RF SWITCH – ZWL-MXS 8A (1000W) 120V AC / For Incandescent Fixtures Only / No Neutral Required
ACCESSORY SWITCH – ZWL-XAS

INSTALLATION INSTRUCTIONS
WARNING:
- **Turn OFF circuit breaker or remove fuse(s) and test that power is off before wiring.**
- **Never wire any electrical device with power turned on. Wiring device with power on may cause permanent damage to device and void warranty.**
- **If you are not sure about any part of these instructions, please contact a licensed electrician.**

Caution:
1. Use only with 120V AC 60 Hz.
2. Do not exceed maximum rating as indicated on the device.
3. Must be installed and used in accordance with electrical codes.
4. If a bare copper or green ground connection is not available in the wallbox, contact a licensed electrician for installation.
5. For use ONLY with permanently installed 120V AC incandescent/halogen fixtures.
6. To avoid overheating and possible damage to other equipment, do not use to control receptacles, fluorescent lights, motor-driven appliances, transformer supplied appliances, etc.
7. Use only #14 or #12 copper wire rated for at least 75º C with these devices.
8. Minimum Lamp Wattage:
   Single Location Control = 60W
   Multi-location Control = 100W

Notes
1. The RF switch (ZWL-MXS) is wired directly to the light fixture.
2. For multi-location installations one RF switch is used with Accessory switch(s) ZWL-XAS.
3. The ZWL-XAS Accessory switch requires a wired connection to the ZWL-MXS switch. Refer to installation instructions for wiring.
4. The RF switch is not compatible with standard 3-way switches.
5. For multi-location installations, the RF switch is the only device that is included in the RF Network.
6. When installing more than one switch in a wallbox, the total lamp wattage must be reduced. See Ganging chart below.

**GANGING** When ganging multiple RF Switches (non-neutral) in one wall box, derating is required as follows

Catalog #	Single Gang	Double Gang	Triple Gang
ZWL.MXS	8A (1000W)	6.6A (800W)	6.6A (800W)

**Z-Wave Device Network Installation Instructions for RF switch Only:**
1. This product may be added to a new or existing Z-Wave network. Your Z-Wave device has a blue LED, which will blink when the device is not included in a Z-Wave network. The LED stops blinking when the RF switch is in a network.
2. To include this device in a Z-Wave network, select the command on your Z-Wave controller for inclusion (Install, Add Device, Add Node, Include Device, etc.). Then press the RF switch ON/OFF switch one time to include it in the network. The LED will stop blinking.
3. To exclude this device from a Z-Wave network, select the command on your Z-Wave controller for exclusion (Uninstall, Remove Device, Remove Node, Exclude Device, etc.). Then press the RF switch ON/OFF switch one time to exclude it from the network. The LED will start blinking.
4. This product works with other Z-Wave products from different vendors and product categories as part of the same network.
5. This product is a listening node and it will act as a repeater in the Z-Wave network. It will perform the repeater function with Z-Wave products from Pro Control and from other Z-Wave vendors.
6. For multi-location install; blue LED will blink on all wired units, when the RF switch (ZWL.MXS) is not included in the Z-Wave network. After including the RF switch in the Z-Wave network, the LED will stop blinking. The ZWL.XAS Accessory switch is not included in the Z-Wave network.
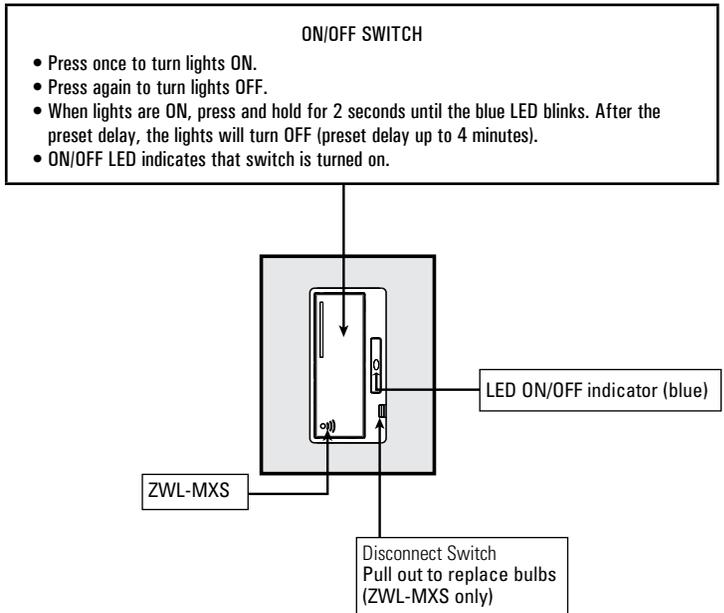
IMPORTANT :
RF switch will not work or will become damaged if wired incorrectly, and warranty will be voided.

(Cut if necessary)   Strip 5/8"
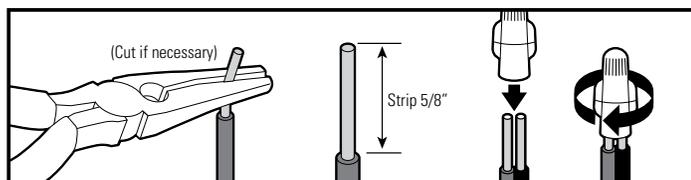
Suggested Tools/Outillaage Suggere/Herramientas Recomendadas
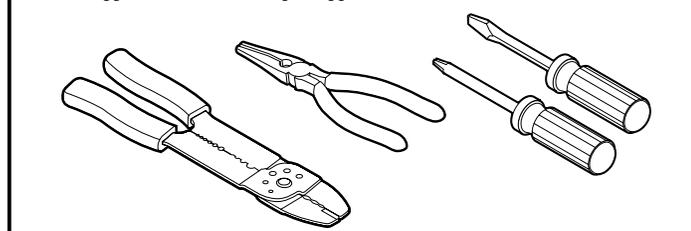
OPERATION

ON/OFF SWITCH
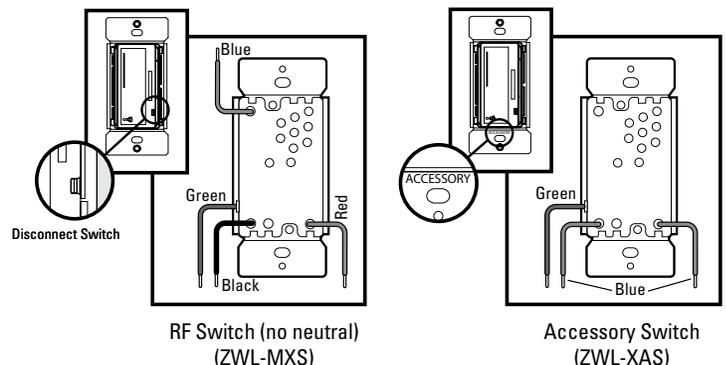- Press once to turn lights ON.
- Press again to turn lights OFF.
- When lights are ON, press and hold for 2 seconds until the blue LED blinks. After the preset delay, the lights will turn OFF (preset delay up to 4 minutes).
- ON/OFF LED indicates that switch is turned on.

LED ON/OFF indicator (blue)
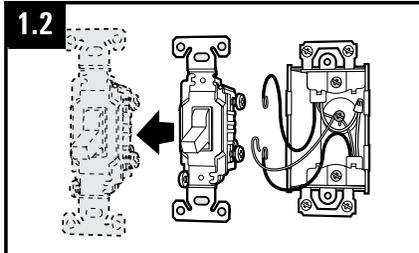
ZWL-MXS

Disconnect Switch
Pull out to replace bulbs
(ZWL-MXS only)

READ BEFORE INSTALLATION!

Device Identification

RF Switch (no neutral)
(ZWL-MXS)

Accessory Switch
(ZWL-XAS)

Troubleshooting Guide

| Symptom	Possible Cause	Solution
No Function. LED is OFF.	A) Light bulb(s) burned out B) Circuit breaker is off or tripped C) Disconnect switch on the dimmer is pulled out to the OFF position D) Improper wiring E) Defective switch	A) Replace light bulb B) Turn on the circuit breaker C) Push in the disconnect switch on the dimmer D) Check and correct wiring E) Replace switch
Erratic operation	A) Lamp power is less than 60 Watts B) Loose wiring connections	A) Increase lamp power to at least minimum wattage B) Check and correct wiring
Functions normally using the ON/OFF push buttons switch but not from remote control and ON/OFF blue LED blinks ON and OFF about once per second	RF switch is not included in a Wave network	Include RF switch in a Z-Wave network using a Z-Wave controller. Refer to Z-Wave controller user manual for details.
Functions normally using the RF switch control but not from remote control and ON/OFF. LED are not blinking	Problem with RF communication device	A) Relocate Z-Wave controller B) Replace dimmer
RF switch is warm to the touch after a period of time	This is normal	No action required
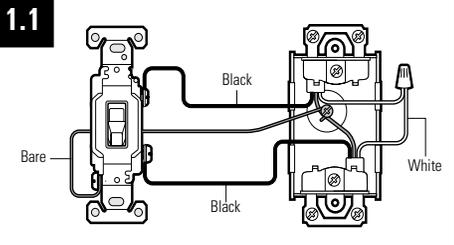
1.1

Black

Bare

White

Black

Turn OFF circuit breaker or remove fuse(s) and test that power is off before wiring. Identify existing wiring (This switch will be a single-pole).
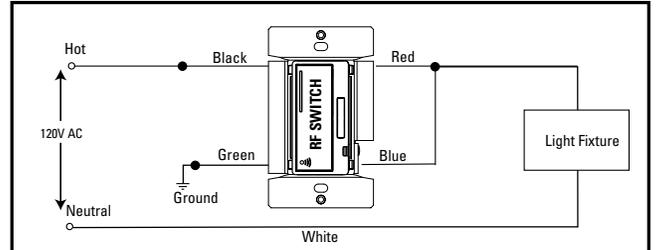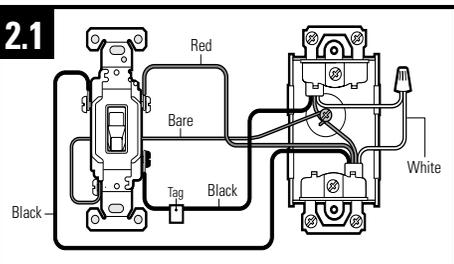
1.2

Disconnect existing switch and remove.

1.3 RF Switch

Black

Green Black

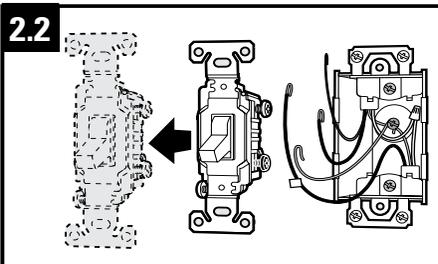Blue

Red Black White
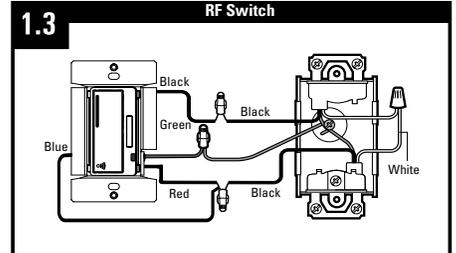
Connect RF switch as shown.

1.4 TOP
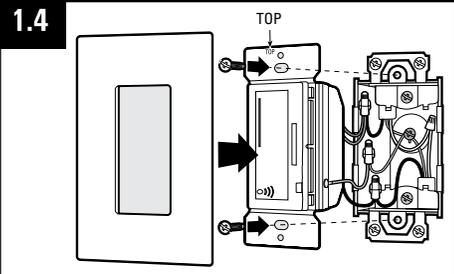
Gently install RF switch into place and secure with mounting screws. Make sure disconnect switch at bottom of master is fully pushed in. Turn on power.
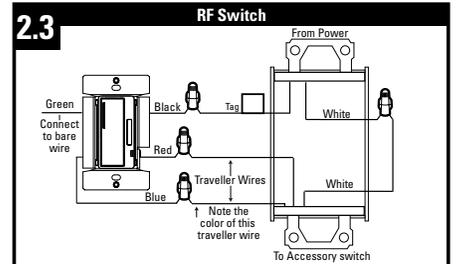
Hot   Black   Red

120V AC

Green   Blue   Light Fixture

Neutral   Ground
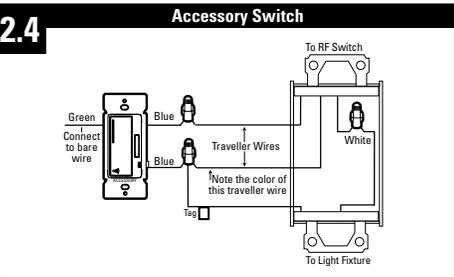
White

2.1

Red

Bare

White

Tag Black

Black

Turn OFF circuit breaker or remove fuse(s) and test that power is off before wiring. Identify existing wiring (both existing switches will be "3-way"). Tag common wire on both 3-Way switches (see "How to Identify Common Wires" section).
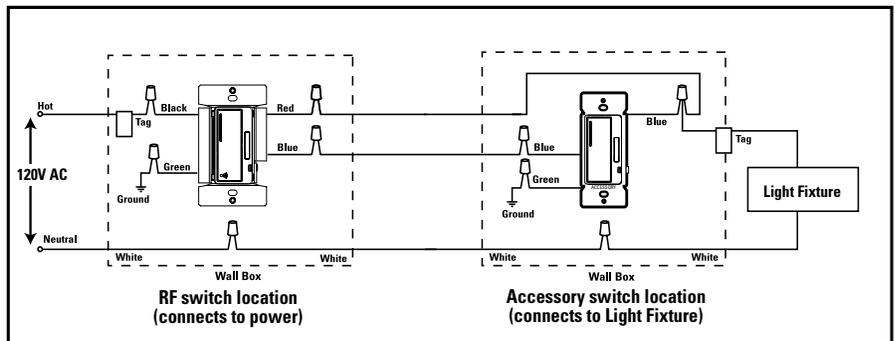
2.2

Disconnect existing switch and remove.

2.3 RF Switch

From Power

Green Connect to bare wire

Black Tag White

Red

Blue Traveller Wires White

Note the color of this traveller wire

To Accessory switch

Connect RF switch as shown. Note the color of the traveller wire you have connected to the blue wire. Connect green wire to bare wire in box

2.4 Accessory Switch

To RF Switch

Green Connect to bare wire

Blue White

Blue Traveller Wires

Note the color of this traveller wire
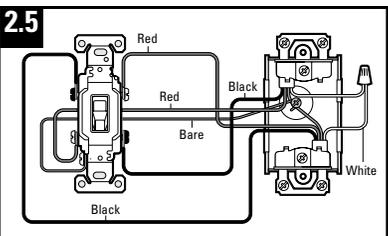
Tag

To Light Fixture

Connect the Accessory switch as shown. You **must** connect the tagged wire to the same traveller wire color noted in Step 2.3. Connect green wire to bare wire in box.
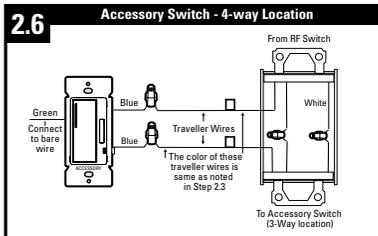
Hot   Tag Black   Red

Blue

120V AC   Green

Ground

Neutral

White   White

Wall Box
RF switch location
(connects to power)

Blue   Blue Tag

Blue

Green

Ground   Light Fixture

White   White

Wall Box
Accessory switch location
(connects to Light Fixture)

Refer to 1.4 to install device in the wallbox.

2.5

Red

Red Black

Bare

White

Black

2.6 Accessory Switch - 4-way Location

From RF Switch

Green Connect to bare wire

Blue   White

Blue Traveller Wires

The color of these traveller wires is same as noted in Step 2.3

To Accessory Switch (3-Way location)

Turn OFF circuit breaker or remove fuse(s) and test that power is off before wiring. Identify existing wiring (4-way switches). See "How to Identify Wires" section.

Hot   Black   Red

Tag

Blue   Blue   Blue   Blue

120V AC   Green   Green

Ground   Ground

Neutral   Light Fixture

White   White   White   White

RF Switch (3-way location)
Connects to Power

Accessory Switch
(4-way location)

Accessory Switch (3-way location)
Connects to Light Fixture

Connect switches as shown.

IMPORTANT! How to identify Common Wires*
Two location:
Each switch will have insulated wires connected to three terminal screws plus a green or bare wire connected to a green terminal screw. The three terminals are usually one dark colored screw and two light colored screws (ignore the Green screw). Alternatively, the three screws may be the same color and one will be marked COMMON or COM Find the wires connected to the dark or COMMON screws. Usually these wires are black but may be red or blue. Tag these wires on both switches to identify when wiring.
Three location:
Two of the existing switches will be 3-way. The 3-way switches will be located at each end of the circuit with a 4-way switch in between. TAG the two 3-way switches as in the Two Location Control section. The 4-Way switch has 4 insulated wires connected to 4 terminal screws. VERY IMPORTANT - TAG two same color insulated wires, which are connected to screws of opposite colors.
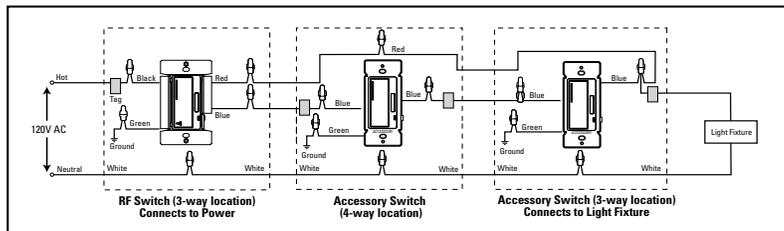
Refer to 1.4 to install device in the wallbox.

Contacting RTI
For news about the latest updates, new product information, and new accessories, please visit our web site at: www.rticorp.com
For general information, you can contact RTI at: Remote Technologies Incorporated, 5775 12th Ave. E Suite 180, Shakopee, MN 55379, Tel. (952) 253-3100, Fax (952) 253-3131, info@rticorp.com

Safety Suggestions
Do not use unit near water, for example, near a sink, swimming pool, open window, in wet basement, etc.
Do not allow objects to fall or liquids to be spilled into the enclosure through openings.
Do not attempt any service beyond that described in the operating instructions. Refer all other service needs to qualified service personnel.

Service & Support
If you are encountering any problems or have a question about your RTI product, please contact RTI Technical Support for assistance. RTI provides technical support by telephone or e-mail. For the highest quality service, please have the following information ready: Your Name • Company Name • Telephone Number • E-mail Address • Product model & serial no. (if applicable)
If you are having a problem with hardware, please note the equipment in your system, a description of the problem, and any troubleshooting you have already tried. *Please do not return products to RTI without return authorization.*