Helios PD2-6200 Analog Input Rate/Totalizer
Quick Start Guide

MeterView Pro
USB Install

Thank you for your purchase of the Helios PD2-6200 large display meter!

This quick start guide will briefly describe some of the common setup procedures for this meter.

This guide includes:

Installing MeterView Pro.....2
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Program and Scale the Input.....4
Program Relays for Automatic Reset...6
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Additional information about the Helios PD2-6200 meter can be found in the instruction manual included on the CD or available at www.predig.com.

MENU — Menu Button – Access *Programming Mode* and to return to *Run Mode*.

Note: If you think you have made a mistake while programming the meter, use this button to return the meter to *Run Mode* without saving.

F1 RESET — Right/Reset Button – Change the selected digit while inputting numeric values in *Programming Mode*.

F2 MAX — Up/Max Button – Increment the selected digit while inputting numeric values in *Programming Mode*.

F3 ENTER — Enter Button – Access a menu or accept an option while in *Programming Mode*.

Programming buttons are located under the bottom door panel. They can be accessed by loosening the securing screw and lifting the door panel.

HELIOS

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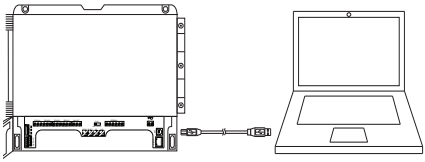
Installing MeterView® Pro

The meter can be programmed using MeterView Pro. This software can be installed on any Microsoft® Windows® (2000/XP/Vista/7/8/10) computer by connecting to the meter's onboard USB. The meter is powered by the USB connection, so there is no need to wire anything prior to programming the meter.

1

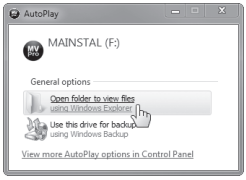
Connect the provided USB cable to the meter and the computer as shown. The computer will automatically install the driver software it needs to talk to the meter.

Note: Only one meter may be connected at a time. Attaching multiple meters will cause a conflict with the meter software.

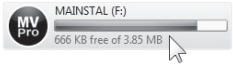


2

Once the driver is installed, an AutoPlay dialog should appear for the drive "MAINSTAL." Click "Open folder to view files."

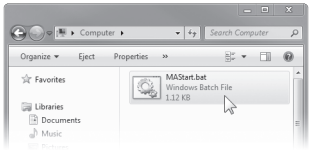


If the computer does not display an AutoPlay dialog for the drive "MAINSTAL," you should open *My Computer* and double-click on the drive labeled "MAINSTAL."



3

Double-click on the file named "MAStart."

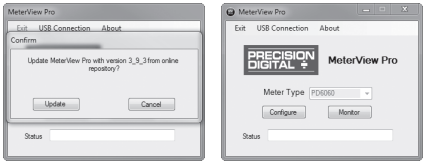


The program will open a few windows and install two programs on your computer. Simply follow the onscreen instructions until you see one of the dialogs below.

Note: If you receive a *User Account Control* warning, click "Yes."

4

If there is an update available, click the "Update" button to install the new version. Otherwise, click "Configure" to begin programming your meter.



Note: When you update your MeterView Pro software, you will be asked if you want to update the setup files located on the meter itself. This way, you will always have the most current version on the meter for future installs.

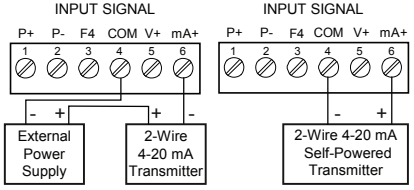
Note: The remainder of this guide will explain how to configure your meter using either the MeterView Pro software or the configuration menus in the meter itself. It is only necessary to perform one of these options in order to configure the meter for a desired setting.

Basic Wiring for Helios Meter

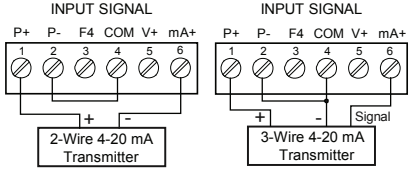
The connectors label, affixed to the inside of the front door panel, shows the location of all available connectors. Run wires through conduit holes at the base of the meter, connect to the provided screw terminals, and plug into the meter as indicated.

4-20 mA Input Wiring

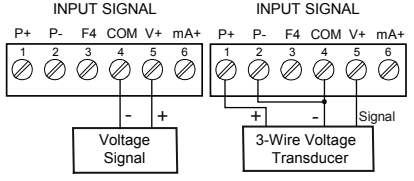
Wiring for a 4-20 mA input using either an external power supply or self powered transmitter.



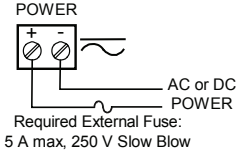
Wiring for a 4-20 mA input using internal power supply.



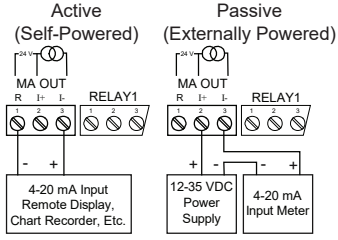
0-10 V Input Wiring



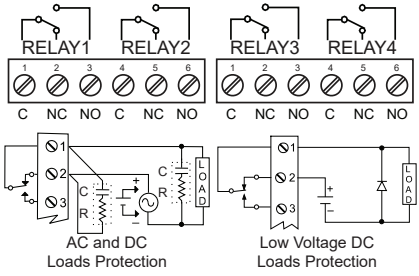
Power Connection



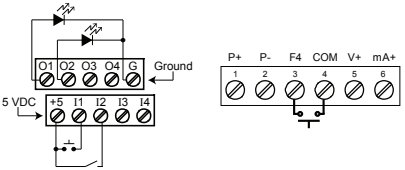
4-20 mA Output Wiring[1]



Relay Connections[2]



Digital Inputs and Outputs[3]



Consult the PD2-6200 instruction manual located on the included CD or available online at www.predig.com for additional wiring diagrams.

[1] Helios models with 4-20 mA output option (PD2-6200-xH7)
[2] Helios models with relay option (PD2-6200-xH7)
[3] If accessible pushbuttons are required once initial programming is complete, the use of digital inputs is recommended.

Program and Scale the Input

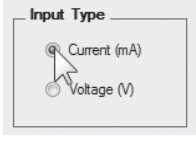
Program the Helios meter to accept a 4-20 mA or 0-10 V input and display a value associated with that range. When the meter is receiving a 4 mA or 0 V input, it will display the low end of the display range; when receiving a 20 mA or 10 V input, it will display the high end of the display range. The input values can be changed if needed, but the default values are sufficient for most transmitter types.

For example: If the meter were setup to accept a 4-20 mA input and display the flow of a pipe whose rate of flow will only ever be between 0 and 100 gal/s, the transmitter would send a 4 mA signal when there is zero flow and a 20 mA signal when there is max flow. The meter should be programmed to interpret these inputs so that at 4 mA the meter will display 0 and at 20 mA the meter will display 100.

MeterView Pro Software

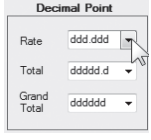
1

On the *Setup* tab, under *Input Type*, select the desired input.



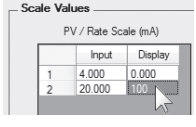
2

On the *Programming* tab, select the desired decimal point location for Rate, Total and Grand Total.



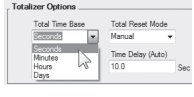
3

Under *Scale Values*, enter the desired low and high display values in the *Display* column.



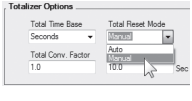
4

Under *Totalizer Options*, select the appropriate time base for your rate measurement (such as gallons per **second**).



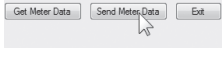
5

Select whether the total should reset *automatically* or *manually*. If *Auto* is selected, use the *Time Delay* field below to input the amount of time (in seconds) until it resets.



6

Click the *Send Meter Data* button to send your programmed settings to the meter.



Meter Configuration Menus

1

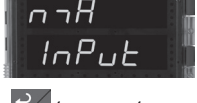
Press MENU to enter *Programming Mode*, press F3 ENTER to access the SEtuP (Setup) menu.

2

Press F3 ENTER to access the InPut (Input) menu.

3

Press F2 MAX to select either mA or voltage (mA or UoLt) and then press F3 ENTER to accept.



4

Press F3 ENTER to access the totAL (Totalizer) menu, press F2 MAX to select YES or no, then press F3 ENTER.

Note: Most applications will require the totalizer to be active (select YES).

5

Press F2 MAX until the dEc Pt (Decimal Point) menu is displayed and press F3 ENTER.

6

Press F3 ENTER to access the dEc Pt (Decimal Point) menu for the rAtE (Rate) parameter.

7

Press F1 RESET until the desired decimal point location is displayed and press F3 ENTER. Continue to press F3 ENTER to assign decimal point locations to the total and grand total.

8

Press F3 ENTER to access the ProG (Program) menu.

9

Press F3 ENTER to access the InCAL (Input Cal) menu.

10

Press F3 ENTER to access the SCALE (Scale) menu.

11

Press F3 ENTER three times, until diS 1 (Low Display Value) is displayed. Press F1 RESET to change which digit is selected, press F2 MAX to increment the selected digit, and press F3 ENTER when done.

12

Press F3 ENTER three times, until diS 2 (High Display Value) is displayed. Using F1 RESET and F2 MAX, select your desired value. When done, press F3 ENTER. The display will show SAVEd (Saved) momentarily.

13

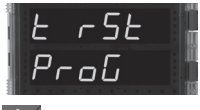
Press F3 ENTER to access the t tb (Total Time Base) menu.

Note: This menu will allow you to set the time base for rate measurement (i.e. units per second, per minute, per hour, or per day).

14

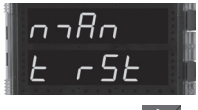
Press F2 MAX to select the appropriate time base and press F3 ENTER to accept.

15



Press F3 ENTER three times, until t rSt (Total Reset) is displayed. Press F3 ENTER to access.

16



Press F2 MAX to select either mAn (Manual) or Auto (Automatic) total reset and press F3 ENTER to accept.

Note: Time base and total reset may also be set for the grand total. These menus are Gt tb and Gt rSt and are accessible directly following the total menus.

Note: If Auto (Automatic) is chosen, an additional menu will be displayed: t dLY (Time Delay). This menu will allow you to set a delay time (in seconds) before the total is reset.

Program Relays for Automatic Reset

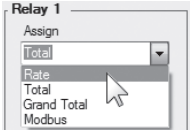
Program the Helios meter to turn the relays on at programmable set points and turn them off at reset points.

Note: Only relays assigned to rAtE (Rate) will require a reset point value. If the *set point* is **higher** than the *reset point*, the relay will be a **high alarm**. If the *set point* is **lower** than the *reset point*, the relay will be a **low alarm**.

MeterView Pro Software

1

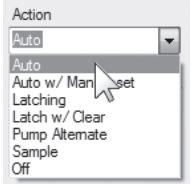
On the *Relays* tab, in the desired relay section, assign the relay to a desired parameter (i.e. rate, total, grand total, or Modbus®).



2

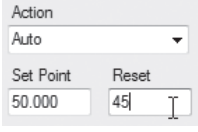
Select "Auto" from the *Action* drop down list.

Note: See PD2-6200 Instruction Manual for details on additional relay actions.



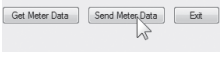
3

Enter the set and reset point values in the provided fields.



4

Click the *Send Meter Data* button to send your programmed settings to the meter.



Meter Configuration Menus

1

Press MENU to enter *Programming Mode*, press ENTER to access the SEtuP (Setup) menu.

2

Press MAX until the rELAY (Relay) menu is displayed and then press ENTER to access.

3

Press ENTER to access the ASS iGn (Relay Assignment) menu.

4

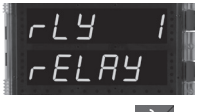
Press MAX to select the relay you wish to assign (ASS iGn 1-4) and then press ENTER to access.

5

Press MAX until the appropriate parameter is displayed and then press ENTER to accept.

6

Press MAX until the appropriate relay number is displayed (rLY 1-4) and then press ENTER.



Note: Once the assignment has been programmed for relay 1, you can continue to assign relays by accessing the subsequent menus.

7

Press ENTER to access the Act (Relay Action) menu.

8

Press ENTER to accept Auto (Automatic Reset).

9

Press F3 ENTER to access the SEt 1 (Relay 1 Set Point) menu.

10

Using F1 RESET to change the selected digit and F2 MAX to increment that digit, enter the desired set point value. Press F3 ENTER when done.

11

Press F3 ENTER to access the rSt 1 (Relay 1 Reset Point) menu.

Note: The reset menu will only be displayed is the relay has been assigned to rAtE (Rate). totAL (Total) and GtotAL (Grand Total) relays do not have reset points.

12

Using F1 RESET and F2 MAX as above, select your desired reset value. Press F3 ENTER when done to accept the new set point value. Press MENU to return to *Run Mode*.

Note: Use F2 MAX to select a different relay during step 3. If you need to program more relays, simply repeat steps 3-9 for each additional relay. Consult the Instruction Manual for information on additional relay action types.

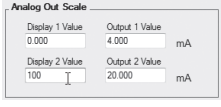
Program 4-20 mA Analog Output

Program the Helios meter to output an analog signal based on its display value. This signal is commonly output to a PLC or chart recorder.

Note: By default, the analog output will output the rate value as it is displayed on the meter. It is possible to output the total, grand total or some other value. Please refer to the PD2-6200 Instruction Manual for information on programming the analog output source.

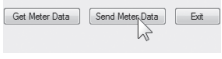
MeterView Pro Software

1



On the *Setup* tab, under *Analog Out Scale*, enter your desired display values in the provided fields.

2



Click the *Send Meter Data* button to send your programmed settings to the meter.

Meter Configuration Menus

1

Press MENU to enter *Programming Mode*, press F3 ENTER to access the SEtuP (Setup) menu.

2

Press F2 MAX until the Aout (Analog Out) menu is displayed and then press F3 ENTER.

3

Press F3 ENTER to access the dIS 1 (Display 1) menu. This is the display value at which the low range of the output will be transmitted.

4

Use F1 RESET to change the selected digit and F2 MAX to increment that digit. Press F3 ENTER when done to accept the new value.

5

Press F3 ENTER to access the Out 1 (Output 1) menu. This is the output signal which represents the value set for dIS 1.

6

The default value of 04.000 (4.000 mA) should be sufficient for most applications. Press F3 ENTER to accept the default value.

7

Press F3 ENTER twice to access the dIS 2 (Display 2) menu. Use F1 RESET and F2 MAX to enter a value and F3 ENTER when done.

8

Press F3 ENTER twice to access the Out 2 (Display 2) menu. Press F3 ENTER to accept the default value (20 mA).

Reset Meter to Factory Defaults

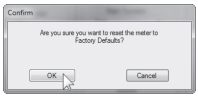
If a mistake has been made while programming the meter and it is unclear where the error occurred, the best option may be to perform a factory reset of the meter and begin again.

MeterView Pro Software

1

On the *Advanced Features* tab, in the bottom left-hand corner, click the *Reset Meter Factory Defaults* button.

2



In the confirmation window that appears, click *OK*. The meter will reset to factory defaults.

Meter Configuration Menus

1

Press and hold MENU for five seconds to enter the *Advanced Features Menu*.

2

Press F2 MAX until the diAG (diagnostics) menu is displayed.

3

Press and hold F1 RESET until the meter flashes rESEt (reset). Immediately press F3 ENTER to reset the meter.

4

The meter will flash all of the LED segments and then display ProcES (Process). The meter has been reset to factory defaults.