April - Volume 12, No 4

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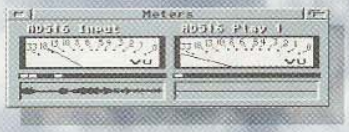
NDD

Australian Commodore & AMIGA Review

For Professional and Home Users



Using Bones in Imagine

Getting onto the Internet

STUDIO 16
SunRize Industries

AUSTRALIAN $4.95
Code: ACA
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Photogenics FULL REVIEW

Studio II Serious Sound Editing

* Recommended Retail Price

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Your SCALA presentations can now include full Digital MPEG Video. CDI and VIDEO-CD also supported

Now you can include Digital Video in your SCALA presentations. The MD100 MPEG-1 card allows playback of 24bit, 25 fps video with 16bit stereo sound. Video quality up to S-VHS is supported. You can playback video from any Amiga partition or from an MPEG CD-ROM drive. Now you can play-back all the MPEG Movie titles and reference titles on you A2000, A3000 and A4000. If you put the MD100 card in an A3000 or A4000, You can genlock on top of the MPEG video playback. The MD100 also features RGB, Composite and Y/C outs.

With the MD100 comes the MPEG Encoder. This allows you to convert anims or grabbed IFF's into MPEG video streams for real-time playback in 24bit colour.

HIGH DENSITY FLOPPIES

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High Density Floppy Drives for all Amigas. All you need is WB 2.0.
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NEW AMIGA TOWER SYSTEMS

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3 x 5.25" Drive bays.
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Real time clock.
5 x Zorro slots.
4 x PC slots.
PC Keyboard interface.

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A4000T

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5 x PC slots.
1 x Video slot.
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FAX and DATA modems.
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The BEST Amiga colour printer by far! The print quality is fantastic. No other colour printer comes close, for the same price!

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Cine Morph	$49
Wordworth V3.1	$149
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Power Copy	$39
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CDBoot is a NEW software product that allows you to use almost any CD32 games on an A1200 or A4000 with IDE or SCSI CD-ROM drive and any filesystem.
Create a configuration file for each CD33 game.

CDBoot 1.0	$69.00
CDBoot 1.0 with Chaos Engine	$89.00

CD-ROM DRIVES

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External Portable - Single Spin
Single Session - No Caddy!
FREE Driver Software

SONY CDU-55Se $599
External - Double Spin
Multi Session - No Caddy!
MPEG & CDI Compliant

SONY CDU-55Si $499
Internal - Double Spin
Multi Session - No Caddy!
MPEG & CDI Compliant

NEW NEC QUAD SPIN CD-ROM DRIVES 600k/sec - PRICE CRASH - $CALL

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ED Y/C Genlock
$699
ED TBC Enhancer
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TURBO CHARGE YOUR A1200

DKB Cobra - 40MHz '030
40MHz 68030
Up to 64 Meg of RAM
Space for 68882 FPU
Connector for SCSI II module
Real-Time Clock

SPECIAL - Cobra 40MHz '030 + 4Meg RAM $699

DKB Mongoose - 50MHz '030 50MHz 68882

50Mhz 68030
50Mhz 68882
Up to 64 Meg of RAM
Connector for SCSI-2 module
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SPECIAL - Mongoose 50MHz '030 50MHz '882 4Meg RAM $995

- True 32-Bit Fast RAM access.
- 28Mhz 68020 CPU.
- 300% Speed increase over standard A1200.
- SIMM's supported 2,4,8 MB.
- Support for 68881 & 68882.
- RealTime clock/calendar
- 100% A1200 compatible.

$499

POWER CD-ROM FOR A1200

Affordable SCSI CD-ROM for your A1200
CD32 Emulation

The new double speed Power CD-ROM for the Amiga 600/1200 plugs directly into the PCMCIA port and provides a direct SCSI interface, allowing up to six additional periperals to be connected, for example: Syquest Drives, Hard Drives, Flatbed Scanners and DAT Drives. What's more the Power CD-ROM features a "Hot-Plug" and "Un-Plug" even when your Amiga is switched on.

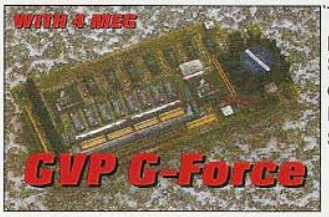
SQUIRREL SCSI FOR A1200

PCMCIA SCSI Interface For your A1200/600

Fast PCMCIA SCSI interface for your Amiga 1200 and 600. Supports "Hot-Plug" and "Un-Plug" Supports up to 7 SCSI-I and SCSI-II devices.

TURBO CHARGE YOUR A4000

The Warp Engine is the only A4000 Accelerator that offers on-board SCSI-2, 128 Meg RAM capacity and 40MHz 68040 performance. The Warp uses standard 72 pin SIMM's in any combimation. Also for A3000(T) $2299



The G-Force offers 40MHz 68040 performace at an unbeatable price. Space for 32 Meg fast 60ns RAM on-board with an optional 128 Meg RAM card. Also suits A3000(T) SCSI-2 module here soon.
$1649

Second hand Commodore 25MHz 68040 board for your A4000/030. 19 MIPs! at a special price.
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TECH MEDIA AD 4.95 ACAR

Put your Amiga in its Place!

with Professional DeskTop Video products from Sigmacom.

The Personal Animation Recorder is shaping up to be one of the most powerfull and popular Digital Video cards for the Amiga.

Its quality has passed the broadcast test at many of Australia's commercial television networks. By now I'm sure you have seen the PAR output on television, but not know you've been watching it!

Many of our clients are using the PAR with 3D rendering packages such as Lightwave to produce TV commercials, Music videos and much, much more.

Here are some of the reasons the PAR has become so popular :-

- *Broadcast resolution output*
- *Real time 25fps Playback of video*
- *Full 24Bit Colour*
- *Component output (Betacam® MII®)*
- *Y/C output (S-VHS®Hi8®)*
- *Composite Video output*
- *Interface with any Amiga graphics s/w*

With the Capture board you add even more versatility :-

- *Real time 25fps Capture of live video*
- *Component input (Betacam® MII®)*
- *Y/C input (S-VHS®Hi8®)*
- *Composite Video input*

SUNRIZE OFFERS DIGITAL AUDIO TO PAR USERS

With the range of Digital Audio cards from Sunrize you can add 8 Tracks of non-linear audio to your PAR Digital video. Lock it all together with SMPTE timecode for perfect, frame accurate, video and audio syncronisation.

There are two versions of the cards available. The AD1012, a 12bit, 4 track record and playback card. Also the AD516, a 16bit stereo version with sample rates up to 48KHz. The AD516 also has 8 Track record and playback capability.

Both cards work with the powerfull Studio16 V3.01 software. Drag and drop, timeline editing, real time fades and cross fades. True broadcast audio excellence for your Amiga.

SunRize INDUSTRIES

Here at last.... an affordable, broadcast quality non-linear editing system has finally arrived in the form of V-Lab Motion!

Its a fully functional non-linear editor and real time 24-bit animation recorder with audio support via the Toccata 16 bit stereo sampler card.

Full time line edit control with A/B roll type interfades and wipes. Also keying and "Blue Box" effects.

V-Lab Motion was "product of the year" in AMIGA PLUS (Germany) as well as a "Perfect 10" an AMIGA COMPUTING First.

Here are some of the features of the V-Lab motion system :-

- *Outstanding quality non-linear editor*
- *16 bit audio with the Toccata*
- *Complete ARexx support*
- *Comprehensive digital effects*
- *Digital character generator*
- *Chroma keying for "Blue Box" FX*
- *Composite & Y/C inputs*
- *Composite & Y/C outputs*
- *Freely adjustable data rates*
- *Optional Component in/outputs*
- *Powerful Movie Shop Software*
- *Time Line & Hierarchical editing*
- *Use as animation recorder*
- ***$ 2788 for V-Lab Motion***
- ***$ 869 for Toccata***

"The V-Lab Motion system will blow your socks off!"
-- Michael Ricks, Producer/Director
-- SUNSTONE PICTURES, Phoenix, Arizona

SCALA NEW MM400

This latest upgrade to SCALA adds multi-platform support with the addition of the File format EX's, New text wipes, better anti-aliasing of text, X/Y font scaling and more. New EX's for the Neptune genlock are also included in this new upgade.

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All systems on display
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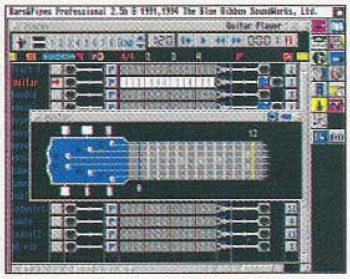

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BASE Jumpers

Faster A1200 and new organizer

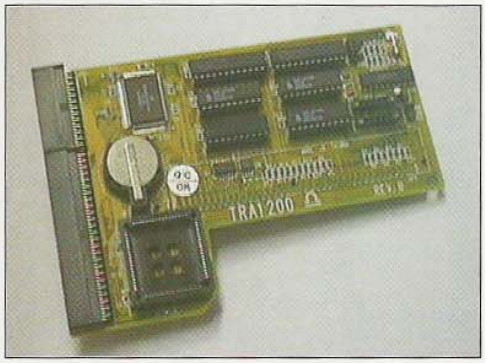
Amadeus Computers are now distributing Pyramid products, most notable among which are two cheap A1200 expansions. A 28MHz 020 with 4Mb of RAM and a clock costs $499, and with the addition of a $50 68882 coprocessor will give you a machine that a shade faster than an A3000 overall.

The other Pyramid A1200 board is a standard coprocessor/RAM/clock unit which doesn't replace your standard 020, and costs $429 for the 4Mb version. Both take a standard 72 pin SIMM RAM unit. Look for a review of both next month!

Also from Amadeus is a new Digita package - a personal organiser titled, inventively, Organiser. It's billed as having all the features you need to keep your life in order except a nice calfhide binder, and there will be a special Australian version with appropriate public holidays an so forth. The price isn't certain yet.

Contact Amadeus on (02) 652 2712 for more information.

❑



A3000 power for your 1200 for $550!

VistaPro competition hots up

Version 4.0 of Panorama, the scenery generation package from Amigadget, looks to have some interesting features. Panorama can do Vistapro's DEM-rendering tricks to allow you to render and animate real digitised landscapes, but it also has a lot of features for making purely random or user-defined fractal landscapes. While there is of course a lot of very heavy-duty math happening in the background, Amigadget say Panorama is easy to use, with lots of sensibly-named adjustable parameters.

Panorama can produce 24 bit images up to 8000 pixels square, and can render to Opalvision, Retina and Picasso boards. There's also good AGA support, and you can produce animations as big as you can store; scripting's made easy with a tweening feature. Animated skies, rivers, seas (which reflect the sky) and waterfalls are possible, too. There's automatic support for single frame video recording.

Panorama is fully ARexx-controllable, so automation freaks can integrate it with their existing image generating and rendering software. You need 3Mb of RAM to run it, and it lists in the US for $US99.95.

Contact Amadeus on (02) 652 2712 for more information.

❑

Deluxe Paint V shipping!

Electronic Arts proudly announced around March 10th that Deluxe Paint V, the latest version of the Amiga Paint Program Everybody Uses, is out. We ran a preview in the February issue, but as you read this the full version should be out (touch wood).

Contact Electronic Arts on (075) 911 388 for more information.

AmigaWorld Ends

Amiga World, one of the oldest Amiga magazines in the world (though not as old as this one, which existed as Commodore Review for quite a while before there was even an Amiga to write about), has ceased publication - the April 1995 issue is the last.

TechMedia Publishing, AmigaWorld's producers, blamed the continuing lousy Amiga-ownership situation in the U.S. as the main reason.

If you're an AmigaWorld subscriber, you'll be offered a choice of two other computer magazines form the same stable.

❑

New ImageFX sneak preview

The next version of Nova Design's popular ImageFX package will be a cheap upgrade for existing users, and the makers claim it'll have some interesting new features. Australian users won't particularly care that there's now better Video Toaster support, but there will also be support for Fargo's Primera Pro and Picture 310 printers, the cheapest professional quality colour output machines on the market.

There will also be a couple of new effects - Sparkle and Film Grain, and powerful new blue or green screen compositing. The compositing will allow soft edges with variation, image processing, and alpha channel mask and key out. It can composite to itself or put out key and matte, and it can protect the foreground colours.

There will also be CyberGraphics 24 bit windowing previews for fast previews on compatible hardware.

Contact your local dealer for more information; dealer enquiries to Peripheral World, (03) 725 3233.

❑

Cut-Price Bernoulli

Iomega Corporation, makers of the reliable, tough but pricey Bernoulli range of high capacity removable drives, will shortly be launching a miniature version. The Iomega Zip drive is a baby Bernoulli which can take 100Mb or 25Mb cartridges (carts), comes with a pile of useless PC and Mac software, and will cost about $450 in Australia. 25Mb carts will be $20 to $25, 100Mb carts $35 to $40.

If you like the look of Bernoulli drives but can't afford $1150 for a 230Mb model (with one cart) and $250 for each 230Mb cart, the Zip looks like an excellent, not to mention smaller, alternative. According to experts, this is as small as Bernoullis can get; the disk technology they use simply can't be squeezed below 3.5 inch. But only people with unusually small shirt pockets should care.

The Zip drives are slated for local release in late May, and you can bet we'll have a review!

In the meantime, contact Sourceware on (02) 427 7999 for more information.

❑

Cheap Alfadata Upgrades

Upgrades to Alfadata scanner and OCR software, as well as the software that comes with the Oktagon and Tandem controller boards, are now available from Natdisc. Just send a disk and a stamped self-addressed envelope and say what you want and they'll get the update off to you. Simple enough, eh.

Contact Natdisc on (02) 544 1874 for more information. Their address is PO Box 343, Cronulla 2230.

❑

Emplant PC finally out!

The long-awaited Emplant 586 DX emulator board is now shipping. Without actually using an Intel or clone processor, the new Emplant module is claimed to give Amiga users startlingly fast PC emulation - up to 2.5 times 486DX/66 speed on a 40MHz 040 Amiga. The popular Macintosh PC emulator software SoftPC, running on a 68040 Mac, allegedly scored a video benchmark more than 15 times slower than an Amiga with the same processor and the new Emplant board.

It's achieved, according to Utilities Unlimited, by means of CPU Transcription, a technique in which Intel processor instructions are translated into Motorola ones, completely avoiding the biggest problem of software emulation, the clumsy continuous translation that makes even the best traditional emulators, like PC-Task, so slow. While not all instructions are currently Transcribable, which means that two complete copies of every program have to be kept in memory, future versions should be able to completely transcribe everything and hence not require twice the RAM.

There's SCSI support via an ASPI compliant manager and driver package that allows the emulated PC to access any Amiga SCSI controller.

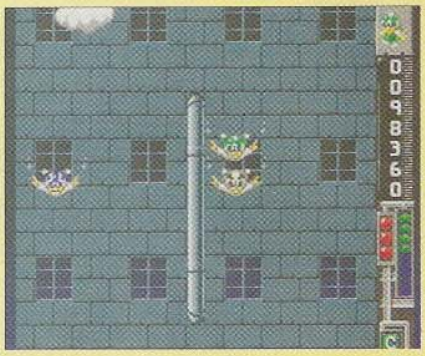
There's PC speaker sound (whoopee), but virtual sound cards that feed to the Amiga sound device are said to be in the pipeline. Jim Drew, proprietor of Utilities Unlimited, even says there's a PowerPC version in beta testing. We're very interested in this remarkable new product and will of course be running a review as soon as we can.

For more information, contact Natdisc on (044) 739 222.

❑

BASE Jumpers

Prepare yourself for the ultimate adrenaline buzz. BASE Jumping!
Climb a variety of structures, such as castles, skyscrapers, and Egyptian tombs then, well, jump off! Getting to the top isn't that easy, and if you make it and jump off - it's a race to the ground. Who will pull their chute last?



Loads and loads of great levels! Up to four players at one time. Cool graphics and music.
At least eleven sub games: Snow boarding, Breakout, Pong, and jousting!
Fast, simple and very addictive!

BASE Jumpers
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A500, A600, A1200, A2000, A3000, A4000 - WB 1.2, 1.3 & 2.0

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• G/I Hand Scanner	$ 329.00
• Epson GT-6500	$1399.00
• Epson GT-9000	$2199.00

Genlocks:

• E/D YC	$ 699.00
• E/D Neptun	$1199.00
• E/D Sirius II	$ CALL

Video Capture:

• Rombo Vidi 12	*Special* $ 149.00
• Rombo Vidi 12RT	$ 349.00
• Rombo Vidi 24RT	$ 499.00
• Personal Anim Recorder	*From* $3995.00

(P.A.R. on display in store)

Ram Chips:

• 1 MB-72 Pin SIMM	*Special* $ 50.00
• 2 MB-72 Pin SIMM	$ 199.00
• 4 MB-72 Pin SIMM	$ 285.00
• 8 MB-72 Pin SIMM	$ 529.00
• A3000 4MB Pagemode	$ 295.00

To suit GVP A500+, HC8:

• 1 MB x 2 100ns (2MB total)	$ 100.00
• 1 MB x 3 70ns (2MB total)	$ 150.00

Miscellaneous:

• Int HD Floppy (A4000)	$ 249.00
• Ext HD Floppy (all Amigas)	$ 275.00
• DNA Fast MIDI	$ 84.95
• Multiface III	$ 199.00
• SX-1 (Suit CD^{32})	$ 399.00
• Alfa data A500 RAM exp.	$ 229.00

- Up to 8MB RAM, IDE controller, 0MB

PRODUCTIVITY SOFTWARE

Adorage AGA	$195.00	Imagemaster R/T 1.0	*Special* $149.00
Amiback 2.0 Plus Tools Bundle	$119.00	Imagine 3 PAL	*Special* $299.00
Anim Workshop	*Special* $ 49.00	Light Wave 3D	$899.00
Anim Workshop V2	*Special* $119.00	Magic Lantern II	$139.00
Art Department Pro 2.5	$259.00	Maxon Magic	$ 69.00
Bars and Pipes Professional V2.5	$399.00	Money Matters V3	$ 99.00
Brilliance V2	$ 99.00	Morph Plus	$175.00
Broadcast Titler 2 Hi-Res	*Special* $299.00	OS 3.1 Kits	$CALL
Can Do V3	$475.00	PC-Task 3	$119.00
Calagari 24	$249.00	PageStream 3	$399.00
Clarissa V1.1	$195.00	Panorama V3	$ 89.95
Cygnus Ed Pro V3.5	$109.00	Pegger V2 JPEG Utility	$ 99.00
Datastore	$109.00	Pen Pal 1.5	$ 95.00
Deluxe Music V2	$139.00	Personal Paint 6.1	$ 99.00
DICE 3.0	$199.00	Photogenics	$129.00
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Distant Suns V5	$ 84.95	SCALA MM400	$449.00
DTU IOQ 1.0	$ 94.95	Scenery Animator V4	$ 99.95
Easy Ledgers 2	$399.00	Sparks 2.173	$199.00
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Final Writer Release 3	$169.00	Superbase Pro V1.3	$325.00
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HiSoft Basic 2.0	$149.00	Typesmith V2.0	*Clearance* $100.00
HiSoft DevPac 3	$139.00	Typesmith V2.5	$199.00
HiSoft Pascal	$199.00	Vista Pro 3	$ 99.95
Humanoid (Lightwave)	$259.00	Wordworth V2	$ 59.00
Hypercache 2.0	$ 59.95	Wordworth V3.1	$139.00
ImageFX V2.0	$399.00		

This list is not exhaustive. Please phone for any titles not listed.

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- Auto sheet feeder allows 70 sheets to be preloaded.
- Print capacity of 1.2 million characters (colour) or 670 sheets (colour at 5% duty A4 at 360 DPI based on supplied driver)
- Allows envelope printing

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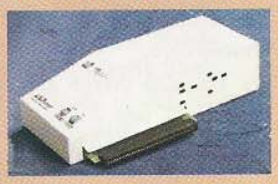
Black Cartridge	$ 43.95
Colour Cartridge	$ 89.95
360 DPI Paper /200 sheets	$ 43.95
720 DPI Paper /200 sheets	$ 49.95
Transparencies / 50	$110.00

A500 HD + RAM



• No HD (up to 8MB RAM)	$229-
• with 370 MB	$499-
• with 420 MB	$569-
• with 540 MB	$639-
• Ram to suit (2MB)	$150-

* Requires WB2.0 or greater for HD use.

SCSI CD ROM SALE

• NEC CDR-25 Ext. single spin	$299-
• SONY CDU 55S Int. 2.4x spin	$399-
• SONY CDU 55S Ext. 2.4x spin	$549-
• NEC CDR 501 Int. quad spin	$779-
• NEC CDR 601 Ext. quad spin	$899-

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DKB

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1202, no Co-Pro, 0MB	$ 189-
1202, 68882 @ 20MHz, 0MB	$ 229-
1202, 68882 @ 33MHz, 0MB	$ 275-
Cobra '030MMU 28MHZ, no Co-Pro, 0MB	$ 299-
Cobra '030EC 40MHz, no Co-Pro, 0MB	$ 449-
Mongoose '030MMU 50MHz, 50MHz 68882, 0MB	$ 699-
4 MB RAM when purchased with any of the above	$ 250-
SCSI-II Option for Cobra & Mongoose	$ 195-

Hard Disk Mechanisms

Quantum Drives:

• 270MB SCSI	$ 349-
• Lightning 540MB SCSI	$ 459-
• Lightning 730MB SCSI	$ 499-
• Empire 1.08GB SCSI	$ 999-

A4000 Seagate IDE Drives:

• 428MB 14ms 120K cache	$ 359-
• 545MB 14ms 120K cache	$ 399-
• 850MB 12ms 256K cache	$ 499-

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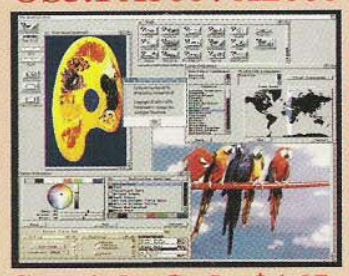

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E & O E

Here today, ESCOM tomorrow

The German PC clone manufacturer Escom has made a splash in the continuing Amiga ownership debate by offering $US6 million to the Bahamian liquidators for the remnants of Commodore.

A public auction will be announced, at which the other bidders (CEI, Commodore UK and whatever other panhandlers stumble in on the day) will have their chance.

As always, there's an interesting background story, too. You see, Escom has already paid $US1.4 million for the Commodore trademark to the liquidator in Germany. We're talking about that old Commodore chickenhead logo on them. They consequently pulled out their bid for Commodore International; they had the name, which was all they were after - perhaps.

Unfortunately, according to the International liquidator and the US courts, the German liquidator was not in fact authorised to make the sale since, according to the Bahamian bunch, the German company didn't exclusively own the Commodore name in the first place; one of the existing bidders (which, we suppose, means CEI or Commodore UK) threatened to withdraw their bid if they couldn't get the trademark as well as the assets.

As a result, the US judge pointed a legal action bone at Escom and the German liquidator. Escom promptly resurrected their bid for Commodore International, and agreed to surrender the trademark to whoever won the bidding. Who ends up with the $US1.4 million Escom gave the German liquidator is, presumably, the topic of rather hot debate.

Escom's bid for Commodore is $US6 million. This includes, according to Dan Stets of the Philadelphia Inquirer, "$US3.5 million for Commodore's core assets, an additional $US1 million for its German assets, $US500,000 for Dutch assets and $US1 million for the manufacturing inventory remaining in the Philippines, where Commodore used to build its computers."

Escom is a big company - the second biggest computer maker in Germany, with more than 200 retail stores there. Stets, however, is not terribly impressed with Escom; he said in a message on CompuServe that he has personally found Escom "rather nasty and uncooperative", and also that Escom's spokesman said to him a few months ago that the company was definitely not interested in Commodore - "in a very unfriendly way". It looks like another month of just having to hurry up and wait.

- By Daniel Rutter
Contributing Editor

❑

Next Month:
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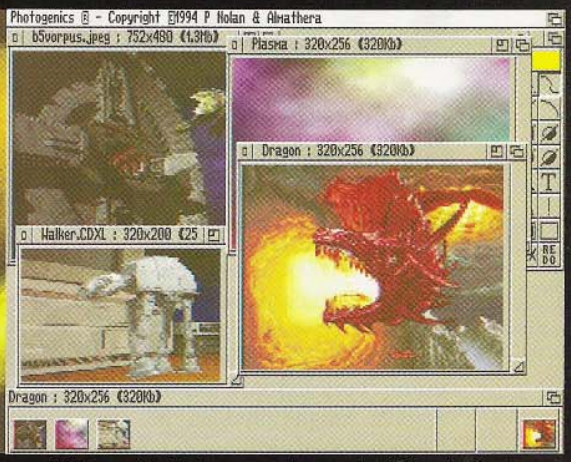

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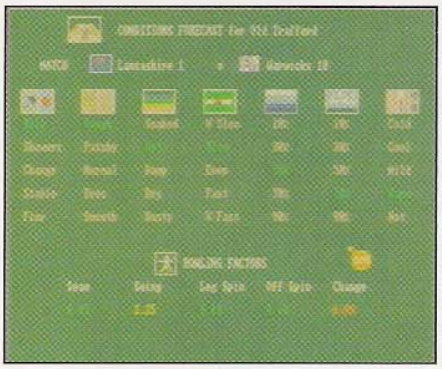

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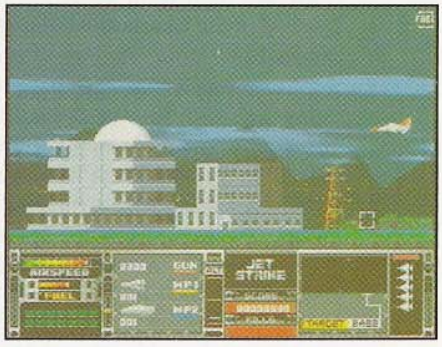

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STORM D004

Getting onto the Internet

AMITCP 4.0 revealed

By Wes Tatters

Unless you've been living in a Tibetan monastery for the last 12 months, you'll probably have noticed the increasing level of discussion of the Internet in computer magazines.

As a result, the question on many people's lips these days is "how do I get my computer connected to the Internet?" Unfortunately, despite all the articles discussing the wonders of the net and services like the World Wide Web, few articles have been written to help new users get online.

PC owners can get Net-connected quite easily these days with several prepackaged and comparatively cheap systems. But Amiga users have been left out in the cold, still staring at the highly complex low level installation procedures necessary to do it yourself.

To help Amiga users get up to speed on the Net, Amiga Review has put together a set of disks containing all the tools you'll need to get up and running. To find out more about getting hold of the disks, check out the ordering information in the sidebar. In addition, we've developed a special logon script which will enable you to quickly get your system up and running.

AMITCP 4.0

The most effective way to connect your computer to the Internet is through what is know as a TCP/IP connection. TCP/IP is a networking protocol made popular by the Unix world which has become the connection standard for the Internet.

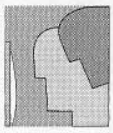
Obviously, very few people have direct Ethernet feeds into the Internet. As a result, an extension to TCP/IP was developed, known as a SLIP connection. A SLIP connection allows users to make a TCP/IP connection from their computer to the Internet using a serial port. Now anyone who owns a modem can make their computer a part of the Internet.

The computer program that makes all this possible on the Amiga is known as AMITCP. It's been around for some time, developing through a number of revisions into the highly functional AMITCP 4.0.

Two versions of AMITCP are now available - a demonstration version and a commercial version. For the remainder of this article, I'll deal with the demo version, which is provided on the Amiga Review Internet Disk.

Installation

For many people, the biggest problem with AMITCP is actually getting it installed and running. Once it's operational people seem to have few or no problems with it. One of the main reasons for this



difficulty in the fact that AMITCP itself can not make the physical serial link to the Internet. In other words, it doesn't know how to use your modem to dial your Internet provider and make the initial connection.

To solve this problem, we've developed a Dialler script based on a popular AREXX library, which makes the physical connection to the Internet and starts AMITCP running once the connection is made.

An added advantage of this approach is that the script also holds much of the configuration information needed to get AMITCP up and running.

AUSNET

Enough of the talk, I hear you all crying - let's get on with the install! Ok. For the purposes of this article, I'll use AUSNET as an example - they're one of the larger local service providers. Users who connect to other services will need to make some changes to reflect their local conditions, but apart from that the process remains the same.

AmiTCP-demo-40.lha

AMITCP is distributed as a compressed LHA file which you will need to unarchive onto your hard drive. To do this, start a shell and change to the directory where you want AmiTCP installed, then type:

```
Acartcp:LHA -x -M x
Acartcp:AmiTCP-demo-40.lha
```

This will create all the directories AmiTCP needs, and copy all the AmiTCP files onto your hard drive.

Workbench Installation

From the workbench, you're now ready to begin the actual installation. Like many Amiga programs, AmiTCP uses the now familiar Installer program. To start the process, open the AmiTCP-4.0 drawer created during the unarchive process and double click the Install AmiTCP icon.

Follow the first few steps listed in the installer to start the process. After a few simple housekeeping screens, which you should answer in the affirmative, you will be asked about installing or updating the SANA-II device drivers. You should install all the available drivers and agree to update any existing drivers. It is these drivers that make the serial port connection possible on the Amiga.

Configuring AmiTCP

The installation program will now ask you for some information which it needs to set up your system correctly. While the Dialler script will override some of these, it's important that they still be filled out correctly for the install to complete.

Default User Name - This should be the same as the User Id assigned by your service provider. While this information is not needed by our startup script, it is still required by the AmiTCP install program. I use wtatters for my service. You will be then asked for some additional information; you can accept the default information for all these options.

Dynamic Connection - This relates to the type of service your provider offers. Unless you have been given an individual IP address by your provider, answer yes to this question.

You will now be asked for some specific information about your service provider. You will need to make a note of this information, as it will also be needed later when you set up the dialler script.

Domain Name - For AUSNET this can be left blank.

Network Interface - SLIP/CSLIP should be selected. At this stage PPP is not available with the basic installation, but can be added at a later date by downloading the separately available PPP device driver.

On the Interface page, "rhcslip" should be selected for providers such as AUSNET who offer a CSLIP capable service. If you are unsure about what you provider offers, select the more widely supported but slower SLIP service using "rhslip".

Your IP Address - For services which offer dynamic addressing this is not required, but you must still enter a number to satisfy the installer - use "0.0.0.0".

Destination Address - This is an important address. You need to enter the IP address of your service provider - for AUSNET this is "192.190.215.5".

Netmask - Unless you provider specifically gives you a netmask, you can leave this empty. For AUSNET it is not required.

You will next be asked for some information about your serial port. Record this information for later, as you may need to make some changes to the dialler if the settings you enter differ from those listed below.

Serial Device - serial.device

Port - 0 for the standard com port

Speed - 19200

MTU - this should be set to 576 for optimum CSLIP performance.

Carrier Detect - No

CTS/RTS - Yes

EOF Mode - No

Default Gateway - For all dialup connections this address should be the same as the address entered earlier as your destination address. For AUSNET, this is "192.190.215.5".

Name Server address - You may

enter as many name server IP address as your service provider offers. For AUSNET, this is the same as the default gateway.

Given Domain Names - for AUSNET this is world.net.

Inetd - This option is not relevant to the dialler script (it's overridden), but for consistency, say yes.

NETDIAL

AmiTCP is now installed. Before it can run, you need to install the files in the NETDIAL directory of the Amiga ReviewTCP disk. If you do not have the disk, these files can also be found on a number of BBS systems and FTP sites, including AMINET sites such as ftp.netnet.net.

The file AMI and AMI.info should be copied to the AmiTCP-4.0 directory on you hard disk. The remaining files should be copied to the AmiTCP4.0/bin directory.

NETDIAL also requires the files in the LIBS directory of the Amiga ReviewTCP disk to copied to your LIBS: directory.

You're now ready to configure the NETDIAL script. Using a text editor, open the file netdial.rexx in the AmiTCP-4.0/bin directory. This file contains all the information needed to connect you to the Internet.

Netdial.rexx is configured by default for AUSNET and is fully commented to allow easy modification for other sites. To find out more about how to make changes to this script, make sure you read the netdial.readme script in the NETDIAL directory of the Amiga ReviewTCP disk.

AUSNET users need to change only three lines of information. "Amiganame" and "username" should be set to the User ID given to you by your service provider, and "passwd" should be set to your user password. Make sure when you don't remove any of the quotes and other punctuation marks which surround these names.

Getting online

Basically that's it, so now we're ready to connect, right? Not quite! Before you do, you need to make one last change. Due to a problem with the way the Amiga handles paths, you need to make sure that the AREXX commands RX and WAITFORPORT are in the C: directory and that rexxmast is running. At this stage you need to restart your Amiga so that the changes made to your startup files can be run.

After the reboot, you should now be able to click on the NET icon, which can be found in the AmiTCP-4.0 drawer. A window will open and NETDIAL will report its progress as it connects you to the Internet.

Where to now?

If you've been following along, you should now be online and ready to play. To make sure, start up a shell and type "ping world.net" - if everything went to plan you should see a message reporting the IP address and then some timing information. If you are still having problems, check the readme file on the Amiga Review TCP disks, which has some additional hints covering typical problems.

Congratulations - you are now on the Internet! At this stage, if you have not done so already, take some time to read all the readme files and documentation that came with AmiTCP - it'll give you a good guide to what's around and what you can do. The Amiga FAQ is a good place to start.

In addition, there are now a number of programs available which add new functionality to AmiTCP. For starters there is Amosiac, a few Newsreaders, IRC clients and Email managers. Most of these are available from FTP sites, such as FTP.WUSTL.EDU in the /pub/aminet directory.

To get you started, we've placed some of the more popular files on the second Amiga Review TCP disk.

Now its up to you! Netsurf on...

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Studio 2

Power printing for your Amiga!

By Glen Sheridan

Studio 2 is an all in one print driver. It provides a custom picture printing program with lots of options and a Workbench driver for use with other programs.

Studio 2 handles images in 24 bit colour or eight bit grey, which means that it's not limited to the 4096 colours of standard Preferences drivers.

Studio 2 comes on three disks, and is installed using the trusty Commodore installer.

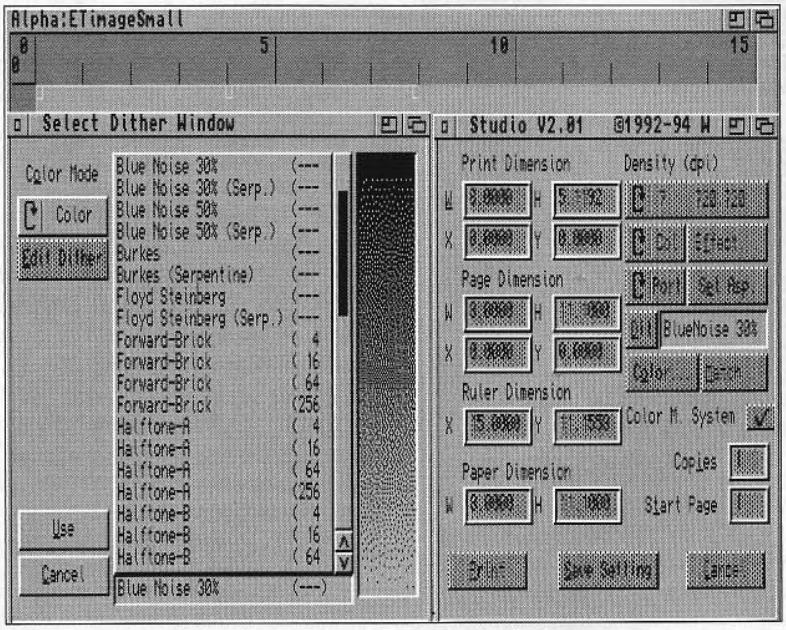
After a quick perusal of the very extensive manual, complete with amusing footnotes, it was quite obvious that this was NOT just a bunch of printer drivers, (although it has lots).

Studio 2 has about a zillion changeable parameters which, when combined, make it a very capable piece of software.

Among the more advanced features is the ability to print colour images on a black and white printer. This is done by manually changing ink cartridges or ribbons for each colour pass. Studio 2 separates the image colours (Cyan, Magenta, Yellow and Black) and prints them one at a time. This process is a little clunky, but it IS a colour print.

How's it work?

When Studio 2 is loaded it asks for the image to be printed, and displays a boxed representation of the image on a ruled page. The



You want options? You got options!

screen's ruler can be displayed in Inches, Centimeters, Pica or Points. From here the user can scale, change the aspect, change the colour balance, or generally muck about with the image in any number of ways. While the image is printing, other images can be selected and put in a queue using Studio 2's own print spooler. You can even change the print specifications for the upcoming images, and Studio 2 will happily multitask. If set and forget is your passion, there are over 100 AREXX commands supported, which can fully automate Studio 2's operation. For those with memory to burn, there's an option to increase Studio 2's buffer size, which speeds up processing and printing times.

Calibration

Studio 2's screen calibration feature is unique among Amiga print drivers. It allows the printer output to match the particular colour balance of a particular monitor. An extensive list of monitor types and brands is provided, ranging from an ordinary 1084 clone to the NEC Multisyncs. You do the calibration by using a slider to match the colour of two nested rectangles. No two monitors are the same, and the settings that work for you will not necessarily be exactly the same on your friend's monitor, even if it's the same model.

While the screen calibration is designed to match the gamma (gamma correction lightens an image without losing detail by lightening the middle shades of the image without affecting the lightest and darkest shades), the Colour Management System (CMS) is designed to provide a similar function for colour - a predictable and calibrated output of colours or shades of grey. In layman's terms, it allows you to match the screen or original colours to the printed page. The CMS takes a little time to get used to, but works well once mastered. You will, in a short period of time, be able to 'tweak' the best out of your images. It stops the "It looks great on the screen but when I print it..." syndrome.

Dithering about

As if that's not enough, there is, for the adventurous types, dither pattern customisation. Dithering is the blending of two colours to simulate a third, allowing smoother gradients and better looking images. Dithering is applied according to a pattern (for example Floyd-Steinberg, the most popular method), with different patterns achieving different results. If none of the 55 patterns supplied with Studio 2 suit your purpose, you can customise your own!

No more banding

Studio 2 overcomes one of the biggest problems with graphic printing, the dreaded banding effect evident on most dot matrix and inkjet printers. Banding is usually caused by the printer's line feed being too small, making the printed strips overlap. Studio 2 allows you to make fine adjustments to compensate for the problem. If your banding's caused by a cheap printer with uneven ink distribution on a ribbon or a tilted print head, though - tough.

Image manipulation

There is a considerable range of image manipulation tools in Studio 2. These include Mirror (useful for printing t-shirt transfers), Negative, Brightness, Contrast, Gamma, Sharpness, Blur, Histogram Equalisation and Clipping. Clipping is a two step operation. The first determines the darkest and the brightest pixels in your

Original image, printed on Epson Stylus Colour

Mirror

Negative

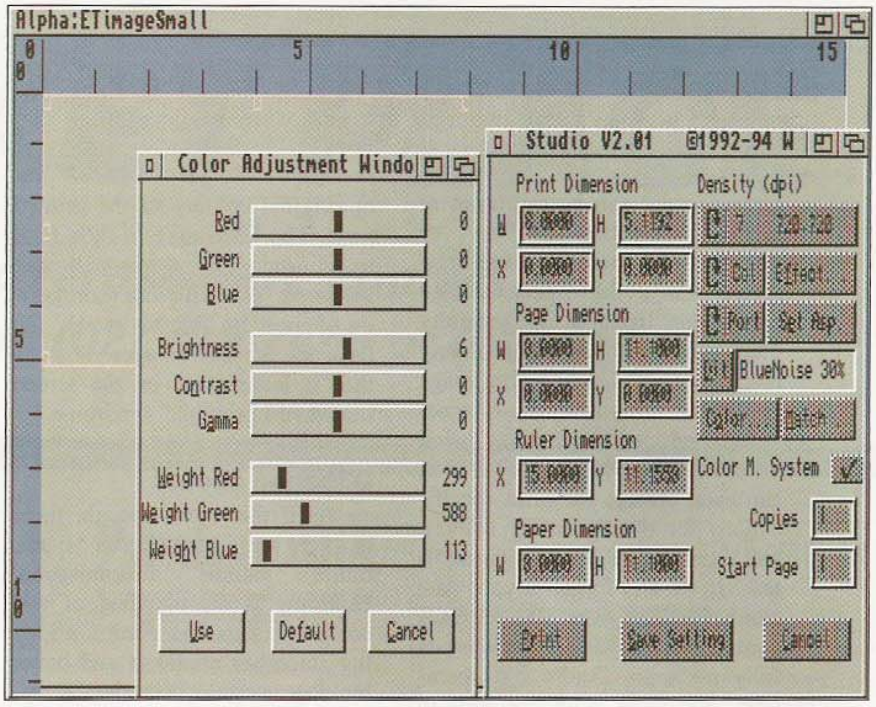
image. The second step involves scaling the dark and bright pixels to values determined by dark and light sliders. (The shades between the extremes of dark and light are scaled proportionally). Histogram Equalisation is similar to Clipping, but more suited to images with a wide range of shades.

Drivers for everything

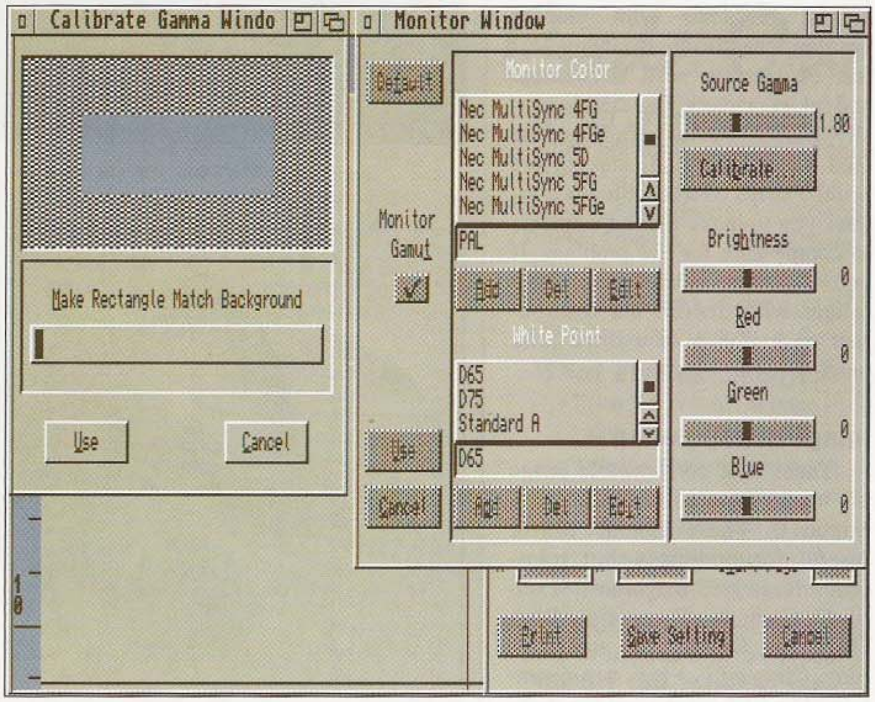
Studio 2 comes equipped with several printer output modules. These are basically printer specific drivers, which replace the standard Workbench drivers but with a lot more options. Printers supported include Canon's range of bubble-jets, Epson's Stylus Colour PS2, and Fargo's Primera.

Extra bits

Apart from the main program, Studio 2 comes with several extra utilities. CMS Scan creates a profile (used by the printer output modules) from a calibration image. It uses both colour and grey scale. The creation of a colour profile can take up to 10 hours. There are several profiles provided, and you probably need never use this function. CMS Edit allows you to edit the profile generated with CMS Scan. CMS Picture converts an IFF image into a format readable by CMS Scan. Please note - the manual recommends that you not go near the CMS Edit utility unless you have the patience of a tree and several days to spare!



Tweak images for best results



Match your screen to your software

Overall

Studio 2 will work on any Amiga with 1Mb or more of memory and OS 2 or higher. It is compatible with Professional Page, Pagestream, Final Writer, Final Copy and DPaint, among others.

In use, Studio 2 provided a consistently better result than the equivalent Workbench driver, as well as being the only Amiga driver available for several printers, for example the Epson Stylus Colour. All in all, this is a very powerful piece of software and a must for anyone trying to get the best hard copy of their computer artwork without going to a bureau. It will take a little time to fully master, but it is worth the effort.

On a personal note, I can hardly wait for the next version, with features including previewing, Postscript... the list goes on!

❑

The quest for beauty

I love my Amiga. My 68000 based A2000 may be somewhat dated - I'm still running a MONO 1804 monitor, for crying out loud! But recently I've upgraded to OS2.1, and installed a 270Mb HD an NEC CDR-25 CD-ROM drive and 3Mb of RAM. Not much, I know, but better than it was before.

My intentions for the future are to further expand by purchasing (maybe) an NEC Multisync 3D monitor, EGS Spectrum 24 bit display card, 68030 board with a couple of extra megs of RAM and, finally, OS3.1.

The reason for my letter is I'd like some advice. I'm a sucker for colours, I'm a sucker for graphics, and I always have to have the best. I was always wanting to upgrade anyway, but when I saw the file "SpumoniBench.jpeg" on the Aminet 4 CD, I saw a lovely Workbench screen that I'd like my system to look like.

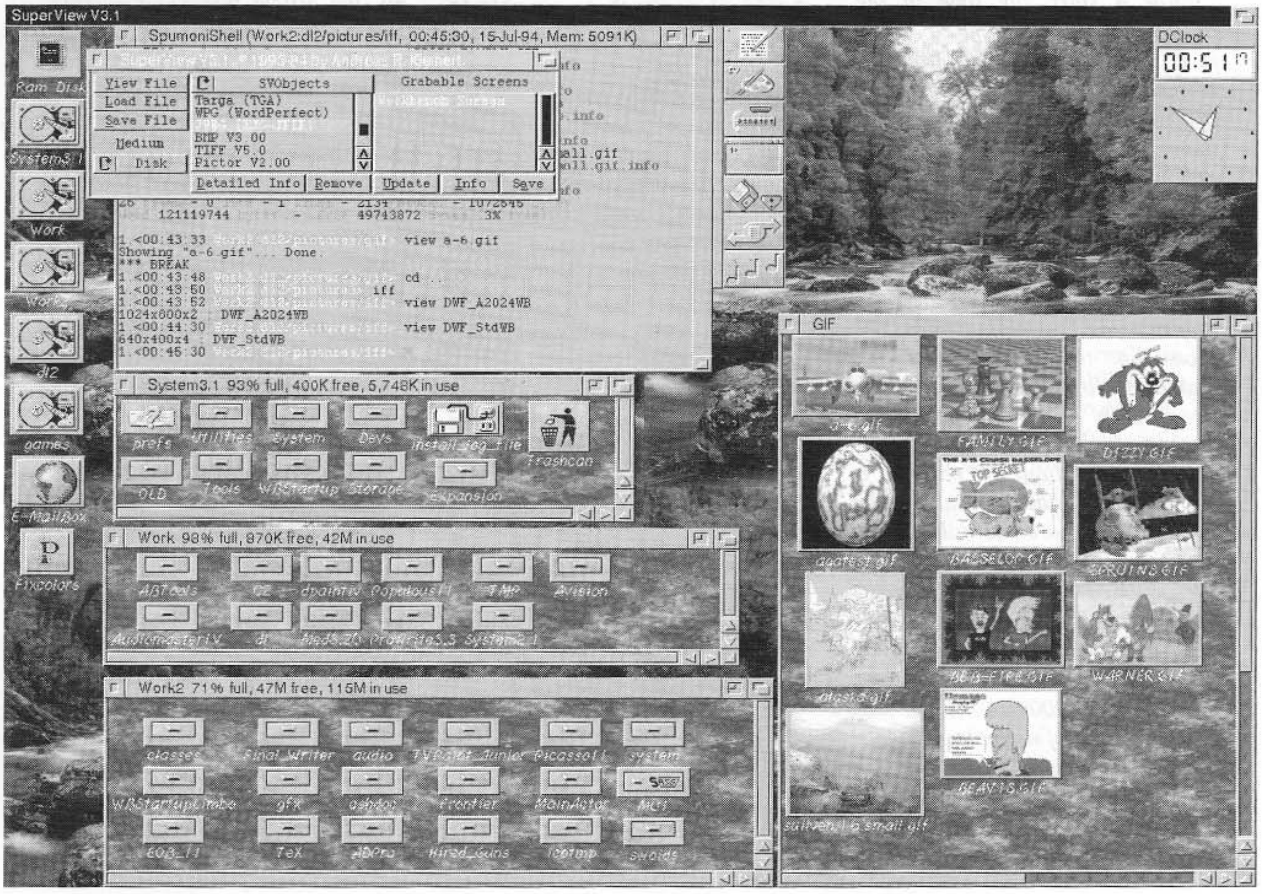
I've got a rough idea how to achieve this, but there are a few details that still irk me. How does he get his Shell to write in different colours, or is that a feature of 3.1? How does he get the time to appear at the beginning of each prompt? Again, a feature of 3.1, or simple hacks?

In the centre at the top are a number of icons sitting vertically - are they called "dock icons"? If so, I believe ToolManager will fix me up on that...

How can I get icons as clear (apart from the obvious resolution barrier...) as Mr. Spumoni has? I picked mine (which look REMOTELY similar) from a selection of Magic Workbench icons I found (also on Aminet 4). But mine look like rubbish. Is it my monitor that gives such a bad picture - if I had a decent one, would it look as clear as this? Or have I just got poor icons? The path I found them on is :Aminet / util / wb / 4colMWBIcons.lha.

What do you suggest? Upgrade my 2000? Buy a 4000 (with whose money)? Do I need to buy Magic Workbench? If I had a modem, I'd E-mail Mr Spumoni himself, but alas... I've read what he has used in the readme file for the picture, but the docs on Sysihack 5 scare the pants off me! I mean, I thought I could cope with most installing, CLI hacks etc - but this...!

One final thing. I wish to change my fonts on my Workbench from Topaz 8 (yawn!) to Times 11, but when I go to the Fonts prefs program and choose to change it I get a program failed requester. Or if I choose "open" from the menu, load a font from DH1:Fonts (I ran out of room for



fonts on DH0:...) I get "error processing IFF file, Work:Fonts / Times / 10." I know it's possible, as I've once changed fonts via "FastFonts" to Koala Fonts on Workbench 1.3. I guess I could do the same again, but if I've got Fonts as a prefs program, surely I should be able to use it?

Ed: Here at Amiga Review, we've got past the stage of tweaking our user interfaces into the hand-polished, burr-walnut version, simply because succumbing to the allure of fritterware results in no work getting done. We believe that form follows function - if your Workbench works well, it'll look fine, and further tweaking just eats time and RAM.

If, however, you're devoted to the manufacture of a spiffy looking operating environment, we're happy to help.

For a start, the time in the prompt and multicoloured interface in Mr. Spumoni's CLI are both features of CShell, the Amiga Shell of Champions. The latest version's mentioned in this month's Hot PD column. Check it out.

Yes, the row of icons is indeed a dock and indeed Toolmanager will do it for you.

Your icons look bad because you're using four colour ones. The icons in the picture are the standard MagicWB models, which are actually only eight colours but very nicely dithered. The full freely distributable MagicWB package is on Aminet; install it, and for the time being ignore the million and one extra icon sets people've made for it. By the way, MagicWB's shareware; if you like it, you do have to register.

By all means, upgrade your Amiga. The 2000's an OK bas platform; lots of room, lots of slots. The only things it's got against it are no AGA graphics (who cares, if you're installing a 24 bit board), only 1Mb of chip RAM (unless you buy an extender board) and the lousy 16 bit bus, which chokes back communication between all of your high tech expansions.

By the way, we're sorry to say this, but Sysihack (which, without a graphics board, just gives you nifty 3D window gadgets) is actually only about a four on the one to ten Installation Difficulty Scale. Nobody offered you beauty without pain.

Your font problem has us somewhat mystified. Try reinstalling everything in sight from floppy; perhaps some file's been hit by a cosmic ray and turned ugly. Aside from that, we haven't a clue what's causing it.

Amiga exposure

I'm writing to you concerning the future of the Amiga in Australia. Whoever gets the rights to distribute the Amiga in Australia should do as much as possible to make it attractive tot he home enthusiast.

Therefore the Amiga should get some sort of coverage in the media, but most importantly it should sell in department stores.

i remember when I first got my Amiga in 1990 you could choose from a huge rang of software in, say, Grace Bros. Now it's a miracle if you see AMiga software in any department store.

The specialist dealers do an excellent job and should be commended, but if the Amiga is to succeed it needs to be sold everywhere. Sure, the people at the department store might not know much about Amigas (they might have been selling underwear the previous day) but at least it's for all to see. I know some people who don't know what an Amiga is!

I'm not after a free subscription - my letter in your magazine is enough reward.

Paul Morabito,
Cabramatta NSW

Ed: Yes, mass exposure for Amigas is a good idea - but department stores aren't, necessarily. We have yet to be convinced that selling even out-of-the-box computers like Amigas as commodities - beigegoods, as they've come to be known - is a good strategy. A computer is one heck of a lot more complex than a fridge, and selling somebody a machine with a half-baked sales spiel is a recipe for dissatisfaction and bad word of mouth.

In our books, a better strategy would be a decent advertising campaign and eight big dedicated stores or (more realistically) sections in existing computer stores. But time will tell.

How fast's an Amiga?

Your review of PC-Task 3 in the February Amiga Review raised some questions in my mind. Overall, the article was clear enough, but the bit about the comparative speed of the Amiga and the IBM PC was puzzling.

According to the review, an A500 with fast RAM is supposed to give 30% the speed of an XT. It goes on to say that an A4000/040 is 10 times faster than an XT, implying, I suppose, that the 4000 is about 33 times faster than a 500.

Running PC-Task 3, the article says that a 68030 based Amiga gives about 2.5 times the speed of an XT. A 486DX/33 is said to be 100 times quicker than this - 250 times XT speed, if I've done the sums right.

Taken together, the implication is that a 486DX/33 is 25 times faster than an A4000/040! Can this be true?

I have an old version of SysInfo, in which the speed tests try to make a comparison between the machine under scrutiny and, among other things, an IBM XT. It suggests that an A500 is a few times QUICKER than an XT. If

this is true, the A4000/040 would be at least on a par with most 486 machines. I know that the different processors, custom chipsets, different operating systems and so on all make it impossible to make a definitive statement about comparative speeds, but a discrepancy of this magnitude is unbelievable.

I've been told that an Amiga 1200 is pretty much comparable with a PC 386 machine. My own experience using both suggests that this is roughly true.

In support (albeit tenuously) of the Amiga Review comparisons, reviews of Sim City 2000 say that it's slow on Amiga compared to the Mac and PC versions.

Can you clarify this speed business please?

Ed: Gladly. The one, crucial, piece of information in the PC-Task review which you obviously missed was that PC-Task is a software emulator, and hence runs slowly. An Amiga emulating a PC with a software package has to do on-the-fly translation of all the low level 80x86 processor instructions into 680x0 instructions, and hence performs operations much slower than a machine that really has the hardware. Indeed, a 68040 Amiga can hold its own against the speedsters of the IBM world, but only if it's running code written for its own processor, not interpreting code written for the other one. It's a native language versus phrasebook sort of thing.

By the way, the Amiga version of Sim City 2000 is slow because Maxis never seem to have quite got the hang of writing Amiga software.

They open every window that they could ever need at once, and with a Maxis game this is often a lot, and their code seems to be ported as directly as possible, with no Amiga optimisation. Hence the slowness ■

More books

Steven Burns of Malabar, NSW, was spurred by the free sub we gave Barry Webster for spotting the Amiga in a novel, and so tried his luck with two spottings.

The first was in Terry Pratchett's "Only You Can Save Mankind", where the Amiga scores a mention near the bottom of page 7.

He also spotted an acknowledgement from Arthur C Clarke in the book "The Hammer Of God", in which Clarke sang the praises of Vistapro and Distant Suns for the Amiga.

Unfortunately, we already know Clarke uses an Amiga, and he gives it a plug in a load of recent books. So while this is a genuine spotting, we don't think it's quite sub-worthy. Nyaah.

Scalpers and more

Victorians T. Josephs, of Reservoir, and Philip Haeusler, of Croydon, both spotted Today Tonight's piece on Pearl Jam ticket scalpers, but disagreed on its content.

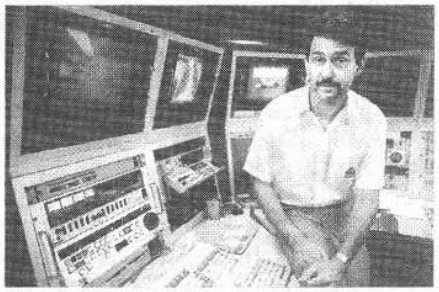
Philip thought he saw a couple of guys who produce an Australian Pearl Jam magazine, with an A500 with a Commodore monitor in the background, running an antique word processor like Kindwords or Textcraft.

T., on the other hand, thought the scalpers were interviewed next to an A1200 with a 1940 or 1942 monitor.

Odd. T. also threatened to kidnap Amiga Review staff and force them to live in Melbourne, a terrifying fate indeed but not terrifying enough to scare a free sub out of us.

Getting back to Philip, though, he also located the Amiga graphics on Melbourne's Channel 31 that we mentioned in the January Media Watch - and he's seen the occasional Scala screen on that channel, too, when the editing falls over. In the same vein, Philip also mentioned that his school (Luther College, Croydon) has an occasional TV station that does all its titles and effects on a Scala-equipped A4000 - as he says, "in a school with millions of PC clones, it's good to see that there's something that only an Amiga can do. Cheaply."

Then he sucked for a subscription, but we're not going to give him one, because we're cruel, uncaring people.



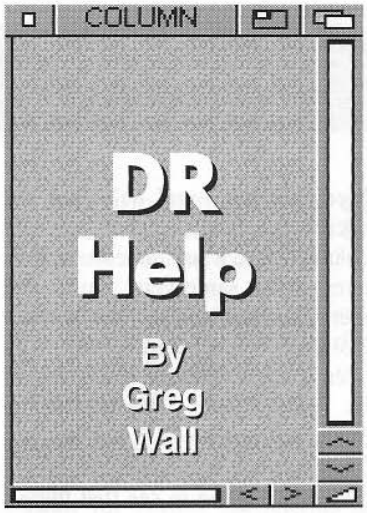
Golf teaching

Dennis Robinson of Fairview Park, SA, spotted an Amiga in a picture in the Australian's computer section on the 20th of December.

The piece was on a pattern-recognition system created by a Mr Rick Baker, which analyses golf swings and compares them to a database of masters' swings, so dodgy golfers can see what they're doing wrong. Amid various high powered video systems is the distinctive shape of an A1200.

Dennis is already an Amiga Review subscriber, so we can't give him a free sub. But we can give him 12 more issues on his current one!

■



I have here two questions that are similar, so I decided to group them together.

Using IBM PD

Dear Helpline: I'm an Amiga Review subscriber, but I recently bought a copy of PC Review. It had an inlay from Micro-Magic, with all the shareware suitable for IBM & compatible machines.

I was amazed at the enormous selection of discs at $2.95.

My equipment is an Amiga 3000; WB 2.1; 40Mb hard drive; Star LC 24-200 printer & 3 floppy drives; 4 Meg chip RAM.

With this setup, do I need an emulator? And if so, which one would be the best to buy? Or could I run these discs with CrossDOS?

I am very keen to hear from you as soon as possible.

Also I wonder if the 3000 is a doomed machine (not much scope for updating). To be honest, I'm wondering if it's not better to switch to a PC in the near future! There seems to be a much bigger assortment of software available.

I have enjoyed Amiga Review for quite a few years now, but I must say I was impressed with PC Review. Seems to be more informative, not so much games orientated, but that is only my opinion.

Keep up the good work, hope to hear from you soon.

J. Dykstra,
Tallai, QLD

Dr Help: To begin with I'd say you have 2Mb chip RAM and 2Mb fast, since the maximum amount of chip you can have is 2Mb! To answer your question, YES there is a large selection of IBM compatible shareware. But if you want to use it on an Amiga there are a few things to consider first. Number one - most shareware for PC's is on 1.44Mb high density floppies, but the standard Amiga drive can only handle 720k double density disks. You can, however, get high density drives for Amigas (expensive) and IBM PD on 720k disks (awkward).

The next question is what sort of shareware are you interested in? Games, Files or Programs?

Using CrossDOS you can read, write and format IBM disks. This means you can take an Amiga disk and format it to 720K for use in a PC. You can save ASCII (plain text) from your word processor to a PC disk and load it into a PC program - and vice versa. You can load PC pictures and convert PC sounds, if you've got the AMiga software to handle them.

Now on to running IBM programs. CrossDOS lets you read the disks, but not run the programs. PC-Task is a commercial program that will allow you to run IBM software right on your Amiga without any hardware add-ons at all.

You can run Windows and some IBM shareware, both programs and games. See the review in Feb 95 issue of ACAR (Page 37) for more detail. The other option, also covered in the review, is putting a bridgeboard in your 3000, which is essentially an IBM inside your Amiga. The bottom line, though, is what sort of IBM shareware you want to use.

Another, possibly cheaper, alternative is to check out the larger Amiga PD libraries, such as Megadisk, or get yourself a CD-ROM drive and grab a few of the brilliant PD CDs available these days - 1000 disks of Fred Fish stuff and the whole four CD Aminet collection for about $100 the lot takes some beating!

Work out what you want to and then make a decision based on what you want to spend/receive. Cheap no cost answer - Cross Dos(limited), Middle of the road choice - Reasonable cost (PC-Task), More expensive - 386 bridgeboard (faster and runs all software that will work on a normal 386). The choice is yours.

By the way, in case you don't know what public domain software is and where to get it - no, there isn't a particular library somewhere with has a huge collection of Amiga software!

Public domain and shareware and all the other names freely distributable software goes by are all basically software written by someone who chooses not to

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market their product commercially and doesn't mind you handing it around.

Sometimes the authors ask you for a small donation if you like their software; often if you send them a few dollars they'll send you updates to the program and some other goodies they have written.

Hanging drives

Dear Helpline: I have a problem and hopefully you can help me. I want to be able to read MS-DOS disks so I can take PCX & GIF picture files or any IBM picture formats and convert them to IFF files.

I want to be able to use them in my posters and newsletters.

I have an Amiga 1200 with two disk drives. I also have PC-Task and CrossDOS. The problem starts after I have put PC0: and PC1: in Devs: and rebooted.

When I put an MS-DOS disk in the drive, the drive freezes up, the red drive light stays on and I can't use either DF0: or DF1:. I have to reboot.

With PC-Task I can read MS-DOS and copy MS-DOS files to my hard drive, but that is no good to me, as I can't read the PC-Task HD file. If you can see what I'm doing wrong could you please tell me, or please tell me who might be able to help me.

Matthew Herbert,
Bowen, QLD

DR Help: The first thing I would check is that you are not putting 1.44Mb disks into a 720k drive, but if you are using those same disks in PC-Task then they must be 720K.

The second thing I would check is that you do not have a virus checker running that is having a problem working with CrossDOS. While we're on the subject, create a new drawer on your Workbench partition and drag the contents of your WBStartup drawer (if you have any) into this to see if this makes a difference on reboot.

You may also want to check that you don't have any other unusual programs or utilities in either the startup-sequence or user-startup. You could also try dragging a new copy of PC0: and PC1: from your workbench disks in case these have become corrupted.

Make sure also that the PC0: and PC1: icons are in the DOSDrivers drawer in DEVS and not just in the DEVS drawer. One final thing you may wish to check is the Information menu of the PC0: and PC1: icons.

The default tool should be C:Mount and the tooltypes on PC0: should be ACTIVATE=1 and on the next line UNIT=0. PC1: should have ACTIVATE=1 and UNIT=1. Hope this fixes your problem.

Slow booting

Dear Helpline: I have installed a GVP A1200 SCSI/RAM+ in my Amiga. While I now have 8Mb of fast RAM, I'm annoyed by the fact that my Amiga takes 20 seconds to "warm up" every time I reboot. Before the card was installed, Workbench 3.0 would be up and running in about five seconds. I'm guessing that this delay is caused by the GVP board remapping Kickstart into its own ROM for a bit more speed. Does this need to happen? If not, is there a DIP switch I can change to prevent the ROM from remapping?

Gordon Reid,
Blackburn, VIC

Dr Help: The delay has nothing to do with ROM remapping - it's the SCSI side of things that's causing it. First, remapping.

Your computer's basic operating system code is kept in the Kickstart ROM. Accessing data in ROM is slower than accessing it in RAM. And the ROM is accessed all the time, as it holds all the low-level operating system routines that everything needs. Remapping ROM into RAM eats 512k of your fast RAM, but will make your machine noticeably faster. But remapping happens after the boot has started - it's done by a DOS program - and your pause is occurring before that stage.

Hard drives take time to spin up - reach their operating speed. Before they've spun up, they can't be accessed. And if a dumb hard disk controller tries to boot from them before they've done it, the computer enters cabbageland and must be rebooted again.

Some controllers hence include a long boot pause to give even the slowest drives time to get to speed - and the GVP is one such. You can't turn it off, so learn to love it.

❑

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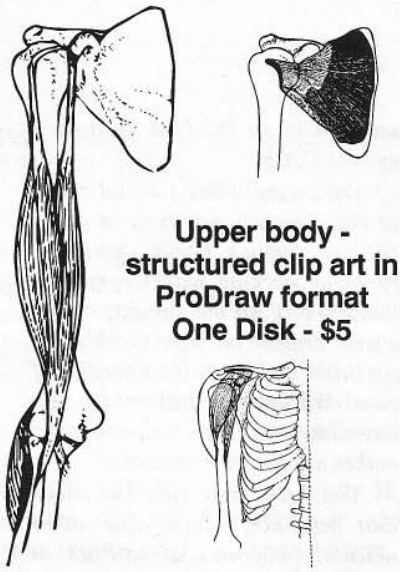

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Author	Title	Publisher	pub
Adams, Douglas	Dirk Gently's Holistic Detective Agency	Pan Books Ltd.	1988
Adams, Douglas	Hitchhikers Guide to The Galaxy, The	Guild Publishing	1986
Baum, L. Frank	Wizard of Oz, The	Mandarin Publishers Limited	1993
Beresford, Dick	Uncensored Boy's Own, The	Macdonald & Co (Publishers) Ltd	1990
Boardman, Tom Jr	Science Fiction Stories	Octopus Books Limited	1983
Burnet, Frances Hodgson	Secret Garden, The	Octopus Books Limited	1983
Carroll, Lewis	Alice's Adventures In Wonderland	Octopus Books Limited	1991
Clarke, Arthur C.	2010: Odessey Two	Granada Publishing Limited	1982
Clarke, Arthur C.	2061: Odessey Three	Grafton Books	1988
Crichton, Michael	Jurassic Park	Random House	1991
Davis, Jim	Garfield: Here's Looking at You	Ravette Books Limited	1985
Davis, Jim	Garfield: Life And Lasagne	Ravette Books Limited	1986
Davis, Jim	Garfield: We Love You Too	Ravette Books Limited	1985
Erwin, Sir Arthur Conan	Lost World, The	Hamlyn Publishing	1986

Database II

A collection of simple to use database programs for maintaining all sorts of lists - from catalogues to clients. Flexer - pictured above - is one of the new programs included on release II of the database compilation. Flexer's form-like display makes it ideal for beginners, and powerful enough for advanced users.

Workbench 2.x and 3.0

Screen Blanker

SUPER DARK 2.1

SuperDark 2.1 NEW

The ultimate screen blanker - complete with various modules offering a wide variety of blanking activities - highly configurable.
Designed to avoid burn-in of static monitor images. Requires Workbench 2.x or better.

One Disk

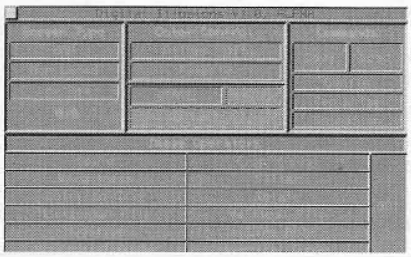
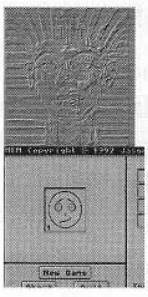


Image Processing



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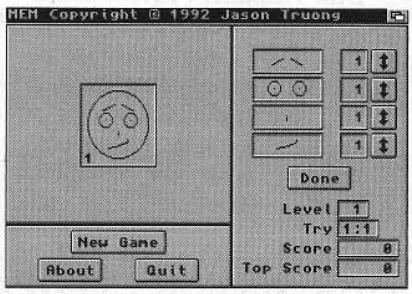

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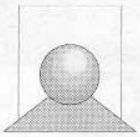
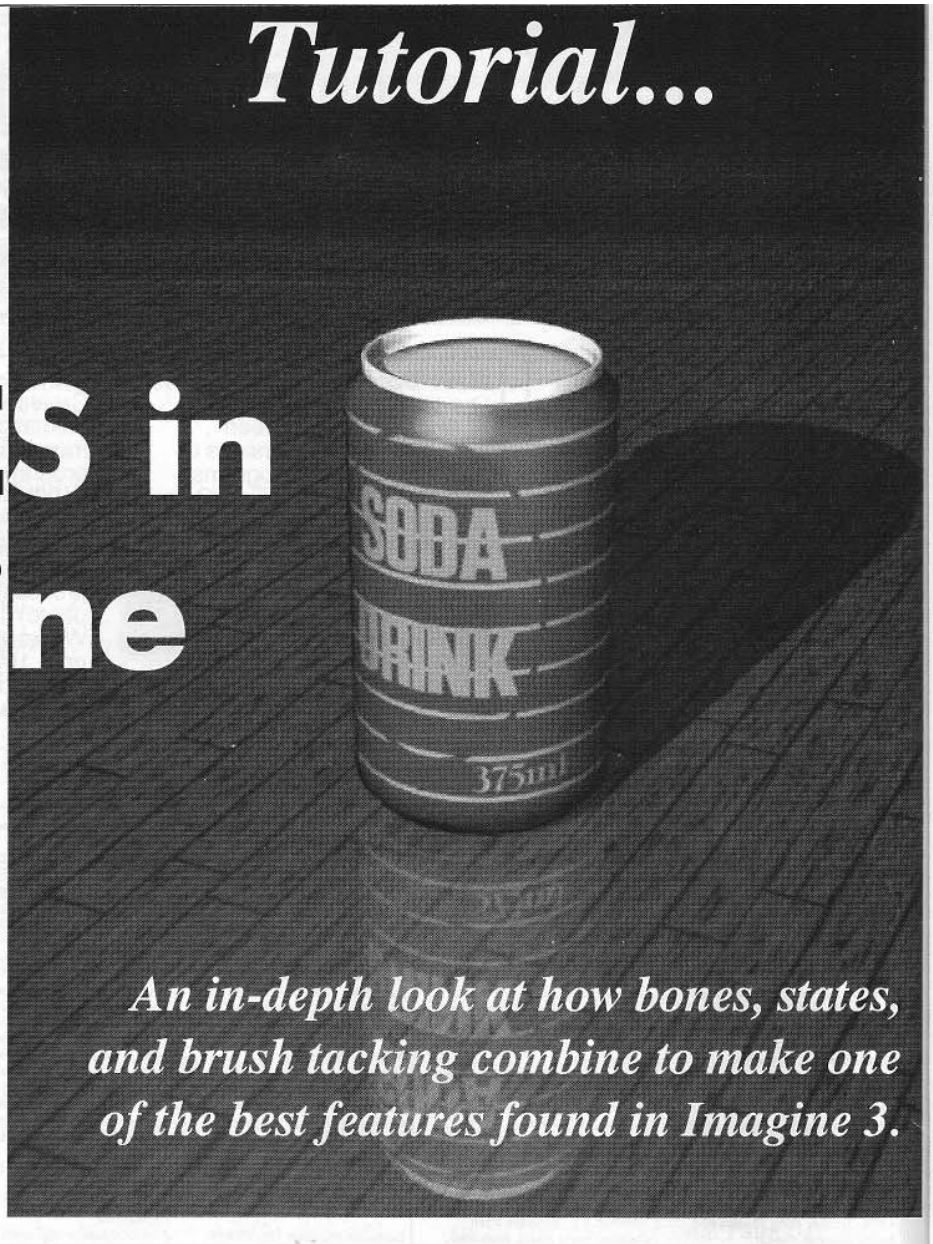


Tutorial...

Using BONES in Imagine



An in-depth look at how bones, states, and brush tacking combine to make one of the best features found in Imagine 3.

By Mark Johnson

Before we start this tutorial, you'll need a few things. First, you need a image to wrap onto your object. It needs to be about 600 x 300. Second, you need a reasonable knowledge of Imagine 3 or 3.1. I will be presuming you know how to add an axis, select points, add lines and so on. For this tutorial I will be using Imagine 3.1, but 3 users can still follow along. There are separate paragraphs for 3 and 3.1 users.

Note: There is a bug in Imagine 3.1. The "BigBone" and "SmallBone" items are reversed. So when I say "click on make BigBone" click on the SmallBone. You could, as I have done, make buttons at the bottom of the screen for these items, and reverse them.

What am I on about?

Simply put, bones give you the ability to manipulate a contiguous object (a single object with one axis). That is, you can squeeze, push, expand, twist or otherwise modify the object and morph those different versions.

States let you make the object have many versions. In the past, if you wanted to morph an object you had to save different versions of the object. Now you can save the object once, with many versions.

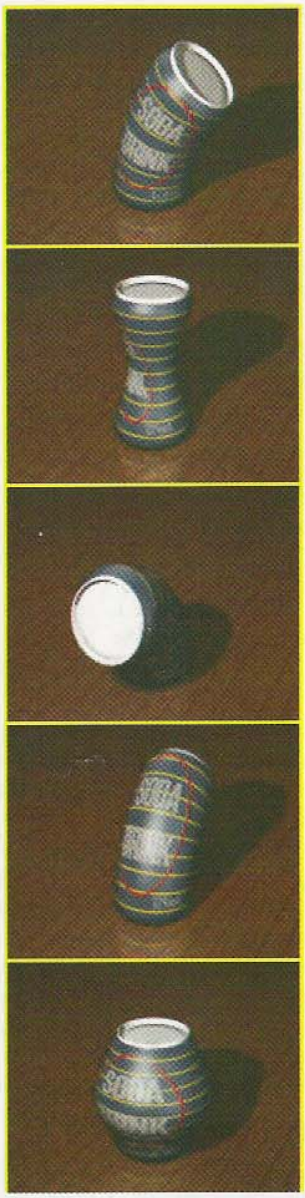
Brush tacking is used to stick a brush or texture onto the triangles on the object, so when you morph the object the brush or texture doesn't slip off.

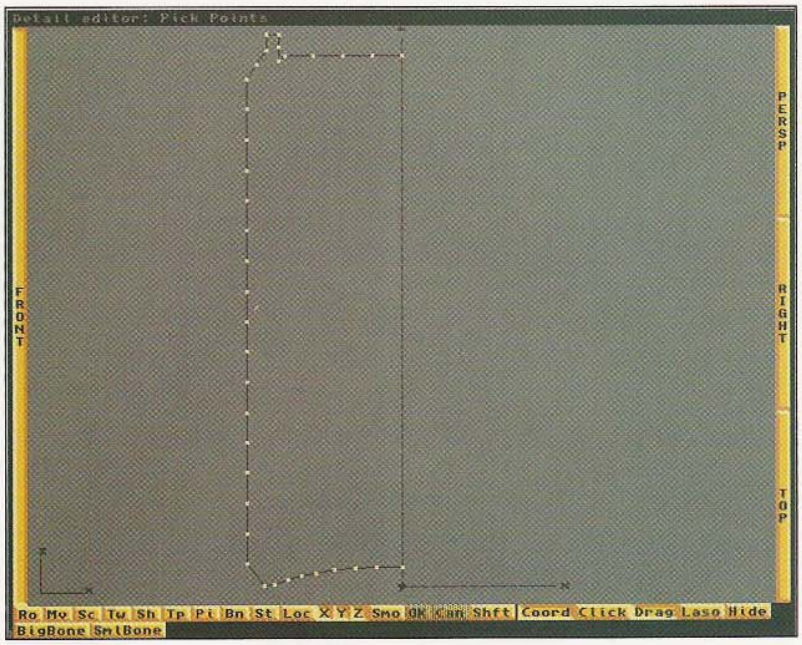
Modelling an object

To start with, let's make a simple object. You could use a tube for an object, but let's make a can of drink. One thing to remember about using bones is that you need more polygons at the point you wish to bend an object.

A can has one long straight edge. This needs to be split up, or "Fractured" in Imagine terms. Copy the object in Figure 1, and Sweep it with 24 Sections. Remember to Merge the points, otherwise you'll have multiple centre points. If you like you can add the ring pull to the top, but it's not important. Now that you've got the object, save it - and keep on saving as you work your way through the tutorial.

Next, you want to put the attributes and brush map on. To start with you need to select the poly-





The can outline ready to sweep.

Fig 1.

gons that the brush map will be sticking to. Select the faces as in Figure 2, using Hide points and Select Faces. Now make them a subgroup called "Texture", under the Functions/Make menu. Load in your brush, and click on Wrap Z. In the Subgroup requester, type "Texture", and in the LockState requester type "Default". Make the colour 85, Reflect 30 and Specular 158 for all three, Hardness 25 and Shininess 44. You could use the metals texture, but the brush map doesn't work with the metals texture, so don't! Rename the object "Can".

Do a quick render to see what the new soft drink in town is looking like! If you find you don't have enough RAM, you could halve your brush map pic or the amount of polygons on your can. Another tip for speedy rendering is to use Set Zone, under the Display menu, to mark the area around the can in the perspective view.

Bones Setup

QuickDraw the can, under the Functions menu. Now add four Axes evenly spaced as in Figure 3. They will be your bones. It is important to know that each bone's Z axis MUST point to the next bone it is connected to - in this case it already does. Group Bone Number 2 to 1, then 3 to 2, 4 to 3 and then the Can's axis to 4. Now go to the paragraph for the version of Imagine you have:

Imagine 3.1

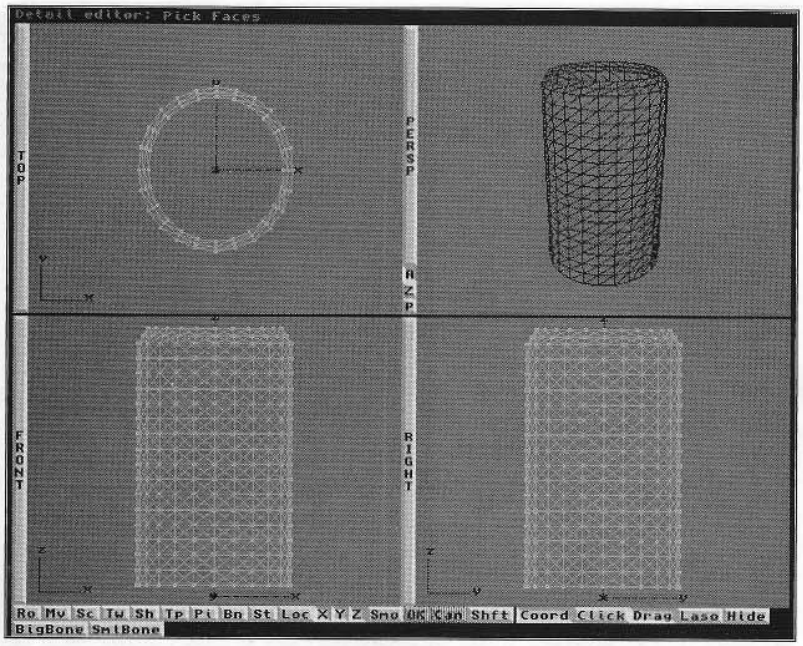
Pick the can, and select Pick Object Mode and Pick Face Mode. Using the Drag Box pick faces 1, as in Figure 3. Select Mk. Sm. Bone Subgrp, under the Function/Make menu, (see intro paragraph on IM3.1 bug) and pick Bone Axis No:1.

Pick faces 2, as in Figure 3. Select Mk. Big Bone Subgrp, pick Bone Axis No:1. Select Mk. Sm. Bone Subgrp, pick Bone Axis No:2.

Pick faces 3, as in Figure 3. Select Mk. Big Bone Subgrp, pick Bone Axis No:2. Select Mk. Sm. Bone Subgrp, pick Bone Axis No:3.

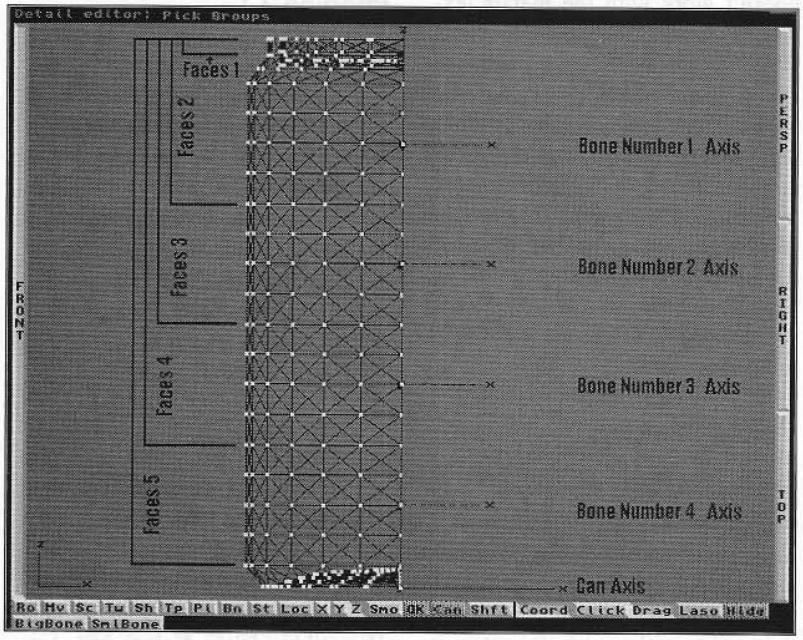
Pick faces 4, as in Figure 3. Select Mk. Big Bone Subgrp, pick Bone Axis No:3. Select Mk. Sm. Bone Subgrp, pick Bone Axis No:4.

Pick faces 5, as in Figure 3. Select Mk. Big Bone Subgrp, pick Bone Axis No:4. Now skip to the States Animation paragraph.



Faces to be used for the brush map.

Fig 2.



Bones and Faces subgroup.

Fig 3.

Imagine 3.0

Pick the can, and select Pick Object Mode and Pick Face Mode. Using the Drag Box, pick faces 1, as in Figure 3. Select Make Subgroup, under the Function/Make menu. Name it "Face1".

Pick faces 2, as in Figure 3. Select Make Subgroup, name it "Face2".

Pick faces 3, as in Figure 3. Select Make Subgroup, name it "Face3".

Pick faces 4, as in Figure 3. Select Make Subgroup, name it "Face4".

Pick faces 5, as in Figure 3. Select Make Subgroup, name it "Face5".

Pick Bone No:1, select Bones Subgroup, under the States menu. In Small Subgroup type "Face1", in Big Subgroup type "Face2".

Pick Bone No:2, select Bones Subgroup. In Small Subgroup type "Face2", in Big Subgroup type "Face3".

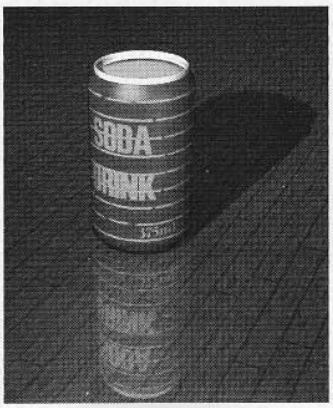
Pick Bone No:3, select Bones Subgroup. In Small Subgroup type "Face3", in Big Subgroup type "Face4".

Pick Bone No:4, select Bones Subgroup. In Small Subgroup type "Face4", in Big Subgroup type "Face5".

States Animation

You need to set up the default state by selecting Create in the States/States menu. Keep the default name and click on Shape (Group should already be selected).

You're now ready to bend and twist the can. Pick Bone No:1 and rotate it 20 in the Y Axis. Do the same with the rest of the Bones. Now pick the Can object and select Bones Update, under the States menu. In a few seconds your can will be deformed. Do a quick render to check out the brush you wrapped, which should now be



bend over with the can! To make a smoother bend, add more bones.

Once you've had a look, let's create a state for that pose. Pick the can and Create a state from the States menu - call it "bend right". Click on Shape. You can now morph these two states using the Make option from the States/State Anim menu. You can also pick points and move them about, and save it as that state too.

To set it up in the Action editor, you need to add the object in frame 1 as the Default state. Then make frames 2 - 30 Bend Right state, and Imagine will morph the two states from frame 1 - 30.

Moving Points

Let's try another one. Load in a Primitive Tube, making the Radius 25, Height 200, Vertical Sections 12 and the Stagger Points off. Add an Axis, moving it 100 in the Z axis. Group the Tube to the Axis. Rotate it 90 in the Y axis. Use Pick Face Mode and pick the far right 4 sections.

Imagine 3.1

Select Mk. Sm. Bone Subgrp, and pick the Axis. Pick the next 4 sections from the right as well and select Mk Big Bone Subgrp and pick the axis. Now Create a State for the tube. At this point skip to the Weight Training paragraph.

Imagine 3

Select Make Subgroup, call it "Arm". Pick the next 4 sections from the right and select Make Subgroup. Call it "Elbow".

Pick the Axis and select Bones Subgroup. In the Small Subgroup type "Arm", in the Big Subgroup type "Elbow". Now Create a State for the tube.

Weight Training

You now need to bend the forearm. Pick the second Axis and rotate it -45 in the Y Axis. Pick the Tube and select Bones Update.

Select Magnetism Setup. Select Dome, Influence 20, Minimum Radius 10, and turn Magnetism on. Using the Drag Points mode, select the top third point from the left. Move it about 15 in the Z Axis. In Magnetism Setup, make Influence 10 and Minimum Radius 5. Select the same point and move it down a little to make it look like a smooth muscle.

Create a state for that pose. Now get that animation rendering!

❑

Tips and Tricks - Quick Render

In Preferences, Rendering Presets, make a new preset that is 160x128 (PAL) and call it Quick 1. You can now select Quick 1 for the Quickrender Preset under Misc. Stuff for a smaller quickrender preview.

Now use Set Zone (Display menu) to speed up your Quick Renders even further! Both of these can also be used in normal renders.

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Accounts receivable for small business

By Owen James

DTU-IOQ claims to offer affordable invoicing, ordering and account handling, and at a lowly $99.00 few will dispute the affordable part. I'm accustomed to packages like MYOB, QuickBooks and even Easyledgers, which all hover around around the $400-$600 mark, so I was interested to see just what kind of performance $99 could buy.

DTU-IOQ is supplied on a single disk, and includes a fairly flimsy 16 page guide. You can install it onto your hard drive, but it works just as well off a floppy disk.

DTU-IOQ consists of several integrated modules designed for handling different areas of business. Separate modules control invoicing, ordering, quotations, stock, payment receipts and queries. Most modules are capable of communicating directly with one another to update stock levels and account figures, without the user having to make these adjustments by hand. Creating an invoice to Mr Customer for 12 Widgets at $2.00 each will debit Mr Customer's account, reduce the amount of Widgets left in stock by 12 and show that an extra $24.00 is now outstanding.

Unlike Money Matters or Home Accounts, DTU-IOQ is designed solely for small business. There are no cute charts, colourful displays or clever icons; this is definitely a package designed for someone who wants to get down to business.

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If you're running a small business which holds and sells inventory, DTU-IOQ is aimed at you. If you're in the service industry, there are better packages around, although you could adapt DTU-IOQ to some extent.

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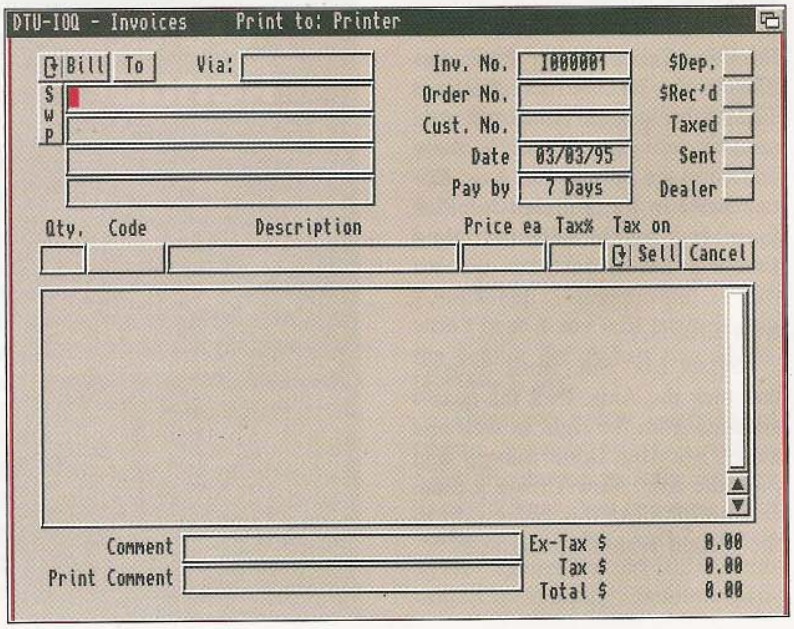

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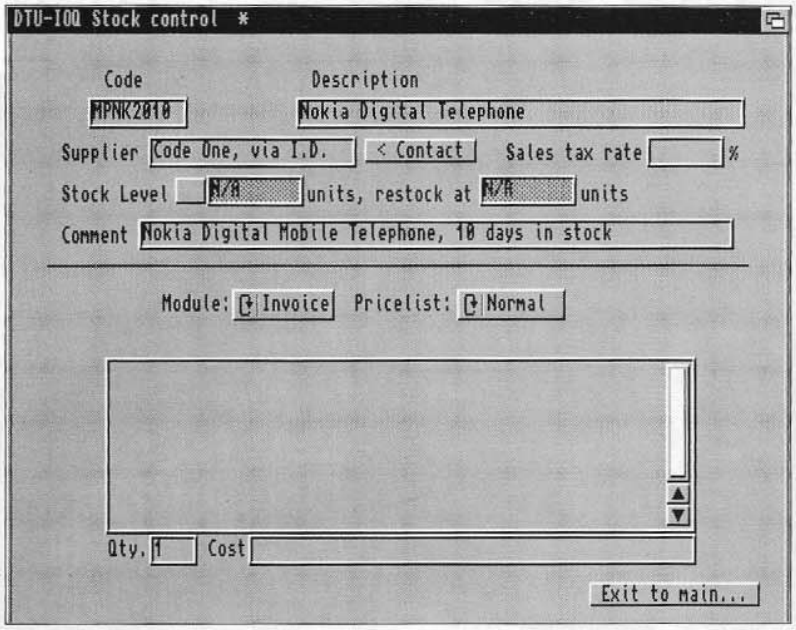


between one and five units gets them for your buy price plus 7% to cover freight and a 30% markup. For five to 10 units, you may decide on a separate price break. These scales may be set differently depending on whether the Special (Dealer/Trade etc.) or Regular (retail etc.) flag is used with a customer. Overall, this part of the program is very flexible. As you would expect, you can set re-stock points and re-order quantities for automatic notification.

The payments module is another with surprising flexibility. An invoice may be flagged as paid in full, unpaid, or part-paid. This is extremely useful for the occasions when parts of an invoice are paid immediately, while others are left. Parts of items may also be paid, such as a deposit on some parts in an invoice, and full payment on others, with 30 days to pay the remainder. Again, very nice bonus features.

An orders module handles external ordering from your suppliers. Stock ordered through this module may have been compiled from below re-order level lists, or just ordered as extras. Unfortunately, there's no room for supplier stock numbers in the stock field. It's unlikely that your internal tracking codes will be the same as your suppliers', and without room for their codes on the form it won't be just a case of print and fax off. It IS possible to create two sets of stock, one with your tracking numbers and one with your suppliers', but this seems such a waste.

Quoting is also catered for. The quotation module looks suspiciously like the invoicing module, but this is to your advantage. With the click of a mouse button, what was once your quote can now be your invoice. Experience tells me that quotes rarely go through to become invoices without adjustments, additions and alterations, but this is still quite a handy feature. There are flags to indicate that the quote has been sent, accepted, or is confidential. This is now moving closer to the paperless office we've all been promised. No longer must hard copies and copies of hard copies be kept, filed, rubber-stamped, initialed, rubber-stamped again, and finally shredded. DTU-IOQ can handle much of this changing of status on screen.

Finally, we come to the Queries module. This is the module to use for producing all manner of reporting information. The types of queries which can be performed depend on which module the query was called from. For example, to query an invoice pile, you'll call Query from the Invoice module. Set a search pattern, a date range, search criteria and flags to check for, and DTU-IOQ will chug along for a few moments and (with luck) present you with a list of what you were looking for. The output can be a simple list detailing information such as invoice numbers, dates, clients and values, or reprints of all of the invoices which match the selection criteria, or even statements.

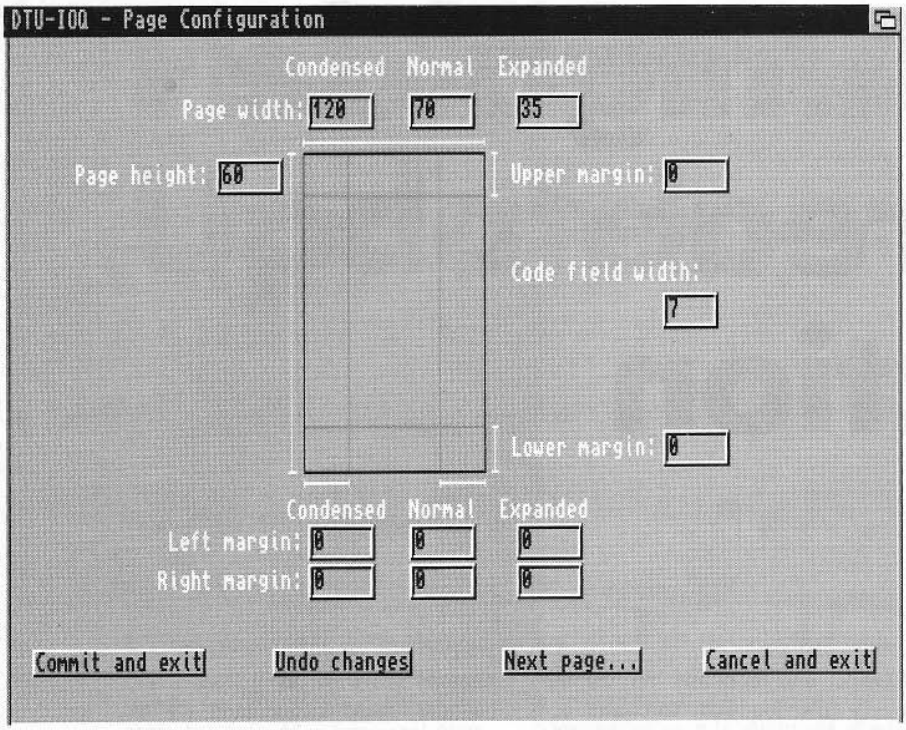
It would be nice if you could save some of your regular-use query criteria for later recall - for example a macro that would produce a list of year-to-date income. More reporting tools would also be a big help, including reports on income and expense, stock movement, and other analytical tools.

Problems

Apart from the minor shortcomings, which may or may not be acceptable considering the low-end price, IOQ also has some other flaws.

The install system is untidy; you have to multiple-select the install icon and the destination drawer, it doesn't close its shell window, it doesn't make an icon for the IOQ drawer, and it installs EVERYTHING on the IOQ disk, including another copy of the installer. It also forgets to set your system up to assign IOQ: to the directory, halting your startup-sequence in its tracks the next time you boot.

Once in DTU-IOQ, I quickly spotted a couple more bugs. One rather annoying one caused the program to exit without warning



when changing between modules; this means you have to remember to save work between modules.

IOQ's method of entering stock details into invoices could be greatly improved upon. Stock must be selected by tracking number only; there's no option for selecting by stock title, or even easily searching by title while in the invoice module. This is not good, although it does show a stock title once selected.

On the whole, the entire interface has a clumsy feel. Printing reports to screen opens a small window back on your workbench screen, which scrolls far too quickly and has no way of scrolling back. Screen updates are slow, and IOQ's method of filing information on disk is not very efficient; every single invoice, stock item, order and quote is in its own separate file, making searches slow and taking up unnecessary space.

The manual is very poor, at just 16 pages, and seems to miss quite a lot of information out. Much of it seems to be devoted to telling you what the program can do, rather than how to actually do it. Buy it, and set aside a day to experiment with it.

DTU-IOQ has very good potential at this end of the market, but sadly it's not ready yet. There are still some problems I would like to see addressed in the next update. If you're already using a good package such as EasyLedgers, DTU-IOQ won't offer anything new. For a small business wanting to start up very small, DTU-IOQ is close to being the package of choice.

❑

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CD ROM

Club Amiga de Montreal Collection

By Daniel Rutter

Having just checked out the mighty Aminet Set 1 collection of four CD-ROMs (see Hot PD, this issue), I was enthusiastic about the other CD-ROM set that came in the same package from Germany. The Club Amiga de Montreal (CAM) Collection is two CD-ROMs, and contains all of the freely distributable software acquired by this French-Canadian organisation.

CAM have produced the thick end of a thousand disks, all of them arranged into themes. Fred Fish's more famous library just releases software as it comes in, but the CAM disks each try to group files in a given category, which they say is a "more logical and easy-to-scan" system.

Indexing

The disks are indexed with an AmigaGuide system, as should become the norm after the Aminet discs' superb implementation of the idea. You can access the disk archives by number or by category - images, animations, games, education, emulations, hardware, clip art, icons, utilities of various flavours, programming stuff, text utilities, audio, 3D data files (mainly objects), graphics utilities, comms stuff and DTP fonts are all listed separately.

Uh oh

Unfortunately, that's all they are - listed. The descriptions are good (and sometimes bilingual) and there's a button you can click to extract the files to a preselected directory, but that's where the convenience stops. There is no single master index file. There is no good search facility - you can only

search for text in disk descriptions, not file names, or something like that, and you can only search in one list at a time, so if you're not sure if a utility is in the Mixed utilities 1, 2 or 3 list you may have to search them all separately.

You have to re-enter the extract directory every time you reboot. And all of the disks are exactly that - the files from each of the CAM disks, archived so that they (usually) extract into an iconed directory in your output dir. Sometimes all the files just tumble into the output dir without going into a directory of their own.

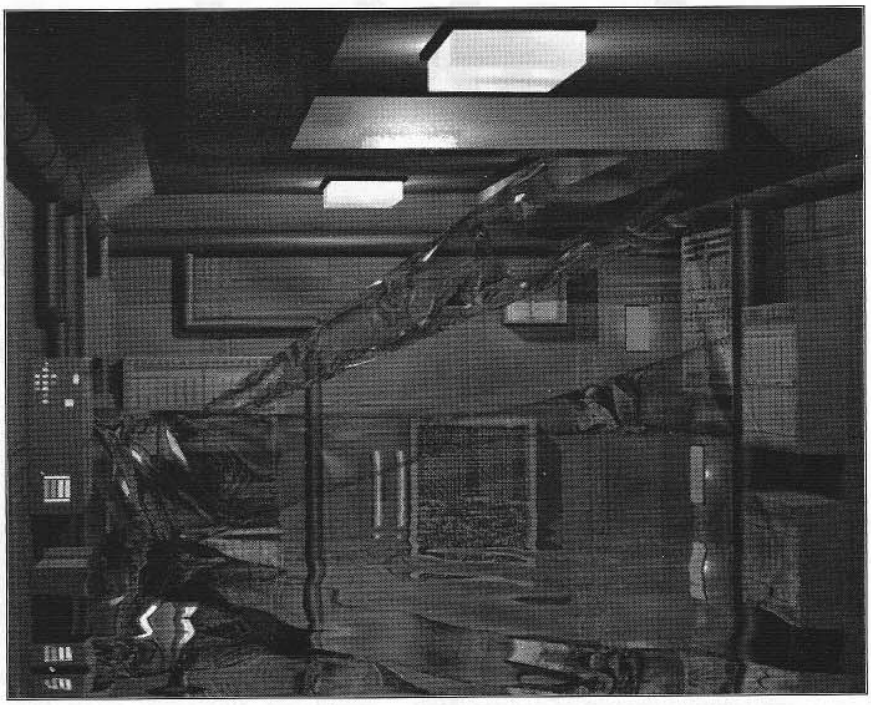
The end result of extracting a disk archive is just what you get if you copy the entire contents of a PD disk to your hard disk - there are often unnecessary directories (libs, devs...) and you also frequently get further archives (the Russian doll syndrome), because all the stuff was originally meant to fit on a single disk and hasn't been reprocessed for hard disk users.

Incidentally, quite a few of the disks seem to have been assembled by somebody of dubious competence, under the impression that archiving uncompressable files like .JPG images and then making the archives self-extracting (read bigger) is a really good idea. Uh huh.

Of course, if you want to manufacture floppy disks for distribution this is not a problem. The default output path is df0, so you can just pump the files to floppy and hand them out to your user group members, or whatever. But as a no-floppies-involved direct resource, the CAM disks are very clumsy to use.

A better way

If you want to try a different access technique, ArcHandler (referred to in my HotPD column a few months back and contained on the HotPD 20 companion disk set) will allow you to access the archives like directories, so you don't have to extract the whole archive from the index file or tinker with irritating LhA options from the Shell.



ArcHandler does need a few minutes to work out what's going on as it wallows through the more than 650 archives on the first disk and the more than 530 on the second - and you get to repeat the wait every time you list the directory again - but it does make for simpler access. It doesn't get rid of the nested archives problem, though; even if they aren't self-extracting, ArcHandler only lets you have one level of directory-like archives, and won't let you look inside "subdirectory" archives.

Antiques

There's also a lot of elderly data. The CAM library has obviously been going for a long time, and you get everything back to its inception. This includes a lot of antiquities. Now if you're interested in historical software this is all well and good, but I suspect the older disks will get accessed about as often as the old Fish disks - virtually never.

The newest stuff is quite recent, though; not as current as the early 1995 data on Aminet Set 1, but not bad.

In summary, the CAM disk set may well contain some quite nifty software. But it's not easy to find and it's often annoying to use. This is the kind of compilation we used to get when any CD-ROM was a good CD-ROM; these days it's up against really professionally assembled products like the Aminet series, and it just doesn't stack up. There's some data here that's not in Aminet, but not a lot of it; personally, I'd say Aminet Set 1 wins hands down.

Contact Don Quixote, (076) 391 578. RRP. $55.

❑

Flatbed Scanners

the highest quality image source

By Heiko Wynen

The cheapest way to get a picture to use with your Amiga is to do it yourself, with a paint package. You can also get images from online services, PD libraries, CD-ROMs and the like. But what if you've already got just what you want - but not in digital format?

Wasted effort

Hand-copying technical drawings, especially, can be very time consuming - if there's already an original available, copying it manually is an extremely inefficient method of getting it into the computer.

It's clear that to take full advantage of a computer's graphics power you need some sort of peripheral which allows you to translate a real world original into a digital copy the PC can work with.

There are two types of gadgets that can do this - video digitisers and scanners.

Video digitisers

A video digitiser turns an analogue video signal into a raw digital image which can then be manipulated, if required, and saved in a format the target software understands.

As long as the video information has the right format - PAL composite, hi-band or whatever - it makes no difference whether it comes off air, from a VCR or live from a camera. Images from tape are of lower quality than direct camera pictures, unless the camera's unusually dodgy.

There are two sorts of video digitiser. The cheap ones are slow digitisers, which need a good freeze frame to give a clear image and produce an unrecognisable mush if you use them from moving video. The better models are called frame grabbers, and these can instantly grab a whole screen from still or moving video.

The main advantage of using a video camera with digitiser as your image source is that there are few restrictions on your subjects. To a camera it doesn't matter if an object is two or three dimensional. On the other hand, while a video digitiser may produce a high resolution image, the actual sharpness is comparatively low, with current consumer equipment only capable of resolutions up to 270 (standard) and 400 (hi-band) horizontal lines.

The lack of sharpness means video sources are doomed to failure on fine details like small text. To resolve such small details, you need a scanner.

Hand and page scanners

Scanners, like video digitisers, are split into budget and professional models.

Hand scanners are little wheeled gadgets which you roll over the object to be scanned. These aren't the crummy monochrome jobs they used to be - some hand scanners can now do high quality colour reproductions as well. However, to remain manageable, their size has to be restricted to a maximum of about one half of A4 format. This makes it annoying to get a copy of a complete standard letter page into the computer, even with the aid of special software for putting partial scans together again.

At the same time, the quality of a scan relies strongly on the operator's ability to move the scanner smoothly and with the appropriate

speed across the original.

Anybody expecting to copy significant numbers of larger than half A4 size material will therefore be better off with a page scanner, of which there are two subcategories.

Cheaper page scanners work much like a fax machine. The original has to be inserted into a narrow slot and is then automatically pulled past the scanner head.

While this principle has the advantage over hand scanners of conveniently reading a full A4 page or larger at consistently high quality, everything thicker, stiffer or part of something bulkier, like a book or magazine, is out of the question.

A better choice is a flatbed scanner, which combines the advantages of handheld and single sheet page units without their shortcomings.

Flatbeds work like a photocopier - you put the object to be scanned face down on the glass sheet and the scan head moves back and forth under it.

Although flatbeds are suitable only for relatively flat objects, the sources can be part of a book, box or whatever. Most flatbed scanners also offer an optional transparency/slide reader. Transparencies often give superior results over reflective sources, but their smaller size means you need to use a correspondingly higher scan resolution.

Handling a flatbed scanner is as simple as using a photocopier, because all the actual scan operations are remotely controlled from the computer. This computer control puts the comparatively cheap scanner in the same league as the most sophisticated photocopiers, especially if you've also got a high resolution colour printer like the Fargo Primera.

Scan types

There are two kinds of flatbed scanners - one pass and three pass scanners. Three pass scanners move the scan head once for each colour - red, green and blue - and one pass scanners do all the colours in one go, giving you a faster result. For scanning flat objects there's little inherent advantage to either method, but if you're scanning something with some 3-D details - the classic example is a coin - three pass scanners will produce a better result, since the one pass models use three angled pick-ups which each see a slightly different view of a 3-D object and give you coloured fringes.

"Even professtional applications probably don't need more than 400dpi"

Resolution

Most flatbed scanners for normal use have a maximum optical resolution of up to 300 dots per inch (dpi), but an increasing number go as high as 400dpi. While these numbers sound relatively low, they're quite sufficient, as I'll explain in a moment.

First, however, to the much higher resolution figures quoted for many scanners.

The optical resolution is determined by the physical layout of the sensor array which reads the page or similar object. This means the number of horizontal points to be resolved is fixed under all circumstances, while the vertical resolution can sometimes be increased considerably by moving the sensor carrier in smaller than normal steps.

As increasing resolution only along one axis would result in a distorted aspect ratio, the horizontal sharpness must also be lifted by an appropriate amount. With no mechanical movement taking place along the x-axis, software interpolation is the only solution for filling in the missing dots.

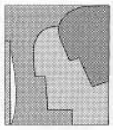
While interpolation may improve the looks of an image, it can't add more information. Depending on the supplied software, many manufacturers quote an apparent resolution of twice or more the "real" optical figures for their product, sometimes employing interpolation for both dimensions of an image.

In whichever way high resolutions are achieved, they are very demanding on the equipment. Scanning a standard 10x15cm photo in 24 bit colour at 144dpi results in an easily manageable 816x540 pixel image of about 1.3Mb. Increasing the scanner's resolution to 600 dpi, however, produces a gigantic 3432x2256 picture taking up over 23Mb. Even a 256 greyscale graphic at this resolution still uses more than 7Mb, with requirements dropping to just 430k at 144dpi.

Scrolling 256+ colour 3000 by 2000 images on a standard screen will drive you crazy, even if you've got a blazing fast computer, and a removable hard drive is indispensable for transporting them.

If they're associated with so many hassles, are extremely high scan resolutions really necessary, or is it possible to get away with a less expensive scanner without the big numbers on the spec sheet?

As usual, there are a several answers. If you're scanning line art, or using a true colour printer capable of reproducing each single pixel at its right shade, higher resolution will result in improved picture



quality. However, if you're going to print multi colour on standard office printers - a standard 300dpi laser, for example - things get a bit more complex. For a laser or similar plain monochrome printer to reproduce more than simple black (dot) or white (no dot), they have to use dithering.

Dithering explained

Instead of individual dots, clusters of dots are used to emulate a number of intermediate shades. For example, if each pixel is assigned to a 4x4 cluster of dots, there can be up to 16 different combinations of black and white in each cluster. Above a certain resolution, this fools the human eye into believing it sees 16 different levels of grey.

Unfortunately, using clusters of dots instead of individual dots as your smallest picture element means a considerable loss of effective resolution. Even a 600dpi laser printer can only resolve a maximum of 150dpi when reproducing 16 shades - 600 divided by 4 is 150. For expressing more shades, more dots per cluster are necessary and effective resolution drops even further.

Unless very small originals (generally slides) have to be reproduced at high magnification, a scanner with an optical resolution of 300dpi will produce results every bit as good as those from a 400+dpi unit.

As professional output also has to rely on dithering for multi colour/shade productions, even its higher resolutions of 1200 to 1600dpi can be satisfied by a standard 300 to 400dpi scanner without any need for software interpolation.

Colour printing is even more complex, depending on the system used, but I'm discussing scanners here, so let's get back to how it all works in practice.

Interfaces

Like other types of scanners, flatbed scanners may be connected to the serial or parallel port, depending on the model. Some manufacturers prefer the SCSI route, which gives higher speed.

One thing to check for when scanner shopping is that the unit you want has some sort of Amiga driver. This may be a standalone program or a loader for ADPro, ImageFX or what have you. If you can't get a driver, though, forget it.

In any case, good scanner driver software should have brightness and contrast compensation, sharpness control, halftoning and dithering and resolution selection. A zoom facility's handy for fine-tuning, as could be a choice of colour correction settings for different kinds of output (monitor, pin printer, laser printer and so on). For scanning print or line art, it's great if you can specify a dropout colour so, for example, text on blue paper comes out as clean as if it had been on a white page. But, realistically, with Amiga drivers you often have to take what you're given.

Most important is the preview facility, which lets you quickly mark what part of the bed should actually be scanned, to avoid time consuming mistakes.

Conclusion

Flatbed scanners are easy to operate and produce high quality results. A model with a maximum optical resolution of 300dpi should be sufficient for all but the most demanding professional printing applications, while 400dpi may be justifiable if you scan a lot of fine black and white material.

❑

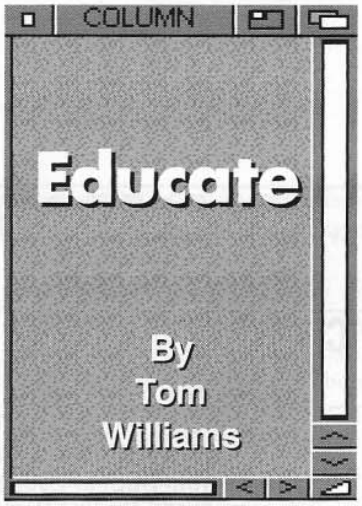
Jargon Buster

Aspect Ratio - The ratio of pixels per inch vertically and pixels per inch horizontally is an image's aspect ratio. If the aspect ratios of the devices used to generate an image and display it differ, the image will look squashed or stretched. For example, if you scan an image at 100dpi vertically and horizontally, it can be said to have a 1:1 aspect ratio. If you scan it at 200dpi vertically and 100dpi horizontally, its aspect ratio will be 2:1 and to display it correctly you'll need a display device that also has a 2:1 ratio - i.e. a screen that displays twice as many pixels per inch vertically as horizontally, or a printer that does the same thing. Otherwise, the picture will look vertically stretched by a factor of two.

DPI - Dots per inch, the universal measure of scanner and printer resolution.

Interpolation - This is the practice of manufacturing more data by taking the values on either side and making a new value equal to their average. With simple one-for-one interpolation, the sequence 2 5 8 1 would turn into 2 3.5 5 6.5 8 4.5 1. You get more numbers, but there's no more information than you had to start with.

SCSI - Small Computer Systems Interface, to give it its full name, is a way for computers and peripherals to talk to each other. If your Amiga has a SCSI controller, you can use SCSI hard and removable drives, SCSI tape backups, and SCSI scanners. SCSI is relatively easy to set up, highly compatible and very fast.



This month I'll be reviewing four new educational titles from Lascelles, the New Zealand educational software company. While reviewing the software it became apparent that a large amount of parent or teacher support would be required to take full advantage of it.

The software is packaged in a video-cassette case for easy storage, and contains the program disks and a small manual. The software is hard-disk installable, although two of the titles, Clock Works and Nimble Numbers, will only work on Amigas with Workbench up to 2.1. I used Kick1.3 to enable me to run these programs on my Amiga 1200.

Clock Works - $19.95

Clock Works is a fairly simple program where the user can select from four types of clock, Big Ben (roman numerals), Station Clock, Cuckoo Clock or Digital Clock. You can then set the clock to the current time and watch the minute hand move every minute or the hour hand move every hour, at which time, depending on the type of clock you have selected, it will chime or cuckoo the hour. If this starts to become a bit tedious, you can select FAST to speed up the clock. At any time you can click on the mouth to hear the current time spoken. The voice is a very clear digitised sample, with a slight New Zealand accent. There is also a Quiz Mode, where the clock is set to a random time and the user must select the correct hours and minutes from the numbers at the bottom of the screen.

The graphics are rather basic, and there aren't any nice animations to enhance the screen. This could be due to the large number of sound files required for the speech, which is the program's best feature. Clock Works requires the child to have a parent or teacher with them, to assist and motivate them to use the software as, even though it's a good piece of software for teaching children to tell the time, there is no incentive for the child to continue using it regularly. A reward system would greatly enhance the program.

Nimble Numbers - $24.95

Another straightforward program, giving practice in the numbers 1 to 30, counting objects and the four arithmetic operators. There are four levels of difficulty. The counting level involves counting a certain number of objects on the screen, and then clicking on the correct number at the bottom of the screen. You will then get either a positive or negative response, depending on your selection. If you're incorrect, the correct answer will flash on the screen and you can then try again. This applies also for the arithmetic operators.

Basic mathematics is a very hard area to make fun to learn on a computer, and unfortunately this software doesn't break any new ground. There is very little incentive to use the program, the graphics are basic and once again no animations are used to enhance the software. There is digitised speech and some music and sound effects, but it doesn't help much. The program was written using the Director, a very old design tool, and it shows.

This program also requires a parent or teacher to assist and motivate the child to use the software. One annoying feature was that when I had finished the program I was returned to a CLI window, and the program was then restarted. I had to quickly reboot the computer and pop the disk out before it loaded again.

Snow Words - $19.95

The object of this game is to score as many points as possible by building up words by clicking on snowflakes which hold letters of the alphabet. You score according to the length of the word, the value of the letters in it, and the speed at which you are playing.

A large amount of adult help is required to use this software, as it is very difficult for a child to use. There are no onscreen prompts, and as soon as you enter your name the game begins, with various letters rolling down the screen. You have a candle for a pointer and have to decide on a word and then try to click on the letters to make that word. After you have created a word, you click the right mouse button to add the word to your list.

Unfortunately, I often had to wait ages to get the next letter in my word, which became very frustrating. This game relies on a great deal of honesty from the user, as after you have finished the game you have to mark your words as correct or incorrect. I cheated and made a lot of words that used seventeen z's, and was thus able to top the high score table. This software would be best utilised in a classroom situation where the child has a wordlist and tries to create as many words from the wordlist as possible in the time allowed.

The graphics in Snow Words are slightly better, and there is music, speech and sound effects and a bit of animation to enhance the

> ***"The graphics in this program are basic, there is digitised speech and some sound effects."***

game. The program is written in AMOS. If you have a problem while trying to print your wordlist, the software either locks up or you need to exit the program to fix it.

Look! Hear! - $42.00

This program has been designed to assist in teaching reading to young children and adults and children with learning problems. There are two modes - learning and testing. In learning mode the user can read and hear lists of 20 simple words from a core list of 360. There are 18 word lists included with the package. The word lists include sight and basic words, and there are three sections accessible from the Main Menu.

The Mailbag section displays a mailbag with a list of twenty words or letters. You can click on each word to hear the word or have the computer automatically run through the words for you. It uses clear digitised speech.

The Truck screen has a small introductory animation of a mail truck arriving, and then you can view each word or letter in the set one at a time. Each word or letter is spoken. There is also an automatic option available.

The Test section shows a mailbox and some envelopes with words or letters on them. A word or letter is spoken and then you must stamp the envelope that matches the spoken word. If you are correct, the envelope is mailed in the letter box. You continue doing this until all letters are posted, after which you are returned to the Main Menu. I would have liked to have seen an animation of the postman delivering the letters, or something similar, but there is no reward at all for completing the set.

The graphics in this program are basic, there is digitised speech and some sound effects. The best part of the program is the TEST section, where an activity creates interest. The other two sections are very bland. One major failing is the inability to create your own word lists. This program is also written in AMOS.

Overall

I was very disappointed with this range of educational software. The quality of the software is not much better than most of the PD educational software around. Understandably, educational software should concentrate more on the learning aspect than being cute to look at, but surely a greater effort could have been put into the interface and graphics. With the quality of commercial software nowadays, children expect a lot more from even the most basic software than is presented in these packages. The fact that two of the programs won't run on a Workbench 3.0 machine is another drawback. As mentioned above, adult supervision is a prerequisite for this software. The price also seems rather high for the quality and lastability of the software.

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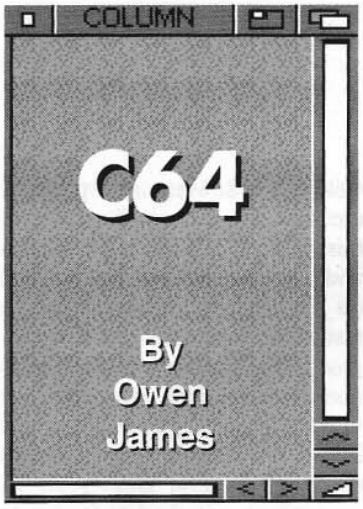

Continuing our look at what's available on the Internet from a C64 user's perspective, this month let's look at some of the best FTP sites.

As I said last month, from a UNIX shell simply type ftp ‹site-name› and log in as anonymous. Net etiquette (often cutely called Netiquette) dictates that you enter your e-mail address as a password.

As you can see from the list, the C64/128 still has quite a good profile on the Internet. Most C64/128 freely-distributable software is available SOMEWHERE on the net, but as usual the challenge is finding it.

What are Newsgroups?

If you're familiar with BBS systems, a newsgroup is the Internet's version of an echo, although usually much faster at pushing the information around. Messages are referred to on the net as Articles. The oe major differenc you'll notice is that there's no "To" field. Generally, if a new article, or a reply to an existing article is of little interest to the newsgroup as a whole, send it direct to the author via E-mail. This keeps down the amount of private conversations flowing around the world.

If you have access to the net, the comp.sys.cbm newsgroup is an excellent group to watch. This is for all Commodore eight bit machines, especially catering for the

```
Host: ftp.eskimo.com
Last updated: 01 Feb 1995
Directory: /voyager/Novaterm
Description: The official support site for Novaterm 9.5.
This site contains the most recent Novaterm version, archives, the
individual files, the documentation in both CBM and standard
ASCII, and any other information, news, new modules, or bug fixes
that come along.

Host: sol.cs.ruu.nl    (131.211.80.17)
Last updated: 04 Feb 1994
Directory: /pub/MIDI/PROGRAMS/C64
           /pub/MIDI/DOC

Host: uceng.uc.edu    (129.137.33.1)
Last updated: 06 Sep 1993
Directory: /pub/wuarchive/ systems/cpm/c128
           /pub/wuarchive/ systems/cpm/c64
           /pub/wuarchive/ doc/misc/if-archive/ infocom/tools

Host: aix370.rrz.uni-koeln.de    (134.95.80.1)
Last updated: 18 Feb 1994
Directory: /.disk2/usenet/comp.archives/ auto/comp.sys.cbm
A compilation of articles posted in the comp.sys.cbm newsgroup.
Often very good reading.

Host: ftp.csv.warwick.ac.uk    (137.205.192.5)
Last updated: 18 Oct 1994
Directory: /pub/c64
Description: Contains a few games and utilities by local author.
Directory: /tmp/c64

Host: rigel.acs.oakland.edu    (141.210.10.117)
Last updated: 03 Sep 1993
Directory: /pub2/cpm
Description:  C128 CP/M.
Directory: /pub2/cpm/c64
Description:  C64 CP/M.

Host: oak.oakland.edu
Last updated: 30 Apr 1994
Directory: /pub/cpm
           /pub2/cpm
Description: CP/M software, most all of which will run on the C128.

Host:  src.doc.ic.ac.uk    (146.169.2.1)
Last updated: 18 Feb 1994
Directory: /usenet/comp.archives/ auto/comp.sys.cbm
           /usenet/comp.archives/ commodore-64-128
           /usenet/comp.archives/ c64
           /media/visual/collections/ funet-pics/jpeg/games/c64
           /media/visul/collections/ funet-pics/jpeg/comp/games/c64

Host: tupac-amaru.informatik.rwth-aachen.de    (137.226.112.31)
Last updated: 07 Oct 1992
Directory: /pub/rz.archiv/simtel/cpm/c64
           /pub/rz.archiv/simtel/cpm/c128

Host: ftp.inf.bme.hu
Last updated: 01 Feb 1995
Directory: /pub/c64
Description: Demoscene-oriented, a lot of demos and related stuff.
Not much yet, but will improve.

Host: ftp.cs.columbia.edu
Last updated: 09 Sep 1994
Directory: /archives/mirror1/kermit
Description:  The official Kermit support site containing he lat-
est C64 Kermit and support files.  80 columns C64 and C128.
```

```
Host: plaza.aarnet.edu.au    (139.130.4.6)
Last updated: 28 Dec 1993
Directory: /pub/kermit/c
Description: Kermit files.  Be sure to get the complete set of
C64/128
Kermit.

Host: ftp.gmd.de
Last updated: 03 Jun 1994
Directory: /if-archive/games/c64
Description: Contains a few PD text adventures.

Host: wilbur.stanford.edu    (36.14.0.36)
Last updated:
Directory: /pub/emulators/c64

Host: tolsun.oulu.fi    (130.231.96.16)
Last updated: 06 Sep 1993
Directory: /pub/c64
           /incoming/c64
           /pub/amiga/4/c64trans.zoo
           /pub/c64

Host: x2ftp.oulu.fi    (130.231.48.141)
Last updated: 01 Feb 1995
Directory:  /pub/cbm
Description: This site supports ONLY technical documents, refere-
ces and specifications for CBM 8-bit programming.  (For example,
memory maps.)  No binaries allowed.
Directory:  /pub/cross
Description: Miscellaneous cross-assemblers.

Host: ucsd.edu    (128.54.16.1)
Last updated: 01 Apr 1994
Directory: /midi/software/c64
Description: SID and MIDI files.

Host:cs.dal.ca    (129.173.4.5)
Last updated: 01 Apr 1994
Directory: /comp.archives/c64
           /pub/comp.archives/ comp.sys.cbm
Description: C128 files, GIF's, and terminals.
Host: rtfm.mit.edu
Last updated: 14 Apr 1994
Directory: /comp.sys.cbm
Description: A place for the COMP.SYS.CBM FAQ

Host: bbs.cc.uniud.it
Last updated: 01 Mar 1995
Directory /pub/c64
Description: New site for general c64 program files.

Host: ftp.rz.uni-hildesheim.de    (147.172.16.34)
Last updated: 18 Oct 1994
Directory: /pub/c64/
Description: The directory oldcbm.pics contains scanned PET and
other 8-bit
Commodore Machie pictures. (54 at the moment) Each picture is
about 200Kb in size. All in JPEG format.

The latest version of The Commodore FTP Sites Listing can
be found in the Usenet newsgroup, comp.sys.cbm, where it is posted
twice monthly, generally at the beginning, and middle of each mon-
th.

For FTP sites where you will find C64 and/or Vic-20 emulators that
run on Amiga, and/or IBMPC, AtariST, or Unix/X, please see The CBM
Emulation FAQ maintained by Russell J. Alphey
(r.alphey@dce.vic.gov.au) and posted to the newsgroup,
comp.emulators.cbm.  That FAQ listing can also be found on
ftp.csv.warwick.ac.uk, in directory: /tmp/c64
```

C64 and 128. Many new products are announced and discussed in this area, and since it's a world-wide forum it's easy to keep an eye on the Commodore scene in the rest of the world. As with all news-groups, the quality of the information is often below par, but on the whole it's a good way of keeping in touch with the rest of the C64 community.

I'll be back next month, but in the meantime I'd love to hear from you.

❑

Drop me a line care of The C64 Column, PO Box 288, Gladesville NSW 2111. Internet users can contact me at oj@code1.dialix.oz.au.

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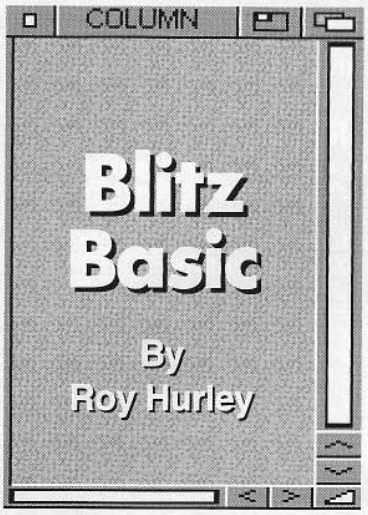

To branch or not to branch - control structures part II

Welcome to this month's Blitz column. We'll be looking at some basic program flow techniques to complement our newly acquired skills with loops and essential knowledge of the different Blitz variable types.

When a program is running, it normally executes instructions one after another, from the top of the code to the bottom. But without the ability to make decisions and then act upon them, computer programs aren't very smart or useful. This ability to make decisions and then execute sections of code in response is the domain of "control structures".

You probably know what a flowchart looks like. Probably the most important part of a flow chart is that little triangle with the question in it, like "Has the kettle boiled yet?" From there the flowchart either tells you to wait another minute, or pour the water into the teapot.

Let's look at the most simple and useful control structure, the IF ... ENDIF.

```
IF a=5 THEN NPRINT "The variable a is equal to five"
```

If you look closely at the format of this command, it's IF {expression} THEN {command}. In the example's case, the expression was "a=5"; if this expression is true, then the rest of the commands on the line after THEN are executed, otherwise they are skipped.

When we talk about an expression in Blitz, it's a true or false situation. In our example, either the variable equals five, or it doesn't. Expressions can come in many different shapes and sizes; here are some examples:*(Note - if a line's been wrapped to the next one, there's a ⊷ to indicate it.):*

```
IF a$="Yes" THEN NPRINT ⊷ instructions$      Checks a user's response
IF joyb(0)<>0 THEN NPRINT ⊷ "Mouse pressed"      Checks for a mouse press
IF inkey$<>"" THEN NPRINT ⊷ "Key pressed"      Checks for a key press
```

When Blitz encounters an expression it evaluates it and gives it either a true value, which happens to be minus one, or a false value, which is any number other than minus one, usually zero.

So this is how simple decisions can be made by Blitz. In cases where you want Blitz to perform more than one instruction if the expression is true, you could always put them on the same line as the first instruction, separated by a colon, but it's important to remember that if the expression is false, Blitz will skip to the very next line in your code.

Another format of the IF...ENDIF control structure allows you to place large chunks of code in between conditions. Take a look at the following piece of code:

```
If WriteFile (1,f$)
WriteMem 1,&tdata(0,0),2496
FileOutput 1
For t=0 To 95 : NPrint ⊷tname$(t):Next
WindowOutput 1
Else
r=Request("FILE ER ⊷ROR!","UNABLE TO OPEN ⊷"+f$+"!","OK")
End If
```

As you can see, in this example our expression is IF WriteFile(1,f$). This is a Blitz command that attempts to open a disk file for your program to write out data to. This is exactly the sort of situation which highlights the need for conditional code. What if the disk is write protected? By checking for success of the WriteFile command, you're checking that everything went OK when Blitz opened the file to the disk.

As you can see from the code, everything between the IF command and the ELSE command gets executed if the file was opened OK, otherwise our program throws up a requester alerting the user of a file error. The ELSE command tells Blitz to only execute this bit of the code if the expression is false.

Please note the indenting in the source code listing. The program will still run if you don't indent sections of code in between control structures, but it will make it much harder for you or anyone else to read the code later. A good general rule to follow is to indent two spaces after each control structure, and come back out two spaces at the end of the structure.

The select...case control structure

Another type of control structure used to select a choice from a larger list of options is the Select...Case command. The SELECT command tells Blitz which variable or number is to be used to determine an action.

Let's look at an example which acts on the user pressing a key.

```
Select RawKey
Case $45      ; Esc key QUIT
quit=1
Case $4e
Gosub scrollforward
Case $4d
Gosub scrollBack
Case $4c
Gosub scrollup
Case $4b
Gosub scrolldown
Default
Nprint "You didn't press a
➡Scroll or Escape key!"
End Select
```

This example passes the Blitz command RAWKEY (which returns the hexadecimal value of the key pressed by the user) to the SELECT command. Blitz then goes through the CASE statements one by one, comparing them to the value passed to the SELECT command, until it finds a match. If it finds a match, it executes the code until the next CASE statement, before dropping out of the control structure and starting again after the END SELECT statement.

You can place an optional special case called "Default" which gets selected if none of the other cases matched, which is useful for trapping those unmatched events.

If you have any ideas or comments about Blitz Basic, then please send a letter to me, Roy Hurley, Box 1420, Wollongong 2500. Until next month, keep coding, and Blitz on dudes!

❑

We're sorry for putting Peter Spinaze's name incorrectly on the column the last couple of issues. They were really written by Roy Hurley.

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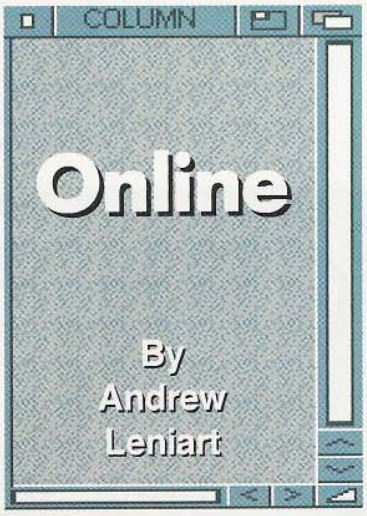

Welcome back to Amiga Online. More juicy hints and tips for Internet L-Platers this issue, including how to stay up to date with the latest uploads to Aminet, grabbing files via Email and more. But first:

Rumour stomper

Despite my advertising the change via Fidonet and the Australian BBS Registry listings a few weeks before it occurred, some occasional callers to my own BBS, Andy's Attic, have heard a rumour around the traps that the system has closed down.

Let's clear that up once and for all. Andy's Attic has NOT closed down. It's simply had a telephone number change. The new number is (03) 748-0784 - it was changed so that the system could go onto a digital exchange. That out of the way, on with the show!

Keeping up with what's new

Now that you've got all those great Aminet FTP site addresses from my column in the March issue of ACAR, you'll want to know how you can stay up to date with new file arrivals easily, right? After all, who wants to ftp over to a site just to see if anything new has been uploaded? The best way is to subscribe to Aminet's new file announcement service.

The first thing you want to decide is whether you want to be kept up to date on a weekly or daily basis. I like to get both, so I'm updated daily and then receive a summary of the files at the end of the week. Once you've made up your mind, here's how to make it happen.

Send an Email message addressed to "LISTSERV@wunet.wustl.edu" (without the quotes) and put the following commands in the body of your message:

SUBSCRIBE AMINET-DAILY

or

SUBSCRIBE AMINET-WEEKLY

depending on the level of your own personal addiction. You can leave the subject line blank, as it will be ignored by the server anyway. Something to remember here is that you are messaging an automated service when you subscribe to these listings, so don't type any other text in your message (Thanks for that dude, regards Colonel Klink) or you could end up confusing the server and cause your request to fail.

If things aren't too busy at the time you post your request, you should get a reply a few minutes later, advising that your request has been accepted along with some other miscellaneous info. How easy was that?

Starting from the next day, you'll receive a regular email message from the server advising you of new files, along with the directory you can find them in. Welcome to file leech heaven!

FTPMAIL - File Leeching by Mail

Not everyone has live access to the Internet. Some only have email and newsgroup access, so they can't ftp over to a site across the world and grab a file or three. If your Internet access provider falls into this category, it doesn't mean you have to miss out on the action. You can still ftp files from Aminet via Email in UUencoded (see the jargon buster) format - it's just a fair bit more fiddly and time consuming.

"FTPMAIL - Clayton's FTP!"

Here's how you do it.

First, you need to know the exact location (path) where the file is kept on the site, and you must also know the exact name of the file.

Everything IS case sensitive, so if a file's name is GREAT-Util.lha, then sending a request for Great-Util.lha will fail. As to locations, you can get the directory the file is in from the Aminet-Weekly or Aminet-Daily lists discussed earlier.

When you get those listings, you will notice that each file has a directory reference. The thing to remember here is that for most Aminet sites, you need to add the /pub/aminet/ path before the directory reference given to you by the listing.

Here's a typical example of a request for the latest freely distributable version of KingFisher, which should work for you if you're game to try it out. You address your Email to Ftpmail like so..

To: ftpmail@connect.com.au Subject: ‹leave blank›

SoftWood is Back!

When software repeatedly wins the highest accolades in reviews worldwide, what do you do? Work even harder to stay ahead of course! Final Writer Release 3 is the latest result of SoftWood's intensive development - it's even easier to use, and even more powerful. It's the best there is, and it's designed for those who expect the most from their Amigas. But, if you don't have a hard drive don't despair, we can still help. SoftWood offer you a choice of two Word Processor/Page Publishing packages. But why TWO? Well, this means that whatever specification Amiga you have, SoftWood have the perfect solution for your requirements - and always the most powerful possible for your system. Final Copy II is at the peak of what can be achieved when running with twin floppies, it's not possible to offer more without losing performance. Final Writer was the first hard drive compulsory Amiga word processor; the only package that didn't make compromises to be floppy compatible!

Final Copy II

Release 2

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Our word processors go beyond simply producing normal letters and documents, at which they naturally excel, and progress into a world where "how the whole document looks" is just as important as "what it says". Admittedly this can be achieved with Desk Top Publishers - but they're not so easily used as word processors, especially when a good looking letter needs creating quickly - they're far too cumbersome. *Final Copy II* offers the perfect balance between the two requirements... Ease and speed of use, with total control over the perfect printed presentation. **Complete control over how documents look, now you have it at your fingertips on your Amiga!** Features include: **FastDraw**™ (on screen drawing tools for the generation of borders, boxes, lines or arrows at any angle), Multiple Newspaper Style snaking columns, **PerfectPrint**™ (the ability to use **PostScript**™ outline fonts on any printer in portrait or landscape) and text auto flows around graphic objects and imported pictures (placed anywhere, scaled or cropped) with the highest print quality. Text can also be printed over graphics! **No other Amiga Word Processor in the same category, and at such a competitive price, has all the capabilities *Final Copy II* users have always taken for granted.**

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Release 3

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In the body of your message, you type the following commands, assuming your want wcarchive.cdrom.com to send you the file..

HOST wcarchive.cdrom.com
GET /pub/aminet/biz/dbase/ KingFisher28.lha

That's all there is to it. Save and send the message, and within a few minutes you'll receive an email from the FTPMAIL server confirming your request. Now it's a waiting game for the file(s) to come back.

What now?

What you'll end up with if you request KingFisher is a HEAP of Email messages, all about 1020k big. What you do next is important if you want to retain the hair on your head and turn all those messages back into an LHA file again.

Step 1

You're going to have to save all those messages to one file. If your site has ELM, the save command is simply "s" and then giving an appropriate path and name to save/append to. Your site's editor may differ.

The emails containing all the uuencoded date will have arrived one after another, and it's useful to save them in the correct order. On my site, the first arrivals are always at the bottom of the list, with the last one at the top. You can normally pick the last message, because it will be the smallest one. If unsure, read the contents of the messages. Near the top, they will tell you that it's either part 1/16 or part 16/16, or similar.

Send Feedback Direct to..
Online Amiga C/- Andrew Leniart
P.O. Box 1060 Hoppers Crossing
Victoria 3029
or contact me via any one of the following methods.
Andy's Attic BBS: (03) 748-0784
3:633/106 @Fidonet 41:300/106
@Amiganet 10:100/16 @Kramnet
or via email at
aleniart@insane.apana.org.au on the Internet.

```
begin 660 TrapPrefs1 4c.readme
M4VAO‹ G0Z(" @(%!R969S(&5D:71O‹ B!F;W(@5')A‹ $1O;W(@,2XX-"L*075T
M:&]R.B@(&UB87)S0&L=65J87DN8W)E:6=H=&]N+F5D=0I5‹ &QO861E‹ CH@
M"6@861D:6YG(&EN9F]R;6%T:6]N('1O(&=U:61E(&9I; &4@8V]N8V5R;FEN
89R!52R!R96= I‹W1R871I; VX@‹VET92X*
end
```

Listing 1

Step 2

Now that you've saved them all to one file, you can use an unshar utility if your site has it to turn the saved file back into an archive. If your site, like mine, doesn't have unshar, then hassle your admin to get it. In the meantime, you'll need to edit the saved message file to remove all the readable text from the messages.

At the start of every message in the file you saved your emails to, there will be explanatory notes. The actual file data is what you want to be left with at the end of the exercise, along with the "begin" line at the top and the "end" line at the bottom. Here's a very much cut down version of what it should look like when you've finished editing.
(See Listing 1)

KingFisher28.lha will be considerably larger than this example. Indeed, even the TrapPrefs readme file which I ftpmailed for the purpose of the example had about 6 times the uuencoded data in it than what I showed here. I never said this was going to be pleasant.

A few points to note at this stage. Editing such a large file naturally requires that you have tons of RAM to play with. With the 9Mb of RAM in my A2500, I've never had any dramas, but not everyone has the same resources.

You should be right though. Most Internet providers are running on fairly hefty souped up systems, so you should hopefully be able to edit and do all the required processing online and then just download the resulting archive. If you can't, all the more ammo for hassling your sysadmin to provide an unshar utility.

Step 3

OK, you've saved the messages to a single file, edited the file and removed all the readable material from it. The rest is easy. You can now use a UUdecode utility to turn the edited file back into its original state - the KingFisher28.lha archive. Your internet provider should have uudecode available for your use, or for download at the very least.

Now, assuming your saved message file is called KF.UUE, you would simply enter the command.

UUDECODE KF.UUE

and press return.

If everything is well, uudecode will turn the garbled mess back into what it originally was. If it fails, feel free to send lots of hate mail to Daniel Rutter, because he obviously messed up my instructions during editing. It always works for me after all. ‹big grin› [Keep grinning, Andy. I know where you live. DR]

Some of the above explanation

may sound daunting, but don't let that put you off. It's hard for me to give general directions on how to achieve something without knowing your exact situation and resources.

Once you've done a few and you're comfortable with the editor you're using to kill the unwanted stuff, a 1Mb archived file can be processed in about five minutes. Use your editor's search & replace routines to speed things up.

The above method should work for just about anybody, and the reason I chose such a large archive (Kingfisher is around 834k in lha format) for this example was to illustrate what you could be up against if you request something of that size.

Smaller archives are much less painful to deal with. If you want an easier example to practice on, ftpmail KingFisher's readme file instead, which will only take up a single email message:

GET /pub/aminet/biz/dbase/KingFisher28.readme

Finally, don't forget that the coin has a flip side. By grabbing a uuEncode utility for your Amiga, you will be able to send files to others in exactly the same way.

Hints and tips

When using FTPMail to request files, keep in mind that each request may only contain one GET command. You can, however, request several files in the same message as long as you put all the file names along with their associated paths on the one line, separated with a space. For example:

GET /foo/bar/file1 /foo/bar/file2 etc..

To achieve this, you may need to turn off the word wrap feature in the editor you write your emails with, or simply do as I do and allow the lines to wrap, then use the backspace key at the start of each line to bring them all back up to the first line.

There are other commands available for use with FTPmail, which can vary depending on the server you use. A useful one which Connect.com.au supports is the DIR command - useful for getting file listings of whole directories. Usage is identical to requesting files, the only difference being that you only specify a path to the directory to want to see:

DIR /pub/aminet/text/edit

to get a squiz at what's currently in Aminet's Text Utilities directory.

Searching for files

Another potentially useful function which I've not gotten around to trying myself is ARCHIE. Archie will search anonymous ftp databases using Prospero. Usage via email appears quite simple, according to my information from the ftpmail server admin.

Send your Email to ftpmail@connect.com.au just as you would if requesting files, but don't include a HOST name. Instead, the body of your message should contain the word ARCHIE followed by the search criteria. For example..

ARCHIE emacs

finds all anonymous FTP sites in the archie database that have the word emacs among their listed files. There are options available which you can use with this command. Some of the handier ones follow:

-c - Case sensitive substring search.
-e - Exact string match. (This is the default.)
-r - Regular expression search.

JARGON BUSTER

Aminet: A collection of Internet sites dealing with the distribution of Amiga public domain files.

Elm: A common and popular UNIX email editor.

Email: Person to person (or person to machine) message.

Leeching: The art of downloading many files for little outlay.

Server: A machine or program set up to do a specific task automatically.

Unshar: A utility which simplifies turning split uuencoded files back into their original form.

UUencode: A utility which will turn binary data into text, making it possible to send the data (or file) in a text-only system (email).

UUdecode: The flip side of uuEncode. This one turns the text created by uuencode back into its original form.

-
s - Case insensitive substring search.
-l - List one match per line.
-m number - Specifies the maximum number of hits (matches) to return. By default, this value is 95.

I'd like to say a quick thanks to everyone that's sent feedback via Internet Email as they get their accounts up and running. I may not always have time to reply to everyone, but all mail gets read, so please keep it coming. Also note that my main Internet address has now altered, so check out the new contact details below.

Till the next time, keep on net surfing and I'll write you again next month.

❑

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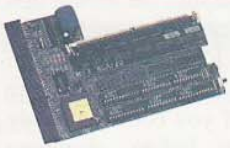

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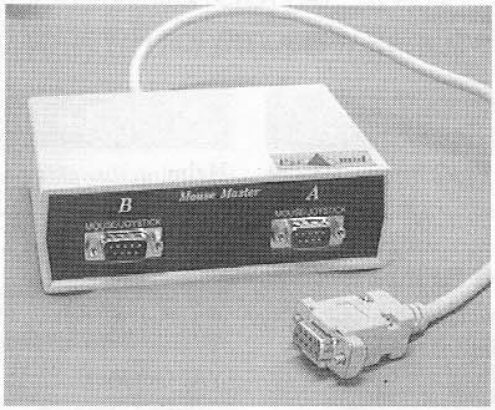
Software Review

Pyramid Mouse Master



By Daniel Rutter

One mildly annoying thing about the Amiga's design, no matter what model you're running, is that the mouse port doubles as the second joystick port. So when you want to play a two player game, you have to unplug the mouse and plug in the stick, and if you do this with the machine turned on you run a small but real risk of cooking chips. Even if you conscientiously power down before swapping plugs, there's still wear and tear to the mouse port, not to mention to your sanity as you grope around behind your computer.

There are gadgets which plug into one or both ports and bring them around to a more convenient location, often with double sockets for port 2 and a switch to allow you to select mouse or stick. The trouble with these is you still have to turn off when you make the swap or you're playing Russian Roulette with your CIAs, and it's one more switch to worry about..

The Pyramid Automatic Mouse Master, selling from Amadeus for $49, solves the problem. It's a box with two standard nine pin sockets on the front and a cable coming out the back which terminates in a nine pin plug; you plug mouse into one socket, stick into the other, and the cable into your mouse port, and then you can switch devices simply by pressing the left button on the mouse or the fire button on the stick.

Whichever one you've pressed the button on is now active, and indicated by one of two small LEDs on the front panel; the mouse LED flickers when you move the rodent and the stick one glows steadily unless the stick is moved off centre.

The design isn't perfect, though. For a start, the button press to select devices gets passed through to the computer, so if you've just quit out of a multitasking game and want to go back to mouse control and the pointer happens to be over a gadget, selecting the mouse will also select the gadget. Likewise, selecting the joystick can cause some games to start before you're ready by cheerfully kicking off as soon as they receive a button signal. A minor quibble I grant you, and one you can avoid by using the amiga-shift-arrow key combinations to move the pointer without mouse activity, and by getting ready to play before selecting the joystick.

I've also struck a couple of glitches, with the joystick spontaneously seeming to select itself when I leave the machine alone or power up my modem. This is not a big deal.

Internally, the Mouse Master's 9x13cm circuit board is sparsely populated with seven resistors, two chips (one socketed), the two LEDS, the 9 pin ports and a standard ten pin plug assembly connecting to the computer lead. The only design fault I can see is that the two sockets are only held in place by their mounting pins, not screwed to the front panel of the case. Since you're not going to be swapping plugs much this should be perfectly adequate, but any sudden whack to the mouse or joystick plugs could wreck the board. If the device is kept well back on the computer table this is very unlikely to happen; I've actually been using it for over two years now without any damage.

Overall, the Mouse Master's a well made, acceptably priced gadget which does what it sets out to do more than well enough.

Contact Amadeus on (02) 652 2712 if you want one.

❑

Photogenics

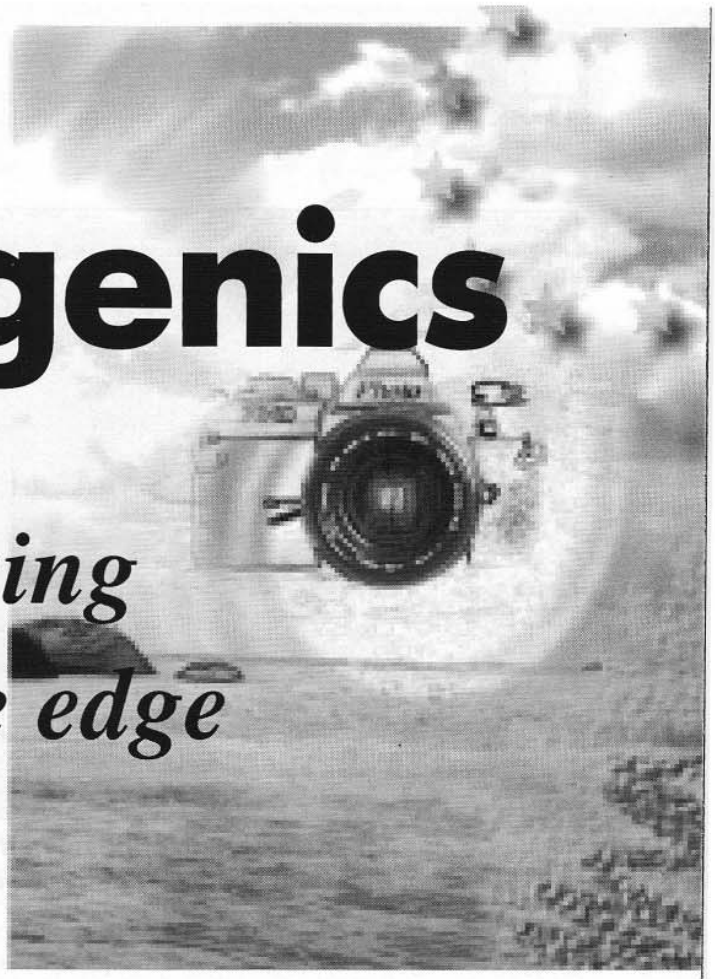


Image processing with a creative edge

By Jarrod Pudsey

Almathera have staked a new claim in the field of image processing with their latest product, but how well does it stand up to big guns like Art Department Professional (ADPro) and ImageFX? Well, Photogenics takes a distinctive approach to this area of graphics applications.

ADPro is the grunting workhorse of image processing on the Amiga. It attempts to cover all aspects of the field while trying to be as professional as possible. It's heavy machinery - just try running it on an A1200.

ImageFX appeared as a strong competitor to ADPro. It's got most of the image processing features, but it also has a paint program. The interface is designed more with this aspect in mind, with a main buffer, where pictures can be loaded and displayed, and a tool menu across the bottom of the screen. Like ADPro, ImageFX works internally in 24-bit, but it can render a lower quality display (HAM8, greyscale...), to provide realtime "hands on" modification.

Photogenics is more like ImageFX than ADPro, but it's aimed at different applications.

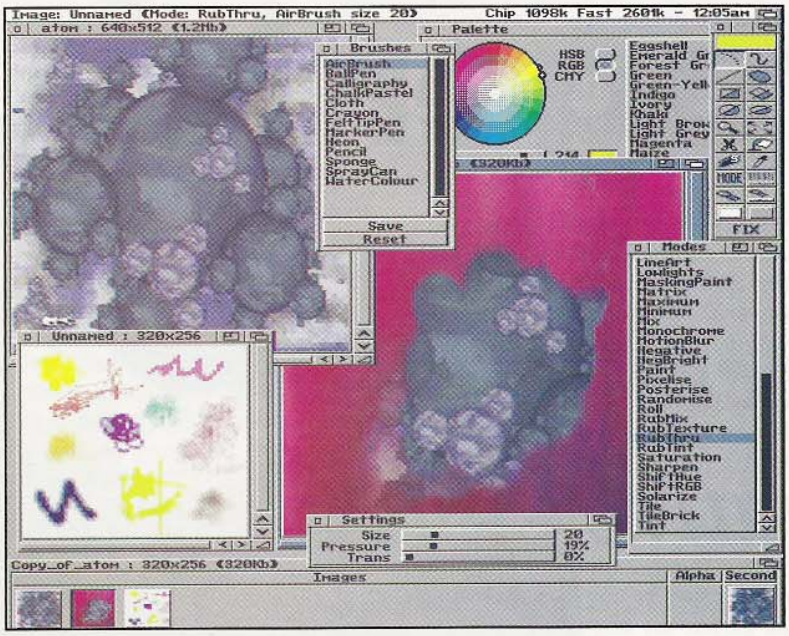
Creativity ho!

At the offices of Storm Front Studios I watch the guys go about their hectic business of putting the magazine together. When they resort to image processing it's usually crop this here, change filetype over there, gamma correct this image everywhere, or scale this back here again. Pretty dull, guys, where's your creativity? And this is what makes Photogenics different. It feels more like programs like Deluxe Paint or Brilliance. In fact it seems as though Photogenics is moving more towards superpowered image processors like those found on the PC and Macintosh.

Brass tacks

To run Photogenics requires an AGA machine, either an A1200 or A4000. The program will work on any Amiga with Kickstart 3.0+, but because the preview displays of the program are HAM8, 256 colour, and greyscale, an AGA chipset is needed to work with images in colour. If you're using an Opalvision or Picasso II board, you can render the image to this display. Likewise, an image can be rendered to a proper HAM8 display. Images modified or created in Photogenics can only be saved as 24 bit or HAM8 - there is no function for rendering an image down to a lower quality.

I tested Photogenics on several machines. Firstly, running on a stock A1200 (actually a CD32 with an SX-1 module) gave surprisingly good results. Photogenics is quite fast on even this basic machine. Loading and manipulating



This shot should succeed in bringing home to you the fact that Photogenics is window-based.

one lo-res image is no drama, and applying an effect like emboss to an entire image only took about 10 seconds, including a preview of what the new image would look like. The Fast-HAM8 preview mode redraws the full screen image in mere seconds, faster than in 256 colour or greyscale. Scaling and rotating an image compares to using ADPro on an A4000, almost.

Only having 2Mb of chip RAM and no fast RAM does cause problems when trying to work with two images or apply certain modes, and the Freehand draw tool can get quite sluggish. Fortunately the program does allow you to boot from a floppy, which can make the difference of an extra few kilobytes. Workbench and the undo function can also be disabled to give even more help, and painting with the dotted freehand tool, instead of continuous freehand, helps remove most of the sluggishness. On a 4Mb A1200 with a 68881 FPU the extra 2Mb of fast RAM makes all the difference. Multiple lo-res images can be loaded, rubbed through, and composed, with a considerable increase in speed. The paint tool still tends to lag a bit behind, but again dotted freehand gives a more real-time painting effect. Working with hi-res interlaced images is also quite possible, but again, when using multiple images problems can arise. Photogenics is very much at home on such a system.

The last A1200 also had a 68881 FPU but with 10Mb of RAM. Photogenics performed on this system similarly to the 4Mb A1200, except for the fact that with the extra memory, working with multiple hi-res, interlaced images was easy. On screen I had two of these images that I was working with, as well as a secondary image for rub-throughs, and a 256 greyscale alpha channel image. No sweat!

Of course I tested it on a 4000 and, well, what can I say? Photogenics didn't have much to complain about on this system.

"You can literally paint the effect onto the picture."

Memory is always important, and if this was a stock A4000 with 6Mb of RAM then the 10Mb A1200 could perform better, albeit a tad slower. Fortunately it wasn't stock. A 1500 by 2000 image loaded in a snap and could be resized and scaled in its own window quick as a flash.

Compositing other images with this one was made easy by being able to see the entire image on screen and moving the other around until it was the right size and in the correct position. I felt as if I was working with an image a quarter of its size.

Installation to a hard drive is painless enough, using Commodore's installer program, although there's a lot of disk swapping. Upon running Photogenics, a registration window appears which asks for your name and the registration number found on the back of disk 1. This then saves to your drive or floppy and doesn't reappear the next time you load the program.

How does it work?

Photogenics is similar to Deluxe Paint in its layout, but when you load images they open up in a window. In this way, more than one image can be loaded and displayed in its own window, and then moved around, resized, and clicked to front and back. Internally the image is calculated in 24 bit,

while on screen it is shown in one of the preset displays - Fast HAM8, 256 colour or greyscale.

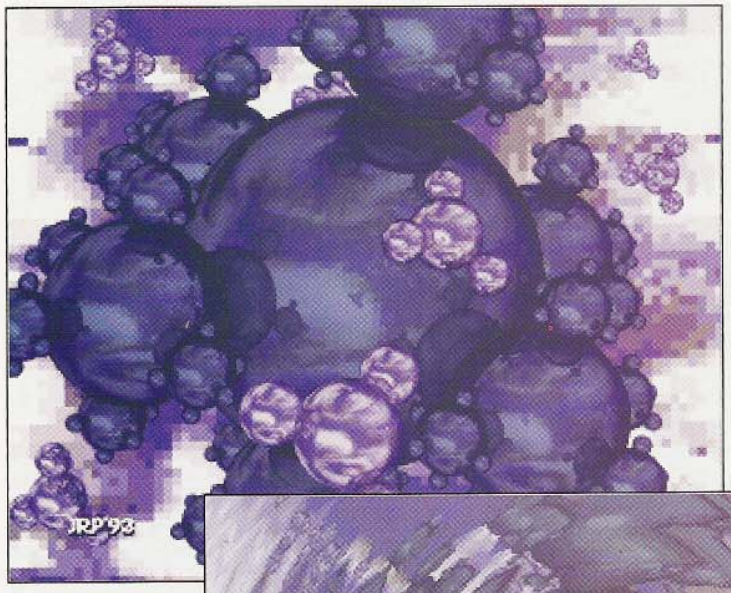
Along the bottom of the screen is a window containing thumbnail pictures of all the images loaded, including pictures of the designated alpha and secondary images if any. These thumbnails can be dragged and dropped or clicked on to select the current image, alpha channel, or secondary image. Any image can be displayed or hidden from view on screen as well as cloned. Once you have an image on screen, you're ready to start modifying it, and this is where the fun begins.

Photogenics uses a Paint Layer to modify the image. Instead of painting directly onto a picture, as you would in a paint program, you paint onto an invisible layer above the image. If you make a mistake in a paint program, you click on undo to get rid of it. With a Paint Layer it's more like an on or off area. Wherever you paint with the left mouse button, the results will appear, and wherever you paint with the right mouse button where the left mouse button has been, the results will disappear or be invisible again.

Let's say you had an image of a brick wall and you simply wanted to airbrush some graffiti onto it. Using an airbrush tool and a desired colour, you can draw the words onto the picture. Although it looks like the graffiti is on the wall image, it isn't actually there. Instead, you have just told the Paint Layer that this is where you want the effect to happen.

To make your creativity more permanent, simply click on FIX in the toolbar window and the graffiti will become part of the image. If you find that you don't like this, even after you've had time to ponder over your work, then you can undo it again.

Why use a paint layer? It's



BrightMap

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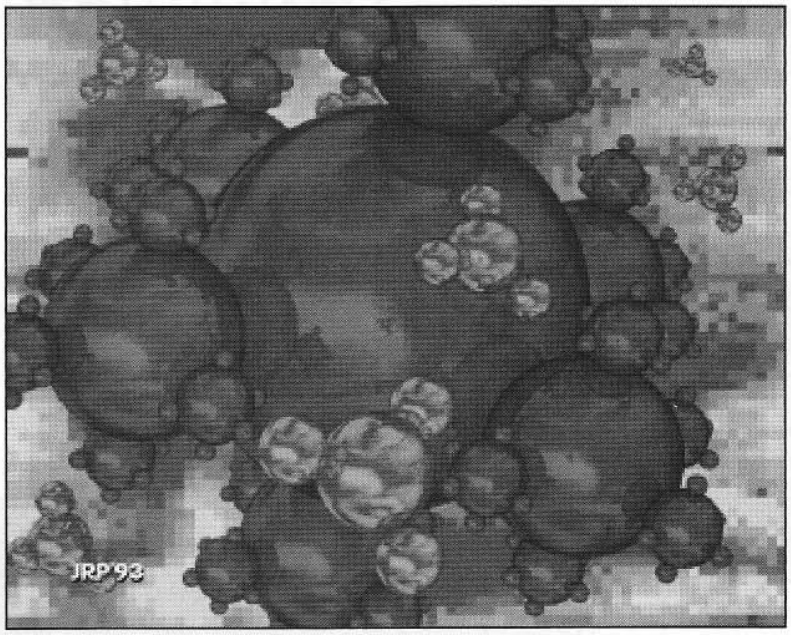


Gradient Tint

simple. Applying paint to the Paint layer is classed as a Mode. When you define an area on the Paint Layer with the mouse, you're given a preview of what that current mode will look like. In the case of the Paint Mode, the Paint Layer shows the colour you've selected in the shape you've drawn. If you're in Emboss Mode, wherever you paint the image will be embossed.

With this technique it's easy to paint the area of the image you want affected, and then watch that area of the image change every time a new mode is selected. Likewise, you can literally paint the effect onto the picture. Once you like the changes, FIX it.

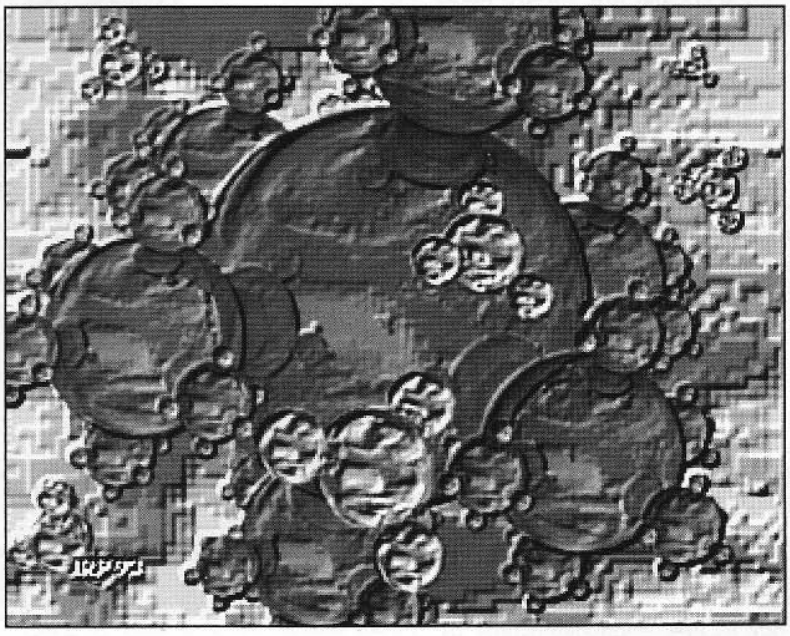
In the Tools window there are two icons, which make the Paint Layer either filled or blank.

If you want a mode applied to an entire image, you use the Fill Paint Layer tool. If there is too much coverage of the paint layer for you to rub off with the right mouse button, you can use the Clear Paint Layer tool. Overall there are about fifty modes for you to experiment with. Different brush types are also available, to change the way in which the modes are applied to an image. Each brush has Size, Pressure, and Transparency controls.

DIY images

There are several interesting features when loading images. Of course you can open a file in various formats, but you can also open an image directly as the alpha channel, secondary image, or a hidden image. Included in the Loaders list are operators for making new images. These operators make an image out of either ColourNoise, Patterns, Plasma, Ripples, Streaks, Text or WhiteNoise. A new, clear, window or buffer can also be opened in either a preset black, white, soft white or selected colour to act as a blank canvas.

When Photogenics creates a new image, with an operator from the loader list or a new buffer, an intuitive requester appears, allowing you to drag sliders for the image's width and height in pixels, as well as entering the values numerically. Also included on the requester are eight preset resolutions to choose from, consisting of lores and hi-res interlaced, with and without overscan, in both PAL and NTSC.



Matrix

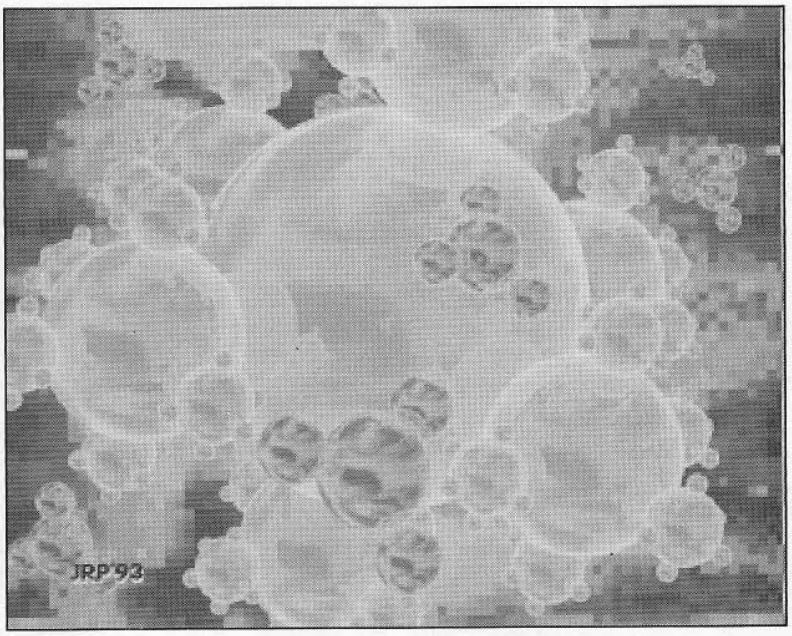
Main Features

The most common uses for an image processing package are cropping and scaling of images. Unfortunately, Photogenics cannot crop an image. It is possible to use the Cut tool to pick out a section of a larger image, which then appears in its own window, but this is not an accurate way of doing it.

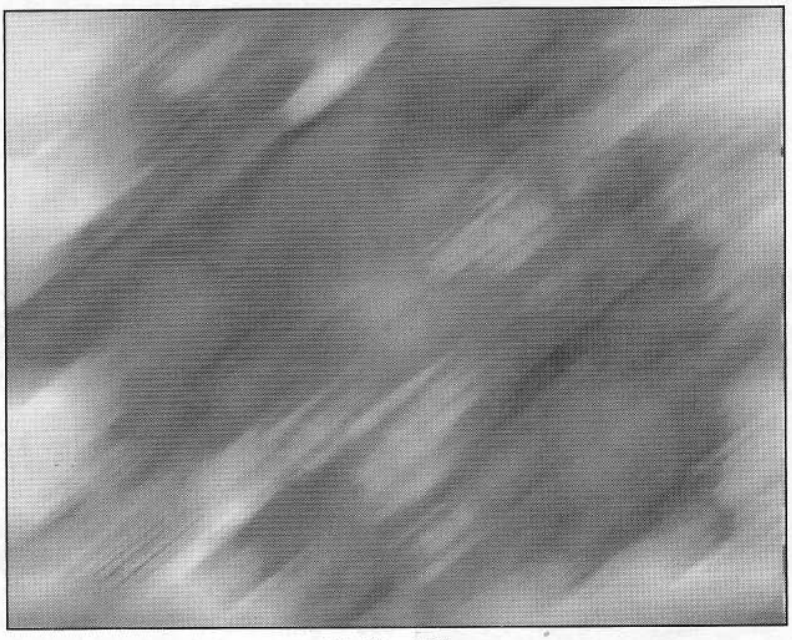
Scaling opens a window, like creating a new image buffer does, with the width and height sliders as well as the preset image resolutions to choose from. There are preset percentages (25%, 50%, 200%, and 400%) to make working faster. When scaling an image in one dimension you can either ignore its aspect and squashing or stretch it, keep its aspect so the other dimension adjusts accordingly, or keep its area, so the other dimension scales itself to keep the same surface area.

A feature included in Photogenics is Shearing an image. This basically takes a rectangular image and warps it into a parallelogram. I'm not quite sure where you would use such a tool, and perhaps this feature could have been substituted for something more important.

Rotating an image can be done in either 90, 180, or 270 degree sections, with no freehand rotation. All these features are very quick and are easy to use.



Mix

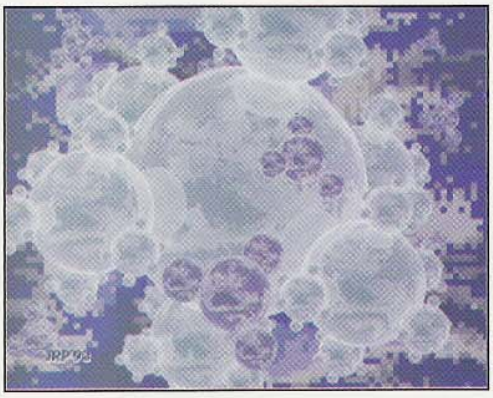


MotionBlur

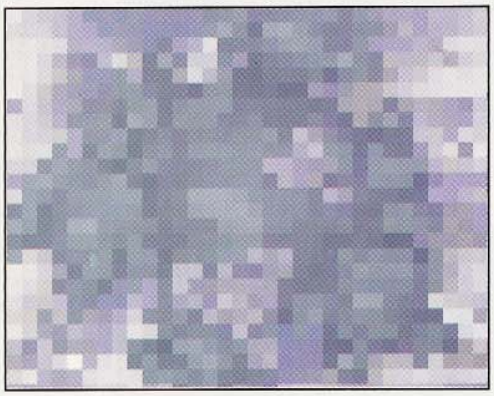
Funky fills

The Fill icon in the Tools menu is like that of a paint program. It allows you to fill in pixels of a certain colour with another colour, or in the case of Photogenics, another mode. This tool has a tolerance control, which determines how similar the surrounding pixels must be to the colour of the filled pixel to also get filled. If the tolerance is 1 then only that pixel and surrounding pixels of the same colour will be filled. If it's set to 255 then all the pixels in the image will be filled.

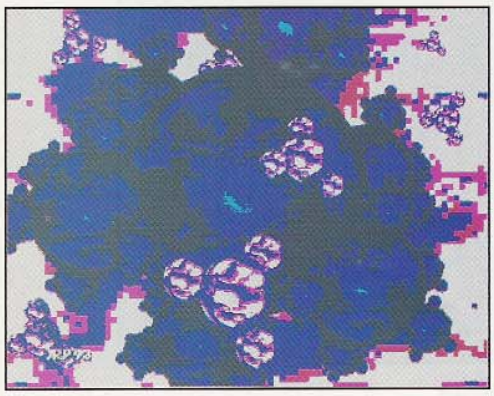
A smoothness control determines how strongly the surrounding pixels of different colour that fall within the tolerance range will be filled. If set to low, the pixels will all be filled with equal strength, and if high, will be filled according to their colour variation from the selected pixel colour. This is kind of like filling each pixel colour with varying transparencies. There is also a Fill Similar function, which uses the toler-



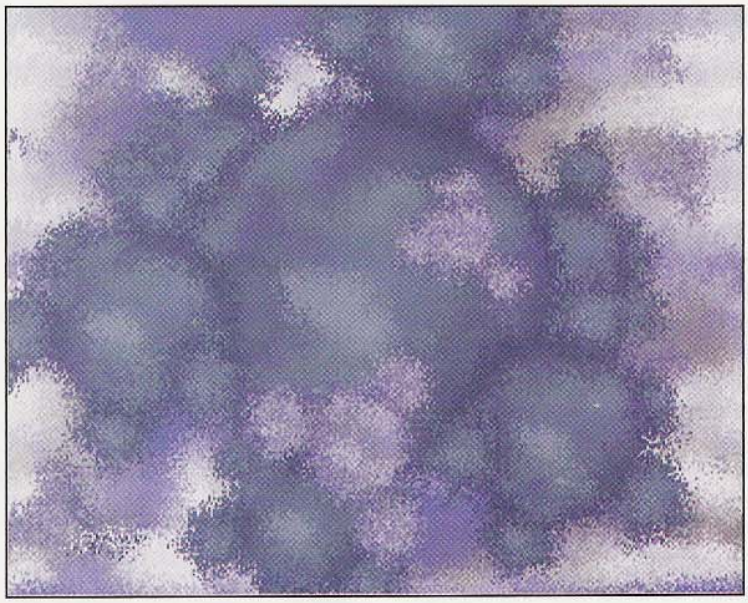
NeoBright



Pixelise



Posterize



Randomize

ance and smoothness values but works on the entire screen, not just interconnecting pixels.

Gaussian Blur takes an entire image and creates (wait for it) a blurred effect. This can range from a radius of two to ten pixels. The effect requires more memory than a standard A1200 or even the 4Mb one could deliver. It also needs a little more time to achieve than the standard Blur mode. It does, however, look better than the standard Blur.

Compose

This function is the biggest included in Photogenics. Coupled with the ability to paint on modes, this is what makes Photogenics so creative.

To compose you need two images. The first image is the one to be affected, and the other acts as the secondary image. With the first image displayed on screen and compose selected, a window of the compose controls appears. First you have to define the size for the second image and where you want it. This is done by either dragging a box out onto the image of the size and aspect you want and then moving it around, or by entering the values numerically into the compose window.

This is called the Edit Points section of composing, and wherever the box is positioned, Photogenics will draw the secondary image in place. Again, this is working on the Paint layer, so no modification is permanent yet. Next, you can choose Blend In/Out to use the left and right mouse buttons to paint the secondary image on and off again.

The Brightness Key button takes the black component of the secondary image and makes it transparent. The white component remains unaffected. This enables you to cut out sections of an image when compositing. When using the brightness key, a Use Paint Mode button becomes unghosted. This lets you choose one of the modes to alter the areas affected by the brightness key. The results are some pretty cool effects. Once everything is right, selecting OK will fix it all in place.

Problems

It's tricky to blend one image over another with a smooth gradient or transition. It's possible to blend the images in with different levels of transparency, but because

you are working with the Paint layer the transparency selected affects the entire image. Using different brush types and intensities - like a large airbrush - can help, but it's still difficult to achieve a smooth gradient transition.

An alpha channel could be used, but Photogenics cannot gradient fill, so you'd have to make it in some other program. It would also have to be in the correct position to create the right effect and the same resolution as the main image, otherwise the alpha channel will tile itself.

Extras

Some of the other features found in Photogenics include Blur Paint Layer, which takes the edges of the affected paint layer and gives them a nice soft edge before fixing. This can be used in conjunction with Compose to give a smooth edge to the combined images.

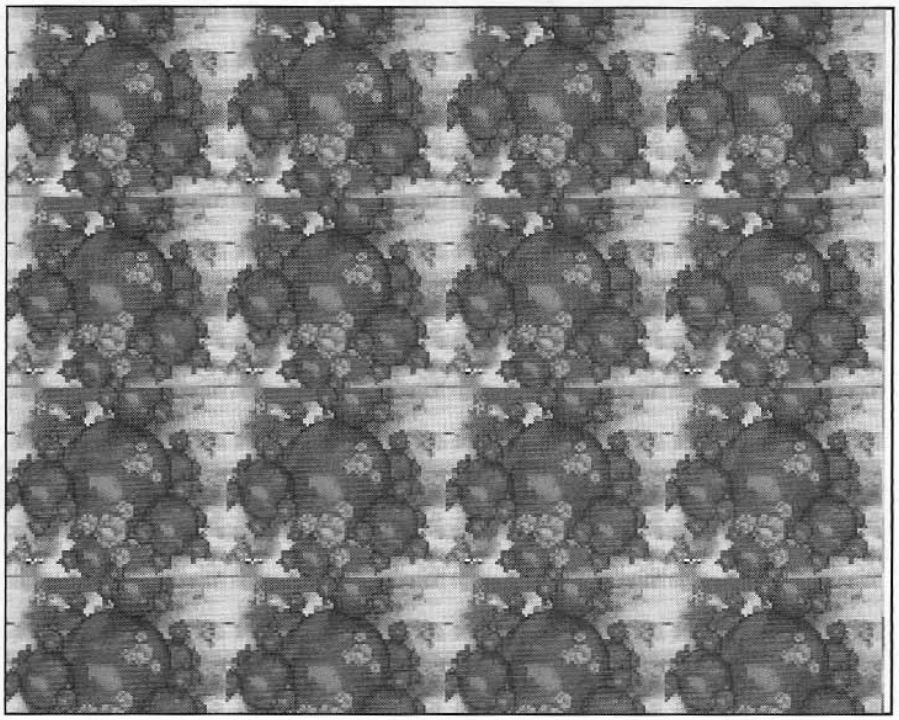
Restore Aspect returns an image's resized window to the correct aspect ratio. Any window buffer can be automatically cleared to black, white, soft white, or the selected colour. The Alpha channel and the Paint layer can be inverted.

The red, green, and blue channels of an image can be activated or deactivated in any combination. If only the red channel is active, then the red component of an image is be the only one affected by any modification.

The Paint layer can be fixed and the layer itself retained to apply the same or another effect to that area of the image.

Displays of the mouse pointer's coordinates over an image, the available memory and the current time can be brought up on screen while working. The program autodetects an image's file format when loading. Open architecture allows creation of custom loaders, savers and painting modes.

The standard line or filled circle, square, ellipse, freehand, and polygon tools, as well as the straight line, cut, zoom, and pick colour from image feature found in most paint programs, are included.



Tile

A palette window offers colour creation in either HSV, RGB or CMY, with a HSV colour wheel. 60 preset colours have been included from Salmon Pink to Emerald Green. The colours window lets you perform operations like copy and spread colours, and loading or saving palettes. If you like, you can select an image file with a load requester to bring up its palette. Smear is an icon in the Tools menu. It works like painting with the mouse, to blend colours within an image together. This tool does not work on the Paint layer - it works beneath it, actually altering the image as you go.

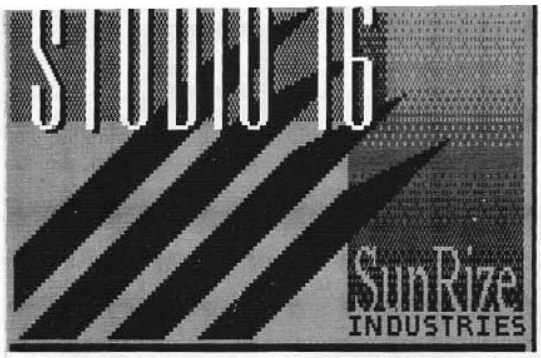
Overall

Although Photogenics doesn't contain all the image processing features found in other packages, it does provide a more fluid working environment and opens up the more creative possibilities of image processing as an art form. Being able to paint an effect directly onto an image is one of its major strong points. The simple fact that it caters so strongly to the Amiga 1200 community should see it become very popular in this area.

Photogenics is very fast and easy to work with, and does offer loads of options. The manual could do with some more information, but the tutorials get you up and working quickly. As far as price goes, it's about half the price of ADPro and ImageFX. Photogenics, combined with Deluxe Paint or Brilliance on an Amiga 1200, will definitely make a nice little graphics workstation.

❑

Contact Don Quixote on (076) 391578. Price: $130.



Studio 16 Bars & Pipes

The Ultimate Amiga Digital Audio & MIDI Sequencer Package?

By Peter Adams

You've probably seen the ads in recent issues of ACAR for the Sunrize Studio 16 Hard Disk Audio Recorder Card and wondered about the claims of eight tracks of CD (16 bit, 44.1KHz) quality audio on and off your hard drive.

I've got news for doubters - it's true! There is a catch, though - you need a reasonably powerful Amiga in order to get all eight tracks. I've been using Studio 16 for the past couple of years and I'd have to say that it's the best bang for buck professional audio hard disk recorder on ANY PLATFORM.

Studio 16 is a hardware / software combination for any "slot box" Amiga (A2000, A3000 and A4000). The hardware consists of a Zorro II card which comes in two versions - the premium AD516 (16 bit stereo audio record and playback) and the budget AD1012 (12 bit mono). The AD516 is fitted with an ADSP 2105 sound coprocessor and dual 16 bit delta-sigma A/D and D/A converters. This provides 64 times oversampling, which gives accurate and distortion-free audio. Frequency response is rated at 15Hz - 22KHz with a dynamic range in excess of 85dB.

The AD1012 also has an ADSP 2105, but it lacks the A/D and D/A converters of the AD516. Both cards have RCA connectors for audio in/out and SMPTE/EBU Timecode In for synchronisation to external devices.

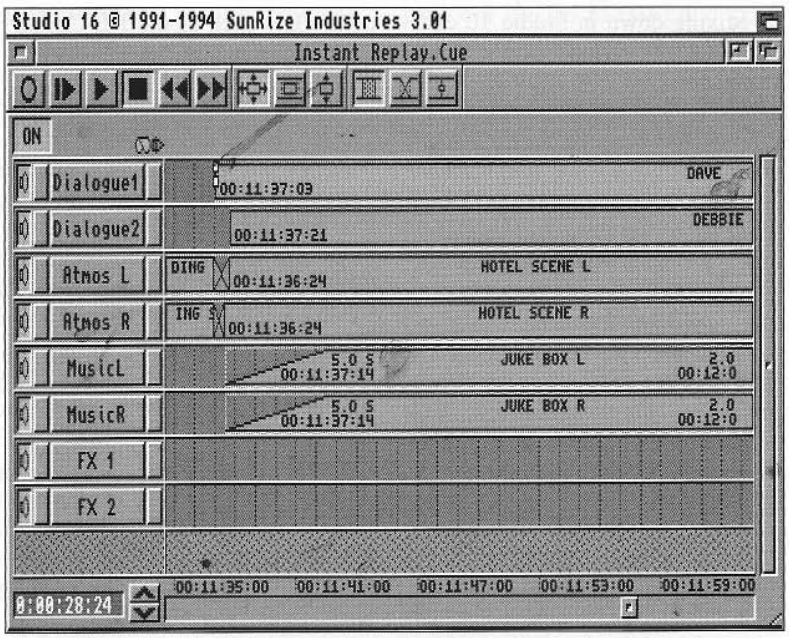
The AD1012 may hold some appeal for those of you who want to improve on the native Amiga eight bit sound output but are on a tight budget. If you can stretch the finances to get the AD516, do, as it really is better value for money than the AD1012, which is only capable of playing back a maximum of 4 audio tracks in mono.

Get a real computer

Card performance is primarily governed by the hardware capability of the Amiga in which it is installed. Processor, hard disk speed and access time and system RAM all affect the number of tracks that can be recorded or played back simultaneously. According to Sunrize, the AD516 will give you eight tracks at 44.1KHz on a 68030 processor with a fast hard disk. From personal experience, I managed to get six tracks on an A3000 (68030 25MHz CPU) with a 10ms seek speed SCSI drive and 18 MB of RAM. On an A4000 fitted with a Warp Engine (68040 40MHz CPU) and 30Mb of RAM, I get eight tracks to playback simultaneously - although I do have to do a bit of work to optimise the hard drive and avoid enormous samples. It should be noted that one track of 16 bit audio at 44.1kHz lasting one minute

requires 5Mb of RAM. Needless to say, hard disk audio recording is not for baby machines!

You can get eight tracks of audio on a moderate system by lowering the sampling rate - right down to 5.5kHz if required. There is one slight drawback in altering the sample rate of a track - you have to convert all the tracks to the same rate, as the program does not play back samples with different rates. To get around this limitation, you can convert samples to eight bit format and play them alongside 16 bit samples - provided they all have the same sample rate. Logically, you would only convert a sample from 16 bit to eight bit when you don't need high fidelity - for example a bomb exploding.



The Cue List/Time Line is a user friendly way of displaying sample sequencing.

Software

So, the hardware's pretty good, but how good is the software? Sunrize has packaged both cards with the Studio 16 software that is very powerful yet extremely intuitive. In fact, the reason for Studio 16's high performance probably lies as much in its software as its hardware.

Sunrize have adopted a modular approach in their software design. There are separate modules for recording, playback, synchronisation and editing. The rationale behind this that you only use a module when required, thus avoiding a screen cluttered with unused modules, and saving memory.

Recording sound into Studio 16 is pretty straightforward. For an external audio source, just plug it into either one (or both) of the RCA input connectors on the back of the card. The Recorder Module lets you select audio source and sampling rate, as well as allowing you to adjust the gain level of the incoming signal. The Meters Module allows you to monitor input and output signals in either Analog, Graph or Digital visual displays. If you want, you can have all three displays on at once.

Re-recording tracks (otherwise known as bouncing down) in Studio 16 is a snap. The software just about takes care of this function. Everything is handled internally - no re-patching of audio leads and no loss of fidelity, as nothing leaves the digital domain.

Editing

Once a sample is recorded, you can change it in the Editor Module. This module offers standard digital audio editing operations such as Cut, Copy, Paste, Reverse and Scale. You can even mix samples together - provided they have the same sample rate. Missing are advanced features such as Time Compression/Expansion, and Sunrize have assured me these are in the pipeline.

However, Studio 16 does offer something really cool - non-destructive editing. Basically, this enables you to edit a sample to your heart's content and, should you decide that you don't like what you've done, you just tell Studio 16 to undelete the last step or, if necessary, all the edits.

One of the best features of the Studio 16 software is the Time Line Cue List. This graphical layout allows you to sequentially order various tracks that are locked to SMPTE/EBU Timecode and are played back when and where you require them. If you want to add a sound, just drop it onto a vacant track on the Time Line. To move a sample, just drag it with the mouse to where you want it to go! It's really that simple.

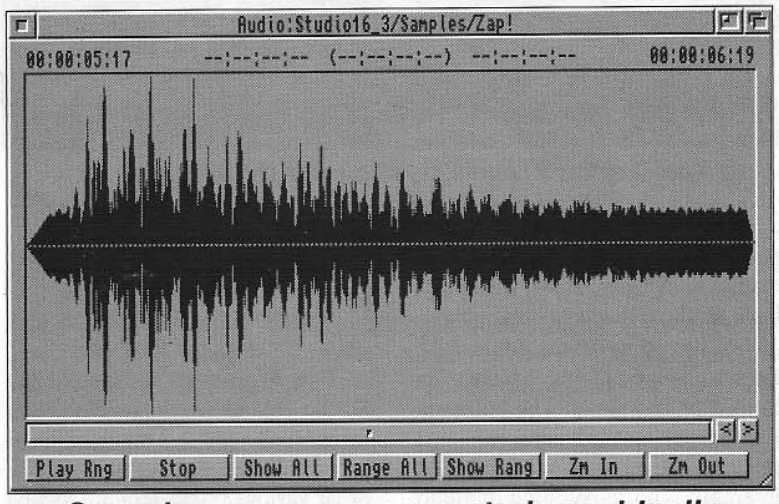
Timecode

Synchronisation using SMPTE or EBU timecode is well supported in Studio 16. External devices with a timecode reference track - such as video tape recorders and/or audio multi-track decks just plug into the SMPTE IN on the back of the card and Studio 16 will lock up automatically. You can even write timecode to VTRs, etc, with the optional SMPTE Output generator.

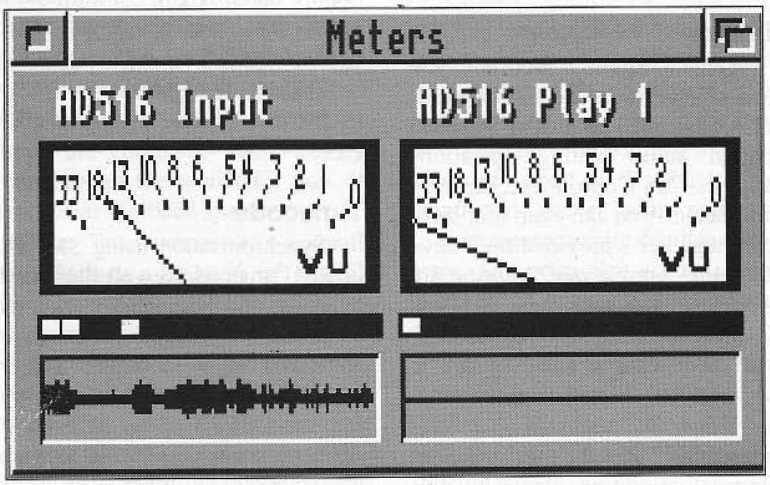
Mixing down in Studio 16 can be done in various ways. The Time/Line Cue List allows you to individually fade and pan samples, although this can be really RAM intensive if there are long cross-fades. Another way of mixing down is to use the Mixer module, which provides you with a "desk" type fader for each track. Fader and pan movements can be recorded for automated playback. Finally, there is mixing via MIDI controller. This enables you to mix tracks using external MIDI controllers such as the J L Cooper Fader Master and the Peavey PC 1600.

Integration

For musicians, the most appealing feature about Studio 16 is that it seamlessly integrates with Amiga's top selling music sequencer, Bars and Pipes Professional. In fact, the integration is so complete now that both programs even share the same screen. B&P will synchronise to Studio 16's timecode reference so that music and samples can be played simultaneously.



Soundwaves are represented graphically for easy editing.



Studio 16 gives you VU type audio meters - to make you analogue heads feel at ease.

Recently, the Studio 16 software was upgraded to Version 3.01, which added a few nice new features as well as some minor bug fixes. One of the most useful updates is Big Blocks V1.4 - a utility which reformats your hard disk to improve seek speed. If you do this, then you should also use the Update File System Utility V1.4 (to FS Version 40.4). I used both of these utilities when I recently formatted my Audio partition and found that it did improve playback speed, particularly for longer samples. The only drawback I found was that Ami-Back Tools would not optimise the drive - it said that the root block had been corrupted.

Other notable new features include Smart SMPTE Switching (which gives you the choice of prioritizing your SMPTE sources) and New Screen Modes, which gives support for third party graphics cards such as the Picasso II and Retina boards.

In case you haven't sussed it out, the sound quality of Studio 16 when using high sample rates is very good indeed - definitely CD quality. If you want more than eight tracks, consider putting a second card in your machine (which, according to Sunrize, can give you a total of 12 tracks, but I would imagine that you'd need a monster machine). The software needs a few tweaks - mainly equalisation and time compression/expansion for samples, and the ability to load more sound wave formats, such as Roland, Akai and PC WAV - although you can convert Studio 16 samples to the common Apple Mac AIFF standard.

Forget the effects

Some people might want more of the Digital Sound Processing

effects which earlier versions of the software had - I thought most of these effects sounded very cheesy. A dedicated effects processor usually does the job a whole lot better - although I must confess to having used the echo effect on a couple of occasions. Another complaint I've encountered is that you can't trigger samples via MIDI - but in fairness to Sunrize, they have gone for a dedicated hard disk audio recorder rather than a sample playback unit. Anyhow, if you happen to have Version 2.8 of the software, you can get MIDI sample playback (via B&P) as well as those cheesy DSP effects. But be warned, the Cue List playback on this version sucks compared to Version 3.0 (and the just released 3.01).

The way Studio 16 integrates with the B&P sequencer is similar to high end product combinations offered on other computer platforms such as the Mac with its Pro-Tools/Cubase combination. Whilst this package is often considered to be the industry standard - and, to be honest, it does have more features then Studio 16/B&P - it comes at a hefty price. Expect to pay at least five times the price of the Amiga combination!

It would be nice to have Studio 16 coupled with leading music sequencers such as Cubase or Notator Logic (both programs are available on Mac, PC and Atari) but Bars and Pipes does make a fair fist of things. On the plus side, Studio 16 has become the default high end audio card for the Amiga - it has received a lot of support from other third party products such as PAR, Scala, MediaPoint and Digital Broadcaster (the new high end digital non-linear video editing system). Programs that don't have direct support for Studio 16 but have ARexx can still interface with it, as Studio 16 has an ARexx port.

The long awaited release of the Digital In/Digital Out card for Studio 16 - the DD524 - will really start bringing Studio 16 into serious consideration for the dedicated professional considering purchasing an affordable digital multi-track. This card supports the main digital standards (SP/DIF and AES/EBU) as well as 16 and 24 bit samples. Apparently Sunrize are holding back on the release of this card until the Amiga ownership situation is resolved. An added attraction for the Sunrize card is that it is supposed to be able to do hard disk data backup on an audio DAT player.

Run out and buy one!

I have done both film and video soundtracks with this card and it does the job! I've worked with analogue tape multi-track systems, and it's getting really hard for me to go back to them, as digital audio offers so much more flexibility. When you think that this card retails for a little more than the cost of a four track analogue audio cassette deck, it's damn good value. Even if you take into account the cost of a machine with plenty of grunt it still compares more than favourably against the purchase price of a high quality eight track analogue tape deck. Production houses that already have a high end Amiga should definitely consider this card - it'll be money well spent.

Bars and Pipes

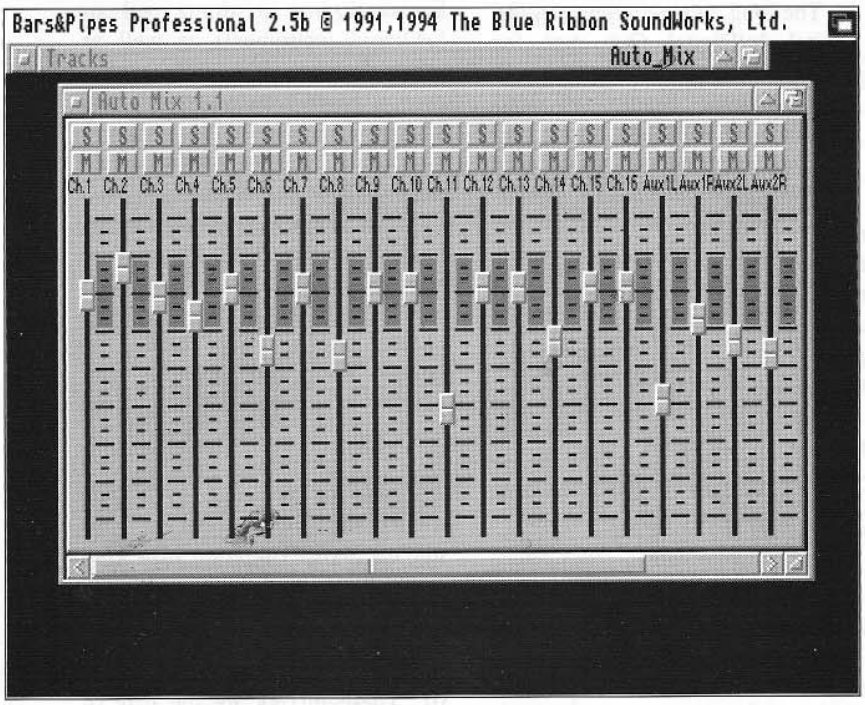
Studio 16 is not the only Amiga sound program that has had a recent update. Blue Ribbon Soundworks' Bars and Pipe Professional, the Amiga's best known music sequencer program, has been upgraded from Version 2.0 to 2.5. The update includes lots of new tools (such as the Drum Key Tool which turns your Amiga keyboard into a drum pad or keyboard instrument) as well as other features like new screen modes, more hotkey options and improved printing support. According to Blue Ribbon, there are over 50 new features.

Two of the best enhancements in B&P are the Guitar Player Tool and the Auto Mix Tool. The Guitar Tool is really cool - just play some chords into a track, apply the Guitar Tool and presto!, your playing is automatically converted into guitar inversions. Several different strumming options are available or you can even customise the Guitar Tool to your playing style. The Auto Mix Tool is for MIDI control of automated external mixing units such as the Mackie OTTO and Yamaha's new (and much raved about) Pro Mix 01. These mixers are the way of the future, so full marks to Blue Ribbon for keeping up with the latest in desktop music.

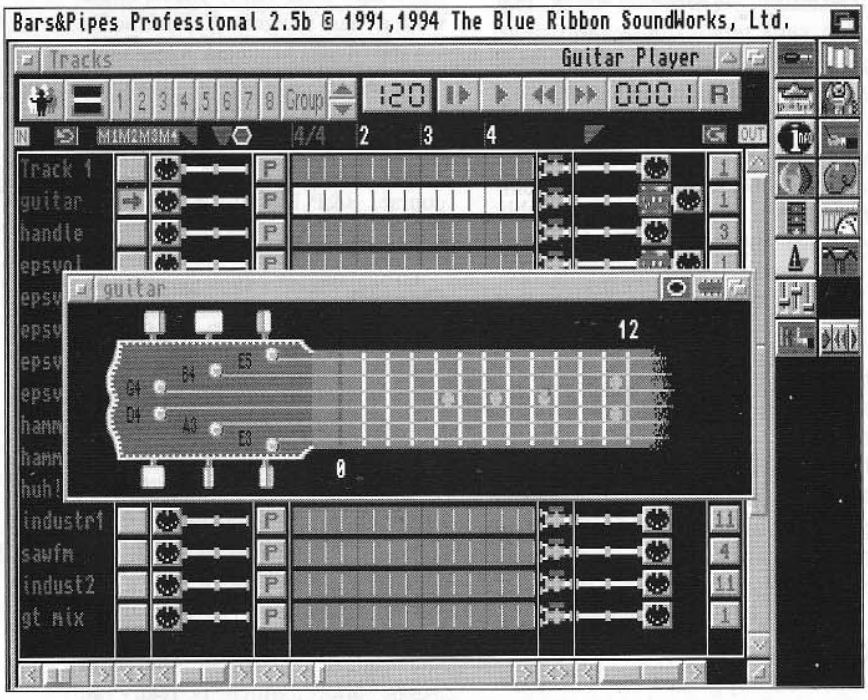
Where B&P really excels is the way it has integrated multimedia via the Media Madness Accessory. Various tools allow you to control GVP's G-Lock Genlock, animation playback, the Mediaphile Video Controller, and Scala. Of course, B&P has full ARexx support.

Overall

In general, B&P Pro 2.5 is an extremely powerful music package. It has a hell of a lot of features and is fairly competitive with far more expensive programs on other platforms. Furthermore, the Blue Ribbon people also offer other products for the Amiga market including the Sync Pro Plus (SMPTE/EBU/MIDI Timecode Synchroniser), and the 16 Bit Music Module Card - The One Stop Music Shop (which is really an EMU Proteus on a card). Of course, the aforementioned multimedia support really makes it the



The Auto Mix Tool enables you to control external MIDI mixers.



BP's really cool Guitar Tool gives your MIDI instruments a guitar feel.

ideal music program for the Amiga.

Personally speaking, though, I'd like to see a couple of changes made to B&P before I give it my unequivocal support. The most important thing I would like to see is the inclusion of an arrange pattern window, which premier music programs such as Cubase and Notator have incorporated for eons.

Sure, B&P has things like the ABA Song Construction and the Pattern Tool - but these are really cumbersome compared to a proper arrange pattern window. MusicX Version 2.0, the Amiga music program which is very popular in Europe, does incorporate an arrange pattern window. MusicX has a neat simple layout - it doesn't clutter the screen with too many icons, which B&P tends to do.

Unfortunately, MusicX does not offer anything like the multimedia facilities of B&P. Nor does it seamlessly integrate with Studio 16. So if it's music and multimedia and/or hard disk audio synchronised with MIDI sequencing you're after then it's Bars and Pipes Pro 2.5 you need. ■

Side Point...

Studio 16 has been available for the past 3 to 4 years and until recently, it was the only 16 bit audio card for the Amiga. However, it now faces a bit of competition with the recent release of two new boards - Macro System's Tocatta Board, and Blittersoft's Wave Tools. For the budget conscious, there is the Clarity 16 Sound Sampler which reportedly gives you 16 bit sound on any Amiga. Also, GVP have been saying for some time now that they are to release a 16 bit audio sampler which works via the PCMCIA slot on Amiga A600s and A1200s.

Workbench 3 the easy way

By Daniel Rutter

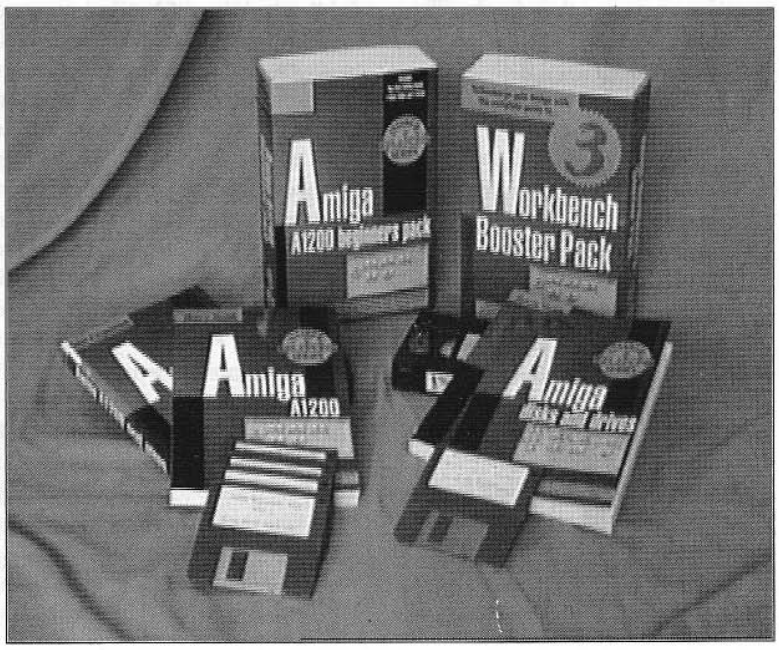
A collaborative effort between Bruce Smith Books, the big gun in Amiga tutorial literature, and local computer training outfit Wall Street Video has yielded two tutorial packs for A1200 (and 4000) users - the Amiga A1200 Beginners Pack and the Amiga Workbench 3 Booster Pack. Each pack contains two books and a video, and the Beginners Pack has four disks of support software, against one disk for the Booster Pack.

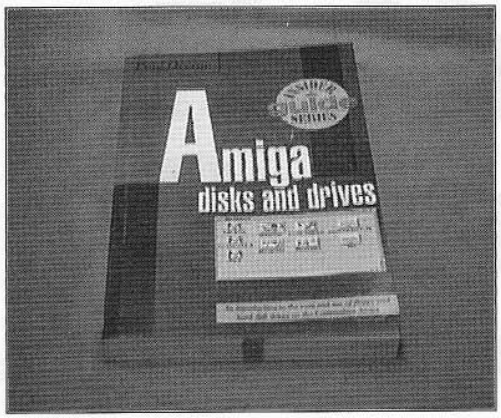
Beginner Pack

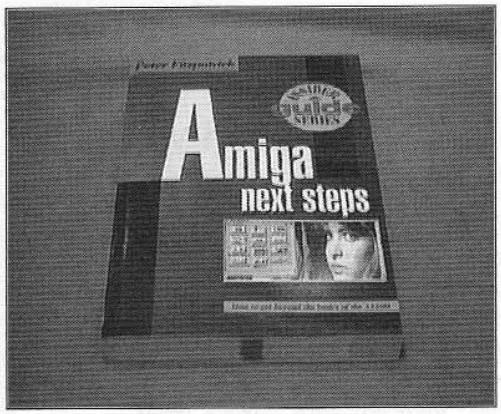
This contains Wall Street Video's Introduction to the Amiga 1200 Basics Tutorial video, reviewed in these pages back in the November 1993 issue. This is very much a "grass roots" tutorial, for the absolute beginner, and does its job well. You also get the Amiga A1200 Insider Guide, and Amiga A1200 Next Steps, two publications from the Bruce Smith Books stable with around 250 pages of information in each.

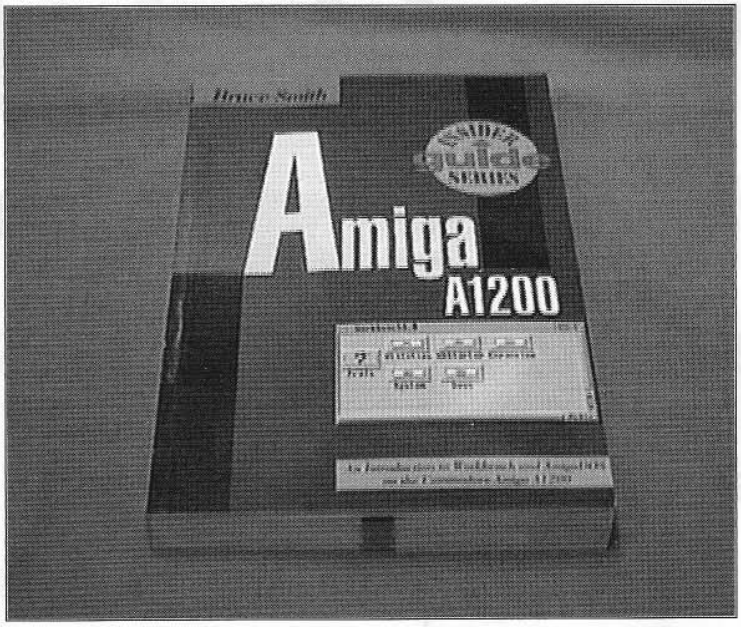
The Insider Guide necessarily steps on the video tutorial's toes in many areas, but goes considerably beyond it in the volume of information offered. You get info on all the basic Workbench-wrangling, basic Shell use, dealing with ED and script files, tolls and MultiView, commodities, icon editing, printing, fonts, multitasking, viruses and more.

Next Steps picks up where the Insider Guide leaves off, and tells you about more involved Workbench manipulation including the more advanced Preferences settings, more detailed shell use, MultiView, RAD, more involved printing including working with outline fonts, file recovery and protection, startup-sequence twiddling, expanding your machine with a faster processor, more RAM, a bigger hard drive, a better monitor and so on, sound and video digitising and outside recording, games, the rudiments of programming and the care and feeding of your Amiga and its accessories.









The four disks with the package accompany the Next Steps book, and contain a PD database program, some clip art, a basic word processor, the freely distributable version of the music package OctaMED 2.0, a collection of helpful utilities (a virus checker, a file undeleter, a backup program and more) and some example files to go with the tutorials.

If you're already basically proficient in the use of your A1200, only the Next Steps book will be of any use to you, but for absolute beginners this pack is a magnificent way to hoist yourself humanely up the computer learning curve.

Workbench 3 Booster Pack

This pack contains the Introduction to the Amiga 1200 Volume 2 video (reviewed in the March Amiga Review, page 87), which is half an hour longer than Volume 1, at 90 minutes, and covers a lot of more advanced topics, with the same smooth, easy to follow presentation.

You also get another two Bruce Smith Books - Amiga Disks and Drives and Amiga Workbench A-Z. Disks and Drives covers the basics of floppy, hard and RAM disks, file layout, more care and feeding advice, file systems and the mountlist, file operations, backups, compression and archiving, viruses, data security, encryption, useful utilities, file transfer and translation, and installing. Then you get some heavier information on how data's encoded on disks, why disks occasionally die and what to do when they do. There's also a decent glossary and index.

The companion disk for Disks and Drives contains the AmiCipher and Encrypt encryption utilities, DirWork 1.62 and DiskSalv 2, plus a couple more useful utilities and the usual example files.

The Amiga Workbench A-Z is just what it says; there's information on every Workbench 3 program, directory, buttons and concept, all arranged alphabetically. It's mostly information you'll find in the manual anyway, but it's better written and easier to find.

There's another glossary, a File Finder appendix that lists the location of every file on the 3.0 floppy disks, but no index - since the table of content does that job pretty well. Not a book to read from beginning to end, but a useful reference for the intermediate Amiga user.

Between them, these two packs really do provide everything you need to move from being a rank beginner to a competent all-round user, able to deal with problems and understand all aspects of using your 1200. Check 'em out.

Contact Wall St Video on (02) 411 2108 at $99.95 each + $6.80p&h.

❑

Final Writer 3 Update

By Owen James

Final Writer has gone through two major revisions since its release in late 1993, each adding more features, bug fixes and overall improvements. Good competition from a constantly improving Wordworth has seen both packages keep getting better and better.

Have the improvements in the latest versions of Final Writer been significant? Well there's nothing earthshattering, but several very nice little options have been added which really bring Amiga word processing up to speed with what's available on the PC.

Easy editing

Final Writer now has the feature I missed most on Amiga word processors - drag and drop text editing. For years we've been able to highlight, cut and paste words, sentences, and paragraphs, but even using keyboard shortcuts the process requires several steps.

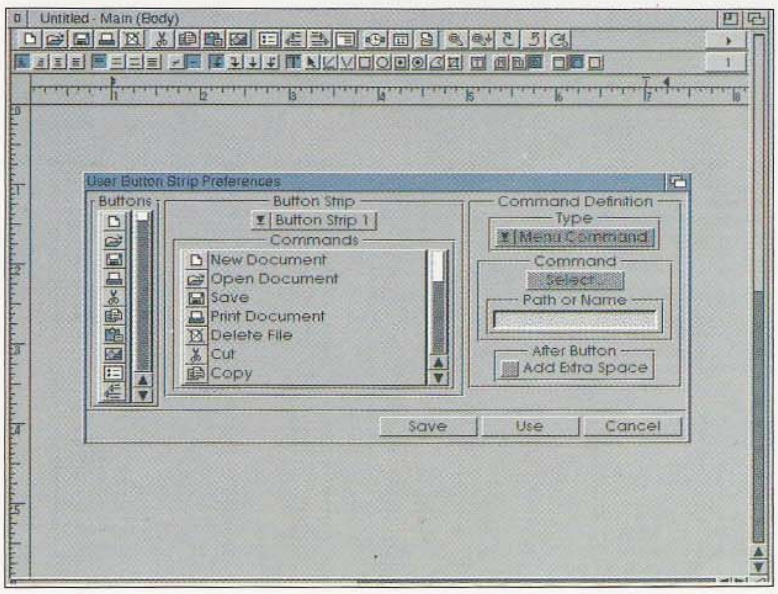
Drag and drop makes the process simple. Just select the block of text, click anywhere within the selected text and drag it to the place you want it.

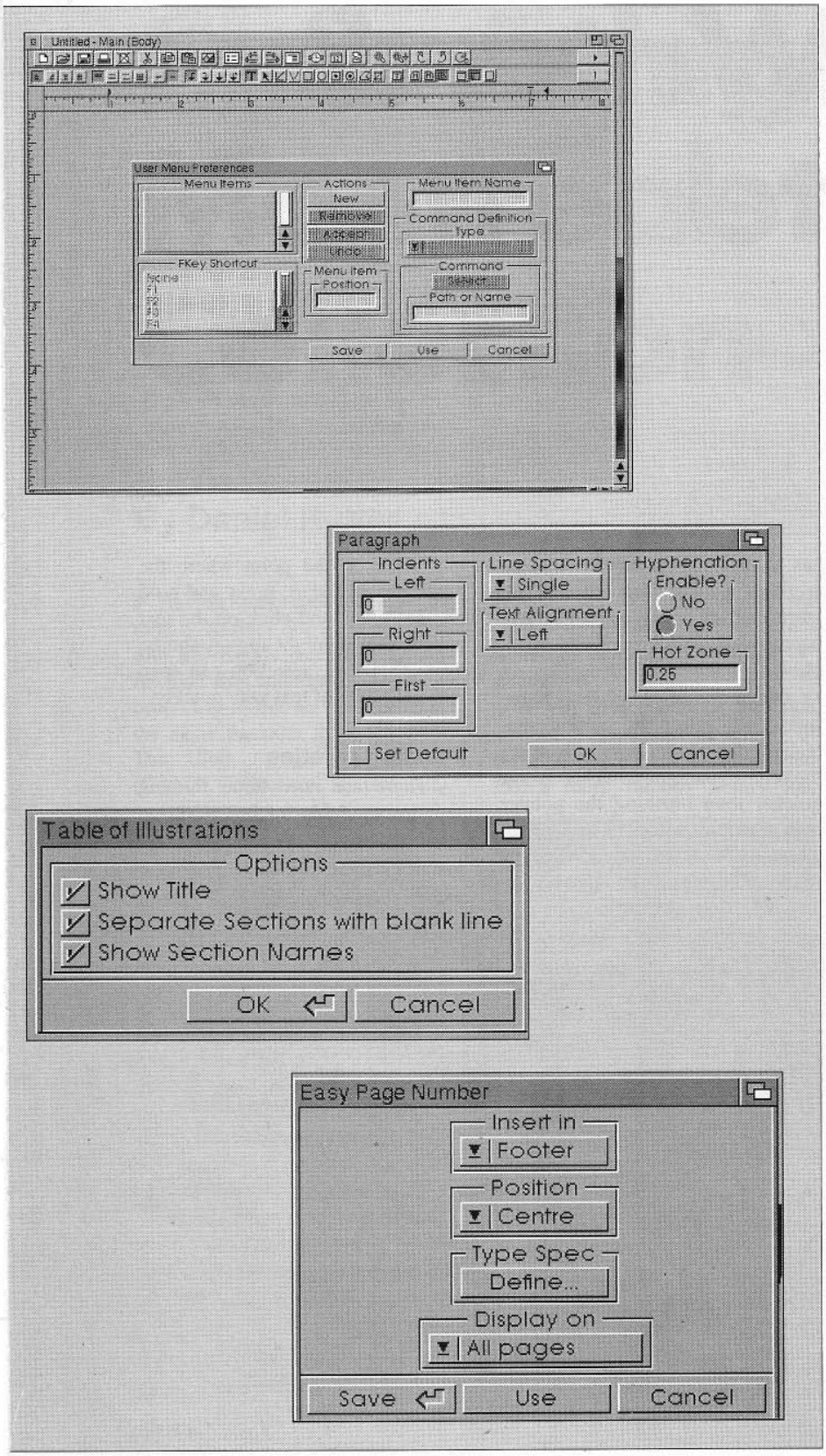
Selecting text has also been made easier. A single click on text has always set the insertion point, while a double-click selects the word, but two new options have been added - triple-click and quad-click.

Clicking on any text three times will select the current sentence. Four quick clicks will select the entire paragraph. This is far quicker than brushing the pointer over the text you'd like to select manually. An extended-select function has also been added. Simply click on the point where the highlight will start, press and hold the shift key, and click on the text where the highlight region should end. This way, selection can span several pages of text very quickly.

Floating palettes

There are now three floating palettes available for fast selection of commonly used tools, styles and functions. You can have as many of these open at once as you like.





Because they're "floating" palettes, they can be moved and shifted around the screen, even resized, so that they're not in the way of your work. Final Writer will remember the location and size of the palettes when you quit, so that next time the palettes will be in the optimum place for you.

Header and footer creation is now simpler than ever, thanks to the new Simple Header/Footer option. Just select this option, enter the elements you'd like to appear (section name, page number, whatever) and hit OK. Selecting Save instead of OK will save this as part of your default preferences, so that it'll be used for all future documents as well.

A new polygon tool will allow you to create closed objects consisting of any number of lines and angles - diamonds, pentagons, stars and so on.

Two new special graphic shapes have also been included. These allow you to create a new shape based on a rectangle, oval or arc as the starting shape. When drawn, several control points will be added to the object, allowing you to stretch and re-shape the object to produce a new one.

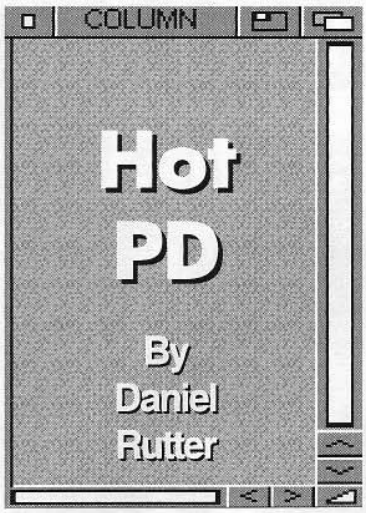
A new Type and Spell option, also known as real-time spell-checking, has been included. Unlike some other type and spell systems, Final Writer's doesn't bring your typing to a shuddering halt when it sees a wrong word. It will flash the screen if it spots an error, but will let you continue typing.

Several more cosmetic changes have been included to many requesters, making them easier to use and more logical.

Overall, no mind-blowing improvements, but certainly enough to make the upgrade worthwhile.

Contact Quasar on (03) 583 8806 for more information.

❑



Aminet Set 1

☆☆

When I was at the Commodore Australia auction (ah, memories), one of the lots was a crate full of miscellaneous objects. When it came under the hammer, some wag piped up with "How many are there?", and the bloke pointing at the crate, without missing a beat, said "One quantity."

I mention this because "one quantity" is quite a good way to describe the amount of stuff on Aminet Set 1, which arrived direct from the manufacturers in Germany the other day. Sure, I've talked about Aminet CDs before (Aminet 4, most recently), but those have just been single CDs, with barely a gigabyte of stuff on 'em once you've unpacked it. Heck, if you wrote enough text to fill one CD after compression and sent it to Amiga Review as an article, you'd probably only get paid about 14 million dollars, and it'd only take us about 130 years to print it all (using every page in the magazine every month).

Small potatoes.

Aminet Set 1 is FOUR CDs, containing the entire contents of the Aminet archive. Not a selection. Not a best of. Not the greatest hits. The lot. About 12,500 archives. And, needless, to say, it's got the same groovy interface that debuted on Aminet 4, only better. You can point and click your way around most of the archive, with pictures viewing without you lifting an finger, sound MODs playing automatically, demos and games running from the archive (but giving you the option to extract them to a directory instead), and so on. And high speed searching. All you need is Amigaguide and it all comes together.

And if you've already set up Aminet 4 (told it what directory to use and all that), Aminet Set naturally doesn't need to be set up as well.

Nice, huh.

Because of the multi-disc layout, the index files are necessarily a bit more complex. There are local index files, which only show the contents of their own disc, and global ones, which cover the lot. To use the global files most effectively you should copy them onto your hard drive - again, they're well enough made that all you have to do is drag a drawer and everything works perfectly.

The first CD contains the complete Aminet util and dev directories (238Mb), 270Mb of new stuff since the Aminet 4 CD (which is also on other discs, but is helpfully put in one place), and 100Mb of top downloads - most popular files - also copied form the other CDs. So you can spend a lot of your time without having to swap from disk one. This also means there's a bit of spare room on the CDs, so they won't have to go to an unwieldy five disk format very soon.

The second disk of the set contains graphic utilities, pictures and text files of all descriptions. All the pictures have a thumbnail indexing system that, regrettably, doesn't seem to fire up under Kickstart 2.x. The third disk has games and demos (most of which can be run with a couple of clicks), hardware information and communications stuff. Disk four has music utilities, tons of MODs, business software, disk utilities and miscellaneous stuff. The main ReadMe Amigaguide file lists some highlights of the new stuff.

A quick JPEG datatype for OS 3.x users. There's also XV, a very powerful graphics viewing and rendering tool ported from UNIX, which only works for AGA (or better...) owners. Similarly, there's XAnim, two ports of which are available for all those lucky 3.1/AGA+ users.

For people sick of the sight of MagicWB, there's NewIcons, a bunch of nice looking freeware icons inspired by the old SGIcons set on, ooh, off the top of my head, Fish 546, but snazzier. NewIcons is also a more technically impressive package than MagicWB; it doesn't just try to dovetail as neatly as possible with the existing icon-handling code - it patches the operating system.

If you're not running the NewIcons patch, all your icons look the same as they used to. But run the patch, and a whole load of gibberish in the icon ToolTypes gets uncompressed and turns into the icon image. Aside from confusing people who do an Information on patched icons, the NewIcons system gives everything the same size icon, with all icons remapped properly to the Workbench palette under 3.x (it works under 2.x but isn't as nice). If you're using a four colour Workbench you get one set of icons, with a prettier set for higher colour displays.

NewIcons also makes the system DefIcons more sensible - it au-

Complexity:

☆ Worm Man
☆☆ Sculley
☆☆☆ Mulder
☆☆☆☆ any Grey

tomatically recognises a whole load of file formats (pictures, sound mods, system stuff, text files, source code, crunched formats, fonts and more) and gives them all useful icons.

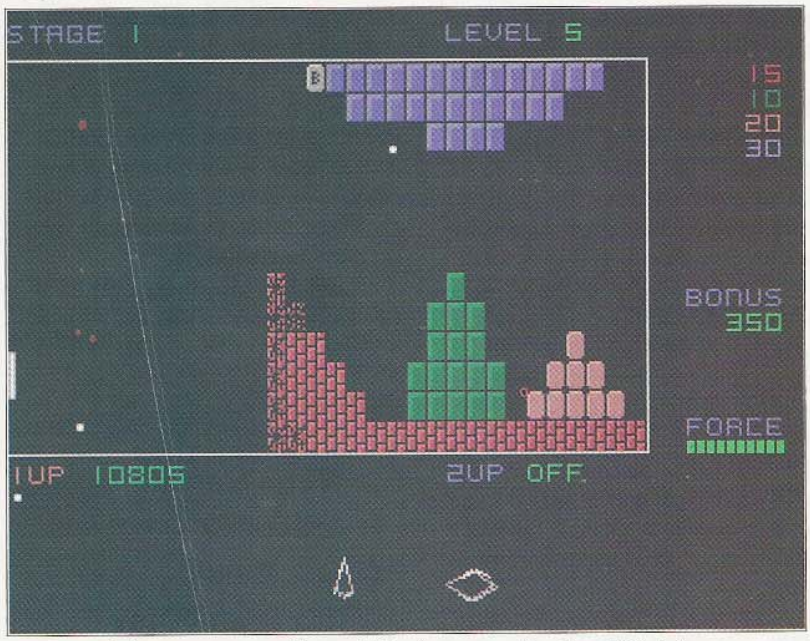
The creator of NewIcons is amusingly bitchy about MagicWB, calling it "overtly disgusting" amongst (many) other things. I'll say one thing for the two systems, though - they don't get along aesthetically. If you're going to install NewIcons, deinstall MagicWB first. NewIcons will work fine next to MagicWB, but your Workbench will be a hopeless jumble of patched and unpatched icons.

3.x users will also like the two sound DataTypes on Aminet Set 1, for AIFF/AIFC and Mac "snd" format files.

There's also the latest version of Poing, a Breakout clone that I rather like. Poing gets around the perennial Breakout/Arkanoid problem of spending three hours with an almost empty screen trying to tidy up that last brick. Instead of having to bust all the bricks to get to the next level, you instead have to hit the back wall (the game plays left to right) ten times. Easy as that.

Version 2.2 adds a few new bonuses, a few new brick types, a silly light show at the bottom of the screen and not much else. But it's worth getting.

Sick of the sight of my Workbench? Here's somebody else's (featuring NewIcons), from Aminet Set 1!



The new version of Poing, on Aminet Set 1.

There's also quite a lot of new MODs, as well as all the old ones - I scanned my huge MODs directory on the hard drive and managed to kill more han 12Mb of its 40Mb bulk by removing the MODs also on this CD. Naturally, there's a "recommended listening" Amigaguide file for these too, that lets you play the best with a mouse click.

Buy these discs!

Aminet Set 1 is not perfect. There are a couple of duplicated files and a few other oddities. But it is absolutely positively the best way to spend $60 or so on your CD-ROM equipped WB2+ Amiga. Get it.

Taglines

☆☆

A few eagle-eyed readers rang after reading my column a few months ago. What, they demanded, was all that text being displayed in the SkoEd screenshot? And where could they get it?

Well, (buffs nails on shirt) that

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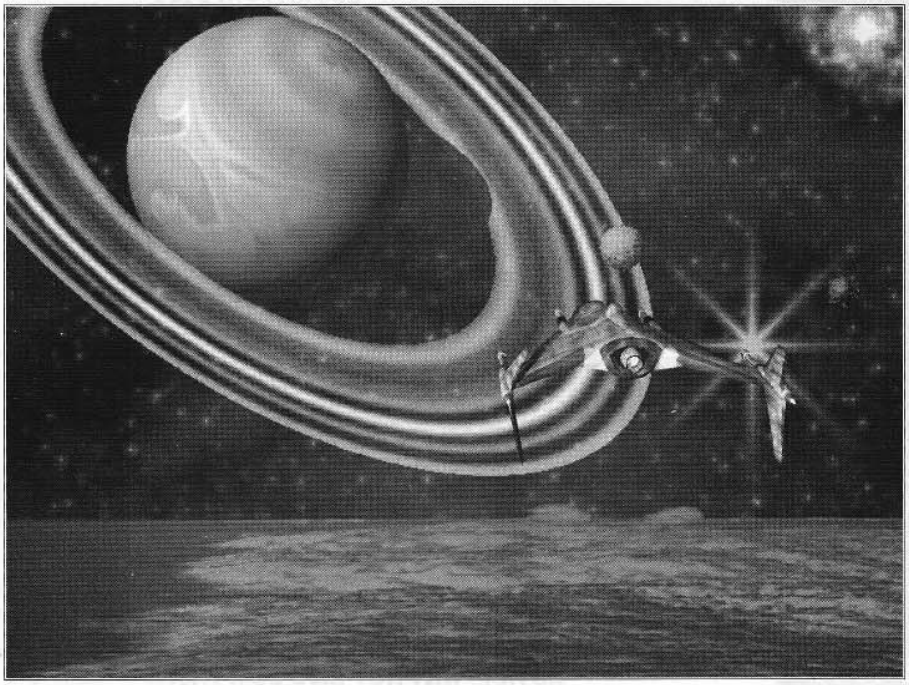

Another new picture from Aminet Set 1.

slab of one-line witticisms is a small, small section of my tagline file, which I've been accumulating for a while and which to date contains no fewer than 5780 individual entries, for a total size of about 300k. Most of the tags are funny, some are profound, some are plain silly, all are in my opinion good. Compiling this file is one of the many miserable sad indoor things I do when the rest of you folks are out there having a life. I don't need you! I'm happy, I tell you! Hahahahaha!

Ahem.

If you want the taglines file (which, incidentally, won't necessarily be much use to you for actual tagline mining because I've set the maximum tagline length at 80 characters and a lot of the tags go pretty close to that), it's on the companion disk. When you run the installer you'll end up with a simple text file, which you can load into your favourite word processor, text viewer or text editor (in increasing order of preference). Incidentally, the tagline file as it resides on my hard drive contains 41 occurrences of the Minor Common Four Letter Curse Word and 11 of the Major Common One, which I have duly replaced with their rot13'd equivalents - shpx and fuvg, respectively. If you are of a delicate sensibility, do not reverse these changes. You'll almost definitely be able to find something else in there to offend you, though. Hunt around.

Deluxe Galaga 2.5

☆

Yes, everybody's favourite polished up old game's been updated again, and naturally there's lots of cool new stuff. The last time I mentioned this game was version 2.3, and since then there's been various bugfixes, including correct behaviour with joypads. Of course, there are one or two other improvements - more secrets, two player simultaneous play in the meteor storm, which now features money bonuses floating about as well as score ones (secret giveaway time - finish the storm at full speed and score 5000 credits!), ship armour (take a hit and don't die - you can get more than one unit of it, too), an iconify feature, more levels (75), XPK library support, multiple alien types on one level in Normal and Hard modes, and, naturally, more. Deluxe Galaga is now also noticeably easier - the Easy mode lets anyone with decent reflexes play for quite a while.

Deluxe Galaga was always a fab game, and now it's, well, fabber. A must have.

Csh update

☆☆☆

Yes, Rutter's off again about another version of CShell. When I wrote my very first (and last) Hot PD column for Professional Amiga User Magazine (32 columns ago!), CShell was at v5.19, and in all that time it's only advanced to 5.40, with 6.00 waiting in the wings. The last version I mentioned was 5.37, and since then this massive UNIX-ported 1001-uses-plus-a-free-set-of-steak-knives shell has had a few more bits stuck on. The only addition that annoyed me is that CShell now disregards input to its window while it's starting up - so if you, like me, habitually type in the name of the directory you want to work in while CShell's starting, feeding the text to the standard AmigaShell underneath, Csh won't hear it and will leave you in the default dir. A half second delay. Woe is me.

There are a few bugfixes, of course, because no shell with a 530k distribution package is going to avoid them. You can now make windows up to 32767 pixels square, against the old 1023 (attention, Cinemascope monitor own-

ers!). The mem command shows the largest block sizes, like good old Avail. [and] are recognised as pattern characters.

There's a new "don't use window pointer" startup option, useful for things that patch CON windows like KingCON. And there are quite a lot of other little changes that I don't have room to detail here. Of course, CShell still does all the cool stuff it did before, and if you're a serious Shell user you should have it. That's an order.

I've just slapped Csh in as one archive in its own drawer on the companion disks; if you can't extract it, you wouldn't be able to use it anyway, and it saves a whole load of space.

LZX

☆☆☆

The Amiga's stuck in a bit of a backwater when it comes to archivers. We use lh5 format archiving by default (.lha files). Lh5 files are quick to make and extract (much better than the earlier lh1 (.lzh) files), but they don't compress frightfully well. But Amigans still use lh5, because everybody uses it, because everybody uses it. I call this the Windows reason.

You can get ZIP for the Amiga, which makes archives considerably smaller than your average lha file, but it's none too fast and not many Amigans have it.

You can't get an Amiga ARJ but that's no big deal; ARJ is to ZIP as lh1 is to lh5; only its easy to use multi-volume archiving makes it at all worthwhile. There's an Amiga unARJ program, which is quite enough.

So I was rather interested when I found LZX v1.00 from Jonathan Forbes and Tomi Poutanen, billed as "the latest and greatest archiver for the Amiga." LZX is, according to its makers, "the most compressive utility available, sporting some revolutionary new ideas in data compression technology." Cool, I thought.

LZX has a number of features that put it ahead of LHA-makers, including the most popular one, LhA by Stefan Boberg. For a start, it uses an inherently more efficient compression system - LZX is a much newer system than LHA and is commensurately better, since compression technology's advancing all the time.

LZX can also do file merging, which can in some situations give you a much, much smaller archive. File merging takes sequential files and sticks 'em together in the archive, then compresses the whole lump instead of doing one file, tacking it onto the archive, doing another one and so on.

This means that if the files are similar in content, LZX will notice and compress them as if they were one big file with lots of nice compressible redundant stuff inside it. It works really well on directories full of internally similar source code, multiple versions of programs for different processors, or backup files containing the previous saved version.

You also get improvement if you're compressing lots of little files, since the whole file compression system doesn't have to run for each one. They won't necessarily get much smaller, but they will compress faster.

That's the good news about file merging. The only bad news is that deleting files from a merged group, or extracting some of its contents but not the rest, can take a long time if the group's very big. Not a big deal, but if you do these operations on archives you might want to set the maximum merged group size nice and small. Personally, I cranked it right up to its maximum of 8.2Mb or so for the tests. LZX also uses a 32 bit CRC (Cyclic Redundancy Check) instead of LHA's 16 bit model, giving better data integrity checking.

Testing the claims

LZX makes great claims for speed - the manual describes it as "obscenely quick" at decompressing, and almost as good at making archives in the first place.

I put LZX through its paces against ZIP (the 1991 version from Intuitive Software) and LhA, testing how long it took to compress a variety of things as well as its archive sizes. The results were good, though not nearly as great as the docs led me to expect. The test machine was my standard 40MHz 030 A500 with knobs on.

I first tried compressing 477k of text files. LZX has three compression modes (fast, normal and best), and I tried them all. The fast mode reduced the files to 37.9% of their original size, in 11.5 seconds. Regular mode scored 37% in 14.7 seconds, and the best compression mode got it down to 36.8% in 15.9 seconds. LhA scored only 42.6% and took 13.38 seconds to do it. Zip managed 36.1%, but took a whopping 27.1 seconds.

Moving on to 42.2Mb of program data (everything in my games directory), I tried seeing what difference different merge block sizes made. LZX in best compression mode with the maximum size merge got the data down to 52.5% of its original size in 33 minutes 42 seconds; with the default (180k) merge size it scored 52.6% - a difference in archive size of less than 90k - and shaved about 50 seconds off the time.

Big deal..

LhA, for comparison, did 55.7% in 40 minutes 18 seconds.

Testing the extraction times for these archives, I found the LhA

And another one.

archive extracted in 6 minutes 17 seconds, while the smaller of the LZX archives took 11 minutes 17 seconds. So much for obscenely quick extraction.

Testing the extraction time of the abovementioned text archive, I found all the LZX archives took about 6.4 seconds to extract, LhA took 3.7 seconds, and extracting the zip archive with Info-ZIP's unZIP utility took 9 seconds. A note to pedants - yes, I did try Zip's high compression mode, and it made a 1% archive size and extraction time difference. Hooray.

I tried 2.4Mb of pictures. LZX got them down to about 69% in about one minute 45 seconds, depending on mode, and took about 20.5 seconds to extract. LhA did almost exactly the same size archive about 25 seconds faster but extracted in 16.3 seconds, ZIP made an archive 6% smaller but took four minutes to make it and 35 seconds to extract.

On the other hand, when I compressed the LZX directory itself, which contains three versions of the program (for 68000, 020/030 and 040/060 chips), LZX's merging came into its own. The directory was 265k, and LhA took 6.8 seconds to make it 48% of its previous size, and 1.6 seconds to extract it. ZIP got it to almost 50% in 20.2 seconds, with 3.8 seconds to extract. But LZX squeezed it to 26.3% in five seconds, with 1.4 seconds to extract. This is what LZX does well. It is, of course, on the companion disks.

Zaxxon

☆

Another Old Game, this time not dressed up at all for the Amiga. If you want to play Zaxxon as she was played on your C64, here it is, faithfully converted.

What? You don't know what Zaxxon is? You're a little ship. You move diagonally up the screen. you can move left and right, up and down, and shoot. You shoot things, and dodge things. It's not easy.

Get it if you're into nostalgia, or just curious; it's on the companion disks.

New SSW

☆

I last mentioned Solar System Wars more than two years ago (it was on Fish 839), but it's been updated. It's a variant on the SpaceWars two human player orbital kill the other guy game, but with up to four stars (or black holes), asteroids, lots of weapons and tons of playability. No computer opponent, though - live with it.

This new version removes Flip Ship, gives both players Full Shields as a matter of course and adds new weapons - the Disruptor, which sends the other guy's ship nuts for a moment but doesn't hurt him; the Anomalizer, which can spin him, teleport him, kill his shields, give him his shields back, stop him, push him - you get the picture; the Guided Torp, which you can steer like a ship while you hold your special weapon button down; and the Cluster Pod, which bursts into lots of bullets and will instantly kill anyone with a direct hit. SSW supports two and three button joysticks, is fun to play and has a funny manual. Worth owning, and on the companion disks.

The companion disks for this column are available from Prime Artifax on 008 252 879 for $9.50 including postage; they're called HotPD22 a and b.

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Reader Services - Back Issues

June 1993 Vol 10 No 6

- 3D Animation with Aladdin - Easy for beginners - The Animation Workshop - How to beat those disk swapping blues - Deluxe Paint Tutorial - Animating in (apparent) 3D.
- Amos column - Andy's Attic - Exploring WB2 - CanDo - Your own directory Utility Part 2 - Education Column - World construction set - Down the Opal mine - Using the Alpha Channel - C64 Column - Hot PD - Games - KGB, Fate - Gates of Dawn, Darkseed, Civilisation, King's Quest Full Solution Part 1.

July 1993 Vol 10 No 7

- Real 3D 2.0 - Accelerators - Golden Gate - Microdeal Clarity - Home Accounts 2 - DPaint - Animation in 3D.
☆ Education - Back to Basics - Amos - CanDo - C64. Andy's Attic - Hot PD - Games - Chaos Engine, Beavers, Sleepwalker - Vikings, Solution to SuperFrog Part 1, Kings Quest 2.

August 1993 Vol 10 No 8

- Show Report - Vidi Amiga 12 - Final Copy II - Sound Digitising - Intro to Desktop Video - Hypercache Professional - Education - Aust Graphics Atlas - CanDo - DPaint Tutorial - C64 Column - Amos Column - Opal Paint's Zap function
☆ Hot PD - Games - Hired Guns, Trolls, Graham Gooch World Class Cricket- Solution to SuperFrog Part 2.

September 1993 Vol 10 No 9

- Art Expression - Paint Program - 68060: the Next Generation - Power Copy Professional - Quarterback Tools Deluxe - CanDo 2.5 Upgrade - DPaint Tutorial - Hot PD.
☆ C64 Column - Amos Column - CanDo - Education - Back to Basics Fractions - Andy's Attic - How to create a RAD drive - Games - Creatures, Flashback, Super Frog, Body Blows, Dark Seed - Solution.

October 1993 Vol 10 No 9

- DPaint AGA - PC Task MSDOS emulation - AmiBack Tools vs Quarterback Tools Deluxe - Personal Paint - Hot PD - Blitz - Andy's Attic - Workbench Tools - DPaint Tutorial.
☆ Education - Learn to play the Piano - CanDo - Make your own Calendar - C64 - Graphics Software - Games - Campo's Int Rugby - Reach for the Skies - Project X Revised Edition, Syndicate, Street Fighter II, Dune II.

November 1993 Vol 10 No 11

- Brilliance - Hoopy'Paint - Amiga on the Cheap - A1200 Video Tutorial - CED 3.5 - Frame Machine
☆ Education - Personal Tutor - Blitz - DPaint - HotPD - Latest Fish Disks - CanDo - Amos - C64 - Games - Pinball Fantasies, Desert Strike, Indiana Jones and the Fate of Atlantis, KGB - Solution Part 1.

December 1993 Vol 10 No 12

- Amiga CD32 - an in depth look - Affordable Tape Backup - SCRAM plus Tamberg - Bernoulli MultiDrive vs SyQuest 105
☆ EGS Spectrum - Education - HotPD - Blitz - more clever functions - C64 - CanDo - Foreign Language file converter
☆ Games - Air Warrior, Two Player Games, 101 PD Games, KGB - Solution Part 2, CD32 Games Pinball Fantasies, Oscar, Diggers.

January 1994 Vol 11 No 1

- Palmtop Computing - low price alternatives to Amiga portable - Final Writer - What the manual doesn't tell you - Deluxe Music 2 - Quicknet - peer to peer network - Understanding Libraries - CanDo - Getting key input - Hot PD - Amos - New extensions for Amos Pro - Blitz - Zones of control - Andy's Attic - C64 Bumper Tips - Games - ACAR PD Games 2, Mean Arenas, Yo Joe!, CD32 Quickshots (D-Generation, Whale's Voyage, Overkill)

Febuary 1994 Vol 11 No 2

- Understanding Genlocks - Final Writer - CoolCat - clipart and animations - Advanced Amiga Analyzer - Upgrading from a 68000 to an A1200 - Dpaint Tutorial - Education - Mathmaster II - HotPD - CanDo - Electronic Log Book
☆ Amos - Hacking AMOS Graphic Modes - Blitz - Main loop for a GUI utility - C64 - Art Gallery - Games - Ishar 2 - Messengers of Doom, Frontier - Elite II, Donk, Soccer Kid, Bob's Bad Day, Flashback - Solution Part I.

March 1994 Vol 11 No 3

- Image processing with Image F/X - A1230 Turbo Plus board - VIDI Amiga 12/24 - Capturing high quality images - GVP's new time base corrector board - Scala MM 300 Synchronous Multimedia - Education - Search for Sanchez - Help Line
☆ DTP Column - Postscript - Hot PD - Fish on ROM - CanDo - Make your own Typing Tutor - Blitz Basic - Data Security - C64 - Online Amiga - Games - Body Blows, Galactic, Zool 2, Alien 3, Lotus Trilogy, FlashBack solution part 2, Deep Force, The Patrician.

April 194 Vol 11 No 4

- Montage 24 - 24 bit video titling - Warranties and your rights - Where do you stand - How to get Broadcast - Sell your Amiga graphics - Introduction to Internet - World's largest network.
☆ Scenery Animator 4 - Virtual virtual reality - Upgrading Fat Agnus - Education - Fun at Sideshow Alley - Blitz Basic Strings - CanDo - Working with Amiga DOS - DPaint Tutorial.
☆ Hot PD - New Fish, plus Mand2000 - Helpline - Amos - Interfaces without banks - Online - Games you can play on your local BBS - C64 - Useful pokes - Games - Assasin (Amiga Games Pack), Cannon Fodder, Tornado, Stardust, Disposable Hero, CD32 Games - MicroCosm, Fly Harder.

May 1994 Vol 11 No 5

- Understanding Amiga Graphics - Computer images often require a compromise between quality and file size - we explain how to acheive the best balance - Modems - An introduction for Beginners - A modem can bring all kinds of information to your Amiga at a very reasonable cost - Up and Running - Making your modem work - trouble shooting and a checklist of what to do.
☆ Personal Write - super cheap word processing with interesting features - Map Studio Vol 1 - JPEG graphics - DPaint Tute - The DPaint beginners

Reader Services - Back Issues *(continued)*

friend - Deluxe Paint Tutorial - The sky's not the limit - Education - Crossword Wizard - Hot PD - Utilities extract more from Workbench - Blitz Basic - Squeezing your Data - Desktop Publishing - Creating Reversed text - Help Line - Problems solved - Online AMIGA! - Start your own MAX'S BBS - C64 Column - CMD picks up GEOS - Games - The Settlers, Second Samurai, Kingmaker - Quest for the Crown, CD32 Games - Trolls, Alien Breed/Quak, Project X.

June 1994 Vol 11 No 6

- Art Department Professional 2.5 - The latest version - The future with AAA, new AAA chips! - DirWork 2 - Amiga Picture Viewers, which is the best - we compare 20 of them - Neptune Genlock, Desktop Video just got better - Amiga Animation Software.

☆ DTP Column, Creating forms in Pro Page - Hot PD - Online Amiga - Blitz Basic - C64 - Games - Liberation - Captive II, Skidmarks, Cliffhanger, Apocalypse, Legacy of Sorasil - CD32 Games, Surf Ninjas, Global Effect.

July 1994 Vol 11 No 7

- Wordworth 3.0 First mpressions - Disk Expander Review - Imagine 3.0 Review - TypeSmith 2.02 - MiGraph MS1200 - Networking Intro - PARNET - PageStream 3.0 - Video Creator CD32

☆ Columns - Hot PD - Amos - CanDo - Arexx - Education - Real 3D - Online - Blitz - DTP Column - C64 - Entertainment, James Pond 3, Noddy's Big Adventure, Dyna Blaster, Mr Nutz - Hoppin' Mad, Star Trek 25th Anniversary

August 1994 Vol 11 No 8

- Wordworth 3.0 vs Final Writer, Is bigger always better? - Virtual Memory, Good as RAM? Using your hard disk to make up for low memory - TypeSmith Font Design, Convert, edit and create typefaces for your Amiga - Biomechanics, Podiatrists find a use for the Amiga with a video digitiser - Deluxe Paint Tutorial, Creating lifelike textures and animation - Microvitec Monitor, The ideal monitor surfaces at last, perfect for AGA machines - Imagine 3 Tutorial - Animation Column - InfraREXX Control - Software for Little Kids, a suite of programs for little kids.

☆ Columns - HotPD - DTP - Humorous - Online - CanDo - C64 - PowerDOS - AMOS - CD32.

☆ Edutainment - KidPix, painting made fun - Games, K240, Dragon Tiles.

September 1994 Vol 11 No 9

- Stepping up to CD-ROM, review of the NEC 3X triple speed drive - Piracy, Alive and Well - PAL Lightwave, Newtek's monster 3D rendering package is now available sans Toaster - SX-1 CD32 Expansion - Supra 28 Turbo, Supra 28Mhz 68000 accelerator gives you power without the price - DevCon Report.

☆ Columns - Hot PD - DTP - Online - CanDo - PowerDOS - Amos - CD32 - C Programming - Education.

☆ Games - Armour Geddon II - Fury of the Furries - Brian the Lion - Benefactor - Traps and Treasures.

October 1994 Vol 11 No 10

- A TBC on your desktop? Improve the quality of your next DTV effort - Amiga into the future, what Commodore UK has in store - Fast Animation, no hardware - A2000 revisited - Graphics boards and mode promotion - Personal Animation Recorder - Registering your Shareware -Turn your A1200 into a CD32... almost!

☆ Columns - HotPD - Blitz Basic - Online - Power DOS - C Programming - Games - Nick Faldo's Golf, Pirates, Impossible Mission 2025 "The special edition".

November/December 1994 Vol 11 No 11

- Brilliance 2.0, 24 bit painting without extra hardware - power to the people! - Disaster Recovery, when in trouble or in doubt, run in circles, scream and shout. Or read this. - Quark Express vs PageStream 3.0, How does the new kid on the Amiga DTP block stack up - Money Matters, a cash book for small business and home - G-Lock, GVP's software controlled genlock - Understanding Fonts - CD Roundup - Easy Ledgers, professional accounting.

☆ Columns - Blitz Basic - Online - AMOS - C64 C Programming - Games - JetStrike - Secrets of Frontier Elite Hintbook. Review of the Competition Pro Super CD32 Controller.

SPECIAL EDITION ANNUAL
January 95 Vol 12 No 1

- Lightwave Goodies, extra software finally in Australia - CEI Conference, hot from the Internet CEI boss Alex Amor speaks - Removeable storage shootout, comparision of the new Bernoulli and Fujitsu 230Mb drives - Magic Lantern - Surf the Net, Internet access with your Amiga.

☆ ANNUAL SPECIAL - Amiga Dealer List - Amiga Service Centre List - Amiga BBS Listing - Fish Listing

☆ Columns - Online, DPaint, C64 - Games - Super StarDust Alien Breed Tower Assault, Cannon Fodder 2, Beau Jolly Pack including Cannon Fodder, The Chaos Engine, The Settlers, and T2: The Arcade Game. CD32 Banshee.

February 1995 Vol 12 No 2

- Amiga digital video, full digital video editing. - Workbench 3.1, latest version reviewed - PC-Task , Windows capable Amiga for $129 - Deluxe Paint 5, a sneak preview - Personal Paint 6.0, and the Cloanto competitor! - CEI Conference II, Alex Amor speaks again!

☆ Dealer List update - Corrections and extensions to the January listing.

☆ Service Centre List - More corrections and extensions.

☆ Columns - Online - C64 - Hot PD - Demo Scene - AMOS - Blitz Basic - Power Amiga DOS

Games - Rocketz - Mr Blobby - The Clue! - Top Gear 2 - Marvins Marvellous Adventure - Rise of the Robots -

$3.50 each inc. pp. Send cheque or money order, or phone/fax credit number to: Storm Front Studios, PO Box 288, Gladesville NSW 2111. Phone: (02) 879 7455, Fax: (02) 879 4236.

Free Reader Classifieds

33MHz 68882 FPU for Amiga 4000 030 with 40MHz crystal. $125. ph. (07) 375 5396.

68030 25mhz Accelerator with 68882 and 2 megs 32 bit ram $450 ono. Suit A500, A1000, A2000 80286 Bridge Board with hard disk card, 5 1/4 disk drive and all software and manuals $100. Or both for $500. Phone (02) 439 3929 wk. Ask for Nic.

A1200/40 with white 1084S monitor. Both are in good condition $900 together. AMOS Professional and AMOS Pro Compiler $100 together. I have plenty of other programming material. Phone (076) 355 898 for more information - ask for Matt and make an offer.

A2000 1084S Monitor, 7Mb RAM, 2 hard drives 130Mb total, 3 disk drives, 1.3 and 2.4 ROMS, books and some software, $800.00. Ring Keith (02) 557 1591.

A2091 Hard disk controller 2Mb 50Mb HD $350.00 ono. AUSGEN (GENLOCK) $140.00 ono. A2000 Keyboard brand new $90.00 ono. Miracle Keyboard Piano Teaching System $450.00 ono. 5 1/4 disk drive as new with 200 disks $200.00. Phone (066) 449 648.

A2500, 120 Mb SCSI HDD with A2091A controller, A2630 accelerator - 25 MHz 68030 + 68882, 5 Mb memory, Flicker Fixer, WB 2.1, $1000. Phone Richard on (049) 873 940.

A2500, 40Mb HD, 3Mb RAM, 2FDD, Eizo Multiscan Monitor, external speakers, 2620 accelerator, Vortex Golden Gate 386SX-25 bridgeboard with high density FD, KS1.3 and KS2 on 3-way ROM switcher, WB1.3 and 2.1, AlfaData optical mouse, 2 joysticks, selectable PAL/NTSC mode, Final Writer, Pro Calc II, SAS/Lattice C V5.1. $2000 ono. GAMES: Gunship, Civilisation, Lemmings, Robosport, Ultima VI, Legend, AD&D Limited Edition set, Populous, Powermonger, Spirit of Excalibur, plus others. All original disks and manuals. $15-25 each. Call Andrew (w) (02) 772 8577. (h) (02) 774 2957.

A500, 1Mb, Kickstart 1.3 + 2.04 Switchable, External 3.5 inch Floppy. All Original disks + manuals. RF modulator (for TV), inc Original Games: Railroad Tycoon Carmen San Diego + More. Many cover disks + magazines (UK + Aus) VGC. Reluctant Sale $250. (incl. Postage anywhere in Aus) Sat-Sun only Call Chris on (03) 478 1374.

A590 CD ROM drive for A500 inc. power supply and titles $160, CDTV with Genlock, trackball and heaps of software $300, Amiga Genlock $150, Amiga 500 1Mb with 1084 moniter and action replay cartridge $500. Phone (066) 452 722.

A3000, 2Mb chip, 4Mb FAST RAM, 2.04 ROM installed, 2 Quantum SCSI HD's (1 x 105Mb 1 x 270 Mb), Roctec 3.5 External FDD, NEC CDR-75 CD ROM Drive, NEC QUAD Multispin CD ROM Drive, Archive Viper 250Mb Tape Backup Unit, Matsushima Multisync monitor, Panasonic KX-P1121 Multi-Mode 24 pin printer. Maestro 288FM 28,800 baud modem. BOSS joystick. Several IBM and Amiga CDs and 100's of disks. Over 150Mb's PD-Shareware software. Fully functional and registered Mebbsnet Professional BBS software included. Phone (074) 942 655 b/h. Netmail 3:640/456 Fidonet or internet kevin@nugent.brisnet.org.au.

Amiga 3000 - 25 Mhz 68030, 25 Mhz 68882 6Mb RAM, High Density 1.8Mb Floppy Drive, 52Mb Quantum Hard Drive, All original manuals plus Amiga Vision Authoring software. $1290. Ph. (07) 375 5396.

Amiga 4000/040, 6Mb RAM, 120 Mb HD, Buster upgraded, 1 X DSHD FDD, 1 X DSDDD FDD, 1960 High Res Multiscan colour monitor, Star NX-1000CL colour printer, Golden Image Hand Scanner, GVP SCSI controller card, WB 3.0, Software - Pro Page 4, Digiview 2, DOPUS, Excellence 2, Pro Draw 3, 5 CD's. ALL ORIGINALS IN BOX. All for $4500 Phone/Fax (044) 713 516 or Phone: (044) 724 381.

Amiga CD32, good condition with magazines $200.00. Also CD32 games - The Chaos Engine $20, Microcosm $20, The Lotus Trilogy $15. Amiga 500 with 1 Meg RAM, working condition $75. Phone (087) 232 368.

AMIGA GAMES FOR SALE: Original Games: Ultima VI, Conquest of Camelot, Red Baron World War 1 dogfight action, Hired Guns, Chrono Quest II, Syndicate, Advanced Dungeons and Dragons limited edition collector set no 2083, $30

each or $200 the lot. Contact Peter Ditsch, NT (089) 412 679 after 4pm or (089) 805 841 during working hours.

Amiga Productivity Software. All original. VistaPro v3, $50. Final Writer v2, $90. DirWork 2.1, $50. Superbase Personal 2, $20. Australian Graphic Atlas with extra modules, $50. Megadisks 1-40 & cards, $30. Intro to A1200 vol.2 video $20. Mini-Office 5-in-1, $20. Pen Pal v1.4, $5. Superplan, $15. Supertex Viatel software, $15. Contact v2.0,$25. GPTerm v4.0,$20, Diskmaster, $10. Biblereader bible-on-disk, $20. DUDE dirutil,$5. HPDeskjet printer drivers (3), $10. I.E. AGA icon editor, $5. Amiga Vision Professional v2.04, $70. Deluxe Print 2, $30.

Amiga Software: Original software, both titles perfect cond, Sim City 2000 AGA - 4 weeks old, manuals + box + original disks, needs 4MB RAM and 5 MB HD space. PC Task V3, latest registered version of PC 286 Emulator, 8 weeks old, original disks, original manuals + box. $125 Lot, or, PC TASK 3 $90 & S C 2000 AGA $45. Call Kris (052) 41 1171 (4.30 pm +).

Bernoulli External 90Mb removeable media SCSI drive with two 90Mb disks, SCSI and power cable, $450 ono. Will sell as internal unit for $350 ono. Mark (041) 1121440.

C64/128 Clearance. Original as new. Flexidraw, Home Design and Light pen package $120. Telesys $25. Xetec Jr $55. Modem with RS232 $50. FastLoad Cart $25. SimonBasic Csrt $25. Handic Spreadsheet Cart $30. Bible KJV Complete $65. NIV NT $25. Phone Swan (044) 713 246.

Caddies wanted for CD-ROM drive (08) 346 5665.

Cannon Fodder $32. Diggers & Oscar on 1 CD $12. Phone Dave on (06) 282 4934.

Canon BJ10 Printer + Cut Sheet Feeder $300.00. Syquest 44Mb Removable (int) + 3 cartridges $250.00. (042) 673 861 after 6pm. Ask for Norm.

CD 32 Console includes Diggers and Oscar CD still in box $420. Call Seby (08) 298 3425.

CD 32, Emerald Mines, 5 Lover disks, As new. $350. Communicator with MIDI input $120. Phone Bob 075 303 271.

CDTV + remote control + welcome CD. As new in carton $280. Illustrated works of Shakespeare $30. Psycho Killer $20. Fleetwood Mac - CD graphics $20. 5 CD caddies $40. Trackball controller (infrared) $40. Or the lot $360. Myron (02) 365 2820.

DCTV, display images and anims in 2 million colours using composite output on 1084 monitor or TV. Digitise 24 bit pics in 10 secs using composite input. Includes manual and disks. $290 ono. Mark (041) 1121440.

Final Copy II Rel 2.0 plus 20 Extra fonts Vol 4, original disks and manuals as new, rego transferable to your name, $80 ono. Mark (041) 1121440.

For sale or swap: Amiga CD32 Games. Nick Faldo Golf $25. John Barnes Soccer 410. Wembley Int Soccer $25. Nigel Mansell $25. Gunship 2000 $28. Psycho Killer 415. Phone (047) 825 289

FOR SALE: 5 "Advanced Dungeons and Dragons" titles plus Buck Rogers "Countdown to Dooms-Day" - Space Crusade - Bard's Tale III and PowerMonger. $25 each ono. Ring (07) 264 2873 after 5 pm. For Amiga 500.

FOR SALE: ABSOLUTE BARGAIN. As new condition. CD32 Console + 2 Control Pads + Games. Gunship 2000, Banshee, Ultimate Body Blows, Jet Strike, Universe, Super Stardust, Sub-War, Tower Assault + Alien Breed, Death Mask, Liberation, The Chaos Engine, D Generation, Wild Cup Soccer, Sensible Soccer, + 7 CD32 Demo Discs + Stacks of CD32 magazines and Amiga magazines. THE LOT $1,200. Phone (02) 759 2494 - Greg after 6 pm.

For Sale: Bard's Tale 2 for $15 (Amiga), Lost Treasures of Infocom $45 (Amiga), GIFS Calore CD-ROM $20, and Psycho Killer $20 (IBM and Amiga). Contact: Shane Robertson (043) 992 437.

FOR SALE: C64 Keyboard, 1545 disk drive, 1526 Printer, brand new printer ribbon, computer leads and assorted games. $180 the lot, ONO. Phone 584 2538 after 5pm and ask for Rhonda.

For Sale: C64 software. Printshop, Pocket Writer and over 30 assorted games $60 the lot. Phone Brett - Gold Coast (075) 357 079.

Game - "Soccer Kid". Excellent platform game reviewed in March 1994 ACAR. Sell - $20 Ph. (07) 208 1238.

Harddisk. Seagate 240 Mb SCSI drive, $180 ono. Mark (041) 1121440.

Imagine 3.0, original disks and manual as new, registration transferable to your name, $250 ono. Mark (041) 1121440.

Loyal Amiga owner (A500) age 15 looking for people to write to of any age. Interests include Amiga games, sports and programming in Blitz Basci 2. Brett Radzik. 12 Sorata St, Port Augusta, SA 5700.

NEC 3D Multisync monitor 14" screen. 15khz - 31khz scan rate. Ideal for Amiga 1200 or 4000's. VGA compatible. Neg. $550. Contact Craig Arnoldt (054) 419 769 (bh) or (054) 413 693 (ah).

Opalvision mother board. Includes Opal Paint & Opal Presents. Perfect condition. Original disks & manual supplied. $650. Kevin. Lower Templestowe VIC (03) 850 9422.

SELL or SWAP: Black Crypt $25. Monkey Island 2 $30. Colonel's Bequest $25. Adventure Games Wanted. Phone Marina (043) 343 917.

Software - Shareware and Public Domain. Huge range available for Amiga, C64/128 + IBM and Compatibles - described on Disk Catalogues. Tel. enquiries (08) 346 5665.

Supra Turbo 28 Accelerator for A500 - A2000 Brand New $300 ono. Post Free. Phone 065 451 545

TAD Disks - Home Brewer, Fractal, Icons, Disk Helpers, Logic Games (TAD Tiles), Pix, Jigsaws, Kids Disk, Flight. All profits to charity. Send $6 per disk plus $2 (postage) to: Amiga Disks, Technical Aid to Disabled, 67 Launceston Street, Lyons, ACT 2606 or send SSAE for more details. Phone enquiries (06) 285 4040.

WANTD: The CDTV title NASA - The Heroic Age of Spaceflight. Please call (02) 399 5869 and ask for William.

WANTED URGENTLY: The Accountant by KFS Software. Will buy or swap with other software. For Amiga 500 KS 2.0. or similar software. (047) 826 818.

Wanted: All Turrican games for all Amigas. On floppy disk or CDTV. Especially wanted Turrican 3 on CD32 or floppy also wanted, MPEG module for CD32. Will pay well PH: (02) 651 3409.

WANTED: Amiga 1200 (AGA) Software. If you have games/utilities under $20.00 each let me know. Also interested in magazines/books that contain A1200 information. Ring (06) 255 2369 after 6 pm please.

WANTED: Amiga art for upcoming book. Please send in your art and as much detail as possible on how it was done. Please send art on blank disk and as many images as you like. Send to Renaye Jolly, 6 Dixon Street, Prahran VIC 3181.

WANTED: CD-ROMS to suit A570, CDTV prefer Encyclopedia, Utilities, Games. In that order. Phone Wayne on 069 254 954 (ah).

WANTED: Games, utilities and publications (including magazines) for the A1200 (AGA only). Also, if anyone has "Pinball" games, especially "Pinball Illusions" please ring, nothing expensive please. Phone Carlos (after 6:00 pm) (06) 255 2369.

WANTED: Original or Copy of ICD's ADRAM 540 memtest and File disk. Contact: Cliff Hickman (049) 469 611.

WANTED: Phasar 4.0 Home Accounting, Phone Mike (07) 264 3264.

WANTED: Pixmate manual (will photocopy). Our manual was lost in a school fire 2 years ago and the expert has since left. Art Dept. PO Box 345 Belmont High School Belmont NSW 2280.

WANTED: Players manual, (Frontier Elite play book) have original game disk (manual lost while moving house) ask for David on (08) 386 0061. After 4pm.

WANTED: Red Storm Rising and 688 Attack Sub for the Amiga 500. Call John (02) 521 7636 after 5pm weekdays. No pirate software considered.

WANTED: Service manuals for CBM 1084S-D monitor, A500, A/B2000 and A570 equipment. Circuit diagrams for 1084S-D and A570 only also required. Phone William (02) 642 8263.

WANTED: Superscript for the C128. Phone Bill on (042) 297 556.

Ads appearing for the second month

"Arthur's Teacher Trouble". $20 inc p.p. Contact Andrew Mearns. Ph: 063 412 286

5.25 Blank floppy disks. Perfect for storing PD on or backing up the hardrive. C64 owners can also use them. $1 each, 3 for $2 or all 60 for $30. Ask for Travis. Ph: 053 810 194

A2000, 40Mb HD and SCSI controller, OS 2.0 Mb chip RAM, mouse, manuals, joystick, etc. Will swap for A1200 peripherals or sell complete or separate. Any offers please ring Paul on (065) 513551 anytime after 4pm.

A2000, 50Mb HD Quantum, 2Mb RAM, 2 floppies, 2.04 ROM & books, Phillips Stereo Monitor and Epson 9 pin printer - $850.00 ONO. Ph: John: 06 231 9966

A600 40 Mb HD (new) $120.00 Phillips colour monitor model 8801 $160.00 memory exp (A600) 1 Mb with clock $75.00. All in mint condition. Phone 049 814 656.

Action Replay III cartridge, hardly used and working fine. Manual included $120 ono. Also have a A500 - TV connector, as new. Sell for $60 ono. Ring, I'll bring my prices down! Carlos 06 266 6221 (9AM - 4PM).

AMIGA 1200 - Blizzard 68030/4-MHz, 40MHz FPU, 10 Meg RAM Internal 3 1/2" 210meg Hard Disk, 1084s Monitor, Manuals, Books and Disks... Craig - 08 391 3021, after 6.00pm $2250 THE LOT O.N.O.

Amiga 1200 + GVP SCSI/RAM board, 40HD, 6Mb RAM, extra disk drive. Gravis joystick, clock, MS mouse, no monitor. Software: Wordworth 2, Morph Plus, Liberation, Flashback, F1GP etc. $1200. Phone 02 665 0772 AH. 02 646 5999 BH.

Amiga 2000 with IBM sidecar 3 x 3.5 drives 1 x 5.25 1084Sstereo monitor 2 joysticks TV modulator ROCGEN Genlock Omni Boot Selector Citizen 200GX color printer with 2 ribbons 200 disks and 50 mags. $2200 ono. Ph 03 744 4165

Amiga 2000HD, 100MBbHD 4Mb RAM, Mono Sound Digitizer, 030 Accelerator, 1084 colour monitor, 3.5" disk drive, mouse, keyboard, joystick, IBM compatible XT/AT slots, All manuals and cables. Phone (063) 724 635 and ask for Wayne. If not available ask for Jenny or Kevin.

Amiga 500, 1 meg, WB 1.3, 1084S Monitor, original manuals and some programs. All in excellent condition. No longer needed. Sell the lot for $500.00 ono. Phone (057) 22 1871, ask for Matthew.

Amiga 500, 1Mb chip/ 4Mb fast, GVP Hdd 52 Mb. W.bench 2.1, VXL30 25MHz accelerator. Software incl. Imagine, Image Fx, D.Paint 4, WP & games. 1084S monitor. 24 pin Panasonic printer $1400 o.n.o Ph: Stephen: 09 328 5210.

Amiga 600 includes: 1Mb chip RAM, ROM v.1.3, 3.5 floppy drive, mouse, power supply, joystick, Audio tapes to teach you how to use the Amiga, and the following disks - Workbench v.1.3, Kindwords v.2 word processor, WWF Wrestlemania, double dragon and many other new release games and programs. Good upgrade from a C64. $229 lot. Ask for Travis. Ph: 053 810 194

Amiga 600HD, 2 Mb RAM 40 Mb HD, 1084S Stereo Monitor, Multikickboard with KS 1.3 & 2.05, Workbench 2.1 joystick, mouse, all manuals $650.00. Phone (046) 262 630 ask for Michael.

AMIGA DOS INSIDE & OUT (WB 1.3) - be an expert in no time. $20 ea or $30 for both.

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◗ You may know about BASE jumping. The acronym stands for Bridge, Antenna, Span, Earth and it describes the things certain loonies climb and illegally jump off, arresting their descent with parachutes or pavements, depending on reflexes and chute-packing ability. If skydiving just isn't exciting enough for you, you can get that extra thrill engendered by the high probability that you'll turn into a giant pavement pizza.

Let's face it, it's a sport crying out to be turned into a game, and Rasputin, the people behind the rather successful Jetstrike, have done exactly that.

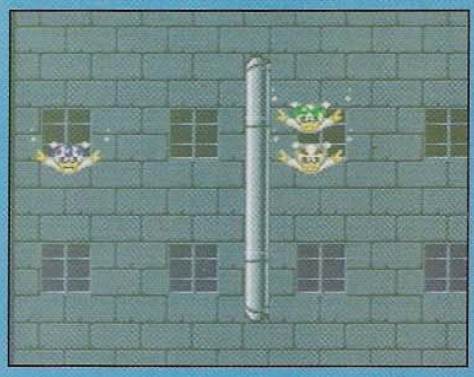
This is a game of the old school. It comes on one floppy disk. It works on ECS machines and looks no better on AGA ones. There's no fancy introduction, no thick manual, no Life Changing Gameplay Experience. It's simple and fun, and up to four humans can play at once.

You play a little Basejumper, who first has to climb to the top of whatever it is he wants to jump off. This section's a traditional platform game, in which you bounce your little guy around various scenery, dealing with various bad guys and sharp things and collecting various bonuses. All of the bonuses take the form of three letter words - if you kill a bad guy by jumping on him he'll produce a letter, and you can get letters and whole words from other places. Some of the bonuses let you into subgames, of which there are allegedly 11; they give you Basejumped takes on snowboarding, Breakout, jousting, Space Invaders, Frogger, Pacman and more.

There's no copy protection of any sort on Basejumpers; it's just one DOS disk. You can easily install it to your hard drive by manually copying all the files and, for neatness, killing off the superfluous devs, libs, c, l and s directories. It ain't elegant, but it works.

Basejumper's graphics would have been state of the art in 1990 and they're still fine today. The sound's basic but useful enough, and the gameplay's easy to get into at first but gets rather challenging rather quickly. Add to this the fact that up to four people can play with joysticks or keyboard (four joysticks if you've got a serial port stick adaptor, and even both sides of single CD32 gamepads if you've got 'em), and you get a darn good game that anyone can get into in five seconds but you can waste quite a lot of your life on nonetheless. A most pleasurable blast from the past.

❑



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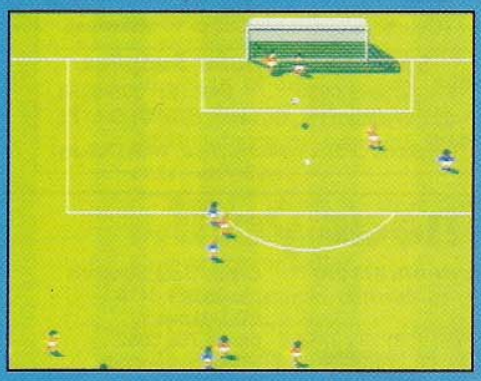

Sensible World of Soccer

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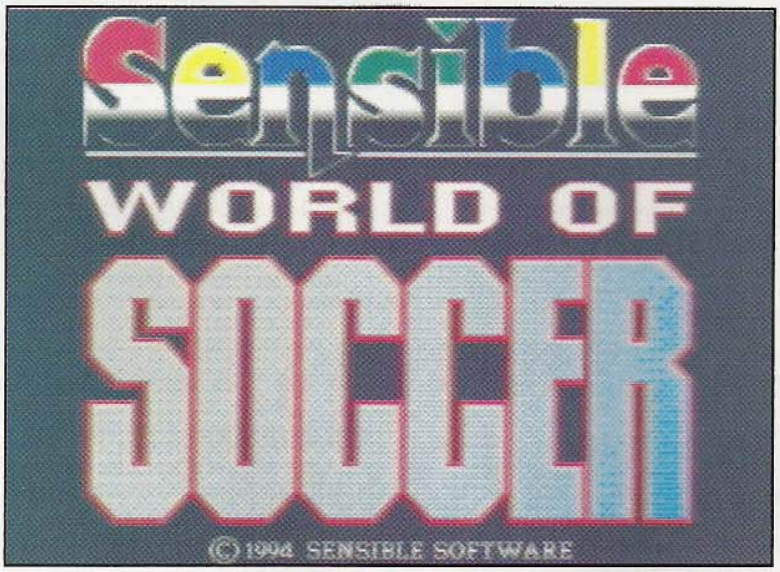


The latest batch of new games for review included two new soccer games, so here's the comparison.

Sensible World of Soccer

Sensible World of Soccer comes from the makers of the enormously popular Sensible Soccer, and adds comprehensive managerial features and every world team worth bothering with - along with quite a few not worth bothering with. in the latter division is Cameroon, whom I selected to oppose my Brazilian boys.

After a few lickety-split games (everything moves rather faster than it does in real soccer - get used to it!) I managed to battle Cameroon to a nil-all draw, my best result so far, but even my frankly lousy skill level didn't conceal the fact that this is a class act. The players are tiny, but that lets you see more of the smooth-scrolling, full-screen pitch. The graphics are only ECS, but there's not a lot you can do with weeny little players and it's perfectly serviceable - and, of course, ECS graphics mean you can play the game on almost any Amiga - all you need is 1Mb of RAM. The controls work with any ordinary one button joystick, yet let you control your players and their kicks very well. A tap on the button passes to any player in the general direction you're facing, and you can affect the ball's trajectory by holding the button with the ball in the air and moving the stick.

Sensible World of Soccer has about 1500 teams with a total of more than 35,000 players - and some sad puppy has apparently made sure they all have the right statistics, right down to skin and hair colours. Every player's graded and you can buy players to beef up your team; there's a big difference between an AC Milan wunderkind and a bald bruiser from Bromley who costs a fiftieth as much. You can even tweak your formation so your star players are in the right places to make their presence felt.

Your players can also be injured - the first injury just reduces their abilities, the second one can put them off the field for one to four weeks, or even the rest of the season. This gives greater encouragement for those dastardly tackles from behind; knock out his star striker in the first minute and see what that does to the odds!

For the wannabee-managers, you can not only buy and sell players. If you despair of ever turning your mob of hand-balling

layabouts into a useful team you can jump ship to a whole different club, if you can find one that'll have you. You get money for winning contests, gate takings and advertising deals.

The only notable bug in Sensible Soccer pops up if you've had some suspensions or injuries and you can't get a full team onto the field. If you decide to play a match and got to the team selector screen, you're stuck. Not enough players, no way back to the main menu, reboot when ready. Aside from that, the game's apparently spotless. The only other annoying thing about the game is that it's not hard disk installable.

Sensible's graphics are plain but dead smooth and very clear, with a few enhancements on AGA machines. The sound's average, with the usual crowd effects. And the control system's easy to learn but hard to master, with lots and lots and lots of moves accessible with a plain old one button joystick. Overall, an absolutely spiffing game experience.

FIFA International Soccer

This one's from the much-advertised EA Sports range, but, in a nutshell, forget it. Compared with Sensible's effort it's toast. The display is isometric with big players, so you can't see as much of the pitch. The game doesn't work on a 1200 unless you turn off AGA in the boot menu. It's very slow on a 68000, and about real life speed on 020, though the scrolling is a bit jerky.

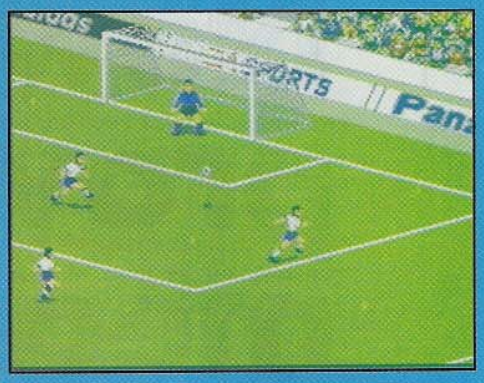
You regularly boot the ball right off the visible screen and have to wait for the screen to scroll before you can see it, or (the flipside) find yourself controlling a player you can't see and who certainly ISN'T the closest man to the ball.

It's hard disk installable, and you'd better do it or swap disks a billion times.

FIFA's control system is best described as squidgy, though it's complex enough that if you don't have a two button joystick you'll have to reach for the keyboard. The graphics look nice in a screenshot but are confusing in real life (have you an urge to play soccer with scrums?). The sound is no better than Sensible's.

EA Sports' American heritage shows in the full soccer rules included in the manual; Sensible Software can't comprehend the idea of anyone not knowing how the game's played. But who cares? Buy the rulebook, and Sensible World of Soccer.

❑



FIFA International Soccer

Contact: Amadeus
Ph: (02) 652 2712
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New research proves darker means faster

By Daniel Rutter

Confirming the suspicions of computer makers and users down the years (largely unvoiced for fear of public ridicule), a new study has confirmed that colour is a powerful factor in computer performance.

One of the most closely guarded secrets of high performance computer manufacturers is that a simple change in the colour of a computer's case, from the regulation beige to jet black, has a significant impact on the performance results. Both ordinary instruction per second and floating point results show a boost from 7 to 16 per cent, with graphics performance following suit.

This is not news to anyone involved with high-powered machines. Think about it. If you've ever been in a room full of fast workstations, how many of them are beige? The NeXT might not have been very popular, but it was certainly fast, and what colour was it? Matte black. What colour's the monster machine that sends this magazine's pages to the imagesetter? Black, naturally. What's the favourite case colour for laptop manufacturers always trying to squeeze the last ounce of performance out of their miniaturised creations? Black. What colour was the Sinclair ZX81? Black. Well, three out of four ain't bad.

New study

Dr. Amanda Butts, from the Nimbin-based Centre for Applied Pharmaceutical Research, recently released a research paper on the subject. In controlled tests where 30 computers ran benchmarks for one week, 10 with beige cases, 10 with black cases and 10 with no cases at all, the black computers consistently beat the beige ones and the caseless machines' results oscillated around the beige machines' scores.

"Modern computing," said Dr. Butts, "has long since passed the point where individual bits of storage or operations per second of processor speed make any difference. In the olden days, when a fast processor did 500 operations per second and a kilobyte was a lot of RAM, case colour was an undetectably small factor in computer performance. The fact that older computers were often built in open plan racks, homebuilt cases or other peculiar enclosures contributed to the paucity of real data on case colour effects - in the absence of a case, a user with a black T-shirt on could have had some effect but probably not enough to measure.

"Let's face it, there just wasn't enough to work with.

"But these days hard drives run to hundreds of megabytes, procesors do scores of millions of instructions per second and eight or more megabytes of RAM is common."

The most logical explanation for the DCC (Dark Case Colouring) effect relates to the well-accepted effects of computrons, the elementary quanta of information. Molecules in a solid object move more rapidly when heated, and, eventually, the object melts. The melting is caused by the loss of computrons, driven off by the heat; without the computrons and their information on atomic matrix location, the atoms don't "know" where they're meant to be. This is why computers need fans, and big computers need air-conditioned

rooms; if they were allowed to get too hot they'd lose computrons and stop working (they'd never actually melt, though; once the computrons start to boil off, the computer shuts down). The use of computron beams for cooling, or the imposition of order on chaotic systems is still in the experimental stage.

Interestingly, it appears that the benefits of DCC are largely directed at Complex Instruction Set Computing (CISC) hardware - processors like the Intel 80x86 series and the Motorola 680x0. Reduced Instruction Set Computing (RISC) chips like the Digital Equipment Corporation Alphas used in Silicon Graphics workstations benefit more from pastel shades, particularly mauve. It could be that processor complexity is directly linked to the spectral position of the ideal case colour; the RISC chips' comparatively simple architecture puts them at the top (violet) end of the visible spectrum, whereas the CISC chips' greater detail pushes them right off the top of the visible range into the ultraviolet and beyond - which, of course, appears to the naked eye to be black.

Spectrograph analysis of the radiated energy from black CISC computers will of course prove or disprove this hypothesis, but it raises some other important questions - can UV radiation be implicated in the reported incidents of dangerous radiation emissions for computers, and could a UV-emissive coating applied to a standard beige or other coloured case provide the accelerative properties of a black case to users of other machines?

It's also interesting that the complexity-modulated DCC hypothesis appears to hold even in the case of mechanical equipment - for example automobiles. Compared with even a RISC CPU, a car is a very simple system - larger and more varied, but with a simpler schematic, even if you take into account the low-powered processors in modern engine management systems. This means the ideal colour for a car would have to be lower in the spectrum than the ideal colour for a computer - probably quite a bit lower, right down at the red end. And we all know red cars go faster!

What you can do

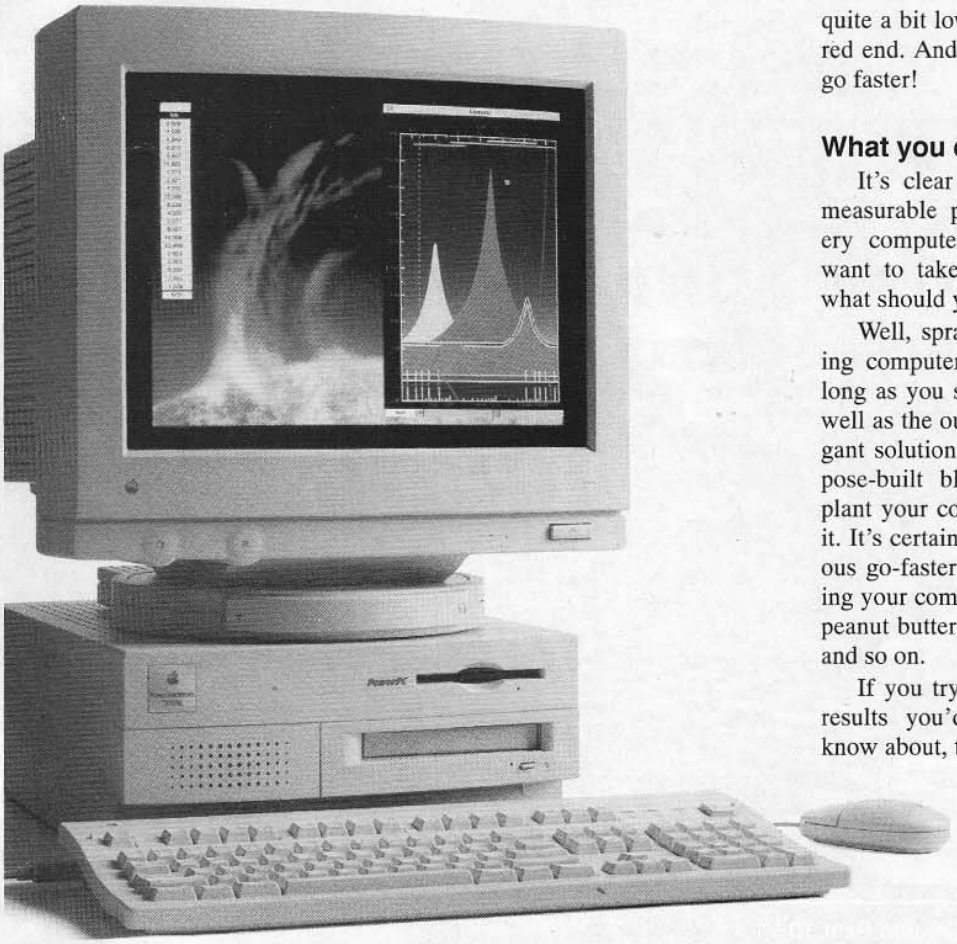
It's clear that DCC is a real, measurable phenomenon, and every computer user will naturally want to take advantage of it. So what should you do?

Well, spraypainting your existing computer's case will help, as long as you spray on the inside as well as the outside, but a more elegant solution is to purchase a purpose-built black case and transplant your computer's innards into it. It's certainly simpler than previous go-faster schemes - refrigerating your computer room, spreading peanut butter on your motherboard and so on.

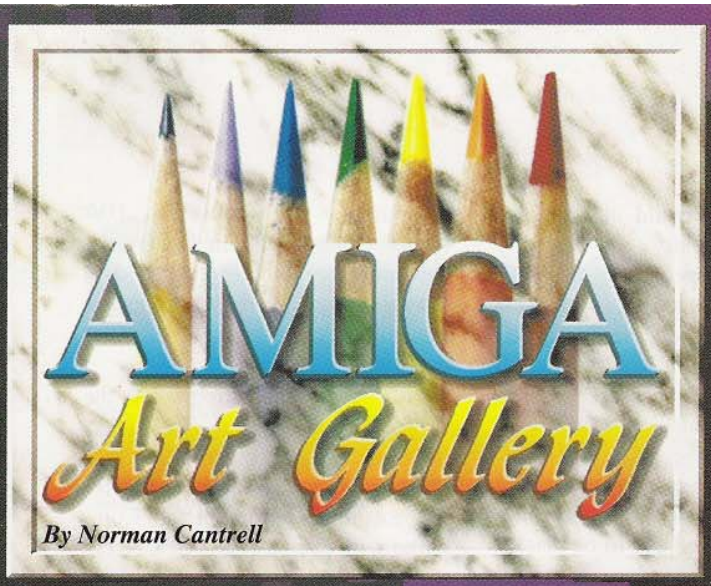
If you try this out and get any results you'd like the world to know about, tell us!

We await with bated beath some real-world tests of the theory.

❑

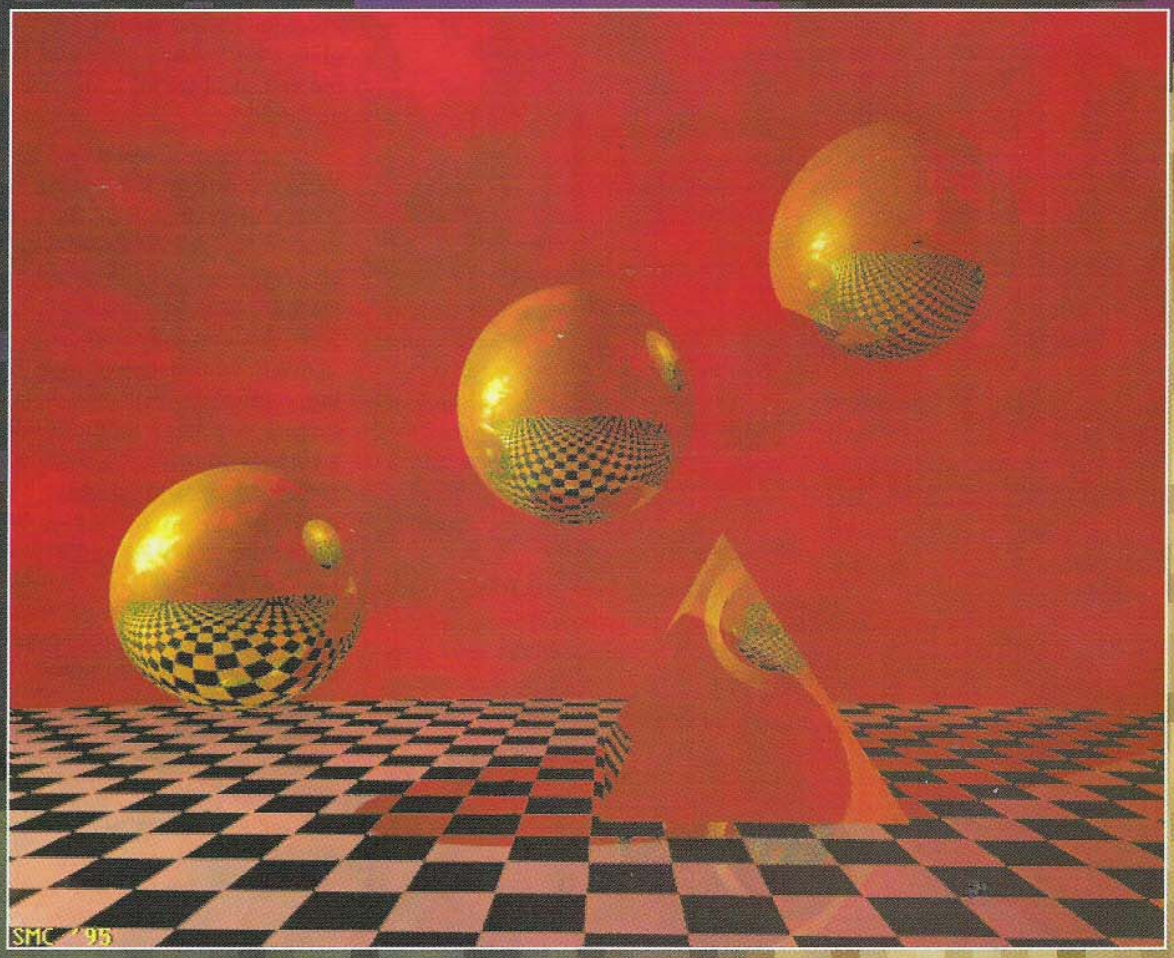


Why are Apple's PowerPC machines still not taken seriously by the workstation cognoscenti? They're not black!



Welcome to April's Art Gallery. More great Amiga Art on display this month, so check it out! If you have art to contribute, why not shoot us a disk - or modem the file to our new number on :- (02) 879 4236.

Please include your name, tel no and how you created the image, in a text file.



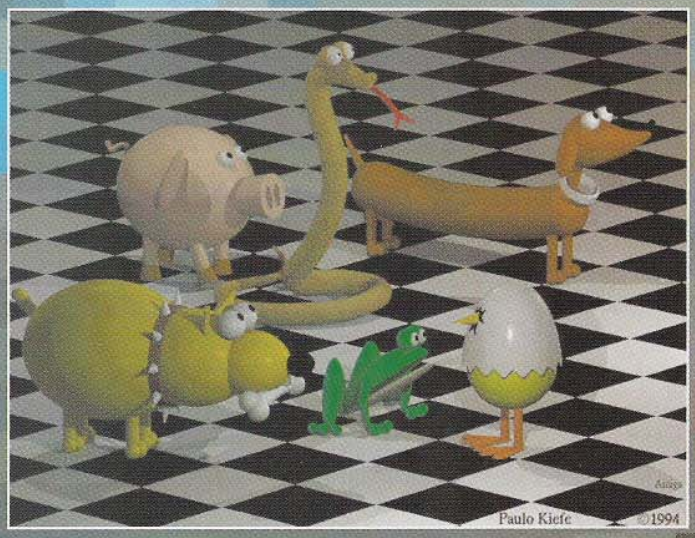
640 x 512, 24bit, Created Real 3D V1.4.
By Sandra Caldwell. ;-)

640 x 512, 24bit, Created with Imagine 3.
By Paul Rance.

640 x 512, 24bit, Created with Imagine 3.
By Paul Rance.

736 x 476, 24bit, Created with Opal Paint.
By J Andrews.

800 x 600, 24bit, Ray traced.
By Fred Schulenburg.

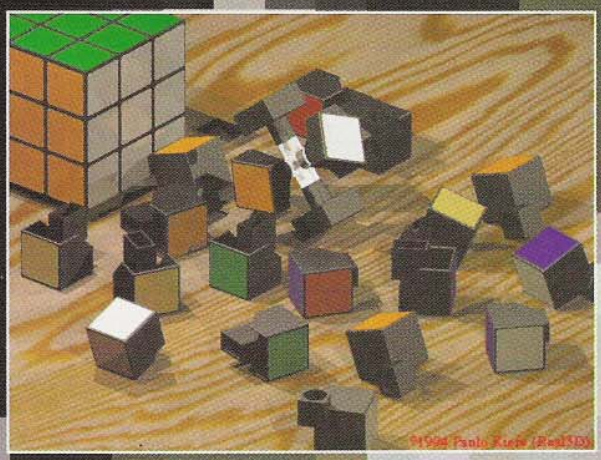


800 x 600, 24bit, Created with Real 3D V2.
By Paulo Kiefe.

800 x 600, 24bit, Created with Real 3D V2.
By Paulo Kiefe.

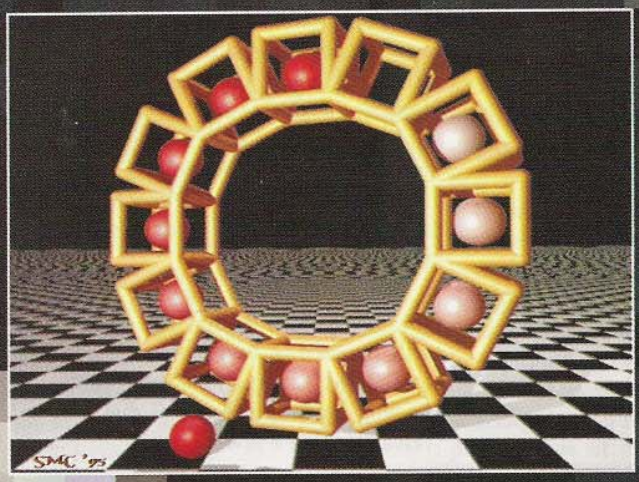
640 x 512, 24bit, Created with Imagine 2.9.
By Paul Rance.

640 x 512, 24bit, Created with Imagine 3.
By Andrew Nunn.



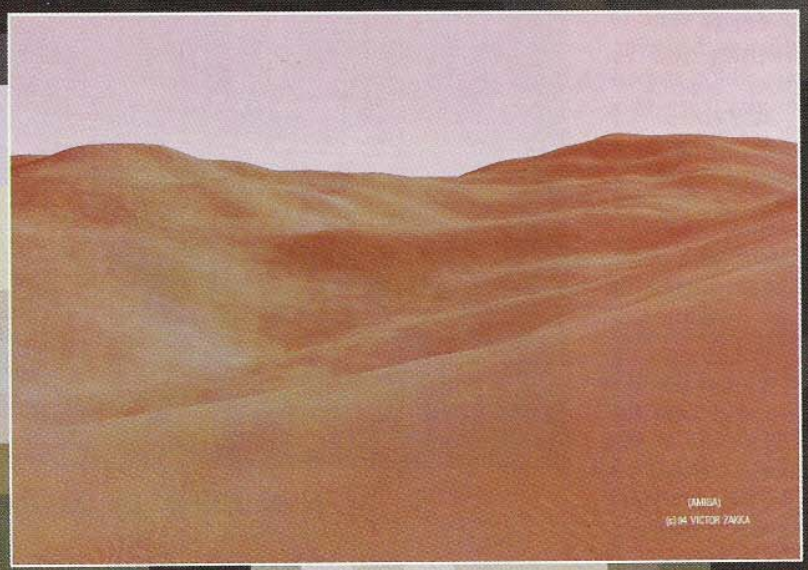
800 x 600, 24bit, Created with Real 3D V2.
By Paulo Kiefe.

640 x 512, 24bit, Created with Imagine 3.
By Paul Rance.



640 x 512, 24bit, Created with Real 3D 1.4.
By Sandra Caldwell.

640 x 512, 24bit, Created with Real 3D 1.4.
By Sandra Caldwell.



1504 x 768, 24bit, Created Scenery Animator.
By Victor Zakka.

COLUMN

Demo Scene

By Rowan Crawford

There have been numerous significant demo releases in the last month, not the least of which is the final arrival of RAW issue 7. Issue 10 of Upstream was also released, along with an interesting little item - TextDemo 5.7.

RAW and Upstream are both demo scene disk magazines. If you're interested in demos, these magazines can be very entertaining reading.

RAW currently leads the diskmag charts, mainly due to its slick design and hard edged writing style, but in terms of article content Upstream 10 is the definite winner. Upstream's only drawback is in the aesthetics department, but it's the articles that count. Both mags also contain a pair of high quality mods which play in the background.

Diskmags are always late, but in RAW's case it has been close to ridiculous. Future issues, however, will see a new main editor, so perhaps they will one day keep to a release date... we'll see.

On the subject of disk magazines, a new diskmag on the scene is the rather interesting "Defy 1". Interesting? It's actually a diskmagazine devoted to the Australian demo scene, released by those productive lads at Cydonia.

The interesting thing is that it's actually quite good. Although the OZ scene is pretty small at the moment, this does mean that almost everyone knows everyone else, which makes this diskmag a good read to any OZ sceners. It's not all roses, however. The (single) font is displayed consistently in white on black, which does weird things to the eyeball when reading for long periods of time. The articles are all good reading, if not terribly well written, and a little more design in the article layouts would go down well.

But it's only issue 1, and already shows a lot of promise. The next issue is slated for a release in about two months time; something to look out for.

Amiga Doom comes closer

TextDemo 5.7 is the latest version of the Wolf "engine", but with this latest release it has taken a big step into the world of Doom.

Although the Doom routine at the end of Bomb's TP94 demo, Motion, was the first to have steps in a Doom clone for the Amiga, TextDemo 5.7 is the first to do it in style. There's still no multiple height ceilings - or even ceiling textures at all - but it now supports multi height floors (stairs) along with multiple floor textures.

The effect is great, and although it's not quite Doom yet, TextDemo is getting damn close. It does need some hefty horsepower to move around at a decent frame rate though, but there are 8 window sizes and 4 pixel sizes to choose from, so even a standard A1200 isn't left behind.

On a 50MHz 030 with some fast RAM, TextDemo's very playable on a large screen with 1x1 pixels - a feat which was considered impossible just a year ago - and the engine is still far from finished. It even contains features Doom doesn't, such as moving light sources and dithered wall textures. TextDemo works on both ECS (WB2+) and AGA machines, though it obviously looks rather better on the latter.

But what about a game? Well, the good news is that the engine will be used in two games, Shade (a DOOM clone) and Mystik Tank (a tank blast-up). Shade is due for release in just a few months.

"Rewarding" by Destop

"AH.Self.D" by RA

General demo releases have been quiet lately, which is not surprising with so many demo competitions just past or just about to happen. Last month I covered the major Party 94 demos, and here's a couple more notable releases.

NINJA by Melon Dezign

Melon are known for their ritual deviation from anything "standard", and this effort certainly continues the trend. Produced by the Melon members working at Funcom (a large console development company in Europe which uses mainly people from the demo scene), this "demo" is really more of an animation. The story is simple, as is the cartoony art style, but the design and music syncing can't be faulted.

TOOTHBRUSH 3 by Dream Dealers

Music video demos are becoming very popular lately, possibly because they are so easy to throw together. The results can often be brilliant, but can also be very poor. Toothbrush 3 fits somewhere in between; it's by no means a Prey (Polka Brothers) beater, but it's interesting enough to save it from being throw-away material. Toothbrush 3's a bit simple, though; take some digitised sequences of someone brushing his teeth, add a techno soundtrack with plenty of brush samples, and, well, that's it really. Funny for one viewing.

Winning Pictures

The graphics competition at The Party 94 had more than 150 entries, including pictures by some of the scene's leading artists.

First place was taken by Peachy, with a picture entitled, "Helge Schneider" (picture shown in last month's column). Peachy hit the scene in a big way in late 1992 with his "Sheryl Lee" picture in TRSI's Wicked Sensation demo.

Close inspection of the picture shows a lack of real refinement, but considering that it's the result of just 5 hours work, no one can really complain (least of all Peachy, who won an embarrassing amount of money).

RA managed second place with what was technically the best picture in the competition. The French art master behind the legendary "Arte" demo (Sanity) is arguably the best artist on the scene, even if his style is something you either love or hate.

His picture, entitled "AH.Self D", is of a large bird on a swirly background. The creation is near perfect, but lacks the big impact you need to win a graphics competition these days (pictures are shown on large wall screens).

"Face Of Nature" by Cougar, the winner of last year's competition, pulled in just 28th position. This is his first fully original picture, and it lacks the real brilliance of his past efforts like "Dragon Sun" and "Sanasmatron". It's good to see that most of the established artists are moving away from copied work and making the big move into producing only original images, even if in the short term it may mean lower quality pictures.

Destop managed just place 51 with an extremely nice picture called, "Rewarding". Destop is best known for his work in the games StarDust and Super StarDust, and this picture of two large faces could easily have placed in the top 10 if the votes reflected graphic quality (which they never do). The same goes for Onyx's picture, "Out of Imagination", which shows some real skill in quality anime drawing. The colours are rich, the design is spot on, and, as the title suggests, it's an original work. A top 10 picture for sure.

Finally, rumour suggests that there might be a demo party held in Melbourne later this year. If true, then this is certainly great news. More information as it becomes available.

❑

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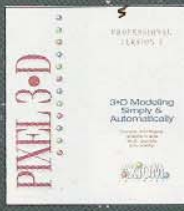

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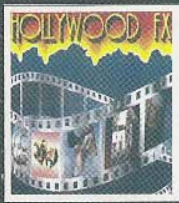

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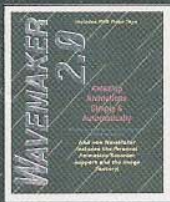

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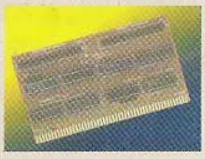

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