

Safety Message to Installers and Operators of Warning Lights

⚠ WARNING

People's lives depend on your proper installation and operation of Federal Signal products. It is important to read and follow all instructions shipped with this product and the original product. In addition, listed below are some other important safety instructions and precautions you should follow:

- To properly install this light, you must have a good understanding of automotive electrical procedures and systems, along with proficiency in the installation and service of safety warning equipment. Always refer to the vehicle's service manuals when installing equipment on a vehicle.
- DO NOT install equipment or route wiring in the deployment path of an airbag.
- When drilling into a vehicle structure, be sure that both sides of the surface are clear of anything that could be damaged.
- For the light to function properly, a separate ground connection must be made. If practical, it should be connected to the negative battery terminal. At a minimum, it may be attached to a solid metal body or chassis part that provides an effective ground path.
- Locate the light control so the VEHICLE and CONTROL can be operated safely under all driving conditions.
- The effectiveness of an interior mounted warning light depends on the clarity, the tinting, and the angle of the glass it is placed behind. Tinting, dirt, defects, and steeply-angled glass reduce the light output of the warning light. This may reduce the effectiveness of the light as a warning signal. If your vehicle has dirty, tinted, or steeply-angled glass, use extra caution when driving your vehicle or blocking the right of way with your vehicle.
- Do not attempt to activate or deactivate the light control while driving in a hazardous situation.
- You should frequently inspect the light to ensure that it is operating properly and that it is securely attached to the vehicle.
- This product contains high intensity LED devices. To prevent eye damage, DO NOT stare into the lightbeam at close range.
- After installation, test the stick light to ensure that it is operating properly.
- If a vehicle seat is temporarily removed, verify with the vehicle manufacturer if the seat needs to be recalibrated for proper airbag deployment.
- After testing is complete, provide a copy of these instructions to the instructional staff and all operating personnel.
- File these instructions in a safe place and refer to them when maintaining and/or reinstalling the product.

Failure to follow all safety precautions and instructions may result in property damage, serious injury, or death.

Product Overview

The SL8C Latitude™ Solaris® Stick Light is an eight-head flashing LED warning light with six head directional capability. The light mounts horizontally with supplied hardware on the interior or exterior of a vehicle with the 30-foot cable exiting from the rear. The end caps are compression-sealed by gaskets to the extruded housing. Each stick light is programmed with 28 eight-head flash patterns, five two-head flash patterns (end heads), and five directional patterns per each direction (5 left, 5 right, and 5 center out). All patterns are selectable by applying +12 V to the programming wire without opening the housing. A selection of internal and external mounting brackets makes the Latitude ideal for many public safety applications.

Unpacking the Product

After unpacking the product, inspect it for damage that may have occurred in transit. If it has been damaged or is missing a part, do not attempt to install or operate it. File a claim immediately with the carrier, stating the extent of the damage. Carefully check all envelopes, shipping labels and tags before removing or destroying them. If you are missing any parts, contact Customer Support at 1-800-264-3578, (708-534-340) 7 a.m. to 5 p.m., Monday through Friday (CT). Disposal of all shipping materials must be carried out in accordance with national and local codes and standards.

Product Specifications

Electrical: Operates on 12.8 V

Cable: 30 ft, Jacketed 6-Conductor

Operating Temperature: -22 °F to +149 F (-30° C to +65 °C)

Material: High-Impact Polycarbonate

Dimensions:

Height: 1.125 in (2.86 cm)

Depth: 2.625 in (6.67 cm)

Length: 31.75 in (80.65 cm)

Mounting the Stick Light

⚠ WARNING

AIRBAG DEPLOYMENT: Do not install equipment or route wiring in the deployment path of an airbag. Failure to observe this warning will reduce the effectiveness of the airbag or potentially dislodge the equipment, causing serious injury or death.

⚠ CAUTION

LIGHT OUTPUT COMPLIANCE: This product is intended for supplemental warning and for use in conjunction with an approved primary warning light system. Consult local codes and regulations to determine if the power supply/ light head combination complies with the horizontal or vertical mount position desired in your application. Failure to follow this caution could result in reduced light output and reduced warning system effectiveness.

NOTICE

WATER DAMAGE PRECAUTION: When installing the Latitude on the exterior of a vehicle, ensure that it is mounted with the bottom channel facing down (Figure 1). Failure to follow this precaution may cause water to enter the lightbar and damage the circuitry.

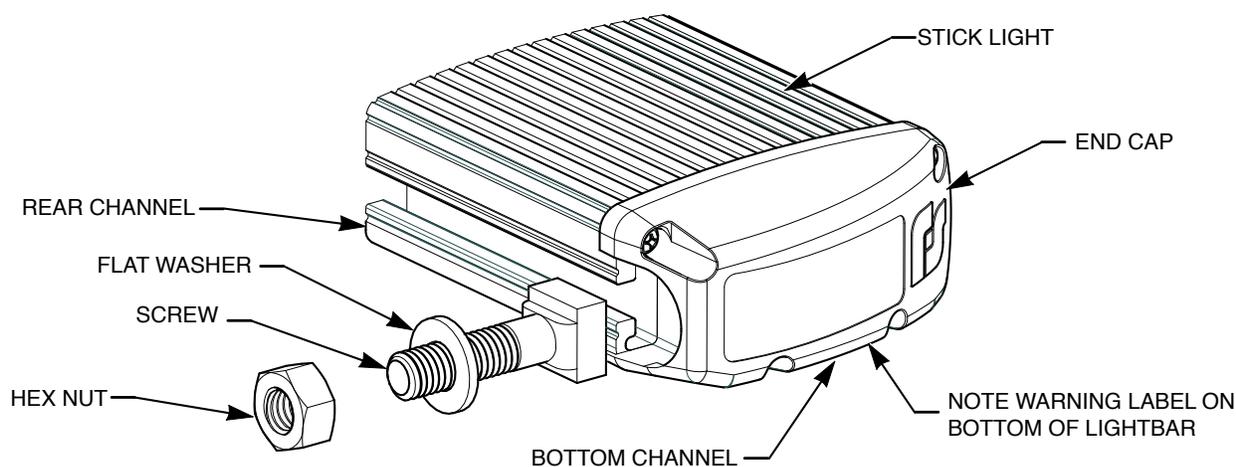
NOTICE

DRILLING PRECAUTIONS: Before drilling, check the area into which you are drilling to be sure you do not damage vehicle components. All drilled holes should be de-burred, and all sharp edges should be smoothed. All wire routings going through drilled holes should be protected by convolute/split-loom tubing.

To mount the stick light:

1. Determine which side of the stick light to secure to the mounting surface. From a horizontal orientation, the bottom and rear surfaces of the stick light are available for mounting.
2. See Figure 1. Locate the opening in the selected mounting-bolt channel and drop in four mounting screws.

Figure 1 Stick light positioned horizontally with mounting hardware



3. Drill holes as needed for the mounting screws.
4. Secure the stick light to the mounting surface using the supplied nuts.

Wiring the SL8C Latitude

NOTE: Extend wiring with 16 AWG leads or thicker.

To wire the Latitude to vehicle ground and power:

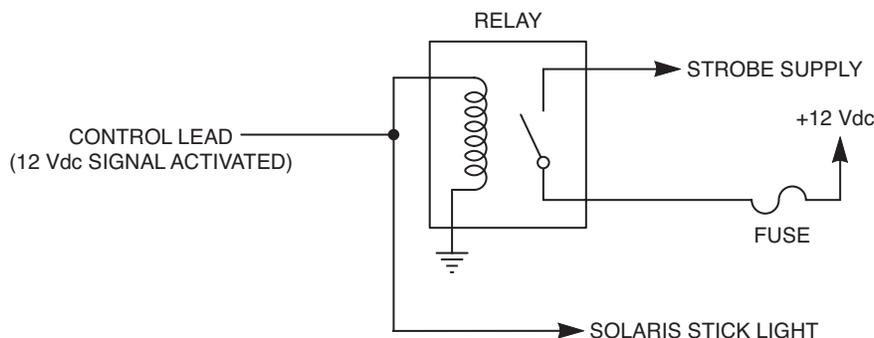
Connect the **BLACK** wire to ground through an installer-supplied 5 A fuse.

- Apply 12 Vdc to **RED** wire for eight-head flashing patterns.
- Apply 12 Vdc to **BLUE** wire for two-head flashing patterns (end heads).
- Apply 12 Vdc to **GREEN** wire for left arrow.
- Apply 12 Vdc to **BROWN** wire for right arrow.
- Apply 12 Vdc to **GREEN** and **BROWN** wire for center-out.

3. Insulate spliced leads with twist-on wire connectors. Fold and seal unused leads. Use wire ties and hold-downs for strain relief.

IMPORTANT: Powering multiple devices with a common control lead may cause one or more units to briefly remain functional after signal power is removed. For example, due to high-input filter capacitance, a strobe supply can briefly provide the current required to operate a low current device such as a Solaris Stick Light. If necessary, use a relay to isolate devices with large filter capacitors. For a suggested schematic, see Figure 2. All components and wires are installer-supplied.

Figure 2 Relay for isolating devices with large filter capacitors



Selecting a Flash Pattern

⚠ WARNING

LIGHT HAZARD: To be an effective warning device, an emergency warning system produces bright light that can be hazardous to your eyesight at close range. Do not stare directly into the light at close range or permanent damage to your eyesight may occur.

⚠ CAUTION

BURN HAZARD: After prolonged operation, the Latitude dissipates heat and can cause burns. Do not hold it in your hands for extended periods of time. Do not touch it during, or shortly after, operation. Always allow the stick light to cool before handling.

Selecting Eight-Head Flashing Patterns

1. Connect the **BLACK** wire to ground.
2. Apply 12 Vdc to **RED** wire.
3. To cycle through the patterns, touch the **WHITE** programming wire to 12 Vdc.

Selecting Two-Head Flashing Patterns

1. Connect the **BLACK** wire to ground.
2. Apply 12 Vdc to the **BLUE** wire.
3. To cycle through the patterns, touch the **WHITE** programming wire to 12 Vdc.

Selecting Left Arrow Patterns

1. Connect the **BLACK** wire to ground.
2. Apply 12 Vdc to **GREEN** wire.
3. To cycle through the patterns, touch the **WHITE** programming wire to 12 Vdc.

Selecting Right Arrow Patterns

1. Connect the **BLACK** wire to ground.
2. Apply 12 Vdc to **BROWN** wire.
3. To cycle through the patterns, touch the **WHITE** programming wire to 12 Vdc.

Selecting Center Out Arrow patterns:

1. Connect the **BLACK** wire to ground.
2. Apply 12 Vdc to both the **GREEN** and **BROWN** wires.
3. To cycle through the patterns, touch the **WHITE** programming wire to 12 Vdc.

The SL8C Latitude is designed to start at the last flash pattern selected before it was de-energized. For example, if it is de-energized at the seventh flash pattern and then re-energized, the seventh pattern is activated.

After installation, test the lights for proper operation.

Getting Technical Support and Service

Federal Signal Corporation will service your equipment or provide technical assistance with any problems that cannot be handled locally. Any product returned to Federal Signal for service, inspection, or repair must be accompanied by a Return Material Authorization number. The RMA number can be obtained from your local distributor or Federal Signal. Please provide a brief explanation of the service requested or the nature of the malfunction. Contact your local dealer/distributor for replacement parts availability or contact the Service Department (7 A.M. to 5 P.M., Monday through Friday, Central Time) at:

Federal Signal Corporation
2645 Federal Signal Drive
University Park, IL 60484-3167
800-433-9132, 708-534-340
800-343-9706 (fax)
E-mail: empserviceinfo@fedsig.com
www.fedsig.com

Ordering Replacement Parts

To order replacement parts, please contact your local dealer/distributor or:
Customer Support
Federal Signal Corporation
Phone: 800-264-3578 or 708-534-3400

Returning a Product to Federal Signal

Before returning a product to Federal Signal, call 800-264-3578, 800-433-9132, or 800-824-0254 to obtain a Returned Merchandise Authorization number (RMA number). To expedite the process please be prepared with the following information:

- Your Federal Signal customer or account number.
- The purchase order number under which the items were purchased.
- The shipping method.
- The model or part number of the product being returned.
- The quantity of products being returned.
- Drop ship information as needed.
- Any estimate required.

When you receive your RMA Number:

- Write the RMA number on the outside of the box of returned items.
- Reference the RMA number on your paperwork inside of the box.
- Write the RMA number down, so that you can easily check on status of the returned equipment.

Send all material with the issued RMA Number to:

Federal Signal Corporation
2645 Federal Signal Drive
University Park, IL 60484-3167
Attn: Service Department
RMA: # _____
1-800-433-9132
1-800-343-9706 (fax)
1-708-534-3400
www.fedsig.com



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