

Nexus[®] 1500+

New Generation High Performance Power Meter



Quickstart Guide

V.1.01

September 8, 2015



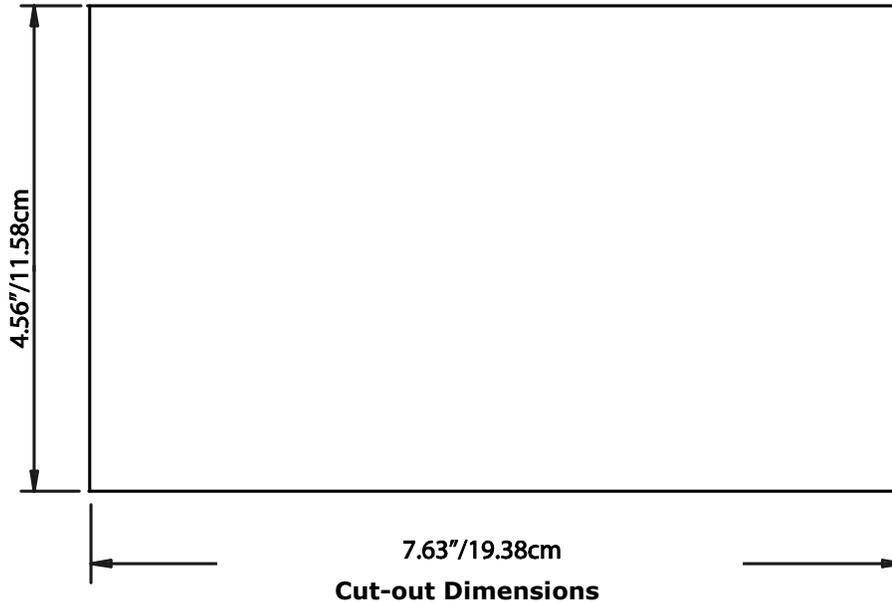
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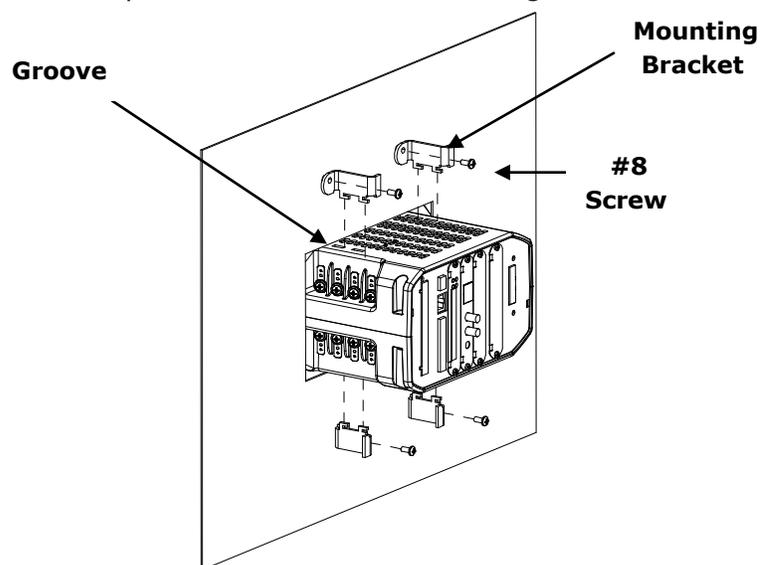
Mechanical Installation

1. Slide the meter into the panel's cut-out. (See the diagram shown below. You can use either an octagonal or a rectangular cut-out.)

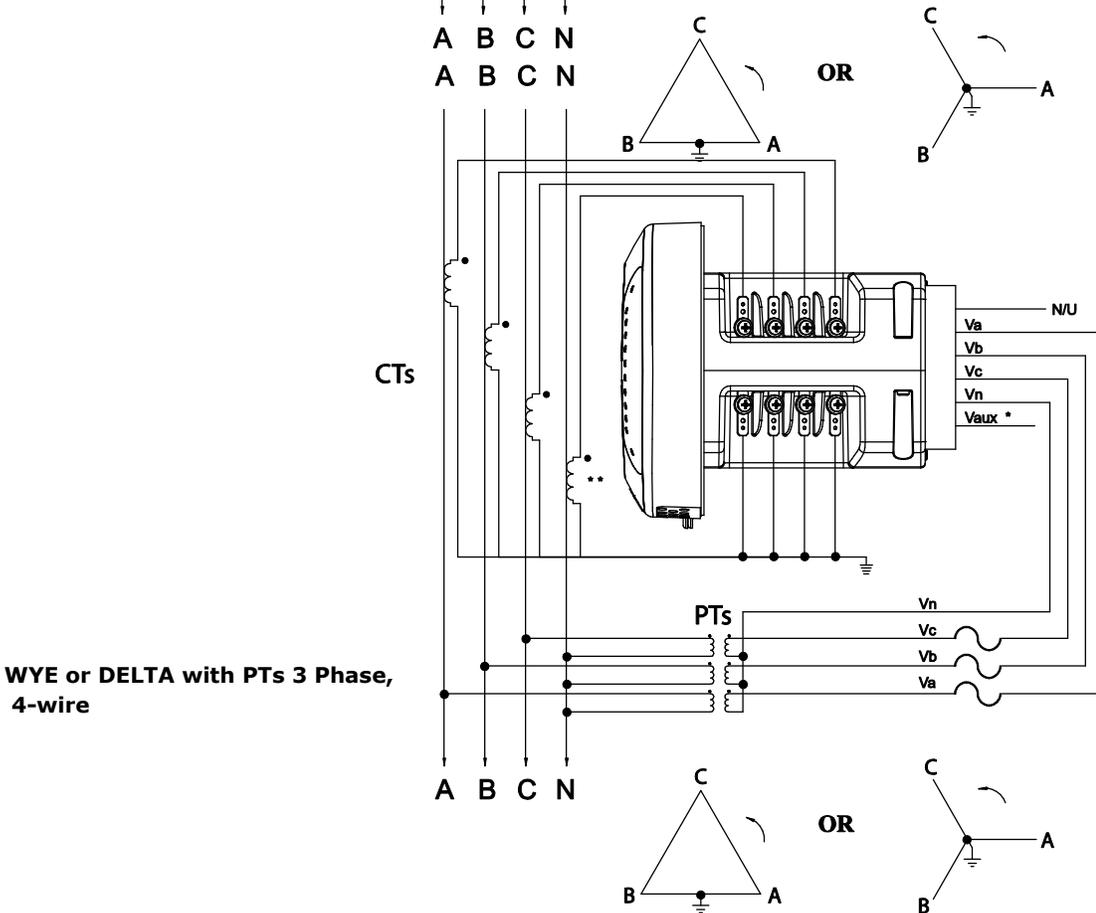
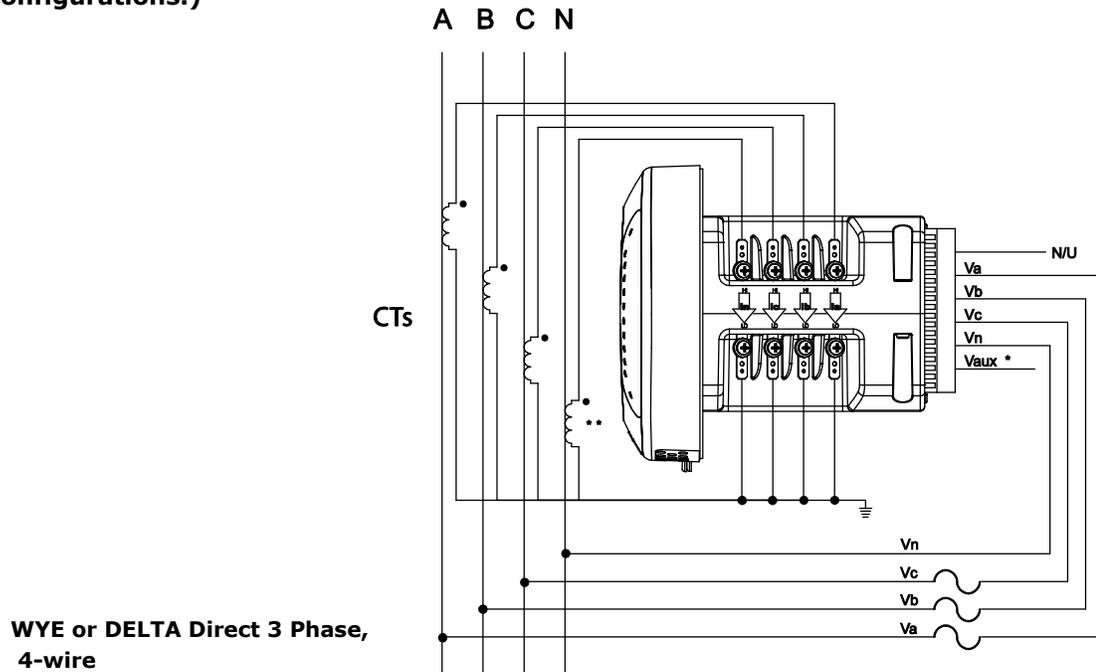
NOTE: You can also mount the meter vertically.

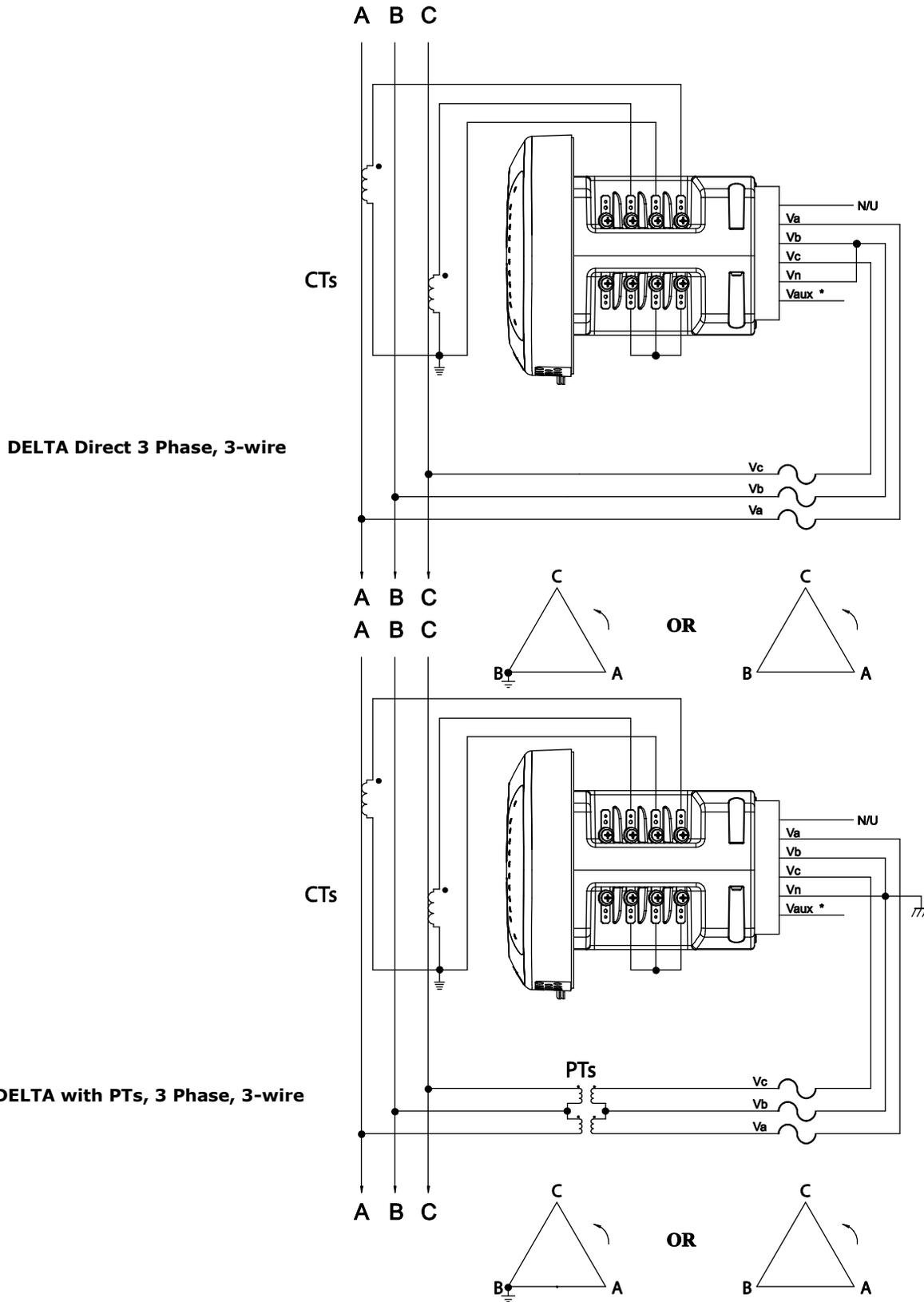


2. From the back of the panel, slide the 4 Mounting Brackets into the grooves on the top and bottom of the meter housing - 2 fit on the top and 2 fit on the bottom.
3. Snap the Mounting Brackets into place.
4. Secure the meter to the panel with a lock washer and a #8 screw in each of the 4 mounting brackets.
5. Tighten the screws with a #2 Philips screwdriver. Do not over-tighten - maximum torque is 3.5 Lb-In.



Electrical Installation (See the meter's Installation and Operation manual for additional wiring configurations.)





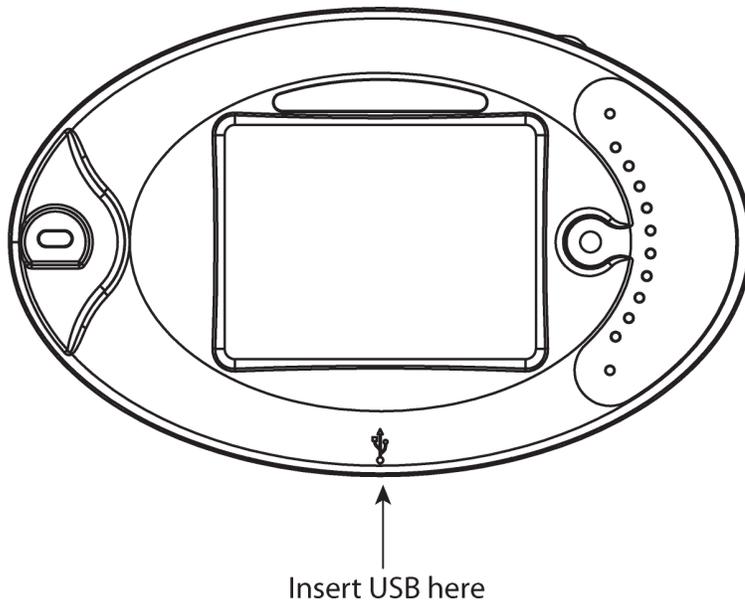
Programming the Nexus® 1500+ Meter Using the USB Virtual Com Port

NOTE: For Operating systems earlier than Windows® 7 OS, you must install the driver before using the USB Virtual Com Port for the first time.

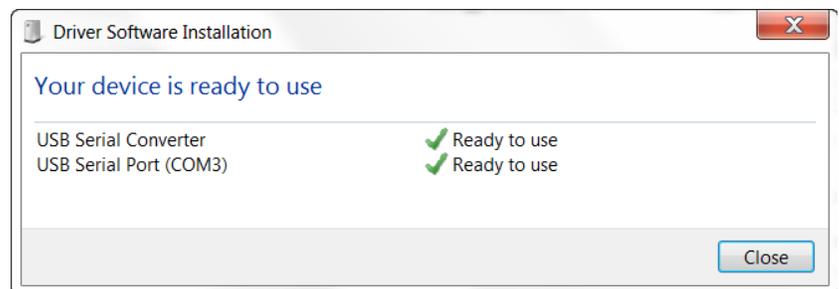
1. Insert the CD that came with your meter into your PC. Click the Nexus® Technical Documents button.
2. Click the USB Driver button. The driver is installed on your PC (you will see screens and messages during the process).
3. Click Start>Settings>Control Panel>System folder>Hardware tab>Device Manager button>Ports. Next to USB Serial port will be the number of the Com port it uses, e.g., COM3. Note this number.

Connecting your PC to the Meter

1. Attach a USB cable from your PC's USB port to the meter's front panel USB port. See the figure below.



2. Windows® 7 and above operating systems install the USB driver and display the screen shown on the right. Make note of the Com port.



Connecting to the Meter via Software

1. Open Communicator EXT™ software. (This software is on the enclosed CD.)
2. Click the **Connect** icon on the Tool Bar. You will see the Connect screen.

The screenshot shows the 'Connect' dialog box with the following settings:

- Serial Port** (Selected)
- Device Address**: 1
- Baud Rate**: 115200
- Port**: COM3
- Protocol**: Modbus RTU
- Flow Control**: None
- Echo Mode**: No Echo
- Parity**: None
- Available Ports** (Selected)

Buttons: Connect, Cancel, Help

3. Click Serial Port.
4. Select Baud rate of 115200.
5. Select the Port that is the USB Virtual Com port.
6. Click **Connect**. You will see the Device Status screen.
7. Click **OK**. You will see the Main Communicator EXT™ software screen.

Configuring the Meter via Software

Click the **Profile** icon on the Tool Bar. You will see the Device Profile screen.

The screenshot shows the 'Device Profile' screen with the following structure:

- Nexus 1500+ V-Switch[1]**
 - General Settings
 - Revenue and Energy Settings
 - Power Quality and Alarm Settings
 - Trending Profile Settings
 - External I/O Modules

Buttons: Update Device, Exit Editor, Save, Load, Report, Help



NOTE: Instructions for a few basic settings are given in this Quick Start Guide. For more information, click **Help>Contents** from the Title Bar of the Communicator EXT™ application’s Main screen, to view the *Communicator EXT™ 4.0 and MeterManager EXT Software User Manual*.

CT, PT Ratios and System Hookup

From the Device Profile screen, double-click **General Settings>CT, PT Ratios and System Hookup**. The current settings are shown on the screen.

1. Double-click one of the settings to open the CT and PT Ratios screen, shown below.

CT Ratio			PT Ratio (Line to Neutral)		
	Primary Current	Secondary Current		Primary Voltage	Secondary Voltage
I A, B, C	5.00	5.00	V A, B, C	120.00	120.00
I N	5.00	5.00	V AUX	120.00	120.00

Hookup
Wye

Operational Frequency Range
45Hz to 69Hz

OK Cancel Help

2. You can enter CT and PT Ratios and select Hookup from the pull-down menu. Click **Help** to view instructions for configuring these settings.
3. Click **OK** to close the screen. Click **Update Device** from the Device Profile screen to save your settings.

Example CT Settings:

200/5 Amps: set the Primary Current value as 200.00; set the Secondary Current value as 5.00.

Example PT Settings:

14400/120 Volts: set the Primary Voltage value as 14400.00; set the Secondary Voltage as 120.00.

Communication Settings

1. From the **Device Profile** screen, double-click **General Settings>Communications**. The current settings for the meter's Ports are shown on the screen.

Device Profile: Communications Settings

Optical Port	USB Serial Port	RS-485 Port 1	RS-485 Port 2
Address: 1	Address: 1	Address: 3	Address: 4
Baud Rate: 57600	Baud Rate: 115200	Baud Rate: 57600	Baud Rate: 57600
Data Bits: 8	Data Bits: 8	Data Bits: 8	Data Bits: 8
Parity: None	Parity: None	Parity: None	Parity: None
Stop Bits: 1	Stop Bits: 1	Stop Bits: 1	Stop Bits: 1
Tx Delay: 0ms	Tx Delay: 0ms	Tx Delay: 100ms	Tx Delay: 100ms
Protocol: Modbus RTU	Protocol: Modbus RTU	Protocol: Modbus RTU	Protocol: Modbus RTU
Mode: Inverted		Mode: Slave	Mode: Slave

Main Network Card Settings (Card 1) (MAC Address 00-01-58-00-88-56)

IP Address	172	200	160	1	Advanced Settings
Subnet Mask	255	255	255	0	
Default Gateway	172	20	161	23	

Optional Network Card Settings (Card 2) (MAC Address 00-01-58-00-5F-14)

IP Address	172	200	160	2	Advanced Settings
Subnet Mask	255	255	255	0	
Default Gateway	172	20	161	23	

OK Cancel Help

2. Double-click one of the Port settings to open the **Communications** screen, shown above.
3. You can configure the settings for all four Communication Ports, as well as the two Network Cards. Click **Help** to view instructions for configuring these settings.
4. Click **OK** to close the screen. Click **Update Device** from the **Device Profile** screen to save your settings.

NOTE: You can also use the standard or optional Ethernet ports, the optional RS485 ports, or the ANSI optical port to connect to and configure the Nexus® 1500+ meter. See the meter's manual on the product CD, and the software manual (click Help>Contents from the Communicator EXT™ application's Main screen).

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