

25500397 A3 1220

## Safety Message to Installers of Warning Light Equipment

### ⚠ WARNING

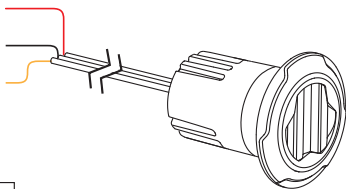
To properly install this light, you must have a good understanding of automotive electrical procedures and systems, along with proficiency in the installation and use of safety warning equipment. Before installing this device, refer to its unabridged instructions for this device, which are available on line at [www.fedsig.com](http://www.fedsig.com). Print the online document and provide copies to the end users of this product and to the personnel who will service it.

## Installing the MPSW9

- Black: To Chassis Ground
- Red: +Vdc activates Memory1 in Color1 (fuse at 1 A)
- Yellow: Synchronization and flash pattern

Connect the yellow wires of multiple units together for synchronization. (All heads must be set up correctly and use the same pattern upon power-up.)

Figure 1 Exploded view



### ⚠ WARNING

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

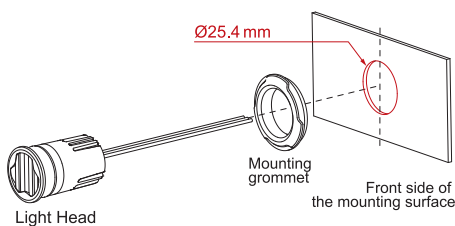
## Flush Mounting

**NOTE:** The suggested mounting position is with the LEDs facing downward.

To install the flush mount:

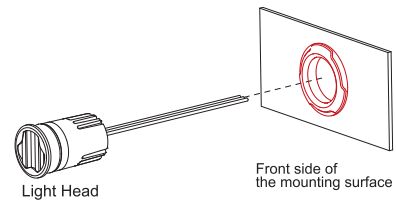
1. Select a mounting location and drill a 1-inch (2.54 cm) cutout.

Figure 2 Drill a cutout



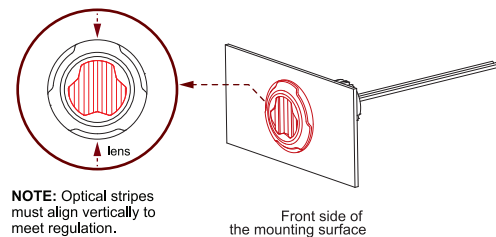
2. From the front, install the appropriate mounting grommet\* onto the cutout and insert the light head.

Figure 3 Mounting Grommet



3. Ensure that the optical stripes are aligned vertically.

Figure 4 Optical stripes



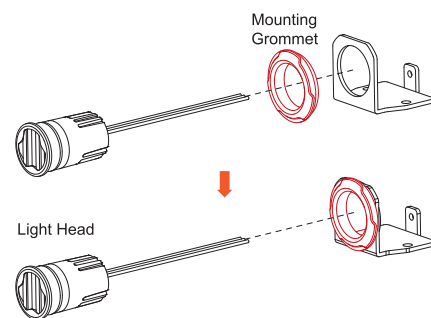
4. If necessary, apply silicone on the reverse side to prevent the unit from rotating.

## Bracket Mounting (416301 sold separately)

To install the bracket mount:

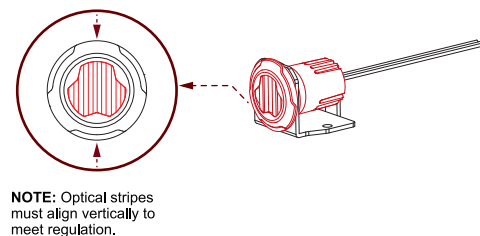
1. From the front, install the mounting grommet onto the bracket and insert the light head.

Figure 5 Mounting grommet



2. Ensure that the optical stripes are aligned vertically.

Figure 6 Optical stripes

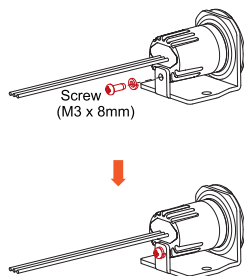


\*Two mounting grommets are included for various material thicknesses.

## Installing the MicroPulse® MPS620UX

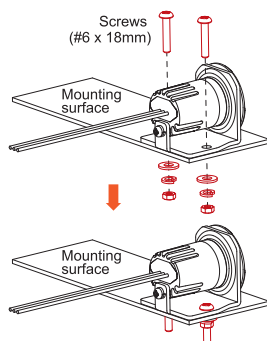
- Secure the light head onto the bracket with a screw.

**Figure 7 Secure the light head**



- Secure the bracket to the desired mounting surface with screws.

**Figure 8 Secure the bracket**



### Synchronizing Multiple Units

Each unit can be set to one of the three different groups: CONTROLLER (default), FOLLOWER-SYNC, and FOLLOWER-ALT. If synchronized flashing is not required, select the desired flash pattern.

For synchronized flashing, one unit should be set to CONTROLLER mode, while all other units must be set to FOLLOWER-SYNC or FOLLOWER-ALT.

To synchronize the units:

- To enter group selection, apply +Vdc to the red wires simultaneously, and then apply +Vdc to the yellow wires.
- Once in group selection, the unit steady burns in low power and pulses in high power:
  - Single pulse = CONTROLLER
  - Double pulse = FOLLOWER-SYNC
  - Triple pulse = FOLLOWER-ALT
- Remove the yellow wire from +Vdc and then momentarily apply to +Vdc to change the mode:
  - FOLLOWER-SYNC units flash simultaneously with the MASTER unit.

- FOLLOWER-ALT units flash alternately with the MASTER unit and all other FOLLOWER-SYNC units.

**NOTE:** If no CONTROLLER unit is present, all FOLLOWER units flash initially and steady burn for 2 seconds to detect any synchronization signal. You may also use this to easily pick out CONTROLLER vs. FOLLOWER units.

**Table 1 Flash patterns**

Number	Pattern
1	Triple 92.3 (all)
2	Triple 90 (all)
3	Single 122 (all)
4	Single 75 (all)
5	Single 90 (1II)
6	Single 113 (all)
7	Single 73 (all)
8	Double 73 (all)
9	Triple 73 (all)
10	Quad 73 (all)
11	Quint 73 (all)
12	Mega (all)
13	Ultra (all)
14	Single-Quad (all)
15	Single H/L (all)
16	Steady All (all)
17	Random -

### Getting Technical Support

For technical support, please contact:

Federal Signal Corporation  
 Service Department  
 Phone: 1-800-433-9132  
 Email: 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