



## INSTALLATION INSTRUCTIONS

### LW2 Product Family

(Using Surge Blox™ 200)

#### THIS PACKAGE CONTAINS:

- Installation Instructions
- Template
- Mounting Feet

### Installer Materials Checklist

The following materials checklist is provided to assist in installation preparations. Installers may find it helpful to verify that all materials are available.

- Wire, recommended #3, THHN for use with 100 amp circuit breaker.
- Wire for remote alarm system – two conductors (one red, one black), #22 AWG, 300 VAC minimum for applications 277 VAC and less, #22 AWG, 600 VAC minimum for applications 277 VAC and above.
- Attachment hardware, ¼ inch (7 mm).
- Mounting template.
- Circuit breaker, 2 pole, 100 amps, 250 VAC or higher to fit Electrical Distribution Panel.
- PVC conduit and fittings, 1 ¼ inch (32 mm) diameter for AC power.
- Punch for distribution panel, 1 – 11/16 inch (43 mm).
- 3/16 inch (5 mm) Hex wrench, ¼ inch (7 mm) slotted screwdriver.
- ½ inch (13 mm) Nut Driver (for servicing suppressor).
- Conduit and fittings, ½ inch (13 mm) for remote alarm.

### GENERAL INSTRUCTIONS

Mount the Transient Voltage Surge Suppressor Panel Protector as close as possible to the service panel to be protected. Whenever possible, use the first circuit in the service panel. Wire lengths of 24" (61 cm) or less are desirable. The shortest possible wire length enhances the suppressor's performance by allowing less let-through voltage into the protected equipment. A ½" (13 mm) nut driver is required for servicing the suppressor. The maximum torque allowed in the metal standoffs is 50 inch pounds (5 Nm).

# Installation and Connection of Suppressor

Install the TVSS breaker. A mounting template is provided for the suppressor panels.

- See Figure #1 below for panel placement.

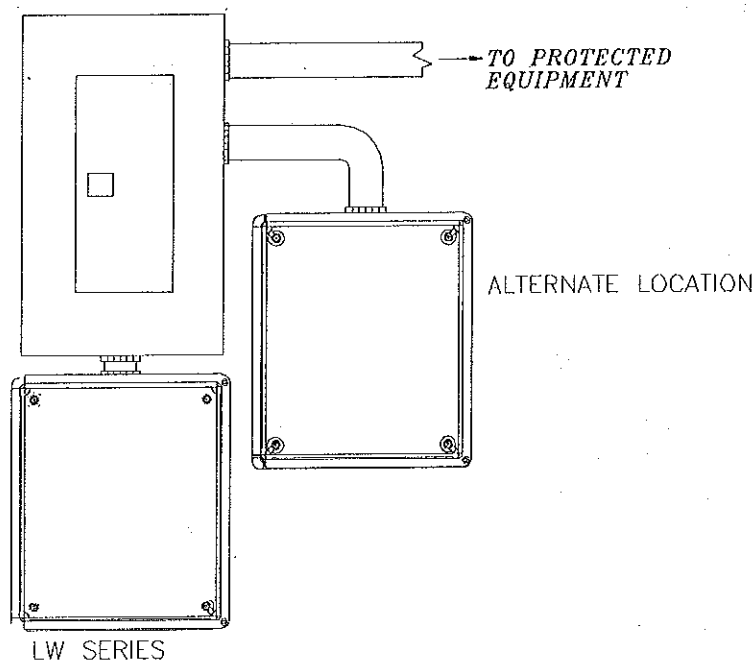


Figure #1  
Location of Suppressor

- Use the mounting template to mark the hole locations where the mounting hardware will go.
- Drill mounting holes.
- Mark location for connecting hole in the distribution panel. Optimum hole location is noted in Figure #2.
- Punch the distribution panel where marked.
- Install 1 ¼ inch (32 mm) PVC Nipple between distribution panel and suppressor.
- Mount suppressor panel to wall.
- Attach mounting feet to panel (See instructions included with mounting feet)

With the breaker in the **"OFF"** position, connect the ground, neutral and hot wires between the breaker and the suppressor. See Figure #2.

## Connection to Remote Alarm System

- Step 1 Using #22 AWG red wire connect to the normally closed (NC) terminal. See Figure #2.
- Step 2 Using #22 AWG black wire to the common (C) terminal.
- Step 3 Route the two alarm wires to the remote alarm system.

NOTE: For normally open contacts, connect the red wire to the normally open (NO) terminal. See Figure #2.

Check the alarm transport function by cycling the suppressor breaker. "OFF" should generate an alarm code. After the test, close (or turn "ON") the suppressor breaker.

Check **ALL** wiring. Incorrect wiring may result in damage.  
Install the protective polymer shield. Lock the door in the closed position.

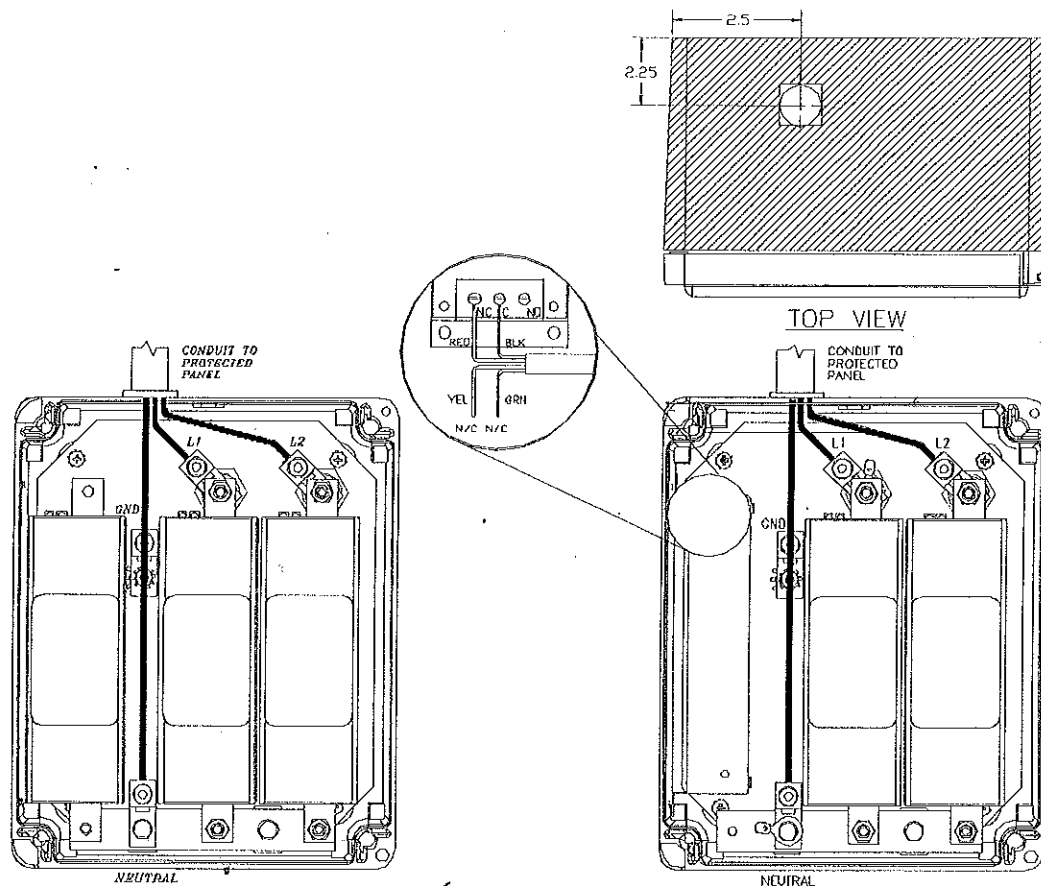


Figure #2  
Power and Alarm Wiring

**OBSERVE THE FOLLOWING OPERATIONS AT INITIAL VOLTAGE TURN-ON.**

- ❑ With the door closed and locked, turn on the power, (Make sure that the door is locked on initial power up).
- ❑ Open the door and observe the LED lamps on the modules. Surge Blox™ 200 have a self-alarm test. During the self-alarm test, the green and red LED's and the piezo will be "on" for 30 seconds. The alarm then will cycle off: and the red LED will turn "off", leaving the green LED illuminated. Common mode module (gray) has no LED's or self-alarm test.
- ❑ Normal conditions for each module are:
  - A) Green LED "on."
  - B) Red LED "off."

For conditions other than those described above, please contact an ACDATA Account Representative at (208) 777-1166, (800) 890-2569, or Fax (208) 777-4466 or [www.acdata.com](http://www.acdata.com)

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