

IS-ZW-LM-1 Lamp Module Installation Sheet

Description

Z-Wave technology is designed to automate lighting/home control and provides easy remote operation of all your Z-Wave enabled devices. The GE Z-Wave family includes a variety of devices to control lighting in your home.

The lamp module is one device 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 ensure 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 can be added to the system and will act as range extenders if they support this function of repeating the signal received to other nodes in the system.

Note: This document assumes you have a remote control to enroll the unit into your system. This document does not include instructions on how to use an optional web portal to enroll the unit. If you have a web-enabled system, contact GE Security.

Key features

- One Z-wave controlled AC outlet for standard incandescent lighting.
- Remote on/off and brightness control via the Z-Wave remote control.
- Manual on/off and brightness control with the module pushbutton.
- Load-sensing that turns the light on if the switch on the connected light is used instead of the remote control or module pushbutton.
- One always-on pass-through AC outlet.
- Space efficient design does not block the lower outlet when plugged in to the upper outlet of a duplex wall receptacle (this assumes that the duplex receptacle is mounted with the ground pin down). Plugs and cords for connected devices route to the side allowing close placement of furniture.
- Grounded 3-wire power connection for safety.

Note: There are no user serviceable ports in this unit.

To reduce the risk of electric shock, this product has a grounding type plug that has a third (grounding) pin. This plug will only fit into a grounding type power outlet.

Caution: If the plug does not fit into the outlet, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

Installation

The incandescent lighting plugged into the Z-Wave controlled outlet on this module must not exceed 300 watts. Do not use this unit with fluorescent lighting. Plugging a non-resistive load such as fluorescent lighting or a device with a motor into the Z-Wave controlled outlet may result in damage to the lamp module and will void the warranty.

WARNING: Due to risk of fire, electrical shock and burns, exercise extreme caution when using Z-Wave devices to control appliances. Z-Wave connected devices should always be unplugged before performing any service or maintenance of the devices. 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. We recommend the following installation guidelines.

Installation guidelines

- Assign Z-Wave controlled appliances to device numbers 10 to 18 on the remote control. 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 to 18.
- Z-Wave devices controlling appliances should be removed from the "All" control setting. Refer to the documentation provided with the remote control.
- Do not include Z-Wave devices in groups or scenes if they control appliances.
- Do not use Z-Wave devices to control electric heaters or any other appliances, which may present a hazardous condition due to unattended, unintentional, or automatic power on control.



- Double check programming for accuracy before using the module.

Caution: Not for use with medical or life support equipment. Z-Wave enabled devices should never be used to supply power to or control the on/off status for medical and/or life support equipment.

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 control and the destination device, the type of construction, and the number of Z-Wave enabled devices installed in the control network.

Z-Wave network

Every Z-Wave enabled device acts as a signal repeater and multiple devices result in more possible transmission routes, which help eliminate "RF dead spots".

RF range guidelines

- Each wall or obstacle (such as a refrigerator or big screen TV) between the remote control or a Z-Wave device and the destination device will reduce the maximum range by approximately 25 to 30 percent.
- 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 percent) since the metal box blocks a large part of the RF signal.
- 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 900 MHz 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 channel.

Basic operation

The connected light can be turned on in three ways:

- With a Z-Wave remote control.
- Manually with the pushbutton on the Z-Wave module.
- By the load-sensing feature. Normally, the Z-Wave module controls the on/off state of the connected light and power is either turned on or off at the module (either manually or by the remote control). If the switch on the connected light is used, the Z-Wave control circuitry automatically senses the light 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 remote controls provide control of an individual device, groups of devices, and scenes. You can include or exclude the module from the Z-Wave home control network with your remote control. Refer to the remote control documentation to access the network setup function and include or exclude devices.

When prompted by the remote control, tap the module's pushbutton. The remote control should indicate that the action was successful. If the remote control indicates the action was unsuccessful, repeat the procedure.

Once the module is part of the network, the same basic procedure is used to add the module to groups or scenes. Refer to the remote control documentation for details.

Manual control

The module pushbutton allows you to:

- Manually turn the connected equipment on or off by pressing the button. This is a toggle switch; if the light is off, pressing the button turns the light on and vice versa.
- Adjust the brightness level of the connected lighting by pressing and holding the button. Release the button when the desired level is attained.

Note: After a power failure, the module returns to its last used on/off/dim state.

Advanced operation

All-on/all-off commands

The module can be set to respond to all-on and all-off commands in up to four different ways. Refer to the remote control documentation for information on how to change this setting.

The four possible responses are:

- It will respond to all-on and the all-off commands (default).
- It will not respond to all-on or all-off commands.
- It will respond to the all-off command but will not respond to the all-on command.
- It will respond to the all-on command but will not respond to the all-off command.

Load sensing

Load sensing is disabled when the module is shipped from the factory. You can enable this feature by setting parameter 29 to a value of 1.

- Parameter No: 29
- Length: 1 Byte
- 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 previously turned off.

Dim rate adjustments

Both the number of steps (or levels) that the dimmer will change and the timing of the steps can be modified to suit personal preferences. The timing of the steps can be adjusted in 10 millisecond intervals. For example, the default setting for parameter 8 is "3". This means that the lighting level will change every 30 milliseconds when the dim command is received. A value of 255 would mean that the level would change every 2.55 seconds. Combined, the two parameters allow dim rate adjustments from 10 milliseconds to 4.2 minutes to go from maximum to minimum or minimum to maximum brightness levels.

When receiving a Z-Wave dim command:

- Parameter 7 (number of steps or levels); Default = 1; Valid Values: 1 to 99
- Parameter 8 (timing of the steps); Default = 3; Valid Values: 1 to 255
- Length: 1 Byte

Manual control dimming (pressing the module pushbutton):

- Parameter 9 (number of steps or levels); Default = 1; Valid Values: 1 to 99
- Parameter 10 (timing of the steps); Default = 3; Valid Values: 1 to 255
- Length: 1 Byte

When receiving an all-on or all-off command:

- Parameter 11 (number of steps or levels); Default = 1; Valid Values: 1 to 99
- Parameter 12 (timing of the steps); Default = 3; Valid Values: 1 to 255
- Length: 1 Byte

Ignore start level when receiving dim commands

Every dim command from your remote control includes a start level embedded in it. The module can be set to ignore the start level that is part of the dim command. Setting parameter 5 to a value of 0 will cause the module to dim or brighten from the start level embedded in the command.

- Parameter No: 5
- Length: 1 Byte
- Valid Values = 0 or 1 (default 1)

Restoring factory defaults

All configuration parameters can be restored to their factory default settings by using the remote control to reset the device.

Software fuse

This module is designed to protect itself against loads that exceed its maximum power rating. An overload is automatically sensed by the module and all power to the load is shut off immediately.

Troubleshooting

If the module does not appear to work properly, verify that the lamp wattage does not exceed the 300W rating. Normal operation can be restored by the remote control when the load is reduced to the proper rating.

Over-current protection

Additional over-current protection is provided by an internal fuse, which is not user serviceable. Check the home's circuit breakers before concluding that the product must be replaced.

Interoperability with Z-Wave devices

A Z-Wave network can integrate devices of various classes. Although every Z-wave certified product is designed to work with all other Z-Wave certified products, the remote control includes the appropriate device classifications in order to control non-lighting Z-Wave devices.

Specifications

Power	120 VAC, 60 Hz
Signal (frequency)	908.42 MHz
Maximum load for both outlets	15A, 1800W Resistive
Maximum load for the Z-Wave controlled outlet	5 A 300 W Incandescent, Z-Wave controlled outlet is fused @ 5 A. This fuse is not user serviceable.
Range	Up to 100 feet line of sight between the wireless controller and the closest Z-Wave receiver module
Operating temperature	32 to 104°F (0 to 40°C)
For indoor use only	

FCC

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 instructions, 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, and

- This device must accept any interference, including interference that may cause undesirable operation of the device.

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 the user's authority to operate the device.

FCC ID: U2Z45602-3

IC: 6924A-45602A3

Model: 45602

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

Contact information

For contact information see our Web site: www.gesecurity.com.