

Installation Guide

E3R-R12GP E3R-R12GP-Z

E3X-R12GP E3X-R12GP-Z

Plug-in Relay Receiver



Overview

The Plug-in Relay Receiver provides ON/OFF control of lamps and other devices. Simply plug the cord of an electrical device into the receiver, then plug the receiver into a standard electrical outlet. The device can then can be controlled using self-powered wireless light switches or sensors.

Compatible Devices

- Single Rocker Self-powered Wireless Light Switch; E3T-S1Axx
- Dual Rocker Self-powered Wireless Light Switch; E3T-S2Axx
- Handheld Self-powered Wireless Light Switch; E3T-S2Hxx
- Key Card Access Switch; E3T-C1AWH
- Self-powered Wireless Occupancy Sensor; E3T-Mxx-SB24
- Switch Leg Transmitter; E3T-Rxx-2INBP
- More transmitters available

Components Included

The following items are included with this product:

■ A -- (1) ILLUMRA Plug-in Relay Receiver

Installation

CAUTION: SUITABLE FOR USE ON A CIRCUIT CAPABLE OF DELIVERING NOT MORE THAN 15 RMS SYMMETRICAL AMPERES MAXIMUM

ADVERTISSEMENT: CONVIENT À UN CIRCUIT POUVANT DÉBITER UN COURANT DE DÉFAUT MAXIMAL DE 15 MPÈRES EFFICACES SYMÉTRIQUES.

Plug-in Dimmer/Relay is intended only for use indoors, in dry locations. Caution:

Note: Depending on circumstances, it may be convenient to pre-program the

receiver prior to final installation.

Step 1: Plug a lamp or other device into the bottom of the Plug-in Relay Receiver.

Step 2: Plug the receiver into any 120 VAC power outlet. (See Figure A).

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.

Rocker Mode (default) Programming Instructions

- Read all Rocker Mode programming steps before taking any action to program receiver in Rocker Mode.
- Step 2: Activate Rocker Learn Mode by pressing and holding the LRN button on the receiver for 1 second. The electrical load connected to the receiver will begin turning ON and OFF in a slow pattern.
- Step 3: When associating a wireless light switch with the receiver, press one end of a switch rocker (See Figure B). When associating a transmitter other than a wireless light switch, press the LRN or TCH button on the ILLUMRA transmitter (see appropriate transmitter starter guide). The load will stay ON for 3 seconds indicating that the receiver has stored the transmitter's unique ID in its memory.
- Step 4: (If only one transmitter is desired then skip Step 4 and exit Learn Mode by following Step 5). To associate a second transmitter with this receiver, wait until toggling of the load 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.
- To complete programming, just wait; the receiver automatically exits Learn Step 5: Mode after 30 seconds. Alternatively, press and hold the LRN button for 1 second to exit Learn Mode.

Momentary Mode Programming Instructions

- Read all Rocker Mode programming steps before taking any action to program receiver in Momentary Mode.
- While the receiver is in Rocker Learn Mode, press and hold the LRN button Step 2: for 3 seconds (See Figure A). The electrical load connected to the receiver will begin turning ON and OFF in a fast pattern. The receiver is now in Momentary Learn Mode.
- Follow steps 3-5 of "Rocker Mode Programming Instructions." Step 3:

Toggle Mode Programming Instructions

- Read all Rocker and Momentary Mode programming steps before taking any action to program receiver in Toggle Mode.
- While the receiver is in Momentary Learn Mode, press and hold the LRN Step 2: button for 3 seconds (See Figure A). The electrical load connected to the receiver will continue turning ON and OFF in a fast pattern. The receiver is now in Toggle Learn Mode.
- Follow steps 3-5 of "Rocker Mode Programming Instructions."

Selective Deleting. Follow the programming mode steps above to delete a transmitter from a receiver's memory. Upon pressing the LRN button on a transmitter (See Rocker Mode Programming Instructions, Step 3) which has previously been associated with the receiver, the electrical load connected to the receiver will stay OFF for 3 seconds indicating that the receiver has removed the transmitter's unique ID from its memory.

Clear All. If the CLR button is pressed and held for 2 seconds (See Figure A), 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.

Additional Programming Options

Inverted Output Mode. The receiver supports the Inverted Output Mode of operation. In the default configuration, the N.O. relay contact is open (not connected) when not active, and closed (connected) when active. When the outputs are in Inverted Output Mode, the N.O. contact is closed when not active and open when active. Inverting the outputs may be used to emulate a normally closed relay that opens when a switch is

One common use for this mode is for magnetic door release controls. The output is ON and the door-hold electromagnet is active until a Momentary switch is activated, deactivating the electromagnet and allowing the door to close. The magnet is reactivated as soon as the switch is released.

Repeater Operation. In order to extend the range of operation in certain environments, ILLUMRA repeaters are available. A repeater re-transmits a copy of every signal received, and many repeaters also function as receivers (The E3X models corresponding to this installation guide function as Receiver/Repeaters, while the E3R models are Receivers only). It is recomended that no more than two repeaters are active within range of any ILLUMRA transmitter or reciever. Installation of more than two repeaters in a single radio domain can degrade the network performance, as radio signal colllisions will reduce signal quality.

For best performance, repeaters should be installed high above the floor in a central location, minimizing walls or other obstructions through which the signal must travel. The repeating function of a combination Receiver/Repeater may be deactivated if more than two are inadvertently installed too close to one another.

Use With Occupancy Sensors. The Plug-in Relay Receiver may be used with wireless occupancy sensors in either manual ON / automatic OFF, or automatic ON / automatic OFF control applications. Please follow the instructions below when using the Plug-in Relay Receiver with occupancy sensors.

Inverted Output Mode Mode Programming Instructions

- Step 1: Unplug Plug-in Relay Receiver from wall.
- Step 2: Hold CLR button while plugging in the receiver; continue to hold button until light blinks twice, then release.
- Step 3: Repeat to uninvert outputs.

Repeater Mode Programming Instructions (E3X models only)

- Step 1: Unplug Plug-in Relay Receiver from wall.
- Step 2: Hold LRN button while plugging in the receiver; continue to hold button until light blinks twice, then release.
- Step 3: Repeat to deactivate repeater functionality.

Use With Occupancy Sensors Programming Instructions

Manual ON / Auto OFF

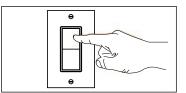
Use Rocker Learn Mode (See Rocker Mode Programming Instructions).

Automatic ON / Automatic OFF

Use Momentary Learn Mode (See Momentary Mode Programming Instructions).

Specifications

	E3X-R12GP E3R-R12GP	E3X-R12GP-Z E3R-R12GP-Z
Range	50-150 feet (typical)	
Frequency	315 MHz	
Power Supply Input Rating	120VAC 60 Hz	
Output Rating General Ballast Tungsten Motor	6A 3A 500W N/A	15A 15A 1800W 1/2 HP
Memory	Stores up to 30 unique transmitter IDs	
Operating Temperature	-13° to +140°F (-25° to +60°C)	
Storage Temperature	-40° to +140°F (-40° to +60°C)	
Dimensions	3.26 x 2.07 x 1.42 inches (82 x 53 x 36 mm)	
Radio Certification	FCC (United States): SZV-TCM2XXC I.C. (Canada): 5713A-TCM2XXC	
Safety Approval	ETL (United States): UL244A ETL (Canada): CSAc22.2#14-05	





Contains FCC ID: SZV-TCM2XXC Contains IC: 5713A-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.

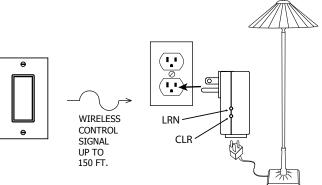


ETL (US) - Conforms to UL STD 244A. This device was tested according to and was found to comply with UL 244A Solid State Controls for Appliances.

ETL (Canada) - Certified to CAN/CSA STD C22.2 No. 14-05. This device was tested according to and was found to comply with CAN/CSA STD C22.2 No. 14-05.

Diagrams

Figure A: Installing the Plug-in Relay Receiver



Always follow local electrical codes when installing this device. Installation should be performed by a qualified electrician.

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.

ILLUMRA is a trademark of Ad Hoc Electronics, LLC. Other trademarks herein are the property of their respective owners.



Figure B: Press Transmitter

www.ILLUMRA.com