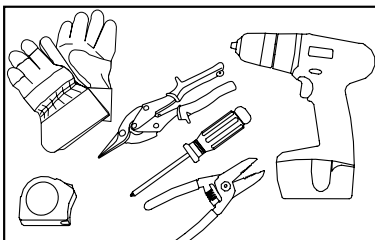


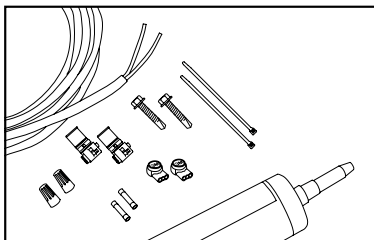


# SignBOX™ II

## Installation Guide

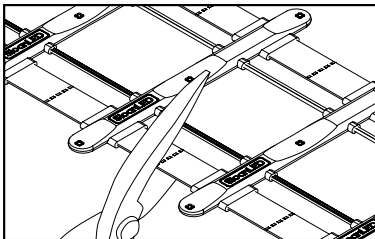


**Tools required:** Measuring tape, wire strippers, gloves, cutting tool (sheet metal shears/snips, scissors, utility knife), drill, and screwdriver.



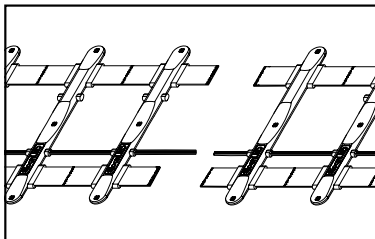
**Supplies required:** PLTC cable, #8 (M4) self-drilling/self-tapping tek screws (required to pierce through strap), minimum length 5/8 in (4 mm), wire nuts, IDC connectors or butt splices with appropriate safety agency markings. Optional: cable ties, silicone, double stick tape.  
**SignBOX II mounting hardware:** Clamps (SLO-SB2-MC), Couplers ( SLO-SB2-C ) (as needed), and Brackets ( SLO-SB2-EB ) (optional).

### Installation

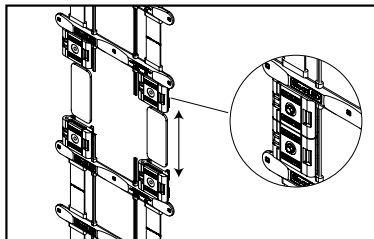


1. **Cutting product:** Cut straps (along dashed lines) and wires between modules to obtain required length. **Tip:** Before cutting wires, refer to Joining Product section.

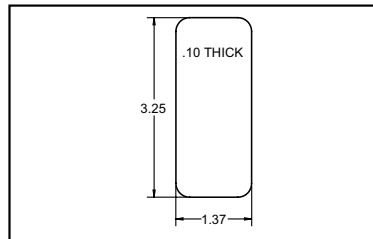
### Joining Product



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 II Clamps (SLO-SB2-MC) and SignBOX II Couplers ( SLO-SB2-C ) to join shorter pieces of product to required length. Insert straps from both sides of modules into clamps (track features facing same direction) making sure clamps are flush against modules, snap closed (avoid pinching wires), slide onto couplers, and secure to them with #8 (M4) tek screws. Connect wires.



SignBOX II Coupler dimensions: 3.25 in x 1.37 in x .10 in (82,5 mm x 34,8 mm x 2,5 mm)





# SignBOX™ II

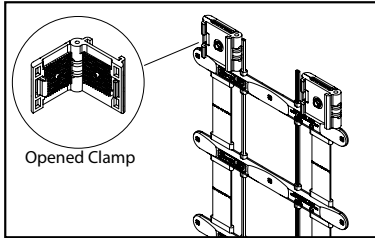
## Installation Guide

### Structural Support Guidelines for SignBOX II

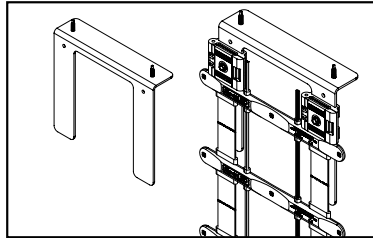
Vertical mounting: space supports at even intervals, but no further apart than 8 ft (2,4 m).

Horizontal mounting: space supports at even intervals, but no further apart than 4 ft (1,2 m).

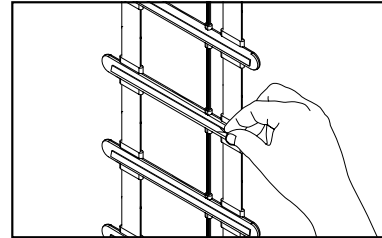
### Mounting Product



**4a. Mounting modules with SignBOX II Clamps (SLO-SB2-MC) directly to cabinet:** Insert straps from both sides of module into clamps (track features facing away from mounting surface) making sure clamps are flush against module, snap closed (avoid pinching wires), and secure to cabinet structure using #8 (M4) tek screws\*. Repeat on opposite end making sure product is taut.



**4b. Mounting modules with SignBOX II Clamps (SLO-SB2-MC) using SignBOX II Brackets (SLO-SB2-EB):** Install brackets 12 in (305 mm) center-to-center along returns of cabinet\*. Insert straps from both sides of module into clamps (track features facing same direction) making sure clamps are flush against module, snap closed (avoid pinching wires), slide onto bracket, and secure to it with #8 (M4) tek screws. Repeat on opposite end making sure product is taut.

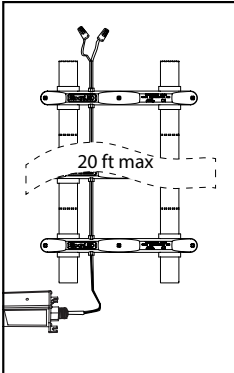


**4c. Optional mounting in single-sided cabinet with double stick tape:** Using non-oil based cleaner, clean all mounting surfaces of sign and bottom of modules for proper tape adhesion. With double stick tape on bottom of modules (not included), mount to back of cabinet. Make sure product is taut.

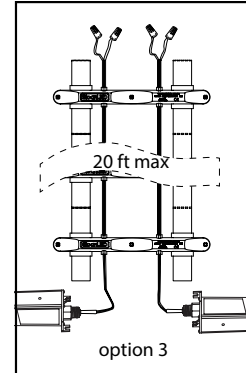
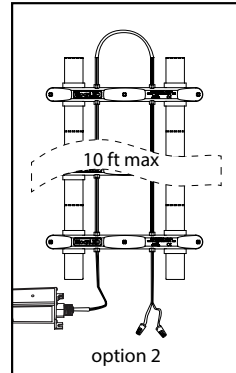
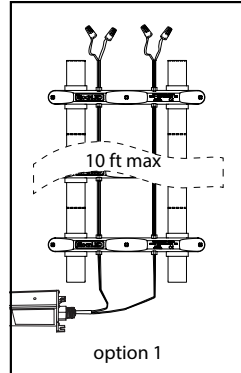
\* Refer to Density Guidelines to determine SignBOX II product and installation method.

### Connecting Product to Power Supply

#### Single-sided option



#### Double-sided options



5. 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 II should be capped and not tied back to power supply.

#### WARNING check polarity:

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





# SignBOX™ II

## Installation Guide

### 12 VDC Power Supply Capacity Table for SignBOX II

Power Supply	Part # (Each)	Input		Output		Maximum modules single-sided or one leg of double-sided	Maximum modules double-sided, both legs
		Nominal Input Voltage	Input Current	Power Output	Output Current		
Self Contained 20	SLO-PS-12SC	120-240 V	0.3 A	20 W	1.5 A	20	10
MODW 60 W (North America)	SLO-PS-12C	120-240 V	1.0 A	60 W	4.5 A	60	30
MODWE 60 W (Europe)	SLO-PS-12C	100-240 V	1.0 A	60 W	4.5 A	60	30
MOD277 60 W	SLO-PS12C277	277-347 V	0.5 A	60 W	4.5 A	60	30
All footage based on 90% of rated capacity		Power used per foot (Meter) in Watts:				2.7 W (8,9)	5.4 W (17,7)

### 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 mm<sup>2</sup> PLTC) or under 50 ft for 14 AWG UL Listed PLTC (15,2 m for 2,5 mm<sup>2</sup> PLTC).

### Troubleshooting:

<b>Entire box/cabinet or product does not light after complete installation.</b>	Check connection from power supply lead to first module. 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-BLACK.
<b>Still does not light.</b>	Check output voltage of power supply using a voltmeter. The output voltage should be DC 12.0 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.
<b>Still does not light.</b>	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.
<b>The beginning of a strip lights, but the entire strip does not light or lights intermittently.</b>	The primary cause of a portion of a strip is 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.
<b>One module does not light, but all others in the product light.</b>	SignBOX II 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.



US patents and foreign patents pending

