Accept no imitations – if you own a CPC the only magazine you need is...

AMSTRAD ACTION

ISSUE No.110
NOVEMBER 1994
£2.95

DON'T MISS IT!

OUTSTANDING SOFTWARE ON THE COVERTAPE

CRAZY CARS 3

TYRE-SQUEALING HARD-DRIVING RACE-WINNING ACTION!

DAILY DIARY

TAKE CONTROL OF YOUR LIFE WITH THIS GREAT ORGANISER

(DISK USERS ONLY – TRANSFER ROUTINE INCLUDED)

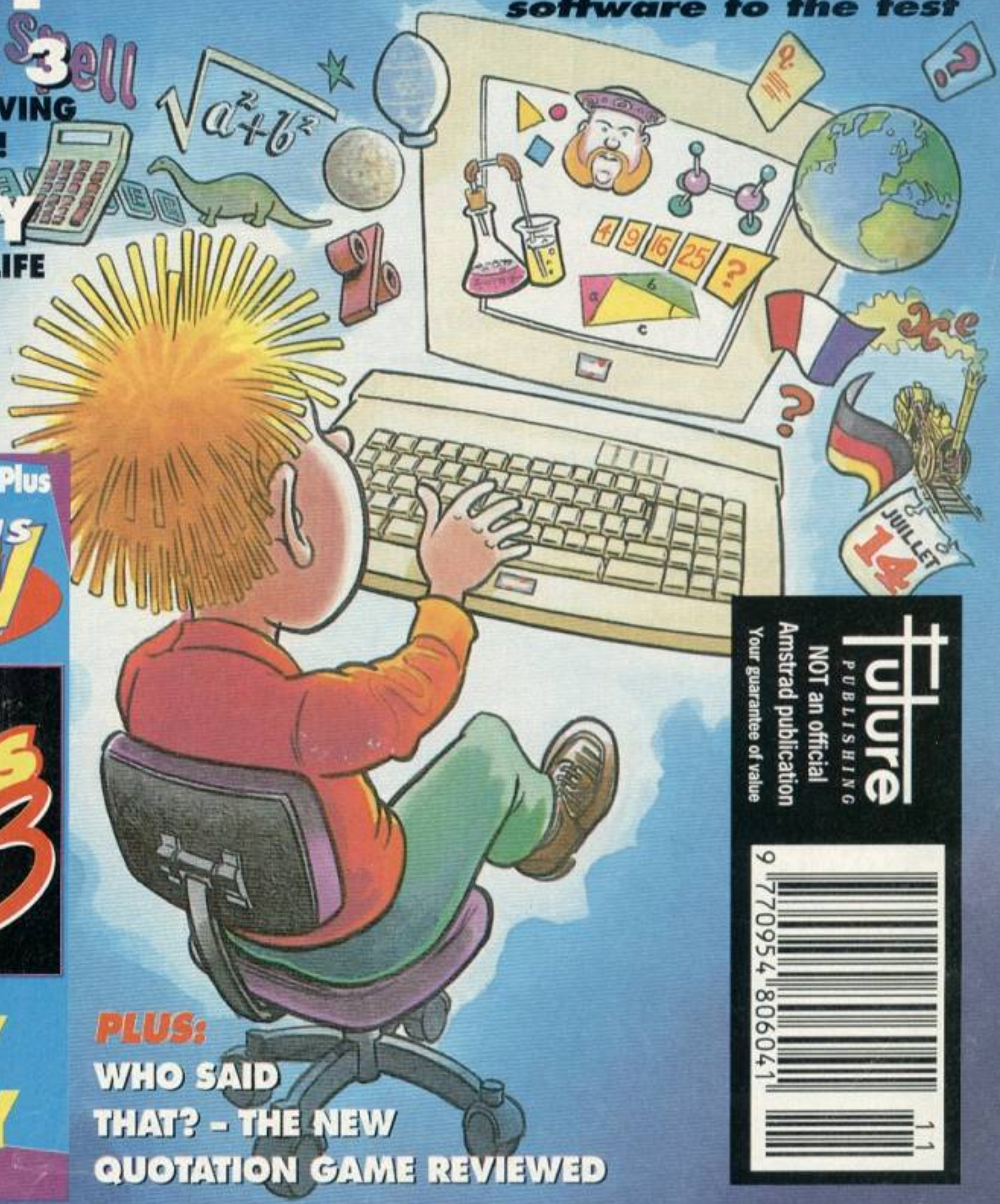
CPC 464, CPC 6128, CPC 464 Plus
NOVEMBER 1994 Serious ACTION



PLUS
DAILY DIARY
DISC USERS ONLY

KNOWLEDGE IS POWER!

We put the top educational software to the test



PLUS:
WHO SAID THAT? – THE NEW QUOTATION GAME REVIEWED

future PUBLISHING
NOT an official Amstrad publication
Your guarantee of value

9 770954 806041 11

AND DON'T MISS: TOP TECHNICAL ADVICE • TONS OF GAME CHEATS • PD REVIEWS

AMSTRAD ACTION

NOVMEBER
ISSUE 110

Line-up

REGULARS

3 Letters
Dave, it seems, looks like some top footballer or other (facially, at least) and we ought to give CPCs away with Cornflakes. Or something. It's a funny old world and no mistake.

4 Amscene
Just what is going on in the Amstrad world these days? Did you know, for instance, that you can talk about CPCs in cyberspace? Well now you do

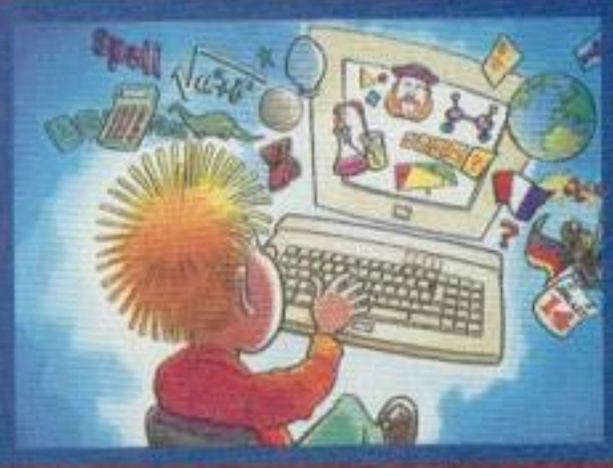
7 Back Issues
They're selling like, er... well, they're selling like back issues of a top computer magazine, actually. Get 'em while they're hot.

16 Reader ads
If there's anything that you want, if there's anything that you need, just read the reader ads and you're sure to find it. You can flog stuff, too.

SERIOUS STUFF

10 Basically Basic
So, you want to know more about BASIC, eh? Think it would be fun to be able to program that little grey box? Well, check out our continuing series of easy-to-follow lessons for beginners and you'll be on your way. This month we take a look into the mysterious world of graphics and find that it's not at all as complicated as you might think.

20 Techy Forum
Old Richard Fairhurst (the man with the nice trousers) can't resist helping people out with technical queries of all shapes and hues. Whether it's trouble with your disc drive or a burning need to access the darkest recesses of your RAM – if there's something technical you need to know, he's the man to ask. And don't forget to compliment him on his fetching trousers.



17 Cover feature: Knowledge is Power
The CPC is a powerful learning tool. We could all benefit from a few extra lessons, but it's our children who can get the most from the machine – if we have the right software. We put some of the major names in the education softeware field to the test to see how much use they really are. What came top of the class? Was anyone forced to sit in the corner in a pointy hat?

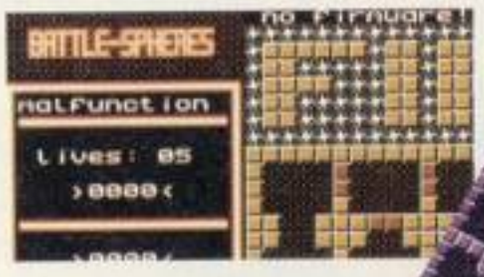
LEISURE ZONE

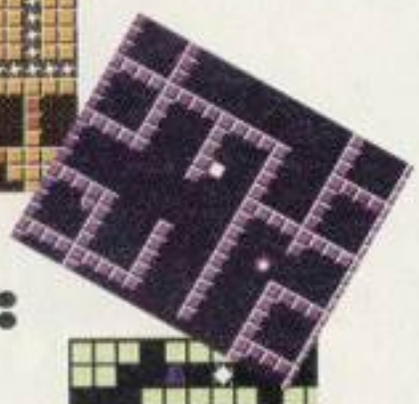
8 Cheat Mode
If you're stuck and you just can't get any further, we'll point you in the right direction. We've got tips and cheats for all sorts this month, including Sim City and Spy vs Spy. Of course there's more, but it's only a short trip to page 8 where you can find out for yourself.

14 Adventures: The Examiner
With a yo-ho-ho and a couple of game reviews, we venture once more into the world of the fantastic and the bizarre with our regular look at the strange folk who inhabit the realms of Middle CPC.

17 Review: Who Said That?
Quiz games just refuse to go out of fashion, and if you fancy yourself as a bit of a quotations expert you might want to have a look at this one. Or rather, you might want to have a look at this review to see if you might want to have a look at this one. Er, we think that's right.

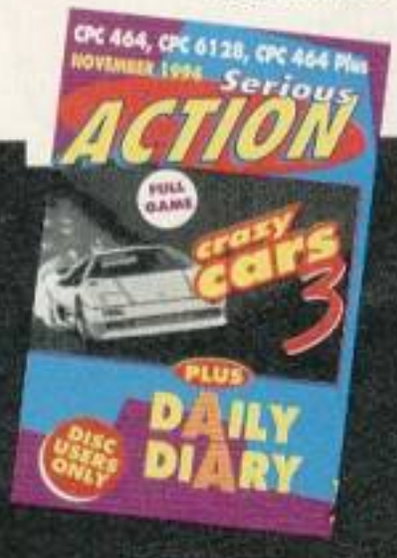






18 Reviews: Public Image
Some people may call you a cheapskate and a freeeloader. We, on the other hand, know that you've discovered the joys of Public Domain software and you don't care what anyone thinks







Check out what's on this month's covertape...

Crazy Cars 3



Tired of living life in the slow lane? Want a bit of racing action? Maybe. But you probably want a bit of strategy and tactics to go with the action, to give it a bit of depth, right? You do? Well that's just fine because that's exactly what you're gonna get in Crazy Cars 3.

Daily Diary

For disc users only, this top program lets you take control of your life by making a note of all those important engagements. Now you'll never turn up for a night at the theatre with the PM when you should be having a spot of supper with HRH.

TURN TO PAGE 5 FOR FULL DETAILS

Reaction

Send your letters to: Reaction, *Amstrad Action*, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW

I am not a number

How about putting some centre page posters in the mag?

Meirion (yes my mother does wish I was born there) Boudier, Penarth.

I think that with the number of pages we have at the moment – or rather don't have – giving over two pages to a poster might seem a bit extravagant. Sorry. **Dave**

Bigger Breakfast

You could give CPCs away with cornflakes to boost ownership and therefore your readership.

Kathy Worth, Ambergate

You'll be suggesting we stick one on the cover next to the covertape next (I wish I hadn't said that). **Dave**

Fat footballers

I must say, Dave Golder does show a slight resemblance to ex-Arsenal, now Everton player, Anders Limpar.

Bence Gomoni, Cambridge

From the neck up, maybe. But about the only sportsman I look like physique wise is Jocky Wilson. **Dave**

Sweet harmony

I own an Amstrad CPC6128, GX4000, Amiga 1200, Sinclair Spectrum +3, CD32 and three C64s. I buy Amstrad Action and Commodre Format every month and Amiga Format as often as I can, and I also used to read Your Sinclair before it closed down. And I have never read such ignorant, arrogant opinions as the ones expressed by the person who wrote the letter titled Mad, Bad And Not Somebody You Would Like To Know in AA108. Why can't computer owners live in harmony. I try to use all my computers as often as possible and I strongly disapprove of people who slag off other people's computers. I can ignore a few ignorant individuals, but when you start doing it, it makes me wonder if I want to buy the magazine anymore. You may think printing a picture of an Amiga and printing the caption KNOW YOUR ENEMY – No 3 is funny but I would rather read a magazine that is unbiased that shows me how I can put my CPC to better use alongside other machines. Slagging off other machines amounts to computer racism.

Mr Indecipherable Signature, Farnham

Yeah, and we'd all like to buy the world a coke and stand all hand in hand. Yeah, sure, we should all love each other and get along. AA's quite prepared to offer all 8-bit owners an olive branch. We're not sure they'll have much use for olive branches, that's all. And anyway, we have been promoting inter-computer harmony – what do you call our comms feature we ran in issue 105? **Dave**

Developing nicely

What's happened to Lethal Moves?

David Ellery, no address, but we know he's 17

It's still in development. Rob Buckley at Radical hasn't given up on it or anything. It's just proving to take a bit longer to write than he expected. **Dave**

Hypocrites

How come you lot at AA always say you hate Dizzy games because they're all just about the same and then you go and put Fantasy World Dizzy on the covertape?

Lee Clary, Rotherham.

We are a democratic magazine and we bend to public opinion, that's why. And it seems to have been a popular move. We even had a couple of letters from newly converted Dizzy-ites thanks to our covertape – oh God, what have we done? **Dave**

Convert

I thought *Dizzy* games were really naff, but then I discovered *Fantasy World Dizzy*. Thank you for putting it on the covertape – you're amazingly wonderful, stupendously br... but how do I get by that Bull thing?

A person on the verge of cracking up

Proof! We have corrupted the nation. Sorry, but you'll have to stay on the verge till next month when we print the full solution. Hang on in there. **Dave**

Happy shopper

If any AA readers want to know a good place for CPC games, try Toys'R'Us. They're selling games like RoboCop, Midnight Resistance and other classic at the crazy price of £1.96!

Stephen Rich, Harpenden

"Well, that's a lot of use – I live in Perth/Bangor/Outer Mongolia/ Perpetual Torment," you might be thinking. But most major chains will order stuff for you, so go to your local Toys'R'Us (what a ridiculous name, by the way – I just had to get that off my chest) and ask 'em if they can send some games your way – they've obviously still got some stock hanging around somewhere. **Dave**

A pea, or not a pea?

Just a few points:

1 What happened to Hairy?

2 I think Nebulous is a cross between a lettuce and a pig that lost two legs in a tragic road accident.

3 What happened to Help? It wasn't in issue 108.

Peter Gomori, Cambridge (that sounds familiar – Ed).

1 What hasn't happened to Hairy? Actually, he's been locked in a room until he finishes producing all those disc masters for the covertapes for the last few months.

Hopefully they should be finished by the time you read this. Sincerest apologies for the long wait.

2 Actually, genealogical research has proved that Nebulus is, in fact, a mutant hybrid of a packet of frozen peas and a GMTV presenter who became involved in a bizarre gardening accident.

3 Sorry about that. But unfortunately Lee had a bit of an accident himself which meant that he couldn't type. So issue 108s Cheat Mode was cobbled together from bits and pieces that were lying about already done – and unfortunately, Help wasn't one of them. If you want to send Lee any chocolates, by the way, send them via the AA office... we can't guarantee they'll get any further, though.

Dave

Re-zined

This regards David Crookes review of Impact 3 in AA108. It didn't tell the readers any of the good points, like:

1 PD on the second side.

2 It's user friendly. Impact 5 will be even more so. It gibes you the option to change pen and paper colours while reading text.

3 The graphics are better than you say. You didn't mention the rather nice 3D writing on the intro screen. Regarding the non-CPC articles, some people think Impact is "brill" and the "funniest read available". The shortcomings that Dave listed were just his opinion. I like exclamation marks! It's makes everything more friendly!

Tom Dean, Impact, 53 High Lane, Burslem, S-O-T, Staffs, ST6 7DF.

Exclamation marks are freindly? Er, I suppose that's why they're used in comics at the and of sound effects! Oh yeah, and at the end of sarcastic statements when the writer's not sure the readers will realise he's being sarcastic. **Dave**

Sorry to butt in, but I'm not a fan of exclamation marks either. And to think I let them talk me into putting one on the cover... **Tim**

Amscene

PREPARE TO ENTER CYBERSPACE...



A badly cut out picture of Tim, yesterday.

It's a slightly shorter issue than usual this month, so there's not so much room for news. That nice Dave bloke has finally escaped the dusty gloom of the AA office and has gone off to another mag – Ultimate Future Games – so that dreadful bloke Tim Norris has been editing AA for a bit. We asked him to say a few words, but he just scowled and told us to get on with our work.

But he did share a snippet of information from his recent trip into cyberspace and some interesting news from Campursoft...

Xmas offers...

We know Christmas is still a long way off, but you might like to know that those lovely people at Campursoft will be offering a 10% discount to all AA readers for 30 days from 1 December. So if you've been looking for the perfect present for a CPC-owning chum, it might be a good idea to give the Campursoft chaps a call and see if they ca sort you out – for 10% less than usual.

CPCs in Cyberspace...

Every time you open your newspaper or switch on your TV set, you're bound to hear something about 'The Information SuperHighway', 'Cyberspace', 'The Internet' and a lot of other arcane mumbo-jumbo. It's all about the comms revolution and being able to link up with computers all round the world. And every time you read it and see it you think, 'That's not something I could ever get into.' And do you know what? You'd be absolutely wrong.

You'd think that if you want to surf the Internet you'd probably better off with a whizzy PC or a Mac or something flashy like that, but it can be done with a CPC.

You'll need a modem and some comms software and you'll have to take a good look at the feature we'll be running in a future issue of AA to tell you all about it, but it can be done. How dio we know? Because we've met people who do it.

There's a commercial bulletin board-type system called CiX (Compulink Information eXchange) which, stated simply, is a place where people with computers can log in for a chat about this and that. One of the conferences there is about, wait for it, the Amstrad CPC.

So, dust off your modems, save up for your phone bill and wait for the AA guide to comms, cyberspace and everything. Coming soon.

AMSTRAD ACTION

Issue 109, October 1994
Future Publishing Limited, 30 Monmouth Street, Bath, BA1 2BW
Tel: 0225 442244
Fax: 0225 446019

Editor Tim Norris
Art Editor Rob Pengilley
Contributors Simon Forrester, Richard Fairhurst, Debby Howard, Lee Rouane, Angela Cook, Dave Golder

Cover Mike Roberts

Ad Sales Executive Robert Bennett
Publisher Jim Douglas
Group publisher Greg Ingham

Production Clair Booth
Lino and Scanning Simon Chittenden, Jon Moore, Chris Stocker, Simon Windsor, Jason Titley, Mark Gover, Brian Hook
Ad Design Cherry Coad ☎ 0225 442244
Circulation Manager Jon Bickley, ☎ 0225 442244

CONTACTING AMSTRAD ACTION
Amstrad Action can only take reader calls on Wednesdays and Thursdays on 0225 442244. At all other times you will get an answerphone telling you pretty much what it says here, so save your phone bill, okay. Please note also that this is not a technical helpline! There is no-one in the office who can help you with technical queries. Sorry. Please write to Techy Forum instead.

© Future Publishing Ltd 1994 *Amstrad Action* is an independent publication. The company producing it – Future Publishing Ltd – has no connection with Amstrad plc. We cannot guarantee to return material submitted to us, nor can we enter into personal correspondence. We take great care to ensure that what we publish is accurate, but cannot be liable for any mistakes or misprints. No part of this publication may be reproduced in any form without our explicit written permission.

Printed in the UK

Future PUBLISHING

'Your guarantee of value'

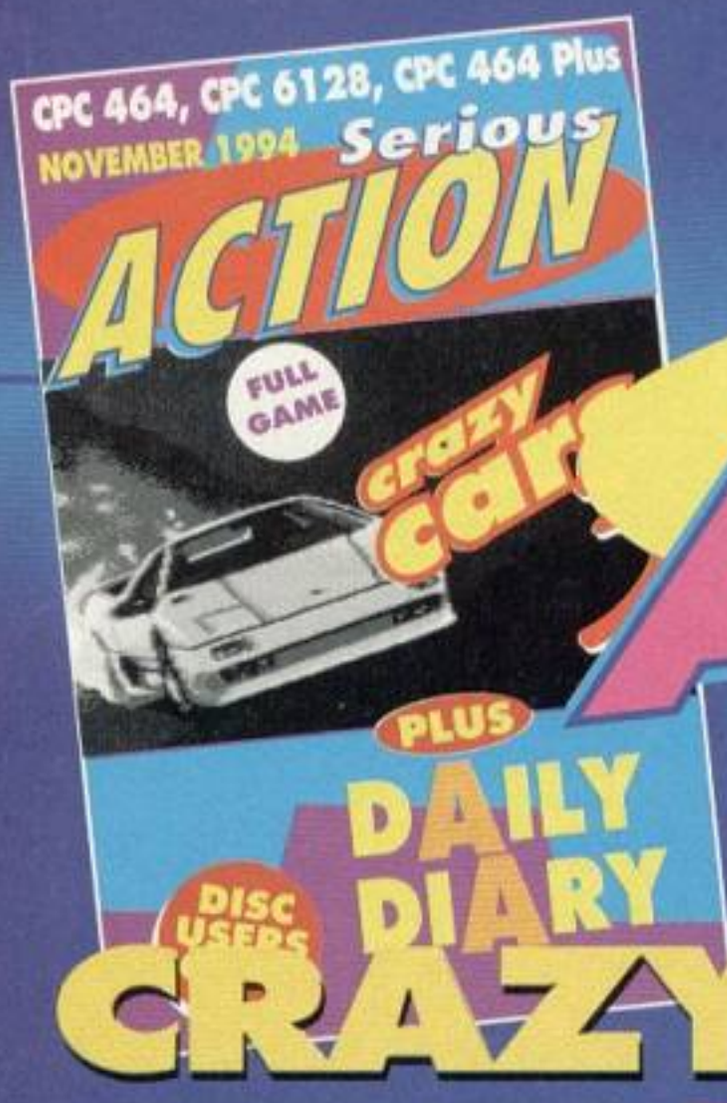
Home of Britain's finest magazines.

Commodore Format • PCW Plus • PC Gamer • PC Plus • PC Answers • PC Format • Amiga Format • ST Format • Sega Power • TOTAL! • Amiga Power • Amiga Shopper • Super Play • Games Master • Mac Format • Edge • Future Music • .Net • Ultimate Future Games... and also Classic CD • Mountain Biking UK • Cycling Plus • Needlecraft • Cross-Stitch Collection • Caravan Plus • Simply Crafts.

Amstrad Action recognises all copyrights contained in this issue. Where possible we have acknowledged the copyright holder. Please feel free to contact us if we have failed to credit your copyright – we will be happy to correct any oversight.

AA111 on sale: Thursday 17th November

ABC 15,168
Member of the Audit Bureau of Circulation Jul '93 - Jan '94



Serious ACTION

CRAZY CARS 3

It's that covertape time again. So make yourself a nice big pot of coffee, and settle down for the ride of your life...

If you've got one of the Plus machines and you have to use that wretched *Burnin' Rubber* cartridge to make the machine work, you'll be sick to death of it by now. Still, we bet you play it once in a while when you fancy some racing action. Well now you've got another option: *Crazy Cars 3*.



White knuckle racing action.

There's an illegal street racing club, and you're the newest member. Of course you have to start at the very bottom and work your way up, but with some skillful driving and a good deal of luck, you can work your way to the top of the heap. And with a heap full of people like 'Tricky Frankie' and 'Ferocious Felicia' the top's the only place to be.

But there's more to it than just charging around, overtaking your opponents and dodging the cops – there's some strategy in here, too.



You make money by winning races and by making a few bets on the side. You'll need money to enter the races, but what's the rest for? For buying things, of course (silly).

Use your skill, judgement and vast wad of cash to buy yourself extra tyres, a radar detector, a turbo charger... there's stuff aplenty for even the most customising-crazy racer.

Watch the other cars (and the scenery) and try not to hit anything. Hitting things causes damage. Damage needs to be repaired. Repairs cost money. And the more money you've got tied up in repairing your car, the less you've got to spend on all the other things. Tricky, isn't it?

(To add to the trickiness, there are police speed traps – and hefty fines)

Amstrad Action Daily Diary

You're now the proud owner of Amstrad Action Daily Diary, a program that can act as both a daily journal or a daily planner. Each month is stored as a separate file on the disk. This program runs from disk only – it will run from tape, but it won't be very nice.

The program itself is very simple to use, as it has only a few options (the rest is automatic). The options are displayed in the menu bar at the bottom of the screen, the key to select each option highlighted on the word itself ('L' to load). The options are all very simple.

Code
Allows you to set the code word used to encrypt a file on saving and decrypt it on loading. You can enter a four letter word, so swear words are in. If a file is loaded and the correct decode key is not used, you won't be able to view any entries and must reset the machine. If you're still unsure, don't select this option as you could lose your work by forgetting the key.

Edit
Will let you edit a particular day in the month you've got loaded. On selecting this you'll be asked for a day, which you enter in numerical form (20 being the 20th). You will be presented with the entry for that day on screen and a cursor. There is only a certain amount you can enter for one day, but it should be enough for all practical purposes.

Load
Loads a monthly file. Enter the month as a number, though the files are saved with a letter representing that number (MONTHF.DIA is the sixth month, June).

Save
Saves a monthly file back onto disk. You must save all work before resetting the machine or loading a new monthly file.

View
Is an easy way to look at the entries in that monthly file. You'll be prompted for a date to start viewing at. This entry will then be displayed. You can move back and forth between the entries of that month using the left and right cursor keys, hitting ESC when you've finished to return to the main menu.

Wipe
Will totally erase a daily entry from the record. The entry will not exist after this point. Only use this option if you want to erase a daily entry.

That's it. Instructions for transferring the package to disk are on the tape, as are these instructions (though in a different form). To get started, simply run the first file on the tape – all becomes obvious from there.

No more discs...

The world shortage of 3-inch discs has finally caught up with us, I'm afraid, and we can no longer offer our usual tape-to-disc transfer service. Sorry about that. But from now on, we will make sure that there is also a tape-to-disc transfer program on ever covertape.

Loading instructions

To run side one of the tape type RUN" to load Crazy Cars 3. If you type RUN"TRANSFER you'll be able to transfer it to disc.

Side two, Daily Diary, you have to load onto disc so here's what you do: put a data-formatted disc in the drive and RUN"UNPACK. The program will be automatically decrunched and transferred onto disc.

Loading troubles?

We make the greatest efforts to ensure our cover- tapes work properly, but if you've tried all that and your tape's still not loading then pop it in the post (with a note telling us your name, address, type of CPC you use and a description of the problem) to the following address:

Ablex Audio Video Ltd,
Harcourt,
Halesfield 14,
Telford,
Shropshire TF7 4QD.

NB When returning faulty tapes could you please also include a stamped, self-addressed envelope. Thank you.



Amscene Directory

PD Libraries

Basic PD
✉ 3 Beacon Lane, Whipton, Exeter, Devon, EX4 8BD
New cassette only library. 15p per side of C15 tape (95p if you don't provide a tape)

Colrob PD
✉ 9 Aviemore Road, Hemlington, Middlesborough
New tape-only PD library

Demon
✉ 42 Overton Close, Hall Green, Birmingham B28 9NA
3.5-inch discs available.

GD PD
✉ 49 Woodville, Barnstaple, Devon EX31 2HL

Image PD
✉ Darren Dodds, 15 Elmwood Drive, Ponteland, Newcastle-Upon-Tyne NE20 9QQ
Also provides a digitising service.

PD Fun
✉ Folly Farm, Cold Ashton, Chippenham, Wilts, SN14 8JR
A policy of 'no serious software'.

PD Point
✉ 10 Frimly Close, Blackburn, Lancs, BB2 3TU
☎ 0254 580901

Fanzines

Amszine
✉ Gayton, Lanesside Road, New Mills, Via Stockport, SK12 4LU
☎ 0663 744863

The Eliminator
✉ 14 Station Road, Riccall, York, North Yorkshire YO4 6QJ

CPC Undercover
✉ 37 Trimingham Drive, Brandlesholme, Bury, Lancashire
A technically-minded fanzine that's also on the look out for writers.

User Groups

UAUG (United Amstrad User Group)
☎ 0329 234291
An AA-recommended user group.

WACCI
☎ 0602 725108
They're fab. Give 'em a ring.

Independent Software Companies

Campursoft
☎ 041 554 4735
You name it, they do it, really.

Crystal X Software
✉ 11 Vicarage View, Redditch, Worcs, B97 4RF
Stellar Outpost is now £2.99 on tape and £4.99 on disc.Please sned an SAE.

DMP Software
✉ 89 Wolverhampton Road, Codsall, Wolverhampton WV8 1PL

New Age Software
☎ 01049-711-4201920
Responsible for *Zap'T'Balls*, the excellent *Soundtrakker*, and, hopefully, a (hopefully) few more titles pretty soon.

SD Microsystems
☎ 0760 720381
Specialists in just about every kind of business and applications software.

Sentinel Software
☎ 081 876 7032
Suppliers of selected STS titles and a few original products.

Siren Software
☎ 061 724 7572

Hardware

Datel ☎ 0782 744707
The place to go for mice, printers, memory expansions, all that sort of stuff.

Microform Fax: 0772 703131
Drives, upgrades, disks, all sort of stuff.

WAVE ☎ 0229 829109
Suppliers of loadsa good stuff.

Software suppliers

OJ Software ☎ 0257 421915
Fast friendly service, the ad says. And it's right. An impressively wide variety of software on offer.

Software Cavern
☎ 0628 891101
Probably the largest selection of CPC software for sale in the known universe.

STS
✉ 298 Holton Road, Top Floor, Barry, South Wales CF6 6HW
They're back – and selling *SoftLok* at £14.99.

Tronics North
☎ 010 6177 253 766
✉ PO Box 7419, Garbutt, Queensland Australia, 4814.
The largest supplier of software and CPC bits'n'pieces in the southern hemisphere.

Mail Order

Trading Post ☎ 0952 462135
They're offering loads of cut-price cartridges at the moment.

Trojan ☎ 0554 777993
Great for cartridge and lightgun stuff.

Wizard Games ☎ 0723 376586
Games on every imaginable format.

Upgrades and repairs

HEC
✉ 47-49 Railway Road, Leigh, Lancashire WN7 4AA.
☎ 0942 261866
They've been around for ages, guarantee a fast turn-around, and must be a much better bet than Avatar. Give 'em a go.



BACK ISSUES

4 ISSUES FOR THE PRICE OF 3

Don't miss out on this amazing money-saving special offer! The more you buy the more you save!

Check out these crazy prices...

1 back issue £2.50
2 back issues £4.50
3 back issues £6.50
4 back issues £7.50

All extra issues.....add £1.50 for each









AA77: Covertape: *Seymour Take One* (mini game), *Firelord*, *Football Forecaster*, Fonts. Inside: The French Connection, GAC tutorial. Reviews: *You're Learning*, *Paperboy 2*.

AA78: SOLD OUT

AA79: SOLD OUT

AA80: Covertape: *Stryker and the Crypts of Trogan* (demo), *Anarchy*, *Croco Magneto*, *GPaint*. Inside: The making of Seymour, buyers' guide to word processors. Reviews: *Titus The Fox*, *Stryker*.

AA81: Covertape: *Forbidden Planet*, *The Addams Family* (demo), *Sprite Designer*. Inside: Fanzines, buyers' guide to DTP.

AA82: SOLD OUT

AA83: SOLD OUT

AA84: *Famous Five on a Treasure Island*, *Notepad*, *Liteprog*. Inside: 3D games. Reviews: *Hideous*, *Brumword ROM*.

AA85: SOLD OUT

AA86: Covertape: *Glider Rider*, animation utilities. Inside: MIDI music. Reviews: *Wild West Seymour*, *Reckless Rufus*.

AA87: Covertape: *Nexor*, *Pakman*, *MPack*, *Pilot* (very simple programming language). Inside: Dizzy, this is your life. Reviews: *Football Manager 3*, *Super Seymour*.

AA88: Covertape: *Tankbusters*, *Penguins*, *JL-Copy* (tape to disk utility). Inside: *Videomaster*, top CPC add-ons. Reviews: *The Shoe People*, *Crystal Kingdom Dizzy*, *Robin Hood*.

AA89: Covertape: *Wriggler*, *MagicDOS*, *Superchars*. Inside: The European demo scene. Reviews: *Zap'T'Balls*, *Crazy Cars 3* and a whole lot more (as they say).

AA90: SOLD OUT

AA91: SOLD OUT

AA92: Covertape: *BooTracker* (music program), *Syntax*, *Balloon Buster*. Inside: Complete guide to data storage. Reviews: *Soundtrakker*, *The Simpsons*.

AA93: Covertape: *Racing Boxform*, *Mystical*, *Who's Afraid Of The Balrog?* Inside: Spreadsheets and databases, setting up a PD library, *Super Cauldron*.

AA94: SOLD OUT

AA95: SOLD OUT

AA96: SOLD OUT

AA97: SOLD OUT

AA98: SOLD OUT

AA99: SOLD OUT

AA100: Covertape: *Elite*. Inside: The Top 100 CPC products ever. Reviews: *Touchdown*, *Page Publisher*.

AA101: Covertape: *Exolon*, *Home Accounts*. Inside: The complete guide to animation on the CPC, interview with Radical Software, *Elite* Masterclass.

AA102: Covertape: *Cybernoid 2*, *Graph Master*, *D•I•Y•F•X*. Inside: make some noise – your CPC's sonic capabilities, The CPC world. Reviewed: *DES* – Desktop Environment System.

AA103: Covertape: *Nebulus*, *Speech*. Inside: copying devices, *Fluff* preview, Elmsoft interview, low-cost printer reviews.

AA104: Covertape: *AA Toolkit*, *Uridium*. Inside: *Fluff* review, the PD scene exposed, sports sim round-up, *Basic Idea*, *Home Teacher* and all the other usual stuff.

AA105: Covertape: *Deliverance*, *Bomber*, *Basic Utilities*. Inside: A complete guide to getting your CPC to communicate with other computers, *Megablasters* preview.

AA106: Covertape: *Zynaps*, *Spriting Back*. Inside: The easy way to animate your graphics, the complete beginners' guide to printers. Reviews: *Making Music*.

AA107: Covertape: *Ikari Warriors*, *Picasso* (art package). Inside: The weirdest and most pointless software and hardware ever released for the CPC. Review: *Masters of Space*.

AA108: Covertape: *Fantasy World Dizzy*, *RoutePlanner* demo (128k only), *Graph Plot*. Inside: *RoutePlanner* reviewed, getting the most out of your Multiface.

AA109: Covertape: *Turbo The Tortoise*, *Crossword Compiler*. Inside: The debt the latest range of computers and consoles owe to the CPC. *Reviews: Star Drivers*, *Black Jack*.

Amstrad Action Back Issues

Name _____

Address _____

_____

Post code _____ Phone No _____

Method of payment (*please tick*)

Access ❑ Visa ❑ Cheque ❑ PO ❑

Credit Card No _____ Expiry date _____

New lower overseas rates:

● Europe £2 ● Rest of the world £4

I would like the following back issues...

_____

Cost of back issues _____ £□□.□□

Please add cost of postage and packaging _____ £□□.□□

Total cost _____ £□□.□□

Please make all cheques payable in pounds sterling to Future Publishing Limited, and send the whole lot off to *Amstrad Action* Back Issues, Future Publishing, FREEPOST, Somerton, Somerset TA11 7BR. No stamp needed within the UK

Cheat mode

Welcome to the cheekiest, chunkiest and chirpiest Cheat Mode around. Get a load of this months goodies courtesy of tipsmaster supremo, Lee Rouane.

BOMBER

Kicking off this month is Gary Ingram from Romsey, Hants with a lovely little snippet for the AA105 covertape game, *Bomber*.

He suggests that you should first press the ESC key and then a block will appear in the top left-hand corner of the screen. Now press the ENTER key and across the top of the screen you should now be able to read the message: CONGRATULATIONS YOU LANDED SAFELY. YOU CAN NOW GO DOWN TO THE PUB.

This automatically puts you on to the next level. You can keep on doing this until you reach the final level, which is a block 20 squares across and 7 squares high. Cheers Gary !

SPY VS SPY

Back with a vengeance is Michelle Tomlinson who seems to send in enough material to write the Cheat Mode column by herself! Sample some of her work now with these excellent tips for two of the *Spy VS Spy* games

Spy vs Spy 2

Find the submarine, (it's usually at the northwest or northeast of the island) and set lots of booby traps around it, cutting the submarine off from the rest of the island.

Player 2 (or the computer player) should now fall into the traps thus draining away their energy and it will force them to drop the missile. When they eventually die, most of the traps will have been deactivated allowing you to get the missile and win the game.

Spy vs Spy 3

Find the detonator and lots of sticks of dynamite. Bury the sticks of dynamite around the entrance to the rocket where the polar bear keeps throwing you out. Make sure that Player 2 will have to cross at least five bombs to reach the rocket.

All you have to do now is to keep pressing the plunger on the detonator while the second player tries to get to the hatch with the briefcase and equipment. If you are lucky, the other player will run out of body heat and die before reaching the hatch, leaving the briefcase and equipment.

You can now cross over the bombs in safety because you can only be blown up by the enemy's bombs. Once over, coliect the briefcase to win the game.

Also, you can cross holes in the ice and slippery patches by using the snow shoes. if you use the pick axe on an icicle you can still use the passage by moving to one side of the icicle and entering the passage. Beware, though, as the icicle trick rarely works when playing against the computer as the computer uses this trick to get past also.

FANTASY WORLD DIZZY

Covertape capers now with an excellent, nay, brilliant cheat written by a handsome cheatster for that old eggy favourite *Fantasy World Dizzy*. Hmmm, I wonder who this cheat bloke is? I bet he's good-looking, sexy, intelligent... (*cut it – Dave*).

```
KAFB  100·'Fantasy·World·Dizzy·Cheat
GACD  110·'Infinite·Lives
GAFM  120·'AA·Tape·108·Version
FAGF  130·'By·Lee·Rouane
AAMN  140·'
IABH  150·DATA·21,30,BF,11,70,01,06,05,CD,1F,BF
IABE  160·DATA·21,14,BF,22,39,02,C3,70,01,3E,00
IAGK  170·DATA·32,63,A0,C3,1C,BF,C3,FB,0D,3E,01
JAPA  180·DATA·CD,6B,BC,D5,CD,77,BC,E1,CD,83,BC
IAPM  190·DATA·CD,7A,BC,C9,64,69,7A,7A,79,BF,11
CANM  200·DATA·LCR
EADF  210·chk=0:x=&BF00
JAJE  220·READ·a$:IF·a$="LCR"·THEN·250·ELSE·230
GAPC  230·a=VAL("&"+a$):POKE·x,a
HAFN  240·x=x+1:chk=chk+a:GOTO·220
HABH  250·IF·chk()&1874·THEN·GOTO·270
DACA  260·CALL·&BF00
KAON  270·PRINT·"Data·Error·Old·Bean·...":END
```

Multiface Poke

`&A063,&00` Infinite lives

The Manic multipoke mania zone

My old mate Ken Wood of Blyth, Northumberland single-handedly manages the multiface poke section this month with a fine bunch of pokes. How about some more, eh Ken? And if anyone else out there wants to boast their poking powers to the world, send your lists of pokes to us here at Cheat Mode, *Amstrad Action*, Future Publishing, 30 Monmouth Street, Bath, Avon (*but for how much longer? – Dave*), BA1 2BW, and overnight fame will be yours. Probably.

GAME	TAPE/DISC	ADDR, POKE	EFFECT
2 Hot 2 Handle Compilation	Tape		
● *Shadow Warriors*		FCDF,00	Infinite credits
● *Golden Axe*		77D8,00	Infinite credits
● *Total Recall*		1BC3,00	Infinite ammo
		22E8,00	Infinite time (Levels 1 & 3)
		13FE,00)	
		2632,C6)	Infinite energy
		3EB6,00)	
		40E7,A7	Infinite lives (Levels 2 & 4)
		43E0,00)	Infinite energy
		5164,00)	
		2055,00)	Infinite energy (level 5)
		3EB6,00)	
		0435,A7	Infinite credits (except level 2)

GAME	TAPE/DISC	ADDR, POKE	EFFECT
Super Cauldron	Disc	0E0E,A7	Infinite lives
		232B,A7	Turns some enemies into frogs
		7F76,A7	Infinite energy
		3FBC,F0	No need to find spells
		3F90,xx	xx = Number of keys
		3F92,xx	xx = Number of books
Blues Brothers (AA98)	Tape	4BA5,00	Infinite lives
Hudson Hawk	Tape	1016,00	Infinite lives
		16F6,00	Infinite energy
Operation Hormuz	Tape	1869,00)	
		540E,00)	Infinite harriers
		53CC,00)	
Gunship	Tape	18EE,00	Infinite ammo (everything!)
Trakers	Disc	58B9,00	Infinite lives

How to use Multiface Pokes

Just in case you don't already know how to put in these BLACK BOX POKES, here are the steps to success.

1 Load the game as normal.
2 Press the RED button on the MULTIFACE.
3 Press "T" for tool.
4 Press "*" to make sure you select the code.
5 Press "H" for HEXADECIMAL input.
6 Press "SPACE" for input.
7 Type in the ADDRESS (4 characters ie. 3A7C)
8 Type in the POKE (2 characters ie. A7)
9 Press "RETURN"
10 If there is more than one poke goto (F)
11 Press "ESC" back to the menu.
12 Press "R" to return to the game.

HAMMERFIST

Ryan Richardson of Gt Tey, Colchester will be amazed to see his name in Cheat Mode after sending in these tips for *Hammerfist* we've had them for over a year. Never mind Ryan, better late then never, and it was nothing personal...

Level 1

In the first room knock out both computers (headbutt) and the three transporters. Destroy the plants with Hammerfist's lasers and then flic-flac (*do what? – Dave*) to the top.

Level 2

Destroy the boxes and tank with the laser. To destroy the object over the doorway shoot upwards so that the laser rebounds onto it.

Level 3

Shoot the canisters before they hit the ground. Headbutt the table to recharge and then shoot the first wall. Rebound lazer bolts off the ship's bottom to destroy the second wall. Shoot the third wall and then to destroy the crab-type thing shoot its claws. Now get as close as possible and shoot its mouth and eye (*and then beware a visit from Greenpeace, because it was an endangered species – Dave*).

Level 4

High flic-flac through the screen using the electric cable to recharge. To kill the ant rebound your laser bolts onto it.

From here on the game is pretty easy, but remember to keep recharging.

CONQUEST

Back yet again is the unstoppable Michelle Tomlinson with some more hints and tips, this time for *Conquest*.

● The spheres are used to open the portcullises contained in the game. Just place the same coloured sphere onto each vase. To get rid of the green monster at the end of conquest there is a red book (where's Michael Aspel then?) which you must read. It's in a green cupboard right next to the monster (you have to have all your stars and you will need to pass one of the portcullises).

● The gold rings enable you to be transported through mirrors and the green book will allow you to get past the bookcases. Also, by using the poker, you can get past the fireplaces.

SANTA'S XMAS CAPER

Robert Hockridge of Chelston, Torquay has been playing *Santa's Xmas Caper* a lot recently (don't you like the summer, Rob?), so much in fact that he has stumbled across a keypress cheat. He informs us that by pressing 1 at any time during play you will be transported to the next level and have a stonking nine lives to boot! Cheers Santa!

STARQUAKE

Starquake fans all sit up and take note now as Ben King (Stand By Me) of Hatton, Lincoln, has provided you all with these juicy teleport codes. Take it away Ben

1 VOREX
2 RALIQ
3 TALIS
4 ASCIO
5 OULON
6 QUORE
7 ANGLE
8 ELIXA
9 KRYZL
10 UPAZZ
11 INOOL
12 OPTIK
13 SNODY
14 ZODIA
15 AMBOR

KARNOV

Andrew Davie from Marton, New Zealand provides us with a handy tip for disc owners of that tricky son of a gun, *Karnov*.

He tells us that if you want to get to the harder levels without going through the earlier ones, load your disc as normal, but as soon as you see a map being drawn eject the disc. Wait until the error message appears and then insert the disc again, press a key and you will have access to the levels on side two of the disc.

SIM CITY

George Dibben from Glenfield, Leicester has come up with a variant on the *Sim City* cheat for disc owners. Follow these steps for loadsa dosh

1 Load *Sim City*
2 Remove *Sim City* disc
3 Insert DATA disc
4 Go to the load city option
5 Remove the disc and select any city to load
6 You should now have 2097160 cents, dollars or whatever you call them.

The month will actually be called airport, but this will soon turn back to normal. To clean up the screen after they go back to normal simply go to the evaluation window. The city name, however, will not go back to normal.

TYPING LISTINGS

If you've never typed in a listing from *AA* before, then reading the following blurb is a REALLY GOOD IDEA. It'll save you no end of hassle.

● Basically, all you need to do is make sure you type in exactly what we print EXCEPT the first four letters in each line.

● The first four letters are a code which work in conjunction with our unique and utterly excellent *TypeChecker* program below.

● Only press RETURN when you get to the end of a command line. If a command line goes on to two lines do not press RETURN at the break in the line. Your lines on screen should break in exactly the same place as they do in the mag.

● The dots you see in some lines (like the one between well and done in `PRINT"Well·done"`) indicate spaces. The dots are there so that you don't have to guess how many spaces to put in when there are more than one.

TypeChecker

This program lets you to check whether you've typed *AA* listings in correctly. Type it in, then SAVE it for future use. When you want to double check that you typed a listing in correctly:

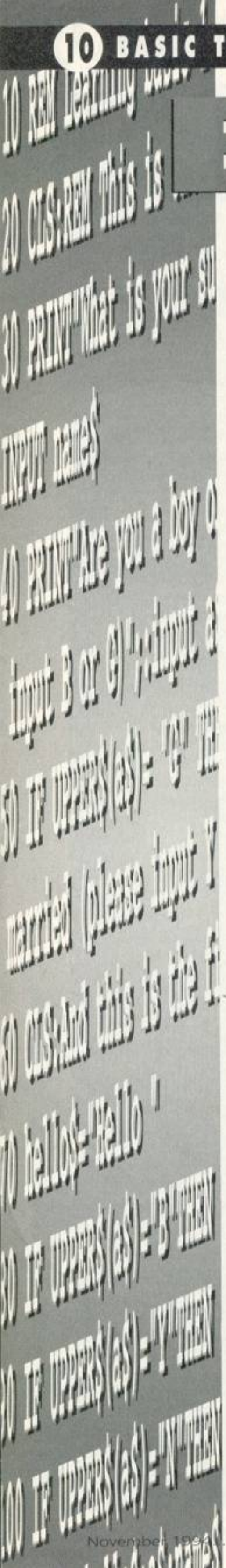
● Load up *TypeChecker*.
● Type NEW.
● Type in the listing of your choice.
● When you've finished type LIST.
● At the end of every line a highlighted code will appear. It should correspond with the code printed in front of the same line in *AA*. If it doesn't you have typed in that line incorrectly.

```
PAML 10·'·TypeChecker·V1.0·-·By·Simon·Forrest
     er·-·Dec·1992
MAOJ 20·'·For·Amstrad·Action·-·Public·Domain
DANK 30·MEMORY·&9FFF
CAJK 40·csum=0
GAME 50·FOR·addr=&A000·TO·&A05B
DAKJ 60·READ·byte$
GAJB 70·byte=VAL("&"+byte$)
FACF 80·POKE·addr,byte
GAFB 90·csum=csum+byte
DALK 100·NEXT·addr
OACI 110·IF·csum()&2ADD·THEN·PRINT·"Checksum·
     Error":END
LAHE 115·POKE·&A001,PEEK·(&BB5B):POKE·&A002,P
     EEK·(&BB5C)
KAHI 120·POKE·&BB5A,&C3:POKE·&BB5B,&3:POKE·&B
     B5C,&A0
MACN 130·PRINT·"TypeChecker·V1.0·Installed":E
     ND
MABC 140·DATA·CF,FE,93,FE,0A,CA,00,A0,F5,C5,D
     5,E5,FE,0D,CA,22
LACJ 150·DATA·A0,5F,16,00,2A,5A,A0,19,22,5A,A
     0,E1,D1,C1,F1,C3
LAFJ 160·DATA·00,A0,3E,20,CD,00,A0,3E,18,CD,0
     0,A0,2A,5A,A0,7C
LADI 170·DATA·CD,45,A0,7D,CD,45,A0,3E,18,CD,0
     0,A0,21,00,00,22
LACN 180·DATA·5A,A0,C3,1B,A0,F5,E6,0F,C6,41,C
     D,00,A0,F1,E6,F0
XAJC 190·DATA·1F,1F,1F,1F,C6,41,CD,00,A0,C9,0
     0,00,END
```

Turning *TypeChecker* off (it is automatically initialised when you RUN the program above) and back on again is quite simple:

```
POKE &BB5B,0      To turn it off
POKE &BB5B,3      To turn it back on again
```

Isn't science amazing? (Now don't argue.)



Basically basic

If you've been following the series, this BASIC stuff should be coming pretty easy to you by now. This month we take a look at some graphics commands and marvel again at what a wonderful computer the CPC is...

What have the following lines got in common? "What's a hunk like you doing in a place like this?", "If I said you had a beautiful body.....?" Yes- this month we are going to have a chat about lines *(They were "Chat Up Lines"- Ed).*

As you are probably aware, the CPC has some of the most powerful graphic commands available on any living 8 bit machine *(Leaves a lot of competition- Ed).* So this month, we thought we might become experts at harnessing some more of these commands for my, er, our game.

```
10 MODE 0
20 PLOT 0,0,1
30  DRAWR  100,0:DRAWR  0,100:DRAWR  -
100,0:DRAWR 0,-100
```

This little program is acting a bit like Terry Wogan at the moment, boring. It's all right producing a square in the bottom left hand corner of the screen, but it's not exactly a party animal. Let's see if a bottle of cider will help- the box that is. Try retyping these lines.

```
20 PLOT
INT(RND*540),INT(RND*300),INT(RND*16)
40 GOTO 10
```

Line 20 is the bottle of cider, it picks a RANDOM point and colour using the RND function, allowing us to draw the square anywhere on the screen. Notice that in Line 30, we have used the DRAWR command, instead of DRAW. DRAWR allows us to draw a line relative from the last point, rather than to a set point.

Still not very useful. Well, here is where it starts to get interesting *(You're not a train-spotter are you Rob?- Angela).* With the DRAWR command we can alter certain other aspects of what we draw. Using variables we can effectively scale the X and Y shapes and create rather excellent looking effects. *(Trainspotters get fired around here, Rob - Ed)*

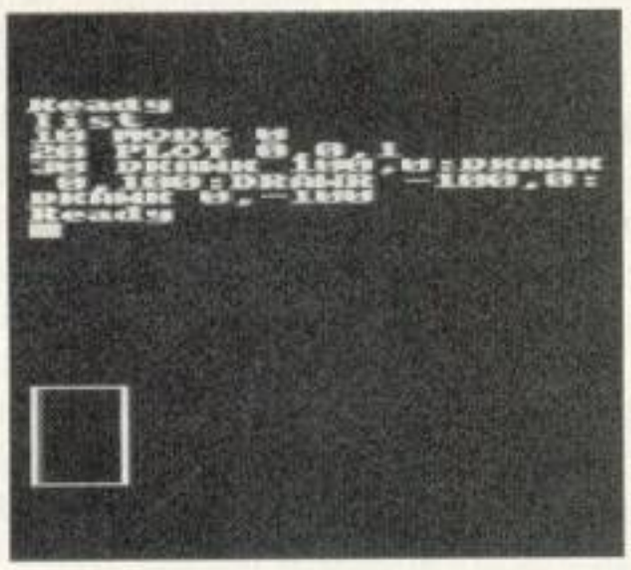
```
10 MODE 0
20 PRINT CHR$(23);CHR$(1);
30 FOR Y=0 TO 20
40 GOSUB 100:CALL &BD19:GOSUB 100
50 NEXT
60 FOR Y=20 TO 0 STEP-1
70 GOSUB 100:CALL &BD19:GOSUB 100
80 NEXT
90 GOTO 30 100 PLOT 200,200:DRAWR
50,Y:DRAWR
100,Y:DRAWR 100,-Y:DRAWR 50,-Y
110 DRAWR -50,-Y:DRAWR -100,-Y:DRAWR
-100,Y:DRAWR -50,Y
120 RETURN
```

Lines 100 and 110 draw the shape onto the screen (But how?- Voice of Reason) (Where did you spring from?- Angela). Well, the GOSUB's in lines 40 and 70 allow us to jump to line 100, without having to GOTO it. Effectively GOSUB is the same as leaving a door open, you can get back through it. With a GOTO you shut the door.

By saying DRAWR 100,Y we are able to draw a line 100 across, and the variable Y up. (This is all fine for manipulating shapes, but what about scaling them up and down?- Reason) Very good point, let's modify our first program to do just that.

```
10 MODE 0
20 PLOT
INT(RND*540(,INT(RND*300),INT(RND*16)
25 S=RND
30 DRAWR 100*S:DRAWR 0,100*S:DRAWR-
100*S,0:DRAWR 0,-100*S
40 GOTO 20
```

The only addition to the program has been the use of a variable, S. S, is essentially a random number between 0 and 1. How we



And here's one we drew earlier.

are actually scaling our square, is by multiplying the original 100 lengths, by a scale. For example. If S had the value of 0.5, when we multiplied it by 100, we would end up with 50, half of what we had before. Using this method we can draw some 3D effects and a shape at absolutely any size we want to (Baron Frankenstein is alive and well, and working on AA).

TOODLEOO

In the next issue we will be having a look arrays, and seeing how pre-stored data can improve the presentation of the game we are trying to fog you off with.

NOT MORE BINARY

One of the major problems with drawing things on screen, is that you destroy what's underneath, exactly as you would repainting our old friend the wall. However there is a rather good train-spotters method of overcoming this problem. It is called XORring.

Make sure you are not in mode one, then type this in;

```
PLOT 0,0,10:DRAWR 200,120
```

A blue line should appear on your screen.

XOR means eXclusive OR. It is to do with binary, but basically means that you can wipe out what you have all ready done. This is because the original line drawn was merged with the background, in a way that allows the image beneath to survive. Redrawing it the same again, just reverses the effect. To be able to use our XOR printing, just add this command at the end of what you are doing:

```
PRINT CHR$(23);CHR$(1);
```

SD MICROSYSTEMS

(DEPT A), PO BOX 24,
ATTLEBOROUGH, NORFOLK.
NR17 1HL (0953) 483750

CPC SOFTWARE:-

Disc only. 64K RAM unless stated.
- ORDER DIRECT FROM THE PUBLISHER!

SUPER LABELLER £12.50
Design and print labels/letterheads on Epson compatibles with a variety of text styles, sizes and Pictures!
Includes FREE CHRISTMAS Clip-Art.

PAGE PUBLISHER £25.00
The ultimate DTP (text & graphics) package for 128K CPCs. 85% AA 100. Ideal for designing letterheads, newsletters, posters and much more.

PICTURE DISCS £12.50
(each). Clip-art Discs 1 and 2 for Page Publisher/Stop Press (state).

GRAPHMASTER £15.00
Displays figures as bars, lines or pie charts etc. Full disc version.

GENERAL LEDGER £30.00
Cash Book-style accounting for the self-employed. Easy to use. (6128).

STOCK ACCOUNTS £40.00
Integrated stock control/invoicing package for small business (6128).

HOME ACCOUNTS..£15.00
Handles Bank accounts, credit cards and savings. Full disc version.

MAILING LIST...£12.50
Address Manager and Label Printer.

DISC-BASE.....£12.50
Creates a master DataBase of all your discs and finds files FAST!

PC/PCW CATALOGUE ALSO AVAILABLE.

CPC SUPPLIES:-

QUALITY DISCS:-
CF2s 3" EACH.....£2.00
BOX OF TEN.....£17.50
Suitable for all CPCs and PCWs.
3.5" DSDD PER 10.....£5.00
Suitable for all 720k drives.
3.5" HD PER 10.....£7.50
Suitable for 1.44 MB PC drives.
5.25" (360k) PER 10.....£5.00

DRIVE CLEANERS:
3", 3.5" or 5.25" all.....£4.00

LOCKABLE BOXES:
40 capacity 3.5" (30x3")..£5.00
80 capacity 3.5" (60x3")..£7.50

PAPER PRODUCTS:
BOX 2000 LISTING SHEETS..£15.00
ADDRESS LABELS PER 100....£2.00

ACCESSORIES:
Printer Cable 464/6128....£7.50
Printer Cable 464/6128+...£5.00
Monitor Copy Holder.....£4.00
Mouse Mat (anti-static)...£2.50
Mouse House (plastic pocket) £2
NEW! WRIST REST.....£4.00

PRINTER RIBBONS:
DMP 2000/3000, PCW 8256/9512,
STAR LC-10 all.....£3.00
STAR LC 24-10, CITIZEN 120D/+
CITIZEN SWIFT, DMP 4000,
EPSON MX/FX/RX 80 all....£4.00
P/P: £1.00 PER ITEM (£2.00 MAX)
SEND CHEQUES/POS OR SAE FOR OUR CPC CATALOGUE (STATE COMPUTER).

3.5" DRIVES

* The ideal 2ND Drive for the CPC 464, 664, 6128 or Plus.
* Slimline 7" x 4" x 1" high.
* Dual modes- AMSDOS (180K per side) or MEGA (800K per disc) - the perfect combination.
* FREE pack of 3.5" discs.
* Complete with connectors, cables, PSU & Side Switch.

PRICES from £79.95

COLOURFUL CHRISTMAS
SEIKOSHA SL96 £200
High performance 24-PIN COLOUR printer. Includes a FREE colour version of SUPER LABELLER.
CITIZEN 120D+ £140
Excellent MONO 9-PIN printer.
Our Printer Packages are all supplied with connecting cable for CPC or Plus (please state).
FOR DELIVERY PLEASE ADD:- DRIVES £5.00, PRINTERS £10.00.

Amstrad Games Cartridges for the 6128+/464+/GX4000

* No Exit
* Navy Seals
* Pro Tennis Tour
* Barbarian II
* Batman The Movie
* Operation Thunderbolt
* Switch Blade
* Klax
* Robocop II
* Pang

All games are unboxed/without instructions at a special price of £9.99
All Ten Games At A Special Offer Price of £74.99

Amstrad 6128+/464+/GX4000

Enforcer Cartridge for the Trojan Phazer Gun	£14.99
Amstrad Burnin' Rubber/ Loco Basic Cartridge	£19.99
Amstrad 6128+/464+ Instruction Manual	£14.99
Amstrad 464+ Computer with Stereo Mono Monitor	£125.00
Amstrad 6128+/464+ keyboard membrane	£12.99
Amstrad Paddle Controllers (6128+/464+/GX4000)	£2.50
Amstrad 6128+ Computer & Mono Stereo Monitor	£160.00
Amstrad CM14 Colour Stereo Monitor	£125.00
Amstrad MM12 Mono Stereo Monitor	£65.00
Amstrad 464+ Computer Console	£65.00
Amstrad 6128+ Computer Console	£85.00

Amstrad 464 and 6128 General

Amstrad LP1 Light Pen and software for the 464	£19.99
Amstrad 464 Light Gun and games cassette (5 Games)	£15.49
Amstrad 6128 Light Gun and games disk (5 Games)	£15.49
Amstrad GT65 Green Screen Monitor	£65.00
Amstrad 464 Cassette Tape Head Alignment Kit	£9.99
Amstrad Cassette Head Tape Head Demagnetizer	£9.99
Amstrad Printer Lead (34 Way Edge Connector to Centronic Plug)	£9.99
Amstrad JY2 Joystick	£9.99
Amstrad 464 "Teach Yourself Basic" Tutorial Guide with 2 Cassettes	
Part 1	£9.99
Part 2	£9.99
Amstrad 464 Circuit Boards complete P/N.Z70375	£34.99
Amstrad 6128 Cassette Leads	£5.99
Amstrad 464 Speech Synthesiser with Stereo Amplifier and 2 speakers	£19.99
Amstrad Action Binders (Holds 12 copies of A.A) Choice Blue or Red	£4.99
Amstrad Action Cheat Mode Book (Cover Issues 17-50)	£4.99
Amstrad FD1 Disk Drive (Limited supply)	£45.00

ALL PRICES INCLUDE POSTAGE, PACKING AND VAT.

TRADING POST

VICTORIA ROAD, SHIFNAL, SHROPSHIRE TF11 8AF
TELEPHONE/FAX (0952) 462135

DISC DRIVES

3.5" Second disc drives for the CPC464/664/6128.

Top quality 'Panasonic' 3.5" drive mechanism, includes Power Supply, Connecting Cable, Full 16 page manual, Ramdos, Ramdisc + many more utilities. Format 800K per disc just like a PC, Amiga, Atari ST etc. The complete PLUG IN & GO solution, Ramdos is not + compatible.

SUPERB LOW PRICE, ONLY
£69.99!!

DISK DRIVE AND ROM DOS XL IN ROM BOX ONLY £89.99

ROMDOS XL

Superb high capacity disc operating system available on ROM or complete in its own ROMBOX! Nothing else compares with these features:

- Built in disc formatter
- Built in file copying/erasing
- Full 19 page printed manual
- Built in Sector/Directory Editor
- Very simple to use.
- Uses no user memory
- Auto detects format
- 464/664/6128 compatible

ROM VERSION ONLY £14.99
Complete IN ROMBOX only £24.99

ALSO AVAILABLE.....

3.5" Discs Only £7.50 for 10. 3" Discs Only £19.99

Single Socket ROMBOX only £14.99

Double Socket ROMBOX £24.99

PC-TRANS, Transfer files from a CPC to a PC and vice versa. Only £24.99

RS232 Serial Interface. Can be used to connect the CPC to another computer, modem, serial printer etc. Ideal for use with Amstrad NC100/200 (connecting cable available priced £9.99). Includes built in Rom software.
NEW LOW PRICE £29.99.

Please add £5.00 postage and packing to all disc drive orders. Other orders please add £1.00. All major credit cards accepted. Immediate despatch for credit card orders.

Siren Software, 178 Bury New Road, Whitefield, Manchester M25 6QF

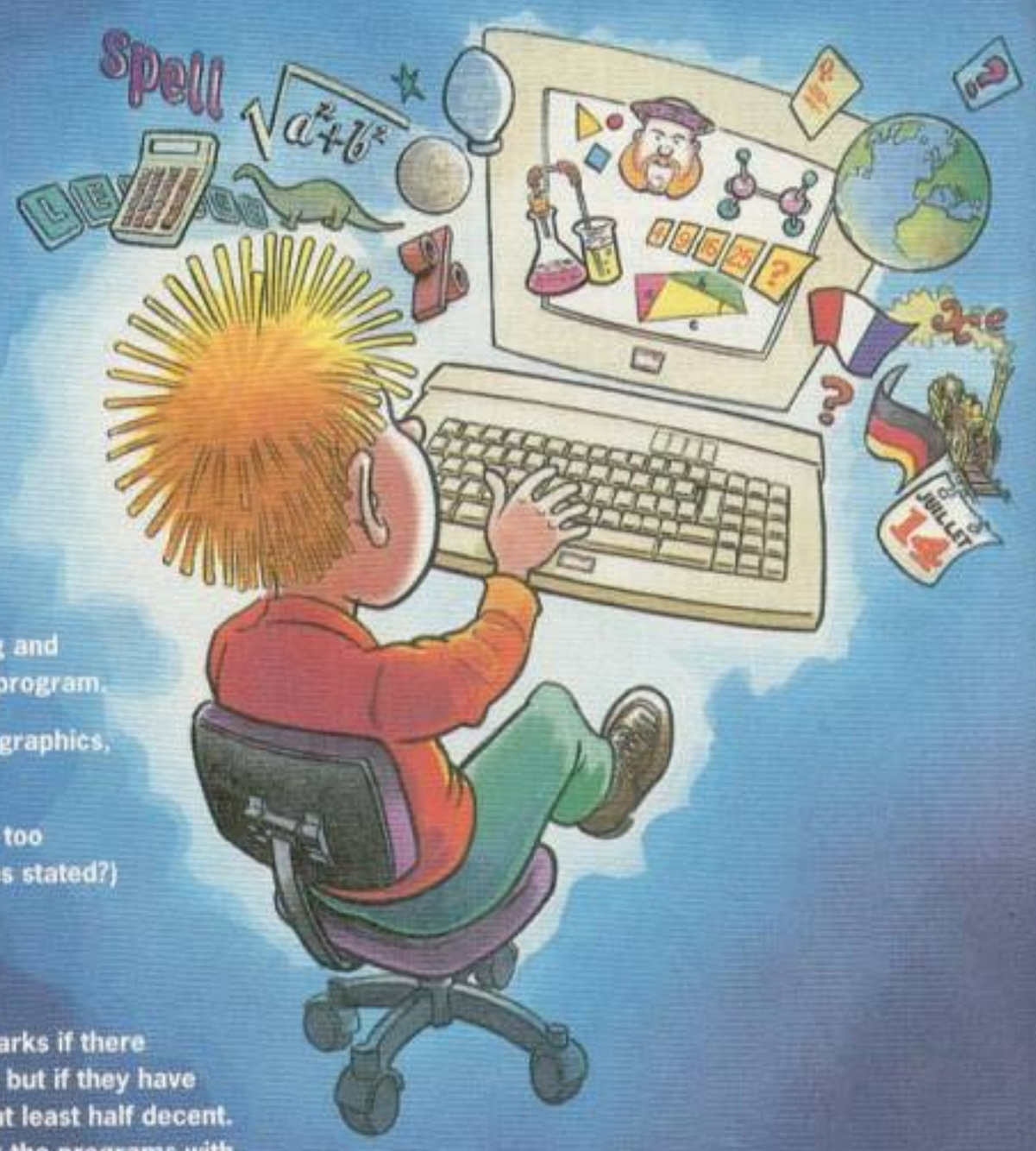
Tel: 061 796 5279

Knowledge is Power

Educational software is very popular with parents who want their children to do well and some children prefer them to platformers and beat-'em-ups anyway. Angela Cook takes a look at some of the best...

Reap the Rewards

Most of the programs reviewed in this article can be won, by answering this simple question : Q) *Name one of Thomas the Tank Engines friends.* Answer on a postcard to the usual address by 30 of NOVEMBER. State whether you can use tape/disc or both.



Scoring

A The teaching, learning and revision ability of the program.

B Fun (is it enjoyable?), graphics, sonics and effects.

C Intelligence level (is it too hard/easy for the ages stated?) and ease of use.

D Overall, the average.

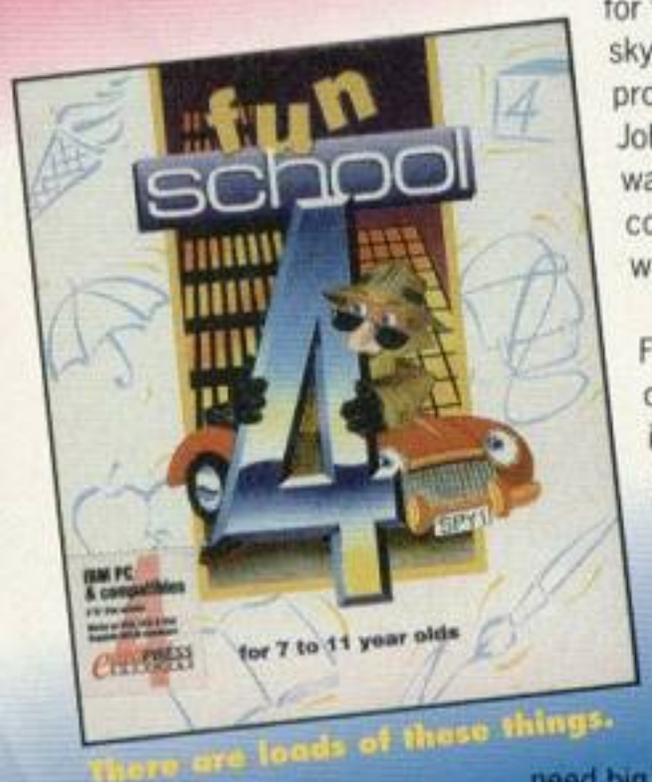
Programs will not loose marks if there are no graphics or sonics, but if they have some, they should be at least half decent. I had lots of people testing the programs with me : Niall, three and a half, John, four, Kieron, seven, Michael, eight and Lewis, thirteen.

There are so many Fun School programs around, I wouldn't be able to fit them all in so I've only reviewed one. They are immensely popular, and are available from the Trading Post (0952 462135) or O.J. Software (0257 421915).

Fun School

Under Fives
(Europress Software)

Lots of different games to play in this one, including number games, matching games and painting games. John's favourite was a game which had quite decent music at the end. From John's reactions, I would say that moving pictures and music, or good effects were his favourite parts in the games. He was not really impressed by just the simple bips and bops. He also liked drawing games, chose a colour for the house/sky/boat etc. The problem was that John often wanted to chose colours that weren't there.



There are loads of these things.

For older children the interest is more easily captured, but just as difficult to hold. With younger children they need big bold graphics, and simple but effective music. However, the older the children get, the more complex graphics and music they want.

A	Simple to master	80%
B	Could have had more music on some of the games	80%
C	Just right for the ages	90%
D	Best of a bad bunch	83%

SCORE

Thomas The Tank Engines Fun With Words

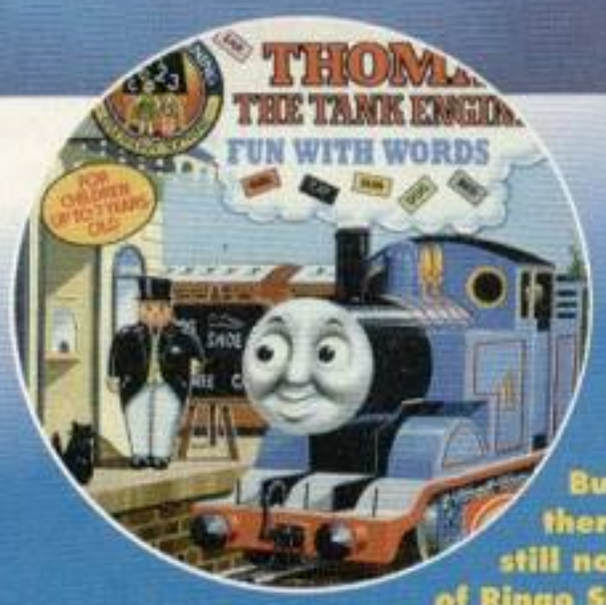
Up to 7 years old
Alternative

This tape program features our puffing friend Thomas, and his boss, the Fat Controller. Within this program there are 6 games. All are based on words and spelling. In one game the child has a line of letters, Thomas brings on another and it must be put along side one that's the same. Most of the other games feature spelling the word, recognising the wrong letter, or replacing it with the correct one.

The graphics on here (although the Fat Controller seems to be cross eyed) are excellent. They are clear, and the pictures that go with words depict to the child exactly what they are meant to.

This is not an ideal game for the younger child. John liked it because of Thomas, and was really only able to use the letter recognition game. The older children took to it much better. Kieron found the program interesting and fun to use, although some games were "a bit easy". Michael said "It's good for younger children, and I think the graphics are naff." Well, each to his own I suppose.

Two draw backs, the child had to get EVERYTHING correct to hear the famed (but not quite correct) theme music, and the same three letter words were used repetitively. Along with this package comes a set of double sided, pictured flash cards.



But there's still no sign of Ringo Starr.

A	Excellent to teach those first few words	95%
B	Graphics are good, with some theme music	92%
C	Children up to about 8 years old will benefit	90%
D	Brilliant for those just starting letters	93%

SCORE

Sooty's Fun With Numbers

Up to 7 Years

Alternative 0977 780767

Similar to Thomas, same design. The games are different, dealing this time with numbers. This is much better for younger children. Graphics are excellent and John was kept mesmerized for over an hour.

There were six number games to play – Sue's hats, Sweep's bones and so on. As with Thomas, controls are keyboard or joystick. The best bit is that the child may have the joystick, and you can use the keyboard to help them at the same time. This is an excellent idea – well thought out. This really bumps up the score. Having the controls like this really helped me to help John and Niall. All these 'games' are designed with the infamous National Curriculum in mind. This program also comes with a set of flash cards. An excellent program, to help any young child.



Izzy Wizzy, let's get busy.

A	Teaches well	98%
B	Graphics are excellent	95%
C	Easy to use, especially with the double controls	98%
D	One to have in the collection	97%

SCORE

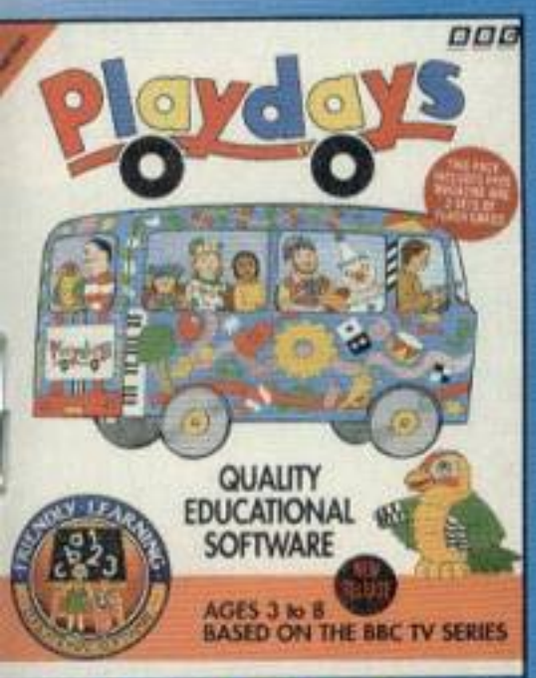
Playdays

3-8

Alternative 0977 780767

An excellent program, with even better graphics. This program comprises several games, from counting through to snap, spelling, rhymes and a host of others even more exciting. Based on the television series, the Why Bird hosts the program and speaks directly to the child.

Children will learn/revise a lot with this program. The one draw back was not being able to choose the game. Oh, and it was a multi load, too, but then nothing's perfect.



Hurrah! Even better than the real thing.

Still, it was one of the best. John said it was "Wow wee." and Niall just sat with his mouth open. Kieron also found it interesting and useful. Everyone loved playing the game. The animation and music are just unreal. This package comes with two sets of flash cards, and a sample comic.

A	Simply the best	98%
B	Excellent, good animation with good music/sound effects	99%
C	Simple to use, would be better on disc	95%
D	The best of the best	97%

SCORE

***Kosmos** are a company that supply a lot of educational programs. They have been supplying parents for 11 years and their goods have always been of a superb quality. Everything I've seen here only makes me want to jump up and give them an award. The Kosmos approach is new and refreshing. This suite of programs offers excellent interactive teaching abilities and all the programs are very flexible. The range of questions and design of all Kosmos programs only enhance and complement the process of learning.*

The French Mistress

Beginners and GCSE learners

Kosmos 0525 873942

This is one in a set of four. The German Master, The Spanish and Italian Tutors are also available. All the programs are the same, with very small differences *(Apart from the languages – Dave)*. So for review purposes when I say "French", it also includes German, Spanish and Italian.



'Within this program there are various options. These include self- teach, self-test, create and edit. Lessons are on different topics, family/shops/animals and so on. These lessons are completely bi-lingual, a lesson being used can display the English or French for the chosen amount of time.

After learning/revising these words, they can be tested. One language is displayed, and you enter in the equivalent in the opposite language. However, even though this program is excellent for teaching you words, and the like, and is a good aid to somebody learning a language, there is no substitute for a good teacher and hard work. This package is as good for students as it is for other people wishing to brush-up or learn a new language before going abroad.

A	As good as a language program can be	90%
B	A good use of colour	90%
C	Self explanatory	85%
D	Every language learner should have one	88%

SCORE

Answer Back Junior

6-11

Kosmos 0525 873942

This is a very good quiz game. This is similar in form to the German Master. You are presented with options such as load a topic, add to it, create or delete one, and a few others. Once a topic is loaded you can choose how you want to answer. Multiple choice, Yes-No, Complete the answer or a selection. Once chosen, you are asked how many questions you want to answer, whether they are to be random or in sequence and whether you would like to be timed on your answer. Next, you move onto the question scene. You are shown towers, and a princess. The princess displays the questions in the sky with a wand. Once the question has been answered correctly, the child is given the chance to kill a dragon (which looks more like a mermaid) from an air balloon to refrain it from eating the princess. This dragon has just three (!) vertically placed pixels on which you can kill it. For the younger child this was absolutely exasperating. On other versions of the game (Atari for example) the process of having to kill the dragon, which does become boring and repetitive, can be side stepped. However, this option is not available for the CPC. At the end of question answering a results screen appears. This shows total questions, the number right or wrong, and a variety (one of them a novelty) of other analyses. You then have the option to go back over wrong or passed questions, or to the main menu. The topics include Nature, The British Isles, TV/Films/Theatre, Brain Strainers and more besides. It is a pity, but the Senior quiz (including a space game) is not available for the CPC.



A	Good for teaching	95%
B	Better graphics than Fun School, good fun	80%
C	All ages enjoyed it, it was easy to use	90%
D	A good program, with add-ons available (See Box-Out)	88%

SCORE



Not great box art-work, but who cares?

Answer Back Fact File

9.14 each

Kosmos

These files are on specialised subjects. The two I had were History (12-Adult) and Arithmetic (6-11). Both of these (and the numerous others available) load into the Junior Quiz and can not be used separately. Both programs have twenty topics. All of the Fact Files (I have seen many) are fluid and provide a powerful tool to any student, or just those interested in the subject. These programs are especially good for the vital facts needed in subjects such as History and Science. Other topics in the Fact File range include Spelling, Natural History, First Aid, Sport, World Geography and more.

The Examiner

In a mystic land far away, where the twin suns set in a blaze of fire over the Mountains of Quillpech, lives the Adventure Queen, Debbie Howard. Or something like that, anyway.

AGATHA'S FOLLY

REVIEW

written by Linda Wright. Price: £5 (two part text adventure for CPM+ and CPM 2.2). Distributer: The Adventure Workshop, 36 Grasmere Road, Royton, Oldham, Lancashire, OL2 6SR. Cheques/Postal Order payable to: P.M. Reynolds.

You have just become the proud owner of a country cottage. Not that the cottage is anything to shout about – it's not exactly very big and, in the words of the estate agent, was "in need of some modernisation". In fact the whole place is in a bit of a state. But there was nothing that couldn't be put right with some good honest sweat, and the surrounding grounds more than made up for it. You were pleasantly surprised to find that, along with the cottage, you has also acquired a small lake, a semi- derelict mill and what could only be described as a "folly".

Having concluded the deal this morning, you have decided to spend the night in your new home just to get the feel of the place. Your furniture isn't due to arrive until tomorrow, because of a misunderstanding with the removal company, so you brought one or two essentials with you, including an old camp-bed. Luckily you bought some furniture with the cottage when it was auctioned and tonight will also give you an opportunity to examine that in more detail.

Local gossip has it that the previous owner just vanished without trace and you cannot help wondering what exactly did happen to them... You love mysteries and with luck you might even find the time to try to unravel this one.

At the beginning you start at a random location somewhere within the cottage. A particularly good feature is that you can RAMSAVE and RAMLOAD your position. This is when you can temporally save your position in the adventure, and RAMLOAD it back again if you get killed, of course you'll lose your RAMSAVE the moment you quit from the game, in that case you will have to save your position to disc. The adventure understands HELP/SCORE (VOCAB is the same as HELP). There are full text locations so you get more than one or two lines to describe where you are, and some very tricky puzzles, that are not always obvious. For exampie, it wouldn't occur to me to use a rock to scrape something off the wall.

What I did find frustrating was that I could only carry six items at any time. I know some people prefer to do things the hard way, but not me. I like to carry everything with me (apart from the kitchen sink), so that I have the chance to try everything out, rather than running around picking up objects and going back to see if I can use them to solve that particular puzzle.

There's a certain amount of timing involved with parts of the adventure, but don't worry because this just usually means that you miss out on the characters, and not necessarily the whole point of them being there. Keep an eye out for the front door and any visitors you might have (they're all very polite – they always knock).

In part two, you'll need the password that you were given at the end of part one – write it down because you won't be able to play part two without it. If you have a saved game from part two, then just type in "LOAD" when it prompts you for the password and you'll be able to load your saved adventure and continue from there.

It has a good texty ending. I get so disappointed when I finish an adventure, just to find the words "well done – game complete". Here you get quite a bit of "they lived happily ever after". Not for the beginner, but if you like a challenge this is the adventure for you.

79%

Where to go

If you're looking for new and re-released adventures, then drop these people a line (enclosing a S.S.A.E. or course) for their latest stock list.

- WoW Software, 78 Radipole Lane, Weymouth, Dorset. DT4 9RS.
- Adventure Workshop, 36 Grasmere Road, Royton, Oldham, Lancashire, OL2 6SR.
- Amstrad Adventure Solution Service, 10 Overton Road, Abbey Wood, London, SE2 9SD. (as the name suggests it provides maps and solutions and not software).
- If you are interested in reading magazines dedicated to adventures, then write to the following addresses. If you are just making an enquiry, please don't forget to send a S.S.A.E.
- Adventure Probe, 52 Burford Road, Liverpool, L16 6AQ. Released monthly – costs £2 per issue.

Lords & Ladies of Adventure

If you're stuck in a game listed below, these kind souls are willing to help you. Please remember to enclose an SAE with your enquiry and DON'T ask for a full solution, as you might be disappointed. If you want to become a lord or lady please write with your full list to: Lords and Ladies of Adventure, Amstrad Action, 30 Monmouth Street, Bath, BA1 2BW.

- *Five On A Treasure Island* – Tommy MacDonald, 7 County Cottages, Piperhill, Nairn.
- *Adult II, Bew Bews, Blue Raider II, Can I Cheat Death? Doomlords I-III, Dick-Ed, Escape From The Planet Of Doom, Firestone, Jason And The Argonauts, Lords Of Time, Nite-Time, Red Moon, Spaced-Out, Welladay, Yawn* – Paul White, 18 Conifer Road, Coxford, Southampton, Hampshire, SO1 6FX.
- *Shard Of Inovar, Five On A Treasure Island, Holiday II, Mell, Hobbit, Lords Of The Rings, Shadows Of Mordor, all Dizzy Games* – Andrew Hughes, 12 Colliers Close, Woodhouse, Sheffield, S. Yorks, SY3 7DE.
- *Boggit, Big Sleaze, Forest At Worlds End* – Bernard O'Leary, Lotamore, Glanmire, Co. Cork, Eire.

Communications

It's hard to believe, but there are some adventurers who have never seen a copy of the adventure magazine called, surprisingly or not, "Adventure Probe". Barbara Gibb (its editor) had kindly offered to reduce the price (for one issue only) to Amstrad Action readers from £2 to £1.50. So if you want to be among the people in the know, then there has never been a better time to order a sample issue. Adventure Probe is just busting with oodles of information – hints, reviews, letters, solutions, adventure poems and stories etc. There are usually 56-60 A5 pages, so you're getting your money's worth, even at full price. Interested?

Then send a cheque or postal order (payable to: Adventure Probe) to Adventure Probe, 52 Burford Road, Liverpool, L16 6AQ.

No sooner than Adventure Workshop release a handful of new adventures, somehow they come up with some more. This makes life very difficult for us poor reviewers! Hardly time to catch one's breath. Still one good thing, they produce a catalogue which you can peruse at your own pleasure, just send them a large A4 stamped envelope and they will only be too glad to send you the catalogue, the name and address are in the where to go section.

DRAGON SLAYER

REVIEW

By Martin Freemantle

Price: DISC ONLY £5 (two part text adventure for CPM+ and CPM 2.2).

Distributor: The Adventure Workshop, 36 Grasmere Road, Royton, Oldham, Lancashire, OL2 6SR.

Cheques/Postal Order payable to: P.M. Reynolds.

Long ago when man edged his way past the borders of Bogwoppit he was confronted by the Goblins who has ruled since the beginning of time. The years that followed were ravaged by many wars, until a great warlock, called Rexel, formed the Circle of Nine. The nine members created the Medallion which, when worn, can protect and also control the elements. It must never fall into the hands of the evil Goblins.

You are Doug Thornton, now twenty years of age, and you receive your late father's legacy. Unfortunately this is not a large sum of money, as you might of hoped, but one small envelope, which you open and read...

Dear son.
If you are reading this letter then I have failed in my mission and I'm dead. Many years ago the Silver Dragon arrived in Bogwoppit and struck up an alliance with the Red Goblins. It was these hideous creatures who raided the Circle of Nine and stole the Medallion of Immortality. They also killed the Warlock chief. I've heard news of a Black Goblin they call Gnasher who is forming an army of his own, and seeks the Medallion for his own evil plans. I ask you, my son, to seek out and kill the Dragon and return the Medallion to the Circle of Nine, at the village called Hayworth.

Your ever loving father.

John Thornton.

You begin with the option to read the full background of the story or just go right into the adventure itself, which is quite handy – it can be quite frustrating to have to go through pages of text when you've already read it ten times before! There are some useful commands such as VOCAB (short for vocabulary), which will list some of the more important words in the adventure, INFO, which will give you more INFOrmation, PAGE ONE which takes you back to the screen which tells you all the special command words. And of course SCORE, which is so often looked over when writing an adventure. In this game you have to get 155 points in part one, and 85 points in part two. RAMLOAD/SAVE are fully featured and very grateful I was for them too! The are quite a few places where you can get killed, and by RAMSAVing I was able to easily get right in the middle of the action and correct my mistakes.

Usually the word EXAMINE is the most important command that you can use. But I found that SEARCH and LISTEN were used quite often, so don't forget them. You may also find LOOK IN/UNDER/BEHIND useful too.

There was one point in the adventure where you're supposed to do something to something. To be honest, if I didn't know any better I would swear that it wasn't there to begin with and I really needed a prod from the solution to help me solve the puzzle. But apart from that it's a well written and challenging adventure.

You'll need to save your position in part one to enter and play part two, so don't forget to have a blank disc handy near the end of the game. If you enjoy playing this adventure then you will be happy to know that there is a sequel called "Death Or Glory" (DOG as it's fondly referred to) for you to look forward to.

82%

CLUEPOT

This months cluepot comes from S. Kempin, Leicester, Peter Clark, Ipswitch, Phill Ramsay, Manchester and Michelle Tomlinson, Hampshire – a big thank you to all of them. You know how it feels to be stuck in an adventure, if you have any hints/tips or clues to pass on, please send them in, I would only be to happy to include them.

Alstrad

- Pull the chain in the toilet to switch off the force field.
- Use the magic table cloth to fly up into the bedroom.
- To find the combination number of the safe, examine the palm tree on the desert island.

Case Of The Beheaded Smuggler

- Examine the path, the ash and the body.

Classic Adventure

- Just for fun: Try to sing.

Dragon Slayer

- Examine bone and then snap bone to find a map hidden inside it.
- TIE ROPE to HOOK, and SWING HOOK to knock out Goblin.

Eunuch's Ball

- You need four keys to open four doors. Each key is colour coded to the lock it fits.
- Buy the book and magazine from the shop (you need to find money).
- LIFT a DOORMAT to find Silver Key.
- Forest At World's End
- At the rock wall, touch the rock before going east.

Gerbil Riot Of '67

- Make a battery and give it to the squirrel.

Warlord

- Free the hare.
- Give the acorns to the raven.
- Give salt to the guard.

Wizbiz

- There are a lot of red herrings. You can get to Lady Violet's Kingdom from the river. Take the frock which you find in the wardrobe to here, (there is a bug in the program, so if you have already given the water demon in the toilet it already, just open the wardrobe and it will reappear again). There type CALL VIOLET twice and then give Lady Violet the dress.
- Make a hot dog from the ingredients you find in the kitchen store cupboard (cook the sausage in the pan over the fire) and give this to the fire demon for more information.
- Just for fun: Look down the toilet.

Reader ads

Buy it, sell it, the game's getting hard, when someone's dealing you the losing card... So say the cast of Bread. But buying and selling are easy with the AA Small Ads.

FOR SALE

Amstrad CPC computer complete with a colour monitor, keyboard, joystick, 50+ games and instruction manual. £100 or near offer. Telephone Karen on 051 424 6234 after 4.30 pm

Tape games. Loads of 'em. SSAE for full list to David Hague, 23 Houghton Lane, Sancton, E Yorks.

MP2 co-ax type £20. 464 with mono screen, joystick and games £55. TV tuner (not MP3) in good working condition £20. Phone John on 0633 857376 (Gwent).

CPC4646, colour monitor, Phazer gun, joystick splitter, two joysticks, 70 games, bound volumes 1+2 of Computing With The Amstrad. Complete £90. 061 682 7023.

Amstrad software and hardware for sale. SAE Darren Littlewood, 33 Clay Flatt Lane, Rossington, Doncaster, S Yorks.

For Sale 6128 with colour monitor £85 ono. Plus loads of discs and tapes – only £3 each, Books and mags too. Phone Ray 0243 821842.

Amstrad CPC464 and colour monitor £30. CPC6128 ROM chip £15. Dart Electronics light pen £15. Many utilities, games, books and magazines. For details SSAE to Julian Carter, 29 St Leonards Road, London, SW14 7LY or tel 081 876 5245.

CPC6128 with colour monitor, tape player, multiface, games, utilities, business discs and tapes, AA mags, instruction manual, joystick, light gun and games, all leads, etc. £275 ono. Tel Rod on 0202 896783.

Multiface 2 for sale £15. Send to Mr S Fernie, 8 Drakies Avenue, Inverness, IV2 3RW.

Printer, Epsom LX800 £40. Light gun and games £15. ROMDOS £10. AMX mouse, Art, S/Press £30. 8 discs of games £20. Tel Darren 0302 864730. (all include p&p)

Small ads buyers' guide

There are loads of great bargains to be found in this Reader Ads section and the other adverts scattered through the magazine. But some of you might understandably be a bit reticent about sending money through the post for goods you haven't seen to somebody you've only talked to over the phone. But don't panic. Just follow our simple guide to buying goods by post to minimise any risks.

✉ Before ordering anything try to contact by phone to the person or company advertising the goods you want. Write down a list of questions you want to ask them – clarify the price, who will pay for delivery, compatibility, etc.

✉ Confirm a delivery date – ask how long you can expect to wait before the goods will be delivered (with official companies it should be within 28 days).

✉ Never send cash through the post. If possible use a credit card because it will probably give you some form of insurance. Failing that use a cheque or PO.

✉ Keep records of all correspondence and phone conversations with the people you're ordering stuff from.

✉ If a problem does occur, the first place to contact is the person or company you're ordering the goods from. Be calm and explain the problem clearly. Most faults are just mix-ups and can be sorted out.

✉ If, however, you continue to have problems write to us at Advertising Complaints, *Amstrad Action*, 30 Monmouth Street, Bath BA1 2BW.

CPC6128, colour monitor, TV modulator, cassette player, 6128 manual, 130 games, programs. Worth over £750. Will sell for £250 ono. Tel Matt 0742 863345 6-9pm.

CPC6128 for sale with printer, games, Mini Office 2, DTP, Pascal compiler, spell check, MIDI compatable software, dot matrix printer (9-pin). £300. Telephone 0942 892010

CPC6128 colour monitor with casstette drive and all leads, £200 worth of games, dust covers, joystick, manual, copies of AA and covertapes, all for £200. Call Andrew on 0322 382122.

Covertapes 24, 25, 28, 29, 30. Originals with mag instuction pages. £13.50 set (not splitting). Original CP/M Plus two disc startup set, manual, £22.50 including postage. 081 518 3335

Action packed AA covertapes 23, 25-41. Includes Elite, Tasword, Blues Brothers, Mastercalc, Instant Recall, Exolon, Stormlord, and more, mint condition, £3 each, £50 the lot. Write B Rice, Hollybrook, Myshall, Co Carlow, Eire.

Amstrad CPC games and magazines for sale. Faar too many to list here. For list send SAE to Mr S Fernie, 8 Drakies Aveenue, Inverness, IV2 3RW.

Sci-fi space strategy game. Features coloured graphics and five different missions. Cheques for £1.90 to Gary Smethers, 13 Meadow Close, West Yorkshire, BD20 8LZ.

464 keyboard and manual, GT65 green screen (vgc), some 30 games and serious tapes £65 including postage. Might split. 081 518 3335.

CPC464, colour monitor, joysticks, Multiface, original Amsoft software (serious), lots of games, plus AA and ACU mags. All as new. £250 ono. Phone evenings 0420 477560 (Bordon, Hants).

CPC6128, colour monitor, TV tuner, DMP2000, all manulas, dust covers, joystick, Mini Office, Fleet treet, Mastercalc, Master File, etc, many games. Split? £150. 0656 840564.

Software bargains for CPC on tape and disc. Write for full list to Eddie, 151 Balsusney Road, Kircaldy, Fife, KY2 5LH (SAE would be nice).

ACE must go. Issues 1 to 47. Into games? These are for you. £30 collect, £37 posted. AA tapes 12 -18 and 20 £1.50 each post paid. R Everett, 2 Colnailhurst Avenue, Braintree, Essex, CM7 7SJ. 0376 344572.

Amstrad CPC464, colour monitor, 57 games, plus AA tapes 6-13 and 15-35, tape head cleaner, Multiface 2, TV tuner, joystick £150. N Staples 0252 878642.

Star LC10 colour printer for sale with spare ribbons and MJC Colourdump program £75 plus postage if applicable. 57 Brookside Close, Harrow, Middx, HA2 9AW.

Amstrad CPC6128, colour monitor, software, manual, cassette player with cable, games on disc and tape, 2 joysticks. £125. Colin 0621 741891.

Sega Master System II with 4 games and Sonic built in. £65 or will swap for good working printer with leads for CPC464. Buyer collects. Phone 021 772 4811 between 5pm and 8pm. May deliver if in area.

WANTED

ROMBOX, Romboard ROMs (Utoria), FD1 or 3.5 inch drive, colour monitor. S Willcox, 20 Hesa Road, hayes, Midd, UB3 2DP.

Sim City disc for 6128. Phone John 0994 484284.

Can anyone help? Amstrad Action issues wanted Nos 50, 52, 54, 57, 58, 60, 61, 62, 63, 85. Reasonable prices. Phone Chas 0284 764936 (Suffolk).

GAC Adventure Writing System (tape) with manual. Urgent! All reasonable offers considered. Phone Anton on 0803 832352. Hillside View, Old Mill Lane, Dartmouth, TQ6 0HL.

Help! I need a modem and RS232 serial interface. Also needed, a DD-1 disk drive for 464. Please contact Gary on 051 604 1366 or write to 8 Pagett Close, Noctorum, birkrnhrad, Wirral, L43 9YP.

Little Computer People. Help needed for this game (I do not have instructions). Please contact Nicholas Campbell on 0238 541716 after 6.30pm.

CPC464 wanted, manual, dsic drive and printer. Also games – particularly golf and adventures. 0904 491286 after 6.30pm.

We want your disc/tape PD. Send it to us and we will put software on the disc/tape. Write to Disk PD, Lower Dexbeer, Holsworthy, Devon EX22 7LA.

Iron Lord by UbiSoft. Will swap for Outrun Europa (disc), The Spy Who Loved Me (tape), and Popeye 2 (tape). Phone Jonathan on 0663 744863.

Rombo ROMBOARD. Will pay around £10. Phone Jonathan on 0663 744863.

For 6128 :Instruction manual, Tasman "Amnsword" on disc, 5 re-usable 3" discs. Tel Ray on 0287 676952

AMSTRAD ACTION FREE READER ADS

Go on, you know you want to. It's really easy. All you have to do is fill in this giving us your name, address and telephone number and then write your ad – one word to a box – in the grid at the bottom. Please put a contact telephone number or address in the ad itself; we will not print any details not given in the ad (we just need your address of phone number in the even of any queries).

YOUR NAME _____

YOUR ADDRESS _____

_____

_____ Post Code _____

Please indicate which section you would like your ad to appear under:

FOR SALE ☐ WANTED ☐ USER GROUPS ☐ SERVICES ☐ PEN PALS ☐ OTHER ☐

Who said that

Who said, 'It doesn't matter whether you win or lose, it's how you make the custard.' We did, of course. Just now. If you always fancied yourself as a bit of a whizz at 'Quote... Unquote' on Radio 4, you might want to have a little look at this new quiz game. Or you might not. Angela Cook did, so we let her.

REVIEW

Tim said that I could only write about "Who Said That" if my review was different from any other printed in AA. I wrote it in German and he complained no end. I don't know, there's no pleasing some people.

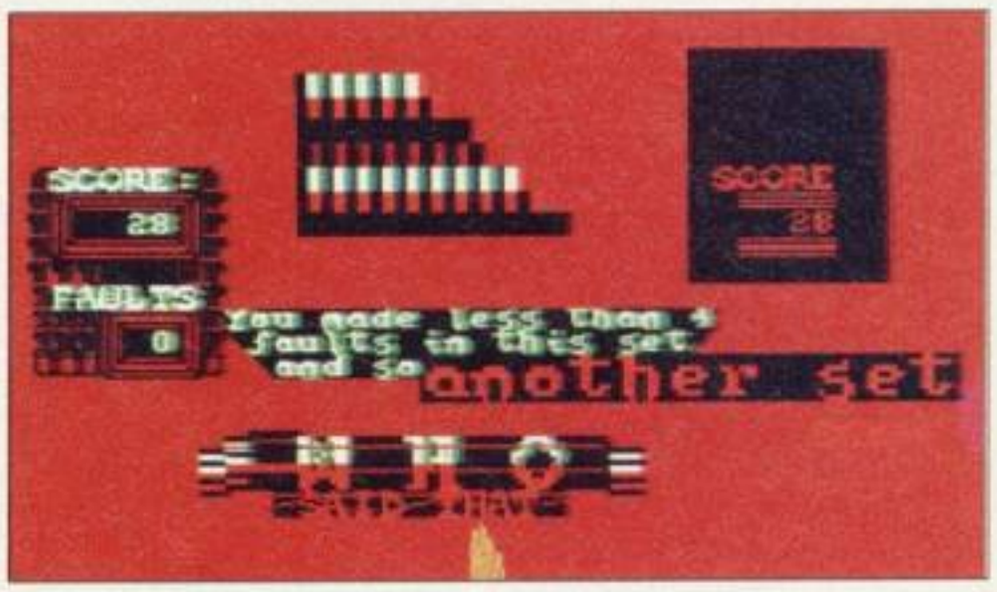
So what is it, this game, this program, this thing? Well, it's a game. In one sense it's slightly educational – it tests what you know, or don't know. In another sense, it's more for fun (ahem). Although it's quite a good game to play, it's aimed at the older person, well read, or just a lucky guesser. Not your average acne-covered, joystick-waggling kid.

So, Who Said That tests the powers of recollection. You're given a quote, then a list of names. For example, "The Owl and the Pussy-cat went to sea, in a beautiful Greenpeace boat. They took some honey, and all was sunny, until they were blown out of the water by the French Secret Service."

Now comes the question, Who Said That? I am given a few options. Elizabeth Taylor (I don't think so), Spitting Image (Quite likely) and John Bunyan (Whoever he is) (He wrote Pilgrim's Progress – Tim). I select Spitting Image, and surprise surprise, I'm right. This continues, with you getting, oooh, massive amounts of points for a correct answer, and funnily enough none for a wrong one.

You are allowed four incorrect answers per set. Get the fourth wrong, and you're out of the big black chair, off the hot spot, gone. The scoring is quite good, first right answer gets seven points, then six and so on. The points are totted up in what looks like a deformed Dalek.

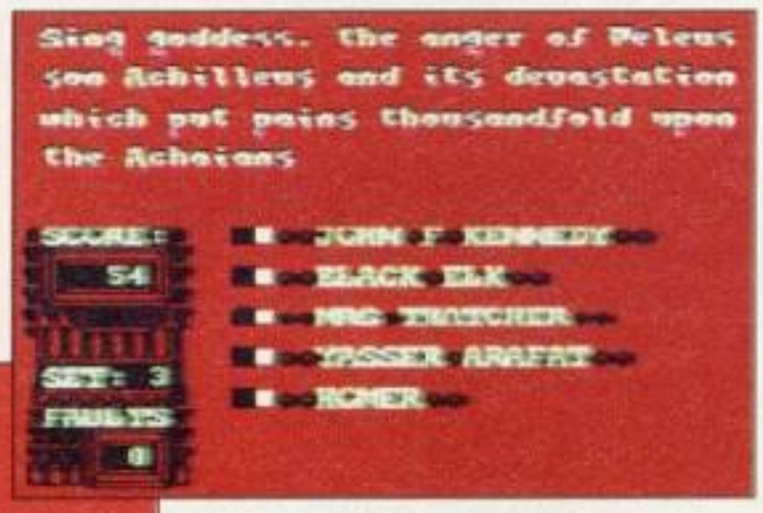
The actual display of the whole game is pretty good. Everything is well set out, and it's obvious the author was not colour blind either. There is a new 'font' used for the writing, gothic, in a range of colours. Quite effective, but sometimes difficult to read.

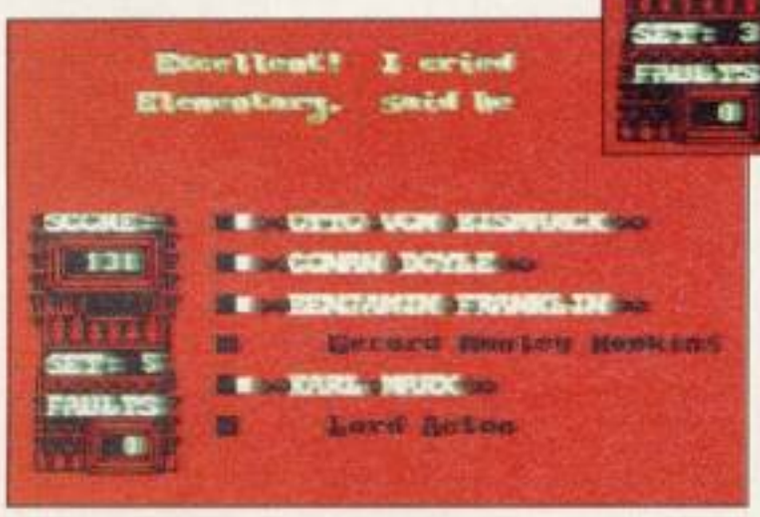


If you make more than four mistakes, you can't go on.

Don't fret over not having enough variety. There are nearly 300 sets of quotes, so you will not get through all of them in a hurry. I understand this took about 2 years to research, so you can imagine the sort of work and accuracy that has gone into this thing.

Was it Lizzie Taylor that said "I am not the girl I was, Thank God"? Was it really Andy "Banana" Wahol that said everybody should be famous for fifteen minutes? Play the game, and find out.





Although it's extremely addictive, it does sometimes seem a little too easy. Look at the example above, for instance. Now who would have mentioned a goddess and Peleus, I wonder? And on the left? Elementary indeed.

REVIEW

GRAPHICS Pretty imaginative, good for this type of game, **90%**

SONICS Stick your favourite Stones album on instead, **80%**

GRAB FACTOR Not for kids, but adults will just lick it up, **80%**

STAYING POWER Nothing to really blow your mind, but well researched and worth the money, **88%**

FINAL RATING **85%**

Oh Dear...

Sorry 464ers, this one is available on disc only. This is because of the amount of stuff that is included in just one program.

'I did notice the distinct absence of any multiplayer mode. That would have made the game a little more desirable, but it hasn't got it, so that's tough s(hower curtains- Ed)

Another aspect of any game, and particularly this one, are the sound effects. The noise. The annoying noise. The noise which makes you want to put a bucket over your head. A bucket full of water. Actually the sound effects are not all that bad, it's just the music at the end of each round. It's strange. An Underground Velvet sort of strange. (Would that be Reed Lou's Underground Velvet? – Tim)

Public Image

There's mountains of great software out there that'll set you back the mere price of a stamp and a disc or tape. But there's also some bilge, as well. That's why we get Keith Woods to sort out the decent PD from the cack every month.



nearly as exciting nor appealing as the cute dog pictures might suggest.

Tearaway Memory Dumper

By CPC Network

Is there anyone out there who likes to search through line after line of memory using their Multiface's window option? Anybody at all? Even one person?

Well, if there is, you'll like this *Tearaway* demo, but you'll probably be the only one.

Tearaway was an excellent answer to Romantic Robot's *Insider*. It sits in your Multiface's 8k, and can do all sorts of wonderful things when you access it, such as search for a string or give you system info. This demo can do only two things – pokes and memory dumps.

The ability to poke memory is well catered for by the Multiface as it is, so that feature is completely useless, and the memory dump option is little better. All it does is list the memory in binary bytes to screen or printer. And no, you can't save the info for disassembly later.

This is an almost completely useless program. It is nothing more than a very poor advertisement for a fine utility.



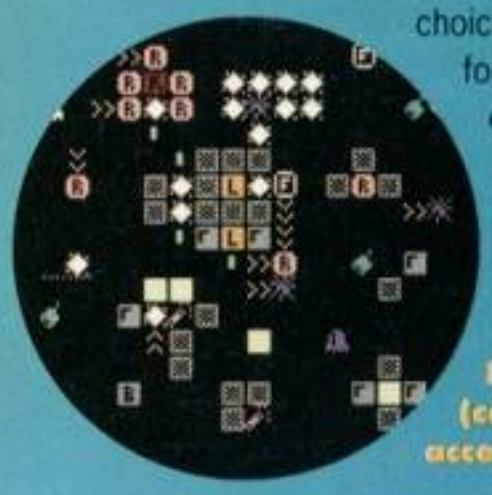
GHOST QUADRANT

By Joe Moulding of Sleepwalker PDS

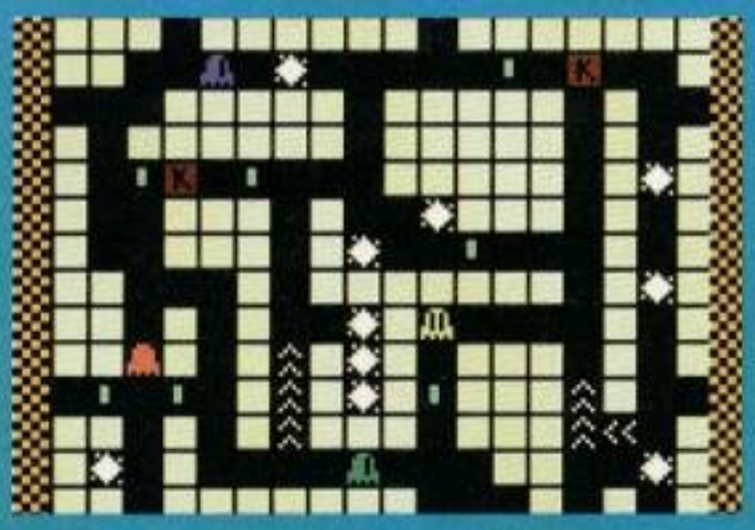
Crrraasshh! The forked lightning flashes like a serpent's fiery tongue in the sky and the thunder roars like an angry bull as the dark, menacing structure of Castle Moulding comes into sight. "Come in, come in," beckons the ancient castle's aged master, "Ve vill have much fun tonight, for tonight eez Quadrant Night! Ah, ha-haha-haaa!

"Come, come, ve must go to ze games room, vere your challengers are vaiting. Everything you understand about ze original Quadrant remains the same. Eet eez a game for two to four players. You play in a large room, filled viz precious diamonds, but also many dangers. There are blocks that your opponents can push into you, weapons they can find to kill you and other bonuses they can use to do such things as freeze you.

"Dere is also much you need to know about ze playing area. You have ze choice of playing in any of four different zones, each viz two levels. All are filled viz difficulties. Dere are one-way conveyer belts, spikes and



Fun and frolicks (comedy foreign accents not included).



This bit looks a tad *Pac Man*-esque, don't you think? Except it's not symetrical.

gates zat lock behind you. If you are not careful, you can get trapped and be at ze mercy of your enemies. You vill also den miss collecting ze diamonds, vich you need to become champion. Ze winner is ze one dat escapes alive viz ze greatest number of zese very precious stones.

"Now go, play! Eet eez a good game, you have my word. Dere is good music and presentation, but most of all great multi-player gameplay. Ok, ze graphics are crap, but ze only really bad zing about dis game is zat dere are only eight levels. But den if you have not already zeen ze original, another eight await you and your friends.

"Spiel, spiel, es ist viel spass! Ah-hahahahaaaa! Ah-ha-coouuugh!"



What did the Crystals sing? Was it 'One Fine Day'? No, that was the Chiffons. Write in and tell us.

PD programmer interview: Malfunction

At 14 years old Malfunction of The Firm is one of the CPC's youngest coders. He's also one of the PD's best, having turned out the classic game *The Smiley Affair*, and also *BattleSpheres*, which receives the highly respectable mark of 65 per cent somewhere to your left.

Malfunction lives in the same fair city as myself (Dublin, that is, if the "fair' hint didn't strike home), so I'd better go easy on the questions in case he sends his big bro' around – not that I'm scaaared or anything, I'd ju....aaaarrrgghh, what was that? It's him isn't it? Oh no, it's not, it's just the wind blowing gently through the branches of a tree. Ho, ho ho...of course, what else could it have been...ho, ho..erm, on with the interview.

Right Malf (can I call you that?), what sort of things do you get up to when you're not attacking the keyboard?

I'm usually to be found listening to music, cycling around, playing the piano or sometimes playing badminton. And no by the way, you can't.

If armageddon was only half an hour away, what one PD program would you load up?

I really don't have a clue. The favourites like *Spots* and *Croco Magneto* are good. For *Tetris* clones I like *Tetrix* and in terms of utilities *Disc'o'Magic* is the best (*this man has taste – Keith*). However, I'd probably take the *Plasma Demo* and stare at it constantly so I could die painlessly under mass hypnosis.

Where did you get the idea for *Battlespheres*?

In the bath. (*No, no! – Keith.*) Oh you mean what inspired it? (*Yeah, that's it – Keith.*) The idea behind BS (which to this day I still think is a bit on the thin side) was basically a cross between two games – an absolutely brilliant type-in (in *AA68*) called *Warzone*, and an ancient game called *Deflektor*. In other words, a cross between an elevation view kill-the-other-player game and an overhead view shoot-around-a-maze game.

Do you find it difficult to come up with original game concepts?

No, I don't try to come up with game concepts. If an idea comes to you, you just work on it. In the case of *The Smiley Affair*, I produced a pile of different blocks, two characters and some levels and I had a game. If you can't think up

Battlespheres

By Malfunction of The Firm

Did you see any of those *Human Animal* programs that were on the BBC a couple of month's back? What a load of tosh they were. *(No they weren't. – Ed)* If you really want to find out about the animal within, you'd be far better off playing a game like *Battlespheres*.

You see, *Battlespheres* is one of those wonderful two-player games that brings out the most base animal instincts in everybody. What happens is that the two players take up positions on a grid liberally dotted with walls and bombs and such like. From their chosen positions the two opponents throw ball-bearings at each other in the fond hope that one of their silver bullets will hit the enemy base.



The best things in life are free. Or are they the simple things? Whatever. This one's simple and free.

Put simply, you've got to hit your enemy... er, opponent... before they hit you. The programmer has been most unsporting, however, (aren't they always) and on most of the numerous levels there are enough obstacles to make this simple aim more than a little tricky. Too tricky on a good number of levels, in fact, which often makes luck the most important asset required to win.

For a while this isn't a problem – if anything, the fact that you fluked adds to the sadistic pleasure of winning. But in the long run it does become tiresome, and detracts somewhat from the gameplay.

Presentation-wise, *Battlespheres* must be the most fully-featured game in the public domain. Not only does it include such familiar things as a level-designer and a choice of colours, but it features options that you've probably never thought of, such as the choice between using QWERTY and AZERTY keyboards (for French users, or so we're told). The sound isn't bad either, but the colourless graphics are just average.

However, no amount of features and options can hide the fact that while *Battlespheres* is initially great fun, you won't exactly keep coming back again and again. Still, for the few hours of primeval gameplay it does provide, it's still well worth a look.

65%



Anyone remember Crossfire, the ball-bearing game?



You used to get terrible blisters on your fingers.



There was a young man from Nantucket, Who... I'm sorry, I forgot where I was.

So, where do you get all this stuff?

PD software is freely copyable, so if you know anyone with a PD program is it completely legal to copy it. Most people, however, obtain their PD from PD libraries who usually charge a small fee for postage and duplication and may require you to send a disc or tape. For a list of PD libraries turn to the Directory on page 6.

Overscan

By Lover Stan

Have you ever marvelled at the wonderfully wide borderless screens that are a trademark of every continental demo or slideshow? Have you ever wished you could do the same yourself?

Well now you can, without having to worry about messing about with machine code. The only things you'll need are a good art package such as *Advanced Art Studio* and *Overscan*.

Overscan works by producing four standard 17k screens.

Demo-style graphics without fiddly mcode.



Each of these contains a box, which you use as a marker. What you've got to do is split your screen into four parts (easy enough if your art package can save windows) and place them in these boxes and save the screens again.

This is where *Overscan* comes in. It takes the four screens you've saved and turns them into one overscan screen file. Unfortunately, this is also where *Overscan* falls down. To reload your lovely new screen you need to run a special program included in the package. This makes it difficult to include your borderless screens in your own programs without infringing *Overscan*'s author's copyright.

This is a terrible shame, because if you could make use of the screen with a little less difficulty, this would be a very useful utility.

50%

Are demos the most essential programs for any PD collection or a glorious waste of disc space?

To be honest, I think *AA* is failing to see the point in the majority of demos *(uh oh! – Keith)*. The reason behind them is often to show programming talent, but more often it's to tell everybody the writer's thoughts and news – like in Amscene, for example. I find it interesting to read scrolls or look at new hardware effects in demos, but if you don't like them I suppose you don't like them *(Oooh, big time philosophical theory that – Keith)*.

Finally, what wonderful future do you see for the humble CPC?

I think that the CPC can last as long as people are loyal to it and not afraid to be "left behind" when everybody has Amigas or PCs. Maybe I should be less optimistic and more practical, but with a computer like the CPC with such a strong team of background support, getting rid of the commercial market doesn't do as much harm as it would on newer machines. PCs would collapse instantly without any commercial strength, but the CPC has become so much a part of history that it has a much greater will to live.

Thanks for the chat, Unction.

NEXT MONTH

You may not have realised, but we're a year into the new look Public Image, so next month we'll be taking stock of what's been happening in the PD world. We'll take a look back at last year's releases, and we'll ask the people responsible what they've got planned for the year ahead. And there's all the usual rubbish as well.

Techy forum

Dear Richard Fairhurst, I thought I'd write you this letter to save you having to think of an original intro for your superb technical Q&A section again. Yours, Mr A Pseudonym, Oakham.

Important announcement

Please could you tell me how to announce an EPROM on the screen. I understand the first parts, like 01 (background ROM) and the next three places, then low and high to jump to, and I understand that the hardware enters ROMs when you first switch on to check the type of ROM there. But where do you put the info for the screen?
LC Dunnings, Southampton

As you know, the first byte (&C000) is 01 for a background ROM, 00 for a foreground ROM, or 02 for an extension ROM – and the next three bytes define the version number. Officially, they are 'mark', 'version' and 'modification' numbers respectively, but the convention has become that the values 1, 2 and 0 denote version 1.20, for example.

The next two bytes are the address of the name table, which contains each command name in turn (bit 7 of the last byte of each is set), and finishes with 0 to indicate 'no more commands'. These two bytes are followed by a jump for each command.

The first command is, in most ROMs, not accessible from BASIC – for example, the first command of the disc ROM has the name 'CPM ROM', which isn't a valid bar command due to the space in the name. Instead, its name is taken as the title of the ROM, and the jump to its routine (at **&C006**) is the initialisation entry for the ROM. This is called when the computer is reset, and on entry, DE will contain the bottom address of usable memory, and HL the top address. Your initialisation entry can change these as required – for example, subtracting 1024 bytes from HL reserves 1k of workspace. This is the time when you should print a string to proclaim your ROM's name. The routine can corrupt AF and BC, but should leave IX and IY untouched, and set carry to indicate successful initialisation. **Richard**

GX – Y?

I have bought an Amstrad GX4000 with *Robocop 2*, *Wild Streets*, *Pro Tennis Tour* and *Burnin' Rubber* at a bargain price of £12. I have some questions for you.
1 Are games for this machine still coming out?
2 Can you still buy them without having to send away?
3 What mags cover this model?
4 Do you think that this is a good computer?
5 Which Amstrad computer that has a tape deck is considered good, has great graphics and isn't too expensive?
Michael Ryan, Whitley Bay

1 Nope.
2 Nope.
3 There's this absolutely stonking mag called *Amstrad Action*, which your newsagents should sell.
4 Well, it's not really 'good' for anything except playing *Burnin' Rubber* (and listening to the excellent music), and to describe it as a 'computer' might be stretching the point, but apart from that, yes.
5 The 464 Plus – GX4000-style graphics, a tape deck, a keyboard and BASIC. Since you've already got the GX4000 for running cartridge games, you could just buy a normal 464, although then you'd miss out on the fabulous *Fluff*. Some sort of 6128 might also be a good bet if you're planning to get into serious computing in the future – you can always add a tape deck. **Richard**



The GX4000 first won fame as the star of the '60s sci-fi series, Lost In Space.

Do not pass go

I am looking for a new disc for the 6128 with a password system. I wondered if you could advise me on which disc to buy, and tell me where it is available. Have there been any issues of your magazine with a covertape that does this?
Simon Hooley, Stockport

You don't make it clear what you want this 'password system' to do. If you want to stop other people getting at the contents of your discs, June's covertape contained a disc encoder (by Simon Matthews and Rob Scott) that'll do the job perfectly; it makes your disc unusable to anyone who doesn't have the password to restore the disc to its original state.

Alternatively, if you just want to protect individual BASIC programs against being loaded, try adding these lines to the start of the program, putting your password (in capitals) in between the quotation marks in line 2:

```
1 LINE INPUT "Enter password: ",p$
2 IF UPPER$(p$)<>"TECHNIQUE" THEN 1
```

It is possible, in fact, to protect your CPC against being used by people without your password; however, you'll need a ROM-box (firmly attached to the computer), an EPROM blower and a limited knowledge of machine code to do this – or a helpful friend who can do it. **Richard**

CATabunga!

I have a 464 with a 3.5-inch 720k disc drive and *ROMDOS*. Problem: how do I stop a nearly full directory from scrolling off the top of the screen when I catalogue the large capacity disc? I have great difficulty in trying to find the right file before it disappears.
L Gilbert, Kidderminster

Here's what you could try...
1 Make sure you use MODE 2 for cataloguing.
2 Save files in different user areas. You can change into a user area (numbered between 0 and 15) by typing a command like `|USER,5`. Prefixing a filename with `5:` will refer to user area 5. To move `DISC.BAS` from user area 2 to user area 5, type:

```
a$="2:DISC.BAS" : b$="5:DISC.BAS" : |REN,@b$,@a$.
```

3 Since you've got ROMDOS, you're probably a

Siren-ite, and so lacking in a side switch. This is a shame, because otherwise you could format each side of the disc to D80 format (396k per side), and so effectively split the bulk of the directory in two.

4 Buy *MaxiDOS*, which is a superb disc utility and pauses catalogues in mid-flow, or *ParaDOS*.

5 Don't save so many files per disc. 3.5-inch discs are comparatively cheap. **Richard**

Quantum... schwantum

I have had my 464 for ten years, my 6128 for eight years, and my 464 Plus for three years. Now I am interested in a PC, and I need you to answer a couple of questions... here goes!

1 What software and hardware do I need to transfer data between a PC and a CPC? I want to use leads or cables, as I sent £70 to Quantum two months ago and have not yet received my 3.5-inch drive.

2 I have enclosed a photocopy of pages from the former *ACU* magazine regarding PCs and CPCs together in a network. Could you give me some advice on how I should go about it?

Gavin Pugh, Harlow

1 First of all, try contacting Quantum to see if they can shed any light on the drive situation, because the 3.5-inch disc method is a lot more sensible. Otherwise, you'll need to fork out for a serial interface and a null-modem cable: they cost between £35 and £40, but are pretty much useless for anything else unless you're planning to get into comms. If you're set on this route, Siren (☎ 061 724 7572) will sell you a serial interface; the null-modem cable you can buy from any local computer store.

2 With *ACU*s typical journalistic prowess, no contact number nor address was ever printed for Nine Tiles – in a series of three two-page articles! When software is so hard to come by for the CPC these days, it would seem even more unlikely that a networking system would still be available. Moreover, any non-Microsoft/Novell PC solution has tended to become rather squeezed out in these days of 'industry standards' (pah). The usual response is 'try the Small Ads', but I doubt it would be much use in this case. Anyone out there with a handle on Nine Tiles? **Richard**

Wish list

Is it possible to get any of the following programs, which I've seen on my friends' computers, for my CPC? Or, if I buy a 3.5-inch disc drive, can I copy my friends' programs and run them on my 6128 Plus? I want: *Microsoft Windows*, *Deluxe Paint*, *Autoroute*, *Populous* and *Lemmings*.

Stephen James, Southend

You can't copy them to run on your CPC, partially because copying is highly naughty and theoretically liable to get the Old Bill knocking on your door, but mostly because programs for other computers just won't run on your CPC. That's why people aren't buying CPCs any more, but they are buying PCs and Amigas – because they're the machines the latest software is being developed for.

Microsoft Windows is only available for the PC, but for a friendly front-end in the same vein, try Campursoft's highly-acclaimed *DES* (☎ 041 554 4735 – there's a demo on this month's covertape), or look for *Desk* or *Worktop* at a PD library near you. There are rumours that an art package will be developed to run with *DES*, but the best bet for your 6128 Plus is Radical's excellent *Smart Plus* (081 856 8402) – Amiga-quality graphics on your CPC.

An equivalent of *Autoroute* is available in the form of *RoutePlanner*, from Sentinel Software (☎ 081 876 7032), which was reviewed in issue 108. It's twiffic (and I'm not biased, honest). *Populous*, unfortunately, has never found its way onto our favourite machine, in original or cloned format – now there's a challenge for someone. *Lemmings*, though, was released on the CPC and raved about in these very pages. Try looking through some of the ads in this issue – a couple of mail order companies are still selling it. **Richard**

Accessing randoms

I've recently started learning machine code for the 464 and have begun converting my old BASIC programs into machine code. However, I seem to have hit upon a problem. That is, how do you generate random numbers in machine code? I would be eternally grateful if you could explain how to do this and give some form of example.

N Bannister, Dartford

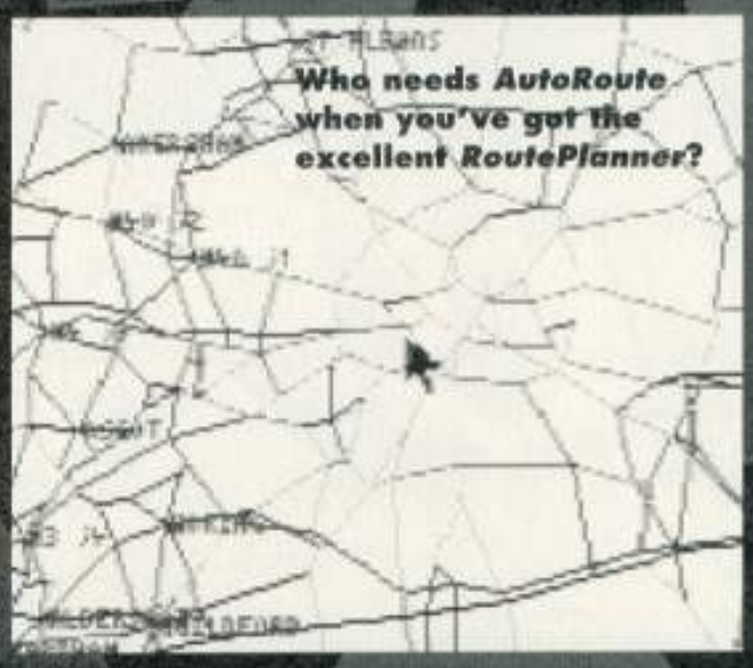
Here's a small routine to do the business for you. It requires a six-byte table to begin with (at the label random), which you can poke with six random numbers between 0 and 255, generated by BASIC.

```
.rnd  ccf
      ld a,(random+5): ld c,a
      ld a,(random+4): ld b,a
      ld a,(random+1): adc b: adc c
      ld (random+0),a
      ld hl,random+4: ld b,5
.rnd_lp   ld a,(hl): inc hl
      ld (hl),a: dec hl: dec hl
      djnz rnd_lp
      ret

.random   ds 6
```

For an example, try CALLing this ten times, with a `CALL &BB5D` after each one. This will generate 10 random characters.

If you start with the same numbers each time, the 'random' numbers generated will always come into the same sequence. The best way to get around this in applications such as arcade games is to introduce an element of true randomness into the proceedings – human input. If you are checking for a keypress every fiftieth of a second, for example, then ask for a random number at the same time, so that when a keypress is detected and a random number called for, you have a genuinely unpredictable result. **Richard**



CRTC is lame

I copied a demo (the *Wulf Demo 3*) off a friend, since it looked really good. However, when I tried to run it on my 464, it wouldn't work, even though it was fine on his 464 Plus. Does it require the Plus features to run, or is there something else wrong with my Arnold?

Alan Black, Guildford

One of the main chips used in demos, the CRTC (Cathode Ray Tube Controller), comes in a number of different flavours; there are Hitachi, NEC and Motorola-manufactured variants. These all have slightly different levels of tolerance when pushed to the limit, which is exactly what most demos do to it. The demo you've got is one such which conflicts with a Motorola chip, by moving the screen too far left on the monitor.

It is possible to get around this. Typing: `OUT &BC00,3: OUT &BD00,&85` before you run the demo will increase its tolerance to this particular problem. The demo's well worth seeing, by the way. **Richard**

Screen two

I recently bought a CPC 6128 from the local market, and so my old 464 is going spare (*why, what's upset it? – Richard*). My dad wants to use it for a display board in his shop window, with various adverts and special offers flashing up. I know that I can store two screens in memory, one at &4000 and one at &C000, but can I fit any more in? Can I put one at &0000 or at &8000, or is there anything else you could suggest?

P Wilson, Exeter

You can't store screens at **&0000** or **&C000**, because the CPC stores some essential firmware routines there that can under no circumstances be overwritten. Having said which, here's a list of things you could try:

1 Squeeze the screens with a good PD graphics compressor, like Dragonbreed Wetware's excellent *SQ23*. You'll be able to load a number into memory at the same time and CALL the relevant addresses to display each one.

For example, let's say that *SQ23* reported the length of the first screen when squeezed as **&C23**, the second one as **&EFF**, and the third one as &897. You would load them as follows...

```
10 MEMORY &1FFF
20 LOAD "SCREEN1.BIN",&2000
30 LOAD "SCREEN2.BIN",&2C23
40 LOAD "SCREEN3.BIN",&3B22
```

The numbers at the end come from the fact that **&2000**+**&C23** is **&2C23**, and **&2C@£0**+**&EFF** makes **&3B22**. You can then **CALL &2000**, **CALL &2C@£** and **CALL &3B22** to display the three screens.

2 Load each screen in, one by one, from disc with a command like: **LOAD "SCREEN1.BIN",&C000**.

3 If you have 128k memory, use a program such as our covertape *Toolkit* to store four screens in the extra memory (at **0**, **&4000**, **&2000**, **&2000** and **&C000**), and copy them to **&C000** in main memory as required.

4 Finally, if your screens are simple ones mostly including plain text, remember that a set of PRINT, PLOT and DRAW statements takes up a lot less memory than a whole screen. You might be able to fit up to 40 in memory at once using this method. **Richard**

A doctor writes

I recently received a fascinating PD program called 'Eliza' from my user group, which holds a conversation with you as if it were your analyst. What amazes me is how the humble 6128 manages to come up with such plausible and occasionally reasonable answers. Do you know how it does it? Or is it a 'trade secret'? I'd love to know.
Charles Morris, Nottingham

It's not a trade secret, and it's not a particularly difficult technique to understand, either. Many versions of the program, a veritable classic which has been floating around since the late '60s, have been written in BASIC.

At its simplest level, *Eliza* knows certain keywords, and is programmed to give a particular response for each one of these keywords. So if you typed in a sentence involving the word 'holiday', Eliza might reply 'Do you feel that you need to go somewhere exotic?'. A slightly more complex variation is to have a number of replies for each keyword, and to print one from that list at random when necessary.

More advanced versions of *Eliza* will perform very elementary parsing: for example, in replying to the sentence, 'I want a doughnut,' with, 'How long have you had this desire for a doughnut?', the first keyword ('I want a') triggering the response to which the part of the original sentence after the keyword was attached.

There are numerous versions of *Eliza* about, all with their own quirks and personalities – such as the extremely insulting CPC program *Thomas LI*. Some American devotees have even claimed that *Eliza*

Tormented by techy troubles?

Don't worry you are not alone. Hundreds of people each month turn to Techy Forum. So don't be put off by pride, give in to humility and write in to ask for help. Richard doesn't bite, you know. Write to: Techy Forum, *Amstrad Action*, 30 Monmouth Street, Bath, Avon BA1 2BW.

Top Tips

STAY IN CONTROL

Control codes. Okay, I know it's not the most enthralling of subjects. You don't generally go to sleep at night dreaming of an island paradise with coconut trees, wide lagoons, beautiful beaches... and an Epson-compatible printer. Control codes are not, unfortunately, more interesting than they sound. They are useful to know about, though (stop snoring at the back.)

Any of the following can be accessed directly from BASIC; for example, by typing:

```
PRINT CHR$(27);CHR$(97);CHR$(3);
```

To do the same from *Protext*, you would set up a control code by typing SETPRINT, and entering it under the letter of your choice – in the form 27, 97, 3. This would then be ready to be called up at any time within your document by CTRL-X followed by that letter. We can't guarantee that all of these will work on your particular printer, but most of them are fairly standard.

● As you probably know, 27, 52 selects italic (slanting) characters, with 27, 53 turning italics off. However, your printer may have an additional set of italics built in, which you can access with 27, 62, and turn off with 27, 61. Graphics characters are also often available using this method; the codes 27, 116, 1 and 27, 116, 0 may select these.

● Similarly, there are two slightly different ways to achieve an 'emphasised text' effect. The usual is to select bold print – 27, 69 to turn on, 27, 70 to turn off. For double-strike printing, try 27, 71, with 27, 72 to turn off.

● This one isn't directly applicable to *Protext* users, but will be useful for BASIC programmers, especially any writing a word-processor. Your printer can probably justify text automatically (so that the right margin is straight), and its own in-built routine will probably use micro-justification: that is, spaces between words are even throughout the line, rather than some being wider than others (à la *Protext*). The catch is that you can't have any carriage returns within the paragraph, which is why *Protext* printing isn't suitable. If this is okay, turn it on with 27, 97, 3. 27, 97, 0 turns it off. 27, 97, 1 will centre text, and 27, 97, 2 will right-align it (the right margin becomes straight, the left margin ragged).

● A nice one for Star printer owners: 27, 115, 1 quietens the noise your printer makes, although it also makes it take a good deal longer. 27, 115, 0 to go back to 'noisy' mode.

● You know all about horizontal tabs, of course, but did you know that your printer can also generate vertical tabs? Set them with 27, 66, and then a number for each line at which you want to set a tab (33 for halfway down the page, for example), polished off by 0. Then to generate a vertical tab, send character 11.

● For a striking headline effect, switch alternate letters between double-width (27, 87, 01, with 27, 87, 00 to turn off) and condensed print (a simple 15 to turn on, 18 to turn off).

• Another unusual effect can be obtained by printing different letters of a sentence (with spaces in-between) on consecutive lines, with the line spacing set very small (do this with 27, 51, 01 – you can change the last number to vary the line spacing). You could even write text in the shape of a sine wave with this.

● Last, and most definitely least, sending 7 will make your printer beep, and 17 and 19 turn your printer on- and off-line (thus flashing a little light). Now that should give someone an idea for a very daft demo...

Plus points

464 or 664 owners who've upgraded their machines to 128k might be more than a little disheartened that they still can't run CP/M Plus (on the other hand, they might not care two hoots). If you have a sector editor like *Xexor* or *DMON*, though, gaining compatibility is extremely simple.

Back your master system disc up onto a blank floppy, boot your sector editor, and insert the new backup. Go to track two, and skip past the directory (by pressing NEXT SECTOR until a messy lump of code appears on screen).

The fifteenth line down, at address &E0, will start with a byte &C8. Change this to &C9, and resave the sector. You can now boot CP/M Plus as you would on a CPC6128, run exciting programs with names like *CRLZH*, and other previously unexperienced thrills.

TO ADVERTISE IN AMSTRAD ACTION

CALL ROB BENNET ON

0225 442244

Next issue on sale 17th November

WIZARD GAMES

1 NORTH MARINE ROAD, SCARBOROUGH, NORTH YORKSHIRE YO12 7EY. IF YOU'RE IN THE SCARBOROUGH AREA, COME IN AND SEE US.
OPEN: Mon-Sat 9.00am-5.30pm, TEL: 0723 376586

4 MOST STUNTS	£3.99	NARCO POLICE	£2.99
BMX NINJA/STUNT EXPERTS/TURBOBIKE/MOUNTAIN BIKE		NAVY MOVES	£2.99
4 MOST MEGA HEROES	£2.99	NINJA REMIX	£2.99
DANDY/CAPTAINS/SPACE TROOPER/FREDDY HARDEST		NORTH & SOUTH	£2.99
4 MOST CUTE	£2.99	PIT FIGHTER	£2.99
HOWARD THE DUCK/DANGER MOUSE/D.A.I WHOOPEE/ PUNCH & JUDY		PLAYDAYS 4-8YRS	£3.50
AIR BORNE RANGER	£2.99	SWORD OF THE SAMURAI	£2.99
ADDAMS FAMILY	£3.50	SNOWBALL IN HELL	£2.99
ARCADE PRUIT MACHINE	£2.99	SHADOW DANCER/ALIEN STORM	£2.99
ARCADE TRIVIA QUIZ	£2.99	SOOTY & SWEEP	£2.99
DAN DARE 3	£2.99	SIMPSONS	£3.50
DARKMAN	£2.99	ST DRAGON	£2.99
GAUNTLET 3 (128 ONLY)	£2.99	TEENAGE QUEEN	£2.99
GEMINI WING	£2.99	TERMINATOR 2	£3.50
JETSONS	£3.99	TETRIS	£2.99
L.E.D STORM	£2.99	THOMAS THE TANK ENGINE	£3.99
LAST DUEL	£2.99	TURTLES	£2.99
MIG 29	£2.99	WWF	£3.50

SALE OFFER ANY 3 FOR £6-00
PLEASE GIVE 1 ALTERNATIVE

DIZZY SPECIALS	ANY 4 FOR £5.00	CASSETTES OUR CHOICE MIXED TITLES
DIZZY PANIC BUBBLE DIZZY SPELL BOUND DIZZY MAGIC LAND DIZZY DIZZY DOWN THE RAPIDS	Please order 1 alternative	10 FOR £5.00

CASSETTE COMPILATIONS Any 2 for £6.00

MOVIE PREMIER £3.99
BACK TO THE FUTURE II/ TEENAGE MUTANT HERO TURTLES/GREMLINS 2/ DAYS OF THUNDER

CHART ATTACK 3.99
LOTUS ESPRIT/TURBO CHALLENGE/ SUPERCARS/ SHADOW OF THE BEAST/ IMPOSSAMOLE/GHOULS 'N' GHOSTS

COIN OP HITS 2 4.99
DYNASTY WARS/NINJA SPIRIT/ VIGILANTE/ HAMMERFIST/GHOULS 'N' GHOSTS

DIZZY COLLECTION 4.99
DIZZY/FAST FOOD/FANTASY WORLD DIZZY/ TREASURE ISLAND DIZZY/MAGICLAND DIZZY

CARTOON COLLECTION 4.99
DIZZY/C/S ELEPHANT ANTICS/ SLIGHTLY MAGIC/ SPIKE IN TRANSILVANIA/ SEYMOUR GOES TO HOLLYWOOD

POSTMAN PAT COLLECTION 3.99
POSTMAN PAT 1,2 + 3

POPEYE COLLECTION 3.99
POPEYE 1,2 + 3

KIDS PACK 1 4.99
POSTMAN PAT/SOOTY + SWEEP/ COUNT DUCKULA/POPEYE 2/THE WOMBLES/SUPER TED

KIDS PACK 2 4.99
FIREMAN SAM/COUNT DUCKULA 2/POPEYE/ POSTMAN PAT 2/HUDLEY PIG/BANGERS + MASH

THE NINJA COLLECTION 3.99
DOUBLE DRAGON/SHADOW WARRIORS/ DRAGON NINJA

SPORTS COLLECTION 3.99
PRO TENNIS TOUR/RUN THE GAUNTLET/ WORLD CUP ITALIA 90

RAINBOW COLLECTION 4.99
RAINBOW ISLAND/BUBBLE BOBBLE/ NEW ZEALAND STORY

HOLLYWOOD COLLECTION 4.99
GHOSTBUSTERS 2/INDIANA JONES LAST CRUSADE/ ROBOCOP/BATMAN THE MOVIE

2 HOT 2 HANDLE 4.99
SHADOW WARRIORS/TOTAL RECALL/ GOLDEN AXE/ SUPER OFF ROAD

POWER UP 4.99
ALTERED BEAST/RAINBOW ISLAND/X OUT/CHASE H.Q./ TURRICAN

GAME SET + MATCH 2 4.99
TRACK + FIELD/IAN BOTHAMS TEST MATCH/BASKET MASTER/SUPER HANG ON/NICK FALDO'S OPEN CHAMPIONSHIP SPRINT/ MATCHDAY 2/ STEVE DAVIS SNOOKER

4 SOCCER SIMS	NIGEL MANSELL WORLD CHAMP
MANCHESTER UNITED IN EUROPE	PING PONG
INT TENNIS	**4 MOST SUPER SPORTS**
GRAND PRIX SIM	US BASKET MASTER/CRICKET INT/ KENTUCKY RACING/ CHAMP SPRINT
1ST DIVISION MANAGER	**4 MOST BALLS BOOTS + BRAINS**
THE BOXER	AUSSIE RULES/RUGBY BOSS/ SOCCER CHALLENGE/ SOCCER BOSS
RUGBY COACH	
PRO TENNIS	ANY 3 SPORTS GAMES £5.00 + P&P PLEASE GIVE 1 ALTERNATIVE
FIRST PAST THE POST	
WEL LE MANS	
MATCH POINT	
J JOHAN SQUASH	
WRESTLING SUPERSTARS	
GRAHAM GOOCH	
KENNY DAGLISH MANAGER	

AMSTRAD DISKS

GRANDSTAND (FRENCH INSTRUCTIONS) £3.99
PRO TENNIS/WORLD CLASS LEADER BOARD/GAZZA'S SUPER SOCCER/ CONTINENTAL CIRCUS

VIRTUAL WORLDS (FRENCH INSTRUCTIONS) £2.99
DRILLER/TOTAL ECLIPSE/CASTLE MASTER/THE CRYPT

3" CLEANING DISK	£3.50
BLANK 3" DISKS EX SOFTWARE 10 FOR £7.99 OR £1 EACH	
100 CAP 3" - 3" DISK BOX	£5.99

GAMES SUBJECT TO AVAILABILITY. PLEASE NOTE - A PHONE CALL RESERVES YOUR ORDER..
CHEQUES + POSTAL ORDERS MADE PAYABLE TO **WIZARD GAMES**
Please send an SAE for full lists. Overseas £1.00 per item P+P. Orders £5 and under add 50p P+P

Access **(0257) 421915** **O.J. SOFTWARE** **(0257) 421915** VISA

Fast Friendly Service

ADVENTURES

	Disk
Acheton	£12.95
Avon (with Murdac)	£15.95
Countdown to Doom	£12.95
Giant Killer (Maths Adv)	£15.95
Kingdom of Hamil	£12.95
Last Days Doom/Hezarin	£15.95
Myth (Role Play)	£6.99
Philosopher's Quest	£12.95
Spysnatcher	£12.95

ARCADE

	Cass	Disk
Alien Storm + Sh Dancer		£12.95
Chart Attack	£4.99	
Dizzy Crystal Kingdom	£8.50	
Dizzy Collection	£8.50	
Dizzy Excellent Adventures	£8.50	
Dbl Drag III + Rodland		£12.95
Double Dragon		£6.99
Dream Team	£6.99	
G - Loc		£6.99
Hanna Barbera Collection	£4.99	
Midnight Res + Nightbreed		£6.99
Mystical		£6.99
Pacland		£7.99
Paperboy II		£12.95
Prehistorik II	£9.50	£12.95
Rock n Roll		£6.99
Rodland + Dbl Dragon III		£12.95
Strider II + UN Squadron		£6.99
Super Cauldron	£9.50	£12.95
Super Space Inv + Pit Fighter	£4.99	£9.99
Turtles The Coin Op	£4.99	£9.99

SPECIAL OFFER DISKS

All Disks Boxed With Instructions

Bonanza Bros	£2.99
Incredible Shrinking Sphere	£2.99
Monty Python	£2.99
Monopoly	£2.99
New York Warrior	£2.99
Wild Streets	£2.99
Cisco Heat	£2.99
Galactic Games	£3.99
Pop Up	£3.99
Back to the Future II	£4.99
Light Corridor	£4.99
Sporting Triangles	£3.99

STRATEGY/SIMULATION

	Cass	Disk
Chess, Draughts, Bridge, Bkgammon		£8.95
Cluedo		£6.99
Colossus 4 Bridge	£3.75	£4.99
Colossus 4 Chess	£3.75	£7.95
Football Manager II	£3.75	£6.99
Football Manager II + Exp Kit	£4.99	£6.99
Football Manager III	£4.99	£9.99
Football Manager World Cup	£4.99	£6.99
Monopoly	£2.99	£2.99
Monopoly, Cluedo, Scrabble	£12.95	£12.95
W.Cup Italia 90 (Not CPC+)		£6.99
Soccer Mania	£6.99	£9.99

ACCESSORIES

AMX Mouse & Interface	£34.95
Amstrad FD1 2nd Disk Drive	£59.95
Amstrad 6128 Ram Chip	£14.99
MP1F/2F 464/6128 to Scart TV	£19.99
Cable 6128 to FD1 2nd Drive	£7.95
Cassette Lead (with REM Conn)	£3.95
Disk Drive Cleaner 3"	£5.95
Disk Drive 3.5" + Ramdos 6128	£79.95
Disks 3"	5: £12.50 10: £23.95
Disk Drive 3" Ex Games	10: £12.99
Discs 3.5" DSDD	10: £4.99
Disks 3.5" DSHD	10: £6.99
Expansion Port Extension 6"	£9.99
Kboard Ext Leads 464	£8.95
Kboard Ext Leads 6128	£9.95
Kboard Ext 464+/6128+	£9.95
Mouse Mat	£2.99
Printer Cable CPC 1 Mtr	£8.95
Printer Cable CPC 1.5 Mtr	£9.95
Printer Cable CPC 2 Mtr	£10.95
Printer Cable CPC+ 2 Mtr	£7.95
Joystick Splitter	£2.99
Joystick Extension Lead	£4.99
Screen Filter Mesh Coll/Mono9	£14.95
System Disk 6128+	£11.95
System Disk 6128 (Sides 1&2)	£9.95

BUSINESS/UTILITIES

	Disk
Advanced Art Studio 6128	£19.95
Adv Art + AMX Mouse + M Mat	£54.95
Adv Art Studio - Col Dump3	£29.99
Basic Idea (Basic Tutorial)	£14.99
Colour Dump 3 (Col Scr Dump)	£15.95
Crash Course Typing Tut 6128	£20.95
D.E.S. ROM Version	£24.99
D.E.S. Disk Version	£14.99
Discology (Disk Utility)	£8.99
Mastercalc 128 (128k)	£27.95
Masterfile III (128k)	£29.95
Maxam Assembler/Disassembler	£23.95
Microdesign + DTP for 6128	£29.99
Microdesign + AMX Mouse	£59.99
Microdesign Extra	£14.99
Microdesign Maps UK	£14.99
Microdesign Maps World	£14.99
Mini Office Original Cass Only	£2.99
Money Manager (+PCW)	£24.95
Parados Rom	£14.99
Proprint ROM £24.99	£15.99
Protext CASS £16.95	£21.95
Protext CPM (6128)	£51.95
Prospell	£20.95
Protype (Print Enhancer)	£23.95
Soft Lok Tape to Disk Transfer	£14.99
Tasword 6128	£24.95
Tas-Spell (For Tasword)	£20.95
Xexor Disk Utility 1	£14.99

EDUCATION

	Cass	Disk
Fun School I Under 5		£8.95
Fun School I 5-8		£8.95
Fun School I 8-12		£8.95
Fun School II Under 6	£3.99	
Fun School II 6-8	£3.99	
Fun School II 8+	£3.99	
Fun School IV 5-7	£10.95	£13.95
Fun School IV 7-11	£10.95	£13.95
Playdays 3-8	£10.95	
Shoe People 4-6	£5.99	
Lets Play with Words 4-8	£12.95	£12.95
Fun with Words 7-	£8.50	£11.95
Read Right Away 1 5-8	£9.95	£12.95
Read Right Away 2 6-9	£9.95	£12.95
Read Right Away 3 7+	£9.95	£12.95
Better Spelling 9+	£8.95	£12.95
Lets Play Numbers 4-8	£12.95	£12.95
Lets Play Money 4-8	£12.95	£12.95
Primary Maths 3-12	£24.95	£24.95
Fun with Numbers 7-	£8.50	£11.95
Target Maths 6-13		£12.95
Micro Maths 11+	£24.95	£24.95
Mega Maths 15+	£24.95	£24.95
French Mistress 11+		£16.95
German Master 11+		£16.95
Spanish Tutor 11+		£16.95
Micro English B-Ad	£24.95	£24.95
Granny's Garden 6-10 (6128)		£19.95
Dragon World 6-10 (6128)		£23.95
Giant Killer Maths Adv 9-14		£15.95
Answer Back Quiz 6-11		£11.95

BUDGET CASSETTES £1.99, 3 FOR £5.00, 5 FOR £7.50

An Veg Min	Action Pack	Aussie Rules	Bully Darts	Cavemania
Cl. Arcadia	Cl. Arcadia 2	Cl.Arcadia 3	Count Duckula	Cricket Int.
Endzone	Fireman Sam	Freddy Hardest	Formula G. Prix	Game Over
Game Over II	G.Gooch Cricket	Grid Iron II	Gun Boat	Indoor Soccer
Jaws	N. Mansell GP	Night Gunner	Pegasus Bridge	Popeye
Popeye 2	Popeye 3	Postman Pat	Postman Pat 2	Postman Pat 3
Rea Arrows	Rex	Rugby Boss	Run for Gold	Soccer Boss
Spin Dizzy	Spitfire 40	Str Force Harrier	Thomas Tank	Top Cat
Trap Door	Theatre Europe	Thru Trap Dr	Dares Wins II	Xanagrams

More Titles Available, Please Give Alternatives When Ordering

PRINTERS

All printers listed below are suitable for use with AMSTRAD CPC, CPC+
When ordering please state computer

PANASONIC KXP1150	£144.95
STAR LC100 9 Pin Mono/Colour	£169.95
(Inc. Colour/Mono Ribbon + Colourdump 3)	
STAR LC24-100 24 Pin Mono	£189.95

All prices include cable & delivery

PRINTER RIBBONS

Quantity:	1	2	5
DMP 2000/3000	£3.75	£7.00	£16.25
CITIZEN 120D	£3.95	£7.50	£16.25
KXP10/1180	£3.75	£7.00	£16.25
LC10/20/100	£3.75	£7.00	£16.25
LC24-10/20/200	£3.95	£7.50	£17.50
KXP1124	£3.75	£7.00	£16.25
LC10/100 Colour	£8.95	£17.50	
LC200 Mono	£4.95	£9.50	
LC200 Colour	£11.95	£22.95	

Other printer ribbons please phone

RIBBON RE-INK £12.95

JOYSTICKS

AMSTRAD JY2	£6.99
CHEETAH Bug	£13.95
KONIX Speedking	£11.95
KONIX Navigator	£13.95
QUICKSHOT Python 1	£10.95
QUICKSHOT Python 1 Microswitch	£11.95
ZIPSTICK Super Pro	£14.95

BUDGET CASSETTES £3.75 EACH

Chuckie Egg	Colossus Chess
Continental Circus	Dizzy Magicland
Double Dragon	Double Dragon II
Driller	F16 Combat Pilot
Golden Axe	Gunship
International Tennis	Matchpoint
Myth	Nightbreed
Rick Dangerous	R - Type
Rodland	Soccer Double 2
Soccer Double 3	Steg the Slug
Spitfire 40	Strike Force Harrior
Teenage Turtles	Test Master
Trivia Quiz	Turrican

HOW TO ORDER:- ACCESS/VISA TEL OR FAX (0257) 421915 MON-FRI 8.30 -17.30 SAT 8.30 - 12.30
BY POST:- LIST ITEMS REQUIRED. MAKE CHEQUES/PO'S PAYABLE TO O.J.SOFTWARE.
SEND TO O.J.SOFTWARE, 273 MOSSY LEA ROAD, WRIGHTINGTON, NR WIGAN, LANCS WN6 9RN.
POSTAGE:- UNITED KINGDOM, ORDERS OVER £5.00 POST FREE (ORDERS UNDER £5.00 ADD 50P).
POSTAGE:- OVERSEAS (AIR) ADD £1.00 PER ITEM SOFTWARE (PAYMENT BANK DRAFT/CREDIT CARD)
PLEASE WRITE OR PHONE:- OR LATEST PRICE LIST (ANSWERPHONE/FAX OUTSIDE NORMAL HOURS)

NOW A TOTAL MOUSE/ GRAPHICS PACKAGE FOR YOUR AMSTRAD AT A TRULY UNBEATABLE PRICE!!

MOUSE SYSTEM

COMPLETE WITH

ADVANCED ART STUDIO



NOW ONLY £34.99

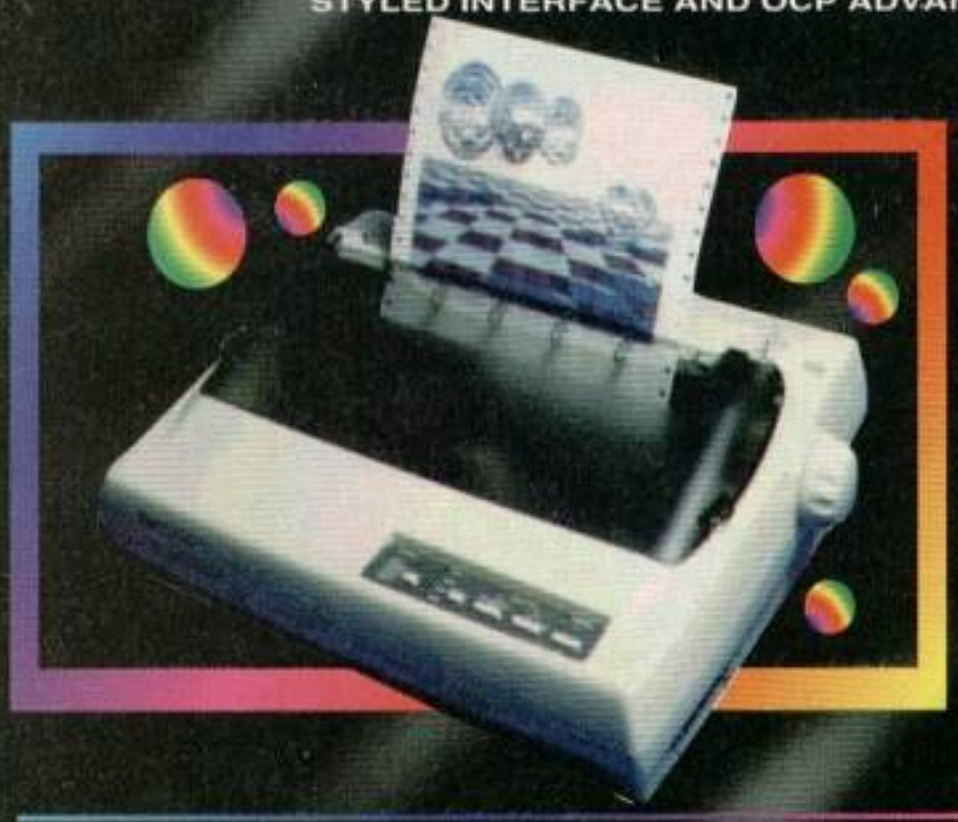
- This Amstrad Mouse is a high resolution two button mouse featuring optical counting, teflon guides, microswitches, rubber coated ball and high quality interface.
- When combined with OCP Advanced Art Studio this graphics package is quite simply the best system available. The features are unmatched...
- Create an image - shrink it, expand it, move it, rotate it, copy it, colour it, etc., etc.
- Spray patterns or shades, make elastic lines - stretch and manipulate shapes.
- Zoom in to add detail in fine mode. ■ Pulldown/Icon driven menus for ease of use
- Mouse operation, plus joystick and keyboard control.
- 16 pens, 8 sprays, 16 brushes - so flexible anyone can create superb graphics easily.
- Full cut and paste facilities plus excellent printer support.

TOTAL PACKAGE INCLUDES MOUSE/ MOUSE MAT/HOLDER, ATTRACTIVELY STYLED INTERFACE AND OCP ADVANCED ART STUDIO

FREE!

MOUSE MAT
AND
MOUSE HOLDER
(WORTH £12.99)
WITH EACH PACKAGE

TAPE OR DISK FOR 464 OR 6128
(PLEASE STATE WHICH REQUIRED)
NB 464 NEEDS DK'TRONICS 64K RAM PACK.
464+ NEEDS ADAPTOR (£9.99)



LC 100 COLOUR PRINTER PACKAGE

NOW YOU CAN PRINT OUT YOUR PICTURES IN FULL COLOUR!

- The Star LC100 Colour Printer not only prints in Near Letter Quality for your regular jobs but also prints out your pictures from Art Studio, etc., in fantastic colour!
- LC100 is a full Centronics printer so it works with other computers (Amiga, ST, PC etc.)
- Made possible by Datel's unique colour printer driver - now you can have a hardcopy in up to 16 colours!!
- No more to buy.

PACKAGE INCLUDES STAR LC100 COLOUR PRINTER RRP £199.00
CENTRONICS PRINTER LEAD RRP £12.99
DATEL COLOUR PRINTER DRIVER SOFTWARE RRP £19.99
NORMALLY £231.98
COMPLETE PACKAGE NOW ONLY £199.00

COLOUR PRINTER DRIVER AVAILABLE SEPARATELY ONLY £19.99

- If you already have an LC10, LC100 or LC200 Colour Printer we can supply the Driver separately.

dk'tronics



- Simple plug in memory expansion gives instant extra memory.
- Features bank switching software for easy use by the programmer or for use as a data storage area.
- Ideal for use with the CPM 2.2 etc.
- The software also features some extra BASIC commands.
- 64K unit expands 464 to 128K.
- 64K unit brings 464 up to CPC 6128 memory configuration making a much larger software base available. Will work straight off with many programs designed for this unit (including OCP Art Studio -see Ad.).
- Bank switching done automatically by software (cassette 464).

64K MEMORY EXPANSION

NOW ONLY £29.99 64K FOR 464

.464+ NEEDS ADAPTOR (£9.99)

DATEL ELECTRONICS

24 HOUR MAIL ORDER HOTLINE

0782 744707

FAX 0782 744292

Send Cheques, Postal Orders or credit card details to:

DATEL ELECTRONICS LTD.
GOVAN ROAD,
FENTON INDUSTRIAL ESTATE,
FENTON, STOKE-ON-TRENT,
ST4 2RS, ENGLAND.

OR CALL AT OURLONDON SHOP:- **DATEL ELECTRONICS** 222 TOTTENHAM COURT RD, LONDON W1 TEL: 071 580 6460