

MP-2

user manual



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INTRODUCTION

Thank you for selecting the Martin MP-2. The MP2 is a fixture software uploader that works with version 4.0 (or later) of the Martin Software Uploader program. It allows you to update software and adjust settings on selected Martin fixtures remotely via the serial link. The MP-2 also provides DMX utilities for reading, storing, and editing data.

Please familiarize yourself with this manual before using the MP-2.

SAFETY PRECAUTIONS

- The MP-2 is NOT for household use.
- For protection against fire and electrical shock, ensure that the fixture is properly grounded (earthed), and do not expose it to rain or moisture.
- Use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault protection.
- Refer all service to a qualified technician.

SUPPORTED MARTIN PRODUCTS

The MP-2 currently supports all Martin Architectural fixtures. Support for the Alien 05 Driver is limited to the firmware upload function. The MP-2 supports all Martin moving head fixtures, but the Mania series, for example, is not supported. If in doubt as to whether a product is supported, check the product's user manual (all manuals are available from <http://www.martin.com/service>).

INCLUDED ITEMS

The MP-2 comes with

- Martin Software Uploader CD-ROM
- Power cable
- 9-pin RS-232 cable
- 5-pin male to 3-pin female and 5-pin female to 3-pin male XLR cables
- User manual

CONNECTIONS

AC power

WARNING! For safe operation, the MPBB1 must be grounded (earthed).

The MP-2 may be connected to any 50 or 60 Hz AC mains power supply from 90 to 250 V that complies with local electrical codes and has both overload and ground-fault protection.

The power cable must be fitted with a grounding-type cord cap that fits your power distribution system. Consult an electrician if you have any doubts about proper installation.

TO APPLY POWER

- 1 Following the cord cap manufacturer's instructions, connect the yellow and green wire to ground (earth), the brown wire to live, and the blue wire to neutral. The table below shows some pin identification schemes.


Wire	Pin	Marking	Screw color
brown	live	"L"	yellow or brass
blue	neutral	"N"	silver
yellow/green	ground		green

Table 1: Cord cap connections

- 2 Plug the power cord into the MAINS INPUT socket and the AC outlet.

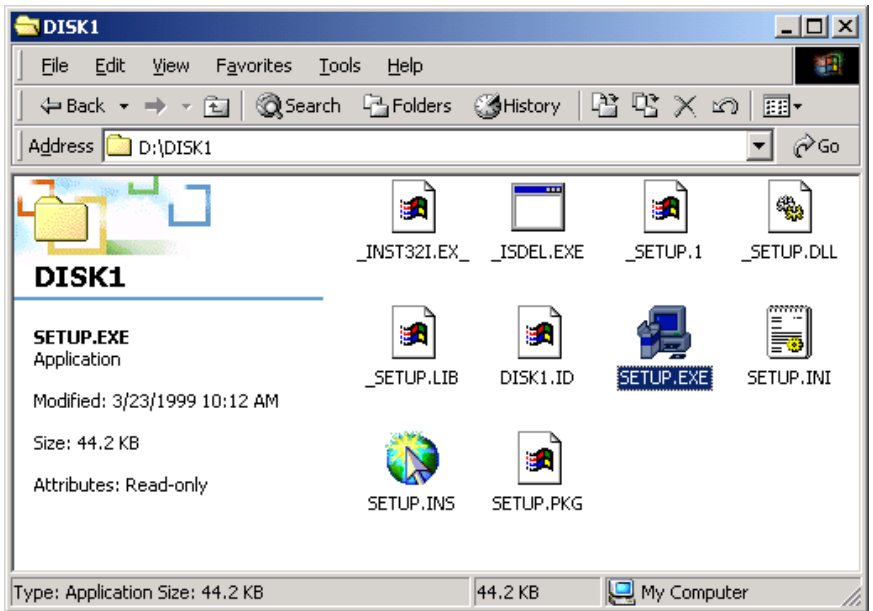
MIDI

The 5-pole DIN socket is not used.

SOFTWARE INSTALLATION

The Martin Software Uploader program (included) must be installed on a PC running Windows 95/98/2000/XP.

To install, insert the Software Uploader CD-ROM in the computer, open the disk1 directory and execute setup.exe.



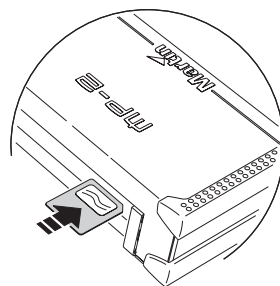
The Software Uploader program is also available for download from the Support area of the Martin web site. Point your browser to <http://www.martin.dk/Service/Software/Utility/SoftUpld.htm>.

MP-2 MEMORY CARD

Martin Update Files are stored on a removable flash memory card. A card is included.

Insert the memory card in the rear panel slot as shown. To remove the card, press the eject button next to the slot.

The memory card is formatted into a number of “slots”. Each slot can contain a complete binary update file and menu data for a fixture or device. The number of slots depends on the size of the memory card: an 8 MB card contains 14 slots.



NOTE!

Formatting the memory card erases information that may be required to make it compatible with digital cameras, MP3 players, and other devices. Do not format for the MP-2 if the card is ever to be used with other devices.

COMPATIBLE CARDS

The MP-2 works only with the memory card provided. It does not work with other memory cards. Use only memory cards supplied by Martin.

UPDATING THE MEMORY CARD

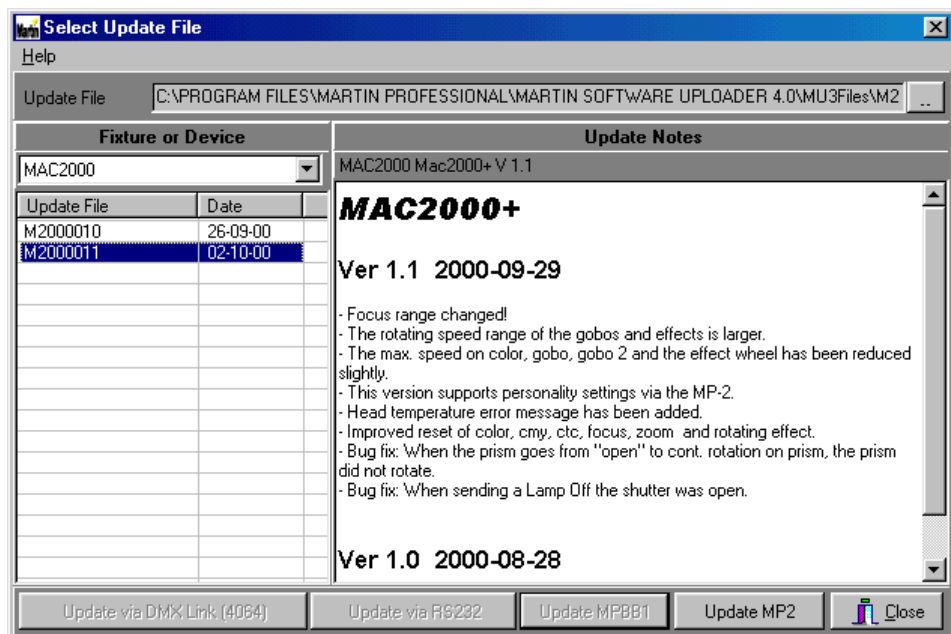
A PC running Window 95/98/2000/XP and the Martin Software Uploader program are required to update the memory card.

TO UPDATE THE MEMORY CARD

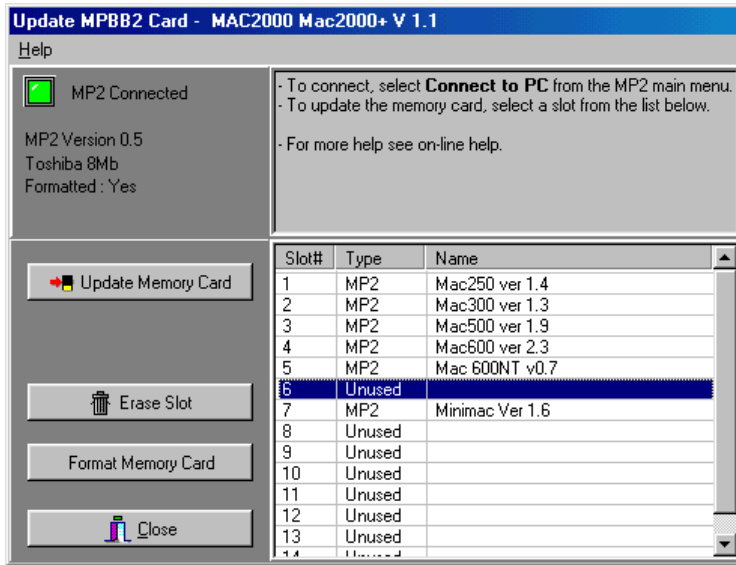
- 1 Connect the MP-2 to a computer COM port. See “RS-232” on page 6. Turn on the computer and the MP-2. Start the Software Uploader program.
- 2 Copy update files to the <Installation>\MU3files\ directory on the PC. The Software Uploader can download update files from the Martin web site if

there is an open Internet connection. Please refer to the Software Uploader's online help.

- 3 From the Software Uploader's main menu click Update Fixture or Device. Select a product from the Fixture or Device list. Select (highlight) the desired firmware version from the Update File list. Click Update MP-2.



- 4 On the MP-2, select Connect to PC. If the Software Uploader reports no memory card, verify that the card is fully inserted and that the gold contacts are facing up.



- 5 If the memory card is unformatted, the only option is Format Memory Card. *Formatting the card may make it unusable with other devices.* To format, click Format Memory Card.
- 6 Select the slot for the update file. If the slot already contains a file, it will be overwritten. To clear a slot, select it and click Erase Slot.
- 7 Click Update Memory Card to start the upload. When the update is finished, click Close to return to the Select Update File dialog. Select additional files or return to the main menu.

UPDATING FIXTURES

UPLOAD MODES

DMX mode

Fixture updates are normally performed in DMX mode, in which a code is sent to initialize fixtures of the selected type for upload. All other fixtures ignore the upload data. If, for example, you have MAC 250s, MAC 300s, and MiniMACs on a link, only the MAC 250s are initialized when you transmit the MAC 250 update file.

Note: If you use a Martin protocol controller such as the 3032, the fixtures must be set to automatic protocol detection rather than Martin mode.

TO UPLOAD IN DMX MODE

- 1 Insert a memory card and connect the MP-2 to the DMX link. Apply power to the fixtures and the MP-2.
- 2 Select *Read Memory Card* from the MP-2 main menu.
- 3 Use the buttons on the right to scroll through the card slots. Select the slot that holds the desired update file.
- 4 Select *Update Software*. Select *Yes* to confirm.
- 5 After all fixtures have finished resetting, select *Update in DMX mode* to start the upload. The MP-2 initializes the fixtures, which respond by displaying the boot message. Avoid interrupting the process as this will most likely leave the fixture with unusable code.
- 6 After a successful upload the fixtures reset with the new software. If a check-sum error occurs and/or the fixtures do not reset, data was interrupted or corrupted during transmission. Perform a boot mode upload as described below.

Boot mode

Boot mode is for use in the following situations when DMX mode does not work.

- An upload attempt was corrupted or interrupted by a power failure or user intervention. In this case the fixture may show a message in the display indicating an invalid checksum (e.g. “CSER”) and enter boot mode upon power on.
- The fixture's PCB was previously loaded with software for another type of fixture or has no software loaded at all.
- The update notes recommend a boot sector update.

TO UPLOAD IN BOOT MODE

- 1 Disconnect fixtures from power. (They must be off at least 10 seconds.)
- 2 Connect the MP-2 to the fixtures and make sure the link is terminated.
- 3 Select `Read Memory Card` from the MP-2 main menu.
- 4 Use the buttons on the right to scroll through the card slots. Select the slot that holds the desired update file.
- 5 Select `Update Software`. Select `Yes` to confirm.
- 6 Select `Update in BOOT mode`. Now apply power to the fixtures.
 - If the fixture does not display the boot message, select upload mode from the fixture control panel.
 - If there is no response from the fixture's control panel, or if the update notes recommend a boot sector update, set the upload mode jumper on the fixture circuit board to the boot mode setting (after disconnecting power). See fixture user manual.
- 7 Select `Ok` to start the upload. After a successful upload the fixtures reset with the new software. Remember to disconnect the fixture from power and put the boot sector jumper back in its normal position if you moved it.
- 8 If repeated attempts are unsuccessful, try updating fixtures individually.

SETTING FIXTURES

The MP-2 provides remote access to fixture menus for changing user options including address and control mode. All fixtures (of a type) can be accessed or just the fixture at a selected address.

Note, however, that the MP-2 does not receive data from the fixtures. As a result, the current fixture settings and readouts cannot be shown on the MP-2 display.

Setting options vary from fixture to fixture. Please consult the fixture user manual for more information.

SETTING MODES

All addresses

In All Addresses mode the MP-2 accesses the menus of all fixtures of the selected type. Use this mode to make global changes and when the MP-2 is connected to a single fixture.

TO ACCESS ALL FIXTURE MENUS (OF A TYPE)

- 1 Insert a memory card in the MP-2 and connect it to the serial link. Apply power to the fixtures and the MP-2.
- 2 Select `Read Memory Card` from the MP-2 main menu. Select the slot that holds the update file for the desired fixture type.
- 3 Select `Fixture Menu`. Select `All Addresses`.
- 4 Scroll through menu items with the up-arrow and down-arrow buttons. Make menu selections with the right-arrow button. If there are submenu items, scroll and select with the up, down, and right arrow buttons. If confirmation is required, press `YES` or `NO`. To return to the previous menu, press `Back`.

Single address

In Single Address mode, the MP-2 accesses the menu of the fixture(s) at a selected address. Use this mode to change a fixture address, offsets, or other settings that do not apply to all fixtures.

As an aid to identifying fixtures, fixtures strike their lamps and project an open white beam when the selected address falls anywhere within their range of channels.

To find an unknown DMX address, scroll to the lowest channel that causes the fixture to respond. Note that it may take the lamp a few minutes to warm up.

TO ACCESS AN INDIVIDUAL FIXTURE MENU

- 1 Insert a memory card in the MP-2 and connect it to the serial link. Apply power to the fixtures and the MP-2.
- 2 Select `Read Memory Card` from the MP-2 main menu. Select the slot that holds the update file for the desired fixture type.
- 3 Select `Fixture Menu`. Select `Single Address`.
- 4 Scroll to the desired address with the left-arrow and right-arrow keys. Press `Ok`.
- 5 Scroll through menu items with the up-arrow and down-arrow buttons. Make menu selections with the right-arrow button. If there are submenu items, scroll and select with the up, down, and right arrow buttons. If confirmation is required, press `YES` or `NO`. To return to the previous menu, press `Back`.

FACTORY DEFAULTS

Fixtures can be restored to different levels of their factory default values. The restore options are shown below.

Level	Settings Restored			
	Address	Protocol	Offsets	All Others
Factory Setting 1	no	no	no	yes
Factory Setting 2	no	no	yes	yes
Factory Setting 3	yes	yes	no	yes
Factory Setting 4	yes	yes	yes	yes

TO RESTORE FACTORY DEFAULTS

- 1 Insert a memory card in the MP-2 and connect it to the serial link. Apply power to the fixtures and the MP-2.
- 2 Select *Read Memory Card* from the main menu. Select the slot that holds the update file for the desired fixture type.
- 3 Scroll down and select *Factory Default*. Select *All Addresses* or *Single Address* mode. If using *Single Address* mode, select an address and press *Ok*.
- 4 Select a factory setting level from 1 to 4 or press *Back* to escape.

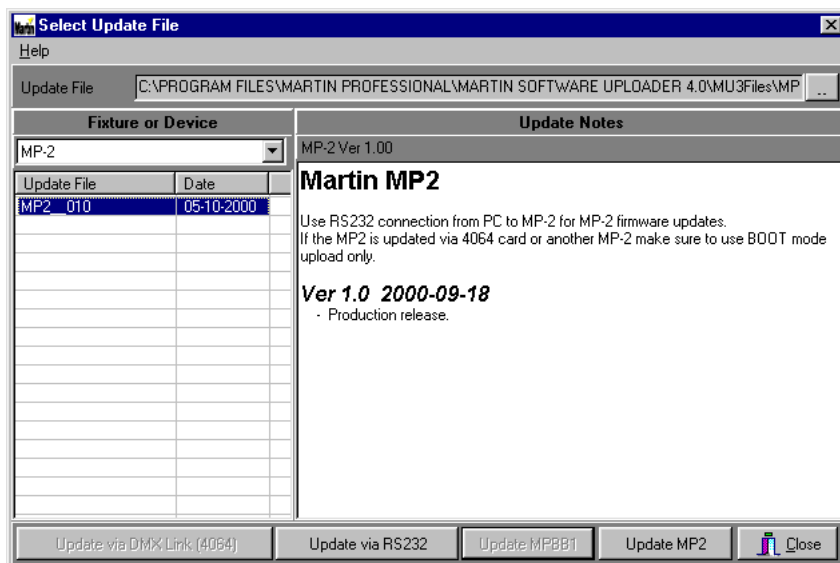
MP-2 UTILITIES

MP-2 FIRMWARE UPDATE

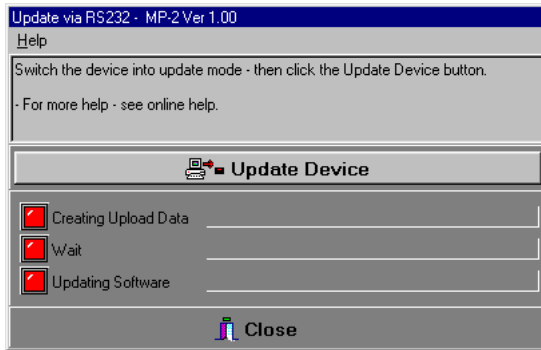
Though MP-2 firmware can be copied to the memory card like other update files, the MP-2 cannot update itself. It has to be updated via the PC's COM port. A DMX connection may be used if the computer is equipped with a Martin LightJockey ISA DMX Interface (4064) card, or if you have access to another MP-2.

TO UPDATE WITH A COMPUTER

- 1 Connect the MP-2 to the computer COM port as described on page 6. Alternatively, connect the 4064 card's DMX output to the MP-2's DMX input.
- 2 Turn on the computer and the MP-2. Start the Software Uploader program.
- 3 Configure the hardware as necessary and copy the MP-2 update file to the PC as you would any other update file. (See Software Uploader online help.)
- 4 Click Update Fixture or Device. Select MP-2 from the Fixture or Device menu and select the desired Update File. Click Update via RS232 or Update via DMX link (4064) depending on the connection.



- 5 Select **MP-2 Utilities** from the MP-2 main menu. Select **Update MP-2 Firmware**, then select either **Update via RS232** or **Update via DMX-In**, depending on the connection. Wait five seconds and then click **Update Device** in the update dialog. The upload process takes several minutes.



TO UPDATE WITH ANOTHER MP-2

- 1 Update a memory card with the latest MP-2 update file. (See “Updating the memory card” on page 8.) In the following steps, the device with the updated memory card is called MP-2(a); the device being updated is called MP-2(b).
- 2 Connect the DMX output of MP-2(a) to the DMX input of MP-2(b).
- 3 On MP-2(a), select **Read Memory Card** from the main menu. Select the slot that holds the MP-2 update file.
- 4 Select **Update Software**. Press **Yes** to confirm. Select **Update** in **BOOT** mode.
- 5 On MP-2(b), select **MP-2 Utilities** from the main menu. Select **Update MP-2 Firmware**, then select **Update via DMX-In**. Wait five seconds.
- 6 On MP-2(a) select **Ok** to start the upload.

DISPLAY CONTRAST

The display contrast can be adjusted to make it easier to read. From the main menu select **MP2 Utilities** and then select **Display Contrast**. To decrease contrast, press the right-arrow button. To increase contrast, press the left-arrow button.

DMX INPUT MONITOR

The DMX Input Monitor displays the DMX values of channels 1 - 512 along with the start code (Id), total number of channels received (Ch), and refreshes per second (Re). Sixteen sets, or “snapshots” of DMX data may be recorded.

TO READ AND RECORD DMX DATA

- 1 Connect the MP-2 as described under “DMX in” on page 6.
- 2 Select `DMX Utilities` from the main menu. Select `DMX Input Monitor`.
- 3 From the controller or other transmitting device, send the look (values) to read and/or record.
- 4 The DMX channels are displayed on the top row. Use the left and right arrow buttons to scroll through the channels. Use the left-end button to jump to channels 1 - 4; use the right-end button to jump to channels 509 - 512.
- 5 Read DMX values in the second row.
- 6 Read the start code (Id), top channel (Ch), and refresh rate (Re) in the third row.
- 7 Press `Snapshot` to enter the `Record Snapshot` submenu. Scroll through snapshots 1 - 16 with the up-arrow and down-arrow buttons. Press the right-arrow button next to a snapshot to record the current DMX values.

DMX OUTPUT EDITOR

The DMX Output Editor allows you to send, display, and edit DMX snapshots.

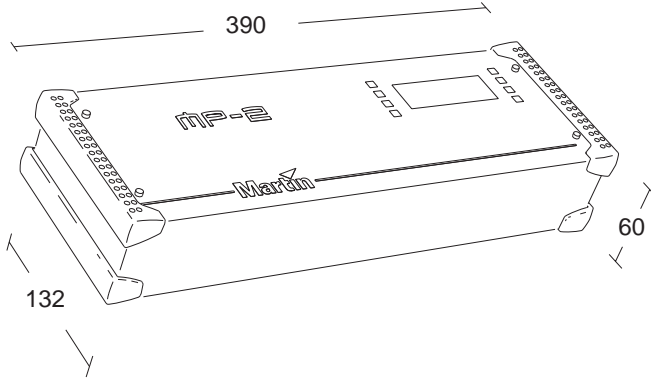
TO SEND, DISPLAY, AND EDIT DMX SNAPSHOTS

- 1 Connect the MP-2 to the DMX link as you would a controller. See “DMX out” on page 6.
- 2 Select `DMX Utilities` from the main menu. Select `DMX Output Editor`.
- 3 Select `Snapshot`. Select `Restore snapshot`. Scroll snapshots with the up-arrow and down-arrow buttons. Press the right-arrow button next to the desired snapshot to display and send the snapshot.
- 4 Four DMX channels are displayed on the first row with their values on the second row. Use the left and right arrow buttons to scroll the channels. Use the left-end button to jump to channels 1 - 4; use the right-end button to jump to channels 509 - 512.
- 5 To edit a value, scroll the desired channel to the first column on the left. Adjust the DMX value with the up-arrow and down-arrow buttons.
- 6 To save changes, select `Snapshot`, then select `Record Snapshot`. Scroll to the snapshot and select it with the right-arrow button.

SPECIFICATIONS

Dimensions

Length	390 mm (15.3 in)
Width	132 mm (5.2 in)
Height60 mm (2.4 in)
Weight	1.7 kg (3.6 lb)



Electrical

AC supply	90 - 250 V, 50/60 Hz
Maximum current and power	30 mA, 1.5 W @ 110 V; 20 mA, 1.6 W @ 230 V

Construction

Housing	sheet aluminum
Front panel finish	anodized, natural aluminum color

Rear panel connections

Power	IEC 3-prong male
DMX input	3-pin XLR male
DMX output	3-pin XLR female
RS-232	9-pin DSUB female
MIDI (not used)5-pin DIN female

Memory card

Capacity	8 or 64 MB
Voltage	3.3 V

