

PHILIPS

Strand Lighting

Lightpack LED

Portable LED Luminaire Controllers



LightPack LED 120V Modules:

71361 / 71362 / 71363

LightPack LED 230V Modules:

71364

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LightPack LED Module Installation & Operation Guide

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Important Safeguards

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



- a. **READ AND FOLLOW ALL SAFETY INSTRUCTIONS.**
- b. Do not use outdoors.
- c. Do not mount near gas or electric heaters.
- d. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
- e. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- f. Do not use this equipment for other than intended use.
- g. Refer service to qualified personnel.

SAVE THESE INSTRUCTIONS.



WARNING: You must have access to a main circuit breaker or other power disconnect device before installing any wiring. Be sure that power is disconnected by removing fuses or turning the main circuit breaker off before installation. Installing the device with power on may expose you to dangerous voltage and damage the device. A qualified electrician must perform this installation.

WARNING: Refer to National Electrical Code® and local codes for cable specifications. Failure to use proper cable can result in damage to equipment or danger to persons.

WARNING: To reduce the risk of fire or shock hazard, do not expose this equipment to rain or moisture.

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PREFACE

About this Guide

The document provides installation and operation instructions for the following products:

- 71361 – LightPack LED 120V, Grounded Stage Pin Connector (GP)
- 71362 – LightPack LED 120V, Twistlock Connector (GTL)
- 71363 – LightPack LED 120V, Edison Connector (GR)
- 71364 – LightPack LED 230V, Bare Leads (no AC input connector installed)



Please read all instructions before installing or using this product. *Retain this guide for future reference.*

IMPORTANT INFORMATION. PLEASE READ!

This unit is intended for installation in accordance with the National Electric Code® and local regulations. It is also intended for indoor applications only. Before any electrical work is performed, disconnect power at the circuit breaker or remove the fuse to avoid shock or damage to the control. It is recommended that a qualified electrician perform this installation.

Observe the following precautions when installing, operating or servicing the product:

- Disconnect power before servicing.
- Install in dry locations only.
- DO NOT power module from a dimmed source. Connect to standard power or mechanical relay ONLY.
- Use the included safety cable for ALL installations.
- If installing any other type of mounting hardware or bracket, DO NOT use screws longer than 1/4" in length. Longer screws WILL damage interior electrical components.

ACCESSORIES

The following accessories are available for the LightPack LED Module from your Authorized Strand Lighting Dealer. Note, all accessories are sold separately.

Clamps

Part Number	Description
SC	Pipe Clamp
71351	Cheeseboro Clamp

DMX512 Termination

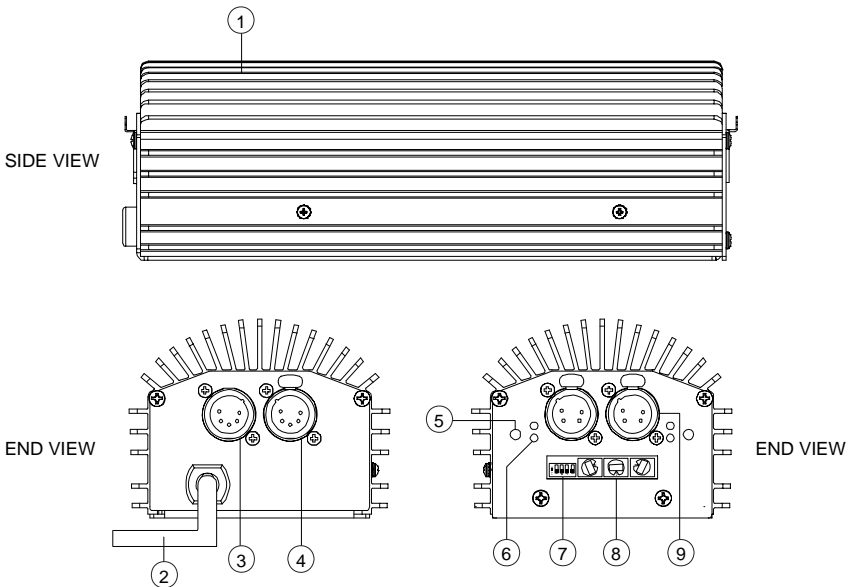
Part Number	Description
71346	DMX512 Terminator

OVERVIEW

LightPack LED controller delivers power and control to any Philips Selecon PL Wash luminaire or Philips Color Kinetics Color Blast wash lights. Smart addressing technology simplifies set up and allows users to quickly address any luminaire regardless of type. Users set an address, select an operating mode and press a button to set up any connected luminaire. Each output is configured to match the luminaire regardless of the number of colors the unit supports and delivers exactly the right number of control channels needed. An intensity channel set up option is also available to make your luminaires even easier to use and program.



CAUTION: The LightPack LED Module is for use with specified LED luminaires only. NOT FOR USE WITH SCROLLERS. For luminaire types, refer to "SPECIFICATIONS" on page 9.



- 1 - Heatsink
- 2 - AC Input Cable
- 3 - DMX 512 In
- 4 - DMX512 Thru/Out
- 5 - Focus / Bump Button (one for each luminaire port)
- 6 - Red and Green Status Indicators (one set for each luminaire port)
- 7 - Mode Settings (one 4-position DIP switch)
- 8 - DMX512 Address Setting (three rotary DIP switches)
- 9 - LED Luminaire Control Port (two each, power and data supplied)

Figure 1: LightPack LED Module Overview

INSTALLATION

The LightPack LED Module can be mounted in a variety of configurations. Depending on your requirements, choose one of the methods shown below. The LightPack LED Module can be mounted vertically (recommended) or horizontally as required, however, to allow for optimum convection cooling, the module cannot be mounted with the heatsink fins downward.



WARNING: A non-removable safety cable is supplied with the unit. The safety cable must be attached to a secure structure and may be required by local or national codes.

Wall Mounting

The LightPack LED Module can be mounted to a wall. Note that the wall mounts (with screws) are included with unit. Wall anchoring hardware is by others. The unit must be mounted with the heatsink fins up/down so the unit will dissipate heat properly. Mounting to wall must comply with local and national codes.

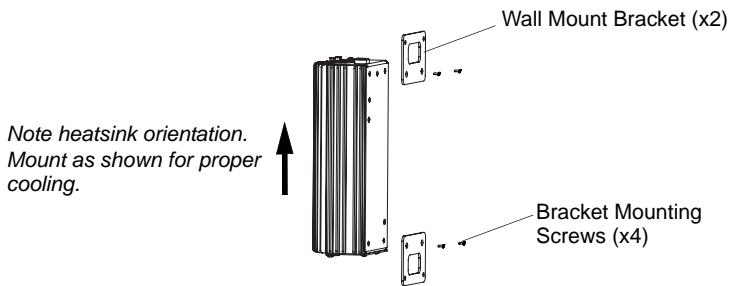


Figure 2: LightPack LED Module Wall Mounting

Pipe Mounting

The LightPack LED Module can be mounted on pipe or truss. Note that the pipe mount (with screws) are included with unit. Clamps are sold separately or by others (See “Clamps” on page 3 for ordering information). The unit must be mounted with the heatsink fins up/down so the unit will dissipate heat properly. Mounting to pipe or truss must comply with local and national codes.

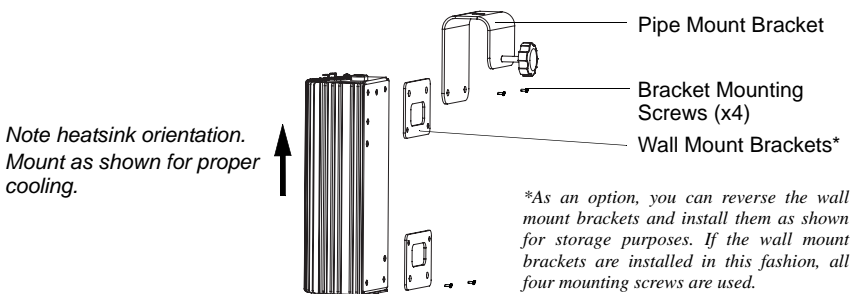


Figure 3: LightPack LED Module Pipe or Truss Mounting

CONNECTING POWER

The LightPack LED Module is supplied with an AC input cable. Some versions are sold with AC input connectors installed.



WARNING: DO NOT power module from a dimmed source. Connect to standard power or mechanical relay **ONLY**.

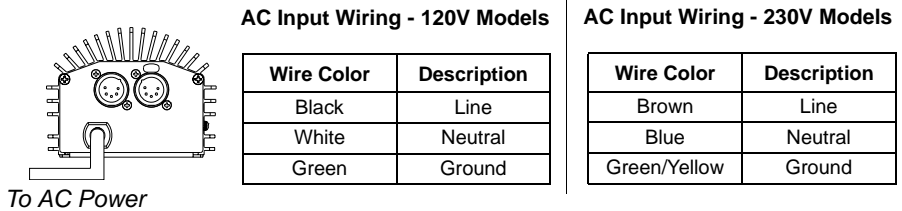
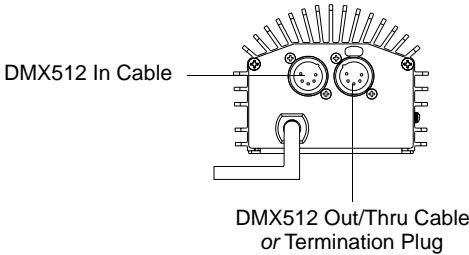


Figure 4: AC Power Connection

CONNECTING DATA

DMX512 Connections

The LightPack LED Module supports standard USITT DMX512/1990 protocol. A termination plug (Strand # 71346) is required at the last module in the data link.



DMX 5-Pin Connectors Pinout:

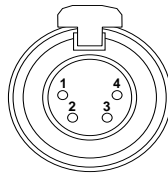
Pin	Signal
1	Common (Drain)
2	DMX512 -
3	DMX512 +
4	No Connection
5	No Connection

Figure 5: DMX512 Connections

LED Luminaire Port Connections

The LightPack LED Module supports the control of two LED luminaires through its two LED Luminaire ports.

WARNING: The LightPack LED Module is only for use with certain LED luminaires. See "SPECIFICATIONS" on page 9 for more information.



LED Module 4-Pin Connector Pinout:

Pin	Signal
1	+24 Volts DC
2	Not Used
3	Data
4	Ground

Figure 6: LED Luminaire Connections

SETTING MODES AND DMX512 ADDRESS

The operating modes and DMX512 address can be easily configured using the controls located inside the recess panel. There is one 4-position DIP switch (Configuration Switch) to configure the modes and three rotary DIP switches to configure the DMX512 address.

For example (as shown in **Figure 7**), to set a DMX512 address of 471, set the 100's dial to "4", the 10's dial to "7", and the 1's dial to "1". To configure the modes, set each of the DIP switches to either the ON or OFF setting (up or down).

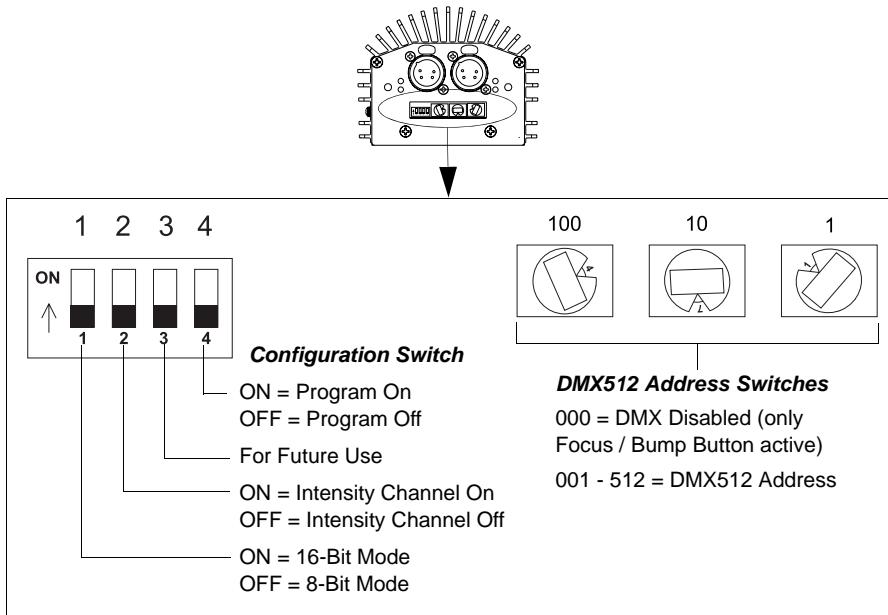


Figure 7: DIP Switches

To program individual DMX512 address, 8/16 Bit Mode, and Intensity Channel for each connected luminaire:

- Step 1. At Configuration Switch, set Switch 4 to "ON".
- Step 2. At Configuration Switch, set 8/16 Bit Mode and Intensity channel switches as desired.
- Step 3. Set each DMX address dial to desired DMX512 address for first luminaire.
- Step 4. Press and hold Focus / Bump button until first luminaire flashes.
- Step 5. Set each DMX address dial to desired DMX512 address for second luminaire.
- Step 6. Press and hold Focus / Bump button until second luminaire flashes (about 5 seconds).
- Step 7. When programming is complete, at Configuration Switch, set Switch 4 to "OFF".

OPERATION

The LightPack LED Module will power up when the AC power is connected. (NOTE: the LightPack LED Module does not have a main on/off switch.)

The LightPack LED Module provides two LED status indicators and a Focus/Bump buttons.

LightPack LED Controller - Status LED Indicators

The two LEDs associated with each channel report various operating conditions.

Red LED	Green LED	Condition
On	Off	No DMX512 Communications
Off / On	On	Module is set to 100% by Focus / Bump button

Focus / Bump Button Operation

Once each luminaire has been set up, tap the Focus / Bump button once to turn on all of the LEDs on the attached luminaire. Each successive Button tap will advance through each LED color that the Luminaire offers. The final tap will turn the luminaire off.

Button Tap	RGBAW Luminaire	RGB Luminaire	WW Luminaire
1	All On	All On	All On
2	Red	Red	Warm White
3	Green	Green	Cool White
4	Blue	Blue	Off
5	Amber	Off	
6	White		
7	Off		

Luminaire Discovery

The LightPack LED Module is set, by default, for RGBAW LED luminaire operation. If you plug in an RGB or WW LED luminaire, you will need to cycle through the Focus / Bump button presses (as described in "Focus / Bump Button Operation") to return to the first color. The LightPack LED Module can "discover" and set itself to control the type of connected luminaire.

To Discover the connected luminaire:

- Step 1. Connect luminaire to LightPack LED Module. Note, LightPack LED Module must be powered.
- Step 2. Press and hold Focus / Bump button for 5 seconds.
- Step 3. The luminaire will flash through all colors and stop.
- Step 4. The LightPack LED Module is now set to connected RGB or WW luminaire.

SPECIFICATIONS

Power Input:	100 ~ 240VAC, 50/60 Hz, 2 Amps
Power Output:	24VDC, 55 Watts Per Connector
Luminaire Types:	Philips Selecon PL Washes or Philips Color Kinetics Color Blast
Weight:	4.2 lbs (1.9 kg)
DMX512 Connections:	DMX512 In / Out (thru)
Output Connections:	2 (power and data on each)
Temperature:	32 to 122°F (0 to 50°C)
Humidity Range:	5 to 95% Non-condensing
Standards Compliance:	ETL, cETL listed and CE marked

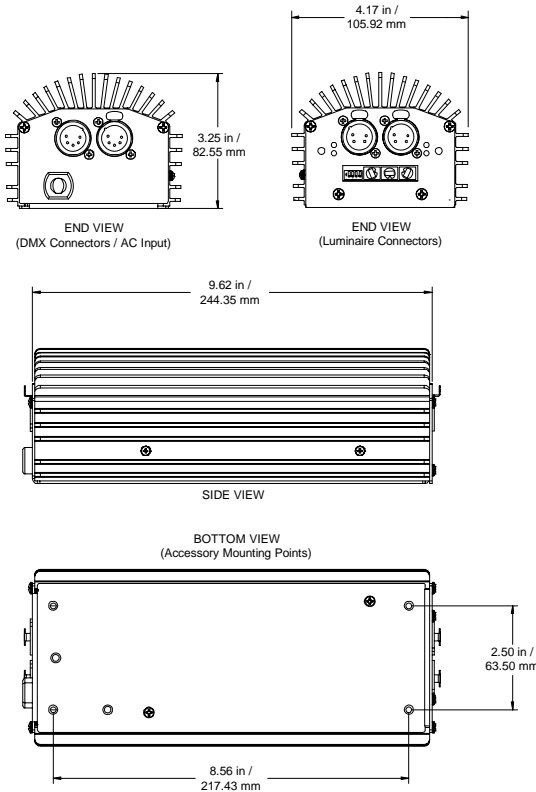


Figure 8: Dimensions

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