uProcess Communication Troubleshooting Guide

**Section 1   Connect to the EIB**

Equipment required:

EIB200

microUSB cable

uProcess power supply

1. Connect the microUSB cable to the EIB200
2. Connect the uProcess power supply to the EIB200. The two LEDS on the EIB200 should flash on and off for 5 seconds, then the green LED will stay illuminated
3. Open uProcess Software
4. View the Interface tree to see if any EIBs are listed.
5. See images below. If no EIB is listed, go to step 8. If an EIB is listed and there is a red circle/slash over both the EIB icon and the Interfaces icon, go to step 6. If there is a red circle/slash only through the EIB icon, go to step 7. If an EIB is listed without the red circle/slash through it, you are connected to the EIB, go to **Section 2 (Connect to uDevices).**

Go to step 8	Go to step 6	Go to step 7	Go to Section 2
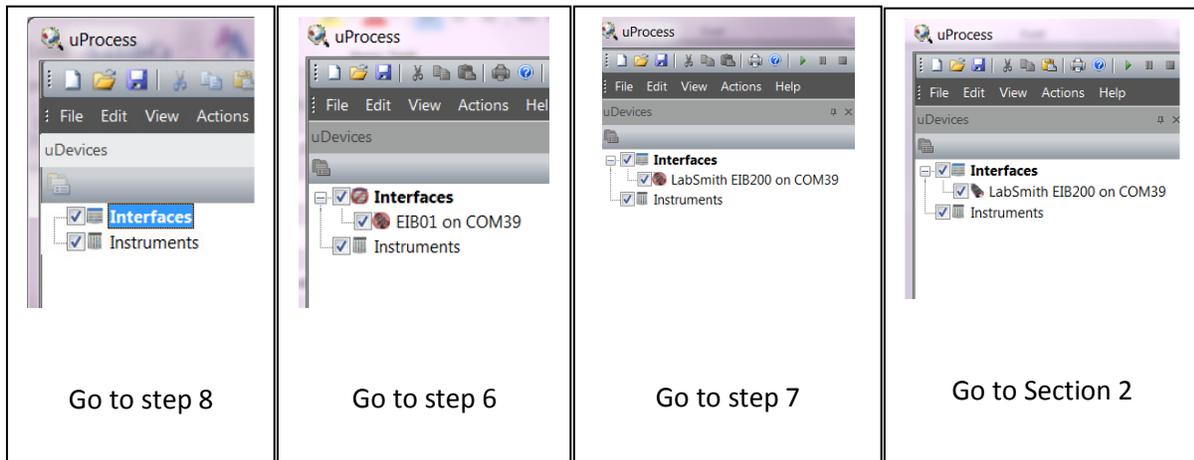
6. Right click on the Interfaces icon and select *Online.* Check the images above and proceed to correct step.
7. Right click on the **EIB** icon and select *Remove this interface.*
8. Right click on the **Interfaces** icon and select *New interface.*
9. The **Serial Port Window** will pop up.
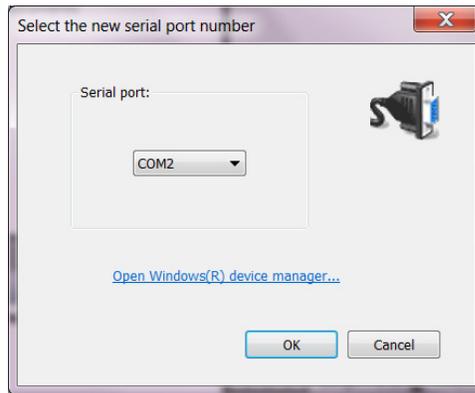
10. Select *Open Windows device manager* to determine the correct com port.
11. Under the Ports subdirectory, you should see the "Silicon Labs CP210x USB" port as shown below. Note the associated com port number (COM 6 in this example shown below)
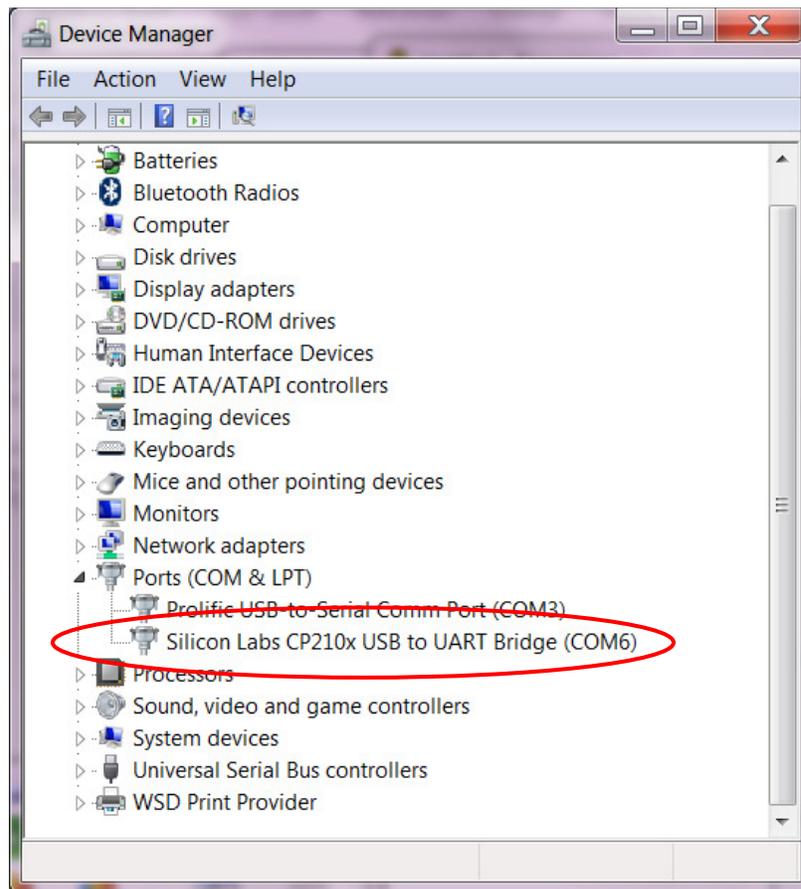
12. If your com port is not listed, this may indicate that one of the following error have occurred:
    a. The correct USB driver has not been installed. The uProcess software disk includes the USB driver software. Or download the CP210x Windows VCP Driver from the Silab website at http://www.silabs.com/products/mcu/Pages/USBtoUARTBridgeVCPDrivers.aspx. Note: once you download the driver package you must install the correct driver based on your operating system. Computers running Windows 32-bit software should install the x86 driver while Windows 64 users should install the x64 driver. After you have installed the driver you may need to close the serial port window and reopen.
    b. The USB port you have plugged your uProcess USB cable into is not working. Try a different com port. Sometimes if a com port is corrupted, restarting the computer will solve the issue.
    c. The USB cable is damaged.
13. Once the correct USB port has been found, close the 'Device Manger' dialog box and select the com port from the **Serial Port Window** and click OK.
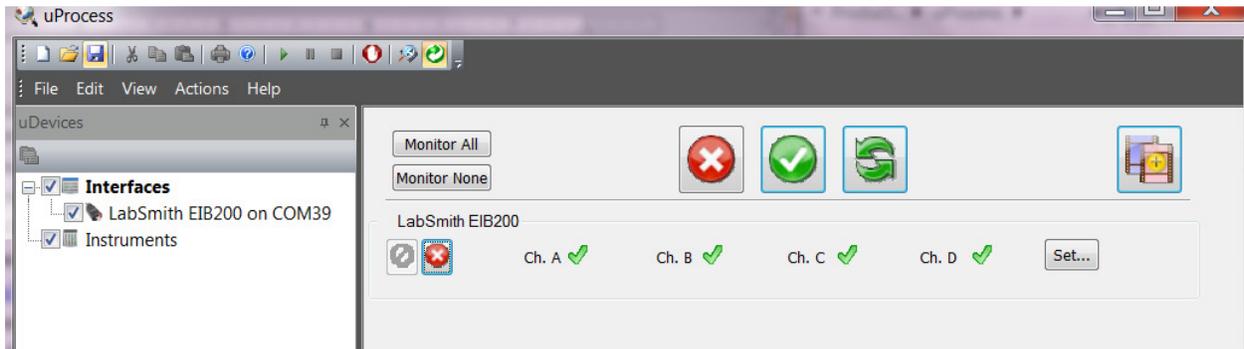
14. The red LED on the EIB200 will flash red and the EIB will be displayed in the Interfaces tree.
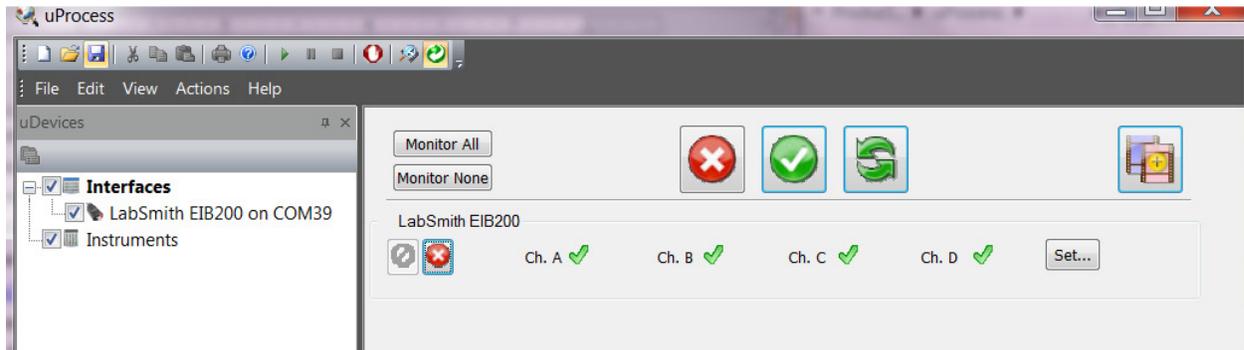
15. Your EIB is now communicating with the uProcess software and you can move on to **Section 2 (Connect to uDevices).**

Section 2   Connect to uDevices

Following Section 1, your uProcess Interface tree should show the EIB icon similar to the image below.

You will now connect to the uDevices.

1. Disconnect the power from the EIB200.
   NOTE: Always removed power from the EIB before connecting or disconnecting uDevices to an EIB (directly or through a uProcess breadboard). Connect the uProcess power supply to the EIB200. This will prevent accidental power surges that could damage the EIB. The power does not need to be removed when connecting valves to a 4VM or pressure sensors to a 4AM.
2. If you are not using a uProcess breadboard, skip to step 3. If you are using a grey communication cable to connect to a uProcess breadboard, connect one end of the cable to the EIB200 and the other to the connector at the top of the uProcess breadboard. If connecting the EIB200 directly to the uProcess breadboard, plug the EIB into any one of the breadboard slots.
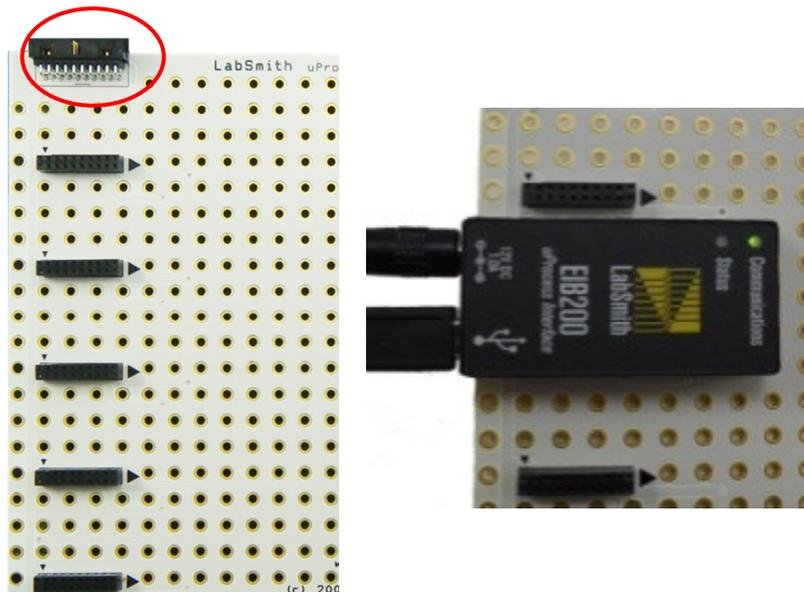

3. Plug one uDevice (SPS01 syringe pump, 4VM valve manifold, or 4AM analog manifold) into the breadboard. Or, if you aren't using a breadboard, connect the uDevice to the EIB using the grey communication cable.
4. Restore power to the EIB200 and rescan devices ( ). uProcess should now show the uDevice connected.
5. Disconnect power and install the rest of the uDevices.

6. Restore power and rescan devices.

Do you see all of the uDevices?   If some are showing and some are missing you may have two or more devices with the same device ID. Do the following:

1. Note the ID #s for the devices that are shown. (In the example shown below the ID#s are 77 and 103)
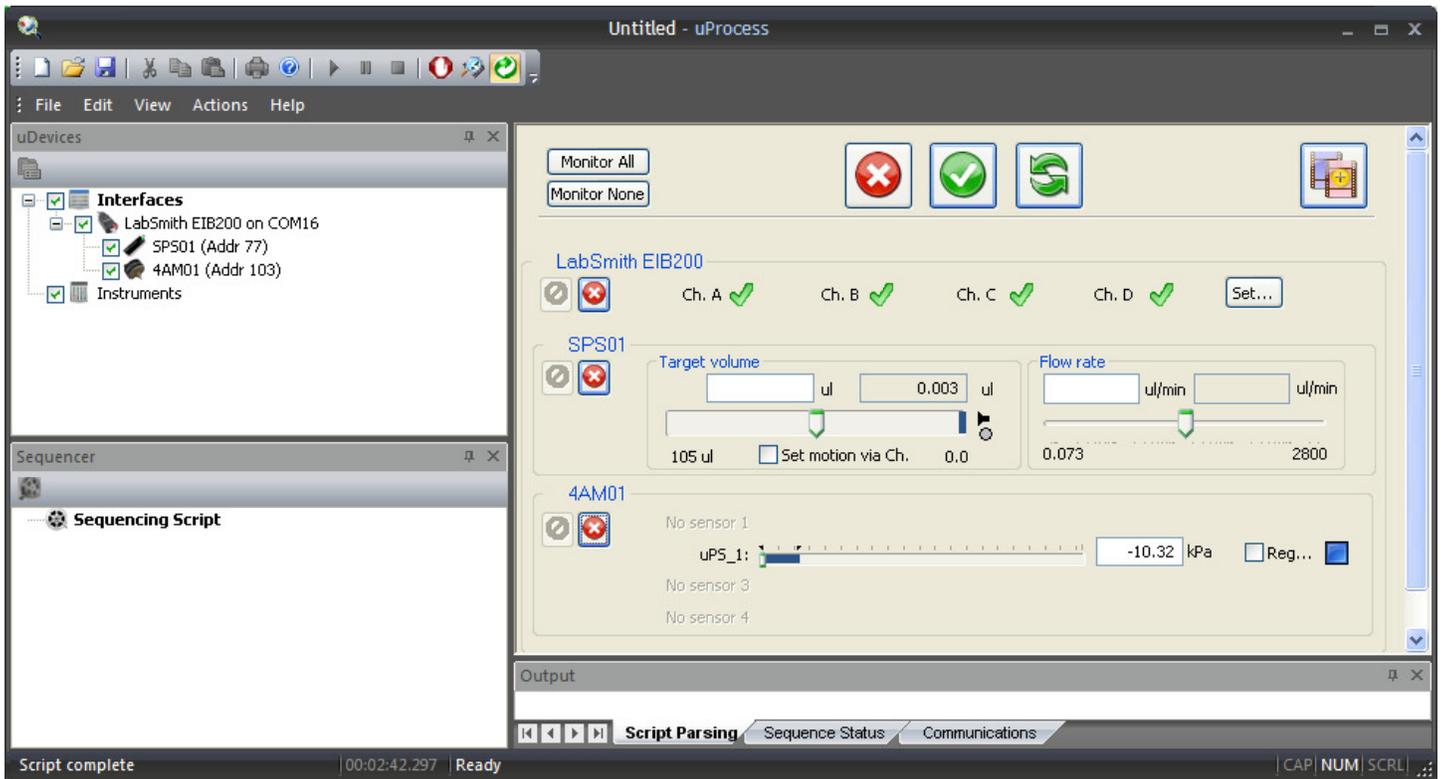
2. Disconnect the EIB power supply

3. Unplug all uDevices from the breadboard except one of the uDevices that was missing (keep the EIB plugged in to the breadboard).

4. Reconnect power to the EIB

5. Rescan for devices ( ) and see if the missing uDevice shows up. If so, note the device ID, and if it is the same as another device ID change it (right click on the device name and change the ID).

6. If you have more than one uDevice that was missing, do this for each device until you have verified that each device has a unique ID.

7. Reinstall all of the devices on the breadboard.