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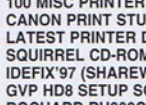
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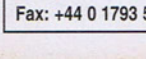
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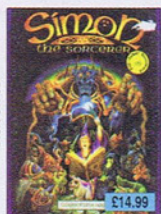
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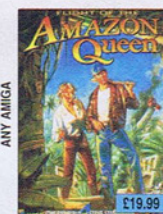
Simon The Sorcerer
Classic point and click adventure



Mega BLAST!
Bomber man clone - 2-6 players



Ruffian
Fun, Fun, Fun! - Platform romp!

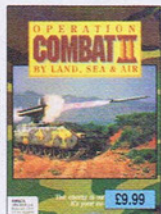


The Amazon Queen
Brilliantly HUGE Adventure game

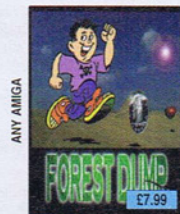


Blockhead 2
100 levels of frustration!

ANY AMIGA



Operation Combat 2
By Air, by Land and by Sea



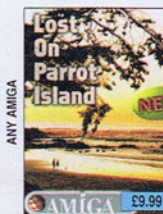
Forest Dump Forever
Fast Paced platform!



Card & Board games
Solitaire, Monopoly, Poker etc.



Damage!
Seriously horrific platform game (18)

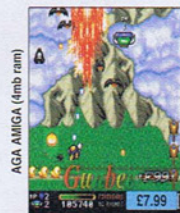


Lost On Parrot Island
Standard click and point adventure

ANY AMIGA - (2mb+ ram)



Abduction
Atmospheric Adventure (Violent)



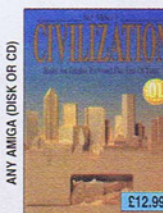
Gunbee
Cute manga style shoot'em up



Pulsator
Stylish horizontal shoot'em up

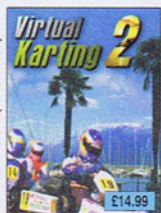


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Build an empire to stand the test of time.

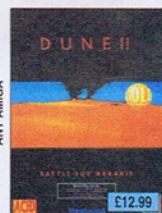
AGA AMIGA (CD OR DISK)



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FAST 3D Karting Sim.



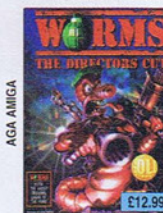
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Create a huge locomotion empire!



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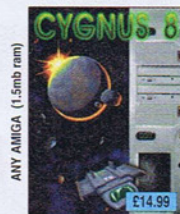


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The most addictive game ever!

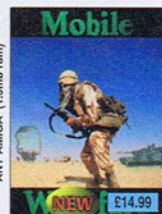
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3 CD-ROM Set



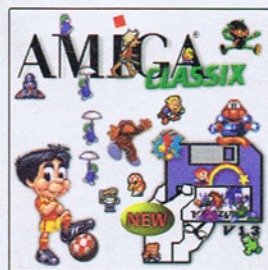
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Space Pirate trading



Mobile Warfare
Tactical warfare simulation



Includes Rainbow Islands, Rainbow Islands2 (Parasol Stars) and Bubble Bobble
Limited stocks available just before Xmas - Strictly First Come First Served.
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PLUS! 100 all-time classic Demo's.
Order: CD526 £14.99
(full games are included with the permission of the authors)



Zombie Massacre is Alpha Software's nightmare vision of a world populated by flesh-eating zombies and the human race struggling for survival. Featuring heart stopping 3D zombie action and pumping digital audio by the Award Winning Will Morton.

"It's a brilliant game and I suggest you get it pretty soon. 96%"
Neil Bullock (World of Amiga Mag.)

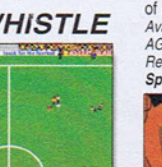
Zombie Massacre features

- Over 40 levels of single and double player mayhem
- 11 new sprites each with 48 frames of animation
- 3 Fantastic CD digital audio tracks including a spoken plotline
- Over 100 Meg of full screen FMV with actors
- New enemy intelligence and realistic shadows



AGA Amiga CD. Game requires 6mb ram. Recommended 10mb ram, 030 or better.
Due to the graphic nature of this game, Viewers discretion is strongly advised.
Order: CD705 RRP: £19.99 Special Price: Just £14.99 with any other game!

EAT THE WHISTLE



- * All 32 World Cup Teams.
- * Controls via Joystick, 2 Button Sticks or Joypads.
- * Play the World Cup or set up your own custom leagues.
- * 30 different field conditions to be played on
- * Very intuitive control method with acceleration/deceleration
- * Spoken comment (CD Version only)
- * Game Tactics and Tactical editor
- * Role playing mode
- * Arcade mode similar to Speedball II (Powerups, bonuses)

- * 1000 frames of animation
- * Full Spoken Commentary

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- Ultimate Gloom (Gloom3) CD £12.99
- Quake CD £29.99
- Doom Trilogy (3 cd's) £17.99
- Genetic Species CD £27.99
- Nemac IV CD £19.99
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- Fears AGA £4.99
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- Pinball Dreams £7.99
- Pinball Obsessions £7.99
- Slam Tilt AGA £14.99
- Thomas' Pinball AGA £7.99
- Pinball Mania AGA £7.99

"Sixth Sense Investigations" is a new graphics adventure for the Amiga, based on the classic LucasArts style games. The base storyboard tells of a crazy young guy who has the ability to communicate with the spirit of a sarcastic man. A friend, who thinks of himself as a detective, profits from the psychic abilities of his friend (the psychic guy), by using his skills to solve the most bizarre problems of the rich.

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AMIGA
CREDIT CARD ORDERS WELCOME

Month In View

Nick Veitch breathes a sigh of relief and tries to guide you through our traditional post-Cologne issue.

Although they're a wee bit late (their 30 days was up a few months ago), Amiga Inc. have finally revealed their partner for the OS of the new Amiga. If you don't know who it is yet, check out our news pages now.

The fact that there is someone now involved with creating a new operating system for our next generation machine is a big relief. In fact, they could have made a deal for BeOs, Linux, CPC or the Devil himself and it would still be a momentous occasion and a great relief.

However, they haven't just opted for anyone. We might not be party to all the negotiations that have been going on, or even know what was on the top of the priorities list when looking for an OS partner, but whether by accident or design, they've managed to stumble onto something special.

The QNX Real-Time Operating System, which is currently developed to run on PC architecture, seems to embody many of

the same ideals which made the Amiga such a special machine. It's efficient, multi-tasking and very flexible. Its use is widespread for specialist applications throughout industry and into space, and it seems to have digital convergence written all over it. It would be hard to imagine a better choice. Don't worry, we'll be keeping you up to date with all the developments as soon as they happen.

The OS announcement wasn't the only thing to happen at Cologne though, and we have tons of recently released stuff to review for you this month, with more to come. Ben and Simon were at the show and you can read their report on page 14. I must dash off now to finish my IDE accelerator head to head...

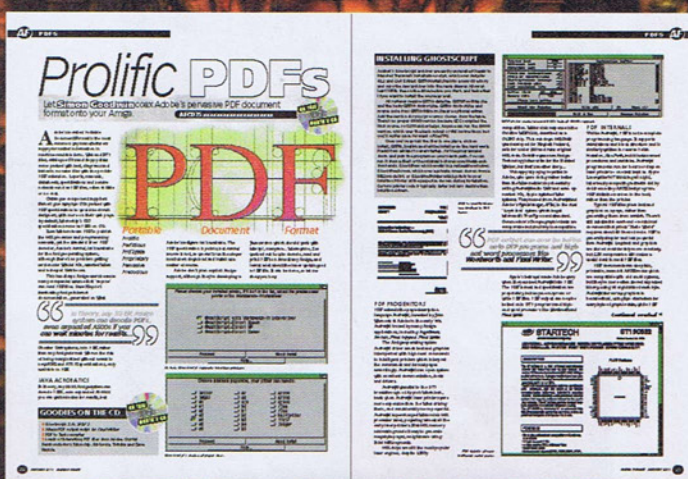


Nick Veitch
Editor



COLOGNE SHOW REPORT PAGE 14

If you want to find out what really happened at the Computer '98 show in Cologne, or just wonder what the beer was like, you need to read our report.



PDF PAGE 24

PDF is slowly becoming the most prevalent format for large documents, but how does it work, and more importantly, how can you use it on an Amiga?



CYBERGRAPHX PAGE 52

Now commercial, CyberGraphX is available on a great value CD.



CANDY FACTORY PRO PAGE 56

Generate stunning logos the easy way with Candy Factory Pro. Ben Vost takes a close up look at the software which can give you a great new image in minutes.



ARIADNE PAGE 59

Ethernet networking on the Amiga just got really cheap!

AF NEWS

8 OS PARTNER
Amiga Inc. finally show us what they've been doing for the past eighteen months.

10 SHOW BOOTY
Eyeteck get some goodies from Köln.

12 IT'S LIKE VOOODOO
3Dfx add-on for the PicassoIV possible.

AF REGULARS

44 PD SELECT
Dave Cusick with the Public Domain's finest.

48 SUBSCRIPTIONS
The cheaper, safer, guaranteed way to get AF.

62 WORKBENCH
Computer cures from John Kennedy.

66 AMIGA.NET
Bargain hunter Dave Cusick goes surfing for free.

80 MAILBAG & GALLERY
The Amiga world's best rants and renders.

86 FREE READER ADS
The place to find a bargain or an Amiga contact.

88 SHOPWATCH
Your worldwide guide to Amiga stores.

AF CREATIVE

70 HTML
Neil Bothwick illustrates his web pages.

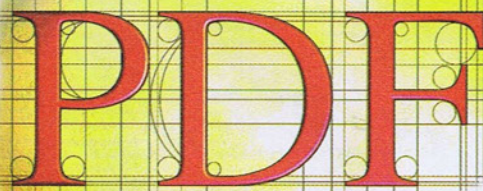
72 SOUND ADVICE
Avoid snap, crackle and pop, with Tony Horgan.

74 C FOR YOURSELF
John Kennedy's tank game takes shape.

78 UNDER THE BONNET
Networks and file systems with Simon Goodwin.

24 PDF

Simon Goodwin explains everything you need to know about Adobe's Portable Document Format, and why you should know about it.

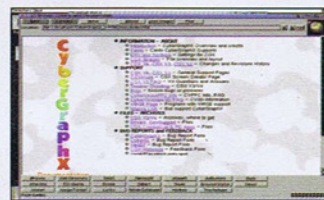


AF SERIOUSLY AMIGA

52 CYBERGRAPHX

It's now commercial, it's reached version 4 and it's thoroughly tested by Nick Veitch.

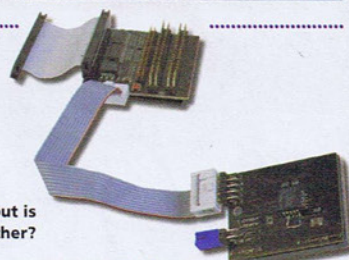
The documentation is quite extensive and is in HTML format.



54 IDE EXPRESS

All aboard as Nick Veitch assesses Jens Schönfeld's attempt to surpass the Power Flyer.

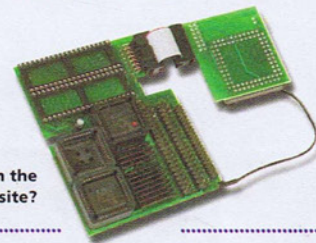
It's simpler to install than the Power Flyer, but is it a better bit of hardware altogether?



55 POWER FLYER JR.

Power's response to the IDE Express is the Flyer Junior. Nick Veitch judges the competition between the two.

The Power Flyer Junior - is it better than the IDE Express reviewed opposite?



56 CANDY FACTORY

It's simple to use, it's fast and it's fun. Sounds like a job for Ben Vost.

Impressive effects like this logo are extremely simple to create.



58 CD ROUND-UP

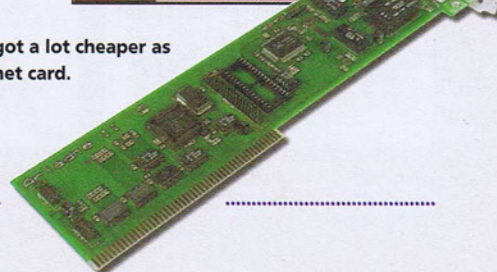
Urban Müller talks to Ben Vost about the future of the Aminet.

Aminet Set 7 and Aminet 27 are the latest excellent discs in the series.

59 ARIADNE

Linking Amigas together just got a lot cheaper as Ben Vost discovers this Ethernet card.

This bargain card is easy to install and use.



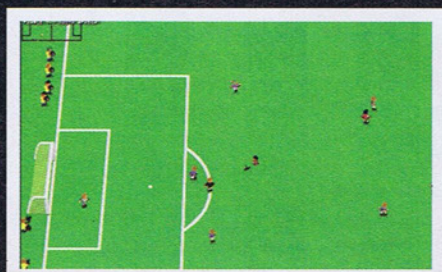
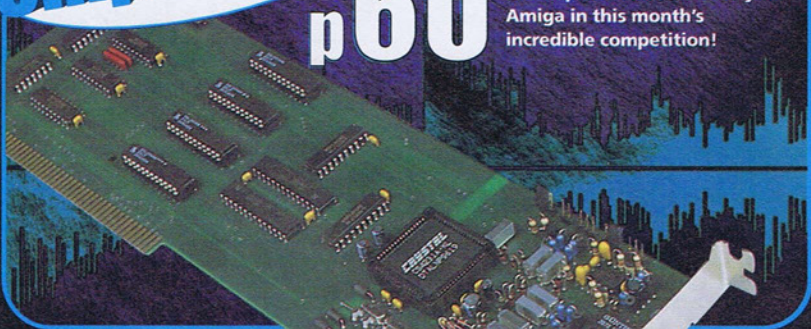
p16 cologne

As every Amiga enthusiast should know, the Computer '98 Show in Cologne is the most important event in the Amiga calendar. As usual, we sent **Ben Vost** in search of all the news, reviews, announcements and gossip, assisted by **Simon Goodwin**. This year's show was one of the most important ever, so for the full picture of what happened, turn to page 16 now...

Competition!

p60

Win an excellent Prelude 16-bit, full-duplex sound card for your Amiga in this month's incredible competition!



Tales of Tamar, Quake CDs, Eat the Whistle, Max Rally and Olo Fight. We really are too good to you.

96 AFCD35

Hear the major announcements from the Cologne show, plus the usual batch of top demos, games and utilities.



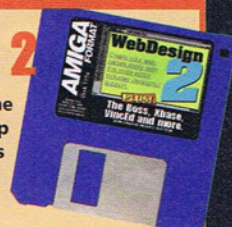
92 WEB DESIGN 2

Just one of the programs making up the 3.5Mb of serious software this month.



POLATAA

A new spin on the classic Breakout game - it's horizontal, with two bats...



PREVIEWS 30

The games coming to an Amiga near you, soon.

MAX RALLY 32

Four players, little cars and lots of speed...

EAT THE WHISTLE 35

The oddly-named new footy game - a Sensi rival?

OLO FIGHTER 36

A worth successor to Capital Punishment?

QUAKE CDS 37

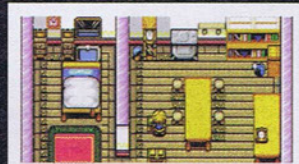
Shoot ogres with nailguns. Again.

READER GAMES 38

Lots of fighting for the reader prize this month.

GAMEBUSTERS 40

The easy way to get through The Speris Legacy.





WHAT'S UP?

QNX are OS partners
The partners for the new AmigaOS
were announced at the Köln show.

Eyeteck information
The new hardware and software that
you could be using soon.

Voodoo sign-up
Get a new add-on for your PicassoIV.

WORLD NEWS

OS partner announced!

Although Amiga Inc. have been incorporated since May last year, the Köln show in the middle of November was the first time that the Amiga community had proof positive that work on the platform was actually going on. They proved that we weren't just being fed empty promises, such as those evinced by previous contenders to the Amiga-owning throne, VISCorp and Escom.

To a packed audience that had been kept waiting for an hour and a half because of technical troubles, Dr. Allan Havemose announced that the new OS partner would be QNX. Although news of QNX's possible involvement in the

next generation Amiga had been leaked the week before, there wasn't much reaction from the audience initially as QNX are something of an unknown player in the desktop OS market. However, as QNX president and co-founder Dan Dodge's

Realistically, the amount of power at the fingertips of the user with this system is incredible...



Dan Dodge, president of QNX, starts his presentation on the new foundation OS.

presentation got under way, gasps of astonishment and cheers, together with huge levels of applause, replaced the apathy that greeted Dr. Havemose's initial statement. Indeed, while Dan Dodge was presenting some of the

About QNX

QNX owes a lot to Unix and AmigaOS, but it is more portable, compartmentalised and hence more extensible than either. It's used for clearing VISA credit card transactions

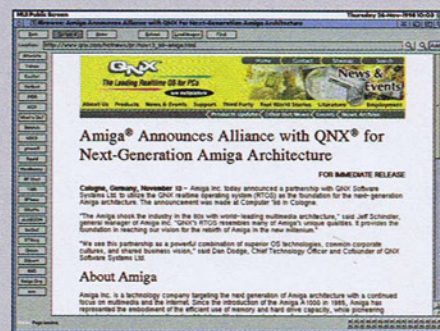
and in Cisco's high performance network routers used by most of the Internet, and by IBM, Philips and chemicals giant Dupont. It controls the robot arm in NASA's space shuttle, plus several ground-based systems.



The Amiga deal makes sense to the QNX team because it will move them from embedded systems to the high-volume market for mass-produced consumer systems. More

crucially, they're Amiga enthusiasts already. When Amiga Inc. first contacted them to gauge their interest, they were told, "We have at least 10 or 15 engineers here with Amigas - any chance of some Kickstart ROM upgrades?"

It's fully localised to the extent that you can have several languages at the same time.



QNX soon announced their involvement.

QNX is built around Neutrino, a micro kernel, and this is a crucial difference between it and monolithic systems like Unix and Windows. Almost all the system code is in separate modules - software components which you can link or detach at any time, as the system runs.

The kernel handles synchronisation and message passing, using ideas derived from the

amazing things that QNX could do, Dr. Havemose was clearly visible at the top table, grinning from ear to ear and mouthing "I told you so".

The new OS is something of a paradigm shift in how operating systems work, at least at the user level. The demonstrations of how translucent filesystems worked, and how interconnectable machines running QNX could be used, drew gasps of appreciation from the audience. The demonstrations were only let down by poor hardware which had to be appropriated at the last minute, due to a hitch with the delivery of the systems which had been set up for presentation at the show.

One of the demonstrations showed *Doom* being played in a window on one machine, only to be moved, across the network, onto the other machine's screen. This really opened up possibilities in the minds of the people present at the conference, your correspondent included.

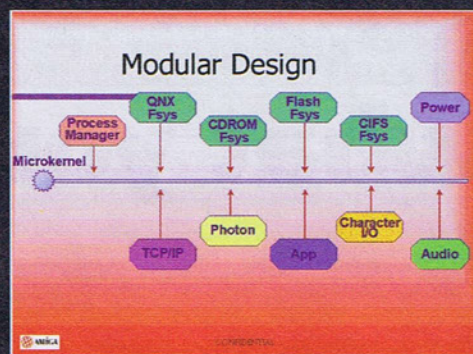
Realistically, the amount of power at the fingertips of the user with this system is incredible, and all the more so once a single computer becomes a network of QNX machines which can share resources and devices as though they were a single unit. As a further example, Dan told us in glowing terms of the fact that his engineers are also ray tracing fans and have a network of 400 QNX boxes all busy rendering images when they're idle between the keystrokes of other employees.

He also confirmed that his company are all Amiga fans, with some 70% of the engineering staff owning an Amiga or two. Indeed, he told us later that he'd had a problem restricting the number of staff who would work on the Amiga OS project since QNX also had to keep customers like Dupont, Cisco and NASA

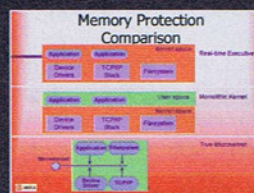
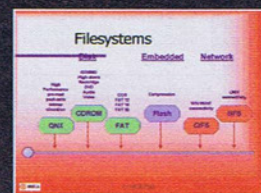
OS3.5 news

There weren't many announcements to do with the latest development for the Classic Amiga range at the Köln show, partly to do with the fact that Dr. Allan Havemose wanted to justify what would be in the new release and what would go onto a developer CD. He also wanted to make sure that proper QA work would take place on the updated version of Workbench.

Although we weren't told this at the show,



There were lots of helpful explanatory slides, but you'll have to tune in to Simon Goodwin's feature to find out more than you can pick out here.



happy, servicing their needs at the same time. He himself owned one of the very first A1000s shipped to Canada.

Dr. Allan Havemose explained that QNX was only the foundation OS upon which would be built Amiga-specific items like convergence APIs, a user interface that would be more like the current Amiga OS than the Windows-

alike current look of QNX's windowing manager. He said that it was an ideal partnership, with both sides playing to their strengths in a holistic fashion to create a next generation operating system that both companies could not only be proud of, but could also expect to do very well indeed.

Continued overleaf →



The highlights of the next generation Amiga OS were explained to an excited crowd at the Cologne show.

Fleecy Moss, many developers' lifeline to what was going on at Amiga Inc., was sacked the previous Wednesday. Many of the developers concerned with working on OS3.5 were also told that their services would no longer be required, and it seems as though German developer Haage & Partner will take over the completion of the new OS.

This is a good move in some ways as it will bring all the developers for Workbench 3.5 together in one place and it will also make it easier for H&P to integrate their PowerPC code into the system. However, using a single external developer for the OS could be seen as heading for trouble.

Dr. Havemose said: "We are still working with a small group of Amiga software developers to finalise the content of 3.5. I can only urge your readers to visit our website frequently."

"We will be giving the press more information as we make final decisions on the Amiga Classic line."

Amiga's EXEC, and fits into a tiny ROM, typically 32K or 48K, depending on the processor. File systems, graphics and audio drivers are all separate, protected programs which run in user mode and don't block real-time performance.

Just about everything can be patched and upgraded using QNX resource managers. The PPC kernel has no hardware dependencies,

which means that it could be ported to existing PPC Amiga systems with minimal effort. QNX supports 'translucent filesystems', where a file can be mirrored on several devices, so a single path can read from ROM or CD, then write updates back to

hard disk and flash RAM. Kernel calls are extremely fast and can be aborted if anything more urgent crops up. Context switching

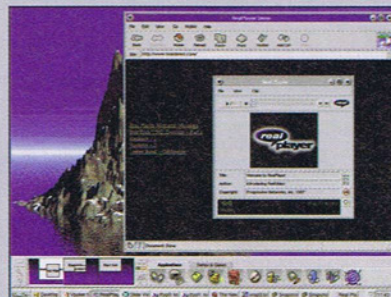
typically takes less than a microsecond and sometimes it may actually be more like only a few nanoseconds.

Although the ability to have virtual memory is crucial in today's desktop computing environment, and yet anathema to the concept of a real-time OS, QNX president Dan Dodge confirmed that the forthcoming version of QNX, and presumably the version that will form the basis for Amiga OS5,

would also feature support for virtual memory. However, it would only use it in non-time critical applications.



One of the coolest things about QNX is the fact that it can make multiple machines behave as one. Here we have two screens on two computers and *Doom* has just been dragged between them. Pretty cool, huh?



The QNX browser has JavaScript and the Real Players.

Talking heads

What have the Amiga Format staff been doing this month?



Nick Veitch
Editor
I'm afraid that when I haven't been at work I've actually been playing around with AREXX and

HTML for a secret project. My favourite book at the mo' is AREXX: Turbocharge your Amiga.



Ben Vost
Dep. Editor
You mean apart from recovering from Germany? Hmm, not much really, apart from the usual frenzy

of cinema-going, including the premiere of *My Name is Joe*, at which Ken Loach was present.



Mark Wheatley
Prod. Editor
Another month involving the usual amount of alcohol, ducks, obscure music, Eddie Izzard,

Simpsons, squirrels, alcohol, soup football and scaly armadillos. Don't ask, it's not my fault...



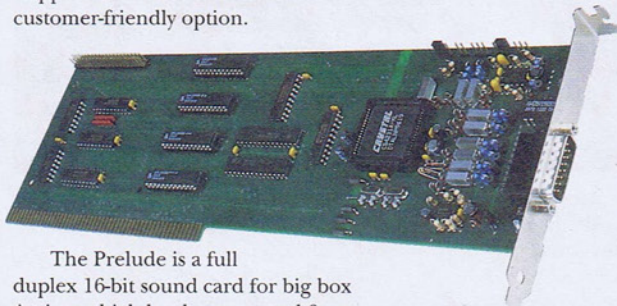
Colin Nightingale
Art Editor
I've been on a bit of a health kick this month - not a drop of alcohol has been drunk for nearly two

weeks to allow my liver to dry. But as it's Friday, pay day and deadline is done, I've come over all thirsty...

Show us what you've got

Eyeteck tied up a number of distribution deals at the Computer '98 Show in Köln this year, and we have full details of the hardware and software that should soon be available.

PRELUDE AND PRELUDE1200: Marc Albrecht's outstanding kit is only let down by patchy distribution in this country, so it's good that Eyeteck have stepped into the breach to offer a customer-friendly option.



The Prelude is a full duplex 16-bit sound card for big box Amigas which has been around for a while now, but the Prelude1200 was only premiered at the Köln show. It's also a full duplex 16-bit sound card, but unlike its bigger brother it needs no Zorro connection to work.

Rather than pile yet more hardware into your A1200's PCMCIA port, or hang it from one of the ports on the back end of your machine, the Prelude1200 fits onto the A1200's groaning-under-the-weight clock port,

Eyeteck will now be able to offer the excellent Prelude and Prelude1200 to UK users.

which is currently receiving a huge number of expansions. Fortunately, one of the other deals that Eyeteck signed up was for a clock port expander from RBM which gives the user four clock ports for the price of one.

The fact that the board is full duplex means that you can have playback and recording of sound simultaneously, making it an ideal candidate for on-the-fly digital editing.

It also has a full MIDI implementation and an AHI driver for all those games that are now coming out which offer AHI sound. Best of all, it won't break the bank as it will only cost you £149.95.

ULTRA CONV 3: This is by the authors of ScanQuix. Since ADPro fell by the wayside all those years ago, we haven't had much in the way of commercial software for image processing, but that's what UltraConv provides.

Not only can it recognise, convert and save numerous popular image formats, it can also deal with animations. It can also be used for web publishing as it has the ability to handle AnimGIFs and can perform preset effects on images and animation sequences. The program has been optimised for FPU and PPC operation and costs just £39.95, or £29.95 if purchased with ScanQuix4.

SCANQUIX 4: Eyeteck also have the licence to sell upgrades to this excellent scanning software. New features for this version include a calibration program to adjust colour balancing for your monitor and printer, plus interpolated resolutions of up to 9600x9600dpi.

It now also has a colour photocopy option (compared with the mono photocopying offered by ScanQuix 3) and also integrates seamlessly with both Studio and TurboPrint. ScanQuix supports Epson, HP, Umax and some Mustek and Artek SCSI scanners, plus Epson parallel scanners. It's compatible with all modern SCSI controllers, including PPC, Blizzard and the Classic Squirrel (but not the Surf Squirrel). The cost has yet to be announced for both the full and upgrade versions.

IO CARDS: Although Eyeteck have been supplying the Hypercom range of IO cards for a while now (rebadged as Port Plus and Port Junior), they're now also going to be bringing in RBM's IOblis range of I/O cards.

As well as the Zorro II version that we'll be reviewing in our next issue, Eyeteck will be supplying the IOblisS1200 and P1200, which offer an additional serial and EPP parallel port respectively. They fit onto the clock port.

GENLOCKS: Eyeteck will also be bringing in a low-cost VHS genlock that they've christened EZGen. It has been designed to accompany the A1200 and is ideal for use with Scala MM300, which was bundled with hard drive-equipped Magic Pack A1200 bundles. The price for the EZGen will be £99.95.

SCANDOUBLERS: Eyeteck's EZVGA units have now been upgraded. The external one now comes in a purpose-built inject moulded box and both can be upgraded by the user from a scandoubler to a full flicker fixer.

Finally, Eyeteck have put together a complete set of EZPC towers to suit every budget and need. If you'd like more information on any of these products, or to order them, get in touch with Eyeteck on 01642 713185.

AOL buys Netscape

America Online, the world's biggest ISP, have entered into an agreement with Netscape Communications to buy the company for a sum of \$4.2 billion, a move that's bound to anger Microsoft. The deal has yet to be ratified by the American government, but if it is it'll mean that between them the new AOL/Netscape partnership will have the power on the Internet to really drive the browser ball back into Netscape's court, away from Internet Explorer once again. With more than 14 million subscribers, AOL is the single largest ISP on the net, and added to that you have Netscape's server market and web content creation tools. This creates a powerful force that is less held to a particular platform than Microsoft, although there's still no Amiga Netscape browser.



Could Netscape get back on top in the browser wars?

PHASE 5 GOING DOWN

GREY IMPORTS

Following last month's news story regarding imports of the Power Flyer, Eyetech have contacted us with information regarding their version of the Flyer.

Both are manufactured in Poland by Elbox, and Eyetech have been legitimately importing and selling them in this country. Power Computing, however, would like to stress that they will not offer any support, advice or upgrades for any Flyer units which haven't been purchased through them.

Eyetech would like to point out that they'll offer full support for any product they sell, including the Elbox Flyer.

White Knight Technology rang us up the other week, all in a dither. "It's phase 5!" they told us. "They've dropped the prices on their accelerator boards!" "Phew," we thought, as from that headline it could have been much worse news.

Anyway, the upshot of all this melodrama is the fact that the prices for phase 5's PPC range have come down dramatically in price, notwithstanding the current poor performance of Sterling against the Deutschmark.

By way of example, the cheapest A1200 Blizzard PPC card now costs less than £200, while the top of the range A1200 PPC card, the 240MHz with 68060 and SCSI, is reduced from £699 to just £609.

On the A3000/A4000 front, the savings are even more significant, with the 233MHz CyberStorm PPC with 68060 being reduced from £889 to an all time low of only £729.

White Knight currently have all the boards in stock, so calling them up on 01920 822321 would be a good idea.

Alternatively, you could always have a look at their brand new sparkly website, which can be found at: <http://welcome.to/white-knight>.

SyQuest bust; CRC steps in

SyQuest Technology Inc. have filed a petition under Chapter 11 of the Bankruptcy Code in the USA. While its plans for warranty repairs and technical support are uncertain at the time of writing, CRC, Computer Repair Centre Limited, have stepped in to provide full support for all SyQuest products.

CRC are an independent repair centre based in Buckinghamshire. They were previously contracted to SyQuest to provide multi-lingual technical support and its technicians have been fully trained by SyQuest's engineers.

They are offering online technical support, fault diagnosis and repair and data transfer to other media. However, all services will be charged at a premium rate. You can get in touch in several

ways: call 0906 557 5508 (calls will be charged at £1 per minute), email SyQuest.help@crc-group.com or fax 01844 219315.

The email and fax support is chargeable and you must provide credit card details and as much detail about the drive in question and its problems.

David Dack, Customer Response Centre manager, said: "We realise the need for support following the developments at SyQuest and we have the trained engineers to provide this. The situation we find ourselves in now is one where we can offer a service to a market where none currently exists, but naturally we need to charge for this. Whatever comes out of the Chapter 11 process in the US will be watched with interest, but SyQuest's users need technical support now and we are best placed to provide it."

Vital Horgan



Have you seen that TV advert for Pentium II processors? There's a series of them doing the rounds at the moment, but the one I'm talking about features a gang of sky divers. As you'd expect, they all jump out of a plane and start free falling before opening their parachutes. All is fine except for one poor bloke who looks up to see his canopy being slowly rendered one block at a time, captioned by a barely moving progress bar. We then get a voice telling us it's time to get a Pentium II.

The thing is, I couldn't help noticing a striking similarity between the chute of the ill-fated, non-Pentium equipped sky diver and the logo of our favourite computer platform. He's gone and got himself a Boing Ball for a parachute, and by the looks of it, an A600 to render it with. Doh!

Accident or design? It's a tough call. Right now the Amiga is no great threat to Intel, and sadly the Boing Ball means nothing to anyone outside the Amiga scene. Then again, it could be a sneaky little plot to undermine the image of the Amiga even before it's had a chance to relaunch itself. Either way, I thought we should start our own counter attack. How about this for a TV ad to be aired around this time next year?

The scene: on board the space shuttle, the pilot enters the final co-ordinates and flight data for re-entry into the Earth's atmosphere, using a Windoze PC. The shuttle begins its descent but suddenly the computer crashes, locking the shuttle into what looks like a catastrophic nose dive.

"Houston, we have a problem..." says the pilot, with an ironic glint in his eye (you see, for an astronaut, saying that is a bit like jumping into a taxi and shouting "Follow that car!", except that it also means you'll probably get burned alive or be marooned in space). Fade to black, followed by a voice-over that says, "Can't afford another crash? It's time you switched to the Amiga."

As I see it, most people don't really want to "think different" as Apple suggest - after all, what if everyone who still "thinks the same" won't talk to them any more? They just want to do the same things better and faster, do new things and not have to restart their computer four times a day...

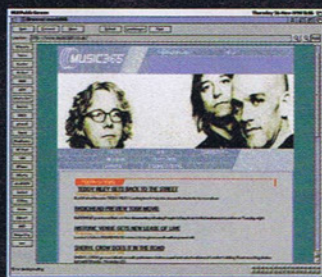
Tony Horgan

Fresh music every day

There's a new website magazine in town. It's called Music365 and offers a personalised email/html newsletter every day. If the concept sounds familiar, it's probably because it was masterminded by IMM Studios, the same people responsible for Football365.

Again, the reason for us writing a news story on it is that it has an Amiga angle in the

Get down with the Music365 people.



shape of those fun-lovin' Amigans, AmigaSoc, who've written an Amiga client for unpacking and displaying the email newsletters, just as they did for Football365.

Not only is there an installer for the emails, there's also a FileType for Directory Opus 5 users so they can simply double click on a message from Music365 for it to be displayed. AmigaSoc are doing this free of charge, but they expect people to use the service on a registered or bought Amiga web browser, rather than a demo or pirated one.

Check out the Music365 website today at <http://www.music365.co.uk> or even sign up right now at this address: <http://www.music365.co.uk/personalise.imm>. Go on, what have you got to lose? It's absolutely free, after all.

Continued overleaf →

Let's go shopping!

The problem with shopping for your Amiga these days is knowing where to go. Since most Amiga dealers have a mail order business they don't always accept callers to their premises, but there are still a few actual shops where you can walk in and pick items off a shelf – Weird Science springs to mind.

Since it's unlikely that you'll be "passing trade", it's also often hard to find out where these shops actually are, and that's where those helpful chaps at AmigaSoc come in handy.

They've pressed their extremely useful postcode database into use to help you search for your nearest Amiga dealer. Even if it can't find one in the distance you've put in that you're willing to travel, it'll still give you the nearest shop at any distance from you so you don't have to constantly widen your search area.

AmigaSoc have also teamed up with the Amiga Yellow Pages website to offer a similar service to people from outside the UK so no-one needs to be alone any more. The only thing is that for the database to work it really needs input, so if you have a local shop that stocks Amiga kit and they aren't on the database, ask them why they're not and then point them in the right direction.

You can get to the StoreFinder at <http://uk.amigasoc.org/storefinder> and Amiga Yellow Pages at <http://web.ukonline.co.uk/michael.carrillo/>

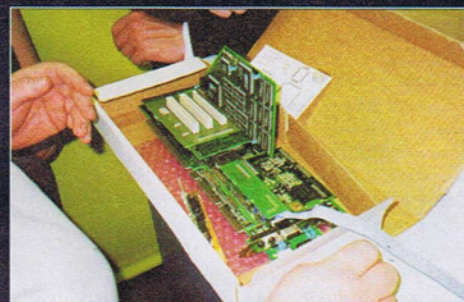
Amiga Voodoo?

Those who aren't online probably won't know that Village Tronic are trying to ascertain the level of interest in an add-on for their excellent graphics card, the PicassoIV. The new add-on would provide true 3Dfx performance thanks to the Voodoo 3D accelerator that is currently used in their MacPicasso 3D board.

The conversion from the Mac board to an Amiga one wouldn't take much work, although Zorro II owners wouldn't be able to use the new board as it has 8Mb of RAM – when combined with the Picasso's existing 4Mb, it would take the combined board well over the Zorro II 8Mb limit.

That's the good news. The bad news is that unless Village Tronic can guarantee 500 sales, they've decided that it won't be worthwhile tooling up for a new PCB production run for the Amiga Picasso card. 500 pre-orders for a card that doesn't even exist yet might seem like a tall order, but that's only one in every seven existing Picasso owners, and Village Tronic already have 200 pre-orders from their website and from the Köln show. British users who are interested in the new

board can contact Blittersoft, Village Tronic's UK distributors, and order the Voodoo add-on directly from them. The cost hasn't been finalised yet, but the German website has a pre-order price of 249DM (roughly £90), with an order price of 299DM (about £110). Contact Blittersoft on 01908 261466 or visit Village Tronic's website at <http://www.villagetrionic.com/Amiga/> to pledge your support.



Will it ever be available for the Amiga? Only your pre-order will make the difference.

Compo results

We have two competitions to draw this month. First up is our superb contest to win a year's free subscription to the UK's premier Amiga Internet service provider, Wirenet, along with the outstanding Pace 56 modem and Active Software's great all-in-one Internet suite of software, NetConnect 2.

The lucky winner is: **Danny Shepherd** from County Durham.

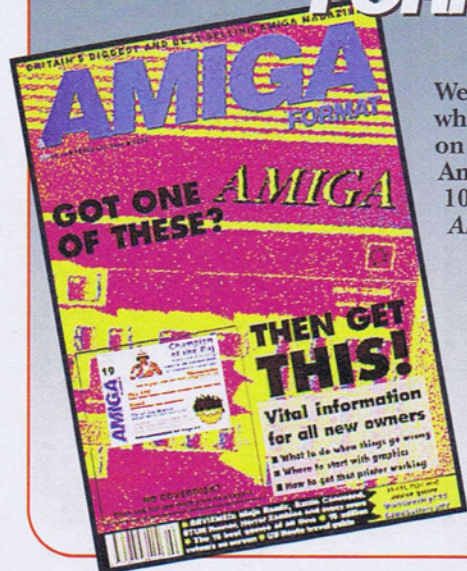
The two runners-up who get three months with Wirenet and NetConnect 2 are: **J. Swain** from Nottingham and **Ann Clements** from Nuneaton.

Sorry to all those people who entered from outside this country, but if you'd won it would have cost you a fortune in phone bills...

Our second contest was only open to subscribers to AF and was to win a bundle of books from our shelves, including some rare tomes of lore. The lucky winner was **David Donaldson** from Southampton.

100 issues ago

AMIGA FORMAT



We look at what was going on in the Amiga market 100 issues of AF ago...

■ Cover feature: Got one of these? A feature for beginners, covering troubleshooting, a glossary of oft-used terms and more.

■ On the disks: Just the one disk with a demo of *Champion of the Raj*, a bunch of PD and a reader picture.

■ News: *Amiga Format* bullishly predicted the death of the PC, thanks to a nifty little gadget from a bunch of Germans called Vortex. The AT-Once fitted into your 68000 socket on your A500 and offered 8MHz 80286 performance and CGA graphics. Stop giggling! That was good in February 1991! We also brought you news of the long-awaited Video Toaster and said we'd keep you posted on a PAL version. One hasn't been forthcoming to date, just in case you weren't aware...

■ Prices: A mono hand scanner from Datal would set you back about £150 (you can get a new flatbed, SCSI, 24-bit scanner for that money now). The

Harlequin frame buffer would set you back £1,400, with 2MB of display RAM and no RTG software – you even had to use programs made explicitly for it to get it to work.

■ Games reviewed included: *Z-Out* (Rainbow Arts) 90%, *Wrath of the Demon* (ReadySoft) 85%, *Nitro* (Psygnosis) 84%, *S.T.U.N. Runner* (Domark) 66% and *Elvira – Mistress of the Dark* (Accolade) 61%.

■ Serious products reviewed: Harlequin, *Mugician*, *ProData*, *Infofile* and *GBRoute*.

■ Notes: It was hard work going through this issue because at some point in the eight years that have gone by, someone has snipped some of the ads out of it, leaving a very fragmented magazine. I couldn't even really tell you about the survey in the pages as I could only see about a quarter of it after the scissors had done their work.

■ Pages: 200

■ Cost: £2.95

amigawriter new

£49.95



program : amigawriter
version : v1.1 (english version)
format : floppy disks
available : yes
price : £49.95
awards : amiga magazine (DE) 87% 'very good'.

AmigaWriter is the newest word processor (or word creating) package for the Amiga. Officially ratified by Amiga International, thus supported by the "Powered by Amiga" logo, AmigaWriter contains some unique features for Amiga word processors: platform independent (full support for commercial, shareware or freeware plugins), ease of use (easy selection, true WYSIWYG, very Amiga-like in action), full paragraph control, page formatting, chapter management, support for different image formats and much more. AmigaWriter is almost similar to a DTP program, allowing full box control over text and image placing within your document. All version 1 users will receive the forthcoming PPC version and version 2 free of charge!

- **PowerPC version inclusive in the price** - in development, due in v1.x, available free of charge
- **Flexible box layout concept** - design your pages in true DTP style
- **Support for external image formats** - support for IFF and JPEG and any other image via datatypes!
- **Extensive plugin support** - expect commercial, shareware and freeware plugins
- **Free update to v2 (due 1999)** - postscript/true type font engine, spell checking, form editor, table editor and MS Word import filter and much more.

netconnect v2

£49.95



program : netconnect
version : v2.2
format : cd-rom or floppy disks
available : yes
price : £49.95
awards : amiga format gold, 96%, cu amiga 94%

The award-winning NetConnect v2 is the easiest and most comprehensive Internet compilation designed to enable any Amiga user, from novice to expert level, to get onto and use the Internet. By using the new Genesis Wizard, a user should be able to connect to the Internet in a matter of minutes. Containing Genesis, Voyager-NG, Microdot-II, AmiIRC, AmFTP, AmTelnet, AmTerm, NetInfo, AmTalk, X-Arc and the Contact Manager. Ideal for both an Internet or local area network connection.

- **Eleven Commercial Programs** - contains the highest quality Internet software, all commercial versions.
- **Truly Integrated** - the beauty of NetConnect v2 is the integration. Contact Manager works with Microdot-II, Voyager, AmiIRC and more. Centralised MIME preferences works between all the programs.
- **Flexible Dock Bar** - setup and launch all your software from this advanced and flexible tool bar
- **Aimed Towards Beginners Through to Advanced Users** - NetConnect v2 is simple enough for the beginner to use to connect to the Internet for the first time, but powerful enough for the advanced user who may require a dialup connection and local area network (LAN).
- **Award Winning** - Amiga Format Gold (96%), CU Amiga Superstar (94%)
- **Expandable** - software works with external programs. The Contact Manager works with iBrowse, YAM v2.6, STFax Professional. Genesis is supported by WebTV, AmiCQ and more.

stfax professional

£29.95



program : stfax professional
version : v3.5
format : floppy disks
available : yes
price : £29.95
awards : amiga format gold, 95%, cu amiga superstar, 95%
amiga magazin (DE) 89%, Amiga Plus (DE) 96%

STFax Professional is a commercial fax/voice message program which enables you to use your Amiga as a digital answer machine. Ever wondered how companies manage to create their voice based operator system? You can do this at home or in a small office! ie. Press one to leave a message for Mike or press two to leave a message for Sue. Setup a fax on demand service, advanced message box system for family members, log numbers via caller-ID, call screen or blacklist phone numbers, control other programs etc.

- **Full fax modem support (class 1, 2, 2.0)** - fax from your favourite Amiga software
- **Advanced voice capabilities** - use your Amiga as a digital answer machine
- **Support for the PACE Solo, 3-Com Message Plus or Kortex Adaptix Independent Operation mode**
- **Mini-BBS** - setup your own small BBS

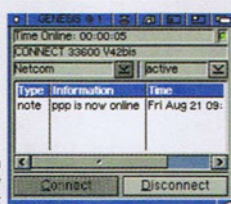
Special Offer: Buy NetConnect v2 and STFax Professional together for only £69.95!

genesis

£29.95



program : genesis
version : v1.0
format : floppy disks
available : yes
price : £29.95
awards



Genesis is a new TCP/IP stack for the Amiga computer, allowing both dialup Internet access and local area networking, with the advanced facility to run more than one interface at one time (ie. keep your ethernet network connected, whilst putting your dialup connection on and offline - ideal for Siamese users, LAN'ing one or more Amiga's or an Amiga to PC/Unix/etc). Genesis ships with an easy to use Wizard. Simply enter some basic information about your provider and the Wizard goes online and gathers the advanced information. The status window (shown here) allows you to control the interfaces and shows the connection speed, the time you have been online and which interfaces are connected. Genesis is supplied with an advanced time and cost logger so you can see how much time you have spent on the net and the costs involved.

Delivery Information

S'Ware - £1.00 for UK delivery
- £1.50 for EU delivery
- £2.00 World delivery
H'Ware - £6 for UK next day delivery
(serial cards charged at £3 for standard delivery)

Make cheques/P.O.'s payable to **Active Technologies** and send to the address listed opposite. Credit/debit card payment accepted. For any additional information contact us.

ACTIVE

Oval House, 113 Victoria Road, Darlington, DL1 5JH

Tel : 01325 460116

Fax: 01325 460117

E-Mail: sales@active-net.co.uk

http://www.active-net.co.uk



home highway - ISDN

from £129.95

With the launch of BT's 'Home Highway', ISDN is now affordable for the home user. Our branded Dyalink 'MagicXpress' modem (as featured in this issue) enables you to connect to the Internet at blazingly fast speeds (you must also have a high speed serial card to use ISDN). So, what does ISDN offer the average home/Internet user:

- **Digital connection** - no line speed fluctuations (unlike normal modems), connect at 64K and you stay at 64K, instant (half or one second) connections and the clearest possible phone/data lines!
- **Upto 4 times as fast as 56K** - surf the net at 64K or 128K (using both lines), meaning that large files or web sites are downloaded at the fastest possible rate (74 seconds for a 1MB file @ 128K ISDN connection, compared to 4.16 minutes for a 1MB @ 44K on a '56K' modem).
- **Upload at 64K or 128K** - the main difference between ISDN and a 56K modem is that you can upload files at ISDN speeds, whereas a 56K modem uploads at 33.6K maximum.
- **Two lines** - use both digital lines for 128K connections, use one line for telephone calls whilst using the other line for a 64K Internet session! Why not connect two computers to either line or simply make phone calls on both lines at the same time?

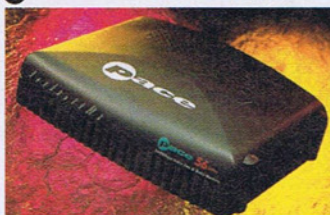
Code	Pack Contents	£ Prices
ID01	External ISDN Terminal Adaptor (TA)	£129.95
ID02	ISDN TA & NetConnect	£159.95
ID03	ISDN TA & NetConnect & Hypercom 1	£189.95
ID04	ISDN TA & NetConnect & IOBlix Serial Card	£229.95

high quality modems

from £79.95

Choose from three high-quality **branded** modems - the top of the range, award winning PACE 56K, the new PACE 'Solo' 56K or the middle of the range Dyalink 'MagicXpress' modem (same colour as your Amiga). All ship with a five year warranty. The PACE modems also ship with free lifetime technical support, UK caller ID (only modem available which supports this), a superb speakerphone, conferencing feature, volume slider/control, easy to understand LED's and non-technical, easy to read documentation. All PACE and Dyalink 'MagicXpress' 56K modems are now v90 shipping ready - the agreed standard for 56K connectivity. Why not treat yourself to the brand new PACE 'Solo'? The 'Solo' can be used standalone from your Amiga. Want to go on holiday but need to receive fax and voice messages, but don't want to leave your Amiga running? The 'Solo' is the answer.

PACE External 56K Modem



PACE 'Solo' 56K Modem



Dyalink 56K External Voice/Fax/Data Modem

£69.95

PACE 56K External Voice/Fax/Data Modem

£119.95

PACE 'Solo' 56K External Voice/Fax/Data Modem

£189.95

modem pack options

from £79.95

Various money saving packs are available. These are all based on the Dyalink 56K modem. Packs based on PACE 56K or PACE 'Solo' 56K modems available as an additional cost option.

Code	Pack Contents	£ Prices
PK01	56K Modem & STFax Professional	£ 79.95
PK02	56K Modem & NetConnect	£ 99.95
PK03	56K Modem & NetConnect & STFax Professional	£109.95
PK04	56K Modem & NetConnect, Hypercom1, STFax Pro	£129.95
PK05	56K Modem & NetConnect, IOBlix Card, STFax Pro	£169.95

ADD £40 for a PACE 56K Modem (instead of the Dyalink 56K)

ADD £110 for a PACE 'Solo' 56K Modem (instead of the Dyalink 56K)

- All packs come with one month free connection to Demon Internet and/or UK Online
- Choose between the CD or Floppy disk version of NetConnect v2 with your modem pack

high speed serial cards new

from £39.95

The new **IOBlix** card offers 4 high speed serial ports and 1 (2nd port option) high speed EPP/ECP parallel ports to your Zorro based Amiga. The serial ports provide 64 bytes of FIFO memory, which is also upgradable. The parallel ports offer both uni and bi-directional connections, offering compatibility for all printers. The **IOBlix** also has a modular interface. Two modules are currently being developed: an AHI-compatible sound card and a SANA-II compatible ethernet module. The **Hypercom** high-speed serial cards are available for the A1200 (uses internal clock port) and Zorro based Amiga's offering one (two with the Hypercom 3Z) extra serial and parallel (Hypercom 3Z only) ports.

Model	Machine	Specifications	Price
Hypercom1	A1200	1 x 460,800bps highspeed buffered serial port	£39.95
Hypercom3Z	Zorro-2/3	2 x 460,800bps highspeed buffered serial ports, 1 x 500K bytes/sec parallel port	£69.95
IOBlix	Zorro-2/3	4 x 460,800bps highspeed buffered serial ports, 2 x uni/bi 500K parallel ports	£89.95

miscellaneous software

Various other individual software titles are available. These titles may be interesting to those not wanting to purchase NetConnect v2.

	By Disk	By Email
Scalos - workbench replacer with advanced features	£20.00	£18.00
Voyager Next Generation	£22.00	£20.00
Microdot-II v1.1 (release) - email and news client	£22.00	£20.00
AmIRC	£22.00	£20.00
AmFTP	£20.00	£18.00
AmTalk	£17.00	£15.00
X-Arc - system archive management tool (handles lha, lzx and zip archives)	£17.00	£15.00
Contact Manager - system addressbook, works with many net/comms programs	£12.00	£10.00
AmTelnet + AmTerm Package Deal	£20.00	£18.00

• 5% Discount when 2-4 Vapor products are bought, 10% Discount for 5+

internet informer issue 3

The latest issue (issue 3, out Autumn 1998) of our **Internet Informer** magazine will be available soon. Wanting to learn more before you connect to the Internet? Still unsure about the costs involved, what hardware you need or what you, as an Amiga user, will obtain from being connected to the Internet? The **Internet Informer** gives you this information, extra product specifications and more.

Cologne

Another Fine Messe!

Ben Vost and Simon 'technical' Goodwin report from Germany's premier Amiga show, **Computer '98** at Cologne Messe.

For those who have missed the show reports I've done for *Amiga Format* for the last three years and who've had their heads stuck in the sand for the last twelve months, the Computer '98 show in Cologne (or Köln, if we want

to be accurate), is the world's best Amiga show. It's bigger than all the other shows put together and although it's marginally smaller than it was last year, it still had more exhibitors than any comparable computer event where Amigas were the main focus.

For those looking to attend next year, I can wholeheartedly recommend you to AmigaSoc (<http://uk.amigasoc.org>) who organised a trip for 18 people this year, including arranging flights and hotel accommodation at as cheap a price as

possible. If you'd like to get in contact with them, you'll find their website on this CD to look at.

Before we start in on the body of the show, I'll just do my customary intro piece about Germany in general to put those of you with a phobia about strangers talking to you in a language you don't understand at rest.

Fortunately, Cologne is a very cosmopolitan city with very few German-only inhabitants, so the language barrier is one that's easily overcome. On the other hand, diet is a little harder to be flexible with, and although my co-correspondent Simon Goodwin managed to eat and drink to his stomach's satisfaction, things can be a little tricky if you're a vegetarian non-drinker. The upshot is that the four main German food groups are meat, potatoes, beer and tobacco, and most of your meals will consist of at least three of the above (with coffee substituted grudgingly for beer at the breakfast table). Even so, being a vegetarian isn't impossible, and if you have to you can always visit the

“It's hard to see how anyone could emerge from the show having an Amiga with just chip RAM and a floppy drive...”



Two turntables and a microphone. Well, a microphone anyway. Oh, and a bag of goodies...

McDonalds near the main train station for their more global, but also far more bland, fare. Sights to see include the German Roman museum, the art gallery and the cathedral, which is as impressive as ever. Finally, there's always plenty to see and do in Köln town itself if you've spent far too much time in the company of Amiga users.

Computer '98 is not exclusively an Amiga show as PC vendors get a look-in too, but the dozens of Amiga stands are the centre of the action, and the PC pluggers come in handy for cheap generic RAM, peripherals and cabinets.

UK vendors like Epic put in a welcome appearance although fellow UK dealer Gasteiner were missed this year, but the most exciting introductions came from the heavyweights of the German Amiga scene – save only phase 5 who used the excuse of attending a Mac show to disguise their lack of new Amiga products.

With two companies poised to produce rival accelerators based on WarpUp and the more recent PPC chips, they were hardly missed.

VILLAGE TRONIC

These days Picasso masters Village Tronic also make Mac gadgets – they were showing at the same Mac show in Düsseldorf as phase 5 but still managed to be at the Köln show. They're not neglecting the Amiga, though – their new Ariadne 2 network card arrived just in time for the show, at a price less than half that of any previous Zorro Ethernet card, generating queues

“The prototype hardware looked clean and ready for manufacture, though the software may take a while...”

around their stand for much of the show. When the enthusiasts crowded forward at Amiga Inc.'s evening conference, they left rows of white-boxed Ariadne Zorro cards in their seats, proof positive that there's a big market for Zorro boards if they're redesigned to use cheap commodity components. Ariadne comes with a special version of the Genesis TCP/IP stack, making it compatible with Unix, PC, Mac and Amiga networks running at a PARnet-humbling 10 megabits per second, as you'll be able to see if you turn to page 59 for our review.

PicassoIV add-ons were much in evidence, with Lazlo Torok showing off his PalomAVI program which will capture a video signal coming in from

the Paloma TV tuner board and create an AVI from it that can be played back at full frame rate. This is thanks to his other little gizmo, MooVid, an AVI and Quicktime player that uses the PIP function of the Picasso to give good-looking playback at top rate.

The most innovative new add-on for the PicassoIV was only present in prototype form – a Voodoo 3Dfx graphics accelerator with 8Mb of memory for texture mapping. Village Tronic used the show to gauge potential demand for this Zorro III product, calling for 500 advance orders, and they weren't disappointed. The prototype hardware looked clean and ready for manufacture, though the software may take a while; CPU-hungry publishers ClickBOOM were the first to pledge support, soon followed by Titan.

The 3Dfx board can only be Zorro III because adding it to your PicassoIV will mean that it has a total of 12Mb of RAM at its disposal.

Unfortunately, Zorro II can only address 8Mb at most, meaning that those with a low end Zorro machine, happily using the Picasso, will have to stump up the extra to buy a Zorro III Amiga before they can make use of this innovative product.

As previously stated, Village Tronic are looking for 500 pre-orders for this product before they'll go ahead and make it, so if you fit the bill, make sure you contact Blittersoft on 01908 261466 with your credit card ready.

Continued overleaf →

NET CONTACTS

Arpeggiator, MPEGit, Prelude, Prelude 1200, ROMbler, Samplitude – Albrecht Computer Technik: <http://www.act-net.com>
 Melody 1200 sound card – Kato Development Group: <http://kato.home.pages.de>
 Tales of Tamar: <http://eternity.amiga-software.com>
 RBM Digitaltechnik: <http://www.rbm.de>
 Individual Computers: <http://www.jschoenfeld.com>
 Titan Computers: <http://www.titancomputer.de>

Main image: Telegraph Colour Library
 Additional pictures: Ben Vost, Andrew Korn



Clockwise from top left: waiting for the press conference (I didn't know there were still so many Amiga mags); Dan Dodge gets voluble; me getting my plaque for my contribution to the outstanding DOpus Plus CD; the Amiga News crew; me and Dan; Dan starts his presentation off gently, but soon whips the crowd up.

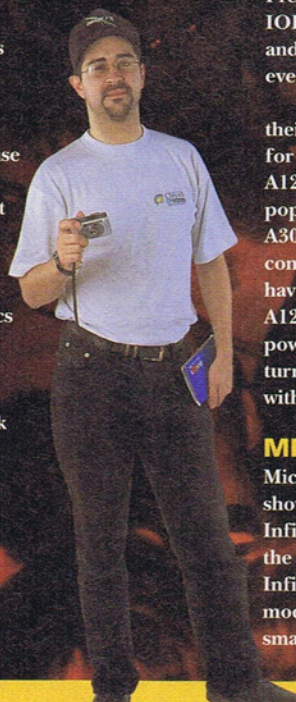


RBM

RBM is another German company piling new daughterboards onto a Zorro card to take full advantage of the slot space and Zorro interface logic. At first sight, their IOBlix looks rather over-specified for a serial and parallel multi-IO card, even one with generous FIFO buffers and twice the usual number of inputs and outputs.

However, the extra chips and connectors make sense when you realise it can be loaded down with add-on modules. These add SANA II Ethernet options, AHI stereo sound, even another IDE interface, with an A1200-style 'clock port' for good measure. There may even be room for a graphics card, although RBM's spokesman said that was for later next year.

The proliferation of ingenious gadgets for Commodore's A1200 clock port has had the inevitable result - a ClockPortExpander from RBM which lets you squeeze up to four gadgets intended for the Commodore clock port in one place. This will work with one standard device, using the A1200 port addresses, and three more with slightly modified drivers to take



advantage of the new 'slots'. Only one port can be addressed in the standard place, but a simple patch should be enough to get add-ons working in the extra slots. Catweasel, Melody and Prelude 1200 should work, as well as IOBlix 1200S and 1200P buffered serial and parallel accelerators. You could even plug in a real-time clock unit here!

Also on RBM's large stand were their range of Towerhawk tower cases for the Amiga, with models suitable for A1200s and A4000s being the most popular. They don't do a model for the A3000, an oversight as far as I'm concerned since that's the machine I have! One novelty was the fact that the A1200 version of the tower needed no power switch since, Mac-like, it could be turned on from your A1200 keyboard with a key combination.

MICRONIK

Micronik's new thing for the Köln '98 show was their newly-remodelled Infinitiv 2 tower for the A1200. Gone is the plastic case from the original Infinitiv tower and in its place is a very modern, non-orthogonal case with a smart two-tone front. The main case

itself is a metal construction but it remains easy to put together using Micronik's snap-together philosophy. Unfortunately, it may be that fitting a new accelerator card might be something of a problem once you've got it home as the tower isn't particularly tall. You'll probably have to remove the motherboard from the case, plug in the accelerator and then put it all back together again.

However, Micronik are also the market leaders when it comes to little bits and bobs that you might otherwise have to make for yourself, and their stand was always crowded by people with little bags of SCSI hardware and Deutschmarks in their mitts. Simon even managed to find a board that not only added three Zorro II slots to an A500, but also a pass-through for your hard drive. Of course, you've still got the problem of boxing the thing up with the Zorro cards, but who cares? You've got Zorro slots on your previously outdated A500.

It's hard to see how anyone could emerge from the show still owning an Amiga with just chip RAM and a floppy drive, with the stalls awash with cheap



Clockwise: the three Amiga amigos; Thomas Svenson and Gunnar Liljas always stand out in a crowd; Jeff and Bill sing show tunes; Andy Elia, Kermit Woodall, Corinna Cohn and our own Simon Goodwin argue the merits of the new OS; Lisa and Kim get ready for their singing career.





Clockwise from left: some of the attendees came all the way from Osaka, so why weren't you there? Skipper Smith, ex-Motorola, revealed lots of stuff we can't talk about, and da boyz from Amiga got down together.



add-ons for every model, and one stand offering 200-odd Mb of goodies ready-installed on a 2.5" IDE drive for 80DM, under £30! Just about anything you can imagine to upgrade an Amiga was on sale at competitive prices, and lots of obscure adaptors and bits and pieces it's difficult to find anywhere else.

INDIVIDUAL COMPUTERS

Jens Schönfeld of Individual Computers was on hand to demonstrate Atlantis, his MPEG decoder for all Amigas, still in prototype form but with most of the software bugs ironed out at last. This should apparently work even on an A500, thanks to its efficient interface which uses Paula's disk DMA channel to move data from the Amiga to the DSP. It ties up most of the CPU power of an A500, but it could make a cost-effective stand-alone MPEG player. On a standard A1200 the CPU load is around 25% to 30%, falling to under 10% on accelerated machines.

Jens also showed his IDE Express hard disk accelerator, which typically doubles the speed of Commodore's A1200 IDE port. It has a jumper to enable or disable the performance

boost, which can be operated at any time. Jens described this as ideal for the 'Turbo' switch on a tower front panel, which is true, though we can't see any reason why it shouldn't be pressed all the time.

The forthcoming A4000 version should be faster still as it's based on the 25MHz motherboard timings rather than the 14.3MHz A1200 clock. Jens also showed the prototype of his ROMflash board, which lets you

“Gone is the plastic case from the original Infinitiv tower and in its place is a very modern, non-orthogonal case...”

dynamically reprogram up to a megabyte of Kickstart flash ROM, and should come in very handy with the experimental new ROM images mooted for Kickstart 3.5.

Interestingly, Poland's ElBox were also on hand on Amiga International's stand with their cut down version of the Flyer, called the Power Flyer Junior,

which takes a similar stance to the IDE Express. As for which is best, you'll have to check out Nick's findings on page 54 of this issue.

ALBRECHT COMPUTER TECHNIK

Marc Albrecht and colleagues were at the show introducing and selling the first 16-bit full duplex sound cards for A1200 owners while the Melody 1200 from Kato, still in prototype form, made its debut on the Amiga International stand. ACT sold out of Prelude 1200 cards, reasonably priced at 300DM (slightly over £100) about halfway through the show.

This is a market area to watch as many A1200 owners want hi-fi sound, yet are reluctant to invest in a Zorro tower. Kato's board promises 20-bit converters and the advantage of digital inputs and outputs, so far only an option via ACT's proposed Arpeggiator add-on for the full-sized Prelude. Later models from Kato should feature MPEG layer 1 and 2 decoding (Melody 1200plus) and layer 3 on the promised Melody 1200pro, thanks to an upgraded

Continued overleaf →



Clockwise from left: more from the PC; Greg "I have to use one eye or I see double" Perry; behind the scenes (well, counter) on Epic's busy stand; Darreck Lisle, Tobias Abt and Alexander Kneer (in public!) of Picasso96; Tony drinks beer (no surprise there then)...





Clockwise from top left: the press conference was jam-packed – standing room only at the back!; Petro; Kermit showing off; no photos, says Ben with Christoph Gülicher, Thom Mills and Tore someone (sorry Tore); the last supper?; "I'm telling you it was this big, Petro..." says Jeff; the Annex dancers, who had a high old time...

← DSP (Digital Signal Processor).

ACT's Arpeggiator didn't show, even in prototype form, but the first units of the ROMbler internal synth and MIDI unit, and MPEGit DSP add-on, were present, and performing well. MPEGit is a tiny board which fits on the Zorro version of Prelude, using top-quality software licensed from standard-setters Fraunhofer to decode MPEG layer 3, as well as earlier MPEG audio formats.

We're testing MPEGit and ROMbler now, for imminent review in *AF*. Expect a comparative review of Prelude 1200 and Melody 1200 as soon as the Kato board gets into production.

GAMES AND MORE SOFTWARE

Some strikingly good-looking games were on show at Cologne, although the prettiest, *Tales of Tamar* and *Wet*, while complete, aren't yet available in the UK. However, CD masters Epic are looking into it. We're working on previews of both, which should appear in the ScreenPlay section of *AF* soon.

Tales of Tamar is a vast new strategy game, five years in the making, with

strong support for network and multiplayer interaction. It's set in Medieval Germany, like *Settlers*, and involves some of the same elements of resource management, but has much more detailed communications and conflict resolution, dispensing with the road-routing and congestion which often dominates *Settlers*. It's divided into sub-games of exploration, combat and kingdom management, with strong

“ This is an adult game in comic-book style, well suited to the searching, frustration and fleeting thrills of the genre. ”

interaction between the elements and further optional embellishments. After a quick tour, it's easy to see why it's taken a large team so long to produce.

Tales of Tamar will be released this spring and will be CD only, requiring 6Mb RAM and at least a 68020 processor, with a 68040 recommended and PPCs actively supported. Graphics use multisync 'VGA' mode: 640x480 pixels in 256 colours on AGA, *Picasso96*

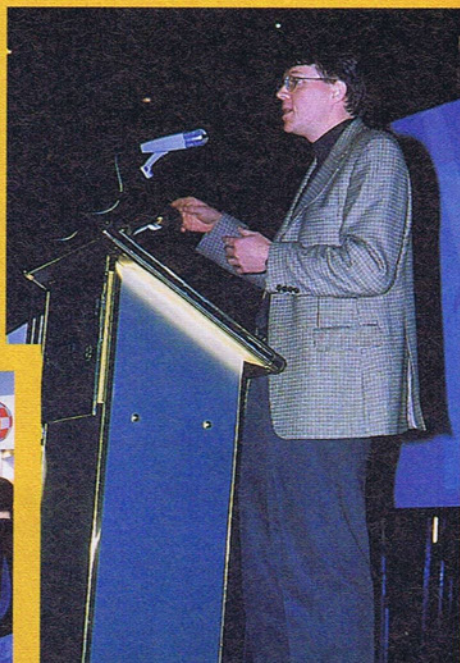
and *CyberGraphX* systems. Sound is also comprehensively supported, with CD, Amiga and *AHI* sampled sounds, plus MIDI and wavetable synthesis.

If you like your software more salacious, new graphic adventure *Wet*, *The Sexy Empire* – starring *Lula* might suit you better. This is an adult game in comic-book style, well suited to the searching, frustration and fleeting thrills of the genre. Originally developed for PCs, the 'special Amiga edition' demands a high performance system with at least 10Mb RAM, Kickstart 3 and a minimum 40Mb of free hard disk space.

Picasso96 and *CyberGraphX* are supported, as well as AGA, at the limits of its resolution. *Wet* is currently only available in the German language, but developers New Generation (newgeneration@aol.com) are considering an English translation of this beautifully-drawn point and click CD game, which we'll preview next month.

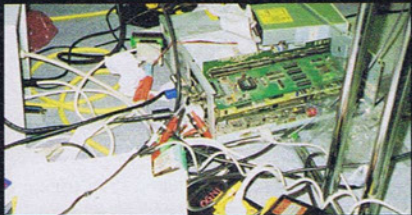
TITAN COMPUTERS

Titan Computers were showing an early version of *Claws of the Devil*, their *Tomb Raider*-style game, which their demo

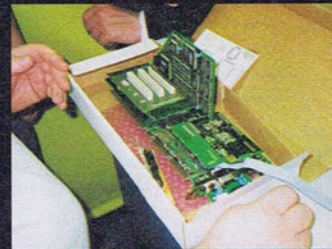


Clockwise from left: Amiga Int.'s stand was always busy; Dan Dodge talks about QNX; Markus Nerdling from Haage & Partner with the editor of some other magazine; "Buy something from us, or Malc gets it!" says Epic's Vinny; RBM had a bunch of people interested in their tower cases, or were they more interested in the semi-naked models demonstrating Thom Mills' Amiga-licensed clothing? I wonder...





Clockwise from left: more shots of the press conference; Don Hicks captured it all for posterity on tape – shame it was NTSC; the prototype Voodoo board for the Picasso V – it might look odd right now, but it still works; my first attempt at sampling the press conference was on ACT's initially professional-looking A4000. Look what was under the desk, though...



showed running on an '060 with AGA, at a slow but acceptable frame rate. However, Michael Garlich of Titan told me that they'd already got a version running on their office PPC with the CyberVisionPPC and were making full use of the Permedia 2 chip on board. It will offer a full framerate at 640x480, making use of the Permedia's built-in effects, such as fogging, lighting effects and lens flares to further enhance the realism of the title.

In common with most of their titles, they'll be supporting the whole platform in the sense that both 68K and PPC processors, AGA and graphics cards and the new 3D graphics cards will be supported. They were also talking about *Settlers 2*, which is now signed up and should be with us in spring next year.

Unfortunately, *Shadow of the Third Moon 2* has been scrapped because of the huge amount of piracy that the first title suffered, even with the good scores given to it by Amiga magazines all over the world.

Go to a show, pick up a bunch of stuff to review, get a bad back – that's the bit they don't warn you about. Oh no.



Titan were also showing *Candy Factory Pro* and *Fantastic Dreams* to an appreciative audience. We've reviewed *Candy Factory* in this issue on page 56, but you'll have to wait until next issue to find out how the successor to *Elastic Dreams* has fared.

SCHATZTRUHE

Germany's hardest to pronounce but most prolific software dealer was in full flow at the show with a number of exciting new products, including the now commercial *CyberGraphX 4* (reviewed in this issue on page 52), *Envoy 3*, a version of *RedHat Linux* for the 68K (get this instead of begging us to put it on our CD), and the latest version of *Directory Opus Magellan*.

On hand were the usual ragtag mix of famous

names, including Urban Möller from Aminet, Greg Perry and Jon Potter from GPS Software, Martin Berndt of *AmiCDF\$* and *MCX* fame, as well as Paul Nolan, still demonstrating *PhotogenicsNG* to an eager audience of people who insisted on speaking German to the young Harrovian.

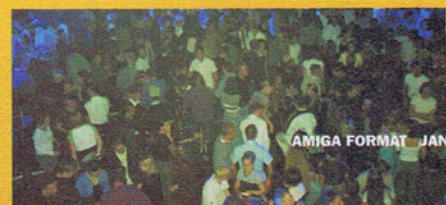
Other than that, Petro's stand was always busy and the new line up for Annex (or possibly Nx – there seemed to be some confusion over the name of the "band") pumped out their Eurodance music three times a day to very appreciative audiences, who even gave them a standing ovation at the midday show on Saturday and demanded an encore.

Even though the show had a slightly lower Amiga content than the previous year, Köln '98 was still clearly an Amiga show, with people coming from all over the world to attend. There was even a pair of guys from Osaka in Japan who'd come all the way just for the show (konnichi wa guys!).

As ever, the Köln show is THE one to go to, and I'm sure it'll be the same next year. Simon and I both hope to see you there...



Clockwise from left: the UK Internet crew in full force – Neil "Wirenet" Bothwick and Chris "I'm Active" Wiles; more beer here, please! Machi from ElBox needs a refill; Bill McEwen (you should see his boots!); people shuffling around on the show floor; Bill McEwen, Jeff Schindler, Dr. Allan Havemose, Dan Dodge and Petro Tyschtschenko await the Thompsons with trepidation; Dan "this should work... uh oh" Dodge demonstrates QNX.



Latest News in Brief

ScanQuix 4 and Upgrades now shipping

ScanQuix 4 is now available. The program features interpolation to give effective resolutions of up to 9600 x 9600, colour photocopy option (to your Turboprint/Studioll supported colour printer) and a unique calibration program which automatically compensates for scanner/printer/paper/ink variations to give photorealistic output on any high resolution Turboprint/Studioll supported colour printer.

ScanQuix4 is priced at £59.95 with SQ3 upgrades at £29.95.

72 pin simm memory prices rocket as production runs down

The wholesale price of 72 pin memory chips has increased around 250% since September 1998 (due to the transfer of manufacturing capacity to DIMM modules) resulting in unavoidable increases in retail prices. Prices are still rising daily with future non-availability being a real possibility. So - if you are thinking of increasing your Amiga's memory - now is the time to act.

To help ease the pain we are currently offering 20% off memory prices when bought with an accelerator.

APOLLO 060/66 51 MIPS Accelerators back in stock

We have purchased the remaining stocks of 060/66 Accelerators - the fastest 680x0 accelerator available for any Amiga. These units have genuine Motorola 60MHz parts, so are a little more expensive than the over-clocked 50MHz units previously sold by us and other dealers. Stocks are strictly limited - see page 3 of this advertising feature for details.

Phase 5 products down in price & up in specification - PPC's from £199.95!!

Phase 5 have reduced the price of their Amiga PowerUp accelerator and BVision cards helping to compensate for the recent adverse exchange rate between the £ and D-Mark.

The long-awaited BVision high performance A1200 graphics card is finally in production - stocks are expected by the time this issue hits the streets. The good news is that, as well as the price reduction, the memory size has been increased to 8MB. Please see the price index on page 4 of this supplement or check our web site for the latest prices.

One-time-charge Internet packages available from Eyetech

The ideal way to get your Amiga connected to - and stay connected to - the Internet with ...

NO ONGOING INTERNET ACCESS CHARGES - EVER!

The basic connection package costs just £49.95 and includes:

- ◆ 25MB of your own web space
 - ◆ 10 email addresses of your own choosing
 - ◆ 90 days inclusive Internet technical support
 - ◆ 100% UK local call (0845) dial-up access
 - ◆ Dial up access to 56Kb via modem or to 128Kb via ISDN
- If you are not already connected to the internet, or wish to upgrade to ISDN capability using BT's Home Highway package, then we have some very special package deals for you ...

- ◆ Net connection as above + 56Kb modem £129.95
 - ◆ Net conn+56Kb mdm+Amiga web,email,TCP/IP £149.95
 - ◆ Net connection + 128Kb ISDN terminal adapter £199.95
 - ◆ Net conn+128Kb T/A+Amiga Web,email,TCP/IP £229.95
 - ◆ PortJnr 460Kbps serial port bought with above £24.95
- This must be the cheapest way to get you and your Amiga onto the Net!

New Amiga Motherboards now in stock

We have obtained a limited quantity of new A1200 motherboards (excluding ROMs), complete with metal shield and 12 month warranty at just £129.95.

A replacement motherboard is usually the best long term solution if you have a damaged or unreliable A1200.

Motherboard 'spacers' now shipped free with Eyetech's Elbox IDE Flyers

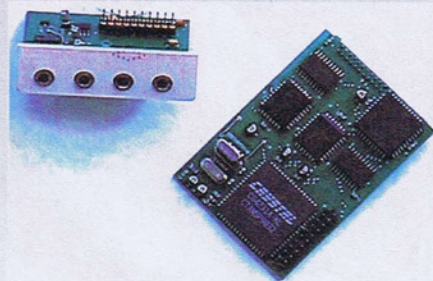
Some A1200 motherboards were shipped with an 'over-populated' clock port connector, requiring the IDE-Flyer to be raised by around 4mm to avoid short circuits. These spacers, if needed, are now supplied free to Eyetech IDE-Flyer customers (normally £8.95).

The Elbox IDE Flyer - which improves hard disk transfer rates by up to 600% and gives large (over 4.3GB) hard drive support - is priced at just £59.95 from Eyetech.

At last - a full 16 bit CD quality, full duplex sound card for the A1200 - which doesn't need a Zorro or PCMCIA slot!

The clock-port-fitting Prelude 1200 is finally here and is now available ex-stock from Eyetech

This remarkable card will convert even a non-towered A1200 into a high performance audio recording studio - and being full duplex you can have simultaneous independent hard disk recording and playback. The Prelude 1200 fully supports the AHI retargetable sound standard (and ARTAS support for the forthcoming WB3.5), as well as applications written for the Tocatta sound card. Software support is extensive, including drivers for Audiolab16 sample editing software, the Camouflage MIDI sequencer, the Samplitude Opus music suite, the Prelude audio mixer panel, surround sound decoding, the Tapedeck hard drive recording & replay software and for PreludeAMP - a PowerPC-based MPEG 3 audio player.



On the hardware front the Prelude 1200 has CDROM audio, MIC, Line and Auxilliary inputs. The supplied graphical mixer software allows non-retargetable Amiga audio to be properly mixed with the output from the Prelude card for a single connection to your HiFi or speakers.

The list price of this remarkable card is just £149.95, but as an introductory offer until 15 January 1999 (or until initial stocks are exhausted) you can obtain a Prelude 1200 direct from Eyetech for just £129.95.

PS. If you already have a clock port accessory - like the Catweasel or Portplus/Portjunior devices - don't worry, you can still use the Prelude 1200. We will have a 4-way clock port expander available early in 1999 to give your A1200 even more non-Zorro expansion capabilities.

UltraConv 3.0 Graphics/Animation converter & effects CD-based package now available and in stock



This superb package is so much more than just a graphics converter.

As well as loading/converting/saving most image formats (ILBM, JPEG, BMP, PCX, PNG, TIFF, TARGA, Raw-RGB, Amiga icons, Newlcons, Amiga Datatypes - and loading images directly from ScanQuix & Vlab) it can build animations from images sequences (& vice versa); generate HTML image maps for web site use; perform image scaling, rotation and filtering; generate Amiga and Newlcons icons from image files; make/convert animated GIFS, Mpeg video streams, FLI, AVI, Anim5 & 7, Quicktime, XFA & Transferanims (the animations used in web browsers).

The included AnimPublisher program can integrate up to 100 simultaneous animations on one screen, specifying position, scaling, transparency etc for each one - perfect for the ultimate website extravaganza! It also has 72 animated and predefined image effects built in.

The program has extensive PowerPC & FPU routines (making some operations up to 20x faster than on an 060/50!) and extensive batch processing & AREXX support - making it easy to extend the programs functionality as required. And the price for all this functionality? Just £39.95 - or £29.95 if purchased with ScanQuix4.

NEW RANGE OF I/O A1200 EXPANSION OPTIONS FROM EYTECH

As well as the fantastic Prelude 1200 card (see above) Eyetech has introduced some new A1200 I/O expansion cards to complement our existing range

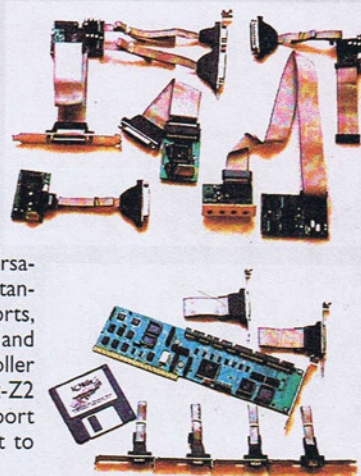
Clock Port Expansion Cards

For non-Zorro expansion A1200 owners the best expansion route is via the (previously unused) clock port.

PortJunior	1 x 460kb serial port	£39.95
IOBlix S1200	1 x 1.5 MB/s serial port	£49.95
IOBlix P1200	1 x EPP parallel port	£49.95
(Drivers for PC parallel port scanners, Zip drives etc available shortly)		
ClockUp	4-way clock port expander	£19.95
PortPlus	2x460kb serial & 1x800kb parallel port	£69.95

ZORRO I/O Expansion Cards

The big news this month is the introduction of the high performance, versatile, Zorro-2 based IOBlix-Z2 I/O expansion subsystem. This comes as standard with 4x high speed serial and 1x high-speed bi-directional parallel ports, with low cost upgrade options to a second parallel port (available now) and (in development) sound, ethernet and high density floppy drive controller card piggy-back options. If you have a Zorro'd up Amiga then the IOBlix-Z2 really is the answer to virtually all your I/O expansion needs. The parallel port is fully PC-EPP/ECP compliant and drivers are currently in development to support popular PC parallel port add-ons like scanners and Zip drives.



The IOBlix-Z2 is priced at just £119.95 with the second parallel port option just £19.95 extra.

EYELINE BACK ISSUES

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NEW EZPC A1200 TOWER EXPANSION CONFIGURATIONS

3 new pre-configured systems to suit different applications and pockets

The EZPC system works by making the PC motherboard act as a slave processor to your A1200 - looking after the operation of the systems accessories whilst you and your Amiga get on with creative work. (You can of course use the PC as a computer in its own right if you really insist!)

It's also important to understand that EZPC A1200 expansion system is based on a real Amiga and is not at all comparable with other PC-only systems running a clever, but slow, Amiga emulator as a PC application.

In fact there are such a range of applications that the EZPC system can open up to an Amiga user that we have introduced three systems pre-configured for different types of use. These are:

A1200 EZ-PC TOWER-HSE (Home Studio Edition). £999.95

The HSE configuration comes complete with TV tuner with cut-and-paste teletext facilities, 24-bit video frame grabber and video clip capture card, 30 bit colour scanner, 56K modem and unlimited internet access at local call rates - as well as the standard EZPC system components

A1200 EZPC TOWER-DVE (Digital Video Edition). £1369.95

The DVE is fitted with a purpose-designed, hardware-based MJPEG non-linear video editing suite for home/semi-professional video production. It also comes with built-in CD Writer/ReWriter (with drag-and-drop CD writing software) for producing your own audio and video CDs.

A1200 EZPC TOWER-XLS. £1995.95

This must be the ultimate creative multimedia expansion platform for your A1200. It comes equipped with non-linear video editing hardware and software, A4 30-bit flatbed scanner, DVD ROM hardware & MPEG 2 decoder (for DVD video playback), CD ReWritable drive, 15" Colour Monitor, 56k data/fax/voice modem with voicemail and internet software - and much more.

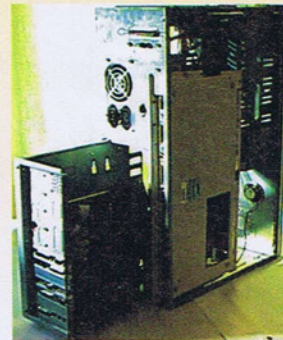
A1200 EZPC TOWER-3.1+. £395.95

Finally, if you A1200 is feeling a bit tired we can supply your chosen EZPC Tower system with a brand new Kickstart 3.1 A1200, complete with Magic Pack software, 24 Speed CDROM, 2.1 GB hard drive (with W/b & Magic Pack software preinstalled), EZCD Mk4 interface and EZIDE software ready installed and connected up. All you need to do is slot in your existing accelerator, fit your old hard drive into the external mounting drawer provided (see photo) switch on and start using your new A1200 EZPC Tower system.

All these three packs are designed for you to fit your existing A1200 in the EZPC Tower and connect it up. This normally takes around an hour, but if you would prefer to receive your system ready to use, we can arrange to collect your Amiga, do the work for you and ship your new system back all ready to plug-in to mains and phone outlets! Please ring for details.

EZPC-Tower Model	HSE	DVE	XLS
EZPC-Tower/250W PSU/PC mouse/HD floppy	Yes	Yes	Yes
EZ-Key k/b adapter PC k/b & rem switch	Yes	Yes	Yes
Ultra DMA hard drive 4.2GB	Yes	Yes	Yes
DVD-ROM (inc 20x CDROM)/CDROM	32x CDROM	+£59.95	DVD-ROM
CDReWriter (inc 6x CDROM) & s/w	n/a	Yes	Yes
10 x blank CDR's 650MB	n/a	Yes	Yes
100MHz bus PC m'board w/64MB	Yes	Yes	Yes
High perf high res 3D Gfx card w/MPEG-1	Yes	Yes	Yes
TV/teletext/framegrabber	Yes	n/a	n/a
Hardware MJPEG Video Editor	n/a	Yes	Yes
Hardware MPEG-2 Video decoder	n/a	+£59.95	Yes
CD-quality sound card with MIDI	Yes	Yes	Yes
Software controlled Amiga/PC audio mixer	Yes	Yes	Yes
Internal 60W PMPO monitor speakers	Yes	Yes	Yes
Siamese RTG2.5 software	Yes	Yes	Yes
Amiga PCMCIA & PC ethernet cards/cabs	Yes	Yes	Yes
30-bit high res A4 flatbed scanner	Yes	+£59.95	Yes
Internal 56k data/fax/voice modem	Yes	+£99.95	Yes
Unlimited access Internet package	Yes	inc w/above	+£49.95
15" SVGA monitor	+£109.95	+£109.95	Yes
17" SVGA monitor	+£199.95	+£199.95	+£99.95
Win 9.x/Lotus SmartSuite bundle	+£99.95	+£99.95	Yes
Miami Amiga TCP/IP stack	+£24.95	+£24.95	Yes
75%-off Cinema-4D/PC voucher	Yes	Yes	Yes
Cost with options as specified	£999.95	£1369.95	£1999.95

The EZPC Tower system showing the A1200 and the PC motherboard in its slide out frame



CD ReWriter
DVD ROM or CDROM
Monitor amp & speakers
Removable HD bay
A1200 CDROM
Blank for expansion

AMIGA 1200 Magic Packs

Direct to Eyetech from Amiga International Inc.

- Full UK specification with Kickstart 3.1/Workbench 3.1 disks and manuals. UK PSU, mousemat, TV lead and 2mb graphics memory (in addition to any memory expansion included in the packs below).
- Fantastic software bundle including Wordworth 4SE, Turbocalc 3.5, Datastore 1.1, Photogenics 1.2SE, Personal Paint 6.4, Organiser 1.1, Pinball Mania and Whizz.
- Hard drive versions come with Scala MM300 pre-installed.
- Other options available, eg EZ-Tower Magic Pack bundles from £338.95 - ring for details.
- Time-of-purchase upgrade packages available at very special prices - see asterisked items in the 'Pack' boxes below.



Eyetech Starter Pack & Starter Pack-Plus

Diskette based system as above Just £179.95
170MB HD-based system as above Just £228.95

Eyetech Productivity Pack 3

170MB HD, 030/33MHz/MMU/FPU/8MB Just £299.95
U/g to an '040/25MHz/MMU/FPU w/16MB & 100W PSU for just £99.95*
&/or upgrade to an EZTower-Plus with EZKey & PC k/b for just £110.00*

Eyetech MiniTower Pack 3

2.5GB HD, '040/25MHz/MMU/FPU/16MB, 20-speed CDROM, EZ-CD-Mk4 4-device buffered i/f & cables, EZIDE s/w, MiniTower case with 230W PSU Just £598.95
Upgrade to an '040/40-SE/MMU/FPU with 32MB for just £69.95*

Eyetech Professional Pack 3

4.3GB HD, '040/40-SE/MMU/FPU/32MB, 24-speed CDROM, EZCD-Mk4 4-device buffered i/f & cables, EZIDE software, EZTower case, Amiga k/b & i/f, 250W PSU Just £798.95
Upgrade to a 160MHz PPC & '040/25MHz/MMU/FPU w/64MB for £129.95*
... &/or add a 14" Monitor & Scandoubler for just £129.95*

The Eyetech A1200 EZTower System - from just £79.95 - or £99.95 including keyboard & keyboard interface

Thinking of towering up your A1200? Then you should certainly be considering the unique Eyetech EZTower System

"This is definitely one of the easiest solutions to building your own Tower" - Amiga Format
"The Eyetech Tower offers clever solutions with a Velcro easyfit mentality" - CU Amiga

- The easiest way to are-house your A1200 by far
- Expand your system with EZPC or Zorro slots
- 250 W PSU with PC and Amiga power connectors
- Available in 3 models to suit different skills and budgets
- The only tower allowing both PC & A1200 in one case

	Backplate kit	DIY* EZTower	Full EZTower
DFO: face plate & ribbon cable	Yes	Yes	Yes
Custom backpanel w/SCSI, audio I/Os	Yes	Yes	Yes
A1200 power & LED adp'ts	Yes	Yes	Yes
CE-approved metal PC case	n/a	Yes	Yes
No of bays/PSU capacity	n/a	10/250W	10/250W
Directly accessible PCMCIA slot	Yes	Yes	Yes
DIY assembly instructions	Yes	Yes	n/a
Installation instructions	Yes	Yes	Yes
PC board/Siamese compatibility	Yes	Yes	Yes
Assembled & A1200-ready	No	No	Yes
Eyetech installation option	No	No	Yes
Cost with options as specified	£39.95	£79.95	£99.95
With EZKey/2PC k/b (w/A4k k/b + £20)	n/a	£99.95	£119.95

*With the DIY EZ-Tower you have to remove the PC tower back plate and some internal shelving and fix the new backpanel in place

External SCSI output socket*
CDROM & Amiga Audio mixer output*
250Watt PSU with monitor output socket
Space for standard PC motherboard* and expansion cards* in slide-out frame
(Surf) Squirrel* or ethernet card* in PCMCIA slot
EZKey input socket
Amiga accel'tor* & optional BVision graphics card*
All A1200 rear panel sockets are directly accessible
24.5" H x 7.5" W x 16.0" D

* Optional extra not included in standard EZTower system

AMIGA SVGA MONITORS

For use with Amiga Zorro & the new PPC Graphics Cards, Scandoublers & the EZPC-Tower system

- All monitors come with a 3-year warranty.
- Special pricing on scandoublers/flickerfixers bought with monitors from just £45 extra
- Monitor specifications are quoted as the highest vertical refresh rate at the maximum resolution. Higher refresh rates (>=72Hz) at lower resolutions are available and give a more visually relaxing display.
- Scandoubler/flickerfixers have resolutions governed by the Amiga's AA/AGA chipset and are restricted to a maximum vertical refresh of 73Hz and a maximum usable resolution of 724Hx566V.
- The PPC BVision supports 1600x1280@72Hz. You will not gain the full benefit of this superb graphics card without a monitor that supports this resolution at that refresh rate.

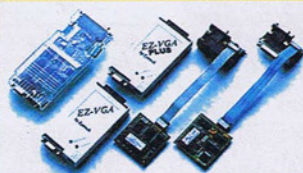


14" SVGA 0.28DP, 1024Hx768V @ 60Hz £89.95
15" SVGA 0.28DP, 1024Hx768V @ 60Hz £119.95
17" SVGA 0.28DP, 1280Hx1024V @ 60Hz £229.95
17" SVGA 0.26DP, 1600Hx1280V @ 75Hz £399.95

EZVGA Scandoublers & Flickerfixers from just £48.95

All scandoublers/flickerfixers allow the Amigas 15KHz modes to display on a PC SVGA monitor. Flickerfixers allow interlaced screens to be displayed, rock-steady, at twice the standard vertical resolution. Other modes are passed through unaltered.

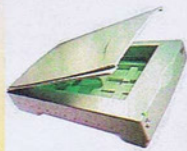
EZVGA-MK2 Compact, external, upgradable scandoubler (to full flickerfixer) £69.95
EZVGA-Plus Compact, external scandoubler with full flickerfixer £99.95
EZVGA-SEFF Economy external scandoubler with full flickerfixer £89.95
EZVGA-INSID Internal A1200/A4000 scandoubler (not upgradable) £48.95
EZVGA-INFF Internal A1200/A4000 scandoubler with full flickerfixer £89.95



Peripherals & Storage

Award-winning UMAX SCSI Flatbed Scanner

- 600 x 300dpi optical resolution, single-pass 24-bit A4 flatbed scanner
- Comes with PhotoScope (Amiga) and Mac software. Compatible with all modern SCSI interfaces - including PPC, Blizzard & Classic Squirrel (but not Surf-Squirrel)
- PCW 'Best Scanner of 1998' Award - July 1998; PCW 'Best Scanner' September 1998
- Highly-acclaimed ArtEffect-SE v1.5 (normally £59.95) free with this bundle whilst stocks last.



Amiga UMAX Scanner & PhotoScope Bundle
now with FREE ArtEffect-SE v1.5 - still just **£179.95**

The Top-Rated CD-Plus Range for the A1200

"Eyetechn have come up with a real winner with this new CDROM drive" - Ben Vost, AF

If your A1200 hasn't got a CDROM then neither of you know what you're missing! At these prices there is really no excuse!

- Whisper quiet 24 or 32-speed CDROM mechanism
 - EZCD-Mk4 4-device buffered interface, 3-connector 40-way and 2-connector 44-way cables included
 - CDPlus driver software specially written for Eyetechn by the author of IDE-Fix
 - Optional Amiga and CDDA audio mixer with Gold phono audio jacks - just £19.95 each
 - 20-watt CE-approved PSU complete with 13A plug
 - Optional upgrade to MiniTower or Desktop case with 230W PSU (which can also hold extra drives and power your Amiga) just £20 extra!
 - 2 Free CDs whilst stocks last
- Complete CDPlus Systems: 24-speed just £79.95; 32-speed just £89.95!
Bare mechanisms for tower: 24-speed just £39.95; 32-speed just £44.95!



A1200 EZWriter and EZReWriter CDROM Burners

Make your own music and data CD's, back up data for less than 0.15p/MB...

- Both are IDE/ATAPI reader/writer units with MakeCD Amiga writing software
- EZWriter units cut 'Gold' CD blanks at 2x speed & read CDROM's at 8 speed
- EZReWriter units cut 'Gold' CD blanks and CD rewritable disks at 2x speed and read conventional CD's at 6 speed
- Gold 650MB CD blanks (for use with either model) are available at ten for £10 at time of purchase
- CD rewritable disks are just £5 each when bought with the EZReWriter



EZWriter/EZReWriter Options

EZWriter-Bare	for A4000 or A1200 Tower (bare drive - no MakeCD)	£199.95
EZWriter-INT	for A4000 or A1200 Tower (with MakeCD)	£249.95
EZWriter-SE	External A1200 unit with separate 100W PSU	£269.95
EZWriter-Gold	External A1200 unit with int 40W PSU, Gold Audio skts	£299.95
EZWriter-MT	Mini-Tower-cased unit with 230W PSU which can house an additional LS120/Zip/CDROM & power your A1200	£299.95
EZReWriter-Bare	for A4000 or A1200 Tower (bare drive - no MakeCD)	£219.95
EZReWriter-INT	for A4000 or A1200 Tower (with MakeCD)	£279.95
EZReWriter-SE	External A1200 CD ReWriter with separate 100W PSU	£299.95
IDE interfaces	EZCD-SE I/F, 44-way & 40-way cables & CDROM s/w - EZCD-Mk4 I/F, 44 & 40-way cables & EZ-IDE s/w - IDE-Flyer or IDE-Express I/F cables & s/w -	add £20 add £30 add £50

A1200 HARD DRIVES - LS120, ZIPs

- All drives come ready to use with WB3.0 pre-installed & WB2.x install script
- All drives over 200 MB come with over 45 top quality utilities (not shovelware) and MME multimedia authoring s/w pre-installed, configured & ready-to-run

LS120 & Zip Drives (ATAPI I/F & EZIDE needed)

LS120 (HD Floppy/120MB Cart)	-	£79.95	3 x 120MB carts	£29.95
Zip Drive (Mac emul. compatible)	-	£79.95	3 x 100 MB carts	£29.95

TowerDrives (3.5" drives, 25mm high)

2.1GB	-£89.95	3.2GB	-£109.95	4.3GB	-£129.95
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2.5" InstantDrives for the A600/A1200/SX32

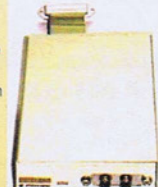
20MB	Entry-level drive for the SX32/A600	£29.95
170MB	Entry-level drive for the SX32Pro/A1200	£59.95
260MB	Entry-level drive for the SX32Pro/A1200	£64.95
720MB	A drive for serious A1200/SX32 Pro users	£99.95
1.4GB	A high performance drive for power users	£129.95
1.8GB	Top-class drive for the A1200/SX32Pro	£149.95



EZGen Amiga Genlock

Just £99.95

- Superimposes Amiga-generated graphics on a composite PAL video stream. Just plug in and go!
- Substitutes incoming video for any 'transparent' colours in your paint package, titling or multimedia presentation software.
- Create stunning transition and titling effects with packages such as Scale MM300 (which is included with A1200 hard drive Magic Packs).



Turn your CD32 into an A1200!

- All models come with keyboard, hard & floppy drive, serial, parallel, RGB & VGA video interfaces
- Pro models have '030 40MHz or 50MHz cpu and optional PC keyboard I/F. Pro-50 has full MMU.
- Mk2 takes up to 8MB & FPU; Pro models take up to 64MB & FPU.



SK32 Mk2	£149.95	The SX32 Pro-50	
SX32 Pro50	£249.95	SX32 Pro40EC	£199.95

Accelerators & Interfaces

Apollo Accelerators for the A1200

Turbo 1230LC '030EC/33MHz (7 MIPS)

WITH FPU AND 4MB ONLY **£54.95**

Options: With MMU (non-EC version) +£5.00

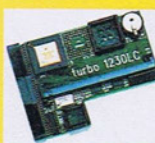
With 8MB +£7.50

A1240/25	'040/25MHz/MMU/FPU*	(19 MIPS)	£127.95
A1240/40SE	'040/40MHz/MMU/FPU*	(30 MIPS)	£167.95
A1240/40	'040/40MHz/MMU/FPU*	(30 MIPS)	£187.95
A1260/50	'060/50MHz/MMU/FPU*	(39 MIPS)	£287.95
A1260/66	'060/66MHz/MMU/FPU*	(51 MIPS)	£367.95

*To 32MB. Optional 2nd simm socket (tower only) offers 64MB total

The Apollo A1260/66 is the fastest Operating System-supported Amiga accelerator currently available

Tip: Buy your memory with the accelerator to ensure full compatibility
20% off memory prices when bought with an Apollo or phase5 accelerator

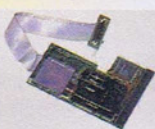


phase5 PowerUp A1200 PPC + '040/'060 Accelerators

Without SCSI (not upgradable)

160 MHz 603e PPC	'040/25MHz/MMU/FPU only	£199.95
160 MHz 603e PPC	'060/50MHz/MMU/FPU only	£479.95
240 MHz 603e PPC	'040/25MHz/MMU/FPU only	£319.95
240 MHz 603e PPC	'060/50MHz/MMU/FPU only	£549.95

Add £69 to the above prices for factory fitted on-board Fast SCSI II interface



Blizzard Vision Permedia 2 PPC Graphics Card

Unbelievable quality and speed - 1600x1280@72Hz!

No Zorro slots needed!

NEW! 8mb card - £159.95 or just £139.95 with a PPC
After repeated delays phase5 have promised that these remarkable boards will be here before Christmas. Customers who have back-ordered will be automatically be upgraded to the 8MB version.

A1200 Clock Port Expansion Cards

For non-Zorro expansion A1200 owners the best expansion route is via the (unused) clock port.

PortJunior	1x 460kb serial port	39.95
IOBlix I200S	1x 1.5 MB/s serial port	49.95
IOBlix I200P	1x EPP parallel port	49.95
(Drivers for PC parallel port scanners, Zip drives etc available shortly)		
PortPlus	2x460kb ser & 1x800kb par port	69.95
Catweasel-2	HD Amiga/PC floppy controller	49.95
Prelude I200	16-bit full duplex sound card	129.95
ClockUp	4-way clock port expander	19.95

Complete A1200 IDE solutions...

Abridged Guide to Buffered Interfaces

A buffered IDE interface is essential if you are considering expanding your A1200's storage capability. Not only does it give you the option to attach up to 4 hard drive/CDROM/LS120/Zip etc devices but it also protects your A1200 by putting back the buffering electronics that Commodore/Al left out of the A1200 design. Some interfaces can also significantly speed up the data transfer to and from your hard drive and/or CDROM... but you will need to choose the right interface for your particular setup - see below, ring for details or send a stamped addressed envelope for an IDE Interface Fact Sheet. Note that the EZCD-SE is equivalent to the 'standard' interface offered by some other suppliers. See also the EZIDE software panel on this page.

Interface	Max Xfer	Suitability
EZCD-SE	2MB/s	68030/40MHz or slower / no accelerator.
EZCD-Mk4	3MB/s	68030/50, 68040/xx, 68060/xx accelerator.
IDE-Express	5MB/s	040/xx, 060/xx, UDMA HD & 24 speed+CDROM
IDE-Flyer	8MB/s	040/xx, 060/xx, UDMA HD & 24 speed+CDROM

EZCD Buffered Interfaces	SE	Mk4
4-Device Buff Interface & CDROM Software	£18.95	£28.95
CDROM s/w, 3x40 & 2x44-way cables	£28.95	£38.95
EZ-IDE s/w, 3x40 & 2x44-way cables	£38.95	£48.95
Elbox IDE Flyer I/F & CDROM file system (>4.3GB HD Support)	£59.95	
IDE Express Interface & IDE-fix Express Software	£49.95	



EZKey2
Autodetects and remaps Amiga & PC keyboards
Plugs directly into the ribbon cable slot on the A1200

EZKey2 alone - for A1200 only - just	£28.95
EZKey2 and Windows keyboard	£38.95
EZKey2, A4000 k/b & 6-to-5 pin adapter	£58.95

EZKeySE
Separate models for Amiga & PC keyboards
Amiga version & k/b detects all multi-key combinations

EZKey-SE/Amiga - for A1200 & A600 - just	£18.95
EZKey-SE/Amiga A4K k/b & 6-5 pin adapter	£38.95
EZKey-SE/PC - for A1200 & A600 - just	£24.95
EZKey-SE/PC and Windows keyboard	£34.95

Software & Drivers

TurboPrint 6 - The essential partner for your digital imaging work

- The most comprehensive, fastest replacement printing system for all WB2.x+ Amigas
- Supports more than 70 printers including the latest models from Epson, Canon, HP printers - including the Award-winning Epson Stylus Photo series
- Integrates seamlessly with ScanQuix scanning software and CamControl digital camera software
- Poster printing, image tiling, colour correction, print spooling, photo optimisation etc, all included as standard
- Selectable parallel device for use with high-speed interfaces such as the PortPlus & IOBlix1200P
- 20% off the price of the the PortPlus & IOBlix1200P when purchased with TurboPrint.



Amiga Digital Imaging Software from Andreas Gunther

ScanQuix4 Software just £59.95 - Upgrades just £29.95

- 24 bit scanning with full range of editing options.
- Stand-alone use or integrates with your Art package (AdPro, ArtEffect, PPaint, Photogenics, ImageFX, XLPaint, Pagestream 3, DPaint5) via AREXX.
- 'Scan-to-disk' option in jpeg or IFF.
- Unique calibration program which automatically compensates for scanner and printer deficiencies allowing photo-realistic output on any high resolution, Turboprint or Studioli supported, colour printer.
- Interpolated resolutions to 9600x9600 dpi.
- Colour photocopy option when used with a one-pass colour scanner
- Supports Epson, HP, Umax, and some Mustek & Artek SCSI scanners & Epson parallel scanners.
- Compatible with all modern SCSI controllers including PPC, Blizzard & Classic Squirrel (but not Surf-Squirrel).



CamControl Amiga Digital Camera Software - now just £29.95

- Serial connection versions available for most popular models of Kodak, Minolta, Olympus, Casio & Fuji digital cameras
- Picture transfer, camera control & slideshow options (camera dependant)
- Stand-alone use or integrates with your Art package (AdPro, ArtEffect, PPaint, Photogenics, ImageFX, XL Paint, Pagestream 3, DPaint 5) via AREXX.
- Selectable serial device for use with high-speed interfaces like the PortJnr or IOBlix1200S
- 20% off the price of the the PortPlus & IOBlix1200S when purchased with CamControl software.



EZIDE - IDE/ATAPI enhancement software

Probably the only hard drive/CDROM/LS120/Zip/Syquest software you'll ever need.

- Supports LS120, Zip, Jaz, Syquest, and other IDE/ATAPI removable cartridge drives AUTOMATICALLY. Cartridges just appear on the Workbench when inserted and disappear when ejected - just like a floppy disk. IDE ZipPrep tools are also included.
- Optimises hard disk performance automatically. Supports 'second channel' hard drives on most 4-device buffered interfaces.
- Extensive CDROM support including multidisk changers, CD32 emulation, high performance Mac, PC & Amiga CDROM filesystems, multisession and multivolume CDROM support.

EZ-IDE Amiga IDE, ATAPI, CDROM & removable media driver s/w	£34.95
If bought with any EZCD, I/F, Zip or LS120 Drive	£9.95
Upgrade from Eyetechn CDPlus/IDE Fix (trade in & proof of purchase required)	£14.95

Amiga Magic Upgrade Packs available in limited quantities

The ideal way to update your Commodore A1200:

- 3.1 Kickstart ROMs
- Photogenics 1.2SE
- 3.1 Workbench (6 disks)
- Personal Paint 6.4
- Wordworth 4.5 SE
- Organiser 1.1
- Turbocalc 3.5
- Pinball Mania & Whizz
- Datatore 1.1
- Workbench 3.1 manuals
- Magic Pack application software manuals....



..... all for just **£49.95!!**

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Net: sales, info @eyetechn.co.uk www.eyetechn.co.uk

UK Bank/BS Cheques, Visa*, Mastercard*, Switch, Delta, Connect, Solo, Electron. Postal/Money orders accepted. (*A 3% charge applies to all credit card orders). Due to space limitations some of the specs given are indicative only - please ring/write for further details. Please check prices, specification and availability before ordering. If ordering by post, please provide a daytime telephone number. Goods are not supplied on a trial basis. A1200 items are tested with a Rev 1.D.1 motherboard - other boards may need modification. E&O.E. All prices include VAT at 17.5%. Non-EC orders are VAT-free.

UK Next Day Insured Delivery Charges: Software/Cables, EZCD I/F = £3.00, 2.5" Drives, Accelerators, Manuals = £7.00, 3.5" Drives, FDDs, PSUs, SK32 = £9.00, CDPlus, Minitor, Desktop = £11.00, EZTW & EZPC = £15.00. Worldwide in 2-7 days from receipt of faxed order & payment details.

EYETECH

Due to variations in exchange rates the prices of some products may change - up or down - from the prices shown. Please ring or check our website [www.eyetechn.co.uk/MAIN/APRICE.HTM] for the latest prices before ordering.

Interfaces and Adapters: EZ-Key & DIY Tower Components

ADPT-EZK2	Mk 2 Amiga/PC k/b -> A1200 kbd direct connect	28.95
ADPT-EZK2-A4K	A1200 EZKey MK2/b -> p adaptor/A4000 kbd bdlle	58.95
ADPT-EZK2-W95	Mk2 Amiga/PC k/b->A1200 rib cab w/Win95 kbd	38.95
ADPT-EZSE-A	EZKey-SE Amiga 5p DIN k/b adapter for A1200/A600	18.95
ADPT-EZSE-A/K	EZKey-SE Amiga + 6p->5p adapter + A4000 kbd bundle	38.95
ADPT-EZKSE-P	EZKey-SE PC 5p DIN k/b adapter for A1200/A600	24.95
ADPT-EZKSE-P/K	EZKey-SE PC k/b adapter for A1200/A600 + Win95 kbd	34.95
ADPT-HD-2/3	2.5"/44way -> 3.5"/40w+4w & mtg bracket	11.95
ADPT-HD-3/5	3.5" Zip/SyQuest/FDD/HD brklpl -> 3.5" bay	5.95
ADPT-KBD-SP6P	Amiga/PC k/b adapter 5p din-f -> 6p m/d-M	5.95
ADPT-KBD-6P5P	Amiga/PC kbd adapter 6p minidin-f -> 5p-dm	5.95
CAB-KBD-MF	5p DIN M - 5p DIN F k/b ex cable 1.2m	7.95
ADPT-DF0-FP	Tower faceplate adapter for A1200 int FD	4.95

Interfaces and Adapters: A1200 Ethernet, SCSI

ADPT-PCM-ETH-C	PCMCIA ethernet card with Amiga/PC drivers	79.95
ADPT-PCM-ETH-H	Hydra PCMCIA ethernet card with Amiga drvrs	129.95
CAB-UPT-X60C	Crossed twisted pair RJ45 for Sysys 60cm	6.95
ADPT-SCS-CSQR	Classic Squirrel PCMCIA SCSI i/f 50pCM	59.95

I/F & Adapters: Flickerfixers, Genlocks, Video Digitisers

ADPT-VGA-BV8M	BVision 8MB g/x card for A1200 (needs PPC)	159.95
ADPT-VGA-BMON	Auto Amiga/BVision m/sync monitor switch	39.95
ADPT-VGA-SMON	Remote monitor switch for SD/IF & high res Gfx card	39.95
ADPT-VGA-AMON	Auto Amiga/CV643D m/sync monitor switch	39.95
ADPT-VGA-M2SD	EZ-VGA-Mk2 external s/doubler PLL upgradable	69.95
ADPT-VGA-PLFF	EZ-VGA-Plus external flickerfixer 23F-15F PLL	99.95
ADPT-VGA-SDOUG	SDBL2 to SD-flickerfixer u/g	40.00
ADPT-VGA-INSO	EZ-VGA internal A1200 s/doubler non-upgrad'le	48.95
ADPT-VGA-INFF	EZ-VGA- internal A1200 flickerfixer	89.95
ADPT-VGA-SEFF	EZ-VGA-SE flickerfixer 23F-15M Xtal	89.95
ADPT-VGA-15MF9	Adapter from 15p HD-M/VGA to 9pD-F	9.95
ADPT-VGA-9M15F	Monitor adapter 9p D-F to 15p HD-M	9.95
ADPT-VGA-15M23M	VGA 15pHD-M -> 23pD-M Amiga RGB adapter	14.95
ADPT-VGA-UNBF	Amiga 23pD-F -> 15pHD-F VGA adapter	12.95
ADPT-VGA-BUF	Amiga 23pD-F -> 15pHD-F buffered adapter	16.95
ADPT-PGB-24RT	ProGrab 24-RT Amiga parallel port video digitiser & psu	119.95
ADPT-GLK-COMP	EZ-Gen composite video Genlock for A1200	99.95

Interfaces and Adapters: A1200 Sound cards & software

INT-AUD-PL12	Prelude1200 16-bit full duplex sound card - clock port	149.95
INT-AUD-PL12-SP	Prelude1200 16-bit full duplex sound card - to 1501/99	129.95
INT-AUD-PL22	PreludeZorroll 16-bit full duplex sound card - clock port	189.95

I/F & Adapters - IDE/ATAPI & software

INT-IDE-FLYR	Elbox 4-dev high perf buf'd A1200 IDE i/f with spacers	59.95
INT-IDE-XPXS	IDE-Express 4-dev high performance buf'd A1200 i/f	49.95
ADPT-FLR-SPC	ROM spacers for Elbox IDE-FLYer purchased elsewhere	8.95
INT-12I-EZCD4	Mk4 4-dev buf IDE i/f w/AIPI w/A1200 CD s/w	28.95
INT-12I-EZCD4/C	Mk4 4-dev buf IDE i/f w/3x40, 2x44cabs, EZIDE	38.95
INT-12I-EZCD4/ICE	Mk4 4-dev buf IDE i/f w/3x40, 2x44cabs, EZIDE	48.95
INT-12I-EZCDESC	Economy 4-dev buf IDE i/f w/AI200 CD s/w	18.95
INT-12I-EZCDESC/C	Econ 4-dev buf IDE i/f w/3x40, 2x44cabs, EZIDE	28.95
INT-12I-EZCDESC/ICE	Econ 4-dev buf IDE i/f w/3x40, 2x44cabs, EZIDE	38.95
INT-4K1-CD4	4-device IDE i/f for A4000 w/CDROM s/w	18.95
DVR-EZIDE	EIDE/ATAPI HD/CDROM/ZIP/LS120/SyQst drvr	34.95
DVR-EZIDE-CPU	P/x upgrade to EZIDE from competitive product	14.95
DVR-EZIDE-SP	EIDE/ATAPI enhancer/CDROM Software Bundle Price	9.95

I/F & Adapters - Serial, Parallel, Floppy & Clock port expanders

INT-SER-PTJR	PortJunior - 460KB serial i/f for A1200	39.95
INT-IOBL-S12	IOBlx 12S - 1.5Mbps serial i/f for A1200	49.95
INT-IOBL-P12	IOBlx 12P - EPP parallel port i/f for A1200	49.95
INT-SER-PTPL	PortPlus - 2x 460KB ser + 1x 800KB par i/f for A1200	79.95
INT-IOBL-Z2	IOBlx Z2 - 4x1.5Mbps + 1x EPP par port Zorroll	129.95
INT-IOBL-Z2PX	1x EPP par port expan for INT-IOBL-Z2 (to 4x+2xP)	19.95
INT-CLK-EXP	ClockUp 4-way clock port expander for A1200	19.95
INT-FDD-DF0	Interface for std Sony FDD for DF0 880KB	9.95

Cables & Cable Adapters: Audio & Mains

CAB-AUD-CD	CDROM inv'd t/cable cab .6m + 2xRCA plg	9.95
CAB-AUD-MIXA	RCA(phono)-M -> RCA-M+RCA-F 'Y' mixer lead 1.8m	6.95
CAB-AUD-2M2M	RCA(phono)-2xM -> RCA2xM stereo lead 1.8m	4.95
CAB-AUD-MJPH	3.5mm st minijack->2xphono-M plugs 1.2m	5.95
ADPT-AUD-RCA	RCA(phono)-M -> 2xRCA-F adapter 'Y' mixer	2.50
ADPT-AUD-RCA-G	RCA(phono)-M -> 2xRCA-F gold plated adapter 'Y' mixer	3.50
CAB-IEC-1.5M	AC power cable 13A plug -> IEC skt 1.5m	2.95
CAB-IEC-4X13	AC powerstrip 1xIEC-M -> 4x13A-F mains skt	19.95
PLUG-IEC	ReWritable IEC monitor plug for PSU/MT/DT	4.95

Cables & Cable Adapters: Serial, Modem, SCSI, Printer

CAB-SER-EX2M	DB25-M -> DB25-F RS232 extrn cab 2m	7.95
CAB-SER-EX50C	DB25-M -> DB25-F RS232 extrn cab 0.5m	6.95
CAB-SER-NUL2M	Null modem cable w/ D9F & D25F at each end 2m	9.95
CAB-SER-NUL5M	Null modem cable w/ D9F & D25F at each end 5m	14.95
CAB-SER-NUL10M	Null modem cable w/ D9F & D25F at each end 10m	19.95
ADPT-SER-25F9M	25p-F to 9pM serial RS232 adapter	4.95
ADPT-SER-25M9F	25p-M to 9pF serial RS232 adapter	4.95
ADPT-SCS-50I50CF	Centronics 50p-F to Centronics 50p-F (for Squirrel)	14.95
SCSI cable DB25-M	SCSI cable DB25-M -> Cent50-M 1m	9.95
CAB-SCS-25D/25D	SCSI cable DB25M-DB25M mac type	9.95
CAB-SCS-50C/50C	SCSI cable Cent50M->Cent50M 1m	9.95
CAB-SCS-50H/50C	SCSI-2 cable 50hp/dm->Cent50M 1m for PPC	19.95
CAB-SCS-50H/25D	SCSI-2 cable 50hp/dm->25D-M 1m for PPC	19.95
CAB-PAR-FULL	Bidirectional printer cable all pins connected	9.95

Cables & Cable Adapters: VGA, Keyboard, Switchboxes & Cables, SCart Cables

ADPT-SW-S/K	Dual monitor & k/b switchbox	19.95
ADPT-SW-S/K/M	Dual monitor, k/b & mouse switchbox	24.95
CAB-KBD-MM	5p DIN M - 5p DIN M k/b cable 1.2m	7.95
CAB-VGA-MF	15p DM-HD - 15p DF-HD VGA ext cable 2m	9.95
CAB-VGA-MM	15p DM-HD - 15p DM-HD VGA cable 2m	9.95
ADPT-SCAR-CMP	Amiga comp video (RCA)+2xAudio to SCART	12.95
ADPT-SCAR-RGB	Amiga 23p+2xRCA to RGB TV SCART + audio	12.95

Cables: HD, CDROM, Floppy, Clock Port Data & A1200 HD Power

CAB-PD-40F44F	2.5" (44F) to 3.5" (40F) data cab adapt for A1200	9.95
CAB-PD-2F	Power splitter floppy drive to hard drive + floppy	9.95
CAB-PD-30C	44->40way 3.5" HD data & pwr cabs -A1200	14.95
CAB-HD-KIT	A1200 full 3.5" hard drive fitting kit	24.95
CAB22-2W-9C	22way-Fx2 A1200 clock port cable 9cm o/a	5.00
CAB34-2W-50C	34way-Fw 12FD ribbon cable for tower	9.95
CAB40-2W-20C	40 way IDE cable 2 connector 20cm	5.00
CAB40-3W-1M	40Way IDE/HD/CD cable 3 connector 1m o/a len	9.95
CAB40-3W-60C	40w-F x3 HD/CD/IDE cable 20+40=60cm o/a	9.95
CAB40-CUST	Custom cable 3x40way IDE up to 1.5m	19.95
CAB44-2W-13C	44way (2.5" HD) cable 2 ctnr, 13cm o/a	9.95
CAB44-2W-60C	44way (2.5" HD) cable 2ctnr, 60cm o/a	19.95
CAB44-3W-12C	44way (2.5" HD) cable 3 ctnr, 12cm o/a	12.95

Cables: HD, CDROM, Floppy Power SCSI & Tower Systems

CAB50-CUST	Custom cable 3x50way IDC SCSI + 1xCent50-F 60cm	19.95
CABPW-1W-1F	Power converter cab HD-M -> FD-F	4.95
CABPW-2W-1H1F	HD/FD pwr splitter HD-M->1xHD-F/1xFD-F	6.95
CABPW-2W-2F	FDD power splitter 4pM->2xFD-F	6.95
CABPW-2W-2H	HD/CD pwr splitter 4p-M->2x 4p-F 15cm	6.95
CABPW-3W-2H1F	HD/FD pwr splitter HD-M->2xHD-F/1xFD-F	8.95
CABPW-3W-3H	HD power splitter HD-M -> 3xHD-F	8.95
CAB-HD-PWXTN	4p-M -> 4p-F HD/CD power cab ext 0.9m	9.95
CAB-HD-FD/4	23p-M-floppy -> 4p-F HD/CD pwr 0.9m	9.95

New - ISDN Term Adapters, 56k Modems & Net Access Bundles

NET-ISP	One time setup/unsupported/unlimited usage/no ongoing net access charge (0845 call charges only) with 25MB web space, 10 email addresses, 90 days free net support.	49.95
NET-EYE-1	128Kbps ISDN T/A + NET-ISP as above	199.95
NET-EYE-2	128K ISDN T/A, Port/jnr i/f + NET-ISP as above	229.95
NET-EYE-3	128K ISDN T/A, web, email, TCP/IP s/w + NET-ISP	249.95
NET-EYE-4	128K ISDN T/A, Pjtn, web, email, TCP/IP s/w + NET-ISP	269.95
NET-EYE-5	56Kb fax/voice modem + NET-ISP as above	129.95
NET-EYE-6	56Kb fax/voice modem, Port/jnr i/f + NET-ISP as above	149.95
NET-EYE-7	56Kb fax/voice mdm, web, email, TCP/IP s/w + NET-ISP	169.95
NET-EYE-8	56Kb fax/voice mdm, Pjtn, web, email, TCP/IP + NET-ISP	189.95

CDROM Systems including EZ-Tower & MT/DT Bundles

CD-SE-24X	CDPlus-SE system 24 speed with CDROM s/w	79.95
CD-SE-32X	CDPlus-SE system 32 speed with CDROM s/w	89.95
CD-DT-MT-24X	CDPlus Desktop/Minitower 24 x with CDROM s/w	99.95
CD-DT-MT-32X	CDPlus Desktop/Minitower 32 x with CDROM s/w	109.95
ADPT-AUD-CDSE	CDPlus-SE A1200/CD audio mixer/adaptor	19.95
CAB44-CD-13C	44way (2.5" HD) cable purch with CD/HD 13cm	6.00
CAB40-DDC	A1200 IDE skt adaptor 40F-40M with mtgs 15cm	9.95
CD24-BARE	Bare 20 speed CDROM mechanism for twr/A4k	39.95
CD32-BARE	Bare 32 speed ATAPI CDROM mechanism for twr/A4k	44.95

CDWriter/ReWriter Systems inc. EZ-Tower & MT/DT Bundles

CDWR-IN-2x8	EZWriter 2/8x with MakeCD for A4000, Tower	249.95
CDWR-PL-2x8	EZWriter-Gold external 2/8x with MakeCD	299.95
CDWR-SE-2x8	EZWriter-SE external 2/8x with MakeCD	269.95
CDWR-DT/MT-2x8	EZWriter Desktop/Minitower 2/8 speed with MakeCD	299.95
CDWR-BARE-2X8	EZWriter Mechanism (no MakeCD)	199.95
CDWR-IN-226	EZReWriter 2x2x6 w/MakeCD for A4k, Twr	279.95
CDWR-PL-226	EZReWriter-Gold external 2x2x6 w/MakeCD	339.95
CDWR-SE-226	EZReWriter-SE external 2x2x6 w/MakeCD	299.95
CDWR-BARE-226	EZReWriter Mechanism (no MakeCD)	219.95
CDWR-CDE-UG	EZCDS-SE+40+44way cabs + CDROMs/w w/CDR	20.00
CDWR-CMD-UG	EZCDS-Mk4+40+44way cabs + EZIDE s/w w/CDR	30.00
CDWR-CDFL-UG	IDE-FLYer high-speed IDE i/f, s/w, cabs purch w/CDR	50.00
CDWR-CDXP-UG	IDE-Express high-speed IDE i/f, s/w, cabs purch w/CDR	45.00
CDWR-DSK-10	Recordable CD media (WORM) 650MB x10	19.95
CDWR-DSK-10-SP	Recordable CD media 650MBx10 pur w/EZWriter	10.00
CDWR-DSK	Single CD Rewritable disk 650MB	9.95
CDWR-DSK-SP	Single CD Rewritable disk 650MB pur w/EZReWriter	5.00
DVR-MCD-TAO-P	MakeCD TAO (P) Amiga CD rec s/w w/ATAPI	38.95

EZ-Tower Systems, MiniTower/Desktop Cases & Accessories

CASE-FT-KIT	EZ-Tower kit w/ bkpln for self conversion	79.95
CASE-FT-SLE	DIY EZ-Tower, 250W PSU, EZKey, PC kbd lim stock	99.95
CASE-FT-I200	Ready-built A1200 Tower 250WPSUED adpt, FD cab	99.95
CASE-FT-PLUS	Ready-built A1200 EZTwr, EZKEY i/f, PC kbd	119.95
CASE-DT	Desktop case with 200W+ psu for HD/CDROM	29.95
CASE-MT	MiniTower case wth 200W+ psu for CD/HD	29.95
CASE-FT-EXKT	EZ-Tower conversion kit - No PC Tower	39.95
ADPT-AUD-EZTW	EZTwr audio mixer/adaptor for A1200/CDROM	19.95
ADPT-SCSI-EZTW	EZTwr SCSI adpt 30cm 2xCent50F, 1xIDC50F	19.95
INT-IOBL-Z2PX	2nd A1200 m/bd powerfeed adapter (if req'd) for PPC acc	9.95
CAB-SER-SSQ	9pDM->9pDF SurfSx EZTwr ser extn cab 50cm	9.95

SVGA Monitors - require Scandoubler and/or Flickerfix to use all Amiga modes

MON-14-28	14" dig SVGA 0.28DP 1024x768@60Hz - 3yr-O.S.	89.95
MON-15-28	15" dig SVGA 0.28DP 1024x768@60Hz - 3yr-O.S.	119.95
MON-17-28	17" dig SVGA 0.28DP 1280x1024@60Hz - 3yr-O.S.	229.95
MON-17-26	17" mon 135MHz, 0.26DP 1600x1280@75Hz	399.95
ADPT-MON-SEFF	EZVGA-SE ext flickerfixer purch w/ monitor	85.00
ADPT-MON-M2SD	EZVGA-Mk2 ext s/dblr u/gable purch w/ monitor	60.00
ADPT-MON-PLFF	EZVGA-Plus ext flickerfixer purch w/ monitor	90.00
ADPT-MON-INSD	EZ-VGA internal s/doubler purch w/ monitor	45.00
ADPT-MON-INFF	EZ-VGA internal flicker purch w/ monitor	85.00

Digital Cameras and Amiga Digital Camera Software

CAM-FUJ-D57	Fuji D59 cam, psu, LCD disp, mem crd w/ s/w (lim stock)	199.95
DVR-CAM-CAS	CamControl s/w for Casio QV10/100/300/700	29.95
DVR-CAM-FUJ	CamControl s/w for Fuji D55/D57/DCX7/DX9	29.95
DVR-CAM-KOD	CamControl s/w for Kodak DC20/DOXT	29.95
DVR-CAM-MIN	CamControl s/w for Minolta Dimage V	29.95
DVR-CAM-OLY	CamControl s/w for Olympus 420L/820L/1000L/1400L	29.95
INT-12I-PTJR-SP	Port/jnr hi-speed ser i/f purch with CamControl s/w	30.00

Amiga Printer Software/Drivers

DVR-ENPR	EnPrint Amiga printer driver for pre-03/97 Epson Printers	9.95
DVR-TBPR6	TurboPrint 6 x .x Amiga printer driver (English)	38.95

Amiga Image Conversion/Effects Software, Scanner Software, Scanner Bundles and Adapters

SCN-FBA4-BDL3	UMAX award-winning SCSI A4FB scanner with PScope	179.95
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Free ArtEffect-SE v1.5 with above whilst stocks last

DVR-SQ4	ScanQuix4 + 1 driver (Epson/HP/Artec/Mustek/UMax)	59.95
DVR-SQ4-UG	ScanQuix3 to SQ4 upgrade (trade-in & receipt req'd)	29.95
DVR-PHS	PhotoScope UMAX-SCSI Amiga Scanner Driver	59.95
CAB-SCS-25D/50C-S	SCSI cable DB25-M -> Cent50-M 1m pur w/scnr	5.00
CAB-SCS-25D/25D-S	SCSI cable DB25M-DB25M mac type pur w/scnr	5.00
CAB-SCS-50C/50C-S	SCSI cable Cent50M->Cent50M 1m pur w/scnr	5.00
CAB-SCS-50H/50C-S	SCSI-2 cable 50hp/dm->Cent50M 1m for PPC pur w/scnr	10.00
CAB-SCS-50H/25D-S	SCSI-2 cable 50hp/dm->25D-M 1m for PPC pur w/scnr	10.00
ADPT-SCS-CSQR-SP	Classic Squirrel PCMCIA SCSI i/f 50pCM pur w/scnr	49.95
ADPT-SCS-50SCF-SP	Centronics 50p-F to Centronics 50p-F (SQ) pur w/scnr	7.50
ADPT-SQ3-PAR	SQ3 adapter Epson scanner -> parallel port cable	9.95
CAB-PAR-FULL	Bidirectional printer cable all pins connected	9.95

Hard & Floppy Drive, CDROM, LS120 & Zip Mech. & Cases

FDD-ITL-1200	Replacement A1200/600 int FDD 880KB	24.95
FDD-ITL-BARE	Bare 1.44/880 Sony FDD for tower (needs i/f)	19.95
FDD-ITL-D/I/C	Twr int 880KB FDD (Sony/EZDFO/cab bundle)	29.95
FDD-ITL-D/I	Twr int 880KB FDD (Sony/EZDFO) No cable	24.95
HD2-21	21MB 2.5" hard drive 90 days warranty	29.95
HD2-170	170MB 2.5" hard drive	59.95
HD2-260	260MB 2.5" hard drive	64.95
HD2-720	720MB 2.5" hard drive	99.95
HD2-1.4	1.4GB 2.5" hard drive for Amiga	129.95
HD2-1.8	1.8GB 2.5" Hard Drive	149.95

PRODUCTS MARKED IN RED ARE SPECIAL VALUE ITEMS

HD3-2.1	2.11GB 1"x3.5" IDE drive for tower	89.95
HD3-3.2	3.2GB 1"x3.5" IDE drive for tower	109.95
HD3-4.3	4.3GB 1"x3.5" IDE drive for tower	129.95
HD3-LS120	Panasonic LS120 floppy/optical 1.4/120MB	79.95
HD3-LS120-CT1	Single 120 MB cartridge for LS120 drive	14.95
HD3-LS120-CT3	3-pack of 120MB (nominal) LS120 carts	29.95
HD3-ZIP-CT1	Single 100MB (nominal) Zip cartridge	14.95
HD3-ZIP-CT3	3-Pack of 100MB (nominal) Zip cartridges	29.95
HD3-ZIP-IDE	Bare ATAPI/IDE Zip drive internal	79.95
CAB44-CD-13C	44way (2.5" HD) cable sold with CD/HD 13cm	6.00
CASE-ZIP	Metal slim case-FDD/IDE/Zip/SyQuest/LS120	9.95
CASE-HD-ECON	External 3.5" HD case no psu	19.95
CASE-HD-REM	Removable drive case for 3.5" HD (metal)	24.95
Keyboards, Mice, Trackballs, PSUs, Misc. Hardware & Software		
FAN-60MM	Cooling fan for A1200 60x60x25mm 5/12v	14.95
KBD-A1000	A1000 keyboard with 6-pin mini-Din ctnr*	39.95
KBD-A1200	Replacement A1200 k/b w/ribbon cable*	24.95
KBD-A4000	A4000 keyboard with 6-pin mini-DIN plug*	34.95
KBD-WIN95	Windows 95 keyboard with 5-pin AT Din plug*	19.95
MOU-WHI	Amiga mouse - white/cream - with mousemat*	6.95
TKB-AM	Amiga trackball 3-button replaces std mouse*	14.95
PSU-100	100w PSU for Amiga (fit your old lead - inc instrns,ctnrs)	29.95
PSU-200	200w PSU for Amiga (fit your old lead - inc instrns,ctnrs)	39.95
PSU-230	230/250w replacement PSU for MT/DT/IT	29.95
PSU-A1200	A1200 23W PSU (original) 90 days warranty	19.95
SPK-16W	16W PMPO speakers w/ PSU 3.5mm jack	10.95
SPK-60W-INT	5.25" Bay Internal mounting 60W PMPO speakers/amp	24.95

Prolific PDFs

Let **Simon Goodwin** coax Adobe's pervasive PDF document format onto your Amiga.

AFCD35:-In the Mag/PDF

ON THIS

MONTH'S CD

Adobe's so-called Portable Document Format is the most common way manufacturers supply formatted information in machine-readable form. Web and FTP sites, catalogue CDs and floppy disks come packed with text, diagrams and tables in monster files with the prolific PDF extension. Reports, manuals, datasheets, specifications and service notes abound as PDF files, often at little or no cost.

Catalogue component suppliers Farnell give away two CDs packed with PDF specifications to would-be circuit designers, with more on their web page. By default, Microchip's PIC specifications come as PDFs on CD.

Even Motorola use PDF to publish the 68K processor and programming manuals, yet the standard 'free' PDF decoder, Adobe's *Acrobat*, isn't available for the Amiga operating system, although there's no problem getting versions for Wintel PCs, assorted Macs and a slew of *Unix* boxes.

This handicaps Amiga users because many companies assume that 'anyone' can read PDF files. Dave Haynie's fascinating Amiga internal documentation, generated on West

PDF

Portable

**Prolific
Perfidious
Profligate
Proprietary
Pervasive
Precocious**

Document

Format

Adobe's software isn't available. The PDF specification is public, but *Acrobat* source is not, so we can't run the viewer most users download and install as a matter of course.

Adobe don't plan explicit Amiga support, although they're developing a

Java version which should work with Merapi, mañana... Meanwhile, I've worked out how to decode, read and print PDFs on almost any Amiga, and learnt a lot about the inner workings of a PDF file. It can be done, so let me show you how.

66 In theory, any 32-bit Amiga system can decode PDFs, even expanded A500s if you can wait minutes for results... **99**

Chester *Unix* systems, is in PDF, rather than any Amiga format. We run the risk of being marginalised without access to new SCSI and ATAPI specifications, only available in PDF.

JAVA ACROBATICS

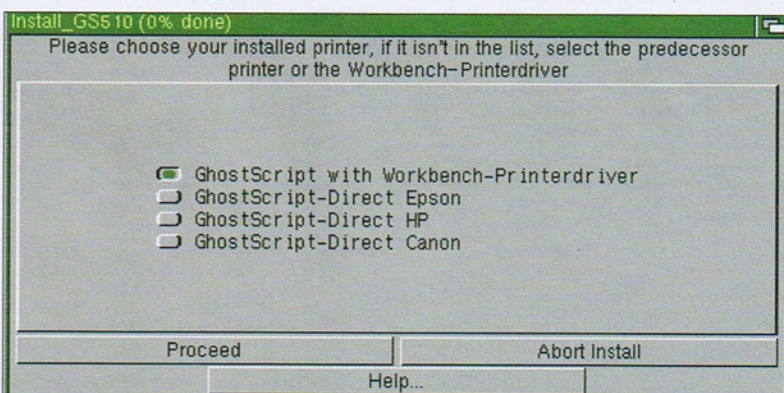
In theory, any 32-bit Amiga system can decode PDFs, even expanded A500s if you can wait minutes for results, but

GOODIES ON THE CD

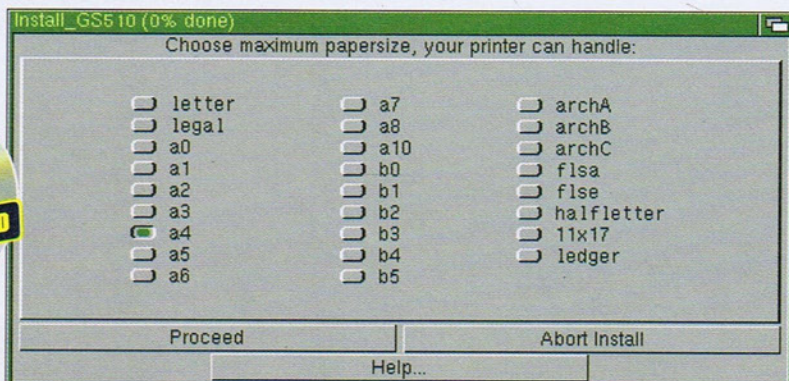
- Ghostscript 5.10, XPDF 5
- ARExx PDF output script for *Final Writer*
- PDF to Text converter
- Loads of interesting PDF files from Adobe, Crystal Semiconductors, Microchip, Motorola, Toshiba and Dave Haynie.

ON THIS

MONTH'S CD



At last, Ghostscript supports Intuition printers.



Ghostscript's choice of paper sizes.

INSTALLING GHOSTSCRIPT

Aminet's *Ghostscript* archives are easily unravelled thanks to Manfred Tremmel's installation script, which uses *Installer* 43.3 and *Lha*. Extract *GS510-Install.lha* into a new directory and copy the raw archives into the same drawer. Allow at least 10Mb free on the drive before you start, and twice that if you want to install the source as well.

All systems require *GS510-data.lha*, *GS510FontMap.lha* and the hefty *GS510-fonts-st.lha*. *GS510-fonts-ot.lha* and source code from *GS510-Main-src.lha* are optional extras. Add the version for your processor, chosen from the table. There's no proper 68060 version because GCC compiled the *Unix* source, so *OXYPatcher* helps. Anyone can run the 68000 version, which uses the basic subset of 68K instructions, but you'll suffer more for want of the FPU.

Once you've got all the files in one place, click on *Install_GS510_English* and let the installer do the hard work. It adds two assigns to user-startup, for the program and fonts, and puts the program on your search path. You can run it from a Shell or these minimal but welcome Workbench front ends: *GhostView*, which works in a resizable window, *GhostViewScreen*, which uses a private screen chosen from a WB3 mode list, or *GhostPrefPrinter* which prints to your Intuition Printer at the page size chosen during installation. Custom printer code is typically faster but less flexible than Intuition drivers.



OXYPatcher works around GCC's lack of 68060 support.

competition. Motorola's response is the Coldfire MCF5102, described as a CRISC chip. This cut-down 68EC040 was developed for Hewlett Packard, sells for under \$20 and runs original 68K code. Coldfire was once Amiga Technology's favourite for the ill-fated Walker, but that's another story...

Unhappy at paying royalties to Adobe, who were doing rather better than the Mac-meisters by cheerfully selling *Postscript* onto *Unix* and even up-market PCs, Apple switched Mac systems. They moved from *Postscript* and Adobe's *Type Manager*, ATM, to the rival 'Royal font' system which begat Microsoft's TrueType semi-standard. Commodore's Compugraphic fonts are comparable but similarly incompatible.

PDF INTERNALS

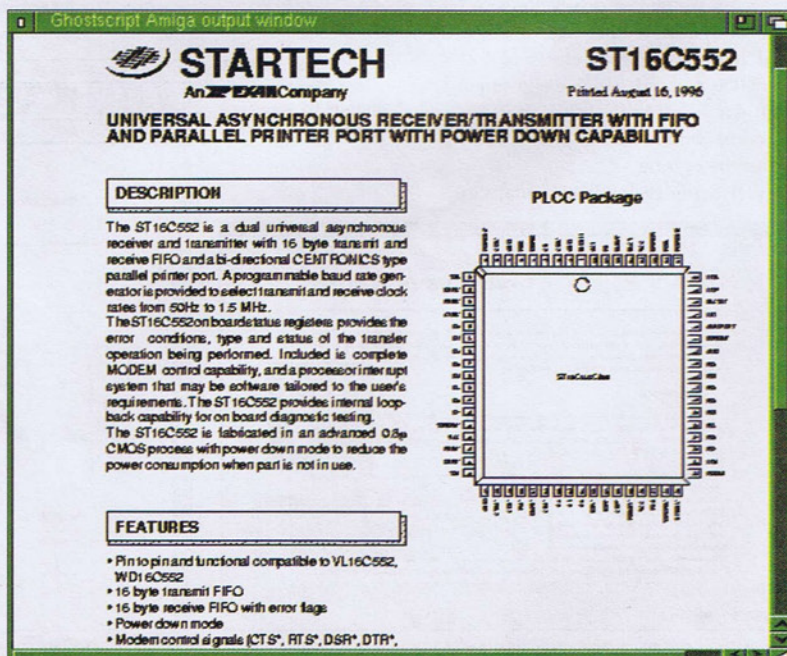
Unlike *Postscript*, PDF is not a complete programming language. It supports calculations and block structure and is similarly written in reverse Polish Notation, like *Forth*, but it lacks named procedures and variables. *Postscript* programs can run for hours or days on laser printers – one test kept an Apple Laserwriter NT thinking all night, laboriously computing a fractal dot by dot from a tiny ASCII text program. PDF shifts the burden to the host, rather than the printer.

Typical PDF files place text and graphics on a page, rather than generating them from scratch. There's still substantial overhead – a minimal document that prints "Hello World" requires about 40 lines of code. PDF is generally simpler and less powerful than *Postscript*. Raw text and graphics are stored considerably more concisely, but *LZX* compression still makes a useful dent in most PDF files.

PDF documents can use plain, printable, seven-bit ASCII codes which are compatible with old email systems, but they're more often stored as packed binary, using all eight bits of each byte. *Postscript* stores raw graphics in hexadecimal, using two characters for every byte of graphic data, while PDF

Continued overleaf ➔

Apple's betrayal made Adobe wary when they evolved *Postscript* into PDF. The PDF format and specification are proprietary, but anyone may read or write PDF files. PDF output can now be bolted onto DTP programs and high-end word processors like *Wordworth* and *Final Writer*.



WORKING DRAFT

T10
Project 997D

Information technology — SCSI-3 Stream Device Commands (SSC)

This is a draft proposed American National Standard of Accredited Standards Committee X3T10. As such this is not a completed standard. The T10 Technical Committee may modify this document as a result of comments received during the public review process and the approval of this document as a standard. Use of the information contained herein is at your own risk.

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Reference number
ANSI X3.11-1996
Printed September 3, 1996 at X3T10

SCSI 3 specifications
are drafted in PDF
form.

PDF output can now be bolted
onto DTP programs and high-
end word processors like
Wordworth and *Final Writer*.

PDF PROGENITORS

PDF extends the page-description language *Postscript*, invented by John Warnock at Adobe in the early '80s.

Postscript is used by many Amiga applications, including *PageStream*, *ProCalc*, *Final Copy* and *Final Writer*.

The Amiga operating system *Postscript* driver sends text and graphics interspersed with high-level commands to intelligent printers which interpret the commands and format pages accordingly. *Postscript* is an open system with excellent documentation, fonts and drivers.

Postscript was vital to the DTP breakthrough of Apple's Macintosh, back when *Postscript* laser printers were more expensive than the Macs driving them, and considerably more powerful. *Postscript* supercharged Motorola's 68K processor sales, powering almost all the early laser printers. Flat 68K memory addressing made it easy to generate megabyte pages, which was a nightmare using Intel 64K segments.

68K chips are still the most popular laser engines, despite RISCy

PDF details of new
buffered serial ports.



← favours Base 85 instead, packing four arbitrary data bytes into five displayable characters.

COMPRESSION

PDF supports four variants of familiar Amiga data compression schemes. The simplest is byte run encoding, used in ILBM files and Apple's *PackBits*, which removes duplicate data bytes. More sophisticated is *Lempel Ziv* compression, akin to *LhA* and *LZX*, which packs strings of bytes into shorter sequences.

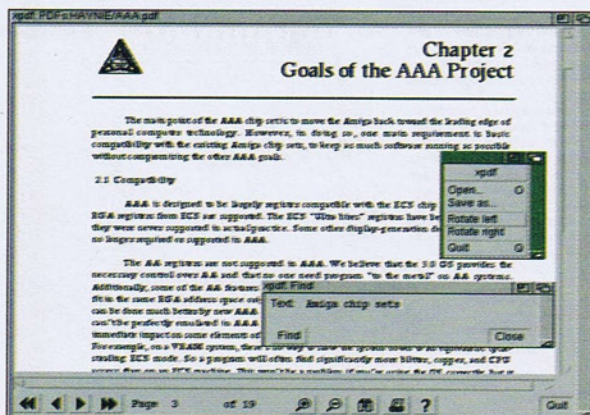
The CCITT FAX standard compresses mono bitmaps, exploiting bit runs and the similarity between adjacent scanned lines. If all else fails, processor-intensive Discrete Cosine Transformations are deployed, akin to JPEG (Joint Photographic Experts Group) standards. PDF's fixed point arithmetic doesn't require FPU co-processing, but many PDF interpreters use one if available.

The other PDF extensions are encryption – for password-protected documents, to protect against reading or modification – and support for hypertext links, so you can jump from one part of a document to another by clicking on items therein.

PDF ELEMENTS

Pages in a PDF file may include four elements: text, line graphics, bitmaps and hyperlinks. The pages and other elements are cross-referenced by a table at the end of the file, so they don't have to be stored in order. PDF files are large, needing extra buffers for efficient access on Amiga FFS drives. Reckoning one 512-byte buffer per 36K of file, you need 26 buffers to read either part of the 68030 manual, which weighs in at around a megabyte a chunk. 109 buffers accommodate files up to 4 million bytes long.

PDF supports familiar bitmaps in



XPdf gleams clues from Dave Haynie's AAA chip specification.

SAMPLE GHOSTSCRIPT COMMANDS

Workbench icons are welcome, but it takes Shell commands to get full control over *Ghostscript*. The documentation is peppered with debug information, *Unix* and PC references, making it hard to follow, so here are examples that work for me. You can view a PDF document page by page with this incantation on a 68040 or above:

GS -sDEVICE=amiga_custom PDFSPEC.pdf

Swap back to the *Ghostscript* Shell window on Workbench and press enter to step between pages. To print a complete file to an HP PCL printer via PAR: at 150 dots per inch, try this:

GS -sDEVICE=djet500 -r150 -sOutputFile=par: TEST.PDF <nil:

You'll need at least 1.5Mb of printer memory to print at 300 DPI on a LaserJet, but 0.5Mb is enough for 150 DPI – it will be grainy but generally still readable. Deskjets don't buffer a full page so their buffer size isn't a limitation.

Finally, this is the spell to print the first three pages of the AAA chipset specification at top resolution on an Epson 24-pin matrix printer connected to a Multiface 3 parallel port:

GS -sDEVICE=epson -r360x180 -dFirstPage=1 -dLastPage=3 -sOutputFile=pit0: AAA.PDF <nil:

All these examples assume that you've got *Ghostscript* and the PDF file in the current directory.

linear grey scales and monochrome scans. Colour pictures use one to four bytes per pixel, with an optional 256-colour palette.

Postscript mainstay vector graphics feature in the most efficient PDF files, clipping and filling 'Cubic Bezier Splines', smooth curves generated mathematically. These are concisely stored as start and end co-ordinates, plus synthetic 'magnets' alongside, which bend the line's path.

would be bloated if they included all the character sets they might need.

Unlike *Postscript*, PDF files can incorporate font metrics alone (sizes without shapes) in a fraction of the space. These preserve pagination but threaten ragged letter spacing unless you already own the full font.

PDF ON AMIGA

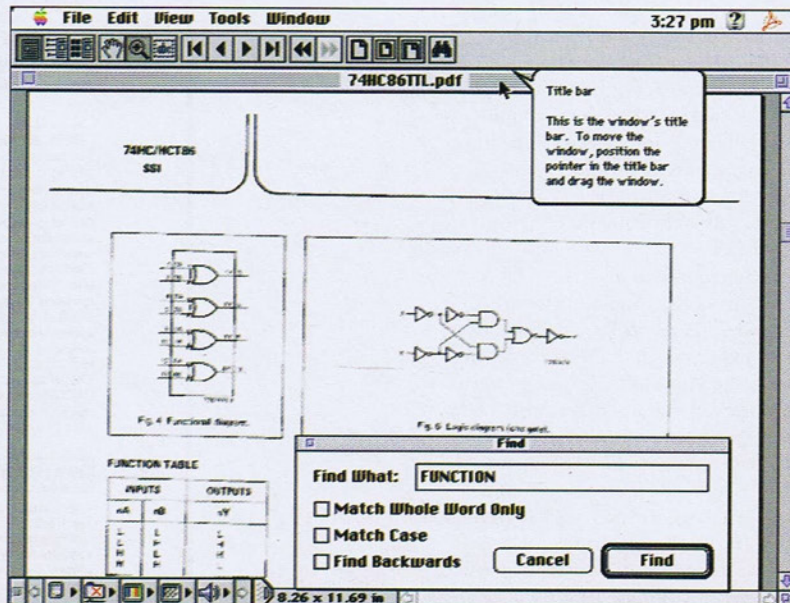
Given *Fusion* or *Shapeshifter*, the easiest and most compatible way to view PDFs is with the Mac version of Adobe's *Acrobat*, which regularly appears on *Mac Format* magazine's cover CDs. However, beware of Mac quirks, such as verbose fat binaries, PPC-only code and Apple printer peculiarities.

Text searching won't work on pages scanned from printed documents, and OCR may confuse characters like '5' and 'S'. Fonts look wobbly unless they're bound into the PDF file or yours match those used by the document's author. Adobe bundle Symbol and ITC Zapf Dingbats, ensuring access to a common set of weird characters.

Unlike *Postscript*, PDF files can incorporate font metrics alone (sizes without shapes) in a fraction of the space.

Text is defined in fonts, using primitive vector operations which ease scaling, translation and substitution. Even expressed as splines, a typical *Postscript* font requires 50 to 100K of disk space. PDF files with several fonts

Scanned TTL specifications are opaque to *Acrobat*'s text FIND option.



GHOSTSCRIPT VERSIONS

A4091, A500, A600, CDTV
A1200, A4000/030, CD32
A3000, Expanded A1200
A4000/040, A4000/060

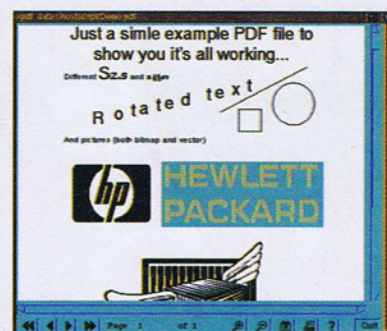
GS510_000.lha
GS510_020.lha
GS510_020fpu.lha
GS510_040fpu.lha

MC68000 or MC68010
MC68020 or MC68030, no FPU
MC68020 or MC68030 with FPU
XC68040 or XC68060

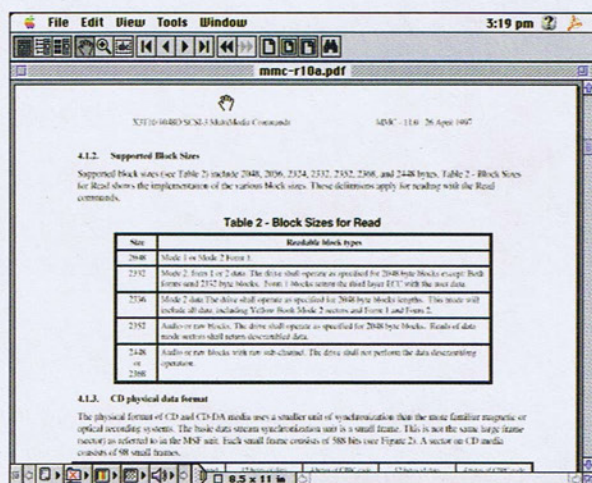
OTHER GHOSTSCRIPT FILES

PDF and Postscript data GS510-data.lha
Font names and files GS510FontMap.lha
Essential fonts GS510-fonts-st.lha
Optional fonts GS510-fonts-ot.lha
Source code, for GCC GS510-main-src.lha

These can all be found on *AFCDS* and they're regularly updated in Aminet's text/dtp drawer.



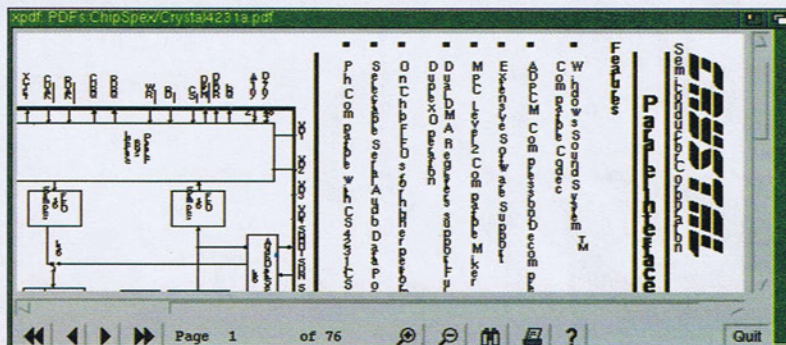
Example PDF output from Final Writer, via Ghostscript.



If you'd rather stay in AmigaOS, your options are the *Unix* ports *XPDF* and *Ghostscript*. *XPDF* is a viewer for PDF files which can also write out *Postscript* for appropriate printers, with a clear display reminiscent of *Acrobat* for *Unix*. Printing requires a *Postscript* interpreter, either in your printer or POST or HGWPOST from Aminet.

Ghostscript is Aladdin's ghost-written *Postscript* interpreter, released within the GNU (Gnu's Not Unix) copyleft range. Later versions interpret PDF files directly, as well as *Postscript* ones, allowing one-step rendering from PDF to printout. *Ghostscript* originally wrote directly to Epson matrix printers, Canon bubblejets and lasers and inkjets

CD specifications served up by Adobe's Acrobat.



XPDF rotation yields weird results.

supporting HP PCL, but version 5.10 supports Intuition printer drivers.

Ghostscript can also generate PBM Portable BitMaps, convertible to most graphic file formats. The Amiga port adds ILBM, Intuition screen, window and custom Retina RTG output drivers. An ARExx script for *Final Writer* uses *Ghostscript* to generate PDF from documents formatted in Softwood's word processor, so at last Amiga users can make PDFs directly.

COMPARISONS

XPDF5 has no Workbench icon and needs extra stack space; a STACK 20000 command in the Shell window or Shell-startup does the trick. Type ASSIGN LIBX11: LibX11, then start the appropriate program: *XPDF040* for the 68040 or 68060 systems.

XPDF has an eccentric but functional Workbench interface, inherited from X via LIBX11. You can zoom in and out on each page; search for text with the same limitations as *Acrobat* and load and save. The menus and requestors require gratuitous clicking and typing; lacking parent or 'Volumes' buttons, directory names must be retyped or cut and pasted, but it's better than Shell commands.

The trick is to press the right button when the program is listening, not while it's preparing a page, then click the left mouse button in the window to get a new orange cursor. Use that and another left-click to select an option, or the Amiga O and Q keyboard shortcuts to Open and Quit. The menu window goes blank if you resize it.

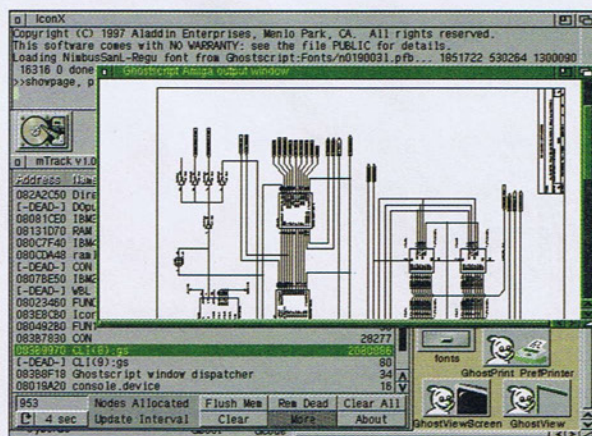
Rotation spins the picture, but not the text, so you end up having to read

letters aligned one above another in vertical lines – amusing, but not what you'd expect.

Ghostscript is barely an Amiga program. *Ghostview* has an Intuition window but no menus, and the close gadget does nothing. You need to press Enter in the CLI window underneath to step to the next page (if any) or control C to abort. *XPDF* is more like *Acrobat*, but less flashy. Adobe's program is easier to use than either, with better fonts, but if anything it's even more hungry for resources, and *Shapeshifter* and *Fusion* are pretty greedy too.

I find *XPDF* more likely to accept files trawled from the Internet than *Ghostscript*, which may crash or stop after a few pages, spewing gibberish, if it runs across something it doesn't like. Consider using a mixture of *XPDF*, then a separate *Postscript* interpreter, for maximum flexibility.

Both are a lot better than early ports, in terms of compatibility and stability. Now they work, it would be nice to see proper support for Intuition, *GadTools* and maybe even MUI...



Ghostscript gobbles over 2Mb of RAM to show part of a schematic.



Colour graphics in Adobe's PDF example files.

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SCREENPLAY

The latest games, hints and some clever programming from you!

Hello! In my first month here in the ScreenPlay

section, I've got reviews of games from three of the major genres, with a beat-em-up, a top down racer and a footy sim – each displaying varying levels of competence.

Each game has a lot to live up to: *Max Rally* aims to take over where the rather excellent *Skidmarks* left off, *Olo Fight* has to get the better of *Capital Punishment* and it goes without saying that *Sensi* is the landmark by which all Amiga football games will be judged.

As well as these new games, there's a sneak peek at the best games that were unveiled at the Computer '98 show in Cologne.

Stepping into Andy's shoes is a tricky job, but it's easier when there's some top games to play and look forward to, and, of course, a foolish photo always helps...

Mark Wheatley

AMIGA FORMAT'S REVIEW POLICY

WHAT OUR REVIEW SCORES MEAN

Every month we scour the world's software houses for the latest and greatest Amiga games. We try to ensure we keep you as up to date as possible and we'll stop at nothing to bring you the best, definitive, no-nonsense reviews of the games that matter.

90+%	The crème de la crème. Only the very best, most playable and original games are awarded an AF Gold – the most highly prized rating there is.
80-89%	These games are very good, but due to minor flaws they're not the finest examples of their genre.
70-79%	Good games which are worth buying, especially if you have a special interest in a game type.
60-69%	Average releases with somewhat limited gameplay and appeal. Games in this category tend to be flawed.
50-59%	Below average games which are unlikely to impress your mates or your wallet...
40-49%	Overwhelmingly poor quality games with major flaws and appalling gameplay.
Under 40%	The absolute pits.

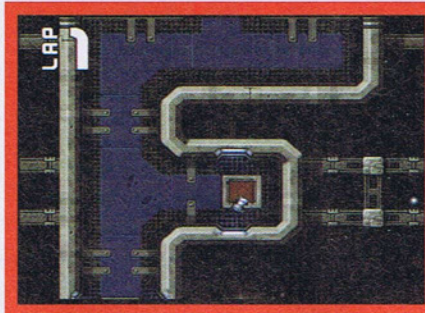
30 PREVIEWS

All the news of the latest games from the Cologne show.



32 MAX RALLY

A fast, Formula 1 frenzy of a game, or more of a Skoda? **Ben Vost** gets behind the wheel.



You can play alone, but it's more fun with others...

36 OLO FIGHTER

Kick, punch, duck, weave, smack! You'll still lose, though, as **Nick Veitch** finds out.



Crispy fried again. Curse those special moves.

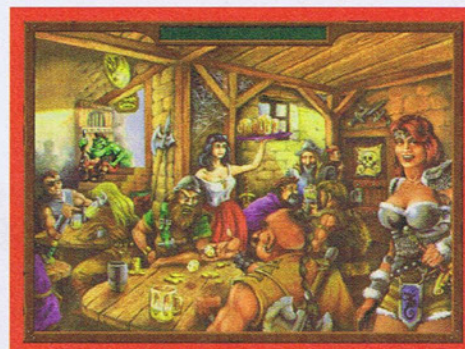
38 READER GAMES

Guns, missiles, tanks, milk bottles, snowballs and Sting? **Mark Wheatley** finds that there's a bit of a violent theme this month...

The Duellists. Robert Strickland
Bullets, missiles and more missiles...

Get Some. A. Cole
Guns, bombs, bottles, grenades...

Snow 'Em All. Jani Parviainen
Snowballs. And an icy pool.



Above: the *Amiga Format* offices always get a bit rowdy after a deadline has passed.

35 EAT THE WHISTLE

AF's tenacious, terrier-like midfielder **Ben Vost** has a kick around with this new footy game.



You're only singing when you're winning...

37 QUAKE CDS

Ben Vost loads up and goes off to kill ogres in a dungeon. Yet again.



It's hard to get bored of big guns and explosions.

37 GAMEBUSTERS

The Speris Legacy, and how to get through it.



Put an end to your aimless wandering around.

Previews

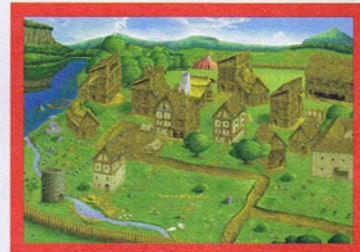
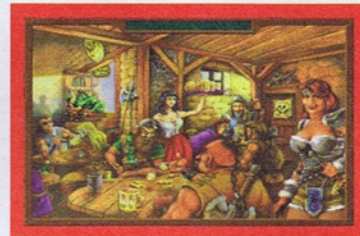


Nick Veitch can hardly wait to build up his empire and take over the world. Oh, and shoot things. Lots of things...

Tales of Tamar



We don't actually have much information on this game yet, but we do have some very nice screenshots we thought we'd share with you. The game is loosely based around the *Settlers* theme, but it promises to have more diverse gameplay, dealing with exploration, combat and management of the kingdom. *Tales of Tamar* is due to be released in the spring. In the meantime, you should make sure that



From the screenshots that were being shown at Computer '98 in Cologne, this looks like it's shaping up into a very interesting game indeed. It should be available in the spring.

your system has at least 6Mb RAM and an '020, or better still, a 68040.

AGA or 24-bit graphics will be required, and if you have a nice sound card, you'll find it will be fully

supported. One other thing is that you should get a CD drive if you don't have one already as this game is CD only. We'll have more detailed information on *Tales of Tamar* in a future issue.

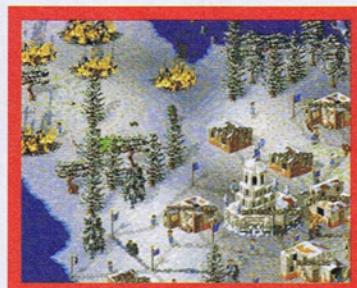
Settlers II



These characters are from the recently released *Settlers III*, which may also find its way to the Amiga.

There's great news for *Settlers* fans this month. Although the original game made its debut on the Amiga, the company responsible for it, Blue Byte, have failed to do any Amiga versions of the sequels. Titan recently got permission from Blue Byte to do a licensed version of *Settlers II*. This was quite handy for them since they'd been unofficially working on porting the game for some time and were nearly finished. The result is that you won't have to wait very long before you can sink your teeth into what has already proved to be a classic on other platforms.

The really good news is that Blue Byte have hinted that they might provide a licence for *Settlers III*, but only if *Settlers II* sells well enough. That sounds like reason enough to buy it to me...



Settlers II has loads of improvements over the original, including better graphics and varied terrains.

If you're still not convinced though, here are some of the features of *Settlers II*:

■ Face the challenge of 49 maps and conquer the world.

■ Choose from four different nations, each with a unique culture.

■ Direct your animated subjects throughout your empire.

■ Use the map editor to create additional new worlds.

■ Construct a fleet of ships to explore uncharted waters.

■ Zoom-in and follow any one of your loyal subjects as they perform their assigned tasks.

■ Create elaborate settlements from a variety of over 25 different building types.

■ Battle against or lead a nation of Romans, Asians, Nubians or Vikings.

■ Challenge up to six computer opponents, or choose the multi-player mode for two player games.



The landscapes may look more detailed and complicated, but it's not too hard to follow.

Wipeout 2097

Although their website hasn't been updated for a while, the word is out that Digital Images have completed negotiations with Psygnosis and are now working on an Amiga version of the PlayStation smash-hit, *Wipeout 2097*.

Psygnosis are no strangers to the Amiga market, of course, and they owe much of the success of their company to the success of *Lemmings*, all those years ago.

Wipeout itself is a graphically powerful racing game which bears some similarity to the old EA classic,

Powerdrome. Players drive hovering vehicles around a variety of tracks, hoping to bump the other competitors off or simply out-drive

them. As you can see from the screenshots, taken from the PlayStation version, it's quite visually intense, but Digital Images reckon they won't have too much trouble creating a version which will run on an adequately powerful Amiga.

If *Wipeout 2097* retains the speed and looks of the PSX version, it should be one of the games of 1999.



These screenshots are from the PlayStation version of the game, to give some idea of what to expect in the Amiga version (and what sort of Amiga you'll need to run it on).



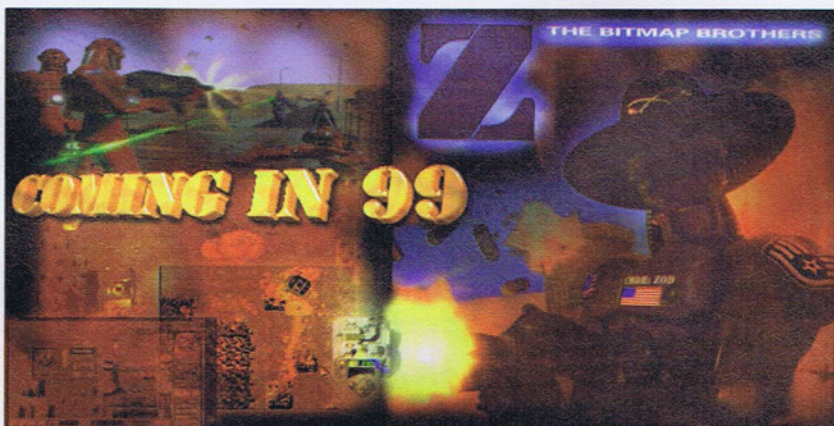
Napalm and Z

Although there's still no sign of *Napalm* (but we're expecting it really soon!) ClickBOOM have announced that they're now all signed and sealed to do a version of *Z* for the Amiga.

There are some similarities between the two games in that they're both *Dune*-style real-time strategy games. *Z* is slightly different as the player controls different types of robots which have their own "personalities". These robots can equip themselves with different weapons and vehicles to carry out

the tasks you've set them.

It got very good reviews from the PC magazines when it was released and there's no reason to believe a ClickBOOM conversion wouldn't be up to those high standards.



ClickBOOM are proudly proclaiming their deal to convert *Z* on their website, but *Napalm* still isn't shipping yet. Any day now, they tell us...



These shots (above and left) are from the Bitmap Brothers' PC version of *Z*. The Amiga version should look exactly the same.



Napalm (above, left) may have more straightforward tanks, but it should still be great.

Max Rally



The first new top-down multiplayer racing game for a long time gets put through its paces by **Ben Vost**.



Racing on your own – against three other competitors – is pretty easy to begin with...

The Amiga Format offices haven't been blessed with a serious multiplayer racing game for quite a while now. Probably the last really decent one was *Skidmarks*, and that was before even my time here.

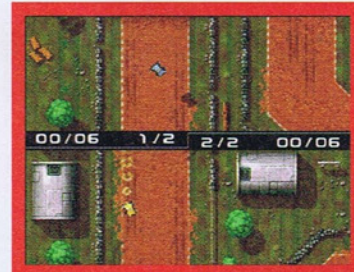
Four players can take part in this game, which always means more fun than simply playing against the computer, although there is a one player game as well. The multiplayer gameplay is split between either a split screen mode for two players only, which is a standard race, or a "battle mode", à la *Micro Machines*, where all four contestants race around the track with the player at the back of the screen getting knocked out until only one player remains and scores some points. Then it all starts again.

However, if you have two Amigas you can still race four cars by using a null modem cable, with two split-screen races going on simultaneously on both machines.

The graphics are nice enough, with diddy little race car sprites and cartoonish backgrounds, but there seems to be little interaction with them, especially since the alpine levels aren't any more "skiddy" than the woodland or dunes levels, which is a great shame.

There are "boardwalks" and ramps on each level, and on some, going offroad results in your car slowing down, but other than that you don't really get a feel for each track – it merely becomes an exercise in making sure that your car is pointing in an orthogonal direction after you come out of a bend because going over ramps at an angle can be death to your racing chances.

Not only that, but although you're given a choice



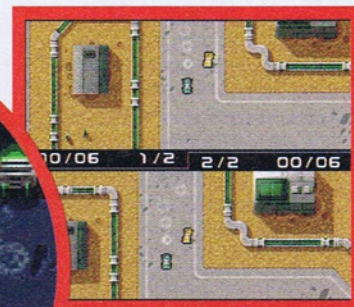
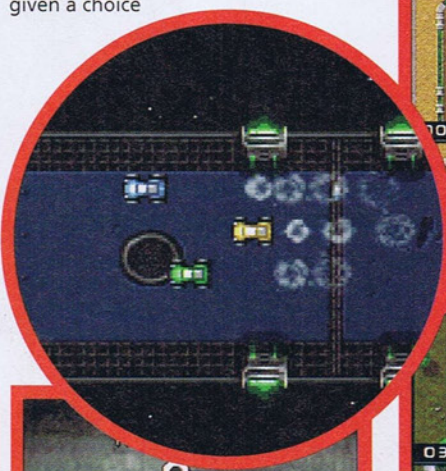
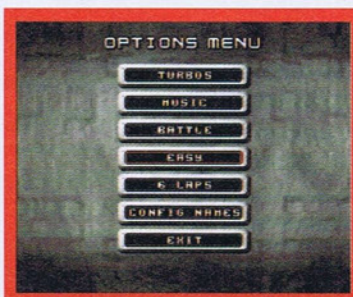
between drivers at the start of the game, in a very *Bitmap Brothers*-style screen, there doesn't seem to be any difference between them even though it says that there is on the back of the box. They all seem to drive in a similar fashion to me.

Having said all that, there's still

Four players can take part in this game, which always means more fun than simply playing against the computer.



When you're playing head-to-head in battle mode, this screen tells you who's winning.



If there are only two of you playing, split-screen mode is probably better than battle mode, especially if you only want a quick game.



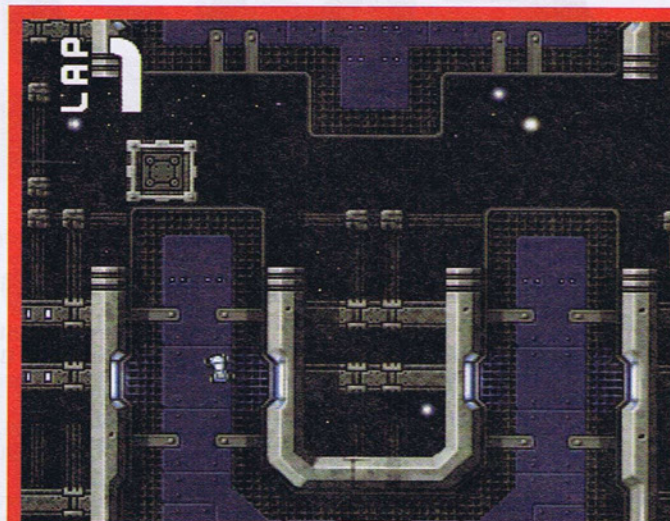
Pick a character, any character, from this attractive Bitmap Brothers-esque screen.

the fun of racing your mates, and *Max Rally* does this very well. Get a four-player adaptor from Gasteiner (0181 345 6000) and plug your joysticks in after the pub and you'll be there for hours, battling it out for first place.

Track trouble

However, it has to be said that the track design could be better for multiplayer action. The problem is that if the players have any familiarity with the course, it makes for long races as it's often quite easy to stay on the screen because the circuits are very compact.

If you're playing the one player game, you'll find that it's not too difficult on the early levels, although you're welcome to try them in any order you like. What is blindingly difficult, however, is the Max Challenge, which you might guess from the name is going to be hard. The Max Challenge is just you against a scrolling screen. You start at the bottom of it and it

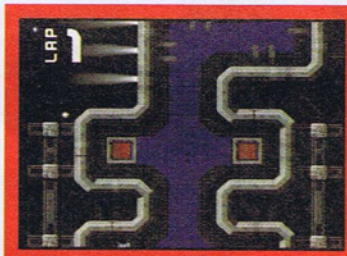
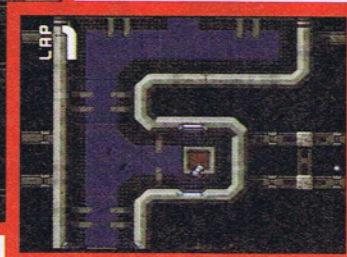
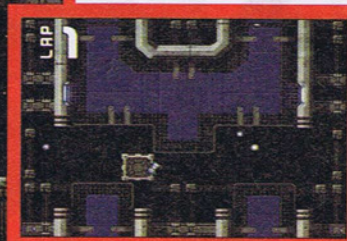


The Max Challenge courses really are a nightmare. You'll need nerves of steel for them.

scrolls upwards until you reach the end of the track. You then have to make your way back to the bottom as the screen scrolls down again. The trick is that you mustn't get caught by the bottom or top of the screen as it scrolls. This is much harder than it might seem because the track isn't continuous – it has huge gaps in it that you have to cross using moving pontoons. The problem is that you often have to wait for these pontoons,

sitting there doing nothing while the screen scrolls inexorably towards you.

There's also a Time Trial mode where it's you racing against the clock on your own, but this is a bit tedious and only for serious *Max Rally* fans (it does save your times to disk so you can keep trying to improve on them, either on your own or in the races).



Switch the switches, get to the end and back, all without being caught. I thought this was meant to be fun!

There's also a Time Trial mode where it's you racing against the clock on your own, but this is a bit tedious...



The courses look nice, but there isn't a lot of difference between them.

Finally, there are demos of most of the tracks stored on the disk, showing some of the manoeuvres you can do, like the 360° spin to help you get round corners while airborne.

Overall, *Max Rally* is great fun for four players. If you come back from the pub with your mates, turn on your Amiga and fire this up. Make sure you've all had a bit of practice though, as it can be quite tedious for the fourth-placed player to wait for the first two to reach some kind of racing conclusion. My suggestion is to bring back some tinnies...

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REQUIREMENTS: Any Amiga, HD installable

Pros and Cons

- ☒ Excellent multi-player fun.
- ☒ Nice graphics and sound.
- ☐ Courses aren't varied enough.
- ☐ Races can go on a loooooong time.

OVERALL VERDICT:
Great fun, but only for four players.

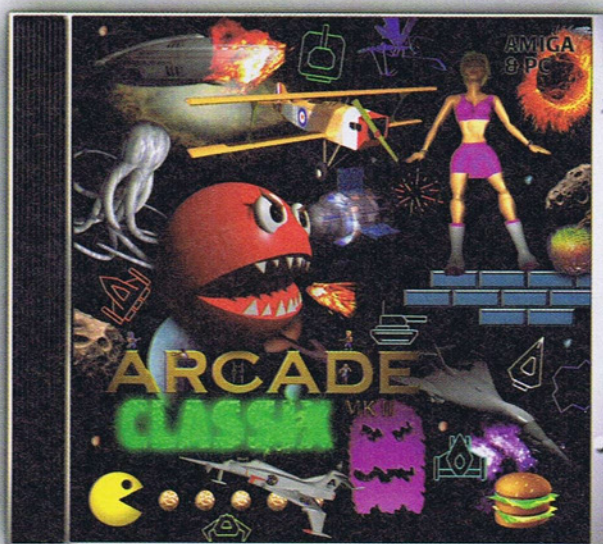
80%

Get two Amigas linked together with a null modem cable and you can have four player split-screen!

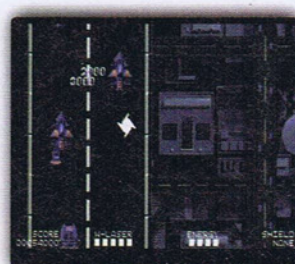
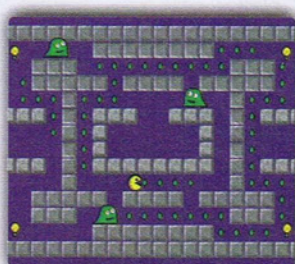
CD-ROMS



AMIGA CLASSIX is an original CD which features over 400 Classic Amiga Games, many of which are full versions. Some of the games include Amegas, Testament, Better Dead than Alien, Charlie J. Cool, Full House Poker, DNA, PP Hammer, Starblade, TechnoCop, Zero Gravity, Boondar, Blaster, Boston Bomb Club, Fruit Salad, Lex, Nemeses, Project Buzbar, North & South, Turn IT, Vietnam as well as versions of Alfred Chicken, Alien Breed 2, Apidya, Apocalypse, Star Dust, Armalyte, Armourgeddon, ATR, Beast Busters, Super Star Dust, Street Fighter2, Syndicate, Steel Sky, Benifactor, Body Blows, Breathless, Bubble & Squeek, Canon Fodder1&2, CoolSpot, Crash Test Dummies, Cyber Punks, Dark Seed, Deepcore, Detroit, Dragon Stone, Dream Web, Fears, First Samurai, Frontier Elite II, Globdule, Gods, Gulp!, The Hustler, Ishar3, K240, Kings Quest VI, Lemmings 2 along with classics like: The Lion King, Lotus III, Soccer Kid, Space Hulk, Minskies, Myth, New Zealand Story, Ruff'n'Tumble, Sensible Golf, Slam Tilt, Tactical Manager, Theme Park, Turrican 3 and more...



After the HUGE success of the original Arcade Classics CD and the Arcade Classics Plus CD we have now excelled ourselves with the release of ARCADE CLASSIX MKII, this innovative duel format CD includes over 1,000 variations of all time classic games such as: Asteroids, Battlezone, Bomberman, Bombjack, Boulderdash, Breakout, Centipede, Choplifter, Combat, Donkey Kong, Defender, Dig Dug, Dogfight, Frogger, Galaxians, Hunchback, Space Invaders, Joust, Jumpman, Loadrunner, Mario Clones, Missile Command, Moon Patrol, Mr Do!, Pacman, Popeye, Pengo, Pong, Q-Bert, Quix, Robots, Scramble, Space Wars, Super Sprint, TanX, Tempest, Tetris, Thrust, Trail Blazer, Tron, Uridium, Xevious, Snakes, Beserk, Mutant Camels, Gorfi, Llamatron, River Raid, Elevator, Bagger, Paradroid, Zelda, Dodg'ems, Aztec Challenge, Bagitman, Frantic Freddie, Decathlon, LCD Games, Zaxxon, Original C64 Conversions, and a wealth of other superb retro games.



Eat the Whistle

Ben Vost examines a game of two halves, and he isn't sick as a parrot...

Football's a funny old game. Anyone who wants to do a game of it on a computer can be sure that they'll come in for some stick if they don't get the details right. You can kind of forgive the lack of an offside rule since not a lot of people understand it anyway, but the computer player being able to steal the ball from your free kick by standing a couple of feet away and just trapping it is a somewhat less forgivable feature.

Hurricane Software have gone out of their way to offer the best Amiga football game since the last *Sensi*, but have they managed to offer what *Sensi* couldn't? Well, *ETW* is a far more modern game in the sense that it multitasks. You can install it to your hard drive and you can also select a screenmode for it to run in, rather than being forced to play it on a small, Low Res screen.

But, and it's a big but, the playability isn't quite at the same level. It's still fun and Hurricane have added other bits to keep you interested, including the France '98 World Cup competition and the ability to play as The Simpsons (well, the Simpsons actually, owing to copyright regulations) in an arcade match where the ball can't go off the pitch and you can get power-ups which enable you to move swiftly or freeze the opposition.

There are several problems, the most important being control of your players. The game often won't give you a player you can control on-screen, and the others don't move in any sensible way.

Secondly, taking a throw-in, corner or free kick is something of a lottery since you can't see enough of the pitch in Low Res mode to see the other players. Even if you can, the game doesn't switch control to the



From the deadly seriousness of a World Cup competition to the silliness of cartoon characters.

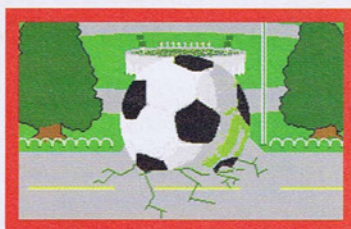
player you've passed the ball to quickly enough to stop the other team from getting to it first most of the time.

Talking of Low Res mode, we've tried the game on a variety of machines and it's the only way to play it. All our experiments on a range of graphics cards failed (very disappointing for me since I don't have an AGA machine), and playing in a higher resolution AGA mode makes the game very sluggish and prone to graphical glitches.

This may be preferable, however, to the flick screen method of scrolling around the pitch that the Low Res version suffers from.

So let's say you just play in Low Res on an A1200. What can you expect? Well, forget about offside as I've said before. Forget about proper names for the footballers too, as the authors would be breaking Electronic Arts' agreement with FIFA if they used real names, although you're welcome to edit team and player names yourself.

Two player games are still a lot of fun, and while the commentary gets grating



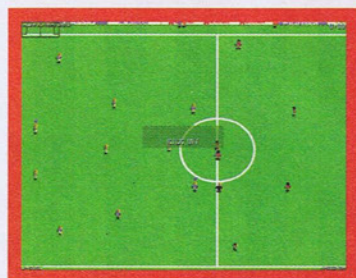
There are a whole bunch of different intros and you get a random one each time, which is nice.



Hurricane Studios are a new team with some nice ideas for a football game. Let's hope they keep it up.

Two player games are still a lot of fun, and while the commentary gets grating fairly swiftly, it's a nice touch...

fairly swiftly, it's a nice touch, as are the crowd chants that you can have instead. *Eat the Whistle* is still a good game, although those used to the polygon trickery of *ISS Pro* on the PlayStation, or even the last versions of *Sensi* for the Amiga, might feel let down by this game's lacklustre performance against those other teams, Brian.



The 640x480 performance of *Eat the Whistle* is pretty poor. Best stick to 320x256.

SUPPLIED BY: Epic Marketing (0500) 131486
DEVELOPED BY: Hurricane Software
REQUIRES: CD (floppy version coming soon)
PRICE: £14.99

Pros and Cons

- ☒ Still great fun with two players.
- ☒ Nice extra touches.
- ☐ Graphics card support doesn't work.
- ☐ Not enough control over players.

OVERALL VERDICT:
A good start, but we'd like to see the next, improved version.

83%

OloFight

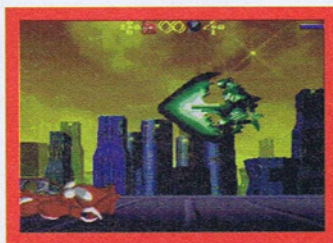
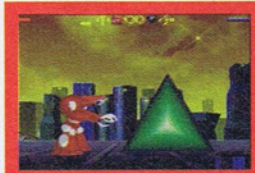


When fighting the CPU, your character will have the minimum possible stats.

Nick Veitch has a fight on his hands with Ologram's new beat-em up.

The Amiga platform has had a rather chequered history when it comes to beat-em-ups. There was the terribly slow *Street Fighter*, with appalling samples and frame rates that struggled to get half way to ten. Then there was the mega-hyped *Rise of the Robots*, with its over-rendered combatants, huge promotional spend and as much gameplay as filling in a tax return. And then there was the surprisingly good *Capital Punishment* from ClickBOOM, which showed that it was possible to bring the genre to the Amiga and actually make an original, beautiful game.

At the end of the day though, the gameplay should have come **first and foremost**, and that's what's sadly lacking...



Above and below: some of the many special moves in action.

I'm sure Ologram are rather hoping that *OloFight* will be a next generation beat-em-up to capture the imagination of a gaming public. They're likely to be disappointed.

Choosing your fighter from a selection of eight (though more become available if you play through the story mode on the harder levels), you can then embark on the usual fare of games in this genre – a story mode, a survival mode (where you have to stay alive for as long as possible), a time attack (simply beat your opponent as fast as possible), a single battle or a versus battle. And then it's time to punch noses.

It's difficult to discuss the actual game mechanics of *OloFight* without the words unfeasible, absurd, ridiculous and laughable being bandied about. The collision detection is woeful and you often find yourself in the ridiculous

position of being too close to someone to hit them. Even so, when someone is coming in with a decent flying kick and it's countered by their opponent punching their incoming foot, something is surely wrong.

Above all else, the problem with this game is the special moves. Holding down the fire button for less than a second will give you the opportunity to unleash a powerful, colourful and devastating blow.

Each of the characters has a base of four moves. You can fill each of your four "slots" with the same move or with any combination. Some of the moves are defensive and some are aggressive, but they will all cause damage to your opponent if he gets in their way.

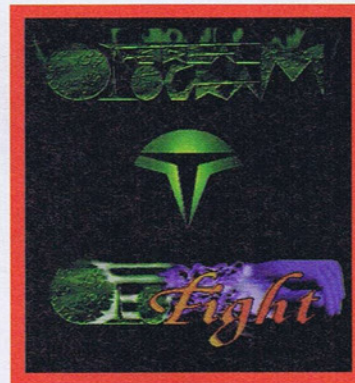
But this is the problem – they're too easy to perform and they're too deadly. If you get caught in the wrong place, two special moves can kill. There's no sequence of difficult joystick gymnastics to master before you can use them either; you just hold down the joystick button and point the joystick in one of four directions which represent your weapon "slots".

Another problem is that when you're playing against the computer you'll find your opponent can usually perform one of his moves nine times, whereas you're limited to one. This tends to make combat slightly uneven.

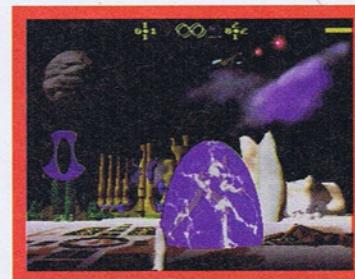
Not that this makes it impossible to win. On the contrary, after a few days of getting kicked to hell, Mark refined the age old tactic of simply jiggling backwards and forwards and punching the other bloke whenever he dropped his guard. It might work, but it's as dull as a two-watt bulb.

I'm sure a lot of work has gone into the multilayer parallax-scrolling animated backdrops. I'm sure a lot of work went into the animations of the characters, the rendered intro sequence and even the packaging.

At the end of the day though, the gameplay should have come first and foremost, and that's what's sadly lacking in *OloFight*. It may have some merits as a two player game, but frankly, we've had Reader Games that have been better.



The scary skeleton character has been at the Ready Brek.



The odds are in favour of the CPU but judicious jabbing can win the day.

DEVELOPER: Real Ologram
<http://www.ologram.com>

PRICE: TBC

REQUIREMENTS: AGA, 10Mb hard disk space, '020 or better

Pros and Cons

- ☒ The animation and backdrops are okay.
- ☐ Special weapons are too powerful...
- ☐ ...and the computer has too many.
- ☐ The collision detection sucks.

OVERALL VERDICT:
I really can't see this having any lasting appeal for anyone.

34%

Quake CDs: Singled Out!

It may not be often that three strange men give you CDs at a show, but it happens to **Ben Vost** all the time.

So there I was, in Köln, last weekend, and I spotted these three guys that I've only met via email, or on the wrong end of a nailgun. They were Abjure Actinic, Reaper Robert and Boomstick Banshee, better known to Internet Quake players as Team Go!Go!

I thought they'd have been easier to recognise since the idea had been for them to dye their hair or get it chopped into the Quake Q logo, but it seems that although they may be Quake demons, in real life they're a bit more timid. They did manage to find one person at the show brave enough to undergo this tonsorial surgery and they gave him a prize of a copy each of the CDs I'm reviewing. Which reminds me...

The two CDs are collections of single player and Deathmatch levels, accompanied by extra maps, bots and other miscellaneous add-on programs to make your Quaking experience more fun. They've been neatly collected together from Internet sources and bunged onto two CDs for your delectation.

The first CD, *Singled Out!*, is a collection of single player levels and conversions with a bunch of add-ons, like the famous Cujo bot, the chase camera (two of these actually) and others. The second CD just has a bunch of Deathmatch levels and additional maps for you to use in multiplayer games.

The CDs aren't produced for profit - they're mainly gathered together for the ease of the Go!Go! three and to give a rich source of new levels for their matches. As such, although they look nicely presented and even have pretty good English documentation, the files are all on the CDs as zip archives and there's no



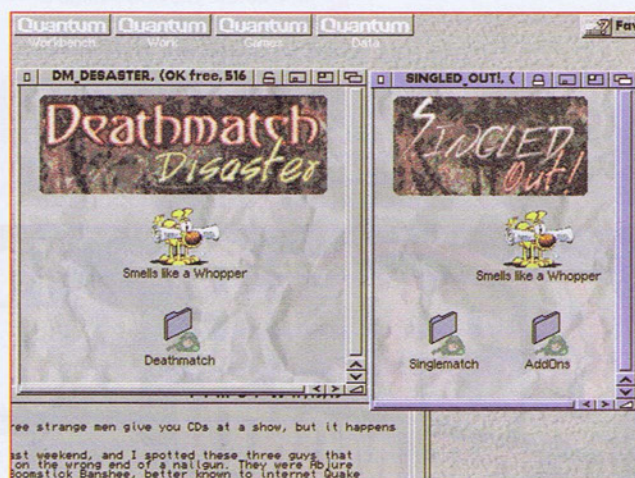
Squawk, squawk, bang, bang. You're @*£%!ng dead. Go on then, name that film.

easy way to recover and install them, unlike the *Time of Reckoning* CD from Weird Science.

Also noticeable by its absence is Team Go!Go!'s *Quake Manager* program, which really should have had pride of place on the CD as it's designed to make third party add-ons for Quake easier to use.

Unfortunately, the guys hadn't quite finished the current version before the show and they still

Deathmatch Disaster



Luvverly icons introduce nice CDs. It's not always true, but it works for me in this case.

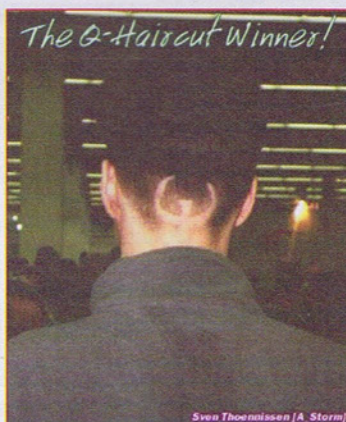
Also noticeable by its absence is **Team Go!Go!'s Quake Manager** program, which really should have had pride of place...

needed to make the ISOs, etc. before heading for Köln.

In any case, you still get about 1,000 Quake levels on each CD, which should be enough to keep you going until ClickBOOM decide to release a PPC version. Although they haven't been unzipped like the levels on our CDs, you certainly get a lot more of them in one place this way. You may also find these CDs a little hard to

get hold of if you aren't on the net, but I'm sure that if you are, and you play Quake, you already know of the Team Go!Go! website.

Me with two of the Go!Go! boys, Reaper Robert and Boomstick Banshee, and the only person either daft or committed enough to show their love for Quake at the show.



DEVELOPER: Team Go!Go!
<http://www.goigoi.com>

PRICE: ETBA

REQUIRES: Quake

Pros and Cons

- + Loads of levels on each CD.
- + Very cheap.
- Still all zipped.
- Hard to get.

OVERALL VERDICT:
If you're a wired Quake fan, you shouldn't miss out on these.

80%

A good mix of fighting, fighting and, erm, fighting, as **Mark Wheatley** pulls no punches with the...

Reader Games

AFCD35:-ReaderStuff-/ReaderGames-

ON THIS

MONTH'S CD

The New Year is here, and the time before the new Amiga is launched is getting closer and closer. Of course, when it launches it would be nice if there was a selection of awesome games that could grab the PC-buying public by the scruff of the neck and show them what they've been missing out on.

And who knows, the writers of the Reader Games today could be those professional coders of tomorrow.

Their efforts in here will obviously lack the pumping stereo soundtrack and stunning visuals that those games will undoubtedly have, but it's the gameplay that's really essential. We can forgive drab

games, although we might mercilessly laugh at them first, as long as you can't put them down until you've got blisters on your fire button fingers. To encourage you even more, we offer a crisp £50 to the best game each month, so what are you waiting for? Get coding...

Game OF THE MONTH £50 WINNER! The Duellists & Tanked Up

Have you seen that advert with the obnoxious American bloke shouting at his grandmother, dog and whoever else while he thrashes them at some Nintendo snowboarding game? Well, that's the fun of two player games – laughing at your opponent's mistakes, revelling in their defeat and getting all surly and vengeful if they happen to win.

It's even better if you can blast them to pieces with high-powered weapons, rather than just watch them fall over in the snow...

The Duellists is basically a new version of *Gravity Wars*; the caverns and gravity-hindered flying of *Thrust*, but with fighting. There are loads of different caverns for you to battle it out in, shown on the handy map at the bottom of the screen. There are various stashes of extra ammunition and armour floating around, but they're not shown on the map – it shows your opponent and that's all you really need to see, so go and get 'em.

You get a choice of three weapons, with homing missiles, bullets and more powerful missiles. From the options screen, you can also decide whether collisions with the rocks damage your ships, and you'll often find that your panicked evasion of homing missiles still ends in destruction as you fly headlong into a rocky outcrop.

The Duellists has that 'just one more game' addictive quality which a lot of two player games have. You lose four in a row to the computer and you throw your joystick down in frustration and have a cup of tea instead. Lose to someone you know and it becomes a matter of life and death, and the best out of three becomes the best out of five, twenty five or a hundred and five, until you've proved you can actually win.

Having said all that, it would be quite nice to be able to play a one player game of *The Duellists* – maybe you're lacking on friends or just need to polish up your skills for the next post-pub bout. Some more power ups around the levels would be good too, as they lead to mad races across the level to see who can get to them first.

READER WARRANT

When you're sending in your submissions make sure you also give us:

1. An address where you can be contacted.
2. Details of the language used to create the game.
3. A recent photo of yourself.

The address to send your stuff into is:

Reader Games • Amiga Format • 30 Monmouth Street • Bath • BA1 2BW

Everything included on the AFCD must have a reader warrant with it. Just cut it out off this page, sign it and send it in to us with your game and a recent photograph of yourself. A last reminder: if you don't include this warrant we simply won't be able to put your game on the CD – that means you won't be able to have it judged by other readers.

In respect of all material which forms my reader contribution to Future Publishing's *Amiga Format*, I hereby warrant that:-

1. The material is original and does not infringe any other material or rights;
2. The material does not contain any material which is defamatory, obscene or indecent and is exempt from classification under the Video Recordings Act 1984;
3. That there are no legal claims against the material provided;
4. That I have full power and authority to provide this material to Future Publishing.

Signature: _____

Cunning tactics (right), technically known as 'hiding'. The blue player (below) is about to pick up a much needed ammunition boost.



Get Some

Following in the steps of *Revenge AGA*, the aim of *Get Some* is really simple: kill everything that moves. You control a helicopter at the top of the screen which can move forwards or backwards and which can fire a variety of weapons at the little soldiers attempting to run from the left hand side of the screen to the right hand side.

With shotguns, missiles and other heavy weaponry, it isn't long before the screen is littered with their little broken bodies, piling up in a seeping pool of blood.

It's remarkably satisfying, despite its simplicity. There are a couple of nice touches, such as being able to drop milk bottles at the enemy, accompanied by a nice bottle-breaking sample, but it's still not quite as addictive as *Revenge*.

Perhaps it's because you expect more: you want the helicopter's rotors to spin, you want the screen to scroll and you want more sense of having a mission, rather than just

holding down the fire button and waiting for the soldiers to run into your wall of bullets. A bit of variation in the soldiers would be good too – how about some tanks or jeeps, or some of your troops to rescue?

It's possible that this would detract from the simplicity of just bombing things, but as it stands, *Get Some* really needs to get some more of those little touches which will make you keep coming back to it. As it is, you'll play it for a while and then forget it. *Get Some 2* should be good though...



When you're bored of guns, you can start dropping chart-toppers and rainforest campaigner Sting onto the enemy hordes. Hee hee!



AUTHOR: A. Cole
LANGUAGE: Blitz 2.1

VERDICT: If you want a short burst of mindless violence, this is the one for you. Just don't expect to get hooked.



The revamped *Tanked Up* may be easier for novices but it still provides a very stiff challenge.

However, as it stands, *The Duellists* is a top notch slice of addictive arcade action.

As an added bonus, Robert also sent us the new, improved *Tanked Up* (Reader Games, AF116). It now has adjustable time limits to give you a chance of completing your objectives (which still mainly involve either escape or destroying a certain number of opponents) and more game maps, which Robert says are more suitable for rookies.

It'll still take beginners a while to get to grips with, though. Manoeuvring through the doorways can often be tricky, and it'll take a while to sort out your tactics – rush headlong into a battle and you'll be turned into a smoking pile of rubble with remarkable ease.

These two top games make Robert the undisputed winner of Reader Games this month. Well done!

AUTHOR: Robert Strickland
LANGUAGE: Blitz Basic 2
VERDICT: Great two player blasting fun that you'll be booting up for a long time to come.

Snow 'Em All

Another two player game here, and very seasonal it is too, right down to the little animated intro with Christmas music. The concept of the game is simple – load up on snowballs at your igloo, run to your opponent and let him have it!

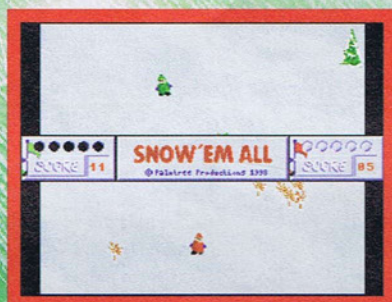
It's perhaps a little too simple, though. Sure, the little chaps you control waddle about amusingly and there's an ice hole you can fall down, but that's it. There's a penguin and a polar bear, but they're just background objects and don't actually do anything.

The game works fine but it's just a little dull, even playing against another person. You just reload, run up to the other chap and then you both press fire as often as possible, hope to hit, then run back to your base to reload. However, it is quite amusing when one character runs away, the other little fella running behind, lobbing snowballs...

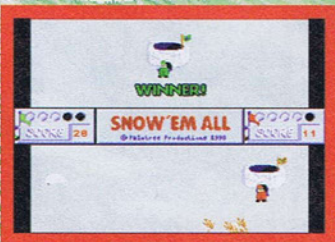
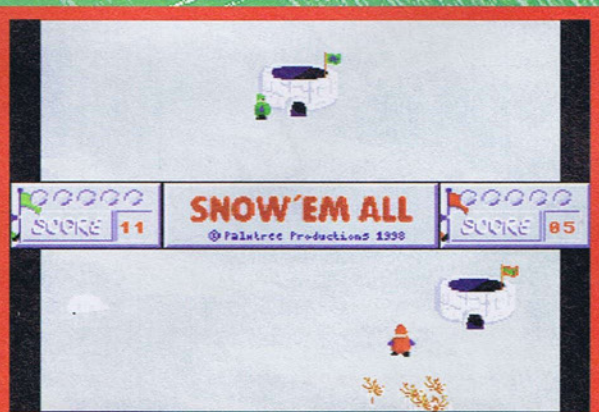
Some more hazards scattered around the levels would be good, levels with the igloos in different places or anything to vary the gameplay a bit more. If the penguin

and polar bear could bobble around and be a danger to your character or igloo it would greatly increase the gameplay (although penguins and polar bears are really found at opposite poles, fact fans).

Perhaps some snowballs with different qualities – explosive snowballs? Rapid fire snowballs? The core of the game is there and it's fine, it just needs the little extras now to turn it from a game that works to a game that's really fun to play.



Split-screen snowballing action – the green player needs to head back to his igloo to reload.



Even if your opponent has a huge lead, the two player competitive element keeps you playing.

AUTHOR: Jani Parviainen
LANGUAGE: Amos Pro

VERDICT: Fun for a short while, but it needs some added extras to make it a long-term addition to your software collection.

GameBusters

The Speris Legacy

H.Y. Lam takes you by the hand and leads you safely through this puzzling adventure game...

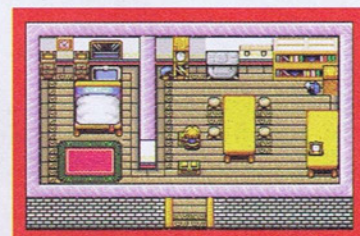
Here is a guide for those stuck playing *The Speris Legacy*, revision 1.1. The problem is that the clues can be very cryptic and you end up wandering around doing

nothing and it gets annoying. You also have to solve certain problems in sequence and you need to talk to some characters before new objects become available.

The key to solving problems is to find out what other characters want and what they have. There are also secret rooms and you have to find them if you are to progress.



Still wandering around Speris, wondering what you should be doing?



Many of the puzzles are pretty cryptic and confusing if you don't know the solutions.

SHARMA CITY Problems – Tame

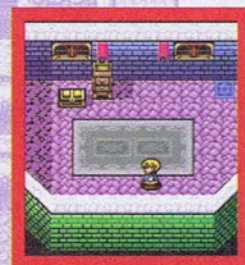
OBJECTS	WHERE/FROM WHO	HOW TO GET IT
Key (Palace)	Side house	-
Sword	Under Palace (right side)	Use key, push statue, step on teleport pad
Shield	Gardens behind south wall	Use sword to remove wall, find teleport pads, activate switch to remove spike barrier, repeat route
Potion	West from Palace	Return home before proceeding to Sandoon Hideout

GILLARDS RHINE Problems – Complicated

CHARACTER	WHERE	TASKS BEFORE MEETING THEM
Rupert	Near village entrance	Give security pass back after you've used it - 10 Gems reward
Green troll	Bridge	-
Phillis	Shop	Defeat troll, Use key
Elsrika	East from church	-
Sick bloke	SE from information building	-
Gardic	South from church	-
Minsk 'da Cat	SW from Gardic	Give pipe to Gardic (give it a cream bowl and it'll give you a hint)
Jobe	Church	Give him seed pod - 200 Gem reward
Joshua	Information building	-
Jack	Pool of Dreams	Talk to Elsrika when she's in bed (after dinner)
Knight	East gate	Talk to Jack

(Not all characters are listed as some don't need anything or have anything)

OBJECTS	WHERE/FROM WHO	HOW TO GET IT
Dagger	Rupert	Talk to green troll, talk to Rupert, give 10 Gems
Key (shop)	Green Troll	Kill it with daggers
Hyperboots	Phillis	Give 10 Gems
Study mallet	Phillis	Give 25 Gems (stomps yellow blocks)
Drill	Hut west from church	Activate left switch, then right, deactivate left switch, then right
Tinderbox	Elsrika's house	Talk to Elsrika, enter house (tinder box enables you to use your bombs - it destroys stone blocks)
Strength potion	SE from Elsrika's house	Destroy round blocks where three chests are located



Medicine	Far east from shop	Push block using potion, teleport
Jewel	Sick bloke	Treat bloke with medicine potion
Pipe	Phillis	Exchange jewel
Gloves	Phillis	Give pipe to Gardic, talk to Jobe, talk to Phillis, give 20 Gems
Seed pod	Far east from maze	Access maze, head east, pick pod with gloves
Ring	Monkey in bar	Give 50 Gems
Ice mallet	Elsrika's house	Give Elsrika's jewel, leave, come back when prompted, enter house
Security pass	Rupert	Talk to Joshua, talk to Rupert, run into Rupert with Hyperboots, pick up pass
Book of riddles	Information building	Give Joshua the pass
Key (east gate)	Knight	Talk to Jack, talk to Knight, kill Knight
Valuable Gem	Phillis	Defeat Knight, give 40 Gems
Missing page 1	South fields	Destroy barrels (must have Shatter Sword)
Missing page 2	NW from bridge	Destroy barrels
Missing page 3	East from shop	Destroy barrels
Metal cutter	Taenith	Retrieve Taenith (baby) from Outlaw's Caves, give Taenith to Rupert, talk to Taenith

OUTLAW'S CAVES Problems – Tame

SECTION 1

Drill stone blocks, throw dagger at switch to activate bridge, push switch to fill pool in Section 2, give complete riddle book to Gorlox (statue) to be teleported to the cave exit.

OBJECTS

Shatter Sword	Secret room
Bowl of cream	North of switch
Cloak	Secret room east from exit

HOW TO GET IT

Right side corner of the rock face, near the switch that the dagger was thrown at
Bomb stone block
Punch hole in wall with special glove

SECTION 2 (entrance hidden on Section 1 SE cliff, non visible side)

Walk into the pool and a cloud appears above you. With the cloud, extinguish flames in the pit and head through the underpass. Use teleport pad, and retrieve Taenith baby from Star Island.

COW TREE ISLAND Problems – Average

Note: if you are splatted by any cow, you cannot fight – take a dip in the Pool of Purity near the inn. Use the golden key to enter the Serenity Tree to exit the level.

CHARACTER

Tomski	Shop NE from entrance
Enya	Inn NE from graveyard
Dickenson	Bridge far west from large inn
O'gert	East from Serenity Tree
Minsk 'da Cat	Island
Wonder (fish)	SE beach

TASKS BEFORE MEETING THEM

–
–
Use magical tool on wand icon to form a bridge
Give him the joke book
Use suit to enter Venus lake, go to the centre and be teleported to the island (give it 10 Gems for a hint)
Talk to Dickenson

(Not all characters are listed as some don't need anything or have anything)

OBJECTS

Spade	Tomski
Love letter	Back of the shop
Magical tool	Graveyard
Safe suit	Behind the guard
Special glove	Island

HOW TO GET IT

Give 10 Gems
Pass Tomski when he's reading the paper
Dig
Get splatted by the cow, talk to guard
Use suit to enter Venus lake, go to the centre and be teleported to the island. Stomp yellow blocks and hack the flowers
Active four switches in four huts (there's a stone that needs moving with the Strength potion), stomp yellow blocks
Talk to Dickenson, talk to Wonder (fish), talk to Dickenson. Leave, come back when prompted and talk to Dickenson. Enter Dickenson's hut, smash glass with the ice mallet
Talk to both Tomski and Enya. Give Enya the letter, talk to both again until Enya thanks you. Use the cloak and listen to the conversation between Enya and Sheila

TUNNEL NETWORKS Problems – Tame

Deactivate the time bomb. Each gate can be opened with a shaped key. Destroy force field by pushing a baddie into it, activate teleport pad by pressing all switches, give both guards sleeping pills while they're sleeping (they change shifts when you leave the area). Exit area.

CHARACTER

B4E (yellow robot)	East from Mirl building
Minsk 'da Cat	Mirl building
Daythan	Secret entrance right of B4E

TASKS BEFORE MEETING THEM

Give the time bomb to it
Give it 10 Gems for a hint
Punch wall with special gloves

(Not all characters are listed as some don't need anything or have anything)

OBJECTS

Star key	Secret room
Diamond key	South from underpass

HOW TO GET IT

Enter room at right side of underpass
Bomb stone block



Continued overleaf →

Circle key	Mirl building	-
Triangle key	South from Mirl building	-
Time bomb	Room left from B4E	Bomb stone block
Miracle growth seed	Daythan	Release him with metal cutter
Sleeping pills	West of Mirl building	Activate teleport pad by pressing all switches, teleport, open gate with Star key

MAKIAH, GARDEN OF O'TALIA Problems – Average

Use green key to enter large green house. Press switch to activate teleport pad NW from monastery and use the teleport pad to exit.

CHARACTER	WHERE	TASKS BEFORE MEETING THEM
Minsk 'da Cat	House west from entrance	Give it 10 Gems for a hint
Tanyo	North from entrance	Grow root with miracle seed growth
Folliock	Large green house	-
Beevis (Beaver)	Dam	-
Monkian	West from dam	-
Brother Yam	Monastery	-

OBJECTS	WHERE/FROM WHO	HOW TO GET IT
Green cloth	Folliock	It's next to him when he's sleeping
Red cloth	Rose bed north from dam	Dig
Blue cloth	Tanyo	Check the washing line after you leave her
Floating spell	Monkian	Use cloak, trade cloak
Puppy	Water well	Place clothes on nearby stones, according to initials
Caramel bowl	Monastery	Use floating spell on Brother Yam, talk to Brother Yam, leave and come back
Whetstone	Tanyo	Give caramel bowl to Beevis, talk to Tanyo
Green key	Folliock	Give whetstone to Folliock. Leave him and come back (the key is visible after the grass is cut)



SANDOON HIDEOUT Problems – Tame

Keep heading NW until you find an open entrance, find a sign to read (O'gert will interpret this) and kill Elgmoore to obtain the key. Open the gate with the key and exit.

Note: if you're poisoned, use the potion you obtained from Sharma City.

SPIRAL CASTLE Problems – Tame

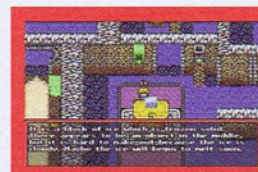
Find the secret room, get the guard drunk and find all 10 musical notes – search everywhere as entrances are hidden. Wake up the waiter to gain access to the dining room with music notes. Bomb the cracked wall to access the kitchen, poison the meal and access the guest rooms on the east side of the castle (all entrances to this area are hidden). Enter the room with the meal outside the entrance, talk to Gallus, kill the boss and you've finished!

Note – if you tell Spike you haven't got enough money, you'll be locked up. He'll let you go if you release the puppy – he can't stand them. If you've explored the whole castle and you're still short on musical notes, leave the castle, return and then search all the chests you've opened before.

OBJECTS	WHERE/FROM WHO	HOW TO GET IT
Alcohol	Secret room	Push cupboard using the strength potion and bomb the cracked wall
10 musical notes	All around the castle	Search each chest in the castle
Poison	NE section of castle	Find the rat blocking the entrance to the room. Place the puppy nearby to scare the rat



It's important to talk, often at great length, to everyone you meet.



Hmmm. A block of ice. I'm sure there must be some way to melt it.



Even if you have bombs, you'll need the tinderbox to be able to use them.



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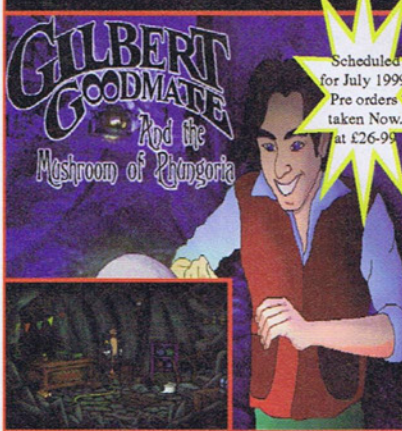
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Graphics shown and features detailed may change in the final versions.

PD Select

Dave Cusick trawls through another PD and Shareware mailbag in search of some more choice catches.

PhotoAlbum 6

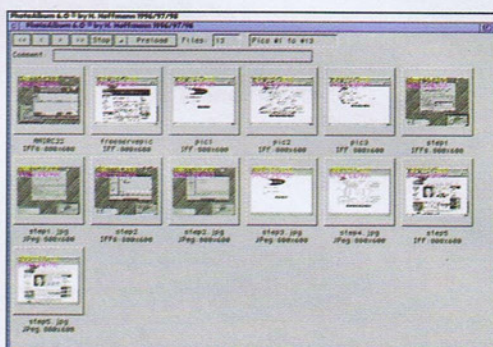
BY: Helmut Hoffman

WARE: Share

AVAILABLE FROM: Aminet

PhotoAlbum is an image management program which will run on any Workbench 3.0 Amiga. However, although it will run quite happily under AGA, it's really targeted at users of graphics cards because it is they who will most

PhotoAlbum 6 could be just what you've been looking for if you have to deal with a large number of images.



appreciate its powerful range of features.

The first thing that strikes you about PhotoAlbum is its speed – it's nippy, probably thanks to the fact that it's written almost exclusively in assembly language, rather than C.

The program can load and save images in more than twenty different file formats, from common

TWIDDLER'S DISK 10

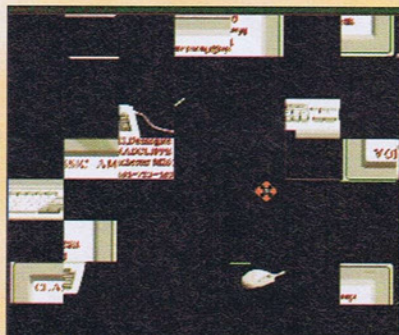
This is an interesting collection of utilities, designed for those who like to twiddle with their systems. Doesn't this include practically all Amiga owners?

For your delectation and delight, you'll find *DiskSafe*, a tiny dos.library patch which is designed to protect disks from invalidation by an accidental reset. Basically, it prevents your machine from resetting before all disk activity has finished.

EZ Backup 2.0 is a Freeware backup utility which has been designed to be totally OS legal. It's extremely easy to use, and although it basically just copies or LHA archives files from one drive onto another, it does greatly simplify the task of backing up large or removable drives. It also doesn't fall into the trap of assuming that you could only ever want to backup your drives to floppy, as so many PD and Shareware backup utilities mystifyingly do.

Onyxbase is an easy to use database program which contains some quite nice features. It works well as a glorified address book, and you can use

AGA Puzzle:
Before, a jumbled mess of spare computer parts.
After, the fully restored Amiga.



it to send your browser to a particular URL or launch your email client so you can compose a letter to a friend. It's actually a rather neat little program, and it's certainly worth taking a look at if you're the sort of person who tends to scribble your friends' telephone numbers down on scraps of paper.

Don'tShowBorder removes the borders from the edges of icons, while *BootpicFix* was created to get rid of the irritating off-centre placement of any pictures you choose to display during boot-up.

Sheep creates a cute, little, badly-animated sheep on your Workbench screen. This hobbles around on the top of windows, and can actually shove around any windows which get in its way. You can run the program several times and have loads of the little critters all over your screen. *Sheep* is a totally useless program, but I quite like it anyway.

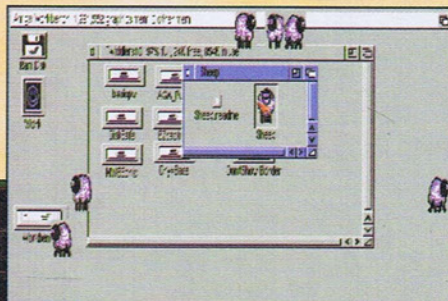
AGA Puzzle looks like some sort of sliding

picture brain-bender, although it didn't want to run properly on my machine, despite my concerted efforts.

There's also a simple password protection program, a collection of mouse pointers, a completely useless Sonic the Hedgehog icon and an equally pointless mini demo called *Blue* which assaults your eardrums with some truly dire so-called music.

Indeed, this is possibly the worst racket to which I've had the misfortune to be subjected since my Atari ST days in the late '80s. On the ST, nearly all games sounded this bad. Just thinking about it makes me shiver.

There are enough interesting inclusions on this disk to justify its purchase, and I strongly suspect that both *Onyxbase* and *Sheep* will be knocking around on my hard drive for some time to come.



Sheep, lots of them. One, two, three... must stay awake... four, fiveZZZZZZZZ...

BY: Various

WARE: Various

PD LIBRARY: Classic Amiga Software

NO OF DISKS: 1

PRICE: £1 plus 75p P&P



Selection of the month

GALAGA WARS

Hurrah! It's yet another remake of a massive smash from the early days of the arcades, the days when crudely drawn alien spacecraft featured in most games, rather than today's lavishly rendered, polygon-based ninja death monkeys.

Ah, those were the days. Ridiculously playable games proliferated, as they never have since and doubtless never again will. Furthermore, the gaming styles developed then served not only to entertain millions of impressionable youngsters at the time, they also provided the impetus and inspiration for millions of would-be programmers to try their hand at producing their very own PD or Shareware clones of the all-time greats.

Twenty years or so after arcades around the world were filled with the sound of teenagers pumping coins into *Space Invaders* machines, we have yet another shoot-the-descending-alien Amiga PD game.

There is a storyline behind *Galaga Wars*, something about an enormous planetoid

heading straight for the main planet in your star system, the imaginatively named New Port. You're the hapless sucker who is sent to investigate, and on nearing the planetoid you come under attack from wave after wave of small alien craft.

But you don't need to know all these details. After all, you've played this type of game a thousand times before.

Galaga Wars may be simplistic in nature and yet another attempt at a well-worn genre of game, but it's enjoyable and that's what counts. It's also fast and frenetic: as you progress through the game, different types of alien craft attack you, flying at ever increasing speeds and launching ever more deadly salvos of missiles in your general direction.

The graphics are slick and smooth and although the sprites have a rather dated appearance, this simply adds to the timeless appeal of the game.

The title screens feature some weird, eerie sound effects which lend the game a really



A game by Michael Rosskopf
September 1998

Insert a COIN please!

Press FIRE to launch the mission,
ESC to quit
or wait for the HIGHECORE!

atmospheric, alien quality. The in-game explosions and alien noises could have been a trifle beefier, but they aren't bad, and at least there's no tuneless "music" to put up with, as there so often is.

Even though it scores a big fat zero for originality, I rather like *Galaga Wars*. If you're fond of the occasional stroll down memory lane, get hold of a copy now.

Score: 2160 Shield: 5 / 20



Back to basics here then. Left a bit, right a bit, shoot. Repeat.

BY: Michael Rosskopf

WARE: Free

PD LIBRARY: Classic Amiga Software

NO OF DISKS: 1

PRICE: £1 plus 75p P&P

Score: 7580 Shield: 20 / 20



Score: 1220 Shield: 20 / 20



ones, such as IFF-ILBM, Jpeg, TIF, BMP and EPS, to less frequently supported ones, such as PhotoCD, QRT and Targa. Further formats are supported through the use of DataTypes.

Beneath thumbnail representations of images you can display things like the filename, FileType, file size and the image dimensions.

As well as functioning as an image conversion utility, *PhotoAlbum* also enables you to sort your pictures and transfer them, either directly or through the use of ARexx scripts, to programs including *PPaint*, *Photogenics* and *ImageFX*.

The full version of the program allows you to organise and view images in up to 256 colours on AGA systems, or in up to 16 million colours on machines equipped with a graphics card. The freely distributable evaluation version of the software only displays greyscale versions of pictures though, so if you like what you see but would rather it was all in colour, you're obliged to send US\$35 or 50DM to the author.

For your money, you'll also get a

complete version of *Cybershow Professional*, the author's universal picture viewing software.

I was very impressed with *PhotoAlbum* on the whole, and I have to say that despite its apparently steep registration fee, it looks like a useful program for anyone who has to deal with large quantities of images.

I did experience occasional lock-ups when accessing certain menu functions but still, not bad at all.

Backclock

BY: David Barbion

WARE: Free

AVAILABLE FROM: Aminet

One thing I hate is people who are late. There's nothing more irritating than arranging to meet someone at a certain time, then making the effort to get there on time yourself – something which often involves having to hurry through other tasks – only to find that you're left standing around waiting. It makes me really cross, I can tell you.

If punctuality isn't your forte then the chances are you have friends who feel exactly the same way as I do and are consistently riled when you turn up half an hour late, even if it is just for a quiet evening in the pub. Trust me, they won't be impressed when you tell them that you lost track of time while playing around with your Workbench settings.

Of course, there's a simple solution to all of this. All you need is a program which can place a massive clock face on your Workbench screen, so you can see exactly what time it is while you're tinkering with your *Neulcons* or rearranging your *ToolManager* docs.

Backclock places a resizable analogue clock face directly onto your Workbench, and comes with a little Preference program which allows you to tweak its appearance a little. The program requires version 2.0 of *notifyintuition.library*, which doesn't actually come in the installation archive so you may have to scour Aminet for that in order to get the program

Continued overleaf →

← running properly. Yes, you'll still have to actually muster the energy to drag yourself away from the screen when the time for that important appointment comes around, but at least you'll be able to play around with your Amiga until the last minute, safe in the knowledge that you won't end up running late.



StrICQ

BY: Douglas F McLaughlin

WARE: Free

AVAILABLE FROM: The AmigaICQ

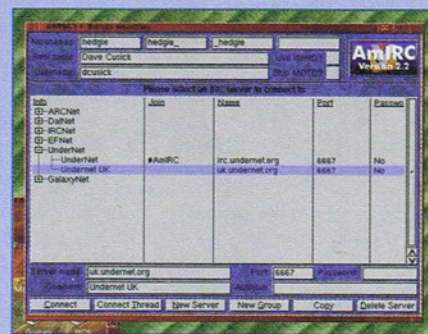
homepage at <http://surf.to/amigaicq/>

Those of you who read the Amiga.net column regularly will remember that several months ago we took a look at efforts to produce

ONLINE UPDATE

I only mentioned the release of version 2.1 of Olli Wagner's superb Internet Relay Chat client, *AmIRC*, in the last issue and yet already it's been superseded. Boasting a series of bug fixes and minor improvements, version 2.2 has been extremely well received by the Amiga IRC community.

Among the most notable features added recently are a single window mode, queuing of non-urgent stuff to reduce the likelihood of you being kicked for flooding an IRC channel, an automatic updating function and a set of new plug in API calls which will be of interest to programmers. Version 2.2 is available free to registered users of previous versions, or for around £20 to new users, via the Vaporware website or licensed sellers such as Active Software.



Classier chatting with the latest version of AmIRC.

A whacking great clock on your Workbench, ideal for perfectly timing a boiled egg.

working versions of Mirabilis' *ICQ* software on the Amiga. *ICQ* ("I Seek You") is an online contact list which highlights when your friends are using the net and allows you to communicate directly with them.

Originally it looked as though a plan to independently produce an official version of the software might come to fruition, but eventually it became evident that Mirabilis weren't going to let that happen. Undeterred, various enterprising Amiga programmers set about producing their own unofficial *ICQ* clients. *StrICQ* has become the most popular of these,

largely thanks to the fact that it's quite clearly ahead of the competition.

Using *ICQ* requires you to register with Mirabilis, something which early Amiga ports didn't allow you to do directly. *StrICQ* lets you do this – indeed, it lets you do many of the things possible with the PC and Mac versions of the software.

StrICQ has been evolving quickly and this release is the first Amiga *ICQ* port to allow users to communicate using real-time chat windows. As yet, this part of the program is a little buggy, but it's nice to have the option of using this mode.

MINI TILES

When this game first appeared about a year ago, it somehow seemed to slip through the PD Select net. Since the PD sack this month wasn't as bulging as it might have been, now seems to be a good time to take a look at it.

Mini Tiles is a reasonably absorbing mouse-controlled puzzle game. It features some nice, colourful graphics, and the sound effects aren't bad either – a round of applause here, an interesting popping noise there. Some of the music is a little peculiar, and the options screen features a bizarre rendition of Kaoma's *Lambada*, but you can't have everything.

The game takes place on a single screen on which several stacks of cards are arranged. The objective is to clear the screen of cards by matching pairs together. However, you can't move a card from the top of a stack which is surrounded by taller stacks.

Every move you make is up against a strict time limit. If time expires before you've removed a pair of cards, either because you couldn't find a pair fast enough or because you'd backed yourself into such a corner that a pair didn't actually exist, then it's Game Over.

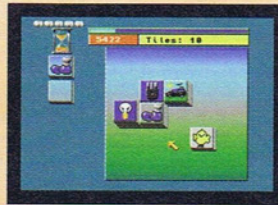
A blue arrow on a black tile and a blue arrow on a black tile – that's snap.



I'm not sure whether there are occasions when a level can become impossible to finish purely by bad luck, or whether I'm just so bad at this game that I kept playing myself into no-win situations.

This, at least, was how I deduced that *Mini Tiles* was supposed to be played. However, I may be totally wrong as I had to work it all out for myself. Despite years of following Serie A football on Channel 4, my command of the Italian language still wasn't up to translating the brief ReadMe document which accompanies the program.

What I do know for sure is that it's not easy to finish a level. Since there are six different levels, each with



The animated title screen (above left) and the high scores table (above).

varying numbers of cards stacked in different ways, *Mini Tiles* should provide you with a fair bit of entertainment.



Help! So many tiles, so little time...

BY: Alberto Grecchi

WARE: Free

PD LIBRARY: Classic Amiga Software

NUMBER OF DISKS: 1

PRICE: £1 plus 75p P&P

EXPLOSIVE CHAOS

A game of *Bomberman* or one of its many clones is without a doubt amongst the most enjoyable things a room full of fully clothed people can be involved in. I speak from experience; believe me, I know. I've been involved in a few late-night alcohol-fuelled *Bomberman* sessions in my time. Hey, I like to live life on the edge.

Unfortunately, comparing a game of multiplayer *Bomberman* to a game of *Explosive Chaos* is rather like comparing a romantic night with Cameron Diaz to an evening watching Anne Robinson gleefully persecuting major tour operators on the TV; one's darned near to heaven on earth, while the other one is about as pleasurable as having your teeth pulled.

Explosive Chaos takes the basic premise of *Bomberman*, that you control a character who lays bombs, and then strips away all the good features of the original gaming formula.

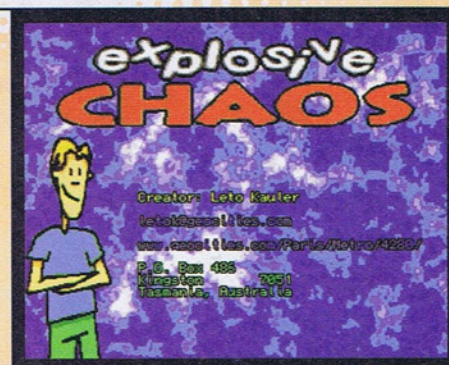
In this game, for example, only two players can take part. Players cannot become trapped

by one of their own bombs and there are no entertaining power-ups.

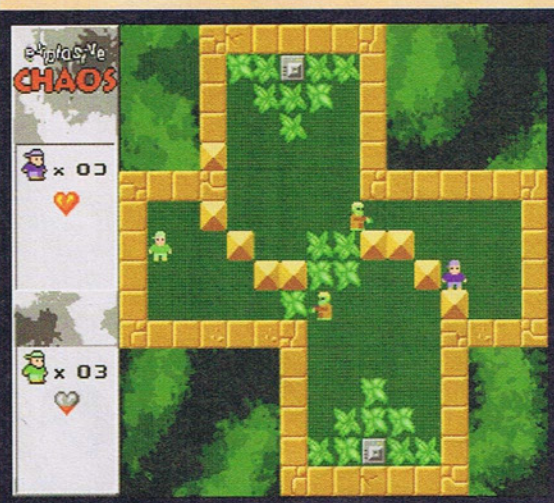
Since these features were what made the original so gloriously playable in the first place, *Explosive Chaos* is the computer gaming equivalent of taking a Ferrari and then removing the engine, the flashy exterior, the classy interior, the exhaust system and the wheels. The chassis system might still be intact, but it's not a fat lot of good on its own.

In terms of presentation, *Explosive Chaos* is equally disappointing. If I was feeling kind, I would probably refer to the graphics as being colourful and quaint – but I'm not, so I'll more accurately describe them as being garish and blocky. There are a few sound effects, but they're hardly anything to write home about.

Perhaps it's because I'm so fond of the original game that I can find little time for such a lightweight attempt at recreating its special magic.



However, I'm very much of the opinion that if you're going to recreate a game for the umpteenth time you should at least make a decent job of it. Unfortunately, decent is not a word which springs to mind when playing *Explosive Chaos*.



Thanks to their immense size, these two lumbering dogs are capable of harming you.



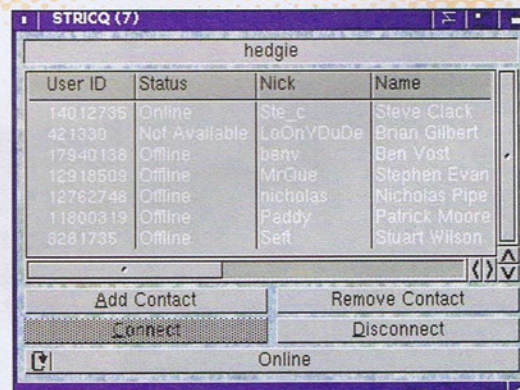
Running away is the order of the day in this monstrous game.

BY: Leto Kauler
WARE: Free
PD LIBRARY: Classic Amiga Software
NUMBER OF DISKS: 1
PRICE: £1.00 + 75p P&P

StriCQ works under any TCP/IP stack, with the notable exception of *TermiteTCP*, with which it can behave oddly. As with nearly all Amiga net programs, *StriCQ* makes full use of *MUI*. This means that you can make it look drop dead gorgeous, which is certainly more than can be done with the PC version of *ICQ*.

Mirabilis may not approve of the

Amiga *ICQ* ports, but I can tell you that I most certainly do. This is another example of a resourceful programmer showing that the good old Amiga is just as good a machine on which to surf the Internet as the PC or Macintosh.



Online chatting in real-time is now possible thanks to the various *ICQ* clones that have appeared on the Amiga.

SCALOS: THE AFTERMATH

Never let it be said that writing the PD column for an Amiga magazine isn't an interesting experience. Believe me, I should know – I've been writing the PD column in *AF*, and in another Amiga magazine before that, for over four years now.

Over the years, I've seen some truly excellent software, but I've also seen an awful lot of absolute tripe. I've also had so many bits and bobs of dodgy PD and Shareware software installed on my trusty A1200 in that time that I've managed to screw it up completely on more than one occasion.

Last month, you may recall that I was rather impressed with a Workbench replacement called

Scalos, version 1.1 of which had appeared just a couple of days before deadline. In the days and weeks since then, I've changed my mind somewhat.

It may be that the extremely unreliable and highly flaky performance of my Workbench since then is a complete coincidence, or that it's been caused by some other software I installed around the same time (although I can't think of any likely candidates). Whether *Scalos* was directly to blame or not, suffice to say that you should probably be careful if you try it out on your system.

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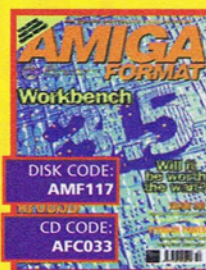
Issue 118

ULTRA ACCOUNTS 4.6
This excellent account management program joins the Digi Booster 4.19 music package this month.

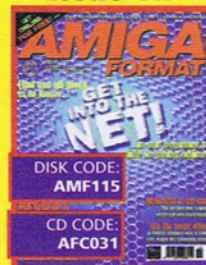
REVENGE AGA
Rifles, bombs, alien experiments... however you like to cause death and destruction, you'll find it in *Revenge*.

There's all the usual top news and reviews, a look back over the past year, a look ahead, over £2,000 of prizes and more. Ho ho ho!

AFCD34
A demo of new word processor *AmigaWriter*, the latest *YAM* preview, a redesigned *Wildfire*, a demo of *RayStorm*, all your contributions and the usual top utilities and games.



Issue 117



Issue 115



Issue 113

Coverdisks:
The latest version of the *Fiasco* database, plus manic bee-blasting fun in the revamped *Gunbee F-99* shoot-em-up.

Coverdisks:
Seven top utilities every Amiga owner should have, plus top platform, lolly-chucking action in *Pati's Quest*.

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Manipulate your images with the versatile *PPT 4.48* and chuck dung at people in adventure game *Kak*.

Coverdisks:
Get your finances in order with *MajorBank* and fight it out on the moon in the new C&C clone, *Moonbases*.

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Icon editor *Iconian 2.98T*, plus *501*, a new darts game, and superb *PacMan* and *Tetris* clones.



Issue 116



Issue 114

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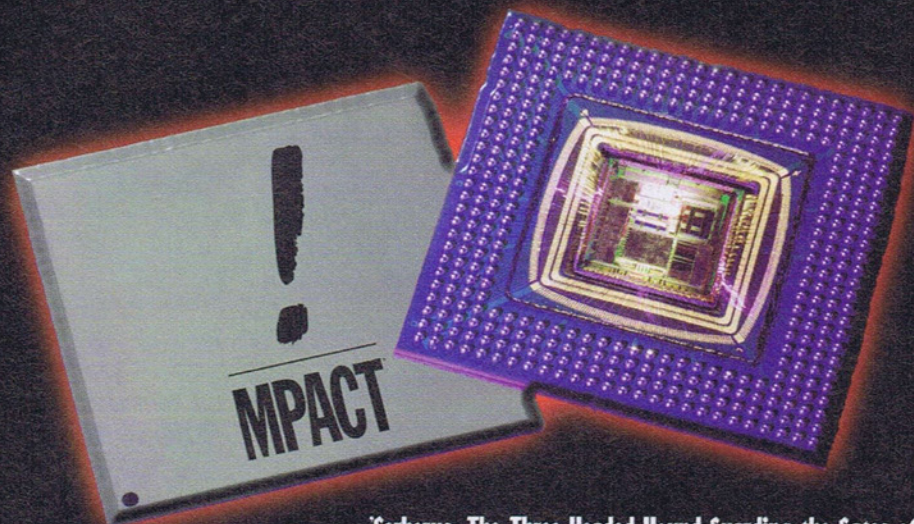
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Hooey! It's been a hard month. Lots of beer drinking and staying up late, and that was just the *Candy Factory* review! But seriously though folks, going to Köln every year has its benefits – lots of new kit to drool over for the next couple of months, plus exciting news of new developments in the pipeline, but it also means that this issue is a bit of a slog when I come back with armfuls of gubbins to review. The things I do for you, I don't know...

Still, we've got some cracking stuff here and now for you to get, and just remember that there's more to come next month too!

Ben Vost

AMIGA FORMAT'S REVIEW POLICY

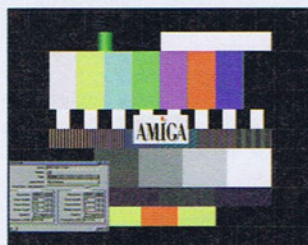
... is very simple. **Amiga Format** is written by nearly all of the most experienced Amiga users in the world and what we say goes. OK?

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90+%	The crème de la crème. Only the very best, most versatile and effective products are awarded an AF Gold – the most highly prized rating there is.
80-89%	These products are very good, but there are minor flaws or areas that could be improved upon.
70-79%	Not a bad product but quite possibly one that needs a serious update.
60-69%	Average products with somewhat limited features and appeal. Products in this category tend to be flawed.
50-59%	Below average products which are unlikely to impress your mates or your wallet. Avoid.
40-49%	Overwhelmingly poor quality products with major flaws.
Under 40%	The absolute pits.

52 CYBERGRAPHX

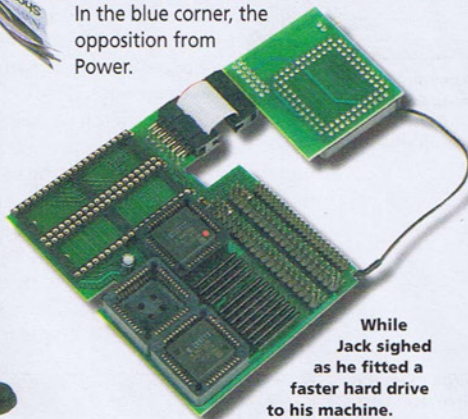
Nick Veitch gets down and dirty with the latest version of this RTG scheme.



A testcard, yesterday.

55 POWER FLYER JR

In the blue corner, the opposition from Power.



While Jack sighed as he fitted a faster hard drive to his machine.

58 AMINET

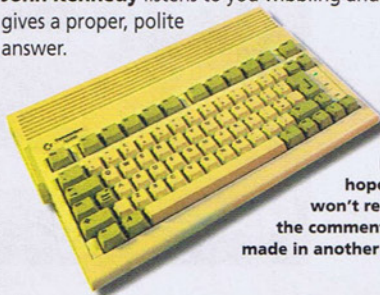
Ben Vost talks to Urban Müller over breakfast and looks at Aminet Set 7 and Aminet 27.



Get XiPaint free on Aminet Set 7 – again.

62 WORKBENCH

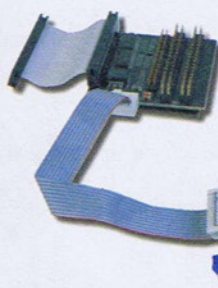
John Kennedy listens to you wibbling and gives a proper, polite answer.



Let's hope John won't repeat the comments he made in another mag.

54 IDE EXPRESS

In the red corner, Jens Schönfeld's offering...



Jill had fun playing Pin the Tail on the Donkey.

56 CANDY FACTORY

Ben Vost plays and plays and plays and plays...



Look ma! I designed the new logo for AF!

59 ARIADNE

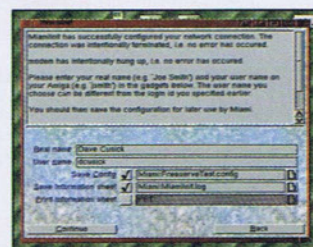
Faster? Not really. Easier to use? Not much. Cheaper? Hell yes.



New and improved, sort of, and much cheaper.

66 AMIGA.NET

Dave Cusick goes online for free.



Get on with Freeserve – go browsing for free.

CyberGraphX 4



The now commercial **CyberGraphX** system has just reached version 4, and so has **Nick Veitch**.

CyberGraphX has come a long way since it was originally introduced. I remember when the first version came out and I was able to upgrade my GVP Spectrum card from the pretty, but essentially flawed, slow and useless EGS system. In those days it was slower, caused plenty of Gurus (at least on my A3000) and was a bit tricky to install.

Thankfully, having now been road-tested by thousands of graphics card owners, it is now mercifully stable and compatible – quite a feat, really. At work, the A4000 on my desk has a CV64/3D card in it, and I use CyberGraphX to drive it. Basically, all the software I use on a regular basis runs through CyberGraphX, and runs well. Even things which were never designed to run on a graphics card, like *Lightwave*, work fine on my CV64/3D thanks to *ModePro*, and CyberGraphX copes with them all.

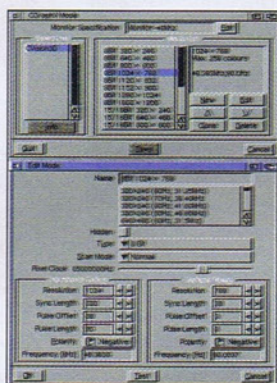
There have been some specific improvements for version 4. The most useful of these, to those who have the required monitors, is the addition of VESA-specific modes. There are so many monitor definitions included that you should be able to set up the software in minutes rather than hours.

As well as the complete CyberGraphX version 4 archives, there's also a host of developer material...

Also, if you were previously confused by the ToolTypes and worried when you were installing them, there is a new commodity. This doesn't explain them any better, but it allows you to quickly and easily change your preferences.

SUPPORT

Phase 5 will no longer be supporting development of the CyberGraphX software, and hence from now on it will



Every known monitor-specific driver is included to make set-up easier.

The extensive documentation is in HTML format.

and the rather extensive HTML documentation derived from the CyberGraphX website. This should answer most of your questions relating to installation, setting up monitors and even links to programs which support some specific features of your graphics card (although you'll need to be online to follow them, naturally). There's plenty of information on graphics cards

only be available commercially, but at a very reasonable price. There will be an upgrade price for those of you who registered previous versions of the software.

Support will be available from a number of websites. The main documentation is all on the CD, and although it only contains 50Mb of data, it's all quality stuff. As well as the complete CyberGraphX version 4 archives, there's also a host of developer material

generally, and you can learn a lot by reading through the FAQs.

As well as the official CyberGraphX stuff, you also get some freebies in the form of two commercial paint packages. The first of these is the feature laden, but rather flaky, *XiPaint 4.0*. To be fair, it is a lot more stable now, but "save often" is my watchword with this one. The second package is probably more useful to those who don't already have it – *Personal Paint 6.4*.

COMPARISONS

The only competitor to CyberGraphX is *Picasso96*, developed in conjunction with VillageTronic to support the Picasso range of graphics cards. Obviously, it also supports a number of other graphics cards as well; in fact, a list pretty much identical to the one shown for CyberGraphX.

There are probably a few more AVI and MPeg viewers available for CyberGraphX, but in terms of quality utilities, the two are equally well supported. There isn't that much to choose between them really. *Picasso96* might be marginally easier to set up and have a slightly better preferences program, but that's about it.

Personally, I prefer CyberGraphX as it enables you to keep screen dragging. In any event, if you have a graphics card you should check this out.

DISTRIBUTOR: Weird Science

PRICE: £24.99

REQUIRES: One of the mentioned graphics cards, WB3, '020 or better, CD drive.

Pros and Cons

- Complete and in one easy to use CD volume.
- Extensive, useful, well structured documentation.
- You get some software included for free!
- Unfortunately, it no longer supports AGA.

OVERALL VERDICT:

If you have a graphics card, you should really get this CD.

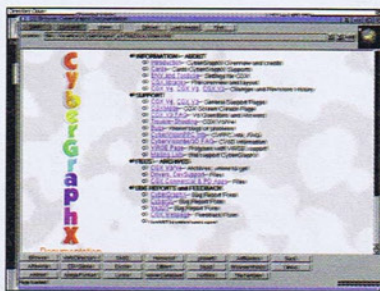
90%

SUPPORTED CARDS

- CyberVision 64/3D ■ CyberVision 64
- Picasso II ■ Picasso II+ ■ Piccolo
- Piccolo SD64 ■ GVP Spectrum
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- CyberVisionPPC

The docs even include lots of useful information on specific graphics cards.

The only change to the test card is the inclusion of an Amiga logo!



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Errors & Omissions Excepted - 17 Nov 98

BOV IDE Express

Now there are two new ways of speeding up your IDE hard drives! Nick Veitch dons goggles and gloves to put them to the ultimate test.

The Catweasel guru turns his hand to making your IDE drives go faster.

Amiga company Individual Computers are probably best known for the Catweasel, the cunning device which allows you to add a PC floppy drive and read and write a variety of disks with it. For some time, Individual's Jens Schönfeld has also made IDE buffered interfaces for use with *IDE Fix*, and now he's expanded this design to make your drives go faster.

The problem is that the Amiga's IDE interface is woefully behind the times. It conforms to the original ATA protocol standards, and that's fine because all IDE devices are compatible with that.

However, over the years the protocol has been extended to allow much faster data transfers, up to 10 times faster than the original. Attaching one of these devices to your A1200 or A4000 isn't going to unleash the extra possible speed though, because the Amiga will just drive it at normal ATA speeds.

Jens' solution to this problem is

slightly different from that of the Power Flyer (AF113, 98%) and the Power Flyer Junior, reviewed here. It doesn't involve connecting anything to the Amiga ROMs as it just has a small board which connects to the Gayle Chip, plus a pretty standard-looking IDE splitter, connected to the Gayle board by a small length of cable.

Two jumpers on the Gayle board allow you to select between normal and "express" IDE operation, so if your boot drive or whatever won't support faster operation, you can turn it off.

...over the years the protocol has been extended to allow much faster data transfers, up to 10 times faster...

This makes installation rather simple, and it obviously doesn't interfere with the clock port at all, like the Power Flyer sometimes can. A new version of the *IDE Fix* software supports the hardware.

IDE Express seems to work by simply driving the Amiga's existing interface at greater speeds, using some CPU power in the process. This means that if you want to achieve significantly faster speeds, you'll need a fast processor (the same is true for the Power Flyer).

There are a few minor problems, though. The most minor of these is that units on the secondary port don't signal the drive light, so unless they have one of their own, you won't know when they're being accessed. The second is

that the two ports still don't behave as though they were separate interfaces, which means a slowdown when accessing devices of both ports simultaneously. This isn't too much of a problem, but it did show up when trying to get *MakeCD* to create a disk on the fly when reading from one port and writing to another, and it did mess up a simple copy operation on one occasion.

On the other hand, it does make your drives go faster, which is the whole point, although we did get more reliable speed results from the Power Flyer. On the test machine, the IDE Express was 15% to 20% slower, producing 3.6Mb/s read times and 2.3Mb/s write times.

The other thing that's fixed, in software this time, is access of drives over 4Gb. AmigaDos has a problem addressing such huge devices because it's arithmetic simply overflows. There have been patches to the file system, released through Amiga Inc.'s website and other places, which address this problem, and it's these patches which the *IDE Fix* software makes use of.

Overall, the IDE Express is pretty cheap, very easy to install, and it works – up to a point.

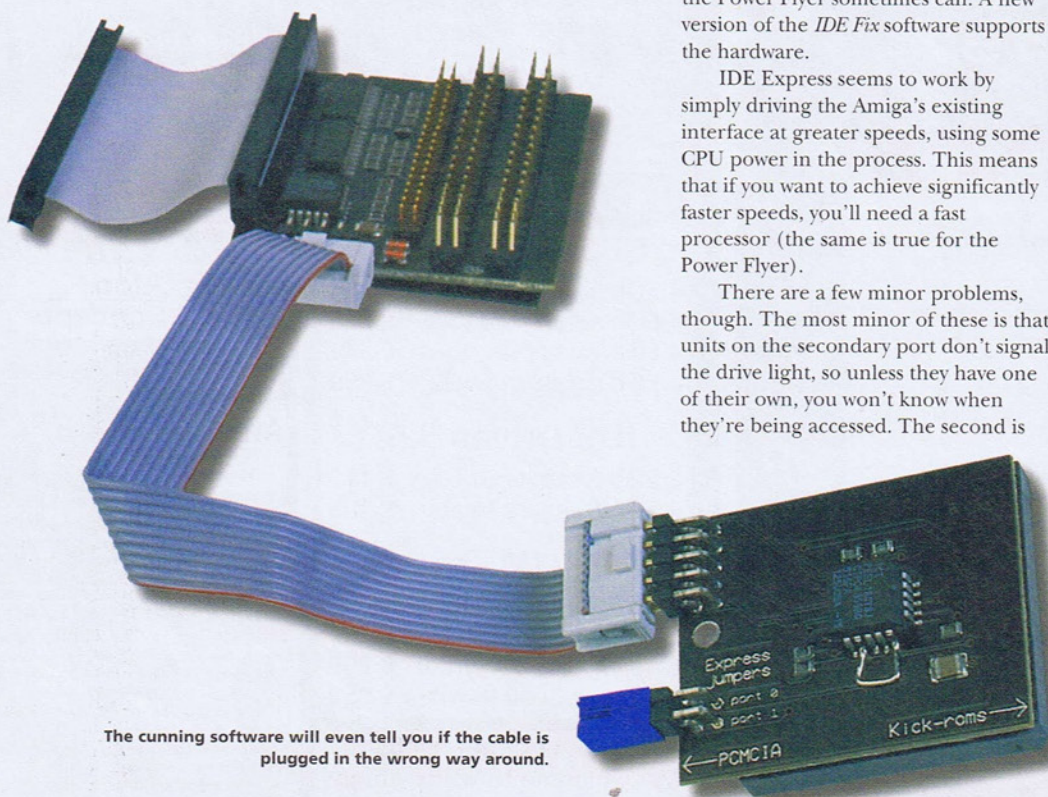
SUPPLIED BY: Individual Computers.
Widely available from UK stockists.
PRICE: £59.95
REQUIREMENTS: IDE interface, IDE hard drive (preferably one which is Fast ATA!)

Pros and Cons

- ☒ Easy to install.
- ☒ Works with most drives.
- ☒ Allows 4Gb+ units.
- ☐ Poor speed using both drives.

OVERALL VERDICT:
A cheap, easy to install and useful upgrade.

88%



The cunning software will even tell you if the cable is plugged in the wrong way around.

Power Flyer Junior



Can't afford a full flyer? This might be the chap you're after.

The Power Flyer was one of the most highly rated serious products ever reviewed in *Amiga Format*, but that was six months ago and things can change. Certainly, the introduction of the IDE Express device is a challenge, and this is the Power Flyer's answer – a cut down version at a cheaper price.

The Flyer Junior is based on exactly the same hardware as its big brother. There's still a board which installs under your ROMs, narrowly missing the clock port, and another to clip over the Gayle. In this respect, it's certainly more complicated to install than the IDE Express, and in a non-towered A1200 you'll have to forsake the cradle for an internal hard drive.

Once you've installed it though, it does fit quite neatly and securely, and in spite of what some might say,

it's still possible to use clock-port devices or add a Zorro backplane.

Both Power Flyers have a rather unconventional way of dealing with larger devices as they are simply split into separate, logical 4Gb blocks. This doesn't follow the conventional route

...it's possible to upgrade the Flyer Junior to full Power Flyer status by simply buying the upgrade chip.

of using the NSD/TD64 patches like *IDE Fix*, but it does have the advantage that it remains compatible with all your old disk utilities, like *AmiBackTools*, etc.

The only real difference between the Power Flyer and the Flyer Junior is that the latter only supports 16-bit ATA transfers, which are slower. Having said that, in the results of our tests it actually

The Power Flyer Junior requires a board to sit on the ROM sockets, so it's slightly more complicated to install.

performed pretty well – even on an '030 card, we managed 4Mb/s reads and 3.5Mb/s writes on our test drive (Maxtor 85120A8). In

fact, unless you've got a much faster processor, the full Power Flyer probably wouldn't go much faster.

And the really good news is that it's possible to upgrade the Flyer Junior to full Power Flyer status by simply buying the upgrade chip. This plugs into the ROM board section and will give you full width, faster transfers.

COMPARISONS

Inevitably, you'll be torn between deciding on the IDE Express system and the Power Flyer. Which one you choose may depend on what you use your drives for.

For example, as the IDE Express software supports the TD64 patch, you can use it safely and you can install PFS on drives bigger than 4Gb. The Power Flyer logically divides drives into 4Gb blocks, but might cause problems with PFS.

On the other hand, the Power Flyer is definitely faster, although on slower processors the difference can be marginal. The Power Flyer Junior, reviewed here, isn't as fast as the full version since it's restricted to 16-bit operation. The figures quoted in the review are an average of access speeds using an '030 processor on the same drive.

As both devices require CPU time, the exact setup of your machine, including tasks which you run, etc, may make a significant difference.

Another feature of the Power Flyer is that the two IDE channels do act as separate channels and this means it's more reliable at things like recording CDs on the fly with an IDE CDR drive, something the IDE Express had problems with in our tests.

Another factor might be ease of installation. The Power Flyer and Flyer Junior will require you to take out your Amiga ROMs and fit them to the Flyer board, in addition to attaching the Gayle socket.

Although it's hardly a difficult operation, it does really need to be done with the right tools, and some people might be wary.

DISTRIBUTOR: Power Computing
PRICE: £59.95
REQUIREMENTS: A1200, IDE hard drive

Pros and Cons

- ☒ Fast and upgradable.
- ☒ Works with most drives.
- ☒ Works well with CD-Rs.
- ☐ More complicated to install.

OVERALL VERDICT:
Great value and a great performance.

94%

A NOTE ABOUT DRIVE COMPATIBILITY

Years of owning an Amiga may have led you to believe that all IDE devices are the same, but this is not the case.

To get any speed benefit out of the Power Flyer or IDE Express, you'll need an IDE drive which supports one of the advanced ATA standards (Fast ATA or Fast ATA2).

Fortunately for you, you may already have such a drive. Most of the 3.5" mechanisms manufactured in the last few years have been Fast ATA or Fast ATA2 devices, making them capable of much higher transfer rates. These include IDE Quantum Fireballs, most of the Maxtor range, many Seagate devices and so on. It even includes some 2.5" mechanisms (though, sadly, none of the ones Commodore put inside A1200s).

To check if your device is covered, try looking up the website for the manufacturer of the drive, as most have all the specs. Try:

<http://www.seagate.com/support/disc/nfmsata.shtml> for Seagate and Conner mechanisms

http://support.quantum.com/menus/ata_menu.htm for Quantum mechanisms

<http://www.westerndigital.com/products/> for Western Digital drives

Candy Factory Pro



Eye candy for your Amiga.
Ben Vost just starts messing about.

When you see some of the images worked on for websites made by people with PCs or Macs you can sometimes get a bit jealous of the seemingly easy way they chuck about glows, drop shadows and the like. Now you have no reason to have only plain-Jane images on your site, or, indeed, in your video presentations, since *Candy Factory Pro* is here.

You may have looked at this program when it was on our CD last month and found it too slow, but the "Pro" version is up to 15 times faster than that version, and on a PPC card it moves in real-time – it's wonderful to see the changes you make to the lighting of your scene occurring as you drag the light source around. It looks like that lighting effect you always see in megademos, only it's useful.

You can just sit there and keep creating cool images, saving them off, altering some values and saving again...

The basic premise of the program is that it uses a mask, a single bitplane image, to do its effects. A mask can either be a picture you've created or some *CGFont* text (*Candy Factory* doesn't



A progression of styles is easy peasy with *Eye Candy*. Best of all, you can save the project and then reuse it at a later date, as with the second and third images here.

support bitmap fonts), so it's time to get out those font CDs you've got in order to create some really funky-looking logotypes.

The program itself is very easy to use, and although I had a few problems installing it originally on my A3000, once up and running it works very well. If you have a reasonably fast machine, an '060 with plenty of RAM for instance, you can turn on a real-time version of what your logo will look like that gets updated every time you change any parameter. If you don't have a high end machine, you still get "real-time" updates of the changes you make, but certain things are mutually exclusive then, like glows and shadows.

They both still get applied, but the preview display only shows one at a time. If you want to see how they all combine you have to render the image.

Images can be rendered as either



TrueColour or indexed, and TrueColour images can be saved in a number of formats, including IFF ILBM24, DEEP, JPEG, and, more bizarrely, Impulse's RGBN format, Alias and a few more, without offering the chance to save out as TIFF, BMP or PNG. If you save a 256-colour or fewer image, it can only be saved as IFF ILBM, so if you want to use it for the web you'll have to find your own way of converting it to a GIF image (or a PNG one for that matter), which

EVOLUTION OF A LOGO

1



Okay, I've started with a really wacky typeface called Memphis Display from EMC Phase 1 (we gave it away on the cover of *AF99*). I've changed the colour of the object to bright yellow and the background to a mid blue.

2



Now I've turned on shading, so the position of the light becomes more important. I've put the light above and to the left of the text.

3



5



Now we've bevelled the text and added a green glow emanating from behind the text.

6



I didn't really like the glow so I got rid of it and changed the colours of the text and background.

You can also invert your mask, making what was black white and vice versa. This makes the text itself become the background and so on. Here I've simply clicked Invert Mask from the previous image.

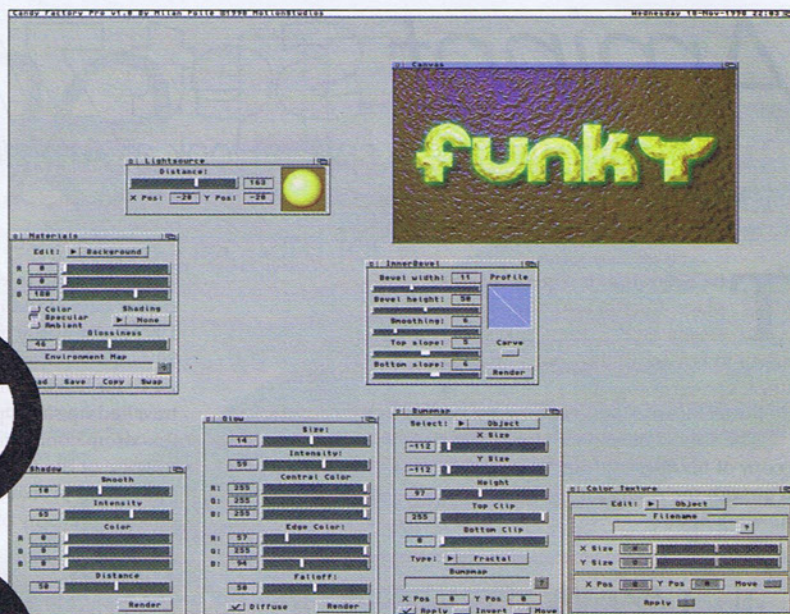
seems a little odd considering this tool is ideal for generating web images. However, you'll probably be running *PPaint* as well anyway, for creating masks and the like, so it's not too much of a hardship to load your *Candy Factory*-rendered image into *PPaint* and save it back out as a GIF or PNG.

Although I had some problems getting the program to work properly, especially with *Picasso96* on my *PicassoIV*, I've spoken with the author, Milan Pollè, about these things and he said that he knew about them already (which I find reassuring) and that there would be a patch made available very soon, which is great.

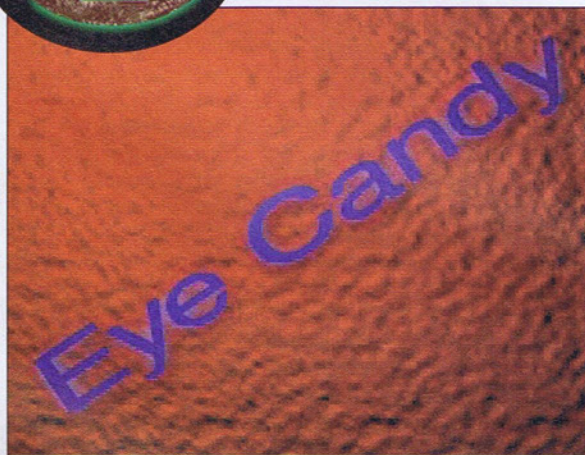
The CD is pretty full considering that *Candy Factory* only takes up about 2Mb of hard drive space and a lot of that is filled with pointless operators and the like that don't get used (they're used by *Fantastic Dreams*, the follow-up to *Elastic Dreams*, but not by *Candy Factory*, bizarrely).

It has a whole bunch of fonts that'll need to be installed (using *Intellifont* in your *Workbench*/System drawer), environment maps and textures for you to beef up your images. The manual is an *AmigaGuide* document which is fine to read through, but when you need to actually find something out, it isn't much use.

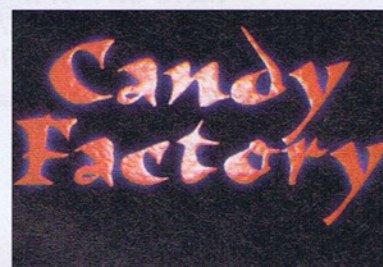
Other than that, *Candy Factory* performed brilliantly on all the machines I tried it on, and best of all it's fun to use. You can just sit there and keep creating cool images, saving them off, altering some values and saving again, ad nauseam. If you don't know how to get some of the cool looks of the examples, you can always use the pre-saved projects that accompany the program on the CD.



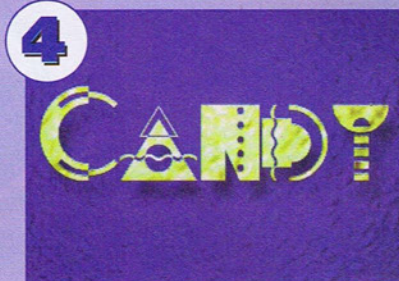
Left: it doesn't have to be text that you mess with. Above: on a 16-bit screen with real-time updates.



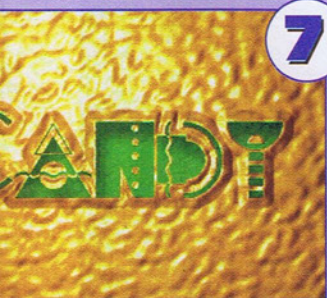
Text on an angle is also possible.



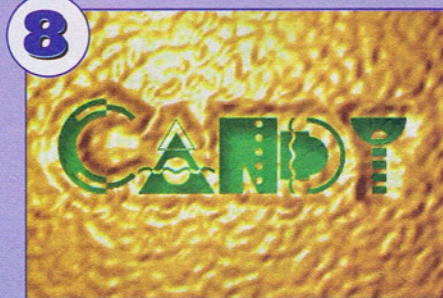
To bring the text out from the background I've added a drop shadow.



And now, to give more texture, I've added two different sorts of bumpmapping to the picture - fractal for the text and "normal" (whatever that means!) for the background. I've also clipped the bottom of the background bumpmap so it looks more as though there are bumps on a flat surface, rather than just an undulating area.



I've added the glow back in and also smoothed out the bevel. This whole series of images probably took about ten minutes to make on an '060, and it would be just as easy to take the logo back to its simplest form. On a PPC it would be even faster.



SUPPLIED BY: Epic Marketing (0500) 131486
PRICE: £34.99
REQUIRES: 16Mb RAM, 68030 + FPU
RECOMMENDED: '060/PPC, 32Mb RAM, graphics card
TESTED ON: A3000, CStormII '060, 128Mb, PIV; A4000, CStormIII '060, 64Mb; A4000, CStorm PPC, 64Mb, CV3D

Pros and Cons

- ☑ Lots of fun.
- ☑ Excellent-quality images.
- ☑ Easy to use.
- ☐ Slightly flaky on some systems.

OVERALL VERDICT: It's great value for money considering the hours of fun you'll have with it.

92%

Aminet Set 7/Aminet 27

This month we take a special look at **Aminet**. Urban Müller talks to Ben Vost.

The Köln show is a great meeting place. On the Friday morning, after a hard night, I talked at length to Urban Müller about Aminet, how it's progressing and what his plans are for its future.

The very same day, we also received a copy of his latest output, Aminet Set 7, to go with the Aminet 27 we'd received the week before.

By early 1999, Urban hopes to have one URL that can be used to put you onto the fastest server at the time...

The main news for Aminet is the progress Urban is making towards a virtual Aminet URL on the web and for ftp. The main problem at the moment is the fact that you have to connect to your local Aminet, which might not always be available, or even be the fastest mirror for you to connect to.

By early 1999, Urban hopes to have one URL that can be used to put you onto the fastest server at the time for you, which may well be your local Aminet server, or it could be one halfway across the world.

On the contentious subject of the MOD directories that seem to get the most movement, Urban told me that although he'd been thinking for some time about moving the mods to a separate archive, he also stated that you'd be able to get your own individualised Aminet index with the information you wanted in it.

So, instead of having to download the current 4.5Mb text file, you may select the util/cdity drawer and the game/demo drawer, which would bring your download way down below 1Mb – in fact, about 50K.

You can already get a recent list based on the last time you visited the Aminet website, but this way it will only contain the items you wish to see. By the way, Urban actually sits there and listens to every MOD that gets uploaded to check it at least cursorily for copyright infringement and so on.

It looks as though Aminet on the net will improve, although the archive is now so big that some of the smaller mirrors can't cope with either the amount of traffic they receive or the amount of files they have to mirror. It's nice to know that few other archives have such problems.

Urban also told me that back in the earlier days of the Internet, around 1992-3, Aminet actually accounted for 20% of all Internet traffic. Nowadays we're far less important, and the most travelled ftp site is probably ftp.cdrom.com, but even so, Aminet is still one of the most visited archives online and probably has more daily uploads than any of the others.

THE CDs

The funny thing, if you're an anal Aminet collector and can see them both together, is that the blurb on the back of these two CDs is completely different. On Aminet 27 it says that up to 10,000 users visit Aminet every day, that it's five years old and that it holds the equivalent of 17,000 floppy disks-worth of software. On Aminet Set 7, on the other hand, the blurb says that up to 40,000 users access the archives every day, that Aminet is more than six years old and that it holds more than 30,000 floppy disks-worth of software. Très amusant. Anyway, whichever one you get, you'll be getting all the latest stuff from Aminet, together with the now customary freebies.

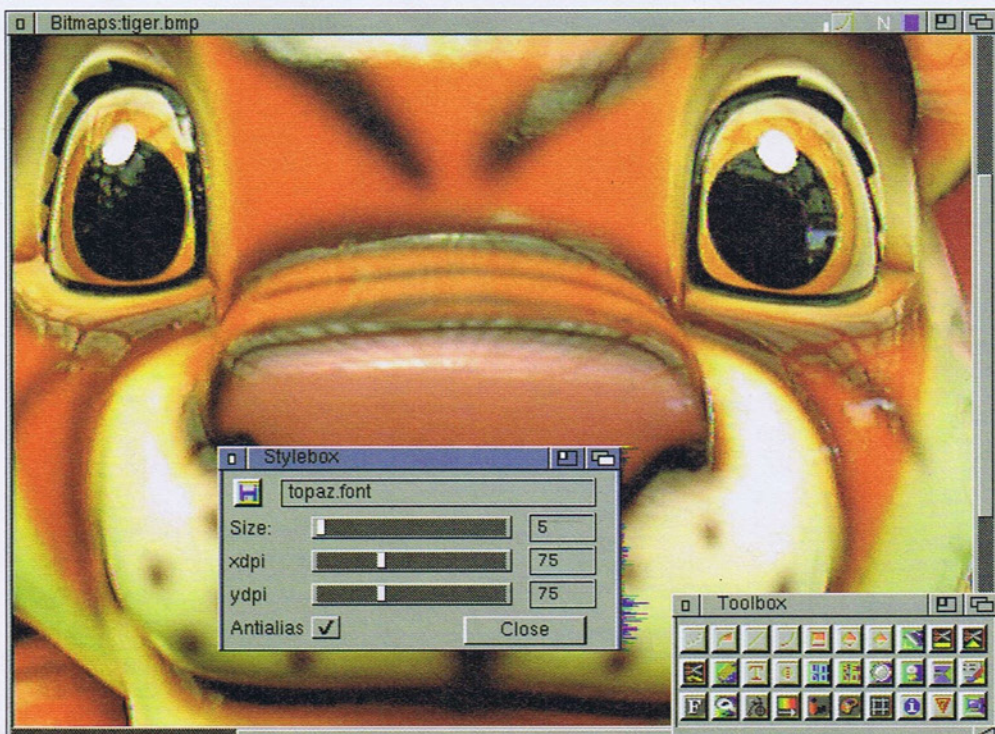
On Aminet 27, the freebie is a special version of *Kang Fu*, the kangaroo platform game from

about a year and a half ago. Aminet Set 7 gives you the same version of *Kang Fu*, but supplements it with special versions of *iBrowse 1.2* and *Picture Manager 4*, plus a complete version of *XiPaint 4*. Again.

It has to be said that there isn't much point in reviewing an Aminet CD these days, or an Aminet Set, and giving them a score seems spurious when they're all equally good. As such, this is the last review you'll see in AF of anything with Aminet in the title.

We'll still let you know when the latest CDs come out, but anything else seems like a waste of space. Basically, if you aren't on the net, and even if you are but don't want a huge phone bill, buy the Aminet CDs or Sets. They're superbly produced, work beautifully and contain everything you're ever likely to need. Nuff said.

The ever-present *XiPaint* is on Aminet Set 7, along with *Kang Fu*.



Ariadne

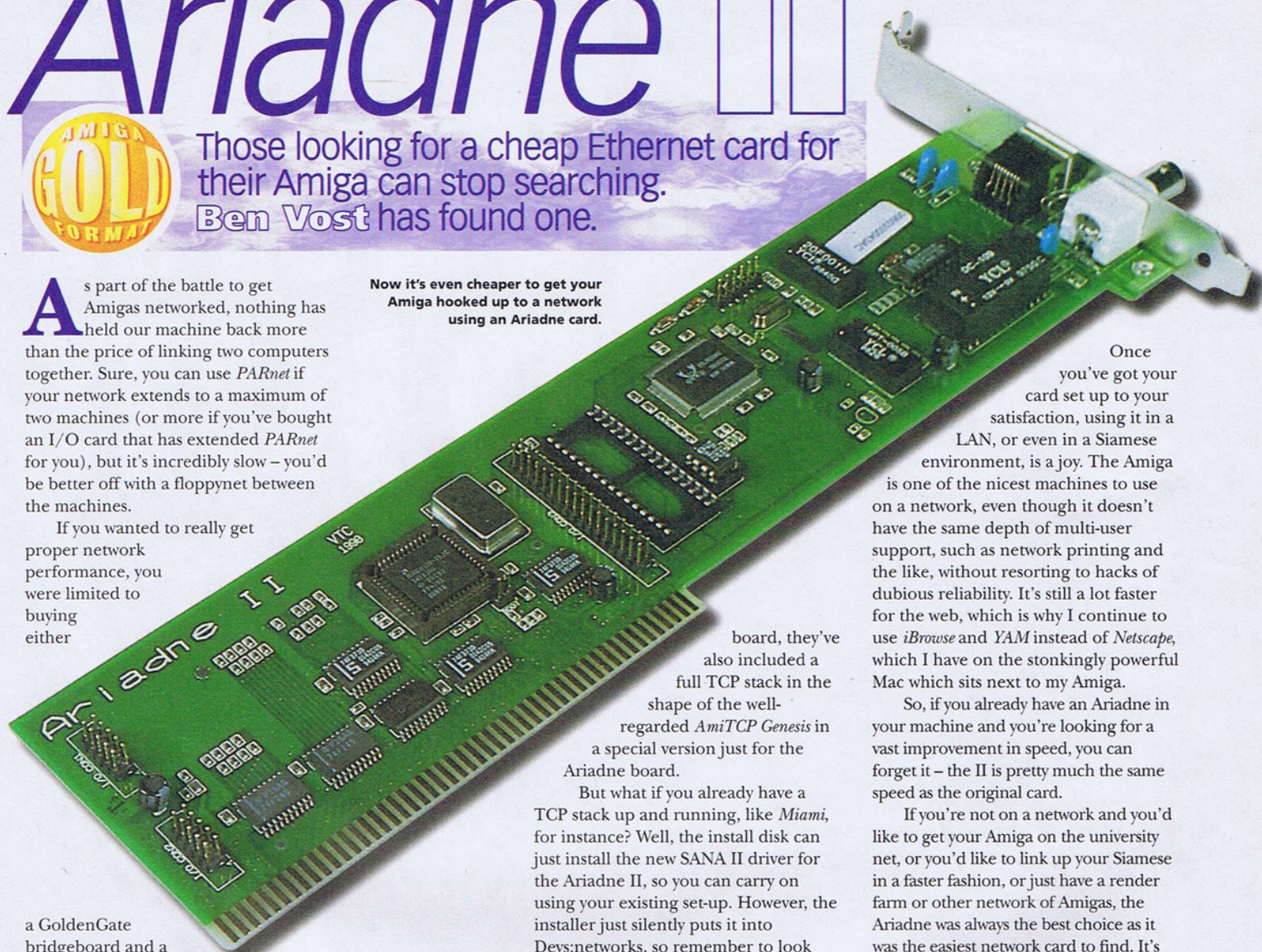


Those looking for a cheap Ethernet card for their Amiga can stop searching. Ben Vost has found one.

As part of the battle to get Amigas networked, nothing has held our machine back more than the price of linking two computers together. Sure, you can use *PARnet* if your network extends to a maximum of two machines (or more if you've bought an I/O card that has extended *PARnet* for you), but it's incredibly slow – you'd be better off with a floppynet between the machines.

If you wanted to really get proper network performance, you were limited to buying either

Now it's even cheaper to get your Amiga hooked up to a network using an Ariadne card.



a GoldenGate bridgeboard and a cheap PC Ethernet card (pros: slightly cheaper than buying an Amiga Ethernet card; cons: where on earth can you get a GoldenGate from?!), or you could buy an expensive Amiga Ethernet card.

Fortunately, by cost-reducing the existing Ariadne, using more standard parts and getting rid of the fairly unnecessary parallel port, Village Tronic have not only managed to more than halve the cost of the Ariadne

board, they've also included a full TCP stack in the shape of the well-regarded *AmiTCP Genesis* in a special version just for the Ariadne board.

But what if you already have a TCP stack up and running, like *Miami*, for instance? Well, the install disk can just install the new SANA II driver for the Ariadne II, so you can carry on using your existing set-up. However, the installer just silently puts it into *Devs:networks*, so remember to look there for it. At the time of writing there was no MNI driver for it under *Miami* either, but I dare say that it will appear soon enough.

Once you've got your card set up to your satisfaction, using it in a LAN, or even in a Siamese environment, is a joy. The Amiga is one of the nicest machines to use on a network, even though it doesn't have the same depth of multi-user support, such as network printing and the like, without resorting to hacks of dubious reliability. It's still a lot faster for the web, which is why I continue to use *iBrowse* and *YAM* instead of *Netscape*, which I have on the stonkingly powerful Mac which sits next to my Amiga.

So, if you already have an Ariadne in your machine and you're looking for a vast improvement in speed, you can forget it – the II is pretty much the same speed as the original card.

If you're not on a network and you'd like to get your Amiga on the university net, or you'd like to link up your Siamese in a faster fashion, or just have a render farm or other network of Amigas, the Ariadne was always the best choice as it was the easiest network card to find. It's now a steal at only £70, including a TCP stack, and you'd be a fool to miss out.

SUPPLIED BY: Blittersoft (01908) 261466
PRICE: £69.99
REQUIRES: Zorro II-based Amiga, network
TESTED IN: A4000

...the Ariadne was always the best choice as it was the easiest network card to find. It's now a steal at only £70...

A1200 ALTERNATIVES

If you don't have an A1200 with Zorro slots, but you're desperate for an Ethernet card, your best bet would be to get in touch with Hydra Systems (g@hysys.com) who do an excellent PCMCIA A1200 solution.

If you've got money to spare, you can buy a standard PC PCMCIA Ethernet card – it will work in some A1200 slots, but different revisions of the motherboard and of Ethernet cards make this a bit of a lottery, and you'll still need some kind of SANA II driver for the card. Of course, all this is supplied if you buy the card from Hydra Systems, but expect to pay more than the £70 for the Ariadne...

Using it with *Genesis* is a breeze, thanks to the excellent installer and prefs for setting up this stack. If you get into trouble, there's also plentiful HTML-based documentation to help you out, although it's a truism to say that you should really have some idea of how a network works before you decide to just bung one of these cards into your machine. The docs also seem to be taken straight from *NetConnect 2* since they spend a great deal of time concentrating on hooking up your machine to an ISP with a modem or ISDN terminal adaptor.

Pros and Cons

- ☒ Cheap, cheap, cheap!
- ☒ Easy to install and use.
- ☒ Did I mention it was cheap?
- ☒ SANA II driver tricky to install.

OVERALL VERDICT:
 If you can get your Amiga on a network, do so – they're lovely.

92%



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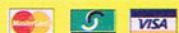
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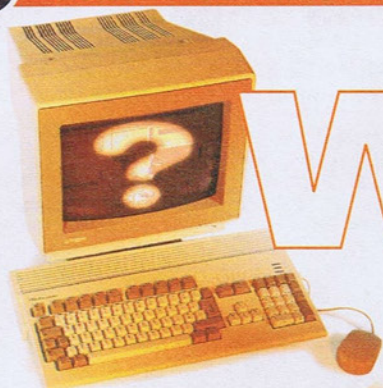
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Workbench

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I WANT ZIP!

My wife has a Pentium P166 with an Iomega Parallel Zip 100 drive which she never uses. I've been told that I can't use this Zip drive on the parallel port of my Amiga, but I haven't been told why. If the Pentium has the same parallel port as the Amiga then why can't I use the Zip drive on my machine? Does anyone provide such a driver or is the Pentium just better than the Amiga in this way?

Perhaps I can use it as an internal drive, replacing my floppy drive unit. If so, where can I get the appropriate driver to use it? This Zip would solve all of my portability problems as all my friends have SCSI Zip drives, but would it be cheaper for me to sell my Apollo light accelerator and get one with a SCSI port fitted onto it?

Mike J. Lee
Wigan

You can use this Zip drive on your parallel port, but be prepared for it to be very slow, and also expect to have to add a little something to your parallel port for it to work. You see, the Zip takes power from the parallel port in a way that the Amiga doesn't support, so there has to be an adaptor in there to provide the signals it's looking for.

You can get these adaptors from a variety of places, but we would suggest trying Eyetech (01642 713185) since they've been doing an adaptor for a while now.

Even so, you might still be better off getting that SCSI controller anyway, since then your whole machine becomes more expandable. You could get a SCSI Zip drive for your Amiga which you could then use to move files to and fro between your Amiga and your wife's hitherto unused PC Zip, not to mention the fact that you'll open up a world of SCSI peripherals, like scanners, that you previously weren't able to use.

EXPANSION QUERIES

Just a few quick questions as I haven't really been au fait with the Amiga scene for a while.

1 I'm going to tower up my humble A1200 ('030/40, 6Mb, 85Mb HD), probably with an Eyetech EZ-Tower. Can I use the Ateo busboard in this and what advantages does it have over Zorro?

The EZ-Tower from Eyetech is big enough, but it might not be fully compatible with busboards from other companies.



HOT STUFF

I've recently upgraded my hard drive and find that the new drive gets quite a bit hotter than the old one. Is this a concern? If so, would fitting a fan help? If it would, where do I fit it and where do I get the power from – can I use the floppy power supply?

Also, this new IBM hard drive has 172Mb written on it, but I can only seem to get 164Mb when I prep it. Why? Is it something to do with the computer needing 8Mb to index it or something?

N. P. Rowe
Plymouth

Some drives do run hotter than others. As long as your computer is well ventilated, that is, not sitting on a carpet next to a radiator, it shouldn't overheat. You'll know if it does as you'll get crashes for no readily apparent reason. The Amiga casing isn't really designed for fitting a fan, although you could fit a low-profile CPU cooler-style one if you really wanted.

You'd have to make up your own lead and connect it to a power supply. Using a splitter cable from either the hard or floppy drive is the easiest way. If your hard drive is a 3.5" model, there'll be a separate power plug. If it's a 2.5" drive then the power is included in the ribbon cable, so use the floppy instead. You should use a voltmeter to check, but usually the black cable is ground, red is +5 volts and yellow is +12 volts. Which wires you use depends on the voltage requirements of the fan.

You're right about the missing disk capacity. The act for formatting the drive takes up some memory as the file system needs a way of organising data.

What slots does it offer? Can I use a cheap, off-the-shelf PC graphics card, for example? Is it or will it be available for the A4000?

Sorry to have to ask you but I haven't seen any advertising.

2 I currently have an 85Mb internal hard drive and when I get my tower I'll get a second drive, probably around 2-4Gb. I want to use my original drive as my system partition. Is this excessive?

3 Can I format a small partition as a trashcan under either the WB or Global/Trash systems?

4 What drivers do I need for a Panasonic CR583-B CD-ROM? Where can I get them?

5 What advantages does WB3.1 have over 3.0? I know they'll be obsolete soon.

6 Why hasn't anyone reprinted a decent DOS manual? If they did, you'd get less phantom-assign questions and have more space for hard stuff, like my questions...

Chris Cox
Bridgend

1 The Ateo busboard is designed for the Ateo tower case, and if you try to fit it into another make of case then you're really on your own. You would have to confirm the measurements, slot orientation and so on to make sure it all worked together. As you know, the Ateo card isn't Zorro compatible, the reason being that trying to build Zorro III compatibility into an A1200 system is apparently tricky and just not worth it.

The Ateo system is therefore proprietary, and so no, you can't stick a PC graphics card into it. There's no point making an A4000 version as the A4000 already has Zorro III slots. Visit the Ateo website for more details: <http://www.ateo-concepts.com>

2 These days, an 85Mb drive isn't excessive: it's puny. While your Workbench is unlikely to fill even half that space, it does no harm. When you work out the cost of the Mbs you aren't using, it's embarrassing to even worry about it. You might be better just donating it to another Amiga owner as it might slow down your system – the new drive will be much faster.

3 No. The trashcan doesn't work like that. There is one can associated with each drive, and you can't separate them.

4 If that's a standard CD-ROM drive and either ATAPI or SCSI, any Amiga CDFS system should work with it. It's not the file

OLD TIMER

I have an Amiga 2000 with a 68020 Commodore accelerator card with 4Mb, 32-bit RAM and 1Mb chip. It also has a 68881 FPU which makes it 15MHz fast.

It has also got Workbench 1.3. I was hoping to upgrade to Workbench 3.1 but found out that I need to upgrade some chips on the accelerator card first. Could you please tell me what chips I have to upgrade and their possible suppliers?

Robbie Almond
Verwood



If any venerable Amiga users out there know about old Commodore cards, send your information to Feedback...

The problem with Commodore's old accelerator cards for the A2000 is that they used the mouse buttons at boot time in order to be able to get to their config menu. Unfortunately, these same mouse buttons have been used since Workbench (and more importantly, Kickstart) version 2 to show the early boot config. You will need to get updated ROMs from somewhere, but the chances of a dealer actually having any of these ROMs is so slim as to be negligible. In all honesty, you would certainly be better off if you bought a secondhand A1200 or A4000 (if you wanted to transfer any Zorro cards over to the new machine), than you would be if you managed to track down updated ROMs for the 2620 and then bought Kickstart 3.1 ROMs and disks.

system support that's the trouble, it's the hardware interfacing. If that drive is one of Panasonic's own standards (something like the Creative/SoundBlaster protocols of yesterday) then you'd better dump it as it won't work.

5 Workbench 3.1 adds more support for graphics cards, especially under Workbench, improvement to Datatypes, and some CD-ROM support.

6 There was a very good set of manuals from Bruce Smith Books called Master AmigaDOS. They're well worth looking out for. And I like easy questions as it means I don't have to think too hard and risk breaking into a sweat.

I WANT TO STOP!

I have an A600 with an odd problem. It has 1Mb, WB 2.x, a 320Mb SCSI HD and an Epson Stylus 300 printer attached. The problem has been that since I've installed TurboPrint 6 I almost always get a message that Workbench can't be shut down because programs are launched, even after I've closed all the windows and often when I've opened none.

This occurs even after TurboPrint has been removed from the hard drive. I think I should perhaps edit my user startup file to stop the Amiga asking for TurboPrint after it has gone, but I don't know how to do this either as I have no manuals. If it helps, I've had small

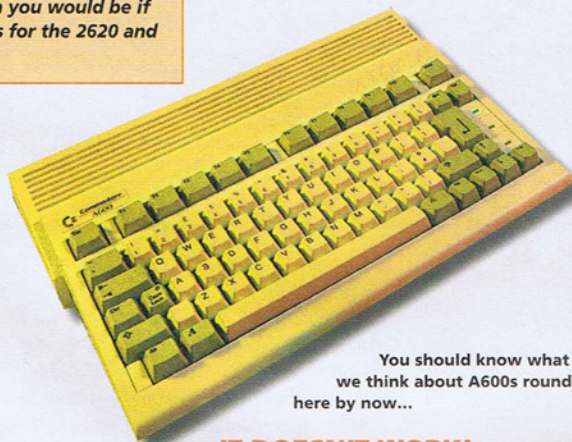
numbers of unidentified programs running before TurboPrint when I try to close WB, and from time to time the whole system crashes for no apparent reason.

Thomas Crawshaw
London

But why are you even trying to shut Workbench down? You don't need to shut it down before switching your computer off—you're using an Amiga, not a dinosaur operating system which leaves files open all over the place. As long as you save any files you have open, you usually don't even have to exit any applications before switching off.

If you can't close the Workbench, it's because there are various programs running in the background. You may have some utilities or commodities running that hide, only making an appearance when needed. Don't worry about them.

A crashing system isn't necessarily a software problem, although an unexpanded A600 is unlikely to overheat. It's possible that your power supply is a little iffy, but you could be right about looking through your user-startup sequence to see what other little applications are being launched. Try removing them to see if that stops your Amiga from crashing.



You should know what we think about A600s round here by now...

IT DOESN'T WORK!

Your subs disk doesn't work on my computer! Well, you have all the LZX scripts to unarchive from df0: but I don't always put my disk in df0:, so to unarchive anything I have to use the CLI. It's probably not that important to you, but it's a tiny problem which could be solved. By the way, great magazine. Keep up the good work.

Tipu Satter

Only those last two sentences save you from being referred to as needlessly picky. I think it's safe to assume that given the high proportions of hard drives in use, most Amigans only have the one floppy disk drive, or if they have two they would know



The connection between flat cats and a dodgy subs disk? Well, it's obvious really...

Feedback

Further to my recent letter concerning Photogenics and my PicassoIV card, I have found a cure. As ramlib was sometimes implicated in causing Photogenics to crash using the graphics card, I tried using a program called Growstack to increase ramlib's stack size to 16Kb. This has almost completely cured the problem and I feel safe using Photogenics again.

N. Malton, Peterborough

While reading Workbench (AF Nov '98) I spotted the Philip Corner "Standards Issue" plea for help regarding corrupt Zip disks. I myself have been happily using a Zip drive pretty much since they first appeared a few years back. In my experience, the Amiga Zip implementation is woefully lacking, particularly with regard to Shugart logic (i.e. disk changes).

Basically, the Amiga sometimes (!) gets no notification of a Zip disk change and thus, oblivious to the presence of a different disk, uses the previous disk and file information. This explains why, when Philip listed a subsequently inserted disk, there appeared to be no difference in file structure or disk usage.

Fortunately, there is a simple solution. When changing Zip disks, follow these steps in order:

1. Eject current Zip disk.
2. Either reboot (ugh!) or force a system disk change by typing the following line at a CLI/Shell prompt: `DiskChange Zip0:` (substitute Zip drive name for Zip0: if different). `DiskChange` will need to be in C: and can be found on the WB2.x/3.x installation disks.
3. Insert desired Zip disk. If you're using `ToolsDaemon`, `FKKey` or similar, it might be an idea to set up a hotkey with the `DiskChange` command to save typing it regularly.

Tony

In response to the letter by Wesley Potter, "Hearing Aid", AF116, I may have a solution. As silly as it sounds, make sure that the power cable is in the computer properly. It has happened to me and it does work, assuming it's the same problem. On another subject, could you tell me how I can disable the copyback cache on my Blizzard '040/PPC? I've used loads of different CPU commands, the option in mcp, but still have no luck. I'd like to disable them as some programs ask to do this. Before I go, could you please continue the newsmag pages that were on the CU CDs? These letters have helped no end of times.

to use df0: as the default when installing floppy-based software. We really do have a hundred-and-one more important things to do. Like photocopying our faces or trying to get our cats to sit still on a flatbed scanner (<http://www.catscan.com>).

Continued overleaf ➔

← **SCSI**

Me and my friend have a disagreement about SCSI interfaces. Please could you settle this once and for all?

Is there a difference between PC SCSI and Amiga SCSI? The reason why I want to know is that he wishes to use PC SCSI hard drives on his Amiga, connected via a SCSI interface. Is this likely to work?

Paul Morris

SCSI is SCSI; there's no such thing as "PC SCSI" or "Amiga SCSI". If the hard drives are SCSI compatible and the Amiga has a SCSI interface, they will work. The only catch is that there are several flavours of SCSI. While most drives are SCSI-2, there are also "Wide" and "Fast" varieties. As long as the Amiga's interface is of the same family as the drives, it will work perfectly well.

SHORT OF CACHE?

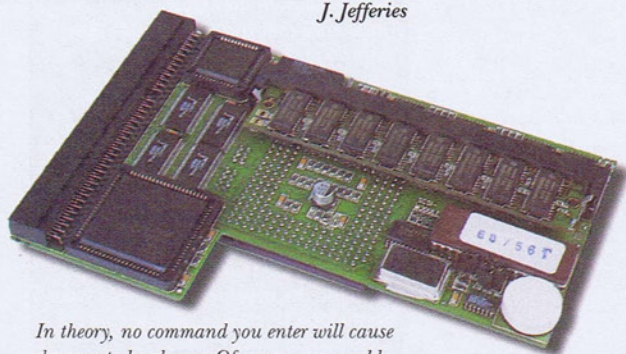
Some months ago I bought a 2.1Gb hard drive for my A1200 and it came installed with a lot of commands which I hadn't seen before. I recently typed some of them to try to figure out what they do. My question is, can a command cause damage to a hardware device, because not long after, I noticed the partitions becoming distorted and some becoming NDOS.

A bit later, every command I typed – list, dir, info, status and so on – caused immediate gurus. Eventually, the computer wouldn't load at all. I took the hard drive out and tried to boot up with a floppy, with no success.

I took my Apollo accelerator card out and the computer boots with both the hard drive and a floppy. It seems okay but I've noticed that when I type CPU, I get System: 68020 (INST: Cache) instead of the usual System: 68020 (INST: Cache Burst) (DATA: Cache NoBurst).

I don't know what to throw away, my computer or the Apollo. I can't find any unusual files that have been unwittingly installed.

J. Jefferies



In theory, no command you enter will cause damage to hardware. Of course, you could type something like "format", which will delete all the information on your drive, but that doesn't destroy the hardware as such.

It might have been useful to list the mysterious commands you typed: it sounds as though you adjusted some of the features of your accelerator card; specifically, you messed with the Data cache, which is weird because

The Apollo accelerator card – could a command have damaged it?

Workbench
⌵ ⌵ ⌵

10 things to do when:

You want to move files from an Amiga to a PC

- 1** Use a floppy disk. While the PC can't read Amiga formatted floppies, the Amiga can read PC disks, as long as they've been formatted as double (not high) density disks. A4000s can read high density disks.
- 2** Use a removable disk, such as Zip. Zip disks are relatively cheap and can store about 100Mb of data. Format the Zip on the Amiga as a PC format disk and it can be read on the PC.
- 3** Use a local area network, running over Ethernet. This works a treat and is the fastest way to shift data. Since Village Tronic have just released the Ariadne II card for only £70, this is becoming a good option.
- 4** Use a modem. The Amiga can dial the PC (or vice versa) using terminal software on both sides. You can then use Z-Modem or similar to move files. Don't attempt this with really large files as the telephone bill will soon add up.
- 5** Use a Null Modem cable. Instead of using a modem, pretend you are. If the computers are in the same room, a Null Modem cable will connect them, allowing you to use the same Z-Modem transfer.
- 6** Use the Internet. If the computers are a long way apart, i.e. outside local call range, use the Internet to transfer them. Both computers should dial into the Internet and one can run an FTP Server and the other an FTP

- client. Files can be uploaded reasonably quickly, even if the computers are on different sides of the world.
- 7** Use email. If you don't know when the other system is likely to be connected to the Internet, send your files as an email attachment. This also has the advantage that files are being uploaded (and downloaded) directly to your ISP's system, which will work a lot more quickly than an FTP transfer.
- 8** Use Internet technology to preserve document formats. We've all had problems trying to keep a text file formatted when swapping between PC and Amiga, as well as between Amiga and PC. Use the standard HTML language to ensure that documents look exactly the same on all platforms.
- 9** Need to move about 650Mb in a hurry? The easiest way is to buy a CD-ROM writer, copy the software to CD and then post it. A single CD can carry a huge amount of data and most systems can read the files without too many problems.
- 10** Worried about preserving file names? The PC has a nasty habit of resorting to 8.3 file names when you least expect it. Use an archive utility such as Zip to compress files into one single file. When un-zipped on the PC, the file names will be returned to normal.

the 68020 doesn't actually have a Data cache, only an Instruction cache. It should really say (DATA: NoCache), but that may be down to the way the CPU command works.

It sounds as though the Apollo card is misbehaving itself, either down to a loose connection, inadequate cooling or some other hardware failure. It's even possible that your woes are due to an inadequate power supply, although this is fairly unlikely.

It's hard to diagnose the exact nature of the problem. Check to see if the system works with the Apollo and no hard drive. If not, and it works with the Apollo removed, you can assume the card is duff and needs to be replaced. You should be able to re-format the hard drive and start again from scratch.

DRIVE BOTHER

My problem is probably a rather silly but annoying one. I recently bought a new hard drive because my old one just gave up the ghost and refused to work any more. Since installing the new drive, I find that I can't install programs to the drive from either floppy or CD-ROM using the drag and drop method.

I had no problems doing this with my old drive, and programs that have a

proper install method are no problem, but a program like *Personal Paint* that doesn't, and which I've always been able to install using drag and drop in the past, now goes through the motions of installing (floppy drive light on, then hard drive light, etc).

When I try to access the program from the hard drive, the program crashes, or on other programs I either get the recoverable alert error message or the error message 'cannot open your tool', whatever the name of the program is. I've tried reformatting the partition that I wish to install to but this makes no difference.

This is really annoying as I have a lot of programs that are currently on floppy that I would like to transfer to hard drive but can't, and you know how slow it is to access programs from floppy. Can you help, please?

Roy Lacey, Bristol

This seems to be the single most repeated problem in Workbench every other month. You need to change the MaxTransfer setting in HDToolbox for your drive so that you don't get information dropouts...

Amiga-net

Dave Cusick plays cheapskate with **Dixons'** new Internet access service.

CONTACT POINT

I can be reached with comments, suggestions and feedback at dave@dcus.demon.co.uk, or via my website at <http://www.dcus.demon.co.uk/>.

When I first signed up with Demon Internet several years ago, its tenner-a-month account was one of the cheapest and easiest ways of getting onto the Internet. I had the option of using AmigaNOS or the newer AmiTCP, and once I was actually online I could use such cutting edge programs as AMosaic and Tin.

So far I've found FreeServe to be pretty good. It's been surprisingly nippy at the times when I've tried it...

That was during early 1995. At the time, the Internet was growing rapidly, but in the UK it was still a long way off achieving the sort of widespread popularity it enjoys today.

In the years since then, much has changed. I usually still use AmiTCP when going online, but Active's Genesis front-end makes configuring this much more straightforward than it once was. AMosaic has long since been consigned to the great hard drive in the sky, replaced by vastly more powerful modern programs, such as its successor, IBrowse, as well as Voyager and AWeb.

Just as significantly, many new net-related programs have appeared on the Amiga, such as the world-beating AmiIRC, and now even various implementations of ICQ.

But one thing that hasn't changed over the years is my monthly tenner-plus-VAT payment to Demon. There have certainly been times when I've considered switching, usually when

experiencing the periodic spells of regular line drops which have seemed to plague my connections during Demon's worst weeks. However, at the end of the day I've always considered it easier to stick with them than switch to another ISP.

PROVIDING SERVICES

My traditional stance on ISPs has always been that you tend to get what you pay for. Back in early 1995, my £11.75 a month bought me 28.8K local rate dial-up access, unlimited email addresses (although access was SMTP-only then, not POP3), an uncensored news feed, a telephone support number to ring if I ran into difficulties and not much else.

Nowadays I get 15Mb of free web space, 56K access (theoretically, anyway) at local phone rates, numbers to ring when accessing Demon via my Psion and mobile phone or when abroad, a quarterly magazine, access to an email to fax gateway service and other things besides.

But Demon haven't extended the services available to their tenner-a-month subscribers out of the kindness of their hearts – they're a business, after

all, not a charity. They've done it because they've had to respond to increasingly intense competition.

The ISP market has changed just as significantly as the Internet itself over the last 42 months. In 1995, Demon was one of a few large ISPs which were complemented by a range of small, local service providers. Over the next year or two, a whole host of new, small ISPs sprang up, offering extra services to try to tempt subscribers away from the older companies. Free web space, cheaper monthly charges and fancy email services were among the weapons most commonly deployed.

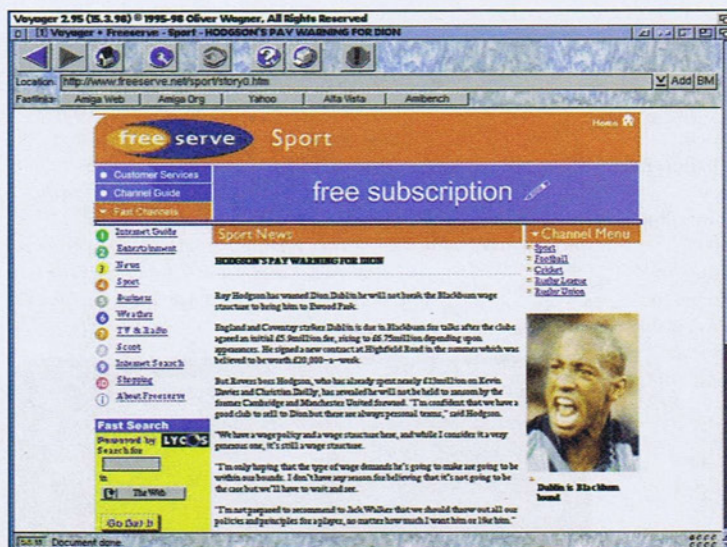
Somewhere along the way, telecommunications giants such as BT and Cable & Wireless decided that they wanted a slice of the action too. Even Richard Branson decided he wanted to try his hand at running an ISP, setting up Virgin.net with a few of his spare millions. And now there's a new development which threatens to kill off more ISPs than any of these big companies: the free service provider.

At the end of September, the Dixons group (which owns PC World, Currys and The Link as well,

incidentally) launched FreeServe. This is an ISP which is totally free to use – all you pay is the cost of your calls. The idea is that FreeServe will tempt thousands of computer users onto the Internet, who have until now been deterred by monthly fees.

In addition to full web access and unlimited POP3 email addresses, FreeServe offers its own UK-specific online content. Furthermore, all subscribers get 5Mb of web space in which to create their very own home pages.

Other than the price of your phone calls, FreeServe doesn't cost a bean to try out – so what's stopping you?

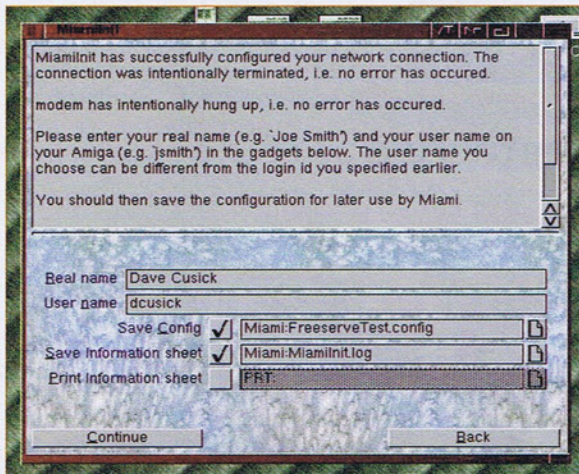


FREESERVE SERVERS:

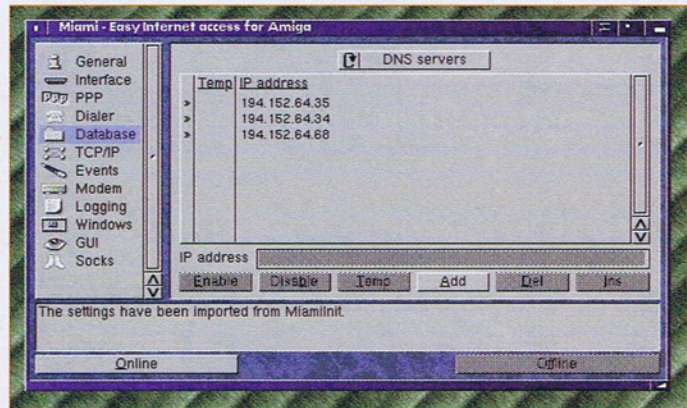
POP3: pop.freeserve.net
SMTP: smtp.freeserve.net
News: news.freeserve.net

GETTING ONLINE WITH FREESERVE AND MIAMI

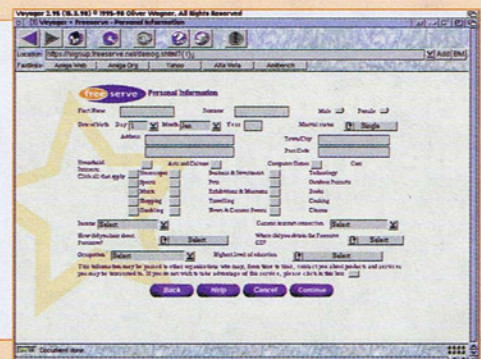
1 In *Miamilnit*, pick your modem, serial port and serial device in the usual way. When prompted for an access number, enter 0845 076 6699, then from the next screen choose Dynamic IP and PPP protocol. Enter the login name "freesserve" and the password "signup", and then tick the Use Login Dialog box. *Miamilnit* will then test the connection. You can now enter your Real Name and a User Name and save the configuration.



2 The next step is to import your configuration into *Miami*. On the PPP options page, turn off Get DNS From IPCP. On the Database page, enter the following DNS servers: 194.152.64.35, 194.152.64.34 and 194.152.64.68. On the TCP/IP page, turn off Verify DNS Servers.



4 Next, enter your personal details. Again, *Voyager* mashes the layout a little, but don't worry. When you've done this, choose yourself an email address and a password. Freeserve will then present you with a Finished button, but this is for the benefit of Internet Explorer users on the PC, so you don't have to click this. Simply go offline.



3 Go online and use a browser capable of secure transactions to visit <http://signup.freesserve.com>. Here I'm using *Voyager NG*, which makes a mess of some of the pages but works perfectly well. First select Create New Account, read the Acceptable Usage Policy (*Voyager* really goes to town here) and click Accept.



5 Now replace the temporary account details with the new PPP login name, "mylogin. freesserve.co.uk" (and not just "mylogin" as you might expect), and the password you have just selected. Then bingo, you're ready to go. The Internet awaits and monthly charges can be a thing of the past.



So what's the catch? Well, if you run into difficulties using Freeserve, you have to pay extortionate rates to ring their helpline. Of course, Amiga users have more than enough nobs to sort their systems out without the help of premium rate phone services (which is just as well, because I'd imagine if you rang the helpline you would be told by their oh-so-helpful support staff that Amiga owners cannot use Freeserve, which simply isn't true).

In fact, Dixons reckon that the money raised by the helpline will merely cover the costs of operating it. Their real income will come from a small cut of

the fee you pay to your telecommunications company when you ring the 0845 local rate number.

Unfortunately, the software which Dixons supply to allow you to sign up for Freeserve is designed for use on the PC, but you can sign up using your Amiga, as our step-by-step guide shows. It's certainly worth giving Freeserve a try - after all, it only costs the price of a local call.

So far I've found Freeserve to be pretty good. It's been surprisingly nippy at the times when I've tried it (typically in the early evening, which is generally a slow time to access most ISPs).

Whether I keep on using Freeserve,

and indeed whether in the long term I'll seriously consider using it as my main ISP, is another matter, and something that remains to be seen. But why don't you try it for yourself and make up your own mind?

WEB SPACE:

You can upload up to 5Mb worth of HTML pages, images and other files for your home page by FTPing to <http://uploads.webspace.freesserve.net> (just login as with PPP). The web address of your home page will be <http://www.mylogin.freesserve.co.uk>

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CREATIVE

The indispensable guide to getting the most out of your Amiga

Once again it's that time of the month where you have to stop drooling over all the new kit you want to buy and get down to some study.

Our Amiga experts this month will be tutoring you in a wide range of different skills, from web design to, er, whatever fiendishly technical devilry Mr. Goodwin is up to this month.

There's no time to be dawdling about here reading this nonsense - I expect you to get cracking right away. If you're having difficulty, remember that you can always write to the authors of these series via Workbench, at Workbench, Amiga Format, 30 Monmouth Street, Bath, BA1 2BW.

Now, start up your machines and get to work. And no talking at the back there...

Nick Veitch

SEND IT IN!

WE NEED YOUR INPUT.

Is there something that you would like to see covered in one of the current tutorial series? Why not send your suggestion to us at the magazine. Here are some things you might like to think about:

PROGRAMMING

Is there a language you can't get to grips with? Or maybe you want to know how to do a specific thing in C or ARexx? You might never find the answer unless you write in and tell us about it!

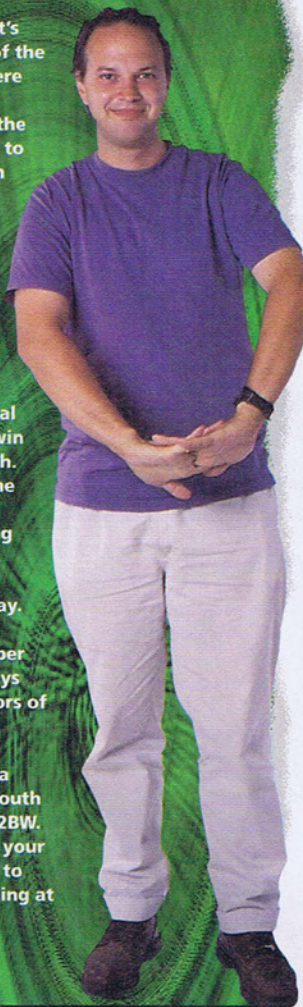
UNDER THE BONNET

Unsure of how your Amiga really works. Not sure if you are getting the best from your hardware - write to us.

GRAPHICS

Is there something you desperately want to be able to draw? Drop us a line! Contact us at:

AF Creative • 30 Monmouth Street
Bath • Somerset • BA1 2BW
Or email: amformat@futurenet.co.uk
putting "Creative" in the subject line.



70 HTML

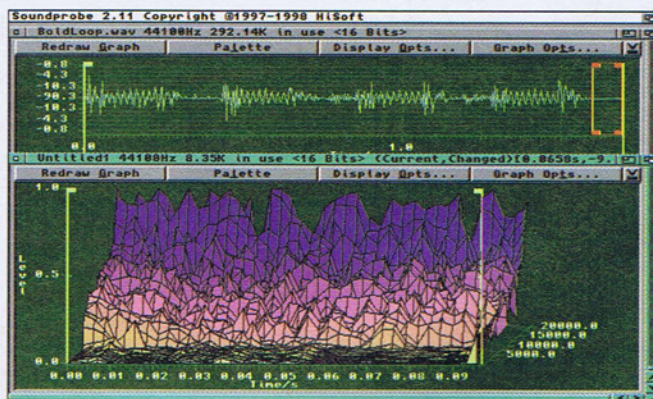
Neil Bothwick explains how to get perfectly positioned pictures on your pages.

Pictures of pubs, and how to get them in the right place on your site.

72 SOUND ADVICE

Unwanted noise and how to drum it out of your tracks, explained by Tony Horgan.

Use Soundprobe to pick part of a song that's supposed to be silent, find the noise on the graph and filter it out.



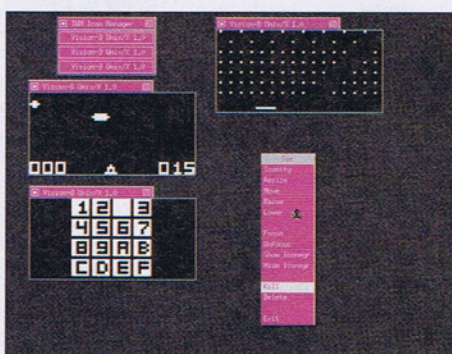
74 C FOR YOURSELF

John Kennedy pokes around your Amiga's custom hardware.

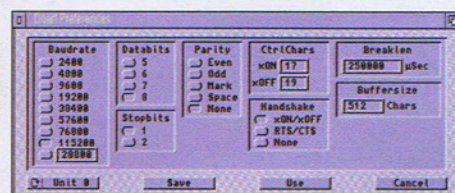
Find how to ignore the OS when writing a game.

```
for (a=1;a<500;a++)
{
    draw_cube(rastport,0); // Erase
    spin_cube(1.0); // Spin
    draw_cube(rastport,1); // Draw
    WaitTOF(); // Wait
}
```

78 UNDER THE BONNET



Simon Goodwin lifts the lid on networks and file systems in the penultimate tutorial in this series for the more experienced Amiga user.



Vision8 running in a remote X-terminal display under AmigaOS (left) and the serial prefs for a Multiface card.

Using HTML

Neil Bothwick and the art of putting pictures on your website.

AFCD35:-In the mag-/Using HTML

ON THIS

MONTH'S CD

We've covered how to set up a basic page and how to format and emphasise text, but it's going to look a bit boring if we have a text-only website. It's time for us to add some pictures.

Images are added with the IMG tag. `` will show an image at the current position in the text. There are several attributes to IMG that let you specify how it should appear, and the main ones are: SRC, ALT, WIDTH, HEIGHT, ALIGN, HSPACE, VSPACE and BORDER.

“If you want to flow text around an image, it's doubly important that you specify the WIDTH and HEIGHT...”

SRC gives the name of the image to show. This can be a relative address for a file on the same site, such as ``, or an absolute address to display an image from another site, like ``. It's generally a poor idea to link to images on another site. If you wish to display someone's logo, it's usually better to have a copy on your site. This may give faster loading and it's friendlier to them if their web space has bandwidth restrictions.

ALT defines the text to be shown when the image is not loaded. This is very important and is now a required attribute in the latest HTML specification. If you're accessing a site over a slow dialup link, you don't want to wait for a dozen button images to download before you can see which one to click on to get where you want.

Something like `` will allow your visitor to go straight to

Contents

Chapter 1: Introduction

Chapter 2: Text styles and fonts

Chapter 3: Using images

Chapter 4: Lists

Chapter 5: Tables

Chapter 6: More to come...

If you've missed any tutorials in this series, call our back issue hotline on 01458 271102.

the news section of your site without unnecessary delay. You can include an IMG tag within many of the text formatting tags we discussed last month, in order to alter the way the ALT text is displayed.

WIDTH and HEIGHT serve two purposes. The most important is to let the browser know how much space to allocate for the image when rendering the page. If you omit these, the browser will display a standard icon where each image should be placed, then it will have to reflow the text to fit around the graphics after each one has loaded. This is what causes that annoying redrawing and jumping around as a page loads. The WIDTH and HEIGHT attributes mean the browser can leave the correct space in advance and simply draw the images as they download.

The second use of the size attributes is to rescale images. This isn't a very desirable feature because the image will look blocky if it's made larger. If it's made smaller, the visitor wastes time downloading a larger image than they need.

However, if the same image appears several times in your document, in different sizes, it can sometimes help to use a single image in the largest size and then scale it so your visitor doesn't have to download different versions. Be careful though; different browsers scale images in different ways and it may not always look as you intended.

The scaling routines used by browsers aren't as good as those used by graphics programs so you may prefer to use separate images.

ALIGNING IMAGES AND TEXT

Putting an image in the middle of a block of text won't usually look very good, but there are several ways to define how it should be aligned. The simplest is to separate it from the text with `<P>` or `
`, possibly using `<DIV>` to centre it. Something like:

```
...here is some text. <P> <DIV
ALIGN=CENTER><IMG
SRC="mypic.gif" ALT="pic"
WIDTH="200" HEIGHT="100"></DIV>
<P> Here is some more text...
```

will show the image between two blocks of text and centred on the page. Until the image is loaded, the browser will display a 200x100 box containing the ALT text.

ALIGN will align an image with a block of text in a number of ways. The first three options are TOP, MIDDLE and BOTTOM, to align the text with the top, middle or bottom of the image. This is fairly limited and only really works with a single line of text, since the second line will appear below the image. More useful options are LEFT and RIGHT, to place the image on the left or right side of the window and flow text around the other side.

If you want to flow text around an image, it's doubly important that you specify the WIDTH and HEIGHT of the image, otherwise the text may start shifting around while you're trying to read it. To place your image on the right hand side of the page and flow the following text around it, use:

```
<IMG SRC="mypic.gif" ALT="pic"
```

CACHING

All browsers keep copies of files downloaded in a cache. No matter how many time you use that image on your pages, the browser only has to download it once. You can make a big difference to the time it takes your pages to load by using the same image in several places.

Image Formats

Although the main image format on the Amiga is IFF ILBM, we need a more generic format for web pages. There are three main formats to consider, all of which use some form of data compression to reduce download times.

FORMAT	PROS	CONS	COMMENTS
GIF	Well supported Fast decoding Handles animation	Limited to 256 colours	GIF is ideal for logo and button images, and results in small files of high quality
JPEG	24-bit High compression	Slower decoding 'Lossy' compression	JPEG is best suited to photographic-type images, where its high compression gives small files with minimal loss of quality
PNG	24-bit Good compression No quality loss	Not supported by all browsers	PNG is a very good image format, but is not yet supported well enough

WIDTH="200" HEIGHT="100"
ALIGN=RIGHT> Paragraph of text

You know exactly how big the image is as it will be the same size in every browser, but you have no way of knowing how much space the text will occupy as this depends on the size of your visitor's browser window and the fonts they use.

What happens if the text takes up less space than is available at the side of the image and you don't want the next paragraph to start alongside this image? Don't worry, because HTML has an option to take care of that.

Just as the ALIGN attribute of IMG starts text flowing around an image, the CLEAR attribute of BR stops it. <BR CLEAR=RIGHT> will move down the page until the right margin is clear, before placing the next object or text. The LEFT and ALL options do the same for the left margin or for both margins.

Three images on a page, showing the use of ALIGN, ALT text and HSPACE to separate text from images.

When you flow text around an image you'll see that the text touches the image, which can make it harder to read. HSPACE tells the browser how many pixels of clear space to leave at the sides of the image and VSPACE does the same for top and bottom of the image. A small margin of empty space around each image can greatly improve the appearance and legibility of a page.

The last attribute for IMG is BORDER. This sets the thickness of any border that appears around the image. The default size is 1 and most browsers won't display a border of this size unless the image is also a link (more on that later). Setting it to a higher value will create a border around an image, although you can't be sure what colour it will appear in. Setting it to 0 means no border will be displayed, even if the image is a link. This is not always a good idea as there's not much point in

using DIV tags to align it on the page. You can also use an image within the A tag to make it a link. There are two popular uses for this. The first is to use a thumbnail of an image link to a larger version of the image, something like:

```
<A HREF="images/bigpic.jpg"><IMG SRC="images/smallpic.gif" WIDTH=x HEIGHT=y ALT="Cool picture">
```

can be used to display a small picture inline that loads the large version when you click on it. The larger image is contained in the A tag, so it isn't displayed inline like the IMG tag's picture. Instead, it is loaded as a separate document and displayed using whatever means you have configured in your browser. This could mean it's displayed in a browser window on its own, or it could be passed to another program, like *FastView*, for display on a separate screen.

The second popular use of image links is for navigation buttons. Let's go back to our example of a local information site from Part 1 and set up a row of buttons across the top of the page:

```
<DIV ALIGN=CENTER> <A HREF="home.html"><IMG SRC="images/home.gif" ALT="Home" WIDTH=80 HEIGHT=30 BORDER=0></A> <A HREF="shops.html"><IMG SRC="images/shops.gif" ALT="Shops" WIDTH=80 HEIGHT=30 BORDER=0></A> <A HREF="pubs.html"><IMG SRC="images/pubs.gif" ALT="Pubs" WIDTH=80 HEIGHT=30 BORDER=0></A> <A HREF="amenities.html"><IMG SRC="images/amenities.gif" ALT="Amenities" WIDTH=80 HEIGHT=30 BORDER=0></A> <A HREF="location.html"><IMG SRC="images/location.gif" ALT="Location" WIDTH=80 HEIGHT=30 BORDER=0></A> </DIV>
```

The examples in the screen grabs are on the CD, where you can view the HTML source to see how each image alignment option works.


[Home](#)
[Shops](#)
[Pubs](#)
[Amenities](#)
[Location](#)

Places to drink in Penketh

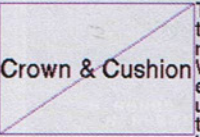
Penketh has a wide range of pubs, clubs and [restaurants](#). Some of the main local haunts are:

The Red Lion

We only have a short text here, but the use of <BR CLEAR=RIGHT> means the next image and text start below rather than alongside this one. All of the images on this page are clickable links, select any of the pictures to see a larger version.




The Crown and Cushion



This one has a much longer description, you can see how it flows under the picture once it reaches the bottom. Note that even when the image is not displayed, the browsers shows a box of the current size, thanks to WIDTH and HEIGHT. However the closeness of the text to the image is even more obvious in this case, compare this with the picture below that uses HSPACE and VSPACE to create a margin. The image buttons at the top of the page have no borders since it is obvious that they are navigation buttons, but I have left borders enabled for the photographs, otherwise it wouldn't be clear that they are also links. Notice that the ALT text is larger than the body text, due to a FONT tag surrounding the image.

The Sportsmans Arms



This image has a five pixel margin at the sides, thanks to HSPACE. See how this makes the text much more readable.

You can still use <P> to generate a paragraph break while flowing text.

Please send any comments on this site to [the webmaster](#).

placing a link on a page and then making it look like it isn't a link, but there are times when it can be useful. If you have a menu of button images, it's fairly obvious that buttons are to be clicked on, and the appearance is often improved by removing the border around link buttons.

LINKING FROM IMAGES

We've seen how you can enclose an image within style tags to affect the display of the ALT text, or

SoundAdvice

A noisy noise annoys an oyster. It also annoys **Tony Horgan**, who's on hand to tell you how to wipe it out of your musical productions.

Noise is the enemy. If you don't keep it at bay you'll end up with more snap, crackle and pop than a family-size box of Rice Crispies. It comes in many forms and from all angles, and if you want to make professional-quality sound recordings, you'll have to keep a look out for it at all times.

First of all we should define 'noise'. This is not noise as an alternative word for 'sound' – what we are talking about here is unwanted noise, which really means any sounds that find their way into your tracks without your invitation.

Noise often occupies the upper frequencies (cassette tape hiss, for

Some common sources of noise include hard disks and cassette deck motors (generally hum and whine)...

example), but it can also be a low frequency hum or a whine. Where there's noise there's always a source, and once you've found the source you're half way towards eradicating it.

Some common sources of noise include hard disks and cassette deck motors (generally hum and whine); effects processors (cheap examples tend to hiss when no signal is being passed through them); TVs and monitors (they can whine too); badly adjusted gain and level controls; not to mention the hiss that's audible on simple waveforms when sampled in low resolutions, such as 8-bit.

BEST CURE: PREVENTION

Assuming you've decided you've got some noise in your mix somewhere, the first thing to do is find out what's responsible. Switch everything off and test each sound source in turn, listening carefully for noise (turn your amp off before you power down any sound sources connected to it, unless you want to risk blowing your speakers).

Once you've found the offending item, you have two choices. Either you try to remove the noise using one of the techniques discussed shortly, or you attempt to stop the noise occurring in the first place, which is always preferable. Noise removal always carries

Contents

Chapter 1: Hard Disk Recording

Chapter 2: Digital Track Bouncing

Chapter 3: Noise Reduction Techniques

Chapter 4: Original Sample Manipulation

Chapter 5: Best Value MIDI Equipment

Chapter 6: Music Production & Mixdown

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a risk of also removing parts of the sound that you want to keep, so prevention is best. Here are some ways you can stop noise happening in the first place.

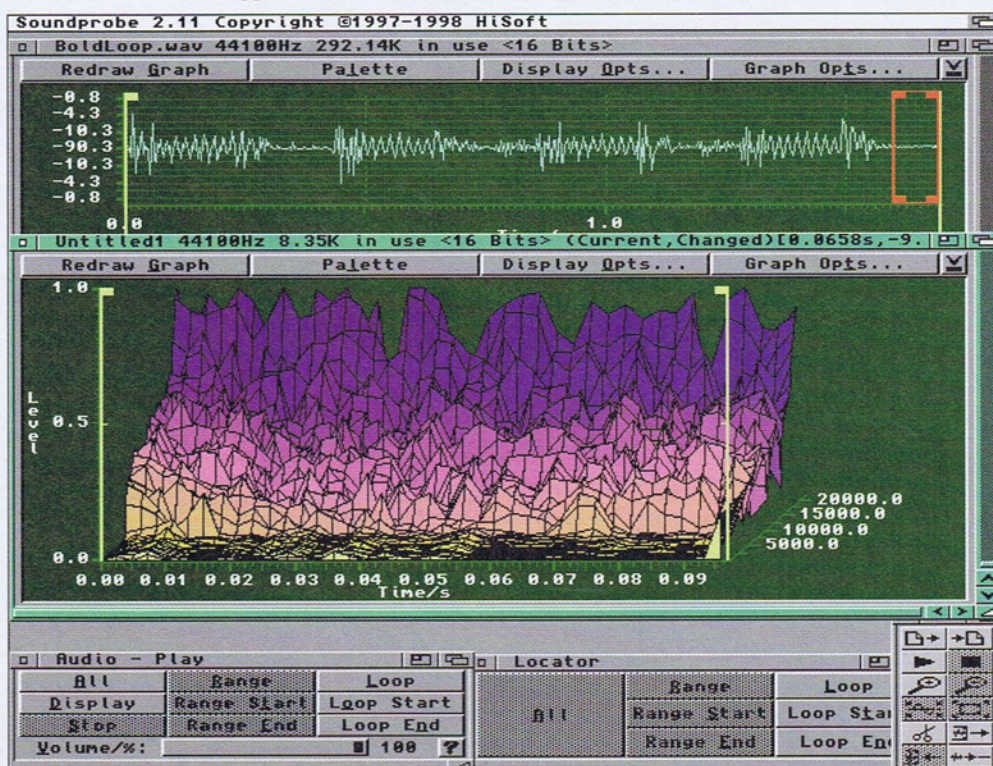
■ **TV/HARD DISK WHINE** – turn them off when you record. For your hard disk, try a utility that makes it 'spin down' on command or after a set time of inactivity.

■ **FLOPPY DRIVE CLICK** – use a utility such as *MultiCX* to turn off your floppy drive's constant clicking.

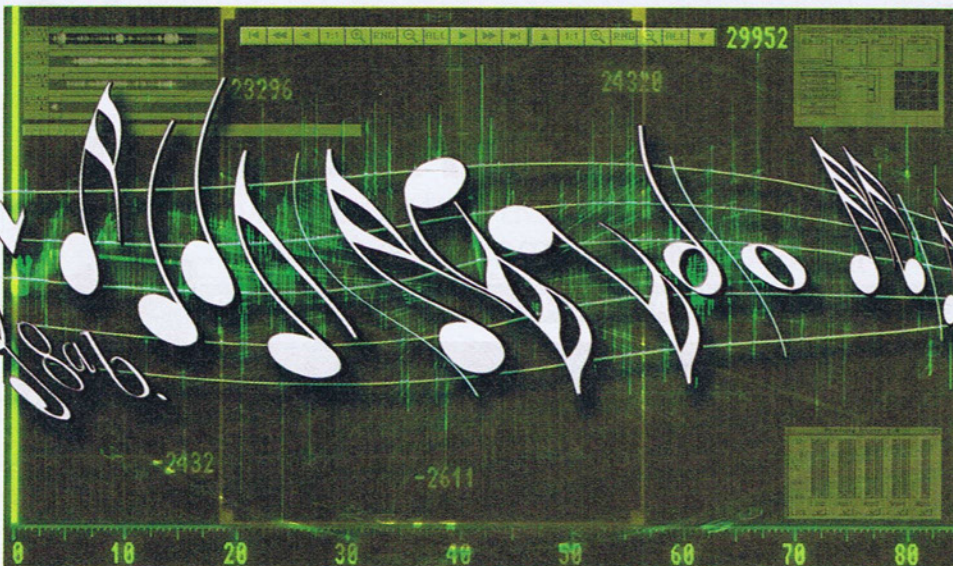
■ **GAIN/LEVEL CONTROLS** – make sure your sound source outputs are set to maximum and your gain controls (on your sampler, mixer or master recorder) are adjusted as low as possible to get a loud enough signal.

BUT FAILING THAT...

It's not always possible to stop the noise occurring, in which case you've got to try to remove it without chopping out great chunks of the audio spectrum that are a vital part of your overall track.



Pick a part of your sound that's supposed to be silent, then use the 3D graph to find the offending noisy frequencies and filter them out.



Most sample editors will have some kind of noise removal function, but these are generally nothing more than simple high frequency filters. That's fine if you don't mind losing all the high frequency content of your sound (maybe it's a bassline sample loop) but it's useless if you've got vocals or bright percussion sounds in there too.

Samplitude Opus has an ingenious method of homing in on just the noise itself. See the box for more on that one. Here are some more noisy problems and solutions...

■ HISSY 8-BIT BASS SAMPLES – this is very common because the inevitable sample noise is more perceptible on the kind of simple waveforms that typify many bass instruments. You can use a graphic equaliser between your source and sampler to reduce the high frequencies that are recorded, but you'll still get some hiss on playback.

Use the Amiga's internal lowpass filter when just the bass sound is replayed. This is an analogue filter which rolls off all frequencies above a certain level. Switch it back off again when you introduce other sounds into your track, as these will mask the noise on the bass sample.

■ EFFECTS UNITS – cheap effects units may not have enough headroom to be able to process low volume sounds without introducing their own sampling noise. This can be especially evident with reverb settings, where the sampling noise of the unit's own DSP itself and any hiss going into the unit is reverbed and so generates more noise.

Make sure the input gain is set lower rather than higher, and that the input level to the unit is nice and high. Then insert a graphic equaliser between the effects unit output and your mixer with the graphic EQ set to reduce the upper frequencies.

■ HUM AND WHINE ON SAMPLES –

this could be introduced by a number of appliances and sound sources. Removal is best done with *Samplitude Opus* (see the box) but failing that you could try to do the same thing by hand.

You'll need to find the frequencies occupied by the noise, then use a sample editor (such as *Sound Probe*) to filter those specific frequencies. You could try a hit and miss approach, guessing frequency ranges to see what works best, but a better idea is to find a part of your sample which contains just the noise, then amplify it to maximum and analyse it in the FFT display mode. This will show you the noisy frequencies.

Tony's Tips

■ Shop around for cheap stand-alone graphic equalisers. Look in second hand hi-fi shops and ads in local papers. Try not to pay more than £20 if it looks like the shop has more than they're likely to sell (not many people buy them these days) and go for one with as many bands as possible. Treat yourself and buy a few as they come in handy in a range of situations.

■ Put the RF shielding back on your Amiga if you had one but took it off while snooping around. It'll keep things quieter.

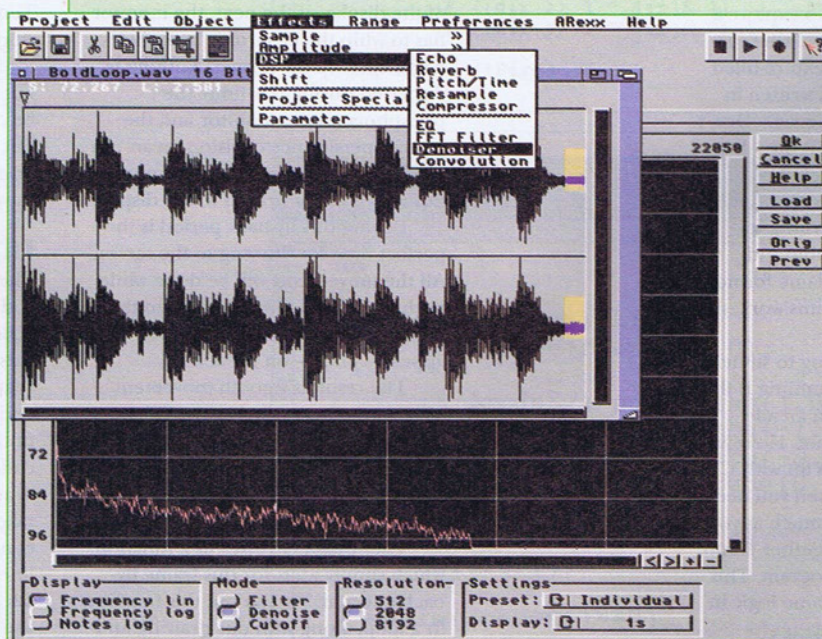
■ To brighten up sound samples, use a graphic equaliser to increase the incoming treble when you sample. This generally gives better results than EQing the sample once it has been recorded, which can lead to a more harsh, brittle sound as the sampling noise is amplified.

■ If you have a GVP D558 Plus sampler, use its own anti-aliasing feature when sampling to grab cleaner samples. The results are better than you might think.

Jot down the frequency range and then use this information to set up a 'band reject' filter to process the main sample (the frequency band you specify will be 'rejected' or removed from the main sample).

THE EASY WAY: SAMPLITUDE

Samplitude Opus has the best noise removal function of all. The Denoiser feature works like this. Let's say you've mastered your latest track to hard disk, but it's got some kind of noise that's all over the whole thing (maybe your sound card isn't well insulated or you had electronic interference from disk drives and fans during recording). The very first couple of seconds of the recording will have just the noise and nothing else (the bit just before you hit Play on your sequencer). You can copy this part and tell *Samplitude Opus* to analyse its frequencies, then remove those frequencies from the main recording.



This is excellent, as it can adapt to any kind of noise. It could take out three or more types of noise in one pass (a hum, a whine and a hiss), without taking a hatchet to the rest of the frequencies in between. It's not infallible however.

If the noise happens to occupy a frequency band also used by the cymbals, for example, it will wipe out the cymbals too. The lesson: avoid noise in the first place!

Samplitude Opus with its seek and destroy Denoiser feature in action.

C for Yourself

John Kennedy shows you how to avoid the OS and get down to some of the Amiga's custom hardware.

AFC35: In the mag/C-Course.10



So far, all our programs have been what's often referred to as "event driven". That is, they generally wait around until an event, such as the user clicking something with the mouse button, happens. Now while event driven programs are an extremely noble ideal, and indeed, they are how all applications work, they just don't suit games. In a game, the bad guys don't wait around doing nothing until you make your move – the action happens all the time.

Of course, we've now moved from a multitasking-friendly approach to that of creating busy processor-sucking loops.

It's only fair to point out that most Amiga games are (were?) written in Assembly language rather than C. *Assembler* is the step down from C if you like, dealing in the instructions which the CPU itself uses. *Assembler* is also very well suited to poking the Amiga's custom chips into doing tricks, something which Amiga programmers have always liked to do.

This pretty much created the demo scene, and you only need to explore a few Amiga programming websites to come across the latest in texture-filled polygon copper effects, all written in brain-bending *Assembler* language. Don't let these people put you off: the "demo" style of programming is great for pushing existing hardware to its limits, but it's not so great for learning to develop neat, understandable and reusable code. You aren't lame for not knowing how those programs work, nor for using C.

That said, I'm not going to sit here and tell you that C programming is the best way to write fast-action arcade games on the Amiga. It's not. However, you can still do a heck of a lot with C. If you do get to the point when you need to speed up everything as much as you can, it's possible to link together C and *Assembler* code into one program. This means you can write the game logic in the easier-to-understand, easier-to-maintain, higher-level C, and then write

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Chapter 5. Simple (OS legal) graphics

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Chapter 9. Simple 3D graphics

Chapter 10. A game! (Continued from last month)

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the time-critical parts in *Assembler*. There is a place for both C and *Assembler* in Amiga programming, and a clever programmer is the person who knows when to use the best language for a given task.

PARADIGM SHIFT

Let's move away from our event-driven model to a design strategy more suited to games. The key to smooth movement in an action game is the Vertical Blanking Interval. As you know, the TV or monitor which displays the Amiga's screens and windows does so on a line-by-line basis, effectively scanning the display from top-to-bottom, left-to-right.

In the time between the end of the display of one frame and the beginning of the display of the next, the monitor has to whip the electronic scanning beam back up the screen. Nothing is displayed during this time: the phosphors on the monitor and the human persistence of vision mean you can still see the display, even though nothing is being written to the display.

During this fly-back period is the perfect time for drawing to the screen. All the movements will be done while nothing is happening, and when the next frame is displayed it will just appear – ping! – on the screen.

The result is smooth movement with no tearing or flickering. Of course, this assumes that your code which displays the new frame can execute in the fraction of a second between each frame update.

The Amiga OS gives us a function which simply waits for this frame fly-back to occur. We can put this function in a loop, along with our drawing and updating code, and everything will work

fine. Of course, we've now moved from a multitasking-friendly approach to that of creating busy processor-sucking loops, but as games generally take over the entire system anyway, this isn't really a problem.

If you're really on the ball here, you might think of using the frame flyback interrupt to create an event which we could process in our ordinary wait statement. And you would be correct: this is possible. When the bad guys in the game are running around doing mischievous things, they're often doing it because a timer has created an event, and the event triggers the code which looks after their behaviour. However, setting up a timer like this is a very tedious business (requiring use of the Timer Device) and frankly it just isn't worth the hassle at this level.

We'll take the easy way out for now, but feel free to explore it if you want to be completely OS friendly. Although not strictly an event driven program any more, we can still make our bad guys move around in the background.

LET CODING COMMENCE!

The main loop of our new, busy system code is simple and consists of four actions. The actions will erase the existing shape, update it, draw the new shape and then wait for the frame to end. That's all – over and over again, until the loop ends. In the example code below, you can see how the drawing function has been expanded to take an extra parameter: this is used to control the ink colour used to draw the lines. When a value of 0 is used, the background colour is selected and so the shape is erased from the display.

The program from which this code

Listing 1

```
for (a=1;a<500;a++)
{
    draw_cube(rastport,0); // Erase
    spin_cube(1.0); // Spin
    draw_cube(rastport,1); // Draw
    WaitTOF(); // Wait
}
```

is taken works well on my Amiga 4000 – at least it does when I make sure that the C compiler makes use of the Fast Floating Point libraries. On a slower Amiga, or using other math libraries, you'll probably see flicker in the display. This isn't good. It implies that the drawing process is taking too much time and it's exceeding the time allowed to us by the fly-back process.

Oh dear, I pretend to hear you cry, and after all that you told us about how C could be used to program games. Isn't a degree of flicker when drawing only a single, solitary shape going to rule out anything more extensive? Don't panic, because there are plenty of ways to get around this problem, and we'll look at one in due course.

“Although not strictly an event driven program any more, we can still make our bad guys move around...”

LOW DOWN DIRTY...

It's about time we looked at getting some degree of feedback from the user, hopefully someone who will eventually become a player. There are three obvious input systems to use with the Amiga: the keyboard, the mouse and the joystick. As you would expect from a sophisticated operating system such as the Amiga's Intuition, there are many powerful and complicated devices and protocols required to access the devices and ask them nicely to provide messages (the "events" I seem to like talking about) to our program.

Yes, well, while these messages and devices (and indeed, events) are all very well and good, let's ignore that side of things. In the interests of simplicity, let's bypass the operating system and deal with the Amiga hardware directly.

Now you might be the sort to throw your hands in the air and call me a heretic for this kind of attitude. If the creators of the Amiga were kind enough to provide us with ways and means to access the hardware through the OS, shouldn't we be using it?

Of course we should – sort of. The reasoning behind using the OS is that it provides an abstraction layer between the application programs and the hardware. If the program makes use of the OS to get input from, say, the

joystick, the OS doesn't need to know anything about the hardware which looks after the joystick. It can simply rely on the OS to tell it when the joystick has been waggled.

This means that if the Amiga was suddenly ported to a DEC Alpha platform and given a thousand-fold speed increase and 16-track stereo sound, the little piece of code which looked after the joystick would still work. It's a nice idea, of course, but I have a sneaky suspicion that the porting to a DEC Alpha isn't going to happen.

These days it's fairly safe to assume that when you look at the hardware address of the joystick hardware, it's going to be the same on any Amiga platform. Heck, even those who have created Amiga emulators for other computer systems have modelled the custom chips so the code will work on a PC as well as an Amiga. There are

occasions when going the OS route is vital, but this certainly isn't one of them. Listing two, therefore, is a little function which returns the status of the joystick (second mouse) port. It's built into a small program which demonstrates how to use it to read the port, and it ends when you press the fire button. It directly reads the settings of the joystick from the custom chips, so don't worry if it looks a little scary.

With this little snippet of code, it isn't difficult to add a few functions to our work-in-process program, including the ability to drive the amazing cube-tank around inside the computer. That's what the full listing does. It has been included on this month's cover CD, and it's also available on the next page in full.

The code has a slightly different main loop, which should make its purpose fairly obvious.

Listing 2

```
#include <exec/types.h>
#include <hardware/custom.h>
#include <hardware/cia.h>

#define CIAAPRA 0xBFEE001

extern struct Custom far custom;
struct CIA *cia = (struct CIA *) CIAAPRA;

main()
{
    UWORD dir,fire;

    do
    {
        dir = custom.joyldat;
        fire = !(cia->ciapra & 0x0080);

        if (fire) printf("Fire\n");

        if (dir&2) printf("Right\n");
        if (dir&512) printf("Left\n");
        if ((dir >> 1 ^ dir)& 1) printf("Down\n");
        if ((dir >> 1 ^ dir)& 256) printf("Up\n");

        } while (!fire);
}
```

Listing 3

```
do
{
    code=joystick();
    draw_cube(rastport,0); // Erase

    if (code&2) spin_cube(1.0);
    if (code&4) spin_cube(-1.0);
    if (code&8) move_cube(-0.1);
    if (code&16) move_cube(0.1);

    draw_cube(rastport,1); // Draw
    WaitTOF(); // Wait

    } while ((code&1)==0);
```

Continued overleaf ➡

GAME PROJECT - DRIVE THE TANK!

```
#include <exec/types.h>
#include <intuition/intuition.h>
#include <intuition/intuitionbase.h>
#include <intuition/screens.h>

#include <clib/exec_protos.h>
#include <clib/dos_protos.h>
#include <clib/intuition_protos.h>

#include <hardware/custom.h>
#include <hardware/cia.h>

#define CIAAPRA 0xBFE001

extern struct Custom far custom;
struct CIA *cia = (struct CIA *) CIAAPRA;

#include <math.h>

struct Library *IntuitionBase;
struct GfxBase *gfxbase;
// Open graphics library!

float const rad=(3.141592654/180);
#define HALFWIDTH 160

struct cord_type {
    float x,y,z;
};

struct cube_type {

    struct cord_type p1[34];

    struct cord_type p2[34];

    float position_x;

    float position_y;

    float position_z;
    float direction;
} cube;

struct cord_type cube_lines[] = {
    // Base
    {2,0,1.5},{-3,0,1.5},
    {-3,0,1.5},{-2,-1,1},
    {-2,-1,1},{1,-1,1},
    {1,-1,1},{2,0,1.5},

    {2,0,-1.5},{-3,0,-1.5},
    {-3,0,-1.5},{-2,-1,-1},
    {-2,-1,-1},{1,-1,-1},
    {1,-1,-1},{2,0,-1.5},

    {2,0,1.5},{2,0,-1.5},
    {-3,0,1.5},{-3,0,-1.5},
    {-2,-1,1},{-2,-1,-1},
    {1,-1,1},{1,-1,-1},

    // Pyramid
    {2,0,1.5},{1,2,0},
    {2,0,-1.5},{1,2,0},
    {-3,0,1.5},{1,2,0},
    {-3,0,-1.5},{1,2,0},

    // Gun
    {0,1.5,0},{-3,1.5,0},
};

void define_cube()
{
    int i;
    int j=0;
    for (i=0;i<17;i++)
    {
        cube.p1[i]=cube_lines[j++];
        cube.p2[i]=cube_lines[j++];
    };

    cube.position_x=0;
    cube.position_y=-0.5;
    cube.position_z=7;
    cube.direction=180;
}

int joystick()
{
    // Scan the joystick and
    // Return a code value

    int code=0;

    UWORD dir,fire;

    dir = custom.joyldat;
    fire = !((cia->ciapra & 0x0080) );

    if (fire) code=1;
    if (dir&2)
    if (dir&512)
    if ((dir >= 1 ^ dir)& 1) code+=8; // Down
    if ((dir >= 1 ^ dir)& 256) code+=16; // Up

    return code;
}

void move_cube (float distance)
{
    // Move the XX,ZZ co-ords, depending on current
    // direction the object is facing

    float zz,xx;
    int j;

    float sd,cd;
    sd=sin(cube.direction*rad);
    cd=cos(cube.direction*rad);

    cube.position_x+=cd*distance;
    cube.position_z+=sd*distance;
}

void spin_cube (float angle)
{
    // Spin around Y axis of the player

    float zz,xx,pxx,pzz;
    int j;

    float sd,cd;
    sd=sin(angle*rad);
    cd=cos(angle*rad);
    cube.direction+=angle;

    for (j=0;j<17;j++)
    {
        xx=(cube.p1[j].x*cd)-(cube.p1[j].z*sd);
        zz=(cube.p1[j].x*sd)+(cube.p1[j].z*cd);
        cube.p1[j].z=zz;cube.p1[j].x=xx;
        xx=(cube.p2[j].x*cd)-(cube.p2[j].z*sd);
        zz=(cube.p2[j].x*sd)+(cube.p2[j].z*cd);
        cube.p2[j].z=zz;cube.p2[j].x=xx;
    }
}

void rotate_cube (float angle)
{
    float zz,xx;
    float sd,cd;
    sd=sin(angle*rad);
    cd=cos(angle*rad);

    xx=(cube.position_x*cd)-(cube.position_z*sd);
    zz=(cube.position_x*sd)+(cube.position_z*cd);
    cube.position_z=zz;
    cube.position_x=xx;
}

void draw_cube (struct RastPort *rastport, int c)
{
    // Draw the Cube in 3D

    float x1,y1,z1,x2,y2,z2; // 3D co-ordinates
    float px1,py1,px2,py2; // 2D co-ordinates
    int i;

    SetAPen(rastport,c);
    for (i=0;i<17;i++)
    {
        x1=cube.p1[i].x+cube.position_x;
        y1=cube.p1[i].y+cube.position_y;
        z1=cube.p1[i].z+cube.position_z;
        x2=cube.p2[i].x+cube.position_x;
        y2=cube.p2[i].y+cube.position_y;
        z2=cube.p2[i].z+cube.position_z;

        if ((z1>1) && (z2>1))
        {
            px1=100*(x1/z1);py1=100*(y1/z1);
            px2=100*(x2/z2);py2=100*(y2/z2);

            px1+=HALFWIDTH;px2+=HALFWIDTH;
            py1+=HALFWIDTH;py2+=HALFWIDTH;

            Move(rastport,(int)px1,(int)py1);
            Draw(rastport,(int)px2,(int)py2);
        }
    }
}

void main()
{
    struct Screen *myscreen;
    struct Window *mywindow;
    struct RastPort *rastport;
    int code;

    IntuitionBase = OpenLibrary("intuition.library",37);
    if (IntuitionBase!=NULL)

        gfxbase=(struct GfxBase *)OpenLibrary("graphics.library",33L);

        if (gfxbase!=NULL)
        {
            if (NULL!=(myscreen=OpenScreenTags(NULL,
            SA_Width,320,
            SA_Height,256,
            SA_Depth,1,
            TAG_DONE)))
            {
                // Screen open, try for Window

                if (NULL!=(mywindow=OpenWindowTags(NULL,
                WA_CustomScreen,myscreen,
                WA_Backdrop,TRUE,
                WA_Borderless,TRUE,
                TAG_DONE)))
                {
                    // Window open!
                    ShowTitle(myscreen,FALSE);

                    rastport=mywindow->RPort;
                    define_cube();

                    do
                    {
                        code=joystick();
                        draw_cube(rastport,0); // Erase

                        if (code&2) spin_cube(1.0);
                        if (code&4) spin_cube(-1.0);
                        if (code&8) move_cube(-0.1);
                        if (code&16) move_cube(0.1);

                        draw_cube(rastport,1); // Draw
                        WaitT6F(); // Wait

                    } while((code&1)!=0);

                    draw_cube(rastport,1);
                    //Delay(500);
                    CloseWindow(mywindow);
                }
            }
            CloseScreen(myscreen);
        }
        CloseLibrary((struct Library *)gfxbase);
        CloseLibrary((struct Library *)IntuitionBase);
}
}
```


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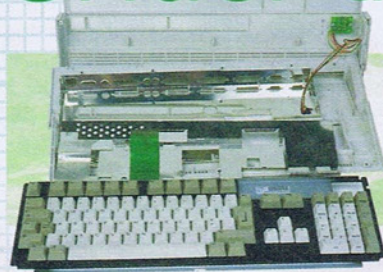
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Under the Bonnet

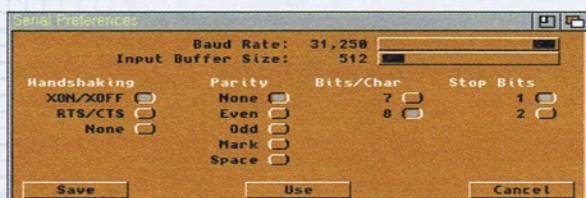
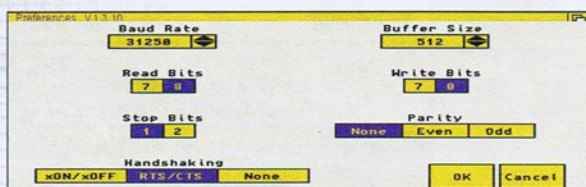
Simon Goodwin lifts the lid on Amiga networks and file systems.



Last month's column explored retargetable sound and vision. Stream and storage system redirection achieves similar effects in less obvious ways.

AmigaOS is a device independent operating system: basic operations can be performed on any stream of data, regardless of source or destination. You can COPY to PRT: as easily to RAM: or DF0:. This principle extends deep into the system software, making it easy to add hardware and redirect existing software there.

It takes subterfuge to redirect Kickstart 1 serial preferences.



Programs identify data sources and destinations by symbolic names; the name PAR: is recognised and connected to parallel.device. So is PRT:, but that symbolic name is routed through a handler which filters output to match your printer preferences.

Disks and drives have distinct names, like Empty: and DF0: – perhaps the same thing if you've just formatted a disk. AmigaOS has symbolic names like SYS:, which might be DF0: again on a system booted from floppy. AmigaOS converts names, including sub-directory paths, into hardware or drive addresses for data.

ASSIGN matches symbolic names with more real paths, which might refer to yet another ASSIGN. So ASSIGN T: SYS:T directs temporary files to the

Workbench 3 serial preferences show off GadTools but still lack unit or device options.

CAMD redirection for MIDI was a late arrival.

AFCD35:-In the Mag-/Under the Bonnet/



Contents

- Chapter 7. Multitasking – keeping it all going at once
- Chapter 8. Memory Mapping – what it's for
- Chapter 9. Memory Management – dynamic mapping
- Chapter 10. Retargeting – the test of system friendliness
- Chapter 11. Redirection – networks and file systems
- Chapter 12. Exceptions – getting along with Gurus

If you've missed any tutorials in this series, call our back issue hotline on 01458 271102.

boot disk, unless SYS: has been reASSIGNed. ASSIGN .. DEFER stops the system looking until the symbolic name's explicitly used.

Redirection is the software technique of adding and substituting names so programs can use new hardware or remote resources without changes, perhaps without even a name change. Stream devices like AUX: and SER: can be re-ASSIGNed by changing the mountlist, but most programs open such devices directly, rather than as files.

Redirection can work at the raw device level, not just through the file system names. MapDevice (Aminet), SetDevice (GVP) and PatchDevice (bsc) tweak the OpenDevice system call to substitute a device name and unit number with others, typically for an add-on serial or parallel port. My Micronik tower uses:

```
MapDevice parallel.device 0 TO
pit.device 0
```

to redirect printing through a Zorro Multiface. This works well as long as the device is accessed through the system software and not directly. Many MIDI trackers tickle Paula's serial parts directly to ensure prompt performance on an A500, preventing redirection to efficient buffered ports on modern machines. Even the generic midi.device bangs the custom metal; Commodore's retargetable CAMD device arrived too late for most Amiga MIDI software.

DRIVING FARTHER

Retargeting can make remote drives appear as if they were local. Multitasking, device-independent Amigas only need a cable and some PD. PARnet and SERnet are the simplest ways to link two computers running AmigaOS. Parallel port transfers shift around 40K to 80K per second between AppleTalk and Ethernet, which is quicker than floppies but slower than a local hard drive.

Remote drives are specified by prefixing any of their names with NET: (the device name) or Network:, the corresponding icon name. Drives 'touched' with a magic node.rinfo file automatically appear as drawers in the drive that pops up on Workbench, and others when you type their name. NetKeys software lets the mouse and keyboard of a client machine control input on a remote server.

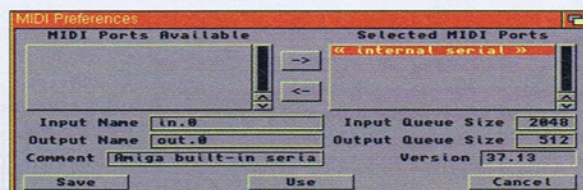
PARnet is not resilient. If you reset a machine you'll have trouble using its drive icon names until you've reset and restarted the network at both ends. PARnet bangs the metal, though bsc have a Multiface version. As with trackers, PD source means variants of parnet.device abound, from 6K to 17K in size, with compatibility a movable feast.

PARBench is an improved installer. SERnet is usually slower, but it's the only option for basic CD³² owners. ProNet is a rewrite which also supports Multiface ports, plus chat and messaging facilities.

PARnet and its relatives are cheap, effective ways to link otherwise isolated Amigas, but if you're joining a larger network you'll want something scalable to almost any cable length or number of network stations. You'll need Envoy, or an Internet-style TCP/IP network.

ON THE CD

■ DOSTrace ■ NetKeys ■ ParBench ■
 Parnet ■ PatchDevice
 ■ PLIP ■ ProNET ■ SANA ■ Sernet ■
 SLIP ■ SnoopDOS





ENVOY

Before the web caught on, Commodore commissioned *Envoy*, a custom Amiga networking package. *Envoy* was well-designed and easily extensible for new hardware, so it's still a good choice if your network is built entirely out of Amigas. It supports multi-user file access, with individual password protection for each partition or sub-directory controlled by a file on the host system.

Envoy also supports printer sharing, which worked rather well around the AF office, alongside *Screamernet*: 3D rendering farmed out to four networked Amiga systems sharing a directory via *Envoy*. *Envoy* works on any Amiga with at least Kickstart 2 and co-exists with TCP/IP stacks using the same hardware, including Commodore's discontinued AS225. Version 2 is now available from lots of places, but we haven't seen it yet.

TCP NETS

These days most serious Amiga systems have a TCP/IP stack installed for Internet access. TCP/IP (Transmission Control Protocol/Internet Protocol) eases operation with alien systems, at the expense of Amiga niceties like backdrop icons and 'notification' of file changes.

Miami and *AmiTCP* interface Internet Protocol, whatever the hardware, to Amiga applications. This is fine for file-sharing, and *Miami* allegedly supports remote printing too. These stacks lack *PARnet*'s easy remote mouse and keyboard operation, but this can be added with software like the Amiga port of the *Unix X Windowing System*, which turns your Amiga into a graphics terminal under IP control.

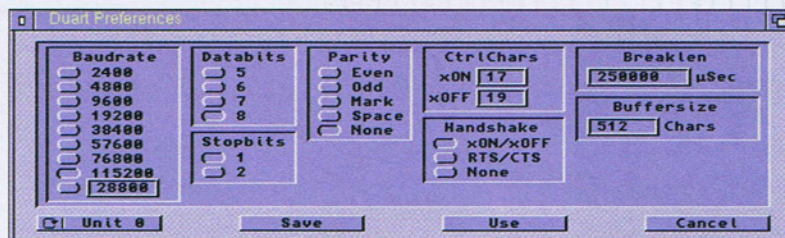
One stack can handle inter-Amiga networking, Usenet, web and FTP access, as well as connections to alien PCs, Macs and *Unix* boxes. You may see odd file names if your host runs on a Mac as Apple's file paths are in a world of their own. Point-and-click requestors obviate this problem, removing the need to retype weird Mac names.

INSECURITY

Timo Rossi's *NetFS* is a net file server for Amigas which are running TCP/IP. You can mark partitions as read-only or inaccessible by putting dummy files called *.readonly* or *.nomount* in the root directories, but you can't prevent anyone who knows your IP number from making a connection.

TCP/IP can be a security hole as it allows remote users to read your files and even execute them. If you're setting up a public server, it's wise to install

DosTrace tracks local and remote file accesses.



PatchDevice links serial.device to bsc's DuartPrefs.

Aminet's MultiUser extensions and adapt the *Unix* concept of user and group permissions.

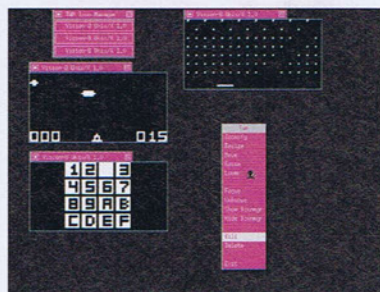
FTPMOUNT

FTPMount (on Aminet and our CD) translates Internet File Transfer Protocol (FTP) into Amiga disk operations so you can view, read and update remote directories from any application, as if

they were on your own machine, simply by prefixing the remote path with FTP:.

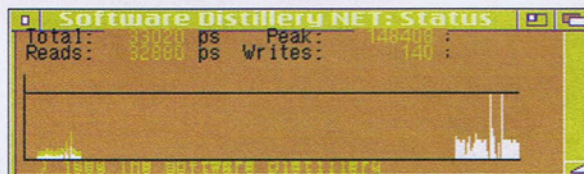
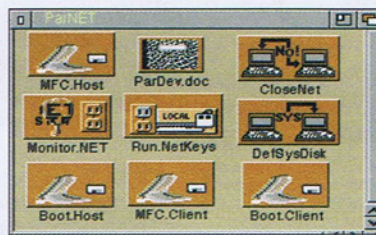
I use *FTPMount* with *Directory Opus* 4 to update my web pages – the connection to Woden, my local ISP, is as easy as

local floppy access. *FTPMount* works well with Ethernet connections, but a dedicated utility like *AmFTP* or the Shell stalwart *NCFTP* may be a better bet for slow remote FTP sites; run that and switch to something else while the net ponders your request.



Vision8 runs in a remote X-terminal display under AmigaOS.

PARBench installs PARnet relatively painlessly.

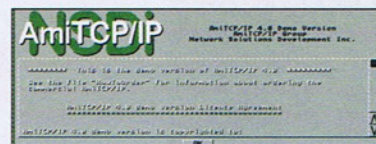
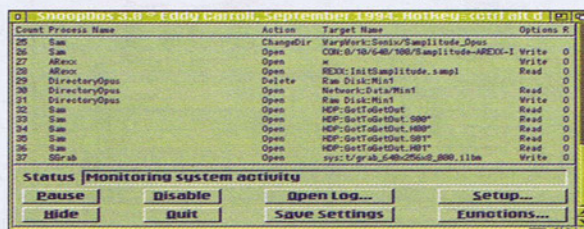


PARnet's speedometer struggles with new Amiga fonts.

SnoopDOS monitors and reports system activity.

SANA

Lower-level access to each device is provided by SANA (Standard Amiga Network Architecture) drivers, currently at release 2. The SANA layer means you can link computers any way you like,



AmiTCP brings Internet Protocol networks to the Amiga.

with serial, parallel Ethernet, AppleTalk, token ring or damp string-and-cocoa-tin connections – given a cocoa tin driver, of course... The speed will vary but the facilities won't.

SANA adds a DEVS:Networks drawer containing hardware drivers. The Amiga Developer CD contains a SLIP (serial link Internet protocol) driver and support for Commodore Ethernet cards, plus lots of SANA2 support files. Other SANA drivers, such as *PLIP* (Parallel Link IP) are on Aminet or supplied with network adaptors. The standard *SLIP* code supports any serial device or unit.

DEBUGGING

The main problem with setting up networks is getting the cables and network station numbers right. After that it just works and it's hard to remember your initial struggle.

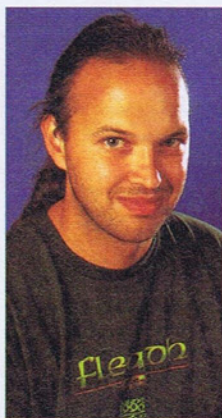
The PING command times low-level communications between your system and a remote one, identified by its IP number (four-byte values which are separated by dots).

If your network software goes wrong, *DOStace* and *SnoopDOS* can be helpful in working out what's being accessed (or not). These programs intercept attempts to open files by name, reporting the path and the result. Some programs have path-name length limits – the original BCPL Amiga code is limited to 255 characters by prefix bytes – so judicious ASSIGNs can avoid path name overflows, as well as gratuitous typing.

Serial and Ethernet links use standard cables, but don't forget the terminators needed at each end of a thin (coax) Ethernet link. Amiga specialists can supply ready-made *PARnet* cables if you don't relish the thought of making your own.

GURU TIME

The next column is the last in this series and appropriately deals with the ultimate challenge for Amiga aficionados – the decoding and diagnosis of Guru Meditation codes, displayed when programs go awry in a big way. Learn to tame the Guru with *Amiga Format*'s ultimate bonnet exposé, next month.



MailBag

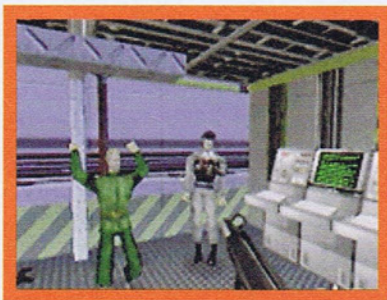
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Somerset • BA1 2BW or email: amformat@futurenet.co.uk
 – putting 'Mailbag' in the subject line.

DEVELOPING SITUATION

When the November Box appears, games and software will be developed for the new super Amiga generation. It certainly won't be long now and I have some questions. First, will games like *Doom Trilogy*, *Quake* and *Napalm* be ported to MMC, the much talked about mystery monster chipset in the next generation Amiga? Also, could we expect to see huge, top-quality games like N64's

Goldeneye on the super Amiga? Do you even know about software houses working on MMC-only titles of brand new games?

Helge Kvalheim
Norway



The N64's *Goldeneye*. The new generation Amiga software should surpass games like this with ease.

In answer to both your questions – you tell me! Will it rain tomorrow? Will Manchester ever host the Olympics? Will Colin ever make a cup of tea? We aren't in charge of who develops what – that's up to individual programmers and software houses. If you've supported the programmers who developed the Amiga clones of the games you mentioned, they may well continue to develop them. Personally, I don't think there will be much point in porting the likes of *Doom* and *Quake* because the new Amiga will be capable of much better things.

SPARE US

- Your ideas for Workbench 3.5
- Hate-mail regarding former members of the CU Amiga team
- Death threats
- Whinges from sysops
- Technical questions (which should go to Workbench)
- Utter drivell

SEND US

- Your ideas for Workbench 4.0
- Constructive criticism about the magazine and its sections
- Nice presents
- Your BBS contact details
- Letters about the Amiga market, the mag or your experiences
- Whatever the opposite of that is

I seriously doubt that any major software houses are developing new Amiga versions of their games yet because, er, the "November" Box development machines aren't available yet.

MESSAGE FROM THE MED

Living as I do in Crete, far from any Amiga support, and being almost completely computer illiterate, you'll understand how much I appreciate AF. However, I'm not writing to compliment you on a helpful, well-designed, amusing and literate (usually a contradiction in terms in the computer mag world) publication. Everyone does that, don't they?

Instead, I'm writing to praise some good service and to make a plea for the forgotten PD writers. First, I want to put on record the excellent service I recently received from Siren software. I wanted to upgrade my Amiga 1200 with a hard disk, CD-ROM and accelerator and, having got very little help from

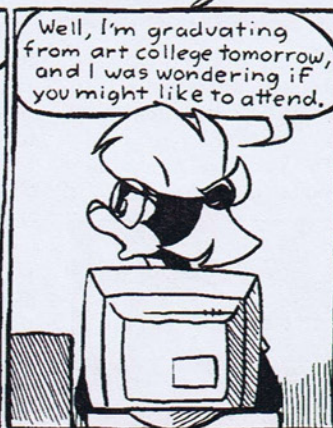
another very well known and powerful company, I turned to Siren. Not only did I get a very lucid letter explaining the options in layman's language but, after I received the equipment, Simon Cobb was extremely patient in helping me through the installation.

On top of all this, because of the strange situation in this village where there are no addresses, Simon had considerable difficulty actually getting the stuff to us.

Companies like this do a great deal to support the Amiga and deserve our support in return. Alas, it's a sign of the times that Siren no longer feel it is economically viable to advertise in AF.

Secondly, a plea to all AF readers. My wife and I recently bought a brilliant PD adventure game called *Talisman* (80% in AF but deserved more). We got stuck towards the end and wrote to the author for assistance. Paul Jenkinson wrote back by return of post with the info we needed, but his letter

Sabrina Online by Eric W. Schwartz ©1998



"Homage to See-CAD"

REUNITED HELP!

A few years ago I had some friends. Not that I don't have any now, but anyway, back to the point. I moved away and lost contact with them. One of them was called Marcus McMullan and he was interested in insects and computers. So imagine my surprise when in the Gallery pages (October, AF115) I saw a picture of two beetles by the aforementioned Marcus. Please could you print this letter in your fine magazine, under the title Paging Marcus McMullan, so he can get in touch?

I also enjoyed the article on digital cameras and kites as I've been looking for something new to use mine for, and I may well try it (girlfriend and bank balance permitting). It's already been taped to the handlebars of my mountain bike with minimal damage. A word of warning here: although it may seem

like a good idea to attempt that 10 foot drop off the garden wall at the same time as pressing the shoot button, IT'S NOT A GOOD IDEA. Your bike may come out pretty much intact, but with two broken ribs and three dislocated fingers, you won't. Trust me, this is a fact.

Mitch Southbourne, Dorset

We've done better than print your address - we've forwarded your details to Marcus ourselves so he should be in touch soon. Perhaps we should print bigger warnings in features like the kite one. Still, what are you complaining about? If you'd broken your bike or camera you'd have had to pay to get them replaced or fixed, but your bones fix themselves for free...

Of course it's sensible to strap your new digital camera to a kite...



also rather saddened us. He said that he had started to develop another, better game but, discouraged by the lack of response to *Talisman*, he had given up and, in fact, got rid of his Amiga. So, all you PD users out there, don't forget to drop a line to the authors of software you enjoy or find useful, even if it's Freeware.

A 25p stamp on a postcard of your local beauty spot isn't too much to ask, is it? Without these dedicated 'amateurs', the Amiga would probably be dead by now.

Chris and Sybil Moorey

Your final point is a very good one. I'm sure there are many, many people who regularly use software which they haven't paid for, and haven't even taking the time to thank the author for. A little thanks goes a long way.

OUT OF DATE

Why is it that when I went out in the middle of October to buy the October FD issue of *Amiga Format*, I found myself with the November CD issue? It must have been in print and on the shelves

within the first week of October, which is just plain silly. Are you going the same way as the end-of-summer-holiday-back-to-school advert campaigns which start weeks before the previous school year has finished? Or have you just forgotten which month it is?

As for the lack of FD issues, this is obviously just WHSmith's fault and I don't mind anyway; it makes the Amiga look better. You don't see PC mags with floppies on the front, do you? I plan to upgrade my pretty basic A1200 soon but with priority to an '030 and lots of RAM, and only £5 a week to save, it'll be a while before I can afford an external CD drive. I have had some ideas for WB 3.5 and OS5 but, apart from animated icons, I've forgotten what they are.

Don't forget to advertise though!

It may only be an expensive short term solution, but if normal people don't know how utterly fantastic the new Amiga is/will be, and if we can't counter the damaging effect of PC



The Christmas issue of AF: we wrote it in October and it's on sale in November. I'm confused...

adverts, it will fail and life will be pointless. Finally, are the members of the Jan Doyle Band and I the only people who have names for our Amigas?

Alex Timiney, via email

There are really two reasons for this. The first is that not all mags come out on the first day of the month. So, say a hypothetical mag came out on October 15th. It would still be on the shelves for the first two weeks of November, but it would have last month's date on it, which would make it appear out of date when actually it wasn't. Secondly, you may have noticed that we actually produce 13 issues of Amiga Format a year, one more than there are months. As a consequence, Amiga Format comes on sale every 28 days, which tends to make it appear earlier and earlier in the month. We have a Christmas issue to adjust for this, before going back to January.

Personally, I've found that this has completely screwed up my own perception of the date, and the names of months have become completely meaningless to me. For example, I am writing the January issue, on sale in December, in the middle of November.

On a note to people contacting the magazine, it's easier to avoid confusion if you go by the issue number, as the phrase "this month's magazine" could mean any of about three issues. Probably.

COVER UP

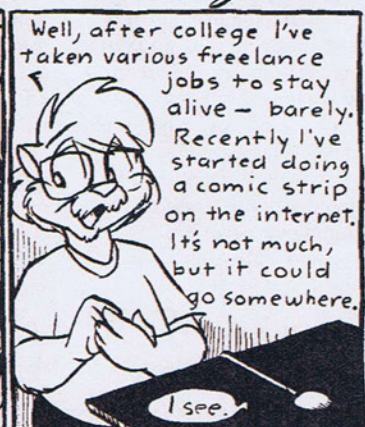
So it seems that you're after suggestions on how to improve AF then? There's only one area that I think really needs improving, and that's your front cover. Don't get me wrong, they look all right, but that's part of the problem; there's nothing really special about them.

The current issue's cover is very similar at first glance to the Internet special issue a couple of months back. Recently you even used a cover image that had been used on .net magazine only a few months before.

Why not try being a little bit more adventurous with your covers? You're the last Amiga magazine on the news stands so you need to stand out from the

Continued overleaf →

Sabrina Online by Eric W. Schwartz ©1998



"A little close to home"

Check out Sabrina Online at <http://www.coanet/people/erici/>

← crowd even more than ever. Take a bit of a risk like *CU Amiga* did with their cartoon spaceman cover earlier this year, which was (just about) relevant to the issue and looked good as well. Some of your past covers have been excellent, from *Pulp Fiction* spoofs to the 'In Two Minds' emulation issue of a couple of years back.

Daniel Thornton

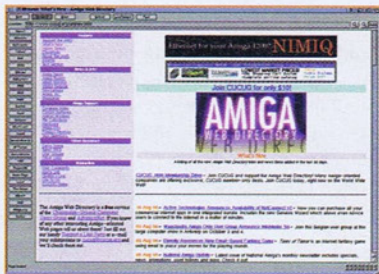
Fair comment. We've had a few difficulties in recent months with cover features being dropped at the last minute, leaving little or no time to sort out images before deadline. As for copying .net magazine, we're afraid we can't find anything remotely similar after checking through their back issues – Colin.

WORTH THE EFFORT

This is the first time I've ever written to a magazine's letters page but I had to, just to tell other readers who are potential net surfers to take the comments of Mr. Drever of Orkney with a large portion of salt.

I've been on the net for a year now – true, at first it was daunting to set up the software, but hats off to Active who talked me through the prefs needed, and thanks to UKonline too.

Surfing the net has opened many doors, and my eyes, and this alone is worth the effort and money. Then there's the wealth of Amiga software available "out there", which if we Amiga owners download and use can only be good for the platform we love.



It's well worth the hassle to get online.

So my advice to any future surfers is don't wait, do it now! Get online, come into the friendly chat channels, meet fellow Amigans and don't bury your head in the Orkney sand.

Graham Morpheys, Essex.

Thanks for those comments. People seem to be having variable degrees of ease in getting connected. Even for those who find it difficult, I'm sure they'll agree that the effort was worthwhile.

WHY BOTHER?

After printing my letter in *AF114* (Millennium) and reading issue 117, I just had to write again. The November Box has now become a February Box, or thereabouts. Obviously you got that information a good couple of months before I read your editorial, so events may well have changed, but introducing

CANON CAN, ACTUALLY

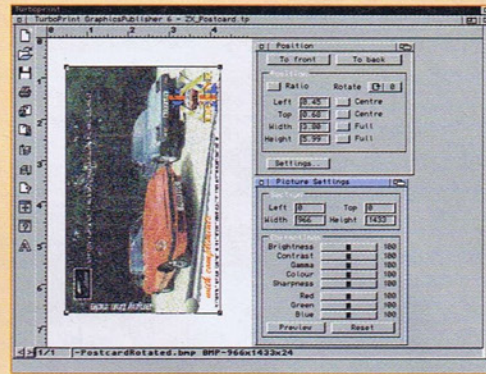
Mr F. Mizon from Huddersfield wrote that he couldn't get scanner software for the Canon 4300 scanner cartridge (Canon's IS-22) and I recently had the same problem until I contacted First Computers on page 72 of *AF115* and asked what software I needed for the Canon cartridge.

They said that *TurboPrint 6* had a built-in software driver for it. First Computers sell *TurboPrint 6* for £40 and with a next week day delivery cost of £7, a total of £47.

I'm sure that this will help Mr. Mizon and anyone else thinking of getting the scanner cartridge.

John Hughes

Thanks for putting us straight. You are, of course, correct.



TurboPrint 6 really is an essential bit of software if you're interested in top quality printing.

DRIVING FORCE

I'm pleased to see that you have taken some of *CU Amiga's* staff and contributors under your wing. It would have been a shame to lose talented Amigans. It was very good of you to tidy up the loose end of *CU Amiga's* non-working installer for *Cinema 4D* as it must have left a lot of people like me scratching their heads, wondering what to do to make it work.

Having read your reviews, I recently bought an Epson Stylus Photo and *TurboPrint 6*. It's a very good combination indeed. I get my 35mm films put onto a Kodak Photo CD by Boots and am able to print them out in *Graphics Publisher*, with excellent results. However, there is one thing that concerns me about the next generation Amiga.

I would like to be able to connect a digital camera to my computer, but at present the list of third party drivers is very limited. Likewise, a film scanner for which there doesn't appear to be any drivers at all. I got four CDs with the Epson printer, one for installation on the PC and Mac, one each for PC and Mac of *Live Pics*, plus a *Corel* sampler. These programs allow access to the printer to check ink supply, align verticals, etc, which

TurboPrint doesn't allow. I don't know whether this is due to the parallel port not being up to spec and allowing communication with the printer or if it just isn't implemented in *TurboPrint 6*. This has raised the question as to whether even if the new Amiga has a full set of the latest ports, USB, Firewire Infra

Red, etc, will the software drivers be available? In other words, no matter what speed and connectivity the new Amiga provides, without the drivers for all the new digital devices coming onto the market, it will be crippled.

It's essential that Amiga International address this problem now so we can look forward to a computer that will plug and play with anything. Maybe the answer is to include

emulation of the PC or Mac so we can make use of the driver software supplied with the hardware. This would allow a whole host of equipment to be used, without waiting to see if a driver eventually appears, either from the manufacturer (unlikely) or a third party (don't hold your breath).

Alistair R. Milne, Washington

It seems to me that the trick is not to emulate systems which do have support, but to get the manufacturers to support the new Amiga. What's the point in having a fast machine with a nice, clean, efficient and easy to use operating system if you have to emulate some tedious, counter-intuitive, flabby nonsense like Windows whenever you want to print something out?

Canon have secured a large percentage of the Amiga printer market just by providing an Amiga driver. I don't think we should allow companies who won't develop drivers have any of our money. I'd rather support those who support me. The Amiga seems to have lost this battle long ago, but the new machine must have a chance. Hopefully Amiga Inc. will take the opportunity to furnish companies like Canon and Epson with development machines. If they make it attractive to develop for the new hardware, they might have some success.

the box after Christmas seems rather silly given that people are more likely to buy a new computer during November and December, rather than as a Valentine's Day present.

I also realise that the machine is designed more for the developers than for your average consumer, so perhaps this is beside the point.

Workbench 3.5: er, why? What's the big deal? Yes, WB3.0/1 hasn't been updated for five or so years, but if WB4 is to be included with the "insert month of your choice here) Box" and WB5 with the super chip Amiga, why bother? As the article in *AF117* so rightly points out, users have been hacking and fudging WB3.0/1 for half a decade, so another nine months or so isn't that long to wait for a brand new kick-ass OS.

Michael Fraser, Leeds

Well, as has been said any number of times, the "sometime February or March Box" is a machine intended for developers, because the "real" hardware won't be ready for some time, so I don't think missing the vital Christmas market is a problem at all – this isn't a mass market machine. The point of WB3.5 is that it will update the existing "classic" Amigas. The OS for the new machine will not run on your A1200, and a lot of people aren't going to throw away their existing equipment for an expensive development machine.

HA HA

This time I can't resist sending you one and I am sure that people will laugh at it. In *AF117*, John Kennedy reviews the *C64 Back In Time* audio CD and talks about a certain Ron Hubbard, who used to compose music on C64, but it's not the case. The guy he's referring to is Rob Hubbard; Rob, not Ron. And he



Is Workbench 3.5 a waste of space? Write in and let us know what you think.

EMAIL ART?

I've been looking a lot to see if I could find any email address to the Gallery, but I haven't. So isn't it possible to send pictures to the Gallery via email?

If not, I really suggest that you open such a facility. It would really be better to send the pictures via email instead of snail mail, as it would be cheaper, faster and more efficient. So why not?

Roy Krister, Norway
deathroy@c2i.net

Well, it is and it isn't. The problem is that files over a certain size tend to cause problems with our mailserver, so if you're sending the kind of large graphic which we prefer, it's better to send it via other means. If your file is 100K or less, you can send it to us at the normal magazine email address, amformat@futurenet.co.uk, but please remember to put Gallery as the subject and to include a few details.

Most importantly, you should include your name and address (otherwise we can't send you your prize). If you have a larger file, you can send it via ftp. It should be copied to: <ftp2.futurenet.co.uk/pub/incoming/>. Please give it a name which begins "AF_" and send us an email with your details, telling us that it's there, otherwise we might never find it.

made the mistake quite a few times. But you know that there is someone called Ron Hubbard and this one is just the Scientology's guru, the man behind Scientology. What an amusing mistake! Why don't you publish something titled Scientology's guru makes music on Commodore 64 and explain this fun happening!

No, truly, this is too good, and by the way, tell John Kennedy that this is only for fun and I guess I'll laugh at it for the rest of this century, it's really excellent! Ah ah ah!

Philippe Dumont, Aywaille, Belgium

Can I point out that "b" and "n" are

I MUST DISAGREE

I am sending you this letter in response to Tony Horgan's article on the iMac and I think he has hit the nail right on the head by saying Amiga International/Gateway should wait and see what happens, but I disagree with his attitude towards it as a failure. It has brought the computer world USB, which the super Amiga must have to compete, and it has captured many people's attention (and their wallets). This could be where a new computer revolution starts and Tony is saying, "iMac doesn't actually offer anything new." Well, for one, it's the cheapest PPC G3 I've seen and with the Ethernet, 56K modem, 4Gb HD, it's a good all-in-one package. That's why I've bought one for my future graphic design career and I'm waiting for the new super Amiga to come out to put alongside it.

Darren Gillick

Hmm. There's no doubt that USB is an advance, but more than anything, the iMac is a piece of slick marketing (it obviously has you hooked). There's nothing revolutionary about it really, though - it's essentially just a "bundle", albeit one which has been incorporated into a convenient unit, and doesn't offer much more than a PC bundle in the cold light of day (except, of course, that you don't have to run Windows on it). However, it has all been put together for you and is easy to use. I think Tony was implying that Amiga Inc. could well pick up some tips on how to aim their product at a market and sell it well.

adjacent on the keyboard, and I guess John is entitled to 3mm worth of error every now and then. I'm sure the fact that Ron was a real person also made it harder for our subs to pick up. We stand corrected. By the way, you aren't related to the Count from Sesame Street are you?

SALVATION

Having recently bought an Amiga 1200 this year, I religiously bought CU Amiga every month. When the magazine finished, I thought, oh no, no more reading about the Amiga, no more games tips, no more reviews. Then I found the answer: yes, Amiga Format.

I think the magazine is superb and the articles are really interesting. Once I've read my current issue I can't wait for the next one to arrive at the newsagent. Keep up the good work and please keep the magazine going.

Steve Biggins, Filey

Well, if only you had been reading us from the start, Steve. But welcome anyway.

CONFUSED?

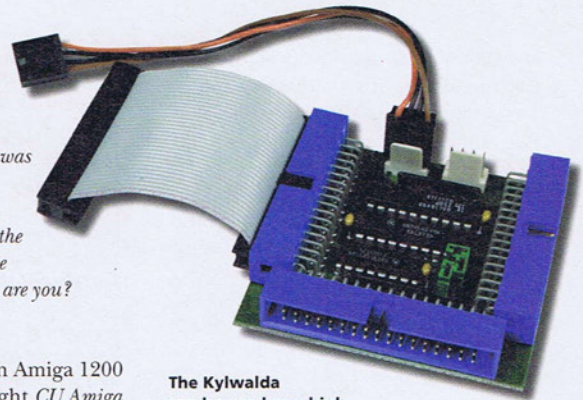
I personally can't wait for the arrival of Amiga OS3.5. I'm sick of having to use "hacks" that don't often work properly or conflict with each other or some piece of hardware in my Amiga. Now maybe everyone will conform to a standard for things like icons, instead of having two competing formats (neither of which work on my Amiga, and one of which cannot be removed completely).

Finally, I just can't make sense of Simon Goodwin's Kylwada review. Can I use a high density floppy drive or not? The statement "You don't get full HD (high density) operation" is a bit confusing when there are also references to using a HD drive.

Mr. Ben, Wales



Glad to hear there's a bit of debate on the subject of 3.5. I guess those who don't like it don't need to buy it, but then again, there are people still using 1.3... Sorry you seem to be confused. Basically, the Kylwada allows you to use a PC-compatible HD



The Kylwada can be used as a high density drive if you've got a Catweasel.

disk drive as though it was an Amiga-specific DD floppy drive. You can also use it as an HD drive if you have a Catweasel. The point is that you can replace a broken Amiga floppy drive with a cheaper PC compatible one and you can use it with the Catweasel, removing the need for two separate floppy drives.

IN IT FOR THE MONEY

Much has been written over the last few years about the downfall of the miggy. There was the bankruptcy of Commodore, the multiple takeover scenarios, the PowerPC fiasco, Gateway's apparent "invisibility" when anything more than generalities were required, and now the fall of CU Amiga.

So what really went wrong? The classic Amiga has held its own for the past God knows how long with its so called inferior technology. The fact that the PC was getting faster and faster didn't release it from the inbuilt limitations of a poor OS and config problems. Both platforms have a gigantic software base, with the Amiga, in my view, tipping the scales with a more playable games base and a more friendly utility base.

However, the graphical quality and speed of the PC base, although more costly, became more of a 'must have' thing. I believe we are where we are now due to two factors. The cost of PCs plummeted (£350 for 300MHz, 3Gb HD, 24x CD-ROM, 32Mb RAM, etc, no monitor) and the cost of Amiga peripherals were colossal in comparison.

What complete nonsense to find that for the price of a complete 233MHz PC system, including 14" monitor, you can get an '060 accelerator with no memory for the Amiga. An outdated, obsolete CPU to anyone but us. Perhaps Amiga Int. could have subsidised here; whatever happened to the capital available to promote the Amiga?

So well done to Eyetech, Power, Wizard and the rest who have, over the years, made a packet out of Amiga owners, and who finally decided that a modified £30 PC tower should cost £150 (£130 now), and lo and behold, perhaps another £100 for a few plastic bits and containers so it will all work. Then

Continued overleaf ➔

← you've got to pay postage and packing of £15, a real bargain overall.

Oh well, things could be worse – you could have bought a Power Tower 3 (030 40MHz) at £899.95 (with three pieces of free, yes FREE software!).

The real truth? I want to play *Quake*. '060 (£280), Power Tower (£200), Zorro II (£150), PicassoIV (£250). Total £880, plus £29.99 for *Quake*. Or a 300MHz PC with all trimmings at around £500 at any computer fair, plus £9.99 for *Quake*, £19.99 for *Quake 2*.

Can you blame the thousands of us A1200 owners for selling up and leaving the Amiga, rather than giving the beasts their final pounds of flesh? Grr... (I kept my A1200 for prosperity.)

Steve, Coventry

I can't really understand anyone paying £500 to play one game, but there you go. There was a guy who worked here who paid a bit more than that on a PC so he could play MechWarrior 2. The result was that after a huge amount of fiddling about, he finally got it to work (clashes between the graphics card and mouse driver) but only if he didn't move the mouse while the hard-disk was active.

The thing is, the PC wasn't designed to play games. It wasn't really designed to do anything actually, it just kept having things added on to it. If you only want to play games, I have a tip for you that will save you another £400: buy a PlayStation or an N64.

CONFUSING?

I have an Amiga 1500 desktop, A1200 HD and a CD³² with SX-1, hard drive, 4Mb and a FMV cartridge. The Cerberus could be my fourth Amiga. I'm glad they added a DVD drive, but will it play video CDs (not CDi)?

If dealers would allow us part exchange on our old machines, like the Amiga, PC, Atari, etc, the Cerberus could be a great seller. A friend of mine (ex-Amiga, now PlayStation) wanted a new PC. When I told him about the new Amiga, he became rather excited.

"You know," he said, "I miss the Amiga. I've still got some of my old games and music programs." I rushed

FAIR COMMENT

In your December issue you asked how you could make AF better. Well, I have an idea. I only buy AF for the mail order because nobody in Hull sells Amiga stuff. The main reason for this, and why many of my friends don't buy your magazine, is because many of us cannot understand what the hell you're on about most of the time.

I've only had my Amiga for a year and I was given it by an Amiga expert (in fact, he looks a bit like your Ben) who put mountains of stuff on it and gave me a load of free software. When I turn it on, it's like the car out of *Back to the Future*. The problem is that I can't run half of these things. CU Amiga and you are (or were, in the case of CU Amiga) not very helpful, as your magazine is produced through the eyes of an expert and therefore you have to be an expert to enjoy it.

I suggest that you put a section for beginners in your magazine. One more question: I have several Amos disks, including Easy Amos and Amos 3D. How do I use them?

Richard Tock, Hull

We ran a section for beginners for nearly a year and had loads of complaints from people who said they knew all that stuff already and why did we bother wasting space on it. Unfortunately, you haven't given me much to work with – are you saying that the writing is too technical or the subject matter is too technical?

out to the newsagent and bought a December issue of AF. When he saw the new Amiga, he said it looked cool and he might buy one next year, but he wasn't too keen on the new name.

Oh, I met a PC hater one day, but unfortunately he supported the Apple Mac. When I asked him if he remembered the Amiga, he burst out laughing. "Oh, the Amiga! I used to have one. And poor old Commodore. But the games were great, though..."

P.W. Soong, Birmingham



The Cerberus – it's a PC, not an Amiga.

I think you're a little confused here. The Cerberus isn't an Amiga, it's actually a PC. It isn't out next year, it's available now from Weird Science and Blittersoft, and is able to run Amiga software through emulation. The new Amiga will hopefully be available next year and, as you will have read in our news pages, significant progress has been made.

The majority of our tutorials are written with novices in mind, including the "technical" ones. Just thinking about some of the tutorials we've run over the last two years: graphics, C programming, Icons, PPaint, Cinema 4D, DOpus, DrawStudio and, er, Beginners Guide – all of them assumed only basic knowledge of how to start up your Amiga and run a program. If you don't know how to do that, there are still books available from HiSoft to get you started with an Amiga, or you could always try reading the manuals. If you have specific questions, why not write in to the Workbench section? That's what it's there for.

I don't believe that you can't follow anything in the magazine. Perhaps you should actually try reading some of it, apart from just the ads, and you might learn more.

As to your other question, several books have been written on the subject of Amos, most of which are sadly out of print. We have also run lengthy tutorials on Amos in the past. The answer which I have space to print here is, er, stick them in the drive and double click on the icons to run the software. If you want to know how to program in AMOS, perhaps you should read the manuals which came with them. I would actually recommend that you tried to learn C instead (for which we are running a beginners' tutorial at the moment) which will have the benefit of generating programs that will actually run on most Amigas.

The development machines should be available early next year, so we can start giving you a taste of what the new Amigas will be like.

ORGAN GRINDER

I have received my December issue of AF and my day has been totally spoiled; my previous high opinion of AF is blighted. Why? Because on page 11 I see the photo of, and contribution by, he who used to edit CU Amiga.

Ever since January of this year, and right up to the end of that magazine's existence, I tried on a number of occasions to get either a refund or a virus-free version of the CU Amiga CD-ROM of that issue which had a virus on it. A colleague visiting the show mentioned this to Horgan, who said something to the effect that they'd get around to it but it was taking time to deal with everyone. I never received one word from CU Amiga.

February 1998's CU Amiga CD-ROM and its covering magazine continue to gather dust, along with other rubbish on my floor. I bought no further issues of that magazine.

I hope that this isn't the start of a slippery slope for AF. I've always believed your magazine to be truly supportive fans of our beloved Amiga; my experiences of this new contributor now cause doubts in my mind.

W. H. Sharman, Belper

Well, I can't answer for Tony and I can't really comment on why EMAP failed to give you a refund. I fail to see how he can do much harm writing a column and a music tutorial. Let's give him a chance, hey?

ADVERTISING

A simple question: if the Amiga is as good as they say it is, why don't Amiga Inc./Gateway 2000 let people know how good it is? A valid question when one considers that ads for the Amiga are never seen in the national or local press, on local or national TV or heard on local or national radio, especially at a time when we are flooded with ads for PCs on all three.

If you want people to purchase your product then you have to let them know about it and, good though your magazine undoubtedly is, advertising in specialist magazines through dealerships just isn't enough to ensure that the Amiga survives long enough to be back for the future.

If the general public don't know how good a product is, they won't buy it. If they don't buy it, they don't need specialist magazines to tell them

how good it is. You then have a self-perpetuating downward spiral of people leaving the Amiga community for various reasons, but not enough coming into it through ignorance of its existence. Surely this is part of the reason for the demise of CU Amiga?

E. E. Bramwell, Blackpool

I guess Amiga Inc.'s reaction to this would be that there isn't much point advertising when they don't have any product to sell. Nobody is actively making new Amiga's at the moment (although new machines are still available).

It would seem to be a bit foolish to waste money advertising now, when the ad spend would be more effective when the new machines are actually available.



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A1200 Desktop Dynamite. 250Mb hard drive, original software, disks, manuals, AF mags April '94-Sept '98, cover discs, games (boxed), Easy Amos, Final Writer, Blitz Basic 2.1, £250. ☎ Murray 01746 761595 (evenings).

50Mb hard drive, 3.5" IDE, £15 inc. p&p. With installer disk for A600 or A1200. ☎ 0411 715548.

120Mb 2.5" hard drive £35, 170Mb 3.5" hard drive £30, 14.4K external fax/data modem £25, 2x8Mb EDO SIMMS £10, 4x1Mb 30-pin SIMMS £10, external floppy drive £20. ☎ 01476 564910. Email tommo@thenet.co.uk.

Canon BJC 250 photo realistic inkjet, plus full Canon Studio Amiga driver software. Also, black colour, neon ink cartridges and printer lead. Bargain £95. Postage extra. Boxed instructions. ☎ Bill 01762 344641.

A500 (1Mb) with Commodore colour monitor, mouse, joystick, two 50-capacity disk boxes, plus a small mixture of games and other disks (30), including Lemmings and WB1.3. £150. ☎ 0181 5732832.

A600 '030 4Mb. Four times faster than normal A600. Sell for £60 ono or swap for 100W/200W PSU. Contact Ross Whiteford, Cordon Mains, Abernethy, Perth, Scotland, PH2 9LN.

A1500 68030 40MHz, OS3.1, 11Mb HD, CD drive, Zorro slot expandable. Monitor, serious and games software, manuals, mags, £200 plus carriage or collect. Also, optical mouse with board, £8. ☎ 01453 882912 (Glos.).

Squirrel, software, 2x SCSI CD-ROM, £30. Floppy DD drive, £5. Old Amiga Formats (no. 13 onwards), phone for details. X-Copy and hardware, £5. ☎ James 01255 504725.

Courier modem, latest x2 code, £90. Siamese system v2.5 RTG, £50. PC-Task v4.40, £30. Power Sound 4 20W speakers, £5. ☎ Andy 01494 711223. Email andy@nerds.co.uk

Loads of games for sale from £3 to £5. Also, hundreds of PD disks at bargain prices. ☎ Aled 01270 256253.

Picasso II graphics board, boxed, software, manual, £55. 2.05 ROM chip, software, manuals, £5 plus p&p. DPaintV with printed manual, £10 plus p&p. Printer Q printer buffer with mains adaptor, £8 plus p&p. ☎ 01453 882912.

Star LC10 9-pin printer, boxed, manual, new ribbon, new lead, excellent condition, £40. Can deliver, within reason. ☎ Paul 0151 6395642.

200W power supply for A1200, £30. Internal CPU cooler fan, £10. Both inc. p&p. ☎ 0411 715548.

Philips 8833 Mk II stereo monitor, boxed, perfect condition, £100. Can deliver, within reason. ☎ Paul 0151 6395642.

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A500+, 120Mb, GVP HD8+ hard drive, 10Mb RAM, 1084 monitor, A570 CD-ROM, external floppy drive, sound sampler, metal workstation, loads of software and magazines, large desk, £220 ono. ☎ 01476 564910 or email tommo@thenet.co.uk.

Books, software for programming C, ROM kernel, etc. All excellent condition. Approx. 30 books plus loads of boxed software and an old CDTV and developers book. £80 the lot ono. ☎ 01371 856472 (after 6pm).

Citizen ABC colour printer, software, spare ribbons. As new. 'Hawk' RAM expansion board, A1200, 4Mb fitted, max 8Mb. 32-bit, 72-pin. Both boxed, £70. ☎ 01453 886735.

Amiga Format magazine collection, issues 9/11-116 inclusive. All coverdisks. Amiga Format collection disks. Whole collection worth £400+, selling for £100. Also Scala MM200, full version. ☎ Graham 0181 5057315 (after 6pm).

A600 2Mb, colour monitor, joystick, games. £100 ono. ☎ 01557 332357.

New gear: Infinitiv tower, Z3i board plus associated extras, Epson Photo printer, Epson FilmScan, Canon 4200 Photo printer, Surf Squirrel, 200W power supply, ProGrab 24RT+, '030/50 Blizzard. Offers. ☎ 01745 887610.

PicassoIV, boxed, new, A1200-A4000, £150 ono. Also Digi ProGrab, also new, £80, boxed. Plus hard disk expander, £20. ☎ Pete 01202 526330.

WANTED

Pagestream 3, latest version. Will pay good price or swap. ☎ Tam 01634 576455.

Amiga games wanted as I've just bought a second hand A1200 after a few years away from the scene. Also, pen pals wanted: Stuart Harris, 202 Abbey Road, Basingstoke, Hants, RG24 9GF.

Need Kindwords disk for Amiga 500 with extra 0.5Mb memory. ☎ 0181 6790352.

Xtreme Racing disk 3 as mine is faulty. Also CD³² games, particularly PGA Euro Tour, Jetstrike, Super Stardust, Robocod and Soccer Kid. Will pay reasonable prices. ☎ James 01707 326903.

Any Level 9 and Rainbird and Infocom software. Also, Lasersquad. Good money paid. ☎ Simon 01992 303524.

Registered version of IDEFix or EZ IDE software (original only, please). ☎ 01902 419292.

Mk1 CyberSCSI expansion for Mk1 CyberStorm accelerator, or may consider Mk2 CyberStorm '060 inc. SCSI expansion if cheap enough, or swap and cash for mine. Email muffy60@hotmail.com or ☎ 01983 200383. Urgent.

Jetstrike CD³². Must be in good condition (i.e. no scratches). Will pay £15. ☎ Thomas 01622 679612. (Please, please, I love this game!)

King's Quest 5 and 6, TVText Professional and Pagesetter 2 manuals. Books to help with basic Workbench operations, like Pocket Workbench and Amigados Reference, Amiga Workbench A-Z, early Amiga Format tutorials. ☎ 0030 84141006.

68882 PGA FPU clocked at 33MHz. ☎ Anthony 01474 706114.

AFCDs: Xmas '96 (no. 8), Feb '97 (no. 10), March '97 (no. 11), April '97 (no. 12), May '97 (no. 13), Nov '97 (no. 19). AGA '97 Toolkit CD. Also desperately wanted: recent AFCDs, July, August, September 1998. ☎ Barry 01582 475131.

Hobby collecting Reko's for Klondike. I have 186. Can you help? Email for list, will swap or beg. Email kevin@reko.karoo.co.uk.

Help, cheats or solution to Blade. Also, any new contacts welcome, plus disk four for Universe. Contact Neil Birnie, 121 Buchan Road, Fraserburgh, Aberdeenshire, AB43 9UG.

Sublogic Flight Simulator. Exchange or buy. Interested in all simulators. ☎ Alan 01323 760751.

The last issue of CU Amiga. Will pay full price. CD version please. ☎ Elliott 01702 582621. Thanks.

SWOS Euro 96, 95-96 or 96-97. Can pay. ☎ Mark 01923 351994.

Epson Stylus Photo or Epson Stylus 600 printer, TurboPrint. Also Scala MM400. All complete with manuals, etc. Will pay p&p. ☎ 01952 812304 any time.

Manual for Stereo Master by Microdeal. ☎ 01289 388601 after 5pm.

PERSONAL

Also see the AmigaAngels document on our CD.

I would like to thank the people who helped me with The Chaos Engine and the second disk drive I wanted. You were all very helpful. Thanks, Elliott. ☎ 01702 582621.

Sherlock Holmes enthusiast would like to contact Amiga owners with same interest. ☎ Eric Monahan 01803 842253.

USER GROUPS

User group ads will be printed for three issues.

West Lancs Amiga User Group meets Sundays 1pm-4pm at St. Thomas the Martyr School Hall, Highgate Road, Upholland, Lancs. ☎ Stephen 01695 625063 or Ralph 01695 623865. Email ralph@twiss.u-net.com.

Medway and Maidstone Amiga Collective. Monthly meeting, monthly news guide, advice at all levels, beginners welcomed. ☎ David 0961 809466.

Any Amiga users in Leicester wanting to set up a user group? Please write to S. J. Webb, 3 Gregory Road, Barlestone, Nuneaton, Warks, CV13 0ET or email sjwebb@mailexcite.com.

New user group starting up for programmers. If you're interested in Basic, Amos, C or Java, ☎ Ross 01705 645311 (afternoons or evenings).

Greenford Computer Club. 180 Oldfield Lane South, Greenford, West London. Meets: Thursdays 7-10pm. All welcome. Anything Amiga. ☎ Richard Chapman 0181 9988599 after 7pm weekdays, all day weekends, or email if97rrc@brunel.ac.uk.

Anyone interested in opening a club in the Plymouth and Sounding area to swap and chat in, helping each other? ☎ 01752 268386 or 0958 910296.

South Wales? Anyone in Llanelli/Carmarthen area interested in an Amiga user group or club, or just a chat and advice? ☎ Owen 01269 861438 (Llanelli area).

United Amiga User Group, est. 1986. Non-profit making. Offers: magazine, book, free PD, digitising, scanning, helplines, technical support for A500, A500+, A600, A1200. Free membership. ☎ 01788 817473, 7pm-9pm, for details.

Italian Amiga CD-ROM user group. Write for news: Casella, Postale 7009, 47100, Forlì 7, Italia, or email amigacdc@lycosmail.com

Norwich Amiga Users Group meets alternate Tuesdays at the Belvedere Community Centre, off Dereham Road, Norwich, at 7pm. Anyone welcome. ☎ 01604 867663 for details.

Are you interested in helping other Amiga users? Are you stuck on a particular aspect of the Amiga (hardware/software/etc)? If so, join the free Amiga helpline. ☎ Terry 01709 814296.

New Northern Dales user group. Would anyone interested in joining/participating in a new group in the Catterick/Rickmond area contact Ian Aisbitt. Email iana@zetnet.co.uk or ☎ 01677 4505646 (between 9-5, Monday to Friday).

Are there any Amiga users in the east Manchester area - Ashton, Hyde, Stockport - who want to start a user group? Is there anyone out there? ☎ Paul 0161 3686433.

Online? Then visit my revamped site at <http://www.shepherd.home.ml.org> for loads of Amiga news, downloads, charts and Star Trek and football info. We need your input.

Kickstart, Surrey Amiga user group. Meets last Monday of month in Ottershaw, Surrey. All Amiga users welcome for fun, help and general Amiga usage, tutorials and Amiga surgery. ☎ Rob Gilbert 01932 562354 or email gilbia@arrakis.u-net.com.

Amiga Design Workshop, UK. Anyone welcome. Monthly newsletter, run by readers, database, stored lists of animations, art, music, etc, which are sent to software houses/websites, competitions, resource panel which offers support and equipment. ☎ 01892 870483 (outside office hours) or write to: 2 Morden Cottages, Chiddingstone, Causeway, Tonbridge, TN11 8JB. ☎

ShopWatch

The best places around the world to buy Amiga hardware and software.

Our ShopWatch section is still growing, and it's the best place for you to find your local Amiga store.

We still rely on you to provide us with up to date information, so please keep telling us about any Amiga retailers you know of who aren't in our listings, or of any changes to contact details of stores we have listed. As an added incentive, we'll even occasionally pick one of your contributions at random and send you a mixed bag of top Amiga stuff...

AUSTRALIA +61

Comfix Computer Maintenance, 111 Cambridge Street, West Leederville, WA, 6007.
☎ 08 9388 1665.

Provides Amiga software and hardware support.

Unitech Electronics, 8b Tummul Place, St. Andrews, Sydney, NSW.
☎ 02 9820 3555.

All hardware and software and also make own cables. Very professional and helpful.

G. Soft Pty Ltd, Shop 4 / 2 Anderson Walk, Smithfield, South Australia, 5114. Also at 33 Adelaide Road, Gawler, South Australia, 5118.
☎ 08 8284 1266, email gsoft@cobweb.com.au
New and used hardware and software, repairs, tech support and advice. Family run, helpful, will custom-make tower systems and will give any hardware a custom colour scheme of your choice.

Computer Magic, 44 Pascoe Vale Road, Moonee Ponds, Victoria.
☎ 03 9326 0133.

Desktop Utilities, Shop 13, Manuka Court, Manuka, Canberra. ACT.
☎ 02 6239 6658.

MVB Computer Supplies, 506 Dorset Road, Croydon, Victoria.
☎ 03 9725 6255.

Synapse Computers, 190 Riding Road, Hawthorne, Queensland.
☎ 07 3899 0980.

AUSTRIA +43

M.A.R. EDV Systeme, Karlsplatz 1, A-1010 Wien.
☎ 1505 7444.
Sells hardware and software and offers an Amiga repair service.

BELGIUM +32

Amiga Service, Rue Du Nord, 93, 6180 Courcelles. ☎ 71 458244.
PD disks, CD-ROMs, software, hardware and services like scanning, hard drive recovery and laser printing.

AFI (Applications & Formations Informatiques), Clos Del' Me 21, 4431 Loncin (Liege).
☎ 4239 0093.
Can provide help on most serious subjects. Stocks the

full Amiga range with a good selection of second-hand hardware. Amint CD's are available, as well as the most commonly used Amiga applications.

Click!, Boomsesteen Weg 468, B-2610, Wilrijk.
☎ 3828 1815.

Generation Amiga, Rue de l' Eglise 22, 1200 Brussels. ☎ 2538 9360.

Amiga City, Avenue du Prince, Heritier, 176, 1200 Brussels.
☎ 2736 6111.

Digital Precision, Chaussee de Jette, 330, 1090 Brussels.
☎ 2426 0504.

CANADA +1

National Amiga, 111 Waterloo Street, London, Ontario, N6B 2M4. ☎ 519 858 8760. Visit <http://www.nationalagima.com>
Stocks all Amiga products. Full line Amiga dealer and service centre.

DENMARK +45

Betafon ApS, Gylden Lovesgade 2, 1369 Kobenhavn K. ☎ 3314 1233, email info@betafon.dk or visit <http://www.betafon.dk>
An Amiga dealer since 1980, sells A1200s, A4000s, PPC cards, RAM, all new software, towers, magazines, etc. Good service with Amiga-specific salesmen who know Amiga.

Kiwi Multimedia, Lerager 60, 3600 Frederiksund.
☎ 4738 0639.
Stocks almost all Amiga products, makes the Millennium Amiga.

FINLAND +358

AIC Systems, ☎ 09 8775 1100, email ymp@dlc.fi

Amigator, ☎ 02 234 5333, email aho@sip.fi

Broadline Oy, ☎ 09 8747 900, email broline@dlc.fi

Broadware Oy, ☎ 09 7001 8580, visit <http://fiwn.fi/broad.html>
Sells a good range of accelerators and other items of hardware.

Gentle Eye Ky, ☎ 03 363 0048, email ge@vip.fi
The staff are very skilled and the shop stocks most new products.

Harcom Oy, ☎ 09 409 373, visit <http://personal.eunet.fi/pp/har>

Hât Data Huolto Oy, ☎ 09 769 314.
Offers a repair service.

Karelia Computer Ky, ☎ 013 897 088.
Has a good supply of most of the older Amiga hardware and software.

Tsunami Trading, ☎ 02 438 9870, email tsunami@dlc.fi

Video Spotronics Ky. ☎ 09 8735 435.
Offers a repair service.

FRANCE +33

Software Paradise, Rue de Lamouly 39, 64600 Anglet.
☎ 5 5957 2088, fax 5 5957 2087, visit <http://www.SParadise.com>
Official MicroniK distributor.

Ateo Concepts, Le Plessis, 44220 Coueron, Nantes.
☎ 2 4085 3085, fax 2 4038 3321, visit <http://www.ateo-concepts.com>, email info@ateo-concepts.com
Manufacturer and distributor of Ateo products, such as the Pixel64 card.

Pragma Informatique, Route Departementale 523, 38570 Tencin.
☎ 4 7645 6060, fax 4 7645 6055, visit <http://www.pragma-info.com>

Mygale, Boulevard Raimbaldi 31, 06000, Nice.
☎ /fax 4 9313 0635

APS, Rue Louis Maurel 15, 13006, Marseille.
☎ 4 910030 44, fax 4 9100 3043, visit <http://www.aps.fr> aps@aps.fr
Only sells quality products.

SL Diffusion, Route du General de Gaulle 22, 67300 Schiltigheim.
☎ 3 8862 2094, visit <http://195.132.8.152/sld>
Very friendly manager.

ADFI Application, Avenue de la Liberation 47, 63000 Clermont, Ferrand.
☎ 4 7334 3434
Distributor of many titles translated into French and have a special agreement with Haage & Partner to sell French versions of their software.

Phoenix-DP, BP 801, 64008 Pau Cedex.
☎ /fax 5 5982 9500, visit <http://www.phoenix-dp.com>, email phoenix@club-internet.fr
Software and hardware for Amiga, PC and Mac.

GERMANY +49

ADX Datentechnik, Haldesdorfer Str. 119, 22179 Hamburg. ☎ 040 642 02656.
Hardware and software reseller.

Softwarevertrieb Kanzmeier, Senator-Balcke-Str. 85, 28279 Bremen. ☎ /fax 04 218 31682, email 01461.2277@compuserve.com

IRAN +98

Ganjineh Afzar Pooya, 30, Alley 4th, Abouzar Str., Seyed-Khandan, 16616 Tehran.
☎ 021 866755, email Ganjineh@apadana.com
Most hardware and software.

ITALY +39

Robymax, Via Varvariana, 14, 00133, Rome, Italy.

☎ 06 2042 7234, email robymax@mclink.it
CD-ROMs, games and hardware.

Non Solo Soft, Casella Postale 63, 10023, Chieri, Italy. ☎ 011 9415237, email solo3@chierinet.it
Full range of software and hardware.

NETHERLANDS +31

Barlage-Den Haag, Rabarberstraat 142a, 2563 RP Den Haag, Holland.
☎ 070 448 0282, email barlage@mailbox.hol.nl
Hardware and software supplier.

Computer City, Zebrastraat 7-9, NL 3064 LR, Rotterdam.
☎ 31 10 4517722, email info@compcity.nl
Sells most Amiga products and helpful staff.

Courbois Software, Fazantlaan 61-63, 6641 XW, Beuningen. ☎ 024 6772546.
All hardware and software, with many second-hand products at very low prices.

Amigis, Spanjaardstraat 53, 4331 Ep, Middelburg. ☎ 0110 625632, email info@amigin.nl
Amiga hardware and software.

NEW ZEALAND +64

Comp Karori, Karori Shopping Mall, Karori, Wellington.
☎ 0447 69088, email gchiu@compkarori.nz or visit <http://www.compkarori.co.nz>
Sells most Amiga products.

NORWAY +47

Data Kompaniet AS, Teknostallen-Prof, Brochsgt.B, N-7030, Trondheim.
☎ 7354 0375.
All new products, very good support.

PORTUGAL +351

Audiovisual, Rua Maria Matos, 6 - C/V Dta, 2675 Ramada, Portugal.
☎ 351 1943264, email info@audiovisual.net
Dealer/distributor, promises best prices for hardware and software.

RUSSIAN FED. +7095

AmigaLine, Moscow, Zorge 6.
☎ 943 3941 or 943 3871, email ambartsumian@glas.apc.org
An Amiga-oriented computer shop.

Amiga Service, Office 309, Bumazhnaya Str 3, Sankt-Peterburg, 198020.
☎ 812 1868842.
A1200 hardware.

SPAIN +34

Club Byte, C/D. Juan de Mena, 21 bajo Izq, 46008 Valencia. ☎/fax (96) 3921567.

SWITZERLAND +41

Applimatic SA, Rte-de-Montreux 49, CH-1618 Châtel-St-Denis, Switzerland.
☎ 41 21 931431.

Digitronic, Chr Merian - Ring 7, 4153 Reinach.
☎ 6176565, visit <http://www.digitronic.ch>
Full range of Amigas.

Amiga Shop 2000, Wallisellenstr.318, CH-8050, Zurich. ☎ 411 3221414.
Hardware, software and skilled staff.

Amigaland, Butzenstr.1, CH-8038, Zurich.
☎ 411 482 4750, visit <http://www.amigaland.ch>
Sells a full range of Amigas (please note that the shop is closed on Tuesdays).

UK +44

SES Computers, 88-90 London Road, Southend-On-Sea. ☎ 01702 335443.
Loads of software, peripherals and second hand hardware.
Limited stocks of new hardware, very helpful staff.

Cavendish Computers, 144 Charles Street, Leicester. ☎ 0116 2510066.
Hardware (old), games and utilities.

Classic, 11 Deansgate, Radcliffe, Manchester. ☎ 0161 7231638.
PD, commercial games, CD³², CD-ROMs, hard drives, CD-ROM drives, A1200s, floppy drives, disks, modems.
Free fitting service on hard drives.

Level 7, 113 Victoria Road West, Cleveleys. ☎ 01253 859004.

Electronics Boutique, Unit 19, St. John's Centre, Perth, PH1 5UX, Scotland.
☎ 01738 637807.
Software and peripherals and will order any Amiga games you require.

Mays, 57 Church Gate, Leicester city centre. ☎ 0116 2516789.
Hardware, games and utilities.

Computer Solutions, Unit 2, Mill Lane Mews, Ashby-de-la-Zouch, Leicestershire, LE65 1HP.
☎ 01530 412983.
New and used software, hardware, stocks full range. Helpful staff.

Tech-Exchange, 3 Forest Road East, Nottingham, NG1 4HJ.
☎ 0115 9100077.
All Amiga products and a helpful and knowledgeable staff.

Electronics Boutique, 30 The Mall, Golden Square, Warrington, Cheshire.
☎ 01925 240731.
A good selection of Amiga software and peripherals.

Computer Cavern (Capri CD Distribution), 9 Dean Street, Marlow, Bucks, SL7 3AA.

Chips, 8 Watchbell Lane, Newport, Isle of Wight. ☎ 01983 821983.
Lots of classic games and older Amiga hardware.

Electronics Boutique, Gallowtree Gate, Leicester city centre.
Stocks most games, although it does tend to be a bit slow on new games.

Vortex Services, 13-15 St. Michael's Square, Ashton Under Lyne, Lancs, OL6 6LF.

Allsorts, 51 Park Road, Wosbrough Bridge, Barnsley.
☎ 0589 272940.
Games, PD, disk drives, monitors (all used).

Electronics Boutique, 81 High Street, Meadowhall Centre, Sheffield.
☎ 0114 2569090.
Games utilities, mice, educational software and can order software.

Planet Games, 3 Royal Oak Buildings, Waterloo Road, Blackpool. ☎ 01253 348738.
Stocks Amiga software.

Game, Sheffield Town Centre.
☎ 0114 2729300.
Sells various Amiga games, utility disks and other items of software, and it's also possible for customers to reserve games in advance.

Swops, Corner of Bold Street, Fleetwood. ☎ 01253 776977.

USA +1

TLAS, PO Box 30499, Midland, Texas, 79712.
☎ 915 563 79712.
Games software, some hardware, 100% Amiga. Very high quality software.

You can help us!

To contribute to the AF ShopWatch project, please fill in the details of your local retailer.

Shop Name

Manager

Address

Country

Telephone Number

Amiga Products

Other Comments

Your Details

Initials

Surname

Address

Postcode

Daytime telephone no.

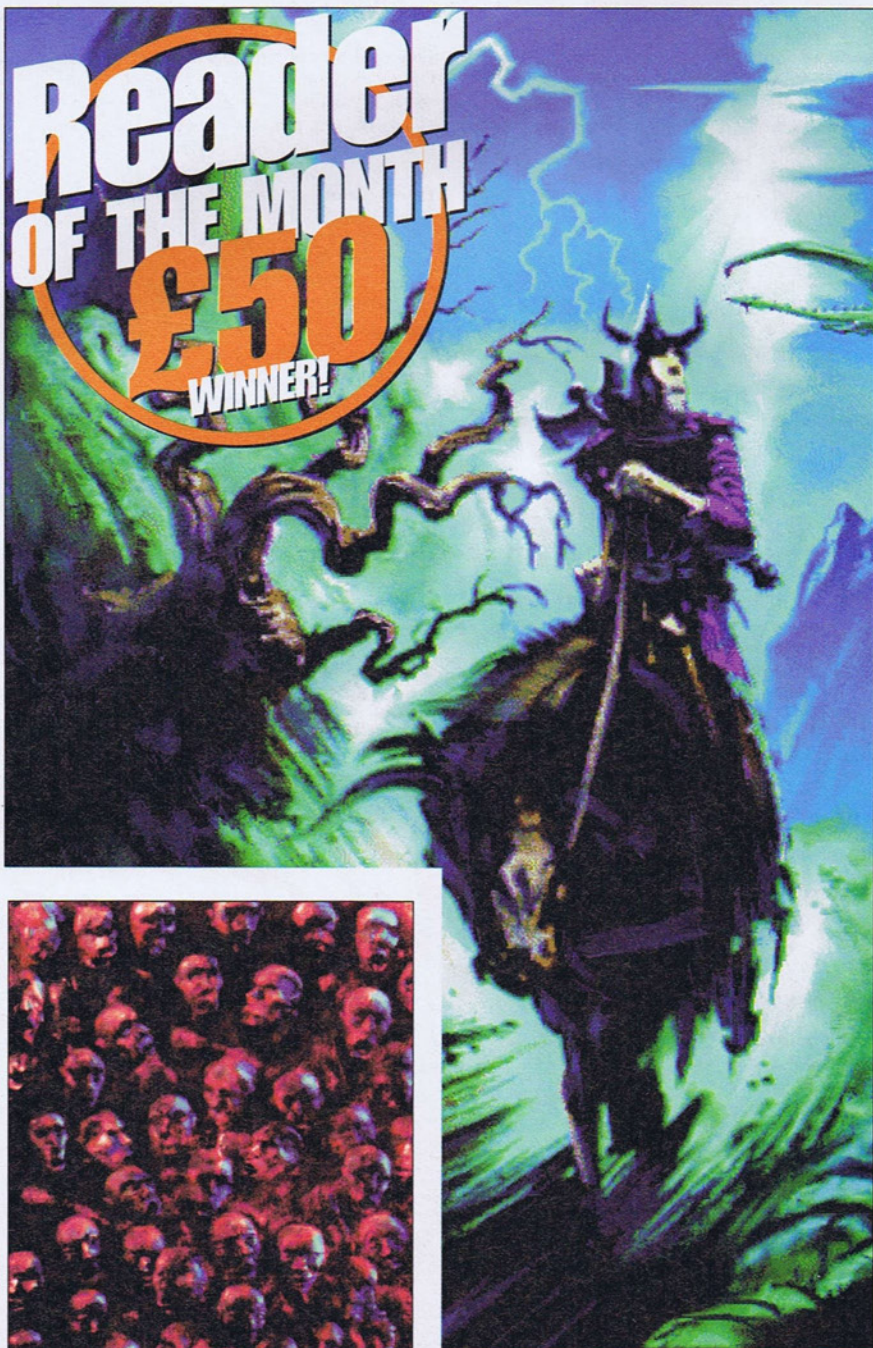
Send entries to: Shopwatch • Amiga Format • 30 Monmouth Street • Bath • Somerset • BA1 2BW.

The Gallery



AFCD35:ReaderStuff-/Gallery-

Another great range of your work. Ben Vost offers criticism and fifty quid to the best artists on the Amiga.



Rider, Make Room and Burn Plain
by Kevin Cullen

Kevin has been sending us his scanned and painted images for some time now, and I can honestly say that it's always a pleasure to receive a new batch of his excellent pictures every so often. Keep 'em coming, Kevin.





Slipped & Social Misfit by Phil Price

Phil won our reader prize for his earlier entries to the Gallery. He's only a young lad, and yet with his meagrely-upgraded Amiga and two paint packages he's managed to give us this level of quality. He would have won again this issue, but for the continued persistence of Kevin Cullen!



Tunnel by Andy Watkinson

This is Andy's first rendered contribution to the Gallery as far as I know. He created the textures, models, etc, himself, but it looks as though the image has been run through a sharpen filter several times, making it look somewhat surreal.



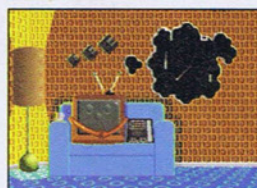
Exodus by Rob Turner

Rob's given us a UFO image which has great attention to detail with the ten-pixel high bods on the rock and the extra ships in the background. It's nice to see something involving sci-fi that hasn't been rendered for a change.



Doom by Ray Elf

Ray's given us some stylish pictures, but we'd like them a lot better if they weren't simply copied from *Batman: The Dark Knight Returns*. See? Weev got kulcha!



Memories

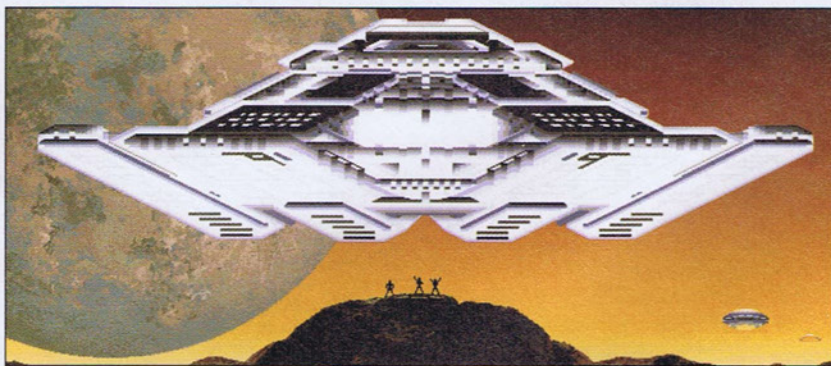
by Richard Lagrue

The first comment everyone here made was "Say what you see", since the image reminded us of *Catchphrase*...

Destruction

by Darren Bentley

Also a reader who tends to paint rather than render, Darren has given us his rendered anime robot this issue. He's on the lookout for any games graphics work so keep your eye out for his art in a game near you at some point in the future.



SUBMISSIONS

If you'd like to enter your work for the Gallery in Amiga Format, read the Reader Submission file on the CD, or simply send your work to: Gallery, Amiga Format, 30 Monmouth Street, Bath BA1 2BW making sure you include the reader warrant from the CD pages in this mag.

The Visions by Ogy

A nice montage this one. We particularly liked the silvery statue in juxtaposition with the Lyapunova render. Oh yes, and by the way, Ogy, if you want to read PhotoCDs on your Amiga, you'd better invest in some better CDFS software; *AsimCDFS* reads PhotoCDs with no problems and is available from Blittersoft.

Serious disk



AMIGA FORMAT

With more than 3.5Mb of serious software packed onto the disk this month, the utilities offer a treat for everyone. From tweaking Workbench to writing websites, everything your Amiga needs is here. **Dave Taylor** gets you started.

WebDesign 2

Creating your own web pages is easy, and we've been running a tutorial in *Amiga Format* recently (see page 70) showing you how to write the HTML tags that turn ordinary text files into those fantastic web pages you see on the Internet.

However, some people don't like learning all the code tags, which is where an editor like *WebDesign* comes in. This simplifies HTML generation by inserting the code for you.

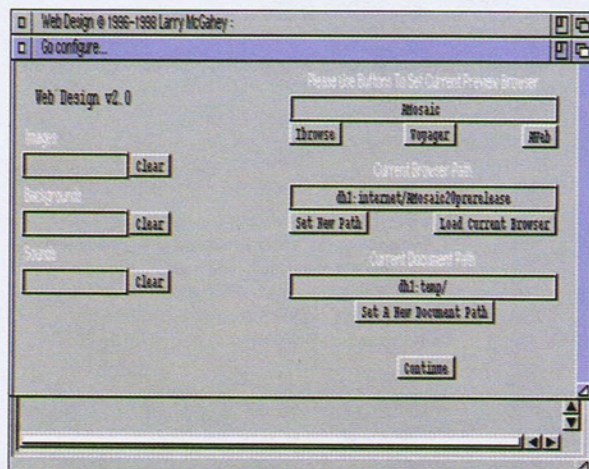
WebDesign is not a WYSIWYG editor – frankly, no HTML editor on any platform can be, because every browser interprets HTML differently. To use this effectively, you need to have a browser installed so you can check your pages. Most pages should look broadly the same in different browsers, but there will be differences.

To use *WebDesign*, you need to

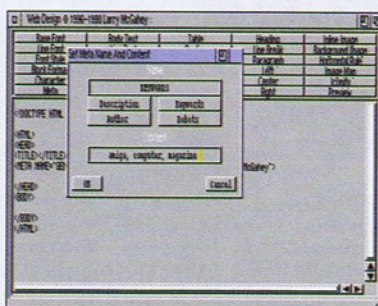
configure it when you first start up. The preferences screen is displayed automatically and you'll need to select your browser through a file requestor. You'll also need to set paths for images and files that you'll be referencing in your pages.

“This guide will help you to create a simple page and you should be able to master the rest of the program quickly...”

All the buttons work in a similar way, taking the leg work out of creating the tags. Here the META tag creation will help search engines index our page.



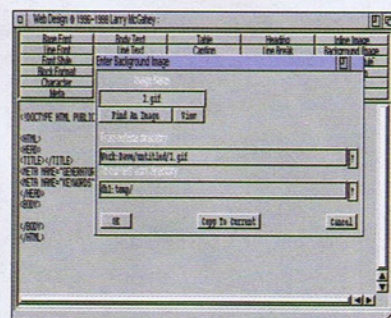
The Go Configure screen allows you to select your working directory, as well as external programs. The working directory will be used to copy all files from for uploading.



CODE WARRIOR

When you click on Continue, you'll go to the main screen. This has a bank of buttons along the top and a main section where the basic code for an HTML page will have been loaded in from a default template. This template sets up the HTML definition and inserts the HEAD, TITLE and BODY tags for you.

As followers of our series will know, you need to place the text you want to actually appear on the screen in the browser between the tags. For instance, in the <TITLE></TITLE> line, you



If you click on a button for one of the global entries, like the background image here, *WebDesign* will automatically place the code in the correct tag on the page, regardless of cursor position.

need to click the cursor between the end bracket of the opening tag and type in your text, so it appears with something like <TITLE>Amiga Format's tutorial</TITLE>. This now means that the title of the page, which is displayed in the top bar of most browsers, will read "Amiga Format's tutorial". This basic idea is used throughout HTML.

If you wish to insert new lines of code, it's best to ensure that you insert a carriage return first. Although browsers ignore carriage returns in text (and HTML tags, though not Javascript), it makes it easier for you to read through. For example, there's a META tag already inserted for the GENERATOR, but you might want to add another META tag. Press <return> after the last bracket on the META line and then click on the META button.

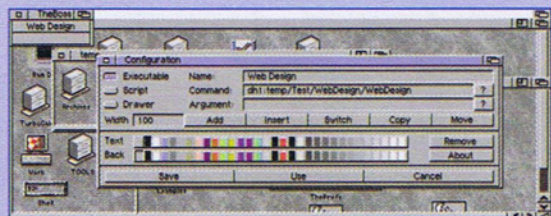
A requestor appears asking which type of META tag you want to insert. Click on Content and then type in a few words that describe your page, separated by commas, such as: amiga, computer, magazine. Click on OK and a whole new line will be inserted.

In this case, what we have done is add a line that gives a quick description of the content of the page that we're creating. This line is picked up by the search engine's robots on the Internet

THE BOSS

The Boss is a new program launcher that looks smart and is easy to use. After unpacking the disk, you need to install the package. Once that's done, you should start the Preferences program before starting the main package and the initial configuration will make the program more useful to you. When it first starts there will be a warning that there is no preferences file found. Go through each section choosing the fonts and display types and then click on Save to create a preferences file.

You can now load **The Boss** main program. When you do, you'll see an uninspiring single button. Don't panic! Right click on the button and a requestor appears which allows you to easily insert the programs, scripts and drawers you want on your palette. Simply enter a name to appear on the button, click on the requestor button next to the Command line, select a file and then choose Save. You can change the colour of text and buttons if you want. To add a new button, click on Add. It couldn't be simpler.



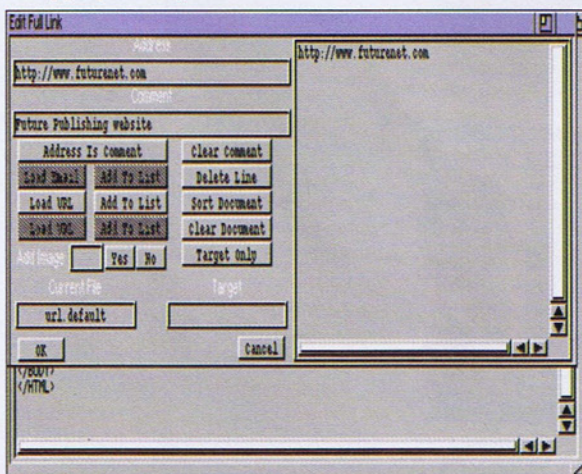
This simple configuration requestor means that you can set up **The Boss** for all your regularly used programs, scripts and drawers for faster access.

so people who request information on the words you have inserted into that tag will see your page as a possible match.

You must be careful not to have the cursor placed in the middle of a tag or anywhere inappropriate when you click on a button to add a tag because one will be added there, regardless of whether it breaks the HTML. The good thing is that you can hand edit the code afterwards if you realise that you need to change something.

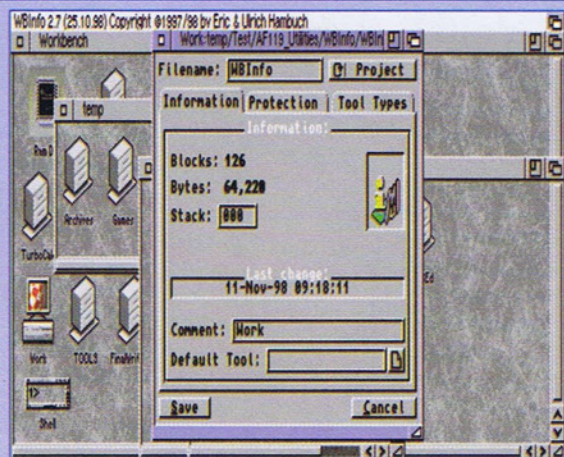
There is some intelligence built into the editor. If, for example, you choose one of the buttons that deals with a universal attribute that needs the tag inserted in a specific place, like a background image or visited link colour definition, which all go in the BODY tag, the cursor can be anywhere when you click on the button. **WebDesign** will automatically insert the selection into the appropriate tag.

The link button is particularly comprehensive, allowing you to create any type of link, from a URL to a MAILTO, including the option of saving favourites for re-use.



WB INFO

The Information requestor for icons under Workbench is rubbish, but who cares any more because **WBInfo** completely replaces it. Simply install it so that it starts every time you boot up and you can have a multi-tabbed, infinitely more advanced version which allows you to change icon type, change protection and work with ToolTypes.



Kick out that old boring Info requestor and bring in this new, funky one. Much better, we're sure you'll agree.

<BODY> LANGUAGE

Click the cursor in between the start BODY tag and the end one (end tags always include the /). You can now start including the content of the web page. Click on the paragraph button and a requestor appears. You can type the text you want to appear in the requestor. Alternatively, when you've OK'd the requestor and the tag has been inserted on the page, you can type some more in between the tags.

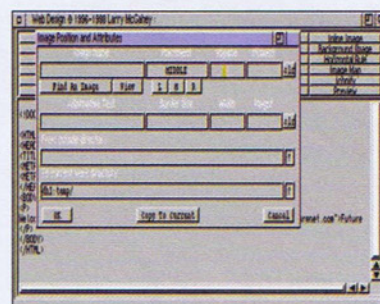
As we mentioned, HTML ignores carriage returns; instead, the end tag denotes the end of one paragraph and a new <P> tag starts the next, so when you want to move down, create another tag. You can enter a line break if you want, rather than a paragraph break, and there's a button for this.

If you want a picture to appear on the page, click on Inline Image and you can browse for one - GIFs or JPEGs only, please. This will insert an image tag and you should note that there's a button to move a picture to a current directory. This is so that when you upload the page, the reference for the image will remain consistent.

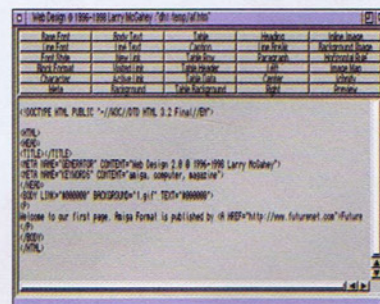
If you had a reference on your website to `dh1:/pics/pic1.gif` then the image would be broken because that directory won't exist on the server. For this reason, all references need to be relative to your HTML page path, either in the same folder or in a subfolder off it. See page 70 for more information on the use of images.

To insert a hyperlink to another web page, choose the link menu and select an option. A full requestor allows you to insert the URL of the page you're linking to and the text that will appear as the link. Add the text you want inserted in the Comment line.

This guide will help you to create a simple page and you should be able to master the rest of the program quickly - check out the menus for lots of extra tag options, but to understand more fully



Inserting images is easy too. Place the cursor where you want the picture in the text and click on the button, then select a picture. The Copy to Current button will copy the picture to your working directory.



Yes, HTML code never looks very exciting as source, but **WebDesign** makes it easy and can even insert Javascript. Cool.

how you can write web pages, our monthly tutorial will help you put the advice into practice.

AND THE REST...

Well, we're short on space so we'll have to cram in the remaining products. There's a new version of **VincEd**, the complete Shell replacement system that offers integrated editing capabilities to improve the CLI interface. There's the latest version of **XBase**, the rather nifty database, and there's also a useful tool called **AssignMaster** which, amazingly, helps you control the use of Assigns. Enjoy!

Games disk

AMIGA FORMAT



Breakout of the mould and get into these games. There's actually three included on this month's disk for you to muck about with. **Dave Taylor** plays around.

Polataa 5

As soon as you thought someone couldn't put a new spin on the classic *Breakout* game, along comes *Polataa*. This game includes many levels and its own editor so you can create more. It also plays very differently to other games of the genre.

When you start the game, you'll find that you have two paddles, one on each side of the screen. These move in synchrony up and down as you move the mouse. The game is played horizontally with the tiles set out vertically. Your aim is to keep the ball in play by bouncing it off the paddle and hitting the bricks to destroy them. Not every brick will be destroyed by a single hit so you may need to bounce the ball off a tile more than once.

Where things get more tricky in *Polataa* is that you don't have the option of breaking through a single section of the wall of tiles. This means you can't bounce the ball from the other side of

the screen so the wall is destroyed from above without you needing to race to catch the ball. If you do break through, you have to hit the ball with the paddle on the other side and keep it in play from both the left and right.

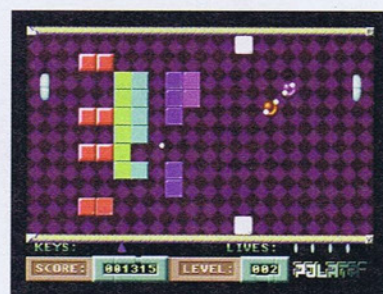
Well, this might not sound that different or difficult but you have to keep yourself alert because it's very easy to get distracted when you're starting to make headway. You concentrate on the

66 If you do break through, you have to hit the ball with the paddle on the other side and keep it in play... 99

side that you've been batting from for a time and look to where you have to get the bat to when it comes back and, of course, it never does because it's just flown off the other side of the screen.

The levels are cunning in that they change the side you start from so you just get used to one way of playing and then you have to change. Although you do have to keep an eye on where the ball is for which side bat you'll need, you'll find that levels favour one side or the other and you play the majority of each level from one side.

One other difference to note is that, as ever, the left button launches the ball from the bat when you start, but the right button can also be used to



Remember that your ball can go off either side of the screen, so stay alert!

aim. If you press it down, the ball will scroll up and down the bat. The centre of the bat fires the ball straight out, and the closer to either edge you set it, the more acute the angle you will fire it in that direction will be. This also holds true for bouncing the ball off the bat – you need to watch which part of the bat you hit it with as you can send it off at very different degrees.

TILE POWER

As you hit tiles you'll find their different properties. The more raised a tile looks, the greater the number of times you'll have to hit it in order to destroy it. As you hit it, the tile will go down in height until it is depressed and then destroyed.

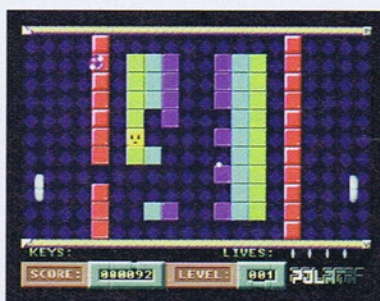
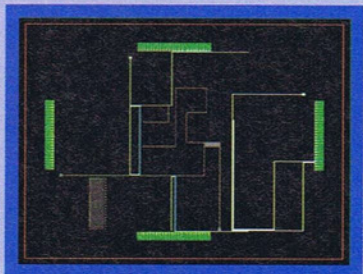
Some tiles are plain, but others may hide goodies – they might look like faces, for example. There are an enormous number of these and you'll have to find them for yourselves as the authors have deliberately not announced them.

The goodies on offer from the different tiles are: **Mamas** – these are released by some tiles and scroll around the screen. They too need hitting and will only take two hits to be destroyed. The balls bounce off them in the same way as tiles. However, some Mamas can only be destroyed if you have collected a certain power-up; **Enlarge bat**; **Speed up ball**; **Slow down ball**; **Gravity** – the ball's speed increases as it drops to the floor; cancelled by **Magnet Magnet** – the ball is

LIGHTSPEED

Another example of a favourite game. When you load the game, you can set some of the options from the requestor that appears by using the mouse and clicking on the various buttons for different option sections. When you play the game you control the line and the aim is to trap other players in a corner or force them to go back on themselves or crash into your line. You play against the computer and we strongly suggest that you turn down its accuracy because it's just too damn good. Anything you can do, it can do better!

Yes, it's another light cycles game. Tron has a lot to answer for.



A Breakout clone that requires lightning quick reflexes and double the batting skills.

VODOO – LEVEL EDITOR

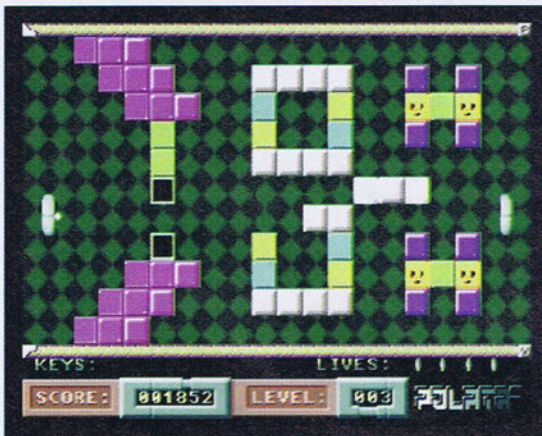
This level editor has been released by the author as a preview of a game in development. Normally you wouldn't expect this sort of thing, but we remember the first *Foundation* editor and know how well that game turned out. The same could well be true of *Voodoo*. The sophistication of the graphics and the editor are encouraging, especially considering the choice of AMOS as a programming language. AMOS has received bad press, mainly down to the quality of many projects released from it, but like all programming languages it can be a very effective tool when wielded by an expert.

The editor can be uncompressed to floppy or hard drive but requires 2Mb RAM. If you run it from hard drive, you need to make an assign for the volume, but to make things easier we've included a script to do this for you, so rather than launching it from in the Voodoo drawer, double click on the icon outside it. When the program has loaded you'll see that you can edit the map by clicking on a terrain button on the left and placing it on the map on the right by left clicking. You can place trees, dirt and water. There are also menus for different buildings, including churches, farms, towers, mines and much more.



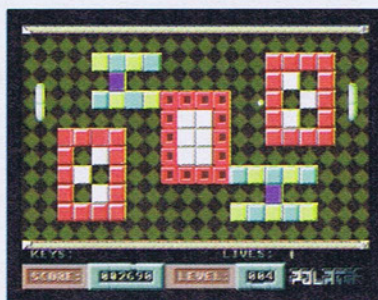
As you place the objects, you may think that the square blocks of the trees and dirt look amateur, but fear not. When you've placed a few, go to the Misc menu and choose Smooth. The scene will become much more aesthetically pleasing. The author is looking for feedback and encouragement, so we strongly suggest you grab his email address from the readme in the Voodoo folder and tell him what you think.

Design your own levels with this exclusive game preview.



attracted upwards and speeds up; cancelled by **Gravity Hardball** – the ball's strength is increased and all tiles take only one hit to be destroyed; **Fire** – makes ball purple and capable of destroying fire; **Mama's Ice** – makes ball blue and capable of destroying Ice Mamas; **Black hole** – doesn't get destroyed but sucks in the ball and returns it to the bat; **Coloured locks and keys** – different locks can only be destroyed if you've collected the key of the same colour Bonus Points.

The smiley faces (above) could be hiding any of a number of bonuses.



The flatter a block looks, the fewer times it needs to be hit.

in the same manner, by pressing "S". You can scroll through the types of blocks available by using the "+" and "-" keys on the numeric keypad.

As you'll see, you have the choice of different levels of tiles. The top right of the screen next to the play area grid shows the selected tile type and colour. Left click on one of the boxes in the grid to place a tile of the selected type.

INSTALLING

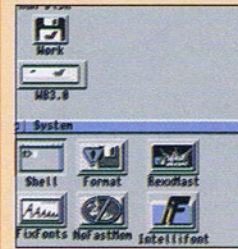
To pack all the juicy games and programs we've crammed onto this month's coverdisks (nearly 5Mb, fact fans) we've had to archive the programs. Simply boot the coverdisks and have some spare disks or a directory on your hard drive ready.

LightSpeed can be played directly from the coverdisk, but *Polataa* and *Voodoo* need a disk each. When the game has been unpacked onto a disk, that disk can be auto booted or played from Workbench.

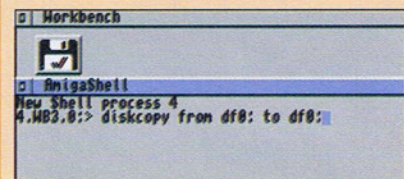
The serious programs that can be installed to floppy disks need Workbench loaded first. All programs can be installed to hard drive.

BACKING UP YOUR COVERDISK

Copying your Coverdisk is really very simple. Just follow the stages below...

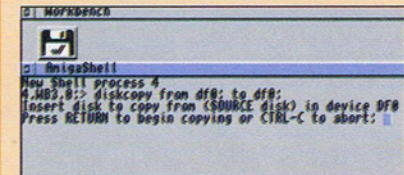


1 Boot up with your Workbench disk and find the Shell icon, in your system drawer. Double-click on this to go into the Shell.

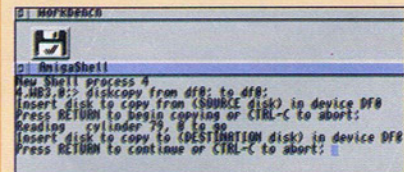


2 Type in the following line (with a zero, not the letter O), taking care to put the spaces in the correct places:

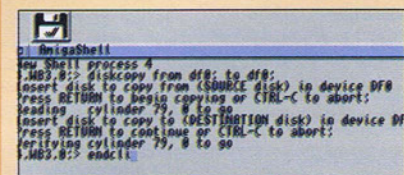
DISKCOPY FROM DF0: TO DF0:



3 When asked for the Source disk, insert your write-protected Coverdisk and press Return. All of the info on this disk will then be copied from the disk into memory.



4 Once your Amiga has read the info, it will ask for the Destination disk. Insert it and press Return. All information on this disk will be destroyed.



5 On an unexpanded machine, the Amiga may ask for the source disk again, because it copies in chunks. Finally, type endcli to close down the Shell.

DISK NOT WORKING?

We take every care to test the Coverdisk software, but Future Publishing cannot accept any responsibility for any damage occurring during its use. If your disk is faulty, send it back, with 2x26p stamps and an SAE to:

Amiga Format (insert name of disk)

TIB PLC • TIB House

11 Edward Street

Bradford • BD4 7BH

If there is a manufacturing error then the stamps will be returned with a replacement disk.

Cover disc

AMIGA FORMAT



For the 31st time, **Ben Vost** introduces what's new and groovy on our cover cd.

NEW STUFF ALERT!

The reason I say 31st is because of the fact that I joined the AF team in time to write the intro for the fourth *AFCD*, all that time ago. And how things have changed since then. For a start, our CDs are much better organised now, and you can be sure of getting more than 640Mb every month. We've also got a consistent layout to help make things easier to find between CDs, and the move to HTML for Ben_Speaks! and other things was a useful one.

However, we're always looking at ways of improving the *AFCD*, now more so than ever, so your suggestions and feedback are always welcome. There's a survey in the +System+ drawer. Do fill it in and email it, or send it by post to the address given, so we can keep making the *AFCD* better and better. We've already done so much to improve it as a result of your suggestions, and it'll let us make our CD that bit better.

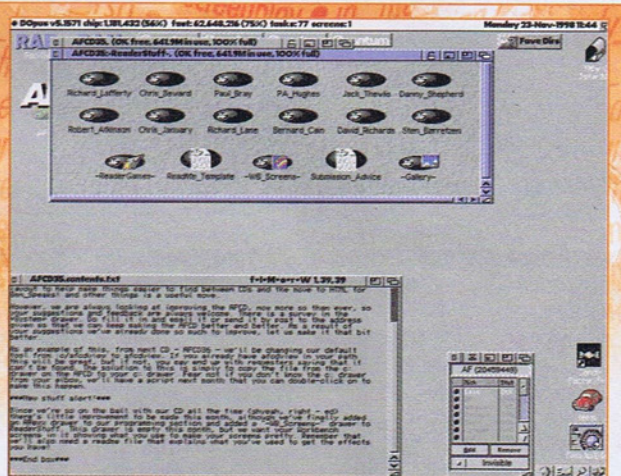
As an example of this, from our next CD, *AFCD36*, we'll be changing our default tool from "c:/afcdview" to "afcdview" because of suggestions from our users. If you already have afcdview in your path this will be great, but if not, you may end up with requestors saying that it can't be found.

The solution is to simply copy the file from the c: drawer on the *AFCD* to your c: drawer. Fear not if you don't

Since we're so on the ball with our CD all the time (shyeah, right - Ed), there's little improvement to be made this month, although we've finally added an AReXX drawer to our programming section, and we've also added a "-WB Screens-" drawer to ReaderStuff.

This drawer is empty this month, but we want your Workbench screens in it, showing what you use to make your screens pretty. Remember that we'll also need a readme file that explains what you've used to get the effects you've achieved.

Although our WB screen may not be too interesting, we hope yours will be...



know the c: drawer from your elbow as we'll have a script next month that you can double-click to make this happen.

COLOGNE '98 -In the Mag-/Cologne

Tune in to the complete Friday night press conference at the Cologne '98 show.

Thanks to incredible advances in technology and insomnia, we bring you the whole of the Cologne show press conference in MPEG 1 layer 2 format for you to listen attentively to. You'll need to install *SongPlayer* on your machine for it to work (unless you already have an .mpeg player) and if you don't already have Stephane Tavernard's mpeg.library, you'll find it

in our libs: drawer on the CD. As I say in the readme, a lot of the speeches are very quiet (poor microphone technique on the part of the Amiga Inc.'ers) and there are some odd pauses where things are happening on-screen with not much vocal accompaniment.

For your listening pleasure, I've managed to edit the speeches down to remove some

of these blank areas, but there's still more than an hour and a half for you to get through.

If you have trouble getting it going, we've included *SongPlayer* on the CD, and you'll find the required mpeg.library in our libs: drawer.

WASTED DREAMS DEMO -ScreenPlay-/Commercial-/WastedDreams

Vulcan's latest game is nearing readiness and we have a lovely demo of it for you on this issue's disc. The game starts in two player mode by default, but you can easily switch to one player by hitting escape as soon as it loads and then going to the options page.

It's a bit like a top-down version of *Flashback* and you can play it with the joystick or keyboard. There are lots of



Wandering through the forest, Andy and David came across a large spaceship.



Your Stuff!

Reader OF THE MONTH

£50 WINNER!

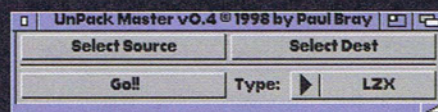
The winner in this month's ReaderStuff section is Bernard Cain. Bernard has been sending us his *Business Card Maker* program since AFCD25, and every time we've put it on our CD it has been improved. So, for his continued persistence and dedication to a perceived gap in the market, as much as anything else, we've decided to give the prize to Bernard this month. We hope that he'll continue to improve his program and submit it to us for inclusion on the AFCD.

Other entries this month include the impressive *Portrait* by Chris January, Danny Shepherd's good start for an Amiga Angels database (it's awfully flaky on our machine, Danny) and a small update for Richard Lane's *Magnum Opus*. And there's more for you to look at, including *Worms* levels, a weaving program and a proper 882 C++ class that uses all 96 bits of precision, rather than the more "normal" 64 bits used by most compilers.

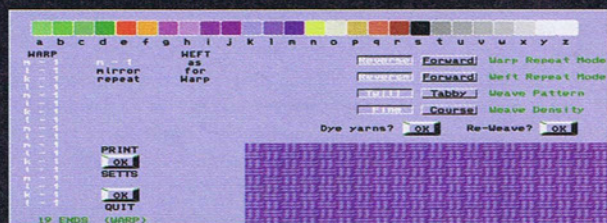
Our new section looking for your WB

screenshots is now in place on AFCD35, and we eagerly await your entries. There won't be a prize for the best screenshot (well, okay, there might be for a really outstanding effort), but you'll be able to share with all Amiga Format readers just how you've made your WB so easy to use and so good looking. Just make sure you remember to include a readme file that explains how you did it!

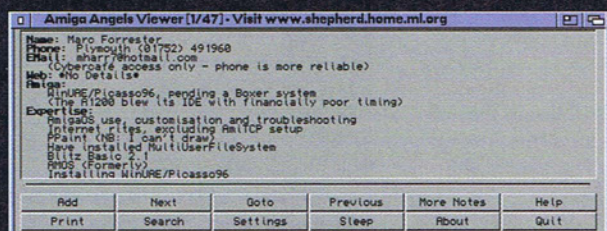
...or a disk magazine, you can be sure that there's plenty to see on our CD.



...or an archive unpacker written in E...



Whether it's a weaving program written in GFA Basic...



...or an Amiga Angels database written in Blitz...

great sound effects, and although the fact that whether you do or don't get a new battery pack for your gun when you kill a baddie seems pretty random at the moment, there's plenty to be explored. Look out for a review in AF soon.

READER REQUESTS

-In the Mag-/Reader Requests

Although any requests for it would have arrived far too late in the schedule to allow for it, we pre-empted you and included the preview trailer for the new *Star Wars* movie that'll be running in cinemas around the world by the time you get this CD. I believe we'll be the first magazine to have it. We've included *CyberQT* for you to play it back with as it doesn't work with the version of *MooVid* that I have.

As usual, we also have a wide range of other items that you've asked for in this drawer, including the latest (at the time of writing) Amiga Index file and a bunch of other items, including a typing tutor and the visual GUI toolkit for MUI, called MUI Builder.

LHA

-Seriously Amiga-/Archivers/Lha194

Back in 1994, Stefan Boberg decided to stop work on the Amiga version of *Lha*. Since then, although it's been the standard archive format for Amiga and in general, it hasn't been superseded, except perhaps by Jonathan Forbes' *LZX*, also no longer in development.

Earlier on this year, Johnathan decided to let go of his code and made the keyfile freely available to anyone who wanted it. The same thing has now happened with *Lha*, probably, as the current maintainer Jim Cooper puts it, "merely to stop his nagging".

In case you're still in the dark as to exactly what *Lha* is, or why you'd want the registered version that's now on this CD, the answer is - pay attention! Really, if you're unsure of what *Lha* is for in this day and age, you haven't been using your Amiga to its full extent. As to what the registered version gives you over and above the Shareware version, it's

simple. This version doesn't need to be registered with anyone, it's faster than the Shareware version and it supports automatic multi-volume archives.

This means that you can ask for an archive of something big and point it at a floppy, and when *Lha* fills a floppy it'll ask you to put another in until it has finished archiving. At the other end, when decompressing, *Lha* will keep asking for the next floppy in line to unpack them all to your hard drive.

SPEEDY GRAPHICS

-Seriously Amiga-/GFXCard/P96Speed

Although we have benchmarks of system performance, processor speed and hard drive capabilities, until now there's never really been a test of the Amiga's graphical power, unless you include *AIBB*'s beachball drawing benchmark. Jens Langner, one of the

Continued overleaf →



It's the new *Star Wars* movie! It won't be on at cinemas here for ages yet, so you'll have to content yourselves with the trailer.

At your fingertips

NEW FOUNDATION

-ScreenPlay-/Commercial-/FoundationUpd

Here's another update for this popular god game. Update 18 (for it is he) offers better support for sound card users and ups the enemy AI quotient. It is also now easier to prioritise buildings, food, etc, making the game a lot more controllable. Paul Burkey, the author, has also had no major bugs reported, which must mean that updates are likely to slow down now as there's less to fix.

YET MORE QUAKE...

-ScreenPlay-/OtherStuff/QuakeStuff

I know you may be sick of the stuff, but a lot of people are very pleased that we have so many *Quake* add-ons each month. Here's the latest batch, with a nice mixture between total and partial conversions.

AND THAYERE THEY GOOO!

-ScreenPlay-/OtherStuff/F1GP_1998

If you haven't had enough of the 1998 Grand Prix season yet, Oliver Roberts' tireless updating of *F1GP* means that you'll now be able to race against the heroes and zeros of this year's competition. If you'd like to update the sounds in the game, there's a bunch of raw sound files in the *OtherStuff* drawer as well.

← gurus at VillageTronic, has made *P96Speed* to redress this imbalance. It works not only with *Picasso96*, as the name implies, but also with any and all graphics systems, whether they be ECS, AGA or a *CyberGraphX* or *Picasso96*-equipped machine.

Like *AIBB*, you can make a module which shows a comparison between your machine and another, so you'll be able to see just how much better an Amiga with a graphics card can be than one without, and what difference Zorro III makes over Zorro II.

GET THE TAGS BOY

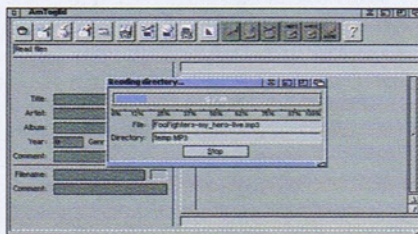
-Seriously_Amiga-/Sound/MP3-TagEd

-Seriously_Amiga-/Sound/AmTagEd

-Seriously_Amiga-/Sound/AmTAGID3

The only trouble with downloading all those dodgy MP3 files from the Internet is that they've often been "done" by people who don't have English as their first language, meaning there are

Edit those MP3 tags in style and comfort, thanks to *AmTagEd*.



spelling mistakes or there's bad grammar. As a writer I find this pretty poor, so I was pleased to find these tools to edit the "tags" – the description of the MP3 file, the artist and track name.

My favourite of the three has to be *AmTagEd*, but if you aren't a big fan of *MUI* you might prefer to use one of the other two.

PROGRAMMING

-Seriously_Amiga-/Programming

If you're into writing programs for your fellow Amigan, whether they be in *C* or *Amos*, our programming drawer has what you need, from the mailing list archives for both the *Amos* and *E* lists for those not blessed with a net connection, to the latest custom classes for *MUI*.

Now that we also have an *ARexx* drawer, you can be sure you can find all those non-specific scripts and add-ons for possibly the best thing the Amiga has going for it.

NO CARTMAN, YOU'RE THE ASS-MASTER!

-Seriously_Amiga-/WB/AssignMaster

I couldn't resist it. Here's a tool called *AssignMaster*. Count the letters – they fit into the Amiga's 25 character limit. Even with ".readme" tacked to the end they still fit, and yet the author has chosen to give the readme the name "assmas.readme". Chortle.

Anyway, *AssignMaster* is one of those very handy tools that allows you to never have to edit your user-startup again. While the "AssignX" function in *MultiCX* is useful for on-the-fly assigning of directories that need it, *AssignMaster* lets you actually edit the assigns you've

already set. You can even replace them from within the program, meaning you don't have to edit any text files. Nice. ☺

DISCLAIMER

This *AFCD* has been thoroughly scanned and tested at all stages of production. We recommend that you always run a virus checker on ANY software before running it. Future Publishing Limited cannot accept any responsibility for disruption, damage and/or loss to your data or your computer system which may occur while using this disc, the programs or the data on it. Ensure that you have up-to-date backups of data contained on your hard drives before running any new software. If you do not accept these conditions, do not use this disc.

DISC NOT WORKING?

If your *AFCD* is defective, please return it to the address below. Please make sure you have followed our installation procedures correctly to ensure that there is no physical problem. Please send us the *AFCD* along with a description of the fault (not forgetting your name and address). A new working version should be returned to you within 28 days. The return address for faulty discs is:

TIB PLC • TIB House • 11 Edward Street • Bradford • BD4 7BH

Your *AFCD* should only need replacing if the CD itself cannot be read. If, instead, you are experiencing problems with an individual application, phone our technical support line.

This is open between the hours of 2pm and 5pm every Tuesday.

Tel: 01225 442244 Fax: 01225 732341

Email: amformat@futurenet.co.uk

(Please remember to put "Coverdisc" in the subject line.)

Please note that the helpline staff provide assistance with technical problems directly related to the CD and cannot provide training on the software or hardware in general.

We want your work!

You can either send it to us on floppies, Zip disks or CDs (we do take other media formats too). If you are going to send us a multiple floppy backup of your work, please use the version of *ABackup* we supply on the CD in the +System+/Tools/Disk_Tools drawer. We'll return any Zips you send us, so don't worry about getting your disks back.

If you have any further queries about how to send your software in then consult the Submissions Advice on the CD (in Ben_Speaks!, or in the ReaderStuff or +System+/Info drawers).

Your signature:

Files you send in this month will probably appear on *AFCD37* – *Amiga Format* issue 121, March.

Please tell us:

Your name:

Your address:

Your postcode:

A contact number or email address:

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- (2) the material does not contain any material which is defamatory, obscene or indecent and is exempt from classification under the Video Recordings Act 1984;
- (3) that there are no legal claims against the material provided;
- (4) that I have full power and authority to provide this material to Future Publishing.

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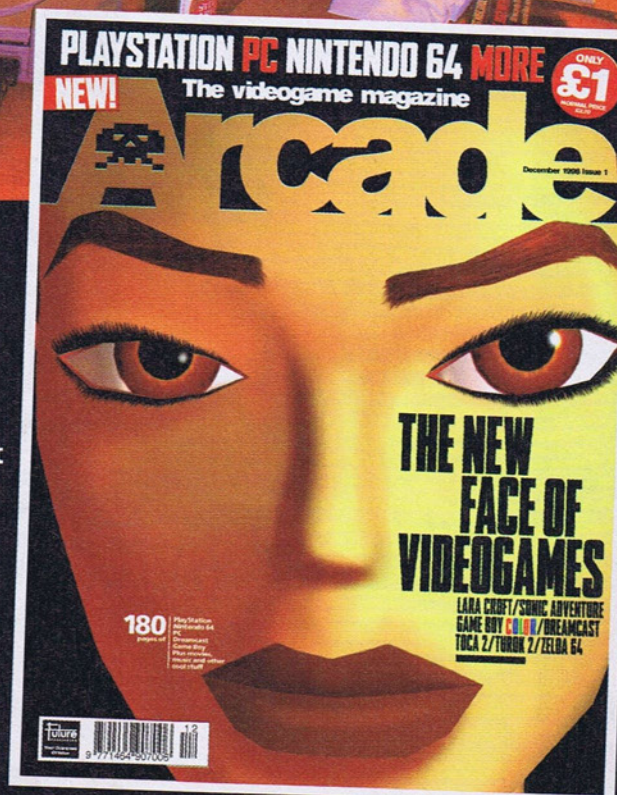
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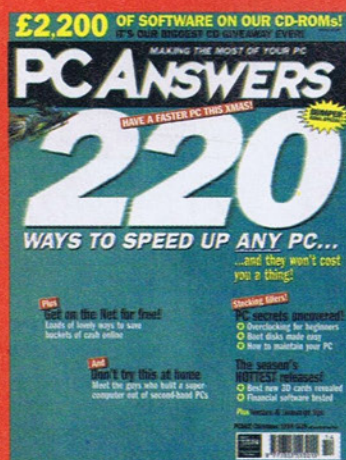
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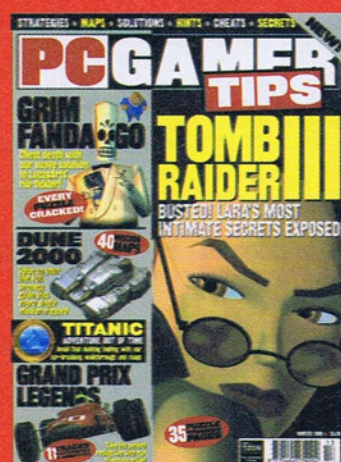
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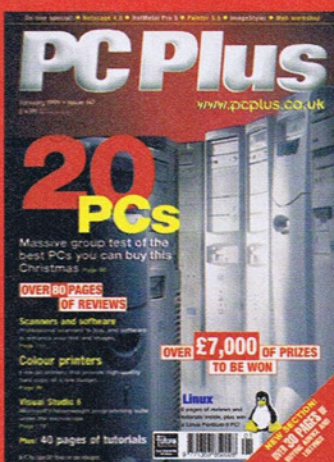
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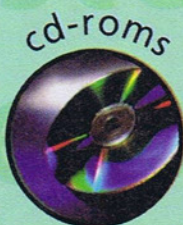


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Mini Mega chip (2MB Agnus chip and 1MB extra Chip RAM) _____£79.95

accelerator boards for a2000

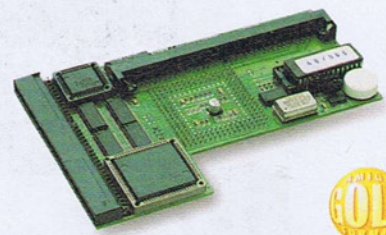
Apollo
full 68030 25MHz with MMU, including FPU,
Up to 64MB of Fast RAM _____£129.95

Apollo
full 68030 50MHz with MMU, optional 50MHz
FPU, Up to 64MB of Fast RAM _____£159.95

50MHz FPU for above _____£29.95

accelerator boards for a600

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Apollo with full 68040 40MHz,
up to 64MB _____£185.95

Apollo with full 68060 50MHz,
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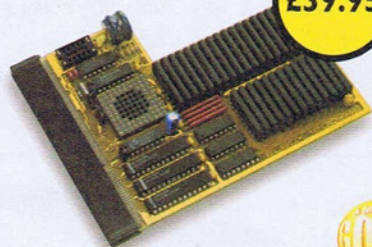
need more memory?

RAM prices are subject to change

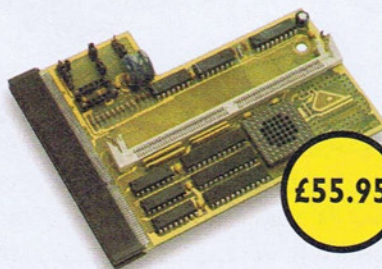
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for accelerator and expansion boards

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50MHz PGA FPU	£29.95



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A1200 bare with standard SIMM socket
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