Fire by Design Inc

INSTALLATION OPERATION & SERVICE MANUAL

PS SERIES LOW VOLTAGE LED DRIVER FOR SUBMERSIBLE SWIMMING POOL/SPA LIGHTS AND AUTOMATED (ELECTRONIC IGNITION) DECORATIVE OUTDOOR FIRE FEATURES.

Model: PS-30V185 – 185 W LED Driver

Input: 120 VAC, Output: 30 VDC

Model: PS-30V320 – 320 W LED Driver

Input: 120 VAC, Output: 30 VDC

Suitable for direct connection to underwater lights and Automated Fire Features. For Outdoor Use Only.

Read and follow the safety instructions listed below and other basic safety precautions before installation or operation of this power supply and other associated equipment.

⚠ WARNING ⚠

Risk of Fire or Electrical Shock

- Do Not Submerse Power Supply
- Do Not connect two or more power supplies in parallel.
- Do Not use with dimmers.
- This power supply must be installed according to the National Electric Code (NEC) by a licensed installer.
- Do Not Install this power supply within 10 feet of a swimming pool.

GENERAL INFORMATION

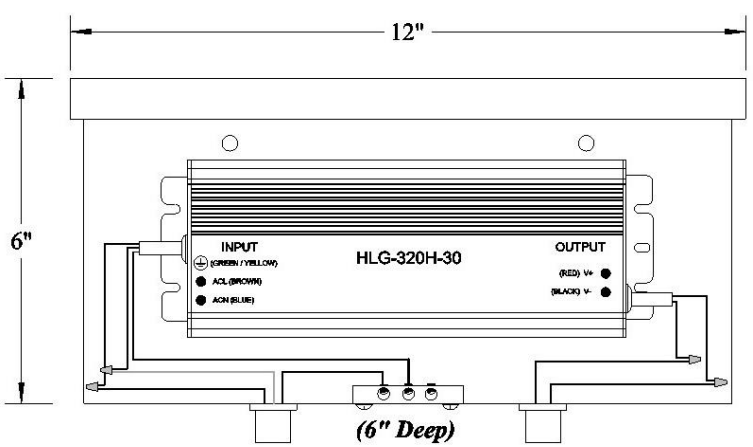
These LED Driver Power Sources are specifically designed to supply 30 VDC to submersible poo/spa lights, submersible fixtures, outdoor garden lights and Automated (Electronic Ignition) Decorative Outdoor Fire Features. The built-in circuit protection will disconnect power to the LED Driver in case of defect or overload. These power supplies are suitable for direct connection to underwater Pool and Spa lights.

Enclosure Specifications

Enclosure Size: 6” high x 12” wide x 6” deep. Mounting holes inside box.

Enclosure Material / Finish: G-90U Galvanized Steel and ANSI 61 Gray Polyester Powder Coating

Knockouts: Total of 3. Two ½” – ¾”, One 1” – 1.25”. All located on bottom of box.



INSTALLATION

Note: This power source, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the *National Electric Code, ANSI/NFPA 70,* if applicable.

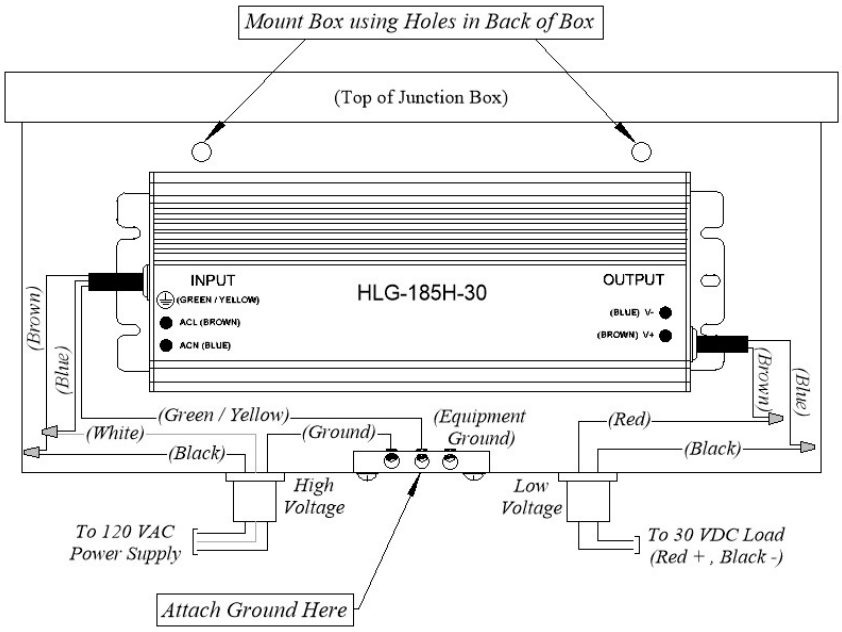
185 Watt Power Supply

1. Mount Junction Box orientated as shown in the illustration at right. Top of Junction Box should be facing up. Use the holes in the back of the box to mount the box.

2. Connect 120 VAC power to the “Input” side of the power source. The Brown wire is to be connected to the Line Voltage Wire. The Blue wire is to be connected to the Neutral Wire.

3. Connect the 30 VDC “Output” wires to the conductors leading to the Load keeping in mind polarity is important (Brown is Positive, Blue is Negative).

4. All Ground wires must be connected to the Equipment Ground Lug mounted in the floor of the Junction Box (shown at right).



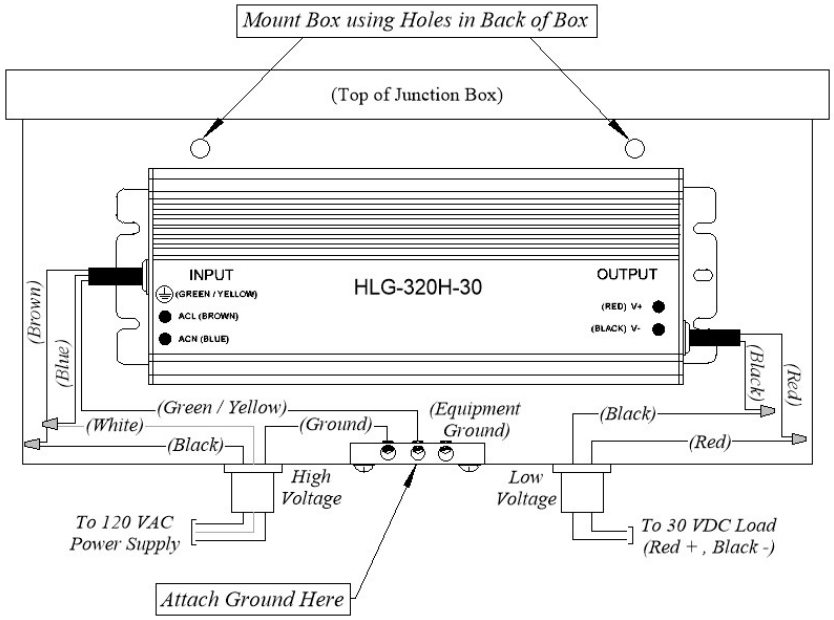
320 Watt Power Supply

1. Mount Junction Box orientated as shown in the illustration at right. Top of Junction Box should be facing up. Use the holes in the back of the box to mount the box.

2. Connect 120 VAC power to the “Input” side of the power source. The Brown wire is to be connected to the Line Voltage Wire. The Blue wire is to be connected to the Neutral Wire.

3. Connect the 30 VDC “Output” wires to the conductors leading to the Load keeping in mind polarity is important (Red is Positive, Black is Negative).

4. All Ground wires must be connected to the Equipment Ground Lug mounted in the floor of the Junction Box (shown at right).



Selecting the Correct Power Source for Automated Outdoor Decorative Fire Features

1. The power required for each Automated Fire Feature is 60 Watts @ 30 VDC.
2. The recommended wire for all installations is 12 AWG or larger.
3. Use the tables below to determine the correct power source to be installed for the number of automated fire features to be installed. Table A is to be used when you will be daisy chaining multiple fire features on the same wire run. Table B is to be used when you will be installing home runs to each fire feature.

Table A
Recommended Power Source when Daisy Chain Wiring of Fire Features

# Fire Features	Distance (feet) from Power Source to Furthest Fire Feature							
	50	100	150	200	250	300	400	500
1	185	185	185	185	185	185	185	185
2	185	185	185	185	185	185		
3	185	185	185	185		(Not enough power supplied by either power sources at these distances)		
4	320	320	320					

Table B
Recommended Power Source when Home Runs Installed to each Fire Feature

# Fire Features	Distance (feet) from Power Source to Furthest Fire Feature							
	50	100	150	200	250	300	400	500
1	185	185	185	185	185	185	185	185
2	185	185	185	185	185	185	185	185
3	185	185	185	185	185	185	185	185
4	320	320	320	320	320	320	320	320

LIMITED ONE-YEAR WARRANTY

If within the warranty period specified, this product fails due to a defect in material or workmanship, Fire by Design Inc will repair or replace it, at its sole option, free of charge. This warranty is extended to the original household purchaser only and is not transferable. This warranty does not apply to: (a) damage to units caused by accident, dropping or abuse in handling, acts of God or any negligent use; (b) units which have been subject to unauthorized repair, opened, taken apart or otherwise modified; (c) units not used in accordance with instructions; (d) damages exceeding the cost of the product; (e) sealed lamps and/or lamp bulbs, LED's and batteries; (f) the finish on any portion of the product, such as surface and/or weathering, as this is considered normal wear and tear; (g) transit damage, initial installation costs, removal costs, or reinstallation costs.

FIRE BY DESIGN INC WILL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS OR IMPLIED WARRANTIES. ALL IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY AND THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY MODIFIED TO EXIST ONLY AS CONTAINED IN THIS LIMITED WARRANTY, AND SHALL BE OF THE SAME DURATION AS THE WARRANTY PERIOD STATED ABOVE. SOME STATES DO NOT ALLOW LIMITATIONS ON THE DURATION OF AN IMPLIED WARRANTY, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

This warranty service is available by either (a) returning the product to the dealer from whom the unit was purchased or by contacting Fire by Design Inc directly. This warranty is made by: Fire by Design Inc, 3255 Pepper Lane Suite 103, Las Vegas, NV 89120