The Federal Communications Commission requires inclusion of the following statement. It refers to the use of shielded cables. **THE SWITCH** does not use any such cables nor does it have any external RF connections.

#### INSTRUCTIONS TO THE USER

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment, Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority operate this equipment.

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# THE SWITCH INSTALLATIONS INSTRUCTIONS

**WARNINGS:** READ INSTRUCTIONS COMPLETELY BEFORE ATTEMPTING INSTALLATION.

DO NOT HANDLE ANY ELECTRICAL WIRES UNTIL ALL POWER HAS BEEN TURNED OFF. USE AN AC VOLTAGE TESTER TO CONFIRM THAT THERE ARE NO LIVE WIRES.

THIS DEVICE IS NOT INTENDED FOR USE IN APPLICATIONS OF A CRITICAL NATURE WHERE LIFE MAY BE AT RISK.

#### 1 WIRING LAYOUT

The Switch base unit comprises a radio circuit and a double pole, double throw latching relay. The radio circuit must be supplied AC power between 110 to 277 volts at terminals marked POWER at all times to operate.

The latching relay performs the same function as a normal double pole, double throw switch when either the front surface push button is pressed or the hand held transmitter is activated. Each pole of the relay is rated for up to 20 Amps at 277 Volts general purpose. The relay can be wired in a variety of configurations with or without existing light switches including single way, multiway, OR, or AND.

The terminal connections are shown in figure 1.

#### 2 INSTALLATION PROCEDURE

- a. Remove the front cover from SWITCH box and store in a safe place.
- b. Attach appropriate conduit connectors. For liquidtight installation use appropriate liquidtight (NEMA 12) conduit connectors attached according to manufacturers recommendations. PVC liquidtight connectors are available from IPEX (Scepter) as part number JBA15. Metal liquidtight fittings are available from Thomas&Betts (Steel City).

Note: The SWITCH box is nonconducting and will not complete a conduit ground circuit. If the box is not a single ended circuit, use standard grounding bushings (Bridgeport 382 or equivalent) and a ground wire to complete conduit ground in the PVC box.

Alternatively, a "grounding kit" is available from www.TensorTechnologies.com

- **c**. Mount the empty circuit box in desired location.
- **d**. Connect conduit as shown in figure 2 and run wires.
- **e**. Attach cover to box temporarily using two screws as shown in figure 3 and connect wires appropriate to the wiring layout, e.g., single, or multiway.
- f. To achieve a liquidtight seal, first, fit the gray gasket into track inside lid. Second, push lid against box carefully so as not to dislodge gasket. Finally fasten lid to box with the 4 screws.
- **g**. Turn power back on. Push button will light and system is ready for operation as described below.

### **4 SYSTEM OPERATION**

Push button on front cover 2 times to initialize circuit. Next holding transmitter about 6 feet from unit depress transmitter button for about 1 second during which time the red LED on the transmitter will light and the Switch relay will change state turning the room lights on or off.

Operate the transmitter in various locations within the area it is to be used to determine any dead spots. The transmitter is a loop dipole radiator and In some cases it may be necessary to rotate transmitter to better direct its signal to the Switch unit.





