

M850 Firmware Update Procedure

To update the firmware, the M850 must be connected to a PC running a Windows™ operating system.

Down load “M850 Firmware Update” (“M850fwUpdate-Vx-yyyymmdd.exe”) from the Software page of our website.

Items required:

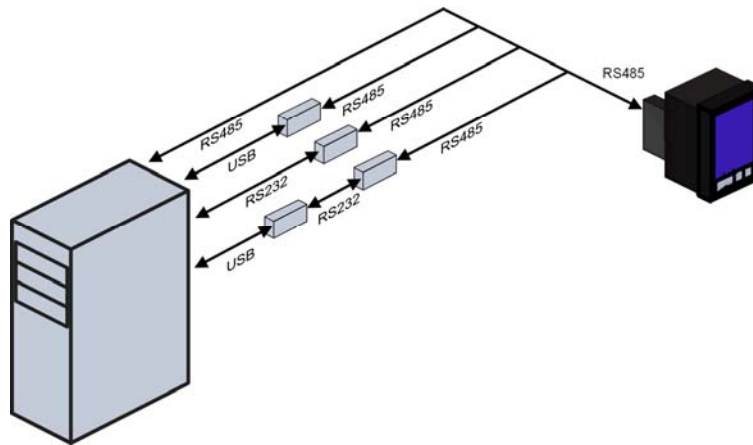
The file “M850fwUpdate-Vx-yyyymmdd.exe”

A PC running a Windows™ operating system with one of the following ports installed:

USB, RS232, RS485

An RS485 pod to insert into the port of the meter if not already installed (see below)

An RS485 to either RS232 or USB converter, depending on the installed port (see below)



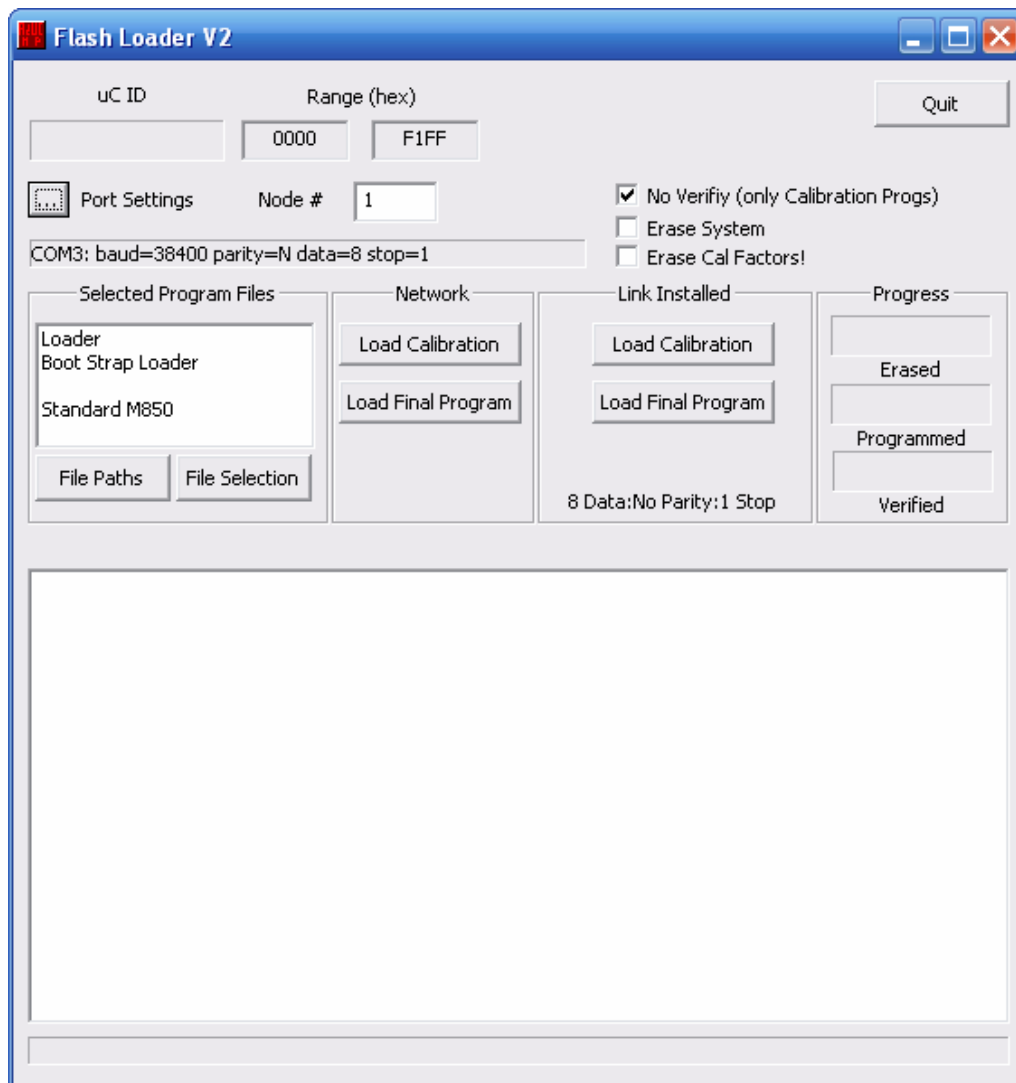
Connect the meter to the PC using one of the above converter configurations.

Switch the meter on.

Start the MultiView application and establish communication with the meter.

Click on the [**Flash**] button.

The Flash Loader will open (below)



Set the address (Node #) of the meter to be updated.

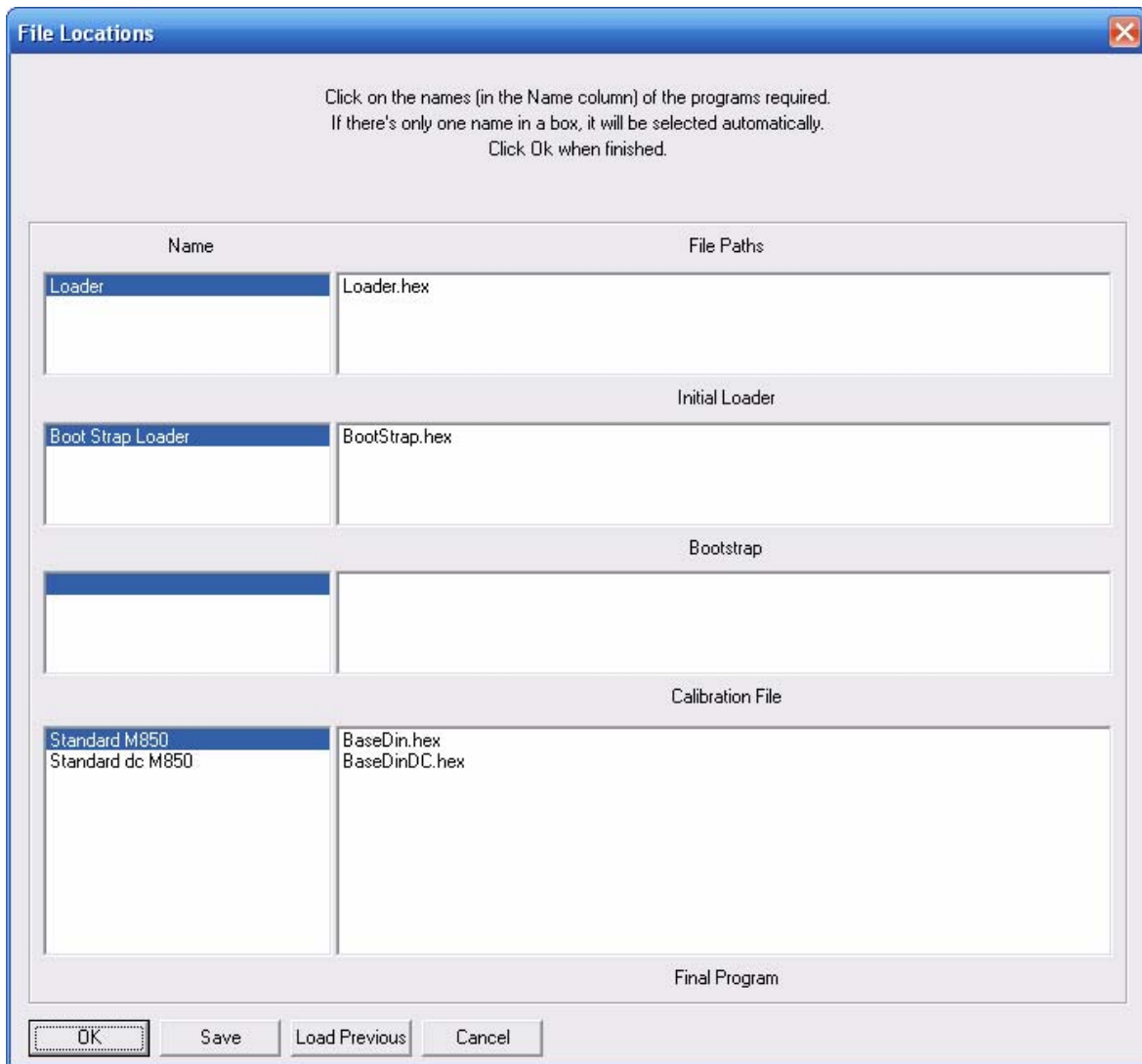
If the programs displayed in the 'Selected Program Files' section are correct, click on [**Load Final Program**] in the "Network" section. Alternatively, change the Final Program to another one as directed below and then click on [**Load Final Program**] in the "Network" section.

Progress of the installation will be displayed.

Important: when the programmer has gained control of the meter, the meter's display will blank. This isn't an indication that the power is turned off.

Interrupting the programming process, either by disconnecting the meter from the pc or by turning the meter or pc off, will corrupt the meter's internal flash memory and render the meter inoperative.

To change the Final Program to another, click on the **[File Selection]**.



The dialog box is titled "File Locations" and contains the following text: "Click on the names (in the Name column) of the programs required. If there's only one name in a box, it will be selected automatically. Click Ok when finished."

Name	File Paths
Loader	Loader.hex
Initial Loader	
Boot Strap Loader	BootStrap.hex
Bootstrap	
Calibration File	
Standard M850 Standard dc M850	BaseDin.hex BaseDinDC.hex
Final Program	

Buttons: OK, Save, Load Previous, Cancel

Select the required firmware and then press [OK]

If for any reason the installation fails and the meter does become inoperative, the procedure described below will have to be used to recover the meter:

There are four stages to recovering a corrupted flash program:

1. The insertion of a link on the pcb of the pod that fits into the rear of the meter.
2. Loading the program.
3. Removal of the link
4. Testing the update

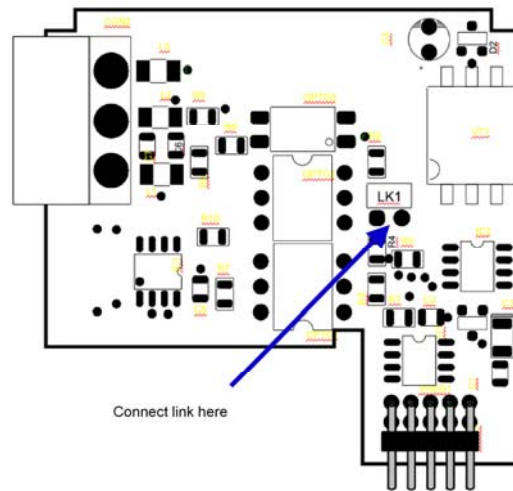
Turn off the power to the Meter.

Disconnect the RS485 cable by pulling the plug from the pod.

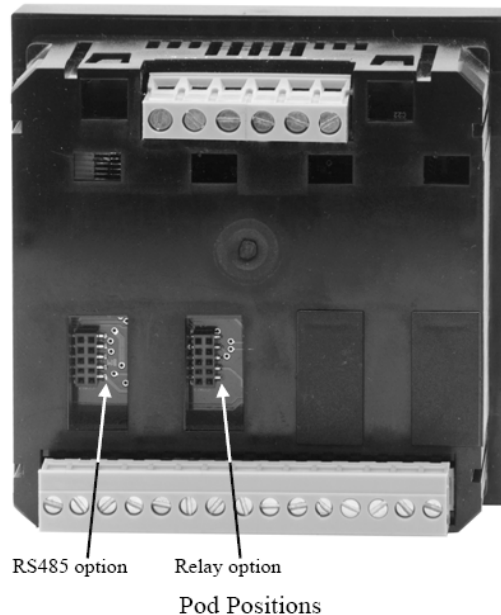
Extract the pod from the back of the meter by easing the clips down with a small screwdriver and pulling away.

Unclip the lid and remove the pcb from inside the pod.

Using a small piece of wire short out and solder the two pads as illustrated below.



Carefully insert the pcb into the back of the meter in the indicated position and reconnect the RS485 cable.

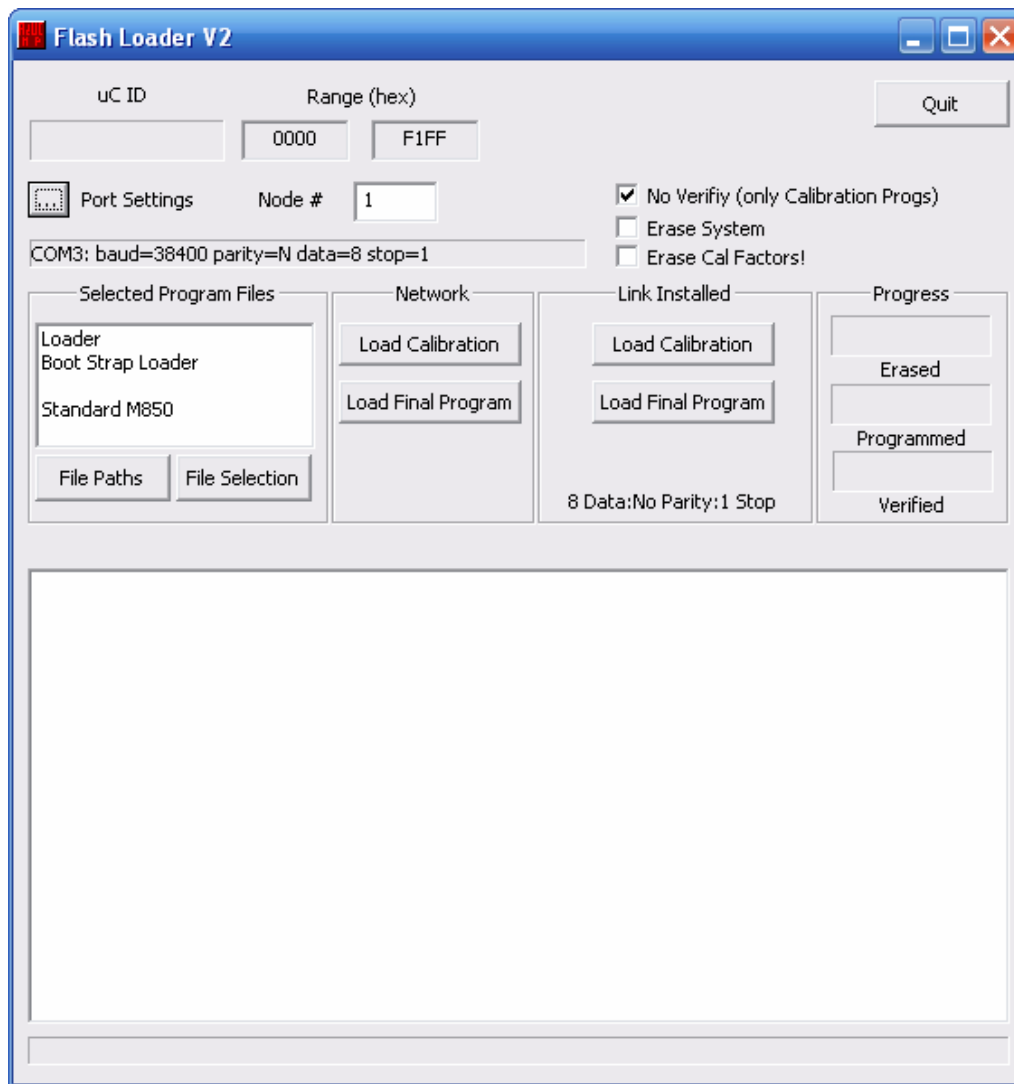


Start the MultiView program and set the port setting to **38400 baud, No Parity, 1 stop bit**.

Click on **[Flash]**

The Flash Loader will open (FL)

N.B. The flash loader must be started before the meter is powered up.



Power on the meter – some or all of the display segments will light.

Click on **[Load Final Program]** in the “Link Installed” section.

If the unit fails to load, disconnect one auxiliary lead for five seconds then reconnect and try **[Load Final Program]** in the “Link Installed” section again.

When the program has finished loading, click **[Quit]** to return to MultiView.

Turn off the power to the Meter.

Extract the RS485 pod, remove the link, reassemble the pod and reinsert the pcb into the meter.

Reconnect the RS485 cable.

Turn on the power to the Meter.