

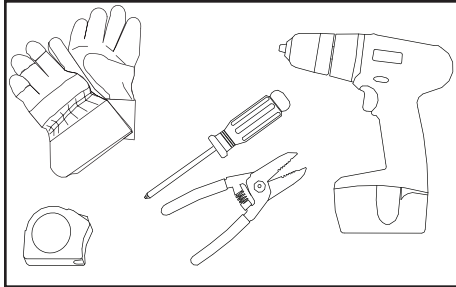
SloanLED PrismBEAM (Discontinued)

Installation Guide for 701972-(C)WP(D,S)(X)1

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. SloanLED PrismBEAM is not suitable for submersion or direct exposure to water for extended periods of time.

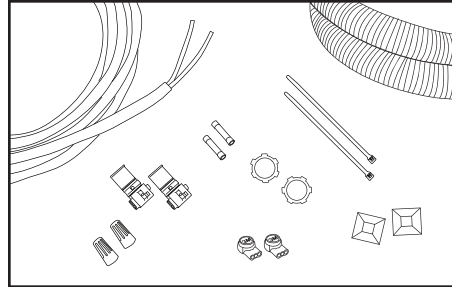
For New Installation, proceed with Step 1 below. For Retrofit Installations, begin with Retrofit Instructions on page 3.

New Installation



1. Tools required:

1. Measuring tape
2. Wire strippers
3. Gloves
4. Drill
5. Screwdriver

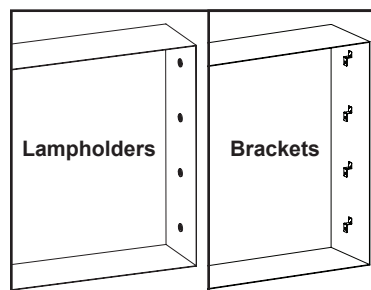
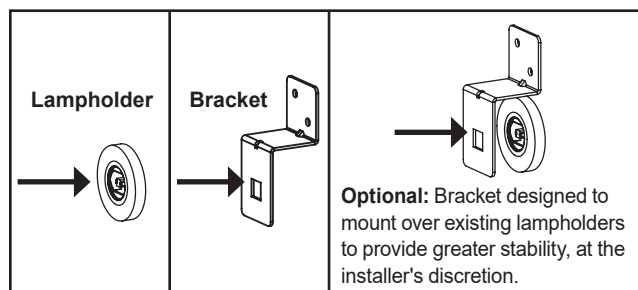


WARNING: Use SloanLED Prism BEAM Double-sided with 100 W 24 VDC Power Supply only.

WARNING: Use SloanLED Prism BEAM Single-sided with 60 W 12 VDC Power Supply only.

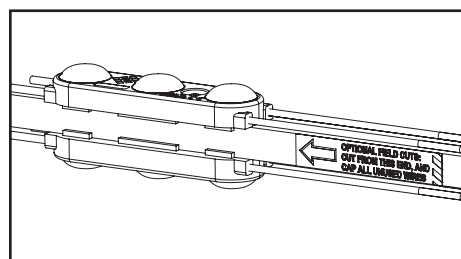
2. Components list:

- SloanLED PrismBEAM assemblies:
 - Double-sided assemblies:** model numbers 701972-(C)WPD(L)1
 - Single-sided assemblies:** model numbers 701972-(C)WPS(L)1
- Power supplies:
 - Double-sided assemblies:** SloanLED 24 V Class 2 output power supply (refer to "100 W 24 VDC Power Supply Capacity Chart" for appropriate model numbers)
 - Single-sided assemblies:** SloanLED 12 V Class 2 output power supply (refer to "60 W 12 VDC Power Supply Capacity Chart" for appropriate model numbers)
- UL approved 18 AWG (1 mm²) or larger diameter supply wire
- UL approved wire connectors appropriate for wire gauge used
- Optional: Electrical grade silicone, 4" (101.6 mm) nylon zip ties, conduit and conduit connectors (water tight if necessary)



NOTE: Lamps must be mounted in an enclosed sign. This product is not suitable for immersion or direct exposure to water for extended periods of time.

3. Install fluorescent lampholders or SloanLED PrismBEAM Brackets (P/N 402297) 12" (305 mm) center-to-center along returns of cabinet (see Layout Guidelines on page 2).



5. Optional field cut:

If lamp needs to be shortened to a different length, measure and cut on end indicated by label, to new length according to table (includes end caps). Re-attach end cap and cap all cut wires. If LED module(s) interfere with cut, remove module(s) and cap cut wires.

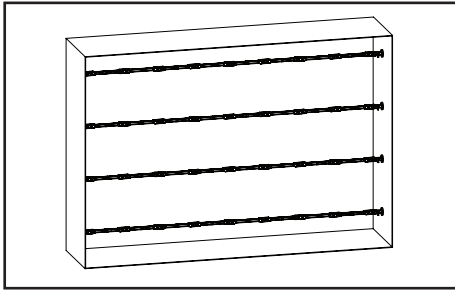
Lamp Lengths

Nominal	Actual	Nominal	Actual
18" (0.46 m)	15.72" (0.40 m)	64" (1.63 m)	61.72" (1.57 m)
24" (0.61 m)	21.72" (0.55 m)	72" (1.83 m)	69.72" (1.77 m)
30" (0.76 m)	27.72" (0.70 m)	84" (2.13 m)	81.72" (2.08 m)
36" (0.91 m)	33.72" (0.86 m)	96" (2.44 m)	93.72" (2.38 m)
42" (1.07 m)	39.72" (1.01 m)	108" (2.74 m)	105.72" (2.69 m)
48" (1.22 m)	45.72" (1.16 m)	117" (2.97 m)	114.72" (2.91 m)
60" (1.52 m)	57.72" (1.47 m)	120" (3.05 m)	117.72" (2.99 m)

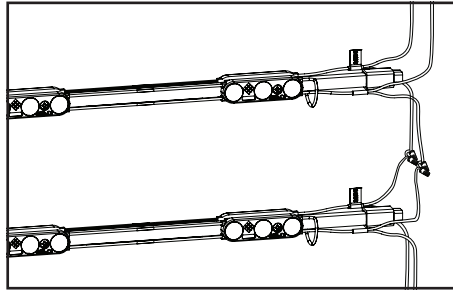
TIP: End cap adds exactly 0.50" (12.7 mm) to length of extrusion.

SloanLED PrismBEAM (Discontinued)

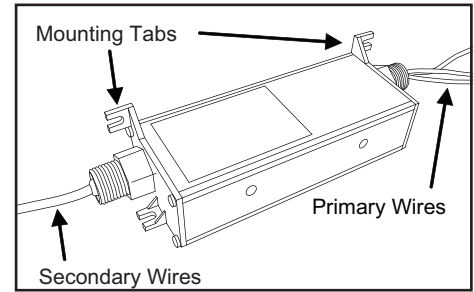
Installation Guide for 701972-(C)WP(D,S)(X)1



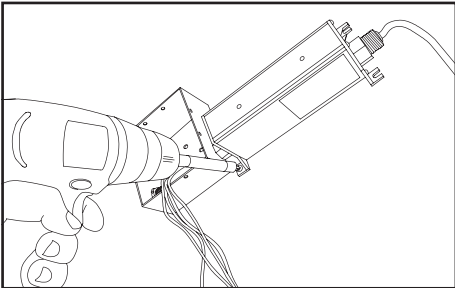
6. Insert SloanLED PrismBEAM into lampholders or SloanLED PrismBEAM Brackets. **Support center for lengths 96" and above.** Tip: For easy wire connections, install all lamps in same direction with wire leads on same end.



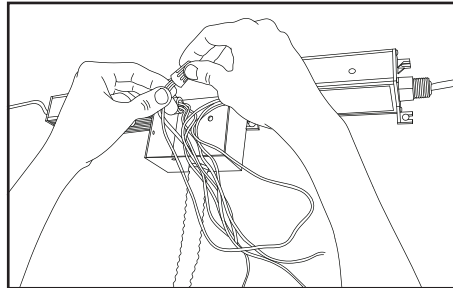
7. Connections: Product may be connected in series or parallel. End wires should be capped and not tied back to power supply. (NOTE: All connections must be RED STRIPE-TO-RED STRIPE [+] and WHITE-TO-WHITE [-]).



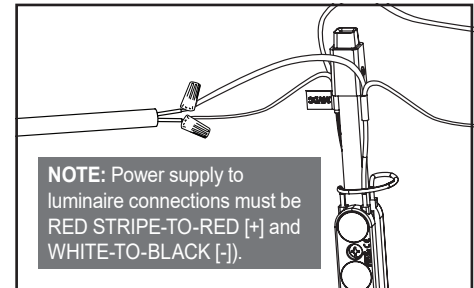
8. **Mount power supply:** Identify primary wires, secondary wires, and location of mounting tabs.



9. Units may be mounted in any orientation using mounting tabs.



10. **Connect primary: CAUTION!** Have a licensed electrician connect primary.



11. **Connect to power supply:** Using UL Listed electrical connectors, connect to power supply. **Do not connect power to lamp sockets.**

Layout Guidelines

Mount SloanLED PrismBEAM in center of returns in double-sided cabinets. For best results, lamps should be $\geq 8"$ (≥ 203 mm) from face of sign. 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.

SloanLED PrismBEAM (Discontinued)

Installation Guide for 701972-(C)WP(D,S)(X)1

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.

WARNING: Use SloanLED Prism
BEAM Double-sided with 100 W
24 VDC Power Supply only.

WARNING: Use SloanLED Prism
BEAM Single-sided with 60 W
12 VDC Power Supply only.

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.
Double-sided signs: Refer to components list (page 1) and "24 VDC Power Supply Capacity Chart" (page 4).
Single-sided signs: Refer to components list (page 1) and "12 VDC Power Supply Capacity Chart" (page 4).
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" (12.7 mm) 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 SloanLED channel letter module mounting tape.
6. To populate sign, refer to SloanLED PrismBEAM density guidelines as well as power supply loading chart (page 1) to determine appropriate number of modules and power supplies. A list of acceptable power supply models is shown in the charts on page 4.
Double-sided signs: "100 W 24 VDC Power Supply Capacity Chart" (page 4).
Single-sided signs: "60 W 12 VDC Power Supply Capacity Chart" (page 4).
7. Follow all instructions on pages 1 and 2 under "New Installations" to properly install LED modules.
8. Connect SloanLED PrismBEAM assemblies to power supply output as shown on page 1 under "New Installations"
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.

SloanLED PrismBEAM (Discontinued)

Installation Guide for 701972-(C)WP(D,S)(X)1

WARNING: Use SloanLED PrismBEAM Double-sided with 100 W 24 VDC Power Supply only.

100 W 24 VDC Power Supply Capacity Table for SloanLED PrismBEAM Double-sided (or any combination not to exceed max. output of power supply)

Part Number	Retrofit Certified	Input		Output		Maximum Lamps per Power Supply													
		Nominal Input Voltage	Input Current	Power Output	Output Current	18" (0.46 m)	24" (0.61 m)	30" (0.76 m)	36" (0.91 m)	42" (1.07 m)	48" (1.22 m)	60" (1.52 m)	64" (1.63 m)	72" (1.83 m)	84" (2.13 m)	96" (2.44 m)	108" (2.74 m)	117" (2.97 m)	120" (3.05 m)
701895-24C1*	●	100-277 V	1.4 A	96 W	4.0 A	13	9	9	6	5	4	4	3	3	2	2	2	2	2
701895-24S1	●	100-277 V	1.4 A	96 W	4.0 A														
Capacities based on 90% of power supply output				Power used per lamp in Watts:		6.7 W	10.1 W	10.1 W	13.4 W	16.8 W	20.2 W	23.5 W	26.9 W	30.2 W	33.6 W	40.3 W	43.7 W	47.0 W	47.0 W

NOTE: Each 24 V circuit must be limited to 4.2 A (100 W) or less. For North American installations, a power supply that meets NEC Class 2 specifications is required. Power Supply Capacity calculations for field cut lengths use 1.68 watts per module.

* Wet location power supply: Refer to install guide for configurations.

WARNING: Use SloanLED PrismBEAM Single-sided with 60 W 12 VDC Power Supply only.

60 W 12 VDC Power Supply Capacity Table for SloanLED PrismBEAM Single-sided

Power Supply	Part Number	Retrofit Certified	Input		Output		Maximum Lamps per Power Supply													
			Nominal Input Voltage	Input Current	Power Output	Output Current	18" (0.46 m)	24" (0.61 m)	30" (0.76 m)	36" (0.91 m)	42" (1.07 m)	48" (1.22 m)	60" (1.52 m)	64" (1.63 m)	72" (1.83 m)	84" (2.13 m)	96" (2.44 m)	108" (2.74 m)	117" (2.97 m)	120" (3.05 m)
60C1 60 W	701507-60C1	●	100-277 V	0.70 A	60 W	4.5 A	16	10	10	8	6	5	4	4	3	3	2	2	2	2
60W2(E) 60 W	701507-60W2(E)	●	100-277 V	0.70 A																
MOD277 60 W	701507-MOD277		277-347 V	0.50 A																
120D1 120 W	701507-120D1	●	100-277 V	1.70 A	2 × 60 W	2 × 4.5 A	2 × 16	2 × 10	2 × 10	2 × 8	2 × 6	2 × 5	2 × 4	2 × 4	2 × 3	2 × 3	2 × 2	2 × 2	2 × 2	2 × 2
Capacities based on 90% of power supply output				Power used per lamp in Watts:		3.4 W	5.0 W	5.0 W	6.7 W	8.4 W	10.1 W	11.8 W	13.4 W	15.1 W	16.8 W	20.2 W	21.8 W	23.5 W	23.5 W	23.5 W

NOTE: Each 12 V circuit must be limited to 4.5 A (60 W) or less. For North American installations, a power supply that meets NEC Class 2 specifications is required. Power Supply Capacity calculations for field cut lengths use 1.68 watts per module.

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 (4.6 m for 1 mm² PLTC) or under 50 ft use 14 AWG UL Listed PLTC (15.2 m for 2.5 mm² PLTC).

Troubleshooting

Entire box/cabinet or product does not light after complete installation.	Check connection from power supply lead to first lamp. 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 (+) 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 ± 0.5 V (double-sided) or DC 12.0 V ± 0.5 V (single-sided). 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 lamps don't light, there may be a short in secondary wiring. Check all connections and cap all loose wires.
The beginning of a lamp lights, but entire lamp does not light or lights intermittently.	Primary cause of a portion of a lamp not lighting or lighting intermittently is a bad connection or reverse polarity connection between lamps that light and lamps that don't light. Check this connection.
One lamp does not light, but all others in cabinet light.	SloanLED PrismBEAM is designed so if one lamp fails, it will not cause entire box/cabinet to go out. If one lamp does not light, but all others do, replace this lamp with a new one.



US patents and foreign patents pending

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