

25500719 Rev. A0 0421

**Safety Message to Installers of Warning Light Equipment****⚠ WARNING**

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

- To properly install a light assembly, you must have a good understanding of automotive electrical procedures and systems, along with proficiency in the installation and use of safety warning equipment.
- Do not install equipment or route wiring 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, be sure that both sides of the surface are clear of anything that could be damaged.
- To be an effective warning device, this product produces bright light that can be hazardous to your eyesight when viewed at close range. Do not stare directly into this lighting product at close range or permanent damage to your eyesight may occur.
- You should frequently inspect the light system to ensure that it is operating properly and that it is securely attached to the vehicle.
- Refer to the instruction sheets included with related products for additional precautions and information.
- File these instructions in a safe place and refer to them when maintaining or reinstalling the product.

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

**Overview**

The On Scene Sync Module is a complimentary device to a FSJoin™ compatible system that allows similarly configured vehicles to synchronize flash patterns to each other. Devices running the same flash pattern will automatically synchronize with each other. The On Scene Sync Module uses a GPS signal receiver to maintain flash pattern timing between vehicles and a GPS clock signal. Each vehicle needs its own On Scene Sync Module. Outputs or light heads set to the same flash rate automatically synchronize across vehicles. The On Scene Sync Module also includes an ambient light sensor. Program a variety of system features with the Convergence Network Configuration Software (available on the Federal Signal website at [www.fedsig.com/software-downloads](http://www.fedsig.com/software-downloads)). The software also includes diagnostic functionality to assist in installation and troubleshooting. Programming requires an FSJoin compatible controller such as a Pathfinder® Siren/Light Controller or the Convergence Serial Interface Module (Part Number 858303641). Programming does not require disassembling or removing any hardware from the vehicle.

**Unpacking the Kit**

After unpacking the kit, inspect it for damage that may have occurred in transit. If it has been damaged, 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. Ensure that the parts listed in Table 1 on page 2 are included in the package. If you are missing any parts, contact Customer Support at 1-800-264-3578, 7 a.m. to 5 p.m., Monday through Friday (CT).

**Table 1 Product specifications**

Electrical Potential	11-28 V
Current Draw	100 mA
Operating Temperature	-40°F to 149°F (-40°C to 65°C)
Height	0.90 inch (22.86 mm)
Length	3.02 inches (76.70 mm)
Width	2.02 inches (51.30 mm)
Ship Weight	1.0 lb (0.45kg)

### Mounting the On Scene Sync Module

**⚠ 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.

**NOTICE**

**DRILLING PRECAUTIONS:** Before drilling holes, check the area into which you plan to drill to ensure that you do not damage vehicle components. All drilled holes should be deburred, and all sharp edges should be smoothed. All wires going through drilled holes should be protected by a grommet or convolute/split-loom tubing.

The On Scene Sync Module must be mounted inside the vehicle with a clear view of the sky for proper operation. The FS logo must face upward if mounted on the dash or deck, or outward if mounted against a window. The On Scene Sync Module is not weatherproof and must be mounted in a location that is free from excessive heat and moisture. The following are a few suggested mounting locations for the On Scene Sync Module.



Front windshield-passenger side top corner



Front dash-passenger side corner



Front dash-centered near windshield



Rear panel next to window-passenger side

### Wiring the On Scene Sync Module

Plug the CAT5 communication cable from the On Scene Sync Module into any available Convergence Network connection on a FSJoin™ compatible controller. The On Scene Sync Module is powered from the FSJoin compatible Convergence Network cable and does not require any additional power or connections.

Figure 1 Convergence Network Ports



Convergence Network Ports

### Troubleshooting the On Scene Sync Module

#### **⚠ WARNING**

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

This section provides troubleshooting assistance for common problems. If you have any questions left unanswered, call the Federal Signal Service Department at 1-800- 433-9132, 7 a.m. to 5 p.m., Monday through Friday (CT).

**Table 2 Troubleshooting**

<b>Problem</b>	<b>Corrective Action</b>
Flash Patterns don't synchronize	<ul style="list-style-type: none"><li>• Check for proper mounting location with no metallic obstructions.</li><li>• Check that the same pattern is programmed. Patterns must be configured the same for proper synchronization from one vehicle to another.</li><li>• Flash pattern synchronization requires a clear, unobstructed view of the sky. Move vehicle outside to test pattern synchronization. Use diagnostics to check signal.</li><li>• Flash pattern synchronization can take up to 45 seconds from an ignition cycle. Assuming a strong enough signal, lights will automatically synchronize after a signal lock is established.</li></ul>
Light Sensor not changing flash pattern Intensity	<ul style="list-style-type: none"><li>• Check for proper mounting location and opaque obstructions</li><li>• Check controller configuration and diagnostics in Convergence Network Configuration Software</li></ul>

### **Getting Technical Support and Service**

For technical support and service, please contact:

Service Department  
Federal Signal Corporation  
Phone: 1-800-433-9132  
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 product returned to Federal Signal for service, inspection, or repair must be accompanied by a Return Material Authorization (RMA). Obtain a RMA from a local Distributor or Manufacturer's Representative. Provide a brief explanation of the service requested, or the nature of the malfunction.

Address all communications and shipments to the following:

Federal Signal Corporation  
Service Department  
2645 Federal Signal Dr.  
University Park, IL 60484-3167

## **Replacement Parts**

This section contains a partial list of replacement parts. To order replacement parts, call the Federal Signal Service Department at 1-800-433-9132 or 1-708-534-3400, 7 a.m. to 5 p.m., Monday through Friday (Central Time) or contact your nearest distributor.

**Table 3 Replacement Parts**

<b>Qty</b>	<b>Description</b>	<b>Part Number</b>
1	25-foot LGD Cable Assembly	1751357-02
4	1/2-inch #6 Thread Forming Screw	70001369-08
2	Velcro® Loop	8559A147
2	Velcro® Hook	8559A148

## **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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[www.fedsig.com](http://www.fedsig.com)

Customer Support

Police/Fire-EMS: 800-264-3578 • +1 708 534-3400

Work Truck: 800-824-0254 • +1 708 534-3400

Technical Support 800-433-9132 • +1 708 534-3400

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