

# **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; E9T-S1Axx
- Dual Rocker Self-powered Wireless Light Switches; E9T-S2Axx
- Dual Rocker Handheld Remote; E9T-S2Hxx
- Key Card Access Switch; E9T-C2AWH
- 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 (stylus)

# 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 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

# Teach/Learn Procedure (a Transmitter teaches a Receiver, a Receiver learns a Transmitter)

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

#### Step 1: Determine the Desired Behavior

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# Specifications

	E9R-R04FP-4	E9R-R04FP-8
Range	50-150 feet (typical)	
Frequency	902 MHz	
Power Supply Input Rating	8-28 VAC or 8-30 VDC 250 mA	
Relay Output	0-30 VAC or 0-30 VDC 2A	
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-TCM2XXU, I.C. (Canada) 5713A-TCM2XXU	

# Figure : LVRX-4 Basic Wiring Diagram



# Diagrams

# Figure : LVRX-8 Basic Wiring Diagram



RELAY COMMON TERMINALS: EACH OF THE EIGHT RELAYS HAS A COMMON TERMINAL. THE COMMON TERMINALS OF FOUR PAIRS OF RELAYS ARE THED TOGETHER, INTERNALLY, AS SHOWN ON THE WIRING TERMINAL LABEL. IN THE EXAMPLE SHOWN, THE COMMON TERMINALS ARE EXTERNALLY CONNECTED TO THE POSITIVE SUPPLY VOLTAGE. HOWEVER, THE COMMON TERMINALS ARE EXTERNALLY CONNECTED TO THE POSITIVE SUPPLY VOLTAGE. HOWEVER, THE COMMON TERMINALS ARE DECONNECTED TO ANY VOLTAGE WITHIN THE SPECIFICATIONS OF THE RELAY TERMINALS. SEE DATASHEET.





This device or certain aspects thereof is protected by at least one U.S. or international patent or has at least one such patent application pending.

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#### Contains FCC ID: SZV-TCM2XXC

The enclosed device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (i.) this device may not cause harmful interference and (ii.) this device must accept any interference received, including interference that may cause undesired operation.

Contains IC: 5713A-TCM2XXC