

# Fixture Modules



## Product Overview



Dimming Module

Powerline Control Systems has incorporated its patented Universal Powerline Bus (UPB™) communication technology into two high quality Fixture Modules. Both are part of the complete Pulseworx Lighting Control System which is a **low cost alternative to hard-wired and RF lighting systems**. The Pulseworx Fixture Modules can be retrofitted in existing homes to allow for remote control capability. The Fixture Modules are available as a Dimming Module for incandescent and magnetic low-voltage lighting control, and a Relay Module for appliance and fluorescent lighting control.

The Dimming Fixture Module is a dual load device rated at 400W max for a single load, and can support 2 loads of up to 400W each where the total load doesn't exceed 400W. The Relay Fixture Module is an inline module designed to control any appliance or fluorescent lighting fixture rated less than 20A.

The **PCS UPB™** lighting control system allows the designer/installer to implement up to **sixteen pre-set scenes** for each circuit. The scene's lighting levels can easily be changed using PCS' innovative programming system. When initial programming is complete a single push of a button is all you need **to activate any group of lights or control points simultaneously**.

The **Pulseworx Dimming Fixture Modules** are the ideal solution to controlling incandescent lights or fixtures that need to be individually controlled but are not currently wired to a dedicated wall switch location.

The **Pulseworx Relay Fixture Modules** are the ideal solution to controlling fluorescent lights or other non-dimming loads such as motors or transformers that need to be individually controlled but are not currently wired to a dedicated wall switch location. Because of the high 20A rating the Relay Fixture Module can control any conventional 20A residential circuit.

Both Fixture Modules are designed to be mounted on any standard electrical box by snapping into a standard ½" knockout. Because the module sits outside of the box it can be mounted on any box or fixture no matter how small it is.

All **PCS** products are completely **Made in USA** and carry a **Five-year limited warranty**.

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## Inline Module Features

- **400 Watt Power Delivery**  
Dimming Fixture Modules can support a single load up to 400W, or two loads of 400W total.
- **20 Amp Control**  
Relay Fixture Modules can support a single load up to 20A.
- **Simple Installation**  
Fixture Modules mount on any standard electrical box by snapping into a standard ½" knockout.
- **Low Cost**  
UPB products are a fraction of expensive hardwired and RF products.
- **UPB™ Communication Reliability**  
Reliability is over 100 times more reliable than existing powerline products.
- **Scene Control**  
All **Pulseworx** Modules store 16 lighting levels per device. Non-dimming devices store On or Off state as part of a scene.
- **Internal Setting for Dimming Modules**  
Can be set by the user to operate as a dimmer or for ON/OFF operation only.
- **Variable Fade Rates**  
Fade rates for all scenes can be set between Instant-on and 60 minutes.
- **Security Flashing Mode**  
Setting can internally flash lights on and off when triggered by a UPB command.
- **All Dimmers Control Inductive Loads**  
Controls low-voltage lights powered by magnetic transformers, fans and motors.
- **Previous State Restored**  
Light returns to previous state if power is lost and then restored.
- **Advanced Programming**  
Allows user to customize fade rates and other UPB light settings.
- **PCS Reputation**  
The PCS reputation is unmatched in the Home Automation market representing superior quality, high reliability and excellent customer service.



Relay Module



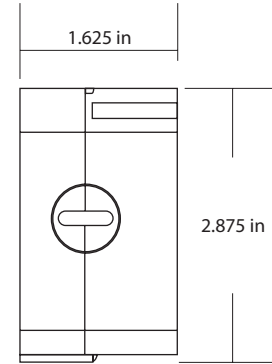
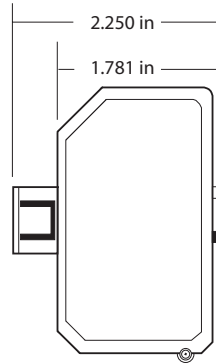
# Fixture Modules



## Ordering Information

- **Part Number**  
**FDM2-4** (Dimmer 120V)  
**FRM1-20** (Relay 120V)

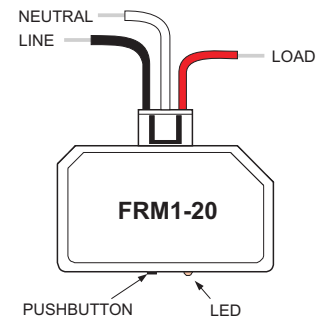
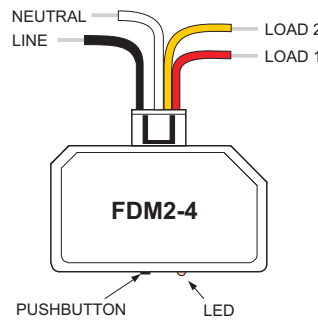
## Dimensions



## Installation

- **Pre-Wire**  
 Pull power wiring to include line and neutral. Run two 120VAC, 12 or 14 AWG rated wires to each fixture module location.
- **Mounting**  
 Mount in an appropriate junction box. Mounts into any standard 1/2 inch knockout.

## Wiring Diagram



## Additional Information

- **Warranty**  
 Five-year Limited Warranty
- **UL Listing**  
 Meets UL 508

Model Number	FDM2	FRM1
Dimming	Yes	No
Non-dimming	Yes	Yes
Max Total Load	400W	20A
Fluorescent Load	Yes	Yes
Inductive Load	Yes 375 VA	Yes
Min Load	60 W	N/A
Current Rating	3.3A	20A
Connections	16 AWG Wire	14 AWG Wire
LED Status Indicator	Yes	Yes
Dimensions	2.8 X 2.2 X 1.6 in	2.8 X 2.2 X 1.6 in
Weight	.25 lb.	.25 lb.
Mounting	1/2 KO Standard J box	1/2 KO Standard J box
Operating Temp	-40 F to 104 F	-40 F to 104



This product is covered under U. S. Patents 6,734,784 and 6,784,790