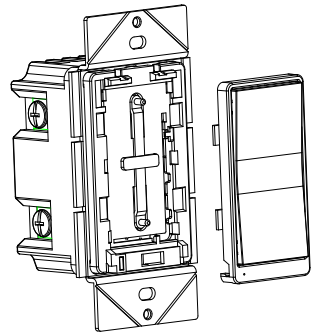


## INSTALLATION INSTRUCTIONS

# ZW15SM

## Wireless Home Automation Control Device

### In-wall Smart Meter ON/OFF Switch



#### ◆ SPECIFICATIONS

Voltage.....	120VAC, 60Hz
Incandescent.....	1000W
Ballast.....	1200VA
Resistive.....	1800W(15A)
Motor.....	1/2 HP
Z-Wave Frequency.....	908.42 MHz
Operating Temperature.....	32-104° F
Range.....	Up to 131 feet line of sight between the Wireless Controller and the closest Z-Wave receiver module.

#### ◆ FEATURES

- Perfect Replacement for regular wall switch, 120VAC, 15Amp
- Wireless Z-Wave technology creates a mesh network for command and control interoperability with other Z-Wave compliant controller and devices
- Manual and Remote ON/OFF control of any connected lighting and other electrical load
- Can be used for single pole or 3- Way (Multi-location) with ZW3K Auxiliary Switch (sold separately)
- Measures energy usage of the wired load

#### ◆ DESCRIPTION

The ZW15SM ON/OFF Switch is a perfect wireless manual and remote on/off control replacement of regular wall switch,controlling incandescent,LED,ballast and so on.This ZW15SM ON/OFF switch is fully compatible with other Z-Wave certified devices from other manufacturers and/or other applications provides, programmable function in custom settings such as scenes, association,schedule event,etc.Also It can be added to most Z-Wave compliant controllers.As part of any Z-Wave network,each device can be remotely controlled by commands sent from Z-Wave controllers in real time,but also act as wireless repeater transmitting RF signal from one to another intended device, then extending the range of RF signal all over the system.

#### ◆ MEASURE THE ENERGY USAGE

The ZW15SM Smart Meter Switch enables you to measure the energy

usage of your appliance. When added to a Z-Wave network, the ZW15SM reports real time data to your gateway or controller. It can also display actual consumption (in W) and the accumulated power used (in kWh) in the user interface of the gateway/remote. Please use the gateway installation manual for specific instructions on measuring the power.

## WARNINGS AND CAUTIONS

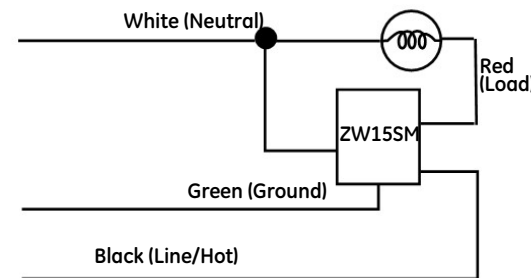
To be installed or used in accordance with appropriate electrical codes and regulations. Exercise extreme caution when using Z-Wave devices to control appliances. Operation of the Z-Wave device may be in a different room than the controlled appliance, also an unintentional activation may occur if the 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 operation could possibly result in a hazardous condition.

Z-Wave enabled devices should never be used to supply power to, or control the On/Off status of medical and/or life support equipment.

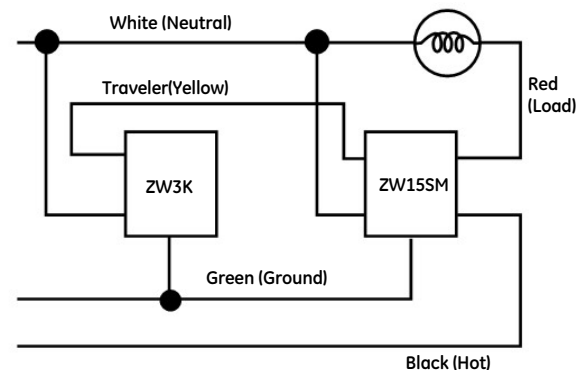
If you are unsure or uncomfortable about performing the installation, please consult a qualified electrician.

#### ◆ INSTALLATION

Single Switch Wiring Schematic

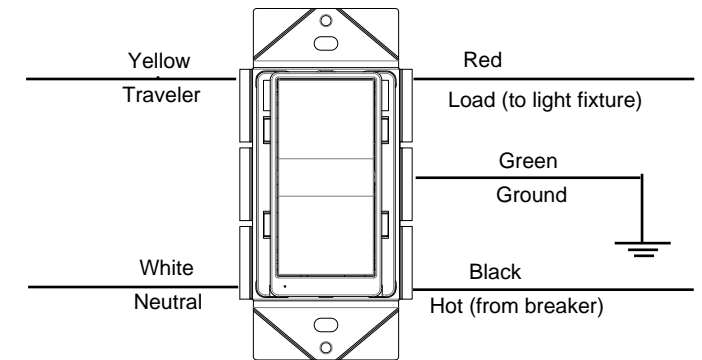


3-Way Wiring Schematic using one ZW15SM and one ZW3K



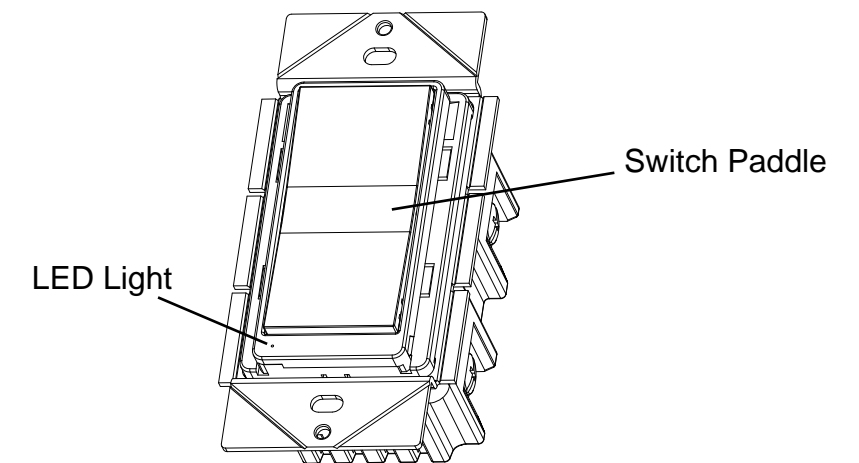
Traveler works with ZW3K for 3-way control, ZW3K sold separated.

Wiring Diagram:



1. WARNING : To avoid fire, shock, or death. Turn off power at circuit breaker or fuse and test that power is off before wiring.
2. Remove wall plate and existing switch mounting screws.
3. Carefully remove the existing switch from the switch box.
4. Disconnect the wiring from the existing switch.
5. Connect the Z-Wave switch as shown in the wiring diagram: Black lead to hot wire, white lead to neutral wire, red lead to load wire, green lead to ground wire.
6. Check connections to be sure they are tight and no bare conductors are exposed.
7. Insert the ZW15SM switch into the outlet box carefully.
8. Make sure the ZW15SM switch to the box using the supplied screws.
9. Attach the wall plate.
10. Restore power at the circuit breaker and test the system.

#### ◆ OPERATIONS



### Remote Control

Z-Wave remotes provide control of an Individual device, Groups of devices and Scenes. Other brands of Z-Wave Certified remotes may not offer as much flexibility in how you can set up your lighting control network. Please refer to your remote control's instructions for details on its capabilities and instructions for adding and controlling devices.

# INSTALLATION INSTRUCTIONS

## Manual Control

The switch paddle on the ZW15SM allows the user to:

1, Turn ON/OFF the connected lighting:

1. To turn the connected lighting ON: Tap the top of the switch paddle.
2. To turn the connected lighting OFF: Tap the bottom of the switch paddle.

2, Turn ON/OFF the nodes of association group 4:

1. To turn ON the nodes: Tap the top of the switch paddle and hold for 1.5 seconds
2. To turn OFF the nodes: Tap the bottom of the switch paddle and hold for 1.5 seconds

3, When the primary controller is in the adding mode, press the paddle once and hold for 4 seconds. The primary controller will verify the adding, assign a node ID number for the module .

4, When the primary controller is in the removing mode, press the paddle once and hold for 4 seconds. The primary controller will verify the removing, remove the module from the current Z-Wave network, and the LED will blink when the module is on power.

5, Press once and hold for 10 seconds, the device will send a device reset locally notification to controller. Then clear all of information for the network, and restore factory defaults, and reset the module. Use this procedure only in the event that the network primary controller is missing or otherwise inoperable.

**Please Note:** After a power failure, the ZW15SM on/off switch returns to OFF state.

## ADVANCED OPERATION

The following Advanced Operation parameters require that you have an advanced controller. However, basic remotes do not have this capability.

### Configuration

Parameter NO.	Size	Description	Valid Value	Default Value
1	1 Byte	synchronization of load power and LED indicator	0: Power on, LED off 1: Power on, LED on	Default=0

### Association

Grouping ID	Max number of nodes	Description
1	1	Lifeline: Send device reset locally notification
2	5	StatusReport: Send basic report
3	5	PowerReport: Send meter power report
4	5	AssGroupSet: Send Basic set command

## All-ON and All-OFF

Depending upon your primary controller, the ZW15SM switch can be set to respond to ALL-ON and ALL-OFF commands in up to four different ways. Some controllers may not be able to change the response from its default setting. Please refer to your controller's instructions for information on whether or not it supports the configuration function and if so, how to change this setting.

### The four possible responses are:

- It will respond to ALL-ON and the ALL-OFF command (default).
- It will not respond to ALL-ON or ALL-OFF commands.
- It will respond to the ALL-OFF command but not respond to the ALL-ON command.
- It will respond to the ALL-ON command but not respond to the ALL-OFF command.

### ◆ WIRELESS RANGE

This device complies with the Z-Wave standard of open-air, line of sight transmission distances of 131 feet. Actual performance in a home depends on the numbers of walls between the remote controller and the destination device, the type of construction and the number of Z-Wave enabled devices installed in the control network. Most Z-Wave enabled devices act as signal repeater and multiple devices result in more possible transmission routes which helps eliminate " RF dead-spots."

### Things to consider regarding RF range:

- Each wall or obstacle (i.e.:refrigerator, big screen TV, etc.)between the remote or Z-Wave device and the destination device will reduce the maximum range of 100 feet by approximately 25-30%.
- Brick, tile or concrete walls block more of the RF signal than walls made of wooden studs and plasterboard (drywall).
- Wall mounted Z-Wave devices installed in metal junction boxes may suffer a significant loss of range (approximately 20%) since the metal box blocks a large part of the RF signal.

## Effects of Home Construction on Wireless Range Between Z-Wave Enabled Devices.

**Note: The distances shown in the table below are typical examples. Actual performance in your home will vary.**

From the Remote (or repeating Z-Wave module) to destination device:					
Type of Construction	Wood Frame with Drywall		Brick, Tile or Concrete		
	Plastic J-Boxes*	Metal J-Boxes	Plastic J-Boxes*	Metal J-Boxes	
Number of Walls or Obstacles	0**	131'	105'	131'	100'
	1	90'	76'	80'	65'
	2	66'	52'	48'	40'
	3	45'	35'	28'	20'

## Restoring Factory Defaults

All Configuration Parameters can all be restored to their factory default settings by using your primary controller or manual control to delete/reset the device.

### ◆ FCC COMPLIANCE STATEMENT

The 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 uses, generates and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. 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.

### Operation is subject to the following two conditions:

- This device may not cause interference
- This device must accept any interference, including interference that may cause undesired operation of the device.

### ◆ WARRANTY INFORMATION

Our company warrants its products to be free of defects in materials and workmanship for a period of two(2) years. There are no obligations or liabilities on the part of our company for consequential damages arising out of or in connection with the use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation or reinstallation.