

# GoControl WD500Z5-1 WD500Z5-1 Manual

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GoControl

WD500Z5-1

SKU: WD500Z5-1



This is a

**Light Dimmer** 

for

U.S. / Canada / Mexico.

To run this device please connect it to your mains power supply.

To add this device to your network execute the following action:

Adding to a Network:1. With your Controller in Discovery or Add Mode, tap the switch. The LED will blink slowly when in ADD Mode.2. You should see an indication on your Controller that the device was added to the network and the LED will stop blinking.3. The device will appear in the list of Switches. It should display as a switch.

Please refer to the

Manufacturers Manual for more information.

# Important safety information

Please read this manual carefully. Failure to follow the recommendations in this manual may be dangerous or may violate the law.

The manufacturer, importer, distributor and seller shall not be liable for any loss or damage resulting from failure to comply with the instructions in this manual or any other material.

Use this equipment only for its intended purpose. Follow the disposal instructions.

Do not dispose of electronic equipment or batteries in a fire or near open heat sources.

#### What is Z-Wave?

Z-Wave is the international wireless protocol for communication in the Smart Home. This device is suited for use in the region mentioned in the Quickstart section.

Z-Wave ensures a reliable communication by reconfirming every message (**two-way** 

**communication**) and every mains powered node can act as a repeater for other nodes

(meshed network) in case the receiver is not in direct wireless range of the

transmitter.



This device and every other certified Z-Wave device can be **used together with any other certified Z-Wave device regardless of brand and origin** as long as both are suited for the same frequency range.

If a device supports **secure communication** it will communicate with other devices secure as long as this device provides the same or a higher level of security. Otherwise it will automatically turn into a lower level of security to maintain backward compatibility.

For more information about Z-Wave technology, devices, white papers etc. please refer to www.z-wave.info.

# **Product Description**

The WD500Z5-1 is an in-wall lighting dimmer switch designed to operate with LED, halogen and incandescent lights. Not only can this switch control the connected load, with Central Scene support it can run up to 6 scenes

created by the Hub it is the most versatile Home Automation light switch available. With OTA upgrading supported, this light switch may be the last one ever installed in a home.

# Prepare for Installation / Reset

Please read the user manual before installing the product.

In order to include (add) a Z-Wave device to a network it **must be in factory default state.** Please make sure to reset the device into factory default. You can do this by performing an Exclusion operation as described below in the manual. Every Z-Wave controller is able to perform this operation however it is recommended to use the primary controller of the previous network to make sure the very device is excluded properly from this network.

### Reset to factory default

This device also allows to be reset without any involvement of a Z-Wave controller. This procedure should only be used when the primary controller is inoperable.

To Reset Unit (If Required):Use only in the event that your primary Controller is lost or otherwise inoperable, to reset the GoControl Dimmer and clear all network information, follow these steps:1. Tap the top of the switch five (5) times.2. Press and hold the bottom of the switch for 15 seconds. The LED will increasingly blink faster to indicate that a Reset is taking place.

# **Safety Warning for Mains Powered Devices**

ATTENTION: only authorized technicians under consideration of the country-specific installation guidelines/norms may do works with mains power. Prior to the assembly of the product, the voltage network has to be switched off and ensured against re-switching.

#### Inclusion/Exclusion

On factory default the device does not belong to any Z-Wave network. The device needs to be **added to an existing wireless network** to communicate with the devices of this network. This process is called **Inclusion**.

Devices can also be removed from a network. This process is called **Exclusion**. Both processes are initiated by the primary controller of the Z-Wave network. This controller is turned into exclusion respective inclusion mode. Inclusion and Exclusion is then performed doing a special manual action right on the device.

### Inclusion

Adding to a Network:1. With your Controller in Discovery or Add Mode, tap the switch. The LED will blink slowly when in ADD Mode.2. You should see an indication on your Controller that the device was added to the network and the LED will stop blinking.3. The device will appear in the list of Switches. It should display as a switch.

### **Exclusion**

Removing from a Network:1. Set the Controller into Removal Mode and follow its instruction to delete the GoControl Dimmer from the Controller.2. Remove the switch by tapping the paddle 2 times. The LED will begin blinking slowly for 10 seconds indicating that it has been removed.3. You should see an indication on your Controller that the device was removed from the network.

### Quick trouble shooting

Here are a few hints for network installation if things dont work as expected.

1. Make sure a device is in factory reset state before including. In doubt exclude before include.

- 2. If inclusion still fails, check if both devices use the same frequency.
- 3. Remove all dead devices from associations. Otherwise you will see severe delays.
- 4. Never use sleeping battery devices without a central controller.
- 5. Dont poll FLIRS devices.
- 6. Make sure to have enough mains powered device to benefit from the meshing

### Association – one device controls an other device

Z-Wave devices control other Z-Wave devices. The relationship between one device controlling another device is called association. In order to control a different device, the controlling device needs to maintain a list of devices that will receive controlling commands. These lists are called association groups and they are always related to certain events (e.g. button pressed, sensor triggers, ...). In case the event happens all devices stored in the respective association group will receive the same wireless command wireless command, typically a 'Basic Set' Command.

# **Association Groups:**

Group NumberMaximum NodesDescription

1	5	Z-Wave Plus Lifeline
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# **Configuration Parameters**

Z-Wave products are supposed to work out of the box after inclusion, however certain configuration can adapt the function better to user needs or unlock further enhanced features.

IMPORTANT: Controllers may only allow configuring signed values. In order to set values in the range 128 ... 255 the value sent in the application shall be the desired value minus 256. For example: To set a parameter to 200â€îit may be needed to set a value of 200 minus 256 = minus 56. In case of a two byte value the same logic applies: Values greater than 32768 may needed to be given as negative values too.

#### Parameter 10: Dim Local On/Off Timer

The Dim Timer sets how fast the dim steps happen in a local dimmable device Size: 1 Byte, Default Value: 10

### SettingDescription

1 – 255 # – Dim Remote On/Off Time in mS	
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# Parameter 11: Dim ALL On/Off Step

This value indicates how many levels the dimmer will change in all devices when an ALL ON or ALL OFF command is transmitted

Size: 1 Byte, Default Value: 10

# SettingDescription

1 – 99	Dim Remote On/Off Steps
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### Parameter 12: Dim ALL On/Off Timer

The Dim ALL On/Off Timer sets how fast the dim steps happen in all devices when an ALL ON or ALL OFF

command is transmitted Size: 1 Byte, Default Value: 3

# SettingDescription

1 – 255	# – Dim Remote On/Off Time in mS
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## **Parameter 3: Night Light**

Control the operation of the LED function,

Size: 1 Byte, Default Value: 0

SettingDescription

0  $\mid$  0 - LED OFF when the load is on, and ON when the load is off.1 - LED ON when the load is on, and OFF w

- hen the load is off.2 – LED is always on.3 – LED is always off.4 – LED blinks during RF transmissions from o

I r to the device.

#### **Parameter 4: Invert Switch**

To change the top of the switch to OFF and the bottom of the switch ON.

Size: 1 Byte, Default Value: 0

### SettingDescription

0-1 0 – Top of switch is ON, bottom of switch is OFF.1 – Bottom of switch is ON, top of switch is OFF

# **Parameter 5: Start Level Dim Command**

The Start Level sent in a Dim command can be ignored or not. Typically the dim levelshould start from the current level and dim from there instead of suddenly changing to the Start Level and then dimming.

Size: 1 Byte, Default Value: 1

#### SettingDescription

0 – 1 0 – Use the Start Level in the Dim Command.1 – Ignore the Start Level in the Dim Command

## Parameter 7: # – Dim Remote On/Off Steps

This value indicates how many levels the dimmer will change a remote dimmable device each time the Dim Timer expires.

Size: 1 Byte, Default Value: 3

## SettingDescription

1 – 99	Dim Remote On/Off Steps
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### Parameter 8: Dim Remote On/Off Timer

The Dim Timer sets how fast the dim steps happen in a remote dimmable device

Size: 1 Byte, Default Value: 10

### SettingDescription

1 – 255	# – Dim Remote On/Off Time in mS
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# Parameter 9: Dim Local On/Off Step

This value indicates how many levels the dimmer will change the local dimmable device each time the Dim Timer expires.

Size: 1 Byte, Default Value: 10

SettingDescription

1 – 255	Dim Remote On/Off Steps
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### **Technical Data**

Hardware Platform	ZM5202
Device Type	Light Dimmer Switch
Network Operation	Always On Slave
Firmware Version	HW: 1 FW: 1.13
Z-Wave Version	6.51.07
Certification ID	ZC10-16095223
Z-Wave Product Id	0x014F.0x5744.0x3530
Color	White
Electric Load Type	Dimmable LEDIncandescent
Neutral Wire Required	ok
Switch Type	Decorator Paddle Push with Indicator
Firmware Updatable	Updatable by Consumer by RF
Frequency	XXfrequency
Maximum transmission power	XXantenna

### **Controlled Command Classes**

- Basic
- Switch Multilevel V4

## **Explanation of Z-Wave specific terms**

- Controller is a Z-Wave device with capabilities to manage the network.
  Controllers are typically Gateways, Remote Controls or battery operated wall controllers.
- **Slave** is a Z-Wave device without capabilities to manage the network. Slaves can be sensors, actuators and even remote controls.
- **Primary Controller** is the central organizer of the network. It must be a controller. There can be only one primary controller in a Z-Wave network.
- Inclusion is the process of adding new Z-Wave devices into a network.
- **Exclusion** is the process of removing Z-Wave devices from the network.
- Association is a control relationship between a controlling device and

a controlled device.

- Wakeup Notification is a special wireless message issued by a Z-Wave device to announces that is able to communicate.
- Node Information Frame is a special wireless message issued by a
  Z-Wave device to announce its capabilities and functions.

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