5 YEAR WARRANTY

OMEGA®

User's Guide

PLATINUM™ Series

Shop online at omega.com®

e-mail: info@omega.com
For latest product manuals:
www.omegamanual.info

CN32Pt, CN16Pt, CN16DPt, CN8Pt, CN8DPt, CN8EPt

DP32Pt, DP16Pt, DP8Pt, DP8EPt

Platinum Configurator

omega.com info@omega.com

Servicing North America:

U.S.A. Headquarters: Omega Engineering, Inc.
Toll-Free: 1-800-826-6342 (USA & Canada only)
Customer Service: 1-800-622-2378 (USA & Canada only)
Engineering Service: 1-800-872-9436 (USA & Canada only)
Tel: (203) 359-1660 Fax: (203) 359-7700
e-mail: info@omega.com

For Other Locations Visit omega.com/worldwide

The information contained in this document is believed to be correct, but OMEGA accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

TABLE OF CONTENTS

1 Introduction 6

1.1 Purpose 6

1.2 Definition of Terms and Acronyms 7

1.3 Applicable Documents 7

2 Installation 8

2.1 Device Interface 8

2.1.1 USB Virtual Com 8

2.1.2 RS232/RS485 9

2.1.3 Ethernet 9

2.1.3.1 Ethernet TCP (Modbus ASCII) 9

2.1.3.2 Ethernet Modbus/TCPIP 10

2.2 Installing Platinum Configurator Software 11

3 Connect to Platinum 12

3.1 Disabled Options 12

3.2 Screens 12

3.3 Connect to Platinum Controller 13

3.3.1 Offline mode 13

3.3.2 Modbus Format 14

3.3.3 Version Verification 14

4 Monitor and Control Platinum 15

4.1 Main Interface 15

4.2 Reading and Control 16

4.2.1 Operating Modes 16

4.2.2 Run Mode Options 16

4.2.3 Calibrate 16

4.2.4 TARE 17

4.2.5 Manual Control 17

4.3 System Configuration 18

4.3.1 Input Configuration 18

4.3.1.1 Input / Output Scaling 19

4.3.1.2 Linearization 20

4.3.1.3 Live Scaling....20
4.3.2 Auxiliary Input....22
4.3.3 Digital Input....22
4.3.4 PID Control....23
4.3.5 Setpoints....24
4.3.6 Ramp & Soak....25
4.3.7 Annunciators....26
4.3.8 Alarms....27
4.3.9 Outputs....28
4.3.10 Display, Safety, Excitation....29
4.3.11 Communications....30
4.4 Controller Configuration....31
4.4.1 Firmware Update....32
4.5 Graphing....34
5 Main Menu Functions....35
5.1 Configuration Files....35
5.1.1 File Options Dialog....35
5.1.2 File LOAD / SAVE....36
5.1.3 Load Parameters/Save Parameters/Apply....36
5.2 Tools....37
5.2.1 Set Connection....37
5.2.2 View Transactions....37

Change History

Revision	Description	Date
1.6	Revised to match configurator version 1.4.0	7/1/2016
1.5	Updated screens, added virtual device section	10/2/2015
1.4	Updated per features found in release 1.2.0.7	5/28/15
1.3	Clean up / edit, updated screen for Charting and Configuration	4/14/15
1.2	Updated Transaction Monitor Screen for Ethernet support	04/08/15
1.1	Change name to Platinum Configurator Updated Transaction Monitor screen	04/02/15
1.0	Initial Release	03/27/15

1 Introduction

1.1 Purpose

The Platinum Configurator software has been developed to provide a PC (Windows) based configuration and monitoring support package. These software tools were originally developed for internal engineering support to specifically test the functionality of the Platinum product. The tools provide a 'grass roots' interface and expose all internal functionality of the Platinum product.

As an engineering tool the Platinum Configurator will continue to grow as new features and capabilities are added to the Platinum family.

The Platinum Configurator operates over one of the communication channels provided on Platinum based products. All Platinum products are provided with a USB channel that is configured to operate as a Virtual Com device (slave to HOST device).

Many products are offered with an optional serial port (RS232, RS485 etc.). These communication channels are supported, although in most instances the PC interface will rely on a USB to Serial adaptor, suggesting that the native USB connection is the most straight forward solution.

Other communication channel support may be provided in future releases.

The Platinum Configurator may be run in a 'Virtual Device' mode with no physical device connected. A 'Virtual Device' configuration may be loaded using the File/Load option, the configuration screens may be modified and the resulting configuration may be then saved. The file format used by the Load and Save command is compatible that used by the Platinum controller, allowing configurations to be updated offline.

The Platinum Configurator uses the Modbus protocol (ASCII or RTU) and has been developed and tested using Visual Studio operating under Windows 7.

No support is provided to users of the Platinum Configurator software.

1.2 Definition of Terms and Acronyms

I2C	2-wire serial interface	**ADC**	Analog to Digital Converter
Base Device	Device connected to slave device	**DAC**	Digital to Analog Converter
Smart Input	Device supporting 1 or more Input sensors	**RS485**	Electrical signals used for serial communications
Smart Output	Device supporting 1 or more Output Elements	**RS232**	Electrical signals used for serial communications
Sensor Element	One of the physical sensing elements on a Smart Output	**CSV**	Comma Separated Values
AC	Alternating Current	**COTS**	Commercially-Off-The-Shelf
DC	Direct Current	**ESD**	Electro Static Discharge
CS	Chip Select	**FW**	Firmware
RS232	Electrical signals used for serial communications	**HW**	Hardware
CSV	Comma Separated Values	**I/O**	Input/output
COTS	Commercially-Off-The-Shelf	**LED**	Light Emitting Diode
ESD	Electro Static Discharge	**Hexadecimal**	Values expressed using base 16 (24)

1.3 Applicable Documents

Doc. #	Name / Description	Rev. #
M5458	Platinum Modbus Interface	1.0
M5457	Platinum Load and Save File Format	1.0
AP-8	Platinum Ramp and Soak Processing	1.0
M5452	Serial Communication Protocol Specification	V1.1b3

2 Installation

The Installation of the Platinum Configurator on a Windows based platform consists of two components, a 'device interface' which allows the Window application to communicate with the Platinum device and the Platinum Configurator application program.

2.1 Device Interface

The Platinum Configurator application supports three 'com channel' device interfaces: USB, Ethernet and Serial. Within the Windows operating system serial and Virtual Com devices are treated equivalently although the Serial channel requires establishing specific baud rate, parity, start bits and stop bit information.

2.1.1 USB Virtual Com

When using the native USB Device interface under Windows 7/8/10, a Device Driver 'INF' file (OmegaVCP.inf) must be installed to enable the Windows Operating system to correctly identify and enumerate the Platinum USB Device.

The file OmegaVCP.inf is included in the Platinum Configurator release software or may be downloaded from www.Omega.com . The file must be copied to the c: /Windows/inf folder.

Administrator rights may be required to copy this file.

After installing OmegaVCP.inf the system should automatically detect and enumerate the Platinum product when connected via a USB cable.

The OmegaVCP.inf file contains the following key parameters.

Parameter	Value	Description
VID	0x2a72	Omega Engineering USB Vendor ID
PID	0x0400	Product Identification indicating the device is operating as a Virtual COM device

When installed, the Platinum device will appear as an enumerated com device and is assigned a name such as COMxx, where xx is assigned by the operating system.

2.1.2 RS232/RS485

Windows 7/8/10 has native RS232 and RS485 device driver interfaces and no additional driver is required. The hardware (or external USB serial converters) will be assigned a name such as COMxx, where xx is assigned by the operating system.

A wide variety of USB to Serial Adaptors are available. To use a serial channel the Platinum Configurator must use the same communication parameter settings as the Platinum device. The Platinum configuration settings may be set using the front panel menu: INIT/COMM/SER/C.PAR.

Parameter	Options	Description
bUS.F	232C 485	Selects between RS232 and RS485. RS485 required for multi-drop and longer distance.
bAUd	1200, 2400, 4800, 9600, 19.2, 57.6,115.2	Data rate
PRty	Even, Odd, None	Parity Bit, inserted for data verification.
dAtA	7, 8	Number of data bits. Note that Modbus/RTU requires 8 bits.
StoP	1, 2	Number of stop bits.

2.1.3 Ethernet

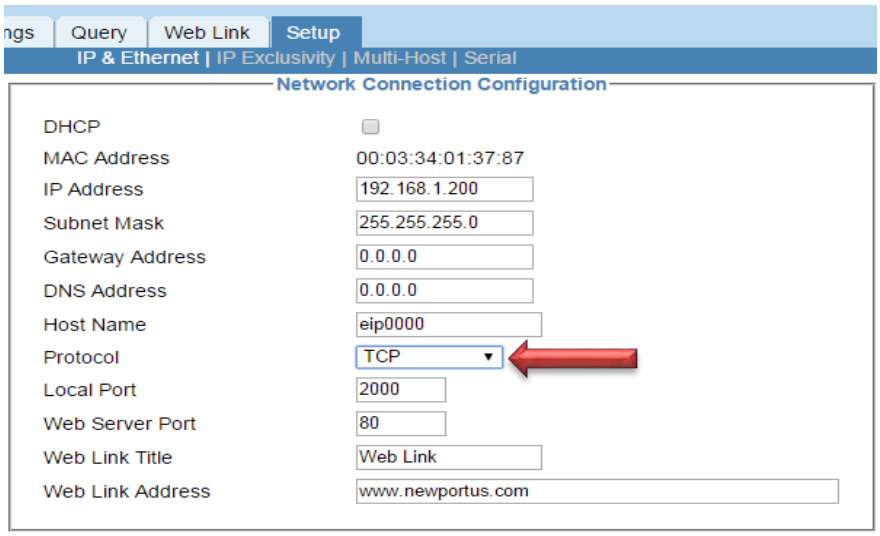
The Platinum Ethernet channel supports 10 and 100 Mbit data rates and is provided with an internal web accessible configuration page that allows setting the Ethernet channel communication parameters.

2.1.3.1 Ethernet TCP (Modbus ASCII)

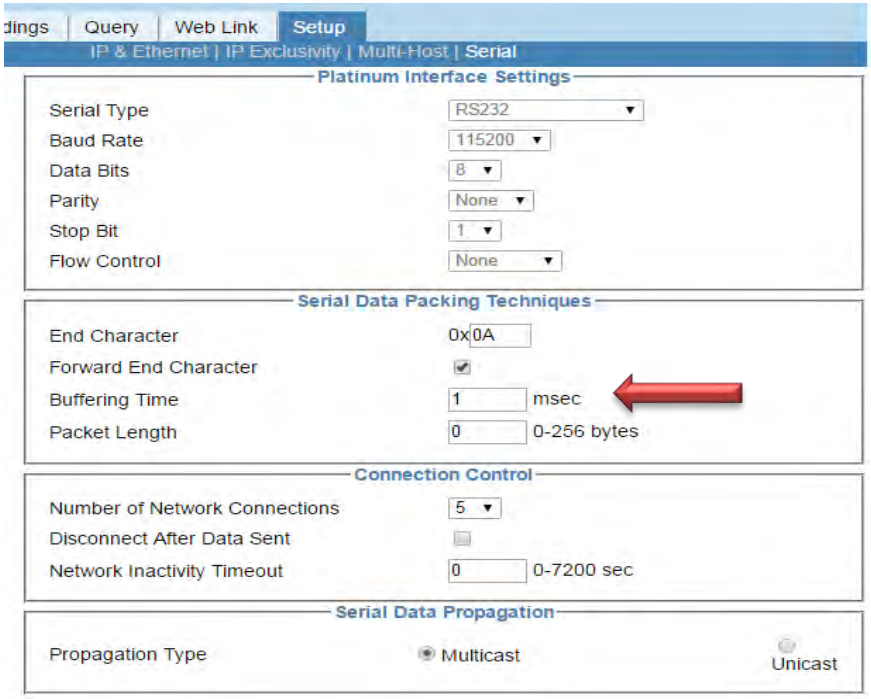
When used in TCP mode the interface supports Modbus/ASCII formats.

The Platinum Ethernet connection configuration may be done thru the built in web pages of the device. Using a PC internet browser (Explorer, Chrome etc.) connection to web page: 192.168.1.200 (Platinum default IP Address.

The following settings are required. The Platinum device must have the ETHN channel configured to accept Modbus ASCII data.



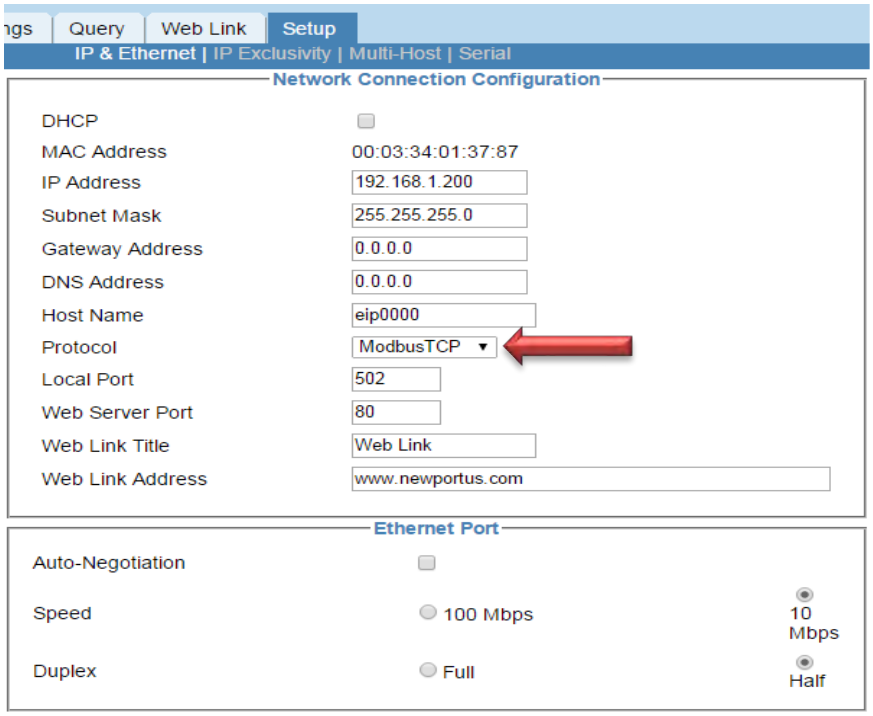
In Ethernet serial interface must also be configured to support Modbus/ASCII data, which uses a CR+LF to Serial Data Packing Techniques and must be changed from the default settings, as shown below.



2.1.3.2 Ethernet Modbus/TCPIP

When used in Modbus/TCPIP mode, the following Ethernet options are required. The Platinum device must have the **ETHN** channel configured to accept Modbus RTU data.

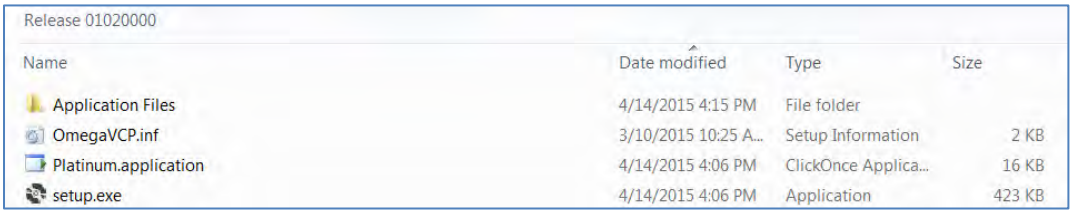
When ModbusTCP is selected, the Local Port automatically switches to 502, the port designated by Modbus for use with TCPIP and the 'Serial Data Packing Techniques' options are disabled.



2.2 *Installing Platinum Configurator Software*

The Platinum Configurator is a self-extracting executable program which may be downloaded and installed on a Windows 7 based system.

1. Download the Platinum_Configurator.zip file.
2. Copy the OmegaVCP.inf file from the downloaded file to the c:/windows/inf/ folder.
3. Click on the **setup.exe file.** The program will install and a shortcut icon will be created on the desktop.



3 Connect to Platinum

3.1 Disabled Options

Fields which are disabled or not applicable will be shown greyed out.

3.2 Screens

The Platinum Configurator has been implemented as a series of ‘screens’, entered by selecting drop down options from the main screen tool bar or by clicking on any of the control buttons appearing on the main screen.

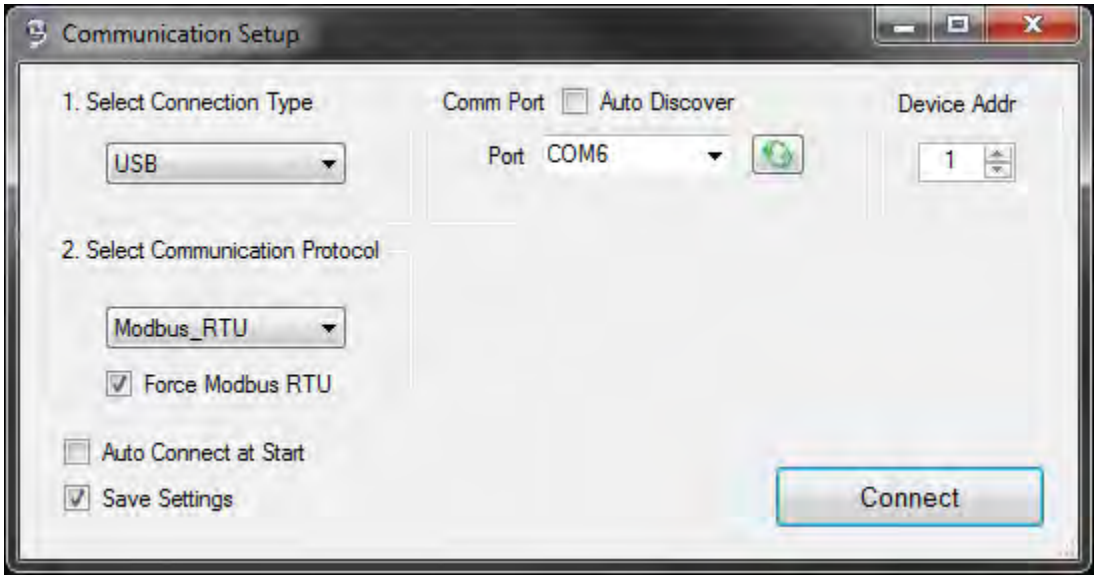
When a screen is loaded the device is read and all screen specific data is refreshed.

A manual ‘Refresh’ button is provided on each screen to allow updating screens where information may have changed due to configuration of unrelated data.

There is no specific ‘close’ option on each of the sub-screens. The screens may be collapsed or expanded to full screen mode using the standard window options. To close a screen select the ‘X’ option.

3.3 Connect to Platinum Controller

To connect the Platinum, the very first step is to setup communication between the configurator and the Platinum device. The communication interface is shown below.



On this interface, please follow 1, 2, and 3 in sequence:

1. **Select connection type:** Available options are USB, Serial, TCP, and Offline. Other parameters will be updated to adapt to the option that you selected.
2. **Selection Communication Protocol:** Only Modbus is supported. You can check Modbus RTU to force the platinum to use Modbus RTU.

There are a few options that help you to use the configurator.

- **Auto Connect at Start:** once this box is checked, configurator will try to use previous saved parameters to connect to controller.
- **Save Settings:** once this box is checked, all communication parameters will be saved once the connection is succeed.
- **Auto Discover:** only applies to USB or serial connection.

3.3.1 Offline mode

The offline connection mode is to use “Platinum Configurator” to set platinum parameters without physically connecting to a platinum controller. Perform all functions supported by the Platinum Configurator such as adjust runtime parameters, turn on off features, etc. Users can also save configuration parameters to a file. This file can be then loaded into platinum controller or its software.

3.3.2 Modbus Format

The available Modbus formats are determined by the Platinum Channel selected.

If Ethernet / TCPIP is selected the USB and Serial options will be disabled. To select one of these channels first select Ethernet/ASCII, which re-enables all three channel types.

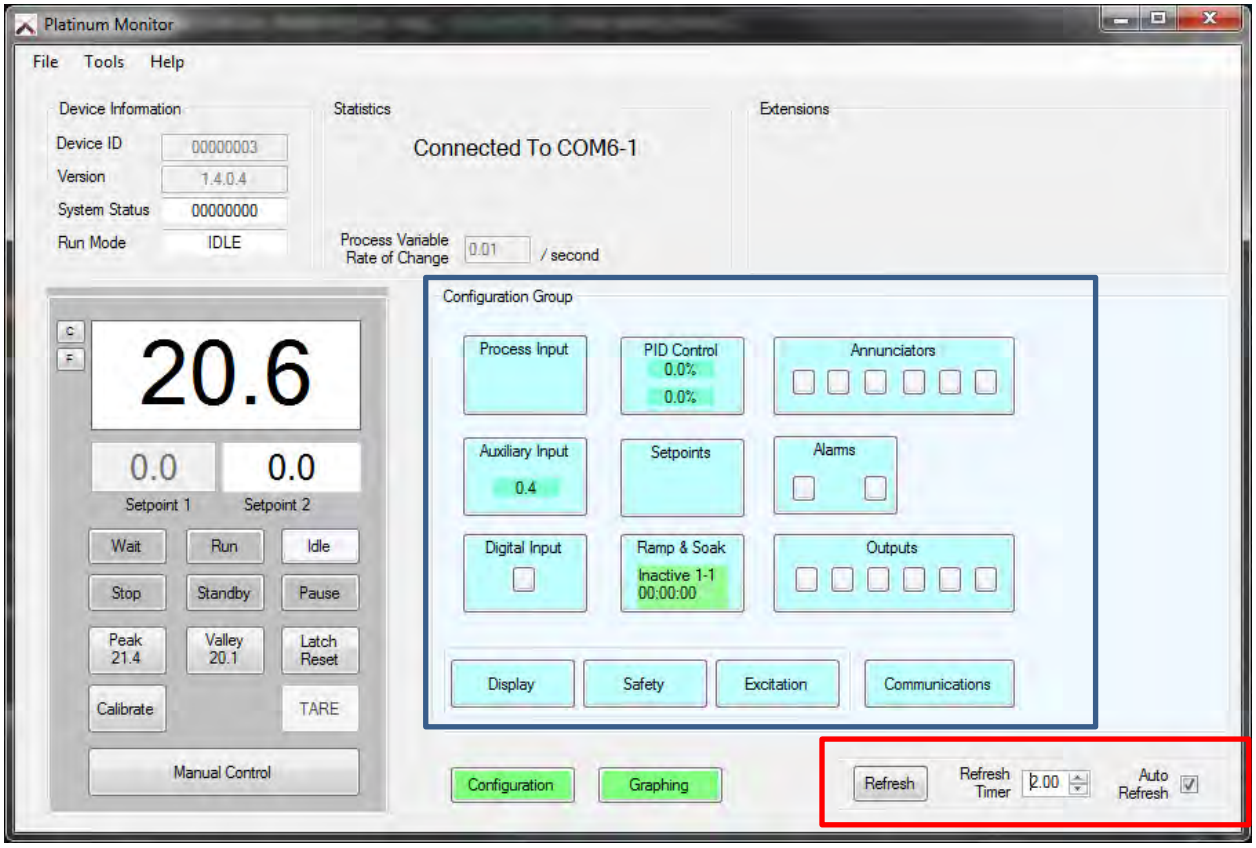
Channel	ASCII	RTU	TCP/IP
USB	X	X	
Serial	X	X	
Ethernet			X
Virtual Device	N/A	N/A	N/A

3.3.3 Version Verification

If the Application or Bootloader firmware of the device requires upgrading, this warning message displays. Operation may continue, but errors may occur.

4 Monitor and Control Platinum

4.1 Main Interface



The main interface of Platinum configurator shows controller system information, process values, and status. It provides functions for controlling the controller. The Main screen can be automatically refreshed at a user selectable 'rate'. It is recommended that a minimum of 2 second refresh timing be used. (See red box above.)

The Main Screen provides a Device Information summary, a pseudo image of what appears on the Platinum display, individual 'buttons' within the "Configuration Group" that allow programming and configuring the functional parameters of the device. (See blue box above.)

On the pseudo image of the Platinum device both Setpoint 1 and Setpoint 2 values are shown. If these parameters are configured as absolute values (see setpoint configuration) they may be changed by entering a new value.

- If Setpoint 1 is configured as a Remote Setpoint, or if Ramp and Soak is active the Setpoint 1 value will be displayed but cannot be updated.
- If Setpoint 2 is configured as a Deviation Setpoint the effective Setpoint 2 value will be displayed but cannot be updated.

Where appropriate the Configuration Group buttons show current 'values' of the primary underlying parameters. Digital (ON/OFF) parameters are shown as small 'display' lights that change to GREEN when active.

4.2 Reading and Control

4.2.1 Operating Modes

The 6 control buttons (Wait, Run, Idle, Stop, Standby and Pause) may be selected to change the operating mode of the device.

4.2.2 Run Mode Options

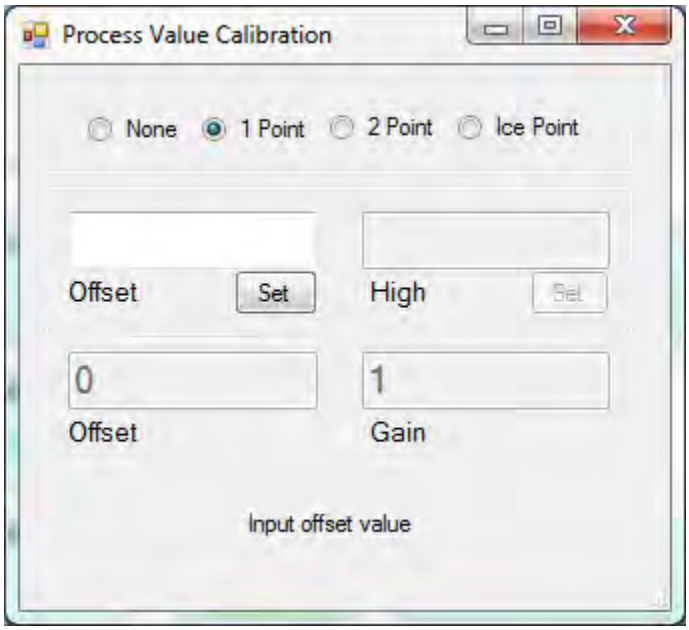
The Run Mode option buttons (Peak, Valley, and Latch Clear) mimic the functionality found in the Platinum Run Mode.

The Peak and Valley buttons include the current Peak/Valley values. Pressing either will clear the current value.

Clicking the Latch Reset button allows clearing latched alarms.

4.2.3 Calibrate

Calibrate button allows user to set user calibration mode and calibration parameters.



4.2.4 TARE

TARE button is only enabled when input is process. Click TARE button will set the current weight reading to 0.

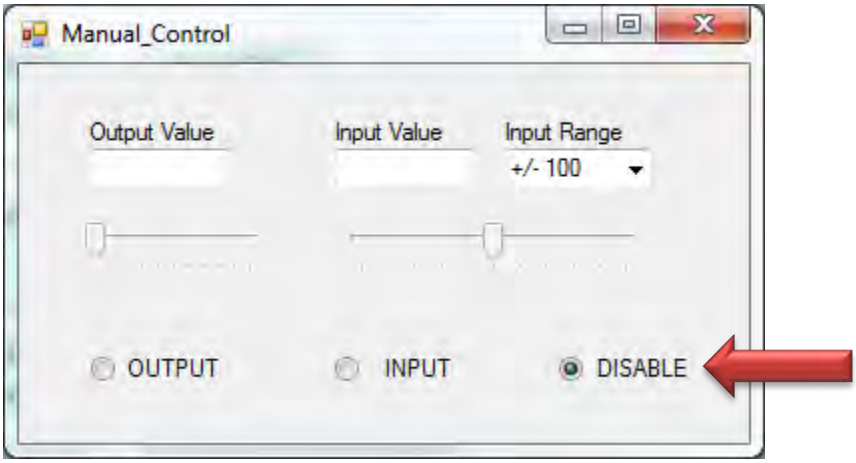
4.2.5 Manual Control

The “Manual Control” button operates like the OPER/MANL option on the Platinum Controller. Selecting this button will open a separate window for manually setting the Input value or Control Value; the unit will be placed into IDLE mode.

Selecting the Output option sets the Control Output; and any outputs configured as PID may be set from 0 – 100% of full power.

Selecting the Input Option allows generating a ‘pseudo input’ within the range defined by the Input Range value.

The Disable option disables both the Input and Output function.



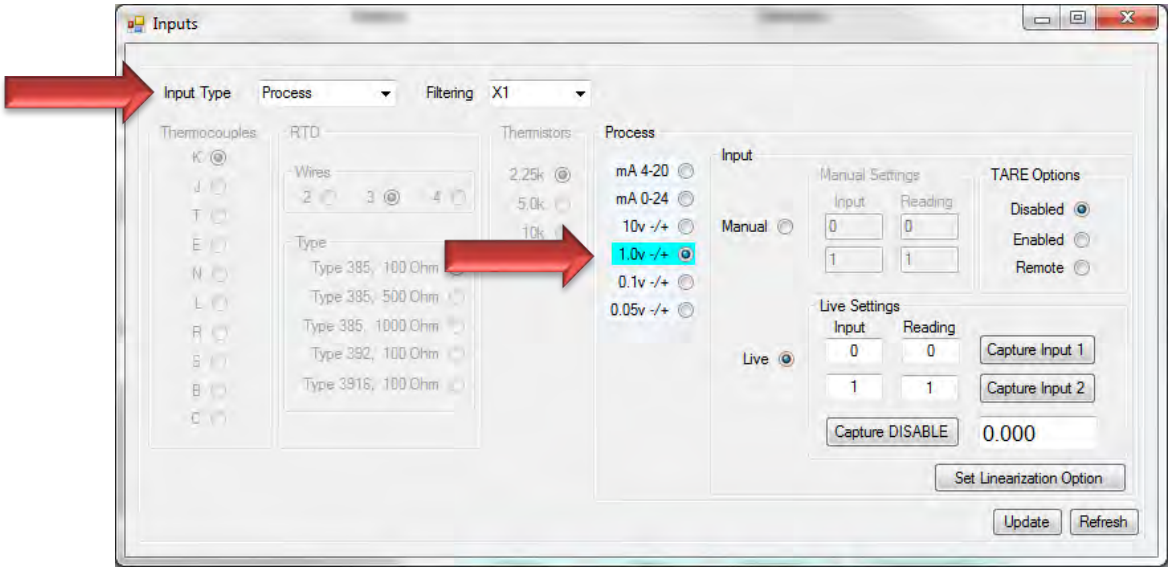
4.3 System Configuration

The “System Configuration” screens are for configuring each of the internal control blocks of the Platinum Controller.

When entered, the current configuration information is read and used to build the screen.

- If a change is made to the current configuration the ‘Update’ button will appear, allowing the selection to be recorded.

4.3.1 Input Configuration



The “Input Configuration” screen configures all of the Input parameters. The “Input Type” ‘drop-down’ menu will enable the selected options. (See Red Arrow.)

The Process Range selection configures the Process Voltage/Current input as 4-20 mA, 0-24 mA, +/-10 Vdc, +/- 1 Vdc, +/- 0.1 Vdc, and +/- 0.05Vdc. Each input range has unique scaling parameters for input values to be scaled in engineering units.

The “View Settings” under the “Process” Input selection. The ‘aqua’ colored highlight moves to view each of the different input scaling options without changing the input range. The radio buttons select different input ranges.

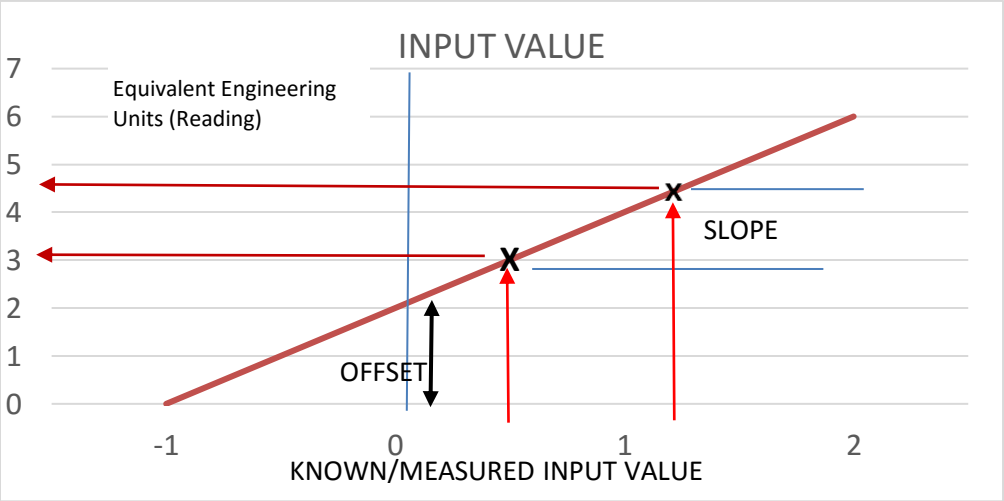
4.3.1.1 Input / Output Scaling

Scaling operations translate source (input) signals to scaled output signal using a linear translation defined by a SLOPE (or gain) and an OFFSET. As shown below, (X1, Y1) and (X2, Y2) define two points on a line with a certain SLOPE and OFFSET. Knowing the SLOPE and OFFSET determines the OUTPUT value for any given INPUT value using this equation:

Output = Input X SLOPE + OFFSET, where

GAIN = (Y2 - Y1) / (X2 - X1)

OFFSET = Y1 - (GAIN * X1).

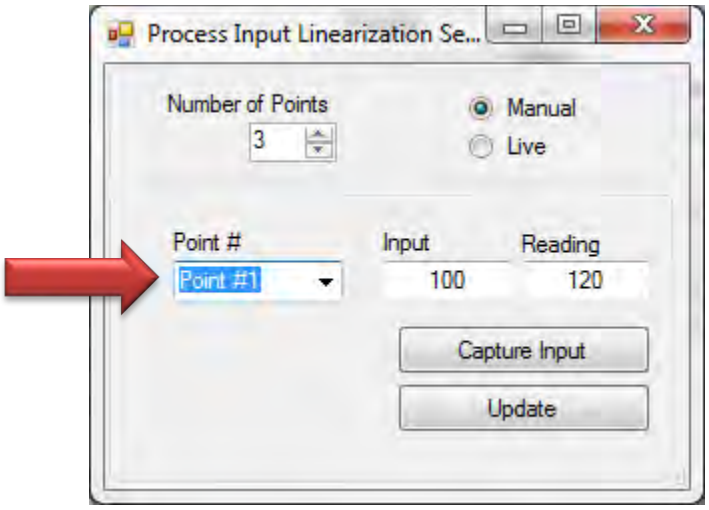


- If (X2 - X1) == 0, the GAIN is set to 1 and the OFFSET is set to 0.

For MANUAL scaling the two points are entered directly, as values, in the “Manual Settings” screen area.

4.3.1.2 Linearization

Platinum supports 10-Point Linearization in process input. The 10-point linearization enters up to 10 Reading/Input value pairs, and is used to internally calculate 10 gain/offset parameters. Select combo box on the UI to change point.

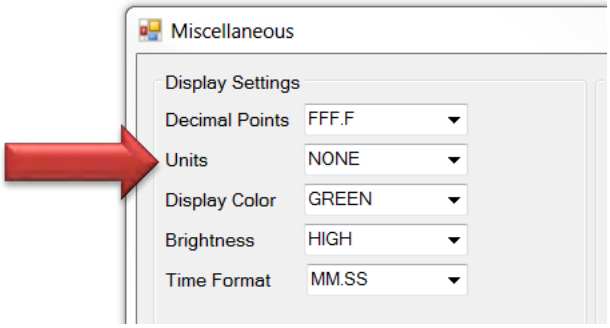


4.3.1.3 Live Scaling

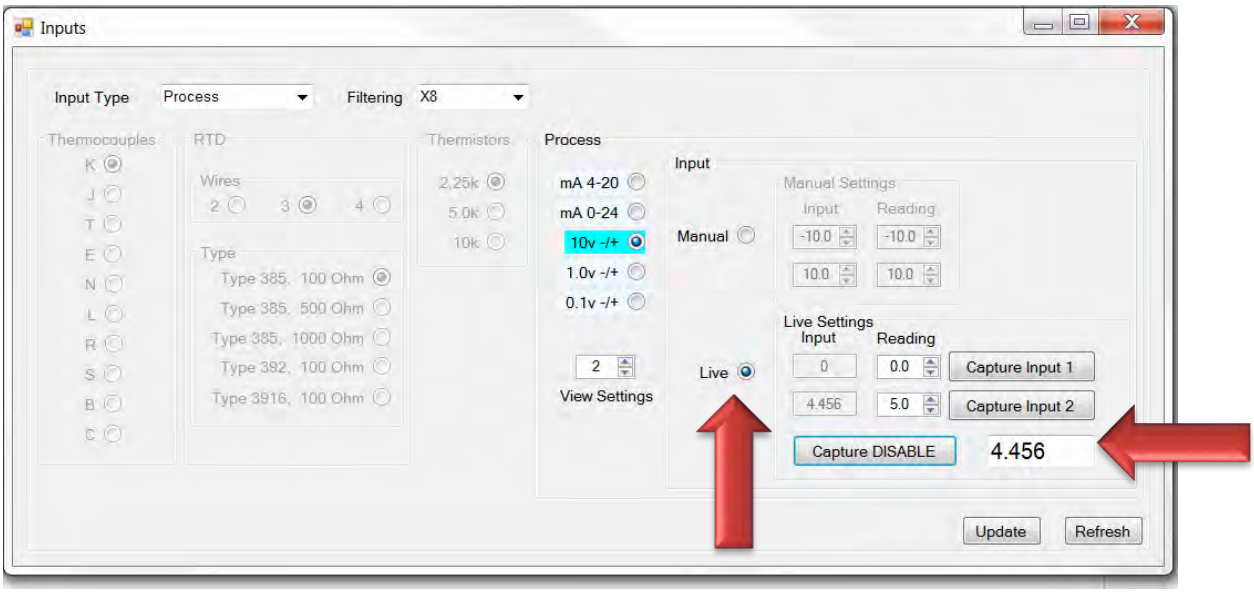
For LIVE scaling, the Reading values for point 1 and 2 are directly entered, and the corresponding process input levels are 'captured' from the measured value.

The following steps are recommended:

1. Disable the unit conversion using the Display (Miscellaneous) screen and set unit to IDLE mode (NONE).

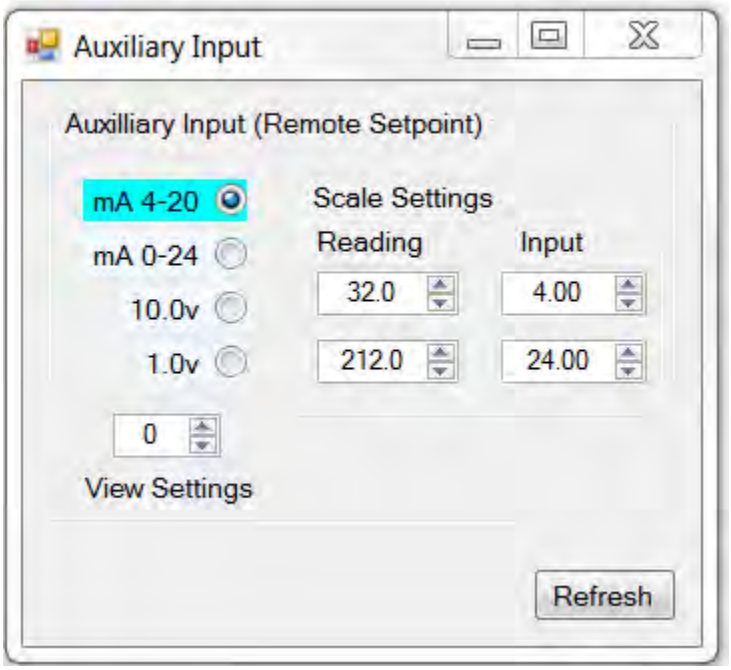


2. Set the scaling mode to LIVE and enable the “Capture ENABLE” button. The “Capture Disable value is displayed, and when the function is turned off, the current unscaled input value is displayed.



3. Adjust the input value that will define data point 1 and click the “Capture Input 1” button. The current input value will be transferred to the Live Settings Input 1 display.
4. Type in the corresponding Reading value for data point 1.
5. Repeat steps 3 & 4 for the data point 2 values and press Update. The values will be transferred to the unit.
6. Press the “Capture Disable” button to re-enable the scaling function.
7. Restore, “Refresh” the desired Units.

4.3.2 Auxiliary Input

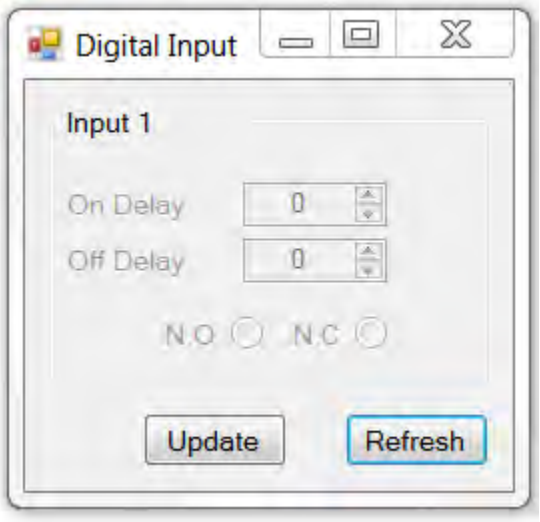


The Auxiliary Input Configuration screen (also referred to as Remote Setpoint) configures all of the Auxiliary Input parameters.

The radio buttons select different input ranges, while the "View Settings" moves the 'aqua' colored highlight to view each of the different input scaling options without changing the input range.

The input value is shown on the main screen.

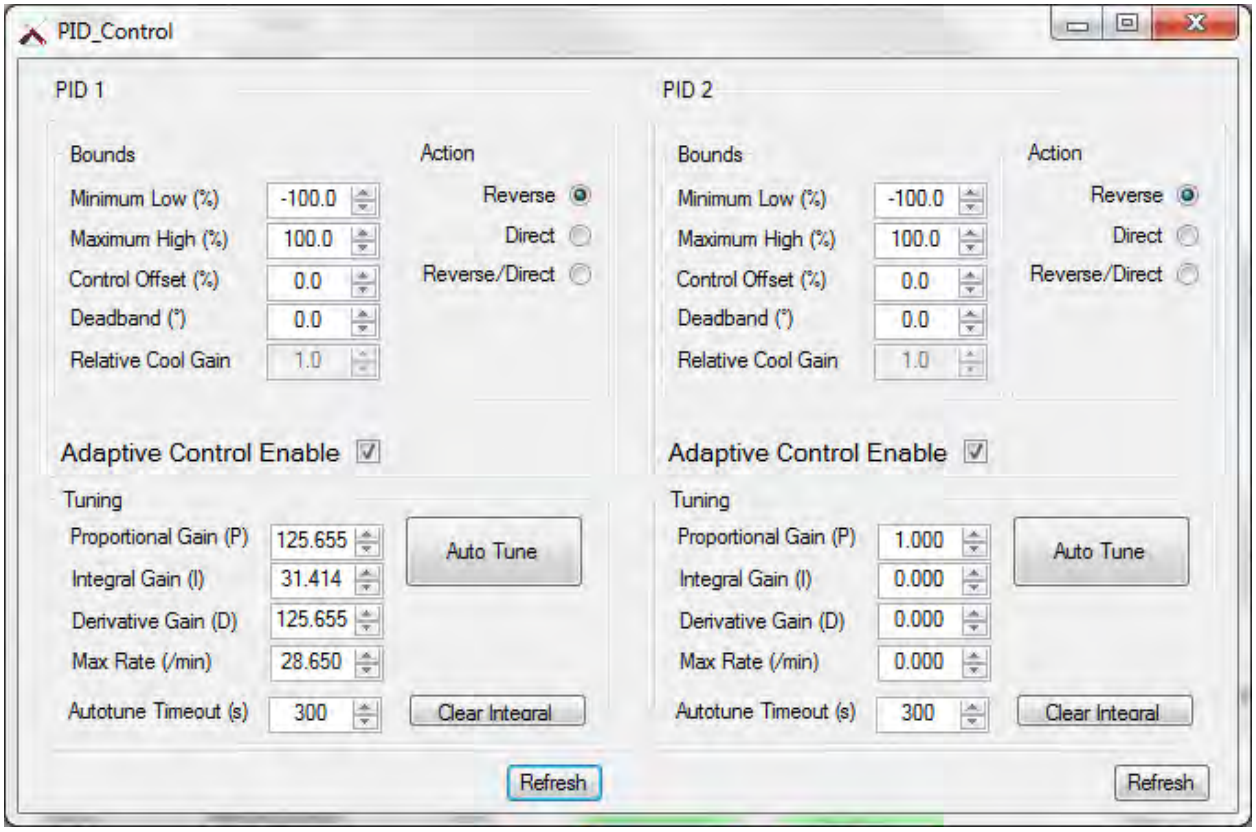
4.3.3 Digital Input



The Platinum Configurator includes (disabled) parameters, but are not currently offered in the Platinum controller digital input.

The state of the digital input (ON/OFF) is shown on the main screen.

4.3.4 PID Control



The PID configuration screen sets the PID control parameters and initiates an Autotune cycle. User can use this dialog to adjust PID parameters for both PID 1 and PID 2.

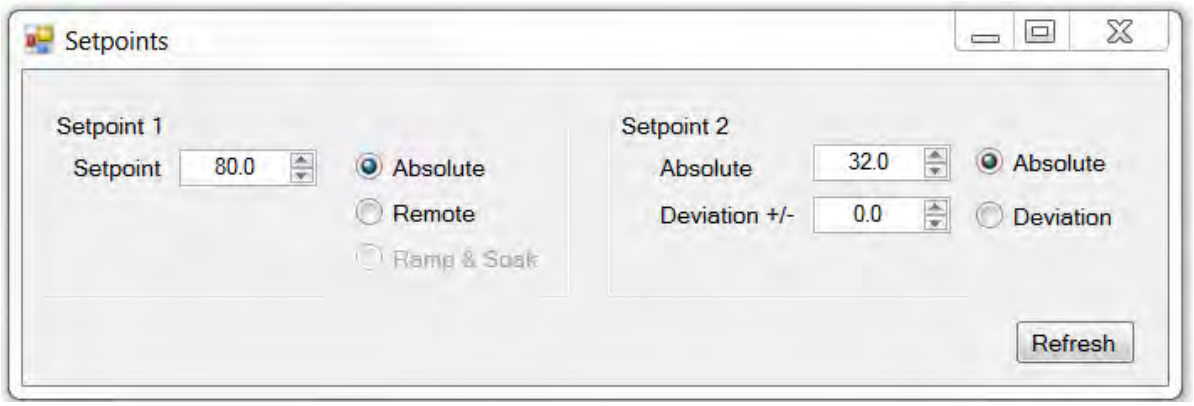
- If the Auto Tune button is selected the system will start an AUTOTUNE cycle and the status / input value is shown on the main screen. At the completion of the cycle the REFRESH button may be used to review the calculated P, I and D values.

The calculated PID Output power is shown on the main screen. Following an Autotune cycle select the Refresh button to update the new P, I and D parameters.

Note

Before initiating an Autotune cycle, ensure that the appropriate output has been configured for PID control.

4.3.5 Setpoints



The Setpoint configuration screen sets the mode for Setpoint 1 and Setpoint 2.

On the Platinum Configurator, the setpoint mode may be easily set. Setpoint 1 mode on the Platinum is set by enabling the Ramp & Soak or Remote Setpoint functions.

Setpoint 2 mode may be set to either Absolute or a Deviation (+/-) from setpoint 1. The value displayed on the pseudo device image of the main screen will be the effective value.

Example: (Setpoint 2 Deviation mode)

Setpoint 1 = 100.0

Setpoint 2 Deviation value = 5

Effective Setpoint 2 value = 105

4.3.6 Ramp & Soak

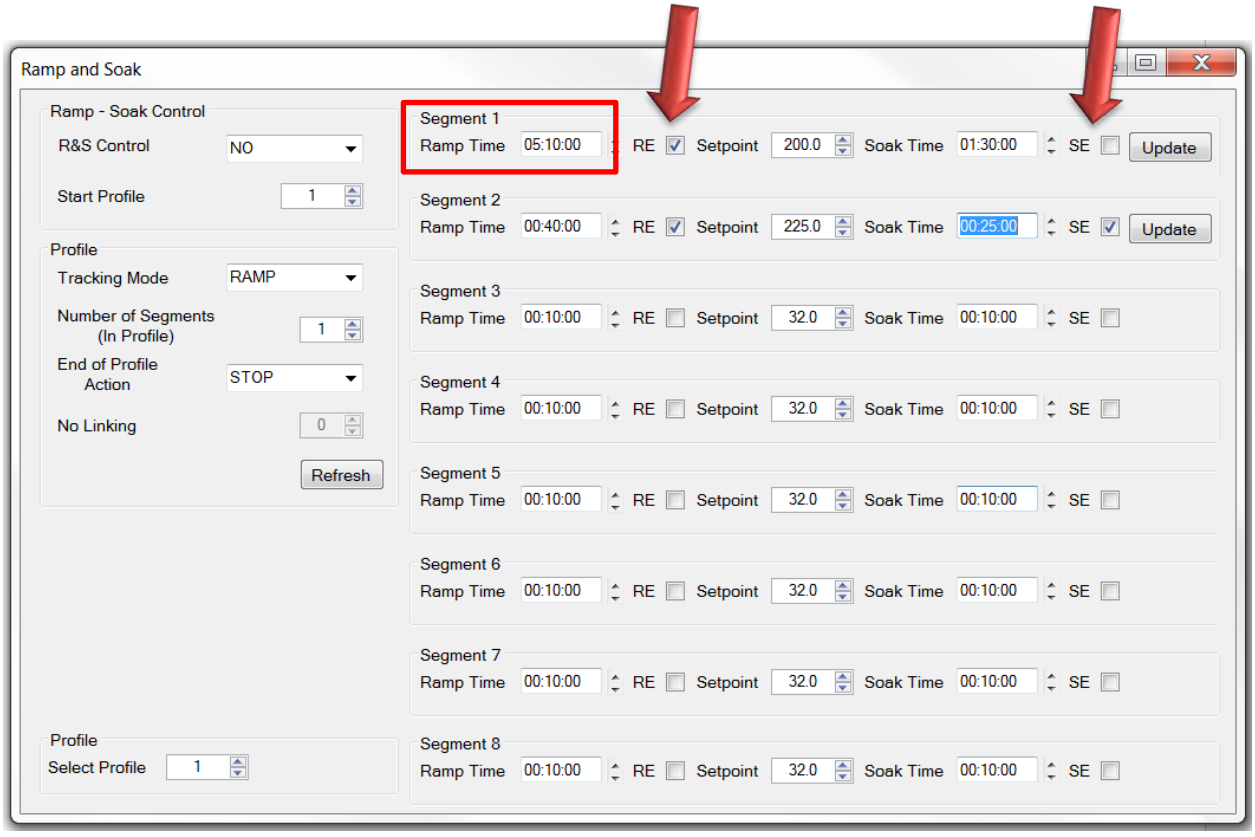
The Platinum controller supports up to 99 Ramp and Soak profiles each supporting up to 8 ramp/soak segments. The ramp and soak profiles may be daisy-chained together using a profile LINKING option.

The Ramp & Soak Control section programs the overall Ramp and Soak control, including enabling the Ramp & Soak mode. Start the profile to use the tracking mode, and a number of segments in each specific profile; and the action to be taken at the end of the profile.

The Profile select control selects which profile data is to be displayed.

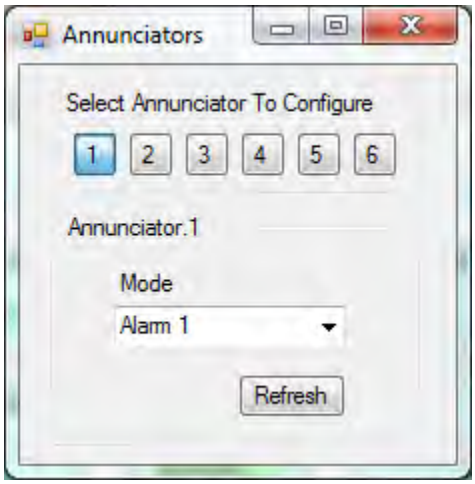
The time format is maintained and displayed as hours:minutes:seconds. The time values may be adjusted using the Up/Down scroll buttons or enter the time value manually into the "Ramp Time" field. Note that when entering time values: spaces, commas, and periods or semi-colons are used to separate the hour, minute and second fields. (See Red Box below.)

Manually entered time values will be normalized when entered. For example, 01:63:67 will be converted to 02:04:07. Leading zeros are not required.



The RE and SE checkboxes enable the annunciators and outputs based on the Ramp and Soak states.

4.3.7 Annunciators



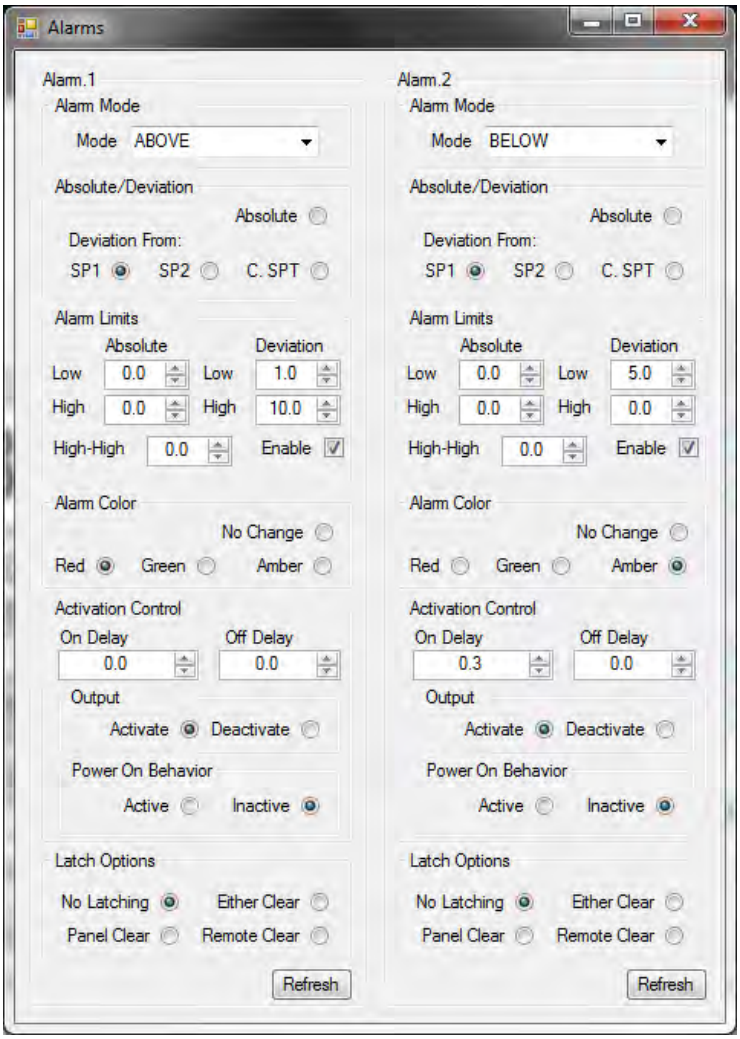
Platinum annunciators appear on the front display and are activated based on the state of the Alarms and Outputs. Total 6 annunciators are supported by the controller. User can select annunciator number to change annunciator mode.

The Platinum Configurator extends the annunciator options to trigger the annunciator based on individual RE.ON or SE.ON states including 'any RAMP' or 'any SOAK' status.

Available Annunciator Modes:

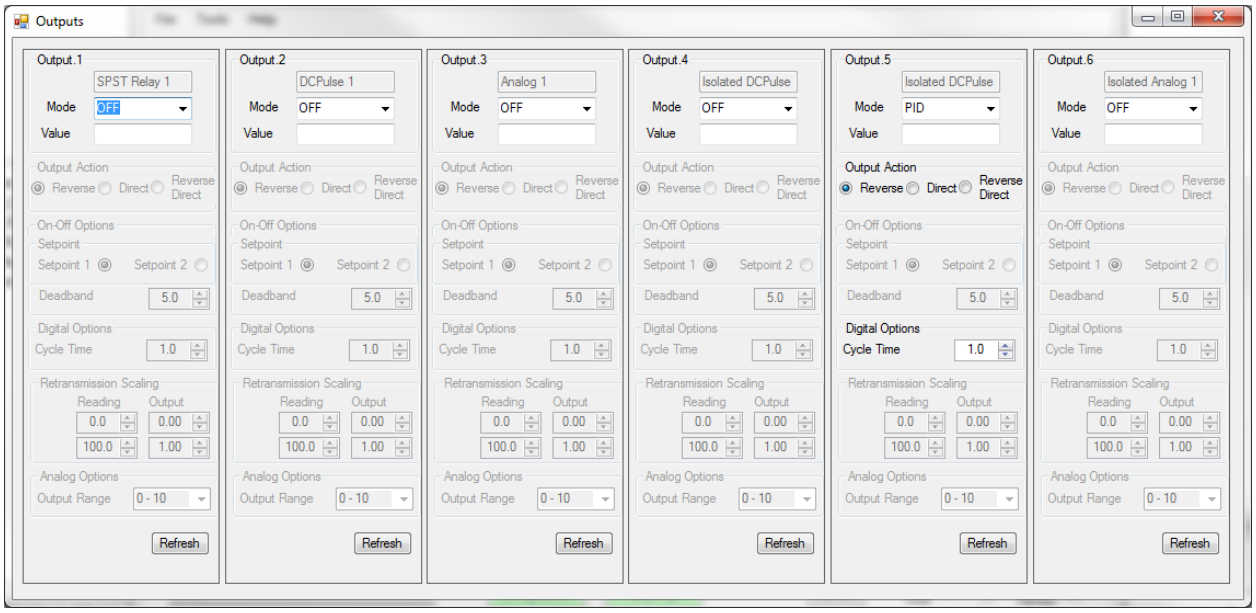
- Disabled – Annunciator is disabled
- Alarm1 – Annunciator is linked to Alarm1
- Alarm2 – Annunciator is linked to Alarm2
- SPST Relay1 – Annunciator is linked to SPST Relay1
- DCPulse1 – Annunciator is linked to DCPulse1
- Isol DCPulse1 – Annunciator is linked to isolated DCPulse 1
- Isol DCPulse2 – Annunciator is linked to isolated DCPulse 2
- RE.ON – Annunciator is linked to RE.ON state
- SE.ON – Annunciator is linked to SE.ON state
- Ramping – Annunciator is active when PID control is in ramping stage
- Soaking – Annunciator is active when PID control is in soaking stage
- Sensor Error – Annunciator is active when sensor is in fault state
- Output Error – Annunciator is active when output is in fault state

4.3.8 Alarms



The Platinum controller supports 2 alarm control blocks. The state of each alarm is shown on the main screen. User can change alarm mode and set alarm parameters/options using the alarm dialog.

4.3.9 Outputs



The Platinum controller supports 6 outputs (future products may expand this capability), and each output configuration may be refreshed or updated independently.

The “Output Mode” selection assigns the output to a specific mode of operation, and defines which parameters apply and enables the corresponding control blocks.

The state of each output is shown on the main screen.

Available outputs modes are:

- OFF - output is turned off
- PID – output is set to output PID control value
- ON.OFF – output is set to On or Off based on set point value
- ALARM1 – output is linked to alarm1
- ALARM2 – output is linked to alarm2
- RAMP ON – output is linked to PID control ramping stage
- SOAK ON – output is linked to PID control soaking stage
- PID 2 – output is set to output PID 2 control value.
- SENSOR ERROR – output is turned on if there is sensor fault
- OPEN LOOP – output is set on when the control loop is open

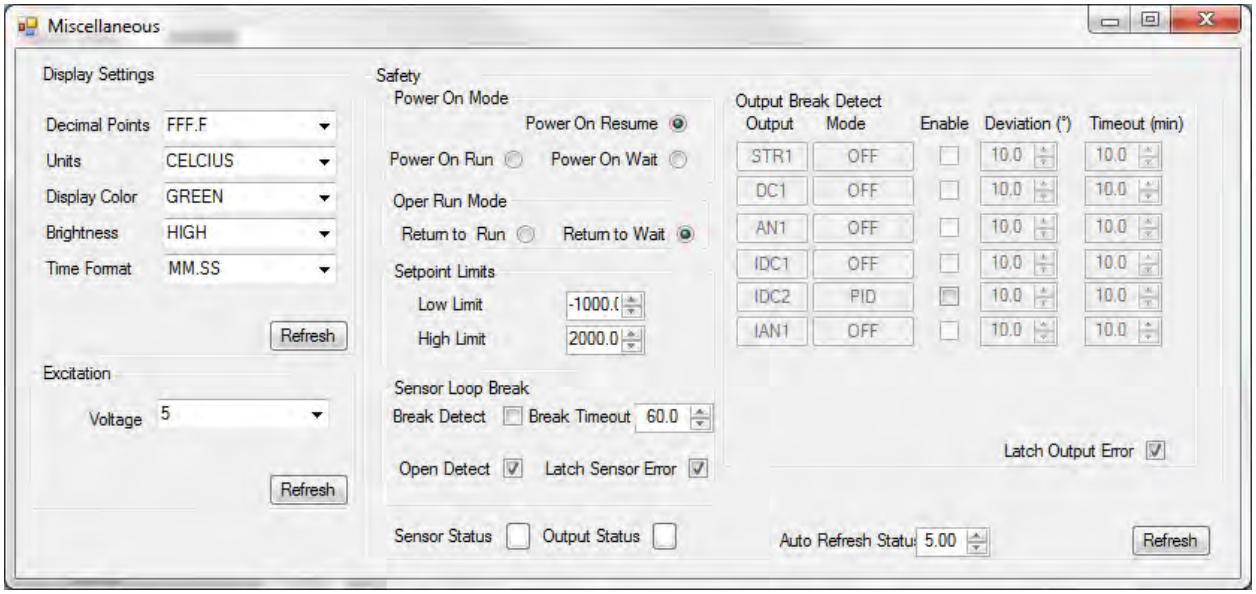
NOTE: that only valid parameters/options for selected mode will be enabled when user switch output mode.

4.3.10 Display, Safety, Excitation

The “Display, Safety and Excitation” control screens have been grouped into one miscellaneous control screen.

Note that several control values, such as Time Format have been grouped within the miscellaneous screen due to common functionality, and may appear in alternate menu positions on the actual device.

Each of the sub-groups may be individually refreshed or updated.



Output break detection could be enable if the output is set to non OFF mode. Once the break detection is enabled, the deviation and timeout parameters will be used for detection. User can turn on latch output error option if he/she wants to has the output error stay on when there is an error occured.

4.3.11 Communications

The Platinum product supports 3 COMM channels: USB, Ethernet and Serial. USB is standard on all products.

Each COMM channel supports either Omega or Modbus protocol. Within the Omega protocol there are a variety of options. Within the Modbus protocol both Modbus RTU and Modbus ASCII formats are supported.

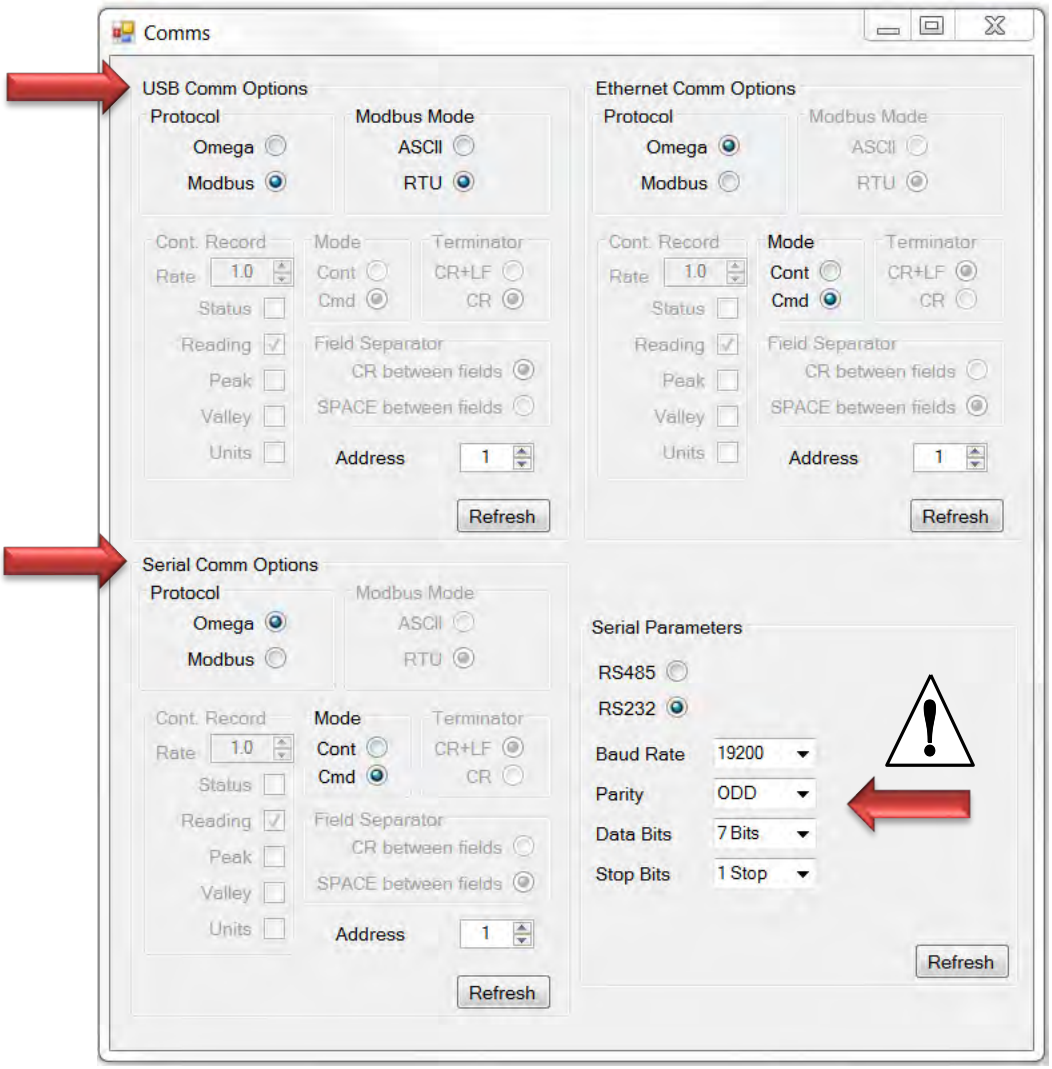
The serial channel supports a variety of data formats and transmission speeds. The configuration options group will be disabled if the module is not supported or is the module that is currently connected.

Note

The channel used by the Platinum Configurator must be configured for Modbus RTU, Modbus TCP/IP or Modbus ASCII. Following a Factory Default (F.DFT) selection the device will revert to Omega Protocol.

The Serial channel has additional parameters allowing the setting of baud rate, parity, stop and start bits. Changing these values while connected thru a serial channel will result in a loss of communications.

When connecting to the device, if the Platinum Configurator is connected using a USB connection and the USB/MODBUS RTU options are selected the device USB configuration will be automatically reconfigured. For all other connection options the device must be set to match the Platinum Configurator connection options.



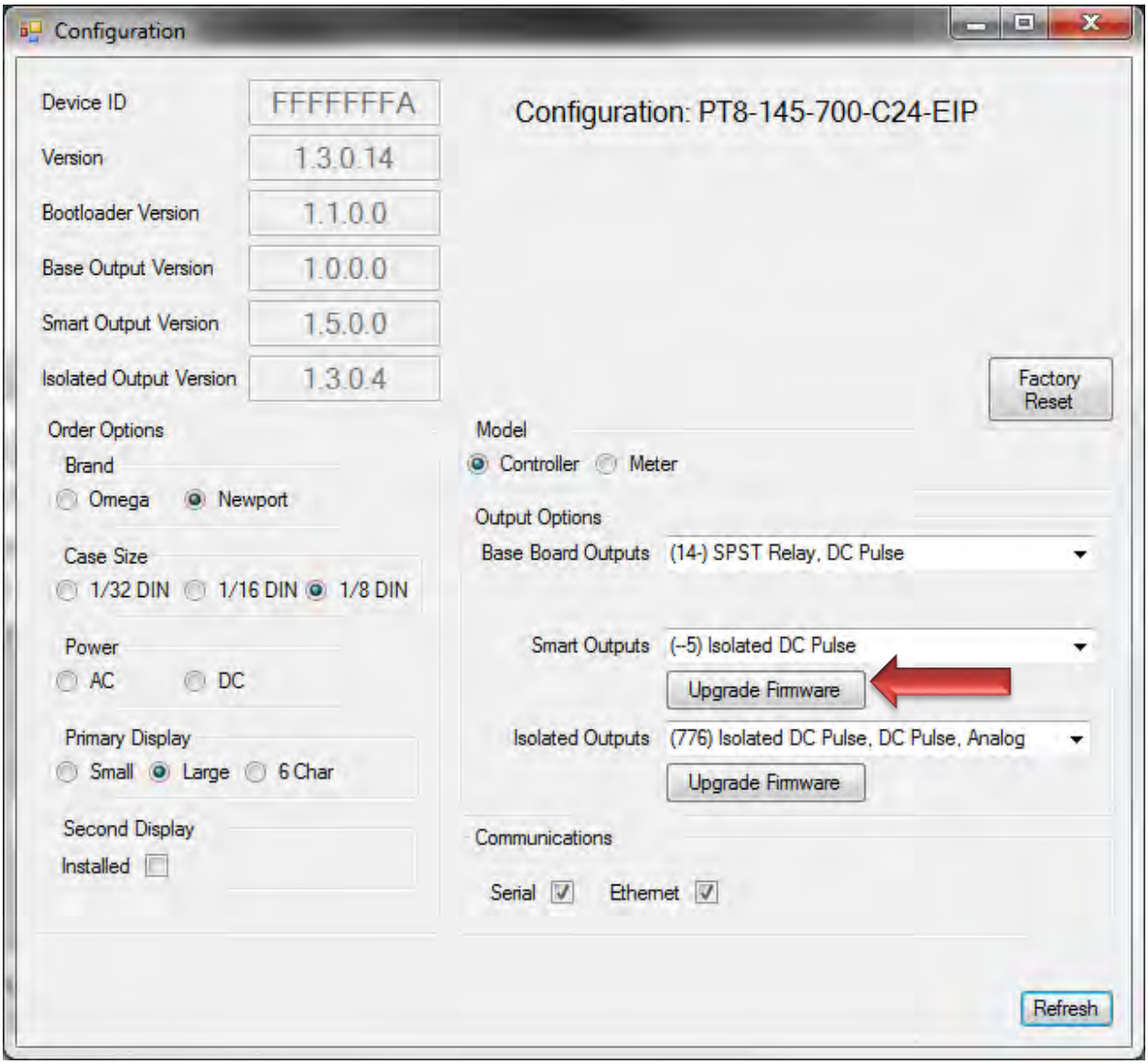
4.4 Controller Configuration

The Configuration screen reviews the current device configuration, order part numbers and versions of the device firmware. The user can upgrade firmware for optional modules.

When the Refresh button is clicked, the current device configuration is read and displayed. Alternate part numbers may be reviewed by selecting different options.

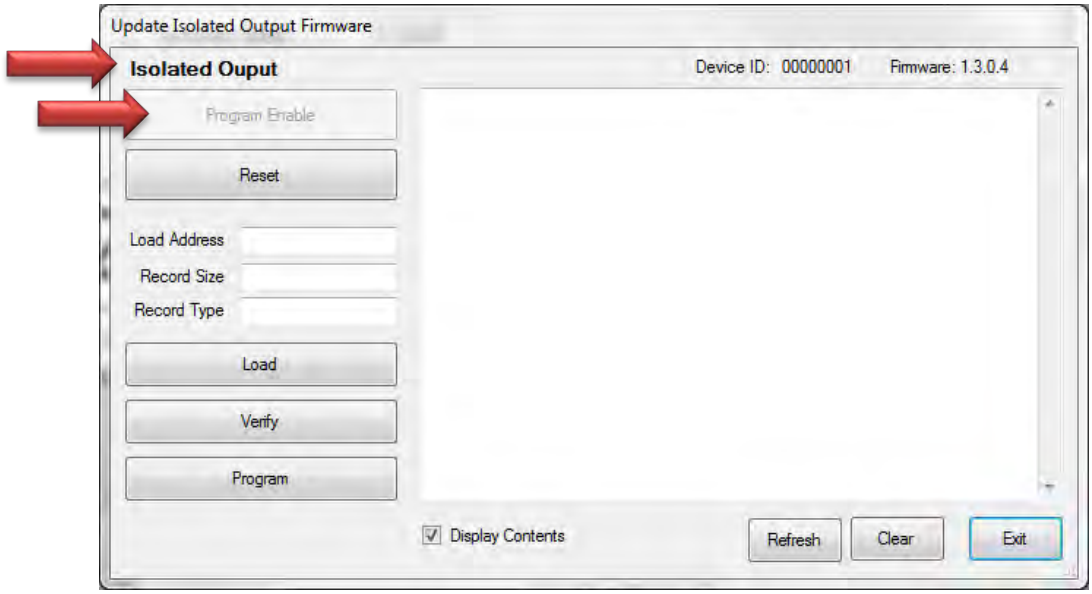
Note

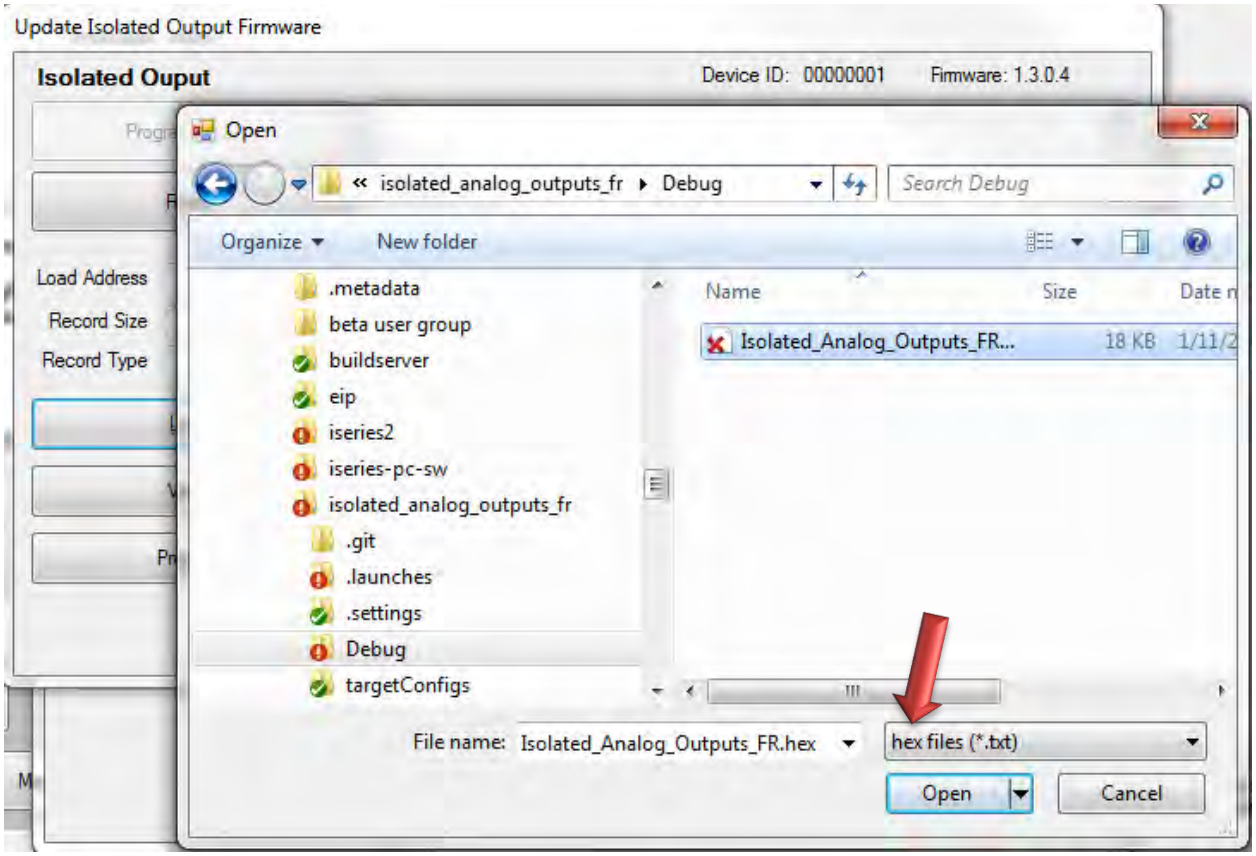
No changes are made to the actual device.



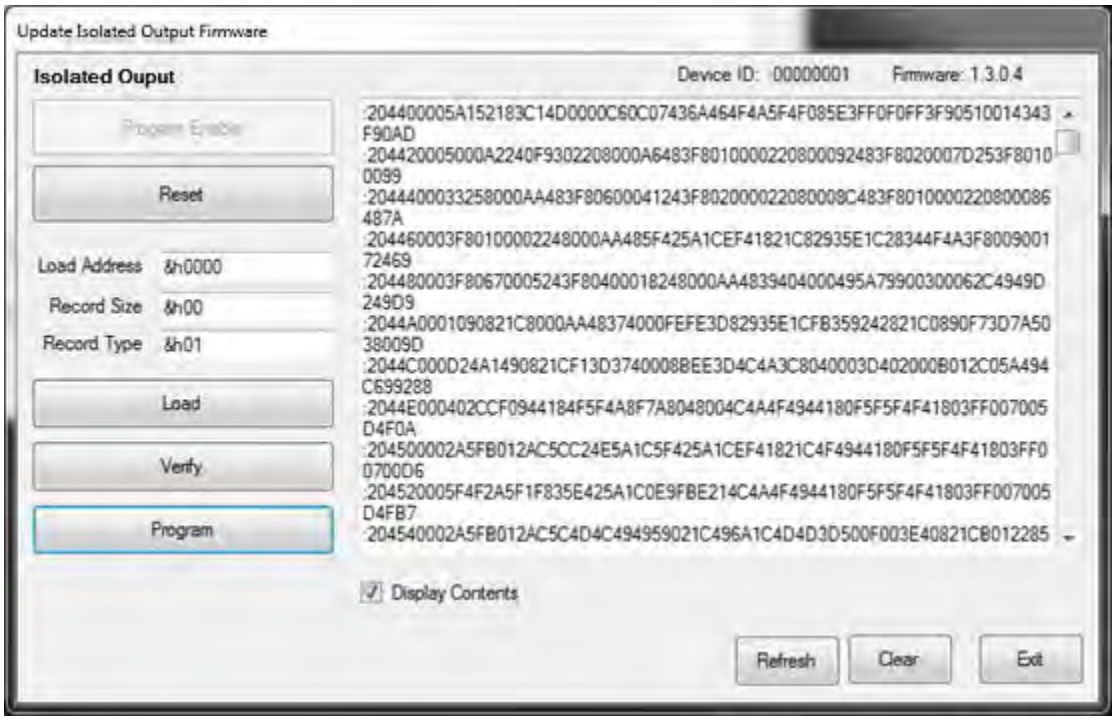
4.4.1 Firmware Update

Use the “Update” function to update optional modules. In Configuration interface, click the Update button to bring up firmware update UI. The default selection is “Isolated Output”; and on the top right side is the current device ID and firmware version of selected device.
To program the device, click “Program Enable” button to enable function. This button will also select image files in “hex” format, and program the hex file to the device.





Once the file is selected, the program process starts and the interface shows the progress of the firmware update.



4.5 Graphing

The Graphing option opens a data charting function. Save data to csv file at any time during the graphing.

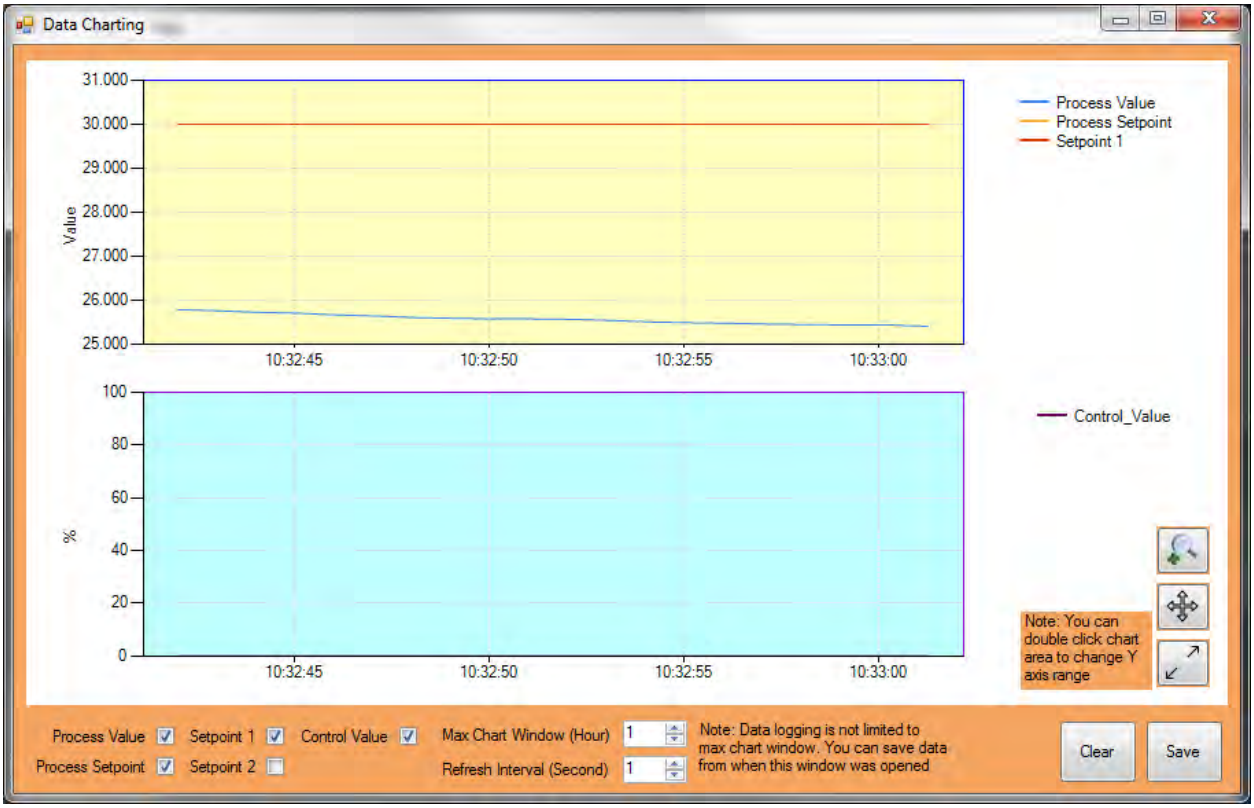
- The “Graphing” screen provides two line graphs, the upper graph showing process variable/setpoint information, and the lower graph showing the PID control output.
- The “process” graph shows the process value, the process setpoint, which is calculated during Ramp and Soak cycles, Setpoint 1 and Setpoint 2. The associated checkboxes disable the display of any or all of the variables.
- The “control output” graph shows the current PID control parameter that display values between 0 – 100%.

Disabling all of the variables for a particular graph will cause the graph to be hidden, allowing the second graph to fill the entire graph area.

The X axis shows the sample count. Operating the auto-refresh at 1 second intervals results in the X axis showing 1 second intervals.

Use zoom, pan and fit to view charts. Both charts are synchronized on X axis.

Adjust maximum charting window. It is the max data windows can be shown on the screen.



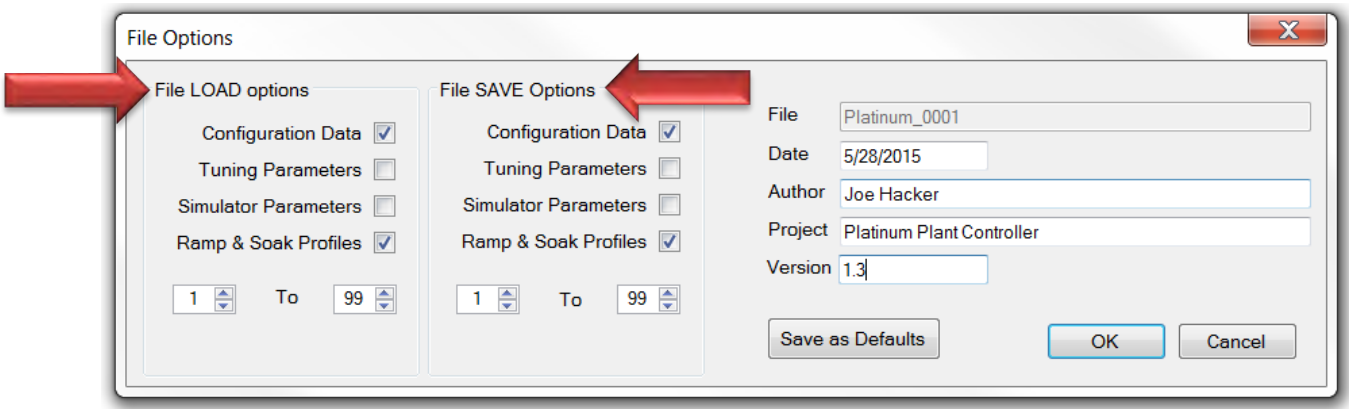
5 Main Menu Functions

5.1 Configuration Files

Configuration data for a device may be saved or loaded as standard ".txt" files using file formats compatible to those used by the Platinum Controller LOAD/SAVE commands. The Platinum Configurator can reads a previously saved configuration file from a Platinum device on a USB thumb drive or modify the configuration, and then SAVE the updated configuration to a USB Memory stick to be reloaded to the device.

5.1.1 File Options Dialog

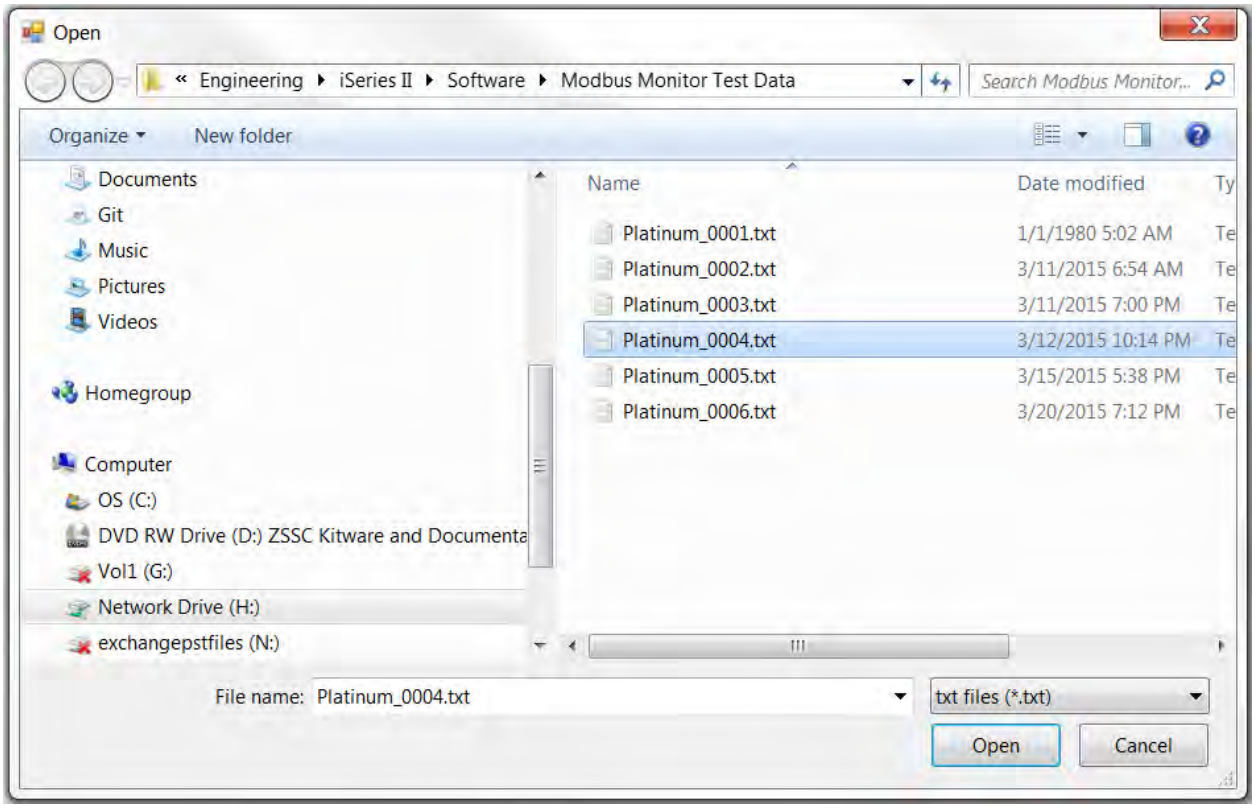
The File Options dialog may be opened under the "Tools/Options" or the "File/Options" menu selections.



- The File Options screen adds additional 'meta data' to the file. This information is retained in the file but is not used by the Platinum device.
- The File name will be updated when the file is SAVED and recovered when the file is LOADED.
- The LOAD and SAVE option blocks select what data is to be transferred from a file.

5.1.2 File LOAD / SAVE

The File LOAD and File SAVE option opens a standard Windows dialog to select a specific file.



5.1.3 Load Parameters/Save Parameters/Apply

The file load parameters, save parameters and apply functions, apply to offline mode. This set of function is different from the File Load and Save. File load and save creates a shadow copy of the Modbus registers values. Load parameters/save parameters/apply only to records or changed parameters.

Load Parameters – Load previous saved parameters

Save Parameters – Save changed parameters

Apply – Apply parameters to controller

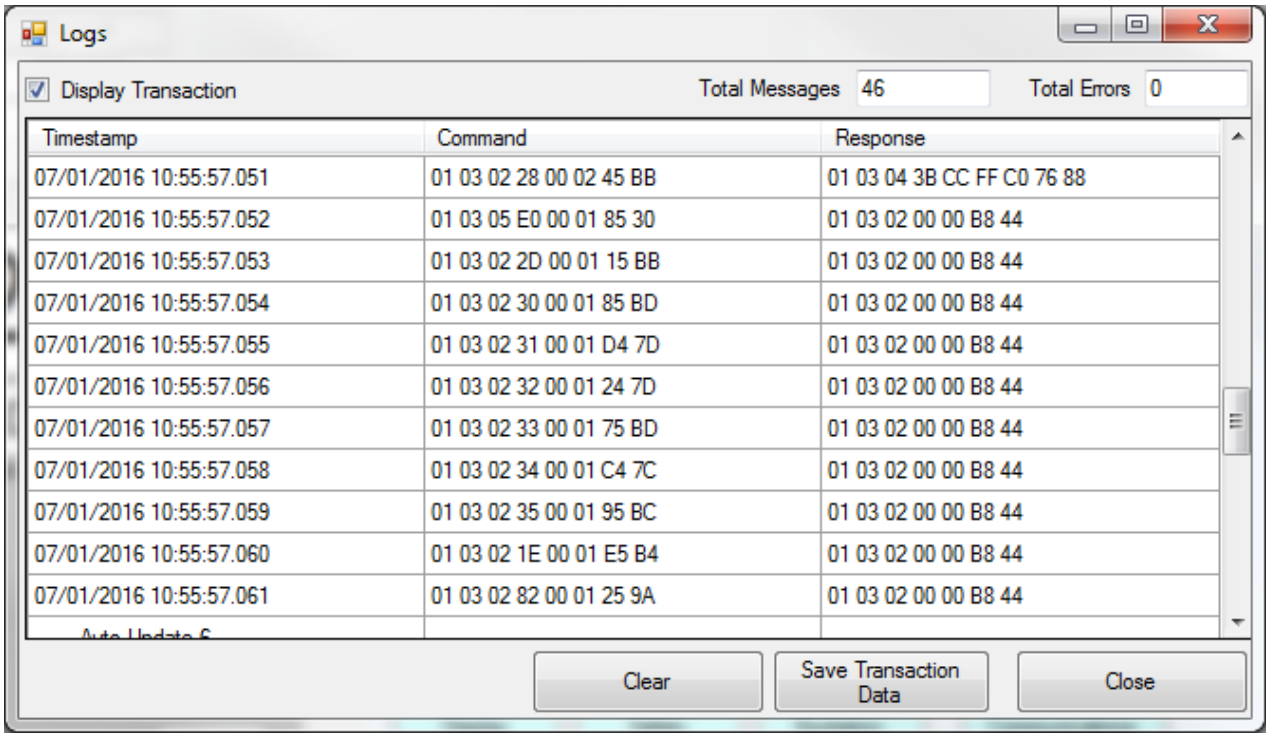
5.2 Tools

5.2.1 Set Connection

The ‘Set Connection” function switches to different connections, used for switching connected controllers or switching communication type.

5.2.2 View Transactions

The “View Transactions” option checks the Modbus traffic between the configurator and the connected controller. This function helps to diagnose and troubleshoot the Controller.



WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **61 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **five (5) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by the company will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

RETURN REQUESTS/INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

OMEGA is a registered trademark of OMEGA ENGINEERING, INC.

© Copyright 2017 OMEGA ENGINEERING, INC. All rights reserved. This document may not be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without the prior written consent of OMEGA ENGINEERING, INC.

Where Do I Find Everything I Need for Process Measurement and Control? OMEGA...Of Course!

Shop online at omega.com℠

TEMPERATURE

- Thermocouple, RTD & Thermistor Probes, Connectors, Panels & Assemblies
- Wire: Thermocouple, RTD & Thermistor
- Calibrators & Ice Point References
- Recorders, Controllers & Process Monitors
- Infrared Pyrometers

PRESSURE, STRAIN AND FORCE

- Transducers & Strain Gages
- Load Cells & Pressure Gages
- Displacement Transducers
- Instrumentation & Accessories

FLOW/LEVEL

- Rotameters, Gas Mass Flowmeters & Flow Computers
- Air Velocity Indicators
- Turbine/Paddlewheel Systems
- Totalizers & Batch Controllers

pH/CONDUCTIVITY

- pH Electrodes, Testers & Accessories
- Benchtop/Laboratory Meters
- Controllers, Calibrators, Simulators & Pumps
- Industrial pH & Conductivity Equipment

DATA ACQUISITION

- Communications-Based Acquisition Systems
- Data Logging Systems
- Wireless Sensors, Transmitters, & Receivers
- Signal Conditioners
- Data Acquisition Software

HEATERS

- Heating Cable
- Cartridge & Strip Heaters
- Immersion & Band Heaters
- Flexible Heaters
- Laboratory Heaters

ENVIRONMENTAL MONITORING AND CONTROL

- Metering & Control Instrumentation
- Refractometers
- Pumps & Tubing
- Air, Soil & Water Monitors
- Industrial Water & Wastewater Treatment
- pH, Conductivity & Dissolved Oxygen Instruments

M5461/0817