



G 134 & G174 Firmware History

# Product Change Notice

**Product Model Name: Gx134 – Gx174**

**Date: April 2008**

**Reference ECO No: 18904**

## Reason for Change

This PCN announces the release of G134 – G174 library firmware version H06e. This firmware is available at no cost from Plasmon via the website [www.plasmontech.com](http://www.plasmontech.com).

## Description of Change

The following changes/features are incorporated into the new firmware release:

- Resolved the intermittent interference of the picker finger at the drive bezel during the error recovery process.
- The LOG SELECT error statistics page , 31H, will now clear as denoted by the SCSI specification.
- UDO2 drive cleaning capability added to maintenance menu.
- H06c introduced an erroneous error of 04-80-20 at the end of the LIB VERIFY test. The erroneous error is resolved.
- Increased the put force of the picker at the drive to alleviate the occurrence of stalled pickers which caused library recoveries.

## Firmware

To confirm the current firmware version using the front panel display menus, select menu 1 Library Status > 1 Config Information > 1 Unit Information. If the new firmware is installed the front panel displays: **H06B CPU = 3069, DSP = 3046, CPLD = 0004** in bold text.

The following table shows the release history of the G134 – G174 library firmware.

Code	ECO#	CPU	DSP	CPLD
H03	17044	3038	3032	Up to 0003
H04	17185	3040	3034	Up to 0003
H04a	17241	3046	3034	Up to 0003
H05a	17636	3053	3039	Up to 0004
H05d	17925	3056	3041	Up to 0004
H05e	18053	3057	3041	Up to 0004
H05f	18092	3058	3041	Up to 0004
H06	18460	3060	3043	Up to 0004
H06b	18571	3064	3043	Up to 0004
H06c	18750	3065	3043	Up to 0004
H06e	18904	3069	3046	Up to 0004

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# Product Change Notice

**Product Model Name: Gx134 – Gx174**

**Date: November 2007**

**Reference ECO No: 18750**

## Reason for Change

This PCN announces the release of G134 – G174 library firmware version H06C. This firmware is available at no cost from Plasmon via the website [www.plasmontech.com](http://www.plasmontech.com).

## Description of Change

The following changes/features are incorporated into the new firmware release:

- Added indication to panel that lift lock may be engaged if the library senses that the lift is blocked during power-on.
- Resolved incorrect indication of UDO2 drives after OFF/ON sequence performed from Maintenance Mode.
- Resolved Element Map update after quick scan due to unexpected power loss.
- Changed position of the pick fingers to reduce media disengagement failures with the new UDO drive bezels.

## Firmware

To confirm the current firmware version using the front panel display menus, select menu 1 Library Status > 1 Config Information > 1 Unit Information. If the new firmware is installed the front panel displays: **H06B CPU = 3064, DSP = 3043, CPLD = 0004** in bold text.

The following table shows the release history of the G134 – G174 library firmware.

Code	ECO#	CPU	DSP	CPLD
H03	17044	3038	3032	Up to 0003
H04	17185	3040	3034	Up to 0003
H04a	17241	3046	3034	Up to 0003
H05a	17636	3053	3039	Up to 0004
H05d	17925	3056	3041	Up to 0004
H05E	18053	3057	3041	Up to 0004
H05F	18092	3058	3041	Up to 0004
H06	18460	3060	3043	Up to 0004
H06B	18571	3064	3043	Up to 0004
H06C	18750	3065	3043	Up to 0004

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# Product Change Notice

**Product Model Name: Gx134 – Gx174**

**Date: Aug 2007**

**Reference ECO No: 18571**

## Reason for Change

This PCN announces the release of G134 – G174 library firmware version H06B. This firmware is available at no cost from Plasmon via the website [www.plasmontech.com](http://www.plasmontech.com).

## Description of Change

The following changes/features are incorporated into the new firmware release:

- Resolved intermittent failure to detect the UDO media type correctly during import.
- Increased the SCSI reselection timeout.

## Firmware

To confirm the current firmware version using the front panel display menus, select menu 1 Library Status > 1 Config Information > 1 Unit Information. If the new firmware is installed the front panel displays: **H06B CPU = 3064, DSP = 3043, CPLD = 0004** in bold text.

The following table shows the release history of the G134 – G174 library firmware.

Code	ECO#	CPU	DSP	CPLD
H03	17044	3038	3032	Up to 0003
H04	17185	3040	3034	Up to 0003
H04a	17241	3046	3034	Up to 0003
H05a	17636	3053	3039	Up to 0004
H05d	17925	3056	3041	Up to 0004
H05E	18053	3057	3041	Up to 0004
H05F	18092	3058	3041	Up to 0004
H06	18460	3060	3043	Up to 0004
H06B	18571	3064	3043	Up to 0004

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# Product Change Notice

Product Model Name: Gx134 – Gx174

Date: May 2007

Reference ECO No: 18460

## Reason for Change

This PCN announces the release of Gx134 – Gx174 library firmware version H06. This firmware is available at no cost from Plasmon via the website [www.plasmontech.com](http://www.plasmontech.com).

## Description of Change

The following changes/features are incorporated into the new firmware release:

- Added UDO60 drive support
- Sets the OVERTEMP bit properly for the log sense page 0x30.
- Corrected condition that shipped slot 73 in a Gx80 during a barcode scan.
- Changed the first put depth when media is placed into a UDO drive.

## Firmware

To confirm the current firmware version using the front panel display menus, select menu 1 Library Status > 1 Config Information > 1 Unit Information. If the new firmware is installed the front panel displays: **H06 CPU = 3060, DSP = 3043, CPLD = 0004** in bold text.

The following table shows the release history of the Gx134 – Gx174 library firmware.

Code	ECO#	CPU	DSP	CPLD
H03	17044	3038	3032	Up to 0003
H04	17185	3040	3034	Up to 0003
H04a	17241	3046	3034	Up to 0003
H05a	17636	3053	3039	Up to 0004
H05d	17925	3056	3041	Up to 0004
H05E	18053	3057	3041	Up to 0004
H05F	18092	3058	3041	Up to 0004
H06	18460	3060	3043	Up to 0004



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# Product Change Notice

**Product Model Name: Gx134 – Gx174**

**Date: Nov 2006**

**Reference ECO No: 18092UK**

## Reason for Change

This PCN announces the release of Gx134 – Gx174 library firmware version H05f. This firmware is available at no cost from Plasmon via the website [www.plasmontech.com](http://www.plasmontech.com).

## Description of Change

The following changes/features are incorporated into the new firmware release:

- Limit Recovery now attempts to place media back into its original position after a failure occurs.
- Resolved Request Sense Data between library and SCSI Specifications.
- Fan faults, 04-80-62 and 04-80-63 now sent to host when the failure occurs.
- Resolved a case during the error recovery process that left the MTE in a vertical orientation when attempting to find the lift reference.
- Resolved the case where 04-52-59 is returned to host during an exchange command, media is in the picker and the 1<sup>st</sup> destination is empty. The library now returns 04-80-1D element unexpectedly empty.
- Infovalid and Infovalid2 bit of the request sense is corrected to return the correct state.
- Gx158 now configurable by SCSI.

## Firmware

To confirm the current firmware version using the front panel display menus, select menu 1 Library Status > 1 Config Information > 1 Unit Information. If the new firmware is installed the front panel displays: **H05f CPU = 3057, DSP = 3041, CPLD = 0004** in bold text.

The following table shows the release history of the Gx library firmware.

Code	ECO#	CPU	DSP	CPLD
H03	17044	3038	3032	Up to 0003
H04	17185	3040	3034	Up to 0003
H04a	17241	3046	3034	Up to 0003
H05a	17636	3053	3039	Up to 0004
H05d	17925	3056	3041	Up to 0004
H05e	18053	3057	3041	Up to 0004
H05f	18092	3058	3041	Up to 0004

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# Product Change Notice

Product Model Name: Gx134 – Gx174

Date: Sept 2006

Reference ECO No: 18053

## Reason for Change

This PCN announces the release of Gx134 – Gx174 library firmware version H05e, for AA174 RoHS compliant units (also safe for all Gx models). This firmware is available at no cost from Plasmon via the website [www.plasmontech.com](http://www.plasmontech.com).

## Description of Change

The following changes/features are incorporated into the new firmware release:

- Fixed display of incorrect screen during power down of Archive.
- The Archive Appliance controller in AA models now monitors the library power button on the front panel.

## Firmware

To confirm the current firmware version using the front panel display menus, select menu 1 Library Status > 1 Config Information > 1 Unit Information. If the new firmware is installed the front panel displays: **H05e CPU = 3057, DSP = 3041, CPLD = 0004** in bold text.

The following table shows the release history of the Gx library firmware.

Code	ECO#	CPU	DSP	CPLD
H03	17044	3038	3032	Up to 0003
H04	17185	3040	3034	Up to 0003
H04a	17241	3046	3034	Up to 0003
H05a	17636	3053	3039	Up to 0004
H05d	17925	3056	3041	Up to 0004
H05e	18053	3057	3041	Up to 0004

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# Product Change Notice

**Product Model Name: Gx134 – Gx174**  
**Date: July 2006**  
**Reference ECO No: 17925**

## Reason for Change

This PCN announces the release of Gx134 – Gx174 library firmware version H05d. This firmware is available at no cost from Plasmon via the website [www.plasmontech.com](http://www.plasmontech.com).

## Description of Change

The following changes/features are incorporated into the new firmware release:

- Prevents downloading firmware older than H05 to RoHS circuit boards.
- Increased error recovery for drive load failures.
- Resolved a sensor update error in Maintenance Mode > Sensors.
- Added support for six drives. RoHS libraries only.
- Removed “Plasmon” from the power up/down display screen.
- Increased the Picker distance for a put to a UDO drive.
- Changed the acceleration and deceleration rate of the picker when putting media to UDO drives.

## Firmware

To confirm the current firmware version using the front panel display menus, select menu 1 Library Status > 1 Config Information > 1 Unit Information. If the new firmware is installed the front panel displays: **H05d CPU = 30556, DSP = 3041, CPLD = 0004** in bold text.

The following table shows the release history of the Gx library firmware.

Code	ECO#	CPU	DSP	CPLD
H03	17044	3038	3032	Up to 0003
H04	17185	3040	3034	Up to 0003
H04a	17241	3046	3034	Up to 0003
H05a	17636	3053	3039	Up to 0004
H05d	17925	3056	3041	Up to 0004

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# Product Change Notice

**Product Model Name: Gx134 – Gx174**  
**Date: April 2006**  
**Reference ECO No: 17636**

## Reason for Change

This PCN announces the release of Gx134 – Gx174 library firmware version H05a. This firmware is available at no cost from Plasmon via the website [www.plasmontech.com](http://www.plasmontech.com).

## Description of Change

The following changes/features are incorporated into the new firmware release:

- Added feature to Lib Verify in Maintenance mode that reads the drive error logs for online drives and requests a drive lens cleaning when a 04-40-9D error is found. After cleaning, the request is withdrawn until a new 04-40-9D error is found. Field Service use only.
- Changed the Scan option in Maintenance mode to update Element Status even if there is media in the picker and the barcode scan cannot be completed. The display now indicates a “barcode read abort because of media in the MTE” instead of “scan failed”.
- Changed how Lift Home is determined.
- Resolved error recovery path for 04-80-1D and 04-80-20 errors. Hardware failures can still cause these errors to occur.
- Changed Test Library option in Offline Operations to select the proper four corner slots, and not abort if library is empty.
- Implemented an error recovery process for a fault condition that leaves media unloaded in a drive, or partially ejected into the MTE but not engaged by the pickers.
- Implemented a Limit Recovery option that limits the number of tries to three, the original plus two retries, in contrast to a full recovery that allows up to seven retries.
- Changed slot selection in Move Media to allow forward/ backward slot selection. Field Service use only.
- Changed Cycle Test option for storage slots to Picker Selection, picker 1 or picker 2. Field Service use only.
- Enhanced Quick Scan to begin at the top of column one.
- Resolved Read Element Status with volume tags.
- Resolved issue of picker selection during an Exchange Media command.
- Resolved issue where a Move command with Invert is performed and there is a cartridge in the unused picker causing corruption of the barcode (side A/B getting reversed).
- A 05-80-4A is now issued when the picker is specified and the source is the same as the second destination (for example: 1→2→1).
- Fixed case where the Lift Home position could become negative, causing media alignment issues.
- When a cartridge is moved to the I/O station the volume tag information is not set to unknown. However, if the cartridge is pulled out or the library is powered down and re-powered up, the cartridge volume tag is set to unknown, and Send Volume Tag / Request Volume Ele Addr does not find the cartridge.
- Fixed SCSI command 5A, Mode Sense 10, returning an incorrect header.
- Corrected conditions that could lead to the library failing to recognize SCSI reset.
- Changed error codes for normal operation to match those that occur during power up self-test.



- A full unit calibration occurs at power up after a Park Library.
- Added Gx16 support for Archive Appliance.
- Updated error recovery process to do a full calibration on the second miss-detect of a piece of media.
- Added configuration plug support for the “AA-Midrange” personality. This applies to libraries with RoHS compliant Main Controller circuit boards only.
- Added verification of media in a drive during a put operation. If media is not in the drive, a retry is attempted even if the DSP indicates that the picker is empty.
- Changed Test Library option to rotate picker usage at drives.
- Changed the stepper motor on pivot to prevent stalling when the motor is started and overshoot when stopping.
- Added Motor Test option to Test & Debug in Maintenance mode. Field Service use only.
- Added support for RoHS compliant Main Controller circuit board.
- Implemented UDO Drive cleaning option in Maintenance Mode.

## Firmware

To confirm the current firmware version using the front panel display menus, select menu 1 Library Status > 1 Config Information > 1 Unit Information. If the new firmware is installed the front panel displays: **H05a CPU = 3046, DSP = 3034, CPLD = 0002** in bold text.

The following table shows the release history of the Gx library firmware.

Code	ECO#	CPU	DSP	CPLD
H03	17044	3038	3032	Up to 0003
H04	17185	3040	3034	Up to 0003
H04a	17241	3046	3034	Up to 0003
H05a	17636	3053	3039	Up to 0004

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# Product Change Notice

**Product Model Name: Gx134 – Gx174**  
**Date: October 2005**  
**Reference ECO No: 17241**

## Reason for Change

This PCN announces the release of Gx134 – Gx174 library firmware version H04a. This firmware is available at no cost from Plasmon via the website [www.plasmontech.com](http://www.plasmontech.com).

## Description of Change

The following changes/features are incorporated into the new firmware release:

- Resolved the issue with the BUSY line that caused the library SCSI bus to become unresponsive.
- Resolved issue that posted an incorrect 04-52-59, unexpected media type at picker, and incorrect element status of drive and picker.
- Resolved issue when media is moved from the IO Station to picker when the picker is the final destination and the barcode is disabled.
- Drive Option under Setup Library > 1 Config Information > 6 Drive Options menu is dependent on drive type. UDO drives only have one option > DASD INQ Response.
- Changed MODEL TYPE to SLOT COUNT under Setup Library > 1 Config Information > 5 Changer Options menu.
- Removed error code 04-80-82 from log postings. It is an internal status code with no meaning.
- Error log and Error Statistics are now consistent with the actual errors.
- Added SCSI Sense fault 04-88-07 to show the mail slot is out of position at power on.
- Moved SCSI additional sense bytes 33-35 (Error Subcode, Error Type, Error Context) to bytes 29-31. Shifted bytes 29-32 (MTE Number, Failure Element Address, Component Number) to start at byte 32. This places Error subcode in first 32 bytes of the sense data.
- Powering down the library while it is busy is now a normal power down with a specific warning on the display.
- Resolved issue where a fault on the motor encoder cable caused the lift assembly to slam.
- Resolved issue with the ChgrEject bit on mode page 20h.
- Resolved issue where the Read Element Status did not report the correct volume tags after an exchange.
- Implemented the Wait-On-Load feature of the library per the SCSI Specification.

# Firmware

To confirm the current firmware version using the front panel display menus, select menu 1 Library Status > 1 Config Information > 1 Unit Information. If the new firmware is installed the front panel displays: **H04a CPU = 3046, DSP = 3034, CPLD = 0002** in bold text.

The following table shows the release history of the Gx library firmware.

Code	ECO#	CPU	DSP	CPLD
H03	17044	3038	3032	0002
H04	17185	3040	3034	0002
H04a	17241	3046	3034	0002

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# Product Change Notice

**Product Model Name: Gx134 – Gx174**  
**Date: June 2005**  
**Reference ECO No: 17044**

## Reason for Change

This PCN announces the release of Gx134 – Gx174 library firmware version H03. This firmware is available at no cost from Plasmon via the website [www.plasmontech.com](http://www.plasmontech.com).

## Description of Change

The following changes/features are incorporated into the new firmware release:

- Now returns a display error code 15 and SCSI error code 04-80-AE when a Gx80 model controller or below is installed in a Gx134/174 library.
- Corrected the offset sensor rubbing the frame of the library during calibration.
- Corrected the MTE rubbing against the rest plate during pivot from column 2 to column 1.
- Fixed issue where an Ignore Reside Wide message is issued while in narrow mode for SUN SCSI adapter after TIN rejection and a bus reset.
- When a power loss occurs, the library now performs a quick calibration.
- Resolved an excessive retry loop with the media scan opto.
- The Prevent/Allow media removal bit is now cleared during a bus or device reset.
- When parking the library for shipping, the MTE is now flipped so that the offset sensor is on the inside of the frame.
- Corrected a mode select to the library causing a UDO drive to reset and change to a narrow SCSI device.
- Corrected SCSI BUSY causing the library to become unresponsive.
- Changed the put distance to place media into the storage slots for recovery.
- The media put point for a UDO drive is now .022" deeper.
- Implemented SCSI/Drive Test. (Service Personnel Only)
- Implemented a library FMR function. (Service Personnel Only)
- Implemented UDO drive FMR function. (Service Personnel Only)
- Implemented a UDO drive firmware information menu. (Service Personnel Only)
- Implemented a UDO drive error information menu. (Service Personnel Only)

## Firmware

To confirm the current firmware version using the front panel display menus, select menu 1 Library Status > 1 Config Information > 1 Unit Information. If the new firmware is installed the front panel displays: **H03 CPU = 3038, DSP = 3032, CPLD = 0002** in bold text.

The following table shows the release history of the Gx library firmware.

Code	ECO#	CPU	DSP	CPLD
H03	17044	3038	3032	0002

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