**LB60Z-1 SMART LED LIGHT BULB**

The GoControl™ family of Z-Wave® certified wireless lighting products (smart LED bulbs, switches, dimmers, outlets, and plug-in modules) and security devices (alarm sounder, passive infrared sensor and door/window transmitter) bring a new level of intelligent wireless capability to commercial and residential environments. The Z-Wave wireless protocol is an international wireless standard for remote home automation, security and other applications. Embedded in each device, the Z-Wave smart chip enables two-way RF communication among hundreds of Z-Wave enabled devices, allowing products and services from multiple manufacturers to work seamlessly.

The LB60Z-1 Smart LED Light Bulb is simple to set up and provides longer life and more energy efficiency than incandescent or florescent light bulbs. The bulb is instant on, without the warm-up delay common in CFL bulbs. GoControl Z-Wave products are easy to install, and allow dealers to create an integrated wireless network with nearly limitless expansion and interoperability with security, energy management, home entertainment, appliances, and more. As part of a Z-Wave network, the LB60Z-1 will also act as a wireless repeater to insure that commands intended for another device in the network are received. This is useful when the device would otherwise be out of the radio range of the wireless controller.

For indoor use only. Retain instructions for future use.

**INSTALLATION**

1. At the selected location, turn the power to the light bulb socket OFF.
2. Screw the Smart LED Light Bulb into the lamp socket.

**Adding to a network:**

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

1. With your controller in Discovery or Add Mode, turn the power to the light bulb socket ON.
2. You should see an indication on your Controller that the device was added to the network. The Smart LED Light Bulb will flash twice.
3. The device will appear in the list of Switches. It should display multi-level switch.

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

**NOTE:** If you have trouble adding the LB60Z-1 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” 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.

**To Reset Unit (If Required)**

In the event that your primary controller is lost or otherwise inoperable, to reset the bulb and clear all network information, follow these steps:

1. Use the wall switch to turn the power to the bulb OFF then ON four times within four seconds.
2. The Smart LED Light Bulb will flash twice when the reset occurs. Before repeating the steps above, try moving the Smart LED Light Bulb to a socket in the same room as the Controller/Gateway in case the preferred socket is out of range initially. Repeat Steps 1-3 above until the Smart LED Light Bulb is added to the network. Once the bulb has been successfully added to the network, move it to the preferred location.

**Removing from a network:**

The Smart LED Light Bulb 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 LB60Z-1 from the Controller.
2. Reset the bulb by using the wall switch to turn the power to the bulb ON. The Smart LED Light Bulb will flash twice to confirm the removal.

**BASIC OPERATION**

**Remote Control Operation**

The Smart LED Light Bulb can be controlled ON / OFF / BRIGHT / DIM through wireless signals from the Z-Wave remote controller or through a gateway via an application on a smart phone, tablet, or PC.

Once the Smart LED Light Bulb has been added to the network, depending on the functions supported by your controller, it can be assigned to a Group or Scene and operate when the ALL ON or ALL OFF command is received from the Controller. It can also be set in Association with another Z-Wave device to perform a specific duty.

**Manual Operation**

The Smart LED Light Bulb can be manually operated using the wall switch while keeping it on-line with the Z-Wave network.

**To manually turn the Smart LED Light Bulb ON:**

Flip the wall switch OFF then ON. Be sure the switch is ON when finished.

**To manually turn the Smart LED Light Bulb OFF:**

Flip the wall switch OFF then ON twice within two seconds. Be sure the switch is ON when finished.
CONFIGURATION

The LB60Z-1 supports the Configuration command. The LB60Z-1 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:

**Parameter 1: Dim Level Memory**
By default, the LB60Z-1 bulb will go to full brightness when turned on. To have the bulb turn on to the last dim level setting, set Parameter 1 to 1.

<table>
<thead>
<tr>
<th>Parameter Length</th>
<th>Valid Values</th>
<th>Configuration Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Byte</td>
<td>0</td>
<td>Bulb will be full brightness when turned on (default)</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Bulb will turn on to the last dim level setting</td>
</tr>
</tbody>
</table>

**Parameter 9: Dim / Bright Step Level**
When the brightness is adjusted by the controller/gateway, how much the bulb brightness will change is set by the programmed dimming step level.

<table>
<thead>
<tr>
<th>Parameter Length</th>
<th>Valid Values</th>
<th>Configuration Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Byte</td>
<td>Default = 1</td>
<td>The step level is small when the value is low</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The step level is large when the value is high</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameter Length</th>
<th>Valid Values</th>
<th>Configuration Option</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 - 99</td>
<td></td>
</tr>
</tbody>
</table>

**Parameter 10: Dim / Bright Speed**
When the brightness is adjusted by the controller/gateway, how fast the bulb brightness will change is set by the programmed dimming step speed.

<table>
<thead>
<tr>
<th>Parameter Length</th>
<th>Valid Values</th>
<th>Configuration Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Byte</td>
<td>Default = 3</td>
<td>The step speed is fast when the value is low</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The step speed is slow when the value is high</td>
</tr>
</tbody>
</table>

Example: If Parameter 9 is set to the default value of 1, setting Parameter 10 from 1 to 10 will equal the number of seconds it takes to dim down the bulb when the bulb is turned off, i.e. 1 equals 1 second for the bulb to dim down and turn off, 10 equals 10 seconds for the bulb to dim down and turn OFF.

**Z-Wave Plus Features**
The LB60Z-1 contains a Z-Wave 500 Series Module that supports Z-Wave Plus features. A Z-Wave certified portable or stationary controller can communicate with the Z-Wave 500 Series Module.

Depending on the capability of the controller or gateway software, the following operations can be performed with the Smart LED Light Bulb. Refer to the controller or gateway manual for details.

- Turn the bulb ON and OFF.
- Dim the bulb.
- Add or Remove the Smart LED Light Bulb.
- Assign the Smart LED Light Bulb to a specific Group/Scene and/or to include the bulb as part of ALL ON or ALL OFF system commands.
- Over-the-air firmware update by the gateway or static controller.
- Lifeline function which automatically notifies the associated modules and the network that a manually reset device is no longer in the network, thus, the corresponding association becomes invalid.

**INTEROPERABILITY WITH Z-WAVE DEVICES**
A Z-Wave network can integrate devices of various classes of products, and these devices can be made by different manufacturers. The GoControl Smart LED Light Bulb has Z-Wave certification which guarantees interoperability.

**ASSOCIATION**
The LB60Z-1 supports one Group with five Nodes for lifetime communication. Group 1 must be assigned the Node ID of the controller to which unsolicited notifications from the LB60Z-1 will be sent. The Z-Wave controller should set this association automatically after inclusion. You can associate up to five Z-Wave devices to Group 1. Lifeline association only supports the “manual reset” event.

For instructions on how to “set lifetime association” please refer to your wireless controller instructions.

**SPECIFICATIONS**

- **Power Supply**: 120 VAC, 60 Hz
- **Brightness**: 750 lumens (Equivalent to 60 Watt incandescent light bulb)
- **Power Consumption**: 9 Watts
- **Color Temperature**: 2700K
- **Bulb Lifetime**: 25,000 hour (equivalent 22.8 years based on 3 hours/day)
- **Radio Frequency**: 908.4 MHz / 916 MHz
- **Wireless Range**: Up to 130 feet line of sight between the Z-Wave Controller and/or the closest Z-Wave Repeater
- **Normal Operating Temp**: 77°F (25°C)

**REULATOR INFORMATION**

The LB60Z-1 is certified to comply with applicable FCC and IC rules and regulations governing RF and EM 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.

**ICC Notice**

This Class B digital apparatus complies with Canadian ICES-003

This apparatus 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.

**WARRANTY**

This Nortek Security & Control product is warranted against defects in material and workmanship for twenty four (24) months based on three (3) hours of use per day. This warranty extends only to wholesale customers who buy direct from Nortek Security & Control or through Nortek Security & Control's normal distribution channels. Nortek Security & Control does not warrant this product to consumers. Consumers should inquire from their selling dealer as to the nature of the dealer's warranty, if any. There are no obligations or liabilities on the part of Nortek Security & Control for consequential damages arising out of or in connection with the purchase, use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation, or reinstatement. All implied warranties, including implied warranties for merchantability and implied warranties for fitness, are voided only until Warranty Expiration Date as labeled on the product. This Nortek Security & Control LLC Warranty is in lieu of all other warranties expressed or implied. All products returned for warranty service require a Return Product Authorization Number (RPA#). Contact Nortek Security & Control Returns at 1-855-646-3579 for an RPA# and other important details.

**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.
- Infrarequently used radio links should be tested regularly to protect against undesired 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.