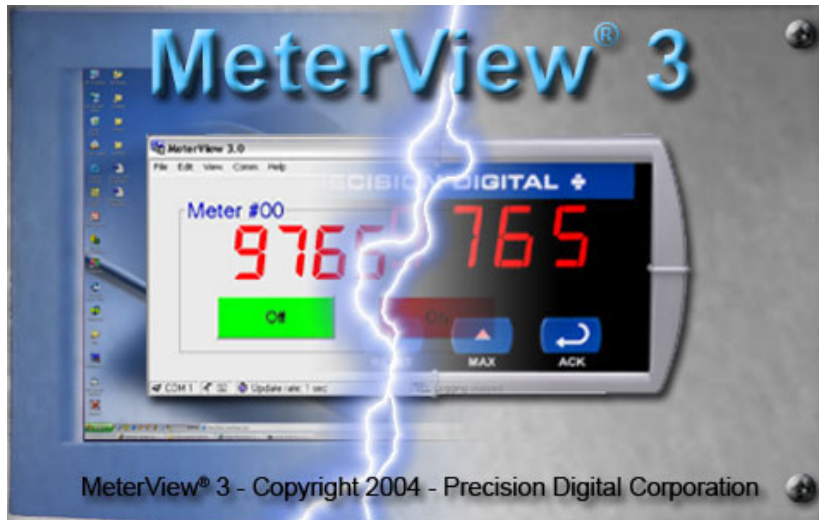


## Instruction Manual



### REMOTE PROGRAMMING

MeterView® 3 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® 3 software provides a convenient way to collect the data generated by the Trident Model PD765 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

<b>SYSTEM REQUIREMENTS</b>	Windows® 95/98/ME/NT4/2000/XP
<b>COMMUNICATION</b>	RS-232 adapter or RS-422/485 adapters with an RS-232 to RS-485 converter may be used for communicating with the meter(s)
<b>NUMBER OF METERS</b>	Up to 100 meters simultaneously with addressing capability (up to 60 seconds scanning delay)
<b>BAUD RATE</b>	2400 bps to 19.2 kbps
<b>REPORTS</b>	Data logging: log to HTML file format Configuration: save configuration to PDC file format or export to HTML file for printing, cloning, or restoring meter settings
<b>CONFIGURATION</b>	Configure one meter at a time
<b>LOGGING</b>	Log data to HTML file. All enabled meters are logged to a single file. Logging interval: 2 seconds to 60 hours or manual

## ORDERING INFORMATION

METERVIEW VERSIONS	
Model	Description
PDA7503-1	Supports 1 meter
PDA7503-2	Supports up to 10 meters
PDA7503-3	Supports up to 100 meters

METER MODELS		
85-265 VAC* Model	12-36 VDC* Model	Description
PD765-6R0-00	PD765-7R0-00	No options
PD765-6R0-10		24 V transmitter supply
PD765-6R2-00	PD765-7R2-00	2 relays
PD765-6R2-10		2 relays & 24 V transmitter supply
PD765-6R3-00	PD765-7R3-00	4-20 mA output
PD765-6R3-10		4-20 mA output & 24 V supply
PD765-6R3-20		4-20 mA output & dual 24 V supplies

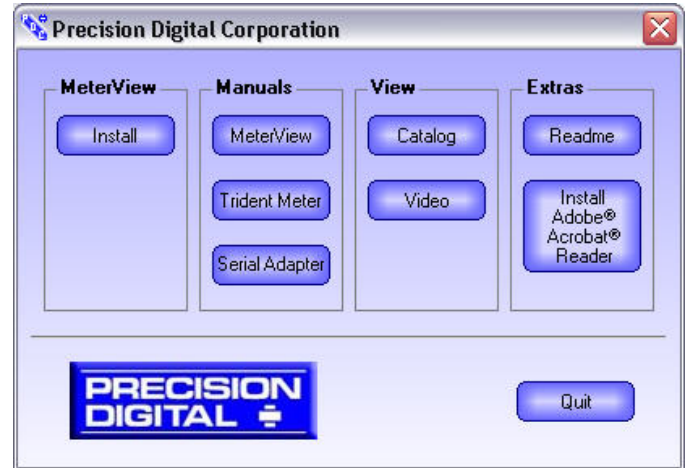
To request meters with Modbus option enabled, replace the last digit with a "1".  
Modbus option may be ordered separately by requesting P/N: PDN-MODBUS

\*All models may be powered from AC or DC, 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)
PDA7485	RS-232 to RS-485 Converter
PDA7486	120 VAC/12 VDC Power Supply
PDA7487	DB25 to DB9 Adapter

## METERVIEW 3 INSTALLATION

1. Load the MeterView 3 CD-ROM into your CD-ROM drive. The MeterView 3 CD browser should load automatically. If it doesn't, click on the **Start** button on the Windows® taskbar, then click **Run**. Type `x:\Autorun.exe` (where x is your CD-ROM drive) and press enter.



2. All contents of the CD are accessible from the CD browser by clicking any of the buttons on the screen. Click on the first button on the left to install MeterView.
3. During installation, the MeterView 3 program icon is placed on the Windows Desktop and also in the Start Menu with other related icons.
4. Afterwards, the MeterView 3 CD browser may be used to access the rest of the CD-ROM contents, including: instruction manuals, a *readme* file containing important information about MeterView, free Adobe® Acrobat® software for viewing PDF files, etc.

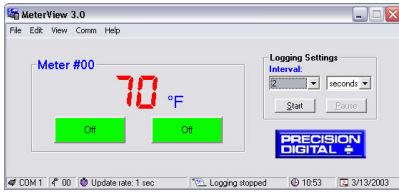
### Notice!

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. For complete terms refer to the End User License Agreement (EULA) found in the MeterView 3 registration window.

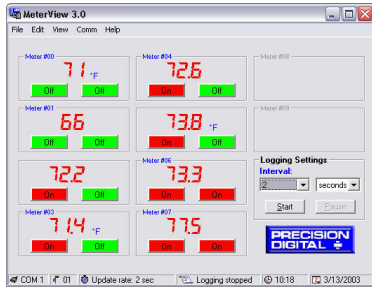
### METERVIEW 3 VERSIONS

MeterView 3 comes in three different versions:

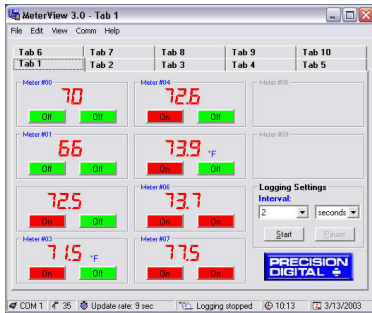
- PDA7503-1 — Supports 1 meter



- PDA7503-2 — Supports up to 10 meters



- PDA7503-3 — Supports up to 100 meters



### RUNNING METERVIEW 3 THE FIRST TIME

The first time MeterView 3 is run it is necessary to set up the serial communication settings of the program. Select the communication port and the baud rate of the meter(s) connected.



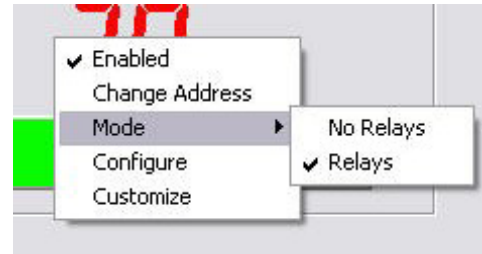
*Note: The selected baud rate in MeterView and the meter(s) baud rate must be the same. Otherwise a communication error will occur.*

### Enable Meter and Select Meter Address

The actual meter address is set up at the meter using the front panel buttons. The location where a meter is displayed is selected on MeterView Main window.

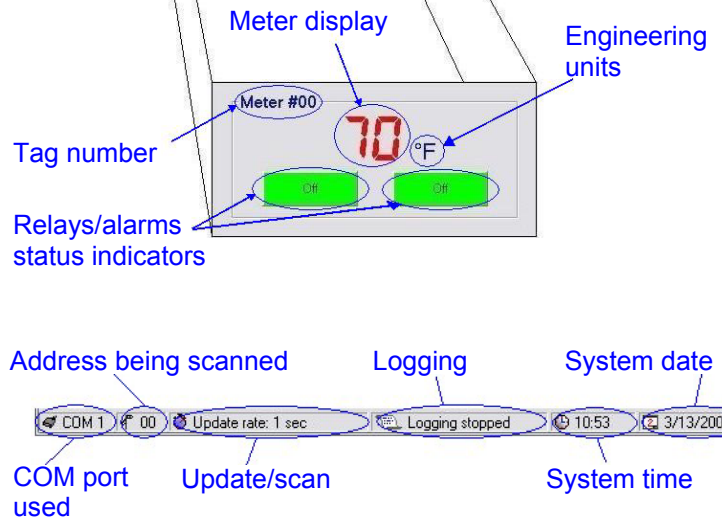
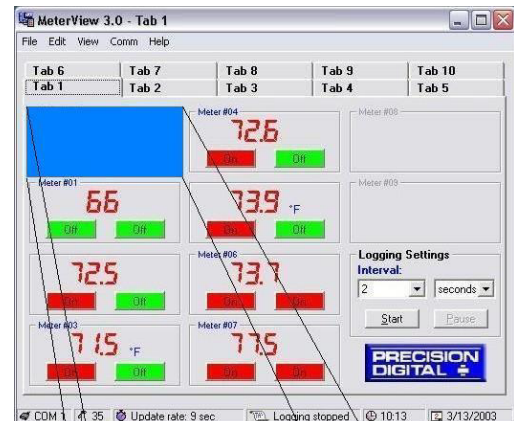
To enable or select a meter with a different serial address:

1. Right-click on the screen location of meter.
2. Click on **Enabled**, if meter is not yet enabled.
3. Click on **Change Address**.
4. Select meter address to display in this location.



### METERVIEW 3 MAIN WINDOW

The main MeterView 3 window shows the present reading(s), relays/alarm status, tag number(s) and selected engineering units, along with other information for each meter. The graphic below indicates the different parts of the main MeterView 3 window.



### Main Window Menus

The MeterView 3 main window contains the following menus:

- File menu
- Edit menu
- View menu
- Comm Menu
- Help Menu

#### File Menu

The following options are available from this menu:

1. **Save Settings** to save the present window settings.
2. **Exit** to close the MeterView 3 program.

#### Edit Menu

The following options are available from this menu:

1. **Serial Settings** to edit the serial communication settings.

#### View Menu

The following options are available from this menu:

1. **Event Log** to view the MeterView 3 event log window where all internal program events and errors are logged.
2. **Show Relay Alerts** select whether or not MeterView should alert the user of a change in the relay status (ON → OFF or vice versa) with a pop-up message.

#### Comm Menu

The following options are available from this menu:

1. **Stop** to halt the automatic meter scanning. This allows quicker access to menu items, functions, and windows.
2. **Start** to resume the automatic meter scanning.

#### Help Menu

The following options are available from this menu:

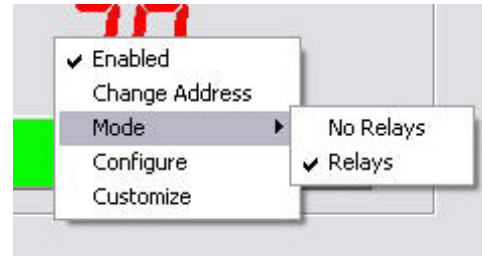
1. **Register MeterView 3** to launch the registration program to register your copy of MeterView 3.
2. **About** opens a window that provides the product number and version information. You should have this information available in the event you must contact Precision Digital Technical Support.



### Right Click Menu

By right clicking on a meter on the screen a menu will appear with the following options:

Menu Item	Function/Submenus
Enabled	Enable or disable a meter on the screen
Change Address	Change a meter's serial address in MeterView
Mode	Select whether relays/alarms are shown or not
Configure	Access the configuration window for a meter
Customize	Customize how a meter looks on the screen



#### Notes:

- Due to the intensive processor usage, it may be necessary to click more than once before a submenu or function is launched.
- Accessing menus or other windows could disrupt communication with the meter(s).
- 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.

## CONFIGURATION WINDOW

Click on **Configure** in the right click menu to open a meter's 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. Units (F or C) and sensor type for temperature inputs.
4. Values for scaling process inputs, values for scaling analog output, Password, Adjust (temperature only), Filter, Bypass, Cutoff (process inputs only), Transmit Delay, Function type, and Cut-off.
5. Relay settings.
6. After the last change has been made, click the **Write to Meter** button or press Enter on the keyboard to send the new settings to the meter, or click on **Exit** to abandon changes. Before sending the new settings, MeterView 3 will ask to confirm that the meter's current settings should be overwritten. Click **Yes** to overwrite the settings, or **No** to abort the operation and return to the configuration window.

The configuration window contains the following menus:

- File menu
- Tools menu
- Password menu

### Note:

- Accessing menus or other windows could disrupt communication with the other meter(s).

## File Menu

The following options are available from the File menu:

1. **Save Configuration** to save the present settings to a file.
2. **Load Configuration** to load settings from a file.
3. **Export to HTML** to save the present settings to a HTML file.
4. **Import from HTML** to load settings from a HTML file.

## Tools Menu

The following options are available from the Tools menu:

1. **Restore Meter** 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 file.
2. **Load Defaults** to load the factory default settings.

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

## Password Menu

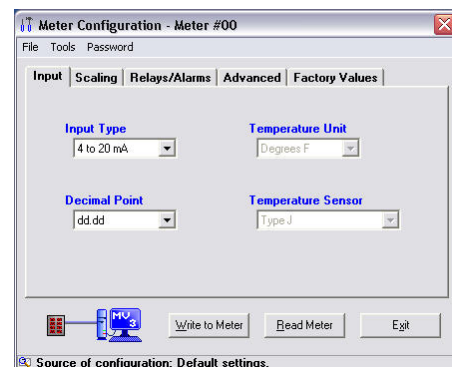
The following options are available from the Password menu:

1. **Lock Meter** to lock the meter and prevent unauthorized changes.
2. **Change Password** to change the unlock password of the meter.
3. **Unlock Meter** to unlock the meter and allow changes to be made.

*The password must be a four-digit number; "0000" is the unlocked password setting.*

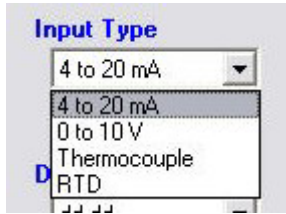
## Input Tab

In the configuration window, click on the **Input** tab to view the input options.



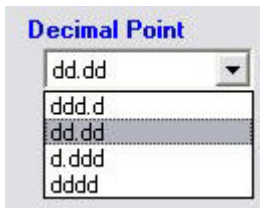
### Set Up Input Type

Click on the arrow next to the 4 to 20 mA box and then click on the desired input type.



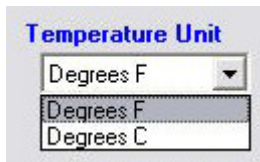
### Set Up Decimal Point

Click on the arrow next to the dd.dd box and then click on the 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.



### Set Up Temperature Unit

Click on the arrow next to the Degrees F box and then click on the desired temperature unit. Temperature unit selection is available for Thermocouple and RTD inputs only.

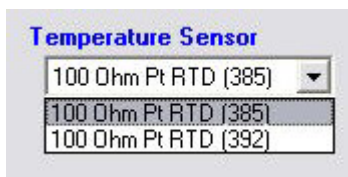
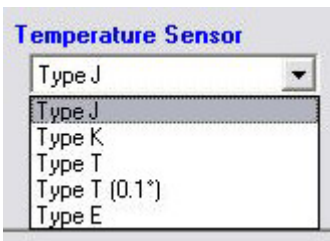


### Set Up Temperature Sensor

Click on the arrow next to the Type J box and then click on the desired temperature sensor. Temperature sensor selection is available for Thermocouple and RTD inputs only.

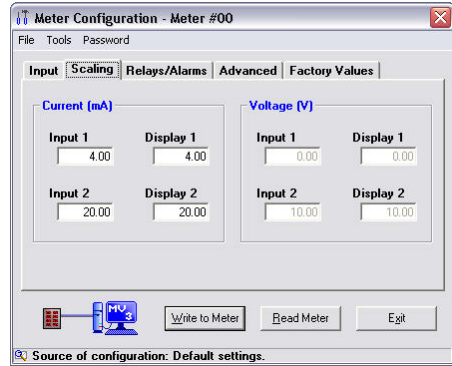
#### Thermocouple Sensors

#### RTD Sensors



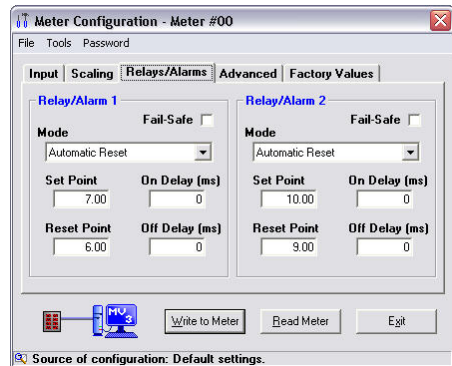
### Scaling Tab

In the configuration window, click on the **Scaling** tab to view the scaling settings for process inputs (current and voltage).



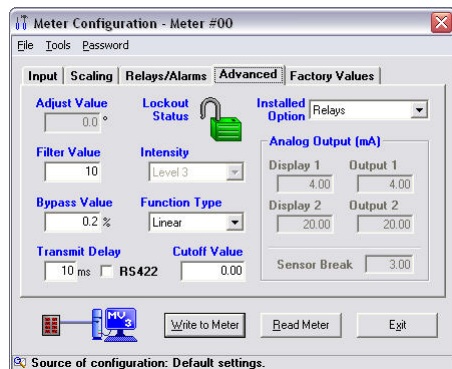
### Relays/Alarms Tab

In the configuration window, click on the **Relays/Alarms** tab to view the settings for the relays/alarms.



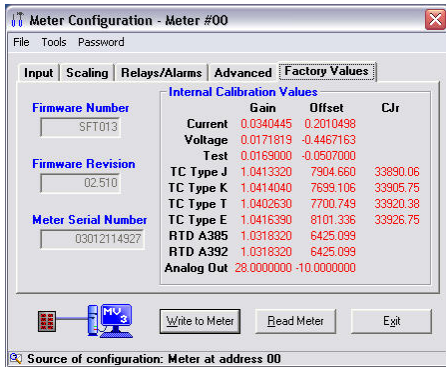
### Advanced Tab

In the configuration window, click on the **Advanced** tab to view the advanced settings. Consult the meter manual for further details.



### Factory Values Tab

In the configuration window, click on the **Factory Values** tab to view the meter serial number, version, and calibration constants.

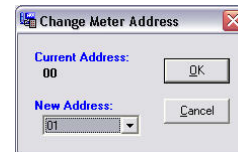


### SERIAL COMMUNICATION SETUP

*Addresses for Trident Meter and MeterView 3 are set to 00 at the factory.*

1. From the main window, click on **Edit** → **Serial Settings** menu to access the Serial Communication Setup.
2. Select correct communication port used for Serial Adapter.
3. If timeout error is received, try another serial port selection or check meter's address.

To change the serial address of a meter, simply click on **Change Address** in the right-click menu. This setting is on a per-meter basis.



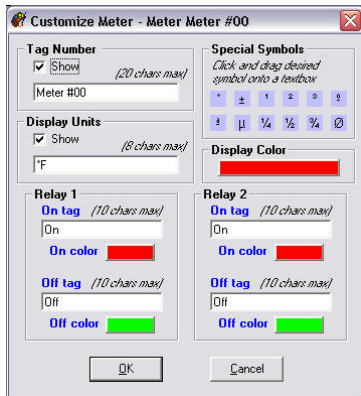
**Note:**

- Baud rate is set up for 2400 bps at the factory.

### CUSTOMIZE WINDOW

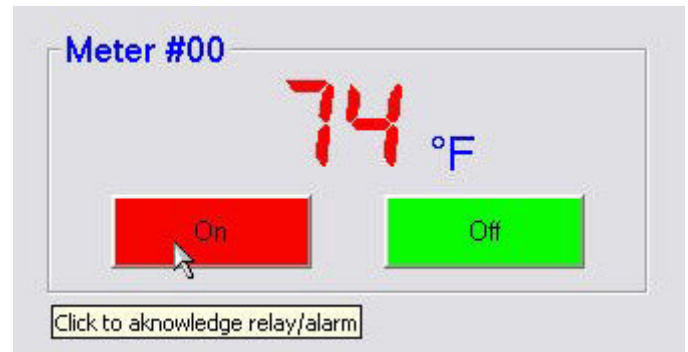
Click on **Customize** in the right click menu to open a meter's customize window. The following settings can be programmed from this window:

1. **Tag Number** to identify a meter and optionally display it on the meter. Pre-selected special characters may be used in this field by simply dragging the desired symbol into it.
2. **Display Units** to identify the engineering units of the value being read and optionally display it on the meter. Pre-selected special characters may be used in this field by simply dragging the desired symbol into it.
3. **Display Color** to change the color of the meter display on the screen.
4. **Relay Tag** to change the text label of the Relay Status indicator(s).
5. **Relay Color** to change the color of the Relay Status indicator(s).



### RELAYS/ALARMS STATUS

Each meter enabled in the main MeterView 3 window can display the current status of its relays/alarms (if the meter **Mode** in the right-click menu is set to **Relays**) and can allow the user to remotely acknowledge the relays/alarms (if applicable). The text labels and colors for the status indicators may be customized through the **Customize** window.



**Note:**

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

**Note:**

- These settings are **NOT** saved to the meter.

## LOGGING METER DATA TO FILE

1. Click on the arrow next to the Interval box to select an interval from 2 to 60 or select manual to log the data only when the **Log** button is clicked (**Log** button is only visible when manual is selected).
2. Select seconds, minutes, or hours.
3. Click the **Start** button.
4. Select file location and enter a file name. Click **OK**. MeterView 3 will begin logging data to the file.



Logging may be paused or stopped at any time. MeterView 3 will indicate logging and paused status with corresponding message flashing in the main window status bar. When logging, all other MeterView functions and windows are not accessible.

### Log File Sample

The HTML log file format contains pertinent information related to the meter and logging selections. Each log entry includes date and time, tag number, serial address, display value, units and relays/alarms status.

Date & Time	Tag Number	Address	Display	Units	Relay 1	Relay 2
3/7/2003 15:36:32	Meter #00	00	69		On	Off
3/7/2003 15:36:32		01	70.9		Off	Off
3/7/2003 15:36:32	Meter #02	02	72.7		On	Off
3/7/2003 15:36:32		03	72.5	°F	On	Off
3/7/2003 15:36:32	Meter #04	04	72.0	°F	On	Off
3/7/2003 15:36:32		05	71.7		On	Off
3/7/2003 15:36:34	Meter #00	00	69		On	Off
3/7/2003 15:36:34		01	70.9		Off	Off
3/7/2003 15:36:34	Meter #02	02	72.7		On	Off
3/7/2003 15:36:34		03	72.5	°F	On	Off
3/7/2003 15:36:34	Meter #04	04	72.0	°F	On	Off
3/7/2003 15:36:34		05	71.7		On	Off

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- For Technical Support please call: (800) 610-5239  
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email: [sales@predig.com](mailto:sales@predig.com)
- For an online version of this Instruction Manual please visit [www.predig.com](http://www.predig.com)
- For *Interactive VirtualMeter Demo* please visit [www.predig.com](http://www.predig.com)

