Martin M6[™] Firmware Installation Guide

Introduction

This document will guide you through the firmware update procedure for the Martin M6 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.

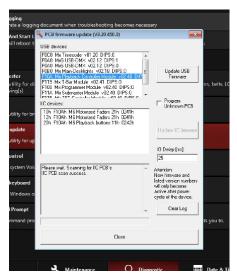
Starting up the Firmware Update tool

- 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 'DMXSen Please wait until the opera	der' tion has complete		

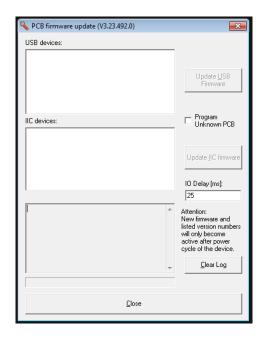




Exploring the Firmware Update tool

There are two types of firmware that you might need to update: USB firmware and IIC (I^2C) 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 Matin Max_USB_DMC2P v02.12 DIPS:102 F100 Mx Programmer Module v02.50 DIPS:0	Update USB Firmware	Q Open				
	Firmware		rofessional + Firmware +		2	
	- Program	Organize New folder	er	}≡ •		Organize Open Burn Newfolder
IIC devices:	Unknown PCB	E Desktop ^	Name	Date modified	Туре	Organize V Open Burn NewTolder
30h F100h M6 Programmer keypad 11h 0246h 70h F080h Digital Bell 01h 0200h 80h F080h Track Ball 01h 0225h		Downloads	ML ML	5/06/2014 10:33	File folder	🛠 Favorites Name Date modified Type
son Fusun Track Balluth 0225n	Update IIC firmware	Magic Briefcase	M2GO-M2PC M6	5/06/2014 10:33 5/06/2014 10:33	File folder File folder	E Desktop IIC 5/08/2014 9:53 File fold
	opoale no minivale	3 Recent Places	Maxyz Compact	5/06/2014 10:33 5/06/2014 10:33	File folder	Downloads (F0A0) DMX Card 40UT 1IN (V3.40) USB.C2 16/07/2014 20:43 C2 File
			Maxxyz Modules	5/06/2014 10:33	File folder	C (F080) Desklight (V3.40) USB.C2 16/07/2014 20:43 C2 File
	IO Delay (ms):	Cilibraries	Maxyz(+)	5/06/2014 10:33	File folder	Magic Briefcase (F0C8) SMPTE MIDI Sound Card (V3.40) USB.C2 16/07/2014 20:43 C2 File
	25	Documents	M-Sync	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:	Music Pictures	PlaybackWing	5/06/2014 10:33	File folder	(1004) Piablack Module II (VSA0) (SBC2 16/07/2014 20:43 C2 File
IIC PCB scan success.	New firmware and listed version numbers	Videos	Universal USB-DMX	17/04/2012 13:05	File folder	
	will only become	VIDEUS				(F11B) Screen Module (V3.40) USB.C2 16/07/2014 20:43 C2 File
	active after power	Computer				Documents (F100) Programmer Module II (V3.40) USB.C2 16/07/2014 20:43 C2 File
	cycle of the device.	Sackup (C:)				Music (F119) T-Bar (V3.40) USB.C2 16/07/2014 20:43 C2 File
-	Clear Log	System (D:)				E Pictures
		📖 Data (E:) 🖛	۰ (III			Videos • • • III
Close		File n	amé:	binary file (*.b6;*.c2;*.i Open	ic) • Cancel	(F100) Programmer Module II (V3.40) US Date modified: 16/07/2014 20:43 C2 File Size 9,77 KB

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 ٠
- In the case below the same version v02.50 is being installed and a warning is given •

×

	No. PCB firmware update (V3.23.492.0)	X	PCB firmware update (V3.23.492.0)	— ×
	USB devices: F081 Mr Wrog-Deskliphts v02.17 DIPS-0 F089 Merim Mag, USB DMKZP v02.12 DIPS-102 F100 Mix Programmer Module v02.50 DIPS-0	Update USB Firmware	USB devices: F081 MA WhyDextlights v0217 DIPS 0 F009 Matin May USB DMC/2P v0212 DIPS 102 F100 Mix Inogrammer Module v0250 DIPS 0	Update USB Firmware
Firmware Update 53	IIC devices: 306 F100h M6 Programmer keyoad 11h 0246h 706 F080h Dojald 84t 01h 0200h 806 F080h Track 8all 01h 0225h	Program Unknown PCB	IIC device: 306: F100h HG Programmer keyped 11h 0246h 706: F109th Oigeal Beit 01h 0230h 806: F1080h Track Ball 01h 0225h	Program Unknown PCB
Ves No	Update firmware of F100 Mx Programmer Module	10 Delay [ms]: 25	V0250 DIPS:0 with C:\ProgramData\Martin	10 Delay [ms]: 25
	VD250 IPS, with C:Vnoam DataMatin Vd250 IPS, with C:Vnoam DataMatin Professional/Emware/MS/(F100) Mx Programmer (V250) 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.	Vid.2:00 UF-3.0 Win L: Y-10/gaft/2 activation Professional/Emvanew4/K6/E100/M Arbogrammer (V2.80).C2 Cutent version same as file version Sending new fimwae	Attention: New firmware and listed version numbers will only become active after power cycle of the device.
	Close	Clear Log	Trimware update success T	Clear Log



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)	X
USB devices: F081 Mix Wing-Desklights v02.17 DIPS-0 F049 Martin Max, USB, DM:CP v02.12 DIPS-102 F100 Mis Programmer Module v02.50 DIPS-0	Update USB Firmware	US8 devices: F061 Mx/Wrg/Deskliphts v02.17 DIPS:0 F0A9 Martin Mar, US8 DMX2P v02.12 DIPS:02 F100 Mx Regenitine Mediles v02.20 DIPS:0	Update USB Firmware	USB devices: [F081 Mix/Vmg/Destäghts v02:17 DIPS:0 F045 Mathn Max USB DMC2* v02:12 DIPS:102 C103 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 Update IIC firmware	IIC devices. 305 F100h MC Programmer keypad 11h 0246h 90h F080h Track Ball Oth 0225h	Program Unknown PCB Update IIC frmware
Please wait. Scanning for IIC PCB's.	IO Delay [ms] 25 Attention: New firmware and listed version numbers will only become	Please wait. Scarning for IIC PCB's.	ID Delay [ms]: 25 Attention: New firmware and listed version numbers will only become	Please walk Scanning 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				 X
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E Desktop	Name	Date modified	Туре	Downloads ^ Name	^	Date modified	Туре	Size
Downloads	🕌 M1	5/06/2014 10:33	File folder	Dropbox (1x-F10A-21) Pl	lavback II Motor Fader (V3.40) IIC.hex	16/07/2014 20:43	HEX File	
Magic Briefcase	M2GO-M2PC	5/06/2014 10:33	File folder	Magic Briefcase (20-F104-11) Pl	layback II Playbacks (V3.40) IIC.hex	16/07/2014 20:43	HEX File	
Recent Places	🍌 M6	5/06/2014 10:33	File folder	Becent Places	rogrammer II Keypad (V3.40) IIC.hex	17/07/2014 20:30	HEX File	
_	Maxxyz Compact Maxxyz Modules	5/06/2014 10:33 5/06/2014 10:33	File folder File folder	(70-F080-01) 4x	DigiBelt (V3.40) IIC.hex	16/07/2014 20:43	HEX File	
🥽 Libraries	Maxxyz Modules	5/06/2014 10:33	File folder	Control Contro	Bar Encoders (V3.40) IIC.hex	16/07/2014 20:43	HEX File	
Documents	M-Sync	5/06/2014 10:33	File folder	Documents (80-F080-01) Tr	rackBall (V3.40) IIC.hex	16/07/2014 20:43	HEX File	
👌 Music	PlaybackWing	5/06/2014 10:33	File folder	Music (86-F0A0-11) D	(86-F0A0-11) DMX 4-Out 1-In (V3.40) IIC.hex		HEX File	
Pictures Videos	Universal USB-DMX	17/04/2012 13:05	File folder	Videos (D0-F11A-11) S	ubmaster Narrow (V3.40) IIC.hex	16/07/2014 20:43	HEX File	
👰 Computer				1 Computer				
🏭 Backup (C:)				🚣 Backup (C:)				
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📖 Data (E:) 🔍 👻	•	п	•	- Data (F-) * *				1 P
File na	ame:	 binary file (*.b6;*.c2;*.i 	ic) 👻	File name: (70-F080-01) 4x l	DigiBelt (V3.40) IIC.hex	 intel H 	IEX file (*.hex)	-
		Open 🖵	Cancel			Op	oen 😽 🖸 C	ancel



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: F0B1 Mx Wing-Desklights v0217 DIPS:0 F0A3 Martin Max_USB_DMX2P v02.12 DIPS:102		USB devices: F081 Mx Wing-Desklights v02.17 DIPS:0 F049 Martin May, USB DMC2P v02.12 DIPS:102 F100 Mx Programmer Moduler v02.50 DIPS:0	
	F100 Mx Programmer Module v02 50 DIPS:0	Update USB Firmware	1100 MX Programmer Module 302-50 Dires 0	Update USB Firmiware
	IIC devices: 30h F100h M6 Programmer keypad 11h 0246h 70h F060h Diazal Beit 01h 0200h	Unknown PCB	IIC devices: 30h F100h M6 Programmer keypad 11h 0246h 70h F000h Digraf Ret 01h 0200h	Program Unknown PCB
Firmware Update 23 Current version same as file version. Do you still want to update?	80h F080h Track Bail 01h 0225h	Update IIC firmware IO Delay (ms) 25	80h F080h Track Ball 01h 0225h	Update IIC firmware IO Delay [ms]: [25
Vez No	Updating Digital Bet with C:\ProgramData\Matin Protessona/Sirimware/MS/170F09001] 4xDigitaBet/2001HEX Please wat, 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 Bek with C:\Program Data/Martin A Professional/Firmware/M6(V/DF00-01) 4-0/jataBek (V2:00 JHEX Please wat: Sending new firmware over IIC Writing address: 0.00ftc Please wat: Veriying firmware over IIC Reading address: 0.00ftc	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 M6 Console Version 3.52

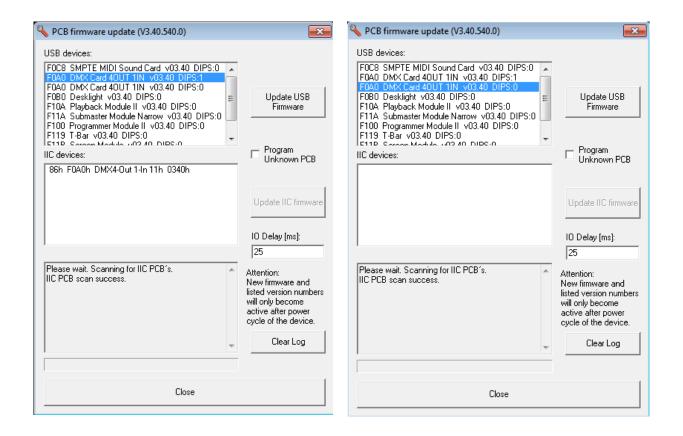
- Start up your console and load/continue a show
- Start up the *Firmware Update* tool

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.

NCB firmware update (V3.40.540.0)	×				
USB devices:					
FOCS SMPTE MIDI Sound Card v03.40 DIPS:0 F0A0 DMX Card 40UT 1IN v03.40 DIPS:1 F0A0 DMX Card 40UT 1IN v03.40 DIPS:0 F0B0 Desklight v03.40 DIPS:0 F10A Playback Module II v03.40 DIPS:0 F11A Submaster Module Narrow v03.40 DIPS:0 F100 Programmer Module II v03.40 DIPS:0 F119 T-Bar v03.40 DIPS:0 F119 Server Module .v02.40 DIPS:0 IIC devices:	Update USB Firmware				
	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				
Close					

USB Firmware	Check
(F0C8) SMPTE MIDI Sound Card (V3.40) USB.C2	





USB Firmware	Check
(F0A0) DMX Card 4OUT 1IN (V3.41) USB.C2 DIPS 1	
(F0A0) DMX Card 4OUT 1IN (V3.41) USB.C2 DIPS 0	
IIC Firmware (DIPS 1 only)	Check
(86-F0A0-11) DMX 4-Out 1-In (V3.40) IIC.hex	



🔧 PCB firmware update (V3.40.540.0)		— ×-
USB devices:		
F0C8 SMPTE MIDI Sound Card v03.40 DIPS:0 F0A0 DMX Card 40UT 1IN v03.40 DIPS:1 F0A0 DMX Card 40UT 1IN v03.40 DIPS:0 F0B0 Desklight v03.40 DIPS:0 F10A Playback Module II v03.40 DIPS:0 F11A Submaster Module II v03.40 DIPS:0 F100 Programmer Module II v03.40 DIPS:0 F119 T-Bar v03.40 DIPS:0 F119 Server Module v03.40 DIPS:0 IIC devices:	* III +	Update USB Firmware Program Unknown PCB
		Update IIC firmware IO 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. Clear Log
	*	
		1
Close		

USB Firmware	Check
(F0B0) Desklight (V3.40) USB.C2	



💊 PCB firmware update (V3.40.540.0)		— ×
USB devices:		
F0C8 SMPTE MIDI Sound Card v03.40 DIPS:0 F0A0 DMX Card 40UT 1IN v03.40 DIPS:1 F0A0 DMX Card 40UT 1IN v03.40 DIPS:0 F0B0 Desklight v03.40 DIPS:0 F10A Playback Module 1L v03.40 DIPS:0 F11A Submaster Module Narrow v03.40 DIPS:0 F100 Programmer Module 1L v03.40 DIPS:0 F119 T-Bar v03.40 DIPS:0 F118 Screen Module 1L v03.40 DIPS:0 F118 Screen Module 1L v03.40 DIPS:0	* III *	Update <u>U</u> SB Firmware
10h F10Ah Playback II Motor Fader 21h 0340h 12h F10Ah Playback II Motor Fader 21h 0340h		Unknown PCB
20h F10Ah Playback II Playbacks 11h 0340h		Update [IC firmware
1		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.
	÷	<u>C</u> lear Log
	-	
<u>C</u> lose		

USB Firmware	Check
(F10A) Playback Module II (V3.40) USB.C2	
IIC Firmware	Check
(1x-F10A-21) Playback II Motor Fader (V3.40) IIC.hex	
(20-F10A-11) Playback II Playbacks (V3.40) IIC.hex	



🔖 PCB firmware update (V3.40.540.0)		23
USB devices:		
F0C8 SMPTE MIDI Sound Card v03.40 DIPS:0 F0A0 DMX Card 40UT 1IN v03.40 DIPS:1 F0A0 DMX Card 40UT 1IN v03.40 DIPS:0 F0B0 Desklight v03.40 DIPS:0 F10A Playback Module II v03.40 DIPS:0 F11A Submaster Module Narrow v03.40 DIPS:0 F100 Programmer Module II v03.40 DIPS:0 F119 T-Bar v03.40 DIPS:0 F119 Serror Module V02.40 DIPS:0 IIC devices:		Update <u>U</u> SB Firmware Program Unknown PCB
D0h F11Ah Submaster Narrow 11h 0340h		Update IIC firmware
		opuate <u>n</u> o miniwale
		IO 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
		1
<u></u> lose		

USB Firmware	Check
(F11A) Submaster Module Narrow (V3.40) USB.C2	
IIC Firmware (DIPS 1 only)	Check



💊 PCB firmware update (V3.40.540.0)		—	
USB devices:			
F0C8 SMPTE MIDI Sound Card v03.40 DIPS:0 F0A0 DMX Card 40UT 1IN v03.40 DIPS:1 F0A0 DMX Card 40UT 1IN v03.40 DIPS:0 F0B0 Desklight v03.40 DIPS:0 F10A Playback Module II v03.40 DIPS:0 F11A Submaster Module Narrow v03.40 DIPS:0 F100 Programmer Module II v03.40 DIPS:0	- III	Update <u>U</u> SB Firmware	
F119 T-Bar v03.40 DIPS:0 F11P Screen Medule v02.40 DIPS:0	Ŧ	Program	
IIC devices:	_	Program Unknown PCB	
30h F100h Programmer II Keypad 11h 0340h 70h F080h 4x DigiBelt 01h 0340h 80h F080h TrackBall 01h 0340h		Update <u>I</u> IC firmware	
		IO 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.	
	-	<u>C</u> lear Log	
	_		
Close			

USB Firmware	Check
(F100) Programmer Module II (V3.40) USB.C2	
IIC Firmware	Check
(30-F100-11) Programmer II Keypad (V3.40) IIC.hex	
(70-F080-01) 4x DigiBelt (V3.40) IIC.hex	
(80-F080-01) TrackBall (V3.40) IIC.hex	



💊 PCB firmware update (V3.40.540.0)		—		
USB devices:				
F0C8 SMPTE MIDI Sound Card v03.40 DIPS:0 F0A0 DMX Card 40UT 1IN v03.40 DIPS:1 F0A0 DMX Card 40UT 1IN v03.40 DIPS:0 F0B0 Desklight v03.40 DIPS:0 F10A Playback Module II v03.40 DIPS:0 F10A Playback Module II v03.40 DIPS:0 F100 Programmer Module II v03.40 DIPS:0 F119 T-Bar v03.40 DIPS:0 F118 Screen Module 102.40 DIPS:0 F118 Screen Module 102.40 DIPS:0 F118 Screen Module 102.40 DIPS:0 F119 T-Bar v03.40 DIPS:0 F119 T-Bar Encoders 11h 0340h	* III +	Update <u>U</u> SB Firmware Program Unknown PCB		
		Update <u>I</u> IC firmware IO 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. <u>C</u> lear Log		
Close				

USB Firmware	Check
(F119) T-Bar (V3.40) USB.C2	
IIC Firmware (DIPS 1 only)	Check
(70-F119-11) T-Bar Encoders (V3.40) IIC.hex	



🔦 PCB firmware update (V3.40.540.0)	EXE VCB firmware update (V3.40.540.0)		—
	USB devices: F0A0 DMX Card 40UT 1IN v03.40 DIPS:0 F0B0 Desklight v03.40 DIPS:0 F10A Playback Module II v03.40 DIPS:0 F11A Submaster Module Narrow v03.40 DIP F100 Programmer Module II v03.40 DIPS:0 F119 T-Bar v03.40 DIPS:0 F118 Screen Module v03.40 DIPS:0 F118 Screen Module v03.40 DIPS:15	6:0 E	Update USB Firmware
IIC devices:	ram nown PCB		Program Unknown PCB
Update IO Delay 25	[IC firmware		Update IIC firmware IO Delay [ms]: 25
will only be active aft cycle of th	ion numbers ecome er power	*	Attention: New firmware and listed version numbers will only become active after power cycle of the device. Clear Log
Close	Close		

USB Firmware	Check
(F11B) Screen Module (V3.41) USB.C2	

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

