi-processor OS. The whole point of the Amiga's custom chipset was primarily that it takes most of the audio video and I/O work away from the CPU (not merely accelerates graphics as with recent PC blitters). Yet many Amigans have fallen into the trap of believing that technological achievement in computers comes from implementing the approach of developing computers with faster and faster CPUs in the hope that the sheer speed of the thing will eventually overcome the inherent flaws. From the very beginning, the Amiga bypassed this problem, yet many Amigans would willingly abandon all this for greater compatibility with the 'mainstream' of computing.

The following questions must be addressed with an implementation of a PC chipset.

1. Would an Amiga retain the unique features such as the copper, the real-time execution of tasks, the fact that the system manages more than one task simultaneously (something that a PC, Mac or even DEC Alpha machine will never do if current trends in their development are anything to go by), and the fact that the sound channels are completely independant to the point that they may be utilised simultaneously by different programs?

2. Will the system retain PAL and NTSC screen modes (proven to be a distinct advantage in video), and will the system retain bit-planes in addition to implementing a chunky pixel mode? The distinct advantage of bit-planes is that with one execution a whole screen can be altered. In contrast, with a chunky pixel screen mode, each pixel requires a command. This feature is what makes the Amiga unique as a multimedia machine. Finally, Zorro slots should be retained in addition to implementing a PCI bus. Zorro's are more stable and their autoconfig nature is superior to the PCI's 'plug and play' – Roll on Zorro IV!

Jay Miner would be turning in his grave with the idea of ditching all that makes the Amiga special. The future PowerAmigas should further the concept of moving away from relying on the CPU. Bandwidth and breaking the 'bandwidth barrier' is the future of computing. Only the Amiga has the basics required for the future of computing if AT doesn't screw it up!

The DMA should be used for everything: from the blitter to the copper, audio video

and I/O. The bandwidth of this DMA would well and truly exceed the 500Mb/s limit and would leave the CPU virtually free to merely assign tasks. Slow-down would not be experienced with this bandwidth (even in bitplane modes), and the video should allow a combination of chunky and bitplane on the same screen. There should be greater modularity than the current machines, but with a broad bandwidth future upgrade paths would be assured. I agree with Ben Vost's other OS and hardware suggestions in the January '96 issue. (Make the OS more object-oriented however, datatypes are a good start and generally, further integrate the OS with the hardware, not move it away.)

From what I have read, the successor to AAA (known as Project Hombre) had reached software simulation stage. Surely this could be geared to the PowerPC processors? AT should do it right or not at all. The Amiga is only an Amiga if it retains that which makes it special. I, for one, will not be replacing my A4000 if AT develops some 'half-baked' Amiga.

Grant Regan, Penrith, NSW Australia

I guess Ben had better reply to this one, as he has all the other hardware/OS letters we have received after our January '96 issue. Perhaps we should think about running a design competition for a new Amiga? Tell us what you think...

Okay. Here's the real problem when it comes to developing the Amiga further. Are you aware that Amiga Technologies doesn't exactly have hundreds of staff to throw at hardware development? Unlike the PC graphics cards manufacturers who can chuck a hundred people at a problem until they overcome it, AT has a very limited personnel budget. This means that perhaps it is time to think about offering a standardised solution when it comes to graphics. There are VGA chips out there that can be programmed for PAL or NTSC compatibility, and there are also chips that can manipulate 3D graphics in the same way the Amiga can handle 2D ones. At the present time, we, as Amiga users, are not using a chipset that has been "...left to stagnate over the past year and a half...", nothing has been done with it for over four years! That is an incredibly long time in the computer industry, and it is a tribute to the Amiga's abilities that it didn't fail a long time ago with that kind of attitude to

So what can AT do (especially under new ownership)? For a start it should really concentrate on developing the OS, which is already further advanced than others in a lot of respects. OS development isn't cheap, but it's certainly a lot cheaper than hardware development. If AT could concentrate on developing graphics routines for these new breed VGA chips to



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those letters coming! If you can't be bothered to find a bit of paper and a stamp, why not e-mail us? Simply point your mailer to: ESP@acomp.demon.co.uk There's a £50 pound prize for the best letter printed as an incentive

provide decent 3D and 2D graphics, then we would have a great machine for graphics again. If these libraries were also designed to work on any chipset, given a driver, then any graphics card could be integrated into the system, allowing for a low-end one for cheap Amigas to a 64-or even 128-bit version for high-end machines.

The other benefit to using standardised parts is, of course, their cost, which would be a lot cheaper than a new Amiga chipset. In principle, I agree that at some point in the future AT (or whoever) should create a stunning new chipset that all Amigans can be proud of, but in the short term, unless machines can be sold, there won't be any Amigas for a new chipset to go into. The libraries idea could also be extended into areas other than graphics, with a similar approach to Apple's, where even text handling can be managed by the system. This way users who felt they wanted them could have 16-bit soundcards, DSPs, highend graphics, all integrated perfectly into the system software.

AMIGA COMPUTING
ISSUE 12

EXPANDING COLLECTION

In Ben Vost's editorial, 'Killing ourselves', in the May 96 issue (that's issue 11 for the American version), he makes a number of points that I feel need commenting on.

He complains that by 'giving away all this nice software' the Amiga purchaser is discouraged from buying 'anything else'. Apart from the fact that even the current Magic Pack contains only nine software titles (and therefore a minuscule amount compared to what is in the average Amiga owner's collection), they are not necessarily the best or preferred choice for Amiga owners. Thus, far from taking away 'their incentive to go and spend some more money', this selection of software will encourage new owners to either upgrade or look for an alternative and explore other areas not covered in the Magic Pack.

While bundling software with any computer is a marketing ploy, one should not forget the inextricable link between hardware and software. The debate between the Amiga and PC is quickly ended if you take away all the software – both are useless (although the disks can be used as coasters).

As to his comments over the 'seemingly endless

stream of full product coverdisks' that negate any further sales, I think he ignores two significant factors. Firstly, they introduce the end user to an area that previously might have been considered technically prohibitive, and therefore not worth risking hard-earned cash on (better to buy yet another shoot-'em-up, the manual only contains one instruction – kill everything in sight). Secondly, familiarity with just one piece of serious software breeds confidence, and confidence (coupled with some knowledge) is essential when using any computer. All too often the games side of computing dominates because of the frustrating lack of knowledge to do anything else (see the advice pages of any computer magazine).

I was initiated into the world of serious software through the give-away of PageSetter 1 (on another magazine, although you did, in fact, put out a demo of PageSetter 2 in October 1990). I then purchased Gold Disk's Office and familiarity with its suite of WP, DTP, spreadsheet and database, coupled with my expanding knowledge, led me to understand my needs better and the limitations of the software.

Subsequently, I have moved onwards and upwards in these areas (although not as far as databases go, the Office one still does everything I require). Indeed, it could even be said that the full product coverdisks have been rather limited in their use, some deliberately so by being lite versions, others by a timed obsolescence (the most sensible option – a demo is restrictive and therefore runs the risk of being casually discarded), and some by a far too optimistic expectation of average machine specifications, but they do serve a need.

Having owned an Amiga since December 1989, I know what areas of the computer interest me and what software will fulfil my needs (although SoftWood will no doubt convince me that Final Writer 5/6/7... is infinitely superior to my now marginalised version 4). Nevertheless, there are plenty of new Amiga owners out there who are not so sure and these disks do provide a window on what can be a very inaccessible and confusing world. Furthermore, it could be argued that these coverdisks stimulate the market and that the very existence of the Amiga is proof of that in what has

ES, WE LOVE

Like many Amiga owners, I use my machine for a wide variety of tasks from 3D modelling to C programming, and because of this I tend to end up buying nearly all the magazines dedicated to the Amiga (with the exception of the games-only mags), simply because they all offer something that their competition doesn't.

However certain magazines have started to become stagnant in their originality and because of this I rarely buy them any more, unless there is something essential on the coverdisk.

Amiga Computing was one of the magazines I rarely bought, but over the last couple of months I've been eagerly awaiting its release. Your articles have been interesting and refreshing to read, particularly the Future Investigations issue.

Your writers seem to have a more professional and mature attitude to the Amiga which is lacking from other magazines who have an annoying tendency to put jovial quips all over what are supposed to be 'serious' articles, and I can't help feeling they don't use the Amiga professionally.

Coverdisks are another strong point – in particular issue 98. There wasn't one program I haven't installed on my hard drive, and the Breathless patch was a god send because I don't have a modem yet (you do now though, don't you Matt? – ed), so I can't download patches from the Internet.

All in all, your magazine offers the widest variety, the most professional approach, and the most informative news and reviews. You have a unique formula. Whatever you are doing, don't change!

Matt Gorner, Coventry

Ta very much Matt.

T'S IAN AGAIN

This month's magazine, as always, has all the up-to-date news and gave me much food for thought and reflection. In particular, your article about 'CeBit'; when I worked for a German company some years ago, I used to need, at the drop of a hat, to whizz off to exhibitions in Germany and, like you, finding accommodation was always a problem at the last minute. I found the best way to deal with it was to hop on a train and go to the next town and stay there. Not only is the German rail network infinitely more efficient than ours, it is also a lot cheaper.

My original reservations about Escom still hold good. Amiga Technologies might, at last, be showing signs of some action, but it still seems to me (and I hope that I am not being too patronising when I say that I wholeheartedly agree with the views expressed in your magazine on this matter) that it is all too little and too late.

So many other people seem to think now that AT and Escom are lovely for the minuscule morsels of comfort that they have offered so far, that I feel I am going out on a limb when I say I think they are up the proverbial creek without a paddle. This new gadget they are slotting into the program - you referred to it as the 'Walker' as the new up-market version of the A1200 - what an abortion! Who do they think is going to pay all that money for what can at best be described as an interim measure? To be more specific, it has the economy version of the 68030 chip, too small a drive to be useful to the high end user, and no real possibility of proper expansion. I refrain from commenting on it's appearance!

The 'lower' end of the market, by which I mean the people who only have a very limited budget and are looking for 'starter' entry to the home computer, are already

catered for in the Amiga market by the many good offers on the 1200 packs currently available. If you start talking in the £500-£800 range as the entry point for a standalone machine, it doesn't take a genius to see that beginners will naturally be drawn to an 'all-in-one' PC with a Pentium processor, monitor and around 8Mb RAM running Windows95 and with a very much reduced upgrade path for the future. Faced with that kind of a choice, if I was just starting I would certainly choose the PC.

If they want to attract the already large and dedicated Amiga community to continue spending money on things Amiga, they should be looking to find a way that existing users with both A1200s and A4000s can upgrade and cross the divide to the PC and Mac. I would suggest they start by designing a new replacement motherboard incorporating all that is best in the existing Amiga, but with expansion slots like one finds on a PC motherboard, to enable the high-end user to transfer all their existing peripherals and memory to make the new Amiga what it always was: the best home computer on the market

Ian Aisbitt, Bedale, N. Yorks.

It's always nice to hear from you lan, and Ben thanks you for your kind (unprinted) comments on his ascendancy to editorship. We both hope you will continue to favour us with your pointed and interesting letters.

As it stands at the moment, I just wonder how many other people reading would buy any of the Amigas as a first computer now, if they didn't know anything about the respective merits of the various different computing platforms?

been some very troubled times. There has been a distinct lack of corporate confidence in the Amiga for some time and while it is not a sinking ship (just listing badly), Ben Vost appears to expect the passengers to do the bailing out while the Captain and crew take to the lifeboats.

Personally, because I have all that I need, I prefer coverdisks that contain utilities (one small program that sits in your WBStartup drawer is better than a full program that sits in the bottom of your computer desk). Nevertheless, not everyone has had an Amiga as long as I have (and I intend to take advantage of Escom's trade-in offer and stay with the Amiga), and these coverdisks do provide, for some, a semblance of stability in unstable

Finally, the rise in the cover price of magazines seems to be in inverse proportion to their size. Your magazine provides the exception. The October 1990 issue (with PageSetter 2 demo on the cover) cost £2.95 and contained 116 pages. The May 1996 issue shows a 50 per cent increase in price (not too bad for an extra disk, six years and a hefty rise in paper prices) and contains 124 pages.

Stephen Edwards, Norwich

A well-reasoned argument - so you get the prize - but some points need issue. Firstly, putting full price software on coverdisks may not have been too bad in the past when mags could only put one or two floppies on the cover, but now, with more and more magazines offering a CD-ROM version - where there are certainly no size restrictions - the full programs will be just that, with on-line documentation and all the features they had originally. Not only that, but if mags only gave away demos, then just think of the market that could be there for budget versions of serious software in much the same way as games are sold. That way the publisher would still be able to sell their product, shops would stock it, and people who missed out on a particular issue of a magazine would still be able to buy the software, a situation not possible once you have devalued the program to zero. The problem

is that there is no incentive to continue to buy software if it's going to be available for free in a few month's time, and there are still an awful lot of people out there who stick with the coverdisk versions given away.

Secondly, giving software away with computers negates the need for a shop to stock software and peripherals. They can sell the Amiga as a complete solution and never see its new owners ever again. Putting the software that was in the bundle into shops (along with competing products) will ensure that punters will be able to see the choice available to them and pick and choose the titles they want to concentrate on. These same shops could also carry demo versions of the software they sell which could be sold for a nominal sum, refundable on the purchase of the full product. But instead it becomes harder and harder to find a shop stocking Amiga software (and the hardware's not so easy to find either) and the situation won't get any better if there is no new software to sell because its authors have bunged it all onto the covers of magazines.

BSERVATION POINT

Every month I read the letters and the pleas for help with open-mouthed amazement and, quite frankly, you must have the patience of angels.

Month after month you are asked the same questions by those who claim to be regular readers of the magazine, but obviously never absorb the information contained within. Month after month you publish letters from many who claim to be committed Amigans who delight in running Amiga Technologies down for their lack of commitment and marketing.

Please bear with me while I make the following observations:

- 1. AT purchased Commodore for £10m plus (actually it was £15m dollars - ed) and a similar amount in preparation for purchase, associated necessary deals, setting up production, minimal advertising, not to mention distribution and direct product costs. After a long period off the shelves, spending £20m was a gamble and as an investment it must be recouped as quickly as possible. With this in mind, AT has to load the price of every Amiga sold. Add a bit for development of new models, a little bit for profit, a wedge for distributors, a piece for retailers, a reasonable royalty for Digita and the other companies in the bundle, and all of a sudden £400 for what is still an excellent computer seems like a pretty good deal.
- 2. Advertising by the big boys over Christmas was tremendous. How can AT compete? Without scratching your head can you name the companies who have advertised their UNIQUE computer in the past 12 months? Yes; Intel Inside, Pentium, Multimedia, CD-ROM, Encarta, Windows95. Walk into any computer dealer or high street box shifter and you can buy an IBM

compatible PC (a clone - no research or development costs). Not always the one you have seen advertised because you can bet that every dealer (Escom included) can offer a better deal on a PC with compatible sound card, quad-speed CD-ROM drive, stereo speakers, blah blah...

3. Christmas advertising did indeed sell a lot of IBM compatibles. AT has a unique product which must be sold as such. It cannot ride on the back of others and it cannot rely on impulse buys or the recommendation of dealers. Dealers make far more money by selling cheap PCs to leads generated by the big boys. The big boys make their money from business buyers.

Don't let your readership and other loyal Amigans be fooled or blinkered into thinking that a high spend on advertising will guarantee high sales - personal recommendation could well be the best way forward. If only 10 per cent of Amiga users in Britain convinced a friend that the Amiga was the best all-round computer, that alone would guarantee a bumper and prosperous year for AT.

Tom Porter, Torquay

You're right about not being able to ride on the back of others' advertising. In fact, the Amiga has never been able to ride on the back of any other platform - the price for being unique, I guess. But I wonder about that 10 per cent. Unfortunately, I'm finding increasing evidence to suggest that there are one time Amiga users who now own PCs that are doing precisely what you suggest, but in the wrong direction. Ah well, we'll have to wait and see what VIScorp have to say about the situation.

NSURE IN THE UKRAINE

Considering the lack of any official Amiga representative in the Ukraine, please assist me in contacting Amiga producers with the aim of dealing in the Ukraine.

Andrew Terentyev

Gavannaya, 6/37, Odessa 270057, Ukraine Tel: 380 482 230693 Fax: 380 482 259835

We're printing Andrew's address and phone number here in case anyone out there would like to help him...

ORE PRAISE

Just thought I would drop you a note about your Web site. It's really rubbish and I hate its crass mediocrity! No, just kidding, I think the new, improved AC Web site is just great and beats all the others hands down. The Webchat service is a smashing idea that I intend to check on a regular basis and it's nice that the site gets updated

One question: why don't you put some of the features and reviews you do online to join the news, etc. No, sorry, I have two questions. I noticed that you did have the Walker pictures up, but when you went to the June update you lost them. Please put them back up, they were really handy!

David Gould, Cold Christmas, Bucks

Phew! I thought someone didn't like our site for a second there! You probably already know that we have the Walker page back online again - it's in our new category 'Stuff!'. As for the reasoning behind us not putting complete features and reviews online, well, someday, it might happen. But for the time being, we are still a print magazine and what we want you to do is buy the collection of perfect bound pages we put out every month.

ow in a permanently bumpersized four page flavour, Public Sector continues to bring you the very best wallet-friendly software. Amongst this month's hotch potch of the top notch you'll find everything from educational disks and indispensable applications to thoroughly absorbing games.

Worthy of mention but unable to squeeze into the packed PD pages this month is the labour of love that is The World Of Football Icons, available from 17 Bit Software (disk code 4051). It contains over 600 icons depicting practically every major soccer team kit (both club and international), as well as American Football and international Rugby strips. Whilst scores of uses for these faithfully reproduced kits do not exactly spring to mind, it's easy to see that a colossal amount of effort has gone into producing this disk.



Add some colour to your Workbench with these Football Icons... and then wonder why you can't recognise what all your programs are



PD and shareware programs cut some rug this month

IME & TIME AGAIN

Since I reviewed Taskbar 4.29 last issue, author Robert Ennals has continued developing it at a phenomenal pace. At the time of writing the current release available on Aminet or from a PD library near you is version 5.2, which features a variety of bug fixes and some new features, such as a tidier display and the option of avoiding windows owned by certain tasks. If you are a Taskbar fan and you have Internet access, you can keep up with the latest developments at http://members.aol.com/ennals/taskbar.html.

COLOURS

Programmed by: Carsten Magerkurth Available from: Carsten Magerkurth

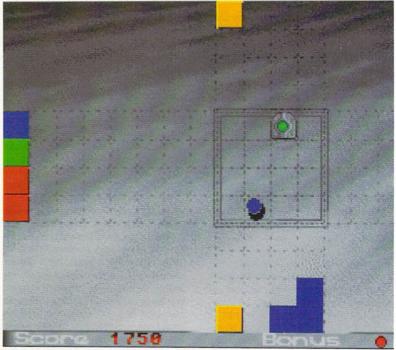
Described by its author as blending elements of classic games such as Breakout and Tetris, Colours is an immensely diverting puzzler.

It's rather difficult to describe in words, but a quick glance at the screenshots should help you understand what's going on. Your sprite, positioned on a four-by-four platform in the middle of the screen, must shoot balls at advancing rectangular blocks. These blocks may be one of four colours, and your sprite itself can only destroy one colour of block at a time, depending on the colour of ball you are firing at that moment. You can change the ball colour by bouncing it off a block colour you cannot destroy, whereupon the block will swap colours with your ball. With me so far?

Whilst you can simply destroy blocks one at a time, you will score far more points if you destroy lines of blocks of the same colour. Because you can change the colours of the advancing blocks, it is possible to deliberately change the colour of certain blocks and save lines of them for a while so that you can destroy them together and score more points.

If you didn't understand a word of that lot, then I reckon the best way to find out about Colours is to get hold of a copy. It can hold the attention for hours – and

that's not just because individual games can last for ages once you get the hang of it. Colours really is a genuinely entertaining game. It has quite attractive graphics, particularly apt sound effects, and copious quantities of addictiveness. As an added bonus, Carsten is offering Amiga Computing readers a vastly improved n on-PD version of Colours. All you have to do to obtain a copy is send a blank disk to him and state that you read the magazine.



Colours: Fiendishly addictive, or something

GAME of the month

CHARLIE J COOL

Programmed by: Neil Cousins Available from: 17 Bit Software Disk No: 4065

This superb platform romp was originally due to be released as a commercial product until publishing problems got in the way. It's now resurfaced as a shareware product, with this demo version giving interested gamers the chance to decide for themselves whether to splash out a tenner on the complete product which features 28 levels of hugely entertaining runny-jumpy action. On this evidence, Mr Cousins should be getting a fair few takers.

The objective on each level is to collect a hidden key and then reach the exit. Along the way there are the usual nasties to avoid and coins to collect, and plenty of platforms to leap between, be they floating in mid-air,

lodged in handy trees, or moving between bits of solid ground.

Charlie J Cool doesn't pretend to be anything stunningly innovative, but it's a polished product with beautiful graphics and suitably cheesy sound effects. It's been a while since a decent Amiga platform game appeared and this one most certainly fits that bill.

There are two flavours of Charlie J Cool, one for all Amigas and another for AGA machines, demos of both being included on the disk. I'd strongly recommend taking a look, because this is just the sort of absorbing action adventure keen gamers will be looking for.



Costing only a tenner to register but more polished than plenty of commercial offerings, Charlie J Cool must surely rank as one of the best value shareware games ever

TALKING TO CLARRY

I want to hear from you if you have any program, whatever its purpose, which you consider worthy of review. Whether it will be freely distributable public domain, shareware or licenceware, if you feel 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. Although Public Sector receives too many submissions to cover them all, I promise I'll at least look at your work even if it's yet another Lottery program or Klondike cardset. It does make my job a lot easier, though, if disks are clearly labelled. Please also include a cover letter detailing the disk contents and price, and giving some basic instructions. The magic address is:

Dave Cusick, PD submissions Amiga Computing, Media House Adlington Park, Macclesfield SK10 4NP

FINAL FRONTIER #9



Unsurprisingly, given its title, Final Frontier is a disk-mag dedicated to all things Star Trek related. Issue 9 is packed with articles, is beautifully presented and fills three disks, so Trekkies are in for a real treat.

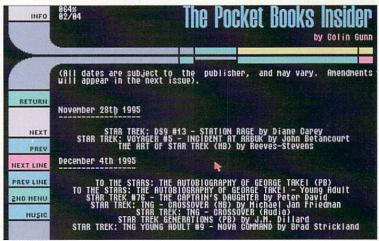
There's Trek Fiction, variable in quality but always featuring the famous characters from the various TV series, especially The Next Generation. A particularly light-hearted inclusion here is 'The Lost Episode? in which the crew of the Enterprise employ Microsoft's Windows to great effect in attempting to cripple the powers of a Borg starship, but are then threatened by the evil and extremely angry forces of the sinister Bill Gates.

There are also reviews of new Trek books and videos, a look at the latest developments in the

Jim Davidson. The Trek Art section includes a few decent images, which appear to be the work of some industrious LightWave-owning fans. There's even a convention section, with reports of recent events and news of forthcoming ones. If you're the sort of person who enjoys nothing better than attending seminars on Klingon battle tactics and dancing the night away in a disco full of people wearing wacky costumes and latex masks, then this section of the magazine will prove marvellous reading.

This issue is rounded off with a 'Generation' movie special, including write-ups of everything from the film itself through to the soundtrack album, images based on the movie and so on.

Whilst to non-Trekkies such as myself the whole thing is vaguely bemusing, Final Frontier would appear to cater extremely well for those whose life revolves around Star Trek in its many incarnations, and for those folks I'd highly recommend getting hold of a copy. And possibly a psychiatrist, too.



Hey, some people genuinely enjoy reading this kind of thing...

MAGIC SELECTOR V1.8

Programmed by: Oyvind Falch Available from: KEW=II Software Disk No: U1144

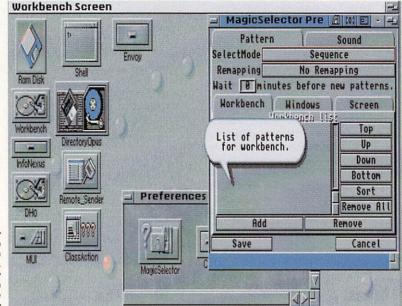
Magic Selector is designed for users of Magic Workbench who are looking for a little variety. It can be configured to load different MWB set-ups every time you reboot, either by working through a sequence or by selecting one randomly.

It is also possible to choose to have a sound sample played on booting, so, for instance, you could receive a personalised welcome message from your machine every time you turn it on.

Magic Selector is supplied with an attractive Preferences program which uses the ever-popular Magic User Interface. Setting things up to suit your tastes is a speedy process, and once you've dragged the program file into your WBstartup drawer, every time you boot your machine you can be greeted by a different Magic Workbench.

Admittedly, it is possible to go completely over the top when customising your boot-up procedure, a shining example of which must surely be Andy Maddock's Macintosh in the AC offices. It's never without an amusing, hard drive space-wasting

intro sequence of some description, not to mention some garish desktop backdrop without any of the subtlety of the attractive MWB designs. But this sort of thing definitely impresses people and as such, Magic Selector is surely another string in the highly configurable bow that is the Amiga Workbench.



Make sure your Magic Workbench isn't as ugly as Andy Maddock's, and add a few boot-time options to boot with Magic

A MOS COMPILER

Programmed by: Europress Software Available from: F1 Licenceware

The first in F1's new series of 'Commercial Ware' titles, the often difficult to obtain AMOS Pro Compiler has been licenced from Europress Software. It consists of the software and manual previously contained in the last Europress release (v2.0) but comes in a plastic wallet instead of a large box, and costs just £14.99 as opposed to somewhere in the region of £35.

The Pro Compiler can turn even the most sluggish of Amos programs into fairly nippy pieces of code. It actually works with every flavour of the programming language, meaning users of Easy AMOS and 'Classic' Amos can also reap considerable benefits from the software. The results it produces are leaps and bounds ahead of those the original Amos compiler is capable of.

The three disks in the package contain version 2.x of the compiler, an update to bring AMOS Pro up to the same standard, and some helpful examples and extras. The installation procedure is adequately explained in the manual, and a tutorial then leads you through some of the more impressive Pro Compiler features.

Using the Compiler itself is extremely easy, with the

program having a distinctive clunky but colourful interface. Your efforts can be swiftly compiled either from the editor itself (if you're got AMOS Pro) or from the Workbench (with Classic Amos or Easy AMOS, or if you're low on memory). Pro users also get powerful additions like the option of squashing banks using the popular Power Packer library directly from the editor, and the facility to read instructions from the Shell command line that launched your program.

Various other handy extras add to the value of the package – for instance, it's now possible to create a booting disk for your creations with the minimum of fuss, rather than having to copy various essential files across by hand, a tedious task at the best of times. And best of all, the amos.library file (which used to be included in every single compiled Amos program, resulting in some huge compiled files for even relatively simple programs) can now be stored in and read from the Libs: drawer as with any other Amiga library.

Overall then, whilst it's of most use to Amos Pro users because of the extra packing commands, the Pro Compiler boosts the power of this programming language considerably and should have a space on every Amos coder's hard drive.



Inject a bit of speed into your Amos creations with the excellent Pro Compiler

A TOUR THROUGH TIME

Programmed by: Mike Austin Available from: F1 Licenceware Disk No: F1-126

Representing the entire history of the universe as a one mile long road, A Tour Through Time manages to be extremely informative whilst still holding the interest. The road of time is divided into 15 sections, spanning history from the Big Bang, followed by the appearance of basic life forms, through the dinosaurs and the evolution of mankind, right up to the present day (mankind's section of the road being a mere few inches right near the mile marker).

The author has done a good job of making A Tour Through Time easy to negotiate, with a main menu leading to three submenus, each containing detailed explanations of five time periods. The basic text contains highlighted keywords connecting it to various commented illustrations and diagrams which help to expand vague areas.

The language used throughout is not overly complicated, although some of the concepts explained are relatively difficult. A comprehensive glossary is included to help demystify problematic terms.

Although the program is aimed at children of eight years and over, it's one of those educational products that could teach most people something new. It's certainly more interesting than an ordinary textbook.

SLIDER 2

Programmed by: Joseph Carlson Available from: 17 Bit Software Disk No: 4045

Remember those little sliding puzzle games that used to knock around a lot? Sometimes immensely frustrating, they at the very least used to help while away long journeys and they were good for a quick fiddle with during bored moments every now and again.

This is an extremely accomplished computerised version of those puzzles, with stylish graphics and some excellent sound effects. Computerised slide puzzles could simply not be done any better than this.

You can choose various pictures which will be split up and scrambled by the computer. The simplest picture is merely a numbered grid, but if you're after a greater challenge you can choose to play with country scenes, teddy bears, and all manner of other images. You can use your own images too, subject to certain restrictions set out in the accompanying AmigaGuide documentation.

A puzzle may be split into any number of squares (or rectangles), from four to sixtyfour, and you can play with or without guide lines identifying the edges of blocks. There's a

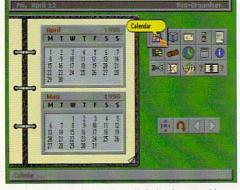


leaderboard displaying the fastest times in which the puzzle has been solved, but if all else fails the computer can be told to solve it, which it will then proceed to do in an embarrassingly short time. Slider might not exactly be a revolutionary gaming experience but it's an enjoyable way of passing the time which deserves a place on every hard drive.

PRO ORGANISER 1.2

Programmed by: Ali Prior Available from: ProSoft

After the success of his excellent series of prediction programs including Pro Gamble and Pro Lottery, Ali Prior has moved into the world of Amiga utilities. It seems there is nothing this man can do badly, because Pro Organiser is one of the best programs of its kind that I've seen for any computer. It's incredibly easy to use, tastefully and intelligently designed, and brimming over with useful features.



Keep your life in order with the excellent Pro Organiser

Everything you'd expect to find in a standard desktop diary is beautifully implemented here. Appointments, anniversaries and so on can be quickly entered, and telephone numbers and addresses can be stored and searched either by entering a name or by simply checking all entries under any given letter of the alphabet. There's even a telephone number dial option. You can also check the time in various cities around the world, and even convert currencies (with an option to set the current exchange rate yourself for up-to-the-minute accuracy).

The presentation is immaculate throughout and the elegant interface makes the program a

Get Some Sleep

Arrange Friday Night
Finish Public Sector
By The Damed Shopping
Kill Andy Haddock
Ring Farouk
Ring Kath And Paul
Ring Mark

To Bo List ... Select as sotion.

joy to use. There's even a guided tour which points out all the features, and a handy Bubble Help option like that featured in MUI applications.

Pro Organiser is, of course, hard drive installable, although it works perfectly well from floppy disk. To obtain the full version you'll need to register, but a free demo version is available which you can obtain by sending a blank disk and a stamped self-addressed envelope to ProSoft.

So much to do,



he arrival of Amiga Technologies'
Surfer pack was quickly followed
by HiSoft's Internet solution, and
this led me to think that it would
not be too long before there was a good old
public domain Internet pack. And the first to hit
the street is from OnLine PD.

Depending on your situation, OnLine PD has a number of options you can choose. For the first timer they sell a 28.8K modem along with an 18 disk Internet and BBS starter pack. For people who already have access to a modem, the software pack can be purchased separately – either the full 18 disk pack or a cut-down 12 disk version that has only the Internet software.

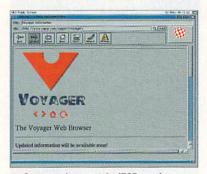
The actual modem you get is a new model from Datatech and is your usual high speed 28.8K modem. Under good conditions you will get binary transmissions of just over 3K/s, and text can typically be received at 4.5K a second thanks to the normal MNP data compression.

As with most new modems the Datatech can transmit and receive both class 1 and 2 faxes. Luckily, AmigaFax is included with the software pack so you can take advantage of this from the start.

APPROVAL

The modem itself is very small and well styled, apart from the cheesy 'Fax Modem' label stuck on the top of it. There are the usual ports in the back including a through socket for a phone. It is BABT approved and also has the new European CE approval, which means all the cables and the modem itself work within some interference tolerances. OnLine PD has also thrown in the Amiga to modem serial cable and a double phone socket converter so you can have your phone and modem both connected.

The software pack that comes with the modem does supply you with all the programs and files you need to get up and running on the Internet or BBS-ing. The most important part of the software pack is the AmiTCP v3 archive. This comes on two disks and is archived, and you



Once you have got AmiTCP running you can try out the Web and get yourself an up-to-date browser

Living with MR INCOME IN INCOME INTOME IN INCOME IN INCOME IN INCOME IN INCOME IN INCOME IN INCO

will need to extract both parts of the archive yourself into the AmiTCP drawer. Once installed there is AMosaic and an early demo version of iBrowse which you can use to try out the World Wide Web. GRn is also set up for accessing news groups.

There are quite a number of other programs such as AmiTCP front-ends and on-line meters to show how much money you are spending. There are also a couple of terminal programs with which you can use the rather overlooked area of bulletin boards.

If you are going to install all the software you will need a good few megabytes free on your hard drive, and if you start going mad downloading programs and files then something more in the order of 20Mb free would be wise.

As a way of getting into Comms, the actual pack has both good and bad points. It gets off to a great start with a very good modem at a very competitive price. The actual software has mixed blessing – some is ready to run while some has to be extracted from floppy by hand, something novice users are going to struggle with. Some sort of extraction script would have

been much appreciated. An AmigaDOS script asking the user where they want the archive extracting to does not take up much room, and I think some sort of accompanying documentation should have been included.

morios

ARGON

BFS - Bits Per Second, a measure of how fast a transfer is, using the number of single bits received a second

CPS - Characters Per Second. Another measurement of transfer speed, this time measuring the number of bytes received a second

AmiTCP — an Amiga implementation of a TCP/IP stack that allows your Amiga to communicate over the Internet

internet - a worldwide network of computers that's a bit slow really

BBS - Bulletin Board System. A computer that you can contact over the phone and do all sort of things.



PRODUCT DETAILS

Product	Mr Modem
Supplier	OnLine PD
Price	Mr Modem + pack — £159.99 18 Disk pack — £12.75
Tel	01704 834335

SCORES

o con co	
Ease of use	72%
Implementation	80%
Value For Money	95%
Overall	89%

ESERVATION FOR MR MODEM

Overall, most of my reservations are about the software in the pack, such as AmiTCP. This is not OnLine PD's fault as this is really the only available choice, but I think it would have been better if OnLine could have put in a little more help for the novice user, for which there are a good few potential problems.

The modem, on the other hand, is excellent and very well priced and you could start using it for BBSing straight away using either JR Comm or Dream Term. Finally, as a bonus you can get 10Mb worth of free downloads from OnLine PD's bulletin board.

SIMPLE QUESTIONS

hope, simple questions. 1) I have heard the A1200 IDE can handle 2-3 devices, is this true? If so would it be able to handle an IDE CD-ROM? I do have some CD Drivers.

Please help me by answering a few, I

2) Am I right in assuming that a HD connected to a 286 Motherboard would be an IDE

3) When I use Urouhack the sizing of some scrolling gadgets appears corrupt on certain programs, such as MultiView and DiskMaster II. Any ideas why?

4) When I try to load Nemac IV it says "can't locate BM". What is BM?

5) After installing some software such as DPaint IV and Gloom, when I come to load it I get the message "Unable to open your Tool Gloom" or whatever title I'm using. I have tried using DOSTrace to find out what is wrong, but all I get is the message "Unable to find Segmented Image", which is no good to me because I don't know what a segmented image is. Do you know why this software will not run from my hard drive?

Alan Bailey, London

1. Well yes, no and no. Any IDE interface can handle up to two drives daisy chained together, so in theory the A1200 IDE interface can take two hard drives being connected to it. The problem you are going to have is how are you going to fit two IDE drives into an A1200? There is bar-

ley enough room to fit one 3.5" drive, never mind two 2.5" drives, unless you fancy having a hard drive dangling out of the side of you machine.

If you have a tower system then you do have the room and can therefore have two drives on your A1200 IDE interface. The problem with IDE drives is that you need to make one the master and the other drive the slave. This involves changing a jumper on the two drives, and unless this is marked on the drive you are going to have to ring up the manufacturers to find out what the correct settings are.

If you want to add another hard drive

there are a couple of possibilities available to you. You have the usual Squirrel or DataFlyer option that will allow you to hook up an external SCSI drive. SCSI drives also have the advantage that they need their own power supply, so your poor old A1200 PSU is not put under any extra stress.

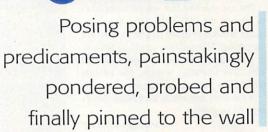
To confuse things further there is a new(ish) standard called E-IDE, pronounced e-d-e I think. This is basically an extension of IDE and allows four devices to be connected to it and is faster. It is also the new hard drive interface on the Walker.

IDE CD drives are another kettle of fish. It is possible use an IDE CD drive with your A1200, but you need an ATAPI device driver. Currently, the only one I know of comes with the AmiCDFS software which is a very good suite of CD utilities.

2. A drive fitted to a 286 board is not necessarily going to be an IDE drive, but it probably is. The simplest way to tell is that an IDE interface will have 41 pins, and a 2.5" drive has four more on the right for power and a 3.5" drive has four large power pins.

3. According to the UrouHack author, the problem is not with UrouHack but with the programs you are running. These programs do not take into account the possibility that the size of the window borders can

-03 -0 P. SeskJet P. DeskJet 550



advice

computing

The latest version

of MCP provides

UrouHack-style

completely

configurable

gadgets that are

service

change. Therefore, when UrouHack changes the proportional scroll bar and arrows, these programs don't recognise this and ask the operating system to draw them as if they were the original size. To prove that the author is right, the version of MultiView in Workbench 3.1 does not suffer from this problem because the programmers have fixed it.

4. BM stands for BitMap. The Nemac IV demo is quite large and needs as much memory as possible. This means that if you are trying to run it from a hard drive it is possible that you will not have enough memory available, particularly if you are running a lot of utilities or have a large Workbench running a lot of colours. Your best bet is to guit as many applications as possible, remove any external devices, and reduce the size of your Workbench screen. On the Nemac IV config window there is an option to use small textures which are of a lower quality but use a lot less memory.

6. We have no idea what is wrong with your hard drive problem. We recently had the same problem with a second IDE drive that we installed on our A4000, and the problem seemed to go away when I reset the max transfer rate and mask to their default values of 0xffffffe and 0xffffff. However, if this is not the problem then I'm not sure what is.

ASSUMPTIONS SSIGNS

I have been having terrible problems getting the Lottery program from your May issue. I have managed to get the program off the coverdisk and copied it onto my hard drive, but every time I try to run the program a window pops up asking for me to insert the analyser disk. The same happens when I try to use the install program that comes with it. What do I have to do to get the program working?

Simon Reeves, Bury

Unfortunately, the problem you are having is one that afflicts every Amiga user. Many programs have extra files that they have to access and to make it easier to find them, for the program anyway, an assign is used.

In the case of Lottery, if you drag its drawer into your work drive then open a shell and type assign analyser: work:lotto, this will allow you to get Lotto up and running. You should also add this line anywhere in your S:user-startup so that each time you start your Amiga the assign will be automatically made.

On the Amiga, every device that is connected has a cunningly titled device name - for example, the internal floppy's device name is DFO. Along with this, every disk has a logical name, so if you put a formatted floppy in the internal drive you can refer to it either as DFO: or as Empty: which is its logical name. Now, as logical names do not have to refer to an actual physical disk it is possible to create your own logical names using the Assign command.

When you run a program that requires assigns to be made, if they do not exist the Amiga operating system thinks the program is asking for a disk to be inserted. This is why when you try to run the Lotto program you get the insert disk requester, but once the assign has been made the OS is fooled into thinking the Analyser disk actually exists and directs all of Lotto's disk access to the assigned directory.

AMIGA SERVER

I have a question about the Internet and the Amiga. I'm thinking about starting an ISP in my area. Would the Amiga 4000T with a 68060 running NetBSD Unix be a reliable setup for running an ISP? I have been told to stay away from using a PC as they start to bog down under that kind of pressure.

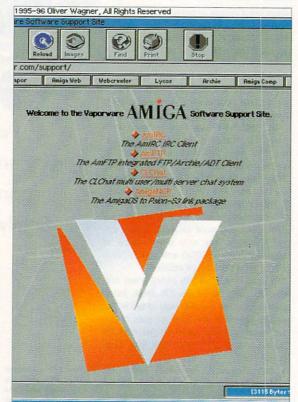
The one machine that was recommended to me was the DEC Alpha. Have you come across any Amiga-based ISPs? If so, how are they doing? I figured Unix would be the way to go because from the experience I've had with Unix operating systems, the Internet facilities are pretty much built in.

If you have any advice for a fellow Amiga user, I'd be grateful.

RSKamiga@aol.com

You will be glad to know that there are a number of Amiga's out there being used as servers. One example would be the Amiga that Vapourware's support pages are running off which is an A3000T. As well as handling mail it works as an FTP and WWW server for a good number of people – its statistics show it has quiet a few thousand accesses a day. I have also heard about an ISP in Sweden run from Amigas.

Generally, it is assumed that the Amiga's own Internet software is very good – apparently the Web server software is excellent, allowing as many user connections as memory permits. Much of the PC's



All this and more is served by a very hard working A3000T

server software only allows up to 256 connections. If you feel easier using Unix software then there is no reason why you should not go that way.

SCSI CHAIN GANG

As a transfer subscriber to your magazine from Amiga World, I read all the columns, particularly the beginners corner and ACAS, from which I've gleaned several helpful tips from these little mines of information. I now find myself needing some of your inestimable knowledge of the Amiga, namely how to add a CD-ROM drive to my system which already has a SCSI hard drive attached.

My system is an Amiga 2000 with a GVP G-Force 68030 accelerator (which has the SCSI driver on-board) and a Quantum 540LPS hard drive running under AmigaDOS 3.1. The CD-ROM drive I purchased is a Sony CSD-76SB. Both the CD-ROM drive and the hard drive are internally mounted – the hard drive is on the controller card and the CD-ROM is mounted in the 5-1/4" drive bay.

My question is about the cabling required to connect these devices to the GVP controller. Is it necessary only to have a 50-pin ribbon cable with 3 connectors attached, or is each device supposed to have a second connector for 'daisy-chaining' to additional devices? Neither the GVP manual nor the Sony manual is clear on this point.

If just a single cable with three connectors is the answer, I can make the cable myself. I understand about the terminating resistors, and since the CD-ROM does have the terminators installed, it will become the 'end' device. I have no idea if the hard drive has the terminators as there are none visible and no documentation of any sort came with the hard drive. Am I required to purchase an additional SCSI controller card for the second device?

Andy Rakaczky, Sun Valley USA. andy@bally.com

The cabling for internal SCSI chains is the same situation as you have with IDE drives — you just need, as you have thought, a 3-way 50-pin ribbon connector. In fact, you can have all seven SCSI devices connected internally, you just have to keep adding ribbon connectors to the existing ribbon. You can still only have a maximum of seven devices connected to the SCSI card be they either internal or external.

If you want to add extra internal drives you will probably find that your main problem is the lack of room. One way around this would be to make yourself a Zorro II shaped card out of plastic and mount the extra drives on this. Internal power isn't really a problem with a 2000 as they have quite a beefy power supply that is more than up to the job.

SERIAL PRINTER

Last year I bought an A1200 with a Hewlett Packard desk writer ink jet printer. At the time of purchase the chap who sold it to me explained that the printer was designed for use with an Apple Mac computer and he had modified it to work with the Amiga serial port which involved a software patch and a cable modification.

All worked well until the hard drive crashed. No problem, I thought, as I had backed up the Devs drawer, including the printer driver I had been using. So I reinstalled all the software and set up the system to how it was before the crash and all seemed fine until I tried the printer. Now I cannot get it to print anything. In fact the only response I get from the printer is that when I run Ncomm it prints ATZ and then locks up Ncomm.

I am now wondering if there was something else needed to run this printer that I did not backup. Do you know of any programs available that will let me use this printer again? If not, do you know anybody who wants to buy a printer for an Apple Mac?

S Mahoney, Gosport

As far as I know, all Mac
printers are serial, but
this is no problem
because the Amiga will
work with printers con-

nected through either the parallel or serial interface. Generally with printers on the Amiga, if you have the correct printer driver then you should have no real problem getting it to work.

I used to have an old ImageSetter II printer, which is a printer made by Apple, and had the unusual round connector that the Mac uses. As the Amiga comes with an ImageSetter driver all I had to do to get the printer working was get hold of an IBM to Mac serial cable, making sure the Amiga end was a 25-pin male D plug, and in the printer preferences set the printer port to Serial. You will also have to set the serial preferences to that of the printer specifications.

Finally, there is no need for a software or cable patch, as long as you have the driver, and I think any HP desk jet driver will do. Make sure you set the printer port to serial and the printer should then work. As Ncomm can send an ATZ signal to the printer, it therefore shows that the printer is receiving data. One last the printer is receiving data. One last Ncomm locks up before printing as it is waiting for a response from a modem.

MUI MADNESS

As a beginner on this system, could you give me some guidance as to where I am going wrong and to help with the problems I am having?

1) I recently went from MUI 2.3 to MUI 3.1 and am having a lot of problems trying to get it to work. I have moved the MUI icon with the '?' symbol to my prefs drawer and assigned MUI to my Work partition but nothing seems to be working as before.

I used to have an icon on my startup screen called MUIEnv which housed all my system variables, including my Mosaic settings. On startup I am getting the message "MUIEnv failed to return should I wait some more", and if I cancel this requester it comes up with MUIEnv failed.

When I start Mosaic I get the message "failed to create appicon" which also happens with MetaMail and MetaTool. Where should the Mui Icons in the freshly created MUI drawer be put, e.g. MUIPrefs to Workbench: Prefs drawer? etc. I am informed by my machine when I try to start some applications that I require MUI 3 or above to run the applications. I have installed it so why do these requesters still appear?

2) Where does MetaTool belong and how do you set it up?

3) After upgrading my Hard Drive from a 120Mb 2.5" to the 3.5" 540Mb E-IDE Seagate one every 20 or so switch ons I get a loud blast of music followed by an arrow formed into a triangle appearing on my screen with the wording 'OPTIMISED FOR BEST WORK-BENCH PERFORMANCE' below the arrow. In the bottom left-hand corner of the screen the Dolby trademark appears with the wording 'Dolby Surround' beside it. I have to switch off

and start again when this happens. Where does this come from? Is it a virus of some sort and how can I get rid of it?

4) My monitor is the Commodore 1084ST, and on the front there is a switch for RGB or CVBS-LCA. What is this for? Can I use it for a better resolution? At the moment I use the Amiga's Video output with the switch in the RGB position.

M Parker, Tullibody matt@mparker.demon.co.uk

in ver

 It sounds like you are having a right barrel of laughs installing MUI. Firstly, since version 2 of MUI all the relative

files are kept in a single MUI directory, and two very important assigns are made so the operating system and MUI programs can find all the right files.

If you have kept things as they were from the original installation, when you install MUI 3 it simply renames the old MUI directory to MUI.old and creates a new one with all the correct new files. If you have fiddled about with the earlier version, perhaps moving library files out of the drawer, then you are going to have problems. Your best bet is to go through your user-startup and remove any lines mentioning MUI. There should be two lines; BEGIN MUI and ;END MUI, and you should remove these lines and everything between them.

You now need to go through your system and delete the old MUI drawers and any of the files you may have moved out of the original drawer. Once you have done this, reset your machine and reinstall MUI. This will make sure all the assigns and files are correct. If you now want to move the MUI

If it wasn't for MUI, many programs would not be around





Do you have a problem? Do you sometimes find yourself poised over your Amiga with axe in hand, spouting profanity at the stubborn refusal of your software or hardware to behave properly?

Well, calm down and swap the axe for pen and paper, jot down your problems, along with a description of your Amiga setup, and send it off to Amiga Computing Advice Service, IDG Media, Media House, Adlington Park, Macclesfield SK10 4NP. Alternatively, e-mail us at ACAS@acomp.demon.co.uk

preferences into your Prefs drawer that is alright.

Some people have reported problems trying to run MUI programs after installing MUI 3. This is probably due to incompatibilities with older preferences, and you should probably delete the MUI drawer in the Envarc directory. Open a shell and type delete envarc:mui.

2. MetaTool is a stand-alone e-mail package, and before you can run it it requires a number of environmental variables to be set. This is normally done for you when you use AmiTCP's startnet script or most of the AmiTCP front-ends such as AmConnect or AmiTCPHelper.

Once you have extracted the MetaTool archive there is really no other installation needed, as long as the environmental variables are set correctly with the SetEnv command. The only thing you may have to change is the MailCap text file. This tells MetaTool which programs you want to display as different filetypes. Therefore, you may want to change the default MultiView entry to FastView or whichever program you prefer.

3. The program that is causing this annoying screen to appear is the MagicWB-Daemon line in your startup-sequence. This is the program that makes sure your MagicWB icons look correct on screens with more than eight colours. Unfortunately, the programmer took it upon himself to add that little extra.

On most machines this does not crash it but it does hold up the boot process and is very annoying. Just delete this line and you will not be troubled with it any more. The down side is that you need a replacement program to remap the screen colours when you change the screen. MultiCX is a good choice and gives you a shed load of other features in to boot.

4. The CVBS-LCA is there if you are using a composite input which means you cannot get any better picture using it. If you select it when using an RGB input you will just end up with a blank screen.



ust over a month ago we, along with the rest of the Amiga community, were amazed to learn that a company called VIScorp were after the Amiga. A Letter of Understanding had been signed between itself and Escom and it made its intentions clear – it wanted to buy Amiga Technologies off Escom and incorporate the technology into its set-top boxes. But it wasn't just the fact that it all came out of the blue like this. For one, no-one knew that Escom had any intention of selling the Amiga, for another VIScorp already had an agreement with Escom which licensed it to use the Amiga architecture in its set-top boxes, and as for the amount of money being estimated for the deal, well this made us even more wide-eyed as we wondered what was going on. Okay, so Escom had posted losses of DM72 million which, in March, it revised to DM125 million, but

Tina Hackett sets
out to see who
VIScorp is and
what it wants with us?

surely it wouldn't sell off the machine only a year after buying it? And what does VIScorp want with the whole company?

The World of Amiga was a few days away and this made tracking down anyone who could answer our questions nigh on impossible. Head Honcho's from VIScorp were travelling over to the UK and, as you'd expect, Amiga Technologies was gearing up for the show. However, we did manage to get some comments off Gilles Bourdin who remarked: "We have changed Mother companies because of the financial position of Escom. It was not in a position to hold Amiga Technologies..." A press conference was announced at The World of Amiga and this attempted to answer what we all wanted to know. However, precise details weren't that forthcoming – after all, it was early days and a deal had not yet been signed. At the time of writing this feature, the two companies have yet to sign on the dotted line as far as we are aware. We all wait with baited breath for the press conference on the 19 May which will outline the plans (this was originally scheduled for earlier this month but was postponed). According to those in the know, everything is ready to go ahead....

W HO IS VISCORP?

VIScorp is an American company founded in 1990. Many are past engineers from Commodore and others have vast experience in the interactive TV industry. We take a look at some of the key players.



CORPORATE CAPERS

William Buck - Chief Executive Officer

William Buck has been in the role of CEO since 1994. He has a long history of involvement in Interactive Television and worked to form IWN with NTN Communications, a top interactive television company. Buck also worked for another pioneering interactive-television company, ICTV, where he was Vice President for business development.

Curtis J Gangi - CEO

Bringing 16 years of experience in consumer electronics to his roles, Gangi worked on the CDTV project for Commodore International

Roger Remillard – Founder, Inventor and Member, Board of Directors

Mr Remillard is one of the founders of VIScorp and is the inventor of ED, the interactive TV. He has more than 10

year's experience of research and development in fields including telephony, television and computer communications. Before VIScorp, Remillard was a consultant in the communication industry, specialising in two-way rapid cellular telephony and data-radio communications.

Jerry Greenberg – Chairman of the Board of Directors Greenberg is the co-founder and major shareholder of VIScorp. From 1982 to 1989 he was the sole shareholder and President of Leader Communications, the Chicagobased cellular phone and two-way radio company.

Also:

David Rosen – Vice President Business Development Florine Radulovic – Director of Communications Christa Prange – Controller

Raquel Velasco - Director of Sales and Marketing



We put VIScorp's Don Gilbreath, Vice President of Engineering, on the hot seat to answer all our pressing questions.

If VISCorp's main aim is set-top boxes, why has it bought the whole company when a licensing agreement to use Amiga technology was already in place?

It's part of a strategy. It's an economic decision. On the flip side, Escom was clearly having a tough time and VIScorp may have had an undesirable partner.

So Escom was up for sale then?

No, not so much up for sale but it had had a tough time, that was clear. You see, there might be people that VIScorp would not want to be forced partners with and get the licensing from.

The estimated figure for the purchase of the company is rumoured to be US \$40 million. Why this much when Escom only paid \$10 million)?

Both those numbers are crazy. Escom bought it at around the \$10 or \$12 million figure, although there were adjustments made. On our side the \$40 million – well, there is still some diligence happening. We can't say much about the deal but it's not a case of write a cheque for that amount. Don't forget that the inventory is more now too.

Where will Amiga Technologies' main Headquarters be when the deal happens?

It's a little early now. Right now VIScorp is very decentralised as a company. There are facilities in Japan and all sides of America. Clearly it will have presence in Europe because that's where a lot of the activities are but it's not clear at the moment.

Will all development take place in America?

VIScorp actually has simultaneous development going on in Japan as we speak. In the States it has some chip work. VIScorp wants to do stuff where the most experienced people are.

Can you confirm that development of new and



existing Amiga models will continue?

Absolutely, we can't say what exactly but by the 19 May the strategy of how this will happen will be opened up.

Can you reassure us of this when you state the main aim is set-top box technology?

Well, we would hope that Escom has kept the highend going, the computer side, because that draws to each other – the set-top business, the development and high-end community all work together as a triangle.

What is VISCorp's company background? Has it always been its ambition to create set-top boxes with Amiga?

As of 1990 that was the intention, that was always the aim.

Can you give me a profile of who's working on the Amiga set-top Box project? What are the past projects?

On the engineering side, the project involves many of the same people involved in the CDTV philosophy. Many of that team are here at VIScorp doing the same vision in the same way that the CDTV was a philosophy change for Commodore. We, as a group, have always felt that hardware needs to be up there

in the masses and the developers are the voices.

Are there any other companies trying to do this?

There's a lot of noise. In America alone there are 15 or 20 set-top projects with many different architectures and Chip Sets.

Who would you say are going to be your main competitors?

I'd say Philips might be the closest. It has a low-cost implementation of electronics, a base of software and knowledge of television.

How soon do you think there will be a market for this set-top box? Does it exist already?

In some areas. The set-top box is not just a product to us, it's a philosophy. VIScorp has a target in the better television and better telephone business and it's to be friendly in all these different networks.

How soon will the average family be able to take up this technology?

It's a cultural thing and in some markets, it's ready now.

How much will it cost?

It is cable and it will actually be leased and not sold to the user. It is subscription based – say \$20 per month which will include the services.

Is it going to be well publicised that the set-top box uses the Amiga?

Yes, if we're successful we hope the Amiga might be considered another Dolby.

Any final comments?

As a group VIScorp believes in the Amiga. It is not buying this on a whim. This group is looking on this as a way of changing the industry. A way to bring this back to life. This may be the last breath the Amiga may have in this world.

ENGINEERING EXPERTS

Don Gilbreath - Vice President of Engineering

Don Gilbreath is best known in the Amiga world as the designer of the CDTV, Commodore's innovative but ill-fated consumer multimedia player. He also has 17 years experience in 'informational sales' and consumer market development in general, and has designed and developed over 30 products including musical instruments and other

multimedia products. He is highly rated as a manager of international engineering teams. From 1980-91, Gilbreath worked with Commodore International as Manager of Consumer Products and then Director of Research and Development. He also developed a 1200 baud modem and laser disk authoring system for the Amiga. His educational background includes a BS in Biomedical Engineering.

Also:

Steve Kreckman, Director of Hardware Carl Sassenrath, Director of Software Jim Goodnow, Senior Software Engineer Louise Carroll, Engineering Administrator



WHAT DO THEY MAKE?

The ED - Electronic Device

According to VIScorp, the ED is a sophisticated cable settop appliance. Designed as a cost-effective solution, it is used in conjunction with a TV set and is connected either through a telephone wire or 'wireless' Radio Frequency connectivity. The package incorporates a modem, video and audio circuitry and a controller. VIScorp states that the ED will deliver services that are either not widely available or can only be accessed by an expensive high-end PC. In the future, it hopes to offer home shopping, educational and games programs, fax facilities and e-mail. It also provides a solution to every parent's worry about what their children watch on TV with a screening capability.

The couch potato is further catered for by on-screen telephone dialing which allows the user to dial up a telephone number with the remote control. If caller ID is available, it checks the incoming caller against its database and, when recognised, scrolls the name up on the screen. Households will also be able to sort out their finances and do some home shopping via the television. A magnetic card stripe reader means that credit cards and debit cards can be swiped for transactions. Debit cards can also have funds put onto it from the user's bank. The ED system can also give you interactive

information to what's on TV that week which is also customised to the local area. Whether this future holds more re-runs of Dallas remains to be seen though.

The UITI (Universal Internet Television Interface)

The UITI also connects to the ordinary TV set and is a dedicated Internet and World Wide Web access device which comes with a 14.4 modem. The user will be able to use the Web and the information will be displayed within the confines the TV display allows, i.e. it will be shown with TV-quality resolution and local memory storage thought to be 10Mb to 20Mb. A remote control will be used, although VIScorp intends to bring out its own keyboard in 1997. The UITI will also provide extended functions within the current Internet programming language which would mean better quality TV programming and accelerated graphics.

What has been in the foremost of many people's minds who are considering home shopping and banking is the safety of transactions over the Internet. The UITI takes this into consideration and provides for the current standards of encryption. Existing Amiga programs can also be downloaded and used, plus it allows video capture from a video camera, video or TV and lets the user process graphics and send them back over the Internet.





THE FUTURE'S NOW

Well, not far off anyway. When people normally talk about their visions of the future it all seems like pie in the sky. But VIScorp, far from merely speculating on what the home of the future will be like, has a production schedule that will mean these promises could be a reality in many homes before the turn of the century.

For 1996

THE UITI

For the US market (NTSC version)
For the European market (PAL and SECAM versions)

For 1997

THE ED

For the US market (NTSC version)

For the French market (SECAM version)
'Smart' Television which incorporates the UITI and ED functionalities into a standard TV set.
For the US market (NTSC version)
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t always seems the same on the Amiga. You have all these great features and functions and different parts to the operating system, but everything always seems to be half-heartedly implemented. Datatypes only work up to 8-bits, you have a 4.2Gb hard drive limit and when printing you are restricted to either 16 shades of grey or 4096 colours.

When the Amiga came out back in 1985 these 'limits' were really revolutionary. I mean you could actually print in colour, but back then I doubt many people could afford a colour printer and why would you want to print out more colours than you have on screen? Excuses aside, the fact is it's not 1985 any more and there have been vast improvements in all aspects of computing, including printers, and these restrictions really start to show up when using bubble jet and laser printers.

The problem arises from the fact that the printer device that converts the data sent from the program into a form that your printer can understand only works with 12-bits – that is 4-bits for the red, green and blue parts of the colour data on screen. Not only does this restrict the maximum number of colours to 4096, but it also means you can only have a maximum 16 shades of red, green, blue and grey. Even with dithering, this small number of shades is very visible.

NO LIMITS

Turbo Print provides two ways of skirting this limitation and therefore gives you access to full 24-bit printing. One approach provides a completely transparent replacement to the standard printer device so *any* program that prints does so using the Turbo Print software. The other approach is a print manager program that allows you to load graphics and print them directly.

The Turbo Print package comes on a single floppy accompanied by a good quality, well written manual. The accompanying installer script makes light work of setting up the Turbo Print software. At this point you will need to choose which printer you want to use. Along with the generic Epson 9- and 24-pin printer drivers there is a comprehensive range of supported printers including all the most popular makes, along with some of the most recent printer models. The major printers for this software are the Canon BJ series, HP Desk Jet and Laser Jet, and the Epson Stylus, along with Citizen, Star and Brother printers to name just a few, and it still supports standard Amiga printer drivers.

Once installed, if you select to run Turbo Print automatically each time you start you computer there is nothing more you actually have to do. Any prints you do now Neil Mohr always thought colour printing was just a novelty on his HP 550C. Not any more with Turbo Print

Colonial Colo

will be done invisibly through Turbo Print's enhanced drivers.

As a replacement to the two standard printer preference programs you get a single Turbo Print program that automatically starts Turbo Print when it is run. From this you can set all the options you previously could with the old preferences, and more. In particular, Turbo Print gives you much greater control over the printing process such as a better selection of dithers for use in different situations.

On the colour side, Turbo Print has a true colour matching system which means the colour you see on screen is the colour that is printed on paper. There are specific colour

correction tables for specific printers, and along with this you can fine tune the colour correction and colour to grey scale conversion. There is even the option to print off colour separations so you can produce printing plates, or to produce a colour print out on a b/w printer using four ribbons. This operation does not happen automatically and for each separation you have to select which colour you want – this is to avoid problems with some DTP packages.

So what about the all-important output? Well speed wise, on my HP 550C there doesn't appear to be any speed increase, but I was pretty much expecting that anyway. However, on colour prints the output is



When p

RINT MANAGER

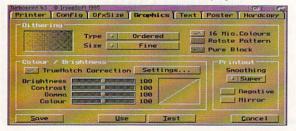
When printing graphics from certain programs – such as Brilliance – that were designed to be used with the standard printer driver, they still only sent 12-bit colour data to Turbo Print. This means that even though Turbo Print can produce 24-bit output, it will be stuck with the 12-bit data. Even this output is far superior both in colour quality and general look. However, to get around this sort of problem the Print Manager program is included.

Print Manager allows you to print graphics at the highest quality possible with your printer because it has be especially written for use with the Turbo Print drivers. To make your life simpler it can accept a good number of graphic formats. Along with the expected Amiga IFF formats including both Ham 8 and 24-bit formats, Print Manager can handle Jpegs, GIFs and PCX formats. These pretty much cover the most common formats Amiga users will come across.

Once you have selected which picture you want to print, the Print Manager program will generate a preview of what the final print will be like. This can be on any screen mode of your choice. ECS owners will have to make do with a 16 colour screen while AGA owners will be able to use a high resolution screen in 256 colour, and this give a good idea of what the final print will be like. Anyone with CyberGraphX will be able to have a 16 million colour display.

From within the program you can adjust the brightness, contrast and gamma of the picture. Generally, these are useful if a picture appears too dull or hazy. On a second window you can scale and position the picture as it will appear in the final print.

Deverything about the final printout can be adjusted from the well laid out preference program



The standard Amiga printer driver gives very visible colour bands

11

12

☐ Turbo Print, however, produces a very smooth gradient, if a little speckly



O Standard colour output is very poor with obvious banding marks



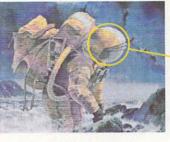
O Turbo Print gives you perfect colour, improved dithering and no banding

completely revolutionised. The normal Amiga printer device produces washed out colours, with blacks and dark colours appearing with a very apparent green tint, and there are terrible banding problems. The Turbo Print output is remarkable in comparison - colour is spot on with blacks and dark colours looking pure in colour and there is no hint of a green overtone.

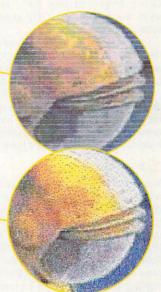
The improved smoothing and dithering makes a huge difference and most impor-







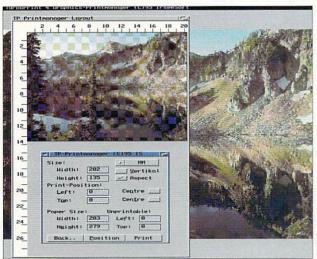




tantly there is no visible banding whatsoever. A 256 colour range of black to white produced by Turbo Print comes out as a visibly smooth gradient - no sudden jumps that you got with the old 16 shades of grey. Actual grey scale quality is also improved thanks to the new dithering and Turbo Print's ability to pick out finer details.

All the example prints were produced on a standard HP Desk Jet 550C using normal laser printer paper. This means that even better results can be achieved by using the special Desk Jet and Glossy paper that is made by HP. There are even special modes in Turbo Print to take advantage of these paper types.

I cannot recommend Turbo Print enough. Anyone even considering producing colour prints needs this program.



C Print Manager allows you to produce the best quality colour and grey scale prints your printer can manage



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hen the original Squirrel came out it really did sell by the lorry load and rightly so. It gave A1200 and A600 owners easy access to a fast SCSI interface allowing them to use CD Drives and fast SCSI hard drives. Now, HiSoft has decided it is time to come out with what could be thought of as the Squirrel mark two.

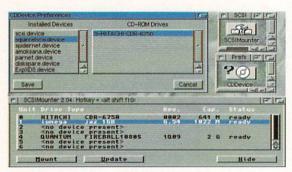
Installation is straightforward – just slot the interface in and run the installer disk. The actual installer has a number of different options that allow you to set up the Surf Squirrel depending on your machine's setup. Current Amiga hard drive users can just install the Squirrel and CD32 emulation software straight to disk.

For people that do not own a hard drive, the installer has a number of options to create boot floppies. These allow you to either run CD titles or boot up a SCSI hard drive if you do not already own an internal hard drive. The SCSI hard drive boot floppy is only needed once each time you turn on your computer because the Squirrel device driver is stored in memory even after a reset.

SPEED TESTS

Speed wise, the Surf Squirrel's SCSI interface is going about as fast as the PC slot can handle. The A1200's PC slot can transfer data up to 3Mb/s, so theoretically the fastest SCSI interface would be around 2.5Mb/s. When testing on an A1200 with a 40MHz 030, the Squirrel was happily reading at 1.9Mb/s, the same speed achieved on our A4000 SCSI interface, which is a marked improvement over the 1Mb/s the old Squirrel could achieve.

As the PC slot does not have DMA, the CPU has to shift all the data to and from the hard drive when accessing the hard drive. Therefore, to a certain extent the absolute speed is determined by your processor, but even so, testing on an A1200 with no



SCSI mounter and the new CD Prefs make
adding new devices even more straightforward

PRICE BUSTER

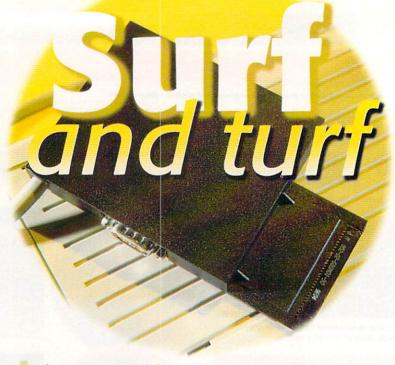
Currently, HiSoft has the unusual offer, for hardware anyway, of allowing current Squirrel owners to upgrade for the discounted price of £64.95. If you are just running a CD Drive then I am not sure whether there would be any benefit in upgrading. On the over hand, if you are planning to add a hard drive or currently own one then you will definitely get a speed increase, and if you are a serious comms user then the Surf Squirrel will be a revelation. With a new tougher case and interface you will never regret purchasing a Surf Squirrel.

ARGON

PC Slot – a much easier way of saying PCMCIA slot. Some wise old soul spotted that PCMCIA slot is horrible to say and decided we could all call it a PC slot

BPS – Bits Per Second, a measurement of the transfer rate between two devices. Mainly used for modems and serial links, it say how many bits are transferred a second. Using bits gives bigger end results and makes top-of-the-range modems seem really fast when they're not

CPU Cycles — every computer's processor can only handle so many instructions a second. When people say a program uses all the CPU cycles they mean the processor has no spare time to do anything else. This can result in a general slowing down of other programs or processes



The Squirrel has just got a big brother. **Neil Mohr** takes a look

all the CPU cycles they mean the processor has no The problem was, there was no CPU time left.

If you plan to use the Squirrel with a CD-ROM, a handy new CD Prefs program means you do not even have to worry about DOS Drivers because it scans your SCSI chain and lists any CD-ROMs attached. All you have to do is click on which one you want to use and click on save.

The major new feature of the Surf Squirrel, and the main reason for the name, is the high-speed serial interface. It is a 9-pin D cup interface, the same type as the Amiga's mouse and joystick ports, and also the normal style that PCs use, so getting hold of cables should be no problem.

The new interface has two major advantages. Firstly it's fast. Its top speed is a whopping 230,400 BPS which is around 28k/s. Compare this to the Amiga's standard serial port which, with everything running at full steam, can only just about manage 7k/s. You should also remember that these sort of speeds are only going to be possible if you are either directly linking two Amiga's via Sernet or if you have a special phone line and a modem that can handle this kind of throughput.

In practice, people using 28.8k modems for Internet'ing or BBS'ing are not going to see speeds this high, but even so you will get a huge improvement over the conventional Amiga serial port. Using the Net and Web package from HiSoft with the 28.8k modem set to 115,000bps, I was getting on average 7.5k/s when downloading a text index file from Demon. This is around twice the speed possible on a normal A1200. Normally, you would be lucky to get 4k/s, and you have the problem that this uses all the spare CPU cycles, borne out by the mouse cursor jumping around the screen. With the Surf



Squirrel's serial interface only around a third of the CPU cycles are needed on a plain A1200.



RED essential BLACK recommended A600/ A1200

PRODUCT DETAILS

Product		surf Squirrel
Supplier		HiSoft
Price		£99.95
Old squirrel trade-in		£64.95
Tel		0500 223660
E-mail	hisoft@cix	.compulink.co.uk

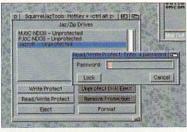
SCORES

Ease of use	89%
Implementation	95%
Value For Money	95%
Overall	93%

o, back when it all started, the SyQuest was the drive to have. with 44Mb cartridges. Bernoulli came along and brought the Bernoulli Box to the fray. Only a 20Mb cart, but much faster access and slightly more durable media. The two continued to compete, with the SyQuest overshadowing its technically superior cousin, but then a couple of years ago the big thing was the 128Mb magneto optical drive. Early last year this, in turn, was displaced by the Zip drive, a 100Mb SCSI floppy drive (kind of), only to have SyQuest fight back with the EZ drive (it cost a bit more, but the cartridges formatted to 135Mb). This year nobody's going to want to mess around with a measly 100Mb - they want more storage, they want it faster and. needless to say, they want it cheaper than

SIBLING RIVALRY

The first of the year's contenders for removable media crown hit our desks a couple of weeks ago. The Zip's larger brother, the Jaz drive (where do they get these names from? - ed) is a pretty similar beastie in its external version. It's slightly chunkier and, no, you can't put your Zip disks into the Jaz's gaping maw. One of the main advantages that the Jaz has over the Zip is the fact that it can be any SCSI ID, unlike the Zip which could only reside at unit 5 or 6. We're actually looking at the internal version in this review, although it has been cased in one of those nice Appledesigned boxes, which works out cheaper than the sci-fi case iomega puts it in. If you own an Amiga 2000, or an A4000 with a proper-sized floppy drive (i.e. one that is actually half-height, not the inch high version), then you'll be able to dispense with the external casing altogether and just shove it in a spare 3.5" bay. Of course, this limits one of the main advantages of buying a Jaz drive, that of transportability. Still, if the disks you need to move about are going to another Jaz-equipped machine, there will be no



Jaz Tools is a commodity and can
be called up with a hotkey press

reason to cart around the whole drive all the time.

As it comes from HiSoft, the Jaz drive is ready to roll. HiSoft supplies the Jaz tools software, a terminator pack to go onto the 50-way Centronics SCSI ports in case it is your one and only external SCSI device, and you can negotiate for a SCSI cable suitable for your needs. If you have a Squirrel or Surf Squirrel you will, of course, already have the cabling you need. There is a disk of software to install, but other than that you are ready to roll. If, like me, you also have Mac emulation at your fingertips, either through Emplant or Christian Bauer's Shapeshifter. you will obviously also want to get that Jaz running on your Mac. Unfortunately, at the time of writing, the Jaz drive didn't want to work under any of the Mac hard disk tools I tried, but I have since learned that the soft-

ware required for the Mac is not yet forthcoming, and this is the reason I wasn't able to get it up and running.

In use, the laz drive subjectively feels very fast, almost as fast as a modern hard drive. Reads and writes feel equally swift and formatting the disk using the quick format option is extremely rapid. HiSoft supplies a modified version of the Zip tools to be able to write or password protect the disk, or even format it from one simple interface. HiSoft has also been kind enough to supply the user with ready-made DOS drivers for PC and Mac access, provided, of course, you have CrossDos and CrossMac to use them with.

Finally, the Jaz drive is a great addition to any power user's system and with programs taking more and more hard drive space, along with animations or 16-bit sound samples and so on, the Jaz becomes almost essential, especially if you buy several of the admittedly pricey (at the moment) cartridges.



standard in removable media hits the shelves. **Ben Vost** checks out HiSoft's latest medium

Bottom line



PRODUCT DETAILS

Product	iomega Jaz drive
available as:	internal £469
exte	rnal - HiSoft case £529
exterr	nal – iomega case £549
	Jaz 1Gb disks £99
Jaz Tools avai	ilable separately £19.99
Supplier	HiSoft

SCORES

01525 718181

Tel

Ease of use	90%
Implementation	87%
Value For Money	83%
Overall	90%

WHAT'S GOING ON

If you are used to using HDToolbox when prepping any new drives, be prepared for a bit of a wait as the Jaz drive doesn't automatically have a table of bad blocks. This means that the drive then goes off and checks the entire drives for blemishes, spots and other potential problems which can take up to twenty minutes. So if you go into HDToolbox and your hard drive light stays on continuously, don't panic, it's merely the Jaz checking itself all over. Unfortunately, even if you have done this (at which point you would expect that the Jaz would have written a bad block table), you will still have the same wait every time you want to repartition the drive. Although this is a pain, you never actually need to go near HDToolbox when using the Jaz, unless you really need more than one partition.

3.5" PC880B EXTERNAL DRIVE



Power Computing probably has the widest range of external floppy drives and its PC880B is a pretty standard one. The floppy drives themselves plug into the 'disk drive' port on your Amiga to make the whole disk process much easier. For instance, now hard drives are a necessity the access from a floppy is rarely used to run software. The best way to run software has always been from a hard drive or from RAM, so floppy drives are only used for exchanging files from one computer to another, or for running software which fails to include an install script.

Games, for instance, all come on floppies which nowadays can even come packed full of archived files which should be unpacked on to your hard drive. A good use for floppies has always been storage. Once your HD has run out of free space you can transfer some files to floppies to keep in a safe place. This is when the demand for floppy disks with a bigger capacity come in.

The PC880B is a fairly standard drive which enables you to use the standard low density Amiga disks. If you install the Disk Expander patch which comes on the included disk then your drive will increase its usability by allowing you to increase the capacity of a normal Amiga disk.

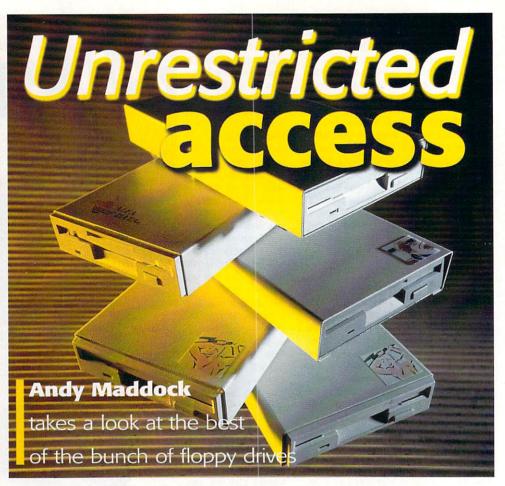
The program itself allows you to compress all the files you have copied onto the floppy by around 30-70 per cent which means you will be able to fit more on. You can increase the size of a normal 880k disk to almost 1.5Mb. If you pay an extra £10 you will also receive the X-Copy software to complement the blitz copier hardware built into the drive, allowing you to back up your disks quickly and efficiently.

For £49.95 you can't go wrong, especially with the software that comes with it. If you use floppies frequently you should recognise the need for an extra drive. The PC880B would be a very cheap and efficient answer.

Bottom line

PRODUCT DETAILS

Product	PC880B 880k	
Supplier	Power Computing	
Price	£49.95	
Tel	01234 273000	



3.5" XL EXTERNAL DRIVE



The XL is Power Computing's next step up the ladder from the PC880B. Although it looks identical in every way the secrets lie inside. You can use standard 880k Amiga disks but you can also access files from other home computer formats with a simple process.

The XL comes with a supplement disk which features an install patch that you can either install onto your hard drive or make into a floppy boot disk. When you install the patch it will rest as a command in your C directory called XLPatch. The installation program will then add a few lines to your startup sequence which upon reboot will run and also enable the

use of other formats. The other formats are PC, Mac (with extra software) and Atari. You cannot actually run any programs which may exist on the disks but you can access files and read them, which is invaluable for text documents.

The drive also has an added function which allows the use of high density disks which are usually found with two windows in the disk instead of one. The XL drive will happily read

and format these disks allowing up to 1.76Mb per disk. The PC disk can be formatted at around 1.4Mb, so your overall disk capacity is increased.

And don't forget, the XL drive also comes with a Disk Expander so you can increase the size even more, which can be as much as 3Mb on a high density disk.

For an extra £20 the XL drive slightly overshadows the PC880B. If you have a use for big files across a number of formats then the XL drive is an absolutely essential purchase.



PRODUCT DETAILS

Product	XL External
Supplier	Power Computing
Price	£69.95
Tel	01234 273000

3.5" SUPER XL EXTERNAL DRIVE



The Super XL drive by Power Computing is more or less the same as the XL drive featured above. The only difference is the fact your disk capacity can be increased to a massive 3.5Mb. Therefore, if you use drives in a workplace where a lot information has to be stored or transferred then this is the answer.

The capacity will hold slightly less than four ordinary floppy disks which you can leaving filling up rather than stopping to format a fresh disk. However, although the idea of

fitting 3.5Mb on disks seems fantastic, the call for it may not be as frequent as you think. And for £129.95 this is almost twice the price of a standard XL drive.

You must also bear in mind that you will only get 3.5Mb on a special Extra Density disk which costs four times the price of a standard Amiga disk so it turns out to be quite expensive.

If you're looking for a drive which will hold masses of information and you're not particularly bothered about the expense, then the Super XL comes highly recommended, although you may have to think twice after seeing the price tag.

Bottom line

PRODUCT DETAILS

Super XL External
Power Computing
£129.95
01234 273000

3.5" EXTERNAL DRIVE



With all the talk of high density disks and multiformat file access, some users are just looking for an extra drive which will speed up the use of the Amiga and reduce disk swapping time, especially if you don't have a hard drive.

If you play games it isn't really necessary for a drive which will read high density disks or PC formats. It's just a helping hand, which means you don't have to ruin your delicate hands by swapping disks every five minutes.

Another good use of this drive is for copying. If you want to transfer files from disk to disk then with one standard internal drive you may have to swap disks as much as six or seven times per session, which means if you have a lot of information to back up you will be there all day.

Marpet Development's external offers a nice cheap alternative to all the other drives. What makes it so usable is the fact it's much smaller and far more compact and while other drives tend to act like Arkwright's till and snap your fingers off, Marpet's will more or less thank you for the disk with a nice cushioned spring.

If you're after a standard external drive this is undoubtedly the best on the market.



PRODUCT DETAILS

Product	3.5" External
Supplier	Marpet Developments
Price	£43.99
Tel	01423 712600

"The good thing about the drive is that it has a long cable which is essential, especially if you want to feed it around the back of a desk"

3.5" ALFADRIVE EXTERNAL DRIVE

The AlfaDrive by Golden Image looked, to me, to be the best of the bunch considering the quality of all their previous hardware. However, I was slightly surprised, especially at the fact the drive access light was coloured red instead of the standard green.

The drive itself can format disks to an 880k capacity just like a standard internal, and although the drive is slim and has a reputation for being reliable, it was quite noisy compared to the others, and after you insert a disk the drive will 'whir' away for a while until it settles down.

The drive contains a pass-through port just like every other drive reviwed so you can either plug another drive in or some other hardware which uses your disk drive port, such as AmigaLink. You can happily plug the network cable in the back without any problems.

The good thing about the drive is that it has a long cable which is essential, especially if you want to feed it around the back of a desk and hide it as much as possible, allowing you more



PRODUCT DETAILS

Product	AlfaDrive
Supplier	Golden Image
Price	£39.95
Tel	0181-900 9291

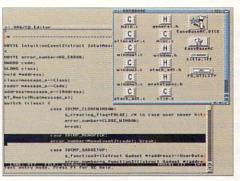
dealt last month with the creation of the EasyBaseAC menus and gadgets but, of course, once these items are added to a window it then becomes the program's responsibility to handle the events generated when a user selects a menu item or makes use of a gadget. Luckily, at this stage of the proceedings, we can broaden our scope a bit because this type of event handling is the same whether you are handling menu events, gadget events, or any other types of event that we've asked for.

As you probably know, event notification on the Amiga takes the form of messages and the message system used is basically an Exec facility. In the case of Intuition, the real message information is provided by supplementing the Exec defined message with additional fields using an extended structure known as an IntuiMessage. Now, before a program can receive such a message it must have allocated and initialised a suitable message port, but with Intuition this job is nigh-on transparent. Providing we ask for at least one type of message to be sent, which we do by using the WA IDCMP tag when opening a window, Intuition will automatically do all this port creation stuff for us at the time a window is opened. Event types, set using flags defined in the intuition.h header file, are available for a whole host of events and you'll see a variety of flags being used with each EasyBaseAC window module.

You should, incidentally, notice how the various flags are combined using C's bitwise Inclusive OR operator, |. For example, in the window2.c module you will find this WA_IDCMP tag definition being used in the OpenWindowTags() call:

WA_IDCMP, IDCMP_CLOSEWINDOW|IDCMP_MENUPICK|
IDCMP_REFRESHWINDOW|IDCMP_GADGETUP|
IDCMP_CHANGEWINDOW

Here, the IDCMP_CLOSEWINDOW flag asks Intuition to notify us whenever the user hits the window's close gadget. The IDCMP_MENUPICK and IDCMP_GADGETUP flags say that we want menu and gadget selection events to be provided, IDCMP_CHANGEWINDOW gives us window size information



EasyBaseAC uses a combined signal detection loop to detect messages arriving at its windows



For Intuition and Gadtool programming it is essential to have the official Amiga include files. The files can be bought separately but do in fact come with all commercial C compilers such as DICE.

Operation Part 4 database

whenever a user has resized a window, and IDCMP_REFRESHWINDOW allows Intuition to remind us whenever our window display needs refreshing (redrawing).

It's all very well saying that our program collects messages sent by Intuition but how does it get to know that Intuition has sent a message in the first place? The short answer is that it's all done using Exec's inter-task signalling system.

For each task Exec allocates 32-bits for use as 'signal bits'. Sixteen are used by Exec itself and 16 are available for use by the task in question. In most cases you will rarely need to worry about how these bits are allocated because Intuition handles the nitty gritty details for you. You do, however, need to understand how programs are put to sleep (rendered inactive) and brought back to life when something of importance happens (i.e. a message arrives indicating that the

Paul Overaa

outlines his
approach for
handling events
which arrive from
the three

windows

EVENT HANDLING PROPER

Having used Wait() to identify the fact that a message has arrived at a window's user port, the appropriate event handler gets called and this needs to do several things: Firstly, it must collect the message. Secondly, it must extract information from the message by copying all required fields into temporary variables. Lastly, it must tell Intuition that the message has been dealt with.

The exec library functions for doing the first and last jobs are called GetMsg() and ReplyMsg() but when Gadtool gadgets, as opposed to Intuition gadgets, are involved it's necessary to use the equivalent gadtool routines called GT_GetIMsg() and GT_ReplyIMsg(). It is these functions that you'll find in my code rather than the underlying exec library functions!

Every time a message port signal bit becomes

set it means that one or more messages have arrived. Because of this, each EasyBaseAC window event handler uses a loop to process it's messages and this loop continues to collect messages for as long as the GT_GetIMsg() routine returns valid (non-NULL) pointers.

Once the information has been extracted from the IntuiMessage and replied, it is normal C practice to then use a switch statement based on the message's class field in order to decide what to do with it, and this is exactly what EasyBaseAC does. In the two window modules already provided you'll see events requiring only simple actions to be taken, being done within the switch statement itself. A typical example is an IDCMP_CLOSEWINDOW event where I essentially just set an error number indicator that causes the window to be closed as

soon as all outstanding events have been dealt with

EasyBaseAC

For menu event handling, which often tends to involve more awkward processing, I pass these onto a separate menu handling routine to avoid the main switch statement from becoming too complicated. You'll notice, incidentally, with the window2.c and window3.c modules (provided in earlier instalments) that I have layered the menu handling code using MenuEventX() and ProjectMenuHandlerX() type calls. You might think that this layering is unnecessary given that the only menu operations that these particular modules have to do is checking for window closing. You will, however, appreciate the benefits of the layering approach when you see the menu handler for the main EasyBaseAC listview based window next month.

program user has done something of interest).

Again, the Exec library comes to the rescue because it contains a function, called Wait(), which allows a program to sleep until one or more signals are received. It's at this point that the EasyBaseAC connections get a little complicated and since Exec signal handling in general seems to confuse a lot of people, I'll sketch out the basic ideas from scratch. A message port structure contains a field designed to hold an 8-bit value called mp_SigBit which represents the signal bit number which has been assigned to the message port.

In the case of Intuition, the IntuiMessages which we have requested will arrive at the UserPort so... if_s_window_p is a pointer to a window then the C code needed to refer to the signal bit number of the UserPort of that window looks like this:

```
s_window_p -> UserPort -> mp_SigBit
```

Wait() needs to know which signal bits we are interested in but it expects these to be supplied as a 32-bit mask, not the signal bit numbers contained in the UserPort's mp_SigBit field. Converting the mp_SigBit value to a mask is easy – we simply left-shift the number 1 an appropriate number of times, namely mp_SigBit times, using the << operator, like this:

```
shift_required = s_window_p-> UserPort-
>mp_SigBit;
mask = 1 << shift_required;
Wait(mask);</pre>
```

With EasyBaseAC, however, a slightly more sophisticated scheme needs to be used because not only can up to three windows be on display at the same time, but the user can shut down or reopen windows as they see fit. Since signal bits are allocated dynamically as windows are opened (and deallocated as windows are closed), EasyBaseAC needs to keep track of which signal bits are currently associated with which windows and it needs to keep this information up-to-date.

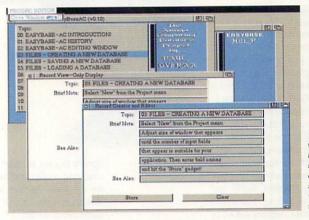
Remember, just closing and reopening a

```
struct IntuiMessage
                       Message ExecMessage;
            struct
                                                                        Wait()
            ULONG
                       Class:
                                                Function Name:
                                                                        Wait for one or more signals
            UWORD
                       Code:
                                                Description:
                       Qualifier;
                                                                        signals=Wait(signal_mask);
            UWORD
                                                Call Format:
                                                Arguments: signal_mask - 32 bit mask of signals to wait for
            APTR
                       IAddress;
                                                                       signal(s) which caused the Wait() to be satisfied
            WORD
                        MouseX, MouseY;
                                                Return Value:
            ULONG
                       Seconds, Micros;
            struct Window
                                    *IDCMPWindow;
                                                    () Note: When this call returns it means
            struct IntuiMessage
                                   *SpecialLink;
                                                    that one or more messages have arrived.
```

∩ Inutition's IntuiMessage structure

```
URYTE MainEventHandler(void)
                                                                                if (g_handler_sigbit[2])
UBYTE error_number=NO_ERROR;
                                                                                          if (g_handler_sigbit[3])
CloseWindow3();
ULONG signals;
do {
                                                                                          CloseWindow2();
             signals=Wait(g_port_mask);
                                                                                          error_number=OpenWindow2();
             if (signals & g_handler_sigbit[2])
               error_number=event_handler[2]();
                                                                                 if (g_handler_sigbit[3])
             if (signals & g_handler_sigbit[3])
               error number=event_handler[3]();
                                                                                          CloseWindow3():
             if (signals & g_handler_sigbit[1])
                                                                                          error_number=OpenWindow3();
               error_number=event_handler[1]();
             if(error_number==REFRESH)
                                                                              }while(error_number!=PROGRAM_EXIT);
               if (g_handler_sigbit[1])
                                                                  return(error_number);
                         CloseWindow1();
                         error_number=OpenWindow1();
```

() Listing 1: The high-level event handling loop from the main.c module



C To cater for various fonts EasyBaseAC makes some rough calculations on text size. These routines will also be found in the main.c module

window could result in the signal bit of that window changing!

The way I handle this is as follows: As each window is opened the associated signal bit is stored in a global array called g_handler_sigbit[] and this value is then inclusive-OR-ed

into a global port mask like this:

```
g_handler_sigbit[2]=1<<s_window_p->UserPort-
>mp_SigBit;
/* add (OR) signal bit to global port mask */
g_port_mask|=g_handler_sigbit[2];
```

Similarly, at the point where a window (either under user or program control) is about to close, that associated signal bit is removed from the port mask by exclusive-ORing and the stored signal bit position reset to zero like this:

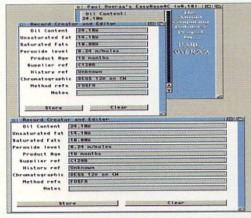
```
g_port_mask=^g_handler_sigbit[2]; /* remove
signal bit from mask */
g_handler_sigbit[2]=0; /* clear signal bit
entry */
```

The above fragments are from the window2.c (record editor) module provided last month (hence the 2 array subscript in the expressions). The net result is that, no matter how the overall status of the EasyBaseAC windows change, the global port mask variable always contains the appropriate signal bit mask for the windows on display. This mask is then used as part of the high-level Wait() loop shown in listing 1. Notice how I'm comparing the signal set returned by the Wait() function and checking it against my g_handler_sigbit[] array in order to determine which windows have messages queued up at their UserPorts.

WINDOW REFRESHING

The EasyBaseAC event handlers return codes that are normally meant to indicate success or failure of the routines. I tend to collect this value using an error_number variable, but in a couple of instances I 'borrow' this variable to pass back what is essentially non-error information to a higher code level.

One example of this will be seen in the window2.c code module where, to force a window to be closed and reopened, I set the error_number to a non-zero REFRESH value. By checking for this value in the MainEventHandler() routine in main.c, and then checking the g_handler_sigbit[] array to see which windows are open, I'm able to close and re-open any windows that I've chosen to update. The reason this approach has been adopted is that it is not safe to close down a window from within the window's own event handler!



Whenever a window's size is changed, Intuition sends
 EasyBaseAC an IDCMP_REFRESHWINDOW message

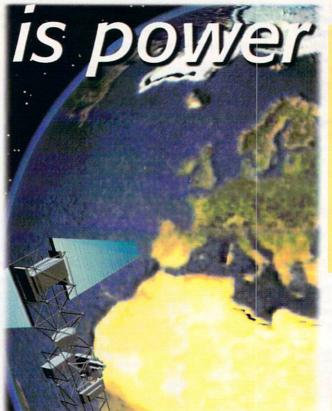
veryone is going Internet crazy these days - the networks are really starting to show the strain, but the only thing probably stopping anyone from going online, apart from the cost, is just how complex a process it all is. When I started on the Internet way back in 1993, Demon was only offering its horribly clunky AmigaNOS software for use with the Internet. At the time, the Web was a mere glint in the eye of the average Amiga owner and you had to contend with shell-based ftp software. Looking for files took an Archie search and Gopher was as graphical as the whole thing got. Needless to say, if you were one of the lucky people that managed to get AmigaNOS to work first time, you were very careful not to mess around with it, even though it had loads of unnecessary files cluttering up your hard drive and the assigns were monstrous. However, various Amiga-owning Demonites were good enough to put together an installer pack for the infinitely superior AmiTCP TCP/IP stack that allowed access to the Web and a variety of other tools that didn't support AmigaNOS.

VIOVING ON

That was three years ago now and the installation side of things hasn't really got any easier, at least judging by the number of letters we get asking for more Internet tutorials. All that is set to change this year, though, with the advent of two new products. One is called Miami (more on this later), and the second is HiSoft's excellent Net&Web. HiSoft is trying to ease the problems suffered by Net newbies by supplying an easy-to-use installer that not only sets up AmiTCP (a painful process in itself), but also e-mail software, an ftp client and a Web browser in the shape of iBrowse.

Now while the e-mail package, ftp client and Web browser are Metatool, DaFTP and iBrowse at the time of writing, it shouldn't automatically be assumed that they will be by the time you stroll up to HiSoft, put your grubby tenners on the counter and say: "I'd like a copy of Net & Web and I'm not too proud to admit it."

To give you some idea of the almost constant mutation that this package is undergoing, I started this review about a week ago and



It may be a touch corny but HiSoft reckon it's true.

Frank Nord

investigates its Internet software



already Richard at HiSoft has sent me a new, improved version and he called me today to let me know he had just finished another newer version that he could send me. Obviously, if we didn't have deadlines on this mag I could have just kept getting new versions til kingdom came, but instead I promised Richard I would tell you all that the package would just keep getting better. The really great thing is the fact that it is already good enough to receive a Blue Chip award, so any improvements that can be made are only

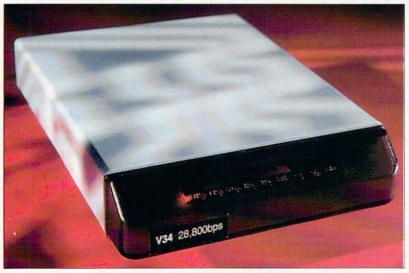
going to improve the pack's standing overall.

On the question of updates, HiSoft has promised me that it will be able to offer either free, or at least very cheap, updates to the latest version of the pack to any and all registered users and that it is currently engaged in

RAISED IBRO

The Web browser that has been provided with Net&Web is iBrowse, currently the Amiga's best browser. The version that is supplied with Net&Web is a full commercial version with none of the limitations of the freely distributable demo version. This means you can have as many as 100 connections to the Net at the same time (although this many connections will probably prove slower than having a most modest number such as eight or ten), and items like the mailto: tag also

The version I received was still a prerelease one, but I fully anticipate the full 1.0 release to be included in the pack by the time you read this. iBrowse supports most of the slightly more fancy HTML tags that are in every day use including forms, fields and tables, although it doesn't yet support frames or news reading. Now that iBrowse is a commercial product with HiSoft's backing, this will almost certainly mean that the rate at which improvements are made to it will increase as more time and energy can be devoted to it.



Bland in looks but fast online. the Enterprise performs well

THOSE NET&WEB CONTENTS IN FULL

There are two versions of the Net&Web package, one with a modem and one without. The modem is BABT approved and isn't bad quality at all. The case for the modem is a bit bland-o but since it is so cheap I'm sure only the most aesthetically sensitive reader is going to mind. The only bad point I can find is the fact that the Enterprise Modem doesn't have an on/off switch on the modem itself, meaning the user needs to unplug the modem every time he or she wants to switch it off.

Next is the software itself. Net&Web relies on MUI

for use with iBrowse and Metatool, and the pack actually comes with a licensed version of the said software, enabling the user to be able to save all those nice buttons and so on that the shareware version doesn't.

Net&Web also comes with a better than rudimentary text editor so the user can a) write all the e-mail they need, and b) edit configuration files and so on. The text editor on its own is a welcome addition and it's nice to see that HiSoft has thought of every contingency. This really is plug and play software. By default, Net&Web uses SLIP for its modem connections to the Net, but Holger Kruse's PPP device is also provided and the TCP/IP stack provided is NSDi's AmiTCP 3.0 beta version, which works perfectly well.

HiSoft has also provided a variety of scripts for people who don't like to mess with the shell to set up the PPP device and extract files without too much hassle, among others, and the whole thing sits in a drawer that weighs in at just under 4.5 meg in size.

speaking to Amiga-friendly ISPs for them to offer Net & Web as the way for Amiga owners to get online. Already Net&Web offers installation scripts for Demon, CIX, Frontier and Applause Data (a Norwegian ISP), and HiSoft is busy working on Planet Internet and Zetnet installers as well.

The installation process is a cinch. All you need know is your node name and password to use it and everything else is automatically set up for you. Net & Web even configures the

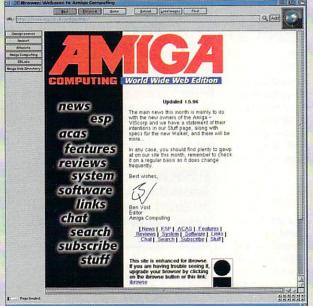
correct phone number for your local POP, based on what STD code you use. For users out there with a bit of savvy, you can also adjust things like DNS, e-mail and news servers (although at the time of writing Net&Web doesn't come with a dedicated newsreader), and so on once Net&Web has been installed through the GUIConnect program. One of the other nice things about the Net&Web installation is the fact that environment variables are also kept in the Net&Web

MIAMI VICE

Miami is the forthcoming TCP/IP stack from shareware heavyweight Holger Kruse. The idea behind offering yet another new TCP stack (alongside Commodore's defunct AS-225, NSDi's AmiTCP/IP, Internetworks I-net225), is one of simplicity. TCP networking is never going to be the easiest of things to understand but there is no reason, other than an elitist Unix attitude, or possibly laziness, not to hide some of that complexity. The upshot is that Miami is supposed to be almost Mac-like in its setup simplicity. Gone are the endless text files that need to be edited by hand to be replaced with modern, easy-to-use interfaces allowing for the configuration of services and clients and all the other gubbins that goes along with any other TCP/IP stack.

Currently, Miami is in alpha, but it should be available by the end of the summer, so hopefully we will be able to tell you how good it is soon. At present, Holger has decided to abandon the SANA 2 networking standard set by Commodore as being too slow and has concentrated on superfast SLIP and PPP implementations for modem use. This does, of course, mean that Miami will be no use for traditional networking between machines unless the ethernet cards you have get a Miami driver, but how many Amiga peer-to-peer networks are there out there anyway? Answers on the back of a postage stamp please to the usual address.

WSE



The full version of iBrowse. Note the number of connections currently being made as we access our home page

directory and therefore don't automatically get loaded as they would if they in ENVARC: thus wasting valuable ram.

In use, Net&Web performs just fine with the GUIConnect script, offering a very easy way of linking up and starting the various programs that come with Net&Web, although it would be nice to see the various shell windows that open up contained in a simple interface, just to tidy things up. At the moment there is also no easy way (other than to use the shell) to access all the little ancillary commands like ping and finger that can prove so very useful, but they are there in the AmiTCP installation.

In conclusion then, I have to say that, in my experience, there isn't an easier way of getting on the Net. In less than ten minutes you can plug in your new modem, turn on your machine and get going. With the package being updated as often as it is and with HiSoft's excellent technical support, I think we're going to see an awful lot more Amiga owners on the Net soon.



REQUIREMENTS

RED essential





Kickstart Hard drive







RAM or above

PRODUCT DETAILS

Product	Net&Web
Supplier	Oregon Research
Price	Net&Web \$POA
Oregon Rese	arch also has bundles with
	modems and Squirrels
Tel:	503 620 4919

orres@teleport.com E-mail

SCORES

Ease of use	95%
Implementation	90%
Value For Money	90%
Overall	93%

f you want to make a computer do something you have to give it instructions in a way that it understands. These instructions are called computer languages and one language that all Amiga owners are provided with nowadays is called ARexx. Now even if the thought of computer programming scares the hell out of you, keep reading because ARexx, unlike most other computer languages, is very easy to learn.

ARexx can actually be used in a number of

different ways. Firstly, you can write standalone programs to do a particular job. If, for instance, you wanted to write a small program that displayed your name on the screen, ARexx will let you do it very simply. ARexx can also be used to replace the existing script language that the Amiga's operating system, AmigaDOS, provides, and because of this you'll often hear ARexx programs being referred to as ARexx scripts!

The area where ARexx really scores, however, is that it contains special built-in communication features that enable programs to send messages to each other. A great many Amiga software products make use of this nowadays by providing sets of commands that allow users to use ARexx to control the way the program operates. This adds a new dimension to Amiga software because it makes it possible for new facilities to be added to a program.

For example, the Final Copy word-processor doesn't provide a document line-numbering option, but because the program has an

Paul Overaa kicks off a brand new series that takes a beginner's look at



ARexx and how it is used

Command performance

ARexx interface it's possible to write a small ARexx script that tells Final Copy what it must do to add line numbers to a page of text. In this case Final Copy could execute the script directly and when this happens the script itself would effectively be controlling Final Copy, causing it to add the required line numbers. Once that script is available you're able to use it whenever you want to add line numbers to a document so your ARexx script will have effectively added a new facility to Final Copy. In short, these ARexx communications facilities aren't just something of academic

interest, they have real practical value and are, in fact, the main reason that ARexx is provided with your Amiga.

STEP BY STEP

In order to create scripts that control other programs you need to know a little about ARexx programming, and the main job of this first instalment is to take you on a guided tour of the steps needed to write, and run, a simple ARexx script. To start with you'll need to open a Shell window and you do this by double-clicking on the Shell icon that you'll

RUNNING THE EXAMPLE

You execute an ARexx script from the Shell window by typing RX followed by the script's name. Unless you need the typing practice it's not necessary to type the .rexx part of the script name because the RX command supplies this automatically. Since our example is in the RAM disk we therefore run it by typing this Shell command:

rx ram:example

If everything goes according to plan you should see a message asking for your name and, when you enter this (and press the Return key), your script will display a personalised message for you. If it did then congratulations – that's your first script written and executed! If things didn't go quite so well,



When the ED editor first starts the window will be blank



Once you've typed in the example program, select the ED Save option

ARexx will stop the execution of the script and provide an error message. It will always do this if there is something in the script that it cannot understand. Like all programming languages, ARexx has certain rules about the way program statements are formed and used and you would, for instance, be given an error message if you wrote the second line of the example like this:

SAY 'what is your name?

ARexx would read the line, realise that the terminal quote mark was missing, and complain. Whenever you get an error message you'll need to use ED to look at the script again. ED is not a particularly easy editor to use but it's good enough for most ARexx script editing. The easiest way to make

changes is to use the up/down/left and right arrow cursor keys to move to the part of the text you wish to alter and either add new characters or delete incorrect ones using either the Del or backspace (<-) keys. You can also change the position of the cursor by moving the Workbench pointer to a character and pressing and releasing the left mouse button.

Having found and corrected any mistakes, you then re-save the script and try running it again. Once you get the original version up and running the best thing to do is experiment a little by changing the text being used, adding a few extra SAY instructions that print some additional text messages and so on. That'll stand you in good stead for next month's instalment.

Workbench3.0>; rx ram:example +++ Error 5 in line 2: Unmatched quote Command returned 10/5: Unmatched quote	Amiga Shell	le le
	lorkbench3.0>: rx ram: +++ Error 5 in line 2:	example Unmatched quote

If you find that ARexx displays an error message then you'll need to take another look at the script you've written

find in the Workbench System drawer. ARexx programs are essentially just normal text files and can be created using any text editor program. We're going to use the Amiga's ED text editor but you could use a word processor if you like, as long as it is able to generate normal (so called ASCII) text files as opposed to document files that contain special formatting characters.

Those of you who haven't used a Shell window before need to know two things about specifying Shell commands: Firstly, you must type the name of the command to be carried out (along with any other information the command might need). Secondly, you must press the Return key because this let's your Amiga know that you have finished typing a command. We're going to be creating a file called example.rexx in the RAM disk and this means that the Shell command line needed is:

ed ram:example.rexx

The moment you've typed this command and pressed Return a window will open and at this point you can enter a script.

Type in the following four lines exactly as written, pressing the Return key after you enter each line:

/* example.rexx */
SAY 'what is your name?'
PULL name
SAY 'hello' name

The first line which starts and ends with pairs of /* and */ characters is called a comment

SOME AREXX HISTORY

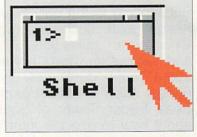
You might be interested to know that ARexx has one hell of a pedigree because it's based on the REXX programming language developed by Mike Cowlishaw at IBM. REXX development actually started around 1979 but it was not until 1985 that Mike Cowlishaw's book (published by Prentice Hall and called The REXX Programming language: A Practical Approach to Programming) first appeared. By then REXX had become part of IBM's CMS user interface and versions for MS-DOS/PC-DOS computers had already appeared.

As the Amiga arrived on the scene a programmer called Bill Hawes realised that REXX and the Amiga had a lot to offer each other and he began planning developments that would eventually be recognised as a major milestone in Amiga history—the Amiga version of REXX which we now know as ARexx. In 1987, REXX itself became the standard Procedures Language for all IBM System Applications Architecture (SAA) machines and, coincidentally, it was also the year that ARexx was first released.

Since then, ARexx has been happily running on the Amiga through both 1.2 and 1.3 versions of the operating system. Though originally provided as a third-party product, the language became part of the Amiga's operating system when Workbench Release 2 appeared and it's been an integral part of the Amiga ever since.

line. All ARexx programs must start with a comment and it's common practice to provide the name of the script. You can put additional comment lines anywhere in an ARexx program and with larger programs you'll often find a few extra comments useful.

SAY is an ARexx instruction that makes ARexx print things on your Amiga's screen. In the second line of the program we've specified the fixed piece of text, 'what is your name?' by placing that text between a pair of single quote marks. Text items like these are called string constants simply because they represent strings of characters that will not change



O Double-click on the System drawer's Shell icon to open a Shell window

during the time the program runs.

PULL is an ARexx instruction that allows us to collect typed input from the user of the program. The important thing to notice about this part of the program is that there is a term - name - which follows the PULL instruction. This is not just another piece of text, it is a special sort of ARexx item called a variable which represents part of your Amiga's memory. Variables are used to store numbers and text that may need to be changed during the time the program runs and, as in our case, for collecting input from a user. It's your responsibility as an ARexx programmer to specify a suitable variable name and it is usually best to use names that are understandable. Because the third line of our program is going to collect the user's name I've used a variable called... name. Notice, incidentally, that there are no quote marks around the variable name and it's because of this that ARexx is able to tell we are defining a variable rather than a fixed string constant.

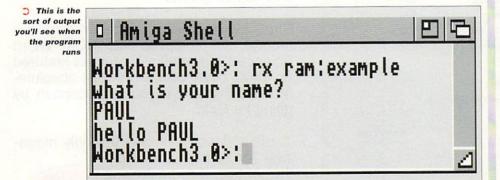
The very last line of the program is another SAY instruction. It differs from our first use only in the fact that this time we're printing two things: The string constant 'hello', followed by the contents of our name variable!

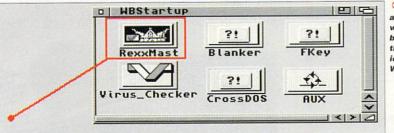
Once you are sure the program text you have typed is correct, select the Save option from the ED Project menu to save your program to the RAM disk. Having done that, select the Quit option (again from the ED Project menu) to exit from the editor and you will be returned back to the Shell window again.

STARTING AREXX

The files which constitute the ARexx language are stored on the Workbench disk. You can start ARexx by double-clicking on the RexxMast icon in the Workbench's System drawer, but a far better idea is to have ARexx start automatically whenever you boot your machine. To do this just drag the RexxMast icon into Workbench's WBStartup drawer. Once ARexx is

up and running you don't actually see much. There are no ARexx gadgets or menus, just a small window which provides a brief sign-on message and then all visible traces of ARexx disappear. Don't panic, ARexx will still be present in your Amiga's memory – it's just sitting quietly in the background waiting to be given something to do!





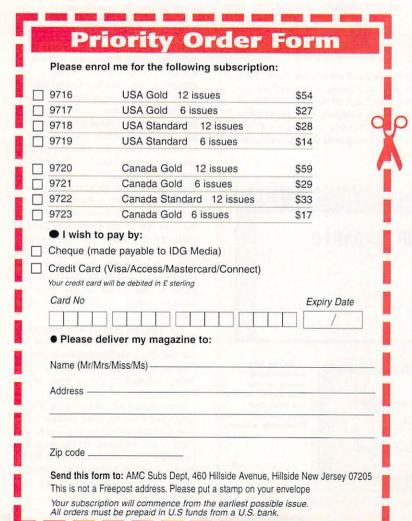
C To run ARexx automatically whenever you boot up just drag the RexxMast icon into the WBStartup drawer



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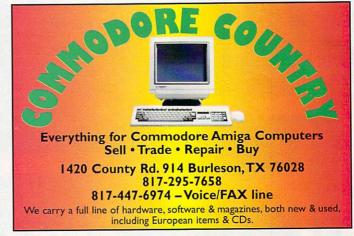
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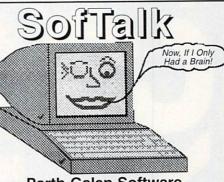


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Contents

News

All the latest news featuring reviews and previews is stored here. If you can find them let us know - we couldn't

Total Football

Domark's new football game is totally brilliant. Why don't you check out the full review



Chaos Engine 2

The Bitmap Brothers make a welcome return to grace the Amiga screen with the eagerly awaited sequel to one of the most popular games ever



XP8

Shoot-'em-up action here courtesy of WeatherMine Software. And the surprising feature is, it's quite good!

Final Gate

Full motion video action ahoy with Alternative Software's latest release. Come on, give it a chance



By Andy Maddock

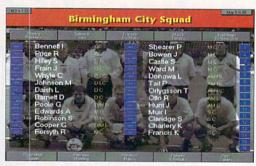
Natural born liars

ight, we promised you last month that we'd have a full review of Championship Manager 2 for this very issue. Unfortunately, due to a lack of information we haven't.

Domark promised us we'd have it for this issue but they have now told us it's going to be another two months while they bug test it and sort other things out.

I'm sorry if I got your hopes up. Never mind,

check out the review of Total Football, Domark's last but one release for the Amiga. Who knows, Championship Manager 2 may even be here for next month, although then again... probably not

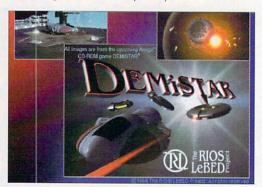


This a game that may be with us in two months, although we reckon less. But I'm not going to start those rumours again...

definite cert

I have just heard about a new CD-ROM adventure game that's going to come out. It's an asteroids-type game with lots of Babylon 5type sequences and sampled sound. Ooh lovely jubbly!

It's called Demistar and was created by the Rios/Lebed Project, a company who wishes to support the Amiga all the way by creating new and innovative software. The good news is that it will probably be out during my lifetime! Despite the lack of information about Demistar I assure you it is all completely accurate.



Och, CD-ROM game here. Oh my lordy lord. If this comes out the CD world will be put to rights... hurrah!

Show report

If you had time to venture down to the Hammersmith Novotel to visit the World of Amiga Show last month you would have noticed we had a stand packed full of games, magazines, subscriptions, not to mention an A4000 whose highlight of the show was to crash repeatedly while punters then decided to wipe the hard drive. Cheers.

Anyway, I hunted around the show myself and found... next to nothing. Some other magazine stand was showing off Capital Punishment by the Canadian team ClickBoom and another was showing Alien Breed 3D. While this was going on a foreign chap showed me an overhead-type adventure game which I thought was quite good, but when I enquired about release dates he made a dash for the exit - so don't hold your breath.

So all in all, it was an exciting show with plenty of goodies on offer, but sadly none of them were games. Never mind, you never know, it may perk up a bit yet.

Next Month

It's not our fault. Okay so System has been greatly reduced in size. It's been a bad four weeks for games. At the beginning of the month we had high hopes. We had heard of some new games which would definitely be ready for review and I hunted around for some news stories which were meant to be printed here but they turned into full pages. We tried our best.

However, next month will be different. We'll have reviews of Capital Punishment, Legends, Atrophy, Chaos Engine 2, Sensible World of Soccer European Championship Edition and Harry's Balloons, and we'll also have some previews which, if we're lucky, may be Thunderstorm and Worms Reinforcements. See, how about that for a packed issue? It surely makes up for this month's feeble effort. Let the good times begin!



ens. We will always be the first with news, reviews previews and cheese

System Selections

Watchtower

89% OTM

This commando-style game is marvellous. So good in fact I awarded it a spiffing 89%. It features some excellent gameplay packed with loads of special effects like explosions. Great.

Premier Manager 3

With the season over and a relegated Manchester City, it's time to pack my bags and head for sunny Stockport in search of some better football - namely Division 2. Oh veah, Premier Manager 3 - Deluxe is quite good. I gave it 92%.

Timekeepers

90% Vulcan Software

Are you always late for those important appointments? Are you always told off for your punctuality? Well, don't look at me. You should 'keep your time'



with Timekeepers. Yes, that oh so puzzling game courtesy of that Portsmouth bunch. (We always call them that don't we?)

Super Skidmarks

88% Acid Software

This is the title that immediately springs to mind after a heavy night of curry abuse. Ho ho, nobody's ever done that gag before. Blimey, I'm always the first with all the jokes around here, oh yes. I am by far the best.

Tracksuit Manager 87% Alternative Software

This is another footy game. It features a league table, fixtures, players, footballs, kits strips, substitutes, cup competitions, player loans, European competitions, playoffs... Yawn.



Slamfilt

90% 21st Century Entertainment



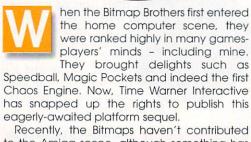
Hey, if this game's by 21st Century it's almost out of date. If the whole point is to prove its games are in the next century then in four years the games will be up to date so they won't be ahead of everyone else. Is it going to call itself 22nd Century Entertainment? But what about in another 100 years...

6 It's been a bad four weeks for games 9

Understatement of the year

Reviewed by Andy Maddock

Engine 2 at ECTS which was a bit of a nightmare for Amiga owners considering there weren't any/many Amigas on show. The only Amiga I saw was the one with Chaos Engine 2 playing on it. Two of the 'brothers' were showing it off alongside other Playstation and Saturn releases, and to be honest, it didn't look out of place. As Simon Knight talked me through the whole game, more and more people were gathering behind watching the on-screen action. It's a pity they didn't stay long enough to see me actually beat Simon, much to his embarrass-



Recently, the Bitmaps haven't contributed to the Amiga scene, although something has sparked enough interest for them to return with a sequel to Chaos Engine which has generated a lot of interest, especially for old wrinkly Amiga owners who can remember when Speedball was released. And incidentally, to this day, it's still one of the greatest games on the Amiga - ever. I first saw light of Chaos



Here's the Navvie character. He's like the big hard one you wouldn't ask for a fight



There are four players to select from, each differing in speed, agility, power etc



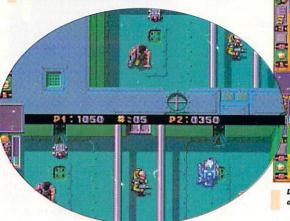
If you collect loads of stuff you get loads of points. Ream



Here are some robots. They're like Metal Mickey only smaller and not as funny

P2:0290 ł

Here's a bald man, er, with no hair



You can climb up ladders and things to escape your enemy

ment. Oh well. The main new feature which was pointed out was the addition of an actual challenge, whereby the screen was halved, with each player taking their respected

half. The general idea is to pick up a key so you can unlock a door, and

the first through wins.

This, by itself, may not stand out enormously but when there are points to collect and beasties to defeat, sometimes the key can be forgotten and you eventually engage yourself into lengthy bouts of Chaos tomfoolery. There's also the added feature of you being able to climb up ladders and jump off platforms which give you many escape

routes from your enemy. However, the game



Quick, get that key before that guy. You'll probably have to get up first though

Harder than it seems

Everybody knows the Bitmap Brothers would never release below-average games and Chaos Engine 2 will certainly be no exception. The big addition to Chaos Engine is the computer intelligence. If you happen to be a bit of a pro, by picking up the key as well as loads of points the computer's intelligence will rise slowly and, more often than not, you'll end up getting a good beating from the computer usually right at the end when you're about to open the final door.



door that leads to the exit

can turn out to be a bit like Tom and Jerry, or hide and seek if you like, but wait... there's a little scanner so you can tell where your enemy is. That's alright then.

The graphics have been slightly enhanced. as well as the sound effects. For instance, as your computer or human opponent gets

closer the music will change in tempo, making it exciting and nerve-wracking - just like a film.

All the same characters will be included with different personalities and looks and there will be some hefty artillery available. Incidentally, you'll be able to pick up other weapons throughout the game such as dynamite.

A nice little touch that makes all the difference and hasn't been seen before in any game is the fact that you can lean into a wall to dodge bullets and flying fists. Also, if you run out of ammunition when your opponent has the key, there's absolutely nothing to stop you going up to him and giving him a good slap round his head. Go for it, man. However, having no weapons does leave you slightly vulnerable and you will probably die.

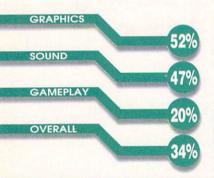
Insight

Chaos Engine 2 is around 90 per cent complete - all that's left are a few bug fixes and generally a bit of tidying up of graphical glitches and things. Hopefully, we should have a full review next month. Get ready, because it's gonna be big.

6 A nice little touch that makes all the difference and hasn't been seen before in any game is the fact that you can lean into a wall to dodge bullets and flying fists 9

review

The hideous monsters who hurtle towards you could have easily wandered from a Space Invaders machine circa



PUBLISHER Alternative Software

DEVELOPER
Gary Pesticcio

PRICE

£TBA DISCS

HD INSTALL

SUPPORTS CD32



This gurning fool congratulates you each time you manage to hit a sniper



tter pap. Just so you're in no doubt as to the quality of this game, I'll repeat that. Utter pap. Utter, utter pap. But I'm getting ahead of myself. Let me describe the game to you. Final Gate is, in the broadest terms, a

shoot-'em-up. Pumped up with a Full Motion Video hose, you sweep down a river in a speed-boat and blast away at the approaching baddies before they collide with your face. Snipers line the riverbanks and take pot shots at you, requiring you to blow them out of their waders at a moment's notice. Operation Wolf à la mer, with a garnish of 'interactive movie'. In theory.

Described thus, Final Gate actually sounds quite exciting. But, oh no! It's not. For a start, the description I gave you might suggest that this is Miami Vice-style action. But from the moment the FMV chugs into life, it becomes clear that this was actually filmed on some grimy canal in industrial England. The hideous monsters who hurtle towards you could have easily wandered from a Space Invaders machine circa 1981. They lurch towards you, and unless you shoot them they just sort of vanish. This apparently means they've hit you and a bit of energy is lost. As they move quite quickly, and the gunsight doesn't, this happens quite a lot. The only consolation is that they appear in exactly the same place each game, so you can soon predict what's coming next.

The 'actors' on the riverbank are highlighted by a half-box gunsight, presumably to help you pop their clogs. Very kind of them, but perhaps collision detection might have been more useful. Many times I held the gunsight over the fella in question, with the fire button firmly depressed, sending bullets all over the general area as I sped past. And still I missed. Maybe I'm rubbish, but the fact that you can't use a mouse makes it very frustrating when you have to haul the sights right over the screen with the joystick. Should you manage to shoot them then some bloke appears and gurns at you saying "good shot." You then get to see the gunmen fall over and your boat continues down the river.

And that's pretty much it. It's basic, but that's usually a blessing for most games. Add the myrical defects here though, and it's a recipe for disaster. Some of the other annoyances that depress me too much to discuss in any depth are the tiny playing area, the use of the generic Amiga font throughout the game, the way you have to restart at the beginning of the first level every time you die, and the way the whole game resets when you run out of lives. One of the most painful games I've ever played.

Final word

This is truly hideous. Unlike most FMV games this one doesn't even have the decency to hide behind nice graphics. If Final Gate was a TV show it would be on ITV at about three in the morning, just before Jobfinder. And that's where it belongs.



Kids, don't be too scared by the Teletext-inspired baddies



Evil assassins, disguised as out of work actors, lurk in the scenery



Bored by the whole thing, our hero takes in a spot of fishing

Next on the interior of the computing the co

"Houston, we have an Amiga!"

Read about how NASA make use of the Amiga in mission control

Also in next month's superb Amiga Computing.

- Epson GT5000 scanner
- **GVP 060**
 - VIScorp press conference
 - CD.-ROM roundup

and our usual mix of tutorials, advice and articles...

review



You can see there are plenty of competitions to keep you involved in the game



So those white things. They're goals. If you kick the ball into it you get one point. (That's for non-football lovers)

GRAPHICS SOUND GAMEPLAY 829 **OVERALL**

ootball Reviewed by Andy Maddock

Austria versus Cameroon is

halves. Heh, I don't think so...

PUBLISHER Domark

DEVELOPER In-house

PRICE £29.99

DISKS

HD INSTALL

No

3

SUPPORTS A1200

otal Football arrived some time last year on the Megadrive - I think - and it wasn't the most popular

game ever and never managed to steal the crown

from the FIFA series. However, on the Amiga it's a different story.

Sensible Soccer was and still is the finest arcade football game, so anybody who thinks they can better it is surely mistaken. I don't think always a good, solid game of two game you get to choose anybody can better SWOS but

one day I hope someone will prove me wrong. However, Domark has finally released Total Football after claiming it may never release it. So here it is... Some people actually mixed Total Football up with Championship Manager 2 thinking they were the same thing, only with different titles - some even

thought the two were going to be incorporated because you manage your side like in Championship Manager and when

you get on to the field you get to play the action in arcade fashion with Total

Football.

At the beginning of the between a standard friendly or

league, knockout and cup competitions. Before you begin the game you can also tinker with the options which range from match length to pitch conditions. When you actually



The All Stars team is truly ream. It should be called the All Ream team just for fun



Och - look at that. England and Scotland. Er, I can't remember the score. I do screenshots before captions

No score draw

It's pretty difficult to score in this game. I had to wait five matches before I managed to put the ball away in open play. It seems the easiest way to score is via a penalty, so if you jog about in the box like a madman someone's bound to tear your legs down. Consequently, it seems as if Total Football has a flaw - but not if you turn the fouls option off.

If you do manage to score a half decent goal your player will run off in delight to the crowd, either to display his happiness or his nipples. Yes, even in computer games scorers have had the rush to rip off their shirts, only to face the inevitable fine from the club.

get into the competition you desire you will find that the only teams available to you are international sides. And after you select your formation from many it's out on to the pitch for some footy action.

Unfortunately, there are no real player names but some of your players are distinguished in other ways, for example you may find a player in your side is completely bald. The only way I can explain the pitch view is that it is isometric FIFA-like – only the camera view is slightly higher up. Also, incidentally, the camera angle cannot be changed.

The first problem that hit me was the control method. When you press up on the controller your player will run up the pitch. Nothing wrong with this, I suppose, except it is quite bizarre bearing in mind the angled isometric pitch. In these games I usually prefer the player to run up the pitch in an up/diagonal way when I press up so I know how to aim shots, otherwise you'll be all over the place – like I was. It will take some getting used to but after a while you should be knocking in goals left, right and centre.

The shooting system is also pretty awkward because you have to press the fire button once to pass, twice for a bit of a shot, and three times for an absolute crack up field. Obviously, you end up using the latter because



You can select from a number of formations and they are all officially ream. Possibly even reamer than ream



Here's a shot on goal. If you score you get one point. Damn, I've said that already!

passing the ball around is not as easy as you think. The computer seems to enjoy taking the ball off the end of your boot and storming forward to smash the ball into the back of the net. Ooh, thanks.

The presentation in Total Football is pretty good. The graphics are nicely drawn and, surprisingly, there are many crowd chants, along with some geezer who insists on thrusting in certain comments about the action.

Final word

Overall, Total Football isn't bad. It's certainly a good effort which will undoubtedly give Amiga owners much relief to know that football games are still being made. But I have a feeling Total Football's success will be very short lived. As soon as Championship Manager 2 is released I think it will be slightly overshadowed, which is a real pity. Oh well.



computer seems to enjoy taking the ball off the end of your boot and storming forward to smash the ball into the back of the net 9

review (

SOUND 87% GAMEPLAY 90% OVERALL 90%

PUBLISHER

WeatherMine Software

DEVELOPER

In-house

PRICE £19.99

DISKS

4

HD INSTALL

Yes

SUPPORTS A1200



f you think of how many genres of games there are it's difficult to believe there is only one which I truly hate. You may think it's adventure games because you either love them to bits or you deny they exist, but no, it's not adventure games and it's certainly not platform games because ooh, I love them so much. So what can it be? Have a wild guess.

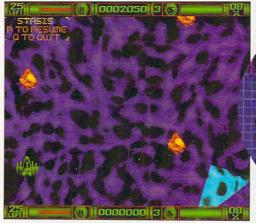
Since Xenon and Xenon 2 there hasn't been a single shoot-'em-up which has impressed me enough to play it. Okay, so Project X by Team 17 couldn't be accused of not attracting my attention, but it wasn't exactly a breakthrough in computer game technology now was it? It looked nice but played as well as Leicester City – promising but still rubbish.

So as you've already gathered, I'm not the world's best lover of shoot-'em-ups. But what makes them so original is the fact they have originated all the way from the early arcades and have hardly changed. The graphics are



Ooh, here's another title screen. This one says 'Options' on it though. See, subtle differences

far better (in some cases), but the gameplay is just as good as it ever was on the early versions, which to this day are still knocking around corners of some of the older pubs. The



You can see immediately the relationship between XP8 and Stardust. Can you? Eh? Eh?



That green thing is your space mobile. It goes like the clappers, although there are no green men here...



The electricity bolts will fly up and hit your face on this level and I'm not kidding. Oh alright... I lied

days are gone where you would drink ten pints and challenge someone to a game of Asteroids. Admittedly, you would fall over unconscious before you lost all your lives, but the point is the fun was there to be had. Why don't they do this with the Amiga?

You may think XP8 looks like one of the many hundred shoot-'em-ups but I assure you, it features much more than your average blast-'em-up. If you can remember a game called Battle Squadron from the early days of

QUIT KP8

CUSTOMISE OPTIONS

CUICK RESTART OFF

CHANGE PASSWORD

PLAYER & OFF

PLAYER I ON

MAIN MENU

ON SCREEN MESSAGES ON

AUTO WEAPON SELECT OFF

POWER UP CHANGE SHOOT

PLAYER 2 CONTROL KEYBOARD

PLAYER I CONTROL JOYSTICK

There wasn't enough space to explain

all the options so I took a screenshot of

the screen to hurry things along

GAME DIFFICULTY NORMAL

the Amiga, then imagine that but with better graphics and a more polished look and feel.

The programmers describe it as 'Banshee with sugared Stardust on top'. You can see why too. It has the playability of Banshee and the typical ray traced graphics we saw in Stardust but, in my opinion, XP8 is better than both.

The game features five levels which contain all those clever ray traced-like baddies like Stardust, so it's easy to see that they've taken time with the graphics. There's also a two-player mode so you and a mate can combine force and try to destroy the enemy. As you destroy more ships they will

reveal power ups and more weapons - there are eight all together and can all be



Here are some medals. I presume this is something to do with ranking. I said RANKING!



This is a nice big beastie. It's a beastie and it's big. If you destroy it you will be rewarded with a beefy power up

6 The programmers describe it as 'Banshee with sugared Stardust on top'. You can see why too 9

increased five times in power. Finally, when you reach the level end you will be confronted with a huge beastie which will throw out homing missiles, amongst other things.

The game is well presented featuring attractive introduction screens instructing you on the next mission because XP8 isn't just a straightforward points fest, there are missions to complete. There are some nice touches too, for example when your ship gets hit the whole screen flashes brilliant white and shakes about as if you've really been hit, which makes all the difference to a standard little explosion sprite.

You can customise the options so you can control the game. Everything involved in the game can be changed which is a good thing because if there's something you don't particularly like you can just alter it or scrap it completely. This just shows how much thinking has gone into the development of this game.

Final word

Overall, it features some excellent graphics and sound effects and is one of the most enjoyable shoot-'em-ups ever to be released. It's what gamers everywhere have been crying out for since the demise of games like Xenon and Project X. Order a copy now, you won't regret it.

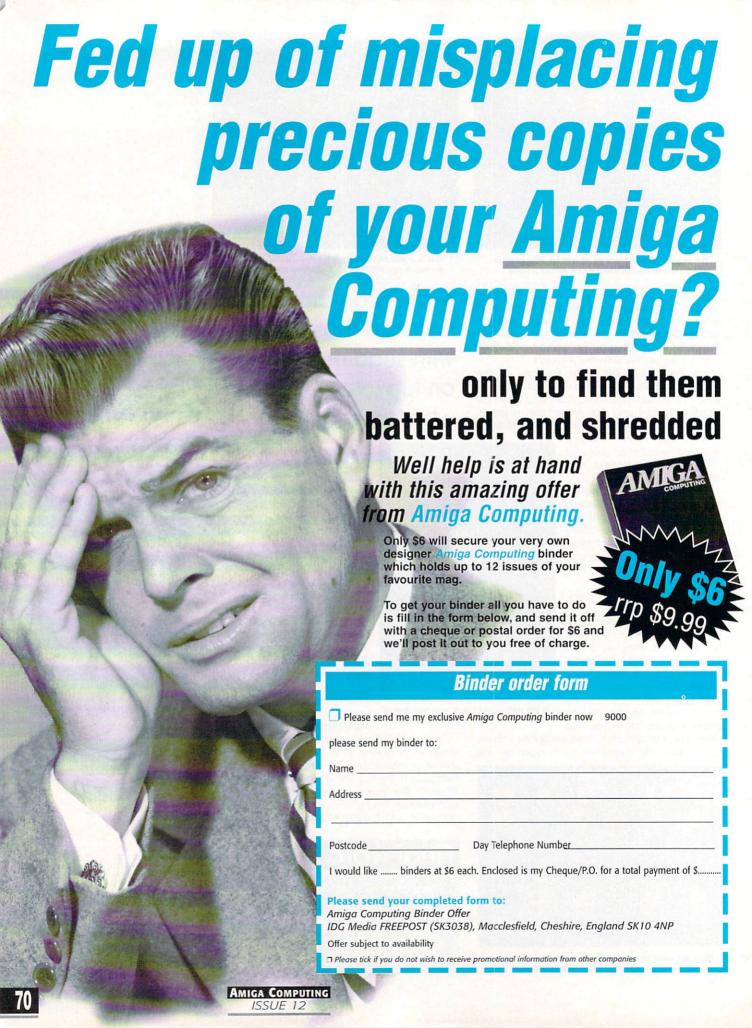
Get your copy now

You can order XP8 for £19.99 from this address:

WeatherMine Software 50 Taleworth Road Ashtead, Surrey KT21 2PY

Make your cheques payable to WeatherMine Software. The price includes postage and packing. If you have any doubts or queries you can contact the team on 01372 276042 or e-mail them on xp8@mattwms.demon.co. uk for more information.

Issue 12





When your Amiga is filthy and your screen dusty, what do you do? Frank Nord'll tell ya



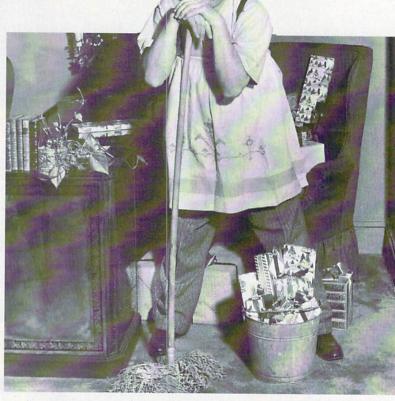
miga owners of long standing are a mixed bunch. For every one that is scrupulous about the cleanliness of his or her machine, there will always be the 40-a-day user that casually keeps his Coke inside his or her keyboard, presumably so they can tip it out at a later date when the fridge is empty. For all you slobs out there, you could actually make an effort to ensure your machine is nice and tidy for special occasions - such as for when your neighbour comes round for tea and to play a head-to-head match of Worms, or maybe, just maybe, you might need to show your Amiga's best efforts to someone in order to get a job. Well, you never know... So the thing is, what should you use to make sure your Amiga is kept in tip-top condition? And no, a mop and bucket filled with bleach is not a

good idea, at least not while the machine's on. You shouldn't even go around spraying Mr Sheen everywhere either. Your best bet lies in purchasing a few bits and bobs from your handy local electronics store. In the UK there's a chain of shops (and a mail order service) called Maplins - there may be a similar thing where you live - and you should proceed there at full speed in order to procure some of the items I will mention in a mo

SPARKLY

The sorts of things you will need to get will vary depending on whether you have a big box Amiga, or just an A500, 600 or 1200. For these machines you will rarely, if ever, need to visit the internal working of your Amiga, but most people have the lids off their 2000s, 3000s and 4000s more time than they've had dinners that were hot but that have become a bit cold and congealed because they were busy doing something on their computer.

So what do we need to get to keep the machine not only in full working order, but also looking as sparkly as the day you removed it from its packaging? Starting with externals, the keyboard and mouse are the items that get the



An Amiga owner's work is never done

> most dirt on and in them. Typing when you've just had a pop tart may have seemed essential at the time, but sticky keys attract grime in large quantities, so the first thing we are going to want is some sort of cleaning product. Most electronics stores sell a range of aerosol-based foam cleaners and you should look for one that is also antistatic and preferably inert so you can spray it everywhere without the fear that it may damage some component in your keyboard or floppy

> To clean the foam off you can either use lintfree cloths (also available where you get the spray), cotton buds, or, best of all, a pig hair brush. These are a lot harder to find, but the effort is worthwhile because they clean your

keyboard best of all without being too harsh. For the outside of your mouse these same implements will be fine and for the inside you can either use a cotton bud, your fingernail (!), or a dedicated mouse cleaner which looks like a barbell for a hamster and has absorbent pads on each ends which you can spray cleaner onto.

You can also use the same spray cleaner for your Amiga's case and monitor, but you should try to get screen wipes for the monitor's screen itself, mainly because it is quite hard to achieve a smear-free screen using the foam cleaner.

If you want to really get that deep down clean feeling in your keyboard (and inside your machine), Maplins also does an aerosol containing inert gas that can be used to blow the dust out of cracks, crevices and other hard to reach areas of your machine. This stuff is also ideal if you have used cloths that aren't quite as lint free as they perhaps ought to be and have left bits all over the surface you were trying to clean.

For that finishing touch, if you are a Zorro II/III card user and you really want everything as clean as clean can be, you can remove your cards from their slots and buff up the contacts by using a normal pencil rubber on them (the white plasticky Stabilo Boss eraser is particularly suited to this purpose). Make sure you blow away the bits of rubber before you re-insert the cards in your machine.

MOMENTS

Last, but not least, I bet you have a whole stack of floppy disks that sit on your desk with the labels half ripped off from where you were trying to remove them but failed dismally. Well, Maplin even have a cure for this ill with a spray-on label remover. It works beautifully on pretty much all the labels I've tried it on. You simply spray it over the entire label and leave it for a few minutes and then the label should peel off really easily. It is a bit of a messy job and the spray smells a bit stinky, but it's certainly an awful lot easier than sitting there cramped over disks thinking you will be able to remove the whole label in one go, just a bit more, then the thing rips and you're left with only the sticky backing of the label on the disk and you know there's no hope of removing it ...

Paul Overaa takes a two-part look at those protection bits that Amiga DOS provides



Protection racket uncovered!

very Amiga disk file has a selection of protection flags associated with it that identify such things as whether the file is deletable or not, and you see the states of the various file flags whenever you use the LIST command. There is another Shell command, PROTECT, that allows individual flags to be set or cleared as required. At this level the flags are represented by letters: 'r' signifies that the file can be read, 'w' that the file can be written (altered), 'e' tells you the file is executable (in other words it is a program), 'd' that the file can be deleted, and 's' that the file is a script.

Two other flags, 'p' and 'a', are also available, with the 'p' entry being used to signify that

Horbench Screen

| Continue | Con

Almost all the information that the AmigaDOS LIST command provides is pulled out of FileInfoBlocks set up by using quite high-level DOS library functions!

part

Listing 1: FileInfoBlock structure definition



the file is pure, i.e. can be made resident and therefore kept in memory to be run and re-run without ever needing to be re-loaded. There's nothing intelligent about this as far as AmigaDOS is concerned, it takes these flag bits at face value. If, for example, you set the pure bit for a program whose code is not pure, AmigaDOS won't realise this and will be happy to make the program resident regardless (not usually a wise thing to do!) The 'a' flag is the archive flag and this is set by utilities which carry out archiving and backup operations. It's because the 'a' flag is always cleared when a file is edited that these utilities are able to identify files which have been changed.

CHECKING UP

The easiest way to check the state of any of the protection flags associated with a particular file is simply to use the AmigaDOS LIST command. Any flags which are set will be shown using the above lettering scheme, whilst those which are not set will be indicated by dashes. If, for example, you create a text file called myfile.txt, and then list the

contents of whatever directory you created it in, you'll see an entry which looks something like:

myfile.txt 326 ----rw-d Today 14:09:14

The line represents the filename, the file size, the current state of the protection bits, and the date and time of creation. To protect this file from deletion you would clear the 'd' flag using the Shell command:

protect myfile.txt -d

where the minus sign before the 'd' signifies that the specified flag bit should be cleared. Having done that you should be able to confirm that the delete flag is clear using the LIST command, and if you then try to delete the file you'll get a 'Not Deleted' error message along with a note to the effect that the object is protected from deletion. Reset the flag using the same protect command but with the '+d' option and the file becomes deletable again.

LOOKING INSIDE THE FILE

Although AmigaDOS commands use letters for the various file protection flags, underneath the surface each flag is represented by the position of a single bit. The bits themselves have standard system names and nowadays you'll find quite a collection of these defined in the dos.i assembler system header. The most important ones, however, are defined like this:

BITDEF FIB, SCRIPT 6 ; program is a script (executable) file
BITDEF FIB, PURE 5 ; program is re-entrant and re-executable
BITDEF FIB, ARCHIVE 4 ; bit cleared whenever file is changed
BITDEF FIB, READ 3 ; actually ignored by old file system
BITDEF FIB, EXECUTE 1 ; used by Shell
BITDEF FIB, DELETE 0 ; prevents file from being deleted

Within the file header block of each file there is a 32-bit (long word) area that is used to store the current state of these and other protection flags. You never need to access this file header data

directly because the current values can be retrieved by using the DOS library's Examine() function. I'll be looking at this function in detail next month but basically, all it requires is a pointer to a file lock and the address of a suitably sized block of memory for storing the returned file information.

The structure used to hold the information that Examine() provides is known as a FileInfoBlock. It is important, incidentally, that this structure be long word aligned although if you're using the exec library AllocMem() function to allocate the structure, this alignment occurs automatically (all exec memory allocations are guaranteed to be long word aligned).

Listing 1 shows the layout of the FileInfoBlock structure and the field containing the protection flags is, of course, the one called fib Protection. Retrieving and altering the state of these flags is actually not that difficult and the only bad news regarding this is that I'm afraid you'll have to wait until next month to find out how it's done!

Paul Overaa
outlines a script
development
technique for
writing programs



Designer scripts

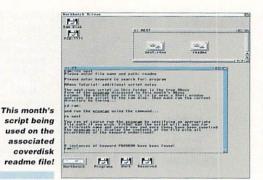
hen writing ARexx scripts of just a dozen lines or so, most people will tend to do it off-the-cuff as it were – by sitting down in front of their Amiga and just typing in the code which they feel will do the job. And that's fine – even if the script doesn't work first time, a few bug hunts will usually find and eliminate any problems.

The only bad news is that this 'suck it and see' method of creating scripts really only works for small programs. As scripts get larger you need to be a little more systematic and, in fact, the more effort you put into the original planning of a script, the better the results are likely to be. One of the techniques I use, however, has shown itself to be consistently reliable and capable of producing code that, barring the silly syntax slips that we all make, enables even large scripts to be created relatively easily.

The idea is to first create the main structure of the script using nested subroutines coupled with a sort of 'ARexx pseudo-code'. Having got this initial basis of the script right, the refining stages, i.e. converting the pseudo-code to real ARexx statements, is relatively straightforward.

KEYWORDS

To provide an example, I've chosen a nice easy task - namely the creation of a script that will search a given text file and count the number of occurrences of a user-specified keyword in the file, underlining all the keywords found. The ordering of some of the things that such a script will need to do should be fairly obvious. You do, for instance, need to open a file before you can read from it. Similarly, you must know the name of the file before you can open it. So collecting the filename and keyword, and then trying to open the file are fairly obvious first steps to be carried out. We do, of course, need to remember that the specified file may not exist and cater for this possibility. With the approach I'm advocating the code for, all these eventualities



become isolated into separate functions and I'd sketch out these details something like this:

Collect name of file and keyword to search for if File Opened OK then call FileOpenOK() else call FileOpenNotOK()

If the file was not found we would presumably like to put up some sort of error message. Pseudo-code for these actions can be written very easily:

FileOpenNotOK: Display error message and flash screen return

If, however, the file did open OK we would want to read lines of text from it and examine the words in each line. The trick now is to concentrate on just the line reading part of the problem. It should be pretty obvious that some loop code is going to be needed and by assuming that an ExamineWords() routine exists that can handle the word-related issues, I can write the line reading loop very easily indeed:

```
FileOpenOK:
do while NOT end-of-file
Read a line of text from the file
call ExamineWords()
end
return
```

Notice that I'm successively working through the tasks that need to be carried out and having now got to the stage where lines are being read from the file, the next stage is to think about what must be done with each line, i.e. to decide what actions our ExamineWords() routine will have to perform.

We need a loop to read each word from the line and check it to see whether it matches the supplied keyword or not and, to cater for possible case differences, I've chosen to compare uppercase versions of the words. As far as the design issues are concerned, the important point with this area of the problem is that we need two ways of displaying a word – routines for both normal and underlined word display are needed. Again, I just assume these routines exist and place appropriate function call references into the pseudo-code sketch like this:

These ARexx pseudo-code sketches represent the main jobs that have to be performed. Creating a blueprint for the real script is now really just a matter of putting the individual fragments together and you'll see the results of this in listing 1. From this point on, producing a real script is just a matter of expanding the pseudo-code statements. You'll find the finished script on the coverdisk and will see that I've defined various text and constant terms using a g. stem.

The reason is that by exposing this stem I'm able to make all such definitions available throughout the program, yet still keep them all collected together at the start of the code for easy reference!

```
Initialise count variable to zero!

Collect name of file and search keyword
Try to open file!

if File Opened OK then call FileOpenOK() else call FileOpenNotOK()
Say count 'instances of keyword' keyword 'have been found'
exit /* logical end of program */

FileOpenNotOK:

Display error message and flash screen
return

FileOpenOK:

do while NOT end-of-file
Read a line of text from the file
call ExamineWords()
end
return
```

```
ExamineWords:

For each word do  

if uppercase keyword=uppercase word then call ShowUnderlined() else call ShowPlain()

end return

ShowUnderlined:
    Display word in underlined text return

ShowPlain:
    Display word as normal text return
```

Listing 1: An ARexx style pseudo-code sketch of the tasks to be performed Dave Cusick wonders whether the Amiga is finally catching up with the Mac and PC



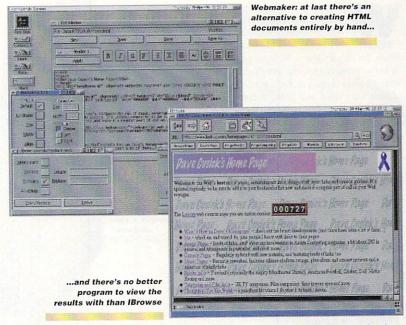
Leading the way

here have been incredible leaps forward in Amiga Net software recently, with the appearance of such decent programs as IBrowse, AmFTP, AmIRC, Voodoo and YAM. These drag the Amiga into line with the PC and Mac in their respective areas – in some cases, even ahead of the field. Indeed, I recently discovered that an e-mail correspondent of mine using a Sun SparcStation running Unix couldn't in fact read a MIME-encoded attachment I'd sent him with Voodoo.

At last there are even some ingenious ways of using AmiTCP to waste time and run up astronomical phone bills. Witness AmiSlate, which on a basic level allows you and a Net friend to draw on the same screen. The real strength of AmiSlate, however, lies in its ARexx interface, which makes it possible to play simple games such as Noughts And Crosses, Backgammon, Checkers and Chess over the Net using scripts. Various game scripts are included with the distribution archive, and others are available on Aminet. In time we may see some more complex AmiTCP games appearing.

There's also an Internet 'phone program for the Amiga now, whereby you can chat with somebody anywhere in the world for the price of a local call to your ISP. It's called AmiPhone and it is quite impressive although, as yet, it is not compatible with similar programs on other platforms. To use it you will, of course, need a sound sampler, and a really fast connection is desirable if not totally essential – reasonable results can be obtained using a 14.4k modem.

With the Web gaining so much attention in the media, it was also reassuring to spot the



appearance of a few new HTML editors on Aminet recently. Although the text editor add-on HTML Heaven has been knocking around for a while, it's not a patch on the newcomer Webmaker, a MUI program by Pascal Rullier which is currently at v1.1. Apart from speed problems when editing large documents, Webmaker is a joy to use. It doesn't yet offer WYSIWYG but a decent Web browser can easily fill this gap. There is also talk on IRC of a program called WebEdit which is now in beta

testing and could well challenge Webmaker's current supremacy.

However there are still some important areas where our beloved machine lacks quality software. Whilst as Phil South noted a couple of issues ago it would indeed be nice to see flashy programs like CU-SeeMe well implemented on the Amiga (ACU-SeeMe is still rather primitive), I would suggest that the most obvious area in need of attention is News handling. At the moment the choice is pretty much limited to Thor, GrN, Tin, or similar. Whilst all fairly capable, none are particularly easy to set up and they are still some way short of the ultra-friendly, ultra-efficient feel of the other leading Amiga Net applications. Interestingly, the Amiga Surfer pack does not yet seem to address this problem. Any industrious programmers out there?

Another sensible suggestion made on IRC recently was that someone should write a RealAudio datatype so that the Amiga could make use of this increasingly popular audio format. I don't know enough technical details to know if this is even possible, but it would certainly be a welcome development if it was.

BATTLE OF THE BROWSERS

At the time of writing, opinion is very much divided in the Amiga-oriented newsgroups and IRC channels on whether AWeb or IBrowse is the better browser. Undoubtedly, those in favour of AWeb point at its rather superior stability across a wide range of Amiga platforms, and the FTP and Mail plug-ins which are already available on Aminet. However, in its current version, AWeb only supports HTML 2. Admittedly this was the last 'proper' revision of the Hypertext Mark-up Language, but IBrowse already supports the large number of Netscapisms which are so prevalent on the Web these days, whereas AWeb is saving this for future shareware releases.

The latest version of IBrowse is 0.81, although by the time you read this it could be another release or two further on in its

development. Version 0.81 certainly seems fairly stable on my system, but it apparently still crashes occasionally on certain machines. However, the new internal image decoder seems excellent, and the MUI-based GUI strangely appears faster than the fairly ugly and much less configurable ClassAct GUI of AWeb. I must confess that at the moment, I fire up IBrowse considerably more often than AWeb.

Meanwhile, I've still yet to lay eyes on Mindwalker, aka Voyager, the official Surfer Pack browser. The wait also continues for the multitude of other browsers promised for imminent beta release for some months now. Little seems to be happening, for instance, on the home pages of Juggler, Hyperion, and the particularly interesting Java browser port P'Jami.

MAILING ME

If you've any comments, suggestions or queries you can contact me at dave@dcus.demon.co.uk, or davecus@idg.co.uk.

Our second guide to earning your keep by creating stationery packs, by Frank Nord



elcome back. This month I'm going to have a shufty at the other side of stationery - that for businesses. As with personal letterheads, the idea for you as the layout guy is not to make unnecessary work for yourself. If you just offer a variety of designs, that's great, but you shouldn't overwhelm your potential clients with all 300Mbs of your font collection. Start with a few pre-set designs, and if you want to really jazz them up, go for overprint paper from PaperDirect or one of the other suppliers. I really mean it, these overprint papers are the best thing to happen in DTP since the advent of cheap colour inkjets and, unlike inkjet-printed designs, they look really professional.

When you are designing a stationery pack for a company, the most important thing to bear in mind is that there has to be a consistency to your design across the different parts of the pack. Never change fonts for the compliment slips, or centre text on a business card if it is all right justified on the letterhead, compliment slips and

PRINT ORDER

What items go into your stationery pack is up to you, but they should always include letterheaded paper, continuation paper (which is usually plain, but if you are using an overprinted paper you may want to include coloured continuation). compliment slips and business cards. Other items may occur to you, especially if have one of PaperDirect's catalogues - three fold brochures, printed envelopes, gold foil overprints and much more - but don't go crazy unless your client wants that kind of stuff specifically. It's definitely not worth spending the money unless you have a use for the products.

The other thing to bear in mind about stationery packs is that it might not actually be commercially viable for you to produce hundreds of printed sheets (especially if you have to use an inkjet printer), and business cards of the sort that



can be run through a laser printer aren't as impressive as ones printed by offset lithography. This is where you really want to befriend your local printer. A lot of printers can be very standoffish if you aren't using a Mac to output your camera-ready artwork, but try to persuade them to experiment with what you are producing any printer worth his salt will recognise a potential customer when he sees one.

So how do you go about producing cameraready artwork for a printer? I think I would probably be right in assuming that very few of us have an imagesetter in our back bedrooms, so what are the alternatives? Firstly, you can produce camera-ready artwork on your own printer, (but if you are using an inkjet, make sure you are using the best possible quality paper, one that doesn't

bleed or wrinkle, and you can forget this option if you are still using a dot matrix of any sort). Remember that if you are expecting colour from the printer, you will need to give him (or her) separations rather than colour output from your printer.

OUTPUT

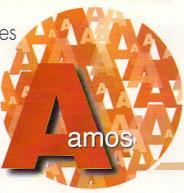
Alternatively, you could give them postscript files that they can then output on their imagesetter. A postscript file (not an EPS, but postscript printed to disk) is a large ASCII text file that can be sent via modem or taken to the printers on disk (if you have pictures in your document the postscript file can be very large. If you intend to do this kind of thing as a business it will definitely pay for you to buy a Zip drive or something similar). They should then be able to download this file directly to their ImageSetter and show you the output.

One thing to bear in mind is the fonts you will be using for the document. If they show you postscript output that has the courier font badly spaced out on it, then the chances are the imagesetter doesn't have the fonts it needs to output your document accurately. You can get around this in one of two ways. You can either stick to fonts you know your printer has in his library, or you can take the fonts to the printers as well as the document, but make sure, if you choose this option, that you are not breaking copyright by handing over the font files you need for your layout.

CONSIDERATIONS COLOUR

If you are going to be producing colour camera-ready artwork for a printer to use then your choice of DTP program is going to be very important. On the Amiga the only currently available commercial package is PageStream 3. ProPage is available from Ih publishing but is not being updated, so is now looking somewhat old fashioned. However, if you don't already have a DTP package, this doesn't mean you should simply go out and buy PageStream, especially if you intend producing colour accurate output. The term in question here is colour accurate because ever since PageStream first came out, it has always had a somewhat cavalier attitude towards colour, and even simple EPS clipart doesn't always come out as expected. While ProPage is no great shakes, it would pay to invest in a copy purely for layouts that need to be separated in colour (and that have to be accurate).

Phil South continues his new series about how to plan an Amos program project



Back to basics

s I said last issue, interface development is a crucial issue in the making of any new bit of software, and the user should know just by looking at your screen what he has to do and which button he should press to get the effect he's looking for. With this is mind, we'll focus this month on designing the interface.

Taking our trusty pencil and paper, we draw out the look of the screen we're looking for. I prefer the propelling pencil myself, partly because they don't need sharpening but mostly because I think it makes me look a bit technical. The example we'll be using over the next few months is an electronic product brochure whereby people can look at your products and check out the specs. You could go haywire and show people how the things sound too, but in this case we don't need to. This design could be adapted to any kind of multimedia program like an interactive recipe book, a reference book, in fact anything where you've got a lot of things you need to show and you want the user to be able to find out what he's looking for easily.

Sketching out the interface is the easy part. What's hard is finding out where to put the buttons on the screen. One of the easiest methods I've found is to use Amos itself to draw boxes on the screen, thereby supplying yourself with the basic co-ordinates system you will be using in your mouse zones – the thing which senses the mouse clicks over a certain button. In other

part 2



words, the process is as follows:

- You decide on paper what your interface will look like, which boxes go where and which buttons etc.
- You get Amos to draw boxes in the right places, and by trial and error get them all lined up and looking okay.
- 3. You save the screen off as an IFF file which you then load it into Dpaint, Photogenics or Personal Paint, or whatever you do your image processing in.

Basing the interface graphic on something you already have the pixel co-ordinates for is better and quicker than finding out the co-ordinates later. You can check out the co-ordinates using Dpaint, but I've found this to be a little bit tricky because Dpaint has 0,0 down at the bottom left hand corner, and Amos uses 0,0 at the top left. For this and various other reasons I find the Amos route preferable. Keep it in the family so to speak

Having made your button template, save the Amos program which made those boxes – we'll be needing it later – and save the screen using SAVE IFF. For example, I made the following program to draw my basic interface:

Screen Open 0,640,256,16,Hires Box 10,10 To 440,160 Box 10,170 To 80,200 Box 95,170 To 170,200 Box 185,170 To 260,200 Box 275,170 To 350,200 Box 365,170 To 440,200

This produced the basic Amos screen you see on this page, which was skilfully wrought into the roughly finished interface design you can also see on this page. Making button templates in Amos is mostly a matter of mathematics, as in the above example: The main window is 10+440 wide and 10+160 deep. This means the box is 540x170. Each button is 70x30 and has a space of five pixels between them. To work out the next co-ordinate for the next button add 90 to the first number of x and y: 95 becomes 185, 170 becomes 260 and so on. The row of buttons matches the main window by dint of adding up to the same amount of pixels. See? Work it out on paper and use a calculator, and you'll get it right first time.

WRITE STUFF

If you have any other Amos programs or queries about Amos, then please write to the usual address, which is: Phil South, Amos Column, Amiga Computing, Media House, Adlington Park, Macclesfield SK10 4NP. Please send routines on an Amiga disk with notes on how the program works on paper, not as text files on the disk. Make the routines short enough to appear in print, i.e. no more than about 30-40 lines of code, and if possible make them use no external graphics, or if they can't be used without them then be sure to provide them on the disk in native IFF format, and the same goes for sound files. Follow these guidelines and stand a better chance of being published. Okay, no guarantees, but leave a fiver in the package too, and I see what I can do, okay? No questions asked... (Oi, what's going on in here? Ed) Nothing, nothing!

PSEUDS CORNER

The interface designed, you will then need to start figuring out the pseudo-code for the program itself. What order should things happen? Well in this case, using our example of an arcade game from last month as a template, it would look something like this:

start
initialise variables
set up the screen size, colours etc.
load the interface graphic
start the music
start main program loop
check for button hits
if there is a hit then activate hit subroutine
if not continue
go back to start of main program loop

hit subroutine
which button was it?
make button sound to give feedback
load chosen graphic or perform chosen action
return to main loop

Next month we'll be going into this part in more detail, and starting to flesh out some of the code.

Steve White explains how you can create beautiful looking typefaces



Face paint

nce of the most often forgotten skills of any professional graphic designer is the ability to create stunning looking typeface, or fonts – not Amiga fonts but fonts that are drawn in a paint package. Drawn fonts became popular on the Amiga with the advent of the demo scene, with many demo groups adorning their productions with their name in big, bold and colourful letters.

They came in all shapes, sizes and style – metal, organic, plastic and in the most dazzling shapes. Maybe I'm going a little overboard on this font thing but a good looking logo can make or a break a concept and the same is exactly true when designing fonts on your Amiga in the comfort of your paint package. It's a good idea

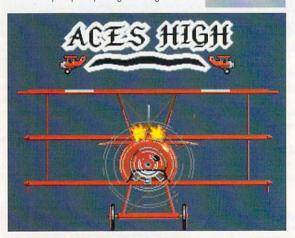
This picture demonstrates how important it is to choose a font style that suits your picture subject matter

THE FIRE FONT

Animated fonts obviously require more work than still fonts but as a result of the extra work they invariably look stunning - depending on your artistic skill and imagination.

Probably the best place to start with animated fonts is with the fire effect. This is simply a series of letters with a fire burning inside them over a series of frames. The major point here is to create the fire first as an animated brush. You can then paste the letters over each frame of the fire with the Rub Thru option set to on. As long as the original letters have been made solid the fire frames will replace the solid areas.

In case the fire doesn't actually fill the entire solid area of the letter, you should place a square horizon image below each of the fire frames and, as a result, any gaps will be filled with this horizon.



to build a catalogue of typefaces and there are several good commercial products on the market offering a wide variety of fonts for every occasion. However, it is cheaper and much more fun to design your own.

If you take a look at the Aces High picture take a closer look at the actual Aces High font. If you pull the font apart you will begin to understand why I used it for that particular image. For a start it has been roughly copied from German lettering around the time of World War I – the time when the Red Baron was flying for Germany, which links the font nicely into the main picture of the tri-plane. It also evokes a serious and official mood because the subject matter can be considered serious (I class shooting a man from the skies as serious). Now, you don't have

REGDEFCHIJKLHNDPORST UUWXYZ E123456789 ;;,"!Ze++04*[]_-=+\[^1+++

Bevelled edges help lift your font from the screen. Adding a spread fill the font can be made to look like chrome

to be a Van Gogh to understand the links made above, but what this process does show you is how to pick a suitable font for the subject of the picture.

IT'S ALL SHINY

Once of the most popular demo scene fonts was the bevelled edge. The bevelled edge raises the font out and with the correct shading and colour looks like pressed metal. If you take a look at the character set picture you can see the bevel effect in action.

You can simulate this yourself by outlining each character in the logo several times to simulate the bevel and then filling the outline with a slightly different colour. To finish the bevel you could add lighting effects such as the white and black shine you see around icons on your Workbench. A neat effect is to fill a chrome pattern though the bevel outline and then fill the actual letters inside the bevel with a single solid colour. You can see this process in the picture.

The first step is to use an Amiga font to make the basic letters - in this case Bevelled. An outline is then created and the letters



A simple font effect in only four stages. A good understanding of your paint package's tools is essential to aid design

inside erased. This outline is then filled with a spread of colours. The spread consists of the colours white to black and then black to white again. This creates a shine or chrome effect. A black outline is then added to the chrome outline and, finally, the original letters are placed back in the holes and flooded with a single colour.

There are many techniques you can employ to create attractive looking fonts. Another popular type of font is chrome reflection, and you will have almost certainly seen this effect at sometime. The actual letters look as if they are reflecting a desert scene - with sand, rocky mountains and a deep blue sky.

Using this style in your fonts can look very effective, but the colours have to be accurate - the more washy the colours the more realistic the reflection. Remember, you don't have to stick to the same colours - change them and you'll more than likely come up with a look you'll prefer to the original one.

Paul Overaa takes a look at some music composition programs for the Amiga

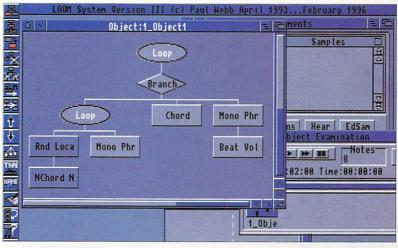


Auto music

ost Amiga owners who use sequencers or trackers for making music would agree that the software they use always tends to go some way towards either helping, or hindering, their 'creativeness'. Some packages, such as the now defunct Blue Ribbon Bars & Pipes Professional, had a whole range of tools available that could massage existing musical ideas in such a way that at times it almost seemed to think for itself.

The idea that computers could be used not just for storing and editing music files but for actually generating original music is not new and, even on the Amiga programs like Music Mouse (which allowed users, usually rather unsuccessfully, to try and create musical themes by moving the Amiga's mouse around), have been around for a long time. In terms of success stories, the only composition program that ever achieved any real acclaim was Blue Ribbon's SuperJAM. Purists will argue, however, that SuperJAM wasn't a composing program in the strict sense (because it didn't create music as such internally it used prewritten sequences). Musicians didn't actually care about this - all they knew was that SuperJAM was easy to use and it could produce arrangements that actually sounded good!

Sequencers in the main do not go down this sort of 'algorithmic composition' road at all, although Dr T's KCS does have a utility called the PVG (Programmable Variations Generator) which allows you not only to modify existing musical ideas but produce totally original



LOOM is a clever piece of software but whether Amiga musicians will take to it or not is another matter

sequences. PVG is a nightmare to learn about and even more of a nightmare to get anything useful out of. The manual itself says it all: "PVG is not optimised to produce music that is immediately pleasing to the average listener." KCS users doubtless agree with that sentiment because in almost ten years of being involved with KCS sequencer users, I've never once met anyone who felt that PVG had been creatively useful to them!

Another program that follows this trail is Dr T's

interactive composing system, M. This is certainly easier to use than the PVG program but M, too, would seem to have received little acceptance from the Amiga's musical community in general. The package is, however, still available from companies like Off Planet Media (tel: 01159 531131).

Bottom Line

REQUIREMENTS



PRODUCT DETAILS

Product:	LOOM		
Price:	£30 (+ £1 p&p)		
Phone:	01903 850378		
Supplier:	SeaSoft Computing		

Users of earlier, experimental, versions of the program can get the manual and upgrade for £10 (+ £1 p&p).

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Ease of use	70%
Implementation	80%
Value For Money	80%
Overall	80%

ENTER LOOM

As far as algorithmic composition programs are concerned then, Amiga users do not seem to have been impressed with the packages they've been offered to date. And in the wake of this rather gloomy news, guess what - this month sees the first official release of a new algorithmic music composition package called LOOM.

The program is 'object oriented' and allows music to be created by assembling objects (notes, chords, arpeggios, drum patterns and so on). Phrases can therefore be built up, manipulated, used as the basis for larger sections of music and so on, and, in fact, much of the power of LOOM comes directly from its ability to use and transform existing definitions. It's pretty obvious that a lot of work has gone into LOOM and it is certainly far more sophisticated, and much easier to use, than programs like Dr T's Programmable Variations Generator. LOOM, incidentally, is Amiga

internal sounds based, although a Midi version of the program is under development.

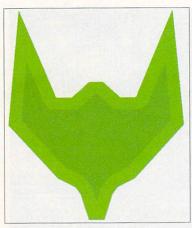
I think the difficulty that musicians will have with LOOM is that the underlying ideas are still, by their very nature, going to seem complex. LOOM object construction involves things like flowcharts, use of networks and, in some cases, even the use of equations. You don't, however, have to define all your music from scratch in this way - there are around 200 predefined drum patterns and a whole disk full of quite impressive pre-defined object files to help you on your way.

LOOM is certainly going to be great for experimenting and if you have a little knowledge of programming or are interested in algorithmic music composition systems as a subject in its own right, then LOOM is going to be worth looking at. For everyone else though I'm not so sure!

Paul Austin adds some of the finishing touches to his cosmic hot-hatch



Final frontier



Just two colours in this case – it's the diffuse map that does the real work

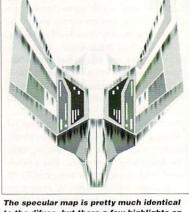
s promised in last month's column, it's time to turn our attention to the tricky business of texturing. Now, before the plagiarism complaints come poring in, I'll admit to stealing the following techniques from the master of the art, Mr Ron Thornton – head animator and founder of Babylonian Productions.

Okay, assuming the modelling stage is complete, the first step is to check your surface assignments. In other words, do all the bits of the ship that need specific textures have appropriate surface names? To do this, pop into modeller, load the ship, go into polygon mode and using the Amiga and W key combination, run through all the assigned textures. If all the appropriate segments of the ship are selected for each you're ready to rock.

Now, go back to layout and position the ship so the camera is looking directly down on the model. Next, create a key frame and open the



Panelling and dirtying-down all courtesy of the diffuse texture. It's here that a good airbrush comes into its own



The specular map is pretty much identical to the difuse, but there a few highlights on leading edges and fine details



The hot-hatch takes to the skies

camera requester, setting the zoom factor to somewhere around 30.0. After making the adjustment the ship will need repositioning to fit the screen properly.

The reason for this odd procedure is to generate a flat template image of the ship that can be used to generate the image maps required for the texturing job. Altering the zoom simply produces the flattest image possible, thereby removing any lens distortion or perspective effects that might cause errors in the image maps.

Once everything is in position, set the camera to video-res with low anti-aliasing and render a frame with flat lighting. You may need to render template images from a variety angles to create the templates for all the maps you'll need, and this may be boring, but it's time well spent.

Now you have your template you can quit LightWave and load up your favourite paint package. Needless to say, DPaint will do the job but, ideally, a true 24-bit paint package with a soft edged air brush is best.

The key to the whole process is using Layout's flexible surface mapping options to the optimum. In this case, the maps have been applied in the colour, specular and diffuse fields. Arguably the most important of these is the diffuse field and.

therefore, I recommend that's the one you start with. Although you'd expect the colour field to add the majority of the detail, in fact it's diffuse that adds the key detail to any surfacing job. In our case it's used to add the panel detail, tonal differences and key control surfaces to the wings. The colour field, on the other hand, is used primarily to add the markings and colour tones to the ship, while the specular field provides the highlights, dirt and imperfections that add that essential feeling of realism.

The first step is to fill the rendered templates with a consistent colour – a light grey in this case – but don't forget to keep the original as it's very handy for keeping track of exactly where the various surfaces are on the model. Once you have your filled surface template, simply draw in the various panels and control surfaces. Next, fill in some of the newly created regions with variations of grey – this produces the all-important tonal changes in the paint job.

Using an airbrush, now add some dirt to the trailing edges on some of the panels, around the engines, and anywhere that dirt and dust would accumulate during the rigours of space travel. As a finishing touch you can also dot a few small detail shapes around the texture – this is a simple trick which adds detail with the minimum of effort.

Okay, save out, but don't close the diffuse texture. Now we're going to use it to build the specular map. This is a much quicker process. Select a very light grey or off-white colour and simply draw highlight lines on the leading and trailing edges of assorted panels and features you think might not quite fit perfectly in position, or alternatively, have a sharp metallic edge to them. It's a subtle but important addition that will bring the model to life in appropriate lighting conditions.

FIRST COAT

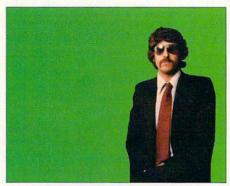
After you've saved the specular map, load up the filled texture template and you can begin adding the actual paint job to the craft. From here on you're on your own. The only rule is to make the paint job accentuate the lines of the ship. The only other pointer is not to be afraid of using vibrant colours – sticking to three or four basic colours is wise because most ships of this type need to be instantly recognisable.

After saving out this final map it's simply a matter of adding the textures to the appropriate surfaces and auto-sizing them to get a perfect fit.

Next month we'll add the engine flares and the allimportant universe for our creation to cruise around in. There's more to keying than meets the eye, as Gary Whiteley explains



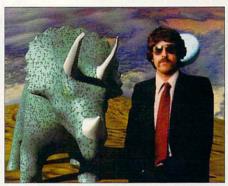
The key to keying



Put your presenter against a green backdrop....



Select your desired background....



...Chroma key the two together and you can be anywhere you like!

genlock serves two main purposes: firstly to synchronise two (or sometimes more, in the case of true TV genlocking) video sources by GENerate LOCKing them together so that their video information runs exactly in sync, and secondly as a means of overlaying one video source (the computer) over another (background video) which is itself providing the original synchronising information for the genlock. Nothing new here, but isn't the genlocking side I wish to talk about. Instead I'd like to concentrate on the keying side, which is how Amiga graphics are overlaid onto video, amongst other things.

There are actually several types of keying, with luminance (brightness) and chrominance (colour) being the predominant methods. These are usually referred to as Luma Key and Chroma Key and can be performed either digitally (as, for instance, in the case of an Amiga genlock), or in analogue fashion, depending upon the keying and video equipment being used. Keying can also be performed on a video signal as it leaves vision mixing equipment (downstream keying), or before the signals are mixed (upstream

WRONG KEYS

So as far as keying with the Amiga is concerned, there have been several (largely unsuccessful) attempts to provide specialist hardware. This has either been integrated into special graphics cards for big-box Amigas or made available as add-ons for genlocks, most notably the RocKey unit which was designed to work with RocTec's own RocGen Plus genlock. Unfortunately, the output quality of the RocGen/RocKey combination left a lot to be desired, though the results were reasonable for the cost of the equipment.

keying) and subsequently output or recorded.

Just as the Amiga must be synchronised to the video signal for genlocking to be successful, the video signals involved in keying must also be synchronous, otherwise it will be impossible to correctly switch between them at the required time, resulting in rolling images which inevitably key badly and look terrible. When correctly synched the electronic switching required to replace portions of one video signal with another will work correctly and the keyed mix will turn out well.

PRINCIPLES

In any case, the principle behind keying is that the part of the image to be superimposed or keyed onto video (for instance Amiga text) is electronically replaced by a corresponding portion of the second video image. With genlocking it is usually the Colour 0 portion of any Amiga graphics which is replaced by the second video signal, with the genlock's electronics sensing when colour 0 is present and rapidly switching the video signal so that the 'background' video image replaces all occurrences of colour 0 in the mixed video output from the genlock. The result – text or graphics appear over video.

A similar thing happens in luma and chroma keying, with part of the 'foreground' image being switched out and the background image being allowed to 'key' through. With luma keying, the crucial aspect is the brightness of the foreground image. Imagine a picture of a keyhole painted in white on a black background. By feeding this image to a suitably-equipped vision mixer or keyer and setting the key level to work with the brightest portion of the image (white), only where there is the shape of the keyhole will the background video be seen, giving a masked view as if through a keyhole.

This is an electronic version of that movie

favourite, the Matte painting, where a false scene is painted on glass, with gaps for the camera to see the live action occurring behind the glass, creating the illusion of the actors being in a fabulous set which would have been prohibitively large or expensive to build. However, with the right equipment, the matte principle can be used to govern the mixing of two different video images together, using such a matte as the key image itself. The result this time will be a special effect where both video sources appear on screen, one cut to fit inside the keyhole area, the other sitting outside it. With a good keyer the edges should be sharp and clear, provided the original matte is well-drawn, and the effect should be quite convincing.

In contrast to luma keying, which works only on predetermined brightness levels, chroma keying works by defining a specific colour to set the keying area. Chroma key is very commonly used in television today, most notably for superimposing presenters against background images (such as weather forecasters over their maps), or actors and pop groups against wild graphics and exotic locations. The most prevalent colours for chroma keying are blues and greens, since human skin contains very little of these hues and therefore will not adversely affect the quality of the keying. For superimposition purposes, chroma keying is much more useful than luma keying, since far more control can be maintained over the subject, though it requires a degree of lighting skill to produce a good clean, shadowless key in order to make a convincing composite

CONTACT

Gary Whiteley can be e-mailed as drgaz@cix.compulink.co.uk



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