

## W902-DZB

### Zigbee Certified AC Wall Dimmer Switch



Momentary paddle buttons for on/off and dim up/down control

Control one or more remote lighting zone(s), depending on setup

Universal 120~277VAC input

RGB status/locator LED



Connect wirelessly via Zigbee 3.0 or Autani EnergyCenter

Neutral wire required

Interchangeable white, beige, and black cover plates available

5 year limited product warranty

## PRODUCT OVERVIEW

### Introduction

The W902-DZB is a Zigbee 3.0 certified universal input 120–277VAC dimmer switch designed for wall mount installation. The AC-powered dimmer switch allows for flexibility in manual override control of one or more associated lighting zone, depending on setup.

### Operation

After it is commissioned with a compatible gateway, the switch can be programmed to apply on/off control and step dimming to a remote fixture group. All aspects and sequence of operations are configurable via the associated gateway control software.

### General Features

Wireless Electronic Control Dimmer Switch  
 Independently Mounted for Flush Mounting

Type of Action: Type 1 action

Pollution Degree: 2

Rated Impulse Voltage: 4000V

Operating Temp: 0°C to +40°C (+32°F to +104°F)

See below for Installation Instructions & Cautions.

### Commissioning

All setup is performed via supported IEEE 802.15.4-based control platforms such as Autani EnergyCenter and other Zigbee 3.0 compatible lighting control systems. Appropriate gateway control software allows for automated schedules, timers, and scenes.

### Applications

This AC dimmer switch is designed for wall mount installation and is ideal for the following applications:

### Locations

- Offices
- Hallways
- Classrooms
- Retail stores
- Waiting areas
- Meeting rooms

## FEATURES

- Momentary paddle buttons for on/off control and dim up/down control
- Dim and switch remote fixtures and fixture groups
- Configurable via gateway software for a wide range of installations and applications
- Zigbee 3.0 certified and Autani EnergyCenter certified for easy setup and adjustment
- AC-powered design removes need for batteries
- UV resistant, flame retardant, impact resistant, and recyclable polycarbonate construction

## SPECIFICATIONS

- AC Input: 120~277VAC, 50/60Hz, 10mA Maximum
- User Controls: 2 momentary buttons for 4 total on/off and dim up/down operations, depending on duration of button press
- Radio Power: Up to +20dBm transmit
- Wireless Certification: Zigbee 3.0

## Datasheet & Installation Instructions

- Platform Certification: Autani EnergyCenter
- Operating Temperature: +32°F to +104°F (0°C to +40°C)
- Operating Humidity: 20% to 90% non-condensing
- Case Rating: IP20 for indoor use only Safety Certifications:
  - E475915 UL/cUL Listed
  - Regulatory Compliance: CE, RoHS, FCC, CA Title 24

## PART NUMBER NOMENCLATURE

## DIMENSIONS

NOMENCLATURE: W902-DXXY, W902-DZB

W902	-DXX	Y
I	II	III

I – Basic Series Model Designation “W902”

II – Control (interface) Type “-DXX”

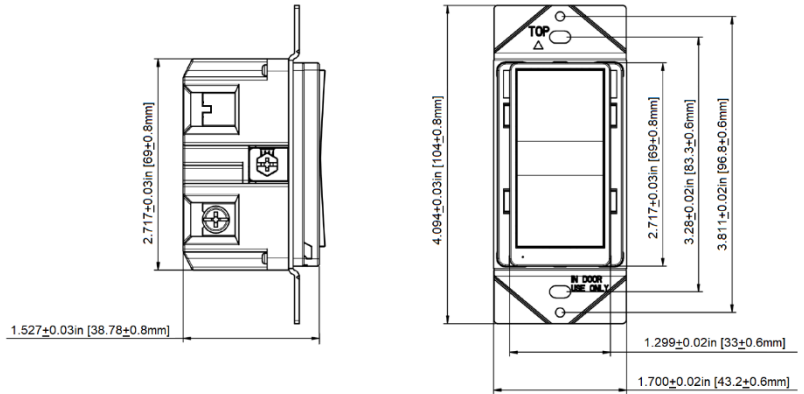
Blank, One or more alphanumeric characters.

As “-DZB” = Zigbee Wireless

As “-DBT” = Bluetooth Wireless

III – Other “Y”

Blank, One or more alphanumeric characters – Color, Packaging, Customer, or others for marketing purposes.



## INSTALLATION

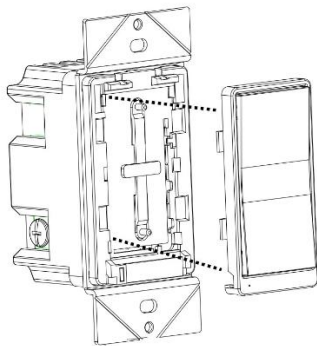
## WIRING

### CAUTION

Risk of Electric Shock – Disconnect power source before servicing.

### PRUDENCE

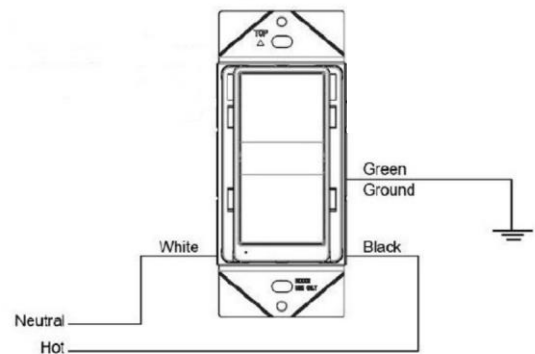
Risque de choc électrique – Débranchez la source d'alimentation avant l'entretien.



Wire: Strip 10mm ( $\pm 1$ ) insulation, connect or disconnect for field wiring.

For supply connector, use 14AWG wire rated for at least 75°C.

Use Copper Conductor Only.



## ORDERING INFORMATION

Part Number	Color	Description
W902-DZB	White	Universal voltage input wall mount dimmer switch with Zigbee compatible radio

### **RGB LED Operation:**

- **RGB** Cycling = 10 seconds, any time the device is powered on, a Leave command or Hard Reset is completed.
- **R** = Used and reserved for Occupancy Sensor. ON when PIR Sensor triggers, OFF when PIR Sensor is not triggered.
- **G FLASHING** = Not connected to any Zigbee network: Slow Flash 0.5 Seconds ON, 0.5 Seconds OFF.
- **G ON** = Joined to a Zigbee Network: **ON**
- **G OFF/FLASHING** = If connection to gateway is lost, device will retry connection for 1 Hour, LED will be **OFF** If after 1 Hour retry fails then device will enter rejoin mode: 0.5 Seconds ON, 0.5 Seconds OFF.
- **G FLASHING** = Zigbee Identify command initiated: 0.5 Seconds ON, 0.5 Seconds OFF. Repeats for duration of specified Identify Time. & Light fixture connected will cycle 1 Seconds ON (AC Relay Closed & DIM=10V), 1 Seconds OFF (AC Real Open & DIM=0V) Repeats for duration of specified Identify Time.
- **Reset** = Press and Hold Up & Down Buttons for >5 Seconds until RGB LED's start Flashing. Then release both Up and Down buttons, the device resets to Un-Joined State and LED's return to the initial **RGB** Cycling.

**LEAVE Command** = Leave then return to the initial **RGB** Cycling.

### **W902-DZB Up/Down Button Control**

#### **Up Button:**

Press 1x = ON and Previous Dim Setting

Press 2x Quickly = ON and 100% Output

Press and Hold (>2 seconds) = ON and Dim UP

#### **Down Button:**

Press 1x = OFF and Minimum

Press 2x Quickly = ON and 10% (0x25) Output

Press and Hold (>2 seconds) = Dim Down to Minimum (Stays ON)

Press and Hold Up & Down >5 seconds until RGB Flashes then release to reset

### **FCCID:**

Bluetooth **2AJ2N-W902-DBT**: Channel 0 to 39

Zigbee **2AJ2N-W902-DZB**: Channel 11 to 25

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance 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 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

To maintain compliance with FCC's RF exposure guidelines, the distance must be at least 20cm between the radiator and your body, and fully supported by the operating and installation configurations of the transmitter and its antenna(s).

This device complies with Part 15 of the FCC Rules. 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.