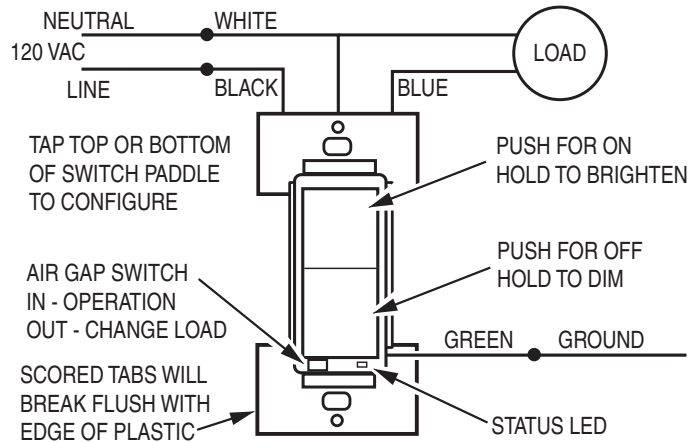


SUPPLIED WITH DECORATIVE SWITCH PLATE



**NOTE:** This unit must be added to the Network **only where it will be permanently installed**. The proper operation of this node in the mesh network is dependent on it knowing its location with respect to other nodes. You cannot "test bench" configure this unit, then install.

### **WD1000Z-1 WALL MOUNTED DIMMER**

The GoControl™ family of Z-Wave® certified wireless lighting products (smart LED fixtures, bulbs, switches, dimmers, outlets, and plug-in modules) Control Products (thermostats, irrigation controller and garage door controller) and Sensors (flood, leak, alert sounder, motion sensor and door/window sensor) bring a new level of intelligent wireless Home Automation capability to commercial and residential environments.

The Z-Wave wireless protocol is an international wireless standard for remote home automation, security and other applications. This product can be included and operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers and/or other applications. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

The WD1000Z-1 Wall Mounted Dimmer allows remote ON/OFF control and dimming of connected lights. The Z-Wave Wall Mount Dimmer is easily wired in place of a standard wall dimmer. This device requires a Neutral connection.

GoControl Z-Wave products are easy to install, are Z-Wave certified, and allow dealers to create an integrated wireless network with nearly limitless expansion and interoperability with security, energy management, home entertainment, appliances, and more.

### **PREPARATION**

**DANGER! SHOCK HAZARD.** Read and understand these instructions before installing. 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. **It is recommended that a qualified electrician perform this installation.** Make sure the total load controlled does not exceed the rated maximum. **For indoor use only.** Retain instructions for future use.

**CAUTION:** To reduce the risk of overheating and possible damage to other equipment, do not install to control a receptacle, a motor operated appliance, a fluorescent lighting fixture, or a transformer-supplied appliance, but only permanently installed incandescent lamp fixtures. Make sure the lamp(s) to be controlled directly from the dimmer total no more than 500 watts.

#### **Air Gap Switch**

The WD1000Z-1 has an air gap switch on the face (lower left), that when pulled out, completely removes the power available to the load (simply turning the dimmer off does not). This enables the lamps that are controlled by the device to be changed with minimal danger of electrical shock. The air gap switch must be pushed all the way back in for the dimmer to operate the lamps again.

#### **Proper Single Gang Installation**

Using WD1000Z-1 standard full heat-sink (all tabs), the connected incandescent lamp load shall not exceed 100W.

If a tab is removed from one side of the unit, the connected incandescent lamp load must not exceed 900W.

If both tabs are removed from the unit, the connected incandescent lamp load must not exceed 800W.

#### **Proper Dual Gang Installation**

The connected incandescent lamp load must not exceed 900W for each of the two WD1000Z-1 units.

#### **Proper Triple Gang Installation**

The connected incandescent lamp load must not exceed 700W for each of the three WD1000Z-1 units.

## INSTALLATION

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### Wiring

Wire this switch in place of a current wall switch according to the wiring diagram. When used, the WD1000Z-1 is required to be **wired to the same line (or neutral)** which is also wired to the load being controlled, and not wired to any other neutral. If multiple neutrals are tied together in one box, separate the neutrals to preserve the integrity of the WD1000Z-1 circuit.

✓ **CAUTION!** Do not wire unit “live” (with power on the circuit).

### Adding to a Network:

Refer to your Controller operating instructions to add this switch under the command of the Wireless Controller.

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. If the Controller/Gateway shows the addition failed, repeat Steps 1-3.

✓ **NOTE:** If you have trouble adding the dimmer to a group it may be that the Home ID and Node ID were not cleared from it after testing. You must first “RESET UNIT” with your Controller to remove it from the network. Although adding it to a group includes it in the network, removing it from a group does not remove it from the network. If removed from a group, it functions as a repeater (only). “RESET UNIT” removes it completely from the network.

### Removing from a Network:

The WD1000Z-1 can be removed from the network by the Controller/Gateway. Refer to the Controller operating instructions for details.

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.

## BASIC OPERATION

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### Local Control

The top or bottom of the WD1000Z-1 switch can be used to carry out inclusion (add to a group), association, exclusion (remove from group) or reset (remove from network). Pushing the top or bottom of the switch, the WD1000Z-1 allows the user to do the following:

- Turn ON, OFF, DIM or BRIGHTEN the load attached.
- Include or exclude the module from the Z-Wave network.
- Configure to Control Shades or Window Coverings via Z-Wave network.
- Control other Z-Wave enabled devices.

Also, when a controller prompts you to “Send Node ID” or to “Press Button on Unit”, quickly tap the top or bottom of the switch once to satisfy those instructions.

- Tapping top of the switch turns the load attached ON.
- Tapping bottom of the switch turns the load attached OFF.
- Pressing and holding the top of the switch will brighten the load attached, and pressing and holding the bottom of the switch will dim the load. When OFF, pressing and holding the bottom of the switch will cause the load will go to the minimum dim level.

✓ **NOTE:** Upon restoration of power after a power loss, the WD1000Z-1 returns to previous known state.

### LED Indication

To act as a night light, the LED on the dimmer will turn ON when the load attached is OFF. However, the LED can be user configured to turn ON, when the load attached is ON, if so desired. See “CONFIGURATION” section.

### Remote Control

The WD1000Z-1 will respond to BASIC and MULTILEVEL commands that are part of the Z-Wave system. Refer to your Controller’s instructions as to whether your Controller can transmit those commands.

## Associations

The WD1000Z-1 supports the Association command.

The WD1000Z-1 can be set to control other Z-Wave devices. **Those devices must be installed in their permanent location.**

You can turn on and off, and even dim other Z-Wave devices once they are “associated” in groups 2 and 3 with WD1000Z-1.

**ABOUT DIMMERS IN A GROUP:** If you combine Z-Wave enabled dimmers and other types of Z-Wave devices in a group, place a Z-Wave enabled dimmer into the empty group first to ensure that the dimming operates correctly.

Each group is turned on, off or dimmed by tapping or holding the switch a differing amount of times.

### Group 2

If you **associate** a Z-Wave device into Group 2, you can turn that device on and off by tapping the top or bottom of the switch twice. You can brighten or dim devices by tapping the top or bottom of the switch once and then hold it down. The load attached to the WD1000Z-1 is not affected.

### Group 3

If you **associate** a Z-Wave device into Group 3, you can turn that device on by tapping the top of the switch three times or off by tapping the bottom of the switch three times. You can brighten devices by tapping the top of the switch twice or dim devices by tapping the bottom of the switch twice and then hold it down. The load attached to the WD1000Z-1 is not affected.

You can **associate** up to 5 Z-Wave devices into each of these groups. For instructions on how to “associate” a Z-Wave device into one of these groups, refer to your wireless Controller instructions. (If you are using the Z-Wave Controller, refer to the Setup Menu, Association section).

**ABOUT DIMMING:** If you combine Z-Wave enabled dimmers and other types of Z-Wave devices in a group, place a Z-Wave enabled dimmer into the empty group 1st to ensure that the dimming operates correctly.

## ADVANCED OPERATION

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### All On/All Off

The WD1000Z-1 supports the ALL ON / ALL OFF commands. The dimmer can be set to respond to ALL ON and ALL OFF commands four different ways. Refer to your Controller for information on how to set the module to operate in the manner you desire. Some Controllers may be only able to set certain settings of ALL ON / ALL OFF response.

The four different ways the dimmer can be setup are:

- Dimmer responds to ALL ON and the ALL OFF command.
- Dimmer responds to ALL OFF command but will not to ALL ON command.
- Dimmer responds to ALL ON command but will not to ALL OFF command.
- Dimmer does not respond to ALL ON or ALL OFF command.

## CONFIGURATION

The WD1000Z-1 supports the Configuration command. Each unit can be configured to operate slightly differently than how it works when you first install it.

Using the Configuration command you can configure the following:

### Set Ignore Start Level Bit When Transmitting Dim Commands

The WD1000Z-1 can send Dim commands to Z-Wave enabled dimmers. The Dim command has a start level embedded in it. A dimmer receiving this command will start dimming from that start level if this bit is set to 0. If the bit is set to 1, the dimmer will ignore the start level and instead start dimming from its current level.

Parameter	Length	Valid Values	Configuration Option
1	1 Byte	0	Dimmer starts from the Dim command level
		1	Dimmer starts from its current level (default)

### Night Light

By default, the LED on the WD1000Z-1 will turn OFF when the load attached is turned ON. To make the LED turn ON when the load attached is turned ON, set Parameter 3 to a value of 1.

Parameter	Length	Valid Values	Configuration Option
3	1 Byte	0	LED OFF when the load is on, and ON when the load is off (default - night lite mode)
		1	LED ON when the load is on, and OFF when the load is off

### Invert Switch

To change the top of the switch to OFF and the bottom of the switch ON, set Parameter 4 to a value of 1.

Parameter	Length	Valid Values	Configuration Option
4	1 Byte	0	Top of switch is ON, bottom of switch is OFF (default)
		1	Bottom of switch is ON, top of switch is OFF

### Enable Shade Control Group 2

The WD1000Z-1 can control shade control devices via its Group 2 if configuration Parameter 14 is set to a value of 1.

Parameter	Length	Valid Values	Configuration Option
14	1 Byte	0	Shade control via Group 2 OFF (default)
		1	Shade control via Group 2 ON

### Enable Shade Control Group 3

The WD1000Z-1 can control shade control devices via its Group 3 if this configuration Parameter 15 is set to a value of 1.

Parameter	Length	Valid Values	Configuration Option
15	1 Byte	0	Shade control via Group 3 OFF (default)
		1	Shade control via Group 3 ON

### LED Transmission Indication

The WD1000Z-1 will flicker its LED when it is transmitting to any of its groups. This flickering can be set to not flicker at all (set to 0), to flicker the entire time it is transmitting (set to 1), or to flicker for only 1 second when it begins transmitting (set to 2). By default, the WD1000Z-1 is set to flicker for only 1 second.

Parameter	Length	Valid Values	Configuration Option
19	1 Byte	0	LED off when transmitting
		1	LED flickers for length of transmission
		2	LED flickers for 1 second (default)

### Resetting to Defaults

Each Configuration Parameter can be set to its default setting by setting the default bit in the Configuration Set command. See your Controller's instructions on how to do this (and if it supports it). All Configuration commands will be reset to their default state when the WD1000Z-1 is excluded from the Z-Wave network by using the controller to reset the node (on the Z-Wave Controller select "SETUP" and scroll to "RESET UNIT").

## SPECIFICATIONS

Power:	120 VAC, 60 Hz
Signal (Frequency):	908.42 MHz
Maximum Load:	1000 watts
Range:	Up to 130 feet line of sight

## REGULATORY INFORMATION

The WD1000Z-1 is certified to comply with applicable FCC and IC rules and regulations governing RF and EMI emissions.

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.

### FCC Notice

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 to help.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

### IC Notice

This Class B digital apparatus complies with Canadian ICES-003

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This device complies with the Industry Canada license 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.

## NOTICES

Z-Wave<sup>®</sup> and Z-Wave Plus<sup>®</sup> are registered trademarks of Sigma Designs and its subsidiaries in the United States and other countries.

## WARRANTY

### What is Covered?

Nortek Security & Control ("NS&C") warrants to consumers who purchase this product for personal, family or household purposes new from NS&C directly or from an authorized NS&C dealer, that the product will be free from defects in materials and workmanship for a period of (1) year from the date of purchase. This warranty only applies if the product is installed at a residence in the 50 United States or District of Columbia, and only at the site of the original installation. It is not transferable. This warranty is not extended to resellers.

If a defect exists, NS&C will have you ship the defective part or product to us and we will, at our option, either repair or replace it. This warranty does **not** cover the cost of labor to remove a defective part or product or to reinstall any repaired or replacement part or product.

This warranty does **not** cover defects or damages caused by improper handling, maintenance, storage, installation, removal or re-installation, misuse, non-factory authorized modification or alteration, use of incompatible accessories, electrical power problems or surges, impact by foreign objects, accident, fire, acts of God, normal wear and tear or shipping damage other than a shipment from NS&C. Note that all NS&C products are designed to be installed, removed and serviced by trained individuals or professionals.

Keep your original sales receipt as it will be required to obtain warranty service.

This warranty shall not be extended or restarted upon receipt of any repaired or replacement part or product under this warranty. No person is authorized to extend or otherwise modify this warranty.

### How do I Obtain Warranty Service?

To obtain warranty service, email our Returns Department at returns@nortek.com. Include your name, address, telephone number, the model number of your product, a copy of your original sales receipt, and a description of the problem. Unless we need to discuss the situation further with you, you will be emailed a Return Authorization Number and shipping instructions. If we need to discuss the situation further with you, we will call or email you. NS&C may require troubleshooting on installed product before a Return Authorization Number is issued. Anything shipped to us without a Return Authorization Number will be automatically returned unopened. You are responsible for the charges for shipment to us, unless you are a California resident.

### Limitations

THE DURATION OF ANY IMPLIED WARRANTY, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL NOT EXCEED THE WARRANTY PERIOD PROVIDED HEREIN.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

NS&C SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE BREACH OF ANY WRITTEN OR IMPLIED WARRANTY.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above may not apply to you.

This warranty gives you specific legal rights, and you may also have other legal rights which vary from State to State.

### IMPORTANT !!!

Radio controls provide a reliable communications link and fill an important need in portable wireless signaling. However, there are some limitations which must be observed.

- For U.S. installations only: The radios are required to comply with FCC Rules and Regulations as Part 15 devices. As such, they have limited transmitter power and therefore limited range.
- A receiver cannot respond to more than one transmitted signal at a time and may be blocked by radio signals that occur on or near their operating frequencies, regardless of code settings.
- Changes or modifications to the device may void FCC compliance.
- Infrequently used radio links should be tested regularly to protect against undetected interference or fault.
- A general knowledge of radio and its vagaries should be gained prior to acting as a wholesale distributor or dealer, and these facts should be communicated to the ultimate users.

# GoControl™

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