⚠ **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 light, refer to the unabridged instructions for it (doc. no. 25500119), which are available online at www.fedsig.com. Print the online document and provide copies to the end users of this light, and to the personnel who will service this light.

CONTENTS

Corner LED System
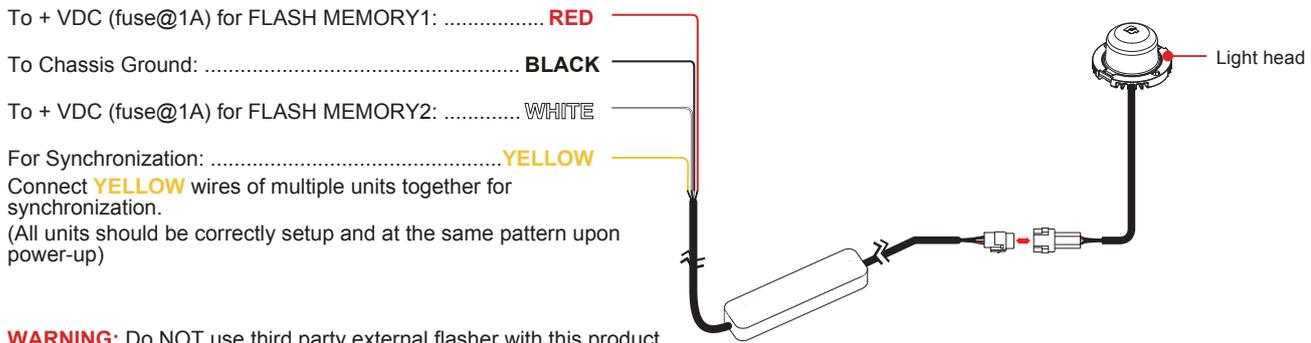
| LIGHT HEAD | FLASHER & CABLE | GASKET & SCREWS | BEZEL & FOAM | 3M™ VHB™ Mounts* |

NOTE: * Sold separately.

To + VDC (fuse@1A) for FLASH MEMORY1: .... **RED**

To Chassis Ground: .... **BLACK**

To + VDC (fuse@1A) for FLASH MEMORY2: .... WHITE

For Synchronization: ....**YELLOW**
Connect **YELLOW** wires of multiple units together for synchronization.
(All units should be correctly setup and at the same pattern upon power-up)

Light head

WARNING: Do NOT use third party external flasher with this product.

OPERATIONS

For Color Mode:
Each MEMORY may flash in 1 of the 4 different Color Modes -
   ❶COLOR 1 (MEMORY1 default), ❷COLOR 2 (MEMORY2 default), ❸COLOR 1 Alternates with 2, ❹COLOR 1 and 2.

To set COLOR MODE:
1. Select the desired setting memory then apply +VDC to **RED** or WHITE wires (depend on the desired setting memory) then apply +VDC to **YELLOW** wire for over 3 seconds.
2. Once in *COLOR SELECTION*, the unit will pulse in low-power in:
   ❶COLOR 1, ❷COLOR 2, ❸COLOR 1 Alternates with 2, or ❹COLOR 1 and 2.
3. Remove **YELLOW** wire from +VDC then momentarily apply to +VDC to change COLOR MODE:
   ❶COLOR 1 >> ❷COLOR 2 >> ❸COLOR 1 Alternates with 2 >> ❹COLOR 1 and 2.
4. Exit *COLOR SELECTION* by:
   (a) Applying +VDC to **YELLOW** wire for over 3 seconds or, (b) Disconnecting all power.

For Multi-unit Synchronization:
Each unit may be set to 1 of the 3 diffient Group -
   ❶MASTER (default), ❷SLAVE-SYNC, and ❸SLAVE-ALT.
If synchronized flashing is not required, simply select the desired flash pattern.

For synchronized flashing, one unit should be set to ❶MASTER group, while all other units **must** set to ❷SLAVE-SYNC or ❸SLAVE-ALT group:
1. Enter *GROUP SELECTION* by apply +VDC to **RED** and WHITE wires simultaneously then apply +VDC to **YELLOW** wire for over 3 seconds.
2. Once in *GROUP SELECTION*, the unit will steady-burn in low-power and pulse in high-power:
   • Single pulse = ❶MASTER (default)   • Double pulse = ❷SLAVE-SYNC
   • Triple pulse = ❸SLAVE-ALT
3. Remove **YELLOW** wire from +VDC then momentarily apply to +VDC to change MODE:
   • ❷SLAVE-SYNC units flash simultaneously with the ❶MASTER unit.
   • ❸SLAVE-ALT units flash alternately with the ❶MASTER unit and all other ❷SLAVE-SYNC units.
4. Exit *GROUP SELECTION* by:
   (a) Applying +VDC to **YELLOW** wire for over 3 seconds or, (b) Disconnecting all power.

NOTE: If no MASTER unit were present, all SLAVE units will flash initially, and steady burn for 2 seconds to detect any synchronization signal. The installer/user may also use this to easily pick out SLAVE vs. MASTER units.

For Flash Pattern, momentarily apply +VDC to **YELLOW** wire
 • once for next pattern   • quick three times to reset

NOTE: MEMORY1 Flash Pattern default at FP#1.
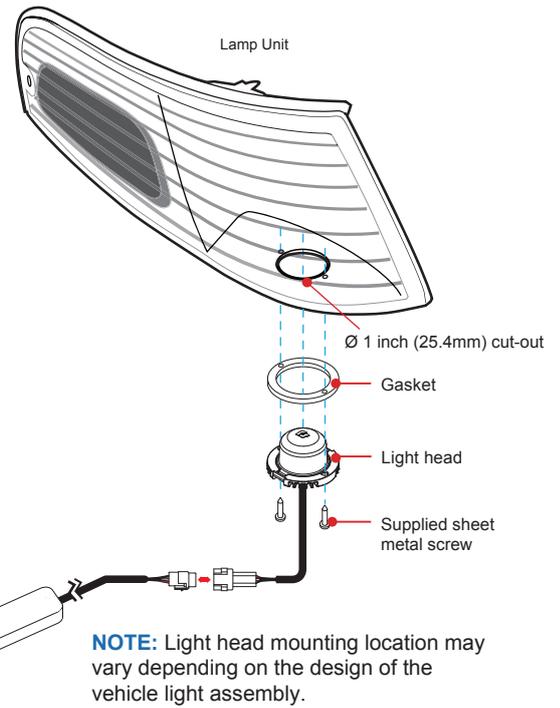   MEMORY2 Flash Pattern default at FP#10.

Flash Patterns			
1	Single 122	11	Single 73
2	Single 90	12	Mega
3	Single 113	13	Double 73
4	Triple 92.3	14	Quad 73
5	Triple 122	15	Quint 73
6	Triple 73	16	Ultra 73
7	Double 122	17	Single-Quad
8	Quad 122	18	Single H/L
9	Random	19	Single-Triple-Quint
10	Steady		

NOTE: The unit may not be factory set at FP#1.

IN-LAMP INSTALLATION (Screw Mount w/ Gasket)

1. Remove the Corner/Head/Tail lamp assembly from the vehicle.
2. Select a location to mount the LED light head and drill a 1-inch (diameter) cut-out onto the lamp assembly.
3. Insert the LED light head through the gasket and the cut-out then secure with supplied screws.
4. Apply silicone around the cut-out (user-supplied) for better sealing and fit.

WARNING: Do NOT cover LED heat sink with silicone. This may cause LED overheating and void its warranty through misuse of product.
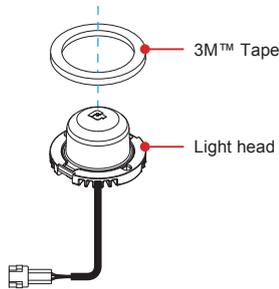
Lamp Unit

Ø 1 inch (25.4mm) cut-out

Gasket

Light head

Supplied sheet metal screw

IN-LAMP INSTALLATION (Self-Adhesive)

1. Remove the Corner/Head/Tail lamp assembly from the vehicle.
2. Select a location to mount the LED light head and drill an 1-inch (diameter) cut-out onto the lamp assembly.
3. Clean and dry the surface around the cut-out with 50:50 mix of isopropyl alcohol and water.
4. Apply the 3M™ VHB™ Mount to LED light head and press it firmly for 30 seconds.
5. Remove the tape liner from the tape on the LED light head.
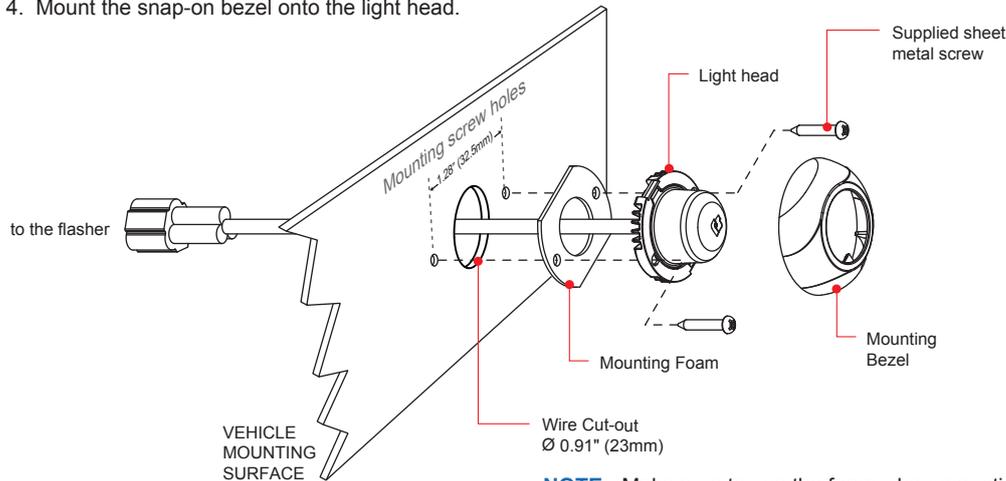6. Insert the LED light head into the cut-out and press it firmly for 30 seconds.

NOTE: 1. 3M™ VHB™ Mount is sold separately.
2. Full adhesion and bonding will be achieved after 72 hours at room temperature.

3M™ Tape

Light head

NOTE: Light head mounting location may vary depending on the design of the vehicle light assembly.

BEZEL MOUNT INSTALLATION (for kits with Bezel option only)

1. Select a location to mount the LED light head and use the mounting foam to mark.
2. Drill the mounting cut-out and screw holes.
3. Feed the cable through the mounting foam and cut-out then secure with supplied screws.
4. Mount the snap-on bezel onto the light head.

Supplied sheet metal screw

Light head

Mounting screw holes

1.28" (32.5mm)

to the flasher

Mounting Foam

Wire Cut-out Ø 0.91" (23mm)

VEHICLE MOUNTING SURFACE

Mounting Bezel

Top View
416900Z / 416910Z Optic

NOTE: For best performance, be sure to keep the horizontal lines of optics parallel to the upper and bottom edges of Federal Signal's logo before installation.

NOTE: Make sure to use the foam when mounting light head.

BEZEL REMOVAL

❶ Apply pressure on both sides marked with arrows shown in the illustration. Please note the bezel surface pattern to press the correct area.

❷ Lift the bezel to remove.

NOTE: Avoid multiple mount and removal of the bezel to prevent loose-fit.

❷ Lift

Press ❶

Press ❶

Press

Press

Top View