

# FRANCE MoguLED

## Installation Instructions

### Applications

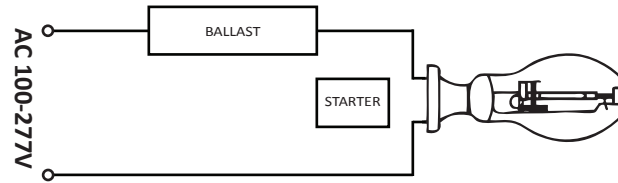
For use in exterior or interior applications. Suitable for Large cabinet sign lighting; High lumen replacement for HID, CFL and incandescent applications; Barn/Shop lighting; Outdoor post top lanterns; High bay lighting; Street lighting; Wall pack lighting.

### WARNING!

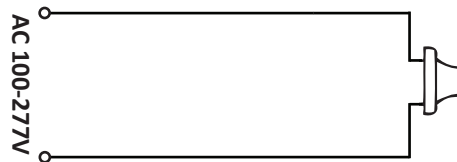
1. Read and follow all instructions provided with this product.
2. Installation and electrical wiring must be done by a qualified person(s) in accordance with all applicable codes and standards, including fire-related construction.
3. Risk of electrical shock. Do not use where directly exposed to water.
4. Turn power OFF at fuse or breaker and follow proper lockout/tagout procedures before inspection, installation, service, or removal.
5. Use included safety cable to fasten the lamp in place in case of accident.
6. Do not stare at operating lamp.
7. This product is NOT for use with dimmers.

## INSTRUCTIONS

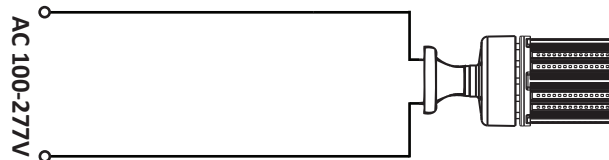
1. Disconnect existing lamp holder from any existing ballast, capacitor, and/or ignitor. Remove and properly dispose of the existing ballast, capacitor, and/or ignitor.



2. Remove existing lamp and dispose of according to local requirements. Reconnect the lamp holder directly to AC line voltage (100 – 277VAC, 50/60HZ)



3. Install the new MoguLED lamp in the lamp holder. Make sure the existing fitting is properly grounded. Use included safety clip strap to secure the MoguLED lamp if necessary.



4. The Replacement of a Self-Ballasted CFL lamp requires removal of the old CFL lamp and installing the new LED lamp in its place.

## HID/CFL to France MoguLED and Replacement Guide

Model No.	Rated Wattage	Rated Current	PF	HID Equivalent	CFL Equivalent
MGLED-27W	27W	0.27A	> 0.9	175-200W	50W
MGLED-36W	36W	0.36A	> 0.9	175-200W	65W
MGLED-45W	45W	0.45A	> 0.9	175-200W	85W
MGLED-54W	54W	0.54A	> 0.9	175-200W	105W
MGLED-75W	75W	0.75A	> 0.9	200-250W	150W
MGLED-100W	100W	1.0A	> 0.9	250-320W	200W
MGLED-120W	120W	1.2A	> 0.9	320-400W	250W

## Mounting Orientation

BASE DOWN	BASE UP	HORIZONTAL
APPROVED	APPROVED	NOT APPROVED

## Recommended Minimum Fixture Size

Model No.	Length	Width	Height	Volume(in <sup>3</sup> )
MGLED-27W MGLED-36W MGLED-45W	11.42"	11.42"	11.42"	1489.35
MGLED-54W	12.40"	12.40"	12.40"	1906.62
MGLED-75W	15.75"	15.75"	15.75"	3906.98
MGLED-100W MGLED-120W	17.32"	17.32"	17.32"	5195.70

800-793-4793 [www.sfeg.com/france](http://www.sfeg.com/france)

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Fairview, TN 37062

## Installation Instructions

<p><b>DANGER</b> Case and any connected metal may become electrified if unit is not grounded properly</p>	<p><b>AVERTISSEMENT</b> Case et tout métal relié peut devenir électrisée si l'unité est pasmise à la terre correctement Tension</p>	<p><b>Included in this package</b></p>		<p><b>NOTICE</b></p>
<p>Hazardous Voltage may cause shock, burn, or death</p>	<p>Hazardous peut provoquer un choc, une brûlure ou la mort</p>			
<p><b>CAUTION</b> Disconnect power prior to installation or service</p>	<p><b>PRUDENCE</b> Puissance disconnect avant l'installation ou service lampes</p>			
<p>Replacement lamps must match type indicated on product label</p>	<p>Remplacement doivent être de type de correspondance indiquée sur l'étiquette du produit</p>			

**WARNING** - Risk of fire or electric shock. LED Retrofit Kit installation requires knowledge of sign electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.

**Avertissement** - Risque d'incendie ou de choc électrique. Kit de conversion à dell'installation nécessite des connaissances de signer des systèmes électriques. Si ce n'est pas qualifié, n'essayez pas de l'installation. Contactez un électricien qualifié.

**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.

**Avertissement** - Risque d'incendie ou de choc électrique. Installez ce kit uniquement dans les signes qui ont été identifiés dans les instructions d'installation et où le score d'entrée de la kit de mise à niveau ne dépasse pas le score d'entrée de l'enseigne.

**WARNING** - Risk of fire or electric shock. 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. L'installation de ce kit de conversion à DEL peut impliquer le perçage ou Poinçonnage de trous dans la structure de l'enseigne. Pour vérifier le câblage et les composants ci-joint pour éviter d'endommager le câblage et les pièces électriques.

### STEP 1 - Which Model, How Many and Spacing of LED Sign Bright Units in a Rectangular Sign

Which model? Signs 30 inches up to 36 inches deep, use Model FR-LEDSB1-80W Signs 36 inches or more deep, use Model FR-LEDSB1-125W

How Many & Spacing: The spacing between LIGHT CENTERS of the lamps is calculated. Light center dimensions relative to the unit base are shown in STEP 3. Please refer to the layout diagram at the bottom of this page. Number of units required:

For the FR-LEDSB1-80W

No. of columns = (width of sign face)/3 - if this no. is odd (e.g. 3, 5, 7, etc) and sign has a center support pole, add one column  
No. of rows = (height of sign face)/3

For the FR-LEDSB1-125W

No. of columns = (width of sign face)/4  
No. of rows = (height of sign face)/4

Total units required =

(no. of rows) x (no. of columns)

If the result of either calculation is less than 1/2 unit round down (e.g. a result of 3.4 means to use 3 columns or rows). Likewise, if calculation results in 1/2 unit or more, round up (e.g. a result of 3.7 means to use 4 columns or rows). After having determined the number of rows and columns, calculate spacing between units:

Column spacing = (width of sign face)/no. of columns  
Column left and right spacing = 1/2 column spacing  
Row spacing = (height of sign face)/no. of rows  
Row right and left spacing = 1/2 row spacing

**EXAMPLE:** A sign 30 inches deep with a face measuring 12 feet wide 6 feet tall, depth requires FR-LEDSB1-80W units (this example at page bottom) and:

No. of columns = 12/3 = 4  
Column spacing = 12/4 = 3 ft  
Row spacing = 6/2 = 3 ft

No. of rows = 6/3 = 2  
Column left and right spacing = 3/2 = 1.5 ft  
Column top and bottom spacing = 3/2 = 1.5 ft

Total units required = 4 x 2 = 8

**EXAMPLE 2:** A sign with a center support pole, 42 inches deep with a face measuring 19 feet wide x 9 1/2 feet tall, depth requires FR-LEDSB1-125W units and:

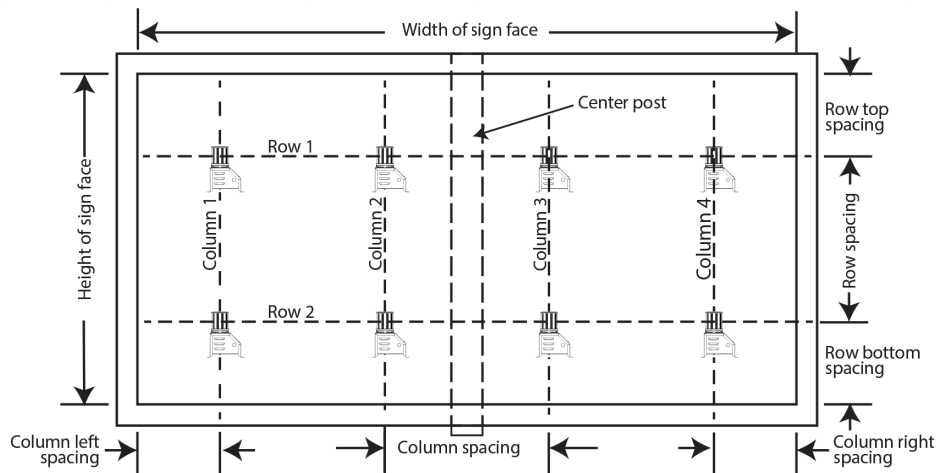
No. of columns = 19/4 = 4.75, round up to 5 - odd, so add 1  
Column spacing = 19/6 = 3.17 ft (38 in)  
Row spacing = 9.5/2 = 4.75 ft (57 in)

No. of rows = 9.5/4 = 2.375 round down to 2  
Column left and right spacing = 3.17/2 = 1.583 ft (19 in)  
Row top and bottom spacing = 4.75/2 = 2.375 ft (28.5 in)

For double-faced signs, mount the units at the center point between the two faces. For single-faced signs, mount the units at least 15 inches from the face for the FR-LEDSB1-80W or 18 inches for the FR-LEDSB1-125W.

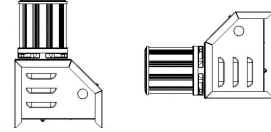
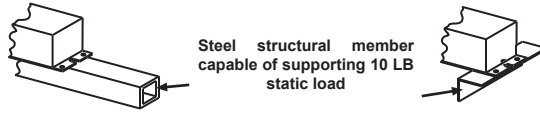
Unsured of the calculations for your particular installation or have a non-rectangular or multi-post sign? Please call Technical Support at (615) 418-9710 for assistance.

\*Actual applications may vary. Optimal layout is dependent on sign construction and graphics. All recommendations are for reference only.

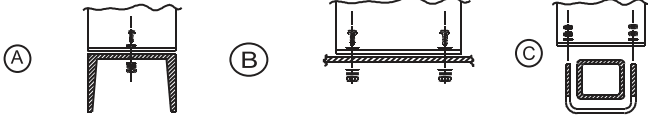


## STEP 2 - Determine desired mounting location

For more guidance, see STEP 1 for spacing examples. An LED Sign Bright can be mounted horizontally or vertically.



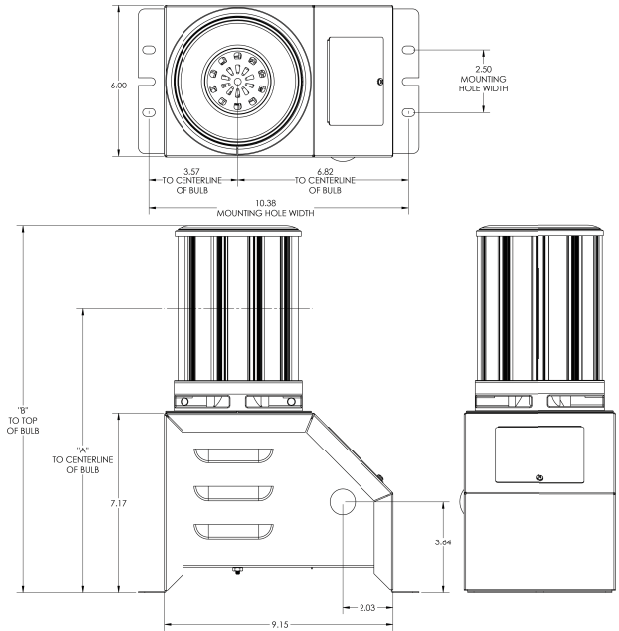
## STEP 3 - Mounting LED Sign Bright base on structural member



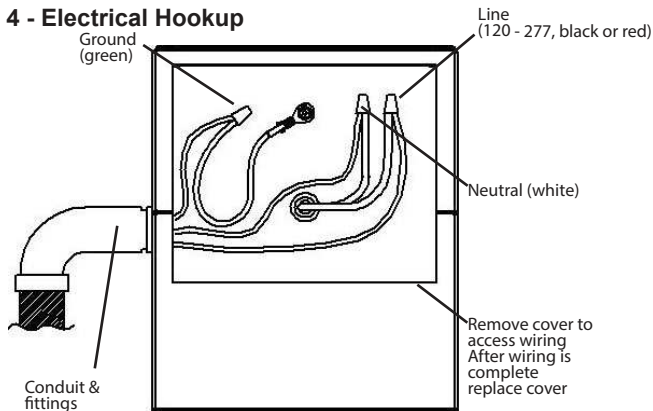
Mount base on structural member with appropriate hardware:

- A: .312 centerbolt mount on heavy framework
- B: .250 double bolt mount on lighter framework
- C: 2.50 x .250 clamp bolt around max 2.0 tubular framework

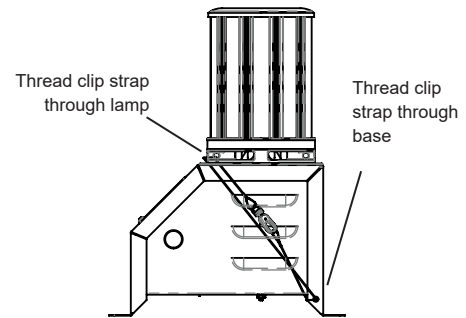
DIMENSION	80W	125W
"A"	10.75"	12.00"
"B"	13.47"	15.96"



## STEP 4 - Electrical Hookup



Maximum Input Current Per LED Sign Bright	At 120 VAC Input	At 277 VAC Input
FR-LEDSB1-80W	0.667 Amp	0.289 Amp
FR-LEDSB1-125W	1.042 Amps	0.451 Amp



After wiring, screw LED lamp into mogul socket.

OPTIONAL: Thread clip strap through lamp and base to prevent loosening in high vibration environments.

## If Retrofitting an Existing Sign

France LED Sign Bright replaces all ballasts, lampholders, lamps and HID Sign Bright units.

1. Disconnect power from sign.
2. Remove or disconnect all existing lampholders, ballasts, capacitors, and HID ignitors. In a wet or outdoor sign, repair and seal any unused openings in the electrical enclosure during this process. Openings greater than 12.7-mm (1/2-in) 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.
3. If the existing installation included internal auxiliary electrical enclosures (for ballasts, etc.) employing switches to control power to devices within the enclosure, then a sign disconnect switch may have to be installed.
4. Select the appropriate MODEL and NUMBER of LED Sign Brights based on the STEP 1 guidelines above.
5. Mount and wire LED Sign Brights in the manner commencing in the STEP 2.
6. A permanent label that is intended to remain in the applied position for the lifetime of the sign under conditions of normal use shall be affixed to the sign where readily visible by the user during normal maintenance, including relamping. The label shall be marked with the following statement:

**"This sign has been modified to operate LED lamps. Do not attempt to install or operate \* lamps in this sign" shall be marked on the retrofitted sign"**

The " \* " shall be replaced by the original illumination type such as "fluorescent," "HID," etc. This marking shall be provided on a separate permanent label that is intended to remain in the applied position for the lifetime of the sign under conditions of normal use. ) The marking shall have a minimum letter height of 2.4 mm (3/32 in) and shall be in Univers Bold, Arial Bold, Helvetica Bold, or Zurich BT Bold or equivalent font.