

# enbrighten ZW3010 In-Wall Smart Dimmer User Guide

Home » enbrighten » enbrighten ZW3010 In-Wall Smart Dimmer User Guide



#### **Contents**

- 1 enbrighten ZW3010 In-Wall Smart **Dimmer**
- 2 FCC/IC
- **3 WARRANTY**
- **4 SPECIFICATIONS**
- 5 Tools You Will Need
- 6 Parts
- 7 Usage
  - 7.1 Multi-Switch Wiring
  - 7.2 Single-Switch Wiring
  - 7.3 Wire Gauge Requirements
  - 7.4 Basic Operation
  - 7.5 Manual Control
  - 7.6 Adjust Dim Levels
  - 7.7 Cycle LED Light
  - 7.8 LED Bulb Adjustments
  - 7.9 Minimum Dim Threshold
  - 7.10 Maximum Brightness Threshold
- 8 Add, Remove & Reset Device
  - 8.1 Adding Device to a Z-Wave Network
  - 8.2 Remove and Reset the Device
  - 8.3 Return Switch to Factory Defaults
- 9 Change Color of The Paddle
- 10 Documents / Resources
- 11 Related Posts



# enbrighten ZW3010 In-Wall Smart Dimmer



# FCC/IC

This device complies with Part 15 of the FCC and Industry Canada license-exempt RSS standards. Operation is subject to the following two 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.

**FCC NOTE:** The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment. **NOTE:** This 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 generates, uses and can radiate radio frequency energy,

and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee 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 which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**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.

#### WARRANTY

Jasco Products Company warrants this product to be free from manufacturing defects for five 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 our U.S.-based Consumer Care at 1-800-654-8483 (option 1) between 7AM – 8PM, M-F, Central Time or www.byjasco.com if the unit should prove defective within the warranty period.

#### **SPECIFICATIONS**

#### ZW3010

- Power: 120VAC, 60Hz
- Signal (frequency): 908.4/916MHz
- Maximum loads: 1-gang 600W, 2-gang 500W or 3-gang 400W incandescent, 300W dimmable CFL/LED
- Range: up to 150ft. line of sight between the wireless controller and the closest Z-Wave receiver module.
- Operating temperature range: 32-104° F (0-40° C)
- Type 1 enclosure, independently mounted (vertical position only), operating control: type 1.c action, pollution degree (2), impulse voltage (2500V), software class A

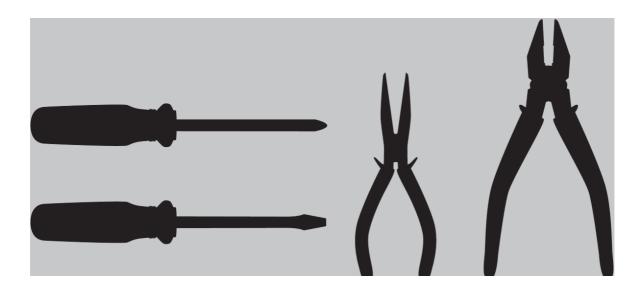
For indoor use only

Specifications subject to change without notice due to continuing product improvement

# **Tools You Will Need**

# **IMPORTANT!**

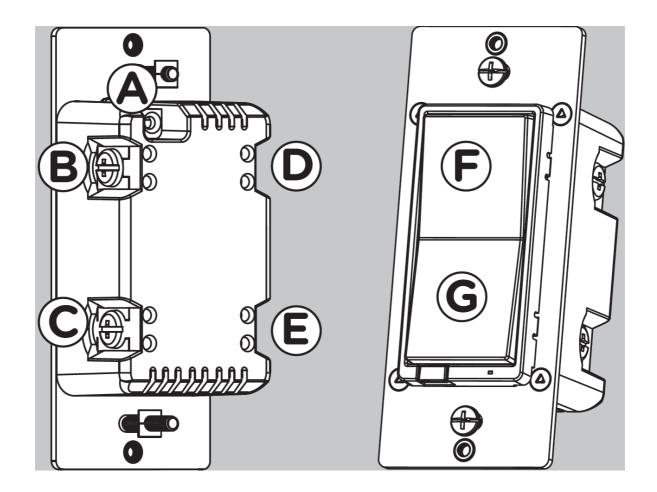
The fixture controlled by the Z-Wave in-wall smart dimmer must not exceed 600W incandescent, 300W dimmable CFL/LED. The dimmer is designed only for use with permanently installed fixtures.



# **Getting to Know Your New Z-Wave Device**

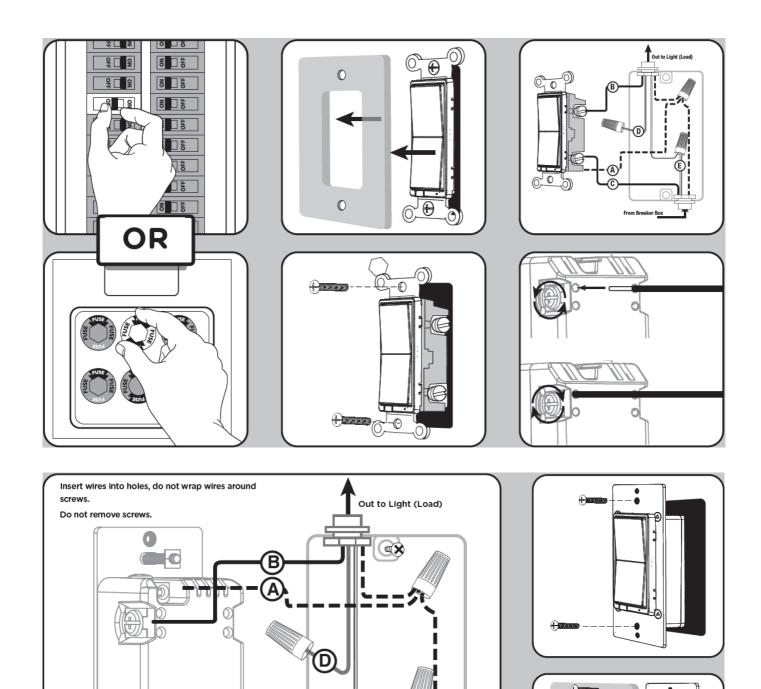
- Turn ON/OFF and adjust dim levels manually or remotely via the Z-Wave controller
- Can be added in multiple groups and scenes
- May be used in single-pole installation or with up to four add-on switches (12723/46199) in 3-way or 4-way wiring configurations
- Compatible with all incandescent and most dimmable CFL/LED bulbs
- · Auto line/load detection
- Interchangeable paddle switch white & light almond paddle in package
- Uses a standard, rocker-style wallplate for single-gang installations (wallplate not included)
- Blue LED indicates switch location in a dark room
- Z-Wave certified for simple pairing and integrated home automation
- Screw terminal installation requires wiring connections for line (hot), load, neutral and ground. Traveler wire required for 3-way or 4-way installation
- This Z-Wave device has advanced features that allow you to customize your experience. These features can only be adjusted by a Z-Wave enabled controller that supports the Z-Wave configuration command class. For a complete list of adjustable configurations, visit <a href="https://www.ezzwave.com/config">www.ezzwave.com/config</a>

### **Parts**



- 1. A. Ground (Green/Bare)
- 2. B. Line or Load (Black)
- 3. C. Line or Load (Black)
- 4. D. Traveler (Red/Other)
- 5. E. Neutral (White)
- 6. F. Top rocker press & release to turn dimmer ON, press & hold increases brightness
- 7. G. Bottom rocker press & release to turn dimmer OFF, press & hold to dim

# Usage



# WARNING — SHOCK HAZARD

Turn OFF the power to the branch circuit for the switch and lighting fixture at the service panel. All wiring connections must be made with the POWER OFF to avoid personal injury and/or damage to the switch. 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.

From Breaker Box

# **Multi-Switch Wiring**

#### Single-Switch Wiring

Before installation, you may wish to change the paddle color to match your wallplate or décor. Please proceed to section 5.

1. Shut off power to the circuit at circuit breaker or fuse box.

# IMPORTANT! Verify power is OFF to switch box before continuing.

- 2. Remove wallplate.
- 3. Remove the switch mounting screws.
- 4. Carefully remove the switch from the switch box. DO NOT disconnect the wires.
- 5. There are up to five screw terminals on the switch; these are marked:
  - A. GROUND Green/Bare
  - B. LINE OR LOAD Black (connected to power or lighting)
  - C. LINE OR LOAD Black (connected to power or lighting)
  - D. TRAVELER Red/Other (only in 3-way installations)
  - . E. NEUTRAL White

Match these screw terminals to the wires connected to the existing switch.

6. Disconnect the wires from the existing switch. Label wires according to the previous terminal connection.

# Observe important wiring information

IMPORTANT! This switch is rated for and intended to only be used with copper wire.

### Wire Gauge Requirements

Use 14AWG or larger wires suitable for at least 80Ű C for supplying line (hot), load, neutral, ground and traveler connections.

Wire strip length

For attachment using the enclosure's holes, strip insulation 5/8in. (16mm).

UL specifies the tightening torque for the screws is 14Kgf-cm (12lbf-in).

- 1. Connect the green or bare copper ground wire to the GROUND terminal.
- 2. Connect the black wire from the light to the other LINE/LOAD terminal.
- 3. Connect the black wire from the electrical service panel (hot) to either LINE/LOAD terminal.
- 4. Connect the white wire to the NEUTRAL terminal (use a jumper wire if needed).

**Note:** The traveler terminal is only used for 3-way or 4-way wiring and should remain unused if the dimmer is being installed in a 2-way system (one switch & one load).

- 5. Insert dimmer into the switch box being careful not to pinch or crush wires.
- 6. Dimmer must be independently mounted (vertical position only).
- 7. Secure the dimmer to the box using the supplied screws.
- 8. Mount the wallplate.
- 9. Reapply power to the circuit at fuse box or circuit breaker and test the system.

# **Basic Operation**

The connected light can be turned ON/OFF and adjust dim levels in two ways:

1. Manually from the front panel of the dimmer.

2. Remotely with a Z-Wave controller.

#### **Manual Control**

The front panel rocker dimmer allows the user to turn ON/OFF the connected fixture.

- 1. To turn the connected fixture ON, press and release the top of the rocker.
- 2. To turn the connected fixture OFF, press and release the bottom of the rocker.

#### **Adjust Dim Levels**

- 1. To increase brightness, press and hold the top of the rocker.
- 2. To decrease brightness, press and hold the bottom of the rocker.

#### Cycle LED Light

The LED below the dimmer acts as a guide light or status indicator. How to cycle through options: Press up three times and down once quickly.

- 1. LED is ON when the load is OFF (guide light in the dark) (default)
- 2. LED is ON when the load is ON (indicates the dimmer is ON)
- 3. LED is always OFF
- 4. LED is always ON (illuminates dimmer in the dark)

# **LED Bulb Adjustments**

Not all LED bulbs are made the same, and performance varies between dimmer brands. This can cause adverse bulb behavior, such as flickering or strobing. To account for this scenario, this dimmer features adjustable dim and brightness thresholds to allow setting minimum and maximum levels.

#### **Minimum Dim Threshold**

- 1. Press ON button four times, then OFF button once quickly.
- 2. Light starts at the most recent dim level (default 1%).
- 3. Press the top or bottom rocker button until the bulb reaches desired brightness without flickering.
- 4. The LED stops flashing 10 seconds after releasing the button to indicate the minimum threshold is set.

**Note:** This can be set by Z-Wave configuration parameter 30/size: 1 byte/values 1-99 (default — 1)

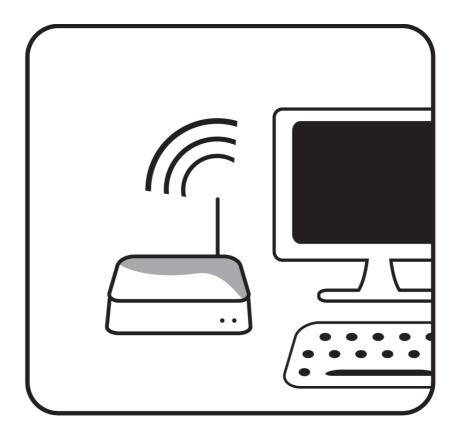
#### **Maximum Brightness Threshold**

- 1. Press OFF button four times, then ON button once quickly.
- 2. Light starts at the most recent brightness (default 99%)
- 3. Press the top or bottom rocker button until the bulb reaches desired brightness without flickering.
- 4. The LED stops flashing 10 seconds after releasing the botton to indicate the maximum threshold is set.

Note: This can be set by Z-Wave configuration parameter 31/size: 1byte/values 1-99 (default —99)

# Add, Remove & Reset Device

# Adding Device to a Z-Wave Network

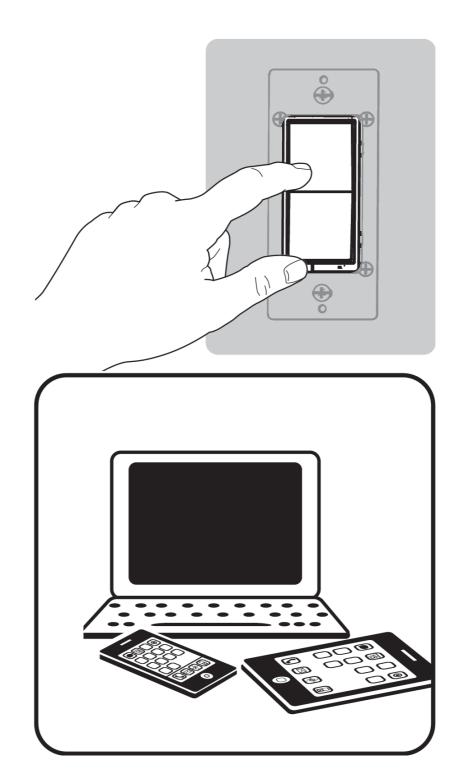


- 1. Follow the instructions for your Z-Wave certified controller to add a device to the Z-Wave network.
- 2. Once the controller is ready to add your device, press up and release the toggle.
- 3. The controller's app will indicate if it has discovered the switch.
  If prompted by the controller to enter the S2 security code, refer to the QR code/security number on the side of the box or the QR code label on the product (see Figure 1). Enter the 5-digit code.

You have complete control to turn your fixture ON/OFF/DIM and create groups, scenes, schedules and interactive automations programmed by your controller.

If your Z-Wave certified controller features remote access, you can control your fixture from your mobile devices. **NOTE:** SmartStart enabled products can be added into a Z-Wave network by scanning the QR code on the product with a controller providing SmartStart inclusion. No further action is required and the SmartStart product will be added automatically within 10 minutes of being switched on in the network vicinity.

#### Remove and Reset the Device



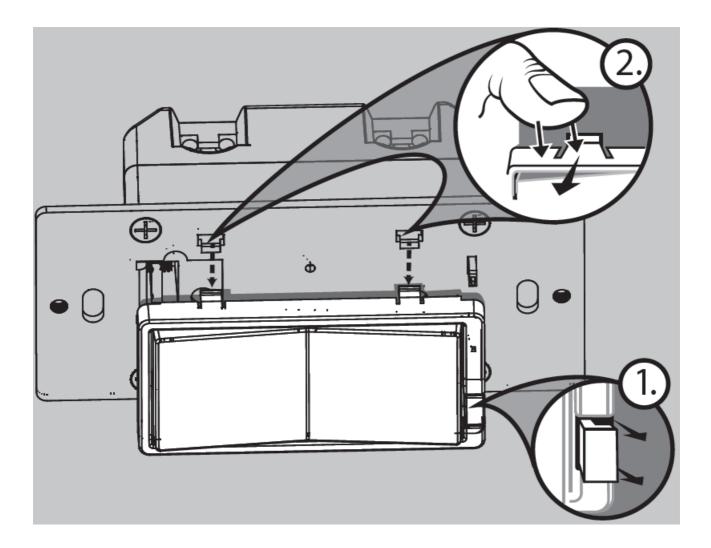
- 1. Follow the instructions for your Z-Wave certified controller to remove a device from the Z-Wave network.
- 2. Once the controller is ready to remove your device, press up and release the toggle.

# **Return Switch to Factory Defaults**

Quickly press ON (up) button three times then immediately press the OFF (down) button three times. **NOTE:** This should only be used if your network's primary controller is missing or otherwise inoperable.

# **Change Color of The Paddle**

This step is optional. Before installation, you may want to change the color of the paddle to match your wallplate or décor.



- 1. Lift the air gap tab at the base of the paddle.
- 2. Push side tabs in on one side and then the other to release paddle. Lift the cover up and off.
- 3. Simply put the new paddle onto the switch by inserting the air gap and side tabs and snapping securely into place.

Once this step has been completed, please return to section 3.

#### Add-on switch (12723/46199) is required for multi-switch 3-way or 4-way installations.

Connecting the traveler terminal of this switch to a standard switch will cause damage or result in improper function. If this switch is a part of a 3-way or 4-way multi-switch installation, do not connect the traveler wire or apply power until add-on switches are correctly installed. For more information on 3-way or 4-way installations, view the manual or quick-start guide with the add-on switch (12723/46199).

NOTE: Actual performance of any CFL or LED will vary from bulb type to bulb type and among manufacturers. It is important to note only bulbs 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.

For a complete list of recommended CFL/LED bulbs for this and other Z-Wave products from Jasco, please vist <a href="https://www.ezzwave.com">www.ezzwave.com</a>

# This device supports Association Command Class (3 Groups)

- · Association Group 1 supports Lifeline, Multi-level Switch report
- Association Group 2 supports Basic Set and is controlled with the local load
- Association Group 3 supports Basic Set and is controlled by double pressing the ON or OFF button

• Each Association Group supports 5 total nodes

# **Documents / Resources**



<u>enbrighten ZW3010 In-Wall Smart Dimmer</u> [pdf] User Guide ZW3010, In-Wall Smart Dimmer

Manuals+,