Wireless Lighting Control

Duplex Receptacle

Z-Wave® Certified Wireless Lighting Control
Introduction:

Thank you for your purchase of a 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 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 duplex receptacle 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.
The device plugged into the Z-Wave controlled outlet on this module must not exceed 600 watts (Incandescent); 15 Amps, 1800W (Resistive); or ½ HP (Motor). The maximum rating for both outlets combined is 1800W (15A) Resistive.

There are no user serviceable parts in this unit.

**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 of medical and/or life support equipment.
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 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 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 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 75 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.

Z-Wave home 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 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 will suffer a significant loss of range (approximately 20%) since the metal box blocks a large part of the RF signal.

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:

<table>
<thead>
<tr>
<th>Number of Walls or Obstacles</th>
<th>Type of Construction</th>
<th>Wood Frame w/Drywall</th>
<th>Brick, Tile or Concrete</th>
</tr>
</thead>
<tbody>
<tr>
<td>0**</td>
<td>100’</td>
<td>80’</td>
<td>100’</td>
</tr>
<tr>
<td>1</td>
<td>70’</td>
<td>56’</td>
<td>60’</td>
</tr>
<tr>
<td>2</td>
<td>49’</td>
<td>39’</td>
<td>36’</td>
</tr>
<tr>
<td>3</td>
<td>34’</td>
<td>27’</td>
<td>21’</td>
</tr>
</tbody>
</table>

* 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, 5.8GHz or DECT 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 receptacle may be used in new installations or to replace an existing wall receptacle. 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 duplex receptacle.

See diagram on next page.
Green Ground

Black (Hot)

Green or Bare

Black

White

White (Neutral)
1. Shut off power to the circuit at fuse box or circuit breaker.

2. Remove wall plate.

3. Warning! Verify power is OFF to receptacle before continuing.

4. Remove the receptacle mounting screws.

5. Remove the receptacle from the box.

6. Disconnect the wiring from the old receptacle.

7. Connect the Z-Wave receptacle as shown in the wiring diagram.

8. Insert Z-Wave receptacle into outlet box being careful not to pinch or crush wires.

9. Secure the receptacle to the box using the supplied screws.

10. Mount the wall plate.

11. Reapply power to the circuit at fuse box or circuit breaker and test the system.
Observe Important Wiring Information
Always follow the recommended wire strip lengths and wiring combination when making wiring connections. You may wish to consult an electrician with questions or for professional installation.

**Important:** The wire connectors included with this receptacle are intended to only be used with copper wire. Consult a qualified electrician if you have aluminum wiring.

**Instructions:**
1. Strip insulation 3/8” for 12 or 14 AWG wire. Strip insulation 7/16” for 16 or 18 AWG wire.
2. Hold stripped ends together in parallel and align any frayed strands (do not twist wires).

**Wire Connector / Combination Chart**
One #14 w/one-to-four #16 or #18
One #12 w/one-to-three #14 or #16 or #18
Two #14 w/one-to-three #16 or #18
Two #12 w/one or two #14 or #16 or #18

You should now be able to use the front panel pushbutton to manually turn On/Off a lamp plugged into the Z-Wave controlled outlet.
Use your primary controller to include the receptacle in the home control network after the receptacle is installed 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 lighting.

**Key Features**
- One Z-wave remote controlled AC outlet
- Remote ON/OFF control via the Z-Wave controller/network
- Manual ON/OFF control with the front panel pushbutton
- One Always-ON pass through AC outlet

**Basic Operation**
The connected light can be turned ON in two ways:
1. With a remote
2. Manually with the pushbutton on the Z-Wave receptacle

**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.
**Manual Control**

The Pushbutton on the receptacle allows the user to:

1. Manually turn the connected equipment ON or OFF by pressing the button.

   - This is a toggle switch; if the device is OFF, pressing the button turns the device ON and vice versa.

2. Include or exclude the receptacle from the Z-Wave home control network with your primary controller.

   - 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 button.
   - The primary controller should indicate that the action was successful. If the controller indicates the action was unsuccessful, please 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 primary controller’s instructions for details.

**Please Note:** After a power failure, the Z-Wave controlled receptacle returns to its last used ON/OFF state.

**LED Indicator**

- The LED will be lit when the Z-Wave controlled outlet 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 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 and All-OFF
Depending upon your primary controller, the 45605 receptacle 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 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.
**LED Light**
When shipped from the factory, the LED is set to turn ON when the connected outlet is turned OFF. To make the LED turn ON when the light is turned ON, change parameter 3’s value to “1”. To turn the LED OFF at all times, change parameter 3’s value to “2”.
- Parameter No: 3
- Length: 1 Byte
- Valid Values = 0,1 or 2 (default 0)

**Restoring Factory Defaults**
All network settings and configuration parameters can all be restored to their factory default settings by using your master controller to reset the device. (delete it from network)

**Over-Current Protection**
Over-current protection is provided by an internal fuse which is not user serviceable. Check your 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, 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.jascoproducts.com) if the unit should prove defective within the warranty period,

JASCO Products Company
Building B
10 E Memorial Rd.
Oklahoma City, OK 73114
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 and
- 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: 6924A-45605
Jasco Products Company
Model: 45605
ZW1001
This Class B digital device complies with Canadian ICES-003.

SPECIFICATIONS
Power 120VAC, 60Hz
Signal (Frequency) 908.42 MHz
Maximum load for both outlets: 1800W Resistive
Maximum Load for the Z-Wave controlled outlet: 600W
Incandescent, ½ 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 - 140° F (0 to 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 Sigma Designs

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