

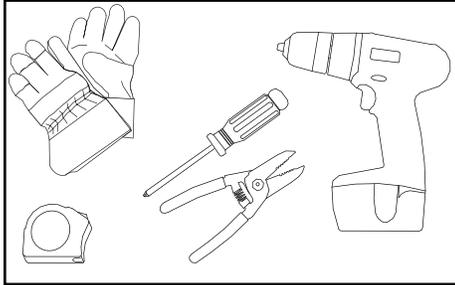
SloanLED PrismBEAM²⁴

Installation Guide for 701972-(CC)24P(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 PrismBEAM²⁴ 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 locaux. SloanLED PrismBEAM²⁴ ne convient pas à la submersion ni à l'exposition directe à l'eau pendant de longues périodes.

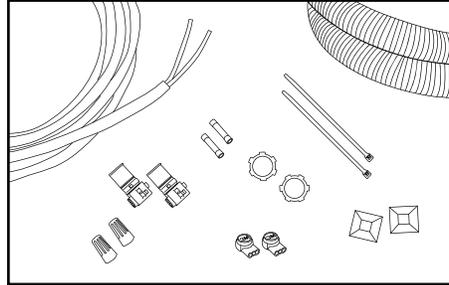
For New Installation, proceed with Step 1 below. For Retrofit Installations, begin with Retrofit Instructions on page 3.

New Installation



1. Tools required:

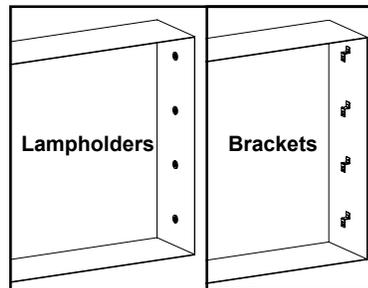
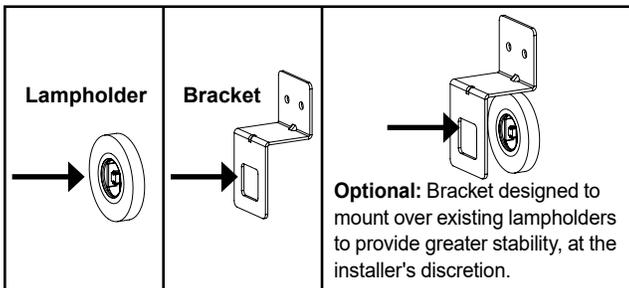
1. Measuring tape
2. Wire strippers
3. Gloves
4. Drill
5. Screwdriver



WARNING: Use SloanLED PrismBEAM²⁴ with 100 W 24 VDC Power Supply only. **AVERTISSEMENT:** Utilisez uniquement le SloanLED PrismBEAM²⁴ avec une alimentation 100 W 24 VDC uniquement.

2. Components list:

- SloanLED PrismBEAM²⁴ assemblies:
 - Double-sided assemblies:**
model numbers 701972-(CC)24PD(X)1
 - Single-sided assemblies:**
model numbers 701972-(CC)24PS(X)1
- Power supplies: SloanLED 24 V Class 2 output power supply (refer to "**SloanLED Power Supply Guide for Sign Products**" for appropriate 24 V power supply models)
- 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 PrismBEAM²⁴ Brackets (P/N 402607) 12" (305 mm) center-to-center along returns of cabinet (see Layout Guidelines on page 2).

4. Determine lengths and quantities of SloanLED PrismBEAM²⁴ (see Power Supply capacity table on page 4). Determine quantity of brackets (P/N 402607): Two (2) per SloanLED PrismBEAM²⁴ assembly.

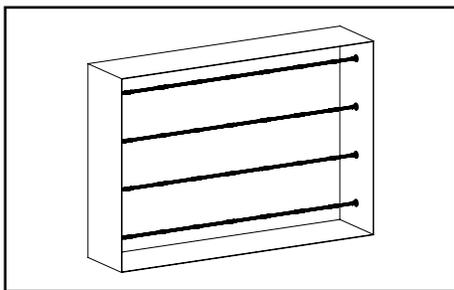
Lamp Lengths

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)

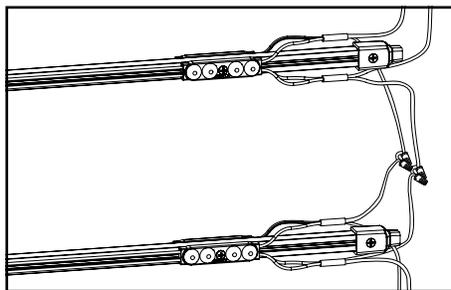
NOTE: End cap adds exactly 0.50" (12.7 mm) to length of extrusion.

SloanLED PrismBEAM²⁴

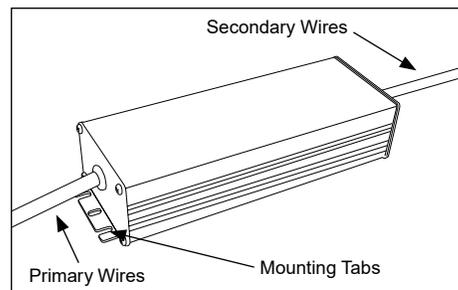
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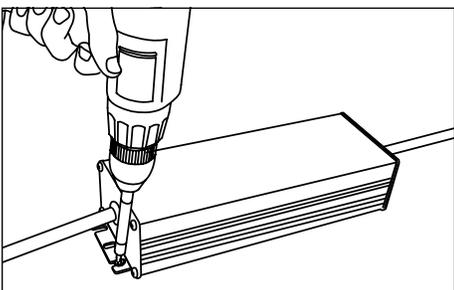
6. Insert SloanLED PrismBEAM²⁴ into lampholders or SloanLED PrismBEAM²⁴ Brackets. **Support center for lengths 96" and above.** Tip: For easy wire connections, install all lamps in same direction with wire leads on same end.



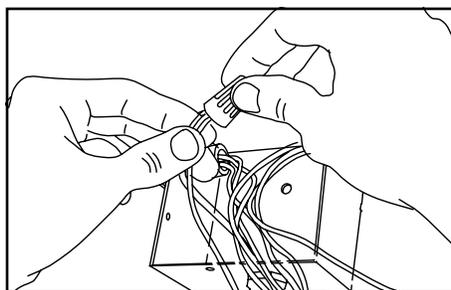
7. Connections: Product may be connected in series or parallel. End wires should be capped and not tied back to power supply. (NOTE: All connections must be RED STRIPE-TO-RED STRIPE [+] and WHITE-TO-WHITE [-]).



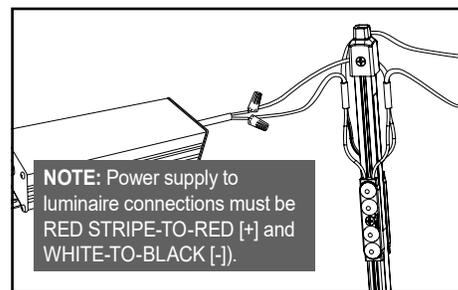
8. **Mount power supply:** Identify primary wires, secondary wires, and location of mounting tabs.



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



10. **Connect primary: CAUTION! Have a licensed electrician connect primary. ATTENTION! Demandez à un électricien agréé de connecter le primaire.**



NOTE: Power supply to luminaire connections must be RED STRIPE-TO-RED [+] and WHITE-TO-BLACK [-].

11. **Connect to power supply:** Using UL Listed electrical connectors, connect to power supply. **Do not connect power to lamp sockets. Ne pas brancher l'alimentation sur les douilles.**

Layout Guidelines

Mount SloanLED PrismBEAM²⁴ 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 PrismBEAM²⁴

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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: Use SloanLED
PrismBEAM²⁴ with 100 W 24 VDC Power
Supply only. **AVERTISSEMENT:** Utilisez
uniquement SloanLED PrismBEAM²⁴
avec alimentation 100 W 24 VDC.

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.
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. 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.
4. 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.
5. To populate sign, refer to SloanLED PrismBEAM²⁴ density guidelines as well as power supply capacity chart (page 4) to determine appropriate number of lamps and power supplies. A list of acceptable power supply models is shown in the supplemental "**SloanLED Power Supply Guide for Sign Products**".
6. Follow all instructions on pages 1 and 2 under "New Installation" to properly install LED lamps.
7. Connect SloanLED PrismBEAM²⁴ assemblies to power supply output as shown on page 2 under "New Installation".
8. 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.
9. If required, install disconnect switch in accordance with local, state and national electrical codes by qualified personnel.

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100 W 24 VDC Power Supply Capacity Chart

Power output	Maximum lamps per power supply (single-sided / double-sided)													
	18 in (0.46 m)	24 in (0.61 m)	30 in (0.76 m)	36 in (0.91 m)	42 in (1.07 m)	48 in (1.22 m)	60 in (1.52 m)	64 in (1.63 m)	72 in (1.83 m)	84 in (2.13 m)	96 in (2.44 m)	108 in (2.74 m)	117 in (2.97 m)	120 in (3.05 m)
30 W (EU/ROW ONLY)	10/5	10/5	7/3	7/3	5/2	4/2	3/1	3/1	3/1	2/1	2/1	1/1	1/-	1/-
60 W	21/10	21/10	14/7	14/7	10/5	8/4	7/3	7/3	6/3	5/2	4/2	3/1	3/1	3/1
96 W	36/18	36/18	24/12	24/12	18/9	14/7	12/6	12/6	10/5	9/4	8/4	6/3	6/3	6/3
3 × 96 W	3 × 36/18	3 × 36/18	3 × 24/12	3 × 24/12	3 × 18/9	3 × 14/7	3 × 12/6	3 × 12/6	3 × 10/5	3 × 9/4	3 × 8/4	3 × 6/3	3 × 6/3	3 × 6/3
100 W	36/18	36/18	24/12	24/12	18/9	14/7	12/6	12/6	10/5	9/4	8/4	6/3	6/3	6/3
150 W (EU/ROW ONLY)	54/26	54/26	35/17	35/17	26/13	21/10	17/8	17/8	15/7	13/6	11/5	9/4	8/4	8/4
Power used per lamp in Watts:	2.5/5.1 W	2.5/5.1 W	3.8/7.6 W	3.8/7.6 W	5.1/10.2 W	6.4/12.7 W	7.6/15.3 W	7.6/15.3 W	8.9/17.8 W	10.2/20.4 W	11.5/22.9 W	14.0/28.0 W	15.3/30.5 W	15.3/30.5 W

Capacities based on 90% of power supply output.

NOTE: Refer to "SloanLED Power Supply Guide for Sign Products" for appropriate 24 V power supply models.

Scan QR code to download SloanLED Power Supply Guide for Sign Products



<https://sloanled.com/PowerSupplyGuideForSignProducts>

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 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 ± 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 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 ²⁴ 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.



Customer service and technical support

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