



# Tech Info Library

## Apple III: Emulation Mode--Controlling Bit 8 of the RS-232 Port

Revised: 10/29/84  
Security: Everyone

Apple III: Emulation Mode--Controlling Bit 8 of the RS-232 Port

=====

This driver allows the user to control bit 8 of the built-in RS-232 port in Emulation Mode. Bit 8 is used by some printers to select expanded or normal print mode or to enable alternate or graphics character sets. DOS 3.2 or DOS 3.3 is required to use this routine. Both the Serial Card Emulation and the Communications Card Emulation are supported.

### SOFTWARE ENTRY

Boot a DOS diskette and enter the monitor with CALL -155 and type

```
3B0:A9 07
:20 95 FE
:A9 80
:20 ED FD
:A9 C5
:85 36
:A9 03
:85 37
:4C EA 03
:29 7F
:0D CD 03
:4C 07 C7
:80
```

To check your typing, type

```
3B0L
```

and compare your listing to the one below.

03B0-	A9 07	LDA	#\$07
03B2-	20 95 FE	JSR	\$FE95
03B5-	A9 80	LDA	#\$80
03B7-	20 ED FD	JSR	\$FDED
03BA-	A9 C5	LDA	#\$C5
03BC-	85 36	STA	\$36

03BE-	A9 03	LDA	#\$03
03C0-	85 37	STA	\$37
03C2-	4C EA 03	JMP	\$03EA
03C5-	29 7F	AND	#\$7F
03C7-	0D CD 03	ORA	\$03CD
03CA-	4C 07 C7	JMP	\$C707
03CD-	80	???	

Now return to Basic with 3D0G

SAVING THE PROGRAM TO DISK:

Save the driver to disk by typing

```
BSAVE SERIAL DRIVER, A$3B0, L$1E
```

USING THE PRINTER:

The driver should be in memory before you want to use the printer. You must load the driver and initialize the interface.

From command mode type

```
BLOAD SERIAL DRIVER
CALL 944
```

This may be done from a program by entering

```
100 PRINT D$;"BLOAD SERIAL DRIVER" : CALL 944
```

assuming that D\$ contains a CTRL-D.

If you want to switch back to the video monitor for output type

```
PR#0
```

or in a program enter

```
200 PRINT D$;"PR#0"
```

Then to reconnect the printer, all that is required is

```
CALL 954
```

or from a program

```
300 CALL 954
```

SETTING THE PRINT MODES:

To set normal print mode POKE 973,0

To set expanded print mode POKE 973,128

Apple Tech Notes

Tech Info Library Article Number:19