Martin M2GO[™] / M2PC[™] **Firmware Installation Guide**

Introduction

This document will guide you through the firmware update procedure for the Martin M2GO / M2PC console.

When is it needed?

It is vital that the firmware is always up to date to the current M-Series software that is running on your console. Not every M-Series software upgrade requires an additional firmware update though. Please do not perform the firmware update during show time, as it stops running services in the software and requires a reboot of the console.





General firmware upgrade procedure

If new firmware is available, it will be copied in a folder on the solid state drive of your console when the M-series software is being installed.

Installing new firmware will not delete any of your current or backed up show files on the console. Nevertheless, it's always a good idea to have copies of important show files.

Starting up the Firmware Update tool

- Start up your console and load/continue a show
- Go into the menu, select the System tab and go to the Tools section
- In the bottom of the page, select the *Diagnostic* tab
- In the Tools section, click on Firmware update



 A popup saying that all services are being stopped, will show up and the *Firmware* update tool is started

Stopping services	
Stopping service 'DMXSender' Please wait until the operation has completed.	
	Gancel





Exploring the Firmware Update tool

There are two types of firmware that you might need to update: USB firmware and IIC (I²C) firmware. The tool has 3 main windows.

- USB devices: Shows all detected USB devices
- IIC devices: Shows all detected IIC devices connected to the selected USB device in the window above
- Lower window: Shows the status of the Firmware tool



Matching firmware name and device ID

To choose the correct firmware for the selected device, make sure that the firmware name and device ID match. For example:

"F100 Mx Programmer Module" = (F100) Programmer Module II (x.xx) USB.C2 "70h F080h Digital Belt 01h 200h" = (70-F080-01) 4x DigiBelt (V3.40) IIC.hex

Selecting USB firmware

- Select a USB device in the first window
- Click on the Update USB Firmware button
- A file browser opens. Select the folder of the product that the module belongs to.
- Select the correct firmware file with *.C2 extension: look at the identifier in the tool and in the folder and make sure they match. In this case F100.
- Check if an update is needed by checking the version. In this case is v02.50 active and in the folder is V3.40 so an upgrade is needed.



PCB firmware update (V3.23.492.0)			
USB devices:			
F081 Mx.Wing-Desklights v02.17 DIPS:0 F0A9 Martin Max US8 DMX2P v02.12 DIPS:102			
F100 Mx Programmer Module v02.50 DIPS:0 Update USB	Q Open	×	
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	Oreanize = Manufalder		Search Mb Search Mb Search Mb
IIC devicer Program	Organize V New folder	····	Organize 🕶 📄 Open Burn New folder 🛛 🕅 🚱
30h E100h M6 Programmer keupad 11h 0246h	Develoade	Date modified Type	
70h F080h Digital Belt 01h 0200h	Contractor MI	5/06/2014 10:33 File folder	Favorites Name Date modified Type
80h F080h Track Ball01h U225h	Magic Briefcase	5/06/2014 10:33 File folder	E Desktop 🔐 🎍 IIC 5/08/2014 9:53 File folder
opose ne ministre	Sign Recent Places	5/06/2014 10:33 File folder	Downloads (F0A0) DMX Card 40UT 1JN (V3.40) USB.C2 16/07/2014 20:43 C2 File
	Maxiy Compact	5/06/2014 10:33 File folder	Copbox (F0B0) Desklight (V3.40) USB.C2 16/07/2014 20:43 C2 File
IU Delay (ms):	Libraries	5/06/2014 10:33 File folder	Magic Briefcase (FOC8) SMPTE MIDI Sound Card (V3.40) USB.C2 16/07/2014 20:43 C2 File
25	Documents	5/06/2014 10:33 File folder	Recent Places (F10A) Playback Module II (V3.40) USB.C2 16/07/2014 20:43 C2 File
Please wait. Scanning for IIC PCB's. Attention:	PlaybackWing	5/06/2014 10:33 File folder	(F11A) Submaster Module Narrow (V3.40) USB.C2 16/07/2014 20:43 C2 File
listed version numbers	Videos	17/04/2012 13:05 File folder	C2 File CF11B) Screen Module (V3.40) USB.C2 16/07/2014 20:43 C2 File
will only become active after power	E de la construcción de la co		Documents (F100) Programmer Module II (V3.40) USB.C2 16/07/2014 20:43 C2 File
cycle of the device.	Backup (C)		Music (F119) T-Bar (V3.40) USB.C2 16/07/2014 20:43 C2 File
Clear Log	System (D)		E Pictures
	🕞 Data (E:) 🗢 🤘		🗑 Videos 👻 K 👘 👘
	File name:	 binary file (".b6;".c2;".iic) 	(F100) Programmer Module II (V3.40) US., Date modified: 16/07/2014 20:43
Close		Open 💌 Cancel	C2 File Size: 9,77 KB
		- Cancer	

Updating USB firmware

- If you want to update the firmware or import the same version, click on the **Open** button
- A popup will be seen that the current version is the same as the file version. Click Yes to • continue
- The firmware is now being transferred to the PCB. Do not cut the power! Please note the • status window and progress bar
- Don't worry if the tool says (Not Responding). It will take a few seconds. Please wait. •
- The tool will verify the update and the result is shown in the status window •
- Repeat all the above steps for each USB device in the list •
- In the case below the same version v02.50 is being installed and a warning is given •

×

e and n numbers ome power device. Log

	PCB firmware update (V3.23.492.0)	—	PCB firmware update (V3.23.492.0)	-
	USB devices: F061 Mx Wing-Desklights v0217 DIPS:0 F049 Martin May USB DMC2P v0212 DIPS:02 F100 Ms Programmer Module v0250 DIPS:0	Update USB Firmware	USB devices: F081 M k Wing-Deskights V02.17 DIPS-0 F045 M Admin May USB DMC2P V02.12 DIPS-102 F100 Mk Programmer Module V02.50 DIPS-0	Update USB Firmware
Firmware Update EX.	IIC devices: 30h F100h M5 Programmer keypad 11h 0246h 70h F080h Digital Set 01h 0200h 80h F080h Track Ball 01h 0225h	Program Unknown PCB Update IIC firmware	IIC devices: 30h F100h M6 Programmer keypad 11h 0246h 70h F080h Digial Bel 01h 0220h 80h F080h Track Ball 01h 0225h	Program Unknown PCB Update IIC firmwar
Yes No		IO Delay [ms]: 25		10 Delay (ms): 25
	Update firmware of F100 Mx Programmer Module v02:50 DIPS 0 with C:\Programmer Module Protessional/Firmware/MAG(F100) Mx Programmer (V2:50):C2 Current version same as file version Sending new firmware	Attention: New firmware and listed version numbers will only become active after power cycle of the device.	V0250 DIFS0 with C*Porgano JasMartin A Professional/Firmware/M6V[F100] Mx Programmer (V250] C2 Current version same as file version Sending new timware Verifying new timware Verifying new timware	Attention: New firmware and listed version numbe will only become active after power cycle of the device.
	-	Clear Log	Firmware update success	Clear Log
	Close		Close	



Selecting IIC firmware

- Select a USB device in the first window
- The tool will now scan for existing IIC devices on that particular USB device
- After a few seconds the results are shown in the *IIC devices* window
- Select a IIC device in the second window
- Click on the Update IIC Firmware button

🔦 PCB firmware update (V3.23.492.0)	—	PCB firmware update (V3.23.492.0)		No. PCB firmware update (V3.23.492.0)	×
USB devices: F081 Mix Wing-Desklights v02.17 DIPS-0 F049 Math Max, USB, DMC2P v02.12 DIPS-102 F100 Mis Programmer Module v02.50 DIPS-0	Update USB Firmware	US8 device: F081 Mx/Wrg/Deskliphts v02.17 DIPS:0 F084 Martin May US8 DM/C2P v02.12 DIPS:0 F100 Mx Brogstwinne Module v02.90 DIPS:0	Update USB Firmware	USB devices: F081 Mix/Wrg/Destlights v02177 DIPS 0 F049 Math May USB DMC2P v0212 DIPS 102 F100 Mix Programmer Module v02.50 DIPS 0	Update USB Firmware
IIC devices:	Program Unknown PCB Update IIC firmware	IIC devices: 30h F100h MG Programme keypad 11h 0246h 70h F188h Ogulai Bell 01h 0200h 80h F080h Track Ball 01h 0228h	Program Unknown PCB	IIC devices: 305 F100h MC Programmer keypad 11h 0246h 90h F080h Track Ball 01h 0225h	Program Unknown PCB Update IIC firmware
Please wait. Scanning for IIC PCB's.	IO Delay [ms] 25 Attention: New firmware and listed version numbers will only become	Please wait Scenning for IIC PCB's.	ID Delay [ms]: 25 Attention: New firmware and listed version numbers will only become	Flesse wat: Scaming for IIC PCB's.	IO Delay [ms]; 25 Attention: New firmware and listed version numbers will only become
-	active after power cycle of the device.	-	active after power cycle of the device. Clear Log	-	active after power cycle of the device. Clear Log
Close		Close		Close	

- A browser window opens. Select the folder of the product that the module belongs to.
- Select the correct firmware file with *.HEX extension: look at the identifier in the tool and in the folder and make sure they match. In this case 70-F080-01.
- Check if an update is needed by checking the version. In this case 0200h is active and in the folder is V3.40 so an upgrade is needed.

🌯 Open			×	🔦 Open	— × —)
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🎉 Magic Briefcase 🚆	M200-M2FC	5/06/2014 10:33	File folder	Recent Places	3 HEX File
Kecent Places	Maxxyz Compact	5/06/2014 10:33	File folder	(30-F100-F1) Programmer II Keypad (V3.40) IIC.hex 17/07/2014 20:3	3 HEX File
Cibraries	Maxoyz Modules Maxoyz(+)	5/06/2014 10:33 5/06/2014 10:33	File folder File folder	Comparise Control (70-F119-11) T-Bar Encoders (V3.40) IIC.hex 16/07/2014 20:4	3 HEX File
Documents Music	M-Sync	5/06/2014 10:33	File folder	Music (80-F080-01) TrackBall (V3.40) IIC.hex 16/07/2014 20:4 Music (86-F0.40.11) DMX 4-0.011 Jp (V3.40) IIC.hex 16/07/2014 20:4	3 HEX File
Pictures	PlaybackWing Universal USB-DMX	5/06/2014 10:33 17/04/2012 13:05	File folder File folder	Pictures Oto 100 11 000 1201 200 Videos Oto FIA-11) Submaster Narrow (V3.40) IIC.hex 16/07/2014 200	3 HEX File
19 Computer				📜 Computer	
Backup (C:)				System (D:)	
👝 Data (E:) 🛛 👻 File na	e me:	 binary file (*.b6;*.c2;*.iii) -	→ Data (F-) File name: (70-F080-01) 4x DigiBelt (V3.40) IIC.hex iii	tel HEX file (*.hex)
		Open 🔽	Cancel		Open 😽 Cancel



Updating IIC firmware

- If you want to update the firmware or import the same version, click on the **Open** button
- A popup will be seen that the current version is the same as the file version. Click **Yes** to continue
- The firmware is now being transferred to the PCB. Do not cut the power! Please note the status window and progress bar
- Don't worry if the tool says (Not Responding). It will take a few seconds. Please wait.
- The tool will verify the update and the result is shown in the status window
- Repeat all the above steps for each IIC device in the list
- Do not forget to check the IIC devices of the other USB devices by selecting the next USB device in the first window
- In the case below the same version v02.00 is being installed and a warning is given

	PCB firmware update (V3.23.492.0) (Not Respondence)	nding)	PCB firmware update (V3.23.492.0)	— ×
	USB devices: F061 MaxWing-Desklights v0217 DIFS:0 F049 Marin Max USB Dv02P v0212 DIFS:102 F100 Mis Programmer Medice v0250 DIFS:0	Update USB Firmware	USB devices: F061 Mx Wing-Deskights v02:17 DIPS 0 F049 Martin May, USB DMC/2P v02:12 DIPS-102 F100 Mc Registerivet Mobile: v02:50 DIPS 0	Update USB Firmware
	IIC devices: 30h F100h M6 Programmer keypad 11h 0246h 70h F080h Digital Beit 01h 0200h	C Program Unknown PCB	IIC devices: 30h F100h M6 Programmer keypad 11h 0246h 70h F000h Digital Beil 01h 0200h	Program Unknown PCB
Firmware Update 23 Current version same as file version. Do you still want to update?	80h F080h Track Ball 01h 0225h	Update IIC firmware IO Delay (ms) 25	80h F080h Traok Bail 01h 0225h	Update IIC firmware IO Delay (ms): 25
Yes No	Updating Digital Bet with C-VProgramData/Martin Professiona/Firmware/MSV70F080011 4xDigital@PV2001HSX Please wait. Sending new firmware over IIC Writing address: 0x03a8	Attention: New firmware and listed version numbers will only become active after power cycle of the device.	Updating Digital Beh with C:\ProgramData\Matin A ProfessionalFimmwee\M6(70F08001) 4-OjglaBeh (Y2:00)FIX Please wat. Sending new fimmwee over IIC Witing address: 00/fit Please wat. Verying fimware over IIC Reading address: 00/fit	Attention: New firmware and listed version numbers will only become active after power cycle of the device.
	-	Clear Log	Verify OK. Firmware update successful	Clear Log
	Close		Close	

Completing installation

The firmware update is complete after a full restart of the console. A popup will be shown when closing down the *Firmware update* tool to execute the reboot.



Instructions for M2GO / M2PC Console Version 3.52

- Start up your console and load/continue a show
- Start up the Firmware Update tool

Select the USB device row in the top of the window, then install every firmware one by one with the correct files as shown below. Check them off in the right column to keep track of completed items.

💊 PCB firmware update (V3.40.542.0)	×	🔧 PCB firmware update (V3.40.542.0)	_X
USB devices: F04A, Martin USB DUO-DMX, v02.12, DIPS:77 F04A, Martin USB DUO-DMX, v02.12, DIPS:77 F111, M2GO-PC Main Panel, v03.40, DIPS:0	Update USB Firmware	USB devices: F0AA Martin USB DUO-DMX v02.12 DIPS:77 F0AA Martin USB DUO-DMX v02.12 DIPS:77 F111 M2G0-PC Main Panel v03.40 DIPS:0	Update USB Firmware
IC devices:	Program Unknown PCB	 IIC devices:	Program Unknown PCB
	Update IIC firmware IO Delay [ms]: 25		Update IIC firmware IO Delay [ms]: 25
Please wait. Scanning for IIC PCB's. ERROR: transfer failed. IIC PCB scan failed.	Attention: New firmware and listed version numbers will only become active after power cycle of the device. Clear Log	Please wait. Scanning for IIC PCB's. ERROR: transfer failed. IIC PCB scan failed.	Attention: New firmware and listed version numbers will only become active after power cycle of the device. Clear Log
Close		Close	

USB Firmware	Check
(F0AA) USB-DMX (V3.42) USB.C2 DIPS 77	



USB devices: F0AA Martin USB DUO-DMX v02.12 DIPS:77 F0AA Martin USB DUO-DMX v02.12 DIPS:77 F111 M2G0-PC Main Panel v03.40 DIPS:0		
		Update <u>U</u> SB Firmware
ı IIC devices: 30h F111h M2GO-PC Programmer 11h 0340h		□ Program Unknown PCB
70h F111h M2GO-PC Encoders 11h 0340h C0h F111h M2GO-PC Playbacks 11h 0340h		Update <u>I</u> IC firmware
		10 Delay [ms]: 25
Please wait. Scanning for IIC PCB's. IIC PCB scan success.	*	Attention: New firmware and listed version numbers will only become active after power cycle of the device.
	Ŧ	<u>C</u> lear Log
, Chara		

USB Firmware	Check
(F111) M2Go-PC Main Panel (V3.40) USB.C2	
IIC Firmware	Check
(30-F111-11) M2GO-PC Programmer (V3.40) IIC.hex	
(70-F111-11) M2GO-PC Encoders (V3.40) IIC.hex	
(C0-F111-11) M2GO-PC Playbacks (V3.40) IIC.hex	



The firmware update is complete after a full restart of the console. A popup will be shown when closing down the tool to execute the reboot.

Final Test

After reboot, open the firmware tool again and confirm all entries to match the checklist.

Close the firmware tool and open the console test application in the same menu screen and test all buttons, faders and encoders for operation. Close the console tester once completed.

Test every DMX line for operation with a DMX tester or a lighting fixture to confirm operation.

Revision	Made by	Description	Approved by	Date
718	Kris Van Hullebusch	Updated for M-Series v3.52	Chris Foblets	10/20/2016

