VerifEye™

LEVITON

Series 8000 Meter

For use with catalog numbers: S8120, S8UWH & 277TS

Quick Start Guide

WEB VERSION

PK-A3236-10-00-0A

WEB VERSION

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WARNINGS AND CAUTIONS

HAZARD OF ELECTRICAL SHOCK, EXPLOSION, OR ARC FLASH

- **TO AVOID DEATH, PERSONAL INJURY OR PROPERTY DAMAGE,** disconnect service voltage from the panel and use caution when working around energized circuits.
- Ensure the installation is completed per NEC® guidelines as well as local codes.
- A disconnect must be provided (such as a breaker from the panel) that will allow shut off of power to the meter for servicing.
- Voltage references to the meter should be connected to a circuit breaker in the panel and/or with appropriate fusing based on the NEC® and any local codes that are applicable.
- Apply appropriate personal protective equipment (PPF) and follow safe electrical work practices. See NFPA 70E.
- This equipment must only be installed and serviced by qualified electrical personnel.
- Always use a properly rated voltage sensing device to confirm power is off.
- Replace all devices, doors and covers before turning on power to this equipment.
- The meters must be connected to the sense voltage and control voltage through a properly rated voltage disconnect (not shown in the wiring diagrams).

Failure to follow these instructions will result in death or serious injury.

IMPORTANT NOTES

- Please refer to the product manual or call/E-mail the Leviton® Meter Support Team for further assistance (800-959-6004 / meters@leviton.com).
- For the full listing of tools and equipment required for the complete installation of this product, please refer to the manual for details.
- **347/600 V** and **480 V** delta services require external PTs to step down the voltages before being wired to the meter.

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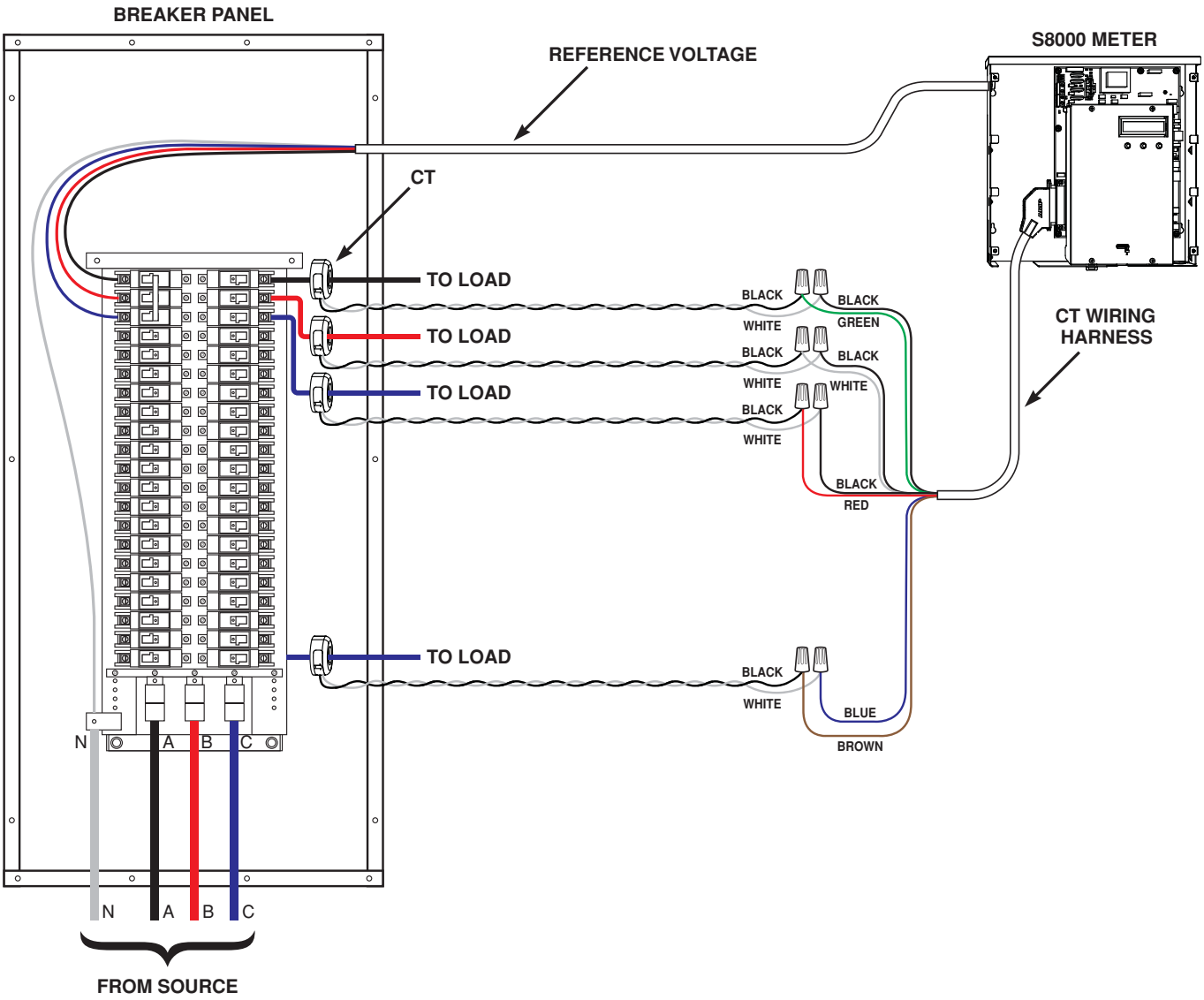
SECTION 1: FULL SYSTEM OVERVIEW

WARNING: Ensure the installation is completed per NEC® guidelines as well as local codes. A disconnect must be provided (such as a breaker from the panel) that will allow shut off of power to the meter for servicing.

General Wiring Diagram:



The system diagram is intended to show the various electrical connections required for the Leviton Series 8000 multi-circuit meter. Indicated in the diagram are the names of the specific components of the meter which will be referred to later in this guide. Follow the installation steps below for the appropriate wiring information depending on the product model and panel service type.

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SECTION 2: VOLTAGE AND METER POWER WIRING REFERENCE

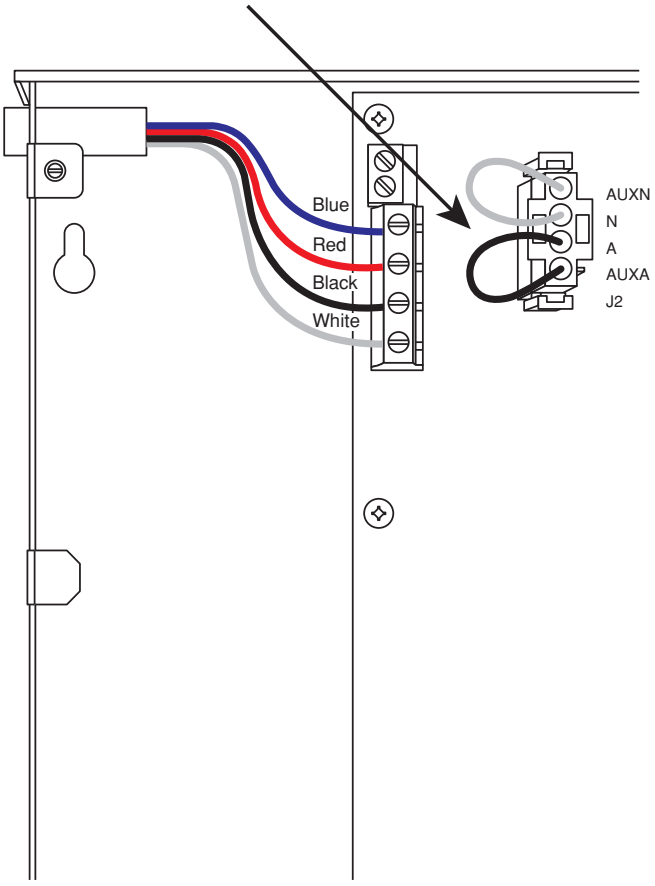
WARNING: Voltage references to the meter should be connected to a circuit breaker in the panel and/or with appropriate fusing based on the NEC® and any local codes that are applicable.

NOTE: 347/600 V and **480 V** delta services require external PTs to step down the voltages before being wired to the meter.

Utilize the correct column below for the type of service being monitored. If none of the examples below match the form of service in the panel, please refer to the full manual for additional types.

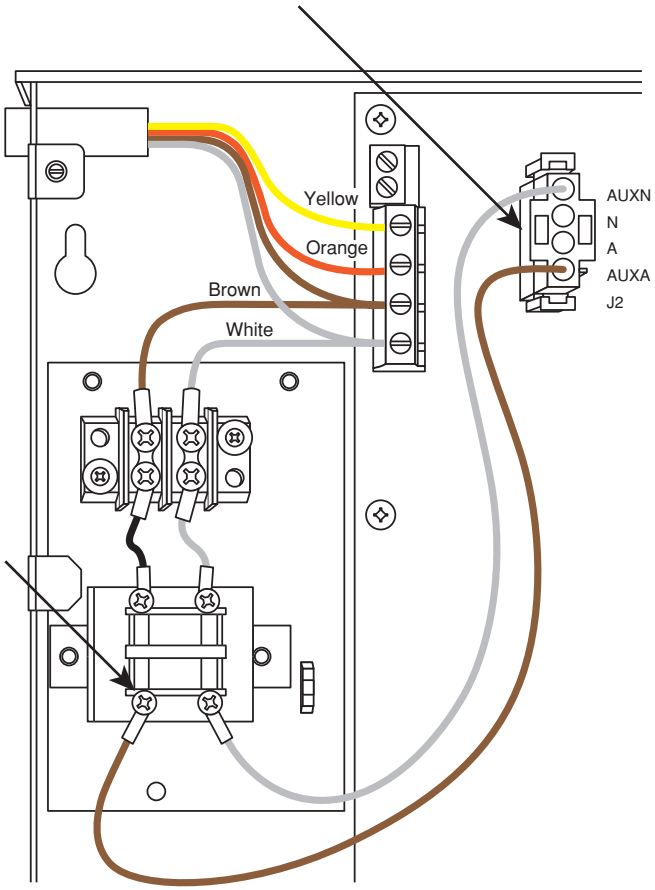
For 120/208/240 VAC services

Verify that the meter has the appropriately installed terminal block in place shown here:



For 277/480 VAC wye services

A transformer is included with the meter for powering the device. Make sure the connections from the secondary side of the transformer and the plug J2 below are made correctly:



Now use the appropriate diagram on the following page for attaching the voltage references depending on the panel feed.

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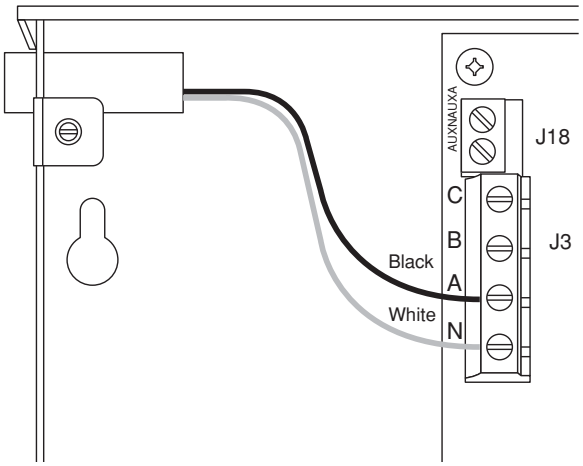
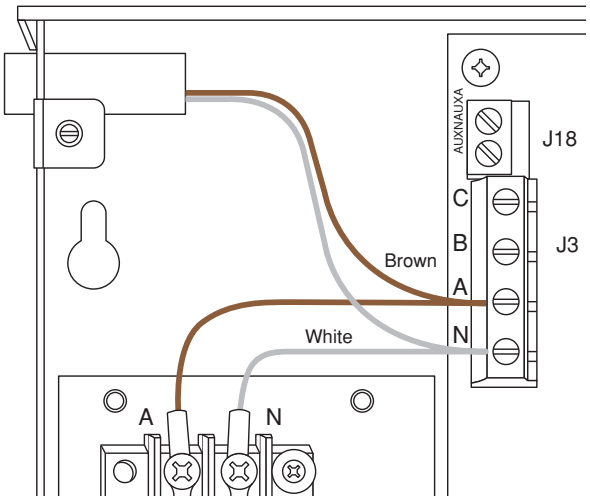
SECTION 3: WIRING DIAGRAMS

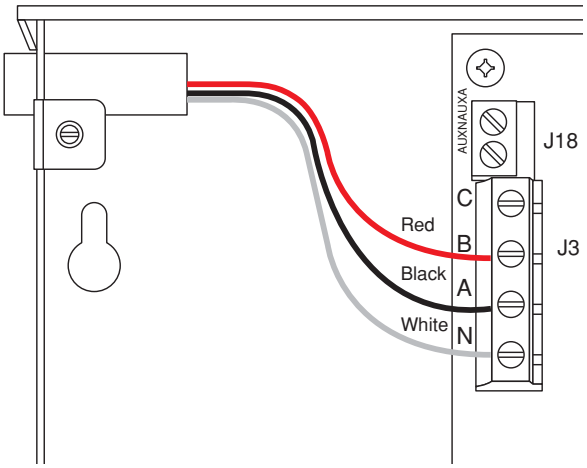
1-Phase 120 VAC (1P 2W)



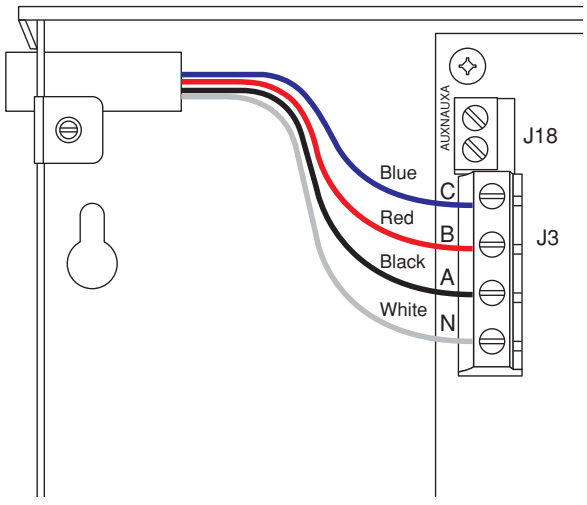
1-Phase Wye 277 VAC (1P 2W)



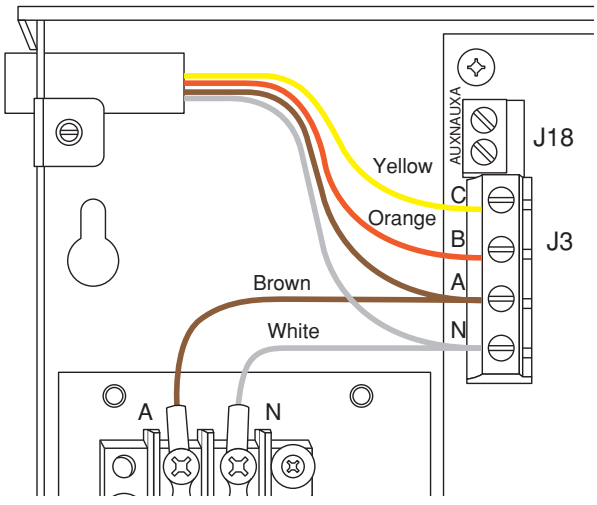
Split Phase 120/240 VAC (1P 3W)



3-Phase Wye 120/208 VAC (3P 4W)



3-Phase Wye 277/480 VAC (3P 4W)



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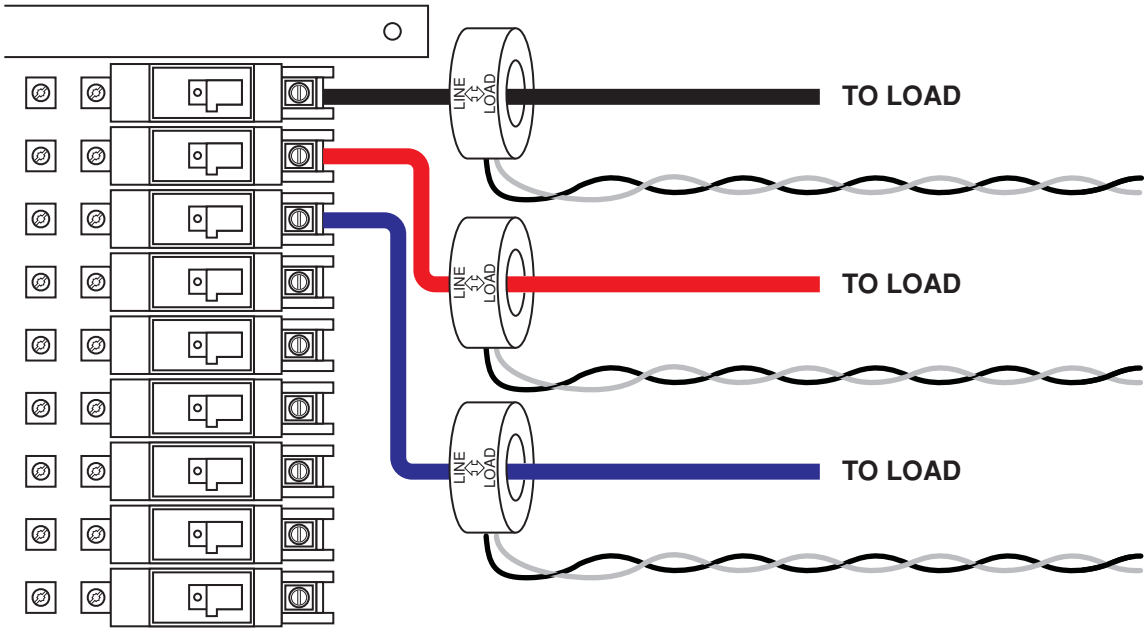
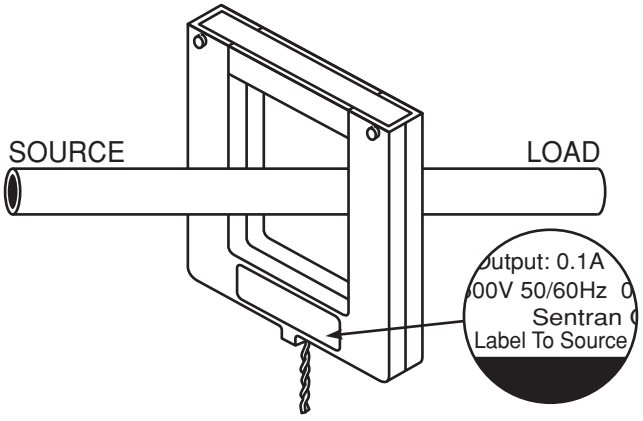
SECTION 4: INSTALLING CURRENT TRANSFORMERS TO MONITOR THE LOADS



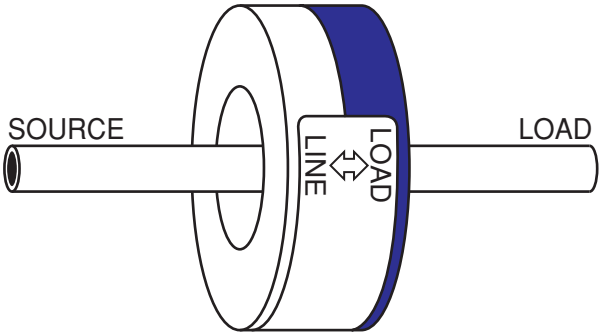
Correct installation of CT orientation on conductor from panel to load. This is an example of a three-phase installation.

Use the appropriate diagram below to identify the correct orientation of the CT to the conductor. The “source” refers to the side facing incoming power from the utility.



Example of a split core CT.

Orientation is based on the product label indicating which side should face the source.



Example of a solid core CT.

Orientation is based on the product label indicating which side should face the source.

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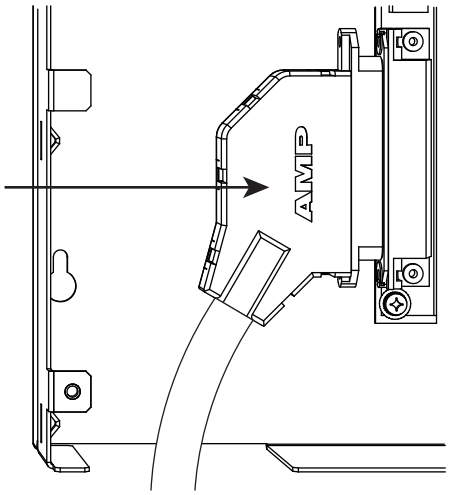
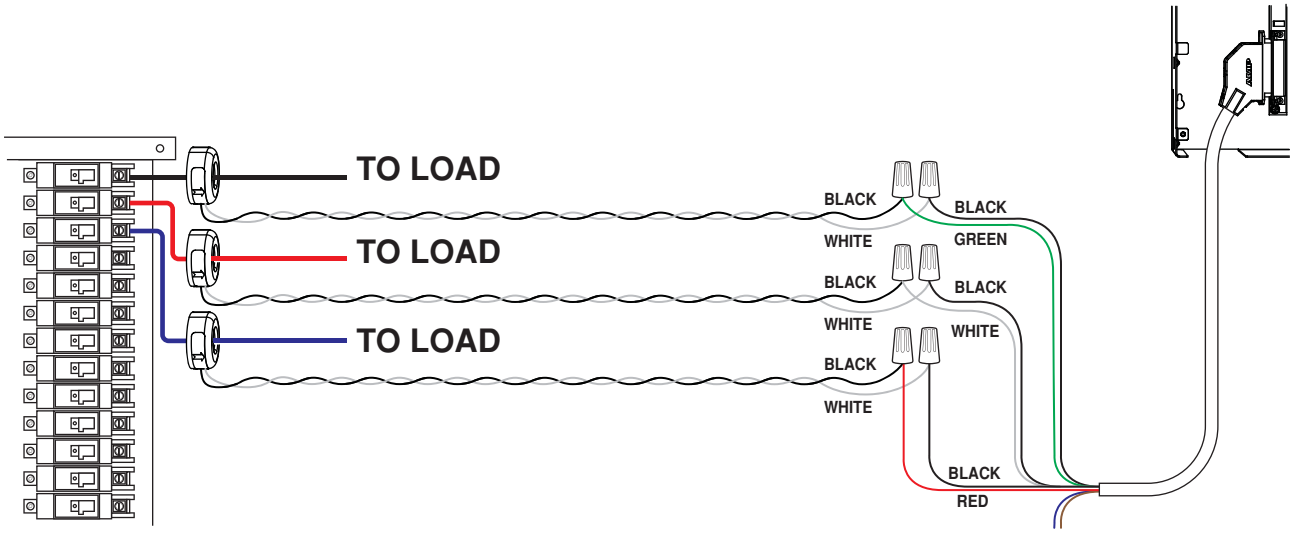
SECTION 5: INSTALLING THE CT WIRE HARNESS & CONNECTING CT SECONDARY WIRES

Install the wire harness AMP® connector to the board.



Wire harness AMP® plug inserted into socket

Depending on the Series 8000 model purchased, the harness has a varying number of twisted pairs that are to be matched with the corresponding CTs from the panel. Please refer to the spreadsheet on the last page of the quick start guide which cross lists the twisted-pair wiring colors to the input number of the meter. Make sure to correctly associate each twisted pair wire to the correct CT in the electrical panel.



Example of a three phase (element) installation with the first three loads wired in the correct order based on the cross-reference list above. The CT wires are always white (X1) and black (X2), and must be appropriately associated with the correct colored pair from the harness.

Important! Fill out the spreadsheet with the appropriate CT amperage ratings and tenant information (circuit/apt/unit #) associated with each of the CTs. This is provided on the last page of the quick start guide.

Once the tenant spreadsheet has been filled out and completed, the last steps are to configure the meter through software and verify the hardware installation is correct. The manual includes the necessary information to complete the commissioning of the Leviton Series 8000 multi-circuit meter.

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CT AMPERAGE RATINGS AND TENANT INFORMATION CHART

S8000 Model Number	1 Element (CT) Meter Mode	2 Element (CT) Meter Mode	3 Element (CT) Meter Mode	Termination Module CT #	Connect X1 CT lead (white) to X1 input color	Connect X2 CT lead (black) to X2 input color	CT Amperage	Circuit Number	Description (Dwelling/Apt/Unit #)
					Cable 1				
8106 - S8120-032	P1-1	P1-1	P1-1	1	Black	Green			
	P2-1	P1-2	P1-2	2	Black	White			
	P3-1	P2-1	P1-3	3	Black	Red			
	P4-1	P2-2	P2-1	4	Red	Green			
	P5-1	P3-1	P2-2	5	Red	White			
	P6-1	P3-2	P2-3	6	Black	Orange			
8112 - S8120-062	P7-1	P4-1	P3-1	7	Black	Brown			
	P8-1	P4-2	P3-2	8	Black	Yellow			
	P9-1	P5-1	P3-3	9	Black	Blue			
	P10-1	P5-2	P4-1	10	Green	Yellow			
	P11-1	P6-1	P4-2	11	Green	Blue			
	P12-1	P6-2	P4-3	12	Green	White			
8118 - S8120-092	P13-1	P7-1	P5-1	13	Blue	White			
	P14-1	P7-2	P5-2	14	Green	Orange			
	P15-1	P8-1	P5-3	15	Green	Brown			
	P16-1	P8-2	P6-1	16	Blue	Yellow			
	P17-1	P9-1	P6-2	17	Brown	White			
	P18-1	P9-2	P6-3	18	Orange	White			
8124 - S8120-122, S8UWH-083, S8UWH-122, S8UWH-241	P19-1	P10-1	P7-1	19	Red	Orange			
	P20-1	P10-2	P7-2	20	Red	Yellow			
	P21-1	P11-1	P7-3	21	Red	Brown			
	P22-1	P11-2	P8-1	22	Blue	Orange			
	P23-1	P12-1	P8-2	23	Yellow	White			
	P24-1	P12-2	P8-3	24	Blue	Brown			

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