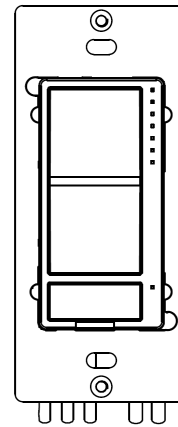


ON/OFF SWITCH 800 User Manual**FCC**

Federal Communications Commission (FCC) Statement FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. 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.

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: 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. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

WARNING

RISK OF FIRE

RISK OF ELECTRICAL SHOCK

RISK OF BURNS

CONTROLLING APPLIANCES:

EXERCISE EXTREME CAUTION WHEN USING Z-Wave™ DEVICES TO CONTROL APPLIANCES. OPERATION OF THE Z-Wave™ DEVICE MAY BE IN A DIFFERENT ROOM THAN THE CONTROLLED APPLIANCE, ALSO ANUNINTENTIONAL ACTIVATION MAY OCCUR IF THE WRONG BUTTON ON THE REMOTE IS PRESSED. Z-Wave™ DEVICES MAY AUTOMATICALLY BE POWERED ON DUE TO TIMED EVENT PROGRAMMING. DEPENDING UPON THE APPLIANCE, THESE UNATTENDED OR UNINTENTIONAL OPERATIONS COULD POSSIBLY RESULT IN A HAZARDOUS CONDITION. FOR THESE REASONS, WE RECOMMEND DO NOT RETURN THIS PRODUCT TO THE STORE THE FOLLOWING: DO NOT USE Z-Wave™ DEVICES TO CONTROL ELECTRIC HEATERS OR ANY OTHER APPLIANCES WHICH MAY PRESENT A HAZARDOUS CONDITION DUE TO UNATTENDED OR UNINTENTIONAL OR AUTOMATIC POWER ON CONTROL.

Specifications

ITEM	INFORMATION
Model	ZEN30 800LR
Power Supply	AC 120V 60HZ
Signal(Frequency)	908.42MHz,912.0MHz,916MHz,920MHz
Long Range	Support
Range	Up to 100 feet line of sight between the Wireless Controller and the closest Z-Wave™ receiver module.
Operating Temperature Range	5-104° F (-10-40° C)

- Specifications subject to change without notice due to continuing product improvement
- Website:www.getzooz.com

Introduction

This product can be operated in any Z-Wave network with other Z-Wave Plus™ certified devices from other manufacturers.

All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.Each module is designed to act as a repeater,which will re-transmit a radio frequency (RF) signal by routing the signal around obstacles and radio dead spots to ensure that the signal is received at its intended destination.

ZEN30 800LR is a security enabled Z-Wave Plus™ device. A security Enabled Z-Wave Plus™ Controller must be used in order to fully utilize the product.

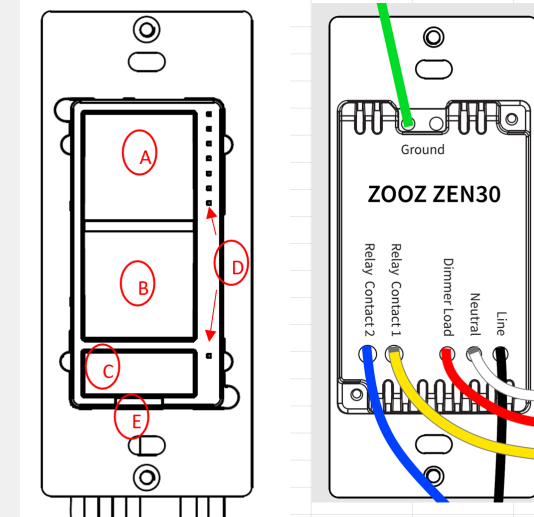
- GENERIC_TYPE: GENERIC_TYPE_SWITCH_MULTILEVEL(0x11)
- SPECIFIC_TYPE: SPECIFIC_TYPE_NOT_USED(0x00)

Key Features

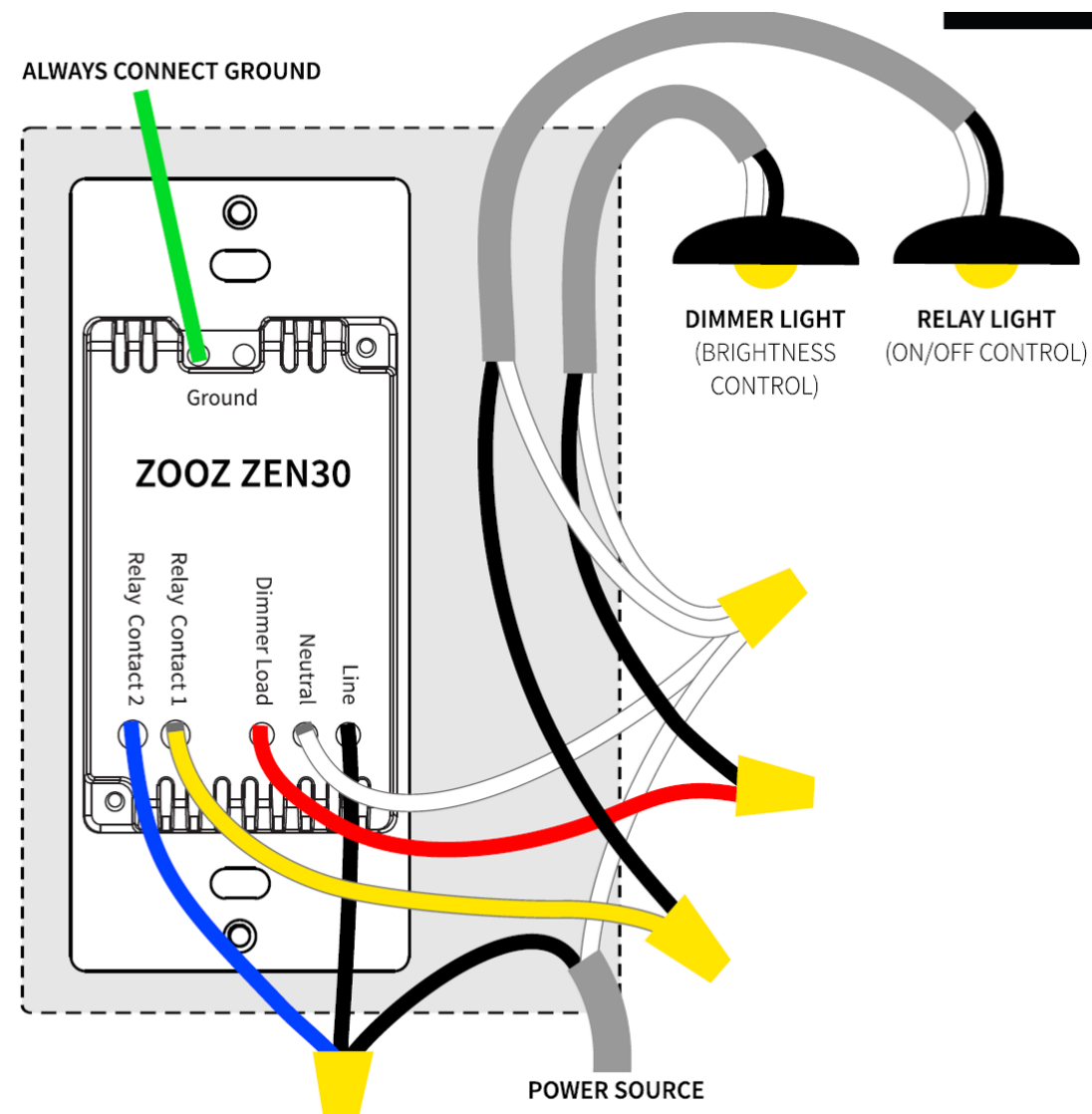
- Remote ON/OFF control via the Z-Wave™ controller
- Manual ON/OFF control with the front panel push button
- Support Association Group and Auto Report switch status
- Support Scenes
- Support Smart Start
- Support Long Range

Product Overview

- A. Upper Paddle for Dimmer
- B. Lower Paddle for Dimmer
- C. Relay On/Off button
- D. Led Indicator
- E. Airgap Switch



Installation Wiring Diagram



Button Function Description

1. Add or Remove the device

- press 3x **Upper** Paddle for Dimmer : Add/Include the device into network.
- press 3x **Lower** Paddle for Dimmer : Remove/Exclude the device from network.

2. Factory Reset

- Press and hold for 15 seconds **Lower** Paddle for Dimmer until all LED's start blinking quickly, then release and within 5 seconds, press and hold the **Upper** Paddle for Dimmer for 15 SECONDS until all LED's blink again for 3 seconds to reset local device

3. Others

- press 1x **Upper** Paddle for Dimmer: turn ON Dimmer Load (to last set brightness level)
- press 1x **Lower** Paddle for Dimmer: turn OFF Dimmer Load
- Hold **Upper** Paddle for Dimmer: Dim up Dimmer Load
- Hold **Lower** Paddle for Dimmer: Dim down Dimmer Load
- press 1x Relay on/off button : turn ON or turn OFF Relay
- press 6x **Upper** Paddle for Dimmer : change LED Indicator Parameter #1.
- press 6x **Relay on/off** button: change LED Indicator Parameter #2.

Adding Your Device To Hub

- The device support two methods of inclusion, When using a Z-Wave Plus™ certified controller choose Network Wide Inclusion or Smart Start.
- Network Wide Inclusion To A Z-Wave™ Network
 - Refer to your primary controller instructions to process the inclusion / exclusion setup procedure.
 - When prompted by your primary controller, click the Upper paddle for dimmer button three times .
- The device is compatible with Smart Start.

Smart Start enabled products can be added into a Z-Wave™ network by scanning the Z-Wave QR Code found on the top of the outlet or the back of the box with a controller providing Smart Start inclusion. No further action is required and the Smart Start product will be added automatically within 10 minutes of being switched on and in the network vicinity.

Z-Wave Long Range device can only support be included via SmartStart.Extract the DSK from end device and paste itinto the DSK Value in PC Controller, make sure theLong Range' option is ticked.

QR Code and DSK

- The QR code are stocked to the side of the case, DSK is included in the QR code.
- The DSK code can be found on the DSK label which is attached on the packaging box.

PACKAGE	DEVICE
	

Command Class

- ROOT

Command Class Name	Version	Required Security Class
Z-Wave Plus Info	V2	none
Security 2	V1	none
Supervision	V1	none
Transport Service	V2	none
Basic	V2	highest granted
Association	V2	highest granted
Association Group Information	V3	highest granted
Multi Channel Association	V3	highest granted
Version	V3	highest granted
Manufacturer Specific	V2	highest granted
Device Reset Locally	V1	highest granted
Power Level	V1	highest granted
Indicator	V3	highest granted

Command Class Name	Version	Required Security Class
Firmware Update Meta Data	V5	highest granted
Configuration	V4	highest granted
Central Scene	V3	highest granted
Binary Switch	V2	highest granted
Multi-Channel	V4	highest granted
Multilevel Switch	V4	highest granted

- Endpoint 1

Command Class Name	Version	Required Security Class
Z-Wave Plus Info	V2	none
Security 2	V1	none
Supervision	V1	none
Basic	V2	highest granted
Association	V2	highest granted
Association Group Information	V3	highest granted
Multi Channel Association	V3	highest granted
Multilevel Switch	V4	highest granted

- Endpoint 2

Command Class Name	Version	Required Security Class
Z-Wave Plus Info	V2	none
Security 2	V1	none
Supervision	V1	none
Basic	V2	highest granted
Association	V2	highest granted
Association Group Information	V3	highest granted
Multi Channel Association	V3	highest granted
Binary Switch	V2	highest granted

Basic Set Mapping

- Basic CC is mapped to Switch Multilevel CC and Binary Switch CC as below:

Basic Set Node	Mapping
ENDPOINT ROOT	Multilevel Switch Set EP1
ENDPOINT 1	Multilevel Switch Set EP1
ENDPOINT 2	Binary Switch Set EP2

Central Scene

Button	Scene Number	Attributes
Upper Paddle for dimmer	1	1x,2x,3x,4x,5x,held down,release
Lower Paddle for dimmer	2	1x,2x,3x,4x,5x,held down,release
Relay ON/OFF Button	3	1x,2x,3x,4x,5x,held down,release

Indicator Command Class

- The indicator (blue color) will flashes according the indicator set command received from HUB.

Indicator ID	Property ID
0x50 (NODE IDENTIFY)	0x03(ON OFF PERIOD)
0x50 (NODE IDENTIFY)	0x04(ON OFF CYCLES)
0x50 (NODE IDENTIFY)	0x05(ONE TIME ON OFF PERIOD)

Association Group

ID	Name	Node Count	Profile	Function
1	Lifeline	5	General: Lifeline	1. Device Reset Locally Notification 2. Indicator Report 3. Switch Binary Report 4. Central Scene Notification 5. Central Scene Configuration report 6. Multilevel switch report

ID	Name	Node Count	Profile	Function
2	Dimmer Basic Set Group	5	Control: Key 1	Mapped to EP1's association group 2
3	MULTILEVEL SET Group	5	Control: Key 1	Mapped to EP1's association group 3
4	Relay Basic Set Group	5	Control: Key 2	Mapped to EP2's association group 2

• ENDPOINT 1

ID	Name	Node Count	Profile	Function
1	Lifeline	5	General: Lifeline	Switch Multilevel Report
2	Dimmer Basic Set Group	5	Control: Key 1	Basic Set Issued by pressed paddle A and B
3	MULTILEVEL SET Group	5	Control: Key 1	Multilevel change start and stop

• ENDPOINT 2

ID	Name	Node Count	Profile	Function
1	Lifeline	5	General: Lifeline	Switch Binary Report
2	Relay Basic Set Group	5	Control: Key 2	Basic Set Issued by pressed paddle C

Configuration Parameters

Number	Name	Information	Format / Size	Read Only	Altering	Advanced	MIN	MAX	Default
1	IndicatorDimmerMode	Led indicator mode for dimmer	1 byte unsigned integer	NO	NO	NO	0	3	0
2	IndicatorRelayMode	Led indicator mode for relay	1 bytes unsigned integer	NO	NO	NO	0	3	0
3	IndicatorDimmerColor	Led indicator color for dimmer	1 bytes unsigned integer	NO	NO	NO	0	3	0
4	IndicatorRelayColor	Led indicator color for relay	1 bytes unsigned integer	NO	NO	NO	0	3	0
5	IndicatorDimmerBrightness	Led indicator brightness for dimmer	1 bytes unsigned integer	NO	NO	NO	0	2	1
6	IndicatorRelayBrightness	Led indicator brightness for relay	1 bytes unsigned integer	NO	NO	NO	0	2	1
7	IndicatorSceneMode	Led indicator mode for scene	1 bytes unsigned integer	NO	NO	NO	0	1	1
8	DimmerAutoTurnOffTimer	Auto turn off timer for dimmer.	4 bytes unsigned integer	NO	NO	NO	0	65535	0
9	DimmerAutoTurnOnTimer	Auto turn on timer for dimmer.	4 bytes unsigned integer	NO	NO	NO	0	65535	0
10	RelayAutoTurnOffTimer	Auto turn off timer for relay.	4 bytes unsigned integer	NO	NO	NO	0	65535	0
11	RelayAutoTurnOnTimer	Auto turn on timer for relay.	4 bytes unsigned integer	NO	NO	NO	0	65535	0
12	PowerRestoreStatus	Restore state after power failure.	1 byte unsigned integer	NO	NO	NO	0	8	3
13	Ramp rate for physical on	Rate for manually turn on.	1 bytes unsigned integer	NO	NO	NO	0	99	0
14	DimmerMinLevel	Multilevel minimum value for dimmer.	1 bytes unsigned integer	NO	NO	NO	0	99	1
15	DimmerMaxLevel	Multilevel maximum value for dimmer.	1 bytes unsigned integer	NO	NO	NO	1	99	99
16	DimmerAssociationReport	Association reports for dimmer only.	1 bytes unsigned integer	NO	NO	NO	0	1	0
17	Double Tap Behavior	Double Tap behavior.	1 byte unsigned integer	NO	NO	NO	0	3	0
18	Single Tap Behavior	Single tap behavior.	1 byte unsigned integer	NO	NO	NO	0	3	0
19	DimmerOutputControl	Control output for dimmer.	1 byte unsigned integer	NO	NO	NO	0	2	1
20	RelayOutputControl	Control output for relay.	1 byte unsigned integer	NO	NO	NO	0	2	1
21	RampRateForHold	Ramp rate when hold the paddle to dimming.	1 bytes unsigned integer	NO	NO	NO	1	99	4
23	Custom brightness level	Custom brightness level.	1 bytes unsigned integer	NO	NO	NO	0	99	0
24	DimmerReportAndIndicatorBehavior	Disable local control behavior for dimmer.	1 bytes unsigned integer	NO	NO	NO	0	1	0
25	RelayReportAndIndicatorBehavior	Disable local control behavior for relay.	1 bytes unsigned integer	NO	NO	NO	0	1	0
26	NightModeBrightness	Night mode brightness level.	1 bytes unsigned integer	NO	NO	NO	0	99	20
27	DimmerLocalButtonFunction	Local button function for dimmer.	1 bytes unsigned integer	NO	NO	NO	0	2	0
28	DimmerSceneEnable	Enable scene of dimmer buttons.	1 bytes unsigned integer	NO	NO	NO	0	1	1
29	RelaySceneEnable	Enable scene of relay button.	1 bytes unsigned integer	NO	NO	NO	0	1	1
30	ButtonBehavior	Disable button programming parameters.	1 bytes unsigned integer	NO	NO	NO	0	1	0
31	Ramp rate for physical off	Rate when turn off by short press the paddle.	1 bytes unsigned integer	NO	NO	NO	0	99	0
32	Ramp rate for hub on	Rate when turn on by HUB.	1 bytes unsigned integer	NO	NO	NO	0	255	255
33	Ramp rate for hub off	Rate when turn off by HUB.	1 bytes unsigned integer	NO	NO	NO	0	255	255
35	Association Group 3 Trigger	Select control association group way.	1 bytes unsigned integer	NO	NO	NO	0	7	7