

BA03 CHARGER/BDX UPDATE PROCEDURE



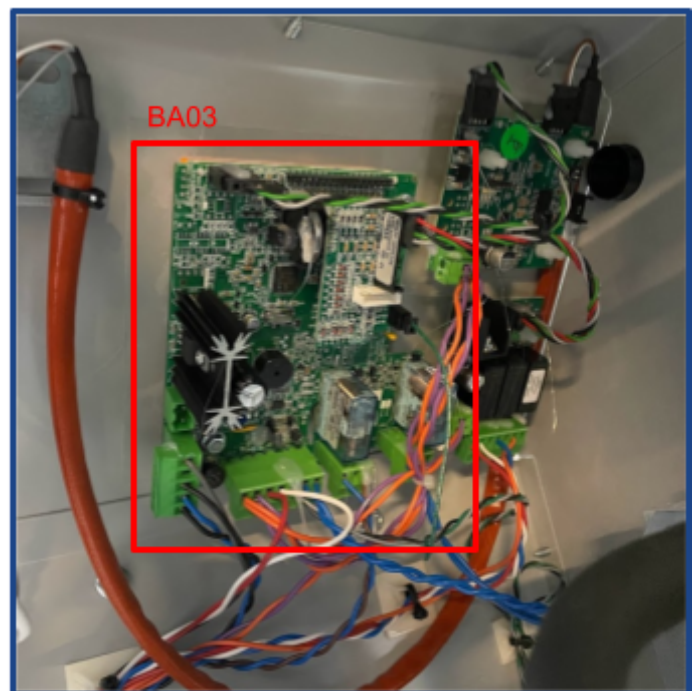
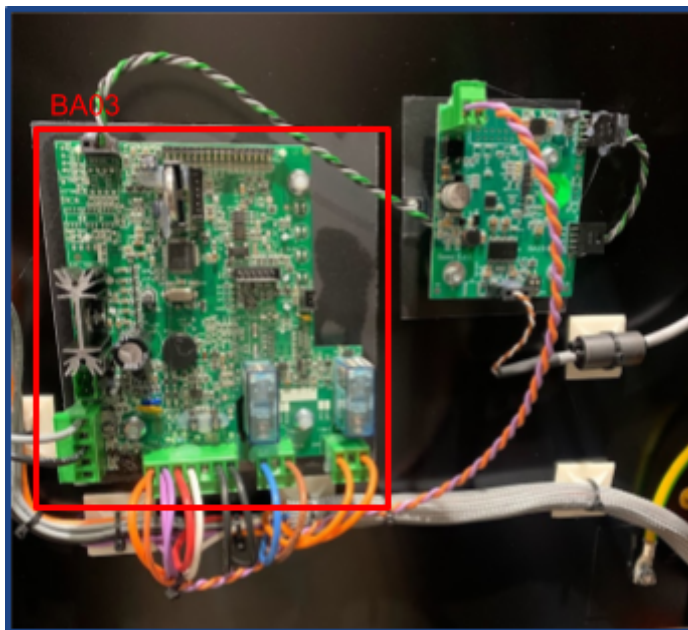
Updating Your Charger/BDX

This guide will take you through the steps to properly update your charger or BDX's firmware and settings to allow the charging/discharging process.

STEP 1: LOCATING THE BA03

Cut off the power to the charger/BDX. Open the charger's front panel door. Locate the BA03*. On the BDX unit you will need to remove the side panel on the right.

*L shaped card located on the inside of the front panel as demonstrated in the image below. It is also known as the display card.



STEP 2: INSTALLING THE MPLAB IDE/IPE.

Using the link below install the MPLAB IDE in its base configuration. (Download version 5.50)

<https://www.microchip.com/en-us/tools-resources/archives/mplab-ecosystem>

STEP 3: CONNECTING YOUR PIC KIT

Connect your pic kit 3.0 and above device to your computer



STEP 4: CONFIGURING THE MPLAB IPE.

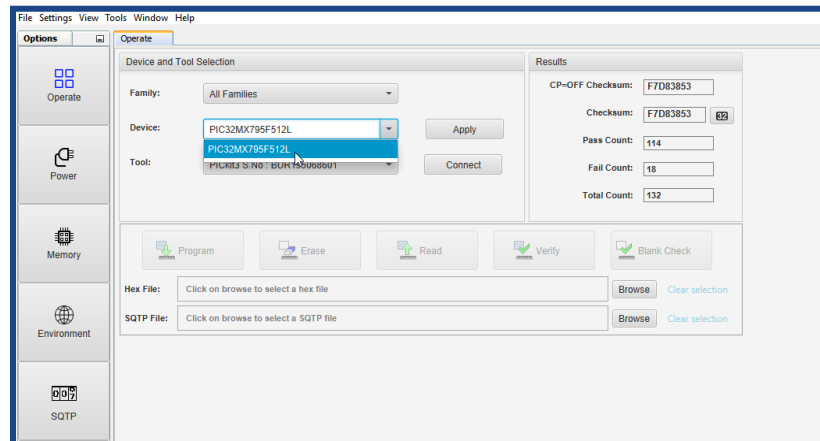
Launch the MPLAB IPE. (P.N. For this guide we'll be using the IPE and not the IDE)



Go to settings at the top left and enable advanced mode.
The default password is “microchip”.

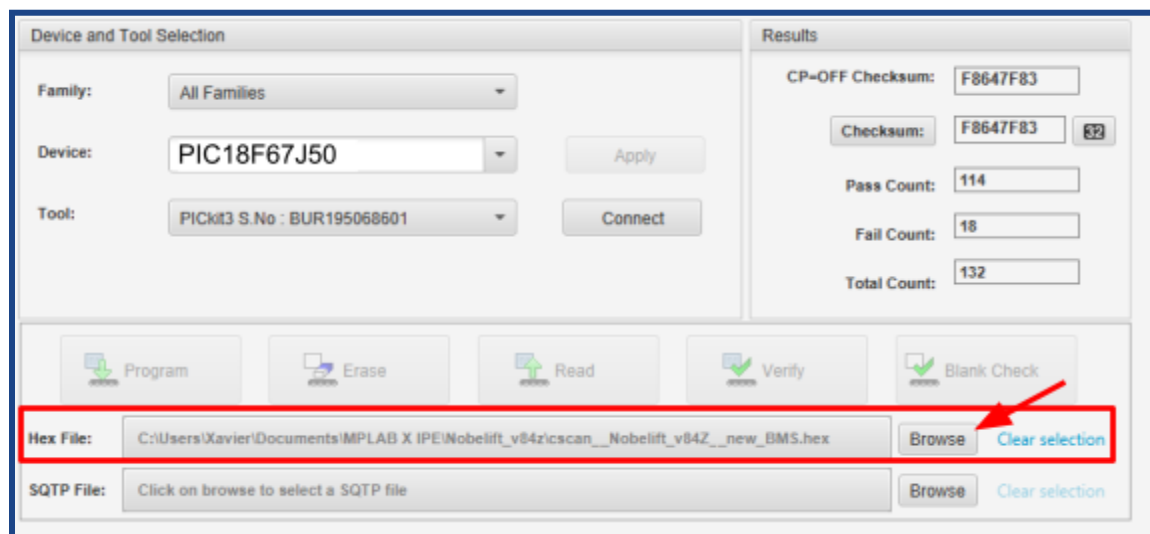
In the Device section enter the following PIC id:

PIC18F67J50



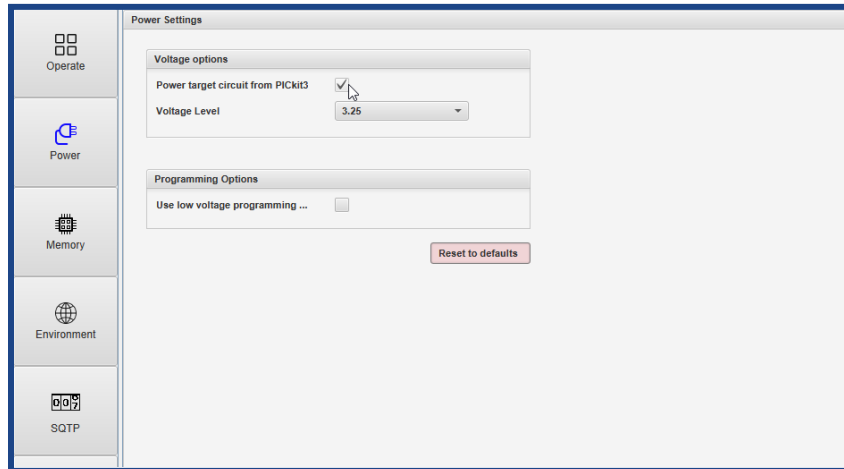
Click apply

Hit browse Hex File and select the firmware provided.



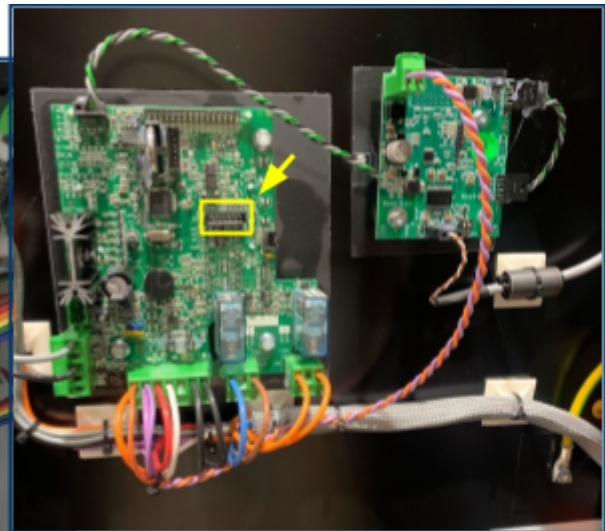
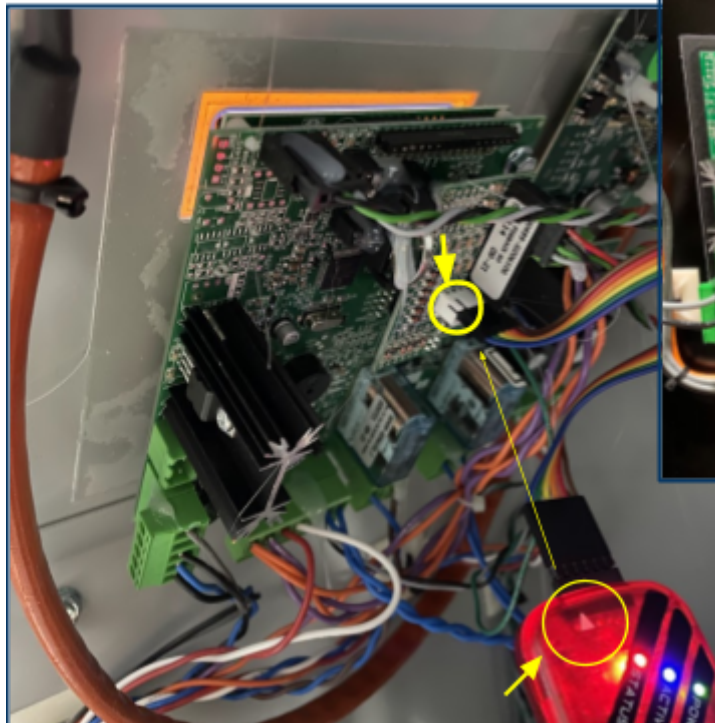
You should see “Hex file loaded successfully” in the output IPE.63p

Make your way to the Power tab and check:
Power target circuit from PICkit3 OR Power target from PM3
depending on your software version.



STEP 5: PROGRAMMING THE BA03

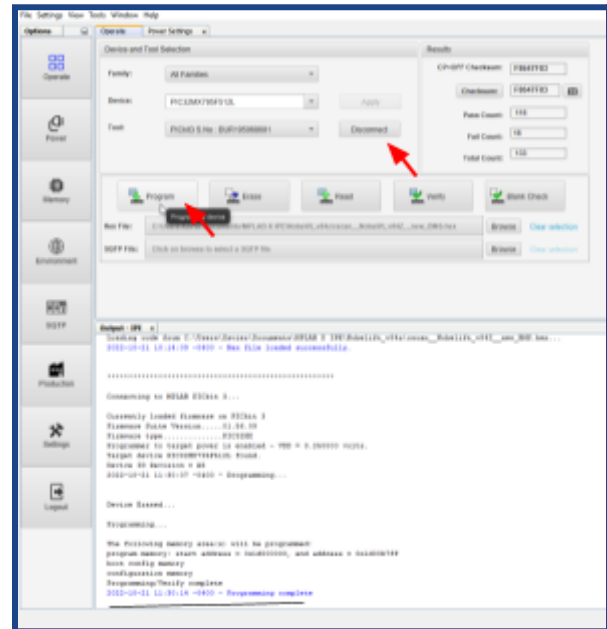
Connect your PICkit so that the left most pin of the BA03 is connected to the arrow as demonstrated in the image below.



In the Operate tab press Connect

Wait for the target device to be found in the Output IPE and press Program.

The Output IPE should say Programming complete



STEP 6: VERIFYING THE SOFTWARE

If you wish to verify that the update worked properly, return the power to the charger and wait for the display to state system ready.



Hit the up arrow until you reach **VERS. SOFTWARE**

If the update worked properly you should see the firmware version you installed.

Ex: BDX Cycling should be V. 10U

STEP 7: APPLYING DEFAULT SETTINGS

Hold the down key until you are prompted to enter a password and enter the following key combination:

UP UP UP DOWN DOWN

You should be entering the manufacturer mode. Using the UP or DOWN arrow make your way to the special settings function. Hold enter for 2 seconds until the LED blinks go up by one until it states **DEFAULT SETTING**. Hold Enter once more to apply.

STEP 8: SET BDX SENSOR CALIBRATION

While remaining in the programming window make your way to the EXT. LEM SENSOR function. Hold enter for 2 seconds and go down by 1 to set A to 0. Hold enter once more to exit the function.

Turn the BDX off and then on.

