



Installation Guide

E3R-R04FP-4
E3R-R04FP-8

Low Voltage Relay Receiver



as above a ceiling hugger fixture, particularly with higher wattage loads. (See “Operating Temperature” on specifications table.)

- Exceeding the voltage or current ratings of the LVRX-4 / 8 will void the warranty and may damage the unit.
- For optimal radio performance do not mount or place receivers close to the floor or inside a metal housing.

Step 1: Connect the AC or DC power supply to the power terminals of the Low Voltage Relay Receiver. Polarity does not matter. DC positive can be connected to either terminal.

Step 2: Connect the appropriate wire(s) to the desired Common terminal(s). C1 relates to Relay 1, C2 relates to Relay 2, etc.

Step 3: Connect either Normally Open or Normally Closed for other wires.

NOTE: 8 Channel Low Voltage Relay Receiver only supports the Normally Open option.

Programming

The receiver must be powered when programming. After programming, settings are retained when power is disconnected. The receiver sensitivity is reduced when in Learn Mode to prevent unintentionally associating unwanted transmitters with the receiver. Transmitters should be within 15 feet (5 meters) of the receiver when programming. Program the receiver in any of the modes below.

Each Low Voltage Relay Receiver unit can be paired with up to 80 transmitters. Each of these associations can be with one or more of the relay channels.

Rocker Mode (default). In Rocker Mode the receiver responds only on a transmitter press and not on the release. For example, one side of the rocker on a wireless light switch will activate the relay (turn the light ON) when pressed and the opposite side of the same rocker will deactivate the relay (turn the light OFF) when pressed.

Momentary Mode. In Momentary Mode, each end of the rocker on a wireless light switch acts as a separate button. Each end of the rocker programs separately to 1 or more receivers. When a rocker is pressed the output on the receiver will activate (turning the electrical load ON). When the rocker is released the output will deactivate (turning the electrical load OFF).

Follow the instructions below for the desired programming mode.

Rocker Mode Programming Instructions

Step 1: Read all Rocker Mode programming steps before taking any action to program receiver.

Step 2: Press and hold the LRN button for 1 second (See Figure A). The LED for Channel 1 will begin turning ON and OFF in a slow pattern. The receiver is now in Toggle Learn Mode.

Step 3: When associating a wireless light switch with the receiver, press one end of a switch rocker (See Figure B). The LED will stay ON for about 3 seconds indicating that the receiver has stored the transmitter’s unique ID in its memory.

Step 4: To associate a second transmitter with this receiver, wait until toggling of the LED resumes. Repeat the instructions in Step 3 and Step 4 until the unique IDs of all desired transmitters are stored in the memory of the receiver.

Step 5: Briefly press the LRN button again to advance to Channel 2 then repeat Step 4. Repeat these steps for each Channel and appropriate receivers on the Relay Receiver.

Step 6: To exit Learn Mode, press the LRN button again for about 2 seconds or just wait; the receiver automatically exits Program Mode after 30 seconds.

Momentary Mode Programming Instructions

Step 1: Read all Rocker Mode programming steps before taking any action to program receiver in Momentary Mode.

Step 2: While the receiver is in Rocker Learn Mode, press the LRN button to cycle through each of the 4 or 8 channels and back to Channel 1 (See Figure A). The LED for Channel 1 will begin turning ON and OFF in a fast pattern. The receiver is now in Momentary Learn Mode.

Step 3: Follow steps 3-6 of “Toggle Mode Programming Instructions.”

Selective Deleting. Follow the Program Mode steps above to delete a transmitter from a receiver’s memory for that specific Channel. Upon pressing the LEARN button on a transmitter (See **Toggle Mode Programming Instructions, Step 3**) which has previously been associated with the receiver, the LED for that Channel will stay OFF for about 3 seconds indicating that the receiver has removed the transmitter’s unique ID.

Clear One Channel. Follow the Program Mode steps above to select the desired Channel. Press and hold the CLR button is pressed and held for about 2 seconds (See **Figure C**), the memory of only that channel will be deleted.

Clear All. If the CLR button is pressed and held for about 4 seconds (See **Figure C**), the entire memory of the receiver will be deleted. The receiver will instantly enter the default programming mode (Rocker Mode) indicated by the electrical load turning ON and OFF.

Specifications

	E3R-R04FP-4	E3R-R04FP-8
Range	50-150 feet (typical)	
Frequency	315 MHz	
Relay Output	0-30 VAC or 0-30 VDC 2A	
Power Supply	8-28 VAC or 8-30 VDC 250 mA	
Output Channels	4	8
Memory	Stores up to 80 switch IDs	
Dimensions	5.12 x 3.21 x 1.1 inches (10.7 x 7.2 x 2.9 cm)	
Operating Temperature	-13° to +140°F (-25° to +60°C)	
Storage Temperature	-40° to +140°F (-40° to +60°C)	
Radio Certification	FCC (United States): SZV-TCM2XXC IC (Canada): 5713A-TCM2XXC	

Overview

The Low Voltage Relay Receiver connects wireless light switches and sensors to new or existing control systems. The low voltage receiver responds to up to 80 different transmitters and provides 4 or 8 output channels (dry contact or 8-30V for relay and contactor applications). The outputs can be programmed as either momentary or maintained contacts

Compatible Devices

- Single Rocker Self-powered Wireless Light Switches; E3T-S1Axx
- Dual Rocker Self-powered Wireless Light Switches; E3T-S2Axx
- Dual Rocker Handheld Remote; E3T-S2Hxx
- Key Card Access Switch; E3T-C1AWH
- More transmitters available

Components Included

The following items are included with this product:

- A -- (1) ILLUMRA 4 Ch. / 8 Ch. Relay Receiver

Tools Needed for Installation

- Pencil or ball point pen

Installation

To install the Low Voltage Relay Receiver, select your application from the options below. Follow the instructions for that application. For transmitter installation instructions, see appropriate installation guide(s).

CAUTION/NOTES:

- Depending on circumstances, it may be convenient to pre-program the receiver prior to final installation.
- Always follow local electrical codes when installing this device. Installation should be performed by a qualified electrician.
- ILLUMRA Relay Receivers are intended only for use indoors, in dry locations, and with permanently installed fixtures.
- ILLUMRA Relay Receivers should NOT be installed in a location where the unit will be in close proximity to the light bulb(s) or other sources of heat, such

Diagrams

Figure A: Enter Learn Mode

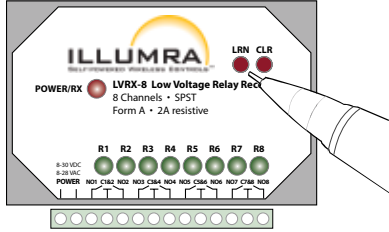


Figure B: Press Transmitter

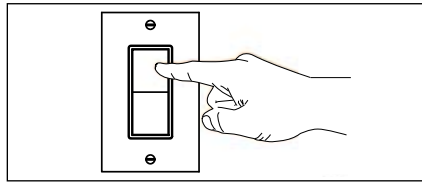


Figure C: Clear All

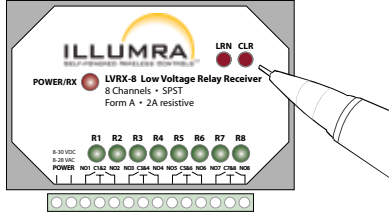


Figure D: 4 Channel Basic Wiring Diagram

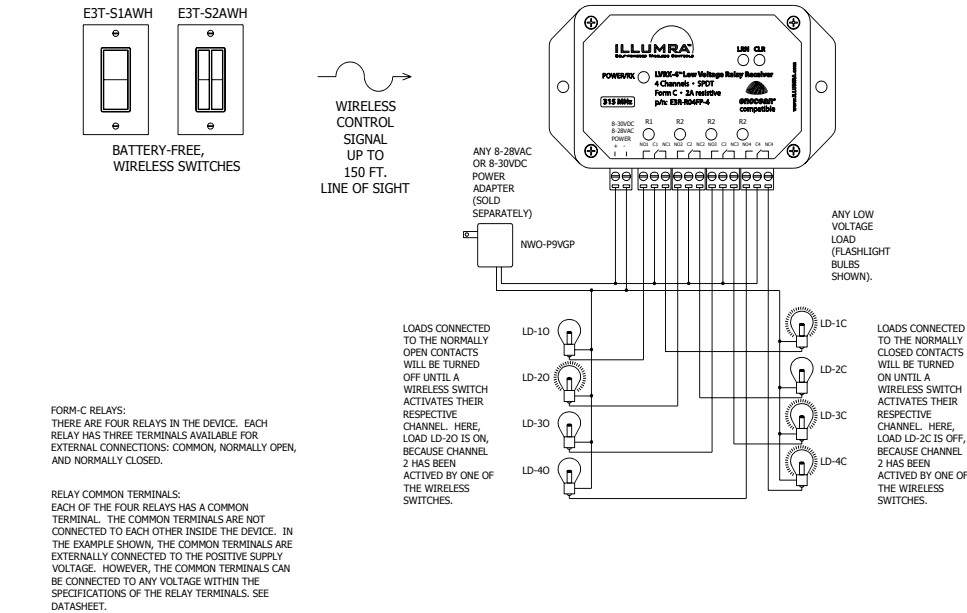


Figure E: 8 Channel Basic Wiring Diagram

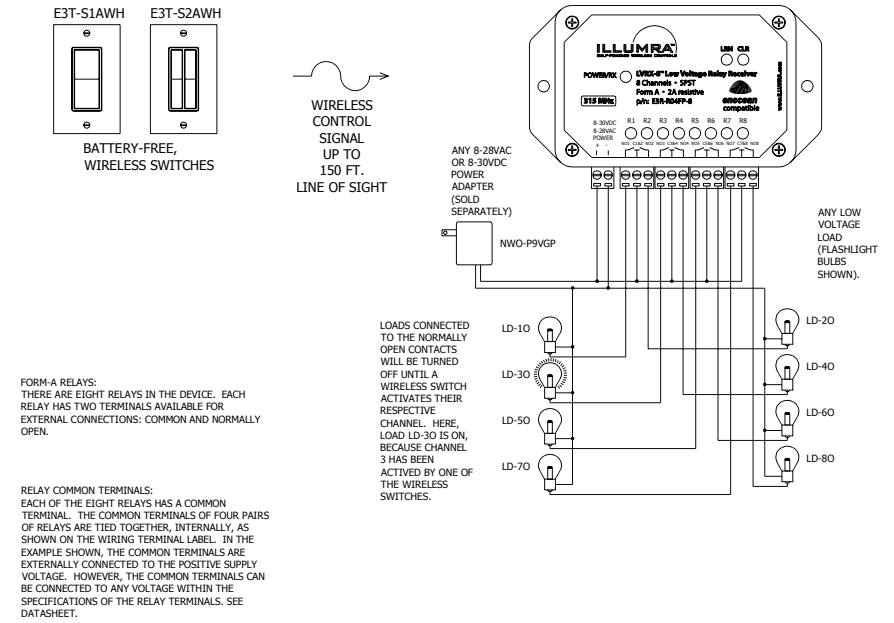
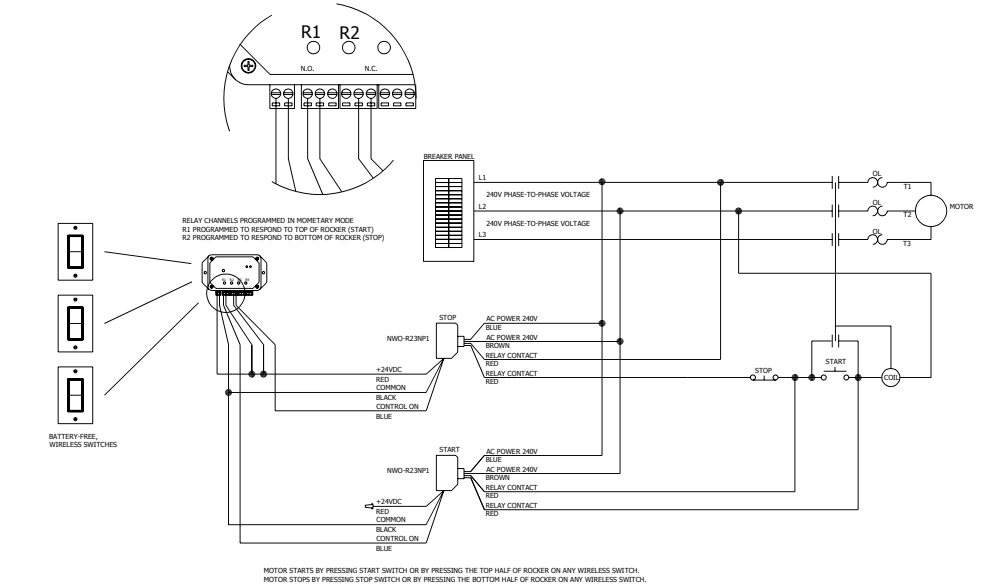


Figure F: Wireless Control of Existing Motor Start Switch



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