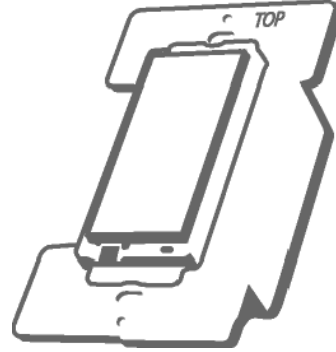




Wireless Lighting Control

Z-Wave

3-way Wall Mount Relay Switch

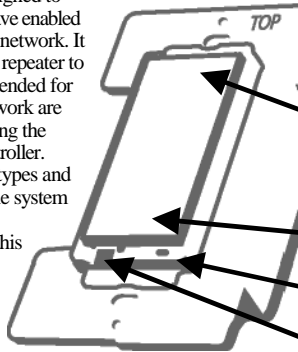


Z-Wave® Certified
Wireless Lighting Control

Introduction:

Thank you for your purchase of a GE Z-Wave® control device. Z-Wave technology is designed to automate lighting/home control and provide easy remote operation of all your Z-wave enabled devices. The GE Z-Wave product family includes a variety of devices to control lighting in your home. It is up to you whether you want to control one room or your entire house and whether you want to do it all now or start with one room and add more over time.

This **wall mount relay switch** is one component of a Z-Wave® control system and is designed to work with all other Z-Wave enabled devices in a home control network. It will also act as a wireless repeater to insure that commands intended for another device in the network are received, thereby extending the range of the wireless controller. Z-Wave devices of other types and brands can be added to the system and will also act as range extenders if they support this function of repeating the signal received to other nodes in the system.



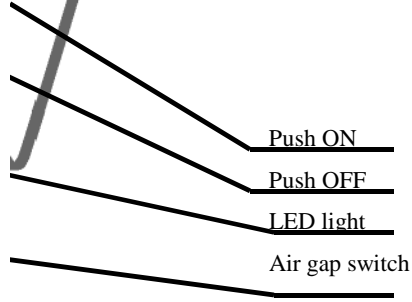
⚠ CAUTION

This device is intended for installation in accordance with the National Electric Code and local regulations in the United States, or the Canadian Electrical Code and local regulations in Canada. If you are unsure or uncomfortable about performing this installation consult a qualified electrician.



This **wall mount relay switch** is designed for use only with permanently installed incandescent lighting fixtures. The incandescent lighting controlled by this **switch** must not exceed a total of **600 watts**.

There are no user serviceable parts in this unit.



WARNING

RISK OF FIRE RISK OF ELECTRICAL SHOCK RISK OF BURNS

The Load-Sense feature on this Z-wave product will turn the power to the connected device ON when a change in the load is detected. Z-wave connected devices should always be disconnected before performing any service or maintenance of the devices.

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 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 operations could possibly result in a hazardous condition. For these reasons, we recommend the following:

1. Assign Z-Wave controlled appliances to device numbers 10–18 on the GE remote. The likelihood of unintentionally turning on the appliance will be reduced significantly because the “Shift” button will need to be pressed before pressing device numbers 10-18.
2. Z-Wave devices controlling appliances should be removed from “All” control setting. Instructions on how to do this are included in the manual for your GE remote.
3. Do Not include Z-Wave devices in Groups or Scenes if they control appliances.
4. 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.
5. Double check programs for accuracy before using them.

Wireless Range

This device complies with the Z-Wave standard of open-air, line of sight transmission distances of 65 feet. Actual performance in a home depends on the number 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.

GE Z-Wave Network

Every Z-Wave enabled device acts as a 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 a Z-Wave device and the destination device will reduce the maximum range of 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 will 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 Brick, Tile or w/Drywall Concrete

		Plastic J-Boxes*	Metal J-Boxes	Plastic J-Boxes*	Metal J-Boxes
Number of walls or obstacles	0	100'	80'	100'	80'
	1	70'	56'	60'	48'
	2	49'	39'	36'	29'
	3	34'	27'	21'	17'

* For Plug-in Modules or In-Wall Devices Installed in Plastic Junction Boxes

** Line of Sight / no obstructions

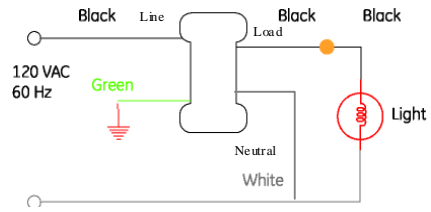
Please Note: Z-wave home control networks are designed to work properly alongside 802.11 wireless computer networks, Bluetooth and other 2.4GHz or 5.8GHz devices. Some baby cams, wireless video devices and older cordless phones using the 900MHz frequency range may cause interference and limit Z-Wave functionality. Many 900MHz products have a switch to select channel "A" or "B". You may find that one of these channels will cause less interference than the other.

Installation

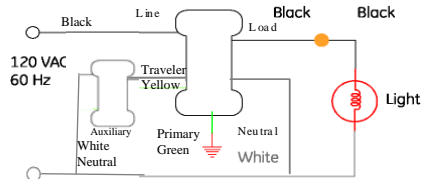
This Z-wave relay switch may be used in new installations or to replace an existing wall switch. A wall plate is not included. You may be able to re-use your existing wall plate if you are replacing a standard decorator style switch. If this is a new installation or your existing wall plate can not be used, we recommend the use of a mid-sized, decorator style wall plate. These are available at most home centers or hardware stores.

See diagram on next page.

Typical Switch Wiring Schematic



Correct Auxiliary Switch Position Schematic



WARNING

SHOCK HAZARD!

Turn OFF the power to the branch circuit at the circuit breaker in your electrical service panel. Ensure power is OFF before you install this device. All wiring connections must be made with the POWER OFF to avoid personal injury and/or damage to the switch.

1. Shut off power to the circuit at fuse box or circuit breaker.
2. Remove wall plate. **! Warning: Verify power is OFF to switch box before continuing.**
3. Remove the switch mounting screws.
4. Carefully remove the switch from the switch box. DO NOT disconnect the wires.
5. **Identify the wiring in the box and decide if this will be the location for the Auxiliary Switch or the Z-Wave Relay Switch.**
6. **Mark the wiring so it can be identified properly later.**
7. Disconnect the wires from the existing switch.
8. **Insert either the Auxiliary or the Z-Wave Relay Switch as shown in the Typical Wiring Schematic or Correct Auxiliary Position Schematic.**
9. Insert the new Z-Wave Switch into the switch box being careful not to pinch or crush wires.
10. Secure the switch to the box using the supplied screws.
11. Mount the wall plate.
12. **Repeat Steps 2 through 11 for the second switch.**
13. Reapply power to the circuit at fuse box or circuit breaker and test the system.

You should now be able to use the rocker to manually turn On/Off the connected lighting.

Use your primary controller to include the relay switch in the home control network after the switch is wired as shown in the above diagram. It can then be added to groups and/or lighting scenes and managed remotely to control the On/Off status of the connected incandescent lighting.

Air Gap Switch

During normal operation, there is a small amount of power passing through the switch to the load even when the Z-Wave switch is turned off. The 45609 has an air gap switch on the lower left side (see diagram for location) to completely disconnect power to the load. Pull the air gap switch OUT to disconnect the power while replacing light bulbs and push it all the way back in for normal operation. The air gap switch must be **not** all the way to control the lighting.

Key Features

- Remote On/Off control via the Z-Wave controller/network
- Manual On/Off control with the front panel rocker
- Load-Sensing turns the light ON if the switch on the connected device is used instead of the remote or the front panel rocker
- LED indicates switch location in a dark room

BASIC OPERATION

The connected light can be turned ON in three ways:

1. With a remote
2. Manually with the push button on the Z-Wave switch
3. By the Load-Sensing feature. Normally, the Z-Wave unit controls the ON/OFF state of the connected device and power is either turned

ON or OFF at the Z-Wave switch (either manually or by the remote).
If the switch on the connected light is used, the Z-Wave control circuitry automatically senses that the light is being turned ON and activates the Z-Wave controlled outlet, providing power to the connected device. This feature is disabled by default; See the section on advanced operation for instructions on how to enable it.

Remote Control

GE 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.

Manual Control

The 45609 wall mount relay switch allows the user to:

Turn ON/OFF the connected incandescent lighting.

- To turn the connected lighting ON: Tap the top of the rocker.
- To turn the connected lighting OFF: Tap the bottom of the rocker.

Program your Light Switch (Include or exclude the Z-Wave switch from the Z-Wave home control network.)

- Refer to the instructions for your primary controller to access the network setup function and include or exclude devices.
- When prompted by your primary controller, tap the top or bottom of the rocker.
- The primary controller should indicate that the action was successful. If the controller indicates the action was unsuccessful, please repeat the procedure.
- Once the wall mount relay switch is part of the network, the same basic procedure is used to add the wall mount relay switch to groups & scenes or

change advanced functions. Refer to the primary controller's instructions for details.

Please Note: After a power failure, the 45609 wall mount relay switch returns to its last used ON/OFF state.

LED Indicator

The LED will be lit when the connected lighting is **OFF**.

This is the factory default setting and can be changed if your primary controller supports the node configuration function (see Advanced Operation below)

ADVANCED OPERATION

The following Advanced Operation parameters require that you have an advanced controller like the model 45601 Advanced remote. Advanced remotes from other manufacturers may also be able to change these settings; however, basic remotes do not have this capability.

All On/All Off

Depending upon your primary controller, the 45609 wall mount relay 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:

1. It will respond to ALL ON and the ALL OFF command (default).
2. It will not respond to ALL ON or ALL OFF commands.
3. It will respond to the ALL OFF command but will not respond to the ALL ON command.
4. It will respond to the ALL ON command but will not respond to the ALL OFF command.

Load Sensing

Load sensing is disabled when shipped from the factory. This feature can

be enabled if desired. Setting parameter 29 to a value of 1 will enable the load Sense function.

- Parameter No: 29
- Length: 1Byte
- Valid Values = 0 or 1 (default 0)

Note: When replacing a burned-out light bulb, the load sensing feature (if enabled) will automatically turn the light ON when the new bulb is installed even if the Z-wave module was turned OFF.

LED Light

When shipped from the factory, the LED on the 45609 is set to turn ON when the connected light is turned OFF. This allows the LED to indicate the switch's location in a dark room. To make the LED turn ON when the light is turned ON, change parameter 3's value to "1".

- Parameter No: 3
- Length: 1 Byte
- Valid Values = 0 or 1 (default 0)

Invert Switch

If the wall mount relay switch is accidentally installed upside down with "On" at the bottom and "Off" at the top, the default On/Off rocker settings can be reversed by changing parameter 4's value to "1".

- Parameter No: 4
- Length: 1 Byte
- Valid Values = 0 or 1 (default 0)

Restoring Factory Defaults

All Configuration Parameters can all be restored to their factory default settings by using your master controller to reset the device.

Interoperability with Z-Wave™ Devices

A Z-Wave network can integrate devices of various classes, and these

devices can be made by different manufacturers. Although every Z-Wave certified product is designed to work with all other Z-Wave certified products, your controller must include the appropriate device classifications in order to control non-lighting Z-wave devices. As an example, the 45600 basic remote is designed only for controlling Z-Wave devices using the lighting control classification. The 45601 deluxe remote with LCD readout can control other Z-Wave certified devices like thermostats as well as lighting.

WARRANTY

JASCO Products warrants this product to be free from manufacturing defects for a period of two years from the original date of consumer purchase. This warranty is limited to the repair or replacement of this product only and does not extend to consequential or incidental damage to other products that may be used with this product. This warranty is in lieu of all other warranties, expressed or implied. Some states do not allow limitations on how long an implied warranty lasts or permit the exclusion or limitation of incidental or consequential damage, so the above limitations may not apply to you. This warranty gives you specific rights, and you may also have other rights which vary from state to state. Please contact Customer Service at 800-654-8483 (option 4) between 7:30AM – 5:00PM CST or via our website (www.jascopeproducts.com) if the unit should prove defective within the warranty period.

JASCO Products Company
Building B
10 E Memorial Rd. Oklahoma City, OK 73114

FCC ID: U2Z45609

The Federal Communication Commission Radio Frequency Interference Statement includes the following paragraph:
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.

Important Note: To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device.

Compliance with IC Rules and Regulations

IC ID: 6739B-45609

Jasco Products Company

Model: 45609

This Class B digital device complies with Canadian ICES-003.

SPECIFICATIONS

Power: 120 VAC, 60 Hz.

Signal (Frequency): 908.42 MHz.

Maximum Load: 600W, incandescent lamps only, 1/2 HP Motor or 1800W (15A) Resistive.

Range: Up to 100 feet line of sight between the Wireless Controller and the closest Z-Wave receiver module.


Operating Temperature Range: 32-104° F (0-40° C)

For indoor use only.

Specifications subject to change without notice due to continuing product improvement

Z-Wave is a registered US trademark of Zensys A/S

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