Establishing RS232/RS485 Communication between the PC3400/PC4400 Particle Counter and the TracData software.

Step 1

Install USB Driver.

Open and install the USB Driver. It can be found under the installation directory (C:\Program Files (x86)\Chemtrac\TracData\USB Driver) or it can be downloaded using the following link.

http://chemtrac.com/tracdata/

There are two Windows drivers for the USB device. One of them should be used for Windows 10 operating systems only. The other is for all other versions of Windows.

Note: The driver should be installed before turning on the Particle Counter and plugging in the USB cable.

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Step 2

Determine which COM Port will be used.

Open Device Manager by using the following command (Windows Start..Run).

mmc devmgmt.msc

1) In Device Manager, find and expand the **Ports (COM & LPT)** section.

2) Find the COM Port for the device that will be used in this configuration. In most cases it will be labeled USB Serial Port, followed by a COM #.
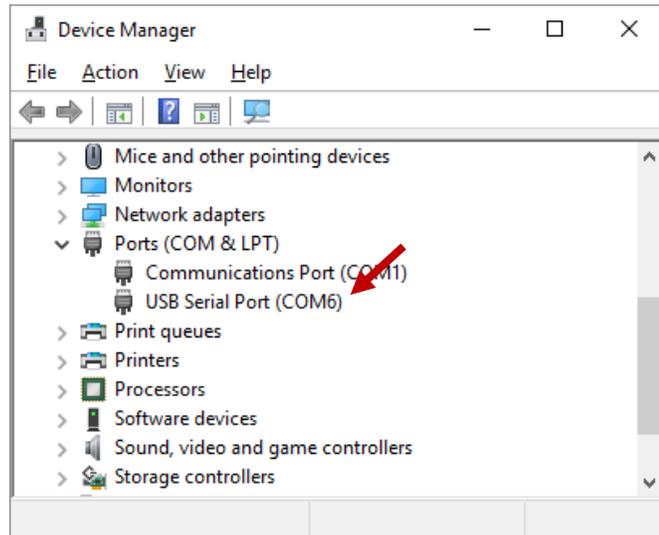
Step 3

Review the Serial Port Settings in the TracData Software.

Open the TracData software and review the serial port settings (Edit..Modbus Device Port Settings from file menu).

For COM Port, use the port that was discovered in Step 1.

Select the other port settings from the available options.

*Note: The default settings are shown in the image and should be used if any problems are encountered.*
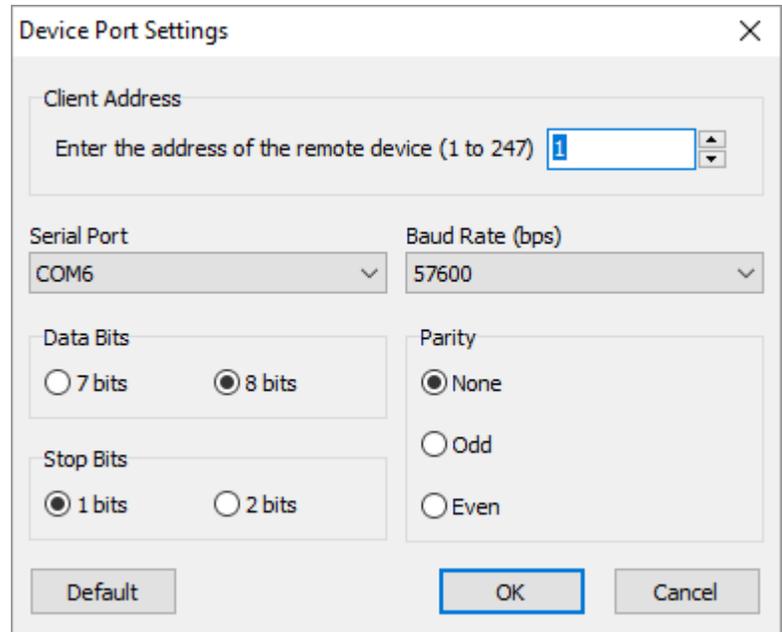
Device Port Settings	✕

Client Address

Enter the address of the remote device (1 to 247) `1`

Serial Port	Baud Rate (bps)
COM6 ⌄	57600 ⌄

Data Bits
○ 7 bits   ◉ 8 bits

Parity
◉ None
○ Odd
○ Even

Stop Bits
◉ 1 bits   ○ 2 bits

[Default]   [OK] [Cancel]

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Step 4

Set the Unit Address.

1) Press the **Menu** button on the keypad of the Particle Counter to enter the SETUP menu (see Image 1).

2) Use the arrow keys to select **General Setup** and press **Enter** to open the menu.

3) Select **Communications Setup** from the General Setup menu (Image 2).

4) Select **Set Unit Address** to learn or configure the Unit ID for this device (image 3).

5) Press **Menu** to return to the Communications Setup menu.
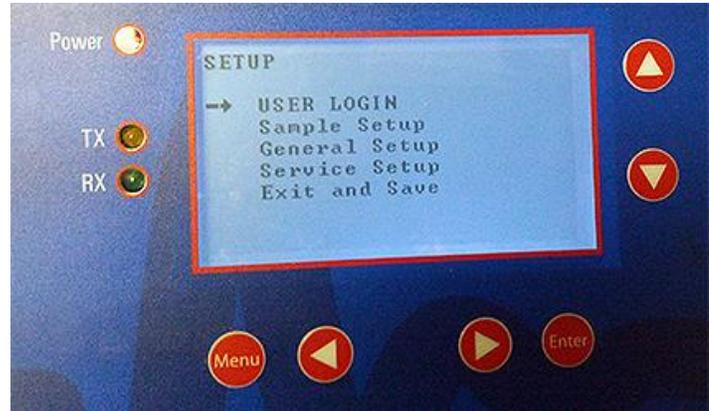
(Image 1)

(Image 2)

(Image 3)

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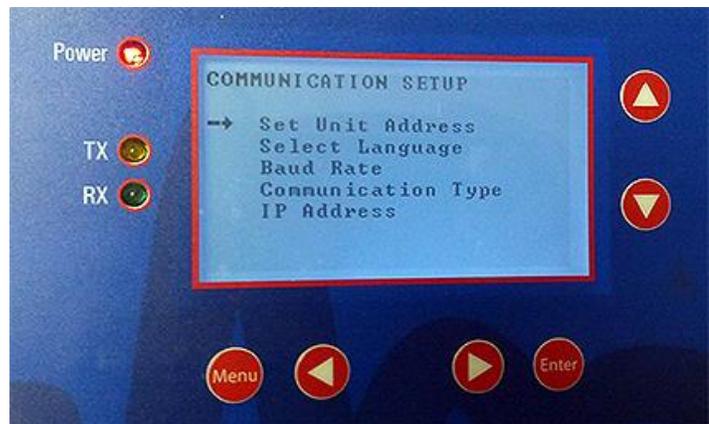
Step 5

Set the Baud Rate and other port settings.

1) Select **Baud Rate** from the menu (Image 4).

2) Use the arrow keys to select the Baud Rate that matches the setting from the software and press **Enter** (see image 5).

3) Continue by selecting the Character Length (Data Bits), Stop Bits, and Parity. Press **Enter** after each selection.

(Image 4)

(Image 5)

Note: The port settings in the device must match the software setup before communication can be established.

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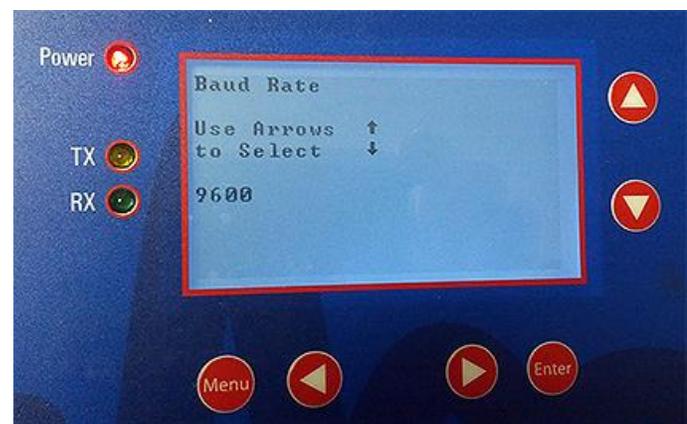
Step 6

Change the Communication Type to Modbus RTU.

1) From the Communications Setup menu, scroll down and select **Communication Type** (Image 6).

2) Scroll to select the **Modbus RTU** option. Press the **Enter** button (Image 7).

3) Continue to press the **Menu** button to return the main **Setup menu**.

(Image 6)

(Image 7)

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Step 7

Save the Settings.

From the main Setup Menu, scroll down and select **Exit and Save** to store the settings (Image 8).
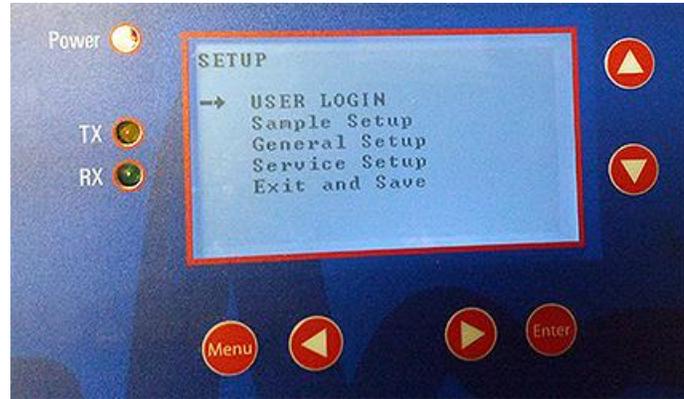
(Image 8)

Step 8

Configure the TracData Software and verify communication.

1) Click Tools..Connect from the menu to open the communications port.

2) Follow the instructions under the Log Data tab to download the data from the Particle Counter.

3) Contact Chemtrac at 800-442-8722 if you have any problems or questions.

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