

## 3-Way Z-Wave Smart Dimmer Switch

• ZW31 •

**Z-WAVE® 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 the 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.

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For more details, please refer to the manual parts.  
If you have any questions during installation,  
Please contact us [ask@nie-tech.com](mailto:ask@nie-tech.com)

**Part 1. Introduction****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

**Manual Control**

The Front Panel Paddle Switch allows the user to:  
Turn ON/OFF the connected fixture

**Air-Gap Switch:**

The "air gap switch" will cut power to the device if it's pulled up. It's located right below the main switch itself, often next to the LED. Pull up for Bulb replacement, push down for normal use.

**CHANGING THE COLOR OF THE PADDLE(OPTIONAL)**

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

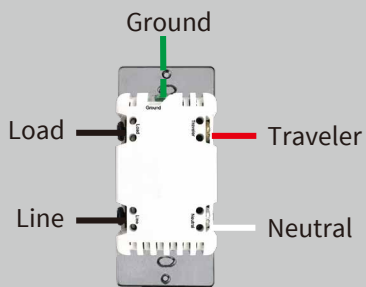
1. Push side tabs in on one side and then the other to release paddle. Lift the cover up and off.
2. Simply put the new paddle onto the switch by side tabs and snap securely into place. Once this step has been completed please proceed to part 2 wiring.

**Model: ZW31****Power:** 120VAC, 60Hz**Frequency:** 908.42 MHz**Maximum Load:** 150W LED, 500W incandescent (300W 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**

**⚡ 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:

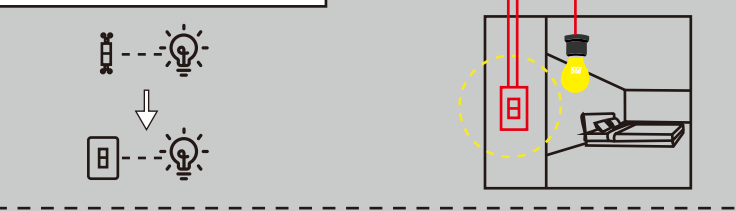
**HOW TO INSTALL THE WIRES**

- Line (hot) — black (connected to power)
- Neutral — white
- Load — black (connected to lighting)
- Traveler — red/other (only in 3-way installations)

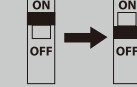
**Note before installation**

- 1) The Z-Wave In-wall Smart Switch must not exceed **150W LED, 500W** incandescent.
- 2) The switch box required: 1-gang U.S. wall box. **3½ in** deep recommended, **2¼ in** deep minimum. (The switch is designed only for use with permanently installed fixtures.)
- 3) Work with **regular 3-way on/off** for 2 locations control. It can only be connected with regular 3-way on/off switch, **don't use a smart switch or a dimmer switch! Couldn't work with an add-on switch!**
- 4) The colors of your wires may not match the ones in our diagrams so please make sure you've **identified all wires correctly** based on their source, not color only.
- 5) Please check your original 3-way wiring circuit in your home before installation, and then **follow the wiring diagram option 1 or 2** in the manual.
- 6) Install the smart switch in the switch box which directly connects to the power **Line and Neutral**.
- 7) This switch **requires a Neutral for installation**, or the installation will not succeed.
- 8) Not recommended for fan.

If you have any questions, please contact us at  
[ask@nie-tech.com](mailto:ask@nie-tech.com)

**Part 2. Wiring Diagram****Single-pole wiring**

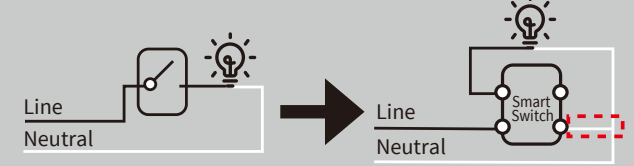
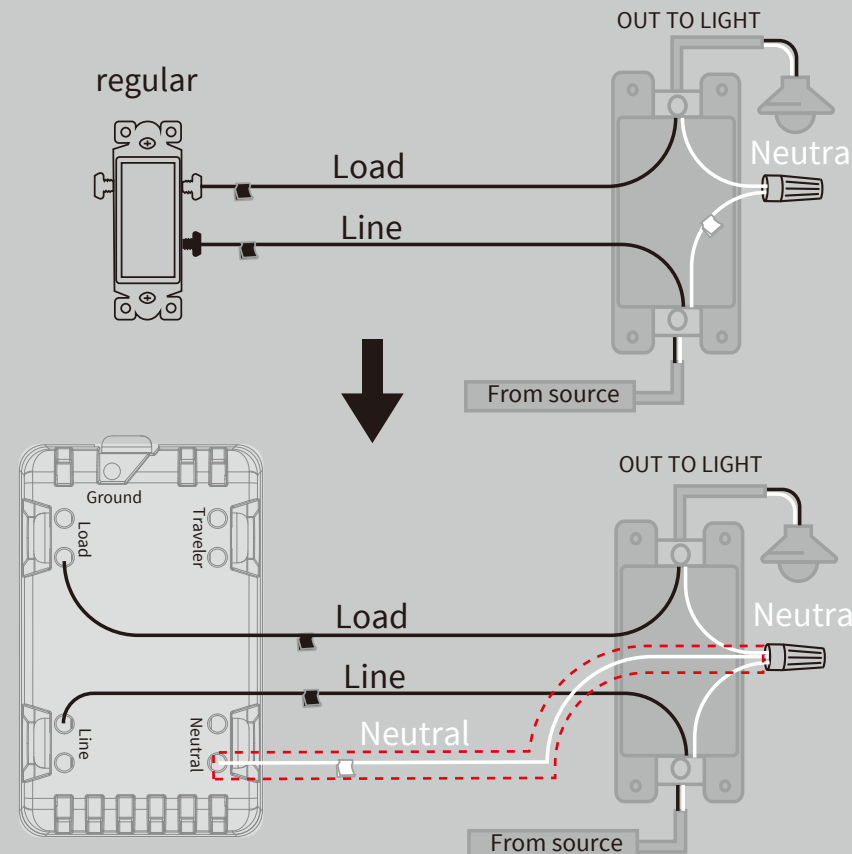
1. **Tool:** Please prepare a flat head screwdriver.
2. **Turn power OFF** at circuit breaker or fuse box.



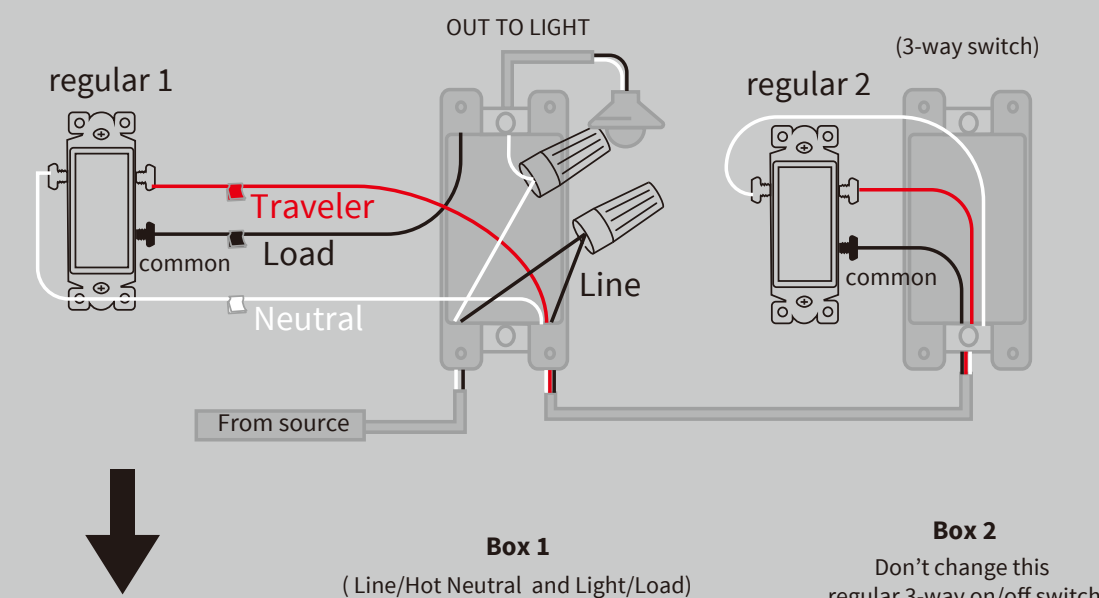
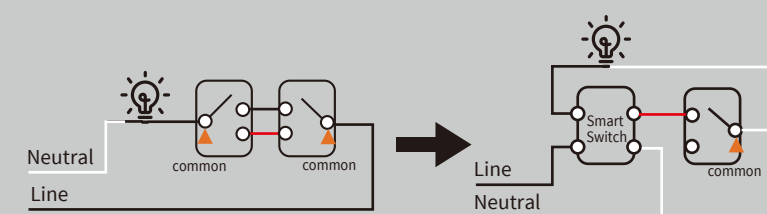
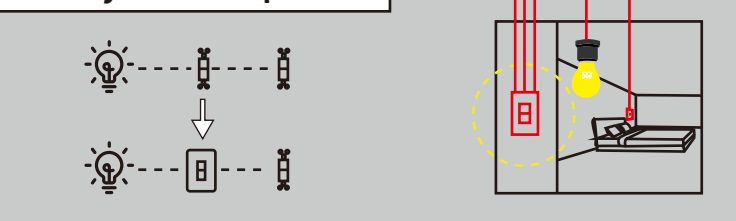
3. **Remove wallplate.**
4. **Remove the switch mounting screws.**
5. **Disconnect the wires and label them after remove the old switch.** (Please use our sticker)

Line Load Neutral Ground Traveler (Just for 3-way switch)

6. **Carefully remove the switch from the switch box.** (DO NOT disconnect the wires.)
7. **There are up to five screw terminals on the smart switch, these are marked** (Please check <HOW TO INSTALL THE WIRES>)
8. **Fix the wallplate with screws after wiring succeed.** (Please use our screws.)
9. **The Ground was excluded from the diagram to simplify the illustration.** Please Make sure all ground wires are connected to all switches respectively.

**⚠ IMPORTANT**

- 1) **Neutral required.** If the box do not have a Neutral, please stop! Connect the **white wire to neutral terminal** (use a white jump wire form the package or the second hole at the terminal to connect.)
- 2) Insert the Line wire to Line terminal and Load wire to Load terminal. **LOAD and LINE Can't be swapped**, please make sure to identify them correctly!

**3-Way switch option 1****⚠ IMPORTANT**

- 1) **Neutral required.** If the switch box do not have a Neutral, please stop! Connect the **white wire to neutral terminal** (use a white jump wire form the package or the second hole at the terminal to connect.)
- 2) Insert the Line wire to Line terminal and Load wire to Load terminal. **LOAD and LINE Can't be swapped**, please make sure to identify them correctly!
- 3) Install the smart switch in the switch box which directly connects to the power **Line, Load and Neutral**.
- 4) Only work with **regular 3-way on/off** for 2 locations control. It can only be connected with regular 3-way on/off switch, **don't use a smart switch or a dimmer switch! Couldn't work with an add-on switch!**



