

PMS200 BASIC DEMONSTRATION INSTRUCTIONS

Using Hyperterminal with a single sensor on a RS232 serial port

1. Open HyperTerminal. On most PC's running Win 2000 or XP, navigate to "START...Programs...Accessories...communications...Hyperterminal"
2. The first prompt window that appears should be labeled "connection description" It will ask for a name and icon. Enter anything for the session name. Leave the icon alone and click OK.
3. The next window will say "connect to". You only need to change the drop down box that is labeled "connect using". Select the proper com port. For example, if you are using the com port built into a PC, chances are that is com1. However, if you are using a com port on a USB to serial converter, the com port will probably have a higher number.
4. When "com properties" appears, enter the following settings for a PMS200 that is in its default mode:
Baud: 19200
Data bit:7
Parity: even
Stop bit: 1
Flow control: none

Click OK

5. Next, go to File...Properties... Click on settings, then ASCII setup. The following boxes should be checked:

Send line ends with line feeds
Echo typed characters locally
Wrap lines that exceed terminal width

6. If you have not connected power to the sensor, do so now. Upon a power-up cycle, you should see a "g0?" string be displayed in Hyperterminal. By default, the red laser spot should not be on.
7. Here is a list of the most common commands. **(0=zero, not an uppercase letter o!)**
 - a. Laser spot on (for aiming) "s0o" <return> **(Note that the enter=return key on the alpha keypad. The enter on the numeric keypad will not work!)**
 - b. Laser spot off (for aiming) "s0p" <return>
 - c. Read a single measurement "s0g" <return> When a reading is triggered the laser spot turns on then off.
 - d. Read continuous measurements (called single sensor tracking) "s0h" <return> This turns on a continuous stream of measurements. **To stop the measurements, send the stop/clear command "s0c" <return>.**

Other commands can be found in the PMS200 technical manual.

Here is a sample output string from a continuous read command:

```
g0?           (this is from a power up cycle)
s0h           (continuous read command)
g0h+00009794 (last reading; The sensor res is 0.1mm, so just move the decimal place over to the left one digit)
g0h+00009793 (Example: this distance = 979.3 mm)
g0h+00009798 (Example: this distance = 979.8 mm)
g0h+00009791
g0h+00009799
s0h+00009797
S0h+00009800
(Send Stop command "s0c" <return>. This may not appear on the screen because readings are still being sent. The readings will stop after the return key is pressed. Once the stream stops "g0?" will appear again)
```

g0?