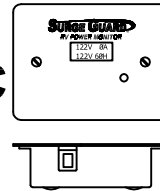


SURGE GUARD

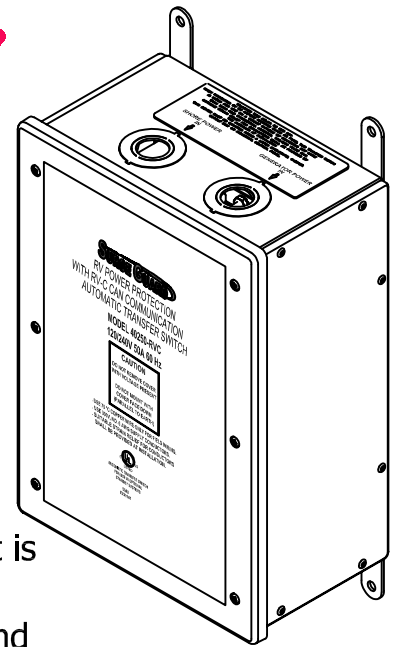
RV Power Protection

Surge Guard Plus Model 40250-RVC

Automatic Transfer Switch with
RV Power Protection
120/240V, 50A, 60 Hz



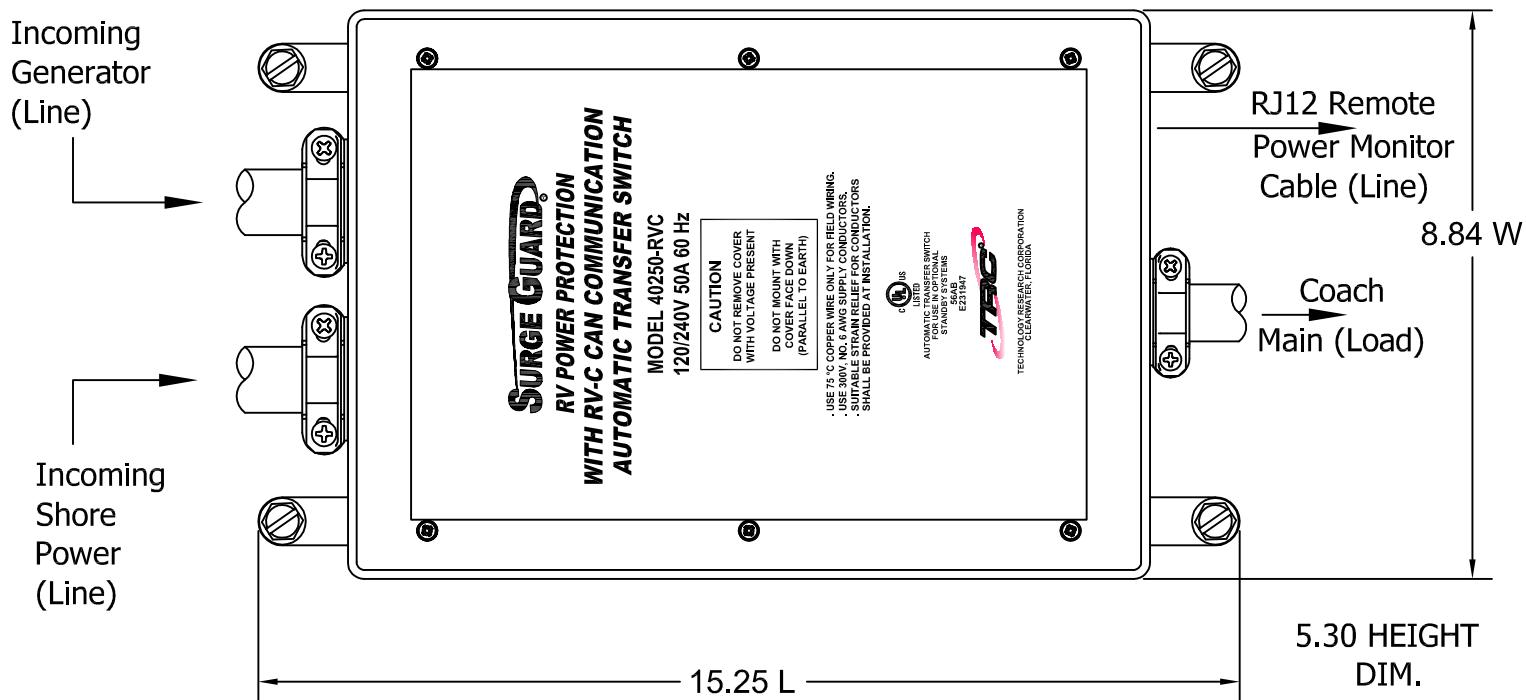
*Optional Remote Power Monitor Display



www.SurgeGuard.com

Installation & Operating Instructions

The Surge Guard unit should be mounted on a dry interior surface that is protected from inclement weather. The Surge Guard unit must have accessibility to incoming shore power source, generator power cable and outgoing coach main load cable. TRC does not recommend installing the Surge Guard unit under the bed or anywhere in the living area.



Package Contents :

- Power Protection Transfer Switch
- NM Cable Strain Relief Connectors
 - 3 EA. Size $1\frac{1}{4}$ in.
 - 3 EA. Size $\frac{3}{4}$ in.
 - 3 EA. Size $\frac{1}{2}$ in.
- Mounting Screws
- 4 Pcs. $-\frac{1}{4} \times \frac{3}{4}$ (Self Tapping)
- Remote Power Monitor Display (Optional)
- (50 ft.) RJ12 Cable Assembly (sold separately)

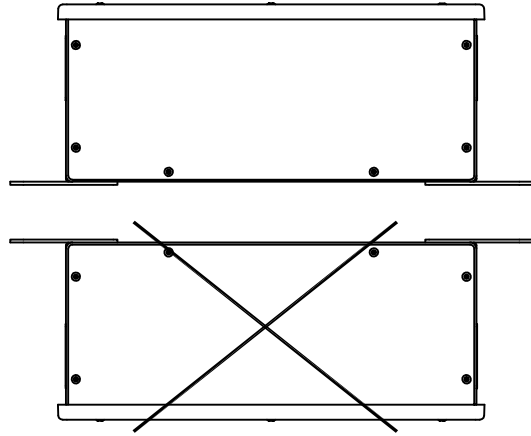
PLEASE READ THE ENCLOSED INSTRUCTIONS CAREFULLY.
In the event you have any questions concerning the care of this product,
please contact the Sales Department at Technology Research Corporation.

WARNING: This Surge Guard Plus® device must be installed by a licensed electrician or by an RV dealer.

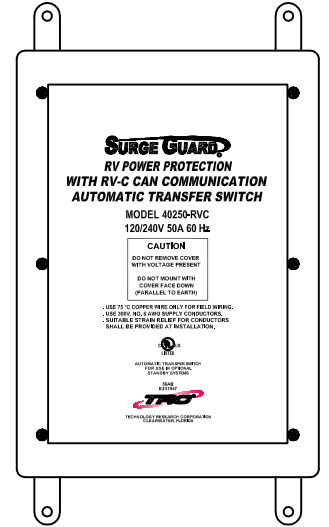
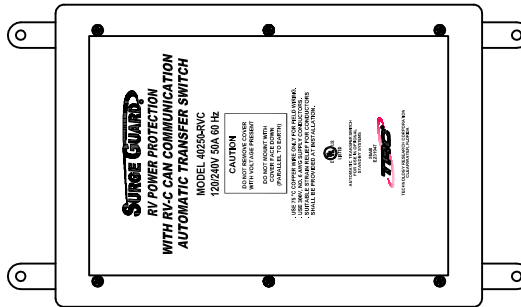
UNIT MUST BE ACCESSIBLE FOR FUTURE SERVICING IF REQUIRED.

RECOMMENDED LOCATION POSITIONS ARE AS FOLLOWS:

FIRST-UNIT COVER FACING UP
AND HORIZONTAL



SECOND-UNIT VERTICAL OR PERPENDICULAR
TO THE HORIZONTAL

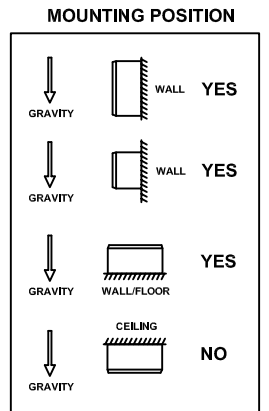


DO NOT INSTALL UPSIDE DOWN WITH COVER FACING DOWN TOWARDS THE EARTH.

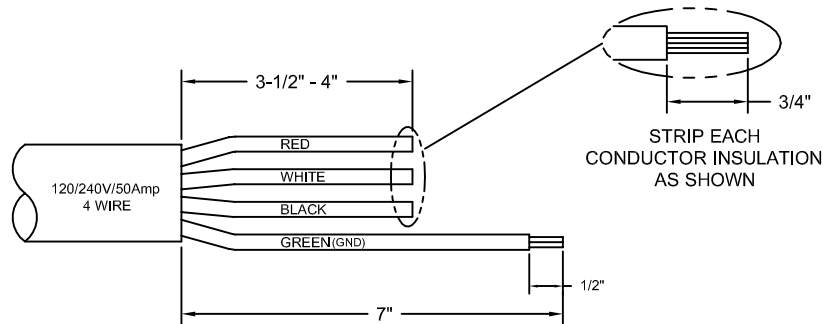
DE-ENERGIZE / DISCONNECT INCOMING SHORE AND GENERATOR POWER BEFORE PROCEEDING.

SUGGESTED INSTALLATION PROCEDURE.

1. Remove Cover.
2. Select NM Strain Relief Connectors.
 - A. Select appropriate size connectors to fit cables to be installed.
 - B. Select corresponding "Knockouts" on ends of unit, install and tighten in place.
3. Tighten connector jam nut with cable clamping screws positioned for easy access during cable assembly. -Unscrew clamping screws to allow for maximum cable opening.
4. Prepare Cable.
 - A. Line Side (INPUT)

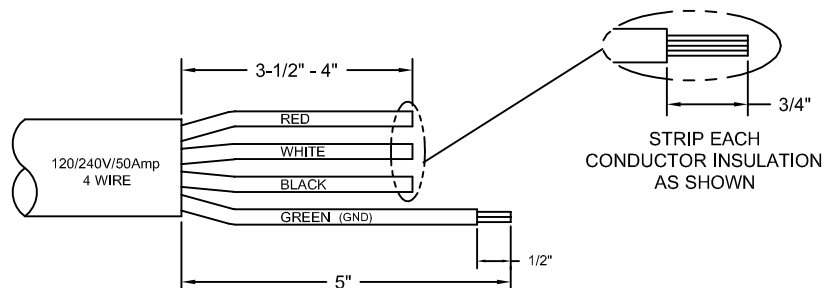


Generator Cable



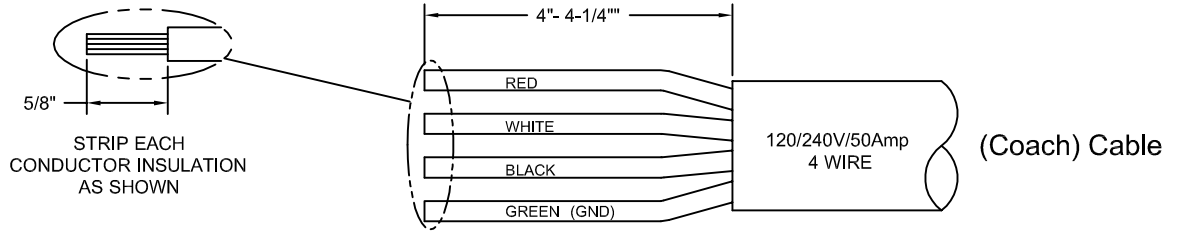
B. Line Side (INPUT)

Shore Power Cable



Cable Preparations Continued.

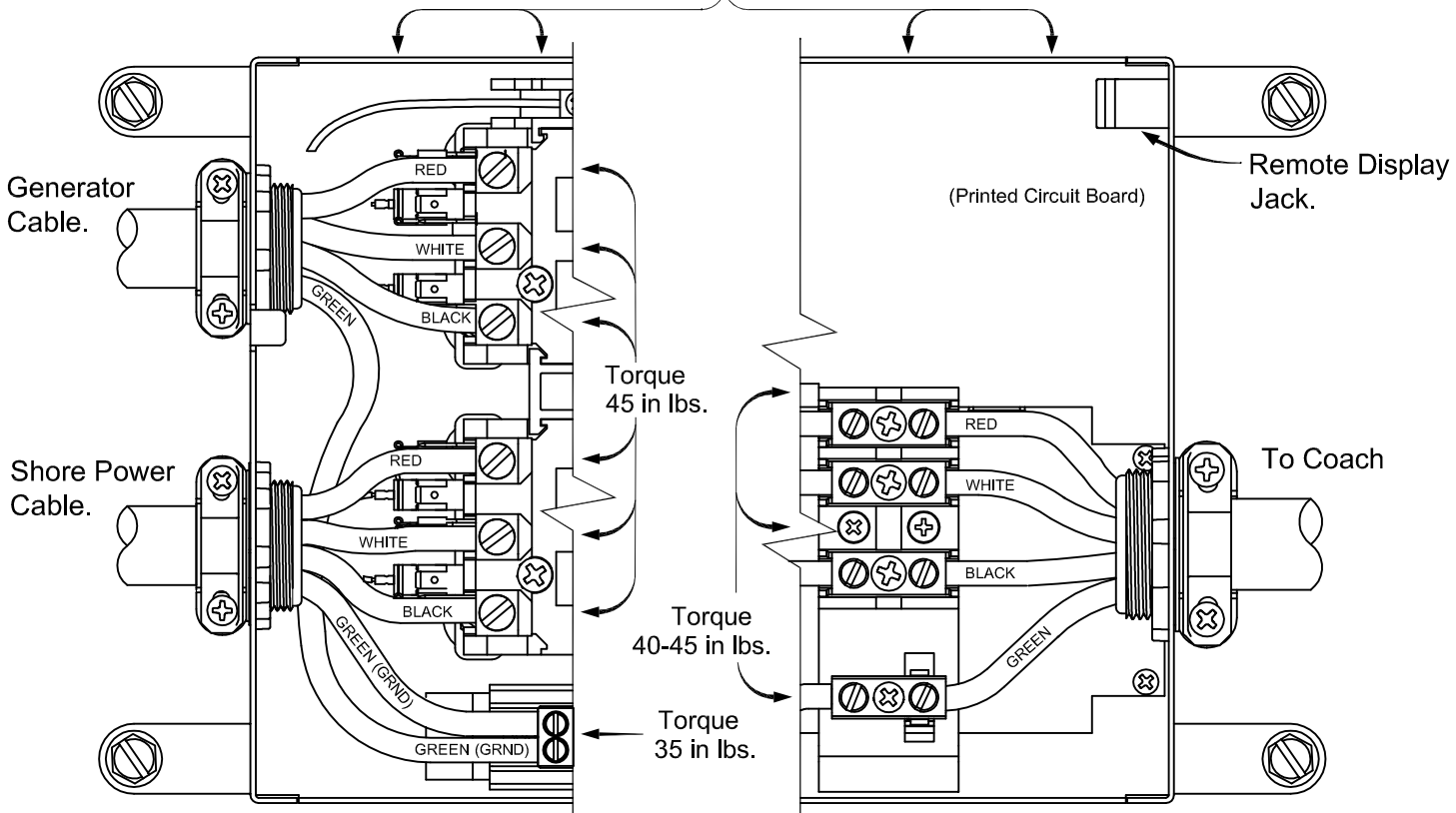
C. Load Side (OUTPUT)



5. Install unit in pre-selected location using mounting template (supplied) (4 mounting screws included).

6. Install cables through strain reliefs and connect wires as shown. Maintain wire color continuity. Torque conductor terminal connections to values shown.

CAUTION Do Not allow wire / insulation clippings to fall into unit- this may cause a failure.



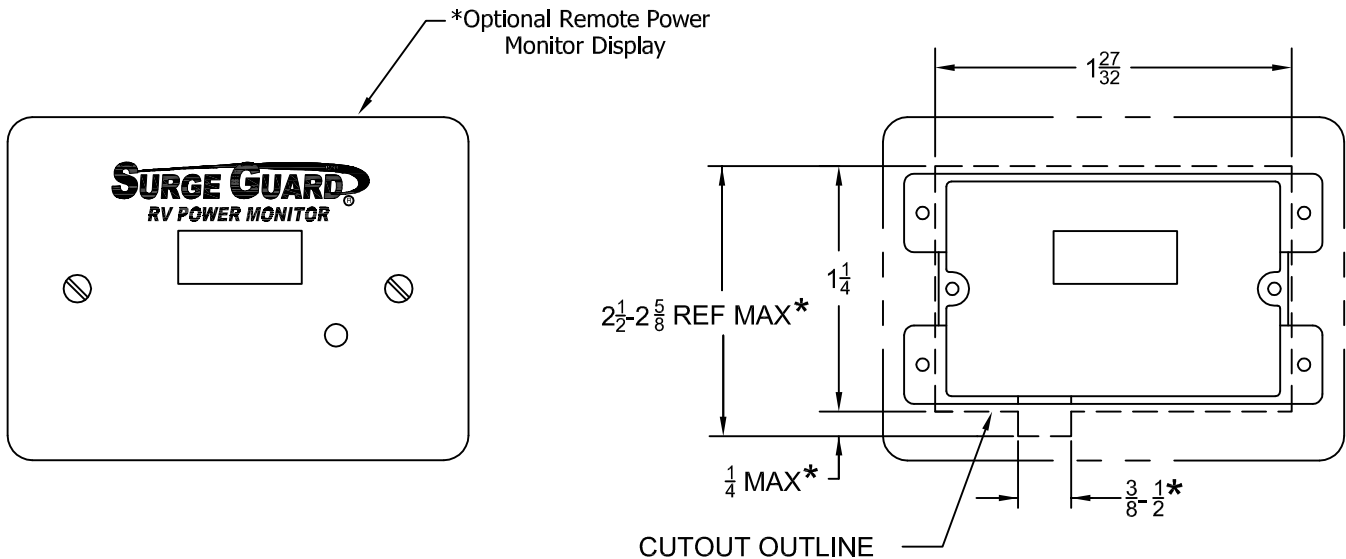
AFTER CONNECTIONS ARE MADE, SECURE BOTH LINE & LOAD SIDE CABLES.

7. Check position of cable through strain reliefs to ensure that no tension is present on all connections, once cables are positioned and connected to the appropriate terminals. Secure cables in-place by tightening cable clamps to prevent cable movement. Install Cover.

TO INSTALL OPTIONAL REMOTE POWER MONITOR DISPLAY.

1. Location for the optional remote power monitor display should be determined by where it is most convenient to view the display. This remote power monitor allows for continuous visual indication of source voltage and load current or diagnostics. A 50 ft. RJ12 connector cable is sold separately and would allow for installation virtually anywhere inside the RV. It may also be installed in the same location as the Surge Guard Transfer Switch. Mounting is not necessary, leave enough cable length for accessibility, balance of cable can be bundled with a plastic tiwrap. Should a remote location be desired, route cable through the coach as needed. (Cable ends and remote display must be located in a dry interior location away from inclement weather and moisture.)
2. Suggested Mounting Procedure for Optional Remote Power Monitor
 - A. Remove Cover (Do not allow foreign matter to fall into open box) using the open box as a template, mark outline on mounting surface. Outline as follows:

*NOTE: Lay box on its side to position "notch" for flat cable connection. Do not exceed dimensions shown or cover plate, when installed, will not cover cable "notch".
 - B. Position box, with cable installed, secure with appropriate screws (Not supplied). Attach the cover plate on mounting surface. Outline as follows:



Installation Test Procedures

1. Plug RV's shore power cord into utility power source.
2. Wait for time delay, then observe remote display of shore power status*.
3. Turn on RV's generator. (Generator power source is dominant over shore power) A 30 second delay will occur.
4. Observe remote display for generator output status (Volts/Amps).
5. Switch off generator, observe remote display of transfer. "Delay Active-Shore Power".
6. Shore Power activated, observe remote display (Volts/Amps).

*Acceptable shore and/or generator power range is 105-135 Volts.
Load (Amperes) 0-50 Amps.

NOTE: During generator (only) power-up, the monitor display will be blank for approximately 30 seconds for generator warm-up.

FOR YOUR RECORDS

MODEL NO: _____

DATE PURCHASED: _____

DATE INSTALLED: _____

INSTALLED BY: _____

**KEEP THIS INFORMATION AND YOUR RECEIPT
FOR WARRANTY PROTECTION**



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www.surgeguard.com