**FUNCTION**

The LM2 Lamp Module is a high quality plug-in home automation load controller that is capable of controlling two channels of 120VAC incandescent lamps based on digital commands received over the power wiring from a remote UPB (Universal Powerline Bus) controller. The module will turn lamps ON and OFF, and will also act as a light dimmer. 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.**
2. 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.
5. Do not use this product for other than its intended purpose.
6. Do not connect multiple lamps that, when combined, exceed the maximum load ratings of the product.
7. 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.
9. 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 Lamp Module is designed for indoor use with devices that plug into a grounded power outlet. To install the LM2 module:

1. Locate the lamp(s) to be controlled and unplug them from the wall outlet.
2. Plug the LM2 into the wall outlet (see illustration below). An optional screw is provided for securing the LM2 to the center screw hole of the wall outlet.
3. Plug the lamp(s) into the socket on the **bottom** of the lamp module. The lamp rating (or combined rating of multiple connected lamps) must not exceed 800 watts.
4. Turn the lamp power switch(es) to their ON position.

If desired, other devices can be plugged into the pass-thru outlet sockets on the **front** of the lamp module, which are always powered.

**CAUTION:** Do not insert metal objects into the module while it is connected to power.
CONFIGURATION
Once your LM2 is installed it can be configured either manually or with the UPStart Setup Software.

Manual configuration can be used to add your LM2 device into a UPB network, link it to controller buttons and change preset light levels. Refer to the Keypad Controller’s Manual Configuration Guide available on the PulseWorx website (www.PulseWorx.com) for more details.

Although the factory default operation of the LM2 is useful in many situations, it is highly recommended that your device be configured with the UPStart Setup Software so that you can take advantage of its many configurable features.

PCS has developed a Powerline Interface Module (PIM) and free software (UPStart) to help you configure all of your PulseWorx Lighting System devices. User’s Guides are available on the PulseWorx web site: www.PulseWorx.com to explain how to configure your system.

Note: The LM2 can be configured to disable the dimmer so it can turn ON and OFF non-dimmable loads such as fluorescent lamps.

SETUP Mode
When configuring a UPB system, it will be necessary to place the LM2 in SETUP mode. To do this, press the Program Button (see illustration) five times rapidly. 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 Lamp Module operates according to commands sent by UPB controllers.

The LM2 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. Each channel of the LM2 can be a member of up to 16 scenes with the capability to store a pre-set light level (0% - 100%, or blink) and fade/blink rate for each scene.

Lamp Switch Triggers
The LM1 will sense when the local lamp switch has gone from opened to closed and can automatically turn on the lamp when this occurs.

AUTO-OFF Timers
New for Generation 2 is the ability to set a maximum on time. If you forget to shut the lamp off yourself then the lamp module will do it for you automatically. The LM2 can be configured to inform the rest of the network when it has automatically turned the lamp off. This allows the LM2 to remotely control other devices or update feedback indicators such as LEDs.

TEST Mode
A manual test feature allows the lamp to be turned ON and OFF locally. To enable the TEST mode press and hold the Program Button on the LM2 for three to five seconds. The Status LED will blink Magenta to indicate TEST mode. Lamp #1 can now be turned ON and OFF by single-tapping the Program Button. Lamp #2 can be turned ON and OFF by double-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 LM2 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: 10
Network Password: 1234
Receive Components:
(Channel #1) Link #1 = 100% @ 1.6 secs
Link #2 = 0% @ 1.6 secs Link #8 = Blink @ 0.5 secs

Receive Components:
(Channel #2) Link #1 = 100% @ 1.6 secs
Link #2 = 0% @ 1.6 secs Link #8 = Blink @ 0.5 secs

TYPICAL USES
The LM2 is perfect for controlling 120VAC dimming loads such as:

- Incandescent bulbs,
- Some dimmable compact fluorescent bulbs,
- 120VAC magnetic transformers,
- Fluorescent lights (when dimming is disabled).

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 website (www.PulseWorx.com) for exact details.