QUANTA HELPLINE 06 - Published in Vol 26 issue 1, Feb/Mar 01

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. Can I use an Iomega Zip drive with my QL?
A. There are three different connection standards to consider:
1. Parallel port. This cannot be used on a QL system (e.g. Super Gold Card parallel port). It can be used with an emulator running on a PC. QPC2 and QXL should be able to see this as one of the PC's drive letters and handle it via the QXL.WIN filing system in the usual way, bearing in mind that you are dealing with removable media.
2. USB drive. Same details as above.
3. Atapi IDE connection. The 100MB and 250MB units should be usable via a Qubide hard disk interface version 2 or later (older versions will need to be upgraded to version 2). The removable media are formatted just like Qubide IDE hard disks.
I have no experience of the 750MB cartridge versions of the Zip drive. Does anyone know if these can be used?

Q. I have an old basic program which needs to redefine the QL character set. Unfortunately, although it works on an original unexpanded QL, the font is either ignored or the program crashes when it runs.
A. The program is probably using an illegal "poke" to set up the new font. This type of poke comand makes assumptions about the layout of memory, so only works on one particular QL system. Such programs usually redefine the fonts with a command like:
  POKE_L 167722,new_font_address
Another method often seen in older programs is:
  POKE_L 42+(PEEK_L(PEEK_L(163960)+4)),new_font_address
Since the system variables and channel definition tables can move around in memory, these approaches are doomed to failure on most QL systems, for example if pointer environment or the second screen are in use. The correction required is to work out exactly what the POKE_L is trying to achieve and see if we can use a CHAR_USE command (CHAR_USE is a Toolkit 2 extension) to set the new font address for a given channel:
  CHAR_USE #channel_number,new_font_address,0
CHAR_USE can redefine both the standard and extended character sets. If the program used the address 167726 in the POKE_L command (or 46 instead of the 42 in the second example) it was probably trying to redefine the second (extended) character set:
  CHAR_USE #channel,0,new_font_address
If you use CHAR_USE, your programs should work across all QL systems and emulators.

Q. I can get Sernet to work between two computers, and only on SMSQ/E systems. Why can't I get it to work if one of the systems has QDOS, and why can't it work with more than 2 connected computers?
A. QDOS serial port drivers don't have all of the facilities of the extended serial port drivers

of SMSQ/E, e.g. QDOS doesn't support split input and output channels. To some extent you can work around this by adding Hans-Peter Recktenwald's new serial port drivers for the QL, which can be downloaded from my website at:
www.dilwyn.uk6.net/utils/index.html
or from Hans-Peter's website:
http://members.tripod.com/phpr/index-ql.html
Look for the SER Handler package called SimSer.
The issue with more than 2 connected computers is rather more complex. Some versions of Sernet only cater for a 2-computer network, although the author Bernd Reinhardt can supply on request a version to work on more than 2 connected computers. 3 or more networked computers also need special cabling, so-called 'circular' serial cables - more details in the Sernet manual.

Q. I'd like to add a new keyboard to my QL, as the membrane is broken and I'm having difficulty obtaining a new keyboard membrane.
A. Rich Mellor at RWAP and Tony Firshman at TF Services can still supply new keyboard membranes. If you want to add a PC-style keyboard to your QL you will need a keyboard interface, which is placed inside the QL. Although none are currently manufactured, it is usually fairly straightforward to obtain a second hand one from some of the QL traders - try contacting Q-Branch, TF Services, or RWAP Services. Examples of good interfaces to consider are the DiRen keyboard interface, and the Superhermes Lite from TF Services.

Q. I'm writing a program which handles accounts and I need a routine to print numbers as currency values to 2 decimal places, such as £1.00
A. Try using the PRINT_USING command from Toolkit 2, which is specially designed to format numbers in this way, e.g.:
  PRINT_USING #channel,"####.##",amount
The above example prints the number as 4 digits before the decimal point and two decimal places. If you change the ####.## to ####,## the separator becomes a comma instead of a decimal point. Some currencies use commas rather than points in prices and currency values. Adding $symbol before the first # uses 'symbol' as a currency value before the number, e.g. $£####.## uses a British pound symbol. On SMSQ/E systems, you can use CTRL SHIFT u to generate an Euro currency symbol €. Further details of PRINT_USING can be found in section 13.1 of the Toolkit 2 manual. f you want to go one step further and convert the currency value to a string which can be handled by your program, try using the FDEC$ function:
  money$=FDEC$(amount, field_width, number_of_decimal_places)
For example, FDEC$(100,7,2) would return the value 100 as a 7 character string with 2 decimal places and any empty spaces out of the 7 character field width filled with spaces, so money$ would be " 100.00" in this example. Always make sure you allow a suitable field width to ensure the value fits!

Q. I need a routine to round numbers to the nearest whole number. I've tried using INT, but it always rounds down to the nearest whole number, for example INT(1.75) is 1, whereas I need it to return 2.
A. Try adding 0.5 to the value when applying INT. This should make it round to the nearest whole number, e.g.
  INPUT num:PRINT INT(num+0.5)

Q. I'm trying to write a program using Jochen Merz's menu extension software. Although my

program draws the menus, I can't control the menu - clicking on items in the menu is ignored and the only way out is to press break to get back to basic.

A. You should use the OUTLN command to set an outline within which the menu is drawn for the basic program. OUTLN should be applied to the primary channel (usually #0) in whatever size you need for your program, a 512x256 area will cover the whole screen on an original QL, for example:

```
  OUTLN #0,512,256,0,0 : LET f$=FILE_SELECT$
```

Q. I've bought a second hand disk interface, but it came without a manual. Where can I get a replacement?

A. Replacement manuals for some disk interfaces and a generic manual are available to download from my website, at:

www.dilwyn.uk6.net/docs/manuals/index.html

Q. Since I upgraded to SMSQ/E I can't get Alt-Enter to recall the last line I entered.

A. Alt-Enter is part of the hotkeys job in SMSQ/E, so you have to make sure that the hotkeys job is running by using a HOT_GO command after you have loaded all your extensions.

Q. I am trying to run a basic program which loads and uses some basic extensions, but when the program tries to call the extensions it stops with an error message. What is going wrong?

A. On some early Sinclair ROM versions (e.g. AH and JM), you can't install and use an extension in the same program, so you should write a short boot program to load and install the extension instead, then the boot program can LRUN the original program. This workaround helps make the program work on all ROM versions.

Q. Can I sell surplus QL equipment through Quanta?

A. Private small adverts in the newsletter are free to Quanta members. Contact the newsletter editor with your sales/wants small advert.