QLUB

News for the QL user

New-price QL sells in big numbers

The new £199.95 price for the QL is proving immensely popular with the buying public as thousands of the machines moved off the shelves in the wake of the recent change.

This increase in the QL-owning fraternity comes at a time when software is flooding on to the market and further upgrades of existing hardware and software are being made available. On the software side, you'll see details in this issue of new adventure programs, arcade games, recreational 'wordplay' software and an excellent drawing program – all newly added to Sinclair's own catalogue of QL Software.

The new software includes QL Paint; a specially-rewitten version of Talent's popular GraphiQL program which adds pull-down menus, icons and a more comprehensive set of commands to the system. More than 4,000 graphics operations can be carried-out and can be manipulated via the drop-down menus and icons OR via 'short-hand' keyboard codes.

Sinclair Research would also like to announce Version 2.3 of Psion's QL Quill, Archive, Abacus and Easel software for the QL. It can be bought directly from Sinclair for £7.50 per program. The upgrades offer enhanced facilities on all programs but will be of most interest in memory-expanded QLs.

The new versions of the Psion software also show a more robust back-up process for files longer than 32K and offer the ability to carry-out all file actions (loading, saving etc.) over the QL's built-in QLAN network.

The upgraded software can be ordered from Sinclair Research, FREEPOST, Camberley, Surrey GU15 3BR.

INSIDE QLUB NEWS

QLetters 2-3

Software update 4-5

Programmers' forum 6

QL Quarks 7

Special Offer Office 8

New QL printer shipped

Shipments of Sinclair's new specially-designed serial dot-matrix printer (pictured opposite with the QL) began late last year – much to the delight of many QL owners, who will find that the machine is ready to plug-in-and-go with their machines.

The high-quality printer offers several modes, including near letter Quality (NLQ) as well as a graphics mode which allows it to carry-out 'screen dumps' from the QL. It costs only £249 (including VAT) and is available from local Sinclair stockists. If you have difficulties obtaining the printer, please contact DDI, 5 Kings Ride Park, Ascot, Berkshire, SL5 8BP or by telephone on 0990 28921.

It is only 390 mm wide, 119 mm high and 266 mm across and weighs less than five kilogrammes. A wide variety of paper types can be used, as paper is accepted either by friction or tractor feed. You can also use carbon-paper with the printer – allowing you to make up to two additional copies of a document while printing (as long as the total thickness of the paper and carbon does not exceed 0.2 mm.)



sinclair

Two years young and celebrating

The QL celebrates its second birthday this month amid a sound collection of hardware add-ons which befit an established and popular computer, along with a new collection of software which brings the QL into new areas of use.

At the announcement of its entry into the world, Sir Clive Sinclair said that he didn't know where the QL would lead – only that he knew its users would make the most of it. Since then, we have seen all kinds of developments for the QL – from hard-disk-based stock control systems to intelligent adventure games which defy description.

RAM expansions, floppy disks, integrated business software suites, dedicated printers and monitors all now form part of a growing stable of QL products which will continue to ensure support and program development for the 'Quantum Leap'. With the recent price reduction of the machine, all kinds of new dedicated applications can be concocted from the grab-bag of goodies available.

Not that there haven't been a wide range of interesting dedicated machines built from the QL already. The most successful, or at least the best-known, of them is the ICL/British Telecom OPD/Tonto project – which incorporated the state-of-the-art computer technology of the QL combined with modern telephony equipment, data communications systems and sophisticated Psion software in ROM to provide a package which offers everything from speech synthesis to mainframe computer communications.

Thousands of the machines have been ordered by telephone authorities throughout the world, with executives and communications experts making use of the same high technology and software expertise first developed on the QL. The attraction of all this, of course, is that the QL has now matured to the point where many of the facilities of the OPD variation on the QL hardware design can now be purchased for use with the standard machine.

Fast memory-based software operation can be achieved through the RAM-disk software included in many memory expansion systems, telephone-based computer communications through devices such as Tandata's popular Q-CONNECT modem system and fast data storage through the Sinclair/Micro Peripherals QL disk drive system.

This is your page

White space is not a pretty sight, particularly in the eyes of an editor. Only you can prevent this dreaded disease from striking the letters' column of Sinclair QLUB News.

If we say or do something you disagree with, are surprised by or just want to sound off about, put pen to paper (or hands to keyboard) and let us know. Like it says here, this is your page and it's up to you to make the most of it.

It isn't the only place in this magazine for your comments; there's the Programmers' Forum for your programming tips and queries, and the QL Quarks column to hear QL quips — but the letters page is the first place most people look for letters.

Write to:
QLUB Editor,
Sinclair Research,
Milton Hall,
Milton,
Cambridge CB4 4AE

Q LETTERS

Adventurer's annotations

I am currently writing an adventure program in SuperBASIC on the Sinclair QL and have encountered a few programming difficulties with which you may be able to help me.

First, is there any way in which the QL's 'Break' key can be disabled, so as to prevent people from stopping the program while it is running?

Also, in the program I have incorporated a 'Save Game' feature. This means, however, that if an error occurs while trying to save or load a game, the QL 'takes over', printing up an error message and the program stops. What I think I need is an error recovery system like that used by Psion in its four packages (QL Quill, Archive and the like). How is it possible to do this on a QL with a lowly 'AH' ROM?

Finally, when I finish writing my adventure game in SuperBASIC, I want to convert it to machine code. I understand that I need a compiler to do this. Are there any such programs on the market at this time and if so which do you recommend?

Simon Nicholson
Welwyn Garden City, Herts

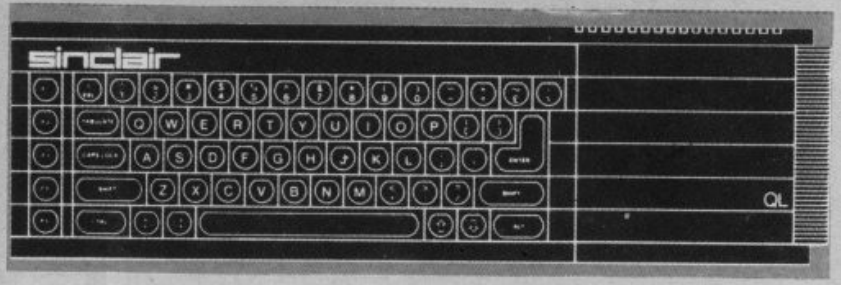
Ed's reply: You need not worry about your ROM version – AH or otherwise – it is not 'lowly'. You can do all the basic tasks on your QL which anyone else with any other version ROM can do – any Qdos changes between ROM versions are usually minor and do not affect basic program operations.

Sinclair Research sells to commercial software houses a package called The SuperBASIC Production Kit. As the name implies, it is a set of routines which give the programmer additional facilities, including break protection, fast program loading, error trapping, copy protection and such features as are intended to allow programs to be published in SuperBASIC. It is available from Technical Support, Sinclair Research, Milton Hall, Milton, Cambridge on a royalty-free basis to be installed into a single commercial package for £100.

If you are intending to use a SuperBASIC compiler, however, you do not need this kit. Break protection is irrelevant to a machine code program – machine code loads at full Microdrive speed because it doesn't have to be 'parsed' by the interpreter.

There are two companies actively developing SuperBASIC compilers, Digital Precision and Pisgah Research.

Sinclair Research has not seen samples of either product so we cannot make any further comment.



Mail plea heeded

Your plea for mail in Issue No 6 of QLUB News was too much to resist. I have recently been making extensive use of QL Quill, now that I have finally been able to obtain Version 2. As a result I have begun to use a few simple techniques to make the work easier which might be of interest to others.

There is nothing startling but on the other hand I have not seen any previous mention of them in the press. Mind you, that might be partly due to the fact that it took me the best part of a year to get QL Quill Version 2 and to make arrangements to receive your newsletter. Sinclair Research cannot provide any services for individuals outside the United Kingdom and I had to wait until a local agent was appointed.

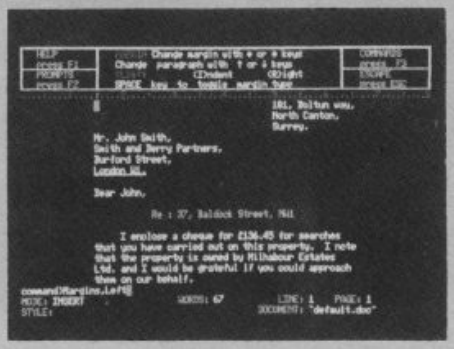
1. Avoiding the default values – I found that it took me a considerable time to set things up at the start of each document as the default values were not what I wanted. I do most of my work in note form, so none of the margin settings was suitable; I prefer to use the full width of the paper with no pre-set indentation. I found that with a fresh sheet of paper in the printer the typehead does not start at the top of the page and I was getting "page 1" printed at the top of page 2. This was fixed by having no FOOTER and using the DESIGN option to set the upper margin to 0 and the bottom margin to 6. All this sort of thing can then be put together and stored along with QL Quill on mdv1_. Then it is just a simple matter to load the blank document at the start of a new piece of work, with everything set out the way I like it.

2. Getting more from the printer – QL Quill provides normal, boldface, underlined, superscript and subscript type, and combinations. My printer can also provide italic script, expanded and compressed type but these cannot be accessed directly from QL Quill. My solution was to use the translation codes provided to convert some unwanted symbols to printer control codes.

There are plenty of funny symbols available by the use of control codes, just like in the manual under "character set and keys" in the "Concepts" section. Of course it is possible to use just one symbol for all the "turn-offs" in one translation code. A label on the blank area to the right of the keyboard serves as a reminder of the codes.

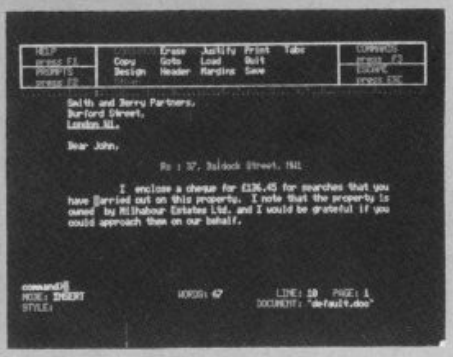
If you want your control symbols to stand out on the screen, you can always use the boldface function to make them appear in contrasting colour but I don't usually bother. Be careful when using expanded type as the letters occupy twice as much space as they appear to and this can give an untidy result. I generally restrict their use to headings and avoid going past column 40 on the line.

John Charters
Ngatea, New Zealand



Here you see a typical letter written with QL Quill, using the underlining, boldface and margin setting controls built into the software.

Margins are changed simply by moving the cursor keys along the ruler line at the top of the page. Here you see a left margin being set using this command instruction.



Cue-L in the billiards hall

We thought you might be pleased to know that our original QL has now completed 12 months' 24-hour-daily use, taking care of the timing and pricing of our tables along with staff and table details.

Other QLs, acquired as back-up, were not required for that purpose but have been used intermittently for stock, accounts and program preparation – as it is a rare occurrence to have no tables in use and be able to interrupt the continuous running of the pricing program on the main machine.

The Management
Chorlton Snooker Centre, Chorlton



SOFTWARE UPDATE

The new year brings with it a new crop of Sinclair-published games and entertainment software for the QL. From arcade games to artistry software, the latest selection of Microdrive offerings will make your machine even more of a pleasure to use.

Probably the most dazzling of the new programs is QL Paint – a specially rewritten version of Talent's popular 'painting' program for the QL. QL Paint is designed to make it easy to exploit the full range of QL graphics using icons and drop-down menus to select from 50 commands. The program can be operated by either the keyboard cursor keys or via a joystick.

Many of the commands can be combined so that you have more than 4,000 graphics operations at your fingertips. At the same time, everything is easy to remember and accessible. If you prefer to work without prompts for greater speed, there is also a 'command short-hand' available by typing on the keyboard.

Screen pictures are created by drawing directly on the screen with the cursor or by using commands for standard features such as circles, boxes and ellipses. The commands also let you change colour and brush style, copy parts of the picture from one place to another, mirror an area, and create different patterns or textures.

Your finished picture and texture library can be saved on Microdrive cartridge or disk and can also be printed on paper. Once saved, it can be included in a SuperBASIC program as a title screen or illustration. QL Paint sells for £24.95 and can be ordered using the form at the back of this issue.

If you want a challenge which requires a little less dexterity and perhaps a little more thought, then you might be intrigued by Magnetic Scrolls' QL Pawn text adventure game. The game is set in a magical kingdom, from which you are free to roam about at will.

QL Pawn's command interpreter makes this a very special game as it allows a very free use of English language instructions - unlike many other adventures, which limit the player to a pre-determined set of commands.

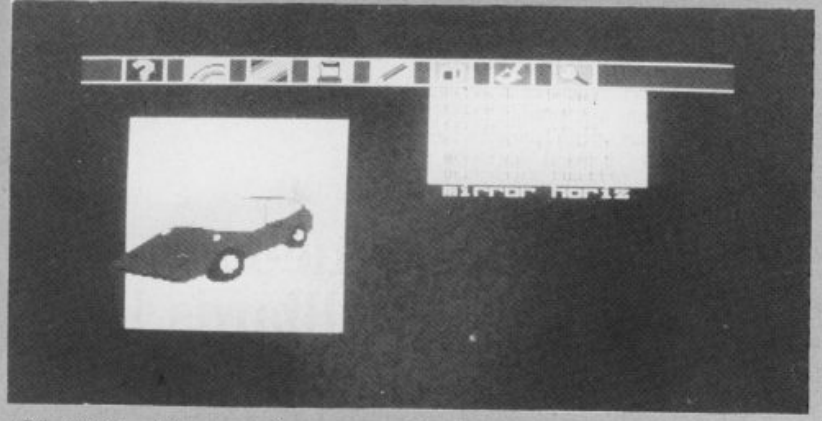
You are the principal player in a story which involves the whole of the kingdom of Kerovnia and its inhabitants. Your first challenge is to discover the goal of the game – and then find the best way to achieve it. You'll soon gather that you need to use the items you find on your travels.

You tell your QL what you want to do by typing-in commands just as if you were instructing a human games master. QL Pawn's sophisticated command interpreter understands a wide range of English words and accepts grammatical constructions.

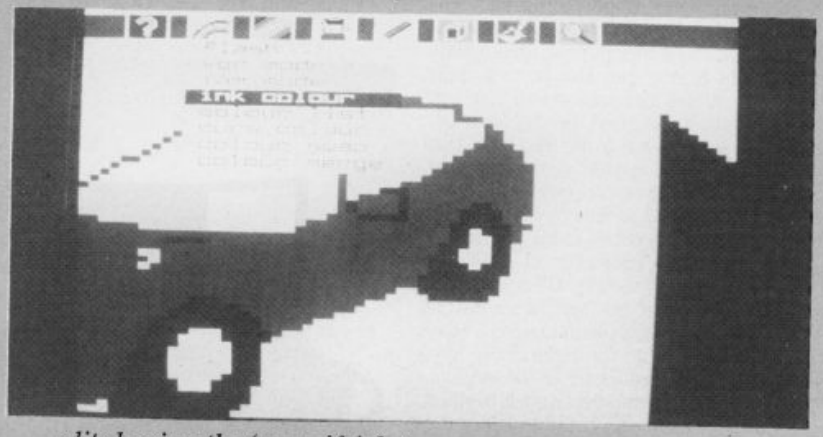
There is also a full range of special commands which do things such as allowing you to change the screen displays; learn your score, save part-finished games, and more.



QL Paint—a screen from 'WEST'.



QL Paint—pictures of a car may be . . .



. . . edited using the 'magnify' feature.

You meet many other characters in this adventure world and each of them can be independently-minded and may choose either to help or hinder you in your quest.

To find whether or not you'll be a successful pawn in this electronic game of life, you can order QL Pawn using the form on the back page. It costs £19.95 and includes a detailed manual to give you a head start in solving this riddle.

If you're not feeling up to solving as big or mysterious an adventure as that offered by QL Pawn, then you might consider QL Classic Adventures – this tape combines two popular and classic adventures which have passed the test of time on many other micros and now appear in an enhanced form on the QL.

The collection incorporates Mordon's Quest and The Adventure - two classic ad-

venture games without which no collection can be said to be complete.

The latter is a special QL version of the famous program by Crowther and Woods. It was considered the first real computer adventure game and spawned a host of imitators. Mordon's Quest is an exciting and original sequel.

Both programs are stored on a single Microdrive and you can choose to load whichever one you want – you don't have to load both at once – so that the maximum amount of memory is left free for the adventure. This classic collection is priced for adventurers on a budget – it sells for £9.95 and again can be ordered using the form on the back page.

After all that artistry and cerebral challenge, you might well be in the mood for a little alien-blasting. The latest QL arcade game takes you not out of this world – but rather inside yourself – for this action.

In QL Jabber you take the role of an antibiotic and antivirus drug, placed in a series of dangerous situations in the fight against disease. Armed with bug-busting missiles, you must fight your way through 26 colourful screens – using either keyboard or joystick control. A successful mission can be rewarded with elevation to the Hall of Fame.

Each screen is patrolled by deadly bugs. You must attack them by using one of your four drug carriers which can fire bursts of powerful antibiotics – up or down as you direct. It's written by Arrakis, which also wrote the well-known QL Meteor Storm, and is really a variation on the 'Space Invaders' theme – except this time the invaders are in your own space.

You must destroy the bugs before they reach you. Different types of virus and bacteria can be identified by their movement; points are gained according to the deadliness of the organism concerned. No points are gained for hitting antibodies (after all, they're on your side).

When you've destroyed a bug, it turns into a wall. The nature of the walls depends on which of the 26 levels you're on; sometimes they are 'safe' to hide behind and sometimes you cannot shoot through them. QL Jabber costs £9.95 and can be ordered through QLUB.

Another choice for arcade action is QL Quboids, a 20-screen 'platform' game in which you patrol walkways and scaffolds in a quest to rid the world of four species of dangerous monster.

Your ladders and platforms have become infested with a particularly virulent form of monster and you are forced to wear breathing apparatus to survive. The only way to get rid of the plague of creatures is to dig holes for them to fall into, taking care that you don't get caught yourself or run out of air or food. Each of the 20 screens is more difficult than the last because there are four types of monster, each increasingly more difficult to kill.

You start each screen at ground level and there are four platforms above you, connected by ladders. The monsters move round these at will and contact with any monster will instantly cost you a life and return you to the ground. You can move round in four directions but you can move only up and down using your ladders. Your other control allows you to dig, using your pneumatic hammer to knock holes in the platforms. They will trap a monster so that you can attack it with your hammer – but you have to move quickly or the monster will crawl out of the hole. QL Quboids is available through QLUB and sells for £9.95.

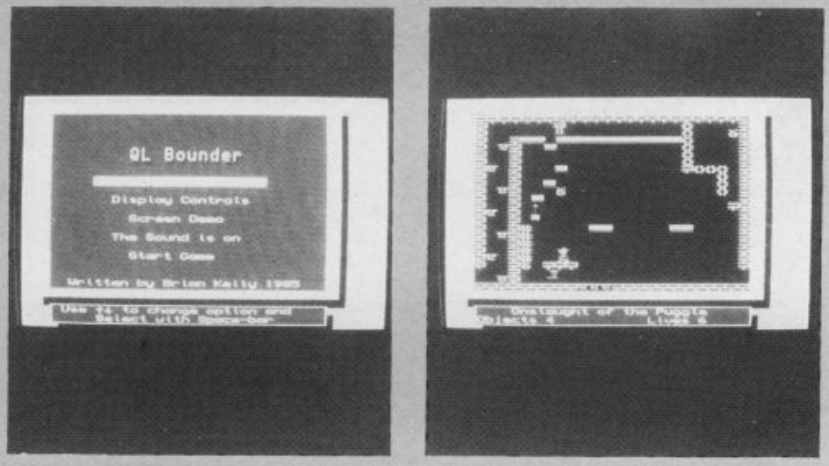
Arcade action and adventures, however, are not really suited for more than one person. So if you have people round to look at your QL, you might consider bringing out Whoopee's QL Fictionary, a word-challenge game reminiscent of those played on popular television programs.

QL Fictionary is two games in one; a word guessing game which requires you to identify obscure and sometimes unrecognisable bits of the English language and Word hoard, a real brain-teaser which asks you to make as many words out of a given series of letters as possible.

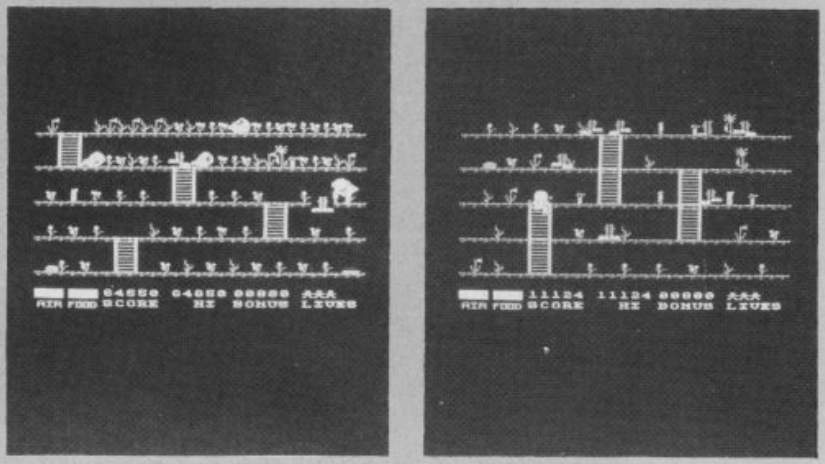
QL Fictionary is suitable for one to four players. The QL gives you a word and asks you to guess which of the four possible definitions is correct. All the words are nouns, verbs and adjectives which are in current usage – but they are specially picked so that you are unlikely to have encountered them previously. With more than 2,000 words – plus amusing true and false definitions – this game should entertain anyone who loves the English language.

Wordhoard is an even stiffer test of your vocabulary. You are given three minutes to find as many words as possible from the letters of a given QL Fictionary word. After checking and scoring your words, the QL will then reveal how many it found in QL Wordhoard's own 18,000 word dictionary. As well as playing both games separately, individual players can play Fictionary and Wordhoard as one game. After 50 Fictionary words, the QL will switch to Wordhoard. When your three minutes are up, the QL will give you a grand total score for both games. QL Fictionary is available through QLUB and costs £9.95.

The complete Sinclair QL software catalogue, giving details of this and other programs, is available from Sinclair Research using the form at the back of this issue.



QL Bounder offers platforms. . .



. . . while QL Quboids offers monsters and ladders.

Programmers' forum

Welcome to the QLUB programming forum, where we answer your programming questions and you solve those of other QLUB members.

Version 2 vexations

I have for some time intended to write to you to say how pleased I have been with the latest version 2.00 of the Quill, Abacus and Easel programs. They are all an enormous improvement on the previous versions, which I found extremely frustrating, not only from the fairly frequent hang-ups but the very frequent referrals back to the cartridge. Archive, I am sorry to say, still suffers badly in this way. You cannot make a back-up copy on a separate cartridge, except by copying in SuperBASIC mode, as it's impossible to change the cartridge without causing a hang-up. I do hope these irritants will be eliminated before long.

'Version 2.3 of QL Quill, Archive, Abacus and Easel are now available from Sinclair Research at Camberley'

Since one can now obtain extra memory, would it not be possible for the program to assess the amount of memory available and, if sufficient, to place the whole program in memory? Including, please, the printer data.

The other point, which led to writing to you finally, is that in the last issue on page 8, you gave instructions on putting the printer installation program on to Archive. At the end you write simply copy Install_bas from Quill or Abacus on to Archive.' After a long time of puzzling as to why the result did not work, but continually came up with at line 129 not found', I found that not only Install_bas but also Install_dat must be transferred from Abacus or Quill to Archive. After this, all worked perfectly. Perhaps your readers might be pleased to know this in your next issue.

These things can be very aggravating and I was continually plagued with such errors in the Users' Guide when I first got my QL computer. There seems to be a breakdown somewhere in the checking procedures in Sinclair Research and improvement would be greatly appreciated by all, I am sure. It seems a pity that such a very excellent product should be let down by such relatively simple, but very annoying things.

One last request. Would you please let me know just how I can send my program listings to my printer? That is without rewriting everything on Quill. Whatever I have tried so far has met with dismal failure and I can find no reference in the manual or any other book. It is probably so simple that no-one thinks it worth mentioning, but I would be very grateful for the information.

R H Melville,
Guildford, Surrey.

Ed's reply: Sinclair Research is continuing to review the performance of Quill, Archive, Abacus and Easel. As detailed on Page 1, Version 2.3 is now available and it offers a number of improved features. Individual titles can be purchased from Sinclair at Camberley at a cost of £7.50 per title. This new version handles RAM expansions in a more coherent manner and will automatically make use of extra RAM if it's there and installed in the correct manner.

Like the previous version, this does not allow you to allocate RAM if you have installed extra memory. It is hoped that a future release will include the facility to do this manually. QLUB News will keep you informed of this and other significant developments as they happen.

One alternative to making use of your RAM is RAM-disk software. Almost all the RAM expansion systems now on offer for the QL make use of the machine's device-independent nature to offer built-in RAM-disk software. This software sets aside part of the memory expansion so that the QL thinks of it like a storage device – such as a floppy disk or Microdrive – and can address it using simple commands such as DIR RAM1, and the like. You can then, depending on how big a RAM expansion system you buy, copy your Psion programs on to these RAM disks and run them from memory – thus speeding them considerably and leaving both Microdrives free for storage.

Listing your programs out to the printer is also simple – although just how simple will depend on the printer you use. It again centres on the fact that the QL is device-independent. All you need to do is open a channel to the serial port – if that's where you operate your printer from – and then send the listing to that port. Here are the commands you would use:

```
OPEN#3,ser1
LIST#3
```

or, if you've already saved the program to Microdrive, type:

```
COPY MDV1_FILENAME TO SER1
```

The only problem you might encounter is if your printer doesn't recognise the QL's 'new line' command, in which case you would find the printer moving down one line every time it prints a line of program but not returning to the start of the line – i.e. a line feed without a carriage return. A small SuperBASIC program which forces a carriage return after every line feed would correct that problem were it to occur.

The QL can communicate with modems as well as printers. Below you see the Q-Connect system offered by Tandata for use with the QL.



User-Defined QL conundrum

I have owned a Sinclair QL computer for more than a year and I am very impressed with its graphics and sound capabilities. I am up to the point of writing games programs for the machine except for one problem - I can't work out how to create User - Defined Graphics. Do you think you could shed some light on the matter?

William Coffin
Birmingham.

Ed's reply: User-Defined Graphic (UDG) creation isn't as simple on the QL as, say, the Spectrum; it can be done, depending on what you want to do with the UDGs. There is an easy way and a difficult way; both require some machine code unless you use QL Toolkit now available from QJUMP, 24 Kings Street, Rampton, Cambridgeshire.

The standard character-writing routines in the QL write characters in a 6X10 box of pixels. The routines, however, expect a font for the characters in the form of a 5X9 pixel shape to ensure a blank guard-band so that adjacent text characters don't merge.

If you want to replace the standard character set with a different type-style, the screen system call to SD.FOUNT TRAP#3,D0=25 (See QL Technical Guide) allows a new font to be selected. If you want joined-up, merged or multi-colour UDGs (for spaceships, monsters and so on), you will need to write a special character-painting routine in machine code.

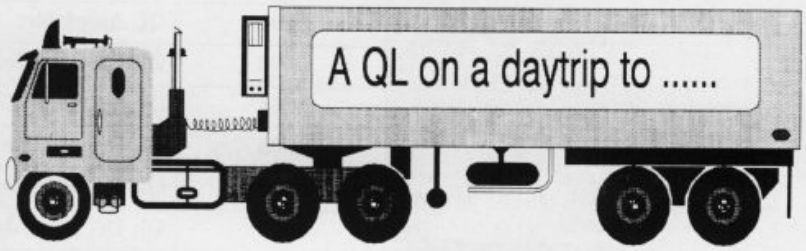
If you want to see good graphics in action look at the new games software titles for the QL such as QL Bounder, a classic 'platform' game which casts you in the role of Quentin Jump, an intrepid treasure hunter plagued by flying ducks, life-sized jumping boots and other obstacles. The game sells for £9.95 and can be ordered using the form on the back of this issue.

Owl and the QL

Owl Computer Training is offering QL training courses. The normal prices for a single day's training is £62.50 + VAT, and the Introductory and Archive courses are normally bookable only as 2-day chunks. As a special offer to QLUB members any day can be booked at £55.00 + VAT and the Archive and Introductory courses can be split into single days, again at £55.00 + VAT per day.

It may also be of interest that a set of Distance Learning Packs on the four Psion programms should be published in the Autumn.

QL Quarks



A party of QLs
did journey down to London
in a heavy lorry
that looked like it weighed a ton

The driver missed the park
while Microdriving for a lark
he was so busy with QL Cavern
that he missed his favourite tavern

As promised in Issue 7, we have selected three winners in our Limerick competition for the best completion of the Limerick - A QL on a day trip to London.

The first winner of the QL Caverns prize is J C Smith of Edinburgh, who picked up the travelling theme:

A QL on a day trip to London
Said Observe how I got that long run done:
With my fast microdriving I am early arriving
Straight down the M1 and the ton done!"

Dr D C Lewis of Alderbury, Shrewsbury picked a communicating theme as his metaphors became well-mixed with history:

A QL on a day trip to London
In the Tower linked up with a QCOM
They hacked from that fort,
And brought Wall Street to nought,
But were found, smartly switched off and undone.

And the final winner, Peter Jones of London often singled-out the gaming activities on the nation's capital in his missive.

A QL on a day trip to London
Met Mr Bill Smith and his son,
Don said Bill "At a guess, I've played it at chess
A hundred times - and never won, Don!"

Although it isn't really a Limerick, we also thought you might be amused by this humorous procedure, from Roger Vanstone of Plymouth, who gets a blank Microdrive cartridge as a runners-up prize;

```
REMARK "POLITIQL":
DIM CABINET(30,0)
DEFINE FUNCTION GOVERNMENT
PAUSE (5 YEARS): END DEFINE
DEFINE PROCEDURE IMAGE
DELETE PARKINSON: SIN(BAUD)
SELECT ON ARCHER: FLASH 1:
END DEFINE DEFINE PROCEDURE
POLICY:
POLICY=PI(IN THE SKY)
IF CLAIM=TRUE THEN FOR
TIMES=PAPER:
PRINT EDITORIAL FAVOURABLE:
BEEP(LONG)
IF CLAIM=FALSE: BLOCK: TURN U:
RETRY:
END DEFINE
DEFINE FUNCTION OPPOSITION
SKINNER=CURSOR:
DALYELL=GOSUB
MERGE OWENSTEEL REPEAT KIN-
NOCK:
NO EXIT: NO END
REPEAT
SAVE US: PENDOWN
RUN LBYTES FOR LEATHER
DON'T STOP
```

Ed's note: Don't bother trying to type it in, or your QL may try running for Parliament.

Special Offer Office

The Special Offer Office keeps track of all deals and discounts for QLUB members, which includes anybody who is sent this newsletter. Listed below are the deals offered to members:

★ GST Computer Systems is offering its acclaimed 68K/OS operating system for the QL at a 20 percent discount. For details, write to GST Computer Systems, 8 Green Street, Willingham, Cambridge CB4 5JA or telephone Jane Pateman on 0954-81991. Have your membership number and address to hand.

★ Westway Software is offering its new machine-code arcade game, EVA, at a discount to QLUB members. The game sells for £10.95 but QLUB members can buy it for £1 off that price. Send your orders to QLUB Special Offer, Westway, 24 Preston Road, Lytham, Lancashire.

★ DRK Products Ltd is offering its Microdrive-tidying racks to QLUB members at a 20 percent discount off the normal £4.95 price. This simple rack can be affixed to your QL, just above the keyboard. To order, send your £3.95 (per rack) to DRK Products Ltd, Bar One, Pipers Lane, Caddington Common, near Markyate, Herts AL3 8QF or call on 0582-840402.

★ Duckworth Publishers offer a 20 percent discount on Adam Denning's new book, Advanced QL Machine Code. The retail price is £8.95 but QLUB members can obtain the book at £7.16. Contact Duckworth Publishers, Sales Department, The Old Piano Factory, 43 Gloucester Crescent, London NW1 or telephone 01-485 3484.

★ A 20 percent discount is available on selected items of QL software sold by Sinclair Research through QLUB.
QL Technical Guide, QLUB price £11.95.
QL Monitor, QLUB price £19.95.
QL Assembler, QLUB price £31.95.

Send your order, using the form on this page, to Sinclair Research, Stanhope Road, Camberley, Surrey GU15 3PS.

★ A special price is available for a year's subscription to *QL World*. If you subscribe through QLUB, the magazine will be delivered for £12 for a year's subscription. To receive your 12 issues, send your cheque for £12 to: QL World Ltd, Subscription Dept, Wells House, 80–82 Upper Street, London N1 0NU.

QLUB product order form

To order DIRECT FROM SINCLAIR RESEARCH Ltd
Complete the coupon below

Product Code	Title	Quantity	Price	Total
5501	QL Assembler		£29.95*	
5503	QL Cash Trader		£69.95	
5504	QL Touch 'n' Go		£24.95	
5505	QL Project Planner		£39.95	
5506	QL Entrepreneur		£39.95	
5507	QL Decision Maker		£39.95	
5508	QL Integrated Accounts		£89.95	
5509	QL Monitor		£19.95*	
5510	QL Meteor Storm		£12.95	
5513	QL Home Finance		£24.95	
5514	QL Cavern		£12.95	
5515	QL Gardener		£24.95	
5516	QL Macro Assembler		£59.95	
5517	QL Fictionary		£12.95	
5518	QL Reversi		£12.95	
5519	QL Bounder		£9.95	
5520	QL Pawn		£19.95	
5521	QL Paint		£24.95	
5522	QL Quboids		£9.95	
5523	QL Jabber		£9.95	
5524	QL Classic Adventures		£9.95	
6509	QL Technical Guide		£11.95*	
			TOTAL	

*Indicates QLUB special 20% Discount price ● Tick here if you would like a catalogue

● Please tick if you require a VAT receipt ☐

● I enclose a cheque/postal order to Sinclair Research Ltd for £ _____

● Please charge my Access/Barclaycard/Trustcard No _____

Signature _____

Name: Mr/Mrs/Miss/Ms _____

Address _____

_____ QLB008

Send to Sinclair Research, FREEPOST, Camberley, Surrey GU15 3BR.