

Installing the MicroPulse® MPSW9 Series

25500372 A1 1120

Safety Message to Installers of Warning Light Equipment

A 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. 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

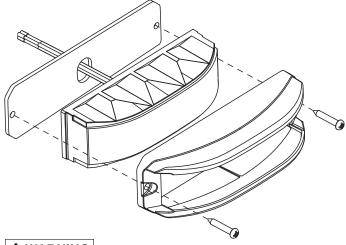
· Black: To Chassis Ground

use the same pattern upon power-up.)

- Red: +Vdc activates Memory1 in Color1 (fuse at 1 A)
- White: +Vdc Activates Memory2 in Color2 (fuse at 1 A)
 Connect the yellow wires of multiple units together for synchronization. (All heads must be set up correctly and

NOTE: The white wire has a higher priority and overrides the red wire when activated.

Figure 1 Exploded view



A 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.

Installing the Light

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

To install the light:

- **1.** Put the light head on to the selected surface and mark the two screw mounting positions.
- 2. Drill a wire access cutout (suggested diameter of 1/2 inch) on the selected mounting surface between the two screw marks.
- 3. Install the foam pad to the light head.
- **4.** Lead the wires through the cutout and make all necessary connections.
- **5.** Tighten the two screws and ensure that the light head is fixed.

Making the Memory Selection

Each unit comes with two memories (Memory1 and Memory2).

To configure:

- **1.** Apply +Vdc to the red or white wire to activate Memory1 or Memory2.
- **2.** For a flash pattern, momentarily apply +Vdc to the yellow wire once for the next pattern, or apply it quickly three times to reset.

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 133 (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	Steady Half (California)
18	Random -

Selecting the Color Mode

Each Memory comes with three color modes.

To configure:

- **1.** Apply +Vdc to the red or white wire to activate Memory1 or Memory2.
- **2.** Apply +Vdc to the yellow wire for 3 seconds to enter Color Mode selection. Once in color mode selection, the unit flashes in low power.
- **3.** Momentarily apply +Vdc to the yellow wire once to change to color mode.
 - Color mode 1 = Color 1
 - Color mode 2 = Color 2
 - Color mode 3 = Color 1 alternate color 2
- **4.** Apply +Vdc to the yellow wire for more than 3 seconds or disconnect all power to exit color mode selection.

Synchronizing Multiple Units

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

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

To synchronize the units:

- **1.** Enter group selection:
 - Apply +Vdc to the red, white, and yellow wires simultaneously, or
 - Apply +Vdc to the red and white wires, and then apply +Vdc to the yellow wire for more than 3 seconds.
- **2.** 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
- **3.** Remove +Vdc from the yellow wire and then momentarily apply it to +Vdc to change the group.

- FOLLOWER-SYNC units flash simultaneously with the CONTROLLER unit.
- FOLLOWER-ALT units flash alternately with the CONTROLLER and other FOLLOWER-SYNC units.
- **4.** To exit group selection, apply +Vdc to the yellow wire for more than 3 seconds or disconnect all power.

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

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

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.