



D60.15.x and D60.13.x Summary of Firmware Changes

This document summarizes the following D60.15.x firmware releases:

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D60.15.1

Release Date: 16 January 2008

This firmware release includes features of the previous D60.15.0 release. It is for use with the following 203 dpi printer models:

- 110XiIIIPlus™
- 140XiIIIPlus™
- 170XiIIIPlus™
- 220XiIIIPlus™
- Z4Mplus™ with 4 MB of flash memory
- Z6Mplus™ with 4 MB of flash memory
- 105SL™ with 4 MB of flash memory
- PAX4™ series

The firmware is not supported on 105SL, Z4Mplus, and Z6Mplus printers that have only 2MB of flash memory. Printers not eligible for this firmware include units in the following serial number ranges:

Printer Model	Serial Number Range
Z4Mplus and Z6Mplus	02C033800002 – 02C04070216
105SL	105SL6400004 – 6457097 This range includes units with configurations 10500-0 and 10500-1.

If this firmware is sent to an unsupported unit in the serial number ranges listed above, the printer will attempt to load the firmware, but will then display the message **Download Not Supported**. The printer will then be reset and return to using the firmware currently loaded on the unit.



Important • Before you attempt to download firmware version V60.14.X or later to a 105SL printer, please note that this firmware version cannot be used in 105SL printers that have ANY of the following:

- a Hardware ID of V06 or V07,
- existing firmware version V40.10.1 and lower, or
- a configurator number beginning with 105xx-0xxx-xxx or 105xx-1xxx-xxxx.

To determine your printer's Hardware ID and firmware version, locate **HARDWARE ID** and **FIRMWARE** on the configuration label. To print a configuration label, have the printer loaded and ready to print. Press and hold the CANCEL button while turning on the printer. Release the button after approximately three seconds.

If the **HARDWARE ID** shows versions V06 or V07 (found on some older 105SL models), please contact Zebra Technical Support at www.zebra.com/support for information on upgrading to V60.14.x or later versions.

Changes

Support added for:

- The Wireless Plus option board for the S4M, ZM400, and ZM600 printers.
- The Cisco™ CB21 802.11b/g card, when used with the Wireless Plus option board.
- New Wireless Securities (see [Table 2 on page 6](#) for the compatibility chart):
 - PEAP
 - EAP-TLS
 - EAP-TTLS
 - EAP-FAST
 - WPA PSK
 - WPA2 PSK
 - WPA PEAP
 - WPA LEAP
 - WPA EAP-TLS
 - WPA EAP-TTLS
 - WPA EAP-FAST
 - Kerberos
 - WPA2 PSK
 - WPA2 PEAP
 - WPA2 LEAP
 - WPA2 EAP-TLS
 - WPA2 EAP-TTLS
 - WPA2 EAP-FAST

Table 1 • Wireless Plus PrintServer Security Support

Securities Supported	Cisco CB21 (CardBus)	Cisco 350 (PCMCIA)	LA-4121 (PCMCIA)	LA-4137CF (Compact Flash)
Open	Yes	Yes	Yes	Yes
KERBEROS	Not Supported	Not Supported	Yes	Yes
WEP 40-bit & 128-bit	Yes	Yes	Yes	Yes
LEAP	Yes	Yes	Yes	Yes
PEAP	Yes	Not Supported	Yes	Yes
EAP- FAST	Yes	Not Supported	Yes	Yes
EAP-TLS	Yes	Not Supported	Yes	Yes
EAP-TTLS	Yes	Not Supported	Yes	Yes
WPA PSK	Yes	Yes	Yes	Yes
WPA LEAP	Yes	Yes	Yes	Yes
WPA PEAP	Yes	Yes	Yes	Yes
WPA EAP- FAST	Yes	Yes	Yes	Yes
WPA EAP-TLS	Yes	Yes	Not Supported	Yes
WPA EAP-TTLS	Yes	Yes	Not Supported	Yes
WPA2 PSK	Yes	Not Supported	Not Supported	Not Supported
WPA2 LEAP	Yes	Not Supported	Not Supported	Not Supported
WPA2 PEAP	Yes	Not Supported	Not Supported	Not Supported
WPA2 EAP- FAST	Yes	Not Supported	Not Supported	Not Supported
WPA2 EAP-TLS	Yes	Not Supported	Not Supported	Not Supported
WPA2 EAP-TTLS	Yes	Not Supported	Not Supported	Not Supported

- Wireless Set/Get/Do commands, allowing for configuration of wireless settings using Set/Get/Do command strings*.
- The Wireless Plus option board firmware has been updated to version 1.51.1761.
- A network configuration label is now available for wireless plus print server on the S4M and ZM400/ZM600, and also for the internal wired print servers on the ZM400/ZM600.
- Eight simultaneous connections for printing via wireless (raw port).
- Updating the Wireless Plus option board when printer firmware is updated. Users will see a **DOWNLOADING FIRMWARE** message and status message for both the printer and Wireless Plus option board firmware downloads.
- A Wireless Pulse feature, which sends a LSAP packet at a regular interval, has been added*.
- The data LED flashes in response to the receipt of data, not to the receipt of each wireless packet.

- Raw printing to port 9100 and printing via LPD are supported via the Wireless Plus and internal wired printservers.



Note • IPP, HTTP, FTP, POP3 and SNMP are not supported on the Wireless/Wireless Plus option boards and ZM400/ZM600 Internal Wired Print Server.

- LCD layout for Wireless Plus Print Server settings:

LCD Layout
IP PROTOCOL
IP ADDRESS
SUBNET MASK
DEFAULT GATEWAY
MAC ADDRESS
ESSID
WLAN SECURITY
WEP TYPE
WEP INDEX
RESET NETWORK



Note • WEP TYPE and WEP INDEX only display when the WEP security type is used.

Wireless Notes

The following items are issues Zebra has noted during testing with various wireless networking products:

- Conflicts can exist between the Symbol LA-4137CF and some Cisco Access Points. This is characterized by the RF card reaching the Maximum Retry timeout.
- Conflicts can exist between the 802.11B Symbol LA-4137CF and 802.11G support on some Access Points. One potential work-around is to disable G support on the Access Point.
- It is recommended to set WPA Handshaking to 1000ms on Cisco access points.
- It is recommended to disable the Aironet Extensions on Cisco access points.
- It is recommended to use Cisco Access Point firmware 12.3(8)JAE1 or later.

Issues Corrected and Items Changed

- *PAX4* goes into Pause when the cover is open.

D60.15.0

Release Date: 10 December 2007

This firmware release includes features of the previous D60.13.0.0 release. It is for use with the following 203 dpi printer models:

- 110XiIIIPlus™
- 140XiIIIPlus™
- 170XiIIIPlus™
- 220XiIIIPlus™
- Z4Mplus™ with 4 MB of flash memory
- Z6Mplus™ with 4 MB of flash memory
- 105SL™ with 4 MB of flash memory
- PAX4™ series

The firmware is not supported on 105SL, Z4Mplus, and Z6Mplus printers that have only 2MB of flash memory. Printers not eligible for this firmware include units in the following serial number ranges:

Printer Model	Serial Number Range
Z4Mplus and Z6Mplus	02C033800002 – 02C04070216
105SL	105SL6400004 – 6457097 This range includes units with configurations 10500-0 and 10500-1.

If this firmware is sent to an unsupported unit in the serial number ranges listed above, the printer will attempt to load the firmware, but will then display the message **Download Not Supported**. The printer will then be reset and return to using the firmware currently loaded on the unit.



Important • Before you attempt to download firmware version V60.14.X or later to a 105SL printer, please note that this firmware version cannot be used in 105SL printers that have ANY of the following:

- a Hardware ID of V06 or V07,
- existing firmware version V40.10.1 and lower, or
- a configurator number beginning with 105xx-0xxx-xxx or 105xx-1xxx-xxxx.

To determine your printer's Hardware ID and firmware version, locate **HARDWARE ID** and **FIRMWARE** on the configuration label. To print a configuration label, have the printer loaded and ready to print. Press and hold the CANCEL button while turning on the printer. Release the button after approximately three seconds.

If the **HARDWARE ID** shows versions V06 or V07 (found on some older 105SL models), please contact Zebra Technical Support at www.zebra.com/support for information on upgrading to V60.14.x or later versions.

Changes

Support added for:

- The Wireless Plus option board for the 105SL, PAX4 and XiIIIPlus printers.
- The Cisco™ CB21 802.11b/g and LA-4137 cards, when used with the Wireless Plus option board.
- New Wireless Securities (see [Table 2 on page 6](#) for the compatibility chart):

- PEAP
- EAP-TLS
- EAP-TTLS
- EAP-FAST
- WPA PSK
- WPA2 PSK
- WPA PEAP
- WPA LEAP
- WPA EAP-TLS
- WPA EAP-TTLS
- WPA EAP-FAST
- Kerberos
- WPA2 PSK
- WPA2 PEAP
- WPA2 LEAP
- WPA2 EAP-TLS
- WPA2 EAP-TTLS
- WPA2 EAP-FAST

Table 2 • Wireless Plus PrintServer Security Support

Securities Supported	Cisco CB21 (CardBus)	Cisco 350 (PCMCIA)	LA-4121 (PCMCIA)	LA-4137CF (Compact Flash)
Open	Yes	Yes	Yes	Yes
KERBEROS	Not Supported	Not Supported	Yes	Yes
WEP 40-bit & 128-bit	Yes	Yes	Yes	Yes
LEAP	Yes	Yes	Yes	Yes
PEAP	Yes	Not Supported	Yes	Yes
EAP- FAST	Yes	Not Supported	Yes	Yes
EAP-TLS	Yes	Not Supported	Yes	Yes
EAP-TTLS	Yes	Not Supported	Yes	Yes
WPA PSK	Yes	Yes	Yes	Yes
WPA LEAP	Yes	Yes	Yes	Yes
WPA PEAP	Yes	Yes	Yes	Yes
WPA EAP- FAST	Yes	Yes	Yes	Yes
WPA EAP-TLS	Yes	Yes	Not Supported	Yes
WPA EAP-TTLS	Yes	Yes	Not Supported	Yes
WPA2 PSK	Yes	Not Supported	Not Supported	Not Supported

Table 2 • Wireless Plus PrintServer Security Support (Continued)

Securities Supported	Cisco CB21 (CardBus)	Cisco 350 (PCMCIA)	LA-4121 (PCMCIA)	LA-4137CF (Compact Flash)
WPA2 LEAP	Yes	Not Supported	Not Supported	Not Supported
WPA2 PEAP	Yes	Not Supported	Not Supported	Not Supported
WPA2 EAP- FAST	Yes	Not Supported	Not Supported	Not Supported
WPA2 EAP-TLS	Yes	Not Supported	Not Supported	Not Supported
WPA2 EAP-TTLS	Yes	Not Supported	Not Supported	Not Supported

- Wireless Set/Get/Do commands, allowing for configuration of wireless settings using Set/Get/Do command strings.
- The Wireless Plus option board firmware has been updated to version 1.51.1761.
- A network configuration label is available for wireless and internal wired printservers or Wireless Plus printservers on the *XiIIIPlus*, *ZxMplus*, *105SL* and *PAX4* series printers.
- Eight simultaneous connections for printing via wireless (raw port).
- Updating the Wireless Plus option board when printer firmware is updated. Users will see a **DOWNLOADING FIRMWARE** message and status message for both the printer and Wireless Plus option board firmware downloads.
- A Wireless Pulse feature, which sends a LSAP packet at a regular interval, has been added.
- The data LED flashes in response to the receipt of data, not to the receipt of each wireless packet.
- Raw printing to port 9100 and printing via LPD are supported via the Wireless Plus and internal wired printservers.



Note • IPP, HTTP, FTP, POP3 and SNMP are not supported on the Wireless/Wireless Plus option boards and ZM400/ZM600 Internal Wired Print Server.

- LCD layout for Wireless Plus Print Server settings:



Note • WEP TYPE and WEP INDEX only display when the WEP security type is used.

LCD Layout

IP PROTOCOL

IP ADDRESS

SUBNET MASK

DEFAULT GATEWAY

MAC ADDRESS

ESSID

WLAN SECURITY

LCD Layout

WEP TYPE

WEP INDEX

RESET NETWORK

Wireless Notes

The following items are issues Zebra has noted during testing with various wireless networking products:

- Conflicts can exist between the Symbol LA-4137CF and some Cisco Access Points. This is characterized by the RF card reaching the Maximum Retry timeout.
- Conflicts can exist between the 802.11B Symbol LA-4137CF and 802.11G support on some Access Points. One potential work-around is to disable G support on the Access Point.
- It is recommended to set WPA Handshaking to 1000ms on Cisco access points.
- It is recommended to disable the Aironet Extensions on Cisco access points.
- It is recommended to use Cisco Access Point firmware 12.3(8)JAE1 or later.

Issues Corrected and Items Changed

- When a dash is used in a font command it will now print correctly.
- Use of special characters in Code 128 subsets resolved.

D60.13.0.0

Release Date: 31 March 2006

This APL-D firmware release is for use with the following 203 dpi printer models:

- Z4Mplus™
- Z6Mplus™
- 110XiIIIPlus™
- 140XiIIIPlus™
- 170XiIIIPlus™
- 220XiIIIPlus™
- 105SL™



Important • After 31 March 2006, the XiIIIPlus, 105SL, and Z Series APL-D supporting printers will no longer accept the current D60.13.0.0 version of firmware and any versions based on this version of code. Refer to [New Features on page 9](#) for more information.



Important • Before you attempt to download firmware version D60.X to a 105SL printer, please note that this firmware version cannot be used in 105SL printers that have any of the following:

- a Hardware ID of V06 or V07,
- existing firmware version V40.10.1 and lower, or
- a configurator number beginning with 105xx-0xxx-xxx or 105xx-1xxx-xxxx.

To determine your printer's Hardware ID and firmware version, locate **HARDWARE ID** and **FIRMWARE** on the configuration label. To print a configuration label, have the printer loaded and ready to print. Press and hold the CANCEL button while turning on the printer. Release the button after approximately three seconds. If the **HARDWARE ID** shows versions V06 or V07 (found on some older 105SL models), please contact apl@zebra.com for information on upgrading to D60.x.



Note • Zebra does not distribute the files necessary to change the Hardware ID on a printer.

New Features

- Implementation enables supported printers to accept DPL code only. The printer will no longer respond to ZPL.
- Most functions of the Datamax Prodigy Plus[®] printer are fully supported, and available documentation specifies which commands are supported.
- This firmware is intended to allow a supported Zebra printer to function as a drop-in replacement for a Datamax Prodigy Plus printer. Formats for other models such as Prodigy[™] may work as well. If formats printed with Zebra printers are not acceptable, contact apl@zebra.com for possible firmware enhancements.
- This version offers limited support for printing to Zebra Wired Print Servers. It does not support Wireless printing.

Using Older Firmware on Newer Printers

Effective 31 March 2006, Zebra will no longer offer ZBI functionality. After 31 March 2006, Zebra will no longer make, distribute, or support firmware with ZBI functionality on any new products. Printers made after 31 March 2006 will no longer accept firmware created before March 31st 2006. After 01 September 2006, all support for ZBI functionality on all products will end.

When firmware released prior to 31 March 2006 is downloaded to a printer manufactured after that date, the printer will remain in **DOWNLOAD MODE** until the appropriate updated firmware is downloaded to the unit. Updated firmware is available at www.zebra.com/firmware. The functionality and version numbers of the updated firmware are unchanged.

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Using Older Firmware on Newer Printers

Printers manufactured after 31 March 2006 can be identified in the following way:

Printer Model	Serial Numbers Above:	Hardware ID*
110XiIIIPlus™ 203 dpi	91C06150075	V34
140XiIIIPlus™ 203 dpi	8592452	V34
170XiIIIPlus™ 203 dpi	7078373	V34
220XiIIIPlus™ 203 dpi	2058243	V34
Z4Mplus™ 203 dpi	02C06150517	V34
Z6Mplus™ 203 dpi	02C06150517	V34
105SL™ 203 dpi	6512869	V34

* To locate your printer's Hardware ID, print a configuration label.

For support, please visit www.zebra.com/support or reference the contact options below

Geographic Location	Telephone	Toll-free	FAX
The Americas	+1-847-793-5585	+1-866-515-2485	—
Asia Pacific	+65-6858-0722	—	+65 6885 0838
Europe, Africa, Middle East, India	Please contact your supplier.		