

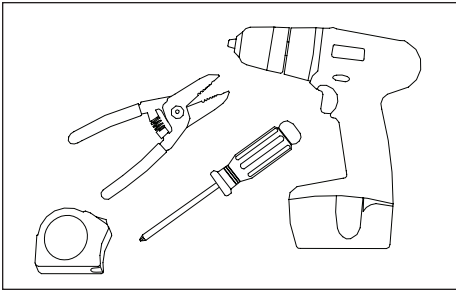
Retrofit Guide for 701946-6WXLP1 and 701946-5WXLP1

Scope: This procedure is designed to aid in the installation of SloanLED's PosterBOX™ Slim illumination product and power supply products. Skilled tradespeople 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 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 LED RETROFIT KIT INTO A SECTIONAL SIGN IS SUBJECT TO THE ACCEPTANCE OF LOCAL INSPECTION AUTHORITY.

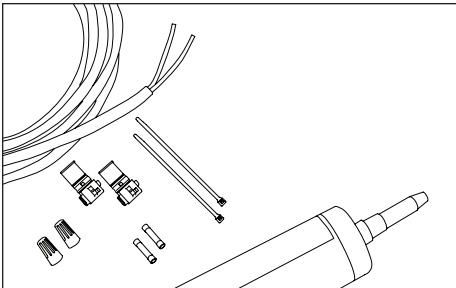
CAUTION: TURN OFF POWER TO THE SIGN BEFORE INSPECTING OR REMOVING EXISTING LIGHT SOURCE. THE POWER MUST REMAIN OFF WHILE INSTALLING THE LED RETROFIT KIT.

THE UL CLASSIFICATION MARK ON THIS LED RETROFIT KIT REQUIRES THE KIT TO BE INSTALLED IN A UL LISTED SIGN ONLY.



Tools Required

Measuring tape, wire strippers (optional: drill, screwdriver)



Supplies Required

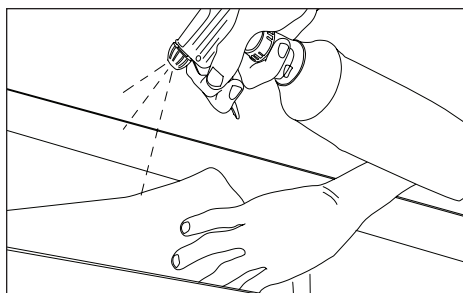
1. UL Listed 18 AWG (1 mm²) or 14 AWG (2,5 mm²), 2 conductor, PVC jacketed, NEC type PLTC cable (can be purchased from SloanLED in 100 ft (30,48 m) rolls)
2. Cable tie downs (plastic with double-sided tape for mounting)
3. 4 in (101,6 mm) nylon zip ties
4. UL Listed wire nuts (IDEAL P/N #30-072 Blue)
5. #8 (M4) Pan Head sheet metal screws or aluminum rivets, 1/8 in (3,17 mm) or 5/32 in (4 mm), for mounting frames
6. Silicone
7. ½ in (13 mm) conduit (water tight if mounting power supply in a box outdoors)
8. ½ in (13 mm) conduit connectors (water tight if mounting power supply in a box outdoors)
9. ½ in (13 mm) locknuts
10. UL Listed junction box

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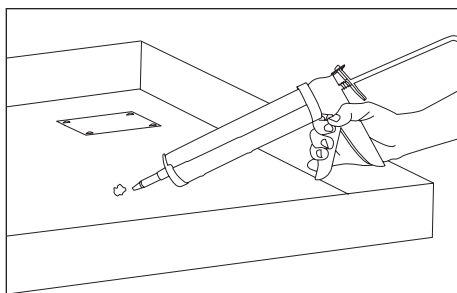
Remove Existing Fluorescent Tubes

1. Have a licensed electrician disconnect and remove all ballasts.
2. Remove existing fluorescent tubes and all standoffs to leave an empty sign box/cabinet.

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



3. Using a non-oil based cleaner, clean the inside surface of the sign. (Be sure to clean any mounting surfaces with alcohol for proper tape adhesion).

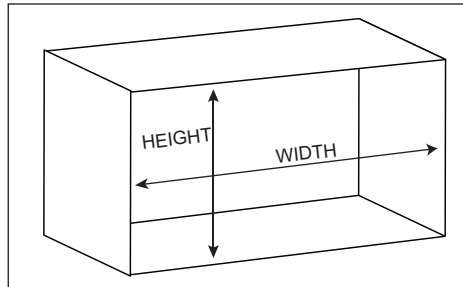


4. Any existing holes in the sign that will not be used for the new installation should be patched to avoid water damage to the building and sign. Openings smaller than 1/2 in (13 mm) diameter may be sealed with silicone. Openings larger than 1/2 in (13 mm) diameter require a metal patch secured by screws or rivets and caulked with silicone.

Layouts:

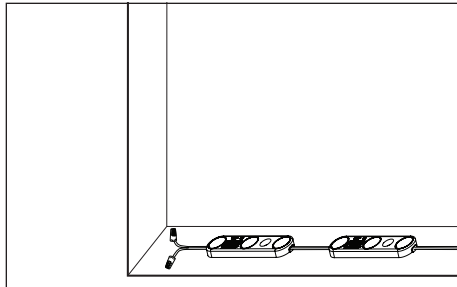
Mount PosterBOX™ Slim modules on return of both long sides of sign box. If brighter output is desired, mount on all four (4) sides. It's recommended to test LED density in a sample cabinet to evaluate brightness, uniformity, and color. If you have questions or require assistance in testing, please contact your SloanLED Customer Service Representative.

Layout

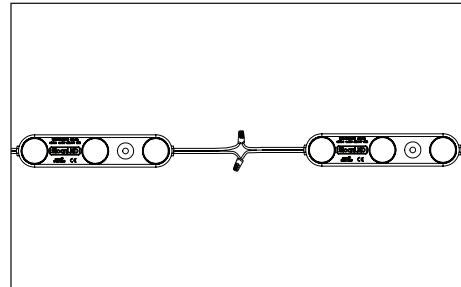


Measure poster box height and width. Use layout guidelines and power supply capacity table to determine amount of PosterBOX™ Slim modules and power supplies required.

Mount PosterBOX™ Slim Modules



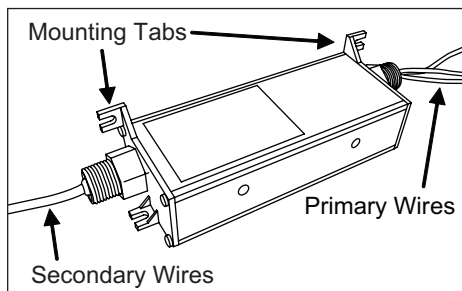
Peel and stick: Using provided double stick tape, mount PosterBOX™ Slim modules to sides of sign box. For best performance in a single-sided sign box, mount modules on returns flush against rear wall of box. For a double-sided sign box, mount modules in center of returns.



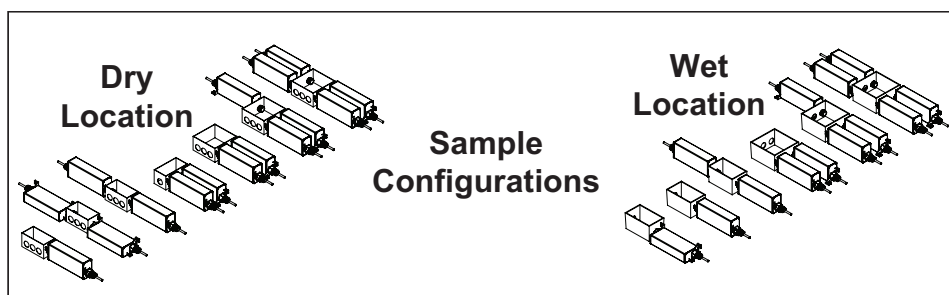
Fasteners: If desired, modules can be secured to sides of sign box using #8 (M4) Pan Head sheet metal screws or 5/32 in (4 mm) aluminum rivets.

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Install Power Supply

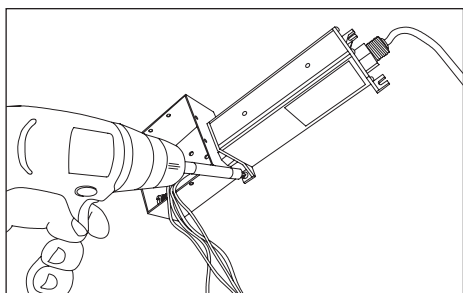


Identify primary wires, secondary wires and location of mounting tabs.

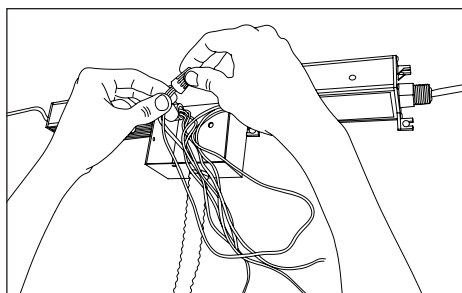


Configure power supplies: Secure power supplies to junction box using ½ in (13 mm) locknuts. Power supplies may be joined together in a wide array of configurations. Power supplies may be mounted in dry, damp, or wet locations. For wet locations use a junction box that is UL Listed for wet locations. For dry locations use any UL Listed junction box.

NOTE: Power supply operating temperature is -40° C to 60° C. To ensure adequate ventilation, it is recommended mounting power supplies without a secondary enclosure. Space power supplies by standard knockout locations ¾ in (19 mm) minimum. If secondary enclosure is used (transformer can), power supply spacing to other heat producing components must have 4 in (102 mm) of space on each side and 2 in (51 mm) minimum to top of enclosure. Ensure power supplies are not overloaded by verifying output current is less than 5 DC Amps. It is recommended to use photo-cells or timing device to make sure power supplies are off during day light hours, when sign illumination is not needed. Higher daytime temperatures and unnecessary operation may shorten power supply lifetime.



Mount power supplies: Units may be mounted in any orientation using mounting tabs.

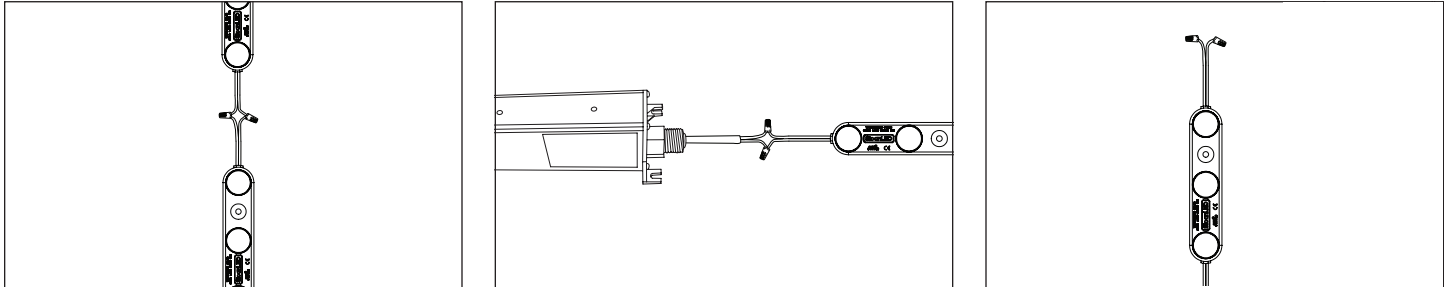


Connect Primary:
CAUTION! Have a licensed electrician connect primary.

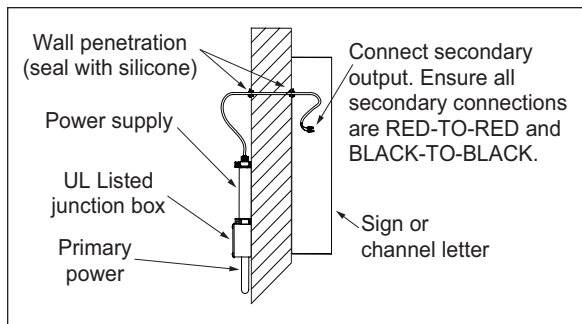
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Connect Modules to Power Supply

Using UL Listed electrical connectors, daisy chain modules as required and connect PosterBOX™ Slim modules to power supply. Modules may be daisy chained in series or parallel configurations. (NOTE: All connections must be RED-TO-RED AND BLACK-TO-BLACK).



Secondary class 2 cables do not require conduit per NEC 2008 Articles 725.121 through 725.130. Seal all sign and wall penetrations with silicone to avoid water damage.



12 VDC Power Supply Capacity Chart

Power Supply	Part number	Input		Output		Maximum modules
		Nominal input voltage	Input current	Power output	Output current	
Self-Contained 20 W	701680	100-240 V	0.3 A	20 W	1.5 A	12
MODW 60 W (North America)	701507-MODW	100-240 V	1.0 A	60 W	4.5 A	38
MODWE 60 W (Europe)	701507-MODWE	100-240 V	1.0 A	60 W	4.5 A	38
MOD277 60 W	701507-MOD277	277-347 V	0.5 A	60 W	4.5 A	38
Power used per module in watts: 1.38 W						

Extension of Power Supply Leads

If longer lead wire from power supply to LED modules is needed, an extension can be used. Extension should be kept as short as possible, i.e., under 15 ft for 18 AWG UL Listed PLTC (4,6 m for 1 mm² PLTC) or under 50 ft for 14 AWG UL Listed PLTC (15,2 m for 2,5 mm² PLTC).