BLUE SEA SYSTEMS
Marine Electrical Products

Analog AC Voltmeter

0-150 Volts PN 8244 / PN 9353
0-250 Volts PN 8245 / PN 9354

Meter Specifications

	PN	Voltage
Input Voltage:	8244/9353	0-150 Volts AC
	8245/9354	0-250 Volts AC
Amperage Draw:	1 Milliampere	
Display:	Analog scale	
Accuracy:	3% of scale range	

	PN	Inches	Millimeters
Face Width:	8244/8245	2	50.80
	9353/9354	2-5/8	66.70
Mounting Hole:	8244/8245	1-1/2	38.10
	9353/9354	1-7/8	47.60

Guarantee

Any Blue Sea Systems product with which a customer is not satisfied may be returned for a refund or replacement at any time.

Installation

Warning

It is not possible within the scope of these instructions to fully acquaint the installer with all the knowledge of electrical systems that may be necessary to correctly install this product. If the installer is not knowledgeable in electrical systems we recommend that an electrical professional be retained to make the installation.

1. Disconnect all AC and DC power

Disconnect all AC power originating on or off the vessel. This includes inverters, generators, shore power attachments and any other device capable of supplying AC power to the ship's circuits. Disconnect the main positive DC cable from all batteries to eliminate the possibility of a short circuit and to disable the inverter while installing the meter.

Blue Sea Systems Inc.
425 Sequoia Drive Bellingham, WA 98226 USA
Phone (360) 738-8230 Fax (360) 734-4195
E-mail conductor@bluesea.com
www.bluesea.com

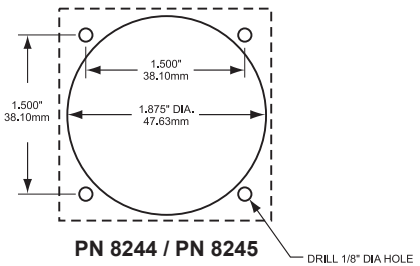
9332 Rev. 003

Installation (continued)

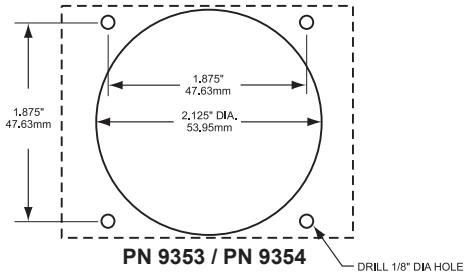
2. Select mounting location and cut opening

Select a mounting location which is protected from water on the meter front and back and is not in an area where flammable vapors from propane, gasoline or lead acid batteries accumulate. The meter is not ignition protected and may ignite such vapors. There are two mounting methods for the meters, surface mount or panel mount.

Surface Mount: Drill five clearance holes as shown below. The part number of the meter will determine the size and location of the clearance holes. Use the nuts and washers supplied in the accessory package to secure the four mounting studs to the mounting surface. This method will work on mounting surfaces up to 5/8" thick.



PN 8244 / PN 8245
Micro Meters



PN 9353 / PN 9354
Standard Meters

Panel Mount: For thicker mounting surfaces, the meter can be mounted into a 0.125" thick panel. Blue Sea Systems offers meter mounting panels for our standard size meters only. Use PN 8013 to mount a single meter or PN 8014 to mount two meters.

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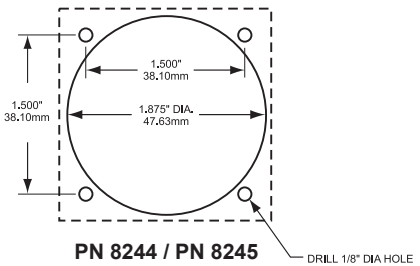
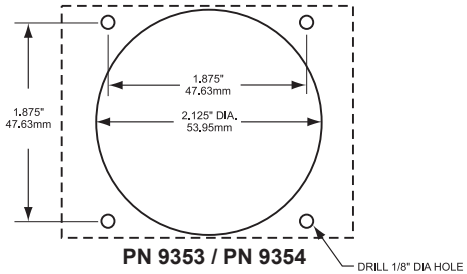


PN 8244 / PN 8245
Micro Meters



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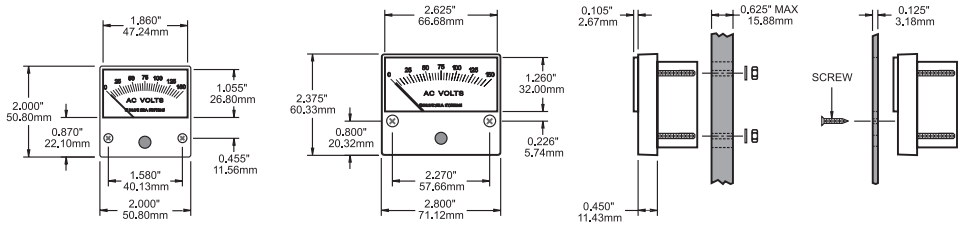
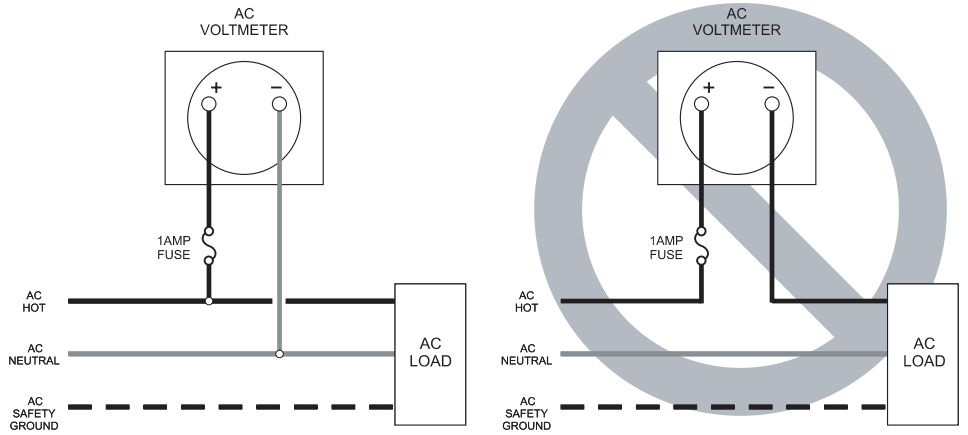


PN 8244 / PN 8245 | PN 9353 / PN 9354 | Surface Mount | Panel Mount

3. **Installation of Voltmeter Wires:** Wire the meter as shown below, making certain to attach the hot lead to the terminal on the meter marked "+" and the neutral lead to the terminal marked "-". Use a minimum 16 AWG wire, black for hot and white for neutral. Verify that the circuit protection device (circuit breaker or fuse) protecting the circuit to be monitored will also protect the 16 AWG meter sensing wires. If it is oversized, install a 1 ampere fuse in the hot lead near the source. Do not connect the voltmeter in a serial (in-line) configuration.



CORRECT
Parallel Installation

INCORRECT
Serial Installation

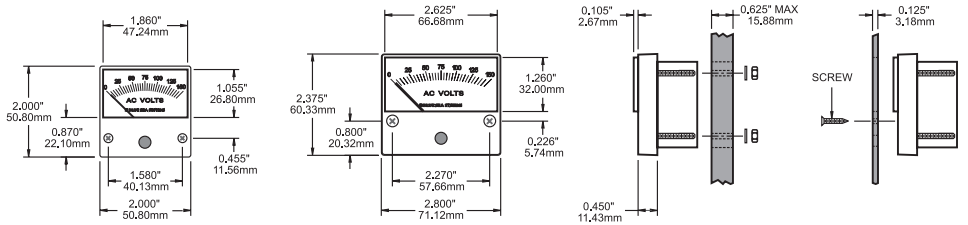
Wiring Diagram
for AC Voltmeters

4. **Calibration**
The voltmeter is calibrated at the factory and recalibration should never be necessary. However, if adjustment does become necessary the needle may be reset to the zero mark.

In the center of the black area on the meter front is an adjustment screw. This screw activates a small cam that deflects the meter needle slightly to adjust the needle position.

Using a small screw driver, turn the screw no more than 90 degrees right or left, as necessary. DO NOT ROTATE THE ADJUSTMENT SCREW THROUGH 360 DEGREES.

Installation (continued)



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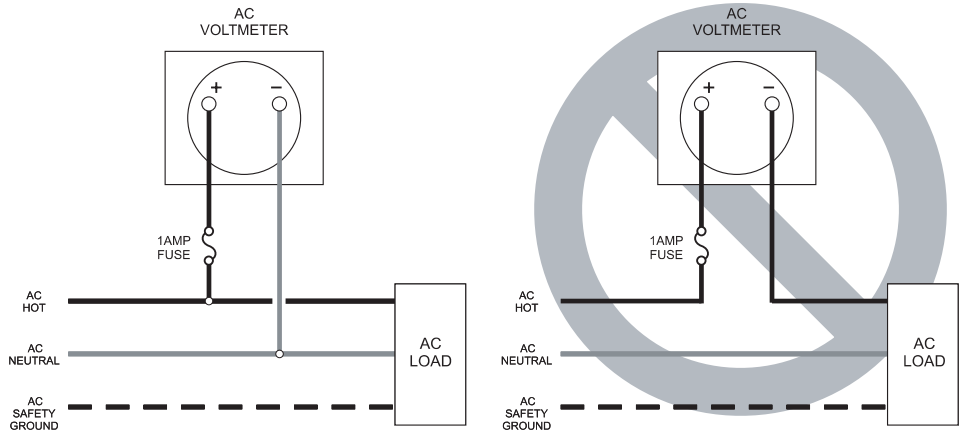

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