Support Group Application Note
Number: 047
Issue: 2Y
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TERMINAL Application Note

Applicable Hardware :
BBC Master 128

Related Application Notes:

Support Group
Acorn Computers Limited
Acorn House
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The TERMINAL software in the Master 128 machine is a "Language" ROM. It does not attempt to emulate any specific terminal as such, but provides the low level code necessary to enable the machine to respond to extended code sequences sent by a host computer. the ISO 2022-1982 international standard discusses the use of these techniques. Terminal Emulations such as the "VT 100" use these techniques and employ a range of "Escape sequences" discussed in ANSI X3.64. The TERMINAL implements most of the more useful "Escape sequences" so that the hardware controlled by TERMINAL can behave as an "ANSI" terminal in a similar way to a VT100 terminal etc.

TERMINAL has a Command mode and a Communications mode. In the Command mode, specific TERMINAL commands are accepted in addition to operating system Star commands. In Communications mode, information is exchanged between the Host computer and the Master 128.

Sending Text

One typical use of TERMINAL is to send text messages to a remote computer. Either the View wordprocessor, or the Edit text editor can be used to create these messages:

VIEW: Text created in View must be SPOOL'd to a filing system prior to being sent via TERMINAL. It is important that the fist line of text is blank ie it effectively just generates a "Return" character. When the text is in RAM, a file is opened using the *SPOOL filename command. The View "SCREEN" command is then used to display the text. Whilst being displayed on the screen, it is also SPOOL'd to the file previously opened. When the complete file has been displayed, the file can be closed using the *SPOOL command without a filename. The TERMINAL language is now entered using *TERMINAL or suitable abbreviation. When the "=" prompt is displayed in command mode, the *EXEC filename command is issued. The redundant embedded commands in the SPOOL'd file will at first be displayed in command mode and will be ignored. When the first blank line ie a Return character is encountered, the TERMINAL will be switched into Communications mode and the text file will be sent to the host computer. When complete, CTRL + f1 will return the TERMINAL to command mode if required.

NB. You can demonstrate the sending of text without a host being present by switching TERMINAL into Local mode prior to sending the file. this is carried out by pressing CTRL +f8.

EDIT: There is no need to carry out the SPOOLing operation with EDIT, as the text file will automatically be in a suitable ASCII form. After ensuring that the text begins with a blank line to generate the Return character, an EDIT file is SAVE'd using f3 whilst in EDIT. When in TERMINAL, the file is *EXEC'd as for View.