### SB8 & SB12 Series Features

- UL Listed
- Certified to CSA Standard C22.2 No.9
- LED Life of 50K+ hours, under normal operating conditions
- Low wattage, low heat, low voltage (24VDC Operation)
- Provide consistent and uniform illumination
- Emits no UV or infrared light and does not contain lead, mercury or glass.
- Eco-friendly handling and disposal when required
- Available in a wide variety of warm or cool color temperatures
- o Available in Flood or Narrow beam angles in configuration lengths.
- Set up for Electronic 0-10V Dimming
- Suitable for damp locations
- Simple user friendly installation
- Top quality connectors and mounting hardware
- o Zero warm-up time and no reduction to lamp life in normal operating conditions

## LINEAR LED SERIES

### **Architectural Illumination Systems**











### **LED Light Bar**

Part Numbers	Length	LEDs	View Angle	Voltage	Watt/ Bar	Watt/Run (Max)	LED Color (Kelvin)
SB8-1/4W-12"-XXX-24V SB8-1/2W-12"-XXX-24V SB12-1/2W-12"-XXX-24V	12.00"	8 8 12	120 <sup>0</sup> 15°, 30°, 45°, 12 15°, 30°, 45°, 12		2.7W 5.5W 6.5W	96W	2800K, 3500K, 4100K, 5000K
SB8-1/4W-24"-XXX-24V SB8-1/2W-24"-XXX-24V SB12-1/2W-24"-XXX-24V	24.00"	16 16 24	120° 15°, 30°, 45°, 12 15°, 30°, 45°, 12		5.5W 11.3W 12.0W	96W	2800K, 3500K, 4100K, 5000K
SB8-1/4W-36"-XXX-24V SB8-1/2W-36"-XXX-24V SB12-1/2W-36"-XXX-24V	36.00"	24 24 36	120° 15°, 30°, 45°, 12 15°, 30°, 45°, 12		8.0W 17.0W 18.0W	96W	2800K, 3500K, 4100K, 5000K
SB8-1/4W-46"-XXX-24V SB8-1/2W-46"-XXX-24V	46.00"	30 30	120 <sup>0</sup> 15°, 30 <sup>0</sup> , 45 <sup>0</sup> , 12	24VDC 20 <sup>0</sup>	10.5W	96W	2800K, 3500K, 4100K, 5000K
SB8-1/4W-48"-XXX-24V SB8-1/2W-48"-XXX-24V SB12-1/2W-48"-XXX-24V	48.00"	32 32 48	120° 15°, 30°, 45°, 12 15°, 30°, 45°, 12		11.0W 22.0W 24.5W	96W	2800K, 3500K, 4100K, 5000K
SB8-1/4W-60"-XXX-24V SB8-1/2W-60"-XXX-24V SB12-1/2W-60"-XXX-24V	60.00"	40 40 60	120° 15°, 30°, 45°, 12 15°, 30°, 45°, 12		13.5W 28.35W 30.5W	96W	2800K, 3500K, 4100K, 5000K
SB8-1/4W-66"-XXX-24V SB8-1/2W-66"-XXX-24V SB12-1/2W-66"-XXX-24V	66.00"	44 44 66	120° 15°, 30°, 45°, 12 15°, 30°, 45°, 12		15.0W 31.0W 33.5W	96W	2800K, 3500K, 4100K, 5000K



SB LED with Lens



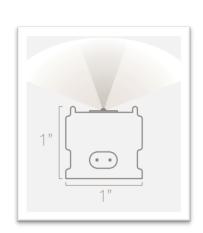
SB 8 1/2W & SB 8 1/4W LED Bar



SB 12 LED Bar







### Accessories

Part Numbers	Description		
SB Flat Clip	Flat Clip		
SB Roto Clip STD	Roto Clip		
SB Ext 90D (3", 6" & 12")	90° Jumper Extension		
SB Ext ST (12", 48" & 72")	Straight Connector		
SB End Cap	End Cap		
SB-BUTT CONN	BUTT Connector		
SB-Ext 90D (12", 36" & 72")	Female 90° Wire Lead		

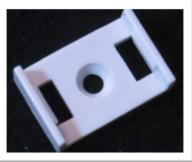




Female 90° Wire Lead



Straight Connector





**BUTT Connector** 



Roto Clip



90° Wire Extension



**Seamless Connections** 





### **LED Light Bar**

Part Numbers	Description	Dimension	Input Voltage	Output Power	Output Voltage	Output Current
PS-Q2-U24-SG	100W ELECTRONIC 0-10v dim Power Supply	6.5"x2.5"x 1.57"	120/277	100	24v	1900-5000
PS-IP710-DLZ	0-10V Slide ELECTRONIC Control Wall Dimmer	-	-	-	-	-
PS-LED1003R15X3	NEMA Enclosure (Optional)	13.4"x2.75"x2 .32"	-	-	-	-



100W Power Supply



0-10V Slide Control



**NEMA Enclosure** 

#### PREPARE ELECTRICAL WIRING

### **Electrical Requirements**

- This lighting system is supplied with an appropriate power supply driver unit; this appliance unit must be supplied with 120V, 60Hz. and connected to an individual properly grounded branch circuit, protected by a 15 or 20 Amp circuit breaker or time delay fuse. The SB LED Light Bar is a CLASS 2, 24VDC low voltage luminary and must be used with an appropriate power supply driver unit. Failure to connect this lighting system correctly will violate all warranty claims.
- Wiring must be 2 wires with ground and rated for 75°C (176°F).

NOTE: Consult local building codes and guidelines on selecting wires. Wires must be UL Listed.

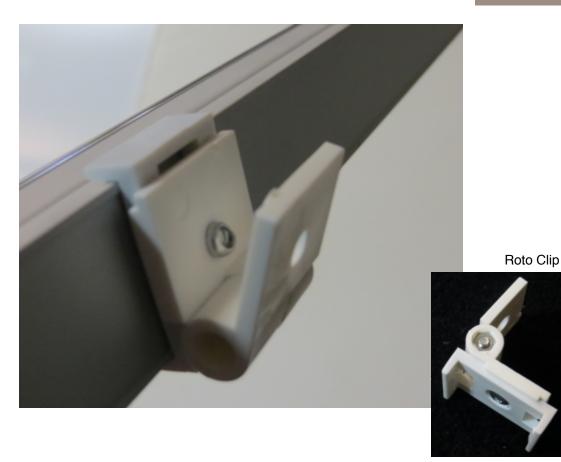
#### **Grounding Instructions-Cable Direct**

This lighting system must be connected to a grounded metal, permanent wiring system, or an equipment grounding conductor must be run with the circuit conductors and be connected to the equipment grounding terminal.





# SB Series INSTALLATION



#### **Mounting Light Fixture with Mounting Clips**

- Mounting clips, whether flat or rotating adjustable type, must be mounted to a flat surface using appropriate screws or other fasteners.
- · See the mounting clip diagrams
- Lock out and tag out the circuit breaker for the lighting circuit of the area where the LED light fixtures are being installed.
- Turn the light switch to "off" to ensure no power is active.
- Remove any hazards in order to access the electrical raceway or necessary space.
- Use a Voltmeter and check that there is no voltage.
- · Remove any existing fixtures, wiring harnesses, etc.
- Remove any Ballast or other power supplies from the electrical raceway or necessary space.
- · Wear gloves to prevent injury when handling the old materials such as reflectors, ballasts, etc.

### MOUNTING LIGHT FIXTURE

#### FOR YOUR SAFETY

Read and observe all CAUTIONS and WARNINGS shown throughout these instructions. While performing installation described, gloves, safety glasses or goggles should be worn.





### Notes Applicable Unless Otherwise Specified BEFORE YOU BEGIN

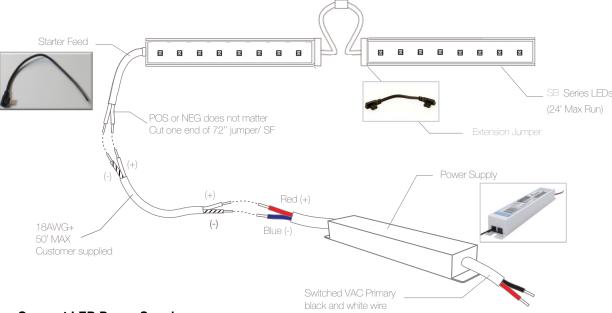
Read these instructions completely and carefully.

WARNING: TO REDUCE THE RISK OF FIRE, ELECTRICAL SHOCK OR INJURY, OBSERVE THE FOLLOWING:

**A.** Use these fixtures only in the manner intended by the manufacturer. If you have any questions, contact the manufacturer.

**B.** Before servicing or cleaning unit, switch power off at the service panel and follow appropriate lock out/tag out safety procedures.





### **Connect LED Power Supply**

- Mount the LED power supply in the electrical raceway or as near as possible; or where the previous fluorescent ballast was located.
- Power supply has 120V 50/60HZ input (primary) and 24V DC output (secondary).
- Using the appropriate wiring diagram connect the original load and neutral wires to the LED power supply input wires (black and white wire) using approved connection method.
- IF NEEDED Mount one (1) DC dimming control module per one (1) power supply in close proximity to the LED Power Supply.
- Prior to installing LED Luminary, please check voltage from the Power Supply to ensure proper voltage
- Install LED Luminary into the mounting clips and tighten the small screws to hold the luminary in place. Fasten each luminary to the mounting clip. If using rotating adjustable clip, adjust the luminary as need and tighten the large screws on either side of the clip.
- Connect the LED Luminary male output connector to the female connector first cable going to the power supply.
- Connect the wires from the female connector first cable going to the power supply, to the wires that are coming out of the 24V DC (secondary) output of the power supply, using approved connectors for the application.

### SB SERIES WIRING DIAGRAM

#### FOR YOUR SAFETY

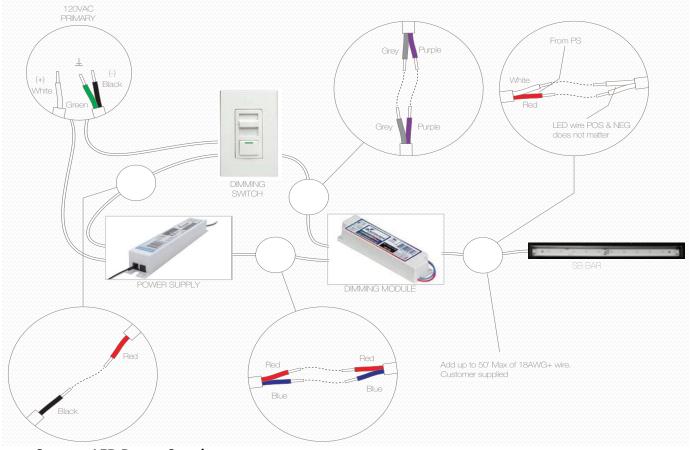
Read and observe all CAUTIONS and WARNINGS shown throughout these instructions. While performing installatic described, gloves, safety glasses or goggles should be wo



#### **CAUTION**

The LED POWERED SB BAR LED luminary MUST be installed with the LED POWER SUPPLY specified by The Smart Lighting Company for this luminaire.





### **Connect LED Power Supply**

- Additional conductors may be needed to connect the power supply to the existing wiring in the raceway or other section. Use conductors of proper size and rating as per local and national codes.
- The LED power supply enclosure case includes a terminal for grounding the incoming 120V 50/60HZ ground wire. Attach LED power supply to ground point in the case either directly with a screw, or by using a green wire to attach to a remote ground point.
- When using the DC dimming control module, connect remaining wires by following the wiring diagram provided in order to connect the LED Luminary to the DC dimming control module
- · Connect the DC dimming control module to the LED power supply by following the wiring diagram provided
- Double check your wiring methods and voltage with a meter at the end of each run to be sure that all wires are properly connected with suitable connectors and that there is no voltage drop.
- · Remove the lock out tag from the circuit breaker for the lighting circuit and turn the breakers back on
- Turn the lights back on to the case and inspect all lights to ensure that they are functioning properly.

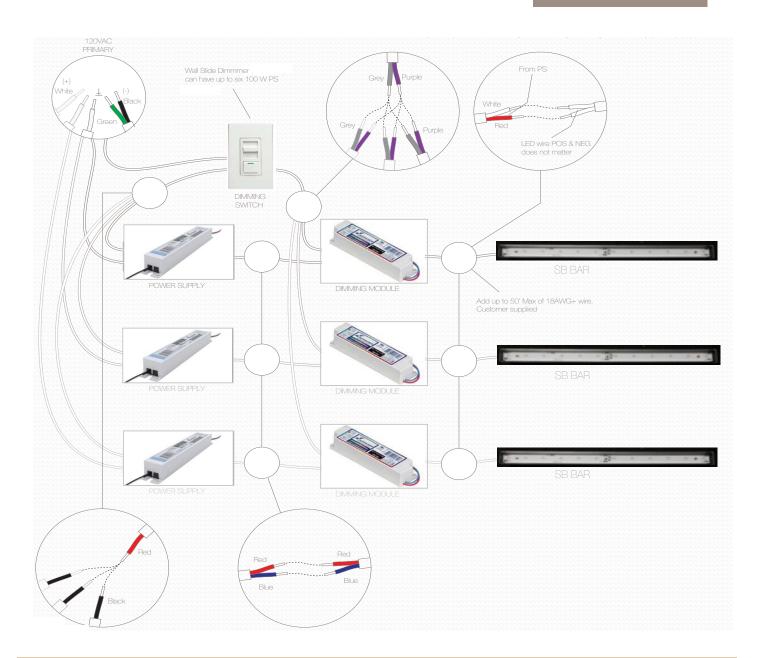
## 0-10V DIMMING WIRING DIAGRAM < 100W

#### FOR YOUR SAFETY

Read and observe all CAUTIONS and WARNINGS shown throughout these instructions. While performing installatio described, gloves, safety glasses or goggles should be wo



# SB Series INSTALLATION



### 0-10V DIMMING WIRING DIAGRAM 100W-300W

#### FOR YOUR SAFETY

Read and observe all CAUTIONS and WARNINGS shown throughout these instructions. While performing installation described, gloves, safety glasses or goggles should be worn.

