FEDERAL SIGNAL
Safety and Security Systems

Model LP3
StreamLine® Low Profile Strobe Light

2561456 Rev C2 0124

Limited Warranty: This product's limited warranty can be found at www.fedsig.com/SSG-Warranty

SAFETY MESSAGES TO INSTALLERS AND USERS ⚠:
Products should be installed by a licensed electrician and follow all safety instructions. Failure to do so may result in property damage, serious injury, or death.

- To avoid electrical shock hazards, do not connect wires when power is applied.

- To be an effective warning device, this product produces bright light that could be hazardous to eyesight. Do not stare directly at the light. Rapid flashing could induce photosensitive epilepsy.

Unpacking the Device: After unpacking the device, examine it for damage and verify parts. If a part is missing or damaged, do not attempt to install, and contact Federal Signal Customer Support.

Certifications and Ratings

- Type 4X, IP66 enclosure (LP3T is IP55)

- Models LP3P and LP3S are IP69K compliant

- PLC and triac compatible

- CSA Certified

- UL and cUL Listed (excluding LP3T 12-48VDC)

- Indoor/Outdoor Use

Table 1 Specifications

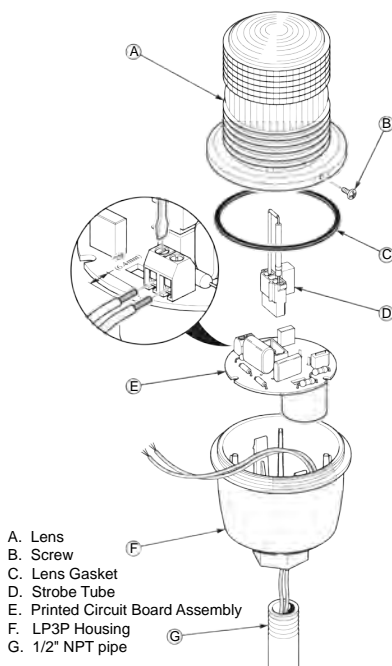| Operating Voltage	12-48 Vdc	120 Vac 50/60 Hz	230-240 Vac 50/60 Hz
Operating Current	0.44 - 0.1 A	0.1 A	0.07 A
Energy Output	2.0 Joules	2.0 Joules	2.0 Joules
Flash Rate	65-95 FPM	65-95 FPM	65-95 FPM
Operating Temperature	-31°F to 150°F (-35°C to 66°C)		

Installing the Device

Pipe Mounting (LP3P)

The Model LP3P strobe light may be installed on 1/2" NPT pipe. If 3/4" NPT pipe is used, a user-supplied reducer and pipe nipple are required.

Figure 1 LP3P Exploded view

A. Lens
B. Screw
C. Lens Gasket
D. Strobe Tube
E. Printed Circuit Board Assembly
F. LP3P Housing
G. 1/2" NPT pipe

To mount the LP3P:

1. Attach the light to the pipe by turning clockwise. Use the tool against the wrench flats on the conduit hub for final tightening.

2. Refer to the Electrical Connections section for information on making electrical connections.
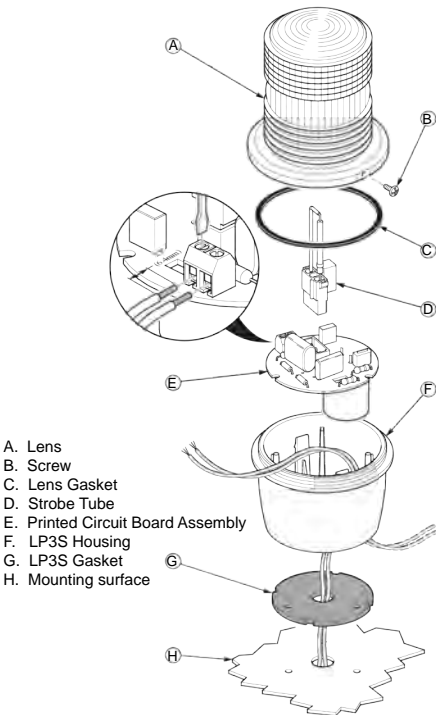
Surface Mounting

Model LP3S and LP3T strobe lights may be surface mounted directly. When surface mounted using Model LP3S, wiring may be run through a hole in the bottom of the housing or through a notch in the bottom recess of the housing.

NOTE: Wiring should NOT be run through the notch in the housing if the unit operates on AC voltage.
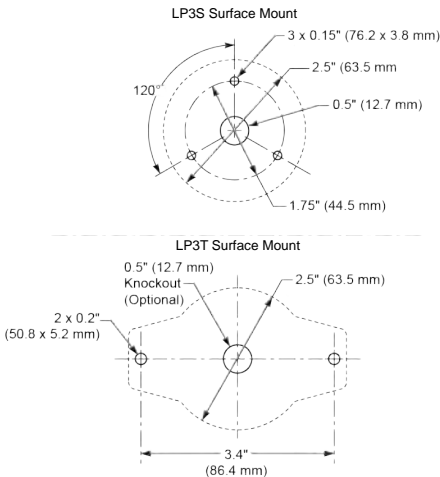
Mounting the LP3S

Figure 2 LP3S Exploded view

A. Lens
B. Screw
C. Lens Gasket
D. Strobe Tube
E. Printed Circuit Board Assembly
F. LP3S Housing
G. LP3S Gasket
H. Mounting surface

To mount the LP3S:

1. Remove the lens from the housing by turning it counterclockwise.

2. Remove the printed circuit board assembly by pressing the two snap tabs inside the housing and lifting the board assembly upward.

3. Using the rubber gasket as a template, or the dimensions shown in Figure 3, mark the three mounting holes and the center wiring hole. Drill or punch out the holes as necessary.
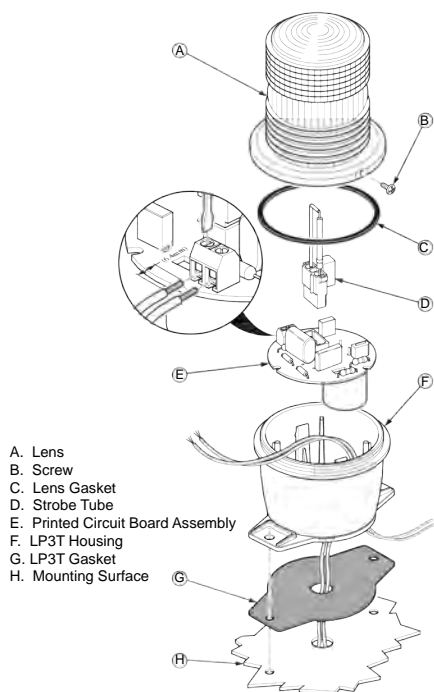
Figure 3 Dimensions

LP3S Surface Mount

LP3T Surface Mount

4. If wiring is to be run through the notch in the bottom recess of housing, remove a 0.28" (7.1mm) diameter knockout in the bottom of the housing and remove the tab from the rubber gasket.

    Feed the supply wires (14 to 18 AWG only) through the 0.28" (7.1mm) diameter knockout and leave enough wire inside the housing to make connections to the terminal block located on the top side of the printed circuit board assembly.

5. Locate the thick rubber gasket on the mounting surface and set the housing on top of the gasket. Secure it to the mounting surface using user-supplied #6 (3.5mm) screws.

6. Refer to the Electrical Connections section for information on making electrical connections.

Mounting the LP3T

Figure 4 LP3T Exploded view

A. Lens
B. Screw
C. Lens Gasket
D. Strobe Tube
E. Printed Circuit Board Assembly
F. LP3T Housing
G. LP3T Gasket
H. Mounting Surface

To mount the LP3T:

1. Using the gasket as a template, or the dimensions shown in Figure 3, mark the two mounting holes and center wiring hole (if wiring is to enter through the bottom of the unit). Drill or punch out the holes as necessary.

2. Locate the rubber gasket on the mounting surface and set the housing on top of the gasket. Secure it to the mounting surface using user-supplied # 10 (5 mm) screws.

3. Refer to the Electrical Connections section for information on making electrical connections.

Electrical Connections

The Model LP3 comes assembled from the factory. Two 9" long lead wires are supplied on the 12-48 volt DC model of the LP3T. All other models are supplied with a two-position terminal block for making wiring connections.

Terminal Block Wiring

If the strobe light was not disassembled previously for mounting, perform the following steps:

1. Remove the lens from the housing by turning it counterclockwise.

2. Remove the printed circuit board assembly by pressing the two snap tabs inside the housing and lifting the board assembly upward.

3. If supply wires were not previously drawn into the housing, feed the supply wires (14 to 18 AWG only) through the large hole in the bottom of the housing.

4. Strip a maximum of 0.25" (6.4mm) of wire insulation from the ends of the power leads. Connect the wires to the terminal block by inserting the stripped ends of the wire into the connector as far as possible and tightening the clamping screw.

   NOTE: Be sure to observe polarity on the 12-48 Vdc printed circuit board assembly. The terminals are designated by a "+" and "-" on the terminal block for the positive and negative supply leads, respectively. AC connections are not polarized.

   The maximum tightening torque is 5 in-lb (.056 N-m) for field wiring connections on the terminal block. Make sure the power supply lead insulation is flush with the connector. If stranded wire is used, ensure that there are no loose strands outside the connector that could touch the adjacent lead to cause a short circuit.

5. To reassemble, snap the printed circuit board assembly into the housing, making sure the board rests on its mounting platforms. Do not pinch the supply wires when inserting the board.

6. Thread the lens onto the housing by turning clockwise until the lens is fully seated.

7. Install the supplied locking screw on the lens to secure it.

8. Energize the supply circuit and test the strobe light for proper operation.

12-48VDC LP3T Lead Wiring

1. Connect the red (+) lead to the positive power source terminal and black (-) lead to the negative power source terminal.

2. Energize the supply circuit and test the strobe light for proper operation.

Strobe Tube Replacement

After extended operation, occasionally check for flash tube degradation. Should the flash tube misfire, have a noticeable decrease in light output, glow continuously, or darken, replacement is necessary.

⚠ WARNING

SHOCK HAZARD: High voltages are present inside the light assembly. Wait at least 5 minutes after shutting off the power before servicing this unit.

To replace the strobe tube:

1. Disconnect power from the supply circuit and wait five minutes before opening the unit to allow all capacitors to fully discharge.

2. Loosen the locking screw on the lens and remove the lens from the housing by turning counterclockwise.

3. Carefully remove the old strobe tube by grasping the connector and lifting upward.

4. See the replacement parts table for a complete list of Federal Signal lamps that are available. Install the new strobe tube by fully seating it into the receptacle on the printed circuit board.

5. Attach the lens to the housing by turning clockwise until it is fully seated.

6. Tighten the locking screw on the lens to secure it.

Maintenance and Service

Technical Assistance: Contact our Technical Support Team at +1 708-587-3587 or signalsupport@fedsig.com.

Repair Service: A return authorization is required. Contact your Authorized Distributor or Federal Signal Customer Support. Defective products under warranty will be repaired or replaced at Federal Signal's discretion.

Product Returns: Returns require authorization from Federal Signal. Contact your Authorized Distributor for more information on our return policy or to request a return.

Replacement Parts

Contact the factory for spare parts availability and part numbers. Typical spare parts are listed below. Due to certification, certain component parts are not available for field replacement. Units with this type of damage must be either replaced entirely or returned to Federal Signal for service.

Table 2 Replacement parts

Description	Part No.
Strobe tube	K149130
Lens, Amber	K8589063
Lens, Blue	K8589063-01
Lens, Clear	K8589063-02
Lens, Green	K8589063-03
Lens, Red	K8589063-04
Gaskets, LP3S, LP3T, and Lens	K858900353
Printed circuit board assembly, 120 Vac	K2001317
Printed circuit board assembly, 240 Vac	K2001317-01
Printed circuit board assembly, 12-48 Vdc	K2001316

Certification Information

UL, cUL, and CSA

⚠ WARNING

Not to be used as a visual public mode alarm notification appliance.

CE

⚠ WARNING

Do not use as a Visual Fire Alarm Device.

When installing this product on machines as an Indicator or Flashing Light, please note the following:

• Indicator lights shall be selected and installed in such a manner as to be visible from the normal position of the operator.

• Circuits used for visual devices that are used to warn persons of an impending hazardous event shall be fitted with facilities to check the operability of these devices.

• For further distinction or information, and especially to give additional emphasis, flashing lights can be provided to attract attention, request immediate action, indicate a discrepancy between the machine state, and indicate a change in the machine process.

- It is recommended that higher flashing frequencies be used for higher priority information. See the Specifications section for flash rate.

- When flashing lights are used to provide higher priority information, additional acoustic warnings should be considered.

- Visual indicators shall be clearly and durably marked regarding their functions, either on or adjacent to the device.

- Indicator lights should be color-coded with respect to the condition (status) of the machine according to Table 2.

Table 3 Color Coding

Color	Meaning	Explanation	Action by Operator
Red	Emergency	Hazardous condition	Immediate action to deal with a hazardous condition (e.g., switching off the machine supply, being alert to the hazardous condition, and steering clear of the machine).
Yellow	Abnormal	Abnormal condition impending critical condition	Monitoring and/or intervention (e.g., by reestablishing the intended function).
Blue	Mandatory	Indication of a condition that requires operator action	Mandatory action
Green	Normal	Normal condition	Optional
White	Neutral	Other conditions. May be used when doubt exists about the application of other colors.	Monitoring

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