

From John Marriott 121_EX1_3PP
To Chris Coxall 56 Cambria House_DA8_3RQ

5.6.2005

Hi Chris,

Thanks for the print-out of File Club-1.pdf May 2005 Einstein Club E-mails. As in my earlier letter/CD I've no intention in programming/supporting the TC01, however I do feel that it would be churlish of me not to recognise/acknowledge your time & effort.

A quick word for those (if you put this on the Web) who are a bit iffy about converting documents to .PDF format. This is being written in MicroSoft WORD as an A5 format, Arial font 8 point (very small!) and when I've finished (presuming you've already got CutePDF Writer on your hard drive!) I stick the mouse pointer on <File> and <click> then on the <Print> (...not the Save!) with more click, on to the <Printer "v"> click and select <CutePDF Writer> then down to the <OKAY> box, click and select a suitable <Directory> and <file name (no .EXT!)> and more click. This "prints" your text file to your hard drive as a converted .PDF file. Remember to reselect back to your "normal" printer - and I'd also save off your original text file in case you need to correct/change/add anything to it - much easier than trying to get to grips with a PDF Editor!

Right, upgrading 1.1 EPROM's to 1.21 (and later System5 DOS/XBAS) - be warned that some of your earlier/large BASIC programs will result in the dread "out of memory" message, for the above takes up more RAM when booted up! This brings me to "adding" other BASIC commands into a "new" EPROM - a simple case that more memory gets earmarked AND you'll land up with a TC01 which isn't compatible with others. Yes, you can substitute some of the little used (if ever) BASIC words with some of your own e.g. TRON, TROFF, GRAY, DEC - but my earlier comment refers. Much better to try the SOFTWARE way, rather like using that little bit of VRAM for the FUNCTION KEYS and even better, some of that GRAPHIC KEY area which just about nobody uses - have a look at this suggestion in the Einstein Magazine No.101-16 "Musings on the AABBBBAA Switch". Whilst I've never played much with the USER DEF function, that's another way of deriving some form of extra BASIC Command and this brings me on to the "Black Art" of Machine Code/BASIC CALL Commands - i.e. RST 08H or &CF (in the "right" place) as it then expects to follow a simple procedure of "jumping" to a "look up" table, and from the "value" given in that table an actual jump to the CORRECT start of a machine code sequence. As EPROM's are corrected through their programming life by the Programmer/Manufacturer there is the chance that these correct starts will move - something a lot of the early SPECTRUM Software Houses didn't appreciate as they jumped part way into a bit of code (for speed!) and then found that a few SPECTRUM "changes" later, their

programs hit the "trash fan". Just think of that postal redirection form you fill in when you're moving home - simple.

Look at EM 103-5 where I've covered the BASIC TOKEN table & etc., but note that was for the later XBAS issued with SYSTEM5 from Crystal Research.

In my last CD (Root directory has Acdsee2, iPhoto Plus 4, Mess, Paintshop Pro, Quick View Plus, WinZip, ZipCentral and List - in the Mess directory is a sub Mess directory containing <zip>Albert (being "Albert Revealed" which I think contains something on "do your own BASIC Commands), <zip>"Hwmanual" (being the TC01 hardware manual), a directory called Software which contains zillions of various .DSK images as well as CPDREAD/CPDWRITE to rebuild onto various types of disks - READ their information files and run the programs under DOS on your PC. Whilst I feel sure that I let Stan Gibbs have the 1.21 EPROM disassembly complete with annotations, as well as the "Pendle Connection" when I gave him my gear last year, rebuild "DISSA80T.DSK" image (yes, you'll need a 80 track double sided drive on your TC01) and look at the files with the .EXT of .PRN & .ASM. My memory's getting a bit hazy on a lot of the files which I had on my TC01 disks, but I'm sure that a lot of annotated EPROM disassembled files were on them.

One thing I'd like to WARN potential re-programmers of the TC01's EPROM emulation - you are in fact running a VIRUS in your PC when running any emulation, the problem being that any change you make to that EPROM cannot be tested in isolation, and as it is in machine code which has the possibility/tendency to scream off in any direction at the same time locking out keyboards/displays and writing to hard drives whatever it sees fit - so be warned and run any re-programming trials on an old/backup PC.

It is not my intention to burn/supply any further copies of my last CD - perhaps Chris will be willing to provide 10 copies to those who will then provide a further 10 copies & etc., but they'll probably get as jaundiced as me when they're expected to do everything without recompense/acknowledgement as well provide a 24 hour on-line support service for those who don't, or won't read "help-me" files & etc.

To those who do obtain a copy of that CD, the .DSK images of "Musical - JMMusic - Propogo - Proport" will give some ideas on how to deal with that "out of memory" problem and some of the MOS in-built calls, especially the much easier way of plotting to the screen than has been shown/perpetuated in EM over the years.

And that's it - John M/