

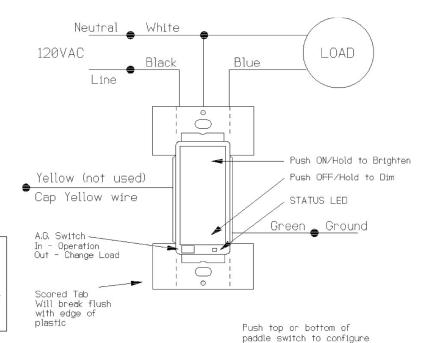


EvolveNet Radio Frequency (RF) Controlled, 500W, 120 VAC, Wall Mounted Dimmer, Series 300, Release 5.1



Supplied with matching decorative switch plate

**Note:** This module must be "Included in 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 module.



This product supports Zensor Net Beam technology.





### LRM-AS WALL MOUNTED DIMMER

The LRM-AS Wall Mounted Dimmer is a component of the HomePro lighting control system. Wire the Wall Mounted Dimmer in place of the standard wall switch according to the diagram above and program from the Wireless Controller to operate loads. Inclusion of the LRM-AS Wall Mounted Dimmer on the EHC-100 Wireless Controller menu allows remote ON/OFF control and dimming of lights connected.

This Wall Mounted Dimmer is designed to work with other Z-Wave enabled devices. Z-Wave nodes of other types can be Included in the network and will also act as repeaters to increase the range of the network.

#### This product is scene capable.

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.

**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. There are no field repairable assemblies on this unit. If service is needed, the unit must be returned where purchased.

**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 receiver total no more than 500 watts. Do not install this device if there is not at least 10 meters (30 feet) or more of wire between the point of connection and the electrical service panel. Retain

### INSTALLATION

STEP 1. With power off, wire this LRM-AS according to the diagram show. Caution! Do not wire unit "live" (with power on the circuit) and do not allow the yellow wire to contact line voltage, neutral or ground or you will damage the device. If more than one LRM-AS is to be installed in a wall box, scored tabs on the side can be broken off by bending back and forth with pliers, to accommodate proper fit. Apply power when completed.

# Proper Single Gang Installation

Using LRM-AS's standard full heat-sink (all tabs), the connected incandescent lamp load shall not exceed 500W.

If a tab is removed from one side of the LRM-AS unit, the connected incandescent lamp load must not exceed 400W.

If both tabs are removed from the LRM-AS unit, the connected incandescent lamp load must not exceed 300W.

### **Proper Dual Gang Installation**

The connected incandescent lamp load must not exceed 400W for each of the two LRM-AS units.

# Proper Triple Gang Installation

The connected incandescent lamp load must not exceed 300W for each of the three LRM-AS units.

### Air Gap Switch

The LRM-AS has an <u>air gap switch</u> on the face (lower left), that <u>when pulled out</u>, completely <u>removes the power</u> 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.

### INCLUDING LRM-AS 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 LRM-AS must be in its permanently installed location.
  - To add a node: Tap the button.
  - To remove a node: Tap the button 3 times, then press and hold (Ex. tap, tap, hold)
- **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 LRM-AS 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 EHC-100 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.

# **BASIC OPERATION**

### Local Control

The top or bottom of the LRM-AS 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 LRM-AS allows the user to do the following:

- Turn ON, OFF, DIM or BRIGHTEN the load attached.
- To include or exclude the module, see step 2 above.

Once the device has been added, when a controller prompts you to "Send Node ID" or to "Press Button on Unit", quickly tap the top or bottom of the switch 3 times, then press and hold (Ex. tap, tap, tap, hold).

- 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 LRM-AS returns to previous known state.

### LED indication

The LED on the LRM-AS will turn ON when the load attached is OFF, to act as a night light. However, the LED can be user configured to turn ON when the load attached is ON, if so desired.

#### Remote Control

The LRM-AS 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.

### All On/All Off

# The LRM-AS supports the ALL ON/ ALL OFF commands.

The LRM-AS 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 LRM-AS 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 LRM-AS can be setup to respond to ALL ON and ALL OFF commands are:

- LRM-AS will not respond to ALL ON or the ALL OFF command.
- LRM-AS will respond to ALL OFF command but will not respond to ALL ON command.
- LRM-AS will respond to ALL ON command but will not respond to ALL OFF command.
- LRM-AS will respond to ALL ON and the ALL OFF command (default).

# Configuration

### The LRM-AS supports the Configuration command.

The LRM-AS can be configured to operate differently than how it works when you first install it. Using the Configuration command you can configure the following:

You can use a EHC-100 to send Configuration commands. (Refer to the Setup Menu, Configuration section)

### **Night Light**

By default, the LED on the LRM-AS 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 0.

- Parameter No: 3Length: 1 Byte
- Valid Values = 0 or 1 (default 1)

### **Invert Switch**

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

- Parameter No: 4Length: 1 Byte
- Valid Values = 0 or 1 (default 0)

### Load Sense:

- Parameter No: 29Length: 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.

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 LRM-AS is excluded from the Z-Wave network by using the controller to reset the node (on the EHC-100 select "SETUP" and scroll to "RESET UNIT").

# **SPECIFICATIONS**

Power 120 VAC, 60 Hz

Maximum Load 500 Watts for control of permanently installed incandescent

lamp fixtures only (not for control of receptacles)

Signal (Frequency) 908.42 MHz

Range Up to 100 feet line of sight between the Controller and /or the

closest HomePro Receiver Module

### INTEROPERABILITY WITH EVOLVE™ DEVICES

A Evolve<sup>™</sup> network can integrate devices of various classes, and these devices can be made by different manufacturers. The LRM-AS can be incorporated into existing Evolve<sup>™</sup> networks.

The top or bottom of the LRM-AS switch can be used to carry out inclusion, association, or exclusion.

### **WARRANTY**

For warranty and general product information visit our web site at www.eguestcontrols.com

#### **ABOUT LRM-AS'S CERTIFICATION**

The LRM-AS is certified to comply with applicable FCC 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.

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



