Flash Pattern Selection:

To select a flash pattern, apply power to the RED wire. Momentarily touch the BLUE wire to the BLACK wire (ground) for less than 1 second to advance to the next pattern, or disassemble the lightbar clear lid and use the button that's located on the circuit board. To prevent water from getting inside of the light please make sure that the rubber washers are in place when assembling the top lid with screws. Also make sure that the rubber seal is well aligned underneath the top lid. For more detail about flash patterns, please see the Flash Pattern Table shown below.

SYCHRONIZATION:

The permanent mount microbars sync with compatible HOLMAN products via the yellow wire:

1.Determine the desired style of flash pattern for each unit and set each unit individually (without the yellow wires connected together) to avoid confusion. It is also mandatory that the same style of flash pattern be used on all units to produce the most effective warning pattern. (NOTE: Phases A and B for each style of flash pattern in the table denote the relative timing between units connected in a synchronizing installation. To operate simultaneously, each unit must be set to the same phase (A + A or B + B); to operate alternately, units must be set to have the opposite phase (A + B or B + A).

2.Connect the yellow sync wires together and check that the units are flashing in a synchronized manner as expected. If a pattern on one unit appears incorrect, the blue pattern select wire can be used to cycle forward on that individual unit until the correct pattern is selected.

Note: This will only change the pattern in the one unit and will not affect the flash pattern of other units connected to the yellow sync wire. DO NOT have the sync wires connected while cycling flash patterns of any of the lights.

3.If the yellow wire is unused, leave unconnected and insulated.

SINGLE COLOR FLASH PATTERN TABLE

Pattern	Description	FPM	Sync	Syncw/ 40424	Phase	ECE R65
						40425
1	Single	75	Υ	Υ	Α	-
2	Single	75	Υ	Υ	В	-
3	Single Alternating Split	75	Υ	Υ		-
4	Single	120	Υ	Υ	Α	Class 1
5	Single	120	Υ	Υ	В	Class 1
6	Single Alternating Split	120	Υ	Υ		-
7	Double	75	Υ	Υ	Α	-
8	Double	75	Υ	Υ	В	-
9	Double Alternating Split	75	Υ	Υ		-
10	Double	120	Υ	Υ	Α	Class 1
11	Double	120	Υ	Υ	В	Class 1
12	Double Alternating Split	120	Υ	Υ		-
13	Quad	75	Υ	Υ	Α	-
14	Quad	75	Υ	Υ	В	-
15	Quad Alternating Split	75	Υ	Υ		-
16	Quad	150	Υ	Υ	Α	-
17	Quad	150	Υ	Υ	В	-
18	Quad Alternating Split	150	Υ	Υ		-
19	Triple	75	Υ	Υ	Α	-
20	Triple	75	Υ	Υ	В	-
21	Triple Alternating Split	75	Υ	Υ		-
22	Quint	150	Υ	Υ	Α	-
23	Quint	150	Υ	Υ	В	-
24	Quint Alternating Split	150	Υ	Υ		-
25	Double Diagonal	150	Υ		Α	-
26	Double Diagonal	150	Υ		В	-
27	Double Diagonal Alternating Split	150	Υ			-
28	Quad Diagonal	150	Υ		Α	-
29	Quad Diagonal	150	Υ		В	-
30	Quad Diagonal Alternating Split	150	Υ			-
31	Fast Rotate	120	Υ			-
32	Rotate/Quad	150/75	Υ			-
33	Wave Rotate	70	Υ			-
34	Steady		N			-

Installation and Operation Instructions40425 **LED Microbars**

WARNING!

Failure to install or use this product according to manufacturer's recommendations may result in property damage, serious injury, and/or death to those you are seeking to protect!

Do not install and/or operate this safety product unless you have read and understand the safety information contained in this manual.

- 1.Proper installation combined with operator training in the use, care, and maintenance of emergency safety devices are essential to ensure the safety of you and those you are trying to protect.
- 2.Exercise caution when working with live electrical connections.
- 3. This product must be properly grounded. Inadequate grounding and/or shorting of electrical connections can cause high current arcing, which can cause personal injury and/or severe vehicle damage, including fire.
- 4. Proper placement and installation are vital to the performance of this safety device. Install this product so that output performance of the system is maximized and the controls are placed within convenient reach of the operator so that they can operate the system without losing eye contact with the roadway.

5.Do not install this product or route any wires in the deployment area of an air bag. Equipment mounted or located in an air bag deployment area may reduce the effectiveness of the air bag or become a projectile that could cause serious personal injury or death. Refer to the vehicle owner's manual for the air bag deployment area. It is the responsibility of the user/operator to determine a suitable mounting location ensuring the safety of all passengers inside the vehicle particularly avoiding areas of potential head impact.

6.It is the responsibility of the vehicle operator to ensure during use that all features of this product work correctly. In use, the vehicle operator should ensure the projection of the warning signal is not blocked by vehicle components (i.e., open trunks or compartment doors), people, vehicles, or other obstructions.

7.The use of this or any other safety device does not ensure all drivers can or will observe or react to a warning signal. Never take the right-of-way for granted. It is your responsibility to be sure you can proceed safely before entering an intersection, driving against traffic, responding at a high rate of speed, walking on or around traffic lanes.

8.This equipment is intended for use by authorized personnel only. The user is responsible for understanding and obeying all laws regarding warning signal devices. Therefore, the user should check all applicable city, state, and federal laws and regulations. The manufacturer assumes no liability for any loss resulting from the use of this safety device.

2

Specifications:

Size: 11" x 8" x 2.5"

Input Voltage: 12 to 24 VDC systems

Current Draw: 4.9 Amps Max (@ 12VDC Nominal)

62.7 Watts Max (@12VDC Nominal)

Flash Rate: See Flash Pattern Chart

Temp. Range: -22°F to +122°F

-30°C to +50°C

Caution: When drilling into any vehicle surface, make sure the area is free from any electrical wires, fuel lines, vehicle upholstery, etc. that could be damaged.

Installation & Mounting:

Important! This unit is a safety device, and it must be connected to its own separate, fused power point to assure its continued operation should any other electrical accessory fail.

Carefully remove the microbar and place it on a flat surface. Examine the unit for transit damage, and locate all parts. If damage is found, or parts are missing, contact the transit company or HOLMAN. Do not use damaged or broken parts.

Permanent Mounting:

1. Select the desired location on a flat surface for the microbar to be mounted. The visibility of the flash and ease of wiring access should be taken into consideration in the selection of the mounting location.

2.Remove lens screws, then remove lens. Use the four holes in the corners of the base to mark the mounting hole locations.

3.Drill the holes using a 7/32" drill size.

4.A fifth hole may be drilled for wire access.

5. Connect the power wires as shown in the wiring section (see Figure 1).

6.(Optional) Place the foam gasket between the microbar and mounting surface.

7. Mount the microbar with M5 hardware provided.

8. Replace the lens and fasten with the lens screws.

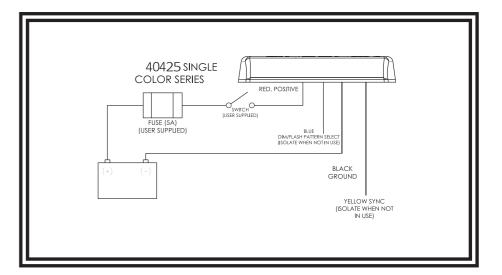


FIGURE 1

Note: Operating the microbar without the lens installed on this product will result in damage that will not be covered under warranty.

Wiring:

Important! Disable power before wiring up the microbar.

The wiring for the permanent mount microbar is as shown in Figure 1. All wiring should be a minimum of 18AWG. The positive line must have a 5 amp fuse, as shown. A switch may be used to control the on/off function.