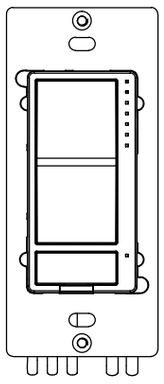
USER MANUAL

zooz™
bright ideas

DOUBLE SWITCH
ZEN30



www.getzooz.com
ask@getzooz.com

FIRMWARE VERSION 1.03

FEATURES

- Manual or Z-Wave control of 2 separate loads (dimmer + relay)
- Perfect replacement for a fan / light combo (neutral wire required)
- Scene control for multi-tap scenarios on select hubs
- Quick and easy pigtail wire installation (single pole only)
- 4-color LED indicator and air-gap switch for added safety
- Packed with advanced dimming features including ramp rate control, custom on brightness level, and double tap to full brightness
- Remembers and restores on/off status after power failure
- Built-in Z-Wave Plus signal repeater to extend network range
- S2 security protocol and 500 Z-Wave chip

SPECIFICATIONS

- Model Number: ZEN30
- Z-Wave Signal Frequency: 908.42 MHz
- Power: 120 VAC, 60 Hz
- **Dimmer Max Load:** 75 W LED, 250 W incandescent; **DON'T use with tube lights, DC powered fixtures, or chandeliers**
- **Relay Max Load:** 15 A (1/2 HP)
- 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 switch. 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 the **dimmer** part 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!

1. CHECK THE LOAD: Lights only for dimmer (75W for LED's, 250W for incandescent), 15 A resistive load / 1/2 HP motor for relay
2. 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.
3. CHECK THE WIRES: Mark load 1 (most often black), load 2 (most often black), line (most often black), neutral (most often white), and ground (most often bare). 14 AWG wires only! **Don't rely exclusively on color code or your multimeter to identify the wires!**

NOT SURE WHAT YOU'RE SEEING?
WE'LL HELP: **SUPPORT.GETZOOZ.COM**

4. REMOVE THE OLD SWITCH: Disconnect the wires and label them.
5. CONNECT THE Z-WAVE SWITCH: Use electrical pliers and the included wire nuts to connect pigtail wires with line, load, and neutral EXACTLY like in the appropriate diagram. **Always connect ground!**

WIRING TIPS

TAKE PICTURES

Before you disconnect any wires, document your set-up and send us images of your existing installation so we can help if needed.

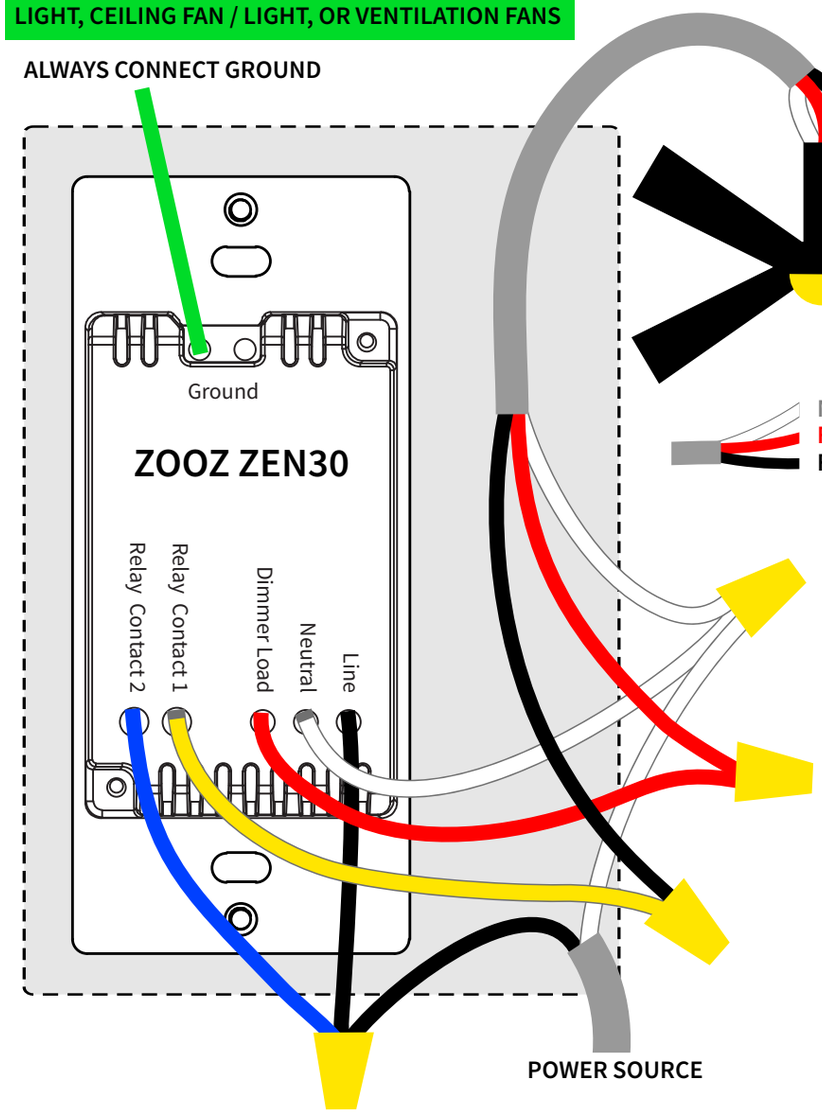
GATHER YOUR TOOLS

Use appropriate electrical tools when cutting, prepping, and stripping electrical wires. If you don't have the necessary tools to perform the installation or are not sure which tools to use or how, please hire an electrician to complete the installation for you.

SAFETY FIRST

Follow the National Electrical Code and your local safety regulations when performing the installation, including (but not limited to), separating low voltage and high voltage wires, grounding the switches, and capping any unused or exposed wires.

USE THIS DIAGRAM FOR BATHROOM EXHAUST FAN / LIGHT, CEILING FAN / LIGHT, OR VENTILATION FANS



ZOOZ ZEN30 FAN/LIGHT WIRING DIAGRAM

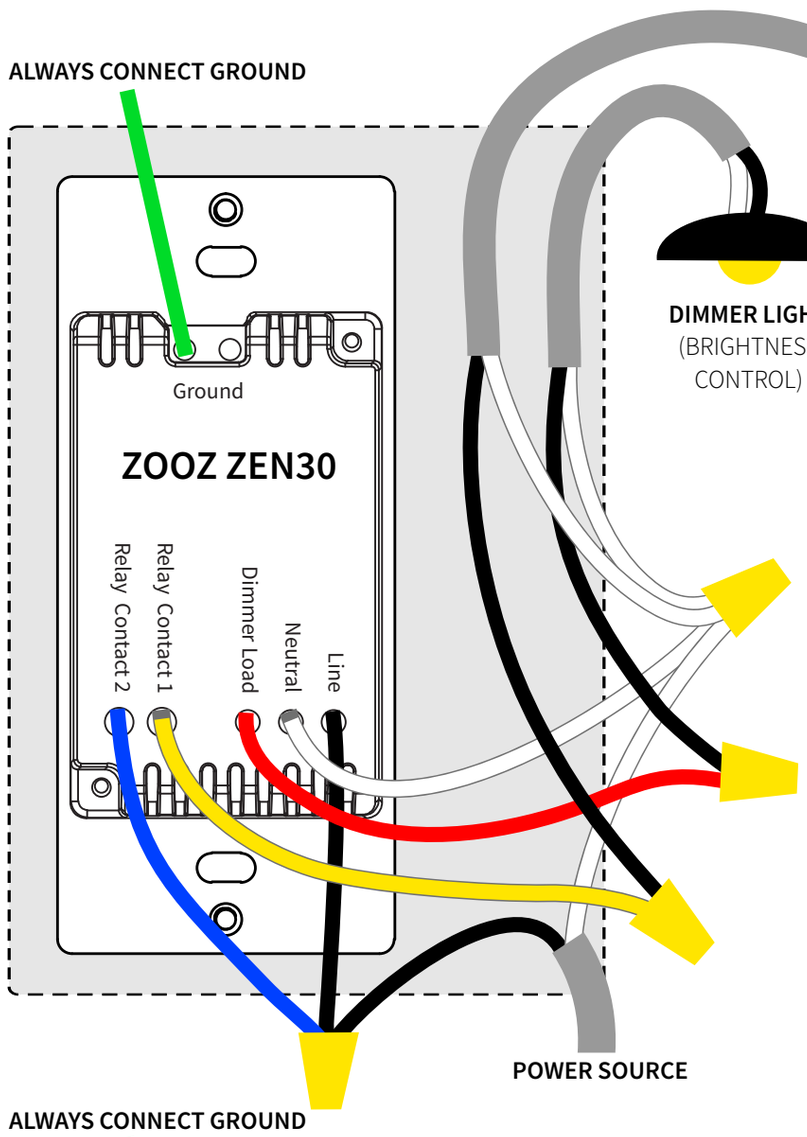
1. POWER OFF:
Cut power to circuits for all switches in the box.
2. PREP WIRES:
Strip at 1/2"-5/8" and straighten.
3. CONNECT:
Use electrical pliers to splice wires and wire nuts to cap them. Add electrical tape if needed. **Don't leave bare wires out.**
4. ARRANGE:
Carefully arrange wires in the box to make room for the switch.
5. COMPLETE:
Screw the switch to the electrical box and install the wall plate. Restore power and test the switch.

NEED HELP? Don't experiment!

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

STOP!

Wire colors and romex layout 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.



ZOOZ ZEN30 2 LOAD WIRING DIAGRAM

1. POWER OFF:
Cut power to circuits for all switches in the box.
2. PREP WIRES:
Strip at 1/2"-5/8" and straighten.
3. CONNECT:
Use electrical pliers to splice wires and wire nuts to cap them. Add electrical tape if needed. **Don't leave bare wires out.**
4. ARRANGE:
Carefully arrange wires in the box to make room for the switch.
5. COMPLETE:
Screw the switch to the electrical box and install the wall plate. Restore power and test the switch.

WHAT IS THIS?

RELAY CONTACT 2:
Unless you're using the relay part of the Double Switch in a dry contact installation, always connect the blue Relay Contact 2 pigtail to the power source (line). Ask us about **dry contact** applications if you're not sure what we mean!

WHAT ABOUT 3-WAY?

THE DOUBLE SWITCH IS SINGLE POLE ONLY BUT:
You can easily create a virtual 3-way or 4-way using the Double Switch and any other Zooz Z-Wave switch/dimmer. The benefits include the ability to dim and trigger scenes from all locations. Get in touch for detailed wiring and programming instructions!

ZOOZ ZEN30 NO LOAD WIRING DIAGRAM

1. POWER OFF:
Cut power to circuits for all switches in the box.
2. PREP WIRES:
Strip at 1/2"-5/8" and straighten.
3. CONNECT:
Use electrical pliers to splice wires and wire nuts to cap them. Add electrical tape if needed. **Don't leave bare wires out.**
4. ARRANGE:
Carefully arrange wires in the box to make room for the switch.
5. COMPLETE:
Screw the switch to the electrical box and install the wall plate. Restore power and test the switch.

USE WITH SMART BULBS!

DON'T CONNECT the switch directly to your smart bulb. Ask us for **custom wiring and programming instructions** for on/off and brightness control of your smart bulb!

DON'T SEE YOUR SET-UP?

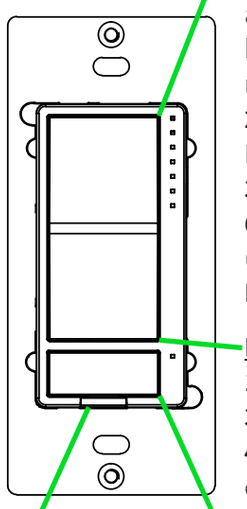
Request custom instructions:
ask@getzooz.com

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 of the dimmer 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

MANUAL CONTROL



UPPER PADDLE

1 TAP: turn the light on to the last brightness level (or custom brightness: see Parameter 23). It takes around a second for the dimmer to reach full brightness. See Parameters 13 and 22 to change the ramp rate.
2 x TAP: go to full (or custom) brightness (see Parameters 17 and 18 to customize).
3 x TAP: inclusion mode active for 30 seconds.
6 x TAP: change LED indicator mode for dimmer (see Parameter 1 for details).
PRESS AND HOLD: add brightness.

LOWER PADDLE

1 TAP: turn the light off.
3 x TAP: exclusion mode active for 30 seconds.
4 x TAP'N'HOLD for 10 seconds: disable manual control for the dimmer paddles.
PRESS AND HOLD: reduce brightness.

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

RELAY BUTTON

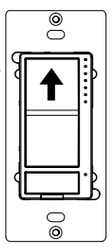
1 TAP: turn the load on or off (change state).
6 x TAP: change LED indicator mode for relay (see Parameter 2 for details).
4 x TAP'N'HOLD for 10 seconds: disable manual control for the relay button.

Z-WAVE CONTROL

1. 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

2. Finalize inclusion at the switch. **TAP 3 TIMES QUICKLY**
The LED indicators 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:

1. Initiate **EXCLUSION** and tap the **lower** paddle 3 times quickly.
2. Tap the upper paddle **4-5 times quickly** when adding it.
3. Bring the gateway controller (hub) **closer** to the switch, it may be out of range.
4. Get troubleshooting tips for your hub at **www.support.getzooz.com**

EXCLUSION (REMOVING / UNPAIRING DEVICE)

1. Bring your Z-Wave gateway (hub) close to the switch if possible
2. Put the Z-Wave hub into **exclusion mode** (not sure how to do that? ask@getzooz.com)
3. Tap the **lower paddle** on the dimmer **3 times quickly**
4. 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, **press and hold the lower paddle** on the dimmer for **at least 15 seconds** until the LED indicators start flashing, then **release.** Then immediately **press and hold the upper paddle** on the dimmer for **at least 15 seconds**. The LED indicators will flash again to confirm successful reset.

NOTE: All previously recorded activity and custom settings will be erased from the device's memory.

⚠ 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.

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.

ADVANCED SETTINGS

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

The Double Switch supports Group 1 with up to 1 devices for lifeline communication. The dimmer supports Group 2 with up to 5 devices and will send BASIC_SET report to other devices in Group 2 to communicate status changes. The relay supports Group 3 with up to 5 devices and will send BASIC_SET report to other devices in Group 3 if its status changes.

CUSTOMIZE YOUR SWITCH

LED Indicator Mode for Dimmer
Parameter 1: 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. This setting is for the top status indicator only.
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 and LED's don't indicate brightness level during dimming; 3 – LED indicator is always on.
Size: 1 byte dec. **OR:**

6 x TAP UPPER PADDLE to change the LED mode.

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

6 x TAP RELAY BUTTON to change the LED mode.

LED Indicator Color for Dimmer
Parameter 3: Choose the color of the LED indicators for the dimmer.
Values: 0 – white (default); 1 – blue; 2 – green; 3 – red.
Size: 1 byte dec.

LED Indicator Color for Relay
Parameter 4: Choose the color of the LED indicator for the relay.
Values: 0 – white (default); 1 – blue; 2 – green; 3 – red.
Size: 1 byte dec.

LED Indicator Brightness for Dimmer
Parameter 5: Choose the LED indicators' brightness level for the dimmer.
Values: 0 – bright (100%); 1 – medium (60%); 2 – low (30%). Default: 1.
Size: 1 byte dec.

LED Indicator Brightness for Relay
Parameter 6: Choose the LED indicators' brightness level for the relay.
Values: 0 – bright (100%); 1 – medium (60%); 2 – low (30%). Default: 1.
Size: 1 byte dec.

LED Indicator Mode for Scene Control
Parameter 7: Choose if you want the LED indicators next to the dimmer to light up when a scene is selected. You'll see 1 to 5 LEDs light up for 1 – 5 tap triggers and 6 LEDs light up for the press-and-hold trigger of any paddle / button used.
Values: 0 – LEDs enabled to indicate scene triggers; 1 – LEDs disabled to indicate scene triggers (default).
Size: 1 byte dec.

Auto Turn-Off Timer for Dimmer
Parameter 8: Use this parameter to set the time after which you want the dimmer to automatically turn off once it has been turned on. The number entered as value corresponds to the number of minutes.
Values: 0 – timer disabled (default); 1 – 65535 (minutes).
Size: 4 byte dec.

Auto Turn-On Timer for Dimmer
Parameter 9: Use this parameter to set the time after which you want the dimmer to automatically turn on once it has been turned off. The number entered as value corresponds to the number of minutes.
Values: 0 – timer disabled (default); 1 – 65535 (minutes).
Size: 4 byte dec.

Auto Turn-Off Timer for Relay
Parameter 10: Use this parameter to set the time after which you want the relay to automatically turn off once it has been turned on. The number entered as value corresponds to the number of minutes.
Values: 0 – timer disabled (default); 1 – 65535 (minutes).
Size: 4 byte dec.

Auto Turn-On Timer for Relay
Parameter 11: Use this parameter to set the time after which you want the relay to automatically turn on once it has been turned off. The number entered as value corresponds to the number of minutes.
Values: 0 – timer disabled (default); 1 – 65535 (minutes).
Size: 4 byte dec.

On Off Status After Power Failure
Parameter 12: Set the on/off status of the device after power failure.
Values: 0 – dimmer and relay forced to off (regardless of state prior to power outage);
1 – dimmer forced to off, relay forced to on;
2 – dimmer forced to on, relay forced to off;
3 – remembers and restores on/off status for dimmer and relay after power failure (default);
4 – remembers and restores on/off status for dimmer, relay forced to on;
5 – remembers and restores on/off status for dimmer, relay forced to off;
6 – dimmer forced to on, remembers and restores on/off status for relay;
7 – dimmer forced to off, remembers and restores on/off status for relay;
8 – dimmer and relay forced to on.
Size: 1 byte dec.

Ramp Rate Control for Dimmer
Parameter 13: Adjust the ramp rate for the dimmer (fade-in / fade-out effect for on/off operation). Values correspond to the number of seconds it takes for the dimmer to reach full brightness or turn off when operated manually.
Values: 0 – instant on/off; 1 – 99 (seconds). Default: 1.
Size: 1 byte dec.

Minimum and Maximum Brightness
Parameter 14: Set the minimum brightness level (in %) for the dimmer. You won't be able to dim the light below the set value.
Values: 1 – 99 (%). Default: 1.
Size: 1 byte dec.

Parameter 15: Set the maximum brightness level (in %) for the dimmer. You won't be able to add brightness to the light beyond the set value.
Values: 1 – 99 (%). Default: 99.
Size: 1 byte dec.

Double Tap Function for Dimmer
Parameter 17: 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 15 with double tap.
Size: 1 byte dec.

Parameter 18: 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 (or custom value set in Parameter 23). 2 – double tap to full / maximum brightness level disabled, single tap turns light on to full brightness level.
Size: 1 byte dec.

Enable/Disable Load Control for Dimmer (Smart Bulb Setting)
Parameter 19: Enable or disable direct manual and Z-Wave control of the connected light. Works great for smart bulb control. If disabled, the dimmer will no longer control the connected bulb directly but will still send on/off and brightness reports to the hub so you can use them to create automations for your smart bulbs or other switches. Scenes and other functionality will still be available through paddles.
Values: 0 – manual control disabled.
1 – manual control enabled (default).
2 – manual and Z-Wave control disabled.
Size: 1 byte dec. **OR:**

4 TAP'N'HOLD LOWER PADDLE to change the mode.

Enable/Disable Load Control for Relay (Remote Control Setting)
Parameter 20: Enable or disable direct manual and Z-Wave control of the connected load. Works great for smart bulbs or any type of remote / scene control. If disabled, the relay will no longer control the connected load directly but will still send on/off reports to the hub so you can use them to create automations for your smart bulbs or other devices. Scenes and other functionality will still be available through the button.
Values: 0 – manual control disabled.
1 – manual control enabled (default).
2 – manual and Z-Wave control disabled.
Size: 1 byte dec. **OR:**

4 TAP'N'HOLD THE BUTTON to change the mode.

Manual Dimming Speed
Parameter 21: Choose how many seconds it takes for the dimmer to go from 0% to 100% brightness when pressing and holding the paddle. Increase the value to decrease the dimming speed.
Values: 1 – 99 (seconds). Default: 4.
Size: 1 byte dec.

Z-Wave Ramp Rate for Dimmer
Parameter 22: Choose if you would like to match the Z-Wave on/off ramp rate with the manual ramp rate or set it separately in your hub.
Values: 0 – Z-Wave on/off ramp rate matches the manual ramp rate set in Parameter 13. 1 – Z-Wave on/off ramp rate is set separately through its command class in the hub.
Default: 0.
Size: 1 byte dec.

Default Brightness Level On for Dimmer
Parameter 23: Set custom brightness level (in %) for the dimmer to come on to at single tap.
Values: 0 – last brightness level (default); 1 – 99 (%).
Size: 1 byte dec.

SCENE CONTROL

You can trigger up to 18 scenes or control up to 18 independent Z-Wave devices in your network using the Double Switch.
You can assign scenes to 1-tap, 2-tap, 3-tap, 4-tap, 5-tap, or press-and-hold for any of the paddles and the relay button. Your hub needs to support central scene implementation for this feature to be available.

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

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_SWITCH_BINARY
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_MULTI_CHANNEL
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

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. STORE INDOORS WHEN NOT IN USE. SUITABLE FOR DRY LOCATIONS ONLY. DO NOT IMMERSE IN WATER. NOT FOR USE WHERE DIRECTLY EXPOSED TO WATER.
This device complies with Part 15 of the FCC Rules.
Operation is subject to the following conditions:
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