

# CRASHED

**NEW GAMES AND  
DEMO REVIEWS**

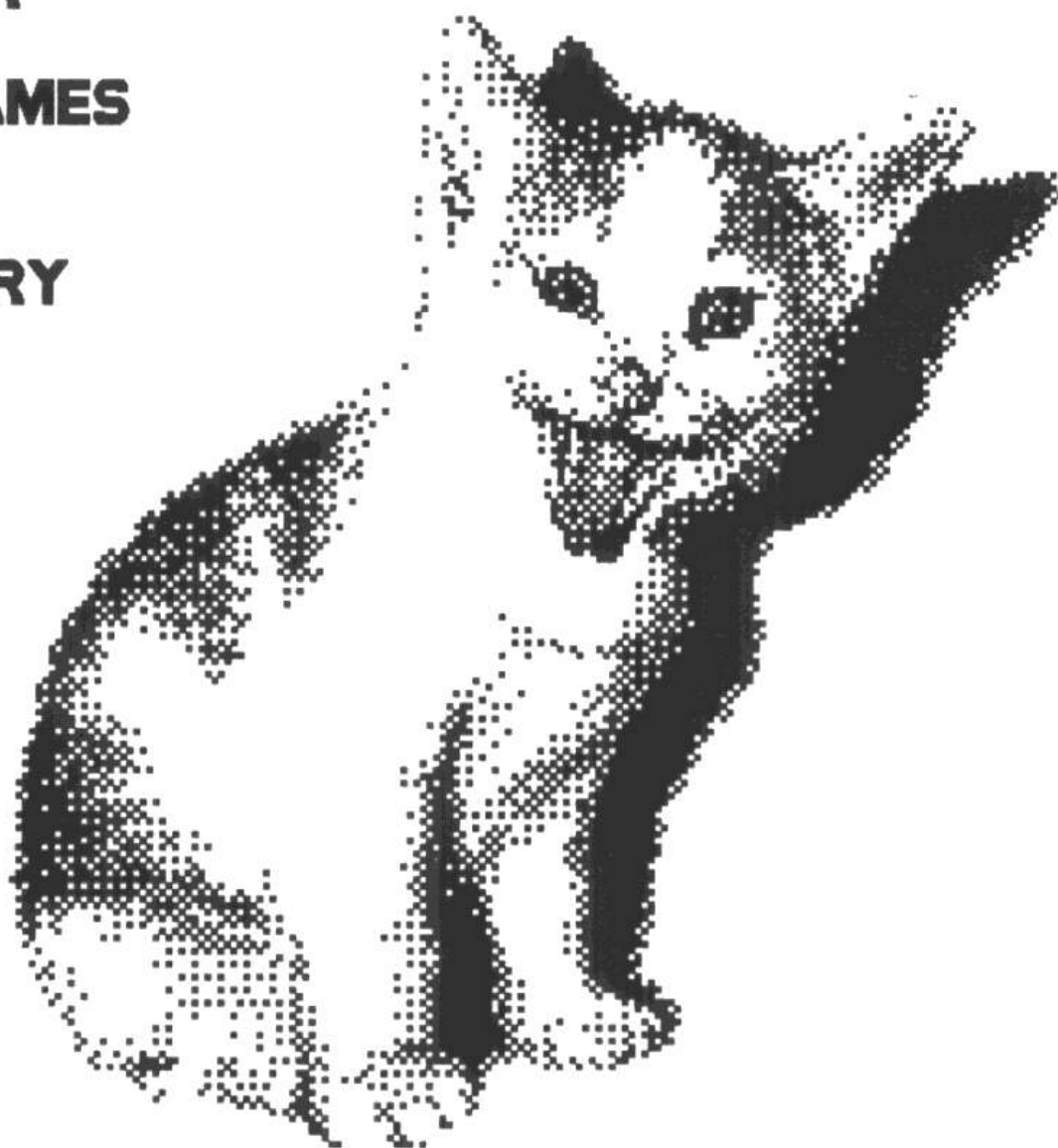
**PAUL WHITES  
INTERNERDER**

**READERS GAMES  
COVERTAPE**

**DEMO LIBRARY  
CATALOGUE**

**932  
DEMOS**

**ISSUE 26  
JULY 1999  
£1.50**



**The alternative Spectrum and Sam fanzine**

## EDITORIAL

CRASHED FANZINE  
11 CAMEL ROAD  
SILVERTOWN  
LONDON E16 2DE  
Tel: (0171) 476 5915

## EDITOR

DAVE FOUNTAIN

## CONTRIBUTORS

LESZEK CHMIELEWSKI  
PAUL HOWARD  
MILES KINLOCH  
PHIL PEACOCK  
MARK STURDY  
MATTHEW WESTCOTT  
PAUL WHITE  
ARNOLD YATES

## PUBLISHER

Fountain PD Software  
Printed by OFFICE WORLD  
Old Kent Road, London SE15 1JU  
Print run: 250  
Made in UK 1999  
ISSN 1361-5505

## DISCLAIMER

Unless an article has someone's name by it then it was written by me, so I'm the one to sue, threaten or ignore just lately. Any other publication can copy Crashed and any of its articles because that's how un-original you are. Anybody taking me to court, please note I'm free most Wednesdays and would prefer a hearing in the south east area if possible.

## SUBSCRIPTIONS

The next 7 issues for £10 which is a tremendous saving of 50p, wow. Cash or uncrossed blank postal orders ONLY please, stop sending me cheques, can't you read Simon from Liverpool?

## ADVERTISING

Full page £10, half page £5, quarter page £2. Lineage adverts up to 50 words free (space permitting). Insertions in three issues will cost only twice those sums. All adverts must be pre-paid so stop mugging me off like you always do.

## BACK ISSUES

Very limited stocks of back issues for £1 each: 10, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25.

# EDITORIAL

No one has come forward to seriously take on the Sam Coupe scene so far, so I can only assume that said computer isn't inspiring anyone to write about it or no one wants to write about it for Crashed. Obviously I can't go on taking money from Coupe users if I can't give you what you'd like to read. It's only down to the sterling work by Mark Sturdy that you've had anything to read whatsoever. Mark, bless his Pulp infatuated cotton socks, needs to spend more of his time doing pointless things like working to pay rent and to buy food. The bottom line is, if no one comes forward before you run out of patience with the situation, then I'll phase the Sam out altogether and give subscription refunds to Coupe only owners. I don't know anything about MGT's beast and I'm not buying one now I've more grey hairs than brown ones. I personally believe the Sam is beyond help.

Yes it's a longer than usual Editorial this month as the covertape stuff is over there somewhere. I'm aware nobody reads this bit anyway, so I'll just bung in a saucy graphic near the foot of the page. Time maybe for a few ideas and suggestions... Is it time Crashed did another Readers awards ceremony? I already realise that if I send out 250 questionnaires I'll only get about 5 back, that's par for the course, so our results wouldn't be an accurate reflection. I'm morbidly interested in what other Sinclair related fanzines you read and how you rate Crashed against them. Our scene has moved on and matured somewhat from a few years ago, I don't consider any Spectrum related project to be in competition with any other, I still believe in natural selection though and it is indeed probable that some are better than others (can you hear the sound of egg shells not being trampled?) I hope you look forward to each issue because I still enjoy producing them.

Thank you to everyone who has taken out new subscriptions recently, it goes more than a long way to making sure Crashed comes out on time. So far I've managed to hit the bi-monthly target. This issue was going to be the biggest Crashed ever at 24 pages, but I forgot it was the middle of summer when absolutely nothing ever happens to write about. Never mind, here's a 24 page issue anyway. And here's that promised screenshot, you can almost see the ladies front bottom but not quite. Somebody please send me what happens after this loading screen before I start thinking nothing much interesting happens at all. Life is like that in so many ways.



# Covertape

## CRASHED READERS GAMES

## Special

They took the cow by the udders and milked those teats for many man hours, they grappled with games creators, they assembled, they compiled, they got turned down by Zeppelin. Crashed is pleased to bring you a fine selection of what Crashed readers do when they're not reading sad computer fanzines or sexually fiddling with themselves - HOME MADE GAMES!

**MAGIC SQUARE** / Miles Kinloch  
Best known for his life saving utilities, Miles also turned his hand and his head to brain punishing logic games. The sort of thing that falls out of Christmas crackers, only better.

**CREEPY CRAWLEY** / Phil Peacock  
Bomberman on platforms. Aid the screen of slugs with just a few well placed incendiary devices. Tricky and beautifully presented, and a few hundred Mastertronic games start to feel very inadequate.

**POPSNOG** / Dave Fountain  
Originally released in 1993 as WAAAAH!, it sold 4 copies. A GAC text adventure, find the three girl members of a pop band, find their instruments and get them to the gig on time supporting an obscure 1980's shambling indie pop band called Heavenly aka Talulah Gosh.

**ZONE M** / Wolfgang Haller  
Slickly programmed homage to the shooting the long electronic worm thing on a grid thing. Jeff Minter did it first but Wolfgang did it better. Strong words? play it and shut up.

**HANGMAN** / Paul Howard  
Mr.Techniche gives us all what we want, a Hangman word game where we can alter the basic so it spells rude words. Paul we salute you.

SEND A BLANK TAPE OR +D DISC PLUS A STAMP AND WAIT A FEW YEARS

**MAGIC SQUARE**

Program by  
M. Kinloch

**HOME POSITION**

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	

10	2		7
15	4	1	9
8	6	5	12
11	3	13	14

**CREEPY CRAWLEY**

1. START GAME  
2. CHANGE KEYS

**PUBLIC DOMAIN SOFTWARE**  
MINTER BY SHAL

**POPSNOG**

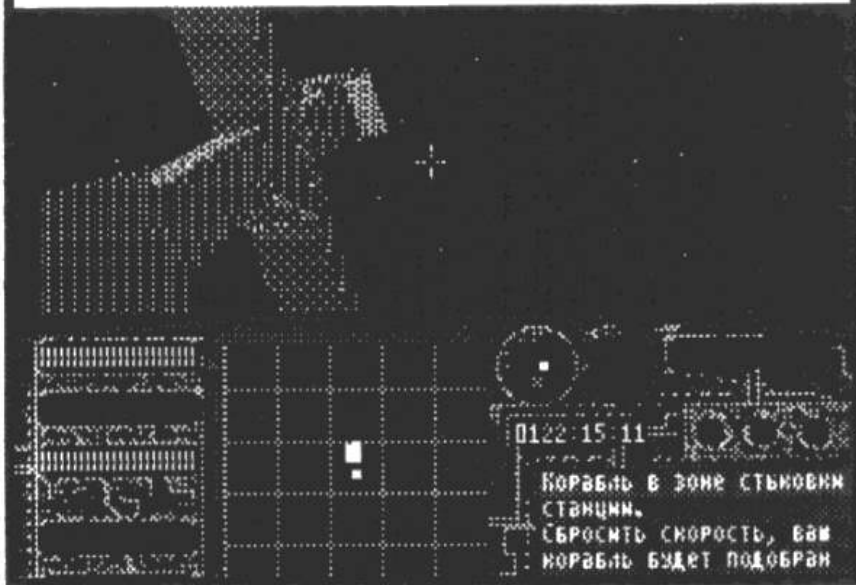
FOUNTAIN 1993



# THE NEWS

## PAIR OF STRIKERS ON THE WAY

News filtering through from Austrian Spectrum club head cheese Leszek suggests that he's just played the greatest Spectrum game ever...and it's a new one. Les, to wrongly shorten his name to an awful English one, doesn't mix his words when it comes to games, he's been working on his own space opus for several years with still no release date confirmed, he knows a good game when he sees one. AWAKEN is reported to be very much in the ELITE mould, but with the added depth, features and programming techniques that 12 years more experience can throw up. A demo version exists in the Russian TRD disk format. And coming up behind is the curiously named PUSSY, a platform game based on the Titanic movie with Manga style graphics. A demo version on tape exists and Crashed will be going crazy apeshit to bring you screenshots in time for issue 27. The thought of playing as Kate Winslet, or even just looking at her lovely bosoms on a sofa is good enough already. Get in my son!



## NEW SPECTRUM BASED FOOTY PBM

A brand new football manager play-by-mail game is currently under development for a January 2000 launch and promises to be run entirely on Spectrums. The code is being written by Graham Shaw, author of many arcade and football games for Alternative and Cult. The mystery GM said "It's a cross between Football Director on Spectrum and Championship Manager on PC, all the best bits that is." Names are now being taken from prospective managers through Crashed.

## ADDRESS MARK MISSING

Long running publication FORMAT seems to have vanished without a trace, with the last issue seen being February 99. In the light of receiving no official press release from Bob Brenchley, (nor in fact has any one else), an answering machine with a million pips on it and his e-mail account closed, we can only speculate that FORMAT is no more. Founded in 1987 from the INDUG newsletter, Format went on to become (along with OUTLET) the most professional and respected semi-pro Spectrum and Sam fanzine co-existing with the high street magazines.

Concerns arose during its latter years from Spectrum users who felt pressurised to upgrade to Sam from the obvious Editorial bias. Comments were also passed on the decreasing pages and general thinness of material throughout last year. In conclusion, it would be fair to say that Format was a very insular and arrogant institution as well as always being a source of vital programming tips. With mixed feelings we wave a bearded bye bye.

## HE'S LOST HIS WRISTWATCH

Former Spectrum tunesmith DJ FISTF\*\*K is turning his hand to the MUSIC:CREATION FOR THE PLAYSTATION software and bringing out an album of Spectrum game/demo music in full 1999 flavour. The MUSIC package offers 3,000 CD quality samples and the ability to trade punches with fully equipped 16 track digital studios. Requests for past favourites to be transformed can be forwarded via the Crashed address. As no one will actually buy it in Our Price, it's highly likely to be given away free with the year 2000 edition of this very publication. This sort of thing is very popular in C64 land.

# software

## TWISTER FRUIT MACHINE

E.S.A Productions

Public Domain

Spectrum 128k only

The brain washing effect of fruit machines have yet to be exposed in the News of the World. You sit there with your pint, innocently looking at the velvety neck of the girl you've fancied for, oooh, at least twenty seconds, wondering if her boyfriend is better looking than you, and there's this flashing hypnotic object in the corner.

Talk about Max Headroom and the illegal blipverts, these lurid colours, flaring and flickering, the Casio style transpositions, it'll have your hand in your pocket fishing for a pound quicker than the late Jill Dando can duck.

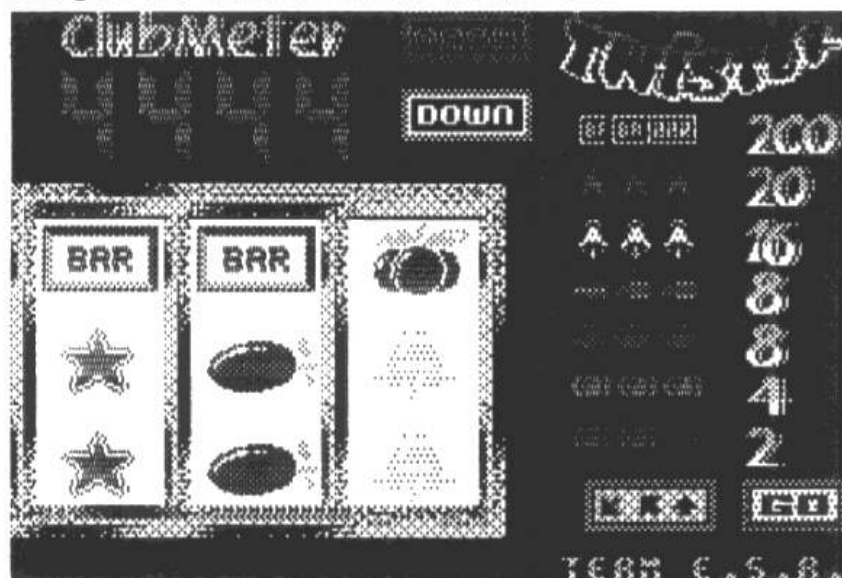
You can tell a lot about a person from the way they interact with a fruit. The complete twat will pretend he knows a system, he'll be straining to see the reels through the little gap to see what's coming (it doesn't need me to tell you he doesn't know what he's



doing). The sensible person puts some money in, wins the same back and sits down again. Of course you always win something immediately, don't get sucked in mothersucker.

ESA have certainly been churning them out lately, and Twister is one of their more pleasingly polished programs. The feel is very Fruit Machine Sim from Codemasters but with fewer options, like almost none at all. The auto-hold function is annoying and the press a button to gain higher or lower prizes is

a breeze to abuse with even the most basic of rhythms. It looks great, the music is a sure fire whistle jerker, but overall the game has no depth or replay value, so best stick with Codemasters for the moment.



Yes, yes, that's one of those fruit machines alright

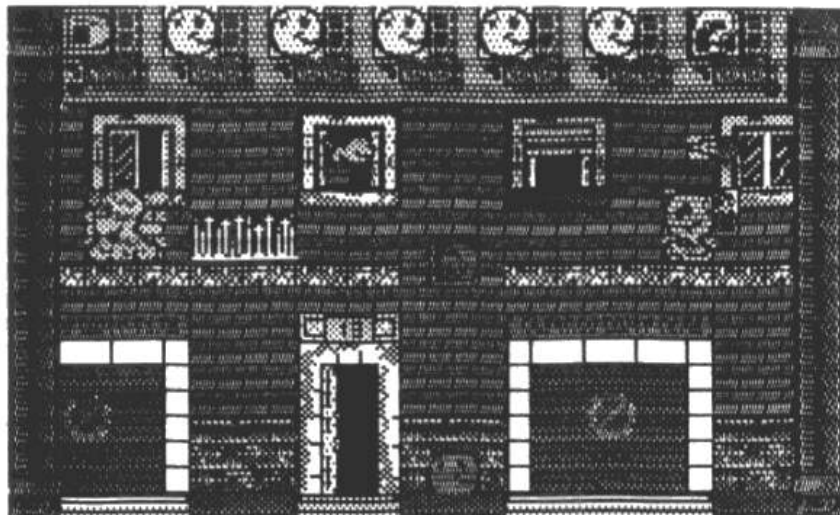
CRASHED RATING 2/5

+ TWO PINTS OF LAGER AND A PACKET OF CRISPS PLEASE, AND SOME CHANGE FOR THE MACHINE PLEASE GUV.

- ALMOST AS GOOD AS PREVIOUS CODEMASTERS GAMES BUT NOT QUITE, SO WHY BOTHER AT ALL?

SMAILY  
ORIGIN: Spain  
Public Domain  
Spectrum 48/128k

It doesn't take a genius to animate a bouncy ball with an inane grin on it's features, sure beats the problem of trailing arms and shuffling legs, but christ we love them so, you just cannot whack a ball with a smiley face on it. There's so much colour in this side scrolling arcade game that you'll either sit there enjoying every second or you'll be closely studying clashing attributes. Don't let Crashed's colour to b/w shading routine put you off, it's very very colourful indeed. The intro is cosy, featuring as it does a young lady with very large hair speaking to you from the television set (speaking as in Ceefax 888 subtitles that is). It appears to be of Spanish origin judging by the way I pronounced the words on screen in that slightly unfunny Manuel accent, you should hear



PacMan look-a-like Smailly gets chased through Camberwell by creatures armed with knitting needles. See what happens when you take acid?

my Inspector Blakey from On The Buses though, it's absolutely wonderful. As per usual I get killed every ten seconds and reset the game after ten minutes to have a play with Driver on the PlayStation.

CRASHED  
RATING 2/5

+ NICE TO  
LOOK AT YOU  
TO LOOK AT  
YOU NICE!

- YOU WON'T  
PLAY IT TWICE.

## HARDCORE HARDWARE

PLUS D ROM 1B  
EPROM SERVICE

Could that much respected beast, the Datel Plus D disk drive and interface, be improved upon? An independent upgraded Rom was made available many years ago, went by the name of UniDos and subsequently tried to fragment the user base with incompatibility. The 1B upgrade however, has been developed from many years of software patches and user experience, it is the Plus D system from heaven. The best news of all is that no compromise has been made on compatibility, just loads of extra in-built features that you normally had to install separately.

The most useful of these are SQUASH (compresses wasteful Snapshot file lengths), SKIPPER (races through long Basic lines in the 48k editor), a built-in front end menu system, a slow motion facility (very handy for games like Uridium), a Multiface style exit to Basic

and infinite game life finder, an ingenious syntax changer and the trade marked catch phrase, lots more. Anyone still using GDOS and its uncanny ability to knock your most important disks without fail, well, you need a good talking to and fast.

Providing you use the correct tool for removing the old Rom chip (and not the rusty kitchen knife you use for all your delicate tasks) and don't bend the legs sticking the new one in, where's the mountain to climb? With a new set of pokes at your disposal your programming and mucking about life has just been made that much easier. You can even send one of your old Roms to be over written (we all know how tight most of you Spectrum users are).

Write to: Kevin Gurd,  
21 Ladycross Rd,  
Southampton, Hants  
SO45 3JR.

CRASHED  
RATING 5/5

+ NATURAL  
EVOLUTION IN  
MOTION

- WE'RE ALL  
TOO LAZY TO  
GET ONE



POSTMAN PAT  
ALTERNATIVE  
SPECTRUM 48/128K

# CLASSIC software

For those of you who think I've finally gone over the edge by enthusing over the likes of Patrick, this is the game that inspired last years infamous smash-a-roony, Grand Theft Auto. No lie.

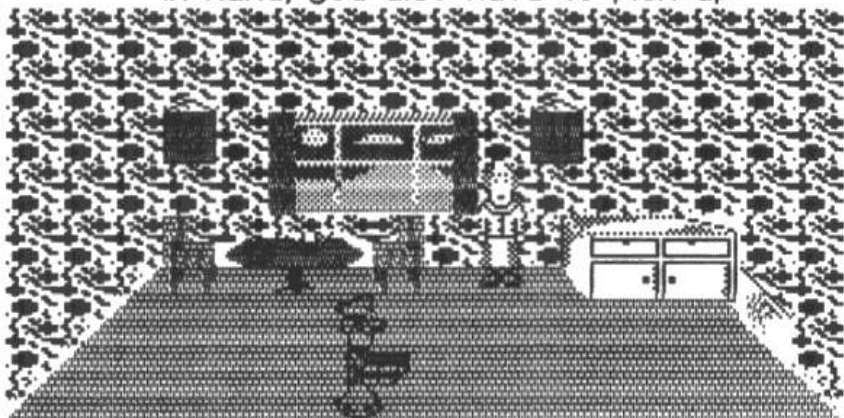
Ask a million students what they think of kids programmes and most will wax lyrical about the hidden drug references that only cool students pick up on. Well, I've never been to University and I can pick up on the fact that Tinky Winky is absolutely screaming and Sweep had an abusive childhood, hence his adult life of bullying and sulky mood swings. Ask a million students what possible point of them existing is, and all you get is silence.

Just like GTA you are given tasks to perform by Greendales hoods to further your career, in this case, Miss Hubbard (never married you know, lives with Betty the bricklayer), Farmer Foggs (pretends to breed sheep but its actually the UK's only cat farm for vivisection purposes), old Goggins (the patriarchal big cheese at the post office) and Dr.Fonsecka (a young mild mannered asian who could charm skin off rice pudding). Just like GTA your view of the proceedings is a lo-fi top down scroller with your vehicle negotiating somewhat unrealistic rectangular road systems. Spending half an hour doing the knowledge of the area is absolutely vital, then you can talk to yourself in your

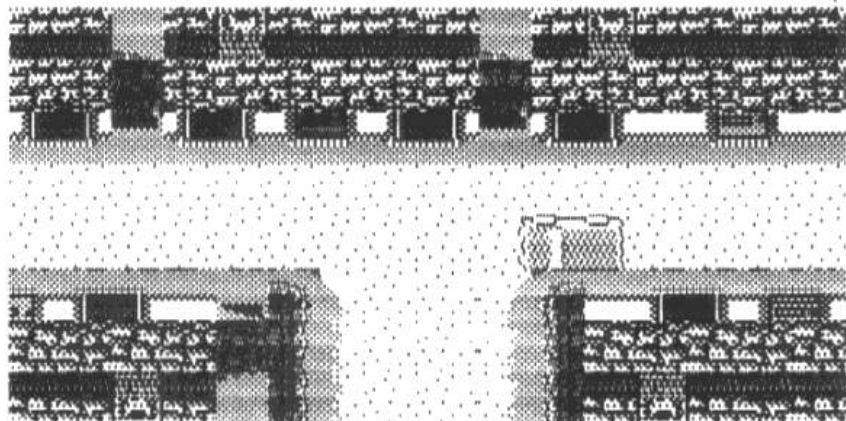


rear view mirror about how we should send them all back to their own country and isn't the Queen Mum great for her age. Sorry, that's another game altogether.

Delivering letters is only part of the job in hand, you also have to pick up



*Ms Hubbard attempts to merge with the wallpaper to avoid being oppressed by a man.*



*Greendale during the hectic rush-hour peak*

prescriptions for Anusol, fend off animal rights protesters, ferry messages for all and sundry and do it all within an hour of simulated game time. Heavy social comment sadly doesn't make an appearance in the shape of Scrumpy Bob going all red in the face and crying because you haven't seen his giro at the sorting office and you give him a lecture on actually getting a job for the first time in nine years. That'd be good though.

# The Crashed guide to valuables

Have you just bought three computers, two boxes of games and a selection of Adult art pamphlets for a fiver from Wakefield Boot fair? Good for you and welcome to the ever flowing world of fill your boots land.

## THE GAMES PEOPLE PLAY

Without getting too technical, there's a lot of this about. The latest considered estimate suggests there was anything up to 15,000 programs released world wide for Spectrums, covering everything from Payroll packages to tape file copiers and all in between. Don't forget there are still new programs being written every day, but for the purposes of this guide, we'll concentrate on software that was available on any high street from 1982-1993.

The vast majority of this software is currently valued at 50p to £1 (merely to give it a token value other than zero, which is actually much nearer the true figure), with only a few select items reaching a bizarre top end price of £10. Collectables that instantly spring to mind include the Ultimate Play the Game label, the multi-sided Tau Ceti box, first issue Elite 48k (with the novella and Lenslok), the little plastic surfboard, programming languages such as Fortran and anything from a left field obscure angle such as Ham radio or even some business software titles. The general rule of thumb is don't pay anything over £1 unless you really want what's on offer, and even then, only buy it if your life wouldn't be the same without it. With retro software, we're dealing with heavy emotional and nostalgic factors, they can sometimes be very misleading in the real world. In the back of your mind you probably already know that the software isn't going to be as good as you thought or remember it would be. Be careful out there.

## STEPTOES LOGIC

The downside of paying inflated prices for valueless shite is that the seller will want to do it again as often as possible, and doubtless become ever more optimistic over what people might pay. This will affect all of us in collecting. It's a buyers market and will continue to be so for several years to come, haggling is a skill we should never lose sight of. Set yourself a top limit and never let the heart rule the head.

Collectors of memorabilia such as movie stars, TV celebs or comic book characters will almost certainly want anything to do with their heros (Daley Thompson anybody?) no matter what it pertains to. That bloke down the road who dresses up like a Klingon would be interested in owning Quicksilver's Star Trek game although he wouldn't play it (he doesn't even have a Spectrum). These people are un-hinged obsessives and deserve everything they get, you could encourage them to seek professional help but they wouldn't listen. I'd beat them up just for good measure if I was you.

Current events, such as the the new Star Wars film, push up values for old games (albeit sometimes only temporarily) or maybe a new groundbreaking super console game written by a very old programmers hand - their back catalogue of achievements can become much sought after for reasons other than common sense.

## NANCY FRIDAY

Mail order companies selling old crap will also stick on a few quid for the larger boxed software, this has nothing to do with the general value, just to offset the postage and packing and sheer bloody hassle costs, so don't over value a title due to its bulk. You can still get away with sending a normal cassette game

for the price of a first class stamp (it's just over but no one seems to mind unless your postman really is a complete jobsworth). There has never been a shortage of house clearance or Charity shops on the high street, it might be time for you to hold your nose and pop inside.

Serious collectors are looking for pristine examples, as new and including any additional posters, badges and inserts (however menial). They don't want scribbles, crushed boxes or budget re-releases. If the collection you're looking to shift or adopt appears as if it almost survived a Nato bomb run, you can forget it. Specialist retro shops will give you up to half of what they'll sell it for. It's a big risk for them to stockpile old software so they tend to be very choosy about what they take in.

## BUBBLEGUM SPLASH

Old software has a habit of being hung onto no matter what, rarely will anyone just throw the whole lot into the dustbin when the Dreamcast arrives. Rest assured that thousands of collections in the attic have yet to reach a car boot sale, and the majority may well never get there at all. Accept that these are as good as lost to he likes of you or I... but just maybe one day we'll stumble over them underneath the Blue Peter annuals and the straw donkey. On the other hand, the majority of the Spectrums official back catalogue can be down-loaded from the Internet, but as mere images they do not carry any value at all. Handy yes, but ultimately worthless.

What is worth more than fuck all would fit into one solitary shoebox, a fourteen hole Dr.Marten boots shoebox granted, but that's your lot. What did you spend your money on today? What's a QL or 16k Speccy worth? Find out next time.



# Public Exposure

WHAT HAPPENS WHEN SOME KNOB STARTS COLLECTING DEMOS FROM 1992, STARTS A PD LIBRARY, PASSES IT ON, STARTS ANOTHER ONE, AND THEN JOINS UP WITH GASMANS DEMOTOPIA WEB SITE? THE BIGGEST LOAD OF DEMOS YOU'LL EVER SEE IN YOUR LIFE. HERE'S THE LATEST ADDITIONS...WE JUST TOO GOOD.

## CHAOS CONSTRUCTION / 1999 / 48u / 60kb

Come to Russia one and all, girls are let in free for this forthcoming Speccy coders party. No kidding. I would suggest you actually use a lasso and drag the poor cows in, that's the only way to get girls to a Speccy party my friends. Did you see how bored Thomas's bird looked in Wetherby? Immediately to your right is a very nice graphic from Chaos, is it me or is that Dennis Hopper out of his nut at Stonehenge? Brilliant music in this one, if you like toe tappers that is.

## TUBULAR BELLS / 1999 / 128 / 22kb

What I really enjoy is something stunning turning up out of the blue, and here it is. Originally written in 1988 by Crashed reader Ignacio Prini from Cadiz, it's currently receiving some modern day tweaks to be finally unleashed on the world. Just look at that artwork - so you see push button heads, before scanners were invented people had to be talented instead. I personally don't like Mike Oldfield but the whole album has been translated to 128k Play statements. A work of genius and no mistake.

## CANNONBALL / HOOPY / 1999 / 128 / 57kb

The mysterious Brit Adam joins up with Polish person Hooy Program. He could be as well known as Extacy 3 but the prick doesn't put his postal address in his demos, just some e-mail shite, aren't we good enough to talk to if we don't have a PC and Spectrum emulator then? I was going to tell him that Crashed really likes his demos and almost agrees with the huge screenshot of Hairbo Jennifer Aniston being quite attractive to look at. But I won't, yer big bastard!

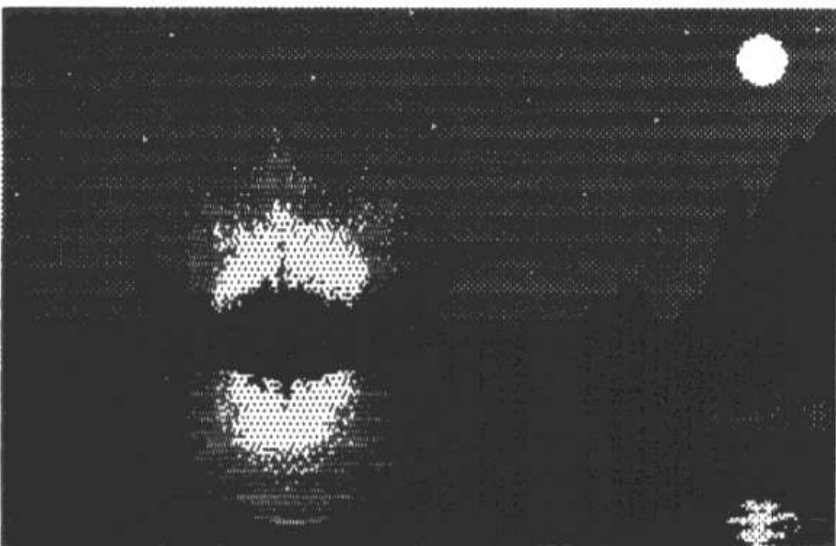
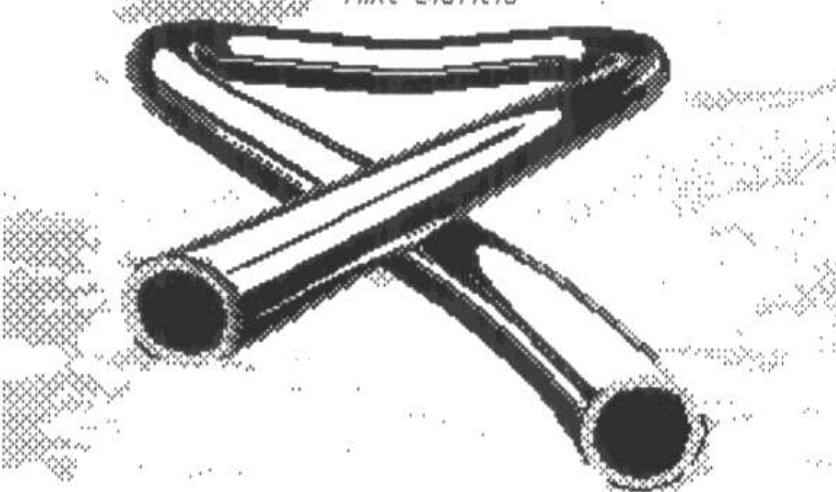
Hooked up to the Intertwerp? Got a spineless Spectrum emulator? I bet you're crap in bed and hung like a pickle as well. Now you can down-load these demos plus hundreds more at the swish of an inflated phone bill.

<http://web.ukonline.co.uk/demotopia>



E 1991  
1999

TUBULAR BELLS  
Mike Oldfield





### ANGEL Neuron / Unknown / 128 / 36kb

There are some shocking things in the world. Two people enjoying themselves with a willy behind locked doors (plus six film crew, the director and the fluffer) doing stuff to each other that should be banned by the church. Absolute filth, and I'm only too happy that my penis was shot off in the war if this is what people do with them. Is that ok Len?

### BLACK FURY / 1998 / 48u / 126kb

The ULA interference does detract from the action somewhat, but it hangs on in there to the bitter end instead of crashing like the others. If XTC had been a synthesiser band in 1977, they would have sounded very much like this. The demo is a kind of sit back and watch cartoon show, the star of which appears to be a large Spy vs Spy shaped black alien who kicks peoples heads off their shoulders then his spaceship winches them up (the heads that is). I think it's about time I got a proper job again.

### SIMPLEMENTO MARIA / 128 / 44kb

I've no idea what the hell is going on here, I'd love people to write in with clues. Three movie stills from a spaghetti western? Oh who cares, the music in the second part is so lovely and relaxing I think I'm going to fall in love with the very next woman I see. Ah, Mrs. Gratolee from the chemists, how smashing you look today. Bottle of dandruff shampoo please. That'll turn her on and no mistake. Just look at that jug!

### EMULATE / Phantasy / 1998 / 48u / 42kb

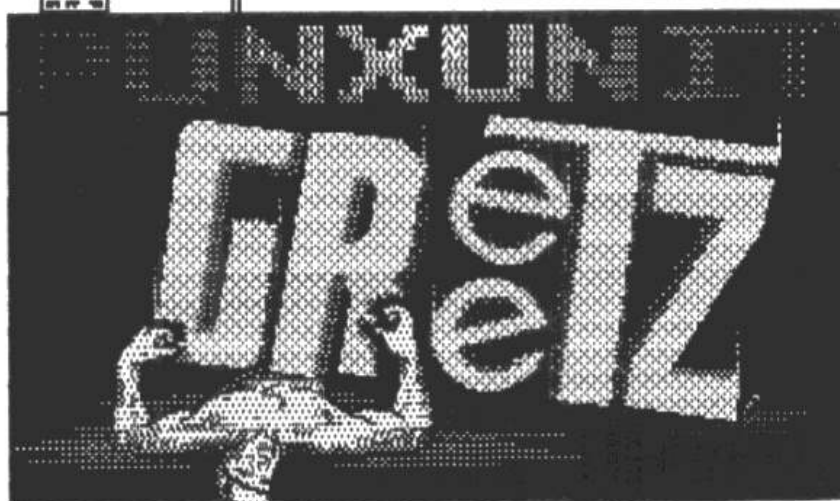
Don't emulate, innovate! Just as well that this has nothing to do with depressed isolated surfers. I just knew I could get a dig in somewhere (I won't do it any more). Imagine the ghost of a PC inside your Spectrum doing things, no not crashing to the floor under the latest amusing virus, playing music and the like. Weird.

### BOOM / Rush / 1998 / 48u / 116kb

I can feel another rush coming on. You're supposed to sing that bit. A touch of class here, the music and the graphics are fused together seamlessly in a production worthy of channel 4, but if you think you might be a borderline epileptic, don't load this up whatever you do. I'm still feeling a bit sick two weeks later and I'm not prone to dancing like Ian Curtis.



HOW MANY MORE TIMES CAN I SAY IT, DEMO COLLECTING IS GREAT FUN, SO ORDER £50 WORTH NOW AND LET THE FOX SEE THE RABBIT. FOR ADDED ENJOYMENT, ALL DEMOS SHOULD BE ENJOYED THROUGH A HI-FI SYSTEM AND IN THE DARK. BEING NUDE DOESN'T HELP BUT DON'T EVER LET ANYONE TELL YOU WHAT YOU CAN OR CAN'T DO IN THE PRIVACY OF YOUR OWN LIVING HELL AS A SPECTRUM FAN.



# TASWORD MAN

THIS IS FOR ANY ONE WHO IS NOT TOO SURE HOW TO CUSTOMISE TASWORD 128+2 FOR USE WITH THE 24 PIN COLOUR DOT MATRIX PRINTERS, THE CITIZEN 24E AND THE A.B.C (PLUS THE 9 PIN 120D MODEL).

1..When it has loaded press symbol shift and letter A at the same time, this will take you to the main menu.

Press letter C for customise then Enter, the menu will change to...

DEFINE PAGE LAYOUT (Y/N PRESS NO)

DEFINE NORMAL PRINT CHARACTERS (Y/N PRESS NO)

DEFINE PRINTER CONTROL CHARACTERS (Y/N PRESS YES)

3..The menu will change to Printer Control Characters, press space for other printer control characters. Now type the following letters and numbers.

## Arnold Yates

From the menu again press C to customise.  
PRESS ENTER UNTIL YOU COME TO CHANGE PROGRAM (PRESS YES)  
PRESS ENTER UNTIL YOU COME TO UNLOCK PROGRAM (PRESS YES)  
PRESS ENTER TO ALL OTHER ITEMS AND YOU WILL END UP BACK AT THE MAIN MENU.

Press R to get into the textfile, select Extend mode then 3, this will bring up the second page of the help screen. Change it like you would edit any textfile to note the following:

```
A (ENTER) 27 (ENTER) 114 (ENTER) 0 (ENTER,ENTER)
B (ENTER) 27 (ENTER) 114 (ENTER) 1 (ENTER,ENTER)
C (ENTER) 27 (ENTER) 114 (ENTER) 2 (ENTER,ENTER)
D (ENTER) 27 (ENTER) 114 (ENTER) 3 (ENTER,ENTER)
E (ENTER) 27 (ENTER) 114 (ENTER) 4 (ENTER,ENTER)
F (ENTER) 27 (ENTER) 114 (ENTER) 5 (ENTER,ENTER)
G (ENTER) 27 (ENTER) 114 (ENTER) 6 (ENTER,ENTER)
H (ENTER) 27 (ENTER) 126 (ENTER) 50 (ENTER) 1 (ENTER,ENTER)
I (ENTER) 27 (ENTER) 126 (ENTER) 49 (ENTER) 0 (ENTER,ENTER)
J (ENTER) 27 (ENTER) 126 (ENTER) 49 (ENTER) 1 (ENTER,ENTER)
K (ENTER) 27 (ENTER) 126 (ENTER) 49 (ENTER) 2 (ENTER,ENTER)
L (ENTER) 27 (ENTER) 126 (ENTER) 49 (ENTER) 3 (ENTER,ENTER)
M (ENTER) 27 (ENTER) 126 (ENTER) 49 (ENTER) 4 (ENTER,ENTER)
N (ENTER) 27 (ENTER) 126 (ENTER) 49 (ENTER) 5 (ENTER,ENTER)
O (ENTER) 27 (ENTER) 126 (ENTER) 49 (ENTER) 6 (ENTER,ENTER)
P (ENTER) 27 (ENTER) 126 (ENTER) 50 (ENTER) 0 (ENTER,ENTER)
```

A-BLACK  
B-MAGENTA  
C-CYAN  
D-VIOLET  
E-YELLOW  
F-ORANGE  
G-GREEN  
H-INVERSE  
I-NORMAL SIZE  
J-DOUBLE HEIGHT  
K-QUAD HEIGHT  
L-DOUBLE WIDTH  
M-QUAD WIDTH  
N-DOUBLE HEIGHT/WIDTH  
O-QUAD HEIGHT/WIDTH  
P-CANCEL REVERSE

4..Press Enter and this will take you back to the menu.

5..You can now press letter T to save the customised Tasword to your disk or tape so far if you wish. Now it's time to alter the help page that describes what printer codes to use to print in colour and in differing print sizes (the help pages usually found at the top of the Tasword editor screen).

When you have finished customising the help page press Extend mode then key 4 to store the changes inside the actual machine code of Tasword itself, you can then re-save the entire program as before complete with the revised second help screen from the main menu. It's a good idea to have an original version of Tasword backed up somewhere safe first.

### PRINTER CONTROL

1 Underline	6 Subscript	C D Height on	H 10 Cpi
2 Bold text	7 Italics	D D Height off	I 12 Cpi
3 Double Strike	8 Double Width	E 9/72 Lines	J 15 Cpi
4 L Quality	A Proportional on	F 10/72 Lines	K DD 10i
5 Superscript	B Proportional off	G 12/72 Lines	L DD 12i

3 =EXTEND TRUE UID =UP HELP INV UID =DOWN HELP 31 =HELP OFF

Here's one your funky Editor did for his Epson LQ100/Tasword set up. Consult your own badly written printer manual and watch as your printer runs off page after page of question marks and graphic blocks. Proportional printing from Tasword? Epson rules man! (...Ed)

TO ACTIVATE DIFFERENT COLOURS AND PRINT SIZES IN YOUR LETTERS AND DOCUMENTS, PRESS THE GRAPH KEY THEN ANY LETTER FROM A TO P FOR THE DESIRED EFFECT. A GRAPHIC CHARACTER WILL APPEAR IN YOUR TEXT FILE BUT NOT ON THE PRINTED PAGE.

NEXT ISSUE: WORDMASTER, TYPELINER AND HEADLINER FULLY EXPLAINED - MAKE YOUR OWN POINTLESS FANZINES AND SELL THEM JUST LIKE CRASHED!



# THE CRASHED DEMO LIBRARY

Welcome to the first edition of the Crashed Public Domain Demo catalogue. Check out the new releases every two months in the latest issues of Crashed fanzine. There's already 932 to choose from!

## THE HISTORY

The hobby of demo-making started on the European continent. During the Spectrum's commercial life, original software was hard to find on the shelves of countries behind the Iron Curtain, and was very expensive even if it was in the shops. Skilled self taught programmers would hack any game they could find (removing various protection routines) to standard Basic and Code files, so making copying that much easier for all their friends and contacts. Yes, it was software piracy, but in the face of the economic and distribution problems, perfectly understandable under the circumstances. The Spectrum was also popular in Spain and Germany - countries that like the UK, could support the luxury of home computers.

To credit themselves with the hacks, the programmers would bolt on a front-end program to prove that they had cracked the game first. Other hackers, sometimes as an afterthought, would concentrate solely on removing in-game music and creating compilations of the best tunes. Titles from the late 80's by Hacker Chris are a good example of the latter style.

These front-end tags inevitably became longer and longer, hackers were now showing off what they could make a Spectrum do from scratch that commercial game programmers rarely scratched the surface of (they had gameplay to worry about after all). Hacking British games became merely a side line, it was getting too easy, but pushing at the limits of what a computer could do could elevate someone to real infamy on the scene. As with the Hip hop culture, different crews would 'battle' to produce the most impressive effects and music scores, it was clear to see who ran with the most respect and who was derided as 'lamers' from the text scrollers. The groups and individuals grew up in public, each demo being more impressive than the last.

Demo collecting is great fun, each program is a window on that particular countries culture and view-points as well as being a source of original music and sometimes stunning graphics. Such are the mechanics of the scene that demos written in a Polish bedroom will shortly be distributed all over the world, from Brazil to Australia without the author even having to lift a finger.

## PRICES

As programs they are free, but as catalogues cost money to print and the time and effort it takes to obtain, archive and copy them all, a nominal charge is made. Any demo under 100k long is 5p and anything over is 10p. Some of the longer titles are disc only so check the catalogue for (+D).

## PROBLEMS?

Demos can be quite fickle on what they run on. It goes without saying that quite a few don't like the +3 or +2A and the vast majority (i.e. all of them) prefer Sinclairs original 128k or grey +2. All titles in this catalogue have been tested on the latter models and all work provided they are loaded in the correct mode. In the second column ...

128 - Load as normal from 128 editor or menu screen.

48u - In 128 Basic type USR0 then (ENTER). The Spectrum will reset into a 48k mode but the soundchip will still be active. A lot of demos will only run this way. Don't let a 120k demo load up from tape then find it crashes on you, always read the catalogue load up mode and they'll be no tears. I didn't test each one because of my health!

48 - These will only run in normal 48k mode and will crash in 128 Basic mode.

Has the demo loaded but nothing's happening? Try pressing a few keys like the numbers, Enter, Space or the Video keys. Prompts are not always listed so get used to pressing things now and again - strange things might happen. Multi-loaders usually need a space bar prompt. If you've done everything right and it still doesn't work, don't just get the hump, tell me about it so I can get it sorted out.

Faulty tapes and dodgy disks are something we all have to live with, badly recorded sources i.e. me, have been given a great deal of attention, so rest assured I've tried my best this end. Sending old and over used tapes and disks as blanks will do neither of us any favours, it'll clog my equipment up with oxides and probably fail to work your end. As countless decorators will tell you, you don't get a good finish if you don't spend time on the preparation.

If you want any demos, just choose a few titles, send a blank tape or +D disc, bung in a stamp if your order is under £2 and I'll do the rest. Orders over £2 are post free. All money received will be put towards the production of Crashed fanzine.





DEMOGOGIA / Omega	92	128	15K	FTKUS PIKUS / Flash	--	128	11k	HERCULES / Busysoft	91	48	15k
DEMOLITION / Tigers Claw	93	128	12k	FINAL STRIKE / Mad Guys	94	128	6k	HEROES 92 / George K.	92	128	29k
DEMONE / Spectec	91	48	59k	FINAL STRIKE 2 / Xterminator	96	128	18k	HEXOGEN / The Jokers	--	128	41k
DEPECHE MODE / Dream Makers	94	128	18k	FINAL STRIKE 3 / Talisman	97	128	17k	HIGHER STATE / JSC	98	48u	80k
DEPECHE MODE SINGLES / BigBug	88	48	40k	FIRE AND ICE / Guardian	94	128	47k	HOLLISBUSTERS / The UVMS	95	128	28k
DESTINY SOUNDS 1 / KVM	--	128	20k	FIRST ASSOCIATION PREVIEW	97	128	41k	HOCUS POCUS / Flash	--	128	24k
DESTRUCTOR MORTAL / Mata	94	48u	69k	FIRST ASSOCIATION (+D)	98	48u	1.6m	HORROR DEMO / Szninkiel	--	128	34k
DEVILS CURSE / Nick Snake	--	128	13k	FIRST DEMO FOR AY / Sauron	94	128	43k	HOT GIRLS / The Guardian	95	128	71k
DIAGRAM 128 1 / Frank Dux	90	128	19k	FIRST SLOVAK REAL DEMO	95	128	114k	HUMOUR IN BW / Theo Devil	93	128	27k
DIES IRAE / Exodus	96	48u	91k	FIRST WONDER DEMO	--	128	63k	HUMOUR IN BW 2 / Theo Devil	93	128	27k
DIG / Jacek Michalak	92	128	24k	FLASH DEMO / Phillip Shark	93	128	37k	HURRICANES SLIDES / P.Howard	95	128	22k
DIGISYNTH 2 / Profsoft,KVM	93	128	38k	FLASHTRACKER / Flash Inc	--	128	21k	HYPERSONIC / Jokers(Poland)	--	48u	43k
DIGISYNTH 3 / K3L	97	128	118k	FLASKA / Srisoft & Factor 6	94	128	11k	HYPERSONIC 2 / Pentagram	92	128	127k
DIGITAL BOX / TFF Team	--	128	69k	FLY, THE / Agent X	--	128	19k	HYPERSONIC 2 48K / Pentagram	92	48	34k
DIGITAL MUSIC COMPOSER	93	48u	32k	FOR K3L TEAM / West Boys	95	128	20k	HYPERSONIC 2 PRE / Pentagram	91	48u	83k
DIRTY MOVIE SHOW 1	--	48u	35k	FOR UNITED MINDS / Extacy 3	95	48u	69k	HYPNOTIC WORLD / Triton	95	128	85k
DIRTY MOVIE SHOW 2	--	48u	34k	FOR YOUR VALENTINE / Oliver	95	128	21k	I OWE YOU NOTHING / CoolGuys	89	128	46k
DIRTY MOVIE SHOW 3	--	48u	34k	FOUR SEASONS / Triad	94	128	139k	IBM PC / Bromba	89	48	40k
DIZZY / Serhsoft	98	128	4k	FRANK FRAZETTA / Rafii,Miva	89	128	19k	ICABOD DEMO 1 / Icabod	93	128	32k
DIZZY DEMO / Profsoft	92	128	44k	FRANK FRAZETTA 2 / Rafii	89	128	25k	ICABOD DEMO 2 / Icabod	93	128	27k
DMC DEMO 7 / DMC	90	48	29k	FRANK FRAZETTA 3 / J.Dalton	90	128	39k	ICE CREAM / World Eyes	96	128	26k
DMC DEMO 8 / DMC	90	48	33k	FRAIGHT DEMO / Stone	--	48u	34k	ICY DEMO / Mortal Hackers	94	128	11k
DO LITTLE / Adam	98	128	36k	FUCK 128 / Hacker Conrad	89	128	36k	IGGY DEMO / IECsoft	93	128	40k
DOBROCKI 128 / Kicia	89	128	20k	FUCKMANIA / Johnny Renegade	95	128	90k	ILL BE BACK / Craig Eades	91	128	38k
DOODY GEI PARTY / Extacy 3	95	48u	125k	FULL PSYCHO 3 / Prodakszyn	94	128	20k	ILLUSION / X Trade	96	128	40k
DOOM 2	--	128	2k	FULLER BRUSHMAN / Womo	--	128	220k	IM NO GOD / Johnny Wizard	90	128	15k
DOOM DEMO / Cobrasoft	96	128	11k	FUN PART DEMO / The UVS	93	128	34k	IN CONCERT / The DVB	89	128	24k
DOOM DEMO / Digital Reality	96	128	49k	FUN PART DEMO REMIX / DC Pak	94	48u	36k	IN THE ARMY NOW / The UVMS	94	128	11k
DONT PULL TOO HARD / Soddom	--	128	25k	FUN TOP 98 / Antares	98	128	16k	INDUSTRIAL PARADAYS / Hooy	98	128	154k
DONT STOP MUSIC / Castor	87	128	7k	FUXOFT SOUNDTRACK 2 / Fuxoft	89	48	34k	INFAMY / Sade	90	48u	31k
DOUBLE DENSITY / SFH	90	128	4k	FX4 - SOUNDTRACK / Fuxoft	91	48u	40k	INFARCT / Black Eagle	--	48u	92k
DOUBLE MEGA XMAS 2 / H.Chris	90	128	78k	FY FY DEMO / JJ Computing	--	128	15k	INFINITY / Anton	98	128	4k
DOW JOINED / Total Eclipse	92	128	16k	G-DEMO 1 / Dusan Balara	92	128	18k	INNER SPACE 5 / Convention	95	128	54k
DOWNTOWN / Daniel Cannon	88	128	9k	GALAXY 3 / Flashsoft	--	128	33k	INNER UNIVERSE / Extacy 3	95	48u	200k
DOXYCON 2 / ESA	98	128	7k	GALLERY / Catman,DC Pak	94	48u	36k	INSANE / JSC	96	48u	99k
DOXYCON 98 / ESA	98	128	17k	GAME ART / Wiseman,Catman	91	128	42k	INSANITY / Extacy 3	94	48u	37k
DOXYCON 99 / ESA	99	128	33k	GEMINI DOUBLE PRE / Exodus	94	48u	55k	INSULT MEGADEMO / Codebuster	94	128	132k
DRAGONS PARTY / Jacek,Catman	90	128	29k	GENETIC ERROR / K3L Team	98	128	7k	INTENDED TARGET / Interceptor	91	128	36k
DREAM DEMO 2 / Flash	93	128	12k	GEOGRAPHY / Maudib,Drozol	92	128	36k	INTERCHROME / Gasman	97	48u	74k
DREAM DEMO 3 / Flash	93	128	16k	GERMAN FOLK SONG / L.Jones	91	128	5k	INTERGRATOR TURBO / Omega	94	128	106k
DRINK 'EM ALL / RST7	94	128	8k	GHAZAS SUPER SOLDIER / Theo	--	128	28k	INTERLACE / Busysoft	92	128	30k
DRSP	--	128	26k	GHAZAS SUPER SOLDIER 2 / Theo	--	128	27k	INTRO 2 / Zaphod Beeblebrox	90	128	40k
DRUM WARRIORS / Fireman	89	128	32k	GIFT DEMO / Flash Inc	--	128	104k	IRON I / The Unbelievables	94	48u	37k
DUCKMANIA / George K.	93	128	15k	GIFT FOR FIKUS PIKUS / Flash	97	48u	117k	IRON I PREVIEW / Unbelievable	94	128	36k
DUNGEON DEMO / Profsoft	93	128	26k	GIRLS / Jacek Michalak	92	128	27k	IRON MAIDEN / SSC Group	--	128	49k
E-TYPE MEGAMIX / Silicon 8	--	48u	13k	GIRLS (TAK) / TAK	95	128	28k	ISABELLE	--	128	26k
EARTH, THE / CBM	92	128	34k	GO TO HELL / Jacek Michalak	89	128	13k	ISI DEMO / Cybercube	90	128	15k
ECHOLOGIA / Omar Pictures	95	128	120k	GO TO HELL 2 / Jacek Michalak	90	128	25k	ISREAL TEAM / Isreal Team	89	128	113k
ECSTACY MEGA / Dream Makers	96	48u	351k	GOA / Vav	98	48u	4k	ISREAL TEAM 2 / Isreal Team	89	128	28k
EEC 1993 / Theo Devil	93	128	32k	GOAT FARMERS 1 / NeonGraphix	93	128	39k	JARRE LIVE / Trensoft	--	128	21k
EEL DEMO / BZYK	90	128	36k	GOAT FARMERS 2 / NeonGraphix	93	128	39k	JAPANESE FOLK SONG / F.Miles	92	128	7k
EGAL DEMO / Mad Guys	93	128	33k	GOAT FARMERS 3 / NeonGraphix	93	128	39k	JERUSALEM / Extacy 3	96	128	17k
EL LOCO / The Lords	90	128	13k	GOAT FARMERS 4 / NeonGraphix	93	128	39k	JESUS ON E'S / LSD,Rebel	96	128	28k
ELECTRIC REINDEER M / Gasman	96	128	81k	GORKI DEMO / Gorki	94	128	31k	JOKES DEMO / Saisoft	--	128	37k
EMIT SEXUAL PLEASURE / Ext3	95	128	22k	GORKI DEMO 2 / Gorki	96	128	75k	JUDGEMENT DAY 2	91	128	18k
EMULATE 128 / Phantasy	98	48u	42k	GOT TO GET / The President	90	128	122k	JUKEBOX 128 / Gavin Hamill	--	128	14k
ENLIGHT 96 / Fil Grafix	96	128	45k	GRAFIX BANK 1 / Mad Guys	92	48u	41k	JUKEBOX TRANCEPORT/Alphasoft	88	48	15k
ENLIGHT 96 GRAPHIX / H.Chris	96	128	118k	GRAFIX BANK 2 / Mad Guys	92	128	30k	JUNKFOOD / Fudgepacker	95	128	18k
ERDELYI BELA COLL / Exodus	95	48	89k	GREAT BUNS 3 / Adrian	90	128	39k	JUST FOR FUN / Jacek,Catman	94	128	23k
EVIL DEMO / United Minds	95	48u	58k	GREAT HEDGEHOG MASSACRE / Alf	--	48	13k	JUST FOR FUN 2 / J.Michalak	94	128	17k
EXALF / The Gasman	96	128	29k	GREAT MUSIC COLL / Pentagram	92	128	115k	KAPTUREK / Mark	91	128	33k
EXAMPLE FOR ESI / CBM,Mata	92	128	25k	GREENSLEEVES / Garry Rowland	92	128	9k	KASSOFT 5 / Kassoft	89	128	30k
EXCESS / Zero	97	128	73k	GYPSY DANCE / Lewis Jones	90	128	4k	KASSOFT 6 / Kassoft	89	128	25k
EXODUS 95 / Exodus	95	128	29k	GYRON DEMO / Jacek Michalak	89	128	27k	KASSOFT 8 THE SUN / Kassoft	89	128	18k
EXODUS MEGADEMO / Exodus	95	48u	132k	HANDZGLA / Saposoft	92	128	34k	KASSOFT 9 MONEY / Kassoft	89	128	26k
EYE OF BEHOLDER / Cassiopeia	93	128	25k	HAPPY BIRTHDAY / EBI,Bobby	91	128	11k	KATHARSIS / Home Computers	98	48u	80k
EYEACHE / Codebusters	96	48u	36k	HAPPY BIRTHDAY MK SOFT	--	128	8k	KAZ 1st DEMO / Kaz	90	128	30k
FANTASY 128 / Rafiisoft	90	128	40k	HAPPY 15th BIRTHDAY / FLP	96	128	13k	KAZ 2nd DEMO / Kaz	90	128	35k
FARAON / Graf	--	48u	14k	HARDCORE / Fudgepacker	94	128	24k	KAZ 3rd DEMO / Kaz	90	128	31k
FBI DEMO / FBI,Omega	96	128	12k	HARDWAY, THE / Bill,Kicia	91	48u	35k	KAZ 4th DEMO / Kaz	90	48	37k
FEARZONE / Naughty Crew	98	48u	82k	HEART / Alphasoft	--	128	44k	KAZ 5th DEMO / Kaz	90	128	39k
FEMMES	--	128	46k	HEAVEN 2 / Dansoft	90	128	17k	KAZ 6th DEMO / Kaz	90	48u	42k
FEVER / Jacek Michalak	92	128	13k	HEAVY METAL / Jacek Michalak	--	128	42k	KEEP SMILING / Kicia.Bill	91	48u	31k



KILLER MEGA DEMO / Phantom	--	128	27k	MEGASOUND 3 / Bill Gilbert	89	128	26k	NIBBLE DREAMS / Tankard	--	128	28k
XIX 128 / Hacker Chris	89	128	42k	MEGATRON / Dominic Morris	93	128	10k	NICE DOG / John Dalthon	90	128	44k
KOLEDY / Kicia	89	128	8k	MEGAVISION / Nick Snake	92	128	28k	NIGHTFIRE / Phillip Mitchell	--	128	13k
KRAFT MEGADEMO 128 / Extacy3	93	128	79k	MIAMI VICE / Roger Rabbit	90	48u	15k	NIGHTMARE / Craig Eades	92	48	32k
KRISS MUSIC / Illusion	--	128	26k	MIAMI VICE CROCKETT / CoolGuy	90	128	38k	NIGHTMARE 2 / Craig Eades	92	48u	24k
KWIK SNAX / Animate	92	128	24k	MIC 18 / Progress	96	128	6k	NIGHTMARE 3 / Craig Eades	92	48	42k
LADY DEMO / Hlavsoft	--	128	43k	MICRO SCREEN 12 / Night Soft	91	128	31k	NIGHTMARE 4 / Craig Eades	92	128	40k
LAMBADA / PP Minio	90	128	43k	MICRO SCREEN 13 / Night Soft	91	128	47k	NIGHTMARE 5 / Craig Eades	92	48	36k
LAID BACK DEMO / Knights	95	128	90k	MICRO SOUND 1 / Inxs	89	128	29k	NIGHTMARE 7 / Craig Eades	92	128	24k
LAST 48 / ESA	98	48u	119k	MICRO SOUND 2 / Inxs	89	128	28k	NIGHTMARE 9 / Craig Eades	92	128	42k
LAST, THE / Icabod	94	128	20k	MICRO SOUND 3 / Inxs	89	128	29k	NINE 1 / Special Team	95	128	11k
LAUREL AND HARDY / Igor	97	128	6k	MICRO SOUND 4 / Inxs	89	128	22k	NINE 2 / Special Team	95	128	17k
LAZARUS / DC Pak	99	128	64k	MILKY WAY / Flash Inc	94	128	57k	NINJA DEMO / Vietnam Boy	--	48u	27k
LCD DEMO / Norosoft, Busysoft	92	128	41k	MINES SOUNDMASTER / JHCS	--	128	31k	NITELIFE / United Minds	94	128	42k
LEARN TO DRIVE / Extacy 3	93	48u	28k	MINDLESS / Extacy 3	93	48u	13k	NMI 1 / Dynamite Dynastie	90	128	23k
LEATHAL INJECTION / Psi Co	95	128	44k	MINDWARP / Extacy 3	94	128	29k	NMI 2 / Dynamite Dynastie	91	128	32k
LEGENDARY SPECTRUM DEMO	92	48	253k	MINI XMAS 2 / Hacker Chris	90	128	27k	NMI 3 / Dynamite Dynastie	91	48	131k
LEGENTARY DEMO / Johnny Red	--	128	82k	MINSTREL DEMO / Lewis Jones	91	128	3k	NO BRAIN NO PAIN / Ballistuff	92	128	9k
LEGION / United Minds	94	128	26k	MIRACLE DEMO	--	48u	21k	NO INSIGHT VIEW / The Lords	--	128	23k
LET THERE DRUMS / Fudgepacker	96	128	36k	MIRACLE / Naughty Crew	97	128	76k	NO INSPIRATION / PNsoft	93	128	40k
LETTER FOR EYE / K3L Team	95	128	32k	MIRAGE 1 / Hacker Chris	89	128	47k	NO NAZIS / Talisman, Vision	93	128	10k
LEW DEMO / Janco/Mike	--	48u	32k	MIRAGE 2 / Hacker Chris	89	128	30k	NO NAME 2 / Dusan Balara	91	128	30k
LIFE SUX / Galaxy Inc.	96	128	29k	MIRAGE 3 / Hacker Chris	89	128	40k	NO NONSENSE / United Minds	94	128	45k
LIFELESS COMMUNISM / Mikropol	90	128	26k	MIRAGE 4 / Hacker Chris	89	128	41k	NO SHIT DEMO 1 / The Knights	93	128	22k
LIGHT AND SOUND / Theo Devil	--	48u	80k	MIRAGE 5 / Hacker Chris	89	128	43k	NO SHIT DEMO 2 / The Knights	93	128	24k
LINE, THE / Hacker Demon	92	128	24k	MISHA MEGADEMO / Resoft	93	48u	79k	NO SHIT DEMO 3 / The Knights	93	128	28k
LINEZ / Extacy 3	93	128	23k	MIX DEMO 128 / Rafiisoft	90	128	26k	NO SHIT DEMO 4 / The Knights	93	128	28k
LION KING / Narcssystem	94	128	29k	MIX 2, THE / Agent X	89	128	24k	NO SHIT DEMO 5 / The Knights	93	128	28k
LITTLE DEMO / Dynamite Duo	90	128	30k	MODERN GUITAR SOLOS / Hutch	91	128	14k	NOP DEMO / Nop	--	128	23k
LITTLE JOKE / The Lords	89	128	15k	MONSTERS / Tommy Cossack	92	128	19k	NOT DEAD / Datasoft	94	128	18k
LIVE 1 / Terminator	--	128	26k	MOOZIK 1 / Anthraxx Dev	90	128	64k	NOT FOR CHILDREN / T.Claw	96	48u	37k
LIVING SHIT / Kassoft	--	128	15k	MOOZIK 2 / Anthraxx Dev	90	128	77k	NUMENON / Numenon	97	128	44k
LIVING ON VIDEO / Exodus	94	48u	26k	MORBID VISIONS / Asphyxia	--	48u	30k	OCTUNES / Damian Griffiths	91	128	12k
LOGIC 2 / The Worms	89	128	21k	MORE THAN NOP / J.Michalak	--	128	56k	ODYSSEUS PARTY DEMO	--	128	21k
LOGIC 5 / Wojtus, CatMan	91	128	38k	MOZARTINA / Les Tyler	--	128	8k	OEI / Eros	--	128	7k
LOLLIPOP / Knuckle Girls	94	128	25k	MQM DEMO / MQM Team	92	128	40k	OI! / Da Gangster	95	128	33k
LOLLIPOP 2 / Pandagirl	95	128	32k	MQM 2 / MQM Team	92	128	43k	OLD HOUSE / Donald, Orgon	91	128	17k
LORDS DEMO / WiseMan, CatMan	90	128	41k	MQM 3 / MQM Team	92	128	42k	ONE TOO MANY / Extacy 3	93	48	73k
LOTUS TURBO 2 / Drozol	94	48u	41k	MQM 4 / MQM Team	93	128	71k	ONE TOO MANY 2 / Extacy 3	94	48	37k
LOVING YOU / Zoetewiej	90	128	4k	MQM 5 (+D) / MQM Team	94	48u	615k	ONE TOO MANY 3 / Extacy 3	96	48u	46k
LUKE DEMO / Spirit	94	48u	25k	MQM 6 (+D) / Matasoft	95	128	327k	ONLY SCREEN\$ 12 / J.Hollis	92	48u	71k
LUNATIC DEMO / Flay & Willy	--	128	5k	MR VAIN / Cat Man, Jacek	93	128	21k	OPEN YOUR EYES / JSC	94	128	78k
LUTSCH (HORSE)	--	128	26k	MUSIC BANK 0 / Exodus	93	48u	20k	OPIUM DEMO / Steel Falcons	98	128	4k
LYRA, THE / ESI	91	128	22k	MUSIC BANK 1 / The Jokers	91	128	29k	ORANGE DEMO / DVB	--	128	21k
LYRA 2, THE / ESI	92	48u	208k	MUSIC BANK 2 / Mat, MaudDib	91	128	31k	OUT DEMO / Jusoft	93	128	19k
MACROBIA / K3L Team	95	128	56k	MUSIC BANK 3 / Pentagram	91	48u	55k	OUT OF ZSL / Tad, Luxsoft	92	48u	82k
MAD CAT DEMO / Tigers Claw	93	128	9k	MUSIC BANK 4 / Agent X	92	128	29k	OVERLAP DEMO / Omar Pictures	95	128	118k
MADE IN KAZAN / Excess	96	128	46k	MUSIC BANK 5 / MaudDib	92	48u	34k	OVERSCAN / Busysoft	91	128	10k
MADHOUSE / Mad Guys	--	48	59k	MUSIC BANK 6 / Drozol	92	128	38k	OXYGENE 4 / Scott F Huhn	90	128	4k
MADNESS REMIX / Mad Guys	91	128	31k	MUSIC BANK 7 / MaudDib	92	128	19k	PAGANINNI CAPRICES +D / Miles	--	128	92k
MADONNA MIX / M+Z Musicsoft	--	128	44k	MUSIC BANK 8 / MaudDib, Drozol	92	128	30k	PALACE 1 / Hacker Chris	90	128	18k
MADONNA MUSIC / Zoetewiej	87	128	11k	MUSIC BOX / Keith Pirie	90	128	14k	PALACE 2 / Hacker Chris	90	128	23k
MAGIC BALLS / Spectec	93	128	38k	MUSIC SNAPSHOT / G.Rowland	--	128	32k	PANCAKE / Catman, Wiseman	91	128	33k
MAGIC BALLS 2 / Spectec	93	128	31k	MUSIC SNAPSHOT 2 / G.Rowland	--	128	33k	PANDORAS BOX PRE / Knights	95	128	22k
MAGIC BALLS 3 / Spectec	93	128	32k	MUSICAL EXPLOSION / Nightman	90	128	131k	PANDORAS BOX / The Knights	96	128	22k
MAGIC SHOW / Speccy Boyz	97	48u	131k	MUSICAL EXTRAVAGANZA / N'man	90	128	131k	PARIS FUN / Angro	--	128	30k
MAGICAN / Dominic Morris	92	128	17k	MY DRIVING LICENCE / Talisman	93	128	14k	PAULCHEN / Panther Paule	--	128	26k
MAGNET DEMO / Bromba	--	128	9k	MY NEXT DEMO / Sabe	90	128	13k	PC DEMO, THE / Spectec	94	128	27k
MANHATTAN / Szafran	90	128	22k	MY NEXT DEMO 2 / Sabe	90	128	20k	PEEPSHOW / JHDsoft	86	128	20k
MANIA DEMO / Icabod	94	128	17k	MY STORY / Faon	--	128	39k	PENG 2 / Xterminator	97	48u	27k
MAP DEMO / Hacker Chris	89	128	35k	MYSTERIOUS ART / Poxoft	91	128	5k	PEPERAMI / Rasputin	92	128	12k
MARIA	--	128	22k	NAMELESS DEMO / The Knights	95	128	85k	PET PORN / H1123	--	48u	15k
MARWINS GALLERY / K3L Team	97	128	44k	NANODEMO / Jacek Michalak	91	128	46k	PETER NOVAK / Flash Inc	--	48	77k
MASTERWANK / Crapman	88	128	9k	NATO / Flay	--	128	7k	PIANOLA BACH BEAT / Von SGG	--	48u	20k
MAX DEMO / Tornado	91	48u	47k	NATO 2 / Flay	--	128	14k	PICCI-SHOW / EBI	93	128	47k
MC PIX / Stupidius	97	48u	44k	NEOGEN / Special Team	--	128	308k	PIKO DEMO / Matasoft	91	128	10k
MDA DEMO / Busysoft	91	128	131k	NEVER MIND / The UVS	95	128	85k	PIVBAR MIDDLEDEMO / Unicum	--	128	72k
MEETING / EBI	93	128	48k	NEW ORDER DEMO / Rasputin	92	128	17k	PLAY IT ONCE MORE / SCsoft	89	128	19k
MEGA 3 TUNES / R.Braithwte	88	128	12k	NEW YEARS SPECIAL / H.Chris	89	128	32k	PLEASURE DEMO / Demolition	--	128	24k
MEGA ROTATION / Players	89	128	19k	NEW YEAR 95 / Musicsoft	95	128	7k	PIPPILLEA / Extacy3	95	48u	94k
MEGADEMO FROM ORION	91	48u	144k	NEW YORK MUSIC REV / Jokers	90	128	38k	PLANETS	--	128	38k
MEGALOMANIA / Mad Guys	95	128	118k	NEXT DUX / Frank Dux	--	128	11k	PLANKTON DEMO / The Knights	95	128	29k
MEGASOUND 1 / Bill Gilbert	89	128	27k	NEVERLAND DEMO	98	128	4k	PODPERSONS FROM MARS / Lords	90	128	20k

POINT 777 / TDM	98	128	10k	SCREAM DEMO / Jacek Michalak	92	128	5k	SPECTRUM 128 MUSIC / A.Brown	88	128	16k
POLICE DEMO / Sabe	--	128	13k	SCRUNK ART / The Lords	89	128	21k	SPEED DEMO / Technium 220	94	128	13k
POND LIFE PREVIEW / Gasman	97	128	16k	SECOND REALITY / M.Westcott	94	128	30k	SPEED DEMO 2 / Technium 220	95	128	30k
POND LIFE PREVIEW / Gasman	97	48u	35k	SECOND WORLD / Tigers Claw	94	128	66k	SPEEDY TOMATO / United Mind	94	128	11k
POO CAKE / Extacy 3	95	128	30k	SECRETS OF LOVE / Talisman	93	128	9k	SPIRIT IN BLACK / L.Quinn	93	128	38k
POPCORN 3 / Wiseman,Catman	90	48u	39k	SEVEN CLASSICS / M.Kinloch	94	128	24k	SPRAY ART	92	128	5k
POPSNOG / Knuckle Girls	94	48u	18k	SEVEN UP / Terminator	91	48	33k	SPRING / John Chapman	--	128	6k
PORNO / Jacek Michalak	92	128	31k	SEVENTH DEMO	--	128	5k	SQ TRACKER DEMO / Depeche C	94	128	20k
POXOFT DEMO / Poxoft	92	128	13k	SEX	--	128	8k	SS DEMO 1 / SS Team	96	128	18k
POWER OF ILLUSION / Illusion	95	128	25k	SFH DEMO 1 / Scott Huhn	91	128	16k	SS DEMO 2 / SS Team	96	128	17k
POZDRAV 98 / Speccy Boyz	98	128	7k	SGT PEPPER / Sgt Pepper	88	128	9k	STAR TREK TNG 1 / T.Claw	94	128	42k
PRESTIGE / Prestige	95	128	11k	SGT PEPPER 2 / Sgt Pepper	88	128	7k	STAR TREK TNG 2 / T.Claw	94	128	36k
PRISONER / The Prisoners	89	48u	59k	SGT PEPPER 3 / Sgt Pepper	88	128	5k	STARE DEMO / Tankard	97	48u	17k
PRO SOUNDS 128 / Priecinsky	91	128	31k	SGT PEPPER 4 / Sgt Pepper	88	128	24k	STIKMAN WORLD / Naughty Crew	97	128	66k
PROPAGANDA PREVIEW / Phantasy	--	128	8k	SGT PEPPER 5 / Sgt Pepper	88	128	8k	STOLEN DATA / Extacy 3	94	48u	73k
PSYCHEDELIA / Simon Freeman	--	128	38k	SGT PEPPER 6 / Sgt Pepper	89	128	14k	STONE PRESENTS / Drozol	--	48u	30k
PSYCHO DEMO / Skusoft	91	128	18k	SGT PEPPER 7 / Sgt Pepper	89	128	16k	STONED ON BANANAS / Psi Co	95	128	25k
PSYCHO HELIX / Spectec	93	128	35k	SGT PEPPER 10 / Sgt Pepper	89	128	10k	STOP RESET / Busysoft	89	128	26k
PUMPED FULL DRUGS / CoolGuys	--	128	37k	SGT PEPPER 11 / Sgt Pepper	90	128	10k	STRANGER 3 / Jim Goer	91	128	35k
PURE BLACK / AyLand	--	128	173k	SHIT 4 BRAINS / Progress	97	128	156k	STRAWBERRY FIELDS / U.Minds	95	128	17k
QUARK DEMO / Dominic Morris	92	128	24k	SHOCK 3 / TDM	94	128	25k	STRIP POKER / Talisman	92	128	34k
QUELLE DEMO / Kurt Schneckner	--	128	10k	SHOCK MEGADEMO / ESI	92	48	100k	STRONG DEMO / Intruders	91	128	26k
QUINQUAGESIMA / The Lords	89	128	23k	SHORT CIRCUIT / Castor	87	128	38k	SUBSONIC / Extacy 3	93	48	16k
RADIO TFF / Sanyi,Franks	90	48u	128k	SID DEMO 2 / The Sid	--	128	34k	SUBSONIC 2 / Extacy 3	93	128	31k
RAGTIMES / KVL	94	128	63k	SIGNAL / Mikropol	89	128	40k	SUBSTANCE / CoolGuys	91	128	120k
RAIN MINI / Saisoft	94	128	5k	SIGNAL PART 3 / Mikropol	91	48	32k	SUC POLTERKAMMER / Cats Eye	96	128	14k
RAINBOW / Ivan Roshin	98	128	4k	SILENCE OF THE AY / Illusion	95	128	189k	SUCKER DEMO / United Minds	95	128	27k
RAVE TIME XTASY / Ironman	96	128	76k	SILLY DEMO 1 / The Lords	89	128	12k	SUMMER SOUNDS 1 / Tarzan Boy	88	128	38k
RAVERS PARTY / Illusion	96	128	145k	SIMPLEMENTO MARIA	--	128	44k	SUMMER SOUNDS 2 / Tarzan Boy	88	128	28k
RAYTRACE	--	128	16k	SIMPLETON 128 / Timsoft	89	128	19k	SUPER SOUND 128 2 / H.Jack	89	48u	31k
RE:EVOLUTION / Manui	94	128	17k	SIMPSONS / Motjus,Thorgal	91	128	34k	SYNTHESIZER / Spectrus	-	128	31k
REAL ACTION / Rush	97	128	25k	SING ALONG A SPECCY / Oliver	95	128	29k	SZAFRAN 2 DEMO / Szafran	--	128	32k
REAL DEAL / CoolGuys	--	128	118k	SIR CLIVES NIGHTMARE / Klowns	--	128	104k	TALISMAN / Total Eclipse	91	128	19k
REAL XMAS 92 / Einstein	92	128	13k	SKELETON DANCE / CIR,Womo	96	128	48k	TARGET EARTH / United Minds	94	128	46k
REALLY SAD / United Minds	96	48u	47k	SKY 128 3 / Hacker Chris	89	128	29k	TARREGA +D / Francis Miles	--	128	78k
RECALL	--	48u	14k	SKY 128 4 / Hacker Chris	89	128	33k	TB MINI DEMO / Craig Eades	92	48	18k
REMEMBER THIS / Alex	--	128	24k	SLAPFIGHT / Theo Devil	--	128	23k	TB MINI DEMO 2 / Craig Eades	92	128	25k
REN AND STIMPY / Extacy 3	94	128	40k	SLIDESHOW / Pentagonam	92	48u	62k	TB MINI DEMO 3 / Craig Eades	92	48	24k
RENDEVOUS / The Lords	89	128	20k	SMALL 1 / United Minds	94	128	12k	TB MINI DEMO 4 / Craig Eades	92	48	34k
RENEGADE LEVELS / Theo Devil	--	128	15k	SMASH MEGADEMO / ESA	96	128	716k	TB MINI DEMO 5 / Craig Eades	92	128	29k
REPLAY / Jacek Michalak	92	48u	25k	SMURF SHIT 1 / Hacker Chris	88	128	40k	TB MINI DEMO 6 / Craig Eades	92	48	20k
RESULTS 92 / Johnny Red	93	128	60k	SMURF SHIT 2 / Hacker Chris	88	128	35k	TB MINI DEMO 7 / Craig Eades	92	48	28k
RHAA LOVELY / The Lords	89	128	57k	SNOBSONG / Daniel Cannon	88	128	1k	TB MINI DEMO 8 / Craig Eades	92	48	23k
RHAA LOVELY / Phil Hard	--	48	36k	SNOWMAN SLIDESHOW / P.Howard	95	128	19k	TDL THE DARK LORD / DarkLord	88	128	19k
RHYTHMICK / Poxoft	92	128	32k	SO STRONG / P.Zoetewij	90	128	8k	TECHNICS / Unit 5	95	128	17k
RIGHT VIEW COLUMBIAN / Mr.Ped	--	128	31k	SOLIDARNOSC DNI / Zoonsoft	91	128	46k	TECHNO CHAOS / CBM	93	48u	100k
RIP OFF / Talisman	91	128	42k	SOLO 1 CARTOON DEMO / Legend	96	128	27k	TELEVISION DEMO / Spectec	93	128	30k
ROARING TWENTIES / Microtec	90	128	63k	SOLSTICE / The Knights	95	128	45k	TENNER DEMO / The DVB	89	128	25k
ROBOCOP SHOW / Matasoft	92	128	40k	SONG IN LINES 4 / Busy,Fuxoft	91	128	48k	TERMINADOR / Mad Guys	92	48	52k
ROCK GUITAR 128 / J.Hutching	92	128	15k	SONG IN LINES 5 / Busy,Fuxoft	91	48u	63k	TFF 04 / TFF Team	90	48u	22k
ROTATION / Jacek Michalak	91	128	21k	SONIC / Icabod	94	128	16k	TFF 05 / Sandor Gyanya	90	128	44k
RR DEMO 3 / Richard Raddatz	--	128	26k	SONIC 8 / MC Coder	--	128	8k	THE BALL / V.Semahcik	--	128	5k
RTL01 / Theo Devil	93	48u	116k	SOPORIFIC / Mad Guys	92	128	17k	THE DREAM 48K / Naughty Crew	97	48u	75k
RUDE PICTURES / Craig Eades	90	128	31k	SORRY / Exodus	96	128	42k	THERE / Exodus	95	48u	39k
RUGRATS ANIMATION +D / Rebel	96	128	130k	SOUND BEAT 3 / Agent X	--	48u	36k	THIEVES LIKE US / CoolGuys	89	128	30k
RUSH 96 INFO / Rush	96	48u	8k	SOUND DEMO 01 / Theo Devil	92	128	31k	THUNDERCATS / Blazko	93	48u	41k
RUSSIAN PRESTIGE / Blackshark	96	128	36k	SOUND DEMO 02 / Theo Devil	92	128	17k	TIM FOLLIN 2 / Mat,Ziutek	91	128	23k
SABRINA DEMO / The Lords	90	128	42k	SOUND DEMO 03 / Theo Devil	92	128	20k	TINBIN CRAZY / Craig Eades	92	128	24k
SACRED QUERY RUIN / Profsoft	92	128	42k	SOUND DEMO 04 / Theo Devil	92	128	16k	TNT 1 / The President	92	128	122k
SAM COUPE TOTAL PT / Extacy3	94	128	18k	SOUND DEMO 05 / Theo Devil	92	128	15k	TNT 2 / The President	92	48u	115k
SAMANTHA FOX / JFsoft	--	128	24k	SOUND DEMO 06 / Theo Devil	92	128	20k	TNT 3 / The President	92	48u	121k
SAMCOM 94 / Luckysoft	94	128	13k	SOUND DEMO 07 / Theo Devil	92	128	21k	TNT 4 / The President	92	48u	130k
SAMPLE BOX 1 / Paul Howard	95	128	34k	SOUND DEMO 08 / Theo Devil	92	128	24k	TO JE JEDNO / FBI, Omega	96	128	60k
SATISFACTION / Codebusters	94	128	197k	SOUND DEMO 09 / Theo Devil	92	128	20k	TOTAL MIND FUCK / Triad	93	128	40k
SAVAGE / Sabe,Wonderboy	90	128	12k	SOUND DEMO 10 / Theo Devil	92	128	20k	TOTAL RECALL ANI / C.Eades	91	128	37k
SAXONY DEMO / Adriano,Wobbel	93	128	28k	SOUND SAMPLER 1 / Womo PD	88	128	19k	TOUCH ME / The Lords	89	128	25k
SCALEXIADA / Scalex	93	128	12k	SOUND SAMPLER 2 / Womo PD	88	128	38k	TOXI DEMO / Busysoft	--	128	1k
SCANNER DEMO / Zoonsoft	91	128	44k	SOUNDRIVE V1.05 / Flash	96	48	72k	TOXIC ELEPHANT / T.Eclipse	91	128	37k
SCHIZOPHRENIA 48 / Exodus	95	48	87k	SPACE CRUSADERS	93	128	10k	TRAIN SPOTTIN' / The Knights	93	128	87k
SCHIZOPHRENIA 128 / Exodus	95	48u	111k	SPACE DEMO 5 / Craig Eades	92	128	20k	TRANSFERRED FROM AMIGA	94	48u	22k
SCHLUMPH DEMO / Spectec	93	128	15k	SPACE DEMO 6 / Craig Eades	92	48	21k	TRILLER / Curriodo	--	48	46k
SCI FI GAME ART / Exodus	95	128	33k	SPECTEC DEMO 2 / Spectec	92	128	30k	TRITON MIX / Spectravision	95	48u	98k
SCORIASONIC 2 PRE / J.Hollis	93	48u	59k	SPECTROLOGY / Luckysoft	94	128	17k	TURBO PASCAL V4 / Szafran	89	128	25k



TV TUNES JUKEBOX / P.Howard	95	128	14k
TWIN PEAKS / Poxoft	92	128	10k
TWIN SOUNDS / R.Priecinsky	91	128	33k
TWIN WORLDS / Exodus	94	48u	44k
TYPICAL ARCADE PLAYER / Greer	--	128	15k
UGLY DEMO / Abacus	--	128	8k
UNCLE BEN BORDELLO / Sperm	89	128	24k
UNCLE BEN BORDELLO 2 / Sperm	89	128	37k
UNIT 5 / Maniac, Snowman	95	128	8k
UNLIMITED DREAM / Spectrav.	95	128	95k
UNLIMITED SPECCY / DreamMkrs	--	48	10k
UNLIMITED SPIRITS / Mad Guys	92	128	30k
UNLIMITED SPIRITS PREVIEW	92	48u	5k
UNREAL DEMO / Hacker Chris	90	128	29k
UNUSED 128 / Omega	94	128	28k
VARIETY / J.Hutching	92	128	15k
VASELINE / Knuckle Girls	94	48u	21k
VECTOR / Jacek Michalak	--	48	23k
VERISIMILITUDE / Zack	95	128	14k
VGA 01 / Theo Devil	93	128	90k
VGA 02 / Theo Devil	93	128	88k
VGA 03 / Theo Devil	93	128	84k
VGA 04 / Theo Devil	93	128	81k
VIBRATIONS / Dream Makers	96	128	35k
VIDI PARTY SHOW / Pentagram	91	48u	95k
VIRUSMAKER / Jacek Michalak	92	128	14k
VIZ DEMO / Fudgepacker	94	128	17k
VMD / Triad Developments	94	128	31k
VOICEBOX DEMO / Spectec	--	48	18k
VOODOO MUSIC PACK / Voodoo	--	48	20k
WAITER WAITER / CoolGuys	--	48	17k
WALKMAN / Madhouse	--	128	30k
WALTZES FROM VIENNA / Oliver	--	128	15k
WANKER / Fudgepacker	95	128	36k
WASTE / SS Team	96	128	21k
WATCHING YOU / P.Rennefeld	96	48u	36k
WATCHMEN / Psi Co	95	128	32k
WE'RE GONDOLIERI / G.Rowland	92	128	23k
WEIRD SCIENCE / Horvath, Mezei	92	128	27k
WERNER	86	128	12k
WERNER 2	86	128	19k
WHAT / Snowman	91	128	20k
WICKED SCROLL / J.Michalak	91	128	9k
WILDCAT DEMO / Sean Adams	89	128	20k
WISH YOU WERE HERE / C.Eades	92	128	26k
WITHOUT SENSE / Gacuck	90	48	10k
WIX 128 - 3 / Hacker Chris	89	48	22k
WONDERFUL LIFE / Knights	96	128	30k
WOODPECKER FROM SPACE / Alpha	89	128	45k
WORST OF KRISS / Illusion	95	48u	36k
WRONG TROUSERS / P.Howard	95	128	18k
X-FILES SLIDESHOW / P.Howard	95	128	21k
XMAS COMPENDIUM	--	128	18k
XMAS GREETING / G.Rowland	93	128	27k
YESTERDAYS DREAM / Knights	93	48u	23k
YOLKA 98 / Lavers	98	48u	13k
ZCROLL / Icabod	94	128	19k
ZCROLL 2 / Icabod	94	128	29k
ZX WINDOWS / FM Delight (+D)	91	128	170k

# Hackers Hangout

THE ONLY DEDICATED SPECTRUM HACKING ZINE  
ALL THE LATEST SPECTRUM GAMES HACKED  
COPIES AVAILABLE FROM £1

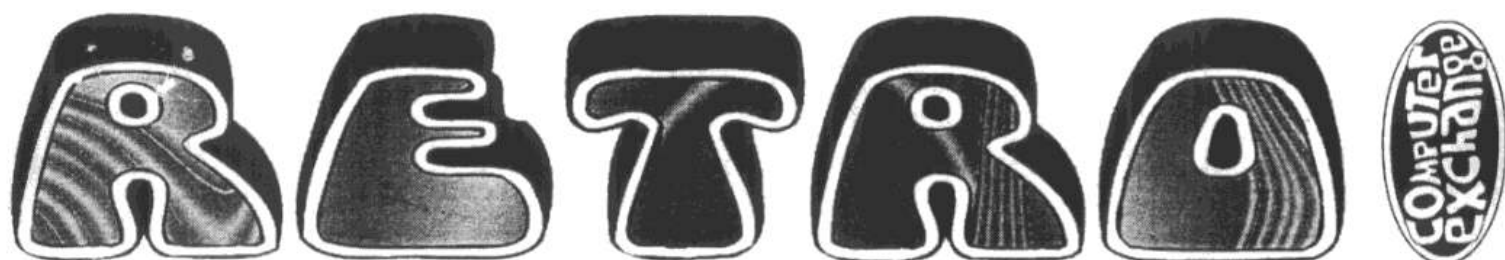
ANDY RYALS, 29 DENTDRIVE, EASTMOOR ESTATE,  
WAKEFIELD, W.YORKS WF1 4JG

## PD POWER

The ultimate 40 page Spectrum magazine for tape, +D, +3, Disciple, DXI and MB 02 users. The only Spectrum zine to average limb! News, reviews, features, competitions, pd reviews. Latest issue out now! Trial copy just £1 (payable to "M. Sherwood") or send 5x26p stamps - to: PD Power, 13 Rodney Close, Bilton, Rugby CV22 7HJ. PD Power is © United Amstrad User Group, Est 1986.

**FREE**  
cover discs/tapes  
each issue - & Ex  
'YS' editor Linda  
Barker writes  
for you!

PD Power is produced  
on a professional  
expanded A1200



COMPUTER EXCHANGE RETRO, 143 WHITFIELD STREET, LONDON W1P 5RY  
0171 - 692 1213



# TECH NICHE

## PAUL HOWARD, A MAN SO TIGHT HE BOILS HIS CURTAINS TO MAKE SOUP, BANGS ON ABOUT BYTES

Optimising is the process of revising a program to make it faster, smaller or more efficient. On the Spectrum, memory space is always limited, so here are some techniques on optimising Basic programs for size.

You've probably seen Basic listings where all the numbers seem to have been replaced by expressions like VAL "5" and NOT PI. Since VAL "5" is always equal to 5 and NOT PI is always equal to zero, why not simply use 5 and 0 instead? It certainly seems that a single digit would take up less memory space than a lengthy expression, this, however, is not the case. Let me explain...

The user manual's character set table describes CHR\$14 somewhat enigmatically as 'number'. Character 14 is stored after each number in your Basic program to signal the start of a number code. You don't need to know exactly how this works; the upshot is that every number in your program is followed by six invisible characters (CHR\$14 and five other bytes representing the number in question. Think of a number of numeric values in any sizeable Basic program and you'll realise that cutting out these six bytes every time would add up to a considerable saving.

Let's go back to the VAL "5" and NOT PI examples. VAL "5" contains a digit inside quotes, which is not interpreted as a number by the Basic editor. So we have only four bytes (VAL, quote, 5, quote) as opposed to seven (digit 5, 14, five byte representation) for a lone 5. A zero similarly requires seven bytes, while NOT PI takes a mere two bytes.

There are many other such optimisations, most of which make ingenious use of Basic functions. For example, SGN PI equals 1, INT PI equals 3 and PEEK PI equals 255. You can also take advantage of the fact that Basic automatically performs rounding where necessary. An expression such as INK INT PI can therefore be reduced to INK PI. How about INK 6? The obvious

optimisation is INK VAL "6" (six bytes) but a better possibility is INK PI+PI (five bytes), since PI+PI rounds down to 6. Similarly, PI\*PI rounds up to 10.

For numbers with trailing zeros (usually machine code addresses) use VAL with the scientific form. For example, VAL "4E4" (six bytes) is shorthand for 40000 (eleven bytes). The number following the E is the number of trailing zeros. Longer expressions can often be trimmed in a number of ways. Consider this expression, which produces a random number between 1 and 4:

```
INT (RND*4)+1
```

This is twenty bytes long. Optimising the separate parts, we might have:

```
INT (RND*(INT PI+SGN PI))+SGN PI
```

Note that multiplication is evaluated before addition, hence the inner brackets. This takes 15 bytes, however it still isn't optimal. We could have used:

```
VAL "INT (RND*4)+1"
```

This is a mere eleven bytes. See how, in this particular case, +1 in existing quotes is smaller than +SGN PI outside? However, you must always take care when enclosing Keywords in quotes. It can only be done in the 48k editor, and editing such lines in 128k mode will change the Keywords into letter sequences, causing VAL to fail.

VAL itself can be used in place of existing brackets. Take the expression 8+4/3. The high-priority division is carried out first, then 8 is added to the result. If we wanted to add 8 to 4 and then divide by the sum of 3, the expression would have to be rewritten as:

```
(8+4)/3
```

Look for cases such as these when optimising, and try to use this kind of construct:

```
VAL "8+4"/INT PI
```

VAL's quotes group the terms to be added, with the effect that the brackets are no longer required - and thus are two more bytes saved!

In practice of course, VAL "8+4" could be replaced by VAL "12", but when variables are involved it sometimes pays to include them in the same set of quotes as any constants in the same expression. If in doubt, count the bytes!

Incidentally, steer clear of BIN. You may see an expression such as PAPER BIN, where BIN (with no argument) returns the value 0. However, BIN is not an optimised expression - it just happens to look like one. In actual fact, BIN is assigned the default value 0 by the interpreter and as a result has a five-byte representation just like any other number.

Most Basic programs make frequent use of the numbers such as 0 and 1. If this is the case, consider using variables instead. It's popular practice to use 0 for zero and 1 for 1. BORDER 0 takes only two bytes whereas BORDER NOT PI takes three. This in itself may seem like an absurdly small saving, but used throughout a program such tricks can drastically reduce code size. As one writer put it, "Take care of the bytes and the Kilobytes will take care of themselves!"

There's one other very useful Keyword for byte-trimming, and that is CODE. Every number from 32 to 255 can be expressed as a Spectrum character. CODE " " produces 32, CODE "A" produces 65 and so forth. Don't forget that having to calculate expressions can significantly slow down a program, particularly if the expression appears inside a loop. Because of this, it's worth avoiding:

```
FOR N=A TO B: PRINT AT NOT PI, NOT  
PI:N: NEXT N in favour of FOR N=A TO  
B: PRINT AT 0,0:N: NEXT N
```

Moving on, not everybody knows this, but when you save a Basic program you also save Data on any existing variables. Reset the Spectrum and (without recording onto a tape) enter the following commands in sequence:

```
SAVE "prog"  
DIM A (200)  
SAVE "prog"
```

The first command saves an empty block of negligible length. However, the large array A means that the second Save takes much longer. In most cases, all the variables your program needs will be initialised when the program is run, so be sure to enter CLEAR before saving so that no unnecessary variables are stored with the program.

An alternative strategy is one where the variables are not initialised by the program at all. Instead, they are entered as commands (LET A=5 and so on) and deliberately stored with the program. The command RUN clears all of the variables, so you'll need to Save the program to run automatically.

# paul whites internorder

While we try to kid ourselves that the Internet is the information highway, an all seeing all giving mass of information that will better our lives and solve all our problems, the truth is that most of it is just pointless. But I like pointless. I like pointless films with zombie wrestlers who have ping pong balls for eyes, and I enjoy finding a web page that is all about zombie wrestlers who have ping pong balls for eyes. Now I don't expect you to have the same bad taste in movies as I do but it is probably a safe bet that you want to read of Spectrum related shenanigans just from the fact that you are reading this magazine and have a birthmark on your left buttock. After all, they don't call me Sherlock for nothing you know, but then again they don't call me Rupert, Humphrey or even Mandy (except on a weekend).

Most of the Spectrum stuff on the Internet is old material given a new lease of life, carefully copied from past issues of Your Sinclair or converted from games that once cost us a weeks pocket money to buy. There is however the occasional web page that gives us something slightly different or new to look at - and this my friends, will hopefully be the first report of my jaunts around the World Wide Web to such places in what will be a regular series. I'm the Spectrum's answer to Michael Palin, except not as funny, not as rich and I only get to take my fat ass on a trip to the spare room.

<http://www.readysoft.es/home/coding/ruputer/maziacs.html>

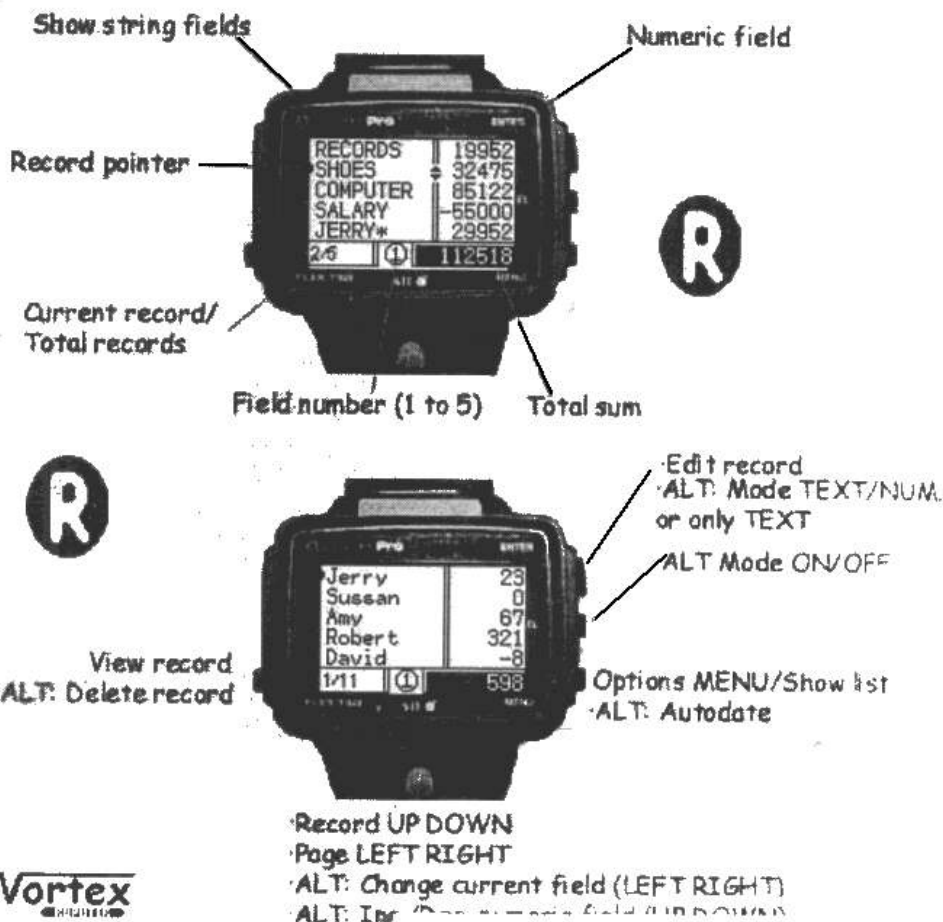
My first port of call is a site dedicated to the Ruputer wristwatch, a miniaturised computer and clock sold by Seiko only in Japan. Its specifications are rather good but what is even better is that the display looks like a diddy version of our very own Spectrum. Unfortunately, given that it is only available from that part of the world, we won't be seeing a flood of Spectrum conversions getting coded for it. However, one enterprising gentleman by the name of Jordi Perez has gone to the trouble of giving our Japanese friends a conversion of Maziacs to play with, that classic maze game originally written by the genuinely nice Don Priestley.

From the screenshots it looks like

everything is intact from the treasure chests to the Maziacs themselves, but unless any of you take a holiday in the far east we must consign ourselves to the fact that we'll never get to play this version. Besides, would playing a computer game on a watch be much fun? No matter how good the game, my shovel-like hands were not designed for quickly and precisely pressing itsy bitsy little buttons. We have after all got the mighty GameBoy for our travelling games playing needs, a machine that surely must be perfect for converting Spectrum games over to...

<http://datapotato.simplenet.com/gbd/ev/>

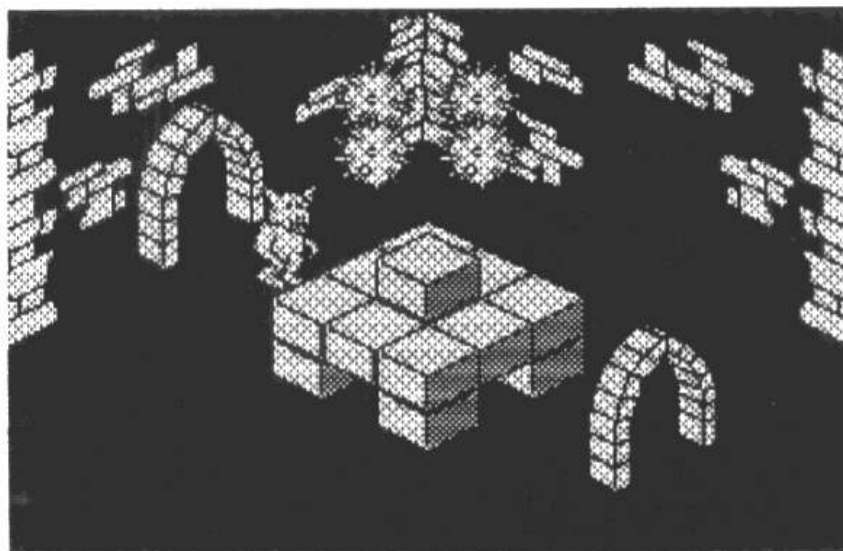
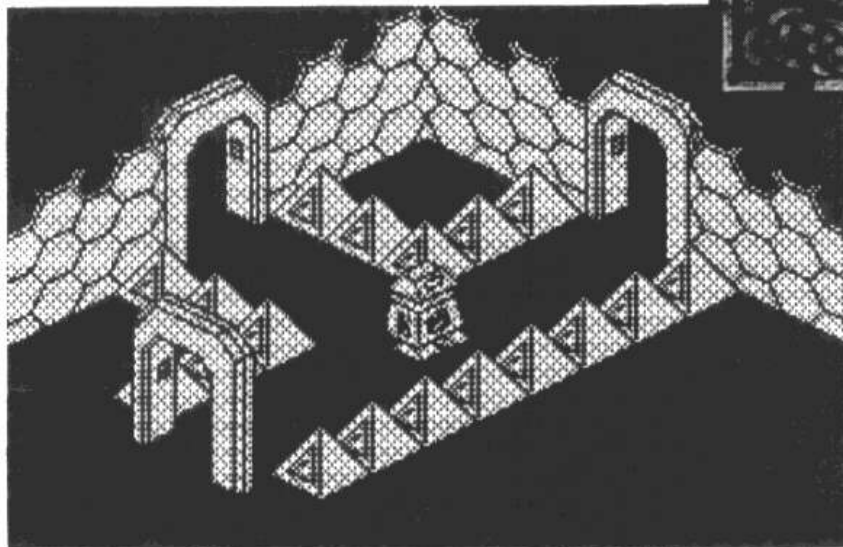
Well, I'm not the only person who thinks so because someone called Quang has converted the crumbly Ultimate classic Jet Pac over to the Color GameBoy. Graphics are now GameBoyfied with a distinct lack of any colour clash and it plays a mean game of build the spaceship before you get your ass kicked. But how do you go about buying a copy of the game? Well, unfortunately you can't, so one has to download the game onto a PC and play it via an emulator which sadly takes the shine off the whole proceedings as all portability is lost unless you're rich enough to own a laptop. I did however come across a company that sells so called back-up devices for the N64 and GameBoy that would have enabled me to copy the Jet Pac file onto a cartridge. At the moment though, I can live without playing Jet Pac on the bus and giving my credit card details to a dodgy looking company based in Hong Kong. (Crashed does not encourage Nintendo lawyers to sue the ass off feeble fanzines (...stinky Ed).



Vortex

The last site this issue takes us to the home page of Rare, a company many of today's yooof will know for their superb N64 games and old crumbles like myself will fondly remember them as Ultimate - Play the Game. In their heyday when they ruled the roost, they created some of the best Spectrum games ever, including Jet Pac, and as Rare they, along with a certain Shigeru Miyamoto, have helped stop the N64 from going completely down the shitter. Like all companies today a web page is the order of the day.

It is good that Rare have not disowned their computing past like many other companies have done. As well as sneak peeks at forthcoming titles Rare also look back at all the games they created, and boy what a back catalogue it is. With games like Pssst, Atic Atac and Underwulde, the word classic all too often applies. But these games are not what caught my eye, another title going by the name of Mire Mare grabbed my attention. It seems that when someone completed playing Underwulde they were given the choice of three exits to take, each one acting as a mini-preview for a forthcoming game. While Knight Lore and Pentagram did materialise, the now legendary (according to Rare anyway) Mire Mare was never finished due to their hectic workload at the time. Despite the cover artwork getting completed and the style of the game been agreed upon to be made similar to that of the top-down



Sabre Wulf and not like their later Filamation titles, you will never find this game no matter how hard you look. It would be nice to think that some lucky soul would stumble across a box at a car boot sale that contained Mire Mare, Atomic Robo Kid, Attack of the Mutant Zombie Flesh Eating Chickens from Mars and the Great Giana Sisters, but in all honesty you'd be better off searching for rocking horse poo.

Rare are also very protective of their old Spectrum games and refuse to let them be distributed on the Internet and don't even offer them for download on their own site. Perhaps they should at some stage once again let the public play these games, maybe spruced up and coloured for the GameBoy in a compilation package of past greatest hits for a whole new generation to play. Come on Rare, this surely has to be a good money-spinner and a welcome addition to the GameBoy catalogue. I'm not greedy either, I'm only asking for 50% of the profits made for coming up with the idea.

Next issue: People who put weird things up their bottoms and post the x-rays on the Internet. This is what we want.



# Sinclair Years

1983

Doesn't time fly when you're a coffin dodger. Programmers were starting to get to know how to do things other than copy basic arcade ideas. Legend software slipped things into second gear with a complex graphic arcade adventure using ancient foke lore as a theme - Valhalla. Melbourne House took the computer by the balls and released The Hobbit, a program so complex it was still ridden with bugs when it hit the shops. Elsewhere some fat bloke released Manic Miner, a game so boring and dull that people started supporting Charlton Athletic as a little light entertainment. Ultimate started flexing their brains in Ashby De la Soul.

Microdrives became available after a long long wait, fragile 90k mini cassettes that no one made games on. As a ground breaking innovation it was a brilliant idea, but then so is drinking 14 cans of Special Brew and picking a fight with that cocaine snorting lispig faggot Toby Anstis.

In more exotic locations, Japanese people were killing each other to play arcade games like Space Invaders, the Government kept running out of Yen as so much coinage was shoved into slots.



Valhalla from Legend software, made Manic Miner look like a pathetic samey arcade toss off. Which was nice.

## NEW HOME COMPUTERS

**ATARI 600XL:** Please go away Atari, you made great consoles but you had not a clue when it came to computers. Stay in America where you belonged please.

**MATTEL AQUARIUS:** Ok, so the Dragon 32 was a bad idea, so they release a Spectrum clone with a fraction of the memory so no one can write games for it. Nice one.

**SORD M5:** If computers could be described as handsome, the Sord was handsome, elegant, slim and desired by no one. Another Spectrum clone, another casualty.

**MEMOTECH MTX 512:** Too powerful for its own time, too expensive and badly distributed to shops. This was a great shame.

**ACORN ELECTRON:** A cut down version of the BBC, and that was quite a good idea because no one was willing to pay £400. Useless without the expansion pack but quite easy to program.

## NEW CONSOLES

**COLECOVISION:** Mash up Atari VCS innit, steering wheels and acelerator pedals in the home? We had only wanked at such things, please Mum I want one for Christmas you old cow.

Sorry to keep going on about unemployment all the time, but I was one of Thatchers victims and its now 3,224,715 and counting. I was starting to look at bit shabby and I couldn't afford a Spectrum in the me me me and sod you society.

First the BBC then ITV launch Breakfast television. Now we could lie back in bed and 'relax' with the lovely Anna Ford.

Antony Blunt, Eaton rhyming slang, drops dead and dies. The former art advisor to the Queen was also a former Russian spy. The dirty great Blunt.

Michael Foot resigns as leader of Labour, Neil Kinnock takes over a party in deep internal and external strife. Despite being a lovely bloke, middle England won't vote for him because he's Welsh and has ginger hair. Thatcher wins again.

Cecil Parkinson, plummy voiced hater of the poor, has an affair with Sara Keays, a very ugly old ripper. He is forced to resign by Thatcher who fancied him as well.

Janet Walton, a woman from Liverpool, gives birth to live sextuplets. They're all girls so that's six more frumpy northern birds but six less car robbers for society to contend with.

Irish wonder horse Shergar was stolen and held ransom for £2 million. The Sun goes for an IRA cat food plot.

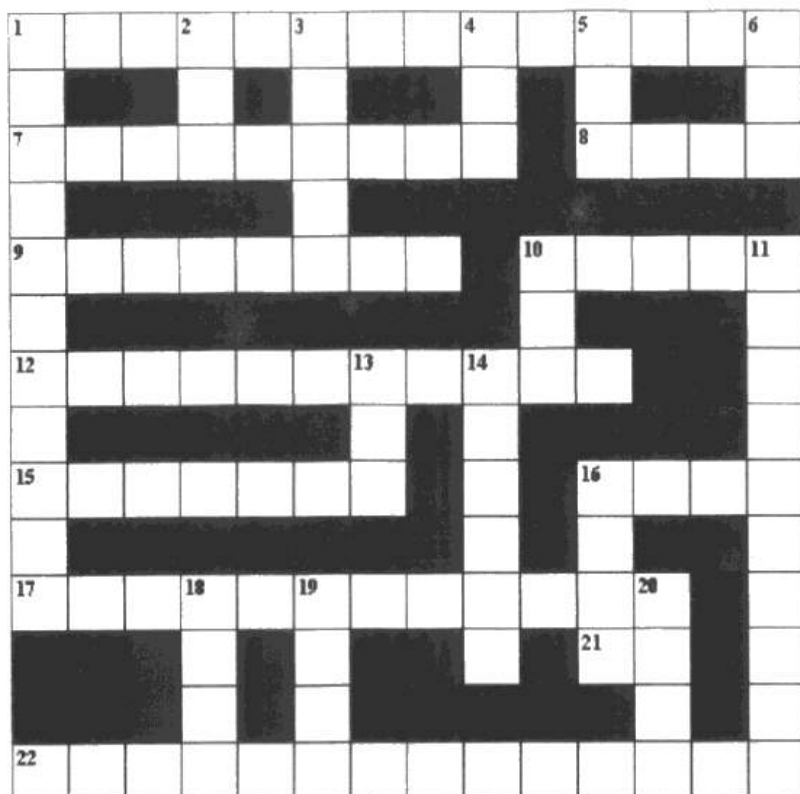
Daley Thompson starts making a name for himself winning Gold in Helsinki, gearing up for the pinnacle of his career, a joystick snapping track and field rip off.

The IRA blow up Harrods, and The Sun can't understand why most people are quite happy about that.

Over £25 million in gold bars is stolen from Heathrow Airport in one of the UK's biggest robberies.

The Irish vote with their guilt and repression to outlaw abortions. Young girls raped and abused by priests in the name of Jesus now have to sneak to England instead.

## Paul Howard's Cryptic Specword #5



ISSUE 25 SOLUTION: (ACROSS) 1.PROCRUSTEAN  
6.ASSIGNMENT 9.CRYSTAL 11.DOCTORJONES 15.LOKI  
16.JASON 17.BIT 19.PILE 21.THEOLIVERTWINS (DOWN)  
1.PUBLICDOMAIN 2.OCEAN 3.SOS 4.EGG 5.TOTALECLIPSE  
7.SOLAR 8.MASKS 10.RUNNING 12.COLUMN 13.ODDJOB  
14.JETSET 18.III 19.POW 20.LEN

### ACROSS

1. Sinclair labelling scheme - high grade remote? (7,7)
7. Might encourage one to release adventure games (9)
8. The following Basic command (4)
9. e.g. Print, List and Open Sesame! (8)
10. Produced truckloads of software in early 80's (5)
12. Shoot footage of document required for movie game (4,7)
15. Flightless bird isn't on time; doesn't even have a real Spectrum! (7)
16. To school - or to the future! (4)
17. Game distributed again by siblings, though never released (5,7)
21. For ever after? (2)
22. Port detect wire is twisted - read only as a result (5,9)

### DOWN

1. A ropey situation - Willy make it? (11)
2. Bruce from Datasoft (3)
3. Trout mixture for language learning aid (5)
4. SGN PI (3)
5. Maths function that calculates sign of holiday (3)
6. Basic assignment may appear in tennis game (3)
10. Car crash on circular path (3)
11. 3.54 MHz for the Z80A, but usually 60 sec/min (5,5)
13. Codemaster's boy from table game (3)
14. Arabian game? (6)
16. Call him yellow, but he fought the space mutants (4)
18. Put one loop inside another, or a bird house (4)
19. Confusedly opts to end Basic program (4)
20. Type of ware - or cuddly partner in game (4)

# NEXT ISSUE

In September, little Betina is five years old. Isn't she cute readers? By a strange coincidence so is Crashed. We're having a bouncy castle and that famous childrens entertainer, Pooky the Clown, who drunkenly disgraced himself in 1968 with a Space Hopper. Join us if you can, Mark Sturdy and Allan Clarkson will be trying to score with Betina's Mum, Mat Beal will do that trick with his willy and don't ask what Stuart Skardon will be doing.



**ISSUE 27 OUT  
SEP 13th 1999  
PRICE £1.50**

# LETTERS

Write to: 11 CAMEL ROAD,  
LONDON E16 2DE.

The best bits of your letters may well end up here, so don't swear or slag each other off. On second thoughts...

Dear Crashed,  
Thanks for all the recent back issues. I noted that in issue 6, Graham D.Shaw went to school with that pretentious introspective tosser Lloyd Cole. This was quite a coincidence as I used to stay at Hughes Parry, a Halls of Residence in Euston for posh kids, and the same Lloyd Cole was shagging his way through a selection of not even almost attractive frumps from Berkshire. It would be quite interesting to know what Lloyd is doing now, especially from another Crashed reader in the pages of Crashed, who has actually witnessed him being a complete tit in person.  
John Walker, Egham.

He went to live in America didn't he? Americans seem to like our rejects. I went to Egham only the other day, I got off the train and it smelt really nice.

Dear Crashed,  
Just some thoughts and ideas for Crashed. A tips page: there are so many games I can't complete and I don't have any cheats or pokes, can you list some cheats for them? Hardware projects that we can make and attach via the interface. More letters and software reviews and maybe even modern reviews like GameBoy and PC games. How about colour coverpages now and again like in the old issues?  
Alan, Wimbledon.

Cheaters always succeed in life, write to Hackers Hangout because they can help where I fear to tread. If you want modern game reviews read Arcade.

Dear Crashed,  
I'm afraid you're wrong about porn being legal, since when? If it was legal it would be in on the news but it isn't. I don't need porn because I can get a girlfriend, porn is for sad people who can't get real girlfriends. If you've got porn on your computers then you are breaking the law and all your equipment could be confiscated by the police. That's what happens every day to people who have porn on their hard drives. I've sent Crashed back to you, please return my £5 subscription money or I will report you to the police. I am writing to your printers so that they can ban you.  
Len Murray, Leicestershire.

I can't return your sub, I pissed it up the wall last month on Special Brew. I'll continue to send you Crashed just to annoy you as much as possible. Let me know periodically how I'm doing.

Dear Crashed,  
Crashed. Racist. Homophobic. Women hating. Crap. Bring back Mark Sturdy. (Anonymous west country postcode)

But he doesn't want to come back. Couldn't you spell misogynist?

Dear Crashed,  
Boy have you lot got a problem with the Internet! Stop slagging it off because there are loads of people into the Speccy on line and we all swap games and keep things going! Thinking that all internet users are sad Star Trek wankers is such a sweeping generalization and couldn't be more wrong, I've never visited a Star Trek site in my life. I've made so many new friends that I wouldn't have made before and played loads of old Speccy games that I would never be able to find. Try it one day, I bet you get hooked and start doing Crashed on the Internet!  
Richard, Milton Keynes.

I stand corrected, it's actually full of Red Dwarf and Star Wars wankers. Crashed did have a web page once, probably still there in an out of date unwanted sort of fashion.

Dear Crashed,  
I would like you could insert a small advert in your next issue if it is possible. WANTED: spare copies or brand new condition issues of Sinclair User, Crash, Your Sinclair, ZX Computing and other British mags for personal collection. Thank you very much.

Ignacio Prini,  
A.Virgen Del Carmen 39A,  
11201 Algeciras,  
Cadiz,  
Spain.

I left all my copies in Nottingham although I do have issues 1-12 of Barely Legal, which I might part with for £500 plus postage and dry cleaning.

Dear Crashed,  
How about printing a picture of a token Japanese anime cartoon girl with her breasts really hanging out all over the shop?  
Allan Clarkson, Leeds.

Seeing as I've no more real letters to print, go on then, you dirty hound.





# POSTBOX

WOW, THEY ALL LOOK SO GOOD, AND SO CHEAP TOO. HOW CAN THE SPECTRUM, COUPE AND SINCLAIR QL STILL HAVE SUCH FANTASTIC SUPPORT AFTER ALL THESE YEARS? BACK ON PLANET EARTH, IT'S TIME TO SWITCH THE PLAYSTATION OFF AND WATCH THE TELLY.

## THE SMALLER REVIEWS SECTION

**BITS**  
Computer Games  
Channel 4 Television

It was universally agreed that Bad Influence was great and Gamesmaster was slightly embarrassing, so we've waited a long time for a better all-round terrestrial TV show to compliment a multi-million dollar industry. BITS is now well into its first run and occupies the graveyard slot usually reserved for Jerry Springer repeats and the Open University.

Games have never looked so good on TV, real thought has gone into showing the clips that can make a game fly off the shelves. There's interviews with programmers (erm...nice) and there's no obvious bias between systems. So what's the problem?

The presenters of BITS are just that and nothing more, they don't play the games, they don't write the scripts, they just present. This isn't admitted to, and hey why should they, this is the nineties man, we can be downright dishonest and put it down to modern anything goes liberality. It's nothing new, look at Linda Barker during the Your Sinclair days - she had never owned a Spectrum nor bought a Spectrum game in her life, yet she wrote and edited a Spectrum magazine and became, for those of us still clutching at straws, a figure-head of sorts. The word here is career, and if you think there was anything else to it then pity you (and me, I really fell for it).

There's a talentless blonde one, or maybe you go for the slightly suggestive girl-next-door American one, for the modern thinker (I said thinker) there's even a short haired cutie boyish one. I'm not exactly complaining, but I resent the fact that the ideas people in TV land (an ironic title but there you go) have put together a package that appeals to every laddish cliché in the book. Take Violet Berlin, she's a very attractive competent presenter who actually plays and enjoys computer games, I want her on the show, not three FHM babes. I wish they were real bimbos because then I'd have more of a point. Damn.

Call me old fashioned but I like to see it in someones eyes, that 'it' being the excitement or the drudgery of what they are trying to put across through experience. As attractive as they are, the presenters leave me feeling duped, swindled and manipulated, and that's not very nice at all is it.

## PERIODICALS - MAGAZINES - FANZINES - MANUALS

**ALCH NEWS:** 62 Tithe Barn Lane, Sheffield S13 7LN.  
-Tape/disczine. Spectrum/Z88. Price: £1.00  
**CRASHED:** 11 Camel Road, Silvertown, London E16 2DE.  
-A4 fanzine. Sam/Spectrum. Bi-monthly. Price: £1.50  
**DESERT ISLAND DISKS:** 32 Dursley Road, Wilts BA14 ONP.  
-A4 fanzine. Spectrum. Quarterly. Price: £2.00  
**HACKERS HANGOUT:** 29 Dent Dr, Wakefield, W.Yorks WF1 4JG.  
-A4 fanzine. Spectrum. Monthly. Price: £1.00  
**MULTIFACE POKES:** 26 Elsie Street, Goole DN14 6DU.  
-A5 fanzine. Spectrum. Editions. Price: £2.00  
**OUTLET:** 34 Saltersgate Drive, Birstall, Leicester LE4 3FF.  
-Disczine. Spectrum. Monthly. Price: £3.50  
**PD POWER:** 13 Rodney Close, Bilton, Rugby CV22 7HJ.  
-A5 fanzine. Spectrum. Bi-monthly. Price: £1.70  
**QL TODAY:** QBranch, PO Box 7, Portslade, Sussex BN41 2ND.  
-A4 magazine. QL. Bi-monthly: Price: Annual subs £25.00  
**RETRO CLASSIX:** 4 Chatterton Avenue, Lincoln LN1 3TB.  
-A4 fanzine. 8 bits/arcade. Monthly. Price: £1.50  
**RETROGAMER:** 52 Kingfield Road, Liverpool L9 3AW.  
-A5 fanzine. 8 bits/arcade. Bi-monthly. Price: £1.75  
**RETROGAMES:** 61 Baccara Grove, Milton Keynes MK2 3AS.  
-A4 fanzine. 8 bits/arcade. Monthly. Price: £2.00  
**SAM COMMUNITY:** 34 Craigowen Rd, Carrickfergus, BT38 7NE.  
-A4 newsletter. Sam. Bi-monthly. Price: Annual subs £2.00  
**SAM SUPPLEMENT:** 37 Parker Street, Walsall WS3 2LE.  
-Disczine. Sam. Bi-monthly. Price: £2.00  
**SCENE+:** Pragerstraße 92/11/12, A-1210 Wien, Austria.  
-Disczine. Spectrum. Bi-monthly. Price: £1.00  
**SOUNDBYTE:** 204 Lamond Drive, St.Andrews, Fife KY16 8RR.  
-Disczine. Sam Quazar support. Monthly. Price: £2.00  
**THE SPC:** Im Tannenforst 10, 51069 Köln, Germany.  
-A5 magazine. Sam/Spectrum. Monthly. Price: Annual £13.00  
**THE SUC:** Gastackerstr 23, 70794 Filderstadt, Germany.  
-A5 magazine. Spectrum. Monthly. Price: Annual £13.00

## USER GROUPS - PUBLIC DOMAIN LIBRARIES

**ALCHEMIST RESEARCH:** 62 Tithe Barn Lane, Sheffield S13 7LN.  
-Spectrum/Z88 user group. Emulator support.  
**CRASHED DEMO LIBRARY:** 11 Camel Rd, Silvertown, London E16 2DE.  
-Spectrum public domain library.  
**PRISM PD:** 13 Rodney Close, Bilton, Rugby CV22 7HJ  
-Restricted access Spectrum public domain library.  
**SAM PD:** 18 Mill Lane, Skelmersdale WN8 8RH.  
-Sam Coupe public domain library.  
**WOMO PD:** Im Tannenforst 10, 51069 Köln, Germany.  
-Sam Coupe and Spectrum public domain library.

## REPAIRS - SPARES - PUBIC HAIRS

If you know of any good, reliable and even reasonable repair services for Spectrums and Sams, write in and tell me, because I made room for this bit and I've nothing to put in it. Same goes for anything else, if I've not mentioned it, what am I playing at?