



**FEDERAL SIGNAL**  
Safety and Security Systems

# FireRay® Scene Light



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## ***Installation and Maintenance Instructions***

25500386

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## Limited Warranty

This product is subject to and covered by a limited warranty, a copy of which can be found at [www.fedsig.com/SSG-Warranty](http://www.fedsig.com/SSG-Warranty). A copy of this limited warranty can also be obtained by written request to Federal Signal Corporation, 2645 Federal Signal Drive, University Park, IL 60484, email to [info@fedsig.com](mailto:info@fedsig.com) or call +1 708-534-3400.

This limited warranty is in lieu of all other warranties, express or implied, contractual or statutory, including, but not limited to the warranty of merchantability, warranty of fitness for a particular purpose and any warranty against failure of its essential purpose.



## FEDERAL SIGNAL

Safety and Security Systems

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## ***Safety Message to Installers and Service Personnel***

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### **Safety Message to Installers and Service Personnel**

#### **⚠ WARNING**

People's lives depend on your proper installation of our products. It is important to read, understand, and follow all instructions shipped with the products. 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 safety warning equipment.
- DO NOT install equipment or route wiring or cord in the deployment path of an airbag.
- If a vehicle seat is temporarily removed, verify with the vehicle manufacturer if the seat needs to be recalibrated for proper airbag deployment.
- When drilling into a vehicle structure, ensure that both sides of the surface are clear of anything that could be damaged.
- Locate the light control so the VEHICLE and CONTROL can be operated safely under all driving conditions.
- Do not attempt to activate or deactivate light control while driving in a hazardous situation.
- This product contains high intensity LED devices. To prevent eye damage, DO NOT stare into the light beam at close range.
- Frequently inspect the light to ensure that it is operating properly and that it is securely attached to the vehicle.
- 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 to you or others.

### **Safety Message to Operators**

#### **⚠ WARNING**

Peoples' lives depend on your safe use of our products. Listed below are some important safety instructions and precautions you should follow:

- Although your warning system is operating properly, it may not be completely effective. People may not see or heed your warning signal. You must recognize this fact and continue to drive cautiously.
- Situations may occur which obstruct your warning signal when natural or man-made objects are between your vehicle and others, such as: raising your hood or trunk lid. If these situations occur, be especially careful.
- This product contains high intensity LED devices. To prevent eye damage, DO NOT stare into the light beam at close range.
- At the start of your shift, you should ensure that the light is securely attached and operating properly.

Failure to follow these safety precautions may result in property damage, serious injury, or death to you, to passengers, or to others.

### Overview of the FireRay Scene Light

The FireRay Scene light is a self-contained, high intensity, LED light designed for mounting to the exterior of a vehicle. FireRay Scene Lights are designed for operation on 12 Vdc.

### Unpacking the Product

After unpacking the light, inspect it for damage that may have occurred in transit. If it has been damaged, file a claim immediately with the carrier, stating the extent of damage. Carefully check all envelopes, shipping labels, and tags before removing or destroying them. If installing a permanent mounted beacon, ensure that the parts listed in Table 2 are included in the package.

Table 1 Kit Contents

| Qty | Description                       | Part No.   |
|-----|-----------------------------------|------------|
| 2   | #8 x 1-inch Stainless Steel Screw | 7011242-16 |
| 2   | Plastic Screw Grommet             | 7065073    |

### Installing the FireRay

#### **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.

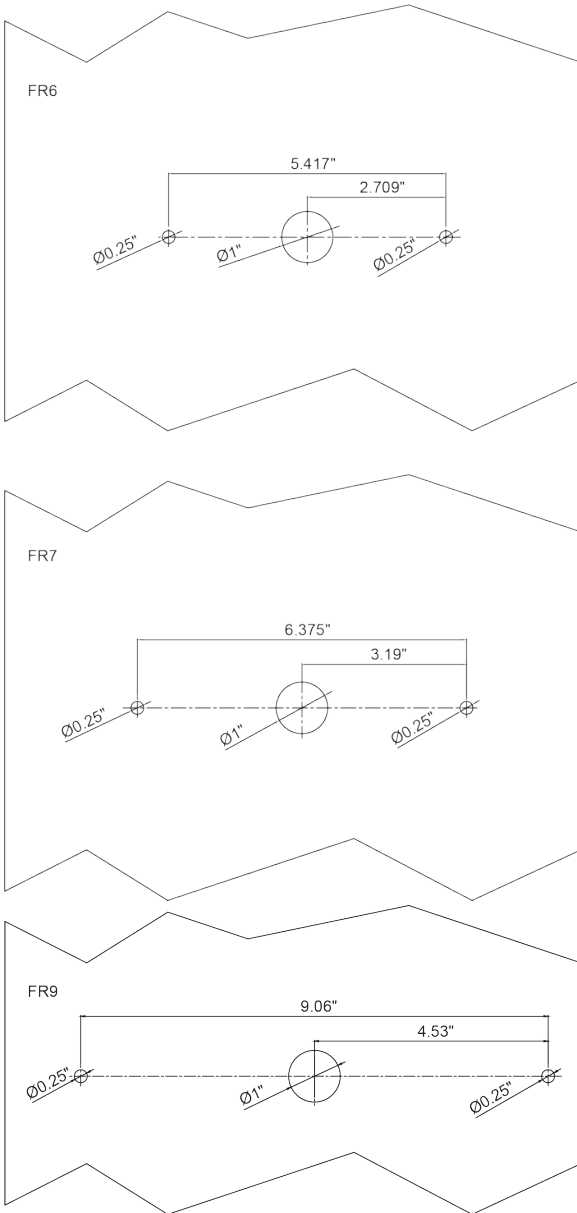
**NOTE:** For maximum coverage and effectiveness, mount the light assembly in a horizontal orientation. See Figure 1.

Before proceeding with installation, determine the approximate location of the light assembly and plan all cable/wire routing.

To install the FireRay:

1. Position the Scene light assembly on the desired mounting surface. Ensure that the unit is level side to side. See Figure 1.

**Figure 1 Mounting Holes (Not to scale)**



2. Using the dimensions provided in Figure 2, scribe the two mounting hole locations and a wiring routing hole location on the mounting surface.

### NOTICE

**DAMAGE TO LIGHT:** When installing the FireRay scene light on a vehicle, you **MUST** use the manufacturer's supplied mounting gasket, screws, and screw grommets. Do not use an impact drill or an electric screw gun when installing the light. Torque the mounting screws to the manufacturer's recommended specification of 7.8-11.3 in-lb. Failure to observe these precautions damages the scene light and void any warranty claims for the light.

### NOTICE

**DRILLING PRECAUTIONS:** When drilling holes, check the area you are drilling into to ensure that you do not damage vehicle components while drilling. 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 a grommet or convolute/split loom tubing.

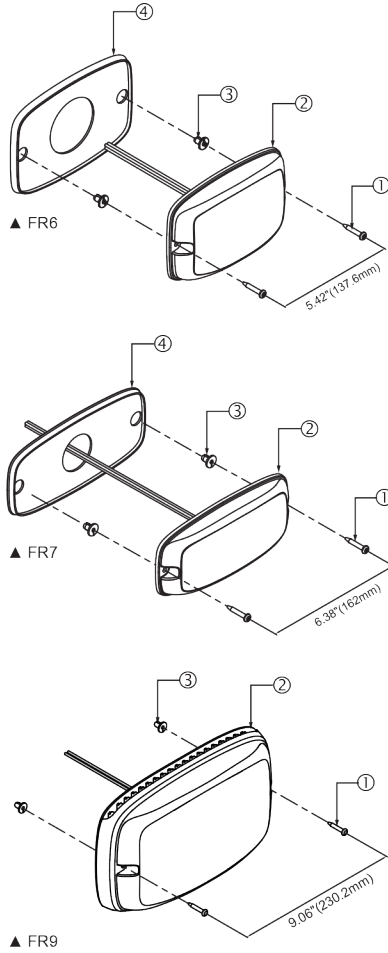
3. Drill two 1/4-inch mounting holes and a 1-inch wire routing hole at the previously scribed locations.
4. Install the two supplied plastic screw grommets into the two 1/4-inch mounting holes.

**NOTE:** When removing the FireRay Scene light, inspect the mounting grommets for wear and replace them as needed.

5. Complete the electrical connections as described in the Making Electrical Connections section. The FireRay warning light assembly has five 8.7-inch long lead wires, which exit out the back of the unit, for making electrical connections.
6. Align the Scene light assembly with the previously inserted plastic screw grommets and secure with the provided #8 by 1-inch stainless steel screws for FR6 and FR7 models. For the FR9 model, use #8 by 2-inch stainless steel screws. See Figures 2 and 3.



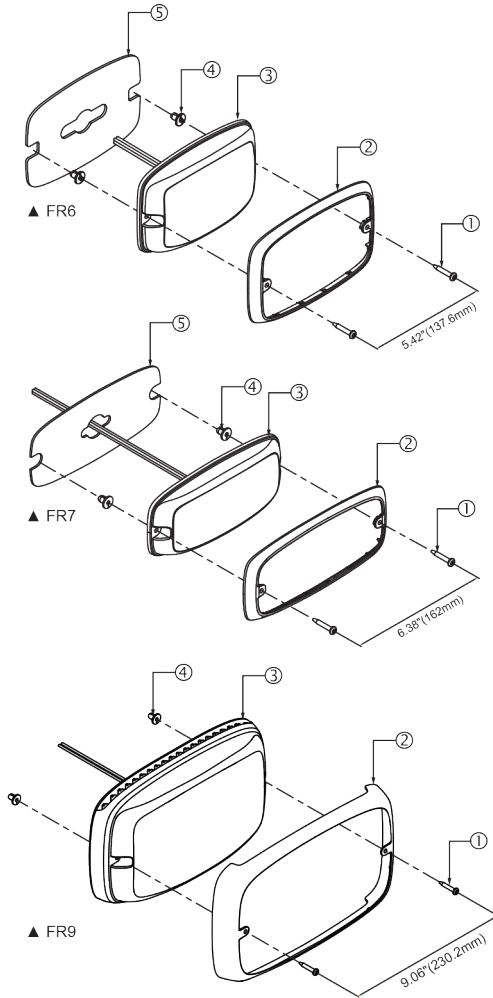
**Figure 2 Exploded View - No Bezel**



**Legend**

- 1. Mounting Screw
- 2. Light Head
- 3. Plastic Screw Grommet
- 4. Rubber Mounting Pad

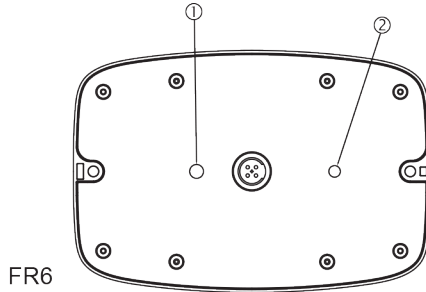
## Figure 3 Exploded View - With Bezel



### Legend

1. Mounting Screw
2. Bezel
3. Light Head
4. Plastic Screw Grommet
5. Mounting Foam Pad

## Figure 4 FR6 Base



### Legend

1. Vent Hole
2. 0.2" Color Coded Sticker Dots To Be Applied To Identify The Corresponding PC Board Assembly LED Color on Each Side.
3. Bottom View - Mounting Foam Removed for Clarity

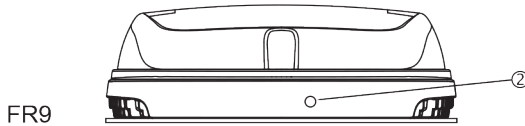
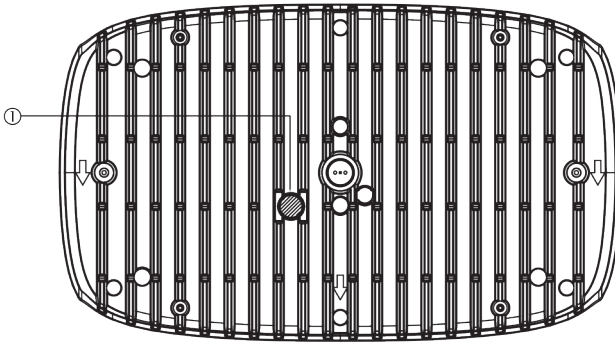
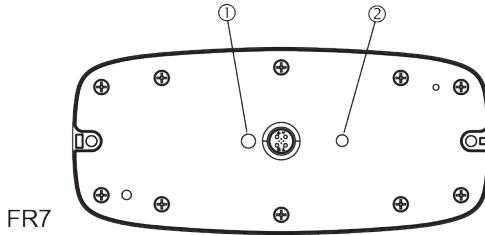
### Légende

1. Trou d'évent
2. Appliquer des étiquettes en forme de points codés couleurs de 0.2 po pour identifier les del de couleur de la Carte de circuit correspondante sur chaque côté.
3. Vue du dessous – joint d'étanchéité de montage enlevé pour plus de clarté

### Leyenda

1. Orificio fe ventilacion
2. Los autoadhesivos en forma de puntos codificados por colores de 0.2 pulg. Se aplicaran para identificar el color del LED correspondiente en el tablero de circuito impreso en cada lado.
3. Vista inferior – empaquetadura de montaje retirada para mayor claridad

## Figure 5 FR7 and FR9 Base



### Legend

1. Vent Hole
2. 0.2-inch Color Coded Sticker Dots to be Applied to Identify the Corresponding PC Board Assembly LED Color on Each Side.
3. Bottom View - Mounting Foam Removed for Clarity

### Légende

1. Trou d'évent
2. Appliquer des étiquettes en forme de points codés couleurs de 0.2 po pour identifier les dél de couleur de la Carte de circuit correspondante sur chaque côté.
3. Vue du dessous – joint d'étanchéité de montage enlevé Pour plus de clarté

### Leyenda

1. Orificio de ventilacion
2. Los autoadhesivos en forma de puntos codificados por colores de 0.2 pulg. se aplicaran para identificar el color del LED correspondiente en el tablero de circuito impreso en cada lado.
3. Vista inferior – empaquetadura de montaje retirada para mayor claridad

### Making Electrical Connections

The FireRay Scene light assembly operates on 12 Vdc. Two 8.7-inch long lead wires are supplied for making electrical connections to the FireRay Scene light assembly. Ensure that all wires are properly connected and insulated appropriately.

**⚠ WARNING**

***EXPLOSION HAZARD: To avoid a battery explosion, always disconnect the negative battery cable first and reconnect it last. Avoid causing a spark when connecting near or to the battery. The gases produced by a battery can cause a battery explosion that could result in vehicle damage and serious injury.***

To make electrical connections:

1. Using 20-gauge (minimum) wire, connect the red (+) lead to the positive power source terminal and the black (-) lead to the negative power source terminal.

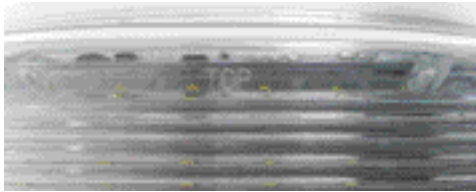
RED wire: To +Vdc

(Suggested Fuse Rating: FR6 at 2A / FR7 at 3A / FR9 at 7A)

BLACK wire: To -Chassis Ground

**IMPORTANT:** Ensure that the “TOP” marking is oriented upward during installation.

**Figure 6 Light Orientation**



## ***Getting Technical Support***

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### **Getting Technical Support**

For technical support, please contact:

Federal Signal Corporation

Phone: 1-800-443-9132

Fax: 1-800-343-9706

Email: [empserviceinfo@fedsig.com](mailto:empserviceinfo@fedsig.com)

## **Getting Repair Service**

The Federal Signal factory provides technical assistance with any problems that cannot be handled locally.

Any units returned to returned to Federal Signal for service, inspection, or repair must be accompanied by a Return Material Authorization (RMA). Obtain an RMA from a Local Distributor or Manufacturer's Representative. Provided a brief explanation of the service requested or the nature of the malfunction.

Address all communications to the following address.

Federal Signal Corporation  
Service Department  
2645 Federal Signal Drive  
University Park IL 60484-3167



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