FEDERAL SIGNAL
Safety and Security Systems

DynaFlare™ Perimeter Light



Installation and Maintenance Instructions

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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. 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 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 Messages

Safety Messages to Installers and Users 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 the lighting system, you must have a good understanding of automotive 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.
- Frequently inspect the light system to ensure that it is operating properly and that it is securely attached to the vehicle.
- When drilling into a vehicle structure, ensure that both sides of the surface are clear of anything that could be damaged.
- Refer to the instructions packed with related products for additional precautions and information.
- File these instructions in a safe place and refer to them when maintaining and/or reinstalling the product.
- Do not stare directly into the lights at a close range, or permanent damage to your eyesight may occur.

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

Overview

The DynaFlare™ is a single-level LED perimeter light with ROC™ (Reliable On-Board Circuity) and Solaris® LED technologies. ROC eliminates approximately 85 percent of potential failure points by incorporating a printed circuit board (PCB) in one assembly to substantially reduce the number of electrical connections. Solaris LED modules use offset, complex reflector surfaces for accurate beam-shaping and the highest optical efficiency. The DynaFlare is available in five-module and six-module versions.

NOTICE

DynaFlare is a potted product. The potting protects the electronics from moisture, dust, chemicals, shock, and vibration. Air bubbles and voids may be present in the potting. These minor imperfections will not affect product compliance.

LED Lights, Colors, and Flash Patterns

The microcontroller inside the perimeter light supplies many operational modes and a library of flash patterns. The light heads contain three different LED colors, eliminating the loss of primary warning colors when steady white lights are active. All modules in a DynaFlare bar have the same LED colors in all light heads.

FSJoin®

FSJoin lights allow flash patterns to synchronize with other FSJoin-compatible devices. You can program patterns and features on an individual light basis with the Convergence Network Configuration Software. Outputs or light heads set to the same flash rate automatically synchronize. You can program a variety of system features with the Convergence Network Configuration Software (available on the Federal Signal website https://www.fedsig.com/resources-page/software-downloads/). Programming requires an FSJoin-compatible controller, such as a Pathfinder® Siren/Light Controller. Programming does not require disassembling or removing any hardware from the vehicle.

Product Specifications

Operating and technical specifications for the DynaFlare™ are listed in this section.

Table 1 Mounting kits contents (77701767)

Qty	Description	Part Number
4	Screw, 10-32, Hex Head, S.S.	7000A346-08
4	Nut, 10-32, Elastic Stop Nut, S.S.	7058061

Table 2 Dimensions

Model	DR6-xxx	DR5-xxx
Length	74.50 in	62.25 in
Width	1.07 in	1.07 in
Depth	2.14 in	2.14 in
Weight	7.13 lb	6.00 lb

Table 3 Electrical and Temperature

Model	DR6-xxx	DR5-xxx
Current Draw (Steady Burn)[1]	10 A max	8 A max
Current Draw (Shutdown)[1,2]	<2 mA	<2 mA
Electrical Potential	12/24 Vdc	
Operating Temperature	-40° to 176°F (-40° to 80°C)	

[1]All specs are rated at 13.8 V at 25°C.

[2]DynaFlare will shut down after 10 seconds of no serial communication.

Mounting the Light

There are various mounting kits available to mount the DynaFlare in the running board area of vehicles. There are also universal mounting kits available. Contact customer service for further details. The DynaFlare can be mounted with the wire exiting either side of the device.

Wiring the Light

NOTICE

INSTALLATION PRECAUTIONS: The warning system and/or two-way radio system may operate improperly if a two-way radio antenna is installed on or within 18 inches of the light. Before permanently installing the light or a two-way radio antenna, test the warning system and two-way radio system. Some installations may require the relocation of the two-way radio antenna to the trunk or fender. DO NOT drill holes in the light or install auxiliary devices on the light, or the warning system may fail.

NOTICE

DRILLING PRECAUTION: DO NOT drill additional holes or install auxiliary devices on the light. Damage to the unit, serious injury, or death may result.

⚠ 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.

⚠ WARNING

SEAT REMOVAL PRECAUTION: If a vehicle seat is temporarily removed, verify with the vehicle manufacturer if the seat needs to be recalibrated for proper airbag deployment.

⚠ WARNING

REVERSE POLARITY/MISWIRING: Reverse polarity may damage the siren amplifier. To avoid damage to the siren/amplifier, ensure that the battery voltage is the same voltage as the rating of the light and that the correct polarity is observed.

The DynaFlare™ is completely wired at the factory and does not require any additional internal wiring. The jacketed field wiring cable (17503225) contains power and ground leads (red and black). The conductors necessary to control the light are terminated in the RJ45 (CAT5 style) connector.

To wire the device:

1. Route the field wiring cable from the light to the power source and Federal Signal siren or light control module.
2. Connect the RJ45 connector to a convergence port on a Federal Signal siren or light control module.
3. Connect the black lead to a known good vehicle ground (-NEG).
4. Connect the red lead through a user-supplied fuse to a positive (+BAT) power source in the vehicle.

Programming the Light

The DynaFlare™ is a serial-controlled perimeter light and requires an FSJoin®-compatible controller, such as a Pathfinder, Pathway™, Serial Interface, or a stand-alone keypad (4-/6-/9-button) for operation and programming. Refer to the respective controller instructions for more wiring and programming information.

All the DynaFlare features (Flash or SignalMaster patterns, steady burn, cutoffs, intensity, etc.) require the use of the Convergence Network Configuration Software.

Cleaning the Light

⚠ WARNING

CRAZING HAZARD: Crazed, cracked, or faded lenses or reflectors reduce the light output and the effectiveness of the lighting system. Tops or reflectors showing this type of aging must be replaced. Failure to follow this warning may result in bodily injury or death to you or others.

⚠ WARNING

CLEANING SOLUTION WARNING: The use of cleaning solutions, such as strong detergents, solvents, and petroleum products, can cause crazing (cracking) of the domes and reflectors. Failure to follow this warning can damage the domes and reflectors and may result in bodily injury or death to you or others.

Periodically cleaning the DynaFlare™ lenses using proper procedures and compatible cleaners will prolong their service life. Use a mild soap and lukewarm water lightly applied on a soft cloth to gently clean the plastic surfaces. To avoid damaging the polycarbonate lenses, do not use heavy pressure or cleaners that are caustic, abrasive, or petroleum-based. To remove fine scratches and haze, use a specialty plastic cleaner/polish and a soft cloth. You can also use a high-quality automotive paste cleaner/wax that is non-abrasive.

Getting Technical Support and Service

For technical support and service, please contact:

Federal Signal Corporation
Service Department
Public Safety Systems
Phone: 1-800-433-9132
Email: empserviceinfo@fedsig.com

Ordering Replacement Parts

To order replacement parts, call Customer Support at 1-800-264-3578, 7 a.m. to 5 p.m., Monday through Friday (CT) or contact your nearest distributor.

Table 4 Replacement Parts

Description	Part Number
End Cap	866004372
Module,DF,CNTRLR,AGW	866004600-CAGW
Module,DF,CNTRLR,BAW	866004600-CBAW
Module,DF,CNTRLR,RAW	866004600-CRAW
Module,DF,CNTRLR,RBA	866004600-CRBA
Module,DF,CNTRLR,RGW	866004600-CRGW
Module,DF,CNTRLR,RWB	866004600-CRWB
Module,DF,CNTRLR,RWB,SMK	866004600-CRWBS
Module,DF,FOLLOW,AGW	866004600-FAGW
Module,DF,FOLLOW,BAW	866004600-FBAW
Module,DF,FOLLOW,RAW	866004600-FRAW
Module,DF,FOLLOW,RBA	866004600-FRBA
Module,DF,FOLLOW,RGW	866004600-FRGW
Module,DF,FOLLOW,RWB	866004600-FRWB
Module,DF,FOLLOW,RWB,SMK	866004600-FRWBS
Extrusion, 1-Module	866004371-1
Extrusion, 2-Module	866004371-2
Extrusion, 3-Module	866004371-3
Extrusion, 4-Module	866004371-4
Extrusion, 5-Module	866004371-5
Extrusion, 6-Module	866004371-6
Screw, Flat HD, M4, Type PT	70001762-10



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