

LaserWriter IINTX: Setting the Mode Software Switch

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TOPIC
The new LaserWriter IINTX ROMs apparently allow software switching between the AppleTalk and RS-232 input modes. Has anyone written these files?
DISCUSSION
Yes, the new version of the "LaserWriter IINT/NTX Owner's Guide" details the commands necessary to switch modes. This manual is included with new LaserWriter IINTX models, and with all ROM upgrades. Appendix C of the manual, "Connecting to and Printing with an MS-DOS Computer," covers this and related issues in relative detail. We definitely recommend reading it, but below we have copied some of this section, which should be useful to you.
Although the section assumes use of a DOS computer, the PostScript code is the same for a Macintosh. Simply remove the DOS specific lines and download the file with the LaserWriter Font Utility.
Selecting an operating mode
If you have a LaserWriter IINT:
*** Details on setting the LaserWriter IINT modes omitted ***
If you have a LaserWriter IINTX:
There are two ways to set the LaserWriter IINTX operating mode:

- You can use the DIP switches to set the mode.
- You can use software switching (sending a program to the printer) to set the mode. Software switching works only with LaserWriter IINTX printers that use PostScript Rev 3.0 or later. Check your printer's startup page to see what Rev it uses.

If you plan to set the printer mode once or infrequently, use the DIP switches to set the mode. If you plan to change operating modes frequently, you should use software switching to set the mode. Both methods are described here.

Setting the Mode with DIP Switches

You can set the LaserWriter IINTX to work in PostScript mode, to emulate a Diablo 630 printer, or to emulate a Hewlett-Packard LaserJet+ printer. Set the switches on the LaserWriter IINTX as follows.

PostScript Mode

If you plan to use software that supports PostScript, switch 2 should be down, and switches 3 and 4 should both be up. Switch 1 can be up or down.

Diablo Emulation

If you plan to use the Diablo emulator, switches 2 and 3 should be down and switch 4 should be up. Switch 1 can be up or down.

LaserJet+ Emulation

If you plan to use the LaserJet+ emulator, switches 2, 3, and 4 should be down. Switch 1 can be up or down.

Setting the Mode with Software Switching

Software switching can be used to set both the software mode used by the printer (PostScript or an emulator), and the hardware mode used by the printer (serial or AppleTalk).

To change the software mode using software switching, you send a program to the printer that changes a value called softwareiomode. To change the hardware mode using software switching, you send a program to the printer that changes a value called hardwareiomode.

The LaserWriter IINTX supports four values for softwareiomode:

- 0 (PostScript batch mode)
- 1 (PostScript interactive mode)
- 2 (Diablo 630 emulation)
- 5 (HP LaserJet+ emulation)

The LaserWriter IINTX supports two values for hardwareiomode:

- 0 (serial communication)
- 2 (the AppleTalk communication protocol)

To use software switching to select a hardware and software operating mode, type the following PostScript program at the DOS prompt and send the program to the LaserWriter IINTX:

cd \
 copy con set.mod
(Macintosh file begins here)
 serverdict begin 0 exitserver

statusdict begin
S setsoftwareiomode
H sethardwareiomode
(Macintosh file ends here)
Control - Z

Instead of typing S in the line where it appears in the program, type the value for the software mode you want to set (0, 1, 2, or 5).

Instead of typing H in the line where it appears in the program, type the value for the hardware mode you want to set (0 or 2).

The program that changes your hardware and software modes is now saved in a file called SET.MOD. To send the program to the LaserWriter IINTX, type this line at the DOS prompt:

type SET.MOD > COM1

Substitute COM2 for COM1 in the line above if the LaserWriter II is connected to the COM2 port on your computer.

Typing the line given above and pressing return sets the software and hardware operating modes on the LaserWriter IINTX.

Switching from an Emulator to PostScript on the LaserWriter IINTX

There is a quick way to switch from either the Diablo 630 emulation or the LaserJet+ emulation and go into PostScript batch mode. Simply type into a file the command sequence Escape-Delete-Zero, followed by a Control-D, and print the file to the LaserWriter II. When you send this file, the LaserWriter II resets itself to PostScript batch mode.

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