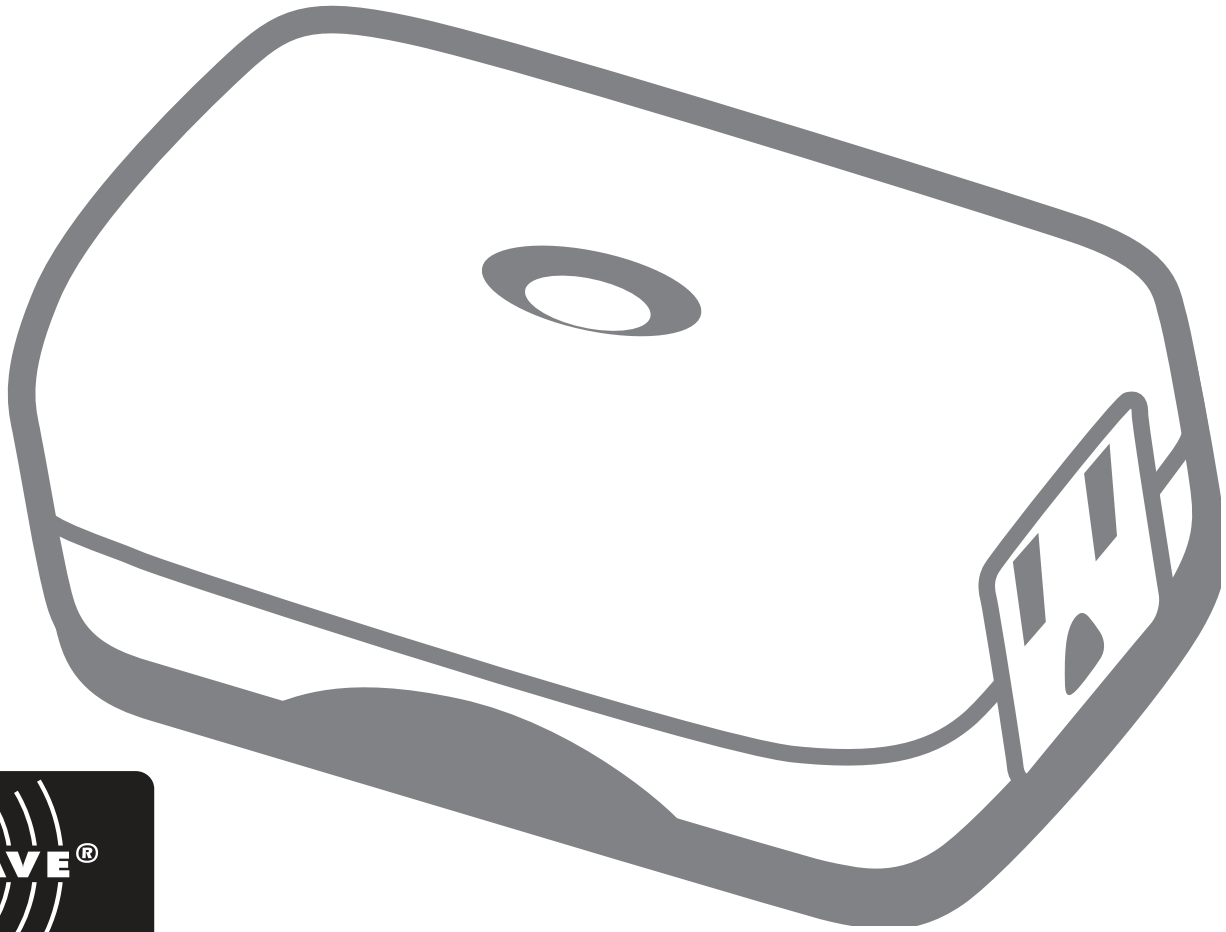
JASCO®

Wireless Lighting Control

On/Off/Dim
Lamp Module

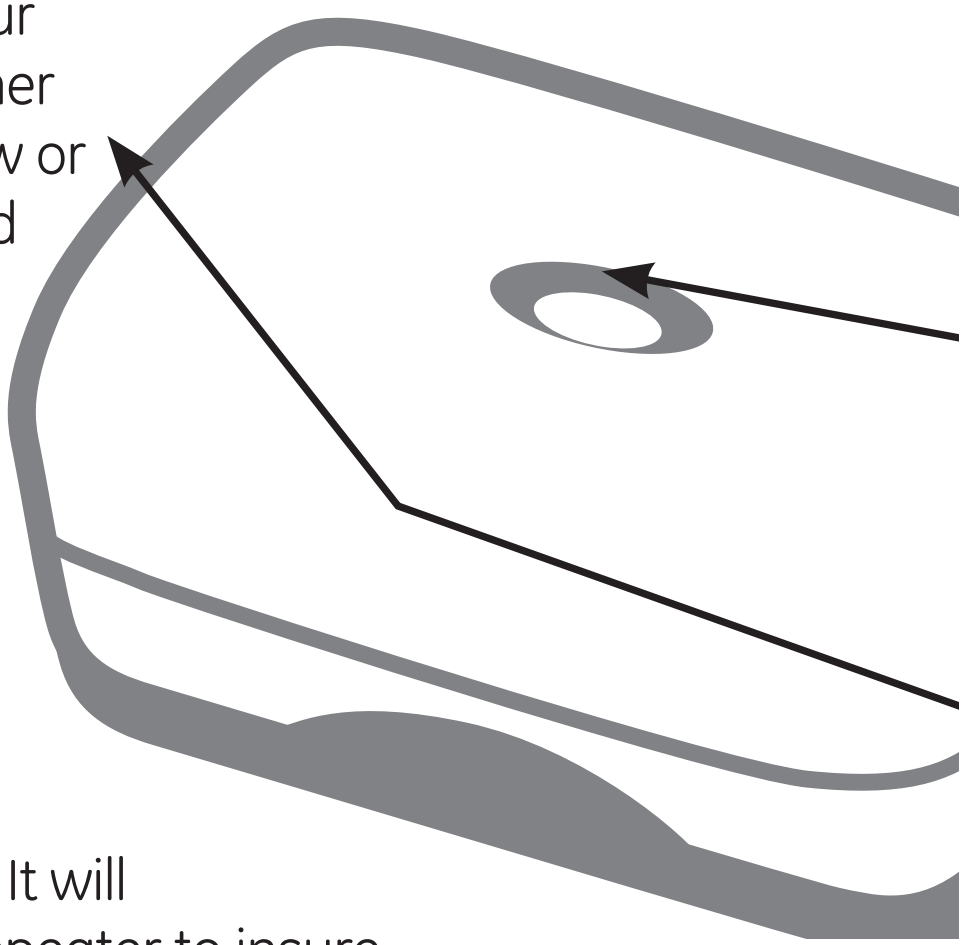


Z-Wave® Certified
Wireless Lighting Control

45702
ZW3103
Made in China

Introduction:

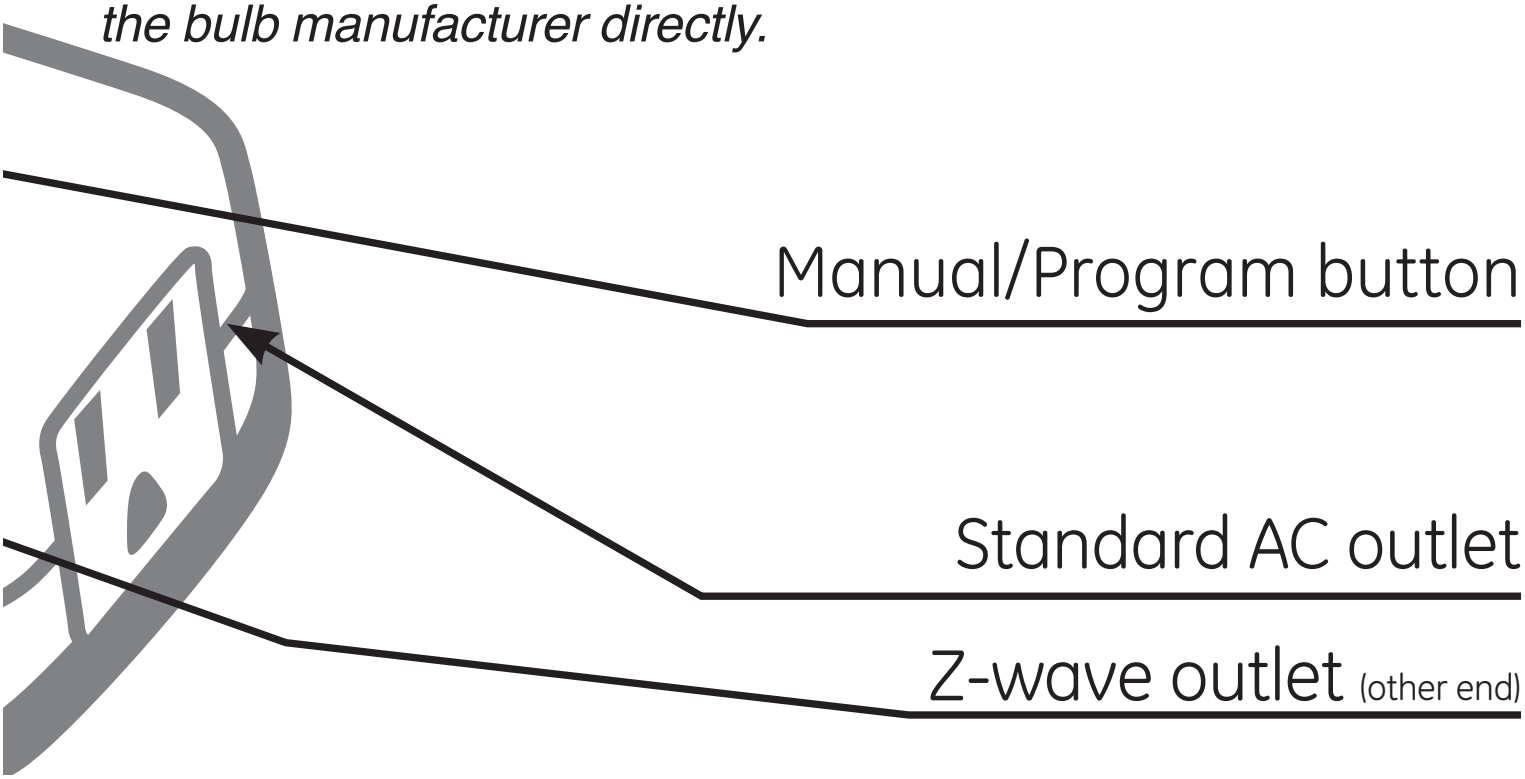
Thank you for your purchase of a Jasco Z-Wave® control device. Z-Wave® technology is designed to automate lighting/home control and provide easy remote operation of all your Z-wave® enabled devices. The Jasco Z-Wave® product family includes a variety of devices to control lighting in your home. It is 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 module 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 lighting load plugged into the Z-Wave® controlled outlet on this module must not exceed 300 watts incandescent. This module has been optimized for use with incandescent lighting as well as with most dimmable CFL and LED bulbs.

NOTE: Actual performance of any CFL or LED will vary from bulb type to bulb type and among different manufacturers. It is important to note that only bulbs that have been designed as dimmable should be used on a dimmer. To find out if your bulb is dimmable, please check the package, the bulb itself, or call the bulb manufacturer directly.



CAUTION — To reduce the risk of overheating and possible damage to other equipment, do not install to control a motor-operated appliance, a fluorescent lighting fixture, receptacle or a transformer supplied appliance.

There are no user serviceable parts 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. 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.

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 unplugged 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 Jasco 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 Jasco 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.
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.

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.

Jasco 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 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.

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 w/Drywall		Brick, Tile or 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.

Key Features:

— One Z-wave controlled AC outlet for standard incandescent lighting or dimmable CFL/LED

— Remote ON/OFF and Brightness control via the Z-Wave controller

— Manual ON/OFF and Brightness control with the front panel pushbutton

— Load-Sensing turns the light ON if the switch on the connected light is used instead of the remote or pushbutton on the Z-Wave module (default setting is disabled)

— 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

Basic Operation

The connected light can be turned **ON** in three ways:

1. With a Z-wave remote.
2. Manually with the pushbutton on the Z-Wave module.
3. 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). 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

Jasco 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 Front Panel Pushbutton on the 45702 Lamp Module allows the user to:

1. Manually turn the connected lighting **ON/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.

2. Adjust the brightness level of the connected lighting by pressing and holding the button. Release the button when the desired level is attained.

- This is also a toggle function. The lighting will dim until the minimum level is attained or the button is released. The next time the button is pressed and held, the level will increase until the maximum level is attained or the button is released.

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

- Refer to the instructions for your primary controller to access the 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 45702 module returns to its last used **ON/OFF/DIM** state.

ADVANCED OPERATION

The following Advanced Operation parameters require that you have an advanced controller like the model 45601 LCD 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 45702 lamp module 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** 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 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: 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. As an 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.

1. When Receiving a Z-Wave Dim Command

- Parameter 7 (number of steps or levels)
- Parameter 8 (timing of the steps)
- Length: 1 Byte

- Valid Values:

Parameter 7 (default = 1) Valid Values: 1-99
Parameter 8 (default = 3) Valid Values: 1-255

2. Manual Control Dimming (pressing the Dimmer's button)

- Parameter 9 (number of steps or levels)
- Parameter 10 (timing of the steps)
- Length: 1 Byte

- Valid Values:

Parameter 9 (default = 1) Valid Values: 1-99
Parameter 10 (default = 3) Valid Values: 1-255

3. When Receiving an All-On or All-Off Command

- Parameter 11 (number of steps or levels)
- Parameter 12 (timing of the steps)
- Length: 1 Byte

- Valid Values:

Parameter 11 (default = 1) Valid Values: 1-99
Parameter 12 (default = 3) Valid Values: 1-255

Restoring Factory Defaults

All Configuration Parameters can all be restored to their factory default settings by using your primary controller to reset the device. (delete from the network)

Software Fuse

This Lamp 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: Verify that the lamp wattage does not exceed the 300W rating if the module doesn't seem to work properly. Normal operation can be restored by remote 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 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 GE 45600 Basic Remote is designed only for controlling Z-Wave devices using the lighting control classification. The GE 45601 Advanced 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

FCC
U2Z45602-3

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: 6924A-45602A3
Jasco Products Company
Model: ZDP100 / 45702 / ZW3103

CAN ICES-3(B) / NMB-3(B)

SPECIFICATIONS

Power 120VAC, 60Hz
Signal (Frequency) 908.42 MHz
Maximum load for both outlets 15A, 1800W Resistive
Maximum load for the Z-Wave controlled outlet: 2.5A 300 W Incandescent; 100W Dimmable CFL/LED
Z-Wave controlled outlet is fused @ 5A. 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 Range: 77° F (25° 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

Distributed by Jasco Products Company LLC, 10 E. Memorial Road, Oklahoma City, Oklahoma 73114.

Made in China
Hecho en China

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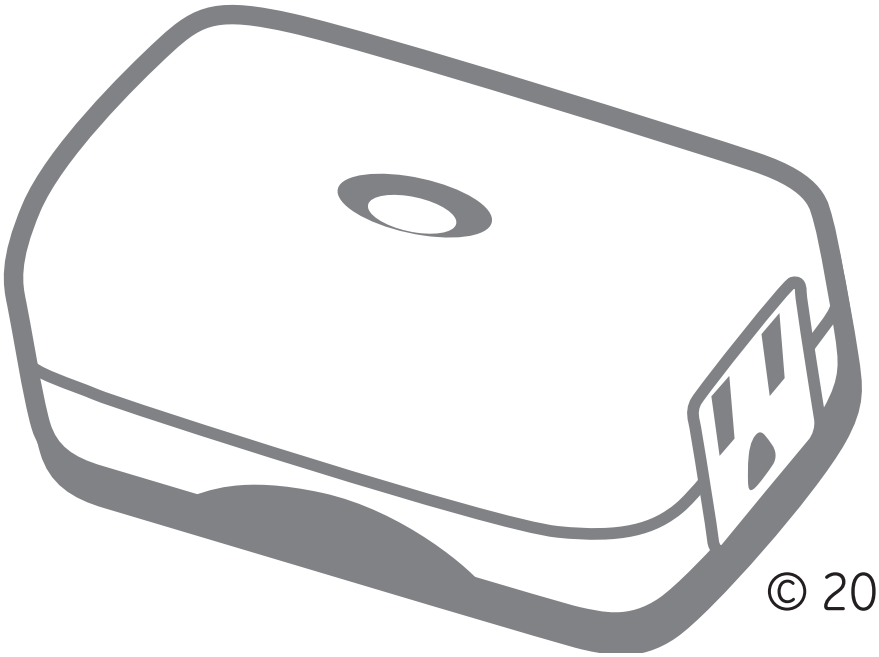

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