

C445 Firmware Upgrade Process

Firmware Upgrade Process Using Modbus Connection

Required Hardware

1 - Computer

1 - RS485 converter (Suggested: C445XS-USBLEADS; Eaton style# 3-4355-001A)



Note: If usb drivers are needed, they are part of the Power Xpert C445 One Installer package and can be downloaded at link below

<https://www.eaton.com/us/en-us/catalog/machinery-controls/power-xpert-c445-intelligent-motor-management-relays.resources.html>

Required Software

Power Xpert inControl – Firmware Upgrade Tool (V1.4.3.44)

See “Power Xpert Firmware Upgrade Setup V1_4_3_44.exe” in package



C445 Firmware Upgrade Process

Firmware

C445 Package 63 Release

Procedure

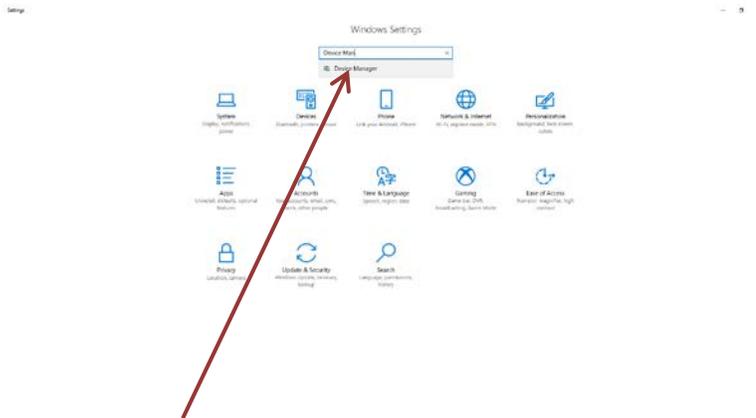
1. Connect the RS485 converter to the computer usb port & RS485 port on the BCM.
D0 wire (yellow) to the D0 terminal
D1 wire (brown) to the D1 terminal
C wire (green) to the C terminal



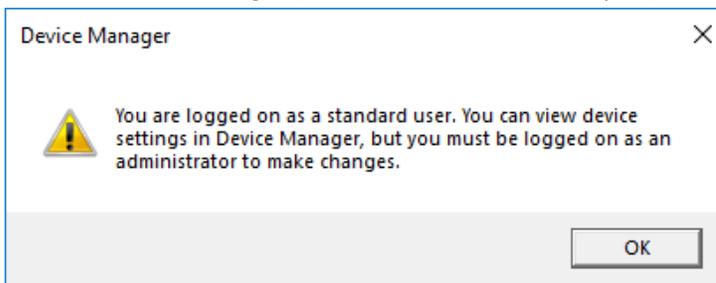
Note: If RS485 port does not exist on BCM, either CH1 or CH2 communication port will need to be used for reprogramming

2. Apply control power to the C445 system.
3. From the Start menu open "Settings" and search for the Device Manager

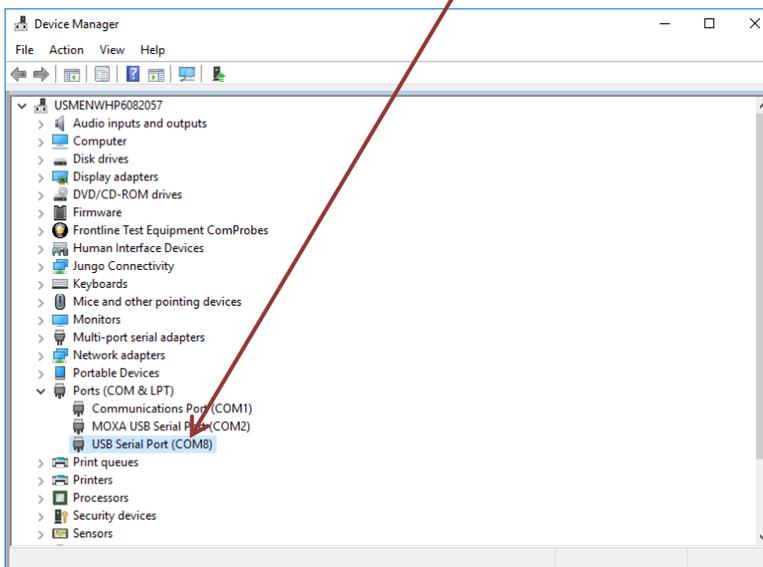
C445 Firmware Upgrade Process



4. Select "Device Manager", the window below will open, click "OK" to open the Device Manager



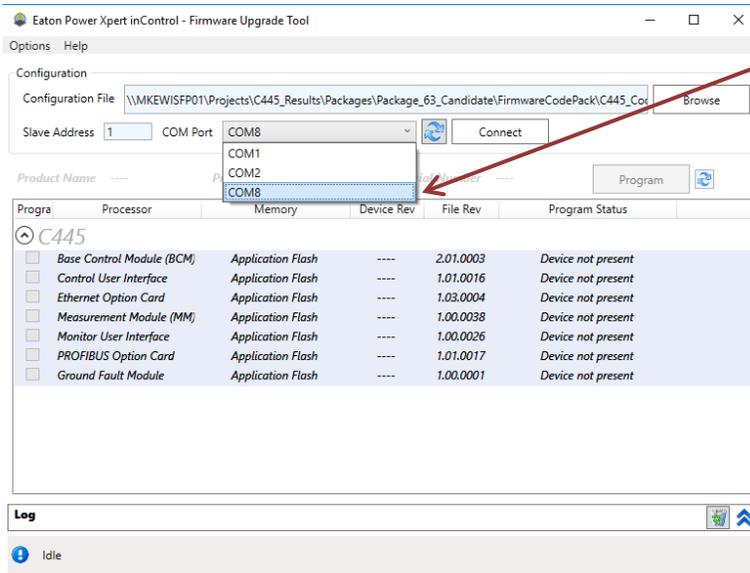
5. The window below will open, click on Ports and record the com port number for the RS485 converter



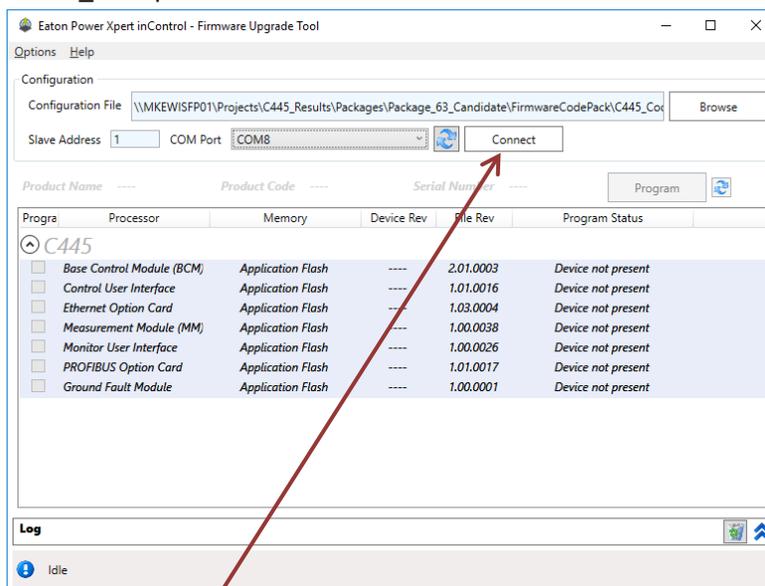
6. Close the Device Manager

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- Open the Power Xpert inControl – Firmware Upgrade Tool and select the rs485 com port

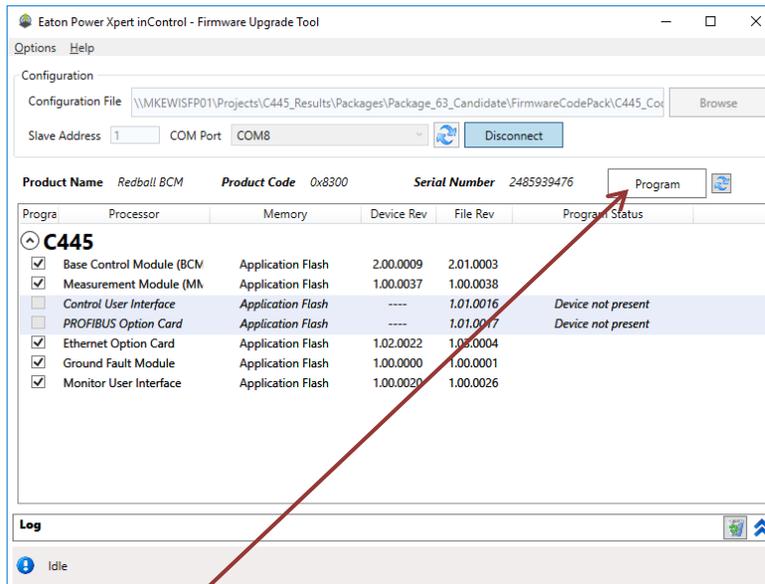


- Browse to where the firmware was saved on the computer and select the “C445_Codepack.xml”. Window should be similar to one below

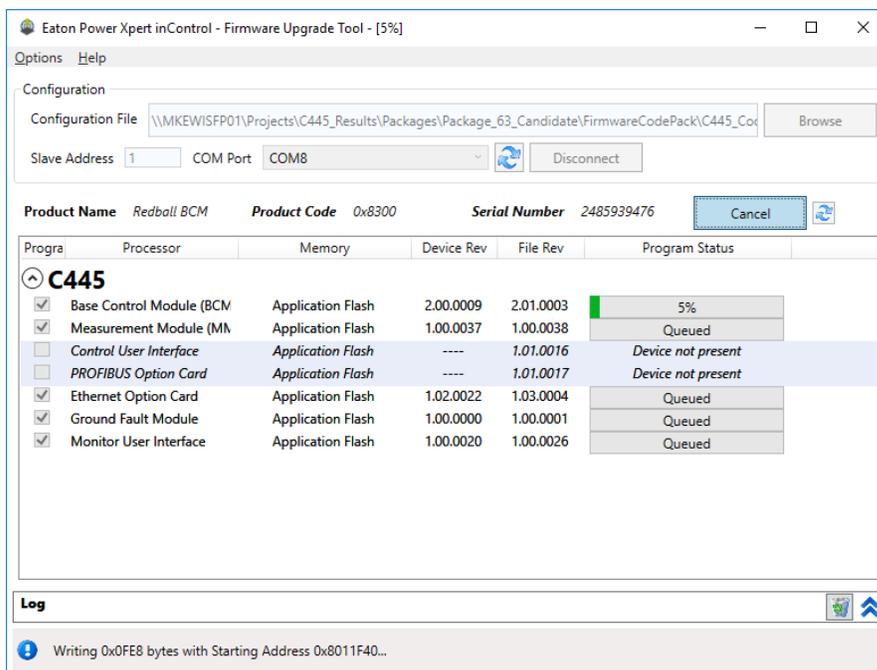


- Select the Connect button and Agree to the License Agreement when it appears. LEDs on all the C445 modules will begin to flash rapidly indicating the C445 has been put into Boot Mode. In addition, a message will be displayed on the user interface that a firmware upgrade is in progress. The important thing to note is that the actual firmware for each module will be displayed in the Device Rev column and the revisions of the firmware for each module in the firmware file will be displayed in the File Rev column. Check marks will only appear to the left of the modules that need to be upgraded

C445 Firmware Upgrade Process



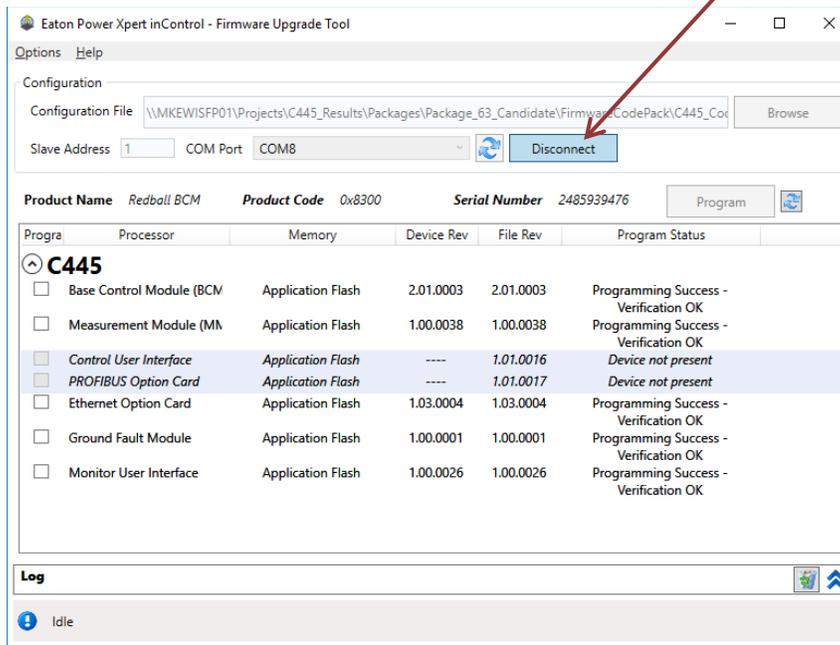
10. Select the Program button and the download process will begin. Each module will be upgraded one at a time and the result of each module upgrade will be displayed in the Program Status column, as each module completes.



11. If any module indicates an unsuccessful download, let the process complete for all modules, then repeat the process (Disconnect when the process completes, then Connect again). Only the module with the unsuccessful download will be checked if the process needs to be repeated

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12. When all modules have been upgraded successfully, select the Disconnect button and the C445 modules will flash all of their LEDs indicating a soft reset and the process is complete. All C445 modules will be at the new firmware level and will all operate properly together.



C445 Firmware Upgrade Process

Firmware Upgrade Process Using a RJ12

Required Hardware

- 1 - Computer
- 1 - RS485 converter (C445XS-USBRJ12; Eaton style# 3-4354-001A)



Photo 1

Note: If usb drivers are needed, they are part of the Power Xpert C445 One Installer package and can be downloaded at link below

<https://www.eaton.com/us/en-us/catalog/machinery-controls/power-xpert-c445-intelligent-motor-management-relays.resources.html>

Required Software

Power Xpert inControl – Firmware Upgrade Tool (V1.4.3.44)

See “Power Xpert Firmware Upgrade Setup V1_4_3_44.exe” in package



C445 Firmware Upgrade Process

Firmware

C445 Package 63 Release

<https://www.eaton.com/content/dam/eaton/products/industrialcontrols,drives,automation&sensors/power-xpert-c445-intelligent-motor-management-relays/c445-firmware-release.zip>

C445 Firmware Upgrade Process

Procedure

1. Connect the RJ12 converter to the computer usb port & RJ12 one of the two ports on the BCM.
Or if the user interface is a C445UM see photos 2 and 3.

Note: If RS485 port does not exist on BCM, either CH1 or CH2 communication port will need to be used for reprogramming

Or If a C445UC-xx is connected see photo 4



Photo 2
NEXT



Photo 3

C445 Firmware Upgrade Process



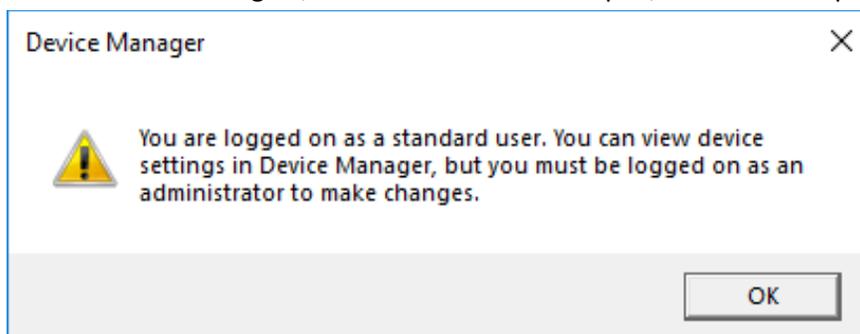
Photo 4

Note: For systems that have a C445UC-xx User Interface module, repeat steps 2 through 12 for each connected device.

2. Apply control power to the C445 system.
3. From the Start menu open “Settings” and search for the Device Manager

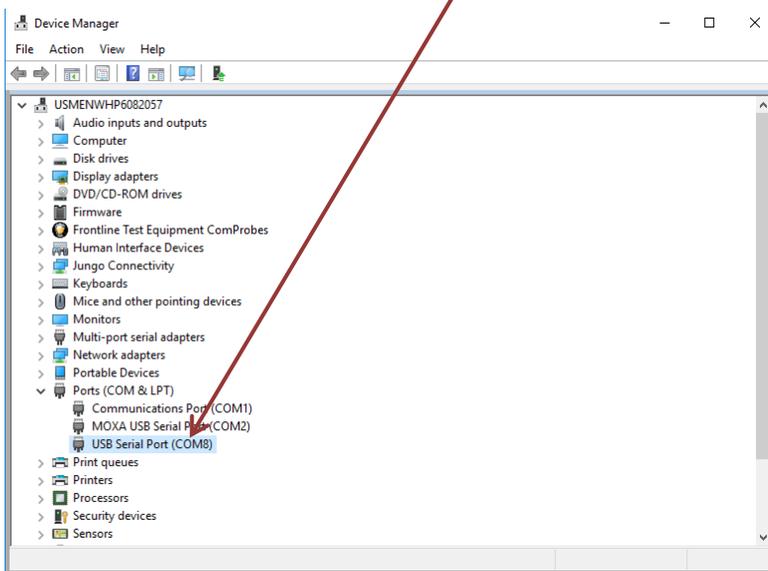


4. Select “Device Manager”, the window below will open, click “OK” to open the Device Manager

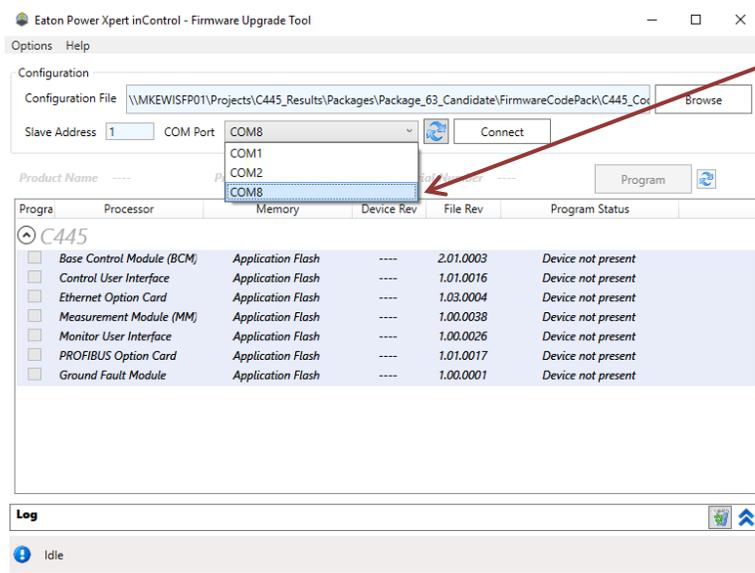


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5. The window below will open, click on Ports and record the com port number for the RS485 converter

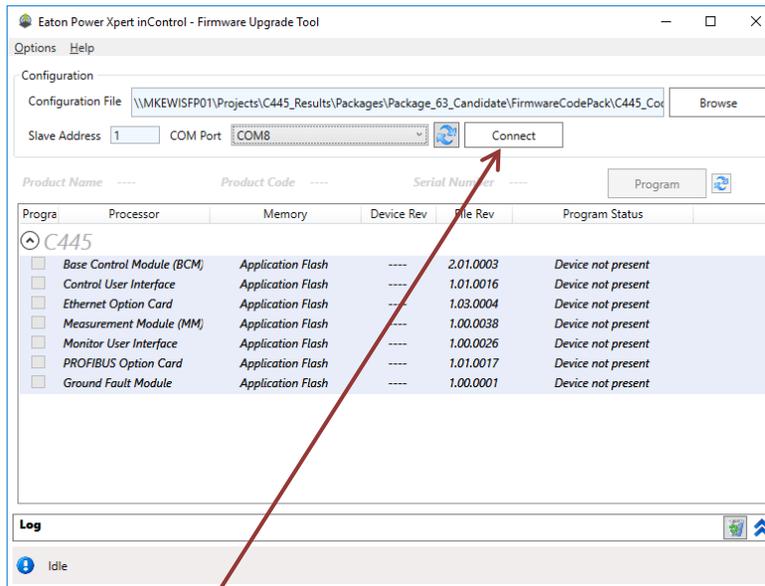


6. Close the Device Manager
7. Open the Power Xpert inControl – Firmware Upgrade Tool and select the rs485 com port

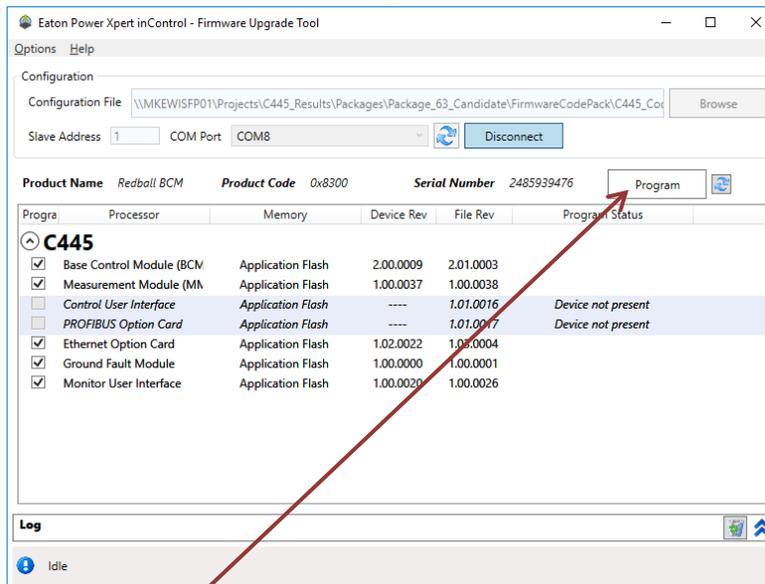


8. Browse to where the firmware was saved on the computer and select the “C445_Codepack.xml”. Window should be similar to one below

C445 Firmware Upgrade Process

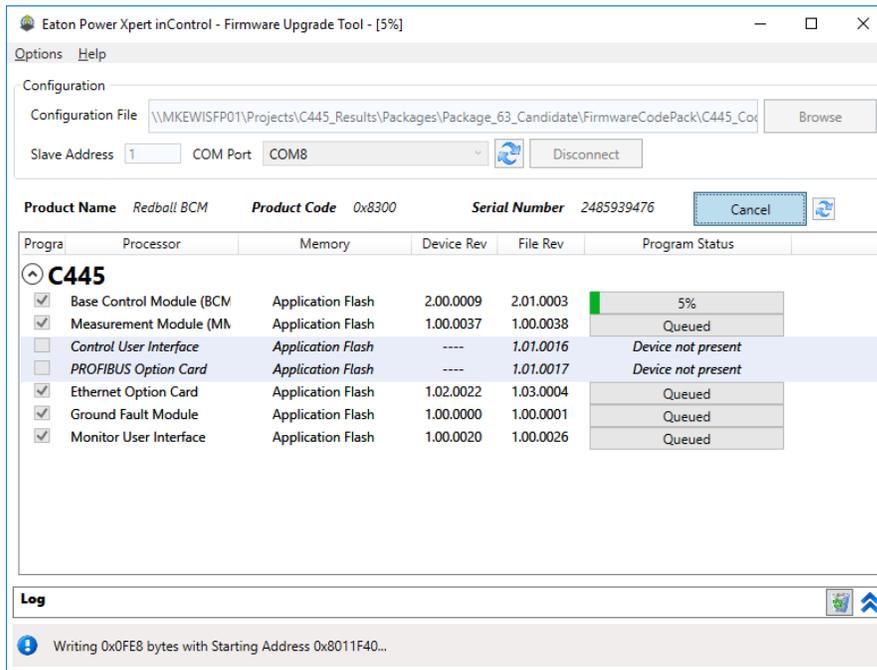


9. Select the Connect button and Agree to the License Agreement when it appears. LEDs on all the C445 modules will begin to flash rapidly indicating the C445 has been put into Boot Mode. In addition, a message will be displayed on the user interface that a firmware upgrade is in progress. The important thing to note is that the actual firmware for each module will be displayed in the Device Rev column and the revisions of the firmware for each module in the firmware file will be displayed in the File Rev column. Check marks will only appear to the left of the modules that need to be upgraded



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