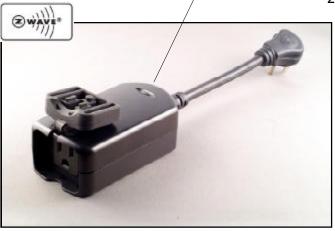




Z-Wave Radio Frequency (RF) Controlled, 120 VAC, 15A, Plug-In Appliance Module, Series 200, Release 1.2

**Button functions:** 

- 1. Adds module under the command of Wireless Controller.
- 2. Local Manual ON and OFF (push and release).



Warning: Although ZRP110 is weather resistant, it is not waterproof. Do not allow it to lay in water or subject it to the possibility of standing water.

**Note:** Even though this is a very portable device, this module must be "Included in the Network" only where it will permanently operate. 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 module, then install.

#### ZRP110 PLUG-IN APPLIANCE MODULE

The ZRP110 Plug-In Exterior Appliance Module is a component of the HomePro lighting control system. Plug the Appliance Module into a 120V outlet and plug a load into the Appliance Module. Remote ON/OFF control of the connected load is possible with the ZTH100 RF Wireless Controller (sold separately).

This plug-in Appliance Module is designed to work with other Z-Wave enabled devices. Z-Wave devices of other types can be added to the system. 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 ZRP110 will 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 Appliance Module into the wall outlet near the load to be controlled, and plug the load into the Appliance Module. Refer to the ZTH100 Wireless Controller operating instructions to add this module under the command of the Wireless Controller. Make sure the load to be controlled is 15 amps (1800 watts) or less (see specifications).

### INCLUDING ZRP110 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.
- STEP 2. The ZRP110 must be in its permanently installed location. Tap the button on the ZRP110 once.
- STEP 3. You should see an indication on your Controller that the "DEVICE WAS INCLUDED" in the network.

NOTE: If you have trouble adding the ZRP110 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. If using the ZTH100 select "SETUP" and scroll to "RESET UNIT"

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 only as a repeater.

## **Button (Local Control)**

The button on the ZRP110 allows the user to

Turn the load attached on or off.

Include or exclude the module from the Z-Wave system

When a controller prompts you to "Send Node ID" or to "Press Button on Unit", quickly tap the button on the ZRP110 once to satisfy those instructions. When included in the network:

Tapping button on the ZRP110 toggles the load attached

#### Remote Control

The ZRP110 will respond to BASIC and BINARY commands that are part of the Z-Wave system. Refer to your controller's instructions as to whether your controller can transmit those commands.

### ADVANCED OPERATION

#### Protection

### The ZRP110 supports the Protection Command.

The ZRP110 can be set to 1 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** and they are the following:

- 1. No Protection
- Child Protection
- Local Button totally disabled

When **Protection** is set to "No Protection" mode, the ZRP110 works normally.

When **Protection** is set to "*Child Protection*" mode, you will have to press the button 3 times rapidly to control the attached load. The ZRP110 operates normally when controlled by a wireless controller.

When **Protection** is set to "Button totally disabled" mode, the button will not work. You will only be able to turn the load on and off with a wireless controller. The button can still be used to access the Z-Wave network.

# All On/All Off

## The ZRP110 supports the ALL ON/ ALL OFF commands.

The ZRP110 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 ZRP110 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 ZRP110 can be setup to respond to ALL ON and ALL OFF commands are:

- 1. ZRP110 will not respond to ALL ON or the ALL OFF command.
- 2. ZRP110 will respond to ALL OFF command but will not respond to ALL ON command.
- 3. ZRP110 will respond to ALL ON command but will not respond to ALL OFF command.
- 4. ZRP110 will respond to ALL ON and the ALL OFF command

### **Powerlevel**

## The ZRP110 supports the Powerlevel command.

The Powerlevel command allows controllers to set and get the RF transmit power level of a node and test specific links between nodes with specific RF transmit power. Refer to your controller's instructions, if it supports this command, for more information. This command is typically used by professional installers

### Manufacturer Specific

The ZRP110 supports the Manufacturer Specific command.

The ZRP110 can return Manufacturer Specific information about itself. Refer to your controller's instructions on how to get this information from the ZRP110 (ZTH100 does not display this).

## SUC Support

There must be a Static Update Controller in your Z-Wave system for this feature to work. The Static Controller can act as a gateway in the system, since other nodes always know its position (not moved after addition to the network. The "always listening" advantage of the Static Controller is that other nodes can transmit information frames to it whenever needed.

You can assign an "SUC Route" to the ZRP110. Refer to your controller's instructions on how to do this (if it supports it). Assigning an SUC Route to the ZRP110 allows it to request an update of the Z-Wave devices that are between it and the Z-Wave device to which it was trying to transmit. The ZRP110 will only request an update when a transmission fails.

## Configuration

## The ZRP110 supports the Configuration command.

The ZRP110 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):

You can use a HomePro ZTH100 Wireless Controller to send Configuration commands. (Refer to the Setup Menu, Configuration section)

#### Load Sense:

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

Parameter No: 29Length: 1 Byte

• Valid Values = 0 or 1 (default 1)

### 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 ZRP110 can be incorporated into existing Z-Wave<sup>™</sup> networks.

The button on the face of the ZRP110 can be used to carry out inclusion, association or exclusion.

#### SPECIFICATIONS

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

Load: Resistive: 15 amps (1800 watts) maximum, 120 VAC

Motor: 1/2 H.P. maximum, 120 VAC Incandescent: 600W maximum, 120 VAC

Range: Up to 100 feet line of sight between the Wireless Controller and /or the closest HomePro

plug-In Lamp Module or Appliance Module

## WARRANTY

For warranty and general product information visit our web site at www.act-solutions.com

### ABOUT ZRP110 CERTIFICATIONS

The ZRP110 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**

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 for help.

### **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.

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.

Warning: Although ZRP110 is weather resistant, it is not waterproof. Do not allow it to lie in water or subject it to the possibility of standing water.



Products that speak Z-Wave work together better.™