

Martin M1™

Firmware Installation Guide

Introduction

This document will guide you through the firmware update procedure for the Martin M1 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.



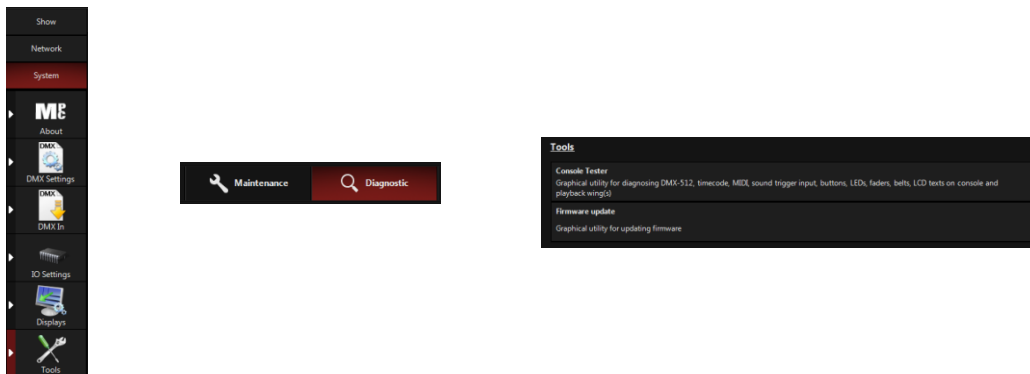
General firmware upgrade procedure

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.

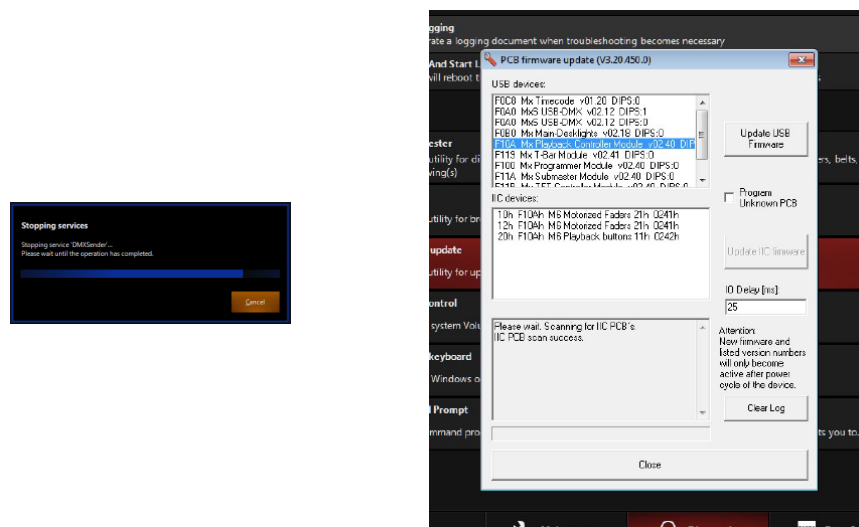
Installing new firmware will not delete any of your current or backed up show files on the console. Nevertheless, it's always a good idea to have copies of important show files.

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**



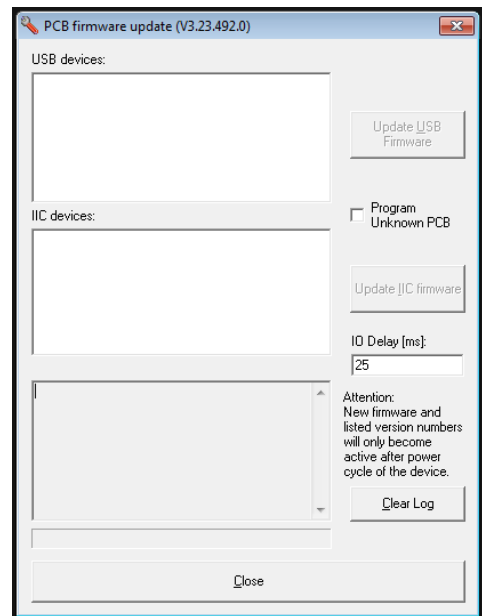
- A popup saying that all services are being stopped, will show up and the **Firmware update** tool is started



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:

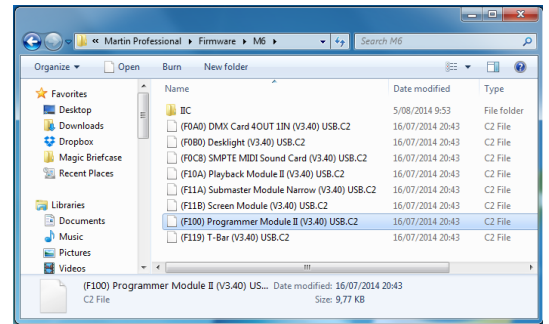
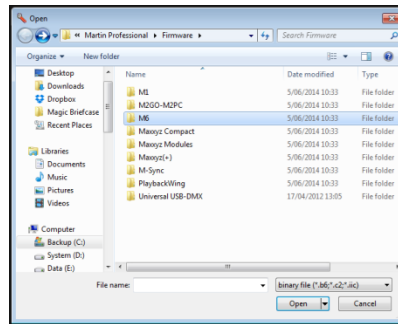
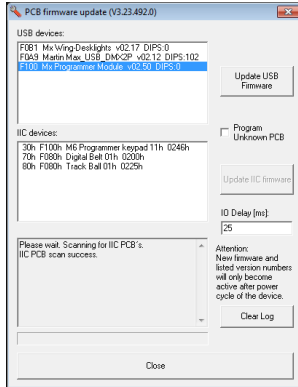
“F100 Mx Programmer Module” = (F100) Programmer Module II (x.xx) USB.C2

“70h F080h Digital Belt 01h 200h” = (70-F080-01) 4x DigiBelt (V3.40) IIC.hex

Selecting USB firmware

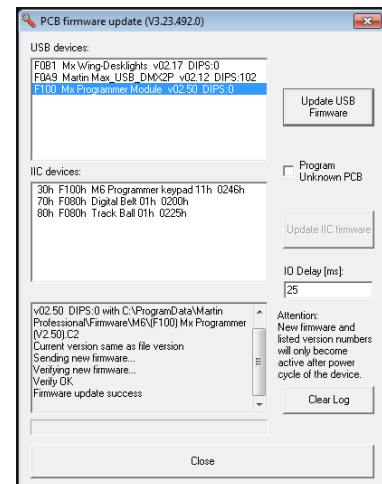
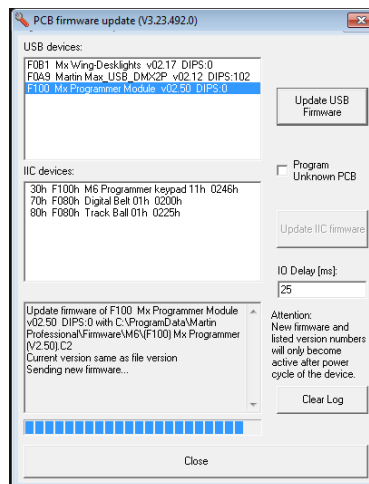
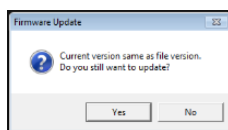
- Select a USB device in the first window
- Click on the **Update USB Firmware** button
- A file browser opens. Select the folder of the product that the module belongs to.
- Select the correct firmware file with *.C2 extension: look at the identifier in the tool and in the folder and make sure they 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.





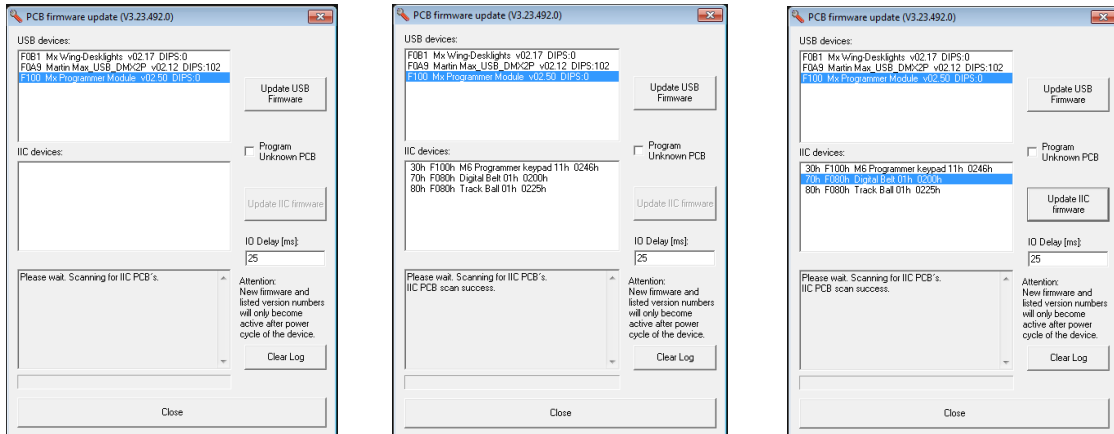
Updating USB firmware

- 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

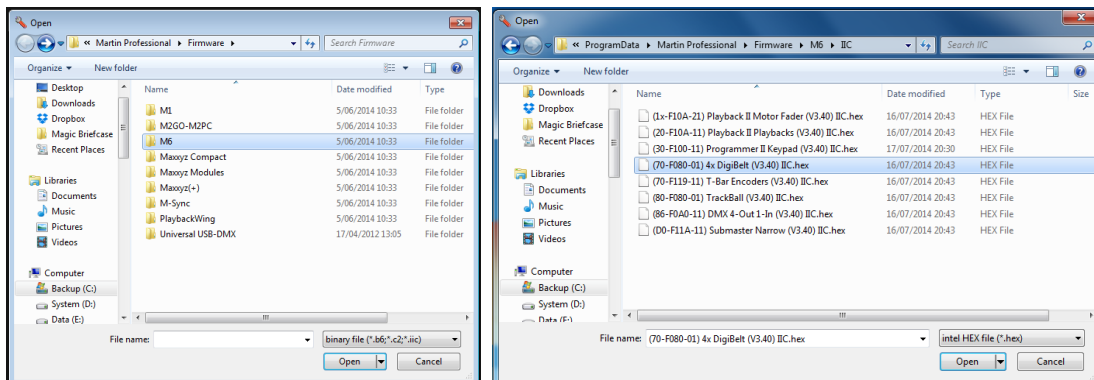


Selecting IIC firmware

- 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

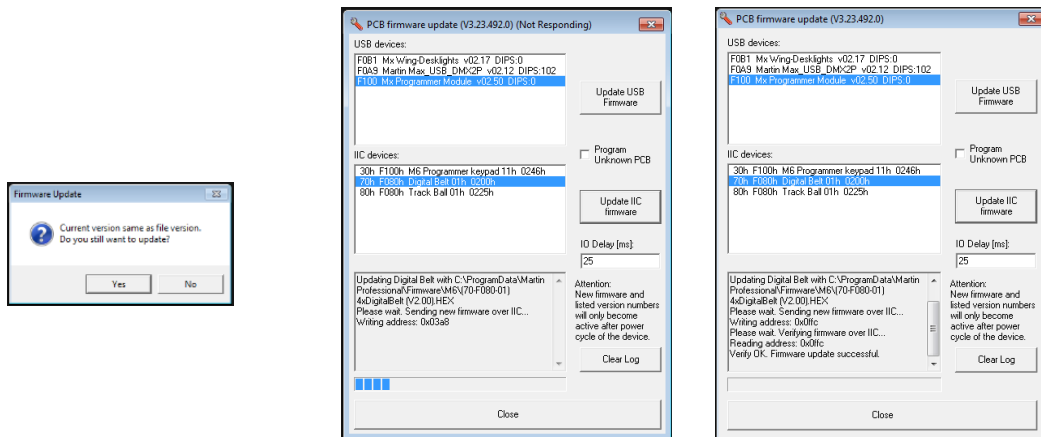


- A browser window opens. Select the folder of the product that the module belongs to.
- Select the correct firmware file with *.HEX extension: look at the identifier in the tool and in the folder and make sure they match. In this case 70-F080-01.
- Check if an update is needed by checking the version.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



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



Completing installation

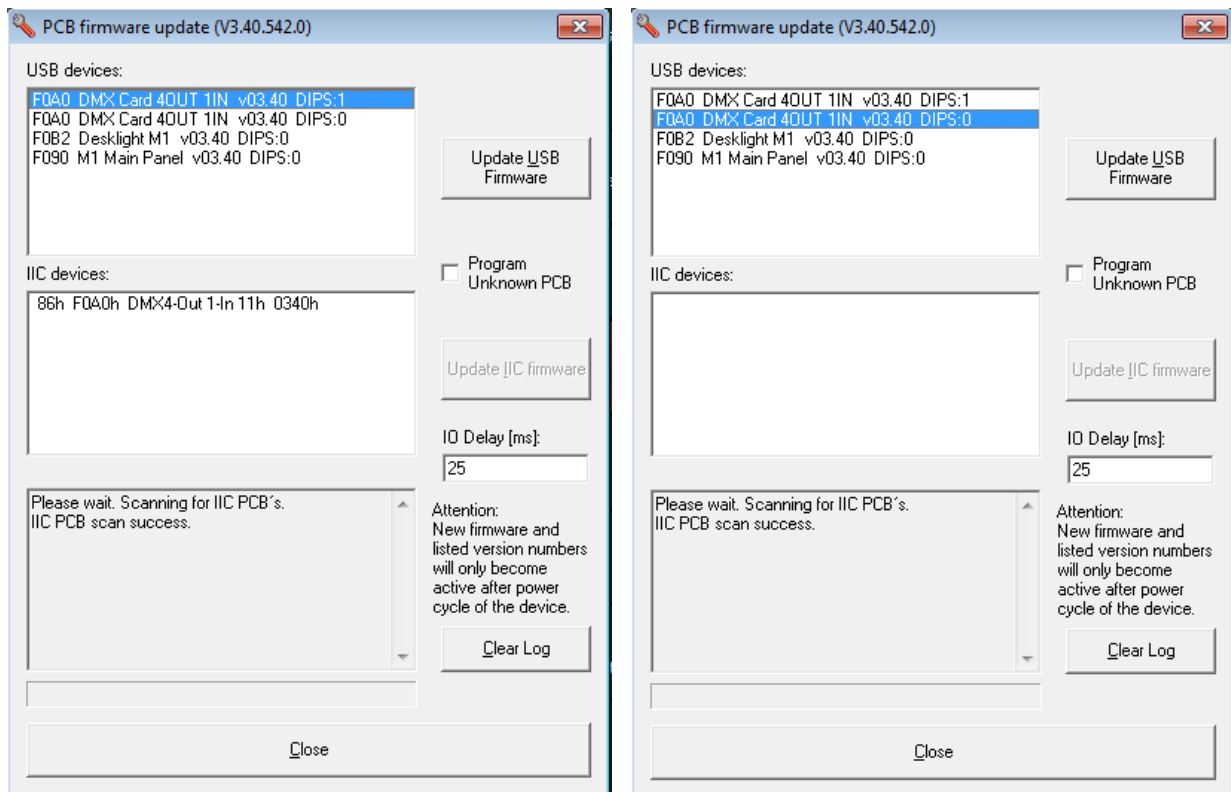
The firmware update is complete after a full restart of the console. A popup will be shown when closing down the **Firmware update** tool to execute the reboot.



Instructions for M1 Console Version 3.52

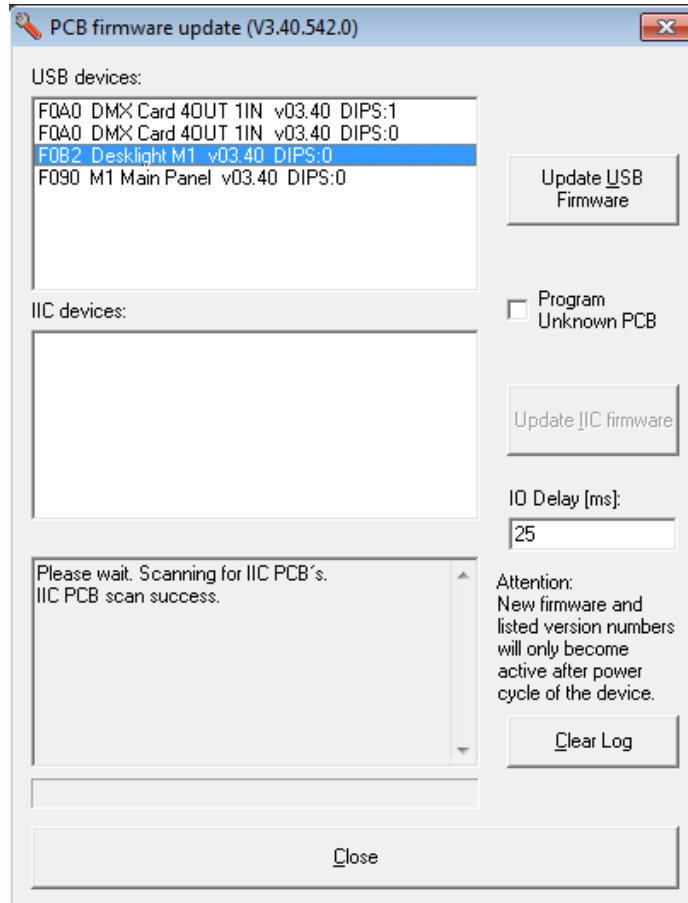
- Start up your console and load/continue a show
- Start up the **Firmware Update** tool

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.



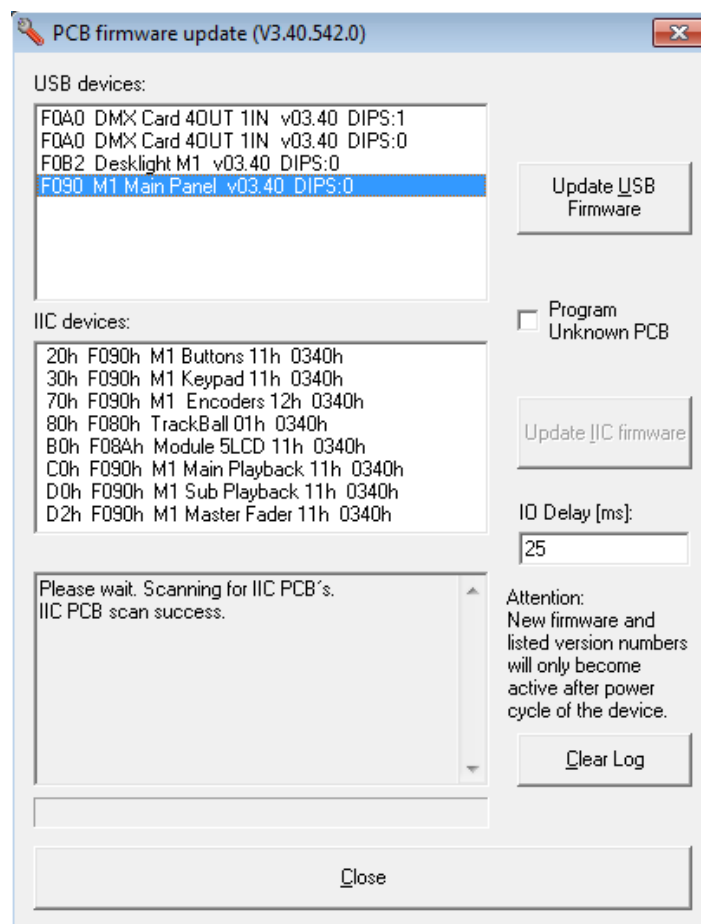
USB Firmware	Check
(F0A0) DMX Card 4OUT 1IN (V3.41) USB.C2 DIPS 1	<input type="checkbox"/>
(F0A0) DMX Card 4OUT 1IN (V3.41) USB.C2 DIPS 0	<input type="checkbox"/>
IIC Firmware (DIPS 1 only)	Check
(86-F0A0-11) DMX 4-Out 1-In (V3.40) IIC.hex	<input type="checkbox"/>





USB Firmware	Check
(F0B2) Desklight M1 (V3.40) USB.C2	☐






Note: Please check the type of encoders that are currently installed on your M1 console. The old model has two small holes in the encoder wheel, the new model only one.

USB Firmware	Check
(F090) M1 Main Panel (V3.40) USB.C2	<input type="checkbox"/>
IIC Firmware	Check
(20-F090-11) M1 Buttons (V3.40) IIC.hex	<input type="checkbox"/>
(30-F090-11) M1 Keypad (V3.40) IIC.hex	<input type="checkbox"/>
(70-F090-11) M1 Encoders (V3.40) IIC.hex (old encoder pcb)	<input type="checkbox"/>



(70-F090-12) M1 Encoders V2 (V3.40) IIC.hex (new encoder pcb)	<input type="checkbox"/>
	
(80-F080-01) TrackBall (V3.40) IIC.hex	<input type="checkbox"/>
(B0-F08A-11) Module 5LCD (V3.40) IIC.hex	<input type="checkbox"/>
(C0-F090-11) M1 Main Playback (V3.40) IIC.hex	<input type="checkbox"/>
(D0-F090-11) M1 Sub Playback (V3.40) IIC.hex	<input type="checkbox"/>
(D2-F090-11) M1 Master Fader (V3.40) IIC.hex	<input type="checkbox"/>

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

