HanleyLED

NRG STIK

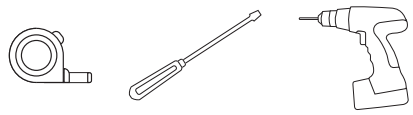
LED light bar for new construction or HO lamp replacement

Before You Begin

Determine your light bar mounting method. Are you using pre-existing sockets to mount? If so, Retrofit Connectors are already attached to the NRG Stiks. For a new construction, simply remove screw and cap.

STOP READ THESE INSTRUCTIONS COMPLETELY AND CAREFULLY

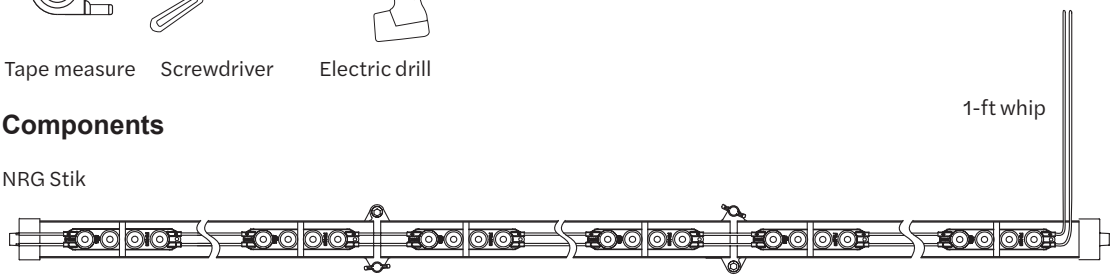
Tools required



Tape measure Screwdriver Electric drill

Components

NRG Stik



24V Power Supply
(sold separately)

- Retrofit (RF) Connector is already screwed onto ends
- Simply remove screw and cap for new construction signs
- NRG Stiks come with a 1-ft whip

E476250 E487794 RoHS Compliant

Specifications subject to change without notice.

PRINCIPAL SLOAN
A Principal Industries Company

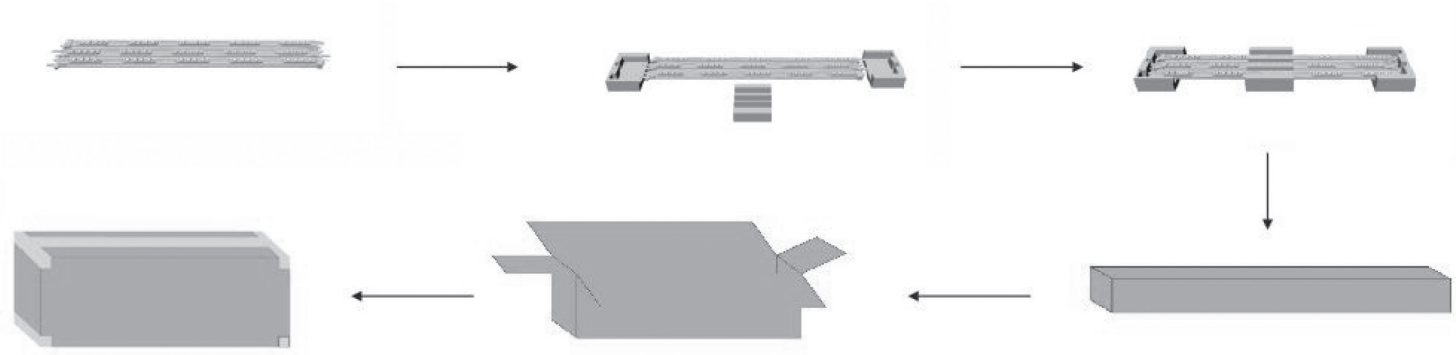
HanleyLED

NRG STIK

LED light bar for new construction or HO lamp replacement

NRG SERIES

Packaging



SKU	Bars per box	Bars per case
HPEB-2S30	3	12
HPEB-2S36		
HPEB-2S42		
HPEB-2S48		
HPEB-2S60	2	8
HPEB-2S64		
HPEB-2S72		
HPEB-2S84		
HPEB-2S96		
HPEB-2S108		
HPEB-2S117		
HPEB-2S120		

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.

HanleyLED

NRG STIK

LED light bar for new construction or HO lamp replacement

Retrofit Installation Guide

NRG Stik

This guide is designed to aid in the installation of HanleyLED's NRG Stik. 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 both the primary and secondary input/outputs of the HanleyLED power supply. 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
- Marking pens
- Measuring tape
- Drill
- Standard hardware and supplies in addition to the HanleyLED modules installation guides (UL listing may be required on certain items).

Prepping the Channel Letter or 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. Leave fluorescent sockets in cabinets with leads disconnected. This should leave an empty channel letter or cabinet.

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

Step 2

Using a non-oil based cleaner, clean the back surfaces of the channel letter or cabinet where the LED modules will be mounted. This is an important step for good adhesion of HanleyLED modules mounting tape.

Step 3

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 letters or cabinet that will not be used in the installation of HanleyLED modules should be patched to avoid water damage. Opening smaller than 0.5" diameter may be sealed with the appropriate amount of rated caulk or sealant. Openings larger than 0.5" should be patched using an aluminum or zinc coated steel patch with rivets and sealant.

Step 4

Proceed with the appropriate HanleyLED module installation guide for your specific product.

Specifications subject to change without notice.

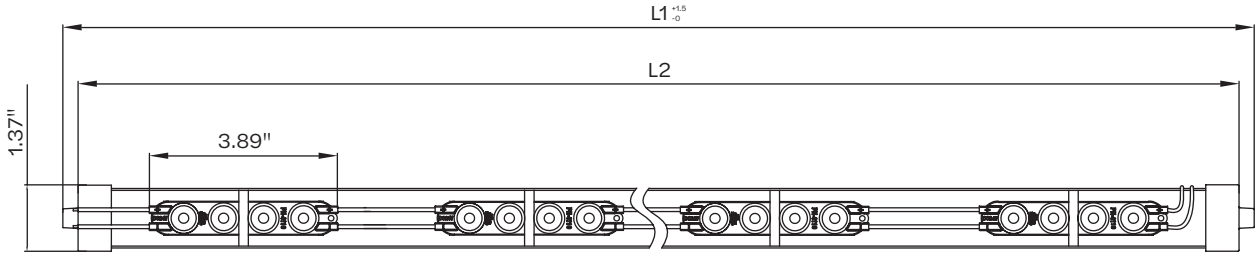
PRINCIPAL SLOAN
A Principal Industries Company

HanleyLED

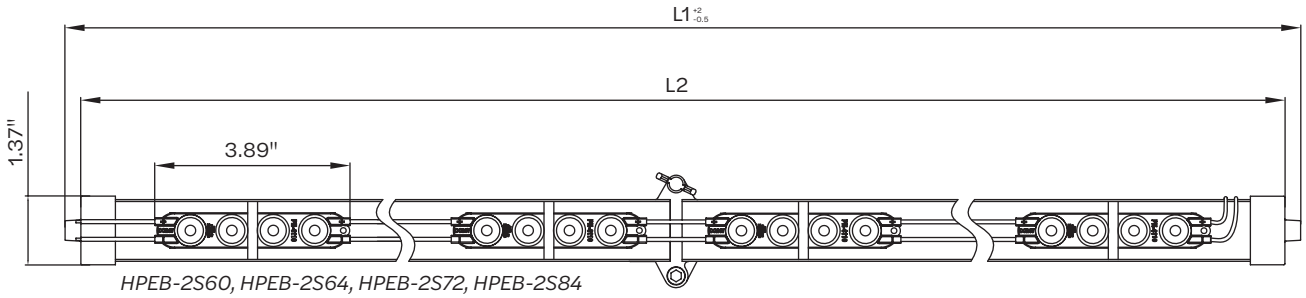
NRG STIK

LED light bar for new construction or HO lamp replacement

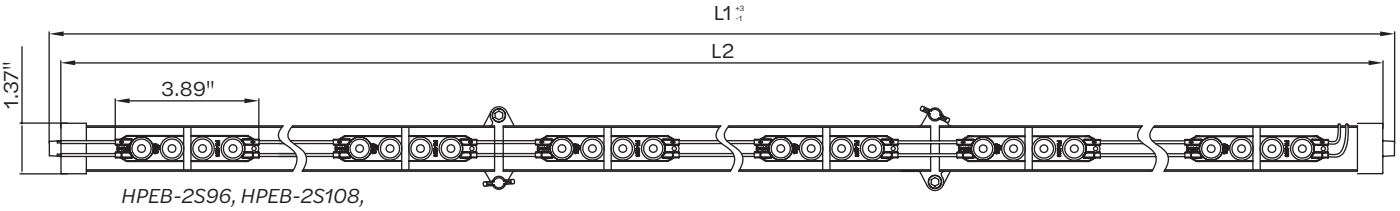
Dimensions



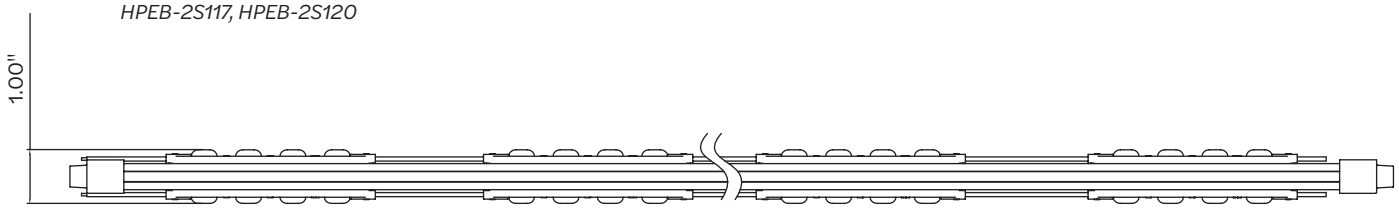
HPEB-2S30, HPEB-2S36, HPEB-2S42, HPEB-2S48



HPEB-2S60, HPEB-2S64, HPEB-2S72, HPEB-2S84



HPEB-2S96, HPEB-2S108,
HPEB-2S117, HPEB-2S120



All NRG Stik sizes

Length	Nominal length	No. of mods	Lumens (lm)	LED lamp cross reference	Power (W)	SKU
30"	27.0"	8	1496	F30HO	8.8	HPEB-2S30
36"	33.1"	10	1870	F36HO	11	HPEB-2S36
42"	39.1"	12	2210	F42HO	13	HPEB-2S42
48"	45.0"	14	2550	F48HO	15	HPEB-2S48
60"	57.0"	18	3400	F60HO	20	HPEB-2S60
64"	61.1"	20	3740	F64HO	22	HPEB-2S64
72"	69.0"	22	4080	F72HO	24	HPEB-2S72
84"	81.0"	26	4930	F84HO	29	HPEB-2S84
96"	93.0"	30	5610	F96HO	33	HPEB-2S96
108"	105.0"	34	6290	F108HO	37	HPEB-2S108
117"	114.0"	36	6800	F117HO	40	HPEB-2S117
120"	117.0"	38	7140	F120HO	42	HPEB-120

Your NRG Stik is ready to go out of the package. Simply open the hinge and snap your bar into existing lamp sockets for retrofits, or screw directly into existing structure for new installs. NO PEELING AND STICKING OF MODULES REQUIRED!

PRINCIPAL SLOAN
A Principal Industries Company

HanleyLED

NRG STIK

LED light bar for new construction or HO lamp replacement

NRG SERIES

Layout Guidelines

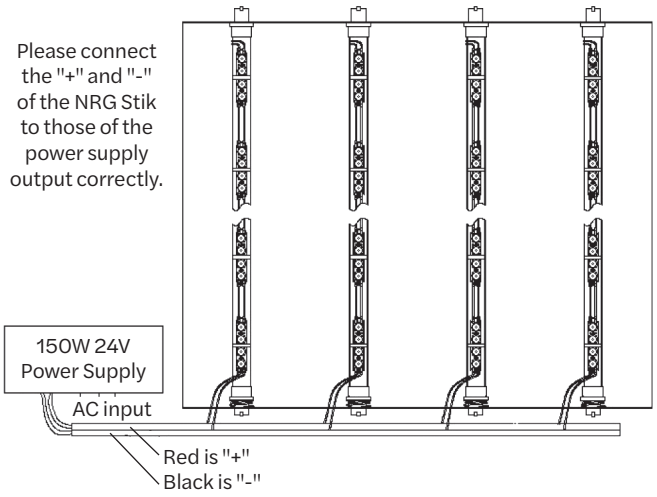
Double-sided light box depth	Max. space between bars
9"	12"
12"	15"
18"	20"
24"	22"

NOTE: Lightbox size: 47" x 67".
Tested with 3/16", 7328 white acrylic.

Power Supply Options

Length	Power (W)	Power Supplies 24V			
		60 W	96 W	100 W	288 W
30"	8.8	6	10	11	24
36"	11	5	8	9	20
42"	13	4	7	7	16
48"	15	4	6	6	16
60"	20	3	4	5	12
64"	22	2	4	4	8
72"	24	2	4	4	8
84"	29	2	3	3	8
96"	33	1	2	3	4
108"	37	1	2	2	4
117"	40	1	2	2	4
120"	42	1	2	2	4

108" NRG Stik Example (HPEB-2S108)



PRINCIPAL SLOAN
A Principal Industries Company

HanleyLED

NRG STIK

LED light bar for new construction or HO lamp replacement

Warranty

SKU	Warranty period
HPEB-2S30, HPEB-2S36, HPEB-2S42, HPEB-2S48, HPEB-2S60, HPEB-2S64, HPEB-2S72, HPEB-2S84, HPEB-2S96, HPEB-2S108, HPEB-2S117, HPEB-2S120	10-Year Product, 5-Year Labor

Above warranty period is only for products which are used inside of waterproof light boxes and valid only when used as a system with HanleyLED Premium Power Supplies.

Cautions

Cautions for installation and use:

- Make sure installing surface is clean and suitable for sticking prior to installation.
- Inadequately connecting the "+" and "-" of module to those of power supply output might ruin your product.
- Full attention should be paid to wire polarity when connecting two or more strings of product during installation.
- Maximum cascade length is 142" ; not recommended to exceed this cascading length.
- Standard operating temperature: -40° to 60°C.

Cautions for selection of other parts:

- Please ensure that output voltage of using power supply is DC (24+5%)V, and rated power supply is recommended to underload by 20%. (HanleyLED "PPS5" and "PPSEM" Power Supplies can be loaded to 100% if absolutely needed with no effect to warranty).
- During installation, please ask qualified person to count and select suitable cable according to diameter and length of wire when connecting cable needs to be extended, otherwise, low input voltage to product may occur, or fire hazard due to overheated cable.
- Prohibited to use any acid or alkaline glue to fix this product.

HanleyLED

NRG STIK

LED light bar for new construction or HO lamp replacement

NRG SERIES

Troubleshooting

Malfunctions	Possible causes	Solutions
All LEDs do not work.	Power supply did not connect to power grid.	Power on.
	No electricity due to short-circuit of external power supply.	Remove malfunction caused by short-circuit, power on again.
	Wires of bar connect to power supply output reversely.	Check connection and ensure wires are connected correctly.
Part of LEDs do not work.	Part of power supplies do not have output.	Check power supply system.
	Part of bar wires have malfunction.	

Malfunctions	Possible causes	Solutions
Brightness of LEDs is weak or uneven.	Overloaded power supply.	Replace it with higher power supply.
	Power loss of power circuit is huge or power loss to each existing circuit.	Ensure working voltage of bars is within +5%V of rated voltage (1. Shorten length of wires between first bar and power supply or replace with wires with bigger diameter; 2. Ensure cascading quantity of string is less than or equal to allowed maximum cascading quantity, and each bar cascading quantity is well-balanced).
	Too many bars in series/cascade.	Lessen cascading quantity for bar and ensure quantity for each electrical circuit is within maximum cascading quantity.
LEDs are blinking.	Poor wiring connections.	Check all wiring connections immediately.
	Failures in power supply.	Replace power supply.

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 0.5" 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.

10|5 YEAR
10-Year Product | 5-Year Labor
WARRANTY

principalsloan.com
325.227.4577
3490 Venture Dr., San Angelo, TX 76905

© 2025 Principal Industries Rev E 2025-12-19

Specifications subject to change without notice.

PRINCIPAL SLOAN
A Principal Industries Company