

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

Step 1

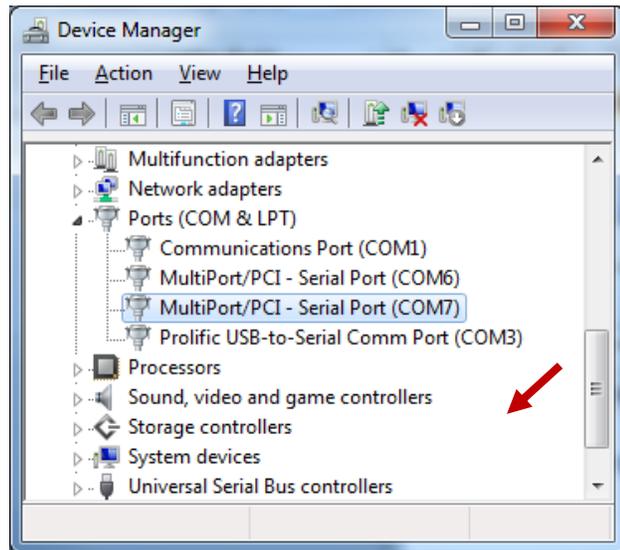
Determine which COM Port will be used.

Note: A USB to Serial cable may be needed if an on-board serial port is not available.

At a command prompt, in the Start Search box, or in the Run box, type the following command to open Device Manager.

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 for this installation.



Step 2

Review the Serial Port Settings in the TracData Software.

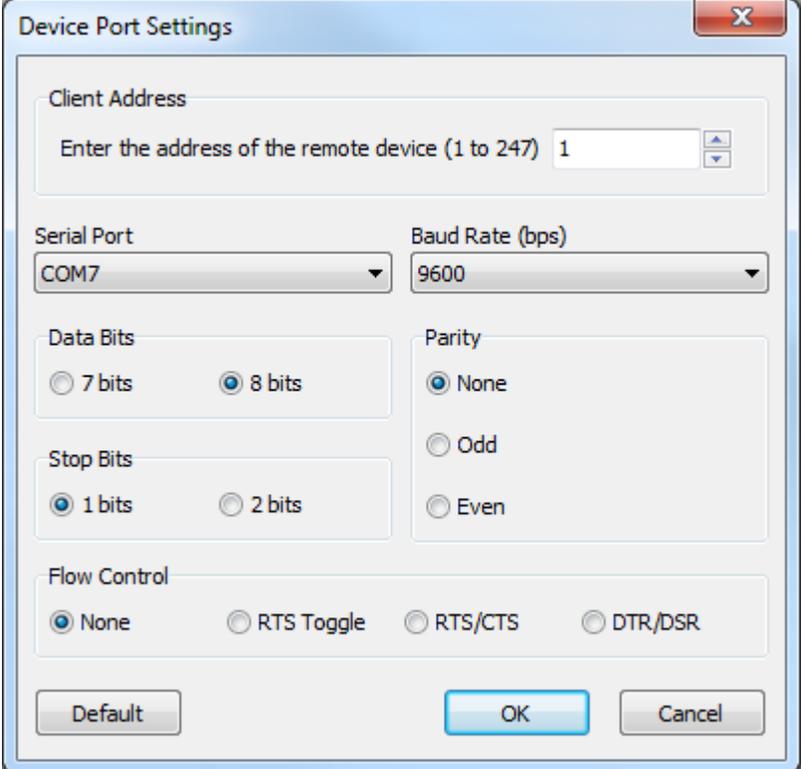
Open the TracData software and review the serial port settings (lower left corner).

Select **RTU (Serial)** for Mode.

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.



The screenshot shows the "Device Port Settings" dialog box with the following configuration:

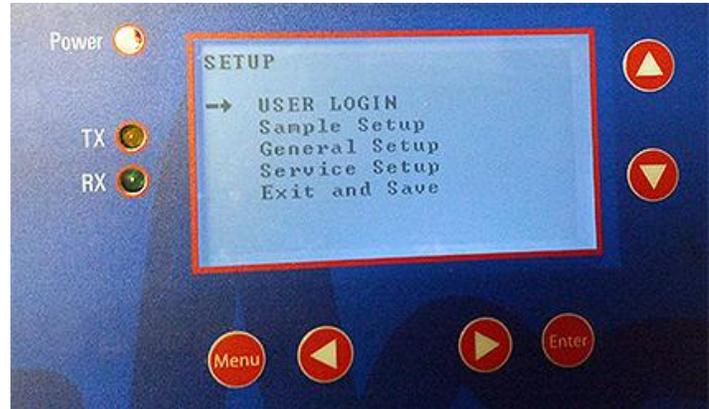
- Client Address:** A text box containing "1" with a label "Enter the address of the remote device (1 to 247)".
- Serial Port:** A dropdown menu set to "COM7".
- Baud Rate (bps):** A dropdown menu set to "9600".
- Data Bits:** Radio buttons for "7 bits", "8 bits" (selected), and "Other".
- Parity:** Radio buttons for "None" (selected), "Odd", and "Even".
- Stop Bits:** Radio buttons for "1 bits" (selected) and "2 bits".
- Flow Control:** Radio buttons for "None" (selected), "RTS Toggle", "RTS/CTS", and "DTR/DSR".

Buttons at the bottom include "Default", "OK", and "Cancel".

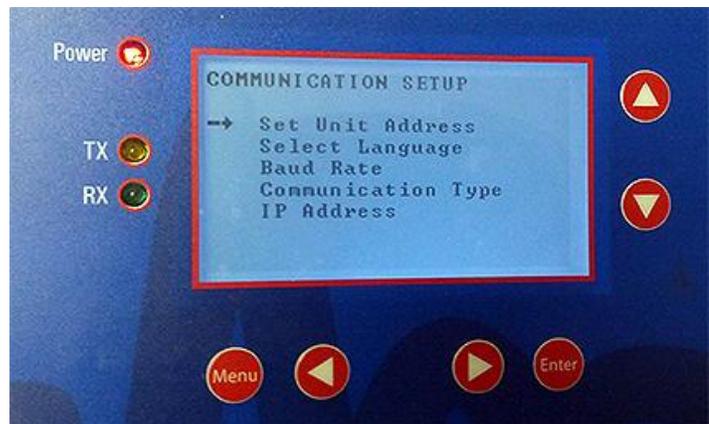
Step 3

Set the Unit Address.

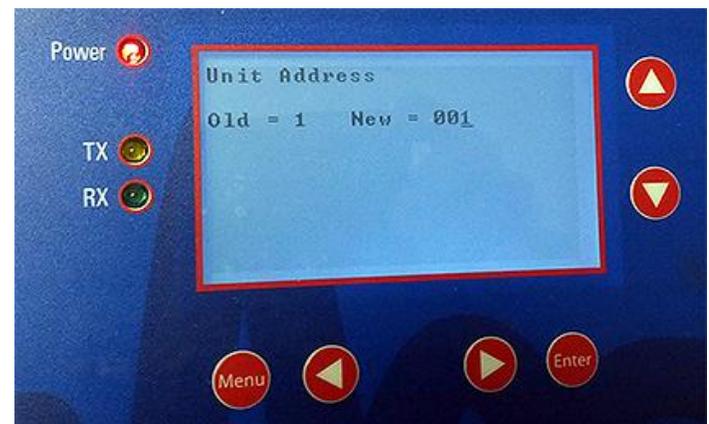
- 1) Press the **Menu** button on the keypad of the Particle Counter to enter the SETUP menu (see Image 1).
- 2) Use the arrow keys to select **General Setup** and press **Enter** to open the menu.
- 3) Select **Communications Setup** from the General Setup menu (Image 2).
- 4) Select **Set Unit Address** 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)

Step 4

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.

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



(Image 4)



(Image 5)

Step 5

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)

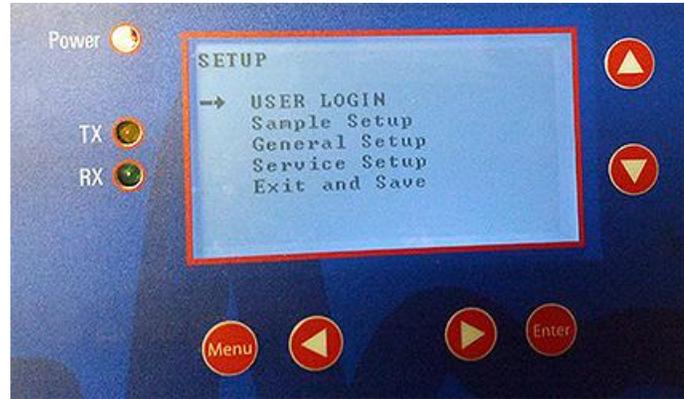


(Image 7)

Step 6

Save the Settings.

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



(Image 8)

