

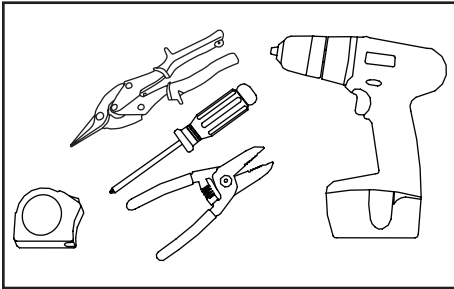
BRIGHTLINE 2



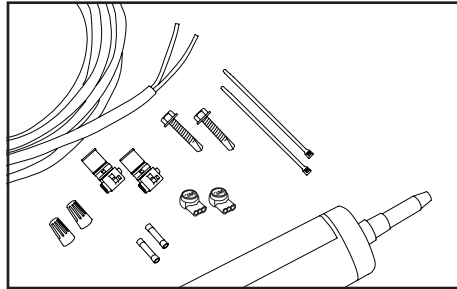
BrightLINE
Series

Installation Guide for 701989-(X)W24(Y)B(Z)

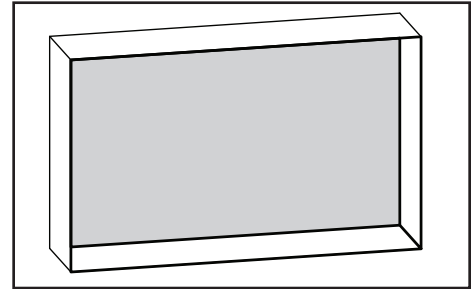
WARNING: Risk of electrical shock. Installation requires knowledge of sign electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician. Follow all national and local codes. SloanLED BrightLINE 2 is not suitable for submersion or direct exposure to water for extended periods of time. **AVERTISSEMENT:** Risque de choc électrique. Installation exigent la connaissance des systèmes électriques de signalisation. Si non qualifié, ne tentez pas l'installation. Contactez un électricien qualifié. Suivez tous les codes national et locaux. SloanLED BrightLINE 2 ne convient pas à la submersion ni à l'exposition directe à l'eau pendant de longues périodes.



Tools required: Measuring tape, wire strippers, sheet metal shears/snips (if cutting product), drill, and screwdriver.

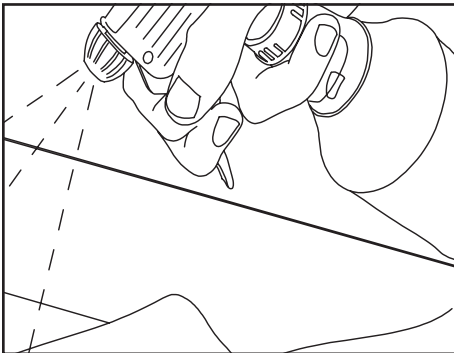


Layout: To populate sign, refer to BrightLINE 2 density guidelines, test, or contact your Principal Sloan Representative for recommendations.

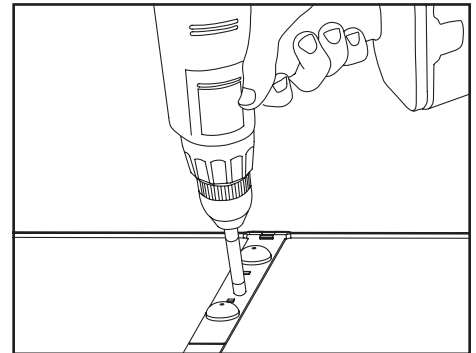
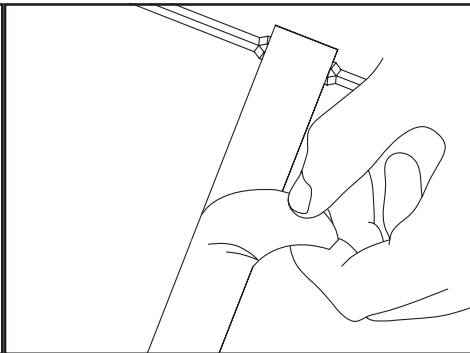


Components list:

- Principal Sloan24 V Class 2 output power supply
- UL approved 18 AWG, or larger diameter supply wire
- UL/CE approved wire connectors appropriate for wire gauge used
- Optional for mounting: Electrical grade silicone, #6 pan or hex head sheet metal screws, or 0.125" aluminum rivets



1. **Peel and stick:** Clean inside sign with rubbing alcohol and allow to dry. Using predetermined layout and LED placement from previous step, remove tape backing and stick LED strips into place. Ensure strips are firmly attached.



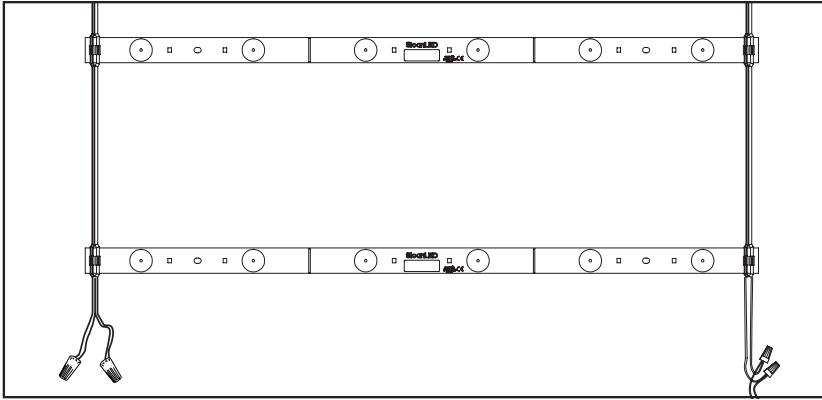
2. **Fasteners:** Use fasteners or silicone as necessary to fix LED strips into place. Refer to components list above for acceptable fasteners.

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3. **Connections:** LED Strips may be connected in series or parallel, using appropriate UL/CE Listed wire connectors. Cap all unused wires. Connect power supply output to first LED strip on string. See power supply install guide for more information regarding power supply installation.

NOTE: BrightLINE 2 Long and BrightLINE 2 Short may be connected to same power supply output. Ensure total power consumption does not exceed power supply output rating.

24 VDC Power Supply Capacity Chart

Power output	Maximum feet / LED strips			
	BrightLINE 2 Long 3.0 W/strip, 6.1 W/ft	BrightLINE 2 Long LP 1.94 W/strip, 5.9 W/ft	BrightLINE 2 Short 1.0 W/strip, 2.0 W/ft	BrightLINE 2 Short LP 0.65 W/strip, 2.0 W/ft
60 W	8.6 ft / 18 strips	9.2 ft / 28 strips	26.6 ft / 54 strips	27.2 ft / 42 strips
96 W	14.8 ft / 30 strips	15.1 ft / 46 strips	44.3 ft / 90 strips	45.3 ft / 138 strips
3 × 96 W	3 × 14.8 ft / 30 strips	3 × 15.1 ft / 46 strips	3 × 44.3 ft / 90 strips	3 × 45.3 ft / 138 strips
100 W	14.8 ft / 30 strips	15.1 ft / 46 strips	44.3 ft / 90 strips	45.3 ft / 138 strips

Capacities based on 90% of power supply output.

Extension of Power Supply Leads

If longer lead wire from power supply to LED strips 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 or under 50 ft for 14 AWG UL Listed PLTC.

Troubleshooting:

Entire sign or leg does not light after complete installation.	Check connection from power supply lead to first LED strip. Make sure polarity of connections made at the 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. The output voltage should be DC 12.0 V ± 0.5 V or DC 24.0 V ± 0.5 V (24 V product). 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 LED strips don't light, there may be a short in the secondary wiring. Check all connections and cap all loose wires.
The beginning of a leg lights, but the entire leg does not light, or lights intermittently.	The primary cause of a portion of a BrightLINE 2 leg not lighting or lighting intermittently is a bad connection or reverse polarity connection between LED strips that light and LED strips that don't light. Check this connection.
One LED strip does not light, but all others in the leg light.	BrightLINE 2 is designed so if one LED strip fails, it will not cause the entire sign or leg to go out. If one LED strip does not light, but all others in the leg do, replace this LED strip with a new one.



Customer service and technical support

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