Instruction Manual

REMOTE PROGRAMMING

MeterView software allows all setup parameters to be programmed remotely from a PC and saved to a file for reporting or programming other meters.

DATA ACQUISITION

MeterView software provides a convenient way to collect the data generated by the Trident's serial output. The user can select the logging time interval. Data can be written to a file, which can then be imported into a spreadsheet or other application.

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SPECIFICATIONS

SYSTEM REQUIREMENTS	Windows® 95/98/ME/2000/XP
COMMUNICATION	RS-232 adapter or RS-422/485 adapter may be used for communicating with one meter at a time
NUMBER OF METERS	One meter at a time with addressing capability
BAUD RATE	Fixed 2400 bps
REPORTS	Data logging: log to Comma Separated Values (CSV) or HTML file formats Configuration: Save configuration in HTML file for printing, cloning or restoring meter settings
CONFIGURATION	Configure one meter at a time

Disclaimer

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ORDERING INFORMATION

Meters

85-265 VAC* Model	12-36 VDC* Model	Description
PD765-6R0-0	PD765-7R0-0	No Options
PD765-6R0-1		24 VDC Output Option
PD765-6R2-0	PD765-7R2-0	2 Relays Option
PD765-6R2-1		2 Relays + 24 VDC Output Option
*All models may be AC or DC powered, see PD765 Instruction Manual for details.		

Accessories

| Model	Description
PDA7420	7' (2.1 m) Standard Modular Cable
PDA7232	RS-232 Serial Adapter (includes PDA7420)
PDA7422	RS-422/485 Serial Adapter (includes PDA7420)
PDA7502	MeterView 2.0 Software

MeterView Installation

1. Load the MeterView software CD-ROM into your CD-ROM drive. The MeterView splash screen will automatically load onto the screen and the installation program will follow. If it doesn't start automatically, click on the **Start** button on the Windows® taskbar, then click **Run**. Enter *x:\setup.exe* (where *x* is your CD-ROM drive) and press enter.
2. Follow the on-screen instructions to install MeterView.
3. During installation, the MeterView program icon is placed on the Windows Desktop and in the Start Menu.
4. Afterwards, Windows® Explorer may be used to browse the rest of the CD-ROM, including: this manual, a *readme* file containing important information about MeterView, and free Adobe Acrobat software for viewing PDF files.

Notice:

This software may only be installed on a single computer. It may not be shared over a network or otherwise used on more than one computer at a time, except for the purpose of remote programming of meters.

Running MeterView for the First Time

The first time MeterView is run it is necessary to setup the Serial Communications. Select the meter address and communication port to which the meter is connected.
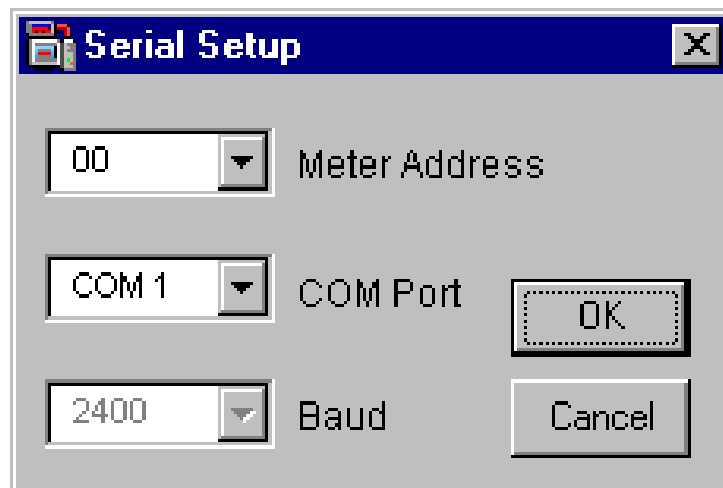
Main MeterView Window

The main MeterView window shows the present reading, selected engineering units, and tag number, along with other information. The graphic below indicates the different parts of the main MeterView window.

| Main Window	Function/Submenus
Setup	Read, restore, and/or clone meter's configuration, Open and/or save configuration file to disk
Customize	Relay Tags, Display Units, Tag Number, Font Color, Background Color, Enable Sound
Serial	Adjust the serial connection settings
Help	About
Relay Status	Displays relay status. This is also used to remotely acknowledge either relay
Logging Time Interval	Click on arrow to select from 1-60 from drop-down menu, or type number from 1-1440; select Minutes or Seconds
Start/Stop Button	Click to start/stop logging to a file
Pause Button	Click to pause logging
MeterView Password	Enter password to lock or unlock MeterView
Exit	Click to exit MeterView program
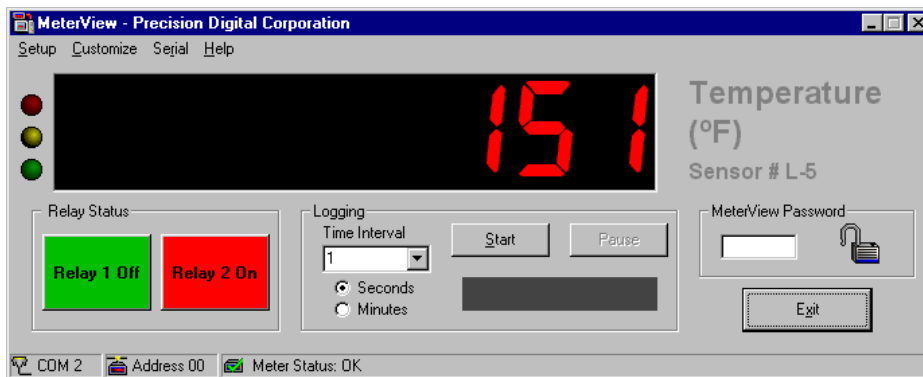
General Notes

- Use left mouse button or tab key on the keyboard to navigate within a window.

- Parameters not available within a window appear grayed-out.

- An arrow next to a box indicates a drop-down menu. Click on arrow to display the drop-down menu.

Setup Menu

Click on the **Setup** menu to load the meter configuration window. The following settings can be programmed from this window:

1. Input type (4-20 mA, 0-10 V, RTD, or TC).
2. Decimal point for process inputs (dd.dd).
3. Temperature scale (F or C) for temperature inputs.
4. Values for Adjust (temperature only), Bypass, Filter, Password, and scaling for process inputs.
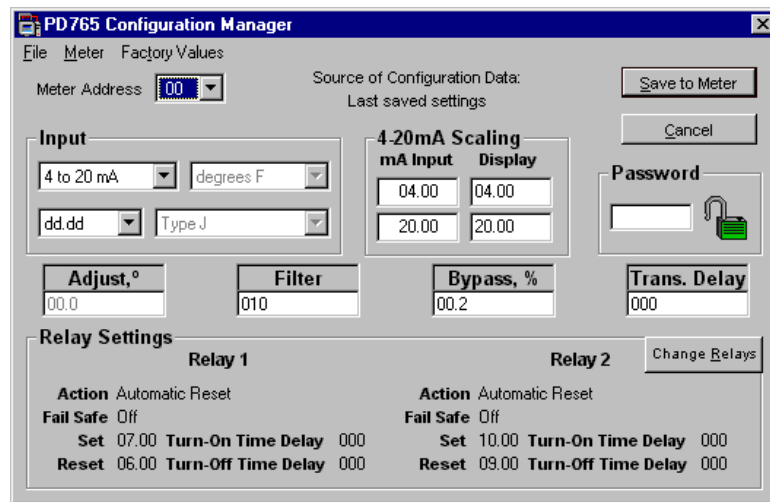
5. Relay settings: see Page 13 for more information.
6. After the last change has been made, click the "**Save to Meter**" button or press Enter on the keyboard to send the new settings to the meter, or click on **Cancel** to abandon changes. Before sending the new settings, MeterView will ask to confirm that the meter's current settings should be overwritten. Click **Yes** to overwrite the settings, or **No** to abandon the changes and return to the configuration window.

Notes

- When any menu is accessed, communication between meter and computer is stopped.
- Transmit and receive status indicators on Serial Adapter stop blinking while changes are made to configuration.
- Before saving settings to the meter, make sure that the correct Meter Address is selected to avoid making changes to the wrong meter.

File Menu

The following options are available from the File menu:

1. **Open** to open saved configuration files.

2. **Save** and **Save as** to save the current settings to a configuration file.

3. **Quit** to close the configuration window and return to the main window.

Meter Menu

The following options are available from the Meter menu:

1. **Read** to import the current settings from the meter into MeterView.

2. **Restore** to restore a meter to settings previously saved in a configuration file. The restore operation will only work with the meter whose settings were originally saved to the configuration file.

> *It is recommended to create a configuration file before changing any setting and before any calibration operation.*

3. **Default** to load the factory default settings into the setup window.

Factory Values Menu

The following option is available from the Factory Values menu:

1. **Display** to show or hide calibration values and factory programmed information (Firmware, Version, and Serial Number).
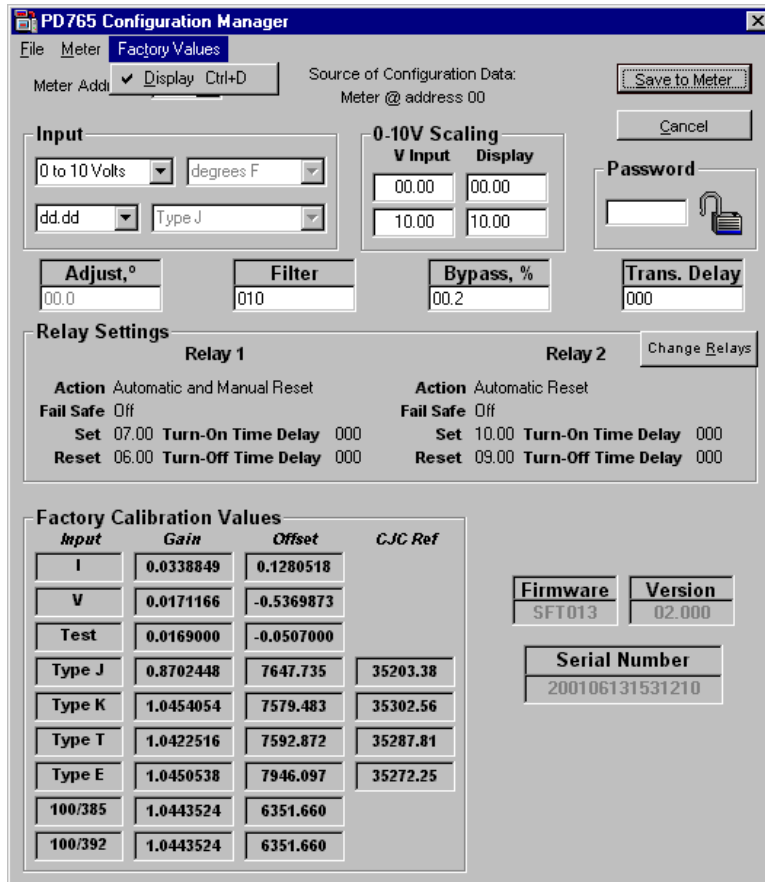

Note

- In order to display the Factory Calibration Values, the settings must first be read from the meter or loaded from a saved configuration file.

Setup Input Configuration

In the configuration window, click on the arrow under Input and select the appropriate input from the drop-down menu. Make all desired changes to Input configuration then click on "**Save to Meter**" or press Enter on the keyboard to send changes to meter.
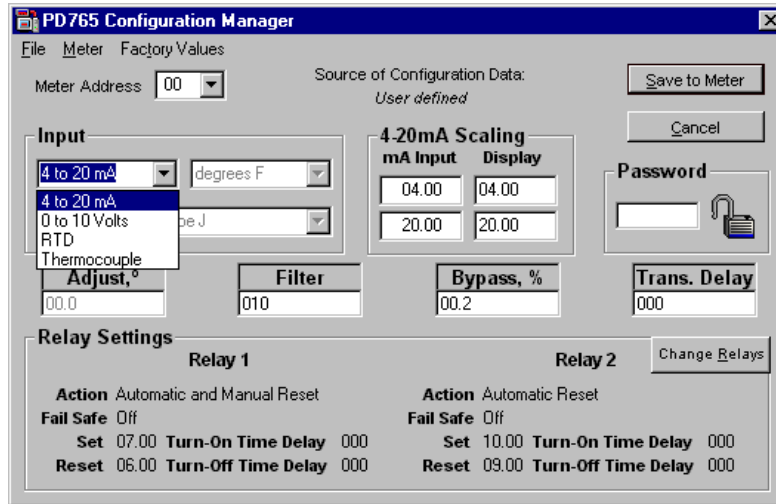
Setup Decimal Point

Click on the arrow next to the *dddd* box then click on desired decimal point position. Decimal point selection is available for 4-20 mA and 0-10 V inputs only.
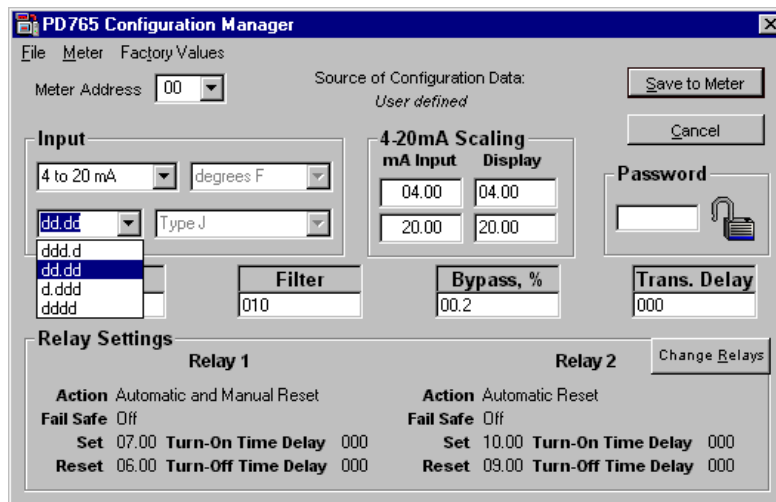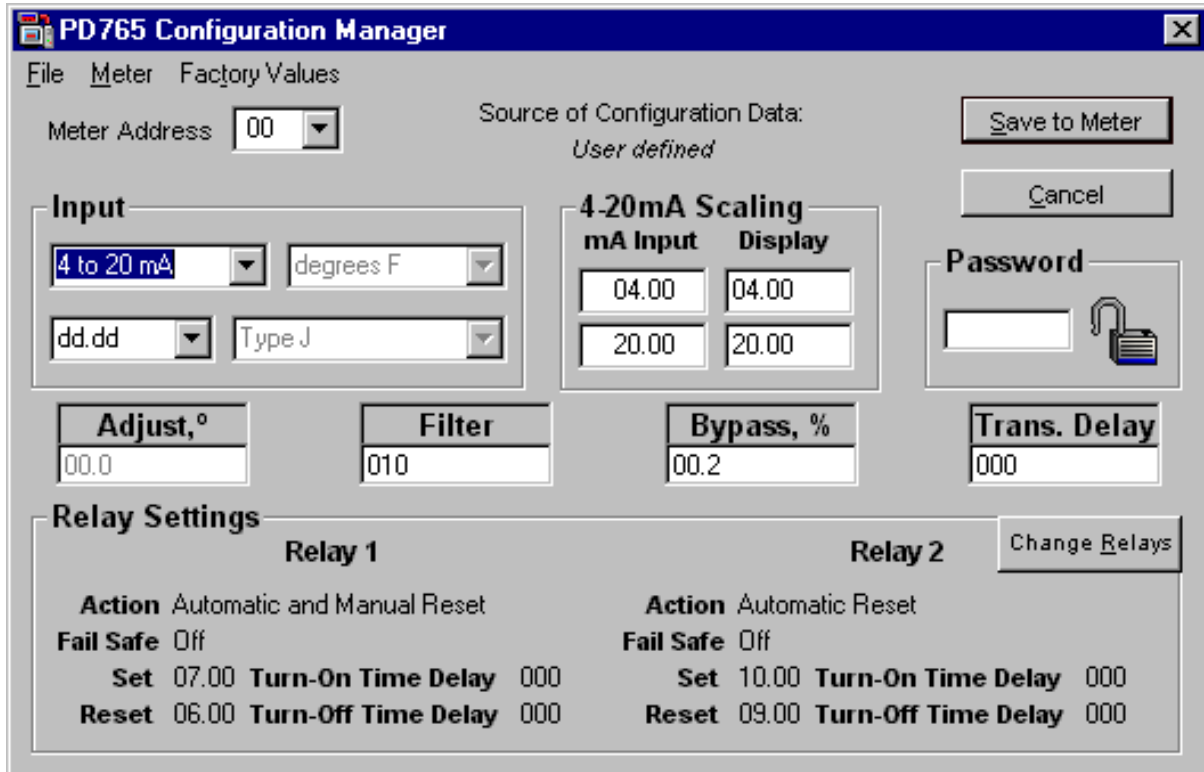

The display scale and relay set/reset points are adjusted according to the decimal point selection.
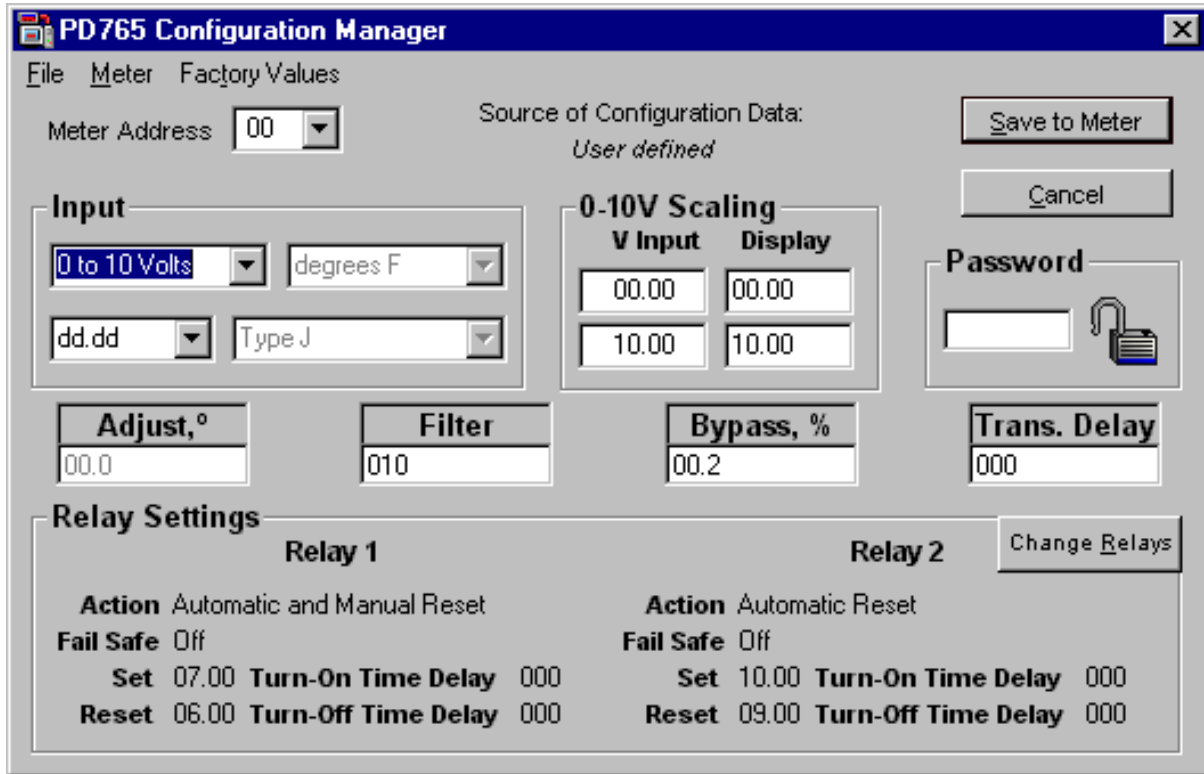
Setup 4-20 mA Input

1. Click on **Setup**.
2. Click on **4 to 20 mA**.
3. Change any other desired parameter within this window, then click "**Save to Meter**" to send changes to meter.
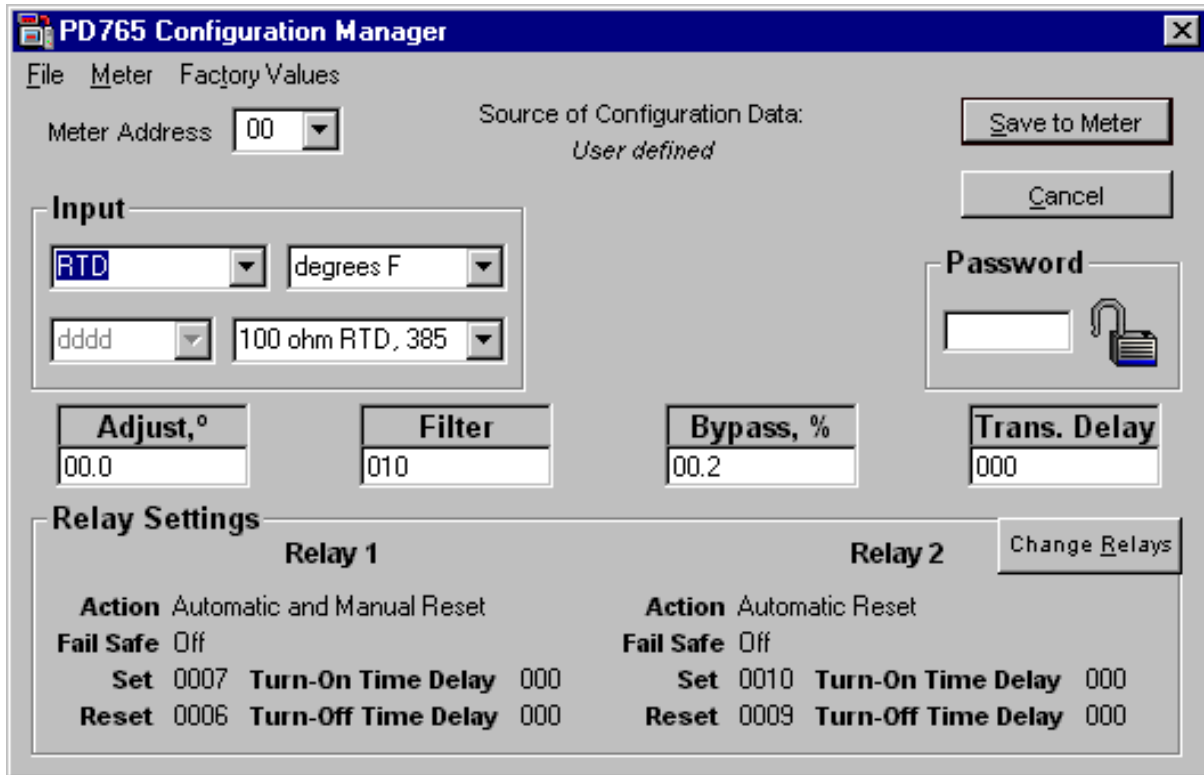
Setup 0-10 V Input

1. Click on **Setup**.
2. Click on **0 to 10 Volts**.
3. Change any other desired parameter within this window, then click "**Save to Meter**" to send changes to meter.

Setup RTD Input

1. Click on **Setup**.
2. Click on **RTD**.
3. Select **degrees F** or **degrees C**.
4. Select **100 ohm RTD, 385** or **100 ohm RTD, 392**.
5. Change any other desired parameter within this window, then click "**Save to Meter**" to send changes to meter.

Setup Thermocouple Input

1. Click on **Setup**.
2. Click on **Thermocouple**.
3. Select **degrees F** or **degrees C**.
4. Select thermocouple type (**Type J**, **Type K**, **Type T**, **Type T0.1**, or **Type E**).
5. Change any other desired parameter within this window, then click "**Save to Meter**" to send changes to meter.
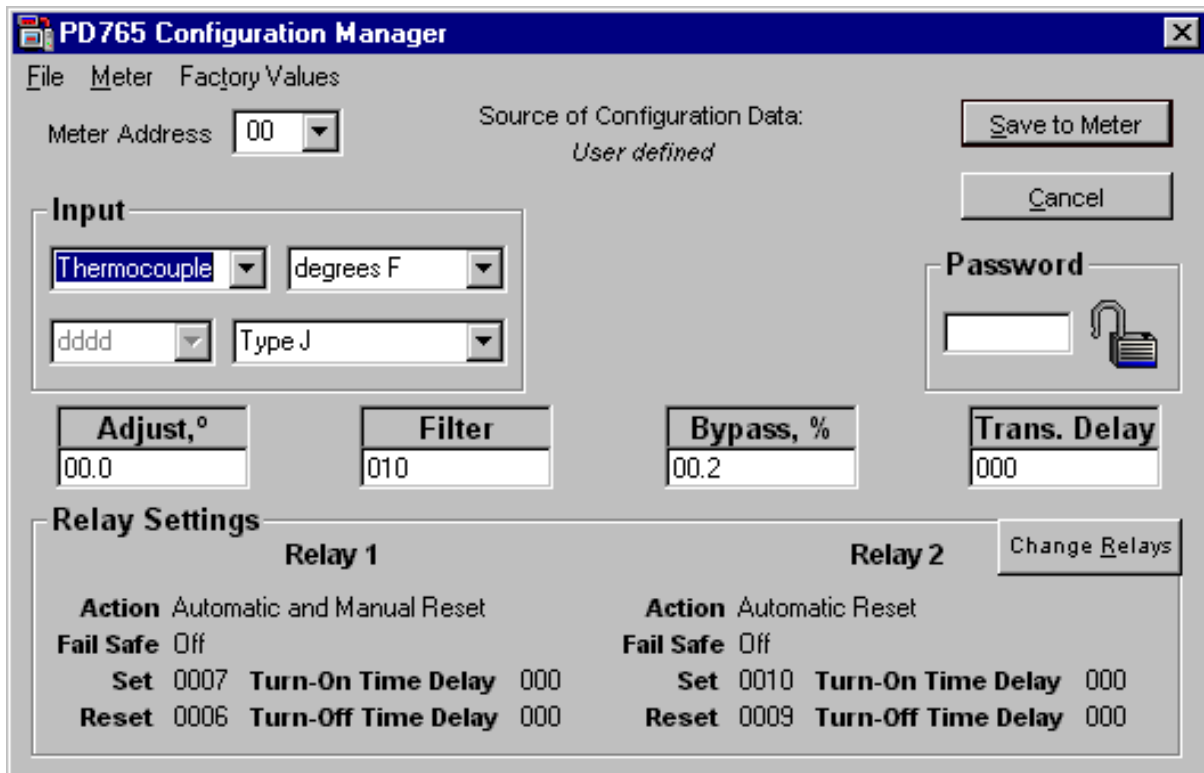
Password

To lock the meter, enter a password in the **Password** box. The password must be a four-digit number; "0000" is not allowed. Change any other desired parameter within this window, then click "**Save to Meter**" to send changes to meter and lock it.

To unlock the meter, enter the password used to lock the meter in the **Password** box. Change any other desired parameter within this window, then click "**Save to Meter**" to send changes to meter and unlock it.

The meter may also be locked, unlocked or the password changed by clicking on the lock icon next to the password box.

Note

- See the PD765 Instruction Manual for more information on locking and unlocking the meter.

Relay Setup

To change relay settings, click on "**Change Relays**". In the **Relay Setup** window, select the desired **Mode**, **Fail Safe** operation, **Set Point**, **Reset Point**, **Turn-On Time** and **Turn-Off Time** for each relay, and click on "**OK**". Change any other desired parameters within the configuration window, then click "**Save to Meter**" to send changes to meter.

Customize Menu

From the Customize menu, the following options are available:
1. **Relay Tags** to change the text label and color of the Relay Status buttons.
2. **Display Units** to show text next to the display indicating the units being measured.
3. **Tag Number** to show text next to the display indicating identifying information about the meter.
4. **Font Color** to change the font color used for the meter display.
5. **Background Color** to change the color used for the background of the meter display.
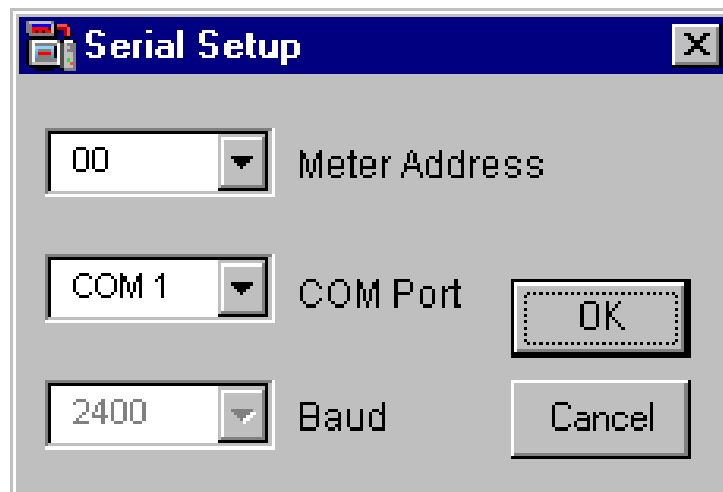
Note
*   These settings are NOT saved to the meter's memory.
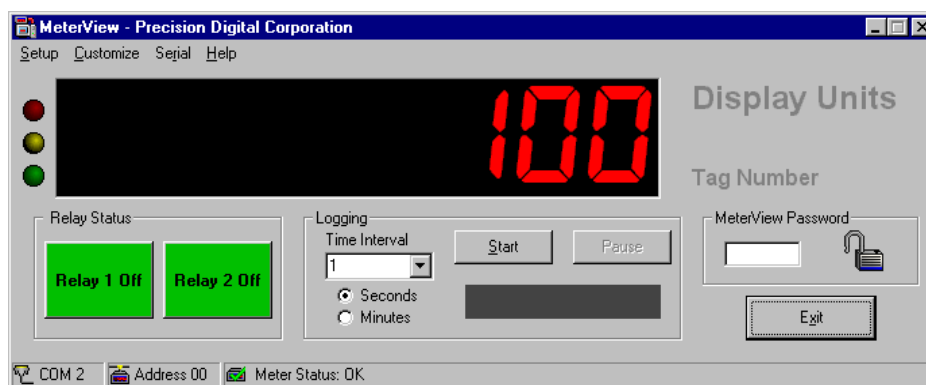
Serial Communication Setup

> *Addresses for Trident Meter and MeterView are set to 00 at the factory*

Click on **Serial** to access the Serial communication setup. The meter address selected must match the address programmed in the meter using the front panel buttons. Select correct communication port used for Serial Adapter. If timeout error is received, try another serial port selection or check meter's address.

Serial Setup   ✕

00 ▼	Meter Address

COM 1 ▼	COM Port	[OK]

2400 ▼	Baud	[Cancel]

Note
- Baud rate is fixed at 2400 bps.

About

The **About** window provides the product number and version information. You should have this information available in the event you must contact Precision Digital Technical Support.

Relay Status and Acknowledgement

The **Relay Status** section of the main MeterView window displays the current status of the relays, and allows remote acknowledgement of relays, if applicable. The text labels and colors for the status buttons many be customized by using the **Relay Tags** item in the **Customize** menu.

Note

- See the PD765 Instruction Manual for more information about relay modes and acknowledgement.

Logging Meter Data to File

1. Click on the arrow next to the Logging Time Interval box to select an interval from 1-60, or type a number from 1-1440 into the Logging Time Interval box.
2. Select seconds or minutes.
3. Click the **Start** button on the main MeterView window to start logging to a file.
4. Select file location, file type (HTML or CSV), and enter a file name. Click **OK**. MeterView will begin logging data to the file.

Logging may be paused or stopped at any time. MeterView will indicate logging and paused status with corresponding message flashing in the display below the Start/Stop and Pause buttons.
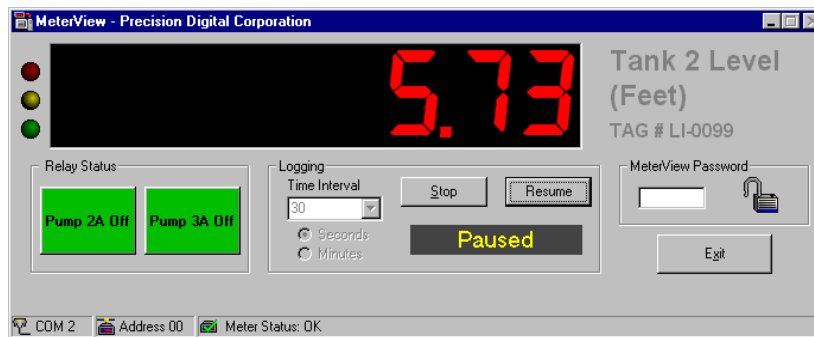
Logging Data

This window shows logging is in progress.
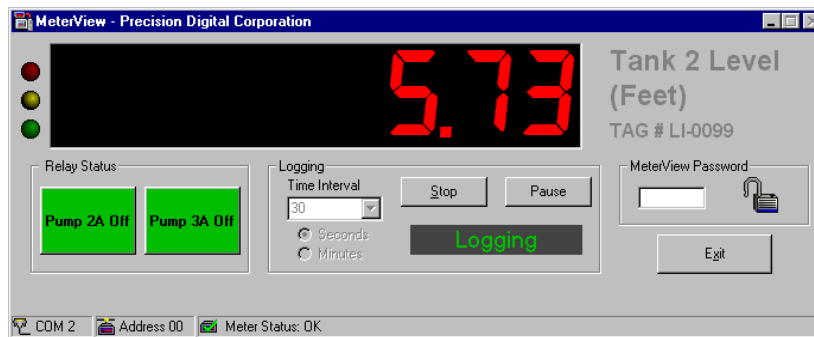
Paused Logging

This window shows logging has been paused.

The meter continues displaying the process, but no data is being logged to the file while logging remains paused.

Click on **Stop** to stop logging process. **Start** button reappears.
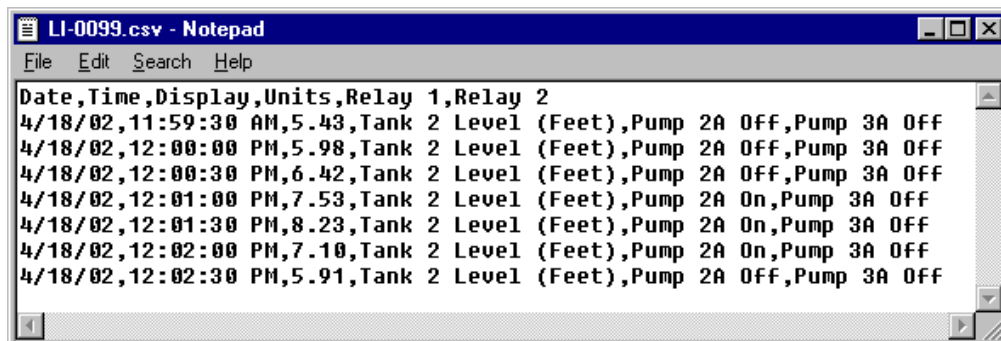
Log File Samples

The HTML log file format contains pertinent information related to the meter and logging selections. Each log entry includes date and time, display value, units and relay status.

HTML log file:
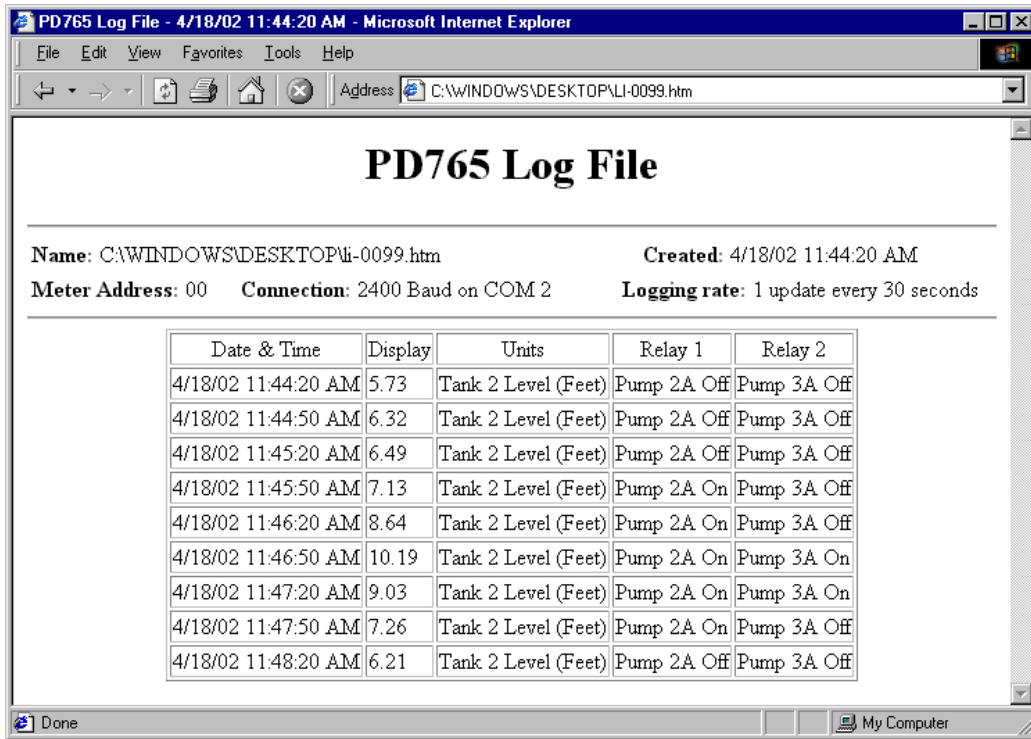
The CSV log file format includes date and time, display value, units and relay status for each log entry.

CSV log file:

MeterView Password

In the **MeterView Password** section of the main MeterView window, a four-digit numeric password may be entered to lock or unlock MeterView. To enter a password, type the four-digit number and press the enter key or double-click the lock icon next to the password field.

Locking MeterView disables all controls, preventing any settings from being changed. This is useful for preventing any changes from being made or preventing logging from being stopped by unauthorized users while MeterView is running unattended.

Note
- Locking MeterView and locking the meter itself are two different features. Locking one does not automatically lock the other.

Status LEDs

The three status LEDs shown to the left of the display in the main window indicate the status of the connection between the meter and the computer.
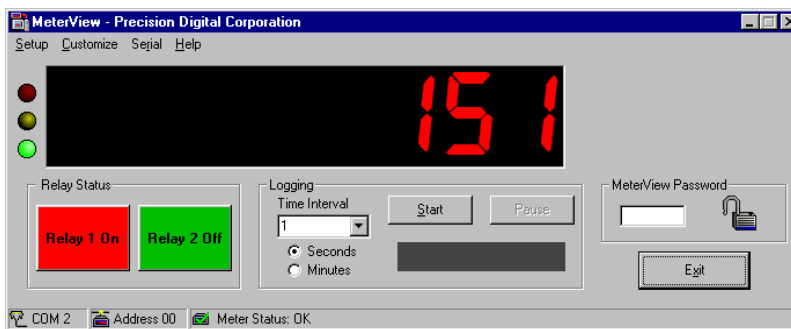
LED	Meaning
Green	MeterView has detected the meter and is functioning correctly.
Yellow	MeterView is attempting to detect the meter.
Red	MeterView failed to detect the meter. MeterView will continue attempting to detect it. Check that the correct serial port and meter address are selected.

How to Contact Precision Digital

- For Technical Support please

  call: (800) 610-5239

  fax: (508) 655-8990

  e-mail: support@predig.com

- For Sales Support or to place an order please

  call: (800) 343-1001

  fax: (508) 655-8990

  e-mail: sales@predig.com

- For an online version of this Instruction Manual please visit

  www.predig.com

- For *Interactive VirtualMeter Demo* visit

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