

25500425A REV. A0 0917

## Safety Message to Installers of Federal Signal Warning Light Systems

### **▲ 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. In addition, 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.
- Frequently inspect the light system to ensure that it is operating properly and that it is securely attached to the vehicle.
- Always refer to the vehicle service manuals when performing equipment installations on a vehicle.
- When drilling into a vehicle structure, be sure that both sides of the surface are clear of anything that could be damaged.
- Locate the light system controls so the VEHICLE and CONTROLS can be operated safely under all driving conditions.
- If a vehicle seat is temporarily removed, verify with the vehicle manufacturer if the seat needs to be recalibrated for proper 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.
- This product contains high intensity LED devices. To prevent permanent eye damage, DO NOT stare into the light beam at close range.
- For additional precautions and information, refer to the instructions packed with related products.
- 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.

## Preparing the Mounting Surface

### **NOTICE**

***DRILLING PRECAUTIONS — When drilling holes, check the area into which you are drilling to be sure you do not damage components while drilling. All drilled holes should be deburred 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.***

## Installing the Light

**NOTE:** 18 AWG (minimum) wire and a 3 A fuse for each +12 Vdc connection is required.

1. See Figure 1 on page 4. Position the light on the mounting surface. Ensure that the light is level side to side.
2. Scribe the two mounting hole locations and a wiring routing hole.
3. Drill the two mounting holes using a drill bit for a #6 sheet metal screw
4. Drill a wire routing hole using a 1/2 inch drill bit.

## Wiring the Light

Depending on the model, the COMSTL light has 2 to 5 wires. To wire the light, refer to the instructions below for your model.

1. Feed the wires through the wire routing hole
2. Using 18 AWG (minimum) wire and fuse all +Vdc wires at 3 A (user supplied), make the following connections:

### **COMSTLF Warning Lights:**

Red Wire: +12 Vdc

Brown Wire: +12 Vdc (Dim Mode)

Black Wire: Chassis Ground

### **COMSTLS6C-W and COMSTLS18C-W:**

Red Wire: +12 Vdc

Black Wire: Chassis Ground

### **COMSTL-BTT:**

Red Wire: 12 Vdc (Brake)

White Wire: +12 Vdc (Tail)

Black Wire: Chassis Ground

### **COMSTL-TANK:**

Red Wire: Red LEDs +12 Vdc

Blue Wire: Blue LEDs +12 Vdc

Green Wire: Green LEDs +12 Vdc

Yellow Wire: Amber LEDs +12 Vdc

Black Wire: Chassis Ground

## Configuring the Warning Light and Brake/Turn/Tail Light Operation

### **⚠ WARNING**

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

Follow the instructions below for your configuration.

- To change from **SYNCH** to **ALT SYNC** or **ALT SYNC** to **SYNC**  
Touch the green wire to + Vdc for more than 1 second and less than 5 seconds. The LEDs will turn off and then on in **SYNC** or **ALT SYNC**. If the LEDs are bright, they are in **SYNC** mode. If the LEDs are dim, they are in **ALT SYNC** mode. There is no **SYNC/ALT SYNC** mode in a brake/turn/tail light.
- To reset the warning light to the **SYNC** default and Pattern 1:  
Hold the green wire to +12 Vdc for longer than 5 seconds. When the LEDs turn off and then on, they are reset to the default.
- For **DIM** mode, apply +12 Vdc to the brown wire. Removing the brown wire from +12 Vdc restores the light to full power.
- For tail light operation, apply +12 Vdc to the white wire.
- For brake/turn operation, apply +12 Vdc to the red wire.

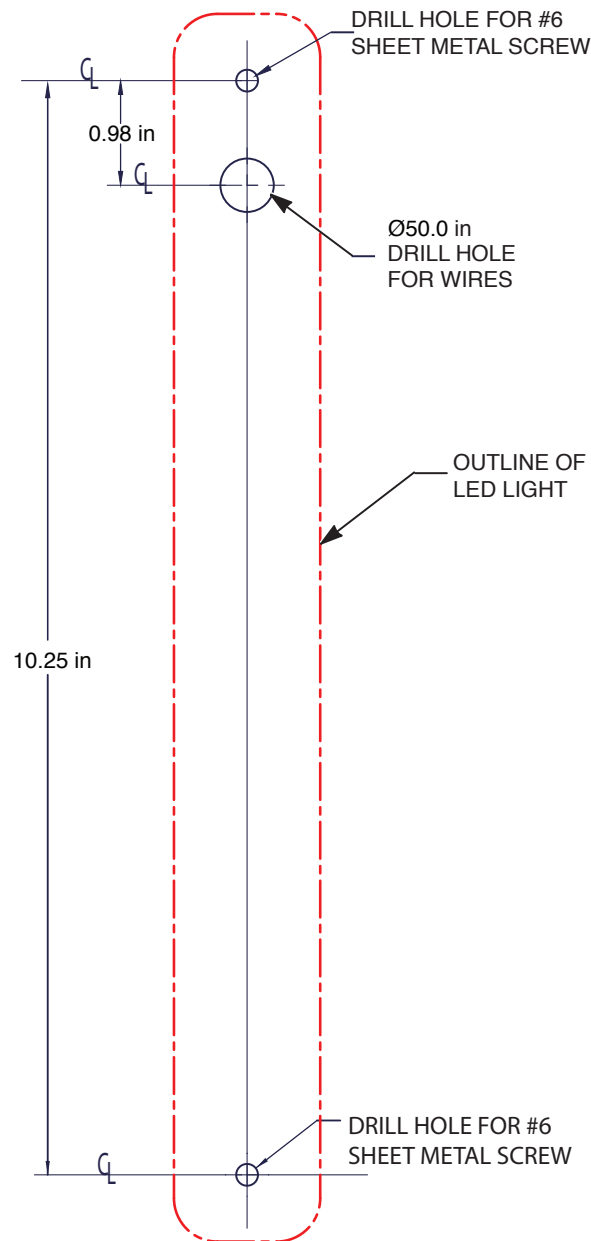
## Selecting a Flash Pattern for the Warning Light

To change patterns on warning light, briefly hold the green wire to +Vdc for less than 1 second. The LEDs are off during pattern selection.

### **Flash Patterns:**

1. Double Flash 150 (Default Flash Pattern 1)
2. FedPulse 75
3. Double Flash 75
4. Quad Flash 75
5. Single Flash 375
6. Single Flash 150
7. Single Flash 75
8. VariFlash
9. Random
10. 3 Flashes Steady
11. Steady Brake

**Figure 1** Mounting holes and dimensions



### Getting Technical Support and Service

The Federal Signal factory provides technical assistance with any problems that cannot be handled locally. Any units 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. Please provide a brief explanation of the service requested, or the nature of the malfunction.

For technical support and service, visit:  
<https://www.fedsig.com/technical-support>  
<https://www.fedsig.com/service-centers>