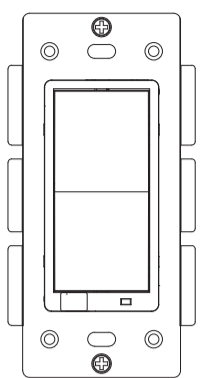


ZOOZ
bright ideas

S2 DIMMER SWITCH
ZEN27 VER. 2.0



www.getzooz.com
ask@getzooz.com



FIRMWARE VERSION 2.01

FEATURES

- Manual or Z-Wave on/off and brightness control
- **Simple Direct 3-Way:** connect with existing on/off switches in 3-way, 4-way, and 5-way set-ups, no add-on needed (neutral wire required)
- Fully adjustable ramp rate for just the right on/off speed
- Double tap to full brightness feature + **NEW: optional scene control**
- Remembers and restores on/off status after power failure
- Built-in Z-Wave Plus signal repeater to extend network range
- Extended compatibility with LED bulbs, no more flickering!
- S2 security protocol and the latest 500 Z-Wave chip
- Customizable LED indicator and air-gap switch for added safety

SPECIFICATIONS

- Model Number: ZEN27 VER. 2.0
- Z-Wave Signal Frequency: 908.42 MHz
- Power: 120 VAC, 60 Hz
- **Maximum Load:** 100 W LED/CFL, 300 W incandescent (100 W with both sides of heat sink tabs off); **DON'T use with fans or tube lights**
- Range: Up to 100 feet line of sight
- Operating Temperature: 32-104° F (0-40° C)
- Installation and Use: Indoor only

CAUTION

This is an electrical device - please use caution when installing and operating the dimmer. Remote control of appliances may result in unintentional or automated activation of power. Do not use this Z-Wave device to control electric heaters or other appliances which produce the risk of fire, burns, or electrical shock when unattended. To reduce risk of overheating and possible damage to other equipment, do not install this unit to control a receptacle; a motor-operated appliance; a fluorescent lighting fixture; or a transformer-supplied fixture.

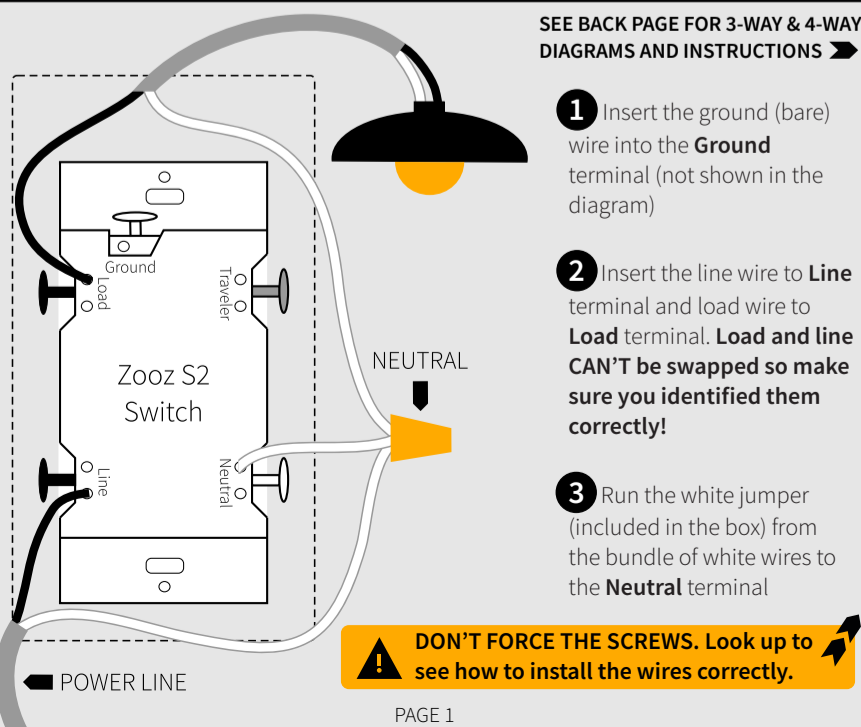
BEFORE YOU INSTALL

This switch is intended for installation in accordance with the National Electric Code and local regulations. It is recommended that a licensed electrician perform this installation.

WIRING: READ IT!

- CHECK THE LOAD:** lights only (100W for LED's, 300W for incandescent with tabs ON), DON'T CONNECT THIS SWITCH TO FANS OR TUBE BULBS
 - POWER OFF:** turn the circuit power off in the breaker panel before you start. If installing in a multi-switch box with multiple circuits, turn power off at all of the circuits.
 - CHECK THE WIRES:** mark load (most often black), line (most often black), neutral (most often white), and ground (most often bare). 14AWG wires only! **Don't rely exclusively on your multimeter to identify the wires!**
- Not sure what you're seeing?
We'll help: support.getzooz.com
- REMOVE THE OLD SWITCH:** disconnect the wires and label them.
 - CONNECT THE Z-WAVE SWITCH:** follow all installation steps carefully. Wire the switch EXACTLY like in the diagram.

ZEN27 WIRING DIAGRAM FOR SINGLE POLE INSTALLATION



- UNSCREW:** carefully turn the screw counter clockwise to make space for the wire. DO NOT unscrew completely.
 - PRESS DOWN:** once it's loose, press the screw down with your finger so it catches the thread.
 - INSERT WIRE:** make sure the wire is perfectly straight, then insert it into the terminal while holding the screw down. DO NOT wrap wires around the terminal screws!
 - TIGHTEN:** turn the screw clockwise to tighten the wire. DO NOT OVERTIGHTEN!
- STRIP WIRE AT 1/2-5/8"

COMPLETE INSTALLATION

Secure your Z-Wave switch in the box with mounting screws, handling the wires with care. For **multi-gang-box installations**, you may need to break the side tabs off with pliers to fit the switch next to the neighboring switches. Install the wall plate and restore power to the circuit.

Without the heatsink tabs, the switch can't control more than 100 W of incandescent / 50 W of LED bulbs.

TEST THE SWITCH

The LED indicator should light up as soon as you turn the power back on if the switch (light) is OFF. Tap the upper paddle for ON and lower paddle for OFF. **If the test fails, please check that:**

- power is fully restored to the circuit
- wiring matches the instructions **exactly**
- the type of load is approved and within the specs of this switch

WARNING

- This product should be installed indoors upon completion of any building renovations.
- Prior to installation, the device should be stored in a dry, dust-and-mold-proof place.
- Do not install the switch in a place with direct sun exposure, high temperature, or humidity.
- Keep away from chemicals, water, and dust.
- Ensure the device is never close to any heat source or open flame to prevent fire.
- Ensure the device is connected to an electric power source that does not exceed the maximum load power.
- No part of the device may be replaced or repaired by the user.

Z-WAVE CONTROL

- ADD DEVICE** to your hub
Initiate inclusion (pairing) in the app (or web interface). Not sure how? Get step-by-step instructions for adding the switch to **SmartThings, Vera, Wink** and other hubs here: www.support.getzooz.com
- Finalize inclusion at the switch. **TAP 3 TIMES QUICKLY**
The LED indicator will blink to signal communication and remain on for 2 seconds to confirm inclusion.

NEED SOME HELP? ask@getzooz.com

TROUBLESHOOTING

- The switch won't add to your system? Try this:**
- Initiate **EXCLUSION** and tap the lower paddle 3 times quickly.
 - Tap the upper paddle **4-5 times quickly** when adding it.
 - Bring the gateway controller (hub) **closer** to the switch, it may be out of range.
 - Get troubleshooting tips for your hub at **www.support.getzooz.com**

EXCLUSION (REMOVING / UNPAIRING DEVICE)

- Bring your Z-Wave gateway (hub) close to the switch if possible
- Put the Z-Wave hub into **exclusion mode** (not sure how to do that? ask@getzooz.com)
- Tap the **lower paddle** on the switch **3 times quickly**
- Your hub will confirm exclusion and the device will disappear from your controller's device list

FACTORY RESET

If your primary controller is missing or inoperable, you may need to reset the device to factory settings. To complete the reset process manually, **tap-tap-tap'n'hold the upper paddle** for at least 10 seconds. The LED indicator will flash to confirm successful reset.
NOTE: All previously recorded activity and custom settings will be erased from the device's memory.



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 product features the latest Security 2 (S2) framework to remove smart home network hacking risks. This device is equipped with a unique authentication code for trusted wireless communication. **This is an ETL certified device.** ETL, just like UL, is a Nationally Recognized Testing Laboratory. The ETL mark is proof of product compliance with North American safety standards.

Please refer to your controller's user guide for advanced programming instructions as they are a little different for every software. **Not sure where to start? Go to www.support.getzooz.com for detailed instructions on how to change the settings on SmartThings, Vera, and more.** Or just email us: ask@getzooz.com

ASSOCIATION

This dimmer switch supports Group 1 with up to 1 devices for lifeline communication and Group 2 with up to 5 devices. This device will send BASIC REPORT to Group 1 and BASIC SET to group 2 when operated manually.

CUSTOMIZE YOUR SWITCH

Paddle Control
Parameter 1: Choose if you want the upper paddle to turn the light on or turn the light off when tapped
Values: 0 - Upper paddle turns the light on, lower paddle turns it off (default); 1 - Upper paddle turns the light off, lower paddle turns it on; 2 - Any paddle turns light on/off.
Size: 1 byte dec.

Parameter 11: Set the maximum brightness level (in %) for your dimmer. You won't be able to add brightness to the light beyond the set value. Note: if Parameter 12 is set to value 0, Parameter 11 is automatically disabled.
Values: 1 - 99 (%). Default: 99.
Size: 1 byte dec.

LED Indicator Control
Parameter 2: Choose if you want the LED indicator to turn on when the switch (light) is on or off, or if you want it to remain on or off at all times
Values: 0 - LED indicator is on when switch is off, LED indicator is off when switch is on (default); 1 - LED indicator is on when switch is on, LED indicator is off when switch is off; 2 - LED indicator is always OFF; 3 - LED indicator is always ON
Size: 1 byte dec. **OR:**

Double Tap Function
Parameter 12: Choose if you want the dimmer to turn on to full brightness or custom brightness level after you double-tap the upper paddle.
Values: 0 - the light will turn on to full brightness with double tap (default). 1 - the light will turn on to the maximum brightness level set in Parameter 11 with double tap.
Size: 1 byte dec.

6 x TAP PADDLE to change LED mode

Auto Turn-Off Timer
Parameter 3: Use this parameter to enable or disable the auto turn-off timer function
Values: 0 - timer disabled (default); 1 - timer enabled.
Size: 1 byte dec.

Parameter 14: Enable or disable the double-tap function and assign brightness level to single tap.
Values: 0 - double tap to full / maximum brightness level enabled (default). 1 - double tap to full / maximum brightness level disabled, single tap turns light on to last brightness level. 2 - double tap to full / maximum brightness level disabled, single tap turns light on to full / maximum brightness level.
Size: 1 byte dec.

Parameter 4: Use this parameter to set the time after which you want the switch to automatically turn off once it has been turned on. The number entered as value corresponds to the number of minutes.
Values: 1 - 65535 (minutes). Default: 60.
Size: 4 byte dec.

Auto Turn-On Timer
Parameter 5: Use this parameter to enable or disable the auto turn-on timer function
Values: 0 - timer disabled (default); 1 - timer enabled.
Size: 1 byte dec.

Enable/Disable Paddle Control
Parameter 15: Enable or disable local on/off control. If enabled, you'll only be able to control the connected light via Z-Wave. Scenes and other functionality will still be available through paddles.
Values: 0 - local control disabled. 1 - local control enabled (default).
Size: 1 byte dec. **OR:**

10 x TAP PADDLE to disable local control

SCENE CONTROL

You can trigger up to 10 scenes or control up to 10 independent Z-Wave devices in your network using this switch. Just enable the setting in Parameter 13 and make sure your hub supports scene control. You can assign scenes to 1-tap, 2-tap, 3-tap, 4-tap, and 5-tap for any of the paddles.

Enable/Disable Scene Control
Parameter 13: Enable or disable scene control functionality for quick double tap triggers.
Values: 0 - scene control disabled (default). 1 - scene control enabled.
Size: 1 byte dec.

Find out how to make scene control work on your hub at www.support.getzooz.com

On Off Status After Power Failure
Parameter 8: Set the on off status for the switch after power failure.
Values: 0 - forced to OFF (regardless of state prior to power outage); 1 - forced to ON (regardless of state prior to power outage); 2 - remembers and restores on/off status after power failure (default)
Size: 1 byte dec.

Ramp Rate Control
Parameter 9: Adjust the ramp rate for your dimmer (fade-in / fade-out effect for on / off operation). Values correspond to the number of seconds it take for the dimmer to reach full brightness or turn off when operated manually.
Values: 1 - 99 (seconds). Default: 1.
Size: 1 byte dec.

Minimum and Maximum Brightness
Parameter 10: Set the minimum brightness level (in %) for your dimmer. You won't be able to dim the light below the set value.
Values: 1 - 99 (%). Default: 1.

This device requires the following **command classes** to be supported and recognized by your Z-Wave controller: COMMAND_CLASS_ZWAVEPLUS_INFO, COMMAND_CLASS_SWITCH_MULTILEVEL, COMMAND_CLASS_ASSOCIATION, COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION, COMMAND_CLASS_ASSOCIATION_GRP_INFO, COMMAND_CLASS_TRANSPORT_SERVICE, COMMAND_CLASS_VERSION, COMMAND_CLASS_MANUFACTURER_SPECIFIC, COMMAND_CLASS_DEVICE_RESET_LOCALLY, COMMAND_CLASS_POWERLEVEL, COMMAND_CLASS_CONFIGURATION, COMMAND_CLASS_CENTRAL_SCENE, COMMAND_CLASS_SECURITY_2, COMMAND_CLASS_SUPERVISION, COMMAND_CLASS_FIRMWARE_UPDATE_MD

WARRANTY

This product is covered under a 12-month limited warranty. To read the full warranty policy or file a warranty claim, please go to www.getzooz.com/warranty

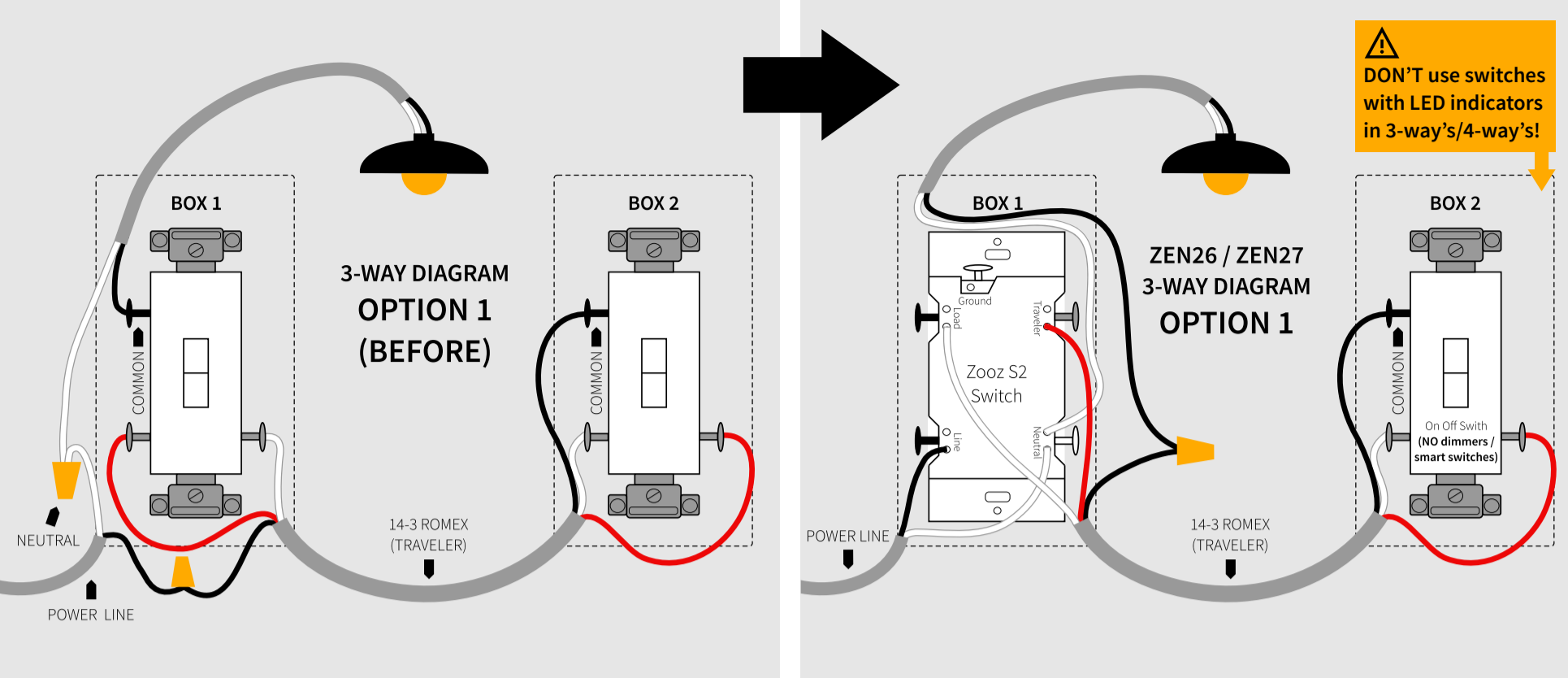
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1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.
This equipment has been tested and found to comply with the limits for a Class B digital 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 according to instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in any given installation. If this equipment causes harmful interference to radio or television reception, the user may try to correct the interference by taking one or more of the following measures:
- Reorient or relocate receiving antenna
- Increase the separation between equipment and receiver
- Connect equipment into a separate outlet or circuit from receiver
- Consult the dealer or an experienced radio/TV technician for additional assistance

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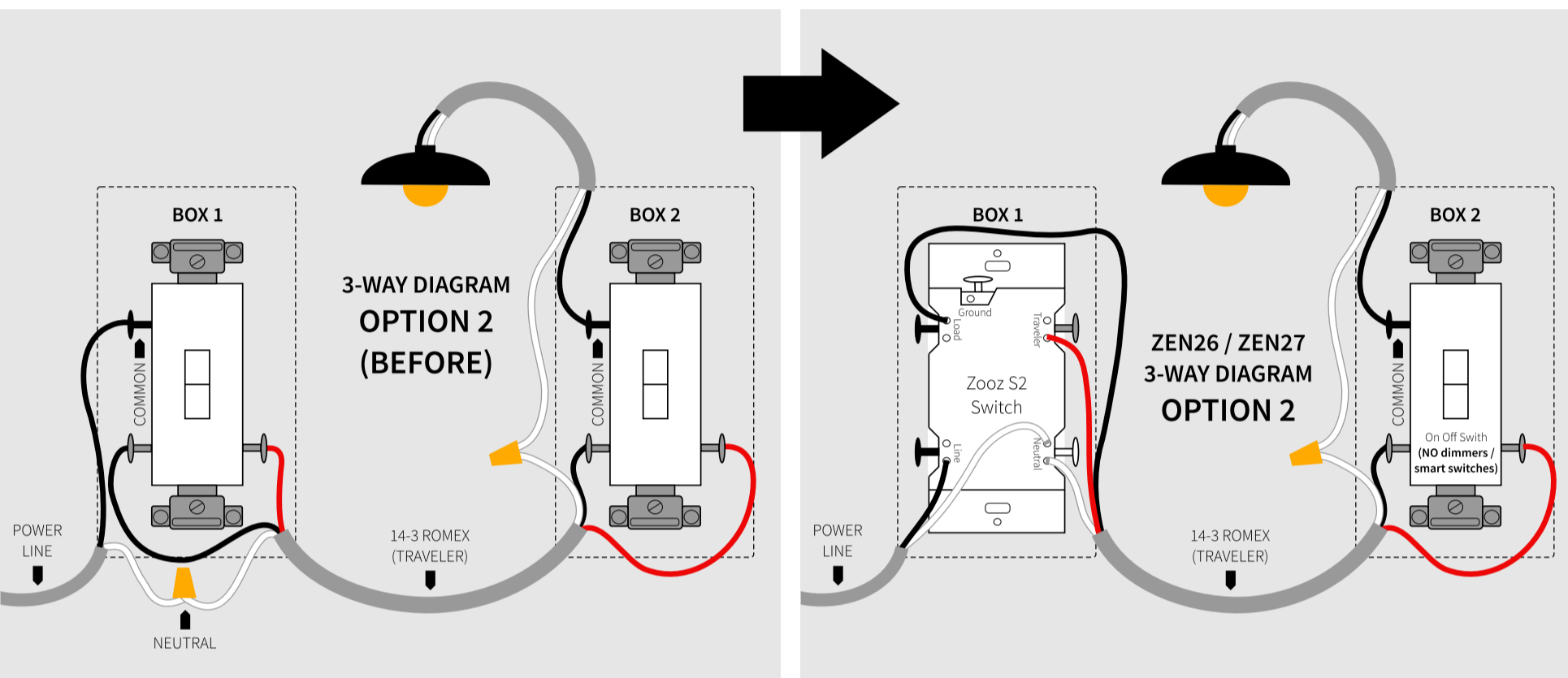
ZEN27 WIRING DIAGRAMS FOR THE MOST COMMON 3-WAY INSTALLATIONS

For more diagrams or to request custom instructions go to support.getzooz.com



STOP! Wire and screw position, as well as color codes are for illustration only. You should not follow the colors and positioning in the illustration blindly. Always identify all wires prior to installing Zooz switches and make sure you can match the diagrams to your set-up exactly. Don't experiment or attempt a "trial-and-error" installation for your own safety.

NOTE! If you are not comfortable identifying the wiring and completing the installation, please consult a licensed electrician. Make sure you have identified all wiring correctly before connecting the switch. If your wiring doesn't match any of the below diagrams, contact our support: ask@getzooz.com

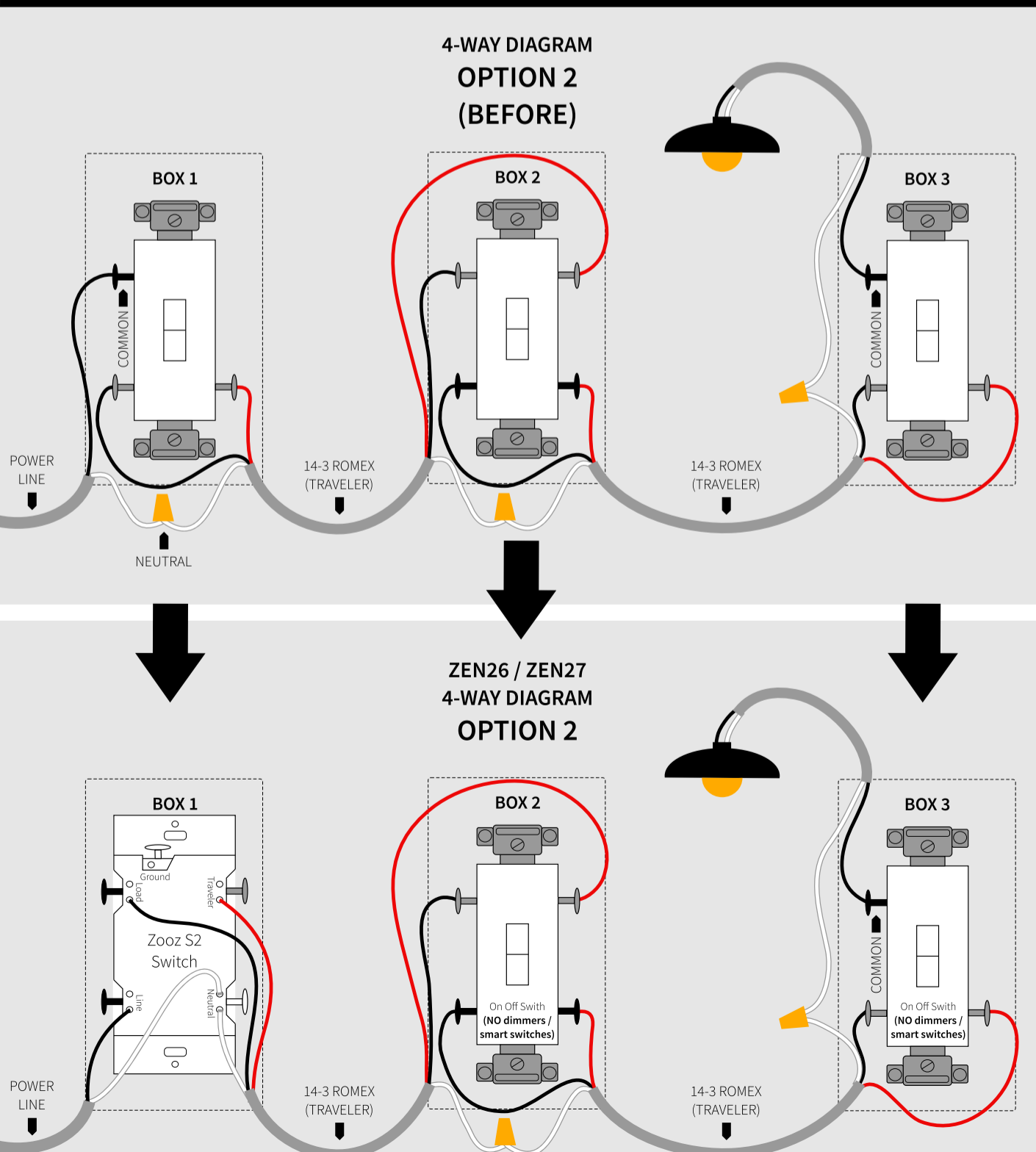


⚠ ON/OFF SWITCHES ONLY Do not connect Zooz Z-Wave switches to an existing 3-way dimmer or an electronic add-on switch. Zooz dimmers can only be wired with mechanical on/off switches in a 3-way or 4-way setting! To simplify the diagrams, we did not include connections for the ground wire. Remember that all Zooz switches need to be wired according to the electrical code, with ground wire connected to the ground terminal.

Always install your Zooz S2 switch in the box with direct connection to power line. Diagrams and instructions in this manual are for ZEN26 and ZEN27 models ONLY!

ZEN27 WIRING DIAGRAM FOR THE MOST COMMON 4-WAY INSTALLATION

For more diagrams or to request custom instructions go to support.getzooz.com



MANUAL CONTROL

1 TAP: turns the light on to the last brightness level. It takes around a second for the dimmer to reach full brightness. See advanced settings to change the ramp rate.
PRESS AND HOLD: add brightness.

2 x TAP: goes from off to full (or custom) brightness.
TAP TAP TAP'N'HOLD: factory reset

1 TAP: turns the light off
PRESS AND HOLD: reduce brightness.
2 x TAP: trigger Scene 1 (if enabled in Parameter 13).
4 x TAP: trigger Scene 2 (if enabled in Parameter 13).

Pull the **AIR-GAP SWITCH** out when changing bulbs to cut off power to the switch for your safety and shock prevention.

NEED HELP? If you're having trouble reading the diagrams or don't see your wiring set-up here, get in touch! We have **more 3-way, 4-way, and 5-way diagrams** and instructions. There are many ways to wire multi-point control set-ups so unless you can match your wiring to the diagrams here, please don't attempt the installation for your own safety.

www.support.getzooz.com
ask@getzooz.com

The Simple Direct 3-Way/4-Way implemented in this device is a unique Z-Wave multi-point control solution covered under U.S. Patent 10,219,353 B1.