

TOMAR

Instruction Manual



975L-4809 Scorpion Half-Bar

IS0622A-03
09.04.2018

TOMAR Electronics, Inc.
2100 W. Obispo Ave.
Gilbert, AZ 85233 USA

800.338.3133 ph
800.688.6627 fax

www.tomar.com



975L-4809 Wiring

RED	+12Vdc
BLACK	Ground
ORANGE	Warning Mode 1, with optional CA Steady behavior
BLUE	Warning Mode 2, with optional CA Steady behavior
ORANGE & BLUE	Warning Mode 3, with optional CA Steady behavior
RED/WHITE	Right Arrow Mode
BROWN/WHITE	Left Arrow Mode
RED/WHITE & BROWN/WHITE	Center Out Arrow Mode
BROWN	Scene Lights (if equipped)
GREEN	Intensity Control

Programming Instructions

Entering Warning Programming Mode:

Three unique warning patterns can be selected using the ORANGE and BLUE mode selection wires.

ORANGE WIRE = Warning Mode 1

BLUE WIRE = Warning Mode 2

ORANGE & BLUE WIRES = Warning Mode 3

To activate the Warning programming mode, connect the BLACK wire to Ground then simultaneously attach the GREEN wire, the RED wire and the mode selection wire(s) for the mode you want to program to +12Vdc.

Changing Warning Patterns and Flash Rates:

To change the Warning pattern, enter the Warning programming mode as described above, including selecting a mode. Tap the RED/WHITE wire to +12Vdc to advance the flash pattern. See the list of available Warning flash patterns below.

A unique flash rate can be assigned to each Warning mode. To change the flash rate, enter the Warning programming mode as described above, including selecting a mode. Move the GREEN wire from +12Vdc to Ground. Tap the BROWN/WHITE wire to +12Vdc to advance the flash rate. See the list of available flash rates below.

Changing CA Steady Behavior for Warning Modes:

To change the CA Steady behavior for a Warning Mode, enter the Warning programming mode as described above. Tap the BROWN wire to +12Vdc to Toggle the CA Steady behavior On (or Off). **NOTE: The position of the lamp for the CA Steady behavior is fixed, and cannot be changed via Programming.**

Entering Traffic Direction Programming Mode:

To activate the Traffic Direction programming mode connect the BLACK wire to Ground then simultaneously attach the GREEN wire, RED/WHITE wire and the RED wire to +12Vdc.

Changing Traffic Direction Patterns and Flash Rates:

To change the Traffic Direction pattern, enter the Traffic Direction programming mode as described above. Tap the BROWN wire to +12Vdc to advance the flash pattern. See the list of available Traffic Direction patterns below.

A unique flash rate can be assigned to the Traffic Direction mode. To change the flash rate, enter the Traffic Direction programming mode as described above. Move the GREEN wire from +12Vdc to Ground. Tap the BROWN wire to +12Vdc to advance the flash rate. See the list of available flash rates below.

Flash Rates, Warning Modes:

- | | | |
|--------------------|---------|--|
| 1) SINGLE FLASH | 312 FPM | |
| 2) DOUBLE FLASH | 117 FPM | ** |
| 3) NEOBE FLASH | 77 FPM | ** |
| 4) SINGLE 75 FLASH | 75 FPM | ** |
| 5) SCROLL FLASH A | | switches between the Single, Double and Neobe flash rates, every 4 seconds |
| 6) SCROLL FLASH B | ** | switches between the Single 75, Double and Neobe flash rates, every 4 seconds. |

Flash Patterns, Warning Modes - Models 4809-01, 4809-C01, 4809-C01P

- | | | |
|---|----|---|
| 1) OFF | | |
| 2) COMBINATION A (<i>Patterns 6,5,7,5 repeat</i>) | | ORANGE Wire (<i>Warning Mode 1</i>) DEFAULT, SCROLL FLASH A |
| 3) COMBINATION B (<i>Patterns 6,5,4,5 repeat</i>) | ** | |
| 4) INBOARD OUTBOARD | ** | BLUE Wire (<i>Warning Mode 2</i>) DEFAULT, SCROLL FLASH A |
| 5) LEFT RIGHT | ** | ORANGE & BLUE Wires (<i>Warning Mode 3</i>) DEFAULT, SCROLL FLASH A |
| 6) ALTERNATE | ** | |
| 7) RANDOM | | |
| 8) SINGLE OUTBOARD | ** | |
| 9) DOUBLE OUTBOARD | ** | |
| 10) SINGLE INBOARD | ** | |
| 11) DOUBLE INBOARD | ** | |
| 12) TRIPLE INBOARD | ** | |
| 13) SWEEP | | |

** = CA Title 13 compliant

NOTE: If the CA Steady behavior is ON for a Warning Mode, a lamp will turn on steady when the Warning Mode is activated.

Flash Patterns, Warning Modes - Models 4809-02, 4809-02P

1) OFF		
2) COMBINATION A (<i>Patterns 8,7,9,7 repeat</i>)	WITH SL's	ORANGE Wire (Warning Mode 1) DEFAULT, SCROLL FLASH A
3) COMBINATION B (<i>Patterns 17,16,18,16 repeat</i>)	WITHOUT SL's	BLUE Wire (Warning Mode 2) DEFAULT, SCROLL FLASH A
4) COMBINATION C (<i>Patterns 8,7,6,7 repeat</i>)	WITH SL's	**
5) COMBINATION D (<i>Patterns 17,16,15,16 repeat</i>)	WITHOUT SL's	**
6) INBOARD OUTBOARD	WITH SL's	**
7) LEFT RIGHT	WITH SL's	** ORANGE & BLUE Wires (Warning Mode 3) DEFAULT, SCROLL FLASH A
8) ALTERNATE	WITH SL's	**
9) RANDOM	WITH SL's	
10) SINGLE OUTBOARD	WITHOUT SL's	**
11) DOUBLE OUTBOARD	WITHOUT SL's	**
12) SINGLE INBOARD	WITHOUT SL's	**
13) DOUBLE INBOARD	WITHOUT SL's	**
14) SWEEP	WITH SL's	
15) INBOARD OUTBOARD	WITHOUT SL's	**
16) LEFT RIGHT	WITHOUT SL's	**
17) ALTERNATE	WITHOUT SL's	**
18) RANDOM	WITHOUT SL's	
19) SWEEP	WITHOUT SL's	

Flash Patterns, Warning Modes - Models 4809-C02, 4809-C02P

1) OFF		
2) COMBINATION A (<i>Patterns 8,7,9,7 repeat</i>)	WITH SL's	ORANGE Wire (Warning Mode 1) DEFAULT, SCROLL FLASH A
3) COMBINATION B (<i>Patterns 18,17,19,17 repeat</i>)	WITHOUT SL's	BLUE Wire (Warning Mode 2) DEFAULT, SCROLL FLASH A
4) COMBINATION C (<i>Patterns 8,7,6,7 repeat</i>)	WITH SL's	**
5) COMBINATION D (<i>Patterns 18,17,16,17 repeat</i>)	WITHOUT SL's	**
6) INBOARD OUTBOARD	WITH SL's	**
7) LEFT RIGHT	WITH SL's	** ORANGE & BLUE Wires (Warning Mode 3) DEFAULT, SCROLL FLASH A
8) ALTERNATE	WITH SL's	**
9) RANDOM	WITH SL's	
10) SINGLE OUTBOARD	WITHOUT SL's	**
11) DOUBLE OUTBOARD	WITHOUT SL's	**
12) SINGLE INBOARD	WITHOUT SL's	**
13) DOUBLE INBOARD	WITHOUT SL's	**
14) TRIPLE INBOARD	WITHOUT SL's	**
15) SWEEP	WITH SL's	
16) INBOARD OUTBOARD	WITHOUT SL's	**
17) LEFT RIGHT	WITHOUT SL's	**
18) ALTERNATE	WITHOUT SL's	**
19) RANDOM	WITHOUT SL's	
20) SWEEP	WITHOUT SL's	

** = CA Title 13 compliant

NOTE: If the CA Steady behavior is ON for a Warning Mode, a lamp will turn on steady when the Warning Mode is activated.

Flash Rates, Traffic Direction Modes:

- 1) SINGLE FLASH 96 FPM **
- 2) DOUBLE FLASH 125 FPM
- 3) NEOBE FLASH 96 FPM **
- 4) SINGLE 75 FLASH 75 FPM **
- 5) SCROLL FLASH A switches between the Single, Double and Neobe flash rates, every two cycles of a pattern.
- 6) SCROLL FLASH B switches between the Single 75, Double and Neobe flash rates, every two cycles of a pattern.

** = CA Title 13 compliant

Flash Patterns, Traffic Direction Modes - Model 4809-01, 4809-C01

- 1) FULL 9 LED ARROW FILL *** RED/WHITE and/or BRN/WHITE Wires (all Arrow Modes) DEFAULT, SINGLE FLASH
- 2) FULL 9 LED ARROW TRAIL
- 3) REDUCED 7 LED ARROW FILL
- 4) REDUCED 7 LED ARROW TRAIL
- 5) REDUCED 7 LED ARROW FILL with 2 Warning (SINGLE OUTBOARD) ALTERNATE
- 6) REDUCED 7 LED ARROW TRAIL with 2 Warning (SINGLE OUTBOARD) ALTERNATE
- 7) REDUCED 7 LED ARROW FILL with 2 Warning (SINGLE OUTBOARD) SIMULTANEOUSLY
- 8) REDUCED 7 LED ARROW TRAIL with 2 Warning (SINGLE OUTBOARD) SIMULTANEOUSLY
- 9) REDUCED 7 LED ARROW FILL with 2 Warning (SINGLE OUTBOARD) STEADY
- 10) REDUCED 7 LED ARROW TRAIL with 2 Warning (SINGLE OUTBOARD) STEADY
- 11) REDUCED 7 LED ARROW FILL with 2 Steady (SINGLE OUTBOARD)
- 12) REDUCED 7 LED ARROW TRAIL with 2 Steady (SINGLE OUTBOARD)

Flash Patterns, Traffic Direction Modes - Model 4809-C01P

- 1) FULL 8 LED ARROW FILL *** RED/WHITE and/or BRN/WHITE Wires (all Arrow Modes) DEFAULT, SINGLE FLASH
- 2) FULL 8 LED ARROW TRAIL
- 3) REDUCED 6 LED ARROW FILL
- 4) REDUCED 6 LED ARROW TRAIL
- 5) REDUCED 6 LED ARROW FILL with 2 Warning (SINGLE OUTBOARD) ALTERNATE
- 6) REDUCED 6 LED ARROW TRAIL with 2 Warning (SINGLE OUTBOARD) ALTERNATE
- 7) REDUCED 6 LED ARROW FILL with 2 Warning (SINGLE OUTBOARD) SIMULTANEOUSLY
- 8) REDUCED 6 LED ARROW TRAIL with 2 Warning (SINGLE OUTBOARD) SIMULTANEOUSLY
- 9) REDUCED 6 LED ARROW FILL with 2 Warning (SINGLE OUTBOARD) STEADY
- 10) REDUCED 6 LED ARROW TRAIL with 2 Warning (SINGLE OUTBOARD) STEADY
- 11) REDUCED 6 LED ARROW FILL with 2 Steady (SINGLE OUTBOARD)
- 12) REDUCED 6 LED ARROW TRAIL with 2 Steady (SINGLE OUTBOARD)

Flash Patterns, Traffic Direction Modes - Models 4809-02, 4809-C02

- 1) FULL 7 LED ARROW FILL *** RED/WHITE and/or BRN/WHITE Wires (all Arrow Modes) DEFAULT, SINGLE FLASH
- 2) FULL 7 LED ARROW TRAIL
- 3) REDUCED 5 LED ARROW FILL
- 4) REDUCED 5 LED ARROW TRAIL
- 5) REDUCED 5 LED ARROW FILL with 2 Warning (SINGLE OUTBOARD) ALTERNATE
- 6) REDUCED 5 LED ARROW TRAIL with 2 Warning (SINGLE OUTBOARD) ALTERNATE
- 7) REDUCED 5 LED ARROW FILL with 2 Warning (SINGLE OUTBOARD) SIMULTANEOUSLY
- 8) REDUCED 5 LED ARROW TRAIL with 2 Warning (SINGLE OUTBOARD) SIMULTANEOUSLY
- 9) REDUCED 5 LED ARROW FILL with 2 Warning (SINGLE OUTBOARD) STEADY
- 10) REDUCED 5 LED ARROW TRAIL with 2 Warning (SINGLE OUTBOARD) STEADY
- 11) REDUCED 5 LED ARROW FILL with 2 Steady (SINGLE OUTBOARD)
- 12) REDUCED 5 LED ARROW TRAIL with 2 Steady (SINGLE OUTBOARD)

Flash Patterns, Traffic Direction Modes - Models 4809-02P, 4809-C02P

- 1) FULL 6 LED ARROW FILL *** RED/WHITE and/or BRN/WHITE Wires (all Arrow Modes) DEFAULT, SINGLE FLASH
 - 2) FULL 6 LED ARROW TRAIL
-