

QUANTA HELPLINE 04 - Published in Vol 25 Issue 3, Jun/July 08

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Members wishing to submit helpline requests via email can use the email address helpline@quanta.org.uk or if you prefer to use traditional post, please send the helpline request to me via the address printed inside the front cover of the newsletter.

Obviously, we cannot guarantee to answer every query we receive, but we will do our best! Where we have been unable to answer the queries, we may print the help request as an open request in the newsletter to ask if any of the readers can come up with a solution. And, of course, if readers feel that they have a better solution than we came up with, or would like to correct any errors we make, please write to us!

Q. All of my programs use the same QL font built into the ROM. I have some nice fonts on disk and would like to be able to make all of my programs use those. Is this possible?

A. As far as I know, under QDOS, the answer is no, since the font is built into the QL ROM and cannot be altered, and all programs start using the default system ROM fonts unless the programmer has specifically provided his/her own font. If you are using SMSQ/E there is a facility to change the default system ROM. Load any standard QL font into some common heap space and use the CHAR_DEF command (see SMSQ/E documentation for full details) to change the default system font to one of your choice. From then on, most programs will use this new font.

(The following query came originally from David Buckley, I have edited it a little to save space)

Q. The other day I was using a QL emulator to read bytes in from the serial port and need to do bitwise operations on the received byte. This was so my Zero2 robot could follow a black line. I can not find anything in the QL Manual, nor on the web. What I wanted to do was: Sensebyte =Sensebyte & %00000111 to mask of the top 5 bits, for example. And I don't suppose hidden somewhere there are commands to print out binary numbers, i.e. 10111001 etc instead of doing it longhand?

A. Information about this can be found in the QL manual, Concepts section, Operators page. Bitwise AND is achieved with a double ampersand in both SBASIC and SuperBASIC. For example: a && b

Bitwise OR is achieved with a double vertical bar, e.g. a || b

Bitwise EOR (Exclusive-OR) is achieved with a double caret, e.g. a ^^ b

Bitwise NOT is achieved with a tilde, e.g. PRINT ~variable

Regarding commands to print binary numbers, we use PRINT with the following operators. SBASIC allows binary values to be specified with the % symbol before a binary number, e.g. decimal 15 in binary would be %1111. Hexadecimal values can be specified in SBASIC with the \$ operator before a value, e.g. decimal 255 can be specified as \$FF in SBASIC.

SuperBASIC does not have the % and \$ for binary and hexadecimal values, so you would have to use the Toolkit 2 extensions BIN and HEX respectively.

Decimal 15 is represented as binary with BIN('1111'), so PRINT BIN('1111') would print the value 15.

Decimal 255 is represented as hexadecimal by HEX('FF'), so PRINT HEX('FF') would print the value 255.

Q. I subscribed to the ql-users email mailing list. I now have a new email address. How can I make the list send the emails to my new email address and stop sending them to the old email address?

A. You can get full details of how to do this on the list owner's website. The list owner is Bruce Nicholls of Quo Vadis Design and the website is at <http://www.q-v-d.demon.co.uk/smsqe.htm>

Another (and possibly more user friendly) way is to use the forms page at the address below to make the changes:

<http://lists.q-v-d.com/listinfo.cgi/ql-users-q-v-d.com>

If your email program supports showing the email message source, have a look at the message header for any ql-users mailing list email, which shows brief details. Look for lines which look like this:

List-Help: <mailto:ql-users-request@lists.q-v-d.com?subject=help>

List-Subscribe: <http://lists.q-v-d.com/listinfo.cgi/ql-users-q-v-d.com>,

<mailto:ql-users-request@lists.q-v-d.com?subject=subscribe>

To make changes, manually you need to send emails to ql-users-q-v-d.com-request@lists.q-v-d.com with the required command such as subscribe or unsubscribe or help in the **body** of the email (*NOT* in the Subject line or it won't work, except for the help command which works in either the subject line or the body of the email). You may need to use the password originally issued to you as well, although you can get a password reminder sent by using one of the facilities on the forms page mentioned above.

The following query appeared on the ql-users mailing list, and the answer was provided by Marcel Kilgus:

Q. System QPC, Program Xchange 3.90L/N, Easel/Abacus

date(0)

date(1)

date(2)

gives wrong date eg. 28/-1/2108

can anyone reproduce this ?

A. This is a clash of the languages. Most abbreviated months are spelled the same in English and German (like "Apr"), but May is "May" respectively "Mai". SMSQ/E is returning "Mai", XChange is looking for "May". You may either change SMSQ/E to English or open XChange in a hex-editor and look for "janfebmaraprmyjunjulaugsepoctnovdec" and change that to "janfebmäraprmai junjulaugsepoktnovdez".

Q. Can I use a Euro € currency symbol into a document on a QL?

A. If you are using SMSQ/E, CHR\$(181) corresponds to the Euro currency symbol. On a British keyboard, use CTRL SHIFT u to obtain the symbol. QDOS system fonts have no Euro symbol normally, but you can get a special font to install on your QDOS system from my website at www.dilwyn.me.uk/fonts/index.html - scroll down to the heading "Euro Font For QDOS" and click on the link to download the zipped font file.

Q. I have downloaded a zip file called “game.zip” from the internet. I copied it to a QL disk and tried to unzip it without success, the unzip program seemed unable to accept that it was a zip file.

A. You may be using an old and unsupported version of QL unzip (version 1, 2, or 3), which does not recognize zip files ending with the Windows-style ‘.zip’ filename ending. Rename the file to end with a QL-style underscore suffix such as “game_zip”. The best solution is to get hold of a copy of the Jonathan Hudson versions of Zip and Unzip which are the official versions, from www.daria.co.uk/qdos/ such as versions 5.32 or 5.40 or later.

Q. I am using QPC2 on a Windows XP laptop with an English keyboard layout. Some keys are in the wrong place, such as the AT and QUOTE symbols reversed.

A. With some laptops, it is fairly common to need to set QPC2 to have a USA keyboard layout rather than a British keyboard layout. In the QPC2 configuration dialogue screen that you get when QPC2 starts (if it is set not to appear, hold down the SHIFT key as you start QPC2 to force it to appear). In the configuration dialogue, look for the Country Code option. British is code 44, USA is code 1. Use whichever works best for your laptop.

Q. I am writing a SuperBasic program which needs to ask the user to input a number. How can I make sure that only numeric values are entering, to prevent silly inputs crashing the program?

A. INPUT num is the traditional form of number input to a variable. Even just entering a letter by mistake can cause the program to stop with an error. Probably the simplest way of protecting the INPUT is to use a small loop as follows which will safeguard the most common entry errors, though it is far from foolproof:

```
100 REPEAT input_loop
110   INPUT 'Enter a number > ';a$
120   IF ('..' INSTR a$) OR ('ee' INSTR a$) THEN NEXT
input_loop
130   num = '0' &a$
140   IF num = 0 AND a$<>'0' THEN NEXT loop
150   EXIT input_loop
160 END REPEAT loop
```

The routine asks you to enter a number into a string variable called a\$. Line 130 uses a feature of coercion to try to safely convert a numeric value in a string to a numeric variable ‘num’. Most errors are caught by this line, which will convert the string entered to a zero if not numeric. By testing for 0 and checking if the string entered was ‘0’ we can test for an error input. There are a few common errors which this won’t trap well enough and we test for a couple of these in line 120 – these are a double decimal point and a double E (exponent symbol), which are explicitly checked for with an INSTR. As you get used to more specific inputs which cause errors you can test for these by adding similar checks to line 120.

Q. Can I connect an old PC VGA monitor to my QL?

A. If it is an analogue monitor, no. The QL video socket uses TTL video levels, and one is not compatible with the other. It would need a new QL video circuit or some complex conversion electronics to allow such a monitor to be connected to a traditional QL motherboard. The situation with an Aurora motherboard is rather better, as the manual for the Aurora card shows how to connect an analogue RGB monitor to the card.

Does anyone know if it would be possible to build a small circuit which would sit between the QL RGB video socket and the input of a VGA monitor to convert the signal? QL Today published an article some years ago showing how to attach a QL to the SCART (Peritel) connector on a TV set, using a few resistors to adapt signal voltages and so on. I wonder if such an approach could help us to connect a VGA monitor to a QL? With the flat screens becoming de facto for PCs these days, there are plenty of cheap second user CRT monitors around just crying out for a cheap interface to a QL. Hardware experts – please write in and let us know!

Q. Apart from the QL itself, are there any other systems able to use the QL network?

A. Only the Aurora card, and a QXL card on a PC as far as I know.

Q. My laptop has become unrepairable (motherboard failure of a 2000 machine). Its replacement will have only USB connections. I have found a cable which will connect USB to a parallel output port. I need this because I have two parallel port printers. One is an A3 - Wye and replacing these is too expensive. There is then the problem of the QL and its association with FLPs. Is there a USB to FLP cable?

A. I presume Mr McKay is using a QL emulator. If so, what he needs is a USB external floppy disk drive. Available from companies like www.eBuyer.co.uk, these are cased floppy disk drives which plug into a USB port on a laptop and are made specifically for use with laptops without built in floppy drives. These take their power from the USB connection, so usually don't need external power packs. They usually present themselves as a drive A: like an internal floppy drive, and should be transparent to QL emulators which address the floppy disk drive as drive A:

You should check if your laptop has USB1 or USB2 ports, as some will only work with USB2. The laptop's manual or spec sheet should explain this.

These drives are usually made by well known brand name companies like Sony, Hewlett Packard and Plextor and cost from about £17 to £30 from websites like eBuyer. PC World used to stock them but they are no longer on their website, however.

Q. Is it possible to have a USB outlet for a QL computer? I have been told that the problem would be that the QL would have to be fitted with a USB card and probably there isn't one?

Could Quanta mobilise some activity on these hardware difficulties?

No laptop = No Emails!!

A. This has been well covered by various discussions in the past. Those discussions explained that the hardware for a QL USB port would be fairly trivial, but the same old issue with lack of software drivers (individual hardwares plugged in would all need SPECIFIC drivers, not just a software driver for USB ports). Unlikely to happen at all.