

## Introduction

Loading new firmware or presets uses the same “Flash Loader” utility that is bundled with the firmware or presets “bin” (binary) file. Firmware (or Program) files have the prefix “LTAM”, and preset files have the prefix “LTAR”.

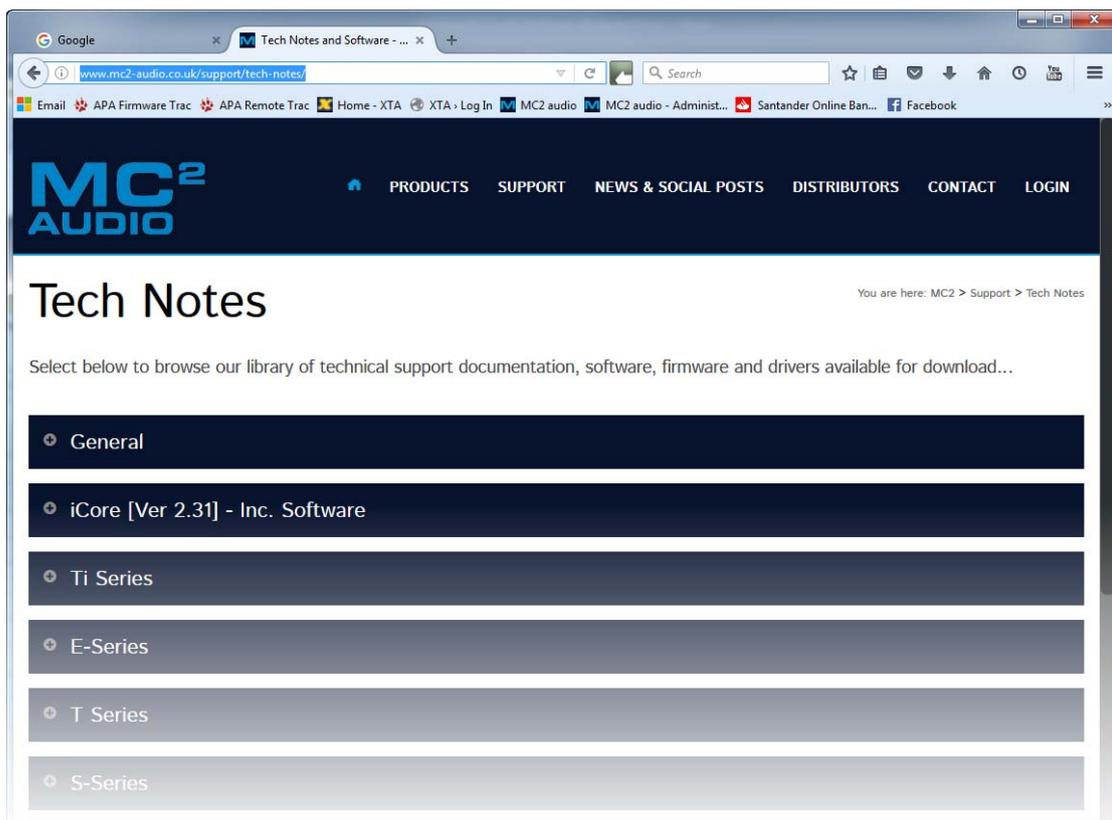
## Amplifier Communications Set-up

Updates can be performed through an Ethernet, US or RS485 connection. Choose the correct port on the amplifier and configure it accordingly through the Interface Sub-menu. See page 48 in the operators manual for more info on choosing the interface.

## Download the Files

Go to the Support > TechNotes section of the MC2 website to find the latest firmware or presets – these will be bundled with the “Flash Loader” application that is used to connect and update your amplifier.

<http://www.mc2-audio.co.uk/support/tech-notes/>

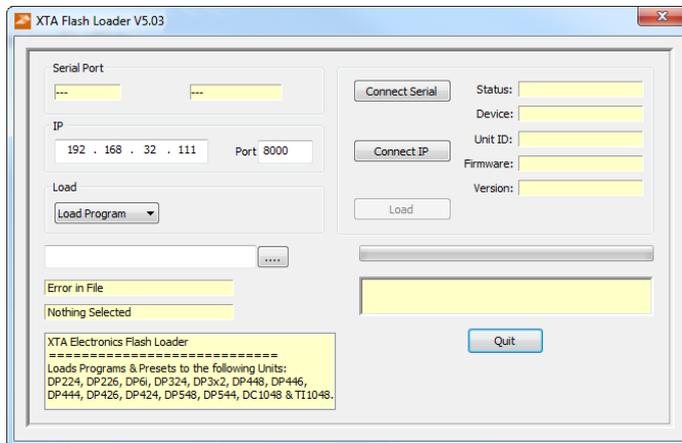


Unzip the files – you will have the loader application, and the firmware or preset file as appropriate.

### Connect To The Amplifier

Plug in the appropriate cable according to your chosen connection method. Remember – if you are connecting via an USB or RS485, you will need to make sure your amplifier is set to ID1 for the loader to find it.

Start the loader application:

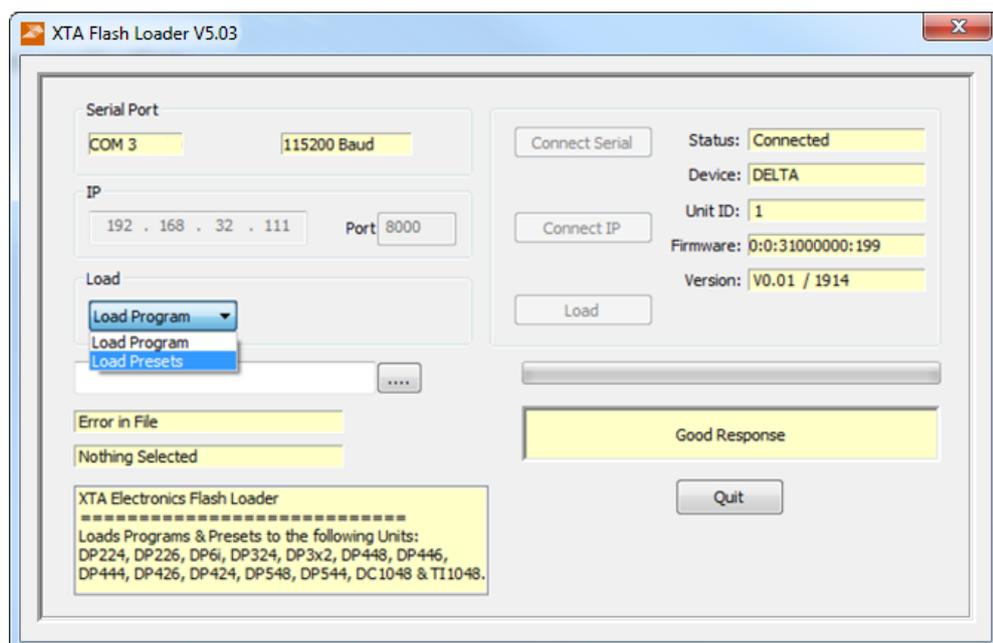


Press the “Connect Serial” button if using USB or RS485, or “Connect IP” if using an Ethernet connection. **We recommend you choose either a USB or wired Ethernet connection.**

After a few seconds, the unit should be located and its status and type should be displayed, along with the current firmware and some other information.

### Choose What To Load

From the drop-down list under “Load” choose either “presets” or “program” (firmware), and then locate the correct file by pressing the “...” button.

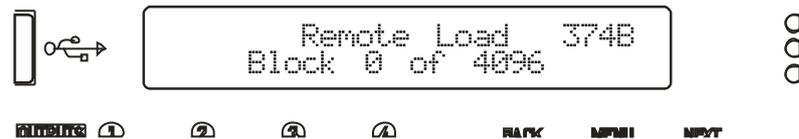


## Delta Series: Upgrading Firmware & Loading Presets

The file type will have been filtered for you – LTAM\*.bin for firmware (program) files or LTAR\*.bin for preset files. Start The Update!

Just before you press the “Load” button – please close any other applications running on the PC – interruptions in the process could render your amplifier inoperable. Do not disconnect the cable, turn off the power or attempt to close the loader app once loading has begun!

Now that you have been warned (!) – press the “Load” button. Confirm the load, and the amplifier will switch to Standby and begin to load the new firmware. A message detailing progress will accompany the bar on the loader app:



Upon completion, the app will close and your amplifier will restart – that’s it!

### *What If It All Goes Wrong...*

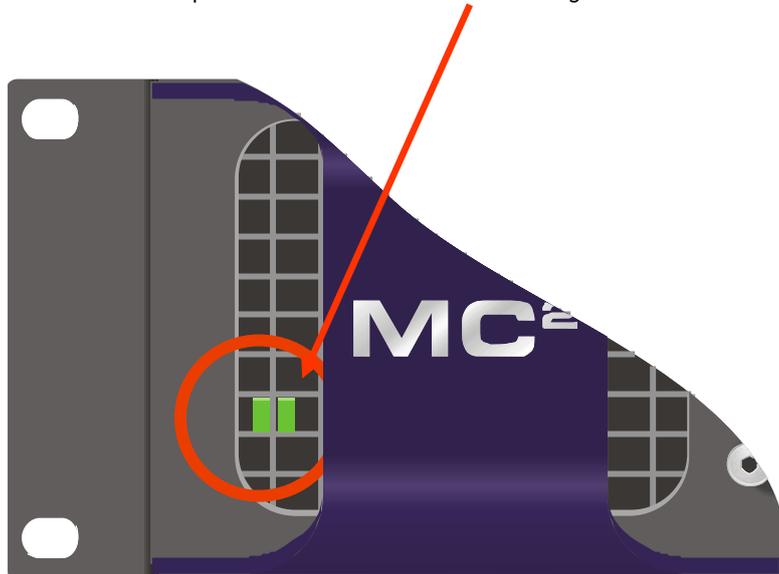
Don’t panic! Your amplifier can be recovered, but please be aware that...

**THE AMPLIFIER OPERATES AT VOLTAGES IN EXCESS OF THE INCOMING MAINS VOLTAGE, AND THESE VOLTAGES REMAIN PRESENT FOR AN EXTENDED PERIOD AFTER MAINS POWER IS REMOVED!**

**READ THESE INSTRUCTIONS CAREFULLY AND HEED ALL WARNINGS!**

Disconnect your amplifier completely from the incoming mains supply.

Ensure that the HT present LEDs visible here through the front left vent with the foam removed...

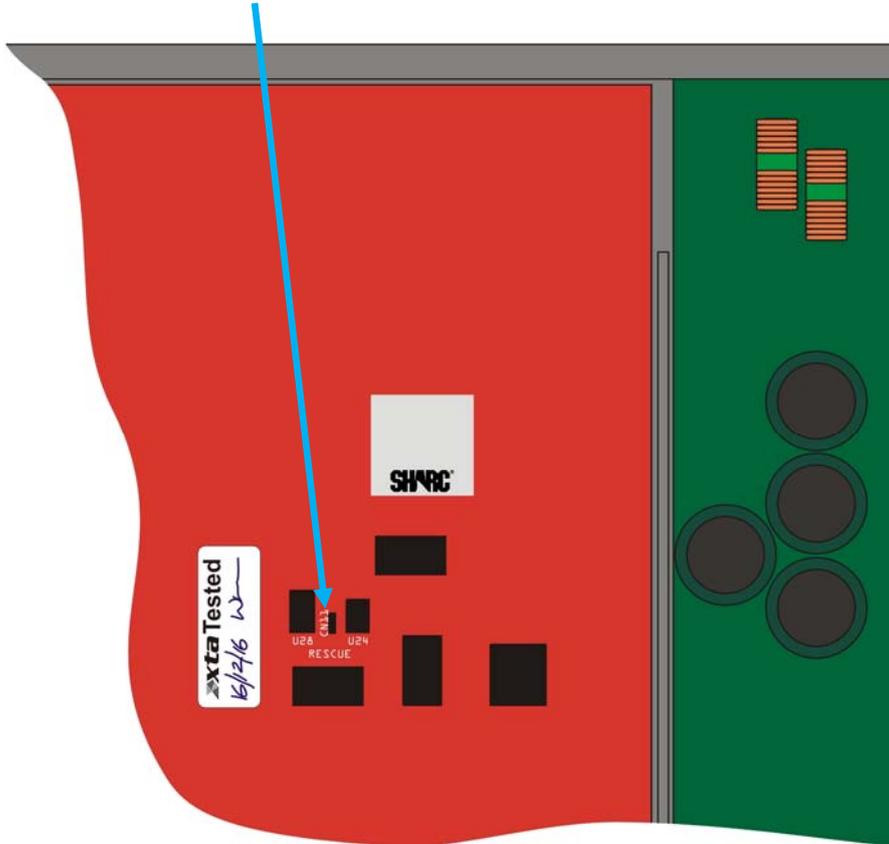


...are fully extinguished before continuing. This will take **at least five minutes** so please be patient for your own safety.

## Delta Series: Upgrading Firmware & Loading Presets

It is now safe to remove the top cover of your amplifier – there are four screws (Torx) along each side and eight on the top of the cover. Be careful not to drop any screws inside!

Locate the “Rescue Recovery” link CN11 – between ICs U24 and U28 on the top circuit board - and remove it. This will make your amplifier run in recovery mode – the original firmware version loaded at the factory will now be active.



Replace the top cover temporarily, reapply mains power and switch on. Once booted, check the interface is set as required and perform a program update again using the Flash Loader application.

The display will show an additional “R” next to the Remote Load message to show rescue mode is active:



Upon completion, the app will close. Disconnect the power and wait for at least five minutes until the HT Present LEDs have fully extinguished again.

Remove top cover and replace the “Rescue Recovery” link once more. Replace top cover and screw down, and replace the filter foam in the left hand front vent.

Your amplifier should now be fully operational again – no settings will have been lost in the process.