# HanleyLED

Simplify Your Systems

19999

## PHOENIXNRG STREAMLINER

### The All-in-One, Time-Saving Retrofit Lamp Solution!

No power supply needed. Powered by socket. Premium LED tube.





Streamline Hanley

L70:5+ YEARS

I M80













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#### **STREAMLINE YOUR INSTALLS**

- Powered by Socket (PBS) retrofit sign cabinet solution where direct 120–277v input power is used.
- No power supply needed.

• Get in, get out. No power supply hookup, no messy wiring, no wire nuts... simply remove ballast, reconnect primary power to sockets and pop in Streamliner Tubes.

- Superior engineered LED Extrusion Bar for added rigidity and less sagging.
- Versatile for all applications where T12 Fluorescent Lamps are used.
- Premium HanleyLED quality with 7 year product warranty when used with Hanley Surge Protector.
- HanleyPRO Layout Creator at hanleyledsolutions.com.

## TOP READ THESE INSTRUCTIONS COMPLETELY AND CAREFULLY

#### **Tools required:**









Tape Measure

Screwdriver

Electric Drill

Wire Cutters

CE CALUS IP67 ROHS T3 T5

0277PW3511

#### **Components:**

#### **Streamliner Tube**

No Additional power supplies required. Mounts direct to socket.

#### Surge Protector SPD10277PW3511

Sold Separately

- 3-lead Surge Protector
- UL Recognized for Surge Protection Devices
- Protects Against Surges According to IEC61643-11
- None Load Current
- 10KA and 10KV
- IP67 Rated for Wet locations
- Parallel Wiring



#### Packaging for tubes 72" and under



Streamliner Tube

Streamliner Tube in box

Boxes placed in a case

10 Streamliner tubes per layer, 50 Tubes per case

#### Packaging for tubes 84" and larger





Streamliner Tube

Streamliner Tube in box



Boxes placed in a case



5 Streamliner tubes per layer, 25 Tubes per case

ltem	Tubes per box	Tubes per case
HPEB-SL2S24	1	50
HPEB-SL2S30	1	50
HPEB-SL2S36	1	50
HPEB-SL2S42	1	50
HPEB-SL2S48	1	50
HPEB-SL2S60	1	50
HPEB-SL2S64	1	50
HPEB-SL2S72	1	50
HPEB-SL2S84	1	25
HPEB-SL2S96	1	25
HPEB-SL2S108	1	25
HPEB-SL2S117	1	25
HPEB-SL2S120	1	25

**NOTE:** All materials removed must be disposed of in accordance with applicable local, state, and federal laws.

#### WARNING Check Polarity:

All connections must be WHITE-TO-RED (+) and BLACK-TO-BLACK (-). Reverse polarity connections may damage the LEDs and will void product warranty.

**Caution:** Turn off power to sign before inspecting or removing existing light source. Power must remain off while installing the Concorde Cabinet System.

#### **RETROFIT INSTALLATION GUIDE**

#### PhoenixNRG Streamliner

This guide is designed to aid in the installation of HanleyLED's PhoenixNRG Streamliner. Skilled trades people that are familiar with general construction, electrical, and sign installation techniques should do the installation. Licensed electricians should provide all installation and hook-up of components. All installation and hook-up should be done in accordance with all National and Local codes and permits. In no way is this document intended to construe warranty or fitness of use of the products described, nor is it intended to provide safety instruction for those installing the product.

## THE FIELD INSTALLATION OF THIS RETROFIT SYSTEM INTO A SIGN IS SUBJECT TO THE ACCEPTANCE OF LOCAL INSPECTION AUTHORITY.

## **CAUTION:** TURN OFF POWER TO THE SIGN BEFORE INSPECTING OR REMOVING EXISTING LIGHT SOURCE. THE POWER MUST REMAIN OFF WHILE INSTALLING THE LED RETROFIT KIT.

#### **Tools Required:**

- Wire cutter & strippers
- Measuring tape
- Marking pens
- Drill

• Standard hardware and supplies in addition to the HanleyLED Streamliner installation guides (UL listing may be required on certain items).

#### **Prepping the Cabinet**

#### Step 1

• Remove existing neon or fluorescent bulbs by having a licensed electrician disconnect and remove the neon transformers or fluorescent ballasts.

- Remove existing neon and standoffs or fluorescent lamps.
- Inspect all sockets for signs of damage.
- Replace any damaged sockets. Reconnect socket wires directly to primary power.
- Attach surge protector at this junction of socket wires and primary wire.

NOTE: Power to the sign should still be off at this stage.

#### ALL MATERIALS REMOVED MUST BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL LAWS.

#### **Prepping the Cabinet Continued**

#### Step 2

• Installer should examine all parts that are not intended to be replaced by the retrofit kit for damage and replace any damaged parts prior to installation of the retrofit kit.

- Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.
- Any existing holes in the cabinet that will not be used in the installation of product should be patched to avoid water damage.
- Openings smaller than  $\frac{1}{2}$ " diameter may be sealed with the appropriate amount of rated caulk or sealant. Openings larger than  $\frac{1}{2}$ " should be patched using an aluminum or zinc coated steel patch with rivets and sealant.

#### Step 3

Proceed with the PhoenixNRG Streamliner installation guidelines.

#### PHOENIXNRG STREAMLINER DIMENSIONS



Your PhoenixNRG Streamliner is ready to come out of the package!

- Simply disconnect and remove the fluorescent lamp ballast.
- Inspect sockets for damage (replace sockets if necessary).
- Reconnect sockets to primary power
- Pop Streamliners into sockets.

NO PEELING AND STICKING OF MODULES REQUIRED AND NO EXTERNAL POWER SUPPLY NEEDED!

ltem	LED Lamp Cross Reference	Module Quantity per Tube	Watts (w)	Max Input (amps)	Lumens (lm)	Actual Size
HPEB-SL2S24 *Available upon special order (MOQs apply)	F24HO	6	10	.08	1500	21"
HPEB-SL2S30	F30HO	8	13	.12	1950	27"
HPEB-SL2S36	F36HO	10	16	.14	2400	33.1"
HPEB-SL2S42	F42HO	10	18	.16	2700	39.1"
HPEB-SL2S48	F48HO	12	21	.18	3150	45"
HPEB-SL2S60	F60HO	14	26	.22	3900	57"
HPEB-SL2S64	F64HO	16	28	.24	4200	61.1"
HPEB-SL2S72	F72HO	18	31	.26	4650	69"
HPEB-SL2S84	F84HO	20	37	.32	5550	81"
HPEB-SL2S96	F96HO	22	42	.36	6300	93"
HPEB-SL2S108	F108HO	26	47	.40	7050	105"
HPEB-SL2S117	F117HO	30	50	.42	7500	114"
HPEB-SL2S120	F120HO	34	52	.44	7800	117"

ltem	Color Temp	Beam Angle	Input Voltage	Luminous Efficacy (lm/W)	Socket Type
HPEB-SL2S24					
HPEB-SL2S30					
HPEB-SL2S36					
HPEB-SL2S42					
HPEB-SL2S48					
HPEB-SL2S60					
HPEB-SL2S64	6500K	2*170°	120-277v	150	R17d
HPEB-SL2S72					
HPEB-SL2S84					
HPEB-SL2S96					
HPEB-SL2S108					
HPEB-SL2S117					
HPEB-SL2S120					



#### MAKE SURE PRIMARY POWER TO SIGN IS COMPLETELY SHUT OFF TO THE CIRCUIT BEOFRE WORKING ON SIGN

#### **RETROFIT INSTALLATION INSTRUCTIONS**



**1.** Turn off primary power to sign. Double check primary with appropriate test to ensure primary wires are not live. Open cabinet.



**2.** Disconnect ballasts from sockets and primary. Remove ballast and fluorescent lamps. Leave enough lead wire on socket as you will reconnect these to the primary in step 4.



**3.** Leave fluorescent sockets in raceway. Inspect the sockets. Ensure that they are clean and free of any damage. Replace any damaged or compromised sockets to ensure that they do not damage Streamliners. Since power passes through socket cap from the socket, ensure that the metal prongs inside the socket are in good condition and can make contact with the Streamliner cap.



4. Connect UL approved surge protector by connecting black wire (L) of surge protector to input (L) line from primary and white wire (N) of surge protector to (N) neutral line from primary and connect green wire (G) to the ground wire of cabinet. \*Only one SPD per circuit



**5.** Connect input (L) line from primary to all wires coming from sockets on one side of cabinet and (N) neutral line from primary to all wires coming from the sockets on the other side of the cabinet. Install Streamliner Tubes into sockets.



6. PhoenixNRG Streamliners should be installed with the LEDs aimed directly at the face. If the Streamliners are oriented in the wrong direction inside the socket, the socket cap can be removed and repositioned. With a pair of pliers, pull out the socket cap and reinsert the cap in the desired position.

#### LAYOUT GUIDELINES

Double-sided Light Box Depth	Item	Average Space Between Tubes	Comments
9" (4.5" single-sided)*	PhoenixNRG Streamliner by HanleyLED	9"	Light box size: 47" x 67"
12" (6" single-sided)*		12"	7328 white acrylic

\*Use the double-sided Streamliners for single-sided signs and for extra deep, double-sided signs that require multiple lamp bays.

#### WARRANTY

Model No.	Warranty Period
HPEB-SL2S24, HPEB-SL2S30, HPEB-SL2S36, HPEB-SL2S42, HPEB-SL2S48, HPEB-SL2S60, HPEB-SL2S64, HPEB-SL2S72, HPEB-SL2S84, HPEB-SL2S96, HPEB-SL2S108, HPEB-SL2S117, HPEB-SL2S120	7 year (product), 5 year (labor) when used with HanleyLED Surge Protector (HPEB-SP10KV)* 5 year (product), 2 year (labor) when used without HanleyLED Surge Protector*

\*Above warranty period is only for Streamliners used inside of water proof signs. See HanleyLED Limitied Warranty Policy for more details.

#### CAUTIONS

#### Cautions for installation and use:

- Disconnect the power before installation to ensure safety.
- Disconnect or remove the existing ballast before installation to avoid short circuit.
- This product must be installed by a qualified electrician or electrical engineer.
- This product must be installed according to the requirements and instructions in the specification sheet.

• A surge protector is recommended to be used with this product to prevent damage caused by power surges, inrush current and other environmental causes of power spikes.

- This product is not intended for use with dimmers; not intended for emergency lighting.
- Suitable for dry and damp locations; suitable for use in enclosed luminaries.
- To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.

#### TROUBLESHOOTING

Malfunctions	Possible Causes	Solutions	
All LEDs do not work	No power from primary	Double check primary connections and turn power on	
	Poor contact between socket and product	Remove and reinstall the product or adjust the lamp holders; Replace damaged sockets	
	Driver inside the product is damaged	Replace damaged tube with new tube	
Part of LEDs do not work	No electricity to those LEDs due to open circuit	Maintain the circuit or replace with new tube	
	The diodes inside the modules fail	Confirm voltage from primary is stable & safe; replace with new tube.	
Brightness of LEDs is weak or uneven	LED diodes inside modules malfunction	Replace with new modules or new product	
	Power input of driver is insufficient	Replace with new product	
LEDs are blinking	Driver inside the product is damaged	Replace with new product	
	Poor contact between socket and product	Adjust the contact between the tube and socket	

WARNING – Risk of fire or electric shock. LED Retrofit Kit installation requires knowledge of sign electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.

WARNING – Risk of fire or electric shock. Install this kit only in host signs that have been identified in the installation instructions and where the input rating of the retrofit kit does not exceed the input rating of the sign

WARNING – Risk of fire or electric shock. Installation of this LED retrofit kit may involve drilling or punching of holes into the structure of the sign. Check for enclosed wiring and components to avoid damage to wiring and electrical parts.

WARNING - To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.

Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.

Only those open holes indicated in the photographs and/or drawings may be made or altered as a result of kit installation. Repair and seal any unused openings in the electrical enclosure. Openings greater than 12.7 mm (1/2 in.) diameter require a metal patch secured by screws or rivets and caulked with non-hardening caulk. Smaller openings may be sealed with non-hardening caulk.