



STYLE ELSS SceneStar™ LED SCENE LIGHT INSTALLATION, OPERATING, AND MAINTENANCE INSTRUCTIONS

The following is intended to provide the basic instructions for installation, operation and maintenance of the SceneStar LED Scene Light. **IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY, NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS, AND CAUTIONS. USE THIS PRODUCT CORRECTLY, AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE, OR PERSONAL INJURY, AND WILL INVALIDATE THE WARRANTY!**

TOOLS REQUIRED

- Utility Knife
- Electricians Pliers (multipurpose, stripping and crimping)
- Appropriate electrical connectors

PRODUCT RATINGS

	ELSS-XLAC	ELSS-XLAC2	ELSS-SLDC	ELSS-XLC
Wattage	220W	220W	144W	216W
Input Voltage Range	90-135VAC	180 – 265VAC	10 - 32VDC	10 - 32 VDC
Nominal Supply Current	1.8A @ 120VAC 25°C	0.92A @ 240VAC 25°C	12A @ 12VDC 6A @ 24VDC	18A @12VDC 9A @ 24VDC
Nominal Frequency	60 Hz-50Hz		N/A	
Operating Frequency Range	50-60Hz		N/A	
Operating Temperature Range	-40°C to 50°C			
Spacing to be observed during installation	0.5m from front of light			
Power Factor	0.85		N/A	
Head Weight	10.3 lbs [4.7 kg]			

ELECTRICAL INSTALLATION

Note: The 240VAC Scenestar is equipped with a type Y power cord attachment. If the external flexible cable of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.

Ensure that an adequate power source is available to operate light and to ensure that the voltage does not fluctuate outside of the listed range.

Ensure that power is off prior to connecting to a power source.

Ensure that an appropriate sized circuit breaker or fuse is installed in the circuit to the light.

When installing the light head, it should be wired as follows:

Model: ELSS-XLDC & ELSS-SLDC

Black=ground,

Red=+VDC

Red/White= +VDC

The red and red/white wires can be tied together and connected to a power source. There are two separate wires to power the right and the left banks of LEDs.

ELSS-XLAC

Black = Line

White = Neutral

Green = Ground

ELSS-XLAC2

Brown = Line

Blue = Neutral

Green/Yellow = Ground

Use appropriate wire gauge to connect lights. Refer to chart below for required wire gauge sizes.

Model: ELSS-SLDC & ELSS-XLDC

WIRE SIZE REQUIREMENTS WHEN USING A 12VDC POWER SOURCE

SceneStar Model	Wire Length - ft (m)								
	20 (6)	30 (9.1)	40 (12.2)	50 (15.2)	60 (18.3)	70 (21.3)	80 (24.4)	90 (27.4)	100 (30.5)
ELSS-SLDC	12 (4.0)	12 (4.0)	12 (4.0)	12 (6.0)	10 (6.0)	10 (10.0)	8 (10.0)	8 (10.0)	8 (10.0)
ELSS-XLDC	12 (4.0)	10 (6.0)	10 (6.0)	10 (6.0)	8 (10.0)	8 (10.0)	8 (10.0)	8 (16.0)	8 (16.0)

*wire size is listed in AWG (mm2)

WIRE SIZE REQUIREMENTS WHEN USING A 24VDC POWER SOURCE

SceneStar Model	Wire Length - ft (m)								
	10 (3)	20 (6)	30 (9.1)	40 (12.2)	50 (15.2)	60 (18.3)	70 (21.3)	80 (24.4)	90 (27.4)
ELSS-SLDC	18 (1.0)	18 (1.0)	18 (1.0)	16 (1.5)	16 (1.5)	16 (1.5)	14 (2.5)	14 (2.5)	14 (2.5)
ELSS-XLDC	16 (1.5)	16 (1.5)	16 (1.5)	16 (1.5)	14 (2.5)	14 (2.5)	12 (4.0)	12 (4.0)	12 (4.0)

*wire size is listed in AWG (mm2)

Model: ELSS-XLAC

Use 18AWG for up to 50 ft.

Use 16AWG if supply is between 50 ft. and 100 ft.

MECHANICAL INSTALLATION

Suitable for indoor and outdoor use.

⚠WARNING: The SceneStar should never be mounted on a flammable surface.

Refer to the detailed installation instructions for the configuration that you have purchased. Installation varies depending on the mounting style purchased.

Do not support or stow the SceneStar head by any means other than that supplied from the factory.

Be sure to mount in a location that allows adequate air flow through the fins on the back of the light. Obstructing or covering the fins can cause the light to overheat and cause damage to the electronics.

IMPORTANT INSTALLATION NOTE: The SceneStar has been designed with a dual stage vent system to allow the unit to perform optimally under all environmental conditions. Due to this design feature, the unit cannot be mounted in an inverted position. It must be mounted in the standard orientation with the swivel on the bottom of the light.

OPERATION:

Model: ELSS-SLDC & ELSS-XLDC

Operation

The SceneStar is supplied with a standard switch on the swivel. After proper electrical and mechanical installation, the SceneStar can be switched on or off using the supplied switch on the swivel or another user installed switch.

Operational Features:

The SceneStar will provide stable, maximized light output within its normal operating ranges for voltage and temperature. Should the lamp be operated outside these ranges there may be a change in the light output as the lamp attempts to maintain functionality despite the improper operation.

Thermal performance:

The SceneStar LED lamp heads are designed to provide maximum light output throughout a wide operating temperature range while providing the highest level of LED life/reliability. The maximum ambient operating temperature for peak light output is -40F to +122F [-40C to +50C]. The lamp will operate in higher sustained ambient temperatures but the lamp will modulate LED intensity to keep the LEDs and other electrical components operating below their maximum temperature.

Thermal roll back:

In the event of continuous operation above 50C the SceneStar will begin to reduce the current through the LEDs in increasing increments until the lamp temperature begins to drop. Once the operating temperature is within bounds (from internal or external cooling) the SceneStar will begin increasing the current back to normal levels.

This thermal roll back will decrease lamp output up to 50% in extreme cases. A gradual dimming and brightening of the lamp can be observed when it is operating in thermal roll back mode. Regardless of ultimate temperature, the SceneStar will not reduce lamp output below 50% of maximum to ensure the operator will always have usable light. Please note that extended operation of the SceneStar above its maximum temperature rating will greatly reduce the overall life or may lead to failure of the electronics.

Over/Under Voltage:

The SceneStar's advanced control electronics allow for a very wide operating voltage range that is suitable for today's 12/24VDC vehicle charging systems. However, a poor wiring or malfunctioning charging/battery systems can lead to operational conditions outside of the acceptable input range for the SceneStar LED.

Under Voltage - Operating below 10V will cause excessive current draw through the power electronics as the lamp attempts to maintain maximum light output. This can lead to current that exceeds the capacity of the control electronics. To protect the wiring and the lamp, the SceneStar will begin to drop out pairs of LEDs until the voltage level returns to an acceptable level. Since low voltage conditions typically occur due to a weak battery and/or undersized wiring, a pulsing of several LEDs is typically visible. This is due to the supply voltage at the lamp quickly rising whenever 2 or more LEDs are disabled. The lamp sees this increase in voltage and attempts to resume normal light operation by turning LEDs back on. This in turn drops the voltage again and the LEDs will turn back off. This pulsing cycle will end whenever the supply voltage/current condition is corrected.

Model: ELSS-XLAC+ELSS-XLAC2

Operational Features:

The SceneStar will provide stable, maximized light output within its normal operating ranges for voltage and temperature. Should the lamp be operated outside these ranges there may be a change in the light output as the lamp attempts to maintain functionality despite the improper operation.

Thermal Performance:

The AC SceneStar LED lamp heads are designed to provide maximum light output throughout a wide operating temperature range while providing the highest level of LED life/reliability. The maximum ambient operating temperature for peak light output is -40F to +122F [-40C to +50C]. The AC SceneStar electronics are designed to continuously monitor LED temperature and regulate power to optimize LED intensity. This process increases LED life/reliability while ensuring maximum light output at any ambient temperature.

Over/Under Voltage:

The AC SceneStar's advanced control electronics allow for a very wide operating voltage range suitable for today's 120VAC or 240VAC generator systems. The standard AC SceneStar operating voltage range is 90 – 135VAC or (180-265VAC).

- Undervoltage

- o Operation below 90VAC or 180VAC will not damage the unit. The AC SceneStar will continue to produce light with decreasing intensity as the voltage falls below 90VAC or 180VAC and will finally shut down below about 65VAC or 130VAC.

- Overvoltage

- o The AC SceneStar implements transient surge protection to protect internal circuitry from surges on the AC line or generator system. If the input voltage rises above 140VAC or 275VAC, the suppression circuitry takes over and begins to draw excess current which will eventually open the input fuse, protecting all components downstream.

MAINTENANCE:

Due to the inherent long life that comes with using LED's, there is very little maintenance required.

When the light requires cleaning, wipe down with a mild soap and water mixture only. Do not use industrial strength or other chemical cleaners as this may damage the light.



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