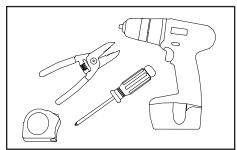
# POSTERBOX 3

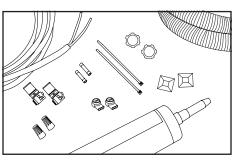
## Installation Guide for 701946-6WLRP1, -6WSRP1

WARNING: Risk of electrical shock. New installation and LED Retrofit Kit installation requires knowledge of sign electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician. Follow all NEC and local codes. PosterBOX 3 is not suitable for submersion or direct exposure to water for extended periods of time. **AVERTISSEMENT:** Risque de choc électrique. La nouvelle installation et l'installation du kit de modification à LED nécessitent la connaissance des systèmes électriques de signalisation. Si non qualifié, ne tentez pas l'installation. Contactez un électricien qualifié. Suivez tous les codes NEC et lecourse. DeterBOX 3 no consulter tors à la submersion n'a l'encourse to la submersion de l'installation. Contactez de signalisation.

For New Installation, proceed with Step 1 below. For Retrofit Installations, begin with Retrofit Instructions on page 2.

## **New Installation**





### **Components list:**

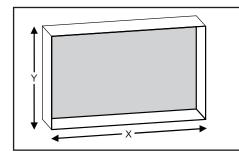
- PosterBOX 3 modules, model numbers 701946-(X)WLRP1 or 701946-(X)WSRP1
- 24 V Class 2 output power supply
- UL approved 18 AWG, or larger diameter supply wire
- UL approved wire connectors appropriate for wire gauge used
- Optional for mounting: Electrical grade silicone, #8 sheet metal screws, or 5/32" aluminum rivets

#### **Recommended tools:**

- Measuring tape
  Drill
- Wire strippers
  Screwdriver

Layout Guidelines

It is recommended to test LED density in a sample cabinet to evaluate brightness, uniformity, and color. If you have questions or require assistance in testing, please contact your Principal Sloan Customer Service Representative.



- Measure sign box to determine quantities of PosterBOX 3 (see Power Supply capacity table on page 3).
- From factory Built-in module spacer For best performance

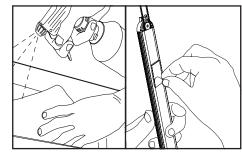
TIP: For best results, space modules adjacent to each

other using built-in module spacer. For best perfor-

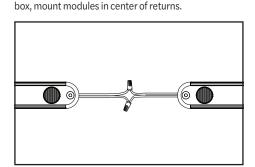
mance in a single-sided box, mount modules on returns,

near rear wall of box (~.5 – .75"). For a double-sided sign

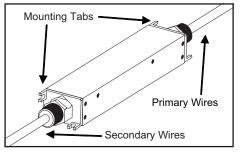
- 2a. Secure modules to sides of sign box using #8 pan head sheet metal screws or 0.15625" aluminum rivets.



**2b.** If desired, double-stick tape can be used to mount modules. Before mounting, clean mounting surfaces inside of sign box with rubbing alcohol and allow to dry for proper tape adhesion.



**3. Connections:** Modules may be connected in series or parallel. Modules should not be looped to create a closed circuit. Cap all unused, exposed wire ends.



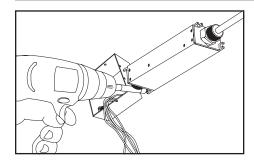
 Mount Power Supply: Identify primary wires, secondary wires, and location of mounting tabs.



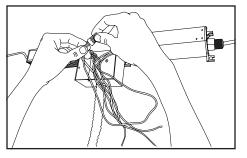
# POSTERBOX 3

## Installation Guide for 701946-6WLRP1, -6WSRP1

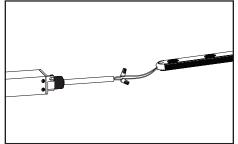
**CAUTION:** Luminaire should be positioned so that prolonged staring into luminaire at a distance closer than 12.7" is not expected. **ATTENTION:** Le luminaire doit être placé de manière à ne pas provoquer de regards prolongés dans le luminaire à une distance inférieure à 12.7". WARNING: Connect Red striped wire of LED modules (+) to Red wire of power supply (+). Connect White wire of LED modules (-) to Black wire of power supply (-). Reverse polarity connections may damage the LEDs and will void product warranty. AVERTISSEMENT: Connectez le fil rouge des modules LED (+) au fil rouge de l'alimentation (+). Connectez le fil blanc des modules LED (-) au fil noir de l'alimentation (-). Des connexions inversées peuvent endommager les DEL et annuler la garantie du produit.



**5.** Units may be mounted in any orientation using mounting tabs.



6. Connect primary: CAUTION! Have a licensed electrician connect primary.



**7. Connect to power supply:** Using UL Listed electrical connectors, daisy chain product as required and connect to power supply.

# **Retrofit Instructions for Existing Signs**



GENERAL PURPOSE RETROFIT SIGN CONVERSION. FOR USE ONLY IN ACCORDANCE WITH KIT INSTRUCTIONS.

KIT IS COMPLETE ONLY WHEN ALL PARTS

REQUIRED BY THE INSTRUCTIONS ARE PRESENT.

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. 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. AVERTISSEMENT: Risque d'incendie ou de choc électrique. Installez ce kit uniquement sur les panneaux hôtes identifiés dans les instructions d'installation et dans lesquels les caractéristiques nominales d'entrée du kit de modification ne dépassent pas celles du panneau. L'installation de ce kit d'amélioration des LED peut impliquer de percer ou de percer des trous dans la structure de l'enseigne. Vérifiez le câblage et les composants inclus pour éviter d'endommager le câblage et les pièces électriques.

**CAUTION:** Turn off power to sign before inspecting or removing existing light source. Power must remain off while installing LED product. **ATTENTION :** Coupez l'alimentation générale du panneau avant d'intervenir ou de retirer la source lumineuse existante. L'alimentation générale doit être coupée tout au long de l'installation du kit de remplacement en LED.

- 1. Identify sign to be retrofit and ensure branch circuit supplying existing sign are within voltage range for LED power supply. Refer to components list (page 1) and "24 VDC Power Supply Capacity Chart" (page 3).
- 2. Remove existing lighting equipment intended to be replaced, such as neon or fluorescent, and all power supplies, transformers, or ballasts. Remove existing neon and all standoffs to leave an empty sign cabinet. **NOTE:** All materials removed must be disposed of in accordance with applicable local, state, and federal laws.
- 3. If required by local, state, or national electrical code, install a new disconnect switch.
- 4. Determine suitability and structural integrity of existing sign after removal of existing lighting equipment. If retrofit does not require the making of any new holes, do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation. If existing holes are present in a wet or outdoor location sign, 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.
- 5. Clean inside of sign using non-oil based cleaner. Follow all manufacturer's instructions and ensure inside of sign is dry before proceeding with installation. This is an important step for good adhesion of PosterBOX 3 module mounting tape.
- 6. To populate sign, refer to PosterBOX 3 density guidelines as well as power supply capacity chart (page 3) to determine appropriate number of modules and power supplies.
- 7. Follow all instructions on pages 1 and 2 under "New Installation" to properly install LED modules.
- 8. Connect modules to power supply output as shown on page 2 under "New Installation".
- 9. Connect power supply input as outlined in power supply installation guide in accordance with local, state and national electrical codes by qualified personnel. Refer to power supply install guide included with power supply for details.
- 10. If required, install disconnect switch in accordance with local, state and national electrical codes by qualified personnel.



# **POSTERBOX 3**

## Installation Guide for 701946-6WLRP1, -6WSRP1

## 24 VDC Power Supply Capacity Chart

	Maximum units per power supply*	
Power Output	6WLRP1	6WSRP1
60 W	3	7
96 W	6	12
3 × 96 W	3×6	3 × 12
100 W	6	12
Power used per unit in Watts:	14.0 W	7.2 W

\*Combination of units must not exceed maximum power supply output. Capacities based on 90% of power supply output.

## **Extension of Power Supply Leads**

If longer lead wire from power supply to LED product is needed, an extension can be used. Extension should be kept as short as possible, i.e., under 15 ft use 18 AWG UL Listed PLTC or under 50 ft use 14 AWG UL Listed PLTC.

### Troubleshooting

Entire sign or leg does not light after complete installation.	Check connection from power supply lead to first module. Make sure polarity of connections made at power supply lead and any jumper wire is correct. Power supply outputs should be connected RED-TO-RED STRIPE (+) and BLACK-TO-WHITE (-).	
Still does not light.	Check output voltage of power supply using a voltmeter. Output voltage should be DC 24.0 V $\pm$ 0.5 V. If there is no output voltage, have a licensed electrician check input voltage. Make sure power supply is connected correctly and getting primary power. If power supply is connected properly and getting primary power and there is still no output voltage, try a different power supply.	
Still does not light.	If power supply is getting primary power and modules don't light, there may be a short in secondary wiring. Check all connections and cap all loose wires.	
The beginning of a leg lights, but entire leg does not light or lights intermittently.	The primary cause of a portion of a PosterBOX 3 leg not lighting or lighting intermittently is a bad connection or reverse polarity connection between modules that light and modules that don't light. Check this connection.	
One module does not light, but all others in leg light.	PosterBOX 3 is designed so if one module fails, it will not cause entire sign or leg to go out. If one module does not light, but all others in leg do, replace this module with a new one.	

The PosterBOX product family is licensed by Signify (formally Philips Lighting) in relation to the following patents: North America: US7841733. Europe: EP1938298, NL1030161, NL2000273, DE202006020673.6. Asia: CN101300616. PosterBOX products are licensed under Signify's EnabLED program when bought as a PosterBOX lighting kit solution including a Principal Sloan power supply. Final application in which PosterBOX lighting kit solution is installed is covered by Principal Sloan's licensing agreement with Signify and free from any further royalties relating to the patents listed above.



**Customer service and technical support** 

principalsloan.com

() 325.227.4577

() 3490 Venture Dr., San Angelo, TX 76905

