BASIC GRAPHICS SAVE/LOAD (requires Monitor 2 or later version)

This program will save a set of characters stored in the graphics RAM or will load them back from cassette.

The program uses 2K of user RAM for temporary storage (from B400 to BBFF) of the character bytes. Hence NEW should be typed before entering this program to allocate enough memory for the program plus character data storage.

Using the Program

1) Enter the program from the listing and save it on cassette tape

2) To save characters you have previously created or modified in the graphics RAM.

   (a) type RUN 2000
   (b) the screen will clear; the top line will display numbers from 0 to 127 as the characters are read from the graphics RAM and put into the area B400 to BBFF
   (c) when 127 is reached, a Filename will be requested. Proceed as you would for a Basic save
   (d) The Basic program plus the data will be saved on tape

3) To load characters already saved on tape

   (a) LOAD as with a normal Basic load
   (b) After loading, type RUN 3000
   (c) The screen will clear; the top line will display numbers 0 to 127 as the characters are written to the graphics RAM.
   (d) When finished, programs may now be entered using the graphics characters

Reminder

CTRL C - turns on graphics characters
CTRL C - turns off graphics
Type RETURN immediately afterwards, ignore ERR 4

Program Comments

LINES	FUNCTION
2010	- CHR(25), CHR(N) reads 16 bytes from the graphics RAM
2040 - 2060	- the 16 bytes are placed in RAM starting at B400
2080 - 2082	- enters a machine language routine starting at BC80 which jumps to the cassette save routine
2084	- SAVE finish at $BC00

LINES	FUNCTION
2086	- SAVE start at $B171
2090	- jumps to monitor save routine
3010	- CHR(27), CHR(N) prepares to write 16 bytes to graphics RAM
3030 - 3060	- 16 bytes are written to graphics RAM for each of 127 characters

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2000 CLS:LINES 1:REM SAVE 128 CHAR
2010 FOR N=0 TO 127:PRINT@10,0J,N,CHR(25),CHR(N),
2030 FOR Y=0 TO 15
2040 D=PEEK($B400+Y)
2050 POKE ($B400+Y+N*16),D
2060 NEXT Y:NEXT N:LINES 16
2080 POKE $BCB0,$6E:POKE $BCB1,$9F
2082 POKE $BCB2,$F8:POKE $BCB3,$08
2084 POKE $BDE4,$BC:POKE $BDE5,$00
2086 POKE $BDE2,$B1:POKE $BDE3,$71
2090 X=USR($BCB0):END
2100 REM
3000 CLS:LINES 1:REM LOAD 128 CHAR
3010 FOR N=0 TO 127:PRINT@10,0J,N,CHR(27),CHR(N),
3030 FOR Y=0 TO 15
3040 C=PEEK($B400+Y+N*16)
3050 PRINT CHR(C),
3060 NEXT Y:NEXT N:LINES 16:END
```