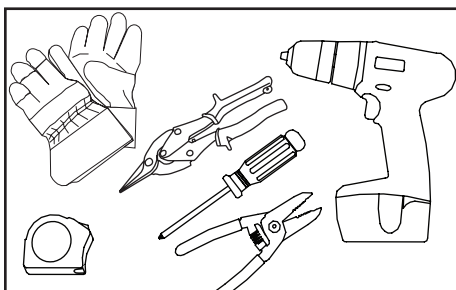


SignBOX 3 Slim

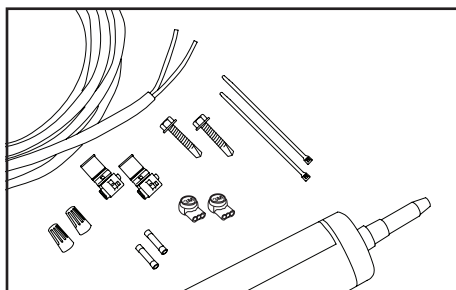
Installation Guide for 701946-(X)WDLS2

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 national and local codes. SignBOX 3 Slim 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.



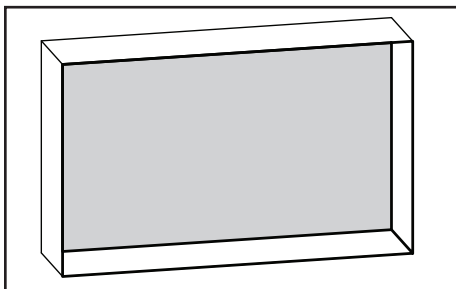
Tools required: Measuring tape, wire strippers, gloves, cutting tool (sheet metal shears/snips, scissors, utility knife), drill, and screwdriver.



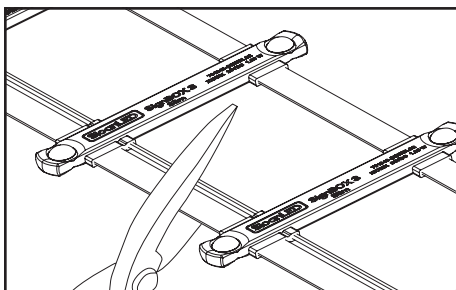
Components list:

- SignBOX 3 Slim assemblies:
SloanLED model number 701946-(X)WDLS2
- SloanLED 24 V Class 2 output power supply
(refer to "**SloanLED Power Supply Guide for Sign Products**" for appropriate 24 V power supply models)
- 1 mm² or larger diameter supply wire
- Wire connectors appropriate for wire diameter used
- SignBOX 3 Slim mounting hardware
Clips (P/N 402106), Brackets (P/N 402107) (optional), and Couplers (P/N 402108) (as needed).
- M4 (#8) self-drilling/self-tapping tek screws (required to pierce through strap, minimum length 16 mm (5/8"))
- Optional: Electrical grade silicone, nylon zip ties, double stick mounting tape

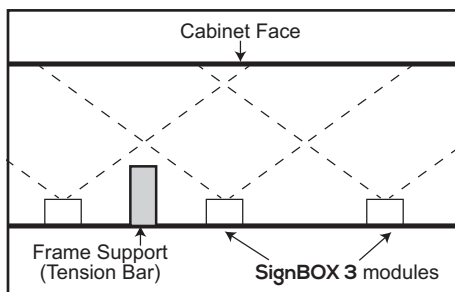
Layout: To populate sign, refer to SignBOX 3 Slim Module density guidelines, test, or contact your SloanLED Representative for recommendations.



New Installation



1. **Cutting product:** Cut straps and wires between modules to obtain required length.
Tip: Before cutting wires, refer to *Joining Product* section.

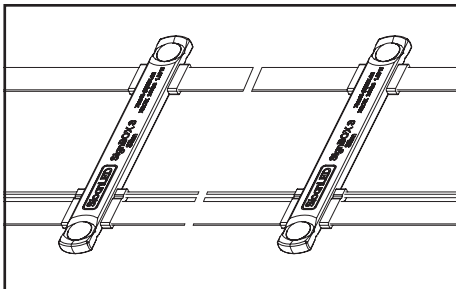


NOTE: To minimize potential for shadows in applications when using frame support tubes, mount modules or frame support tubes such that tubes are centered in between modules and at a depth that will not directly interfere with beam angle of LEDs.

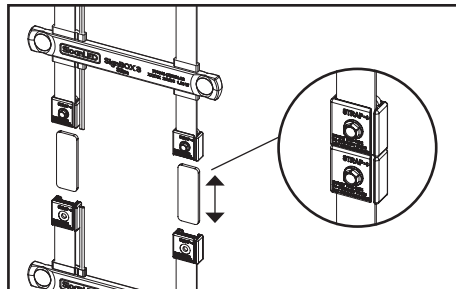
SignBOX 3 Slim

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Joining Product

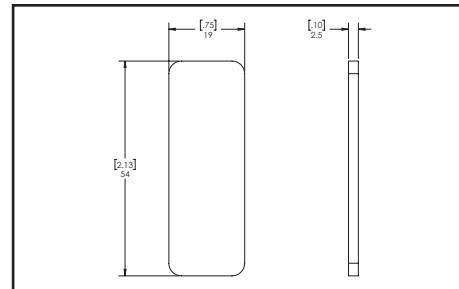


2. When cutting wires between modules, leaving one side longer will aid in joining product where needed. If, however, wires are not long enough for connections, use either jumper wires or remove a module to maximize wire length.



3. Use SignBOX 3 Clips (P/N 402106) and SignBOX 3 Couplers (P/N 402108) to join shorter pieces of product to required length. Insert straps from both sides of modules into clips (track features facing same direction). Slide onto couplers, and secure to them with M4 (#8) tek screws. Connect wires.

Tip: Use pliers to help hold parts during assembly.



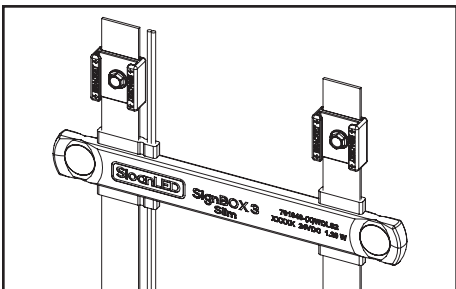
SignBOX 3 Coupler dimensions:
54 mm x 19 mm x 2.5 mm (2.125 in x .75 in x .10 in)

Structural Support Guidelines for SignBOX 3 Slim

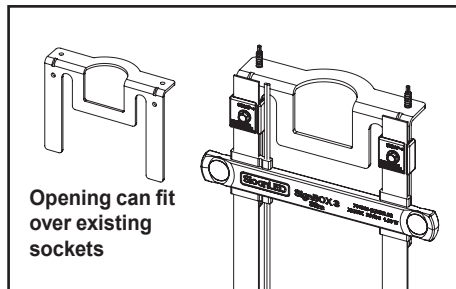
Vertical mounting: space supports at even intervals, but no further apart than 2.4 m (8 ft).

Horizontal mounting: space supports at even intervals, but no further apart than 1.2 m (4 ft).

Mounting Product



- 4a. **Mounting modules with SignBOX 3 Clips (P/N 402106) directly to cabinet structure:** Insert straps from both sides of module into clips (bracket tracks facing away from mounting surface) and secure to cabinet structure using M4 (#8) tek screws. Repeat on opposite end making sure product is taut.

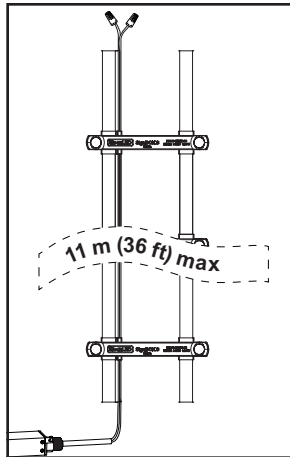


- 4b. **Mounting modules with SignBOX 3 Clips (P/N 402106) using SignBOX 3 Brackets (P/N 402107):** Install brackets 305 mm (12 in) center-to-center along returns of cabinet. Insert straps from both sides of module into clips (bracket tracks facing same direction). Slide onto bracket, and secure with M4 (#8) tek screws. Repeat on opposite end making sure product is taut.

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Connecting Product to Power Supply



- Using electrical connectors with appropriate safety agency markings, daisy chain product as required and connect to power supply as shown above. **CAUTION! Have a licensed electrician connect primary.** Modules may be connected in series* or parallel. End wires of SignBOX 3 Slim should be capped and not tied back to power supply.

*For optimal performance, SloanLED recommends connecting no more than 36 modules in series.

WARNING check polarity:

All connections must be RED-TO-WHITE WITH RED STRIPE (+) and BLACK-TO-WHITE (-). Reverse polarity connections may damage LEDs and will void product warranty.

Retrofit Instructions for Existing Signs

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.

CAUTION: Turn off power to sign before inspecting or removing existing light source. Power must remain off while installing LED product.

- 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 4).
- 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 or national regulations.
- If required by local or national regulations, install a new disconnect switch.
- 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 12.7 mm (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.
- 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.
- To populate sign, refer to SignBOX 3 Slim density guidelines as well as power supply capacity chart (page 4) to determine appropriate number of modules and power supplies. A list of acceptable power supply models is shown in the supplemental "**SloanLED Power Supply Guide for Sign Products**".
- Follow all instructions on pages 1 and 2 under "New Installation" to properly install LED modules.
- Connect modules to power supply output as shown on page 3 under "New Installation".
- Connect power supply input as outlined in power supply installation guide in accordance with local or national regulations. Refer to power supply install guide included with power supply for details.
- If required, install disconnect switch in accordance with local or national regulations by qualified personnel.

SignBOX 3 Slim

Installation Guide for 701946-(X)WDLS2

24 VDC Power Supply Capacity Chart

Power output	Maximum SignBOX 3 Slim modules
30 W (EU/ROW ONLY)	21
60 W	43
96 W	72
3 × 96 W	2 × 72
100 W	72
150 W (EU/ROW ONLY)	108
Power used per ft (m) in watts	7.87 / 2.40 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/downloads/SloanLEDPowerSupplyGuideForSignProducts.pdf>

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 4.6 m for 1 mm² PLTC (15 ft for 18 AWG UL Listed PLTC) or under 15.2 m for 2.5 mm² PLTC (50 ft for 14 AWG UL Listed PLTC).

Troubleshooting:

Entire box/cabinet or product 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-WHITE WITH RED STRIPE and BLACK-TO-WHITE.
Still does not light.	Check output voltage of power supply using a voltmeter. The 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 modules don't light, there may be a short in the secondary wiring. Check all connections and cap all loose wires.
The beginning of a strip lights, but entire strip does not light or lights intermittently.	The primary cause of a portion of a SignBOX 3 Slim 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 the product light.	SignBOX 3 Slim is designed so if one module fails, it will not cause the entire box/cabinet or strip to go out. If one module does not light, but all others in the product do, replace this module with a new one.



Customer service and technical support

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