



NWI and Scene Capable Button functions

- **1.** Use to include module under the command of a Controller.
- 2. Local ON and OFF (push and release).
- 3. Local dimming (hold down).



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

# PD300Z-2 PLUG-IN LAMP MODULE

Linear's family of Z-Wave certified wireless lighting controls (switches, dimmers, outlets and plug-in modules) brings 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.

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

This product supports 40Kbps data transmission. This product can also be used for networking support in systems that stream metadata. An example might include transmission of information from audio devices such as song title, artist, and album information to various displays around the home. As part of a Z-Wave network, the PD300Z-2 can 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.

## **INSTALLATION**

Plug this Lamp Module into the wall outlet near the lamp to be controlled, and plug the lamp into the Lamp Module. Make sure the lamp(s) to be controlled total no more than 300 watts. To reduce the risk of electric shock, this product has a grounded type plug that has a third (grounding) pin. This plug will only fit into a grounding type power outlet. If the plug does not fit into the outlet, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

**WARNING:** Plugging a non-resistive load such as florescent lighting or a device with a motor may result in damage to the Lamp Module and will void the warranty.

NOTE: Grounded outlet is always powered and can be used for any other appliance. See Wireless Controller operating instructions for details to include this module under the command of the Wireless Controller.

### **INCLUDING PD300Z-2 TO THE NETWORK**

**STEP 1.** Prepare the Controller to include a unit to the network, by adding it to a group (method of adding a node to the network). Refer to controller instructions.

Z-Wave Radio Frequency (RF) Controlled, 300W, 120 VAC, NWI and Scene Capable, Plug-In Lamp Module, Series 300

**STEP 2.** The PD300Z-2 must be in its permanently installed location. To add a node: NWI: Tap the button once. This can be done upon power-up of the node to be included, or once the controller is prepared to add all nodes to the network.

Classic Inclusion: Tap the button twice.

To remove node: Tap the button twice

**STEP 3.** You should see an indication on your Controller that the "DEVICE WAS INCLUDED" or "DEVICE WAS EXCLUDED" in the network.

**NOTE:** If you have trouble adding the PD300Z-2 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.

### **BASIC OPERATION**

#### **Local Control**

The button on the PD300Z-2 allows the user to:

- Turn ON, OFF, or DIM and BRIGHTEN the load attached to the controlled outlet.
- Tapping button toggles the load attached.
- Pressing and holding the button will dim or brighten the load attached.

#### **Operation Note**

When a light bulb reaches the end of it's life and burns out, it sometimes creates a momentary short circuit. The high current that results may cause the dimmer to respond by turning off. Should this happen, replace the bulb with a new one. The dimmer can now be operated to restore power to the light.

### Remote Control

The PD300Z-2 will respond to Basic, Multilevel and Scene Activation commands that are part of the Z-Wave system. Refer to your controller's instructions as to whether <u>your</u> controller can transmit those commands.

See the information in the section titled **Version** for a complete list of commands the PD300Z-2 will support.

### **ADVANCED OPERATION**

### **Protection**

### The PD300Z-2 supports the Protection Command.

The PD300Z-2 can be set to any one of 3 **Protection** modes by a wireless controller. Refer to your controller for information on how to set the various modes of Protection. Some controllers may only be able to set certain settings of Protection. There are 3 modes of Protection:

- 1. No protection
- 2. Child protection
- 3. Button on PD300Z-2 totally disabled

When Protection is set to "No Protection" mode, the PD300Z-2 works normally. When Protection is set to "Child Protection" mode, you will have to press the button 3 times rapidly to toggle the attached load. Tap the button twice then press and hold it to dim or brighten the attached load. The PD300Z-2 operates normally if controlled by a wireless controller. When Protection is set to "Enable Total Protection" mode, the button will not work. You will be able to turn the load on and off only with a wireless controller, however the button can still be used to access the Z-Wave.

#### All On/All Off

## The PD300Z-2 supports the ALL ON/ALL OFF commands.

The PD300Z-2 can be set to respond to ALL ON and ALL OFF commands 4 different ways. Refer to your controller for information on how to set the PD300Z-2 to operate in the manner you desire. Some controllers may be only able to set certain settings of ALL ON/ALL OFF response. The 4 different ways the PD300Z-2 can be set up to respond to ALL ON and ALL OFF commands are:

- PD300Z-2 will not respond to ALL ON or the ALL OFF command.
- PD300Z-2 will respond to ALL OFF command but will not respond to ALL ON command.
- PD300Z-2 will respond to ALL ON command but will not respond to ALL OFF command.
- PD300Z-2 will respond to ALL ON and the ALL OFF command.

#### Configuration

### The PD300Z-2 supports the Configuration command.

The PD300Z-2 can be configured to operate slightly differently than it works when you first install it. Using the configuration command you can configure the following (if your controller supports it)

### **Load Sense:**

- Parameter No 29
- Length: 1 Byte
- Valid Values = 0 or 1 (default 1)

Set this parameter to 0 to disable load sense. Set this parameter to 1 to enable load sense.

### Manufacturer Specific

The PD300Z-2 supports the Manufacturer Specific Command. The PD300Z-2 can return Manufacturer Specific information about itself. Refer to your controller's instructions on how to get this information from the PD300Z-2.

#### **SPECIFICATIONS**

Power 120VAC, 60 Hz Signal (Frequency) 908.42MHz

Maximum Load 300 W, for incandescent lamps only.

NOTE: A minimum of 20 watt

load is recommended for the "Load Sense" feature and dimming capabilities of this

product to operate properly.

Range Up to 100 feet line of sight between the

Controller and or closest Z-Wave Receiver

module.

## INTEROPERABILITY WITH Z-WAVE™ DEVICES

A Z-Wave<sup>™</sup> network can integrate devices of various classes, and these devices can be made by different manufacturers. The PD300Z-2 can be incorporated into existing Z-Wave<sup>™</sup>networks. The button on the face of the PD300Z-2 can be used to carry out inclusion (add to a group), exclusion (remove from group) or reset (remove from network).

### REGULATORY INFORMATION

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

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 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 NOTIC

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.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada. 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.

#### WARRANTY

This Linear product is warranted against defects in material and workmanship for twelve (12) months. This warranty extends only to wholesale customers who buy direct from Linear or through Linear's normal distribution channels. Linear 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 Linear Corporation for consequential damages arising out of or in connection with 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 reinstallation. All implied warranties, including implied warranties for merchantability and implied warranties for fitness, are valid only until Warranty Expiration Date as labeled on the product. This Linear LLC Warranty is in lieu of all other warranties express or implied. All products returned for warranty service require a Return Product Authorization Number (RPA#). Contact Linear Technical Services at 1-800-421-1587 for an RPA# and other important details.

#### IMPORTANT !!!

Linear 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.