



Connecting to a DLMS4080 through an RS232 port

We strongly advise that the Ethernet connection be used to network a group of processors and do not use the RS232 connection. The RS232 is the old standard, where Ethernet is a much improved protocol. When operating a single unit, deeper control beyond that of the front panel can be accomplished through the DLMS4080's RS232 connector to a computer running ProControl under Windows XP.

Connecting to a DLMS4080 through a USB port

File downloads, uploads, and deeper control beyond that of the front panel can be accomplished through the DLMS4080 USB connector to a computer running ProControl under Windows XP. Installing ProControl onto your personal computer will also install the USB driver required to set up the USB connection to the DLMS4080.

The following procedure will allow your personal computer to communicate to the DLMS4080:

- 1) Load the ProControl software from the CD included with your DLMS4080 onto your computer.
- 2) When the ProControl software installation is complete, connect a USB cable from the USB socket on the front panel of the DLMS4080 to a USB connector on your personal computer. (cable not included)
- 3) Turn on the DLMS4080. Be sure that the baud rate setting in the DLMS4080 is set to 115200. This is done through the LCD window of the processor.
- 4) Start up the ProControl software on your personal computer by double-clicking on the ProControl icon on your Desktop.
- 5) When you are asked "**Do you want to connect to the device**" answer "**Yes.**"
- 6) You will note in the top left of your computer's screen that the software will state "**Device 1- (Not Connected)**" which is expected for now.
- 7) Click on **Setup** located on the top menu bar and open **Port Connection**.
- 8) Change the connection **Type** to **Serial Port / USB**.
- 9) Leave the **Device No.** set as **1**.
- 10) Click on the **Online** box so that a **checkmark** appears in the box.
- 11) This step will require a small amount of trial and error process for selecting the **COM Port** as every computer's default setting will be a little different. Expand the **COM Port** box by clicking the arrow on the right side. Scroll down to find which port numbers are available. Select the first available com port.
- 12) Click on **O.K.**
- 13) The program will ask you to restart ProControl for the connection to take effect. Click on **O.K.**
- 14) Close the ProControl software by selecting the red X located in the top right hand corner of the ProControl Window.
- 15) Now start up ProControl from your personal computer's desktop.
- 16) When you are asked "**Do you want to connect to the device**" answer "**Yes.**"
- 17) Observe the **Device 1** box on the top left corner of your computer's screen. If it says "**(Connected)**" the installation is complete. If it says "**(Not Connected)**", repeat steps 11 to 15 selecting the next available com port in the scroll down list. Eventually you will select the port that's connected to the DLMS4080 and the installation should be complete.



DLMS4080 won't communicate with your computer

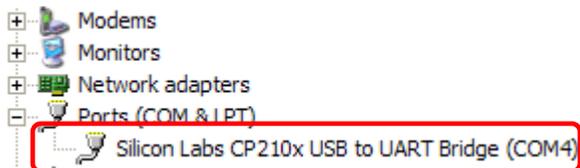
Problem: Asked to "Please Log on first" when you mouse click on "Device 1 - (Connected)".

First check that the setting in the ProControl Setup Window is set to the SAME device number that you can access through the LCD of the DLMS4080 through the path: press **ENTER/SYS**, press the **MENU** button 5 times, press **CURSOR** once and confirm the **DEVICE ID:** number.

If the DEVICE numbers match, then the computer is not communicating through the USB connection to the DLMS4080. Verify that the **SiLabs USB Driver** that came on the DLMS4080 CD ROM is installed properly.

To verify for **Windows XP:**

- 1) Click **Start > Settings > Control Panel**
- 2) Double-click **System**
- 3) Select the **Hardware** tab
- 4) Click **Device Manager**
- 5) Expand the **Ports** directory
- 6) Under **Ports**, you should see both the USB port and the COM port number
- 7) It should look like this:



If your computer does not have a similar image to the one above, you will need to uninstall the **SiLabs** program and reinstall. If the device driver indicated above appears in the root directory of the **Device Manager** and not under the **Ports** section, place your cursor on the device driver label, right mouse-click and choose **Update Driver**. When asked for the source file for the update, choose manual selection and browse for the file within the **Program Files/SiLabs/MCU/CP210X** directory. The **OK** button should appear, press **OK** and the update will occur. Open ProControl and the Device should be connected at this time.

Checking a USB COM Port

To be sure that the ports are working and are available you can run the following port verification in Windows. If after noting which ports are available and trying those port numbers in the ProControl set-up there is still a connection problem, your USB cable may be suspect, or a more serious computer problem may be the cause.



Checking the status of your computer's USB ports

Windows XP

- 1) Click the **Start** menu button in the bottom left corner of the screen.
- 2) Click on **Run**
- 3) Type "**command**" and click **OK**
- 4) In the Command window, type "**mode comX**" (X is the COM port number, start at 1 and each time increment to "mode com2" etc)
- 5) If the device is not available you will see "**Illegal device name**"
- 6) If the port is available, you should see a list of COM port parameters like this:

Status for device COMX:

Baud: 115200

Parity: None

Data Bits: 8

Stop Bits: 2

Timeout: ON

XON/XOFF: OFF

CTS handshaking: OFF

DSR handshaking: OFF

DSR sensitivity: OFF

DTR circuit: OFF

RTS circuit: OFF

The values in the list are not relevant. As long as the list in BOLD above is shown, this means that the port is available. Keep track of the available port numbers as you test 1 through 10, then enter the available port numbers into the ProControl USB setup procedure.

How do I find in Windows XP which USB Port is connected to the DLMS4080?

Follow the same procedure outlined above in the "**Connecting to a DLMS4080 through a USB port**" section to determine which COM port is presently assigned as the DLMS4080's current USB Port. In ProControl version 2.00 (or higher), the available ports are shown in **Setup**.