

Technical Instructions

2 December 2020

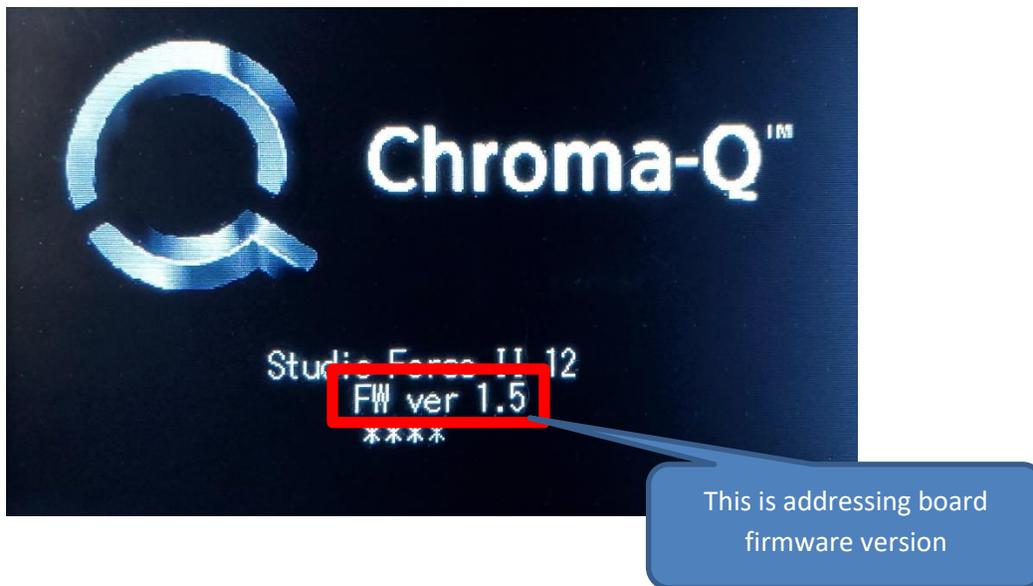
Chroma-Q CFII SFII - Procedure to update the Addressing board firmware

Introduction

It is possible a Chroma-Q fixture will require a new firmware update for its addressing board (display).

This procedure should only be performed by factory trained technicians.

Please note, the firmware version shown when the unit is powering up is the firmware version of the addressing board only, which is independent of the engine firmware (discussed further in this document).



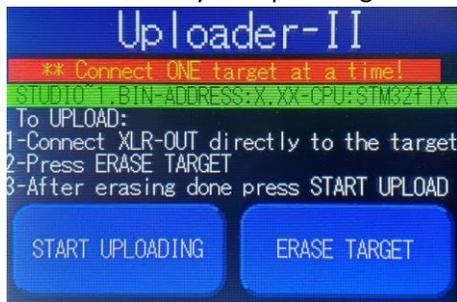
Preparations:

1. A Chroma-Q Uploader II will be needed for this operation.
<https://chroma-q.com/products/uploader-ii>
2. A Windows or MAC computer with USB port
3. A firmware file that can be downloaded from the Chroma-Q website
<https://chroma-q.com/support/downloads>
4. The downloaded zip file will contain multiple files, as in the example below. The file with **Addr** in the name is for the addressing board. 12, 48 and 72 fixtures use different addressing board firmware. You will need only one file. Example:

5.

- StudioForcell_Addr_App_12_v2.0-rc5.bin
- StudioForcell_Addr_App_48_v2.0-rc5.bin
- StudioForcell_Addr_App_72_v2.0-rc5.bin
- StudioForcell_Eng_App_v3.0-rc5.bin

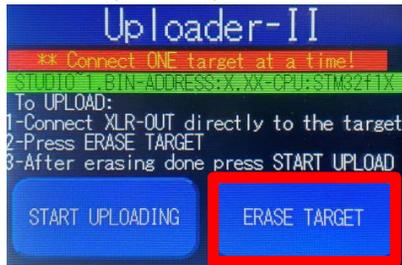
6. Connect the Uploader II to the PC and it will show as a USB drive.
7. Delete all files/folders from the Uploader II drive
8. Copy the **Addr** firmware file to the Uploader II memory. **It is very important that there's only one file in the memory.** If a MAC is used, make sure to delete any extra hidden files that the MAC OS typically also copies.
9. **Once copied, unplug the USB cable from Uploader II,** wait a few seconds and plug it back.
10. The Uploader should now show the addressing board firmware and its version on the display, and is now ready for uploading.



11. If the Uploader II shows an error here, it is most likely there are more than one files in the memory. Make sure the PC is set to show all hidden/system files

Uploading the Addressing Board

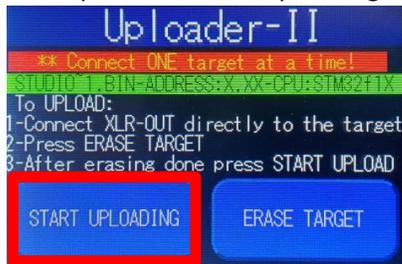
1. Connect the Uploader II to a **single fixture** using a data cable (XLR 5 pin)
(**DO NO LINK MULTIPLE FIXTURES TOGETHER**, it could brick the fixture firmware)
2. Power up the fixture
3. On the Uploader press the “Erase Target”



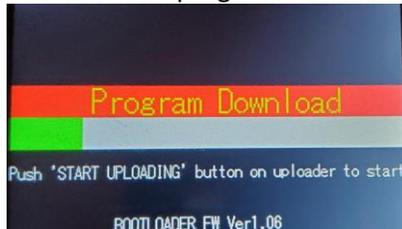
4. Wait until the erase command is completed



5. Then, press the Start Uploading button on the Uploader II



6. Wait until the program download is done



7. If successful the display will show a green rectangle with a “Checksum Matched”. Wait a few seconds and the fixture will restart automatically



If not successful, the invalid checksum will show in a red rectangle. No panic, the upload procedure will simply have to be redone. Unplug / plug the USB from the Uploader and restart the fixture. Then jump to step number 5 to upload firmware again. (no need to erase target)

8. The fixture is now ready to be used. Note that all settings, programmed looks and DMX address are reset to factory default after an addressing board firmware update.

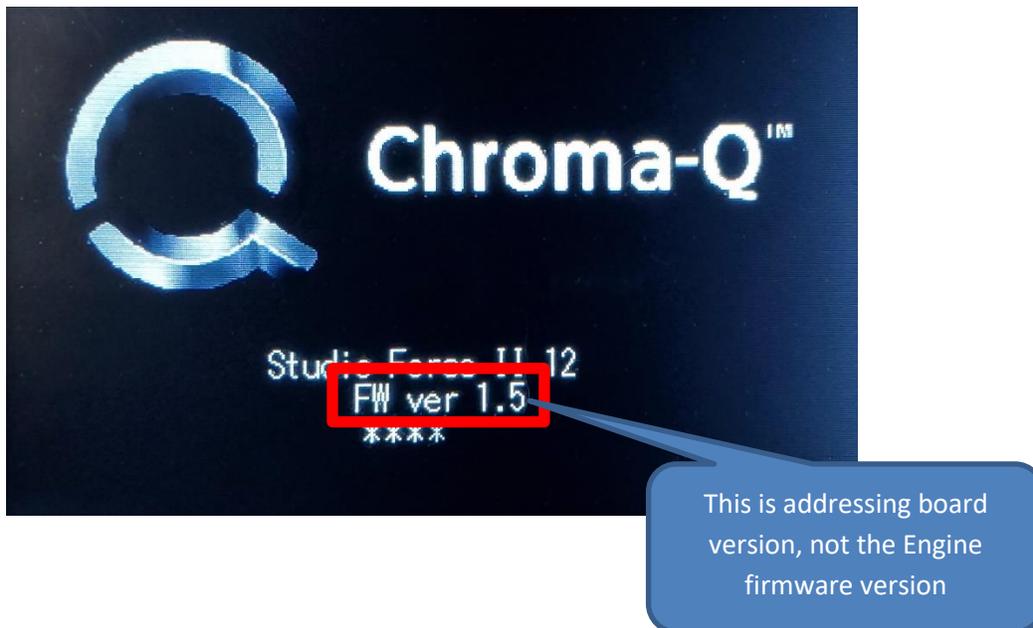
Chroma-Q CFII SFII - Procedure to update the Engine firmware

Introduction

It is possible a Chroma-Q fixture will require a new firmware update for its LED engines.

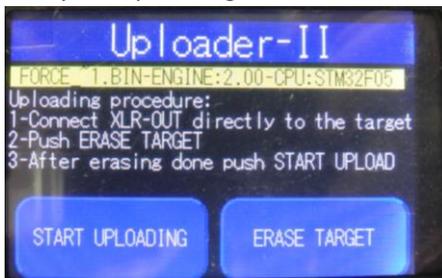
This procedure should only be performed by factory trained technicians.

Please note, the firmware version shown when the unit is powering up is the firmware version of the addressing board only, which is independent of the engine firmware discussed in this document.



Preparations:

1. A Chroma-Q Uploader II will be needed for this operation.
<https://chroma-q.com/products/uploader-ii>
2. A Windows or MAC computer with USB port
3. A firmware file that can be downloaded from the Chroma-Q website
<https://chroma-q.com/support/downloads>
4. The downloaded zip file will contain multiple files, as in the example below. For this update, you will only need the file with **Eng** in the name.
5. Example:
 - StudioForcell_Addr_App_12_v2.0-rc5.bin
 - StudioForcell_Addr_App_48_v2.0-rc5.bin
 - StudioForcell_Addr_App_72_v2.0-rc5.bin
 - StudioForcell_Eng_App_v3.0-rc5.bin
6. Connect the Uploader II to the PC and it will show as a USB drive.
7. Delete all files/folders from the Uploader II drive
8. Copy the **Eng** firmware file to the Uploader II memory. **It is very important that there's only one file in the memory.** If a MAC is use, make sure to delete any extra hidden files MAC OS will also copy.
9. Once copied, unplug the USB cable from Uploader II and wait a few seconds and plug it back.
10. The Uploader should now show the engine firmware and its version on the display and is now ready for uploading.



11. If the Uploader II shows an error here, it is most likely there are more than one files in the memory. Make sure the PC is set to show all hidden/system files

Uploading the LED Engine Board

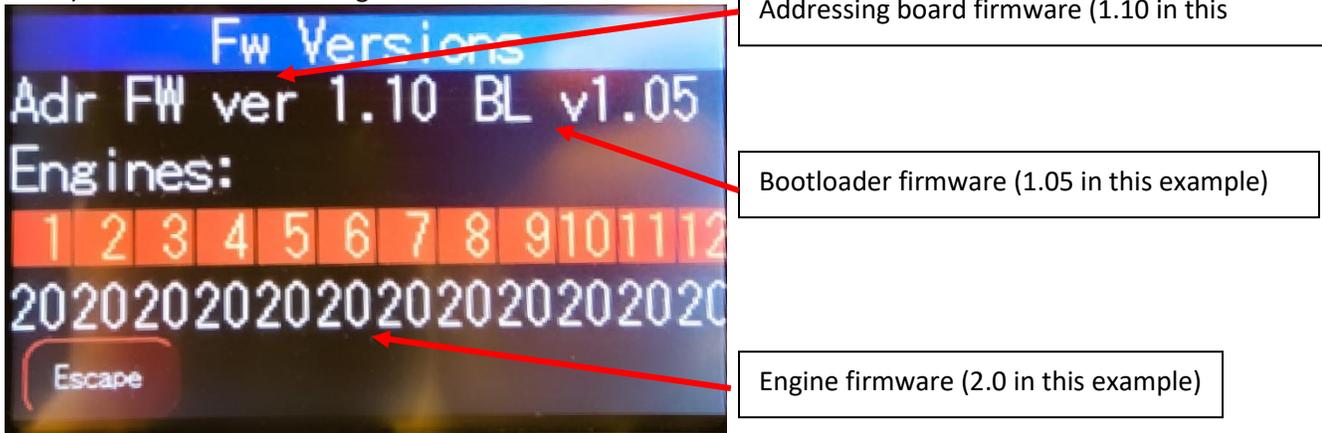
1. Connect the Uploader II to a **single fixture** using a data cable (XLR 5 pin)
(**DO NO LINK MULTIPLE FIXTURES TOGETHER**, it could brick the fixture firmware)
2. Power up the fixture
3. From the main menu press **Setup**



4. From the setup menu press **Fw Version** to verify the current version



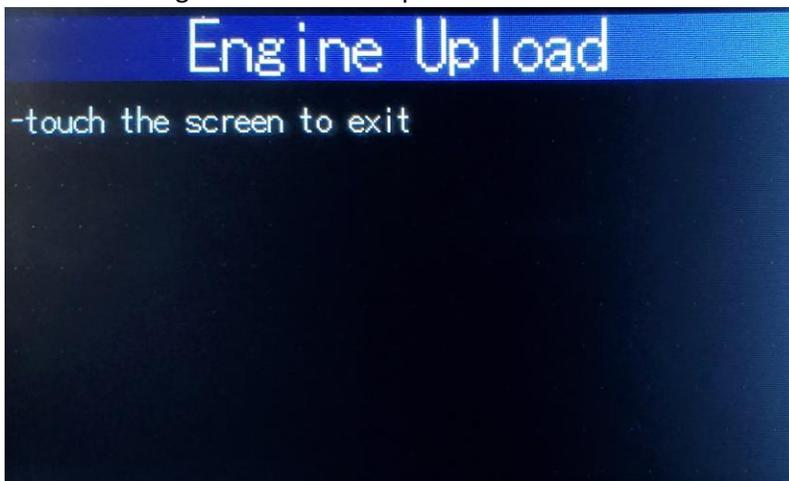
5. The display will show three numbers: 1) the addressing board version, 2) the bootloader version and 3) the version on each engine.



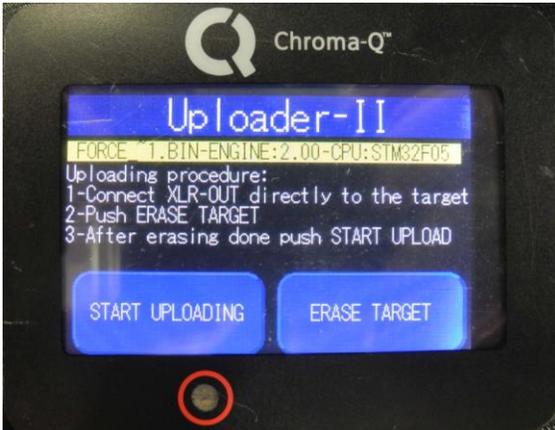
6. Press **Escape** to go back to the Setup menu



7. Press **Upload ENG**, the fixture is now ready to upload. Act promptly to the next step before it times out and go back to the setup menu.



8. Back to the Uploader II, press the **“Erase Target”**



9. The fixture should blink for a few seconds.



10. When the blinking has stopped and only shows alternate red cells, press **“START UPLOADING”**.
Once the firmware has been uploaded correctly, all cells will turn blue.



11. After the fixture has restarted, confirm the firmware update by accessing Setup -> FW Version.
For example, if it was 2.0 before and now 2.1, it will read 21



12. Coffee time!