

# Personal Computing Today

JULY 1983

75p

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Incorporating  
UPDATE

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MICRO?**  
The Top 10  
computers  
surveyed

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Programs for  
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Improve your  
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home for your  
programs



# YOUR LETTERS

**This page is where you get the chance to put your opinions in print. Personal Computing Today welcomes letters from you on any aspect of microcomputing and views in general – as long as they're printable!**

**Please drop us a line to: The Editor, Personal Computing Today, 145 Charing Cross Road, London, WC2H 0EE.**



Dear PCT,

I am an owner of a ZX Spectrum computer and find that the sound, or the lack of it, irritates me more than anything else. But now I have discovered a way of amplifying the sound through the cassette recorder. The sound coming from the computer is present but additional sound comes from the cassette recorder.

To amplify the sound through a cassette recorder the Spectrum's ear plug should be plugged into its socket on the machine. The other ear plug should be plugged into the MIC socket of the cassette recorder. The cassette recorder is then set to play and then PAUSED via a pause button on the cassette recorder. The sound output from the cassette recorder can now be controlled using the tone and volume controls.

This ability to increase the Spectrum's sound facility improves all games where sound plays a prominent part, and at times can even increase scores.

I enjoy your magazine, particularly the software reviews and the software listings, but I was disappointed that the Invisible Maze program did not work once I had typed it in. I noticed the obvious errors, for instance line 401, and 433 where a '+' sign has appeared but having corrected it, it still refuses to run. I hope that in the June issue you will attempt to rectify these errors. Besides that carry on the good work.

Yours faithfully  
Sarbjit Singh Gidda

**Editor's reply: There wasn't a correction in the June issue but turn to this month's Micro Answers and you'll find it there.**

Dear Editor

I recently bought an Oric 1 micro computer, but found that in high resolution mode the display had a tendency to jump every time an explosion or shoot command was used, which would win any fast and furious game that was being run on the machine.

So I took the Oric back to Lasky's and they promptly gave me a replacement machine, but when I got it home I discovered it too suffered from the same defect. So back I went again and believing that this fault was inherent in the machine I exchanged it for a Sinclair ZX Spectrum and luckily haven't had any trouble with it.

Yours truly  
T Tirabi  
North London

Dear Sir

I really must protest about your publication of a 'piano player' program for the Sharp MZ-80B.

If you desire to play or compose music for the piano, would it not be much simpler and more convenient to use a piano? There is not one note on the Sharp which can compare for purity or clarity with a piano note. If you want to play tunes on an MZ80B, all well and good: but if you do so, you are playing a Sharp, not a piano. In any case, unless music is simply a succession of notes, played at a certain speed, I rather doubt if you will create anything worth listening to.

Yes, I have an MZ80B. It is a fantastically good machine at its price. No, I do not propose to use it as a piano (I have a piano to do that). The MZ80B is being

overworked at present, keeping various catalogues for me, developing a simple payroll/accounting program for a small local business and being used by my children to help their exam revision.

What's your next program - using an IBM as a church organ?

Yours faithfully  
R H Hill  
Essex

**Editor's reply:** We do not claim that a Sharp MZ80B could possibly reproduce the quality of notes or tones that a piano can. That wasn't the purpose of the program. The real use of programs such as this or indeed a church organ program, is as a teaching tool for those who are not very experienced in programming techniques. As *Personal Computing Today* is primarily intended for beginners in computing it makes sense for us to publish such programs.

If you would like more business oriented programs in *Personal Computing Today* may I suggest you send me your payroll/accounts program to learn about the more intricate details of programming?

Dear PCT

Being the owner of a T199/4A home computer I was very happy to find a program for it in the January 1983 edition. However, when I typed it all in, I found that the program did not work as it was supposed to. First of all, the score after hitting the first invader immediately turned to 1000 and stopped there, and also at the end the computer refused to return to the beginning of the program.

After checking for any typing mistakes and not finding any, I started gradually to work through the program and found that to make the program work I had to change lines 780 and 1000 to read:

780 CALL HCHAR (1,26,C+1) instead of CALL  
HCHAR (1,25,C+1)  
and

1000 GOTO 10 instead of GOTO 1000.

After the initial frustration and annoyance at the program not working, I realized that in the end it was actually useful, because instead of just typing the lines in I learnt what and how the various parts of the program do and work.

Yours sincerely  
Dina Puvacic  
Morecambe

**Editor's reply:** Congratulations on working the bugs out yourself. It's not the ideal way to do it, and indeed we don't go out of our way to let errors get into programs. But you are right in saying it helps you learn about programming.

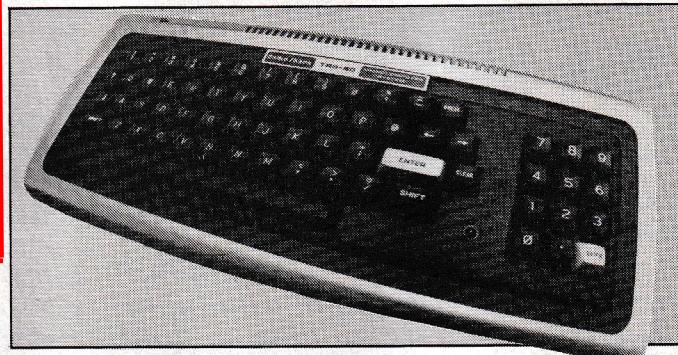


Dear Sir

I have been reading your excellent magazine for three years now and I am pleased with it. However, for the past six months there have hardly been any programs for the TRS-80 Model 1 or III, Level 2 BASIC, 16K. I am sure many people also agree with me, especially those who have just invaded the intrepid regions of computing.

Keep it up, your magazine is great.  
Yours faithfully  
Toby Green

**Editor's reply:** I'm afraid that it is virtually impossible to keep everyone happy with the programs we publish, but I can only assure you that I try to cover as many machines as possible. Your turn will come.



Dear PCT

Listed below are some observations on advertisements and computing. They may be a source of enlightenment for people about to buy:

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Available Now	Ha!
Pleash Rush Me	If You Don't All Want
Press Any Key	One
High Res	If You're Not Too Busy
Coming Soon	Not The Break Key
Rave Reviews	Medium Res
Good After Sales Service	Eight Months
48K Spectrum Only	Reviewers Raved
Six Skill Levels	You've Broken This
Tests Your Reflexes	17K
Loads with	The Cat Won On The
The Ultimate Adventure	First 2
	I Won On The Second 2
	Fell Asleep Waiting . . .
	Need Extra Fingers
	Loads Occasionally
	The Last One He Wrote

Just kidding! - really.  
Yours faithfully  
Mike Goldberg  
Liverpool

**Editor's reply:** It's refreshing to hear from someone with a sense of humour, although you do have a point in that some adverts can be misleading. Maybe some software suppliers will read your letter, take note and improve the standard of commercial products.

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# DEALERS

## MICRO SHOWS

# EXHIBITION SPECIAL

**We take a break from dealers reporting instead on recent computer shows.**

This month Look Before You Leap lets the dealers take a partial rest and instead examines the goings on at some recent shows.

The Hannover Messe is possibly the biggest exhibition ever held in Europe. The computer section alone could probably swallow the NEC, Earls Court and Olympia and probably have room for more. Indeed, to attempt to cover even a fraction of the stands is an ambitious project for the single day that was available.

### Germany's Front Line

Heading straight for the market opened up by the Spectrum and the Oric comes the Panasonic Alpha. This new computer features rubber keys and a single-key entry system. It comes supplied with a built in graphics set and 32K of RAM. Coming further down-market is Panasonic's JR100. This will be cheaper than the Alpha, featuring simplified operation and fewer keys. Not to be caught out, the JR100 is already complemented by an expansion unit.



Sharp are making efforts to move into the home market with their MZ-700 computer. Based around the ever popular Z80 processor, the MZ-700 contains 64K of RAM and has a full QWERTY type writer-style keyboard. The screen display is 25 lines by 40 characters. Available as optional extras are a plug-in, four colour plotter and an on-board microcassette drive.

### Casio Goes Personal

Casio, having worked their way

up from calculators to hand-held computers are now ready to have a try at the personal computer field. The FX-702P is an extended version of their VX-801P programmable calculator. It will be supplied with 16K of RAM, full keyboard and an inbuilt liquid crystal display. Peripherals will include a numeric keyboard and a four colour plotter.

On show at the Commodore stand was the new DX-64. This is Commodore's first attack at the Osborne portable market. The DX-64 is a restyled Commodore 64 fitted into a portable carrying case. Contained in the case is a half height 5 1/4 inch disc drive, a five inch black and white monitor and a detachable keyboard built into the lid. If everything goes according to plan the DX-64 will be previewed in Britain at the Commodore Computer Show in June. Retail price is expected to be around £800.

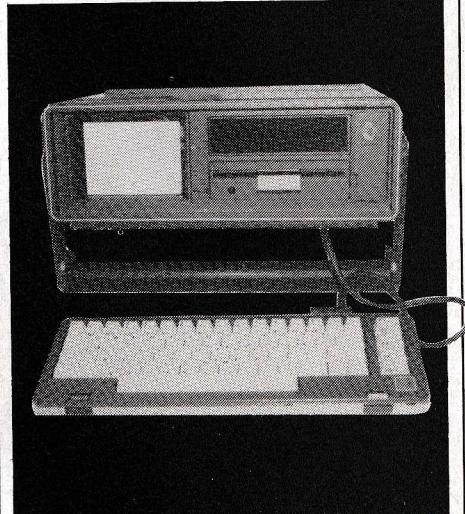
### London Calling

On a slightly less majestic scale the Association of London Computer Clubs held the 4th London Computer Fair. Held in the Central Hall, Westminster, even though the show was bigger than previous years it still managed to retain the hobbyist feel. The show marked the release of some interesting software titles.

Software company ASN released four titles for the under-supported Commodore 64. Brain Strain, Squares and Light Bike are all games costing £5.95. Necked is an educational game and takes the form of a multi-lingual hangman game featuring words in French, German, Italian and Spanish. Necked costs £6.95. ASN can be contacted at 17 Adelphi Crescent, Hayes Park, Hayes, Middx UB4 8LY.

### E.T.'s New Home

Spectrum software company Abex released a potentially controversial new title for the Spectrum. Called ETX, it bears more than a passing resemblance to



Atari's own E.T. VCS cartridge. ETX costs £5.95 and further details are available from: Abbex, 20 Ashley Court, Great Northway, Hendon NW4.

Fuller Micro Systems released some new Spectrum add-ons. First was the Printerface. This is a £30.00, RS232 interface. Using this a large range of cheap printers and communications equipment can be easily interfaced to the Spectrum. Their second new product, the Orator, will cater for the growing interest in speech synthesis among computer users. For £39.95 you can add this unit to your Spectrum and explore the intricacies of speech.

Micronet 800 were exhibiting at the show and were generating a lot of interest from computer users, especially those who own BBC Micros as they are the only people who could use the system. Already Micronet offer over 100 programs for the BBC Micro through the Tele-software side of the system and a lot of these are free.

Finally, for BBC users who want to use their machines for serious work, Braintech released a new EPROM based wordprocessor. Designed to run 1.0 and 1.2 operating system Beebpen features a display of 80 characters by 18 lines. The price will be £44.85 and Braintech can be contracted at 81 Rydal Crescent, Perivale, Middlesex UB6 8DZ.

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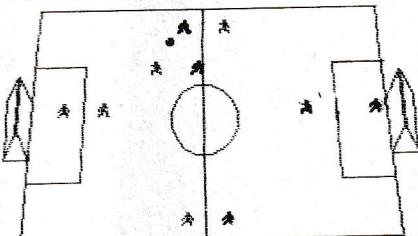
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## SOFTWARE LISTING

### DRAGON

Title	Program Type	Program Produced By	How Sold	Supplier Codes	Prices
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Invaders Revenge	Gm	Microdeal	16K	C KY	£8.00
Jerusalem Adventure	Gm	Microdeal	16K	C KY	£8.00
Lightpen	Ut	Microdeal	16K	C KY	£12.00
Madness and the Minotaur	Gm	Dragon Data	32K	C DN,KY	£7.95
Mansion Adventure	Gm	Microdeal	16K	C KY	£8.00
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Breakout	Gm	Sharpsoft	20K	C AB	£5.75	
Bridge	Gm	Highlight S/W	22K	C CC	£12.95	
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Brownian Motion	Ed	Kuma		C AX	£12.00	
Bytesaver	Ut	DCS	20K	C JQ	£4.00	
CPM	Ut	Chrystal	48K	C AX,AO	£172.50	
Calc II	Bs	Kuma	20K	C AX,AO,FZ	£39.65	
Camelot	Gm	Kuma	48K	C AX,AC,AB		
Carols	Gm	Kuma	48K	C AX,AO,AB	£6.32	
Cash Book	Bs	Microtek	48K	C EQ	£6.32	
Cash Flow Projection	Bs	NCG Ltd	36K	C KW	£95.00	
Castle Bloodstone Adventure	Gm	Sumlock	48K	C DN	£95.00	
Casino	Gm	Kuma		C AX	£17.25	
Catch 2000/Invader	Gm	Kuma	12K	C AX,AO,AB	£6.32	
Cesil III	Ed	Kuma	20K	C AX	£17.20	
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Chess	Gm	Kuma	12K	C AX,AO,FZ,CH	£12.00	
Children's Maths	Ed	Kuma		C AX	£6.32	
Chrystal Basic	Ut	Chrystal	48K	C AX,AO	£46.00	
Code Breaker	Gm	Plymouth	15K	C OG	£4.99	
Colditz	Gm	Sharpsoft	20K	C CH	£8.46	
Combat	Gm	Highlight S/W	6K	C CC,AB	£5.75	
Combat	Gm	Kuma	12K	C AX,AO,AB	£6.32	
Commands	Gm	Sharpsoft	20K	C AB	£5.85	
Composer	Gm	Highlight S/W	6K	C CC,AB	£5.75	
Concentration	Gm	Kuma	12K	C AX,AO,AB	£6.32	
Conflict	Gm	Sumlock	48K	C DN	£6.33	
Connect 4	Gm	Highlight S/W	6K	C CC,AB	£4.60	
Connect Four	Gm	DCS	24K	C JQ	£3.00	
Cosmiad	Gm	Highlight S/W	10K	C CC,AB	£5.75	
Cosmiad	Gm	Kuma	12K	C AX,AC,AO,AB	£9.20	
Count and Add	Ed	Highlight S/W	22K	C CC,AB	£5.75	
Cribbage	Gm	Kuma	12K	C AX,AO	£12.00	
Critical Path Analysis	Bs	NCG Ltd	36K	C KW	£40.00	
Cricket	Gm	Kuma		C AX	£6.32	
Cursed Chambers	Gm	J Wolstencroft	48K	C CZ	£5.75	
Data Bank	Ut	DCS	48K	C JQ	£6.00	
Data Base	Bs	Kuma	48K	C AX,AO	£33.95	
Data File	Gm	Gamer	48K	C CZ	£29.95	
Defender	Gm	Plymouth	Computers	20K	C OG	£4.99
Deferment Allowances	Bs	DCS	32K	C JQ	£3.00	
Demons Castle	Gm	DCS	48K	C JQ	£3.00	
Demon Drive	Gm	DCS	24K	C JQ	£3.00	
Disassembler	Ut	Kuma	20K	C AX,AO,AB	£12.00	
Donky Derby	Gm	Kuma	12K	C AX,AO,AB	£6.32	
Double Precision Basic	Ut	Sharp	48K	C AB	£28.75	
Drunken Driver	Ut	Sharp	48K	D AX	£46.00	
Dybug	Ut	Kuma	6K	C CC,AB	£5.75	
Editor Assembler	Ut	Sharp	48K	C AX	£16.65	
Editor Assembler	Ut	Sharp	48K	D AX	£51.75	
Editor/Disassembler	Ut	DCS	20K	C JQ	£12.00	
Electon '84	Gm	Sharpsoft	20K	C CH	£8.45	
Electronic Organ	Gm	Kuma	12K	C AX	£6.32	
Electronic Organ	Gm	DCS	48K	C JQ	£3.00	
Electrons I	Ed	Kuma		C AX	£12.00	
Electrons II	Ed	Kuma		C AX	£12.00	
Empire II	Gm	Sharpsoft	20K	C AB	£5.85	
Enigma	Gm	Kuma	12K	C AX	£6.32	
Escape Forth	Gm	J Wolstencroft	24K	C CZ	£4.60	
Evasion	Gm	Kuma	6K	C AX,AO	£6.32	
Executive	Gm	Kuma	6K	C AX,AB	£9.20	
Exploring Africa	Gm	Kuma	6K	C AX,AB	£6.32	
F DOS	Ut	Sharp	48K	C AB	£57.50	
Fall Out	Gm	Kuma	6K	C AX,AO	£6.32	
Finance	Bs	DCS	20K	C JQ	£3.00	
Fireballs	Gm	Kuma	6K	C AX,AB	£6.32	
Fishing	Gm	Sumlock	48K	C DN	£8.50	
Football League	Do	Plymouth	Computers	10K	C OG	£4.99
Football Manager	Gm	Highlight S/W	10K	C CC,AB	£5.75	
Forth	Ut	Kuma		C AX	£40.20	
Foundry Package	Bs	Microtek	48K	C EQ	POA	
Four in a Row	Gm	Kuma	6K	C AX,AO,AB	£6.32	
Fox and Geese	Gm	Highlight S/W	6K	C CC,AB	£4.60	
French Vocab	Ed	DCS	20K	C JQ	£3.00	
Fruit Machine	Gm	Kuma	6K	C AX,AO,AB	£6.32	
Fruit Machine	Gm	DCS	20K	C JQ	£3.00	
Full Accounting	Bs	Microtek	48K	C EQ	POA	
Games Pack 1	Gm	Sumlock	48K	C DN	£8.50	
Games Pack 2	Gm	Sumlock	48K	C DN	£8.50	
Gamestape 1	Gm	DCS	48K	C JQ	£8.00	
Gamestape 2	Gm	DCS	48K	C JQ	£8.00	
Gamestape 3	Gm	DCS	48K	C JQ	£8.00	
Gamestape 4	Gm	DCS	48K	C JQ	£8.00	
Geography	Ed	DCS	20K	C JQ	£3.00	
Guess Word	Gm	Kuma	6K	C AX,AB	£6.32	
Hangman	Gm	Kuma	6K	C AX,AO,AB	£6.32	
Hangman	Gm	DCS	20K	C JQ	£3.00	
Head On	Gm	Highlight S/W	10K	C CC,AB	£6.90	
Head On	Gm	Kuma	6K	C AX,AO,AB	£6.32	
Head On	Gm	Sharpsoft	20K	C CH	£5.85	
Hissing Sid	Gm	Kuma		C AX	£6.32	

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IS	Microcomputer Applications	JN	Terminal Software
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	Blandford Forum		Prestwich
	Dorset		Manchester
	DT11 7LA		M25 5AJ

# REFERENCE

## SOFTWARE LISTING

### SHARP

Title	Program Type	Program Produced By	How Sold	Supplier Codes	Prices
Home Budget 1	Do	Kuma	6K	C AX,AC,AO,AB	£6.32
Hunter Killer	Gm	Kuma	48K	C AX,AB	£6.32
I Spy	Ed	Highlight S/W	22K	C CC	£5.75
Instant Addition And The Four Rules	Ed	Kuma		C AX	£6.32
Intruder	Gm	Kuma	48K	C AX,AO,AB	£6.32
Invaders	Gm	Kuma	20K	C FZ	£6.30
Invoice Control	Bs	David Computer Software	48K	C JQ	£6.00
J S Line 4	Gm	Kuma	48K	C AX,AB	£6.32
Junior Maths and Stepping Stones	Ed	Kuma		C AX	£6.32
Junitori	Gm	Sharpsoft	20K	C AB	£5.85
Kentucky Derby	Gm	Kuma		C AX	£6.32
Knights Commander	Ut	Knights	48K	C AX	£28.75
Knights Commander	Ut	Knights	48K	D AX	£74.75
Knights Fortran	Ut	Knights	48K	C AX	£34.50
Knights Wee Pascal	Ut	Knights	48K	C AX	£23.00
Large Display	Gm	Kuma	48K	C AX	£6.32
Las Vegas	Gm	Sharpsoft	20K	C AB	£5.85
Ledger	Bs	NCG Ltd	40K	C KW	£90.00
Letterwriter WP	Bs	David Computer Software	48K	C JQ	£10.00
Life	Gm	Kuma	48K	C AX,AO,AB	£9.20
Linear Programming	Bs	NCG Ltd	20K	C KW	£45.00
LP Gas Flow	Bs	DCS	20K	C JQ	£3.00
Lunar	Gm	Kuma	48K	C AX,AO,AB	£6.32
Lunar Lander	Gm	Kuma	48K	C AX,AO,AB	£6.32
MZ Othello	Gm	Kuma	48K	C AX	£12.00
Machine Code Editor	Ut	DCS	24K	C JQ	£14.00
Machine Code Editor	Ut	DCS	48K	C JQ	£14.00
Madness	Gm	J Wolstencroft	24K	C CZ	£4.60
Mailing List	Bs	DCS	48K	C JQ	£6.00
Maniac	Gm	Highlight S/W	6K	C CC,AB	£5.75
Man on the Run	Gm	Sumlock	48K	C DN	£6.33
Map of England	Gm	Kuma	48K	C AO	£6.32
Map of England	Gm	Kuma	48K	D AX	£12.00
Marauders	Gm	Plymouth		Computers	£4.99
Mastermind	Gm	Highlight S/W	6K	C CC,AB	£4.60
Mastermind	Gm	Kuma	48K	C AX,AO,FZ,AB	£6.32
Match the Character	Ed	Highlight S/W	22K	C CC,AB	£4.60
Match the Word	Ed	Highlight S/W	22K	C CC,AB	£5.75
Maths	Ed	Highlight S/W	22K	C CC	£5.75
Maths 1	Ed	DCS	48K	C JQ	£3.00
Maths 2	Ed	DCS	48K	C JQ	£3.00
Maths 3	Ed	DCS	48K	C JQ	£3.00
Maths 4	Ed	DCS	48K	C JQ	£3.00
Maths 5	Ed	DCS	48K	C JQ	£3.00
Maths 6	Ed	DCS	48K	C JQ	£3.00
Melody	Gm	Kuma	48K	C AX	£6.32
Memory Tests	Ut	Kuma	20K	C AX,AO,AB	£6.32
Minefield	Gm	Kuma	48K	C AX	£6.32
Missle Defence	Gm	Sumlock	48K	C DN	£8.50
Missle Defence	Gm	Plymouth		Computers	£4.99
Miz-Maze	Gm	Kuma	48K	C AX,AO	£6.32
Monkey Climb	Gm	Kuma	48K	C AX,AO	£6.32
Moonlander	Gm	Highlight S/W	10K	C CC,AB	£5.75
Mortar Attack	Gm	Kuma	48K	C AX,AO	£6.32
Munchie Men	Gm	Plymouth		Computers	£4.99
Music Composer/Editor	Ed	Kuma	48K	C AX,AC,AB	£12.00
Multiple Regression	Ed	NCG Ltd	24K	C KW	£65.00
Narpx	Ed	Kuma		C AX	£28.70
Newton/Conservation	Ed	Kuma		C AX	£12.00
Number Advance	Gm	Plymouth		Computers	£4.99
Oil Strike	Gm	Plymouth	3K	C OG	£4.99
Pac Man	Gm	Kuma	14K	C OG	£4.99
Pascal	Ut	Sharp	48K	C AX	£9.20
Patience	Gm	Kuma	48K	C AB	£34.50
Payroll	Bs	Microtek	48K	C EQ	£65.00
Payroll	Bs	NCG Ltd	40K	C KW	£150.00
Payroll 81-C	Bs	Sumlock	48K	C DN	£74.75
Payroll 81-D	Bs	Sumlock	48K	D DN	£74.75
Payroll	Bs	Tridata	48K	D ID	£170.00
Pelmanism	Gm	Sumlock	48K	C DN	£5.75
Physics 1	Ed	DCS	48K	C JQ	£3.00
Physics 2	Ed	DCS	48K	C JQ	£3.00
Picture Count	Ed	Highlight S/W	22K	C CC,AB	£5.75
Pilot	Ut	Kuma	48K	C AX	£17.25
Poker	Gm	Kuma	48K	C AX,AO,AB	£6.32
Polaris	Gm	Sumlock	48K	C DN	£6.50
Pontoon	Gm	Kuma	48K	C AX,AO,AB	£6.32
Poseidon	Gm	Highlight S/W	6K	C CC,AB	£5.75

## SOFTWARE DEALERS

<b>JO</b>	Mossoft Microcomputer Software 10 Garden Street Norwich Norfolk NR1 1QX	<b>KH</b>	Llamasoft Computer Software 49 Mount Pleasant Tadley Hants 07356-4478
<b>JP</b>	Romik 24 Church Street Slough SL1 1PP	<b>KH</b>	Superior Software 69 Leeds Road Bramhope Leeds 0532-842714
<b>JQ</b>	David Computer Software 38 South Parade Bramhall Stockport SK7 3BJ	<b>KI</b>	Earthshock Software 15 Eden Avenue Wakefield WF2 9DJ
<b>JR</b>	Creative Software 48 Hartlip Hill Newington Sittingbourne Kent ME9 7NZ	<b>KJ</b>	Bridge Software 36 Fernwood Marple Bridge Stockport Cheshire SK6 5BE
<b>JS</b>	Allrian Data Services 100a Uxbridge Road Hayes Middx UB4 0RL	<b>KK</b>	ME & P Micro Products The Old Oast House Malting Lane Cambridge CB3 9HF
<b>JT</b>	Apex Trading Ltd 115 Crescent Drive South Brighton BN2 6SB	<b>KL</b>	Calpac Computer Software 108 Hermitage Woods Crescent St Johns Woking Surrey GU21 1UF
<b>JU</b>	TX Software 109 Abbottsweld Harlow Essex CM18 6TQ	<b>KM</b>	KCET Software 17 Torry Drive Alve 0259 60840
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<b>JW</b>	GT Software 8 Bull Street Potton Sandy Bedfordshire SG19 2NR	<b>KO</b>	Rucksoft 10 The Moorlands Hanley Road Malvern Wells Worcestershire WR14 4PS
<b>JX</b>	Garland Computing 35 Dean Hill Plymouth PL9 9AF	<b>KP</b>	Liverpool Computer Centre
<b>JY</b>	Corona Software Corona House 21 Tennyson Avenue London E11 2QN	<b>KQ</b>	W. E. Hunt
<b>JZ</b>	MP Software & Services 165 Spital road Bromborough Merseyside L62 2AE	<b>KR</b>	ABC Software
<b>KA</b>	Ludinski Computer-Assisted Learning 26 Avondale Avenue Staines Middlesex 0784-58771	<b>KS</b>	Rainbow Software
<b>KB</b>	B.B.C. Publications The British Broadcasting Corporation 35 Marylebone High Street London W1M 4AA	<b>KT</b>	Chalksoft Lowmoor Cottage Tonedale Wellington Somerset TA2 0AL
<b>KC</b>	Miking Software 28 New Road Northbourne Bournemouth Dorset BH10 7DS	<b>KU</b>	Wizard Software
<b>KD</b>	Inverse 'Orchard View' Droitwich Road Fernhill Heath Worcester WR3 7T2	<b>KV</b>	Data Brain Software
<b>KE</b>	Alan Turnbull 65 Vicarage Road Cale Green Stockport Cheshire	<b>KW</b>	NCG Ltd, Lettergesh Renvyle, Co. Galway Republic of Ireland
<b>KZ</b>	Cases Computer Simulations 14 Langton Way Blackheath London SE3 7TL	<b>KX</b>	Broadwater Economic Simulations 24 Hill Barn Lane Worthing West Sussex
<b>LA</b>	Juniper Computing 8 Pembroke Green Lea Malmesbury Wiltshire SN16 9PB	<b>KY</b>	Kent Computer Company Alders of Bromley High Street Bromley Kent
<b>LC</b>	Computersmith 40 Greensfields Avenue Bromborough Wirral Merseyside L62 6DD	<b>KF</b>	Chromasoft

Poster Printer	Bs	DCS	48K	C	JQ	£3.00
Princess & Monster Maze	Gm	Kuma	48K	C	AX,AB	£6.32
Program Filing Index	Bs	Kuma	20K	C	AX	£6.32
Quadrax	Gm	Kuma	48K	C	AX,AO,AB	£6.32
Quest	Gm	J Wolstencroft	48K	C	CZ	£4.60
Race Track	Gm	Kuma	48K	C	AX,AO,AB	£6.32
Racing	Gm	Kuma	48K	C	AX	£6.32
Raider	Gm	Kuma	48K	C	AX,AO,AB	£6.32
Ram Test	Ur	DCS	48K	C	JQ	£3.00
Reactor	Gm	Kuma	48K	C	AX,AB	£6.32
Reportwriter WP	Bs	David Computer Software	48K	C	JQ	£8.00
Rhymes	Gm	Kuma	48K	C	AX,AB	£6.32
Road Alignment	Bs	Canal Computing	16K	C	OF	£6.00
Road Hunter	Gm	Kuma	48K	C	AX,AO,AB	£6.32
Rocket	Ed	Kuma	48K	C	AX	£6.32
Roulette	Gm	Sumlock	48K	C	DN	£6.33
Tank Wall	Gm	Kuma	48K	C	AX,AO	£6.32
Tank Practice	Gm	DCS	48K	C	JQ	£3.00
Target Practice	Gm	DCS	48K	C	JQ	£3.00
Tape Copier	Ut	DCS	20K	C	JQ	£4.00
Tenpin Bowling	Gm	Kuma	48K	C	AX,AO	£6.32
Timetabling Aid	Ed	Kuma	20K	C	AX	£22.45
Towering Inferno	Gm	Sharpsoft	20K	C	CH,AB	£5.85
Towers	Gm	DCS	48K	C	JQ	£3.00
Towers of Hanoi	Gm	Kuma	48K	C	AX	£6.32
Track Layer	Gm	Kuma	48K	C	AX,CH	£6.32
Trader Smith	Gm	Kuma	48K	C	AB	£6.32
Tudor Village	Gm	DCS	48K	C	JQ	£3.00
Trench Mortars	Gm	DCS	48K	C	JQ	£3.00
Tycoon	Gm	Kuma	48K	C	AX,AO	£6.32
Typewriter	Do	DCS	48K	C	JQ	£3.00
Typing Test/Tutor	Bs	DCS	20K	C	JQ	£6.00
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Video Draughts	Gm	DCS	48K	C	JQ	£3.00
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Waves I	Ed	Kuma	48K	C	AX	£12.00
Waves II	Ed	Kuma	48K	C	AX	£12.00
Wizards Quest Adventure	Gm	Sumlock	48K	C	DN	£10.50
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Wordpro	Bs	Kuma	48K	C	AX,AC	£91.95
Wordprocessor LW	Bs	DCS	48K	C	JQ	£10.00
Wordprocessor RW	Bs	DCS	48K	C	JQ	£8.00
Utility Tape 1 - Maths	Ed	DCS	48K	C	JQ	£8.00
Utility Tape 2 - Maths/Physics	Ed	DCS	48K	C	JQ	£8.00
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Zen Dos	Ut	Kuma	4K	C	AX	£66.16
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Z-80 Disassembler	Ut	Sumlock	48K	C	DN	£12.00

## TRS-80

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				GB	£15.50	
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All Stars	Gm	Instant S/W	16K	D	GB	£26.50
				AB	£28.95	
All Turret Gunner	Gm	Instant S/W	16K	C	GB,AB	£8.50
Amateur Log	Ut	Molimerx	32K	D	AJ	£18.40
Amazing Maze	Gm	Kansas	16K	C	IH	£7.50
Touchdown	Gm	Adventure Int.	8K	C	AB	£14.35
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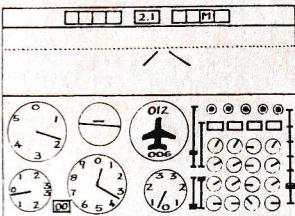
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