

ZW31 In-Wall Switch (Dimmer)



IMPORTANT!

The fixture controlled by the Z-Wave In-wall Smart Switch must not exceed 150W LED, 500W incandescent.
The switch is designed only for using with permanently installed fixtures.

Pre-installation preparation

Tools You Will Need

Single switch wiring

Before you start; you may wish to change the paddle color to match your wallplate or decor.

Please proceed to <To Change Color Of The Paddle>.

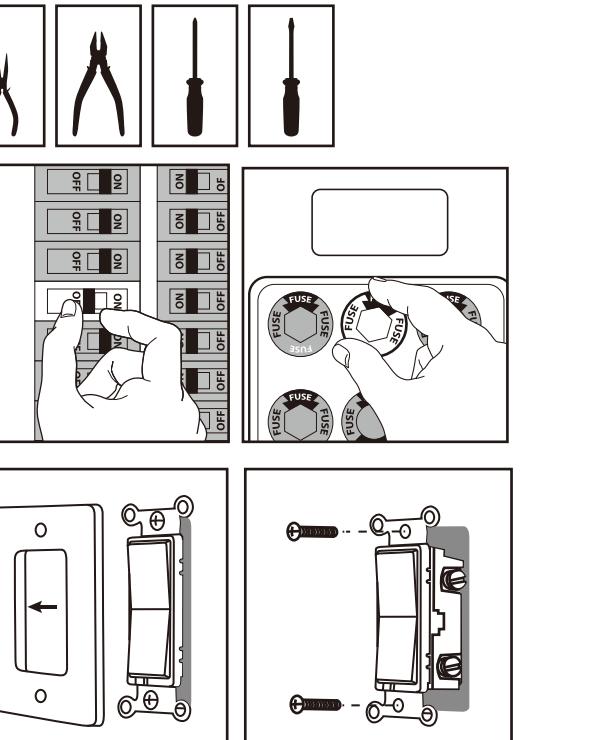
(1) Shut off power to the circuit at circuit breaker or fuse box.

IMPORTANT! Verify power is OFF to switch box before continuing.

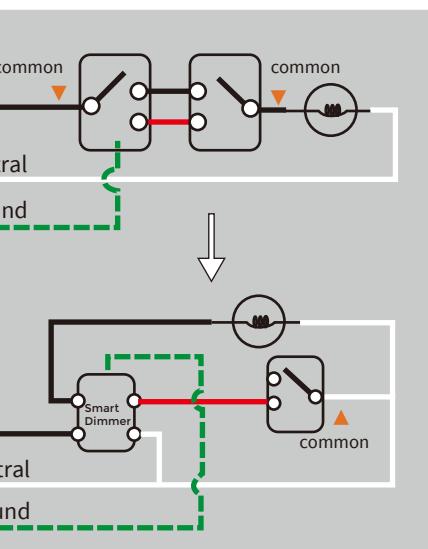
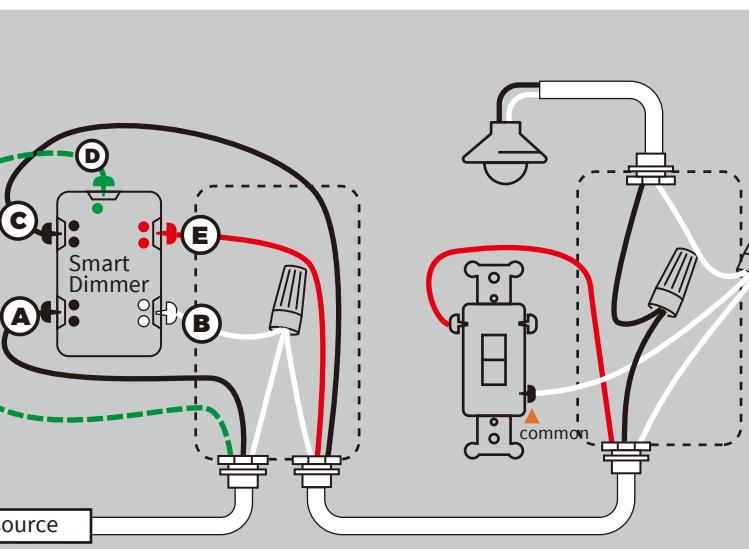
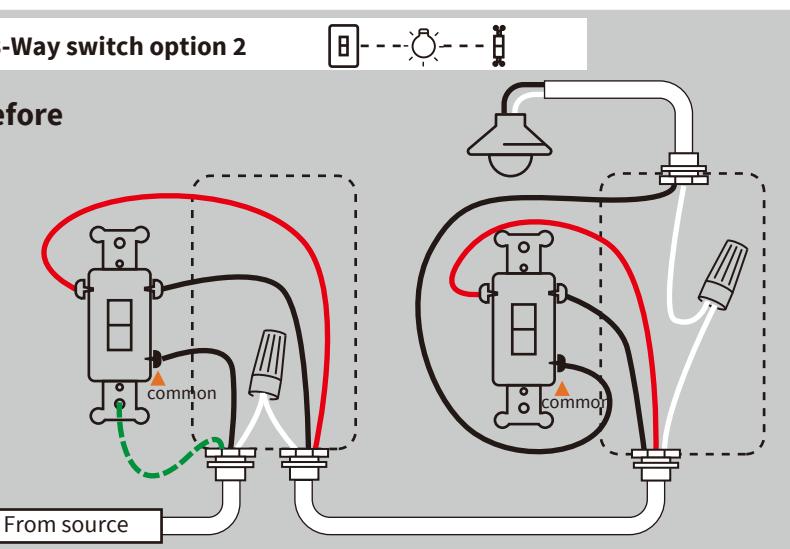
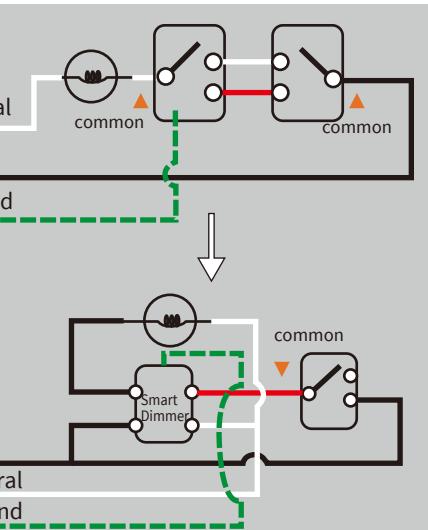
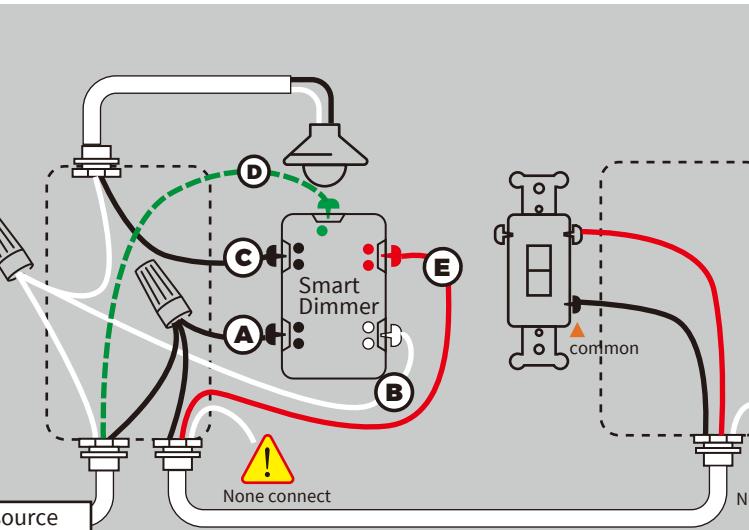
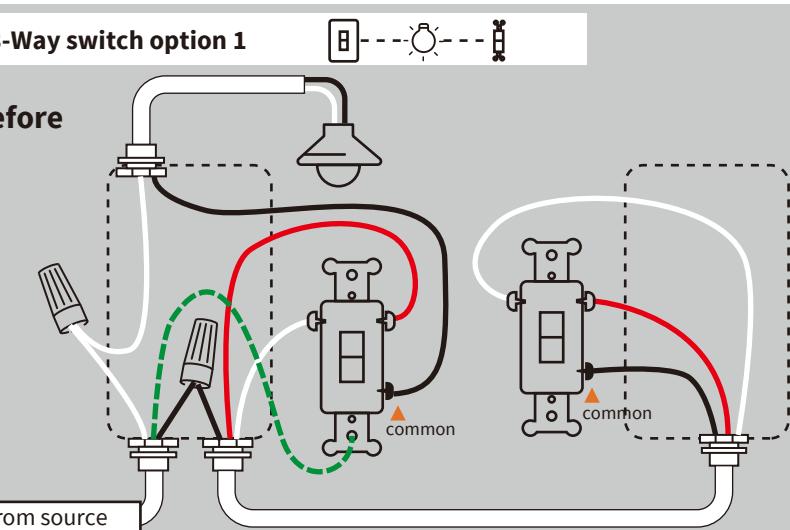
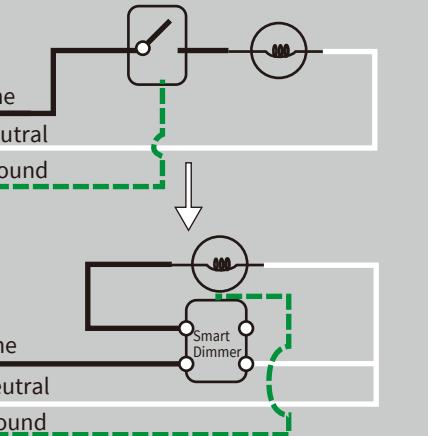
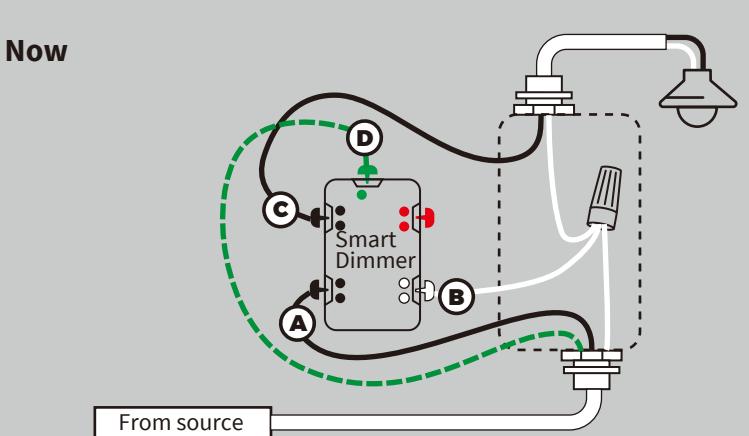
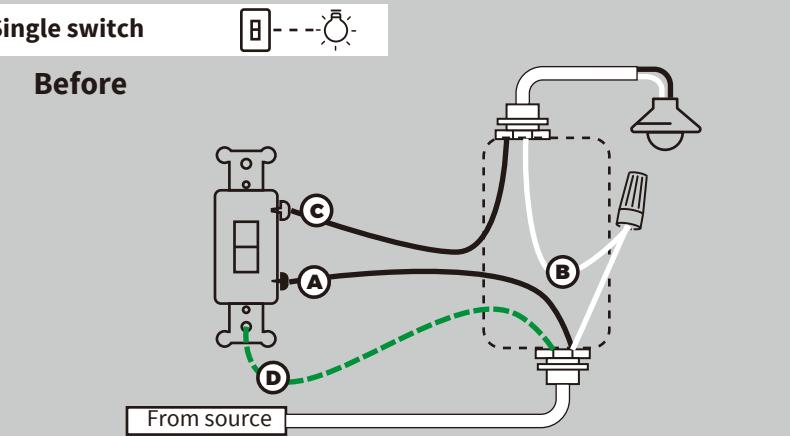
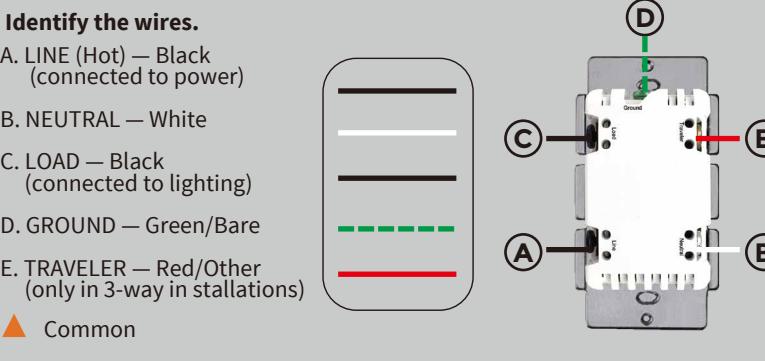
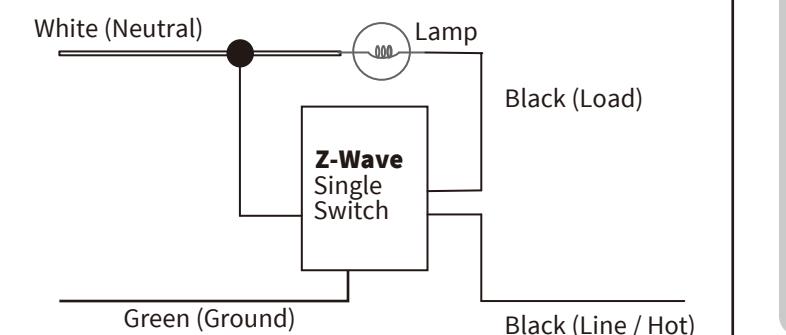
Turn OFF the power to the branch circuit for the switch and lighting fixture at the service panel. All wiring connections must be made with the POWER OFF to avoid personal injury and/or damage to the switch.

(2) Remove wall plate, remove the switch mounting screws.

(3) Carefully remove the switch from the switch box. DO NOT disconnect the wires.

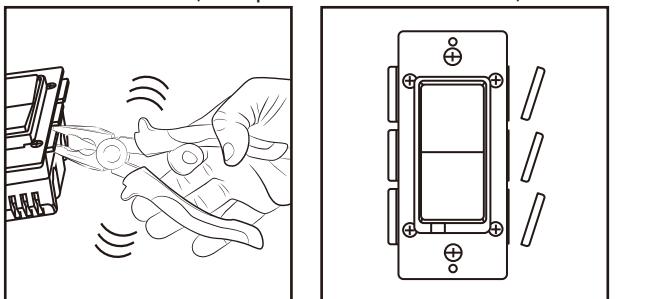


Understanding circuit diagrams



Dual And Triple Gang Boxes

When installing the In-wall smart switch in multiple gang boxes it may be necessary to break off one or both sides of the scored tabs on the front yoke. This does not affect the electrical rating of the smart switch (see specifications for details).

**Triple Gang Boxes****IMPORTANT! Please Read.**

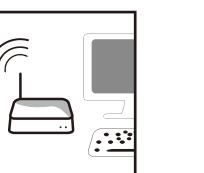
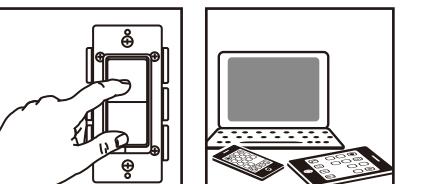
For 3-Way setups, please only use an On/Off, 3-Way slave switch (non-dimming).

Please Note.

Line and load must be in the same box for this schematic to work. If yours is not, please reach out for a custom schematic.

(3-WAY SWITCH WIRING)**Note:**

The Traveler terminal is only used for 3-way wiring.

Adding your device to a Z-wave network**(1) Follow the instructions for your Z-wave certified controller to include a device to the Z-wave network.****(2) Once the controller is ready to include your device, quickly, three times press the top or bottom of the wireless smart switch(rocker) to include it in the network.**

Now you have completely controlled to turn your fixture ON/OFF according to groups, scenes, schedules and interactive automations programmed by your controller. If your Z-wave certified controller features remote access, you can now control your fixture from your mobile devices.

To exclude and reset the device

1. Follow the instructions for your Z-wave certified controller to exclude a device from the Z-wave network.
2. Once the controller is ready to exclude your device, quickly, three times press the top or bottom of the wireless smart switch (rocker) to exclude it from the network.

To return your switch to factory defaults

1. Tap-tap-tap and hold the upper paddle for at least 10 seconds.

Note: This should only be used in the event your network's primary controller is missing or otherwise inoperable.

To Change Color Of The Paddle

This step is optional. Before you start you may want to change the color of the paddle to match your wallplate or decor.

1. Lift the Air Gap tab at the base of the paddle.
2. Push side tabs in on one side and then the other to release paddle. Lift the cover up and off.
3. Simply put the new paddle onto the switch by inserting the air gap and side tabs and snapping securely into place.

Once this step has been completed please return to <Single switch wiring>.

Basic Operation

The connected light can be turned ON/OFF in two ways:

1. Manually from the front panel of the In-wall Switch
2. Remotely with a Z-Wave Controller

**Z-WAVE INTEROPERABILITY**

This product can be included and operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers and/or other applications. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

This Device supports Lifeline (association group 1) supporting 1 node for lifeline communication. Group 1 must be assigned the Node ID of the primary controller where unsolicited notifications will be sent. The Z-Wave controller should set this association automatically after inclusion. Lifeline association only supports the "Device Reset Locally" function. Refer to the instructions of your controller for any available details on how this can be set.

Command Class Information

GENERIC DEVICE CLASS:
11 - GENERIC_TYPE_SWITCH_MULTILEVEL

SPECIFIC DEVICE CLASS:
01 - SPECIFIC_TYPE_POWER_SWITCH_MULTILEVEL

COMMANDCLASS:

5E - COMMAND_CLASS_ZWAVEPLUS_INFO
26 - COMMAND_CLASS_SWITCH_MULTILEVEL
85 - COMMAND_CLASS_ASSOCIATION
8E - COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION
59 - COMMAND_CLASS_ASSOCIATION_GRP_INFO
55 - COMMAND_CLASS_TRANSPORT_SERVICE
86 - COMMAND_CLASS_VERSION
72 - COMMAND_CLASS_MANUFACTURER_SPECIFIC
5A - COMMAND_CLASS_DEVICE_RESET_LOCALLY
73 - COMMAND_CLASS_POWERLEVEL
70 - COMMAND_CLASS_CONFIGURATION
9F - COMMAND_CLASS_SECURITY_2
6C - COMMAND_CLASS_SUPERVISION
7A - COMMAND_CLASS_FIRMWARE_UPDATE_MD

Parameter Settings

- 1: Locally Button function
Parameter=1 Size=1 Value=0 Up Button:On
Down Button: Off
Value=1 Up Button:Off
Down Button: On
Default = 0
- 2: LED Indicator
Parameter=2 Size=1 Value=0 On when Off and Off when On
Value=1 On when On and Off when Off
Value=2 Always Off
Value=3 Always On
Default = 0
- 3: Auto Turn-Off Timer
Parameter=3 Size=4 Values: 0 – 65535 (M); default 0M
- 4: Auto Turn-On Timer
Parameter=4 Size=4 Values: 0 – 65535 (M); default 0M
- 5: Restores state after power failure
Parameter=6 Size=1 Value=0 output off
Value=1 output on
Value=2 out put the state after power
Default = 2

Special Settings

Tap 6x on Button (A) = Change LED Status
Tap 8x on Button (B) = Invert Switch

*The association group supports five nodes and lifeline function

FCC / IC

This device complies with part 15 of the FCC and Industry Canada license-exempt RSS standard(s). 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.

FCC NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

Wiring Instructions - A Few Quick Reminders

A quick note before we give out the wiring schematics. Please do not try installing this device if you are unsure of how electrical circuits operate within your home. As exciting as it is to have a smart switch installed, it can be dangerous and even life-threatening if you do not install this correctly. Please consult a qualified electrician if necessary. With that said, here are a few other warnings we'd like to point out for your safety:

CAUTION - PLEASE READ!

This device (ZW31) is intended for installation in accordance with the National Electric Code and local regulations in the United States, or the Canadian Electrical Code and local regulations in Canada. If you are unsure or uncomfortable about performing this installation consult a qualified electrician.

WARNING - SHOCK HAZARD

TURN OFF THE POWER to the circuit for the switch and lighting fixture at the service panel (circuit breaker) prior to installation.

ALL WIRING CONNECTIONS MUST BE MADE WITH THE POWER OFF to avoid personal injury and/or damage to the switch.

OTHER WARNINGS

Risk of Fire
Risk of Electrical Shock
Risk of Burns

MEDICAL EQUIPMENT

Please DO NOT use this switch to control Medical or Life Support equipment. Z-Wave devices should never be used to control the On/Off status of Medical and/or Life Support equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Important note: To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device.

CONTROLLING APPLIANCES

Please exercise EXTREME CAUTION when using Z-Wave devices to control appliances. Reason being is because the appliance you want to control may be in a separate room and if unintentional behavior occurs (such as a device turning on or off intentionally via schedules, or unintentionally via network error) this event may lead to a hazardous condition. For these reasons, please note the following suggestions:

- 1) Do not include Z-Wave devices in Groups or Scenes if they control appliances.

- 2) Do not use Z-Wave devices to control electric heaters or any other appliances which may present a hazardous condition due to unattended, unintentional, or automatic power control

SPECIFICATIONS

Model: ZW31
Power: 120VAC, 60Hz
Signal (Frequency): 908.42 MHz
Maximum Load: 150W LED, 500W incandescent (300 W with both sides of heat sink tabs off)
Minimum Load: 5W for LED bulbs
Range: Up to 100 feet line of sight
Operating Temperature Range: 32-104° F (0-40° C)
For indoor use.

Specifications subject to change without notice due to continuing product improvement
Approval: Z-Wave Plus Certified
V3.0