





ZB3101 (45852)

# ZigBee, Plug-In Dimmer Lamp Module

Home Automation Standard Version 1.2 Compliant

## Introduction

Thank you for your purchase of a Jasco Zigbee® control device. Zigbee technology is designed to automate lighting/home control and provide easy remote operation of all your Zigbee enabled devices. The Jasco Zigbee 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.

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 asdimmable 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

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.

There are no user serviceable parts in this unit.

# ! Warning !

RISK OF FIRE RISK OF ELECTRICAL SHOCK RISK OF BURNS

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 or a Transformer Supplied Appliance"

#### **WARNING**

## **Controlling Appliances:**

Exercise extreme caution when using Zigbee devices to control appliances. Operation of the Zigbee 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. Zigbee 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.

1. Do Not include Zigbee devices in Groups or Scenes if they control appliances.

2. Do Not use Zigbee 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.

#### **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.

# Key Features

- One Zigbee controlled AC outlet for standard incandescent lighting or dimmable CFL/LED
  - o Remote ON/OFF/BRIGHTNESS control via the Zigbee controller
  - Manual ON/OFF/BRIGHTNESS control with the front panel push button
- One Always-ON pass-through AC outlet
- Over the Air updates Once joined to your Zigbee network, the device can transparently receive updates through your Zigbee gateway
- LED Status Indicator Indicates device scanning during pairing process
- 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
- Energy Monitoring The device can report wattage (W) and kilowatt hours (kWh). Energy usage is monitored through the ZigBee Controller Interface

# **Basic Operation**

The connected light can be turned ON in two ways:

- 1. Manually with the push button on the module
- 2. Remotely with a Zigbee Controller

#### **Manual Control**

The Front Panel Push button on the Appliance Module 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 once turns the device **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.

#### **Remote Control**

Zigbee devices can be controlled remotely with a Zigbee Controller or **over long distances** with a PC or mobile phone through a gateway connected to your wireless router. To control the device remotely it must be paired to the Zigbee network.

# Zigbee Network Pairing

## Pair the Device to the Zigbee Network

- 1. Plug in appliance to be controlled into the Zigbee controlled outlet on the module
- 2. Auto-Scan: LED Status Indicator Blinks as the device scans for a compatible network controller to pair with (IMG Required Indicates LED blinking while plugged into outlet)
- Timeout: Auto-Scan mode will eventually time out after the LED Status light stops blinking. The front panel push-button on the module must be pressed to initiate manual pairing following timeout.
- 4. From your controller, choose to add lighting device and enter Locating/Pairing mode as instructed by the controller
- 5. After the device is located and paired to the approved Zigbee network, the LED status will stop blinking and will appear in your controller's menu.

The module is now paired to the Zigbee network and can be controlled remotely.

# Remove from Zigbee Network (Reset Device)

## From the Zigbee Controller

From your controller or hub interface, choose to remove or delete the lighting device as instructed. The device will be removed from the Zigbee network following indication from your controller. All configuration parameters will be reset after the device is removed from the network.

#### Manual

#### To manually remove the device from the Zigbee network:

- 1. Unplug the module from the outlet.
- 2. Hold down the button.
- 3. Plug the module back into the outlet.
- 4. Release button within 4 seconds to start the join process for the iControl network.
- 5. If user wants to stay with the current network, release button after 4 seconds and before 10 seconds.

#### 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.

#### **FCC**

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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 equipmentand 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.

This device can be expected to comply with Part 15 of the FCC Rules provided it is assembled in exact accordance with the instructions provided with this kit. Operation is subject to the following conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.

#### Compliance with IC Rules and Regulations

IC: 6924A-ZB3101 Jasco Products Company Model: ZB3101 (45852) CAN ICES-3(B) / NMB-3(B) The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter within a host device, except in accordance with FCC multi-transmitter product procedures.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

## **SPECIFICATIONS**

- Power 120VAC, 60Hz
- Signal (Frequency) 2.4 Ghz IEEE 802.15.4
- Maximum load for the ZigBee controlled outlet: 2.5A 300 W Incandescent; 100W Dimmable CFL/LED
- Maximum load for both outlets 15 Amps, 1800W Resistive
- For indoor use only.
- Complies with FCC and Industry Canada regulations

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The images, product information and specifications listed in this document are preliminary and subject to change