

# Model: FMR1 Fixture Module - Relay

# Installation Guide and Owner's Manual



## **FUNCTION**

The FMR1 Fixture Module - Relay is a high quality wire-in home automation load controller that is capable of turning 120VAC appliances and fluorescent lamps ON and OFF based on digital commands received over the power wiring from a remote UPB (Universal Powerline Bus) controller. UPB controllers and modules can be freely located anywhere throughout the home. No additional wiring is required and no radio frequency signals are used for communication.

## IMPORTANT SAFETY INSTRUCTIONS

When using electrical products, basic safety precautions should always be followed, including the following:

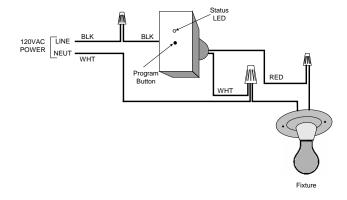
- 1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS.
- Keep away from water. If the product comes in contact with water or other liquid, turn off the circuit breaker and unplug the product immediately.
- 3. Never use products that have been dropped or damaged.
- 4. Do not use this product outdoors.
- Do not use this product for other than its intended purpose.
- Do not connect multiple lamps or appliances that, when combined, exceed the maximum load ratings of the product.
- To avoid any risk of fire, burns, personal injury or electric shock, install this product out of the reach of small children.
- 8. Do not cover this product with any material when in use.
- This product uses grounded plugs and sockets to reduce the risk of electric shock. These plugs and sockets fit only one way. If they do not fit, consult an electrician.
- 10. SAVE THESE INSTRUCTIONS.

## **INSTALLATION**

The Fixture Module – Relay is designed for indoor use with devices that are permanently wired into the home electrical system. To install the FMR1 module:

- 1. Locate the device to be controlled. Note that the device power rating must not exceed 20 amps.
- 2. Disconnect power at the circuit breaker.
- Remove any existing ceiling or wall fixture hardware for the device. Disconnect the black wire that supplies power to the device.
- 4. Using a wire nut, connect the **black** (Line) wire of the fixture module to the **black** (Line) power wire.
- Using a wire nut, connect the red (load output) wire of the fixture module to the black wire from the lighting fixture or device being controlled.
- Using a large wire nut, connect the white (Neutral) wire of the fixture module to the white (Neutral) power wire and the white wire from the lighting fixture.
- 7. Refer to instructions on CONFUGRATION and OPERATION prior to placing the fixture module in its final location, as it may be necessary to have access to the Program Switch in order to add the module to the UPB network and test its operation. Temporarily restore power in order to perform these functions. Disconnect power again when finished.
- 8. Once proper operation is established, fit the module into the outlet box or otherwise secure it using wire ties or fitting the nipple into a ½" knockout. Reinstall fixture hardware as needed.

**CAUTION**: Do not insert metal objects into the module while it is connected to power.









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# **CONFIGURATION**

Once your FMR1 is installed it can be configured either manually or with the UPStart Setup Software.

Manual configuration can be used to add your FMR1 device into a UPB network and link it to controller buttons. Refer to the Keypad Controller's Manual Configuration Guide available on the PulseWorx page (<a href="www.pcslighting.com">www.pcslighting.com</a>) for more details.

Although the factory default operation of the FMR1 is useful in many situations, it is highly recommended that your device be configured with UPStart Setup Software so that you can take advantage of its many configurable features.

PCS has developed a Powerline Interface Module (PIM) and free UPB Setup Tool software (UPStart) to help you configure all of your PulseWorx Lighting System devices. User's Guides are available on the PulseWorx page: <a href="https://www.pcslighting.com">www.pcslighting.com</a> to explain how to configure your system.

#### **SETUP Mode**

When configuring a UPB system, it will be necessary to place the FMR1 in SETUP mode. To do this, press the Program Button (see illustration) **five** times rapidly using a non-metallic toothpick. The Status LED will continuously blink Blue when the device is in SETUP mode. To exit SETUP mode, press the Program Button once or wait five minutes for it to time out.

# **OPERATION**

The Fixture Module operates according to commands sent by one or more UPB controllers. The FMR1 can accept powerline commands from any UPB-compatible transmitter such as PulseWorx Keypad Controllers, Timed Event Controllers, Wall Switches, Interface Modules, approved Third-Party Controllers and touch screens. The FMR1 can be a member of up to 16 scenes with the capability to store a pre-set relay state (on, off, or blink) for each scene.

#### **AUTO-OFF Timer**

New for Generation 2 is the ability to set a maximum on time. If you forget to shut the fixture off yourself the fixture module will do it for you automatically. The FMR1 can be configured to inform the rest of the network when it has automatically turned the appliance off. This allows the FMR1 to remotely control other devices or update feedback indicators such as LEDs.

#### **TEST Mode**

A manual test feature allows the device to be turned ON and OFF locally. To enable the TEST mode **press and hold the Program Button on the FMR1 for at least three seconds**. The Status LED will blink Magenta to indicate TEST mode. The fixture can now be turned ON and OFF by single-tapping the Program Button. Press and hold the Program Button again for at least three seconds to exit from TEST mode.

# **Factory Default Settings**

To restore the following default settings put the FMR1 into SETUP mode and then press the Program Button **ten** times rapidly. The Status LED will blink red to indicate that factory defaults have been restored. Press the Program Button twice more to stop the blinking.

Network ID: 255 Unit ID: 61 Network Password: 1234

**Receive Components:** Link #1 = ON

Link #2 = OFF

Link #8 = Blink @ .5 sec

#### TYPICAL USES

The FMR1 is perfect for controlling 120VAC non-dimming loads such as:

- Fans,
- Pumps,
- Low voltage transformers,
- Coffee makers,
- Christmas lights.

### LIMITED WARRANTY

Seller warrants this product, if used in accordance with all applicable instructions, to be free from original defects in materials and workmanship for a period of five years from the date of purchase. Refer to the warranty information on the PulseWorx page (<a href="www.pcslighting.com">www.pcslighting.com</a>) for exact details.



