



G Entry and Midrange Firmware History



Models: G16, G24, G32, G72, G80

Product Change Notice

Product Model Name: Gx24 – Gx80

Date: April 2008

Reference ECO No: 18904

Reason for Change

This PCN announces the release of G24 – G80 library firmware version G05e. This firmware is available at no cost from Plasmon via the website www.plasmontech.com.

Description of Change

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

- Resolved the intermittent interference of the picker fingers 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.
- G05c 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: **G05B CPU = 3069, DSP = 3047, CPLD = 0004** in bold text.

The following table shows the release history of the G24 – G80 library firmware.

Code	ECO#	CPU	DSP	CPLD
A000	Initial Release	3003	3004	Up to 0002
A001	16306	3004	3004	Up to 0002
A002	16335	3007	3006	Up to 0002
A003	16336	3009	3007	Up to 0002
G000	16397	3017	30016	Up to 0002
G00a	16417	3019	30016	Up to 0002
G00b	16461	3021	3018	Up to 0002
G01	16791	3026	3023	Up to 0002
G02	17044	3037	3031	Up to 0003
G03	17185	3039	3033	Up to 0003
G03a	17241	3045	3033	Up to 0003

Code	ECO#	CPU	DSP	CPLD
G04a	17636	3053	3038	Up to 0004
G04d	17925	3056	3040	Up to 0004
G04e	18053	3057	3041	Up to 0004
G04f	18092	3058	3040	Up to 0004
G05	18460	3060	3042	Up to 0004
G05b	18571	3064	3042	Up to 0004
G05c	18750	3065	3042	Up to 0004
G05e	18904	3069	3047	Up to 0004

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Product Change Notice

Product Model Name: Gx24 – Gx80

Date: November 2007

Reference ECO No: 18750

Reason for Change

This PCN announces the release of G24 – G80 library firmware version G05C. This firmware is available at no cost from Plasmon via the website 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: **G05B CPU = 3064, DSP = 3042, CPLD = 0004** in bold text.

The following table shows the release history of the G24 – G80 library firmware.

Code	ECO#	CPU	DSP	CPLD
A000	Initial Release	3003	3004	Up to 0002
A001	16306	3004	3004	Up to 0002
A002	16335	3007	3006	Up to 0002
A003	16336	3009	3007	Up to 0002
G000	16397	3017	30016	Up to 0002
G00a	16417	3019	30016	Up to 0002
G00b	16461	3021	3018	Up to 0002
G01	16791	3026	3023	Up to 0002
G02	17044	3037	3031	Up to 0003
G03	17185	3039	3033	Up to 0003
G03a	17241	3045	3033	Up to 0003
G04a	17636	3053	3038	Up to 0004
G04d	17925	3056	3040	Up to 0004
G04e	18053	3057	3041	Up to 0004

Code	ECO#	CPU	DSP	CPLD
G04f	18092	3058	3040	Up to 0004
G05	18460	3060	3042	Up to 0004
G05B	18571	3064	3042	Up to 0004
G05C	18750	3065	3042	Up to 0004

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Product Change Notice

Product Model Name: Gx24 – Gx80

Date: August 2007

Reference ECO No: 18571

Reason for Change

This PCN announces the release of G24 – G80 library firmware version G05B. This firmware is available at no cost from Plasmon via the website 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: **G05B CPU = 3064, DSP = 3042, CPLD = 0004** in bold text.

The following table shows the release history of the G24 – G80 library firmware.

Code	ECO#	CPU	DSP	CPLD
A000	Initial Release	3003	3004	Up to 0002
A001	16306	3004	3004	Up to 0002
A002	16335	3007	3006	Up to 0002
A003	16336	3009	3007	Up to 0002
G000	16397	3017	30016	Up to 0002
G00a	16417	3019	30016	Up to 0002
G00b	16461	3021	3018	Up to 0002
G01	16791	3026	3023	Up to 0002
G02	17044	3037	3031	Up to 0003
G03	17185	3039	3033	Up to 0003
G03a	17241	3045	3033	Up to 0003
G04a	17636	3053	3038	Up to 0004
G04d	17925	3056	3040	Up to 0004
G04e	18053	3057	3041	Up to 0004
G04f	18092	3058	3040	Up to 0004
G05	18460	3060	3042	Up to 0004
G05B	18571	3064	3042	Up to 0004

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Product Change Notice

Product Model Name: Gx24 – Gx80

Date: May 2007

Reference ECO No: 18460

Reason for Change

This PCN announces the release of Gx24 – Gx80 library firmware version G05. This firmware is available at no cost from Plasmon via the website 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: **G05 CPU = 3060, DSP = 3042, CPLD = 0004** in bold text.

The following table shows the release history of the Gx24 – Gx80 library firmware.

Code	ECO#	CPU	DSP	CPLD
A000	Initial Release	3003	3004	Up to 0002
A001	16306	3004	3004	Up to 0002
A002	16335	3007	3006	Up to 0002
A003	16336	3009	3007	Up to 0002
G000	16397	3017	30016	Up to 0002
G00a	16417	3019	30016	Up to 0002
G00b	16461	3021	3018	Up to 0002
G01	16791	3026	3023	Up to 0002
G02	17044	3037	3031	Up to 0003
G03	17185	3039	3033	Up to 0003
G03a	17241	3045	3033	Up to 0003
G04a	17636	3053	3038	Up to 0004
G04d	17925	3056	3040	Up to 0004
G04e	18053	3057	3041	Up to 0004
G04f	18092	3058	3040	Up to 0004
G05	18460	3060	3042	Up to 0004

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Product Change Notice

Product Model Name: Gx24 – Gx80

Date: Nov 2006

Reference ECO No: 18092UK

Reason for Change

This PCN announces the release of Gx24 – Gx80 library firmware version G04f. This firmware is available at no cost from Plasmon via the website 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 1st 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.

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: **G04f CPU = 3058, DSP = 3040, CPLD = 0004** in bold text.

The following table shows the release history of the Gx24 – Gx80 library firmware.

Code	ECO#	CPU	DSP	CPLD
A000	Initial Release	3003	3004	Up to 0002
A001	16306	3004	3004	Up to 0002
A002	16335	3007	3006	Up to 0002
A003	16336	3009	3007	Up to 0002
G000	16397	3017	30016	Up to 0002
G00a	16417	3019	30016	Up to 0002
G00b	16461	3021	3018	Up to 0002
G01	16791	3026	3023	Up to 0002
G02	17044	3037	3031	Up to 0003
G03	17185	3039	3033	Up to 0003
G03a	17241	3045	3033	Up to 0003
G04a	17636	3053	3038	Up to 0004
G04d	17925	3056	3040	Up to 0004
G04e	18053	3057	3040	Up to 0004
G04f	18092	3058	3040	Up to 0004

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Product Change Notice

Product Model Name: Gx24 – Gx80

Date: Sept 2006

Reference ECO No: 18053

Reason for Change

This PCN announces the release of Gx24 – Gx80 library firmware version G04e, for AA16 – AA80 RoHS compliant (also safe for all Gx models). This firmware is available at no cost from Plasmon via the website 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: **G04e CPU = 3057, DSP = 3041, CPLD = 0004** in bold text.

The following table shows the release history of the Gx24 – Gx80 library firmware.

Code	ECO#	CPU	DSP	CPLD
A000	Initial Release	3003	3004	Up to 0002
A001	16306	3004	3004	Up to 0002
A002	16335	3007	3006	Up to 0002
A003	16336	3009	3007	Up to 0002
G000	16397	3017	30016	Up to 0002
G00a	16417	3019	30016	Up to 0002
G00b	16461	3021	3018	Up to 0002
G01	16791	3026	3023	Up to 0002
G02	17044	3037	3031	Up to 0003
G03	17185	3039	3033	Up to 0003
G03a	17241	3045	3033	Up to 0003
G04a	17636	3053	3038	Up to 0004
G04d	17925	3056	3040	Up to 0004
G04e	18053	3057	3041	Up to 0004

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Product Change Notice

Product Model Name: Gx24 – Gx80

Date: July 2006

Reference ECO No: 17925

Reason for Change

This PCN announces the release of Gx24 – Gx80 library firmware version G04d. This firmware is available at no cost from Plasmon via the website www.plasmontech.com.

Description of Change

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

- Prevents downloading firmware older than G04 to RoHS circuit boards.
- Prevents Gx16 from accepting “H” code.
- 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: **G04d CPU = 3056, DSP = 3040, CPLD = 0004** in bold text.

The following table shows the release history of the Gx24 – Gx80 library firmware.

Code	ECO#	CPU	DSP	CPLD
A000	Initial Release	3003	3004	Up to 0002
A001	16306	3004	3004	Up to 0002
A002	16335	3007	3006	Up to 0002
A003	16336	3009	3007	Up to 0002
G000	16397	3017	30016	Up to 0002
G00a	16417	3019	30016	Up to 0002
G00b	16461	3021	3018	Up to 0002
G01	16791	3026	3023	Up to 0002
G02	17044	3037	3031	Up to 0003
G03	17185	3039	3033	Up to 0003
G03a	17241	3045	3033	Up to 0003
G04a	17636	3053	3038	Up to 0004
G04d	17925	3056	3040	Up to 0004

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Product Change Notice

Product Model Name: Gx24 – Gx80

Date: April 2006

Reference ECO No: 17636

Reason for Change

This PCN announces the release of Gx24 – Gx80 library firmware version G04a. This firmware is available at no cost from Plasmon via the website 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.
- 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: **G04a CPU = 3051, DSP = 3036, CPLD = 0004** in bold text.

The following table shows the release history of the Gx24 – Gx80 library firmware.

Code	ECO#	CPU	DSP	CPLD
A000	Initial Release	3003	3004	Up to 0002
A001	16306	3004	3004	Up to 0002
A002	16335	3007	3006	Up to 0002
A003	16336	3009	3007	Up to 0002
G000	16397	3017	30016	Up to 0002
G00a	16417	3019	30016	Up to 0002
G00b	16461	3021	3018	Up to 0002
G01	16791	3026	3023	Up to 0002
G02	17044	3037	3031	Up to 0003
G03	17185	3039	3033	Up to 0003
G03a	17241	3045	3033	Up to 0003
G04a	17636	3053	3038	Up to 0004

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Product Change Notice

Product Model Name: Gx24 – Gx80

Date: October 2005

Reference ECO No: 17241

Reason for Change

This PCN announces the release of Gx24 – Gx80 library firmware version G03a. This firmware is available at no cost from Plasmon via the website 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 AVAIL 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 the 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.

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: **G03a CPU = 3045, DSP = 3031, CPLD = 0002** in bold text.

The following table shows the release history of the Gx24 – Gx80 library firmware.

Code	ECO#	CPU	DSP	CPLD
A000	Initial Release	3003	3004	0001 or 0002
A001	16306	3004	3004	0001 or 0002
A002	16335	3007	3006	0001 or 0002
A003	16336	3009	3007	0002
G000	16397	3017	30016	0002
G00a	16417	3019	30016	0002
G00b	16461	3021	3018	0002
G01	16791	3026	3023	0002
G02	17044	3037	3031	0002
G03	17185	3039	3033	0002
G03a	17241	3045	3033	0002

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Product Change Notice

Product Model Name: Gx24 – Gx80
Date: June 2005
Reference ECO No: 17044

Reason for Change

This PCN announces the release of Gx24 – Gx80 library firmware version G02. This firmware is available at no cost from Plasmon via the website www.plasmontech.com.

Description of Change

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

- Improved reliability of the barcode reading process.
- 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.
- The Cycle Tests under Maintenance Mode options are changed to 2, 20, or 50 cycles. Originally it allowed for 200 cycles.
- Removed the error text when the [?] mark is pressed on the front panel. The text data is stored in the error log.
- Resolved the invalid slot number selection in Maintenance Mode>Storage Slot Cycle Test.
- Updated the Test Library option from the front panel to better test the four corners of the library.
- Formerly, when an invalid field was sent in the Mode Select command Page Code 20h, the library returned an invalid field in CDB. It now responds with invalid field in parameter list.
- When a power loss occurs, the library now performs a quick calibration.
- Resolved the excessive retry loop that occurred when the media scan opto failed.
- 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.
- Resolved lift calibration failure in column 2.
- 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.
- 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: **G02 CPU = 3037, DSP = 3031, CPLD = 0002** in bold text.

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

Code	ECO#	CPU	DSP	CPLD
A000	Initial Release	3003	3004	0001 or 0002
A001	16306	3004	3004	0001 or 0002
A002	16335	3007	3006	0001 or 0002
A003	16336	3009	3007	0002
G000	16397	3017	30016	0002
G00a	16417	3019	30016	0002
G00b	16461	3021	3018	0002
G01	16791	3026	3023	0002
G02	17044	3037	3031	0002

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Product Change Notice

Product Model Name: Gx24 - Gx80

Date: February 2005

Reference ECO No: 16791

Reason for Bulletin

This PCN announces the release of Gx library firmware version G01. This revision of firmware enhances library operation and reliability and is available at no cost from Plasmon via the website www.plasmontech.com.

Description of Change

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

- Selection of picker is now based on RAS, Restrictive Access Slots, to ensure the best performance.
- Resolved the intermittent problem while utilizing the initialize command from the operator panel of the library with media in the picker.
- A feature was added to automatically restart (rescan) and come ready if library power is lost. If a normal power down is performed via the front panel the unit does not automatically come ready.
- Resolved the issue that prevented the bar code scan with media in picker. Added faults to identify incorrect usage, 0B/83/00, which indicate an aborted bar code scan due to media in the picker.
- Changed the operator panel Initialize command so that it no longer scans utility slots.
- When a move or exchange command fails the firmware intends to reflect the ending invert status of the media when returned to the source. This may or may not be the original invert status.
- If the MTE had a piece of media in it at power-up, the unit would export the media to the IE, do a quick-scan, and read the barcodes if a barcode scanner was installed. Media now remains in the picker. The library becomes ready. If the barcode scanner is enabled, and a request to read barcodes is received while media is in the picker, the library returns an Abort.
- An Initialize Element Status command with the TypeSel field set to 1 or 2 would causes all barcode data for the elements not scanned to be cleared. This was fixed by only clearing barcodes for those elements that are scanned.
- Resolved intermittent cases where the exception data was not handled correctly.
- Implement true quick-scan capability.
- Fixed a case of incorrect barcode values introduced when changing the consecutive read value from 3 to 1.
- Added functionality that performs lift calibration for column 1 and column 2 to accommodate for picker tilt variance utilizing the offsets.
- Added a feature request to have the unit return media to the source when performing the media unload option from the library operator panel, offline operations menu.
- Added option to do scan modes like the G Series libraries by setting an added mode page bit. This is in SCSI spec, Rev E and beyond.
- DEMO mode was changed to do exchanges instead of random moves.
- Resolved a fault during mail-slot import.

- Corrected SCSI to check if picker 1, picker 2 or both are full and EAC, Element Access Code, to select the correct picker based on single picker full status.
- Changed the test library option under the offline operations of the front panel to do the library calibration only once at the beginning and not each cycle.
- Changed the library action during a SCSI Bus Device Reset message (0x0C). The library was performing a reset/clean up which took too much time. The library now does the same action as for a SCSI Bus Reset.
- Previous calibration data is now stored on the Main Controller to shorten the library initialization time.
- Inquiry command with zero length returns sense data. This was fixed to not return data.
- An issue with SCSI bus hangs when overlapped SCSI commands were issued was resolved.
- Log Sense SCSI history log page (34h) returned no data. The proper data is now returned.
- Implemented SCSI log sense page 31.
- If the first command immediately after power-up entered ERP, Error Recovery Process, it would fail due to a position tracking error. This issue was resolved.
- Changed the method for performing UDO drive power down, if any, during ERP. It was changed to ensure no inadvertent power-downs of a drive.
- Fixed an event where the menu [CYCLE-TEST, DRIVE] fails with a cartridge in ejected position; pick failed.
- Fixed an event where the menu [LIBRARY-TEST] fails: cartridge in ejected position; pick failed.
- Added soft put recovery on IES, Import/Export Slot, scan for failed events.
- The SCSI exchange would return the wrong error code for media ID errors. This was resolved.
- Resolved an issue where the G72 with GCB3 and Pittman motor drives the lift in the wrong direction at power-up was fixed.
- Changed the operator panel LED 1 to illuminate as soon as the library comes online on the SCSI bus. Changed operator panel LED 2 to illuminate when the robotics are in motion.
- Added a function to check the download header field for GMID or G174 based on model type. If an incorrect download type is attempted (G32/80 firmware to a G174 and vice versa) then an 0x05-0x26-0x00 is issued and the improper field pointed to.
- Change move of element to element involving a picker that is full to respond with illegal command (0x05-0x86-0x00) versus a hardware error (0x04-0x80-0x1E).
- When using Mode Select Page 22h to turn on a drive, the drive is turned on and then scanned to determine if media is present. The display changes when the drive is turned on to indicate the drive is present and empty. However, if the drive has media in it when it is turned on, the display does not show this until the next time the display is refreshed. This was changed to update display immediately.
- Load of a picker via the mail-slot with a piece of media already in the picker was not previously prevented. This was made an illegal request.
- The mode page 20 Wait On Load bit would wait for the drive ready bit to be true. However, the drive ready bit was inverted so the library would wait it to go false. This was reversed.
- Added retry path to recheck the media type upon a fault.
- A qualification was needed on standard pick/put that complete with error for cases in which there is media in the other picker. Added that bar code scan errors are re-positioned in the ERP path.
- Resolved event where some move/exchange commands the picker of being re-staged in front of the mail slot causing an ERP to take place.

- Exchange commands that specify the transport as the second destination would fail with 04/80/21. The fix is that exchange will not allow commands with the transport as second destination.
- Added error logging for internal system resets. This helps in problem analysis.
- The power up SCSI sequence was changed to return SCSI Sense Data 02-04-01 if the unit needs initialization. The Sense data is posted until calibration and initialization are both complete. Prior to this change an 02-04-82 was being posted during the initialization phase.
- Resolved the SCSI bus protocol violation by sending an invalid message byte in the middle of negotiation caused the unit to fail response to the selection after a SCSI Bus Reset. After a second SCSI Bus Reset the library does respond to selection and the Test Unit Ready command.
- Fixed conflict on sync mode during negotiation versus inquiry.
- Added a rescan re-calibration after a user forced power-down during an operation.
- Resolved multiple lines of text are displayed on the LCD, when looking at error log text, sometimes text from a previous log entry appears on the end of the line of text.
- Resolved persistent alignment calibration faults.
- Fixed UDO drive media load faults.
- Fixed MO media ID check problem.
- Fixed events where the picker was left extended after drive failed loads.
- Fixed a case where an exchange command failed when media was already in the picker. Now both pickers must be empty to service an exchange command.
- Request to modify media-in-picker at power up handling. Media is now kept in the unit if found in the picker at power up. Barcode reading is cancelled if there is media in the picker and element status appropriately set.

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 library displays: **G01 CPU + 3026, DSP = 3023, CPLD = 0002** in bold text.

Non-contractual Gx libraries and spare parts shipments will contain G01 firmware after February 17, 2005.

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

Code	ECO#	CPU	DSP	CPLD
A000	Initial Release	3003	3004	0001 or 0002
A001	16306	3004	3004	0001 or 0002
A002	16335	3007	3006	0001 or 0002
A003	16336	3009	3007	0002
G000	16397	3017	3016	0002
G00a	16417	3019	3016	0002
G00b	16461	3021	3018	0002
G01	16791	3026	3023	0002

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Product Change Notice

Product Model Name: Gx24 – Gx80
Date: July 24, 2004
Reference ECO No: 16461

Reason for Change

This PCN announces the release of Gx library firmware version G00b. This firmware is available at no cost from Plasmon via the website www.plasmontech.com.

Description of Change

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

- Resolves the problem of Media Type switching to “unknown” when performing a single step command.
- Resolves the problem of misreads of bar code labels due to column one scanning too high. The lower offset (from pick position) is now larger to optically take in more of the bar code in a scan move from the low offset to the high offset.
- Resolves the problem of a UDO drive hanging the media transport element (MTE) if the drive sensor unexpectedly changes states during a soft media insertion into the drive. The library now does an eject/wait for three seconds after any failed media insertion to 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: **G00b CPU = 3021, DSP = 3018, CPLD = 0002** in bold text.

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

Code	ECO#	CPU	DSP	CPLD
A000	Initial Release	3003	3004	0001 or 0002
A001	16306	3004	3004	0001 or 0002
A002	16335	3007	3006	0001 or 0002
A003	16336	3009	3007	0002
G000	16397	3017	3016	0002
G00a	16417	3019	3016	0002
G00b	16461	3021	3018	0002

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Product Change Notice

Product Model Name: Gx24 – Gx80
Date: June 25, 2004
Reference ECO No: 16417

Reason for Change

This PCN announces the release of Gx library firmware version G00a. This firmware is available at no cost from Plasmon via the website www.plasmontech.com.

Description of Change

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

- Modified power-up to prevent premature entry into the front panel menus. This prevents improper initiation of menu operations during initialization.
- Provides a method for clearing NVRAM sector one.
- Resolves the problem of a send diagnostic command causing the library to park. Now if a real park command is issued, the library parks itself and waits for a power-down/power-up before accepting further commands.
- Resolves the problem of an MO drive reporting full and intermittently that it is a UDO drive.
- Resolves the problem of reporting an incorrect media type when media is ejected from a drive, flipped, and reinserted.
- Resolves the problem of a UDO drive changing from wide to narrow as a result of mode select.
- Forces the centering of all text on the front panel display during a mode select operation.

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: **G00a CPU = 3019, DSP = 3016, CPLD = 0002** in bold text.

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

Code	ECO#	CPU	DSP	CPLD
A000	Initial Release	3003	3004	0001 or 0002
A001	16306	3004	3004	0001 or 0002
A002	16335	3007	3006	0001 or 0002
A003	16336	3009	3007	0002
G000	16397	3017	30016	0002
G00a	16417	3019	30016	0002

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