Martin Audio Engineer 418 & 818

Firmware v1.01 Upgrade Instructions

Do I need it?

The Firmware Upgrade is essential for all Engineer 418's purchased prior to April 2009 to enable them to work with the Engineer Mk2 software. They will of course still work perfectly with the Mk1 software supplied with them but we would encourage anyone using an Engineer 418 regularly to upgrade as the Mk2 software is a major step up in features and ergonomics.

Please be aware that the Mk2 software is <u>not</u> backwards compatible and Mk 1 projects and presets cannot be loaded

Owners of Engineer 818's purchased prior to April 2009 may also upgrade, this is not essential as all 818's are designed to work with the Mk2 software but the new Firmware addresses a couple of issues; in the existing Firmware there is a possibility that the Engineer could lose incoming data, when it was received in a small timeframe, approximately 10 seconds after receiving the previous incoming data, while the flash memory was busy storing the workspace. This issue is fixed in this new version. Also the Engineer could send a double set of acknowledgement databytes in response to a flash ready request command coming from the software. This is also fixed.

Before Starting

First you need to download the Engineer Firmware v1.01 from the Martin Audio ftp site. This is a zip file and it will need to be unzipped into a folder somewhere convenient on your PC hard drive such as the desktop.
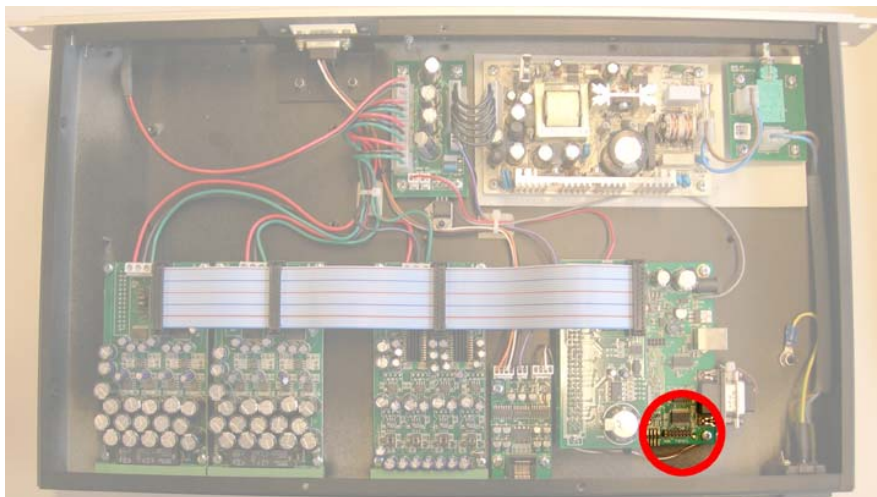
The final part of the upgrade is to re-load a default, blank project to the device so you will need a copy of the Engineer Mk 2 software. If you do not already have a copy installed it can be downloaded from the Martin Audio ftp site in the same location as the Firmware upgrade file.

Next it is essential that you close any versions of the Engineer Software that you may have been running; even if you are not connected to a unit there will be conflicts with the COM port used to connect to the device for the upgrade.
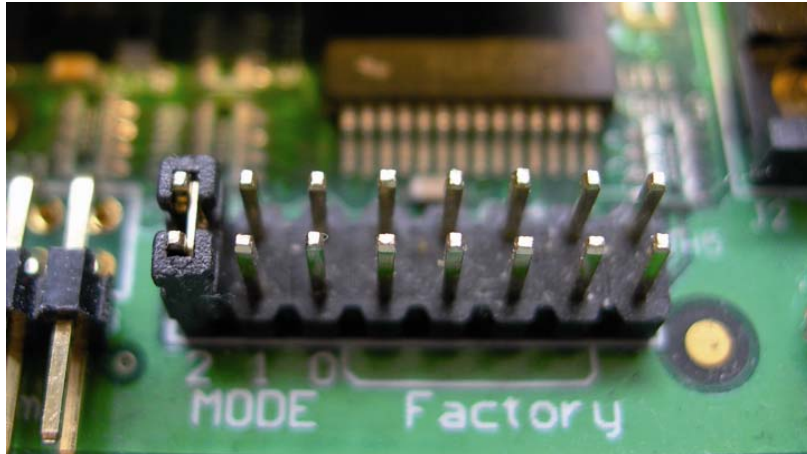
Please close all other applications that may use the same COM port to allow uninterrupted communication during the upgrade.
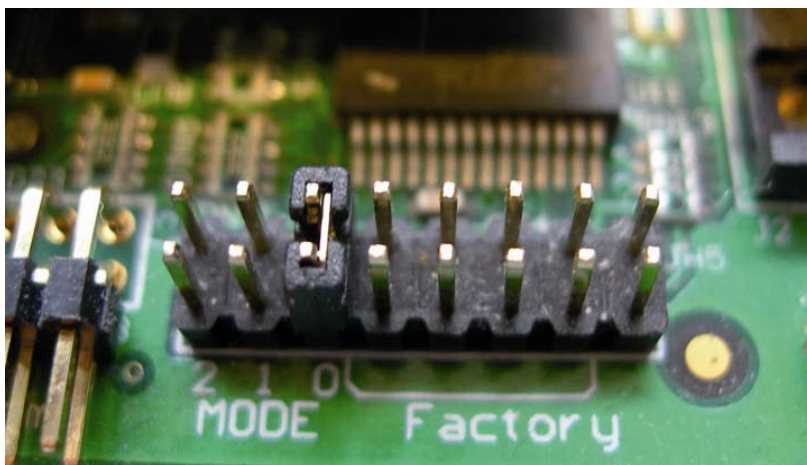
Start the upgrade

1. First you MUST disconnect the power from the Engineer to be upgraded; there are exposed mains connections inside the unit, turning the power off using the recessed on-off switch is NOT sufficient.

2. Next remove the lid of the Engineer by removing all screws. On an Engineer 418 there are 3 screws on the top and 2 on each side to be unscrewed.

3. You now need to locate the service jumper which is at the back of the unit in the corner close to the power inlet;-
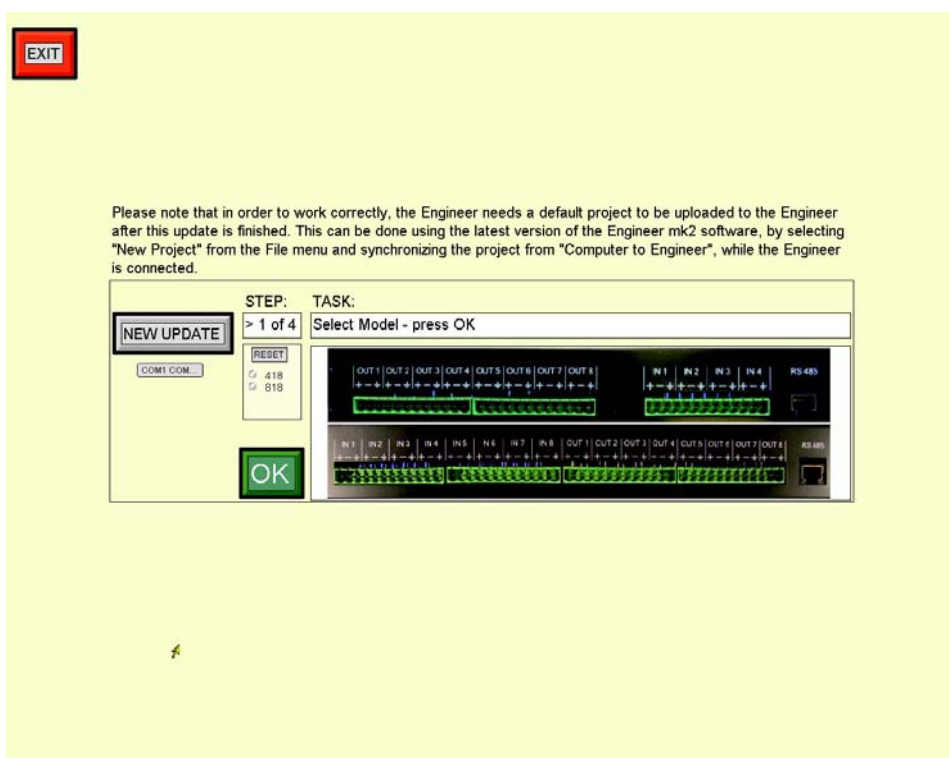
4.   The Jumper will be in the "Mode 2" position for normal use;-

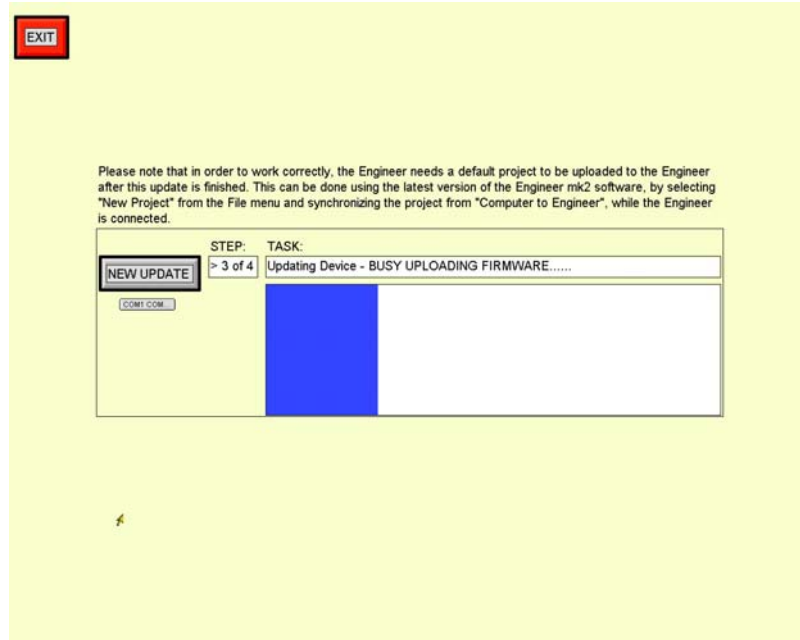It will need to be moved to "Mode 0" for the upgrade;-

5.   Next connect the Engineer to your PC with an RS232 cable but do not re-connect the power just yet.

6.   Now open the Engineer Firmware folder and run the Engineer Firmware Loader 1_01 application, click 'New Update' and this is how the window appears;-

As you can see the Window shows the rear panel of both the 418 and 818, click on whichever device you are going to update and the other rear panel disappears
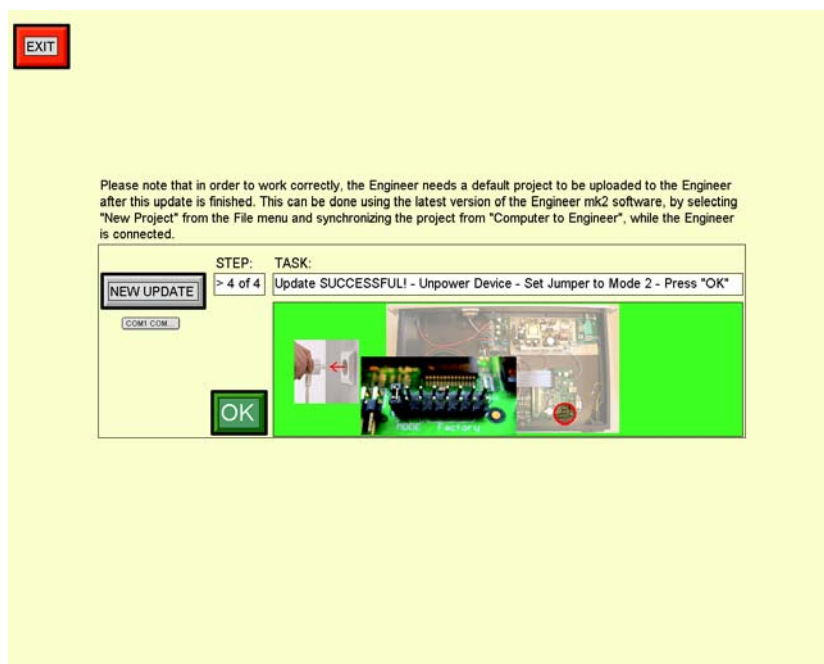
7.   Now click on the Com panel to select the correct COM port, usually COM1 for most PC's

8.   Now click 'OK' it will tell you to un-power the device and move the jumper but you should already have done this. Now re-connect the power, the application will detect the device via the COM port and the upgrade will start;

Upgrade in progress

You will see the large blue status bar move across from left to right indicating the progress of the upgrade. This will take a couple of minutes to complete depending on the speed of your PC
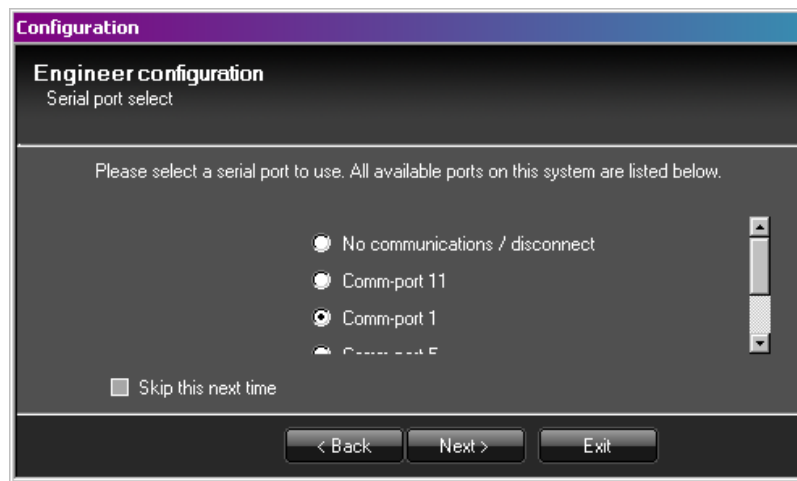
9.   When the upgrade has finished it will do a self check and if all is well you will see this window;-
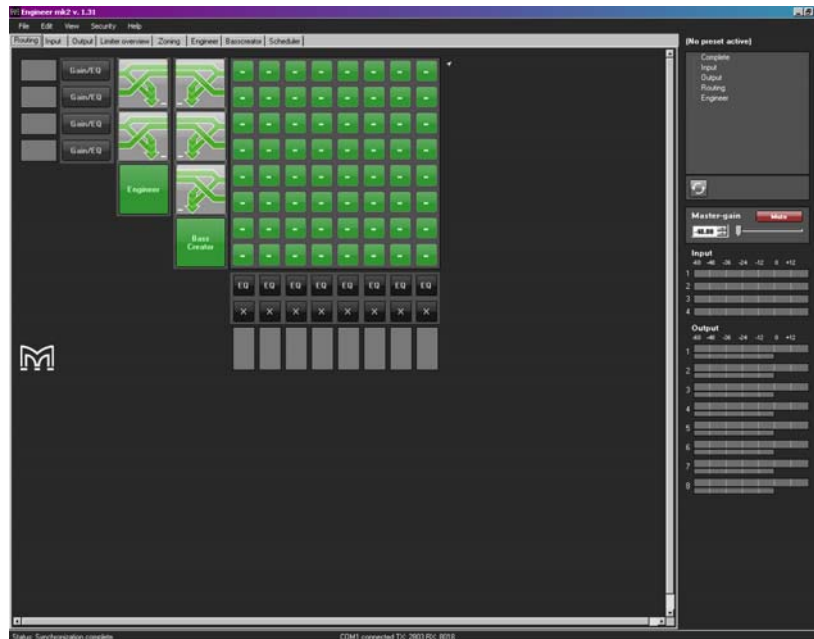

Disconnect the device and move the jumper back to "Mode 2". Click OK in the software and the upgrade is complete; you can click on 'New Update' to upgrade further units or click 'Exit' to move on to the final step.

10.   If the upgrade failed for any reason, click on 'New Update' and start the process again.

11. Replace the lid on the upgraded Engineer and re-connect power. Now run the Engineer Mk2 software so we can restore a default project.

12. Open the software and select the correct COM port to connect to the device

13. The software will upload the settings from the device which will be random following the Firmware upgrade;

14. The Log In window will appear. On a 418 the password will have been changed to the default "MA**". If you had previously changed the log in to your own password you will need to go into the security settings and restore your previous password(s)**. If you have upgraded an 818 your existing password will be retained (which is MA if you have not changed it).

15. Once logged in click on the File menu and select New Project. A window will appear warning you that this will overwrite the existing project, click 'Yes'

16. Another window will appear telling you that you will need to Synchronise to use the project, click on 'Yes'. The default project will now be uploaded to the device.

17. You can test the success of this by exiting the software and running it again, connecting to the device as before. Once the software has uploaded the settings from the device you should see the default project. Now the Engineer is ready for use with all future projects designed using the Mk 2 software.

Finished!