Introduction:
Thank you for choosing the ZDS-200 (Dimming Switch Module) 2-Wires control module. This product allows users to remotely control lighting, home appliances, and make home control easy with low installation and maintenance costs. You may begin with a few Z-Wave enabled devices as well as some of our products to build up a complete home automation system.

Note: ZDS-200 is a 2-Wires enabled device and fully compatible with Z-Wave enabled network. It can be configured as either a "DIMMER" or a "SWITCH" device. It allows you to control lighting, home appliances, and make home control easy with low installation and maintenance costs.

Key Features:
- Supports Dual mode (“DIMMER” and “SWITCH”)
- Supports dual mode as the Z-Wave controller
- Manual ON/OFF/DIM control with the front panel push button
- Switch mode
- Support Association Group and API Report switch status
- Supports Network Power ON/OFF and Explore Frames
- High output power in DIMMER and SWITC mode
- Over temperature protection
- Grounded 2-wires-power connection for safety
- Do not block power cord when plugged into upper outlet of a duplex wall receptacle

Warning:
Before using the unit, it is recommended to perform a power cycling operation. (The unit will enter classical inclusion/exclusion first, then jump to NWI, and then the final NWI setup procedure.)

Z-Wave Wave Remote Control
- ZDS-200 can be configured as either a "DIMMER" or "SWITCH" device, and it will detect the operation mode using the position of the slide switch when powering on. This ZDS-200 will stay in the selected operation mode after inclusion process, and it will not respond to the slide switch selection after re-programming.
- This ZDS-200 can be configured as either a "DIMMER" or "SWITCH" device, and it will detect the operation mode using the position of the slide switch when powering on.
- This ZDS-200 will stay in the selected operation mode after inclusion process, and it will not respond to the slide switch selection after re-programming.

WARNING:
ZDS-200 can be configured as either a "DIMMER" or "SWITCH" device, and it will detect the operation mode using the position of the slide switch when powering on.

User Manual:
1. Switch to DIMMER mode.
2. Plug the lamp into the ZDS-200’s 2-Wires outlet. Ensure that the loading is not exceeding 330 Watts Incandescent.
3. Plug the ZDS-200 into a wall AC outlet. Lower than 330 Watts Resistive Load.
4. Press the button to turn the light ON/OFF. (This button is a toggle switch.)
5. Presse and hold the button will change the brightness. Release the button when the desired brightness is attained. (This is also a toggle switch.)
6. Unplug the ZDS-200 from wall AC outlet.
7. Switch to SWITCH mode.
8. Plug the lamp into the ZDS-200’s 2-Wires outlet. Ensure that the loading is not exceeding 330 Watts Incandescent or 500 Watts Resistive Load.
9. Plug the ZDS-200 into a wall AC outlet.

Z-Wave setup and operations:
ZDS-200 can be configured as either a "DIMMER" or "SWITCH" device, and it will detect the operation mode using the position of the slide switch when powering on. This ZDS-200 will stay in the selected operation mode after inclusion process, and it will not respond to the slide switch selection after re-programming.

Z-Wave Configuration Parameters
Different user has different preferred settings of their therapist, you may use the below configuration parameters to change settings of corresponding functionality.

<table>
<thead>
<tr>
<th>Parameter No.</th>
<th>Description</th>
<th>Values</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0x00</td>
<td>0 (0x00) - Switch does not save the state after power failure</td>
<td>0 (0x00)</td>
<td>1 (0x01)</td>
</tr>
<tr>
<td>0x01</td>
<td>1 (0x01) - Switch saves its state before power failure</td>
<td>0 (0x00)</td>
<td>1 (0x01)</td>
</tr>
<tr>
<td>0x02</td>
<td>0 (0x00) - Does not support Dual mode</td>
<td>0 (0x00)</td>
<td>0 (0x00)</td>
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<tr>
<td>0x03</td>
<td>1 (0x01) - Dual mode supported</td>
<td>0 (0x00)</td>
<td>0 (0x00)</td>
</tr>
<tr>
<td>0x04</td>
<td>0 (0x00) - Single switch</td>
<td>0 (0x00)</td>
<td>0 (0x00)</td>
</tr>
<tr>
<td>0x05</td>
<td>1 (0x01) - Dual switch</td>
<td>0 (0x00)</td>
<td>0 (0x00)</td>
</tr>
<tr>
<td>0x06</td>
<td>0 (0x00) - No Inclusion</td>
<td>0 (0x00)</td>
<td>0 (0x00)</td>
</tr>
<tr>
<td>0x07</td>
<td>1 (0x01) - Inclusion</td>
<td>0 (0x00)</td>
<td>0 (0x00)</td>
</tr>
<tr>
<td>0x08</td>
<td>0 (0x00) - No Exclusion</td>
<td>0 (0x00)</td>
<td>0 (0x00)</td>
</tr>
<tr>
<td>0x09</td>
<td>1 (0x01) - Exclusion</td>
<td>0 (0x00)</td>
<td>0 (0x00)</td>
</tr>
<tr>
<td>0x0A</td>
<td>0 (0x00) - No Association</td>
<td>0 (0x00)</td>
<td>0 (0x00)</td>
</tr>
<tr>
<td>0x0B</td>
<td>1 (0x01) - Association</td>
<td>0 (0x00)</td>
<td>0 (0x00)</td>
</tr>
<tr>
<td>0x0C</td>
<td>0 (0x00) - No Report</td>
<td>0 (0x00)</td>
<td>0 (0x00)</td>
</tr>
<tr>
<td>0x0D</td>
<td>1 (0x01) - Report</td>
<td>0 (0x00)</td>
<td>0 (0x00)</td>
</tr>
<tr>
<td>0x0E</td>
<td>0 (0x00) - No Dimming</td>
<td>0 (0x00)</td>
<td>0 (0x00)</td>
</tr>
<tr>
<td>0x0F</td>
<td>1 (0x01) - Dimming</td>
<td>0 (0x00)</td>
<td>0 (0x00)</td>
</tr>
</tbody>
</table>

Definitions:
- Switching value is the last position saved before power failure.
- Parameter No. 0x00 = Maximum/Minimum value
- Parameter No. 0x01 = Minimum/Maximum value
- Parameter No. 0x02 = Minimum/Maximum value
- Parameter No. 0x03 = Minimum/Maximum value
- Parameter No. 0x04 = Minimum/Maximum value
- Parameter No. 0x05 = Minimum/Maximum value
- Parameter No. 0x06 = Minimum/Maximum value
- Parameter No. 0x07 = Minimum/Maximum value
- Parameter No. 0x08 = Minimum/Maximum value
- Parameter No. 0x09 = Minimum/Maximum value
- Parameter No. 0x0A = Minimum/Maximum value
- Parameter No. 0x0B = Minimum/Maximum value
- Parameter No. 0x0C = Minimum/Maximum value
- Parameter No. 0x0D = Minimum/Maximum value
- Parameter No. 0x0E = Minimum/Maximum value
- Parameter No. 0x0F = Minimum/Maximum value

Basic Operation:
ZDS-200 can be configured as either a "DIMMER" or "SWITCH" device, and it will detect the operation mode using the position of the slide switch when powering on.

Warning:
Switch Mode is required for inducive and capacitive devices unsuitable for dimming, (e.g. fluorescent lamps, motors etc.). The dimming function will be disabled in this mode.

The connected device can be turned ON/OFF in two ways:
1. Manual control with the push button on the ZDS-200.
2. Z-Wave remote control.
Support for Association Groups

ZDS-200 supports 2 association groups. A maximum of 144 node IDs (muli-channel devices) can be assigned to these association groups.

Association group 1:
-Association group 1 is used to report status changes such as Auto root to gateway. (Max. 1 node ID can be assigned to this association group)
-ZDS-200 will trigger data report function if the Dimmer or Switch status has been changed.

Association group 2:
-Dimmer mode: After receiving a dimming command from a local switch or gateway (e.g. 0%), the ZDS-200 will automatically send out a related status data command (e.g. 0% to its associated group).
-Switch mode: After receiving a basic set command from a local switch or gateway. On (0xFF) or Off (0x00), the ZDS-200 will automatically send out a related status data command. (On (0xFF) or Off (0x00) to its associated group. (Max 4 node IDs can be assigned to this association group))

Please refer to your controller's instructions for information on whether or not it supports the Association function.

Operation diagram for Association Groups:

1. Association group 1 is to report status to gateway
2. Association group 2 is for dimmer and switch mode
3. 2-Wire Gateway (Node ID: A)
4. ZDS-200 (Node ID: B)

All ON/OFF functions

Dependent upon your primary controller, the ZDS-200 will be able to report to ALL ON and ALL OFF commands up to four (4) ways.

Example:
-ZDS-200 will send out a control command to Association group 2, when device status has been changed.

Operation for Association Groups:

1. Device Load turned off
2. Device Load turned on
3. Device Load turned off
4. Device Load turned on

NOTE: This device complies with Industry Canada RSS standards. Performance can vary depending on the type of obstacles, such as walls and furniture, between the Z-Wave devices. Every 2-Wire device set up in your network will act as a signal repeater, allowing them to talk to each other and to find alternate routes in the case of obstruction dead spots caused by obstacles.

Radio Frequency Limitations:
-Each wall or object (e.g. refrigerator, bookshelf, large TV, etc) can reduce the maximum range by up to 20-30%. Plasterboard and wooden walls will have less effect on the signal than concrete, brick, or tile.
-Well mounted 2-Wire devices will also suffer a loss of range (as they are housed in metal junction boxes, which could reduce the range by up to 20-30%)

Maintenance

1. Do not expose your unit to dust, strong sunlight, humidity, high temperature or mechanical shocks.
2. Do not use corrosive or abrasive cleansers on your unit.
3. Keep the unit dust free by wiping it with a soft, dry cloth.
4. Do not disassemble your unit; it contains no user-serviceable parts.

Restoring Factory Defaults

All Configuration Parameter values and Association information will be restored to factory default settings and excluded from the network.

1. Press and keep holding the PROG button for less than 1 second
2. Release the PROG button when the LED stays in ON state about 3 seconds after the pressing the button

Wireless Information

Wired range:

This device has an nominal line-of-sight transmission distance of 33m, which is compliant with the 2-Wire standard. Performance may vary depending on the type of obstacles, such as walls and furniture, between the 2-Wire devices. Every 2-Wire device set up in your network will act as a signal repeater, allowing them to talk to each other and to find alternate routes in the case of obstruction dead spots caused by obstacles.

Certifications

This device complies with Industry Canada beame-exempt RSS standard(s).

FCC Information

IC: 12524A-DA011

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, including interference that may cause undesired operation of the device.

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.

There are no user-serviceable parts in this unit.