



# Tech Info Library

## LaserWriter 16/600 PS: IOP 3.0 Release Notes (2/97)

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### TOPIC -----

The IOP (Input-Output-Processor) ROM on the LaserWriter 16/600 PS has been revised to version 3.0. This article includes information on how to identify the IOP ROM version, and a change history listing many of the changes made since IOP v2.0.

### DISCUSSION -----

The 3.0 version IOP ROM (922-2458) is now available from Service. Should a LaserWriter 16/600 PS printer experience a network-related printing problem, the IOP ROM should be checked and upgraded to version 3.0 if necessary.

The IOP ROM can be checked by inspecting a startup test page. On a startup test page, the version number of the IOP ROM will be listed along the right edge of the page. Alternatively, the IOP ROM version number can be checked with the Apple Printer Utility software program.

Numerous improvements were rolled into v3.0 IOP ROMs. The issues addressed are listed below.

#### Ethernet

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Issue: Lock-ups (the printer stops responding to network traffic).

Resolution: Fixed. One such fix was the Ethernet driver receive routines were modified to handle reception of packets greater than the maximum legal size (1518 bytes including the 4 byte CRC). Previously, reception of an illegal sized packet greater than 1518 bytes caused the IOP to "crash".

#### AppleTalk

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Issue: Printer's EtherTalk stack stops responding during or after a broadcast storm: the printer disappears from the EtherTalk network even though TCP/IP and IPX continues to function.

Resolution: Fixed. The EtherTalk stack will now reregister after a long broadcast storm that caused it to lose contact with its router.

Issue: Unexplained, random PostScript errors.

Resolution: Fixed. This is a very rare problem that if encountered, is only likely to be observed on very busy networks or during broadcast storms, or even less likely, when the printer is receiving a lot of data very quickly.

Issue: Helios EtherShare Print Server doesn't successfully print to a LaserWriter 16/600 with the EtherShare Accounting feature on.

Resolution: Fixed. The LaserWriter 16/600 now works with EtherShare whether Accounting is enabled or disabled.

Issue: The LW 16/600 registers on the network with an enumerated name even if there were no other printers in that zone with the same name.

Resolution: Fixed. Previously at startup the printer temporarily registers in the default zone prior to registering in its proper zone. If there were other printers with the same name in the default zone, it would register with an enumerated name.

Issue: The printer appears in different zone than was set with the Apple Printer Utility.

Resolution: Fixed. Previously the printer would accept then store in NVRAM an invalid ZIP GetNetInfo response. It no longer stores this value in NVRAM. Now if the connection with that router is lost and the current zone is default, the printer will return to the zone stored in NVRAM set by the Apple Printer Utility.

Issue: EtherTalk now stores its current network number in NVRAM and uses this number as its first guess on startup.

Issue: On very slow WAN network links, connections may have timed out.

Resolution: Fixed. The AARP Request interval and maximum retry count were increased.

Issue: Enhanced the error recovery algorithm for Open Connection transactions. Previously a lost TREL from the host to the LW 16/600 would confuse the LW 16/600.

TCP/IP  
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Issue: The LW 16/600 previously accepted BOOTP (and DHCP) response packets intended for a different host and would assume that host's IP address.

Resolution: Fixed.

Issue: The printer would accept IP packets with the correct hardware address but wrong IP address.

Resolution: Fixed.

Issue: The TCP/IP stack could acknowledge a FIN request from the other node before all of the data was received.

Resolution: Fixed.

Issue: Entering an IP password longer than 10 characters could cause a telnet connection to lock up.

Resolution: Fixed.

Issue: Trying to change the password from telnet under Open Windows would cause the telnet port to lock up.

Resolution: Fixed.

Issue: The LW 16/600 prints an old TCP/IP address at boot up when using RARP.

Resolution: Fixed. The printer will now either print the new address if it has been received, or 0.0.0.0 if it is still waiting for a RARP reply.

Issue: The printer now uses the Subnet Mask and Default obtained from BOOTP, RARP or Gleaning.

Issue: Some IP addresses, Subnet Mask or Default Gateway values were not set properly with the LaserWriter utilities.

Resolution: Fixed.

#### NetWare/IPX =====

Issue: To avoid unnecessary IPX network traffic when NetWare is enabled (the factory default), the LW 16/600 stops looking for NetWare servers five minutes after startup provided the printer has not been configured for NetWare via LWPMAN. If the printer was configured for Netware via LWPMAN, it will advertise every 60 seconds to allow LWPMAN to be able to reset or configure the protocol.

Issue: Printer appeared to a Netware spooler running in Rprinter mode to be rebooting or locked up when it wasn't.

Resolution: Fixed.

Issue: NetWare 4.xx jobs with a banner did not print when the job was submitted to an aliased queue when the user submitting the job was logged in under a different context than the queue was created in.

Resolution: Fixed. The NetWare 4.xx banner printing problem when using NDS aliased queues was corrected.

Article Change History:

19 Feb 1997 - Information on identification & availability of 3.0 ROMs.

27 Sep 1996 - Corrected ship date of v3.0 ROMs.

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