


ILLUMRA
SELF-POWERED WIRELESS CONTROLS

Installation Guide

E3T-MICFP-40

**4-Channel
Switch Leg Transmitter**



Overview

The 4-Channel Wireless Switch Leg Transmitter (SLT) in combination with a receiver (sold separately) replaces control wires between a switch and an electrical load with a wireless control signal. The SLT senses status of photocell, timer, or manual switch master circuit to control wireless slave receiver(s).

Compatible Devices

- 3-Wire Relay; E3R-Rxx-3HOBP
- 5-Wire Relay; E3R-Rxx-5IBBP
- Plug-in Dimmer/Relay; E3R-D12GP-1
- Plug-in Relay; E3R-R12GP-1
- 4-Channel Low Voltage Receiver; E3R-MICFP-04
- Room Controller; E3X-MRCFP-xx
- Thermostat; E3X-T02-U2W
- More receivers available

Components Included

- The following items are included with this product:
- 1 Illumra 4-Channel Wireless Switch Leg Transmitter

Tools Needed for Installation

- Pencil or ball point pen (stylus)
- Electrical tape

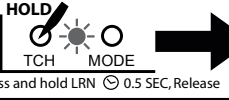




















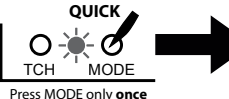




Installation

WARNING: To avoid risk of fire, shock, or death, TURN OFF POWER at circuit breaker or fuse and verify that it is OFF before installation begins. Make sure that it remains OFF until installation is complete.

CAUTION/NOTES:

- Always follow local electrical codes when installing this device. Installation should be performed by a qualified electrician.
- Illumra 4-Channel SLTs are intended only for use indoors, in dry locations, and with permanently installed fixtures. ILLUMRA SLTs should NOT be installed in locations where the units will be in close proximity to light bulbs or other sources of heat, such as above a ceiling hugger fixture, particularly with higher wattage loads. (See "Operating Temperature" on specifications table.)
- Installation in metallic enclosures or near large metal objects will typically reduce radio range. If possible, install in plastic or fiberglass enclosures for best performance.
- FCC Regulations limit the number of radio messages that may be transmitted each hour to approximately 500. The SLT transmits periodic status messages (one per channel) every 30 seconds to 1 minute. Each time an input changes, another message is transmitted. **After the 500 messages are depleted, the SLT will stop transmitting until one hour has elapsed.** During initial installation and testing, this limitation may be overcome temporarily by removing and re-applying power.

Step 2: Teach the Receiver

PART	ACTION	RESULT	NOTES
(A)	Enter Learn Mode on Target Receiver (see instructions for receiver you intend to teach)		Receivers have reduced range during programming (5 meters from the transmitter).
(B)	Enter Teach Mode 	IN 1        Power LED light of SLT will blink in the above pattern.	Connect wires as shown in Figure A. Twist wire nuts on clockwise making sure no bare wires show. Wrap connections with electrical tape.
(C)	Choose Channel 	IN 2     IN 3     IN 4    	After the target device has learned the SLT packet part B-D can be repeated to unlearn the SLT (see device instructions)
(D)	Send SLT Teach Packet 	  Indication light on the target receiver is on for three seconds, then resumes blinking Learn Mode Pattern. This channel of the SLT has been learned.	
(E)	Exit Target Device Configuration 	 Lights stop blinking. Device is configured and ready to use.	

Step 3: (Optional) Activate Other Features






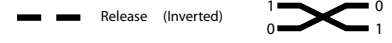
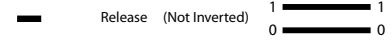
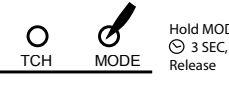



PART	ACTION	RESULT	NOTES
(A)	Turn power to relay off 	 It is important to understand that the entire device needs to be powered down. This can be done with a switch or breaker, or other means.	This may be a difficult task as the CLR/LRN button needs to be held pressed while powering up the device. This is most easily done before installation or with two people.
(B)	Press and hold TCH  Turn power to relay on with TCH held 	Sense Invert Feature For some applications it may be convenient to transmit an "ON" signal to the receiver when the input to the SLT is low, and transmit and "OFF" signal when the SLT is high. The 4-Channel SLT is capable of inverting the sense of its inputs to support this application.   	Individual inputs can also be inverted. While the device is powered hold down the "Mode" button until the "Power" LED blinks. Any input that is low (no power supplied) while the "Mode" button was held down will be in the non-inverted mode. (The "OFF" signal will be sent when the input is low). Any input that is high (power supplied) while the "Mode" button was held down will be in the inverted mode. (The "OFF" signal will be sent when the input is high).
(C)	Press and hold MODE  Turn power to relay on with MODE held 	Switch between transmission modes There are two transmission modes: STM (default), and PTM. In STM mode the SLT will transmit a ON/OFF packet everytime the SLT input changes. In addition, the SLT will also send a status packet every ten seconds.  	In PTM mode the SLT will transmit a ON/OFF packet every time an SLT input changes.

Figure B: Press Teach Button

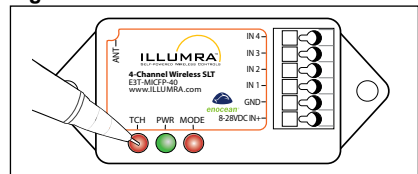
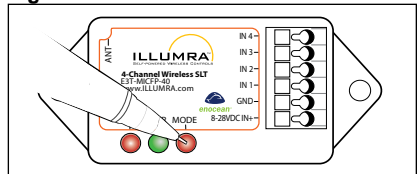


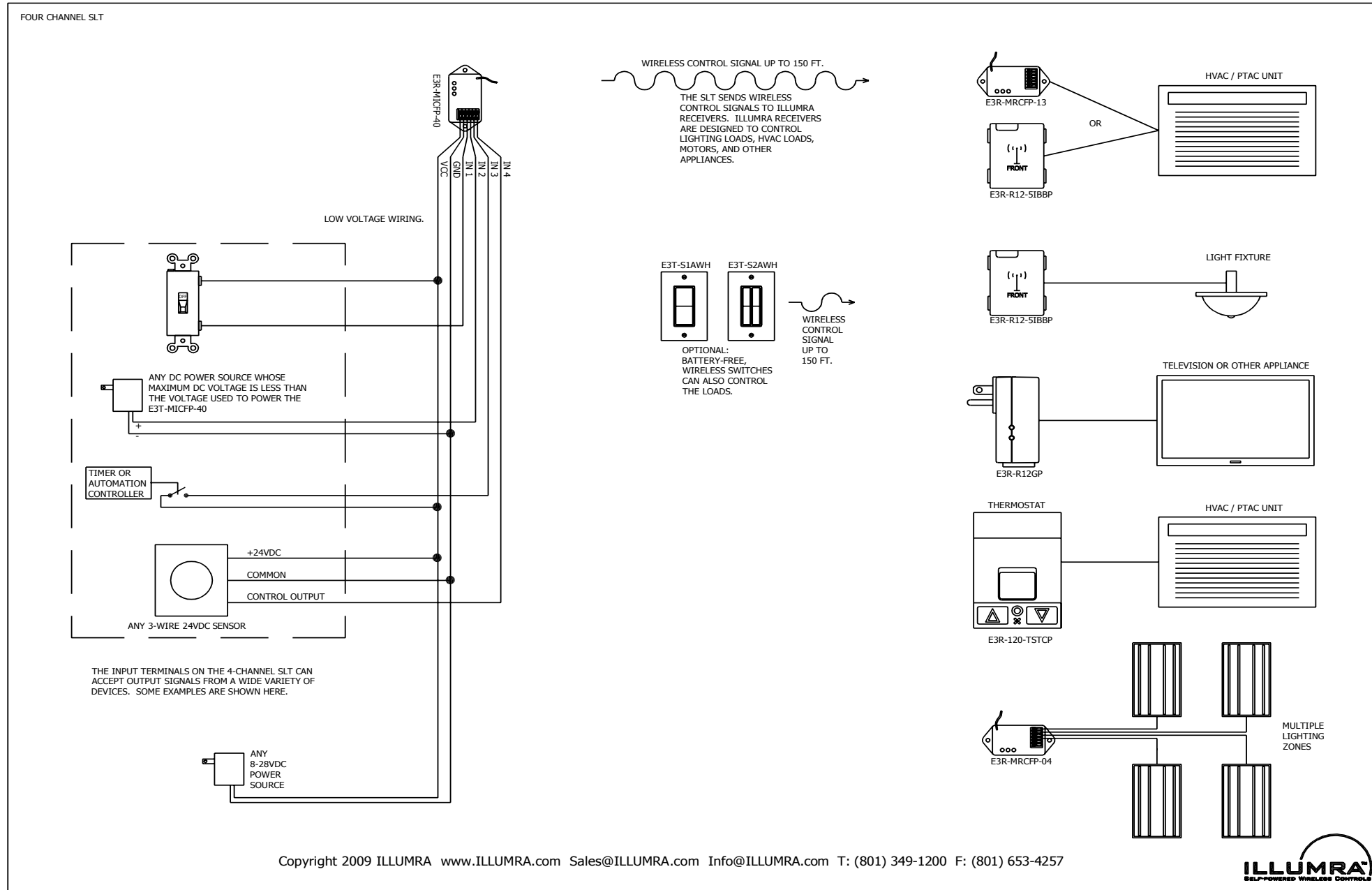
Figure C: Press Mode Button



Specifications

	E3T-MICFP-40
Range	50-150 feet (typical)
Frequency	315 MHz
Power Supply Input Rating	8-28 VDC, 40 mA
Inputs	30 VDC max, 10 mA max
Input Threshold Voltage Levels	Input Low Voltage: <1VDC Input High Voltage: 3VDC<VIN<30VDC
Channels	4 inputs
Operating Temperature	-13° to +140°F (-25° to +60°C)
Storage Temperature	-40° to +140°F (-40° to +60°C)
Dimensions	2.88"(W) x 1.30"(H) x 0.67"(D) 7.32 cm x 3.30 cm x 1.70 cm
Antenna	attached whip antenna (5.85")
Radio Certification	FCC (United States) SZV-TCM2XXC I.C. (Canada) 5713A-TCM2XXC
Addressing	Factory set unique ID (1 of 4 billion)

Diagrams



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.

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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