lumina™ rf

LEVITON®

Lumina™ RF 10A Relay Switch
Cat. Nos. ZSS10-NxZ, ZSS10-GxZ
Incandescent: 800W @ 120V - Ballast: 1200VA @ 120V, 2700VA @ 277V - Motor: 1/4HP @ 120V

DI-000-ZSS10-00C

INSTALLATION AND QUICK START SHEET　　　　**ENGLISH**

WARNINGS AND CAUTIONS
- **TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER** AT CIRCUIT BREAKER OR FUSE AND TEST THAT POWER IS OFF BEFORE WIRING!
- To be installed and/or used in accordance with appropriate electrical codes and regulations.
- If you are unsure about any part of these instructions, consult an electrician.

NOTES
- 10A robust/commercial mechanical latching relay to handle high inrush (LED) and large loads.
- Utilizes Leviton® Lumina™ RF technology to communicate with other Lumina™ RF wireless compatible products.
- Requires Lumina™ gateway for programming and control communication to other devices.
- ZSS10-NxZ (Neutral Model) - Requires a neutral (white) connection wire.
- ZSS10-GxZ (No-Neutral Model) - 25 watts required as minimum load. Neutral (white) connection wire not required. Product is designed to leak voltage to load.

LEVITON LUMINA RF WALL SWITCH OVERVIEW
The Lumina™ RF components are designed to communicate with each other via 2.4GHz Radio Frequency (RF) to provide remote control of your lighting. Each module in the Lumina™ RF component line is designed to act as part of a system. Line powered devices are designed to act as a router. These routers will re-transmit the RF signal from one device to another until the intended device is reached. This ensures that the signal is received by its intended device by routing the signal around obstacles and radio dead spots.

CHANGING SWITCH COLOR
The color of the Lumina™ RF Wall Switch may be changed to complement the interior décor. The Lumina™ RF Wall Switch is supplied with a white, ivory and light almond switch plate. Additional colors are available; contact your Leviton distributor for more information. When changing the switch plate, *before* wiring and installation, proceed as follows:
1. Push in at two tabs on side to release **(see Figure 2).**
2. Line up and press in side to attach **(see Figure 2)**.

WIRING
The Lumina™ RF Wall Switch is wired directly to the load and utilizes a mechanical latching relay for power switching control from the Decora® rocker. When multiple wall switches are controlling the same load, the following wiring instructions apply to each wall switch and the multi-location load control is completed through programming via the Leviton Lumina™ gateway. A gateway is required for all Lumina™ RF Wall Switches to control programming. Please refer to the Lumina™ gateway user manual for details.

NOTES:
1. Refer to **Figure 3** to determine the wire colors for each connection.
2. Lumina™ RF Wall Switch ZSS10-NxZ requires a neutral (white) connection.
3. Wiring Connections:
    a. Connect the Load (blue) wire to the lighting load.
    b. Connect the Neutral (white) wire to the neutral supply.
    c. Connect the Line (black) wire to either phase of the 120-277V supply.
    The Line (black) wire must be accessible for the installation of any additional switches.

INSTALLATION
1. **TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER** at circuit breaker or fuse and test that power is off before wiring!
2. If applicable, remove the faceplate from the existing wall switch, remove the existing wall switch from the wall box, and disconnect the wires from the existing wall switch. Identify the "Line", "Neutral", "Load" and "Traveler" (if applicable) wires.
    NOTE: Traveler wire is not required for multi-location load control. If unused, firmly attach wire connector and tuck into wall box.
3. Remove 3/4" of insulation from each of the wires on the Lumina™ RF Wall Switch. Install the Lumina™ RF Wall switch by connecting wires per wiring diagram **(see Figure 3)**.
4. After all connections have been made, ensure that all wire connectors are firmly attached and there is no exposed copper.
5. Gently place the wires and the Lumina™ RF Wall Switch into the wall box with the LED at the top of device. Using the supplied screws, attach the Lumina™ RF Wall Switch to the wall box.
6. Before installing the faceplate, restore power to the circuit, and verify LED, switch ON/OFF operation.
7. After testing the Lumina™ RF Wall Switch and Multi-location Switches for proper local operation **(see Table 1)**, install a Decora faceplate over each switch.

SWITCH OPERATION
Local Rocker Switch Operation
The Lumina™ RF Wall Switch has a rocker that can be used to control the load **(see Table 1)**.

LED Indicator
The Lumina™ RF Wall Switch comes equipped with a LED indicator that is normally lit to green when the load is OFF. The LED is OFF when the load is ON.

Setup Mode for Controls Communication
Configure the Lumina™ RF Wall Switch using a Lumina™ gateway with a PC running the Lumina™ RF smart configuration software **(see configuration videos and software for detailed radio frequency pairing and control programming online at www.leviton.com/luminarf)**.
NOTE: The device must be in Network Enrollment mode while the Lumina™ gateway is searching for new devices to Enroll.

WARNINGS AND CAUTIONS
- Use this device with **copper or copper clad wire only.**
- For indoor applications only.
- Save these instructions.

TABLE 1 - Leviton Lumina™ RF Switch Local Operation		
Rocker Event	**Top Rocker**	**Bottom Rocker**
Single-Tap	Load turns ON.	Load turns OFF.

Figure 1 - Lumina™ RF Wall Switch

LED Indicator
Top (ON)
Bottom (OFF)
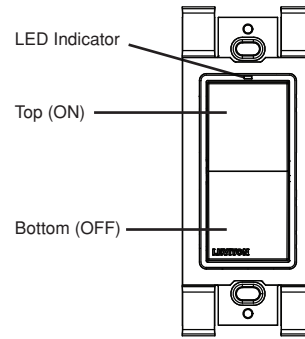
Figure 2 - Changing Switch Color

Push in at two tabs on side to release

Line up tabs and press in side to attach

Figure 3 - Wiring Diagrams

ZSS10-NxZ (neutral required)

Black
BL
Load
White
BK
WH
Hot (Black)
Line
120-277VAC, 60 Hz
Neutral (White)
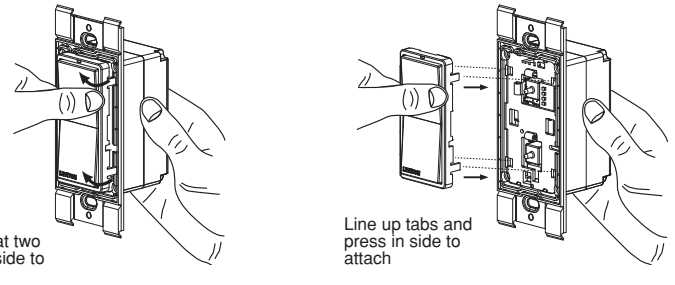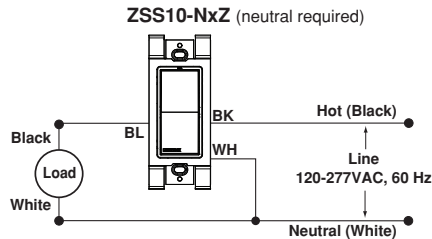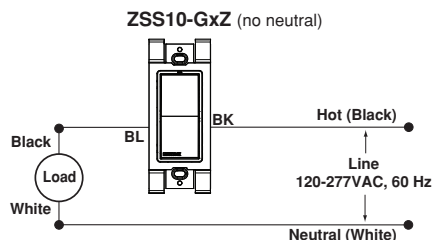
3-Way NOTE (two or more ZSS10-N):
Only one switch will be wired to load (master switch). Remaining switches will cap off blue wire.

ZSS10-GxZ (no neutral)

Black
BL
Load
White
BK
Hot (Black)
Line
120-277VAC, 60 Hz
Neutral (White)

3-Way NOTE (one ZSS10-G and two or more ZSS10-N):
ZSS10-G must be wired to load to operate (master switch). Remaining ZSS10-N switches will cap off blue wire.

TABLE 2 - Operation Modes Defined	
Mode / Blink(s)	**Operation**
1	Enrollment - Allows the device to enroll in a network, or be removed.
2	Identify - The device will go into Identify Mode.
3	RF Pairing - Will initiate a search for compatible devices that are already in Identify Mode.
4	LED Operation - Allows the device to enable/disable LED operations.
5	Reset - Resets device to Factory Default settings.

TABLE 3 - Configuration Menu, Quick Start Programming	
Notes	Requires Lumina™ gateway - Review all related gateway instructions before beginning.
	Idle Time Exit: No button presses for > 20 seconds will time out the menu and return to normal operation.
Mode 1: Enrolling your Device in RF Network	
Enter Menu	Press and hold the bottom (OFF) rocker for > 10 seconds - identified by the LED switching to amber blinking (Mode 1 - One Blink - Enroll into Lumina™ RF Network).
Step 1	Review Lumina™ gateway instructions. Power up gateway and prepare network. Note: The device will stay in Enroll Mode for up to 5 minutes before exiting. The Lumina™ gateway will only stay in Enroll Mode for 1 minute.
Step 2: Add Device	Press and hold the bottom (OFF) rocker for > 5 seconds to enroll into Lumina™ RF network. Start green blinking until completion (time out or press of bottom rocker), then return to Mode 1 - One Blink.
Step 3: Exit	Tap the top (ON) rocker.
Mode 1: Removing your Device from RF Network	
Enter Menu	Press and hold the bottom (OFF) rocker for > 10 seconds - identified by the LED switching to amber blinking (Mode 1 - One Blink - Enroll into Lumina™ RF Network).
Step 1: Remove Device	Press and hold the bottom (OFF) rocker for > 5 seconds to enter the enroll into Lumina™ RF network. Once the green blinking starts, Press and hold the bottom (OFF) rocker for > 5 seconds to leave the Lumina™ RF network. When complete the device will return to Mode 1 - One Blink.
Step 2: Exit	Tap the top (ON) rocker. Note: Be sure to DISBAND device from Lumina™ RF gateway when done.
Mode 4: Turn LED OFF/ON	
Enter Menu	Press and hold the bottom (OFF) rocker for > 10 seconds - identified by the LED switching to amber blinking (Mode 1 - One Blink - Enroll into Lumina™ RF Network).
Step 1	Tap the bottom (OFF) rocker 3 times to move into Four Blink (Mode 4 - LED Operation).
Step 2	Press and hold the bottom (OFF) rocker for > 5 seconds to toggle the LED mode - Green LED confirmation blink indicates locator LED will operate normally - Red LED confirmation blink indicates locator LED will be disabled and remain OFF.
Exit	Tap the top (ON) rocker.

TABLE 4 - Configuration Menu: Reset to Factory Default Settings		Mode 5
Enter Menu	Press and hold the bottom (OFF) rocker for > 10 seconds - identified by the LED switching to amber blinking (Mode 1 - One Blink - Enroll into Lumina™ RF Network).	
Step 1	Tap the bottom (OFF) rocker 4 times to move into Five Blink (Mode 5 - Reset).	
Step 2	Press and hold the bottom (OFF) rocker for > 5 seconds to enter Factory Default pending mode (Start red blinking until top (ON) rocker is pressed to initiate. To cancel Reset - press the bottom (OFF) rocker or allow idle timeout.	
Step 3: Reset/ Exit	Press and hold the top (ON) rocker for > 5 seconds to complete Reset process (Stops the red blinking, cancels the menu and returns to normal device operation when reset is complete.	
Identify		**Mode 2**
Enter Menu	Press and hold the bottom (OFF) rocker for > 10 seconds - identified by the LED switching to amber blinking (Mode 1 - One Blink - Enroll into Lumina™ RF Network).	
Step 1	Tap the bottom (OFF) rocker 1 time to move into Two Blink (Mode 2 - Identify).	
Step 2	Press and hold the bottom (OFF) rocker for > 5 seconds to enter "60 second RF Identify Devices". Start green blinking until completion (times out). Press the bottom (OFF) rocker after pairing to return to Mode 2 - Two Blink.	
Exit	Tap the top (ON) rocker.	
Pairing		**Mode 3**
Enter Menu	Press and hold the bottom (OFF) rocker for > 10 seconds - identified by the LED switching to amber blinking (Mode 1 - One Blink - Enroll into Lumina™ RF Network).	
Step 1	Tap the bottom (OFF) rocker 2 times to move into Three Blink (Mode 3 - Pairing).	
Step 2	Press and hold the bottom (OFF) rocker for > 5 seconds to initiate a search of compatible devices currently in the RF Identify Mode. Will blink Amber on enter followed by a three second solid green for success or solid red for failure, then return to Mode 3 - Three Blink.	
Exit	Tap the top (ON) rocker.	

NOTE: To pair switches activate Identify Mode (2) before activating Pair Mode (3). The pairing mode happens very quickly once it scans network and finds another device in identify mode. Devices need to be enrolled in network for 3-way pairing to work. Pairing and Identify needs to be done on both devices for full 3-way control. The maximum recommended switches that can be paired is 5 devices. Devices can be unpaired by repeating the same Identify/Pairing process used above for pairing.

SPECIFICATIONS	
	ZSS10-NxZ, ZSS10-GxZ
LED, Incandescent, Inductive and Fluorescent Loads	Yes
Motor Operated Appliances	Yes
Current Maximum	10A
Connections	16 AWG
LED Indicator	Yes
Dimensions	4.1" x 1.75" x 1.45"
Weight	0.25 lb
Mounting	Standard J box
Input Power	120-230-277VAC
Input Frequency	50/60Hz
Frequency/Range	2.4GHz / 100-150ft
Power Consumption	ZSS10-NxZ: 120VAC @ 6.8mA AC (360mW typical) 277VAC @ 5.7mA AC (620mW typical) ZSS10-GxZ: 120VAC @ 6.2mA AC (350mW typical) 277VAC @ 4.7mA AC (520mW typical)
Operating Temperature	0°C - 40°C (32°F - 104°F)
ETL Certified to UL Standard	UL-508, CAN/CSA-C22.2 No. 14