

DLM SHADE CONTROLLERS

LMSH-PS6XX

Connect shade controllers together to form a larger shade network

Includes system configuration button for easy system programming from the room controller

Plug n' Go™ automatic configuration along with Pull n' Save and Push n' Learn™ for system personalization



Connect switches and other shade controllers using Cat 5e cables with RJ45 connectors eliminating wiring errors

Powers shade bus using easy to connect pre-terminated cables for trouble-free connections

Shade controller is one component of a Digital Lighting Management integrated shade control system



DESCRIPTION

The LMSH-PS602 and LMSH-PS610 are DLM shade controllers, which provide low voltage power and control for up to two or ten motorized shades. The controllers accept 120/277VAC input line voltage and are typically mounted in the ceiling to a four-square or 4 11/16 junction box. The controllers provide power and control for shades on the shade bus and integrate switches on the shade In-Room-Bus (IRB).

The DLM motorized shade control system is easy to install and program. Shade controllers power motors using a four-wire shade bus with pre-configured cables and simple to configure bus system. The switches are connected using standard DLM in-room-bus (IRB) RJ45 cables for easy installation. The shade motors have a unique counter balanced design that is very quiet and saves energy. The patented motor design allows shades to be pulled into position from the hembar without damage to the motor or shades.

OPERATION

The LMSH-PS6xx is the hub of the DLM distributed shade control system. It connects and provides power to shade

motors and switches. Connecting additional shade controllers allows expansion of the shade system for up to 48 total devices (shade controllers and switches). Plug n' Go™ (PnG) automatic configuration assigns addresses and configures all shade controllers, shade motors, and shade switches. In addition, shade default upper and lower limits are assigned during PnG. There are two additional programming procedures that allow for customization of the motorized shade system—Push n' Learn allows for switch button assignments and functions to be reconfigured and Pull n' Save allows the installer to change the shade upper and lower limits.

APPLICATIONS

The DLM shade control system is recommended for virtually all roller shade applications, including offices, conference rooms and classrooms. The system is ideal for any area where motorized shade control is desired. The distributed shade controller system allows for flexible installation and power distribution for shade motors and switches, eliminating multiple lengthy homerun cables while allowing shades to be controlled by occupants to reduce glare, increase comfort, and control light for presentations or privacy.

FEATURES

- Distributed shade control system reduces lengthy homerun wiring.
- Two different shade controller options, LMSH-PS610 for up to 10 shades and LMSH-PS602 for up to two shades, allows for system flexibility when setting up a shade room network
- Plug n' Go automatic configuration along with Pull n' Save and Push n' Learn for system personalization
- Connect shade controllers and switches together using Cat 5e cables with RJ45 connectors eliminating wiring errors
- Shade controllers provide buttons for shade control and system configuration to allow testing and control of the system while installing the shades
- Four wire shade bus with pre-terminated cables simplifies wiring to shade motors. The wiring system is plug and play
- Component of Digital Lighting Management integrated shade control system
- The product meets the materials restrictions of RoHS

PROJECT

LOCATION/
TYPE

SPECIFICATIONS

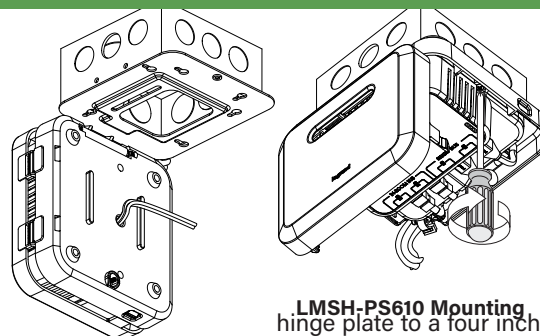
- Input voltage: 120/277VAC, 50/60Hz
- Maximum Power: 35W (LMSH-PS602), 115W (LMSH-PS610)
- Shade Bus Ports: 1 (LMSH-PS602), 2 (LMSH-PS610)
- Shade Bus Voltage: 24VDC (LMSH-PS602), 36VDC (LMSH-PS610)
- Shade Capacity: up to 2 (LMSH-PS602) or 10 (LMSH-PS610) LMSH-MCAxxx shade motors
- Connection to the DLM Local Network: 2 RJ-45 ports
- Local Network Characteristics when using shade controller:
 - Shade Bus provides low voltage power to shade motors over Shade Bus cables, up to 1,000' (no motor can be more than 500' from shade controller); don't intermingle Shade Buses from different controllers; max 48 devices on Shade Bus network
 - DLM Local Network In-Room Bus (IRB) provides low voltage power to switches over Cat 5e cable LMRJ;
- Class 2 output to DLM local network: 24VDC, 150mA
- DLM local network parameters
 - Maximum current: 800mA
 - Cat 5e cable: 150' per device to 1,000' max
 - Up to 48 communicating devices (controllers, switches, etc.) per room
 - Up to 64 loads (shade motors plus lighting loads), per room
- Operating conditions: for indoor use only;
- 32-131°F (0-55°C); 5-95% RH, non-condensing
- UL and cUL listed
- Warranty: Lifetime; for shade motors, shade controls, and shade power supplies manufactured by Legrand: Standard five-year warranty applies to all other DLM components. See <https://legrand.us/commercial-shading> to download the complete Legrand Shading warranty

MOUNTING

Unlike a centralized panel system, the decentralized DLM low voltage shade controllers are installed in the ceiling near the area where shades will be installed. This allows for shorter cable runs that are easier to install and require less cable management.

The LMSH-PS602 is typically mounted in the ceiling onto any junction box with 1/2" knockouts, as shown in the wiring diagram below.

The LMSH-PS610 attaches to the open end of the junction box, using a hinge plate. To mount, first open the cover on the LMSH-PS610 and loosen the securing screw so that the hinge plate on the back can open. Next attach the square or 4 11/16 inch junction box.



WIRING AND NETWORK CONNECTION

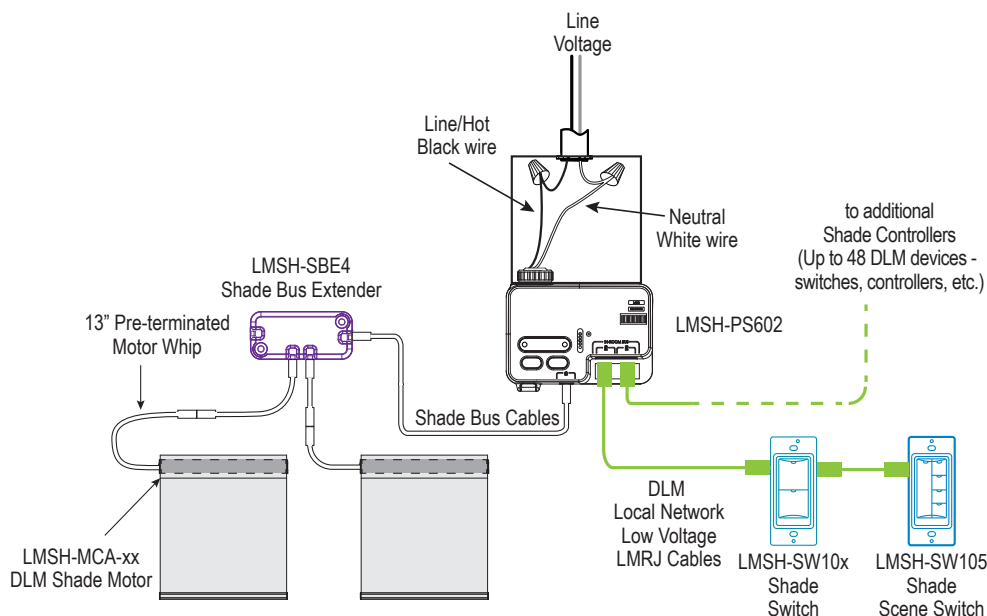
The LMSH-PS6xx controllers use a 4-wire shade bus for power and control of shades and a DLM IRB network using Cat5e for connection to wall switches and other shade power supplies.

Legrand offers preterminated cable assemblies for both the shade bus and local network for plug and play in a single room or area.

Install room controllers so that switch and shade bus wire bus limits are not exceeded. The shade bus limit is 1000' and no motor should be farther than 500'. The DLM bus limit is 1000'.

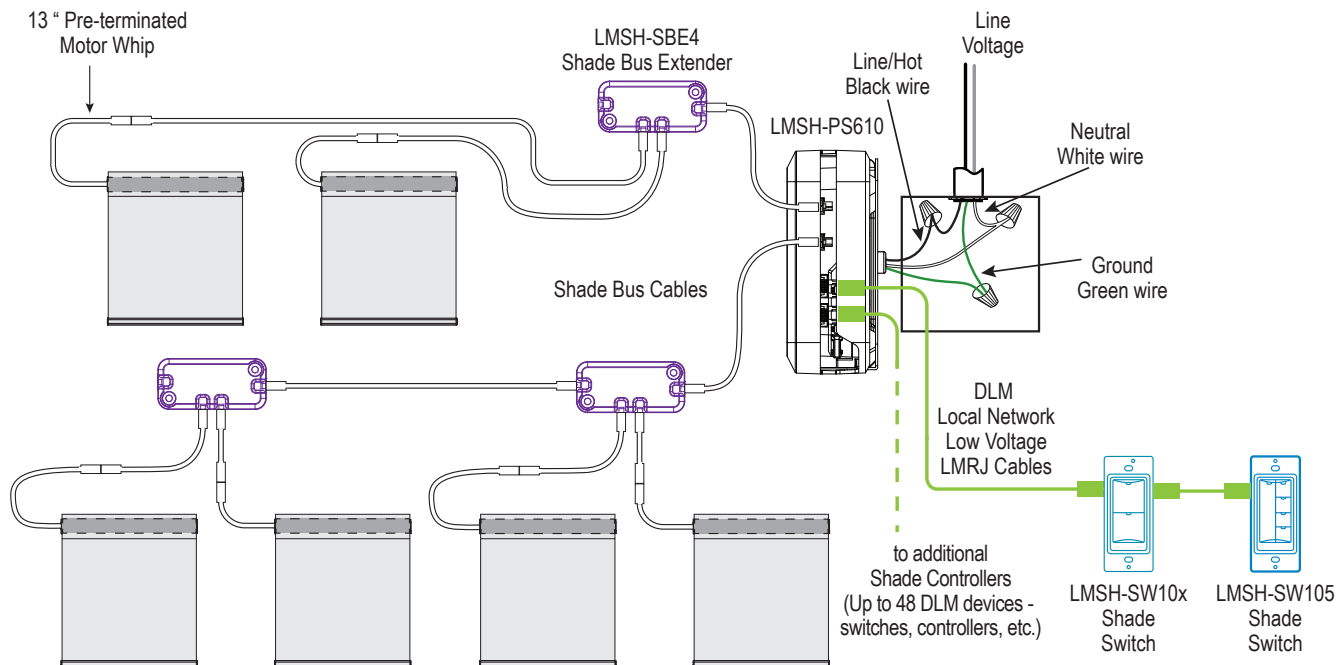
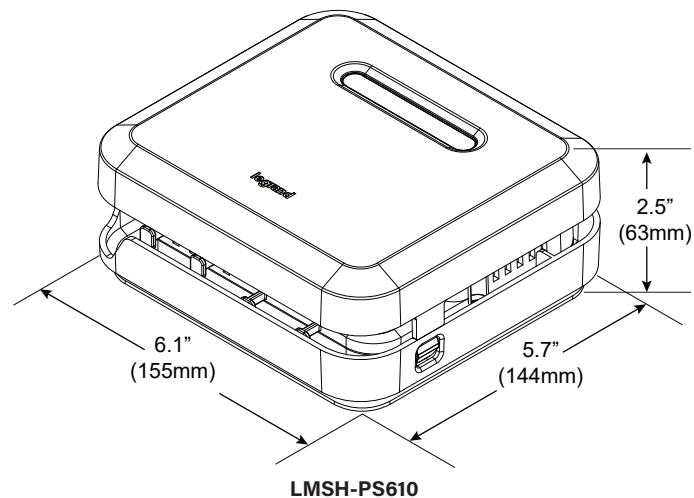
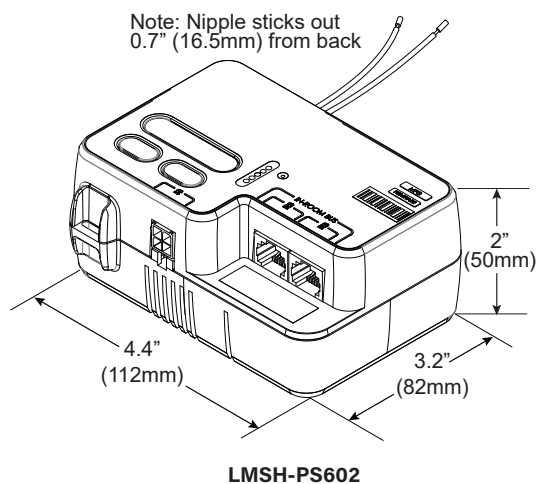
LMSH-PS602

A single shade can connect directly to the LMSH-PS602. To connect a second shade, use the LMSH-SBE4 Shade Bus Extender or splitter



LMSH-PS610

Use the LMSH-SBE4 Shade Bus Extender to connect multiple shades.

**DIMENSIONS****ORDERING INFORMATION**

Catalog #	Description
■ LMSH-PS602	2 Shade DLM Shade Controller, 120/277VAC, 50/60Hz
■ LMSH-PS610	10 Shade DLM Shade Controller, 120/277VAC, 50/60Hz