

The Bootloader programs the micro-controller located on the device's logic board.

1. Plug the USB cable into the type B-mini USB (DEVICE) port on the rear panel of the FC-5000.

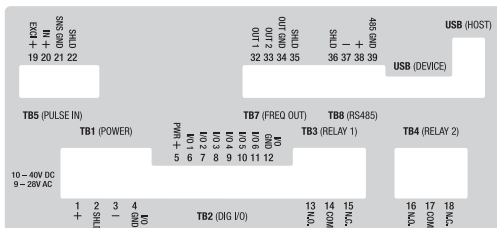


Figure 1: Rear panel

2. Plug the power cable into the TB1 (POWER) terminal.
3. Open the Windows Device Manager using one of two ways:
 - ◇ Follow this path: *Control Panel > Hardware and Sound > Devices and Printers > Device Manager*.
 - ◇ Or right-click *My Computer* (or just *Computer*), select *Manage*, then choose *Device Manager* from the left panel of the window that opens.

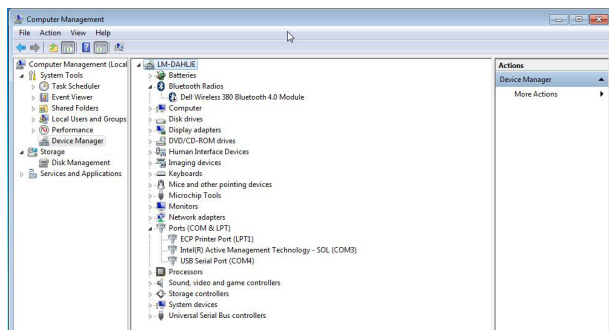


Figure 2: Device manager selection

4. Expand the Ports (COM & LPT) menu and verify that a USB Serial Port COMXX item is created, where XX is the COM port for the flow computer.
5. Double-click the *FC5000 Bootloader Application* icon.



Figure 3: Bootloader application icon

6. Select the *Com Port* for your computer.
7. Set the *Baud Rate* to **115200** (should be set by default).

8. Verify the *Enable* box is checked.

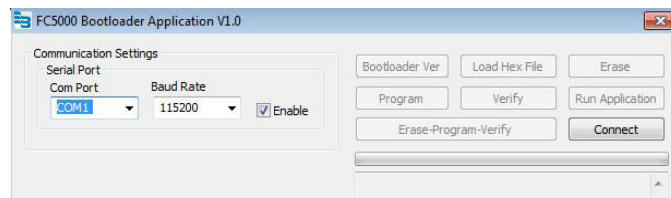


Figure 4: Com port, baud rate and enable

9. Click **Connect**.
10. When the Bootloader status window shows "Device connected", click **Load Hex File**.

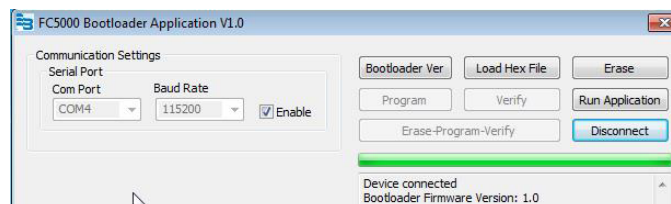


Figure 5: Load hex file

11. Navigate to the location of the hex file given for the build of firmware and click **Open**.

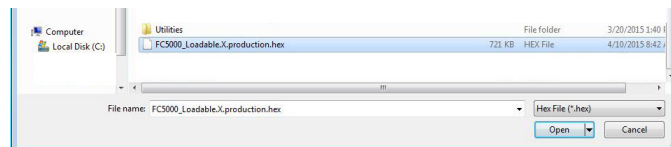


Figure 6: Locate the hex file

12. Verify that the Bootloader status window shows, "Hex file loaded successfully."

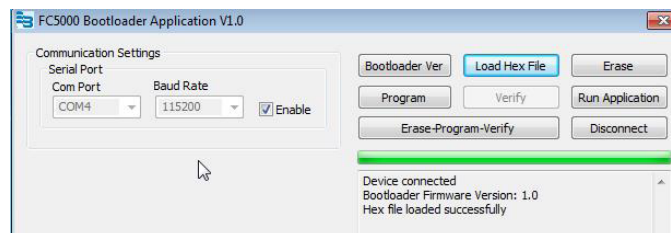


Figure 7: Hex file loaded successfully

13. Click **Erase-Program-Verify**.
14. Verify that the Bootloader status window shows these three phrases:
 - ◇ "Flash Erased"
 - ◇ "Programming Completed"
 - ◇ "Verification Successful"

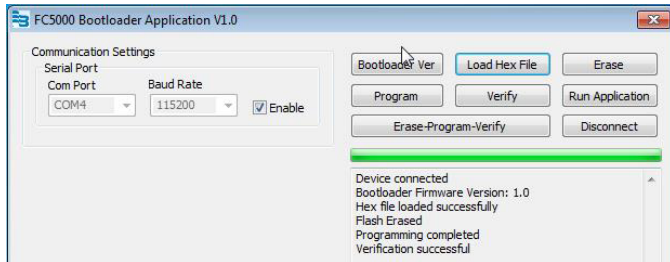


Figure 8: Status messages

15. Click **Run Application**. The status window shows, "Command issued to run application."

16. Check the LCD screen on the FC-5000 and verify that the program is running. After running a series of internal verifications, the program displays the screen below, before displaying the splash screen.

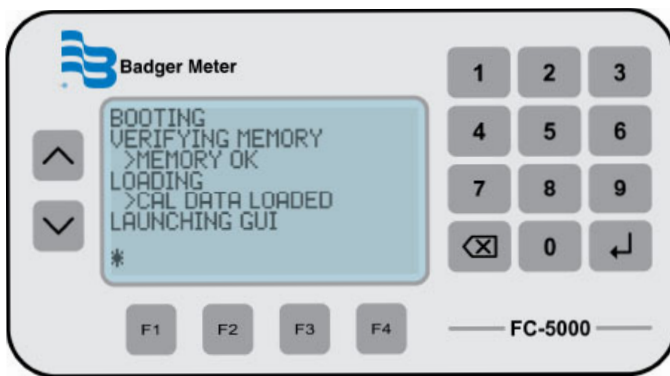


Figure 9: Verify the run application command

NOTE: An indicator, located on the bottom left of the screen, rotates during the boot process to indicate that the unit is booting.

17. Click **Disconnect** on the Bootloader application.

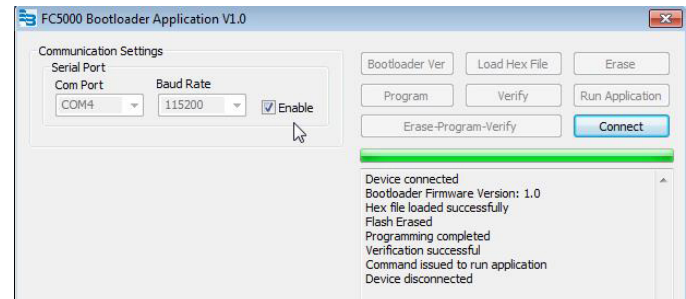


Figure 10: Verify the run application command

18. Remove the USB cord from the rear panel.

19. Click the exit (red "X") to close the bootloader program, then click **Yes** to confirm that you want to close the program.

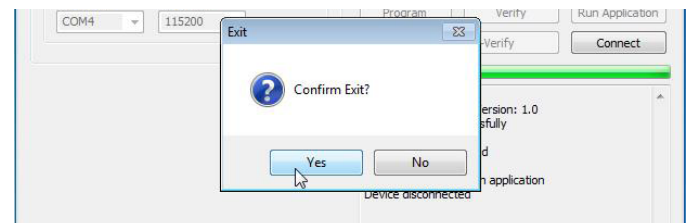


Figure 11: Verify the run application command

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