intelligent
lighting controls
Simplifying Lighting Controls from Installation to Use

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LightLEEDer Wireless

LLEVO-W

LSG3-W

WR5D **WR20D and WR20D-2**

WR20D-EM

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LightLEEDer Wireless User Guide

Revision A
8-25-2022

FCC Device Statement

This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions;
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

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Section 1 LightLEEDer Wireless Product Description

1.0 Overview

The ILC LightLEEDer Warless products provide both the ability to be “Direct Linked” for stand-alone operation in a single office or networked using a LightLEEDer EVO-W controller that can control multiple spaces. The LightLEEDer product line includes the LLEVO-W controller, the WR5D 5Amp single load relay with dimming, the WR20D and WR20D-2 that are both 20Amp load rated with dimming for a one or two independent loads, the WR20D-EM device that has a 20Amp rated relay with dimming for the normal power load and includes an integrated 20Amp rated Emergency relay with dimming output all in a single package.

1.1 LightLEEDer EVO Wireless Controller

The LightLEEDer EVO-Wireless controller (LLEVO-W) is a distributed lighting control panel that simplifies installation and connects with ILC wireless relays, LSG3-W switches, occupancy, and photocell sensors. The LLEVO-W controller provides all the same control options as a standard wired EVO controller, with the enhanced wireless radio connection to inputs and outputs.

1.1.1 Features

- Made in USA
- 915Mhz radio communication with 50-foot line of site distance
- Distributed lighting controller
- Digital CAT-5 connection to ILC panel network
- Link up to 64 wireless relays
- Link up to 64 wireless LSG3-W switches or sensors
- Push button with status LED to sweep relays
- Standalone or networked with any LightLEEDer controller
- Time clock includes 7/365-day calendar, Daylight Savings Time, Astronomic, Open/Close
- RJ45 connectors for networking with other LightLEEDer panels
- Enclosure, suitable for plenum mounting

1.2 Wireless Relays

The LightLEEDer Wireless Remote Relays are designed to be mounted at the power junction box or lighting future for direct control of the lighting load. Wireless relays come with 0-10V dimming and are available a 5 Amp 1-load, 20 Amp 1-load , or 20 Amp 2-load configurations. The relays utilize latching contacts for low power consumption and are rated for handling high LED inrush. Communication is done over the 915 MHz radio frequency, and allows for both direct link and networked applications.

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1.2.1 Features

- Made in USA
- Wireless Remote relays with 915 MHz radio communications
- 5 Amp WR5D relay with dimming
- 20 Amp WR20D and WR20D-2 relay with dimming for lighting loads or 20Amp Plug-load
- Latching relay holds position without presence of power, saving energy
- Direct mounting at power junction box or light fixture with 1/2" K.O. mounting
- Direct link and relay control button with status LED
- 6" Wire leads for line/load and dimming connections
- 600V rated wire allows 0-10V in high voltage compartment
- Isolated 0-10V Dimming control

1.3 Wireless Emergency Relay

The ILC Remote 20 Amp, Emergency Bypass Relay combines normal relay operation with a UL 924 bypass relay in one convenient package. Relays are available in both a wireless (WR20D-EM) version, and a hardwired version (R20D-EM). The WR20D-EM communicates with a 915 MHz radio with other ILC wireless devices. When normal power is lost, the EM relay will automatically force ON the EM load and send dimming to 100%. When normal power is restored, the device will return to normal control. The WR20D-EM relay has a test button and a wired input that can be used for a remote test switch, or as an override connection from a Fire alarm system.

1.3.1 Features

- Made in USA
- UL 924 rated
- EM Relay rated up to 20Amp @120/277VAC
- Normal Relay rated up to 20Amp @120/277VAC
- EM Load follow operation of normal load control
- Test button for local test operation
- Override Input for remote emergency test switch or fire alarm system override
- Plenum rated
- Direct mounting at power junction box or light fixture with 1/2" K.O.

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1.4 LightSync G3 Wireless

The LightSync Digital G3 Wireless Switch (LSG3-W) can connect to ILC wireless relays in direct link mode or to the LLEVO-Wireless controller for networking. The LSG3-W is provided in all the standard G3 switch types. The MZD and Scene switch dimming buttons support Press-and-Hold Ramp-Up/Ramp-Down dimming. Holding a zone button on an MZD will allow a user to select that zone for individual dimming. Scene buttons set a dimming scene, holding the scene button will capture the current dimmer levels to the scene. The Scene/MZD combo switch provide both operations in one device. LSG3-W digital switch stations provide control of wireless relays and wired relays over the ILC network when linked to an EVO-W controller in the ILC network.

1.4.1 Features

- Made in USA
- Digital 915Mhz radio communication with 50-foot line of sight range
- 10 Year lithium battery
- Direct Link to wireless relays or networked with EVO-W controller
- Unique ID radio transmit code per switch station
- Wireless switch station for control of any relay, group of relays, dimmers, scene, or preset
- Non-Dim 1 to 7 button control configurations
- MZD - Multi-Zone Dimming for up to 6 zones with All-Off
- Scene Switch with dimming for up to 5 scenes with Off
- Scene/Multi-Zone with dimming combo for up to 4 Scene's or Zone's (2S/4Z, 3S/3Z or 4S/2Z)
- Scene Capture operation for all stations with scene buttons
- Press and Hold dimming operation with raise and lower buttons for ramp-up and ramp-down dimming
- Laser engraving is provided, and custom engraving is available
- Black and Red button stations are pad-printed
- Color Change Kit available for White, Ivory, Gray, Red and Black
- Internal Configuration can be changed at the switch
- Decora® style single-gang switch plate available upon request

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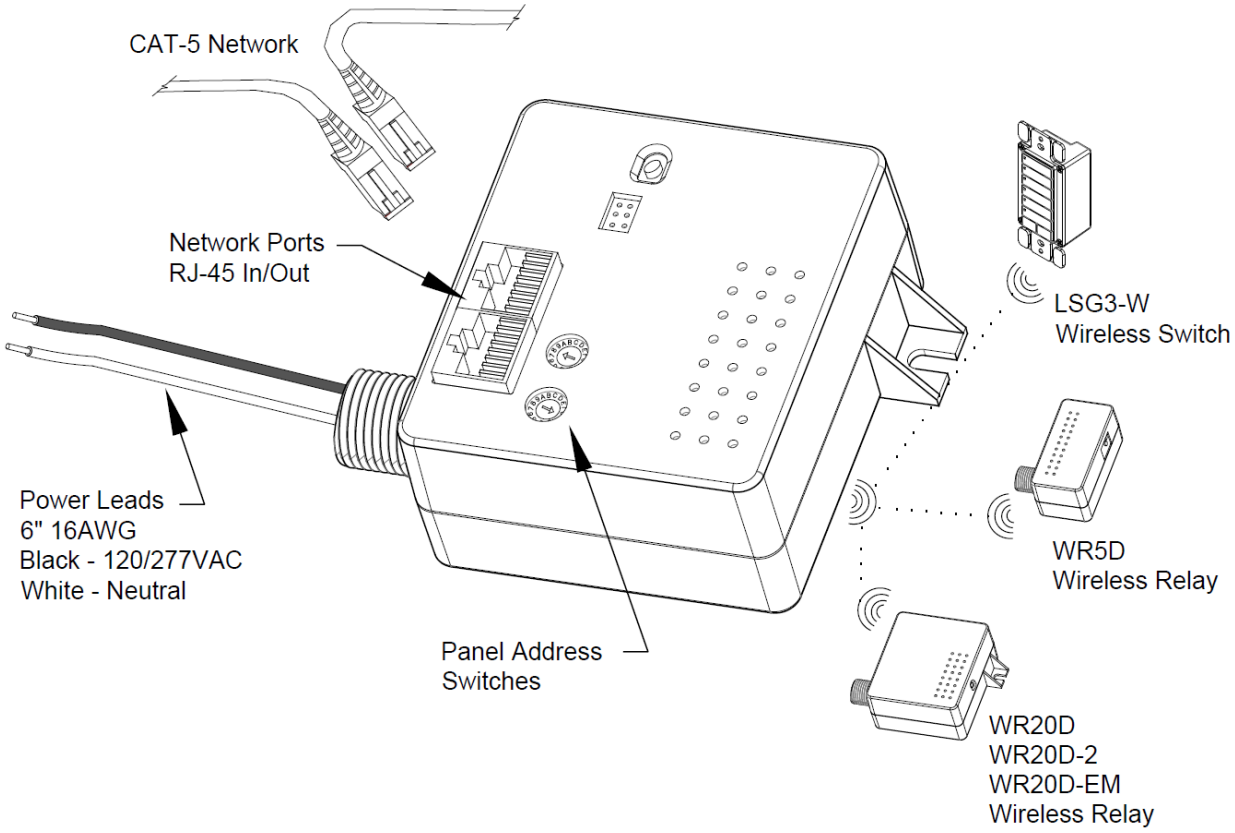
Section 2 LightLEEDer Wireless Product and Wiring Details

2.0 Overview

When wiring the Wireless devices always observe standard NEC code requirements for making line voltage and class-2 low voltage connections. Review the product detail and wiring detail information below before installing product.

2.1 LLEVO-W Details



- Wire the LightLEEDer EVO Wireless controller to 120 or 277VAC power within range of the wireless devices to be controlled.
- Wireless devices are linked to the LLEVO-W controller using a 915Mhz radio signal within a 50-foot line of sight range.
- Connect CAT-5 data cable from the ILC data network and set the panel address switches for networking the LLEVO-W controller
- Refer to network layout for panel address information.
- Link the remote LSG3-W switches and wireless relays to the LLEVO-W controller to create a wireless panel system.

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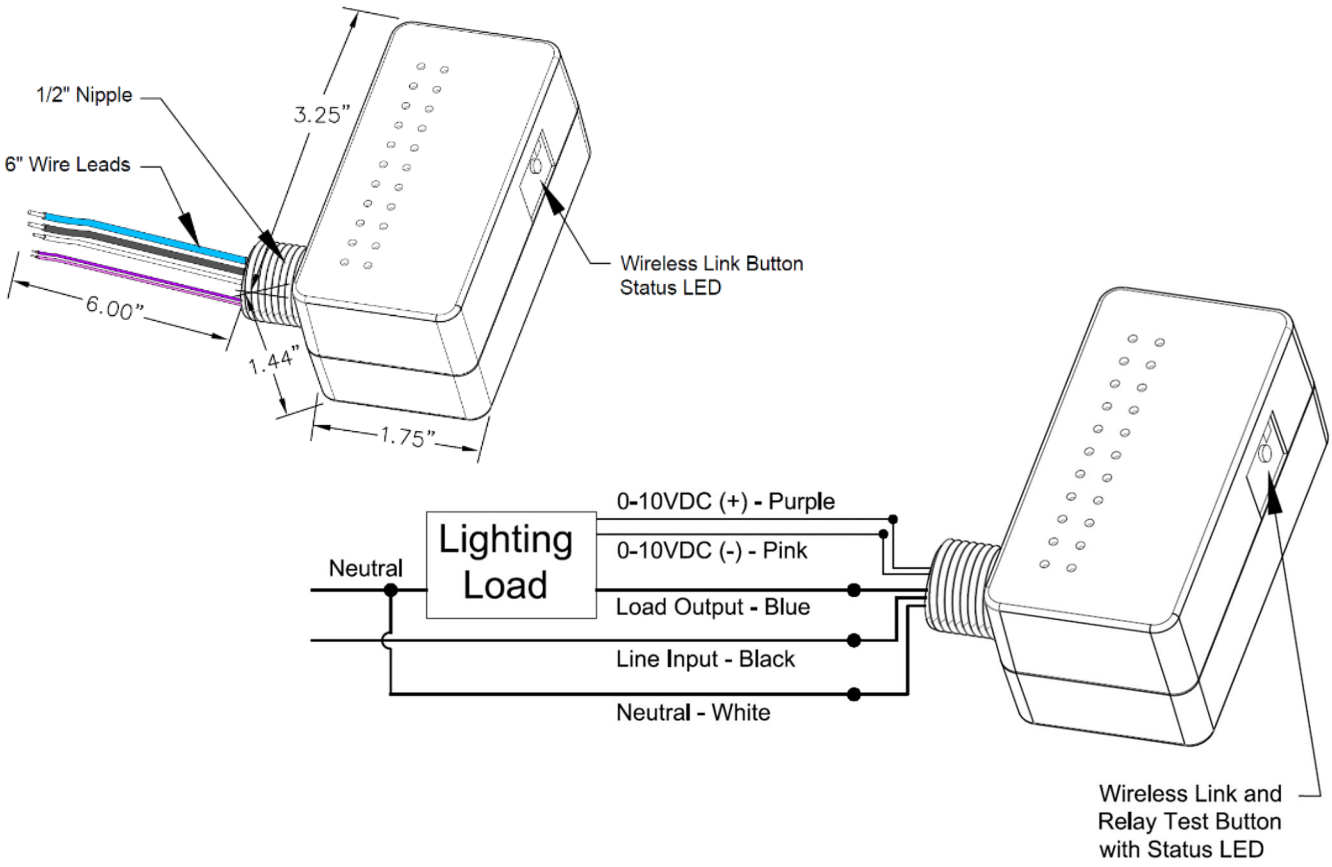
2.2 WR5D, WR20D, WR20D-2, WR20D-EM Details

2.2.1 WR5D Details



- Mount on junction box with ½" knock out or directly to fixture
- The WR5D Wireless Relays is designed for up to a 5 Amp load.
- Connect all Line/Load and Neutral wires, plus 0-10VDC control wires as shown above, cap all unused leads.
- Press the Wireless Link/Test button to toggle the relay, LED status should light green for relay on.
- The WR5D can direct link to LSG3-W switches or to the LLEVO-W for networking.

Electrical:

1 Load with Dimming
5Amps, 120/277 VAC LED/Electronic
5Amps, 120/277 VAC Tungsten
1/4HP @ 120VAC Motor Load
50mA Sink for 0-10V Dimming
600VAC rated dimming leads

Operating Environment:

Location: Interior
Operating Temp: 0-50 deg. C
Humidity: 10-90% Non-Condensing
Atmosphere: Non-Explosive/Corrosive
Vibration: Stationary

Wire Color Guide:

Neutral = White
Line Input = Black
Load Output = Blue
0-10VDC (+) = Purple
0-10VDC (-) = Pink

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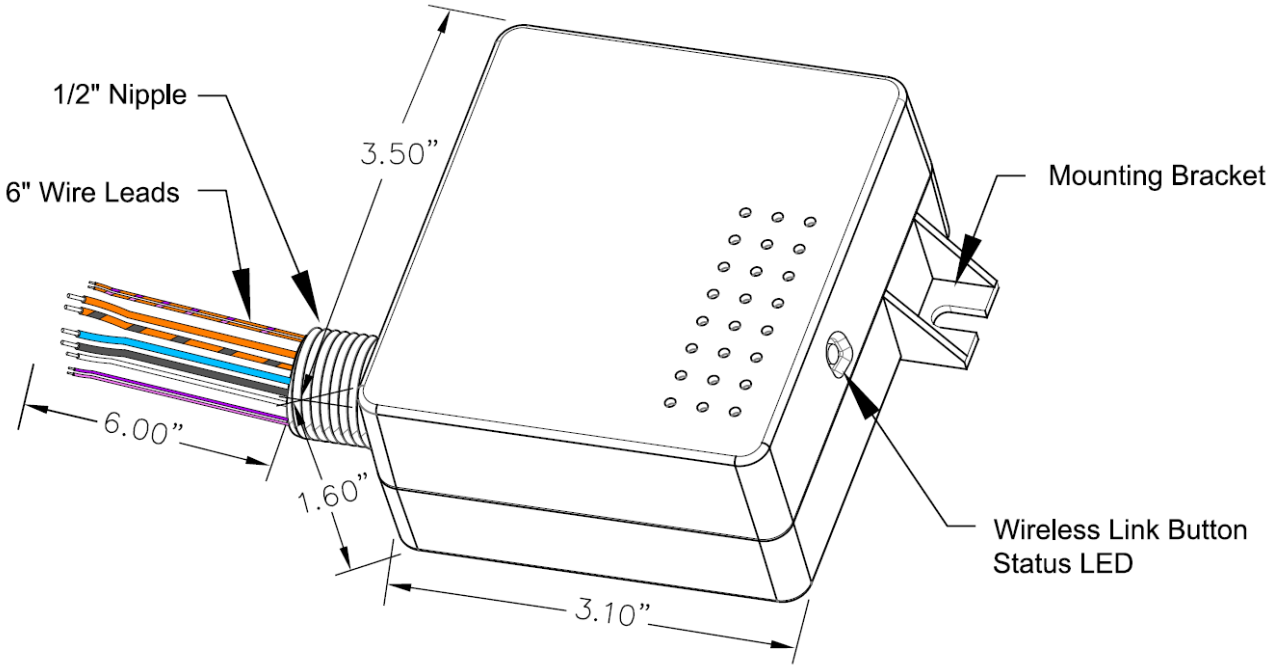
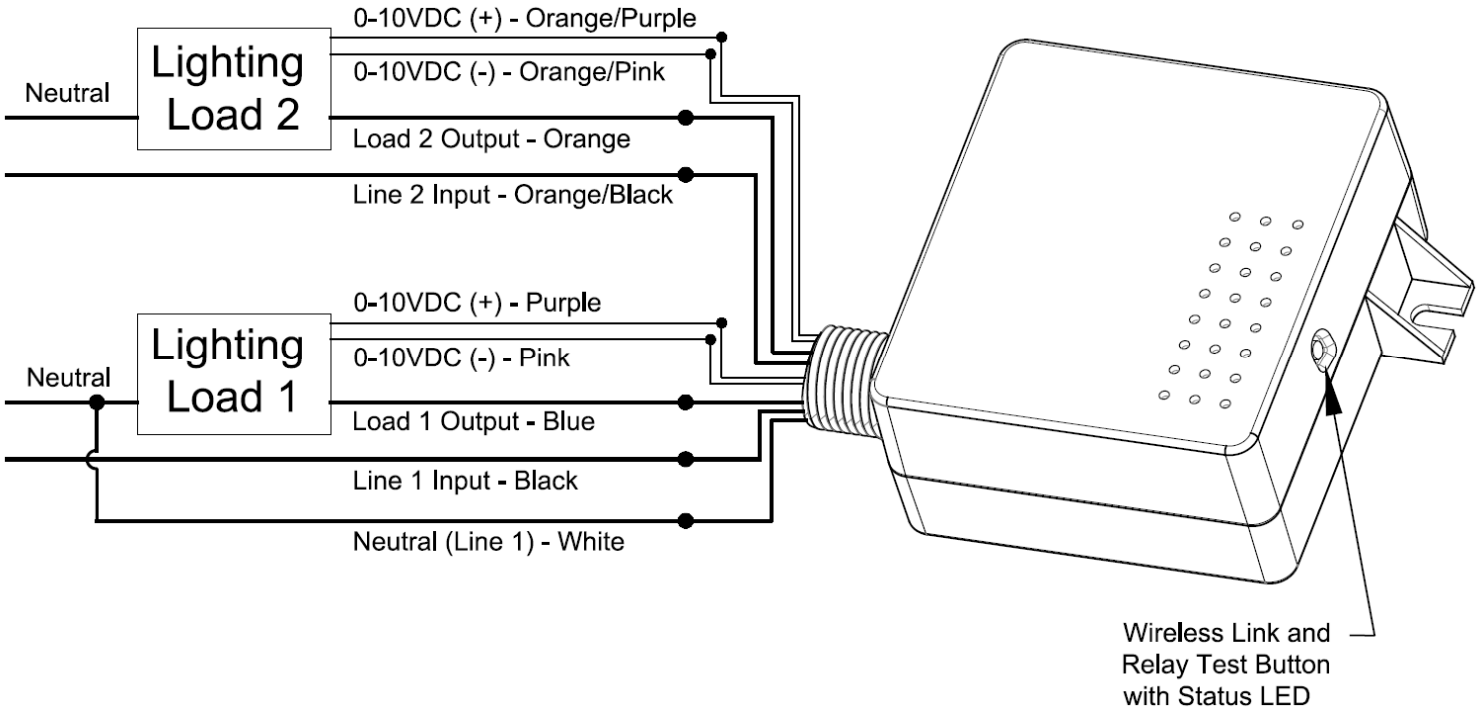
2.2.2 WR20D and WR20D-2 Details





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- Mount on junction box with ½" knock out and secures to wall with mounting bracket.
- The WR20D Wireless Relays is designed for up to a 20 Amp load per relay.
- Connect all Line/Load and Neutral wires, plus 0-10VDC control wires as shown above, cap all unused leads.
- Press the Wireless Link/Test button to toggle the relay, LED status should light green for relay on.
- The WR20D can direct link to LSG3-W switches or to the LLEVO-W for networking.

Electrical:

1 or 2 Load Independent with Dimming
16Amps, 120/277 VAC LED/Electronic
20Amps, 120/277 VAC Tungsten
1/4HP @ 120VAC Motor Load
100mA Sink for 0-10V Dimming
600VAC rated dimming leads
Plug Load Compatible

Operating Environment:

Location: Interior
Operating Temp: 0-50 deg. C
Humidity: 10-90% Non-Condensing
Atmosphere: Non-Explosive/Corrosive
Vibration: Stationary

Wire Color Guide:

Neutral (Load 1) = White
Line 1, Input = Black
Load 1, Output = Blue
Load 1, 0-10VDC (+) = Purple
Load 1, 0-10VDC (-) = Pink

Line 2, Input = Orange/Black
Load 2, Output = Orange
Load 2, 0-10VDC (+) = Orange/Purple
Load 2, 0-10VDC (-) = Orange/Pink

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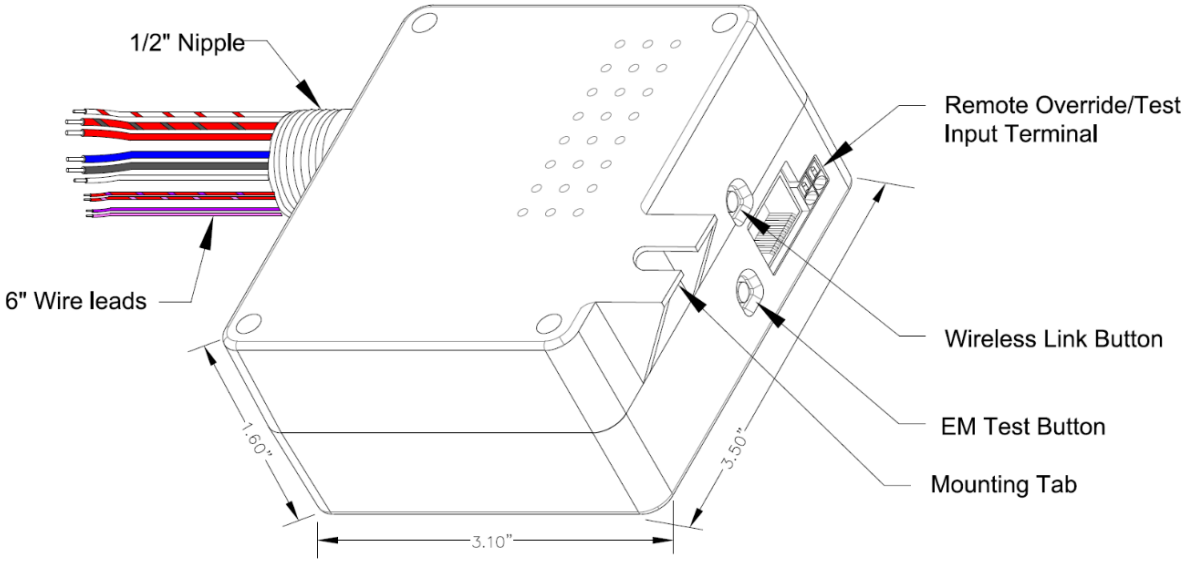
2.3 WR20D-EM Details



- Mount on junction box with ½" knock out and secures to wall with mounting bracket.
- The WR20D-EM Wireless Relays is designed for up to a 20 Amp load per relay.
- This Device will be supplied by two power sources from normal and emergency power circuits, turn off both circuits at the breaker before connecting the wires or servicing the device.
- Connect all Line/Load and Neutral wires, plus 0-10VDC control wires as shown above, cap all unused leads.
- Test Input for a test switch, Fire, or security interface. The input accepts a two wire non polarized 10-28VDC/VAC at 10mA maximum.
- Press the Wireless Link/Test button to toggle the relay, LED status should light green for relay on.
- The WR20D-EM can direct link to LSG3-W switches or to the LLEVO-W for networking.

Electrical:

2 Load Independent Emergency and Normal Power control with Dimming
16 Amps, 120/277 VAC LED/Electronic
20 Amps, 120/277 VAC Tungsten
1/4HP @ 120VAC Motor Load
100mA Sink for 0-10V Dimming
600VAC rated dimming leads
UL924 EM and UL916 Normal load rated

Operating Environment:

Location: Interior
Operating Temp: 0-50 deg. C
Humidity: 10-90% Non-Condensing
Atmosphere: Non-Explosive/Corrosive
Vibration: Stationary

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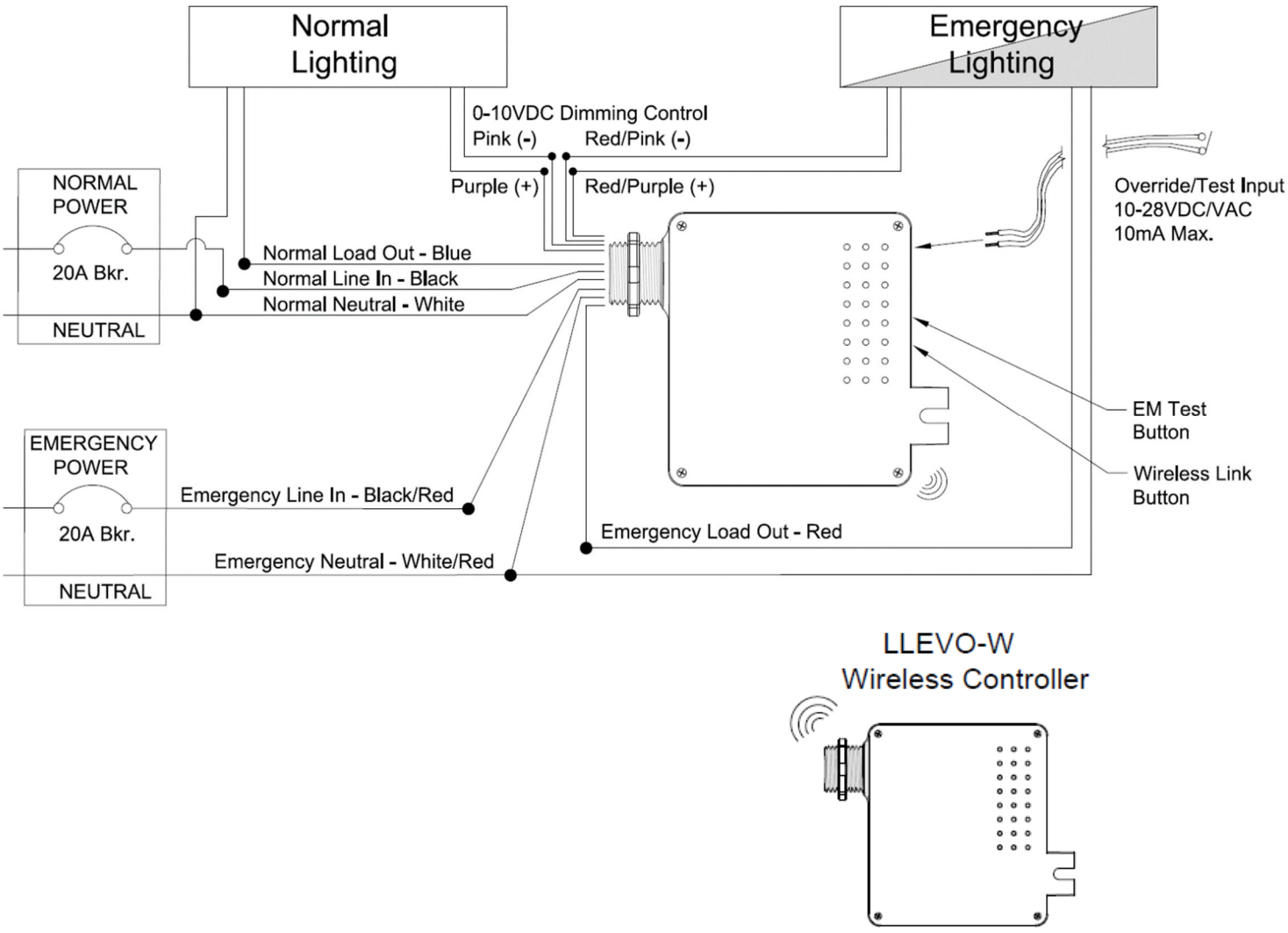
Wire Color Guide:

Emergency Power Wire:
Neutral = White/Red
Line Input = Black/Red
Load Output = Red
Dimming 0-10VDC (+) = Red/Purple
Dimming 0-10VDC (-) = Red/Pink

Normal Power Wire:
Neutral = White
Line Input = Black
Load Output = Blue
Dimming 0-10VDC (+) = Purple
Dimming 0-10VDC (-) = Pink

The WR20D-EM Relay combines both normal and emergency powered lighting control in the same device. Both loads operate together under normal conditions, when normal power is lost the Emergency load and 0-10V dimming are forced ON.

2.3.1 WR20D-EM Wiring Details



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- The WR20D-EM relay is powered by two electrical circuits, verify that both circuit breakers are OFF before connecting.
- Connect the Emergency power line and load wires as shown above.
- Connect the Normal power line and load as shown above.
- Keep the Emergency and Normal power separate per NEC code requirements.
- Connect all 0-10VDC control wires as shown above, cap all unused leads
- Press the Emergency test button to force an emergency state test.
- Connect any remote test switches or connections from a fire alarm system and test the operation
- The WR20D-EM can direct link to LSG3-W switches or to the LLEVO-W for networking

Caution: The WR20D-EM devices are feed from two independent electrical circuits. When servicing, confirm that both circuit breakers are switched OFF to prevent accidental harm.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

- Do Not use outdoors
- Do not mount near gas or electric heaters
- Equipment should be mounted in a location and at a height where it will not be subject to tampering by unauthorized personnel
- The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition
- Do not use the equipment for other than its intended use
- All service should be performed by qualified personnel

READ AND FOLLOW ALL SAFETY NSTRUCTIONS

SAVE THESE INSTRUCTIONS

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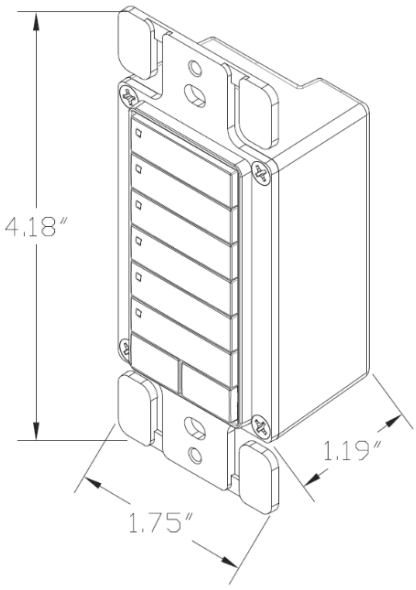
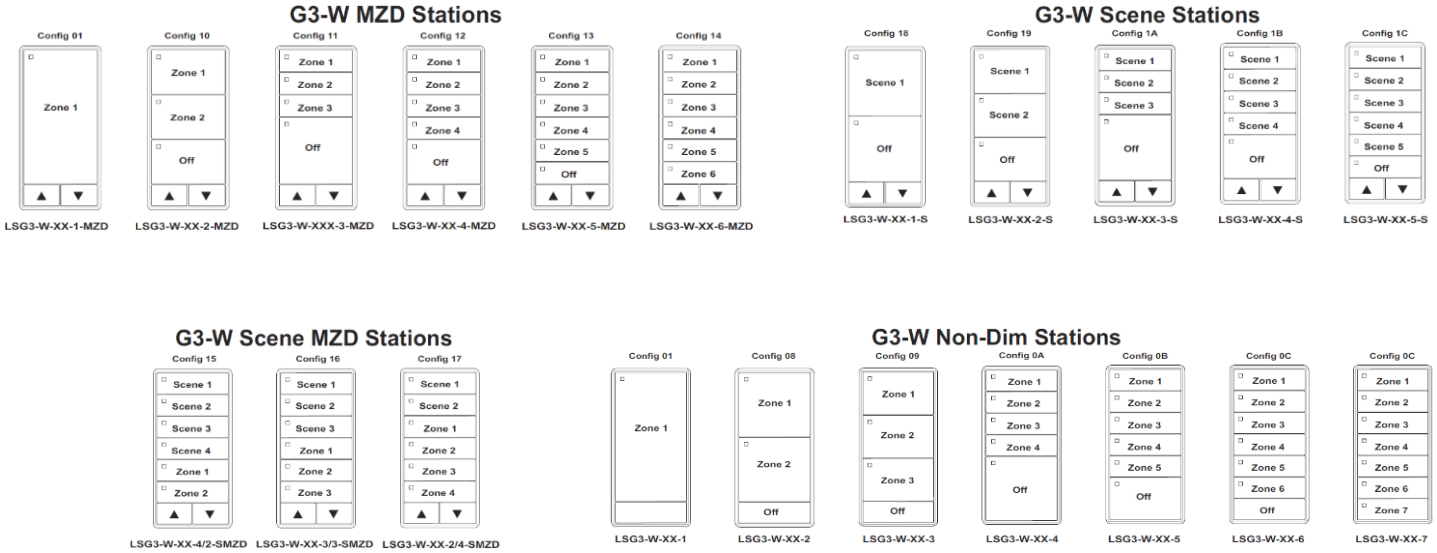
2.4 LSG3-W Details



- Standard single gang mounting.
- Unique ID factory set
- Wireless 915Mhz communication
- Lithium battery provided (CR123A)
- Mounting screws provided

Operating Environment:
Location: Interior
Operating Temp: 0-50 deg. C
Humidity: 10-90% Non-Condensing
Atmosphere: Non-Explosive/Corrosive
Vibration: Stationary

LightSync G3 Wireless switches are available in all standard switch configurations



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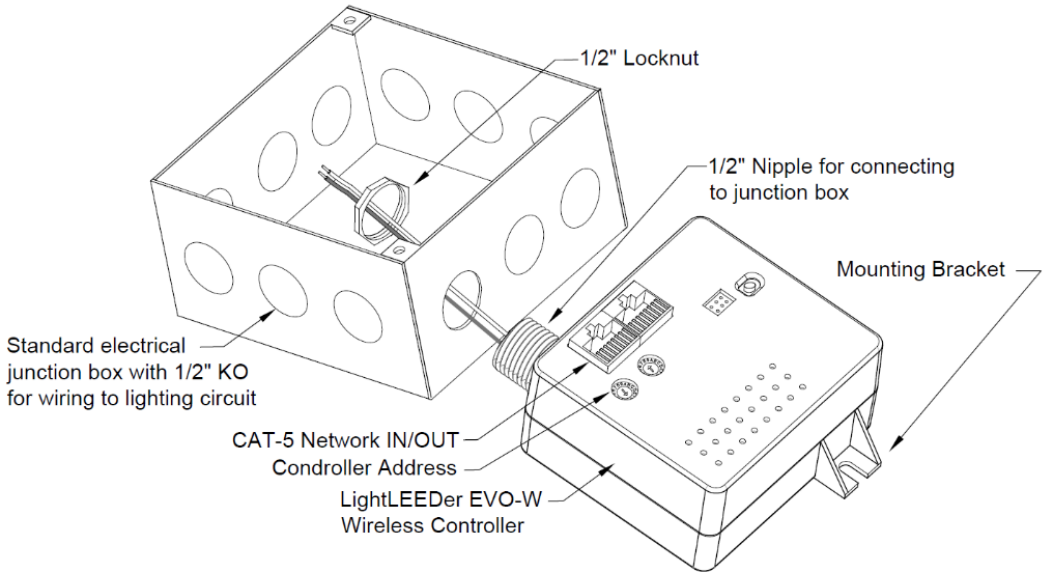
Section 3 LightLEEDer Wireless Product Installation

3.0 Overview

The LightLEEDer Wireless product use a 915MHz radio system for communication supporting a 50” line of sight distance between devices. When installing always be aware of and avoid other equipment that may produce RF noise that could interfere with the ILC radio communication. Do Not install the devices where a steel structure like ventilation ducts may block or reduce signal strength. Always install the devices in an easy to access location.

3.1 LLEVO-W Installation



- Mount the remote LLEVO-W wireless controller in an easy to access location, typically, at the power junction box centrally located to the area to be controlled.
- For best performance always place the LLEVO-W where its radio is not obstructed by metal enclosures or subject to equipment with high EMF noise.
- Verify that the LLEVO-W is within 50 feet line of sight to all switch stations and relays intended to be linked to the controller.
- Mount the LLEVO-W to the junction box using the 1/2" nipple and secure the controller using the 1/2" locknut provided and mounting bracket.
- Terminate the line voltage lighting circuit 120 or 277VAC power leads to the controller as required by NEC Code.
- Run CAT-5 data cable from the ILC panel network to the LLEVO-W controller In/Out ports to add this controller to the system.
- Set the controller's unique address (2-digit HEX) and record for future reference.
- The LLEVO-W can be programmed for stand-alone or network operation from the ILC network system, refer to LL-Pro software instructions.
- To link the LightLEEDer wireless relays and LightSync G3 wireless switches to the LLEVO-W controller refer to TB0402.

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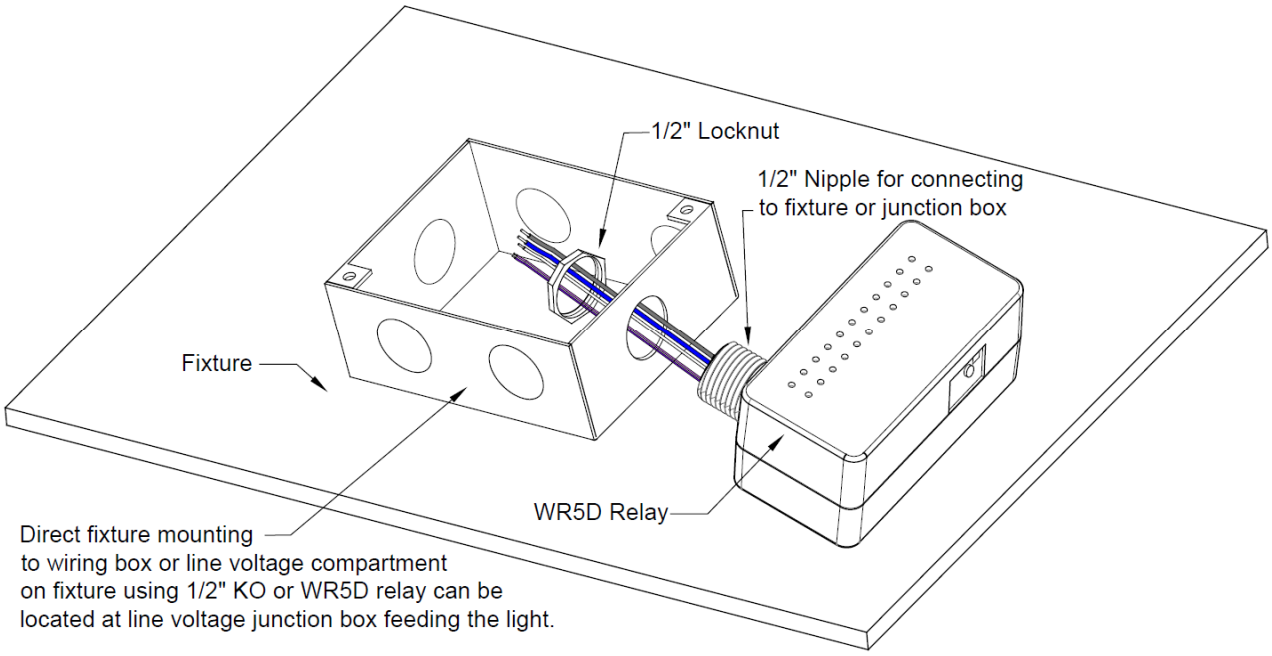
3.2 WR5D, WR20D, WR20D-2 Installation

3.2.1 WR5D



- Mount the remote mount WR5D relay in an easy to access location, typically directly on the exterior of the fixture or at the power junction box feeding the first light fixture to be controlled.
- For best performance always mount the relay where its radio is not obstructed by metal enclosures or subject to equipment with high EMF noise.
- Verify that the relay is within 50 feet line of sight to the switch stations intended to control it and that radio transmission is not obstructed by metal barriers.
- Mount the relay to exterior of the fixture or line voltage junction box using the
- 1/2" nipple and secure the relay using the 1/2" locknut provided.
- Terminate the line voltage 120/277VAC power, neutral and fixture load output leads from the relay to the load wires as required by NEC Code.
- Test 0-10VDC wiring from the fixture for proper voltage and reverse wiring of the DC control leads before connecting to the WR5D relay.
- Terminate the low voltage 0-10VDC dimming control leads (Purple/Pink) using two 18AWG wire to any remote fixtures, keep Class-2 wiring separate from line voltage runs per NEC code requirements.
- Test relay for ON/OFF operation using the Test/Link button on the relay.
- To Link the relay to a LightSync G3 wireless switches refer to TB0401 and to link the relay to a LLEVO-W wireless controller refer to TB0402.

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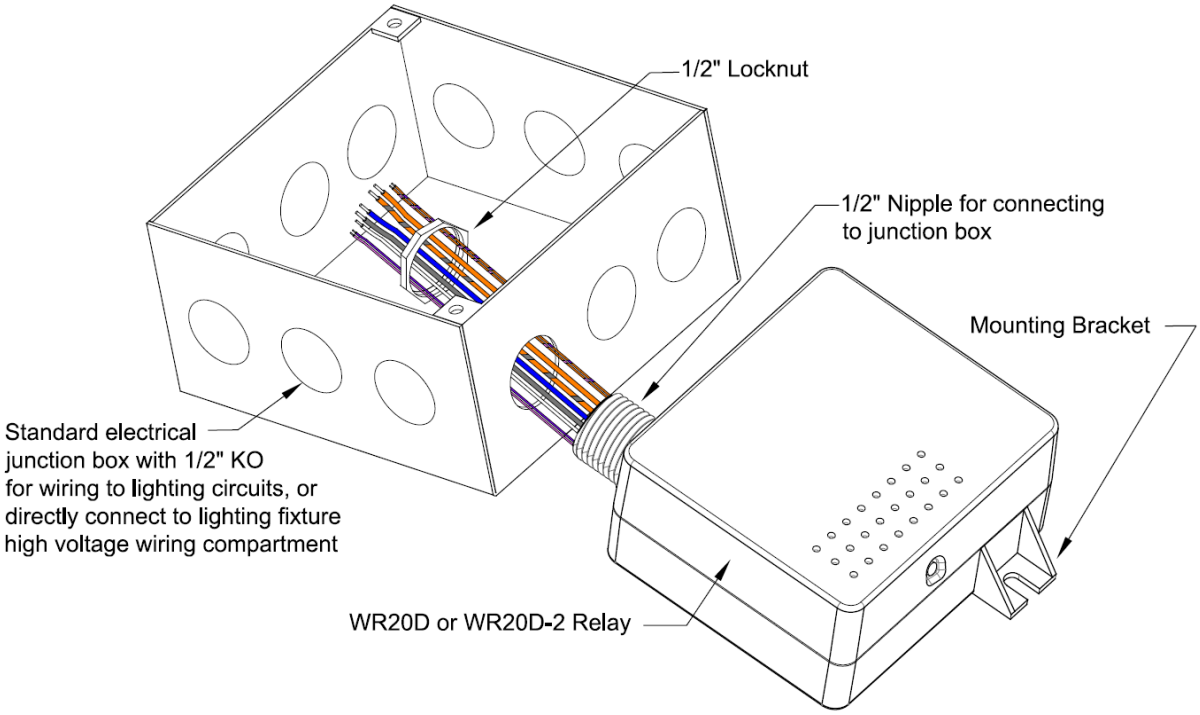
3.2.2 W20D and WR20D-2



- Mount remote mount relay in an easy to access location, typically at the power junction box feeding the first light fixture to be controlled, or directly into the fixture line voltage wiring compartment.
- For best performance always mount the relay where its radio is not obstructed by metal enclosures or subject to equipment with high EMF noise.
- Verify that the relay is within 50 feet line of sight to the switch stations intended to control it and that radio transmission is not obstructed by metal barriers.
- Mount the relay to junction box or fixture using the 1/2" nipple and secure the relay using the 1/2" locknut provided and mounting bracket.
- Terminate the line voltage 120/277VAC power, neutral and fixture load output leads from the relay to the load wires as required by NEC Code, cap off the unused leads.
- If using the WR20D-2 relay terminate the 2nd load control wires to the 2nd fixture or plug load as required by NEC Code, cap off the unused leads.
- Test 0-10VDC wiring from the fixture for proper voltage and reverse wiring of the DC control leads before connecting to the WR20D or WR20D-2 relay.
- Terminate the low voltage 0-10VDC dimming control leads (Purple/Pink) using two 18AWG leads. Keep Class-2 wiring separate from line voltage runs per NEC Code requirements.
- Test relay for ON/OFF operation using the Test/Link button on the relay.
- To link the relay to a LightSync G3 wireless switches refer to TB0401 and to link the relay to a LLEVO-W wireless controller refer to TB0402.

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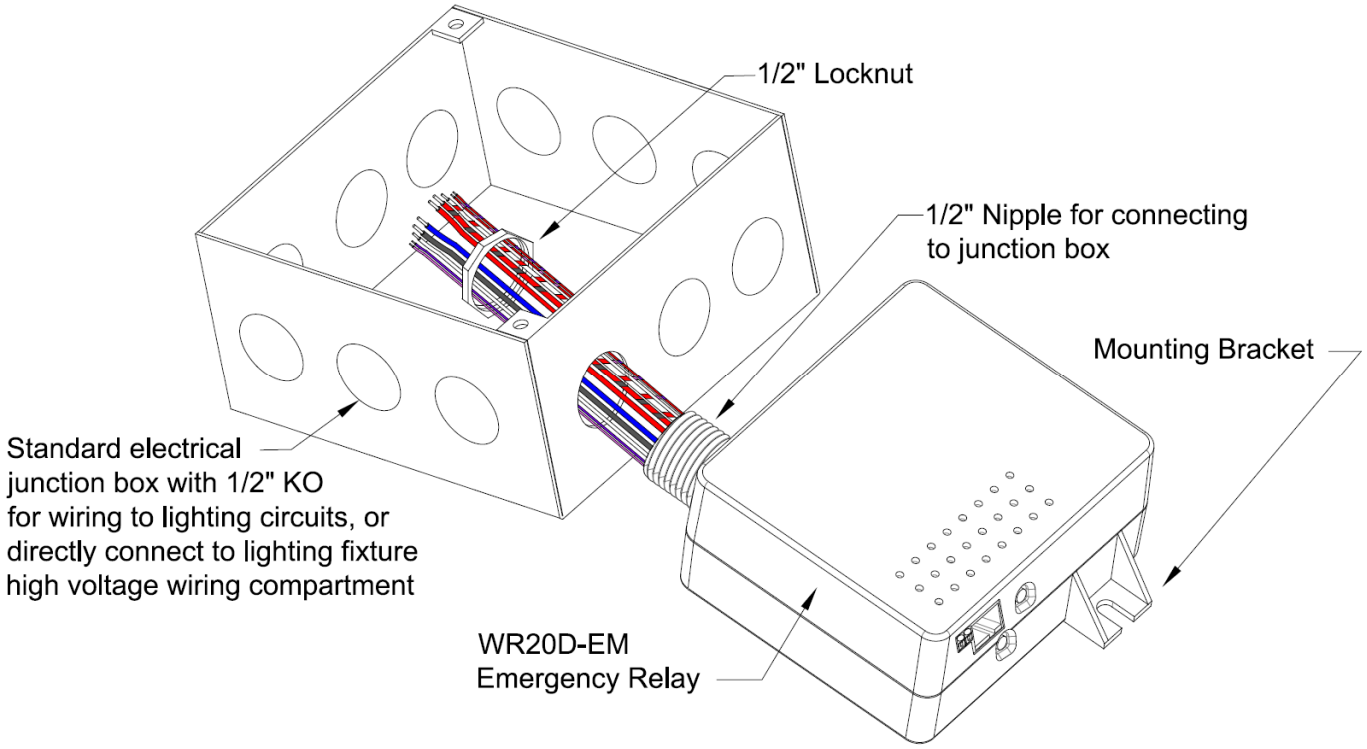
3.3 WR20D-EM Installation



- Mount the relay in an easy to access location, typically at the power
- voltage wiring compartment.
- This Emergency relay should be installed where it can be frequently tested for EM operation, refer to local code requirements for periodic testing.
- The Wireless EM Relay (WR20D-EM) should be mounted where the relays radio communication is not obstructed by metal enclosures or subject to equipment with high EMF noise.
- The WR20D-EM relay must be within 50 feet line of sight to the switch stations intended to control it and that radio transmission is not obstructed by metal.
- Mount the relay to a junction box or fixture using the 1/2" nipple and secure with the 1/2" locknut provided and mounting bracket.
- Terminate the Emergency and Normal power line inputs 120/277VAC, neutrals, and fixture control load outputs from the relay to the EM and Normal power fixtures to be controlled as required by NEC Code.
- Test 0-10VDC wiring from the fixtures for proper voltage and polarity of the DC control leads before connecting to the WR20D-EM relay.
- Terminate the low voltage Class-2 0-10VDC dimming control leads using two #18AWG leads for EM and Normal control to the fixtures. Keep Class-2 wiring separate from line voltage runs per NEC Code requirements.
- Test the EM relay operation using the EM Test button on the relay.
- To link the WR20D-EM relay to LSG3-W switches, refer to TB0401
- For control of the WR20D-EM from a LLEVO-W controller refer to TB0402.

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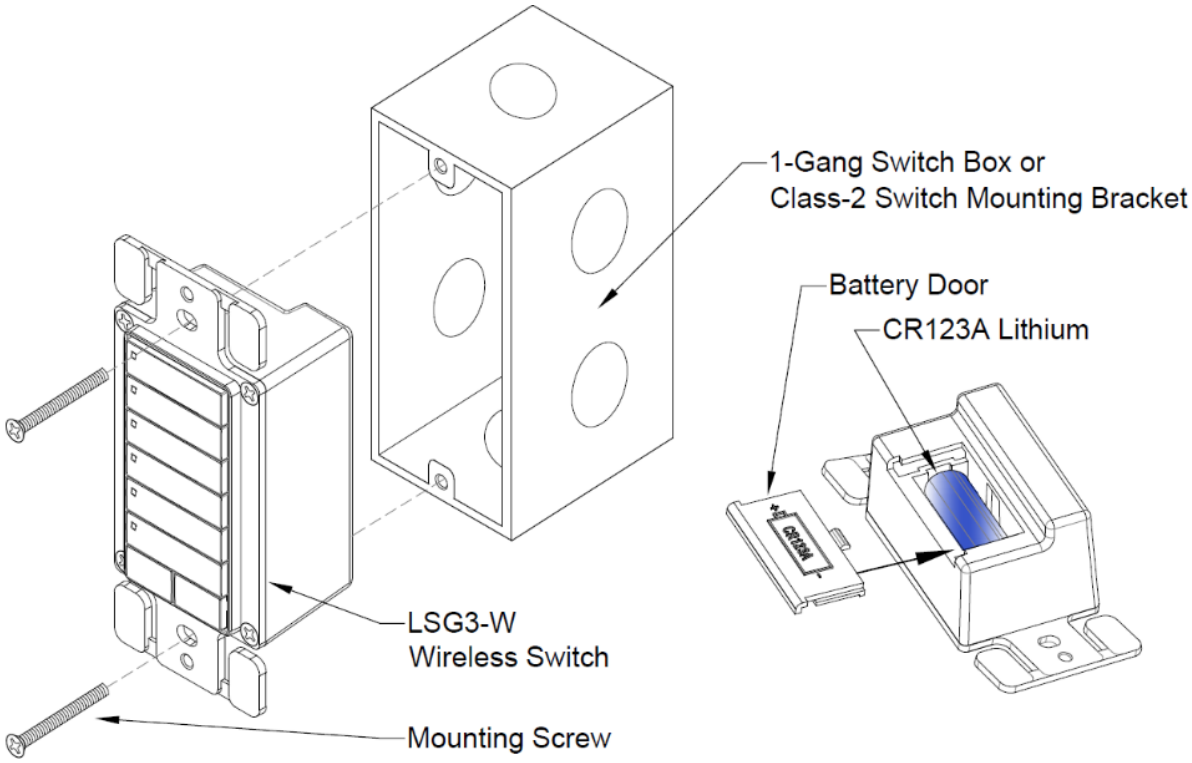
3.4 LSG3-W Installation



Installing the LSG3-W Switch:

- Install remote mount LightSync G3 Wireless switch within radio proximity of the wireless relay or LLEVO-W controller it will be linked to.
- For best performance always mount the LSG3-W switch where the radio is not obstructed by metal enclosures or subject to equipment with high EMF radio noise. Plastic low voltage class-2 enclosures or switch mounting brackets are recommended if allowed by code, along with a plastic cover plate.
- Mount LSG3-W switch in standard 1-gang switch bracket or junction box using screws provided.
- Verify that the switch station is within 50 feet line of sight to the wireless relay or LLEVO-W controller it is intended to be linked to.
- Before installing LSG3-W switch, open battery door and install the provided battery. The wireless switch will automatically enter link mode, refer to Technical Bulletin TB0401 for wireless relay direct link directions.
- To link the LSG3-W switch to a LLEVO-W wireless controller refer to Technical Bulletin TB0402.

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Section 4 Direct Link Control Operations

4.0 Overview

The Wireless Relays and LightSync switches can be Direct Linked to each other to operate as stand-alone devices. When direct linked the relay holds the link data and reads the switch type connected for internal mapping. Each wireless relay can be linked to a maximum of 6 wireless devices, and 2 wireless photocells. Each LSG3-W wireless switch station can be linked to an unlimited number of wireless relays. When direct linked the devices can no longer be linked to a LLEVO-W panel for networking.

4.1 Recommended Procedure for Installation and Linking Devices

1. Install the wireless relay and connect to the load to be controlled.
2. Test operation using relay Control/Link button to toggle the relay ON/OFF.
3. Before installing the LSG3-W wireless switch, refer to procedures below to link the switch to the relay or relays to be controlled.
4. If the relay and switch have *previously been linked*, you will need to clear the link settings in the relay's memory before proceeding, See section 4.5

4.2 Activate Direct Link Mode at a LSG3-W Wireless Switch

1. Remove the battery and press any key to drain power, then re-insert battery. The LSG3-W switch will stay in direct link mode for 10 minutes after battery power-up. (Each wireless device transmits a unique ID code to prevent overlapping signals)

4.3 Link WR5D, WR20D & WR20D-EM Relay

1. Hold the relay link button for 3 seconds until the Green LED flashes and then release link button. The green LED will remain ON and the relay will turn ON.
2. Press the button on the LSG3-W switch for the desired Zone to be controlled. The Relay will turn OFF and ON to indicate the link was accepted.
3. Press the button on additional LSG3-W switches if needed.
4. Press the relays link button to exit relay linking mode, Green LED will turn OFF. *The relays link mode times out after 16 seconds of non-activity.

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4.4 Link a WR20D-2 Relay

4.4.1 Link to Load 1 (Relay-1 / Dimmer-1)

1. Hold the relay link button for 3 seconds until Green LED flashes and then release the link button. The Green LED will remain ON and Relay-1 will turn ON.
2. Press the button on the LSG3-W switch for desired Zone-1 control, Relay-1 will turn OFF and ON to indicate the link was accepted.
3. Press the button on additional LSG3-W switches for Relay-1 / Dimmer-1 if needed.
4. Press the relay link button to exit relay linking mode, Green LED will turn OFF.
   *The relays link mode times out after 16 seconds of non-activity.

4.4.2 Link to Load 2 (Relay-2 / Dimmer-2)

1. Hold the link button for 4 seconds until Red LED flashes and then release the link button, the Red LED will remain ON and Relay-2 will turn ON.
2. Press the button on the LSG3-W switch for desired Zone-2 control, Relay-2 will turn OFF and ON to indicate the link was accepted.
3. Press the button on additional LSG3-W switches for Relay-2 / Dimmer-2 if needed.
4. Press the link button to exit relay linking mode, Red LED will turn OFF.
   *The relay's link mode operation times out after 16 seconds of non-activity.

4.5 Clear all Settings in the Relay's Link Memory

*This may be needed if the relay has been *previously direct linked*.

1. Hold the link button for 8 seconds or until the red and green LEDs flash alternately, and then release the button to clear the memory.

4.6 Direct Link Notes

- The direct link memory is held in the wireless relay.
- Each wireless relay can be linked to a total of 6 LSG3-W switches and 2 wireless photocells.
- The LSG3-W switch can be linked to an unlimited number of wireless relays.
- All wireless devices operate within the transmitter range of 50-feet line of sight or better.
- For a direct Link and control operation instruction sheet refer to TB0401.

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Section 5 Wireless EVO Configuration

5.0 Overview

The LightLEEDer EVO-W wireless controller can connect to 64 relays and 64 LightSync input devices such as LSG3-W switches, photosensors, and wireless occupancy sensors. The LLEVO-W controller can then be configured to control these devices in the same manner as any ILC controller using the stand alone or network software.

The LLEVO-W controller is equipped with a 900MHz radio with standard 50' line of sight range for communication with ILC wireless devices. The devices cannot be "Direct Linked" when connected to a LLEVO-W controller.

5.1 Recommended Procedure for Installation and Linking Devices to LLEVO-W

1. Install the wireless relay and connect to the load to be controlled.
2. Test operation using relay Control/Link button to toggle the relay On/Off.
3. Record the relays unique ID 8-digit code for reference during programming.
4. Install the LSG3-W wireless switch, with the provided battery.
5. Record the switch's unique ID 8-digit code for reference during programming.
6. Use the LightLEEder-Pro Single Panel or Network Configuration Software to link devices.

5.2 Clear All Settings in the Relay's Direct Link Memory

*This will be needed if the relay has been *previously direct linked*.

1. Hold the link button for 8 seconds or until the red and green LEDs flash alternately, and then release the button to clear the memory.

5.3 LL-Pro and LL-Pro Network Configuration Software

The Software contains a wireless link control screen found under "Tools" for finding wireless devices and linking devices to the LLEVO-W panel, after this is completed the control mapping of the LS devices and relays is done in the same manner as with wired LightSync CAT-5 devices and relays in a standard wired LLEVO panel.

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Navigate to “Tools” on the top menu bar, then select “Wireless Links” (see Figure 1).

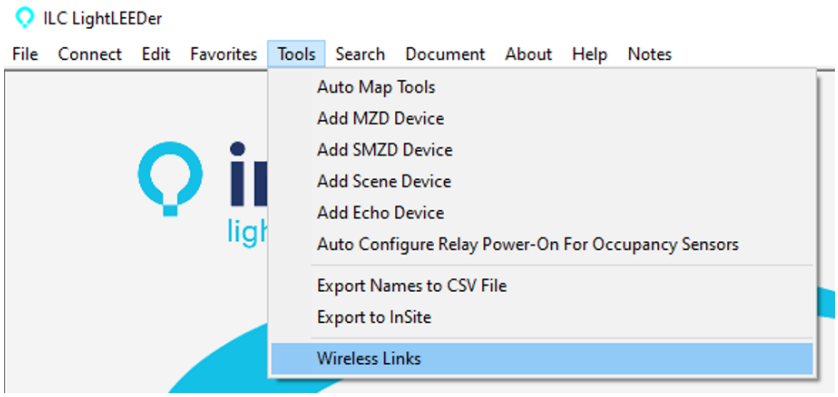

Figure 1

The Wireless Link page in the LightLEEDer Pro software will display all 64 possible LS switch addresses and relay/dimmer outputs. It also has buttons at the bottom of the page for “Get Links” and “Send Links” to the LLEVO-W, and a “Read UID’s” button to start a scan for the unique ID broadcast by the devices (see Figure 2).

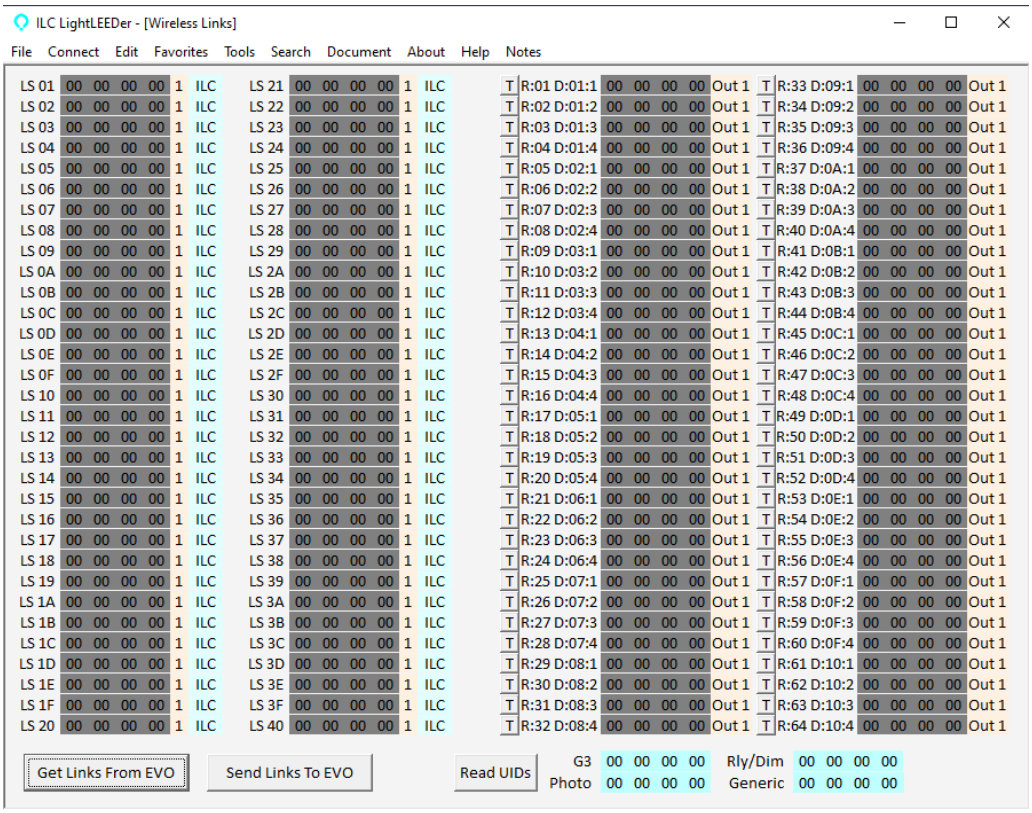

Figure 2

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When looking for the UID of a device, first press a button on the LSG3-W wireless switch to initiate a transmit command, at the relay use on/off button to cycle the relay and initiate a transmit command. Then click the "Read UIDs" button in the software to read the unique device IDs for the switch and relay that last transmitted (see Figure 3).

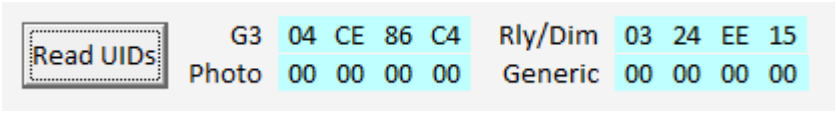

Figure 3

You can left click on the "G3", Rly/Dim", Photo", or Generic locations to copy the currently displayed UID then left click on the light gray LS 01 or R:01 D:01;01 location to paste the 8 digit code into a LS device or Relay/Dimmer location (see Figure 4). You may also directly type in the 8-digit ID code. This ID code is made of four 2-digit HEX sets (00 to FF).

5.4 Example Link Programming

As an example: my switch is a LSG3-W-2MZD with an ID: 04.CE.86.C4. The LLEVO-W also received a relay/dimmer at ID: 03.24.EE.15. The LLEVO-W panel will always display the last device ID it received within its radio range.

I have assigned the LightSync switch to two lines because it is an MZD-2 type and uses two LightSync device addresses in series. You also need to set the orange count box for "**1**" on the first device and "**2**" for 2nd LS address, if the G3 switch uses 3 device addresses such as a MZD-5 then the 3rd sequential LS address would be set for "**3**". I have assigned the 2-load WR20D-2 relay (ID: 03.24.EE.15) to R:01 D01:01 and R:02 D:01:02, you must also selected "**Out 1**" for the first load and "**Out 2**" for the 2nd load using the orange "Out #" box on the right (see Figure 4). The WR5D, WR20D, WR20R-EM relays are all a single load device and use "Out 1" only.

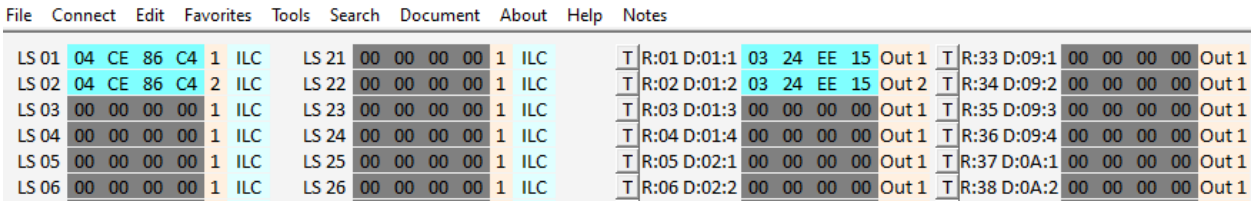

Figure 4

You can test the relay control to the ID by clicking the "T" test button, the relay should trigger the load Off/On once.

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I also have a Single Zone MZD switch and a WR5D relay to be connected. First, cycle the relay Off/On using the relay control button and the press the first button on the LS switch to initiate an ID transmit to the panel. Then press the “Read UID’s” button in the software this will give you the two devices 8-digit codes (see Figure 5). These I assigned to LS:03 and R:03 D01:03 (see figure 6).

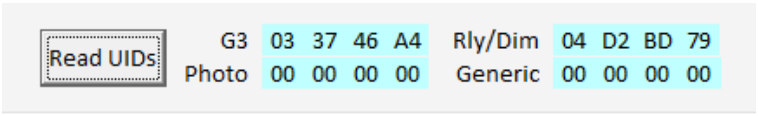

Figure 5

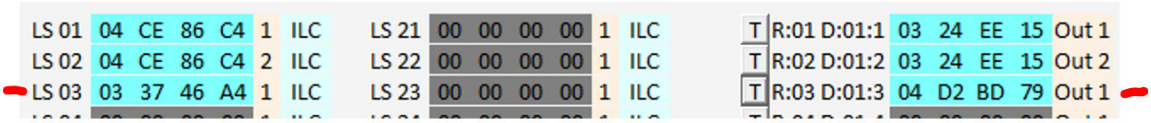

Figure 6

To send the Link information to the LLEVO-W panel press the “Send Links To EVO” button. When activated the button will display a count of the LS Links and then the Relay Links (1 to 64) of 64. If you are connecting to a LLEVO-W panel that has existing Links configured use the “Get Links from EVO” button to retrieve the current Link data into the software.

To Add a wireless photocell sensor or wireless occupancy sensor you would repeat the process above for the LS Inputs and then mapping. If a Sensorworx occupancy sensor or switch with wireless radio is used with the LLEVO-W controller then it will receive a “Generic” link code from the SWX device, you will need to change “ILC” to “Gen” for the LS input line item (see Figure 7)

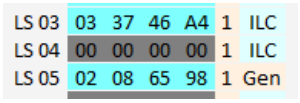

Figure 7

Now that you have assigned the wireless devices to the LLEVO-W panels LS inputs and relay/dimmer outputs you will next map the control configurations in LightLEEDer Pro software the same way that you would for a wired device. I suggest using the Tools menu “Add MZD Devices” option for quick and easy programming.