

# Installation and Operation Instructions



## Multi-Mount Directional LED

**IMPORTANT!** Read all instructions before installing and using. Installer: This manual must be delivered to the end user.



### 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 understood the safety information contained in this manual.**

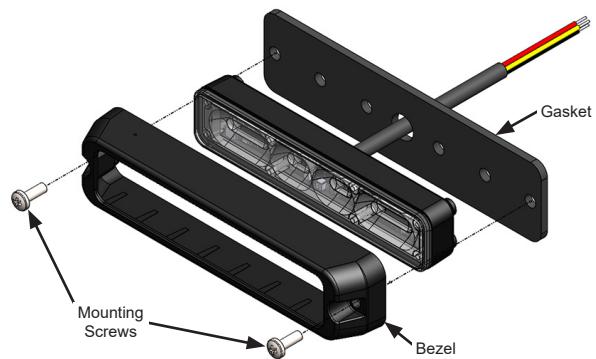
1. Proper installation combined with operator training in the use, care, and maintenance of emergency warning devices are essential to ensure the safety of emergency personnel and the public.
2. Emergency warning devices often require high electrical voltages and/or currents. Exercise caution when working 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 is vital to the performance of this warning 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 daily 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 warning device does not ensure all drivers can or will observe or react to an emergency warning signal. Never take the right-of-way for granted. It is the vehicle operator's responsibility to be sure they can proceed safely before entering an intersection, drive against traffic, respond at a high rate of speed, or walk 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 emergency warning 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 warning device.

## Specifications

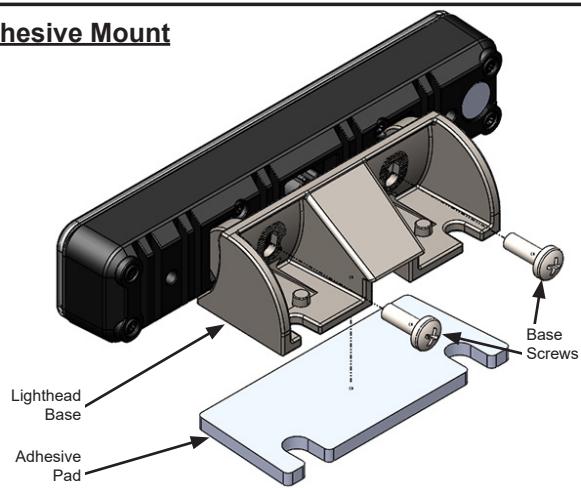
	MR6X	MR6MC-XX	MR24Q-XXXX
<b>Size:</b>	4.3" x 0.7" x 0.9"		
<b>Size w/ Bezel:</b>	5.1" x 0.7" x 1.1"		
<b>Weight:</b>	0.48 lbs.		
<b>Input Voltage:</b>	12-24 VDC		
<b>Current:</b>	0.9 A @ 12 VDC	1.3 A @ 12 VDC	0.9 A @ 12 VDC
<b>Power:</b>	11.6 W	16.7 W	11W
<b>Temp. Range:</b>	-40° to 65°C	-40° to 149°F	

## Installation and Mounting

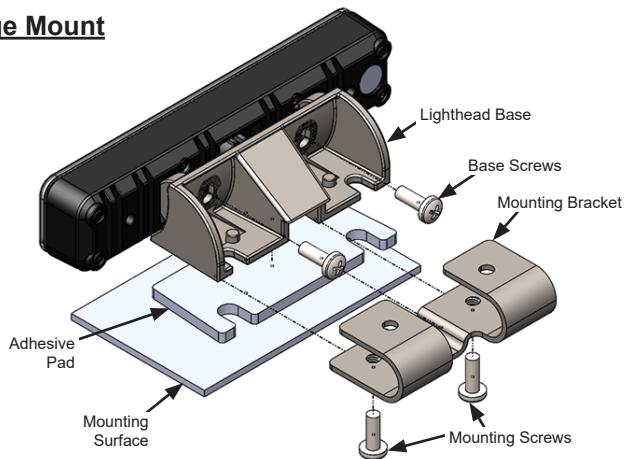
### Bezel Mount



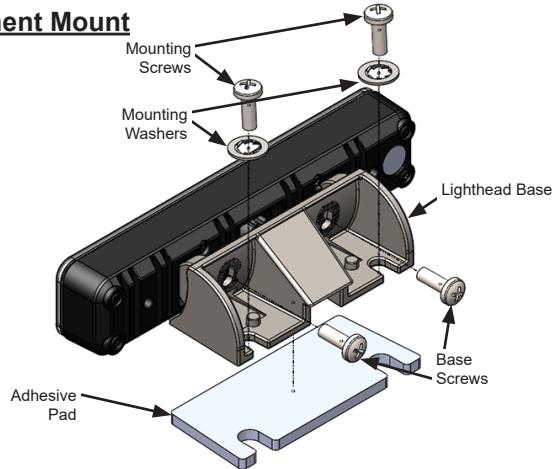
### Adhesive Mount



### Edge Mount



### Permanent Mount



## Wiring Instructions

### MR6X

RED: Positive (need to add 2A Fuse)  
BLACK: Negative  
BLUE: Pattern Switch to Negative, Dimming to Positive  
YELLOW: Synchronized Function  
(Up to 8 units can be Synchronized)

### MR6MC-XX

RED: Positive, Colors 1 & 3 (need to add 5A Fuse)  
WHITE: Positive, Colors 2 & 4 (need to add 5A Fuse)  
BLACK: Negative  
BLUE: Pattern Switch to Negative, Dimming to Positive  
YELLOW: Synchronized Function  
(Up to 8 units can be Synchronized)

### MR24Q-XXXX

RED: Group 1 to Positive  
GREEN: Group 2 to Positive  
ORANGE: Group 3 to Positive  
WHITE: Group 4 to Positive  
RED & GREEN: Group 5 to Positive  
RED & ORANGE: Group 6 to Positive  
RED & WHITE: Group 7 to Positive  
GREEN & ORANGE: Group 8 to Positive  
GREEN & WHITE: Group 9 to Positive  
ORANGE & WHITE: Group 10 to Positive  
RED & GREEN & ORANGE: Group 11 to Positive  
RED & GREEN & WHITE: Group 12 to Positive  
RED & ORANGE & WHITE: Group 13 to Positive  
GREEN & ORANGE & WHITE: Group 14 to Positive  
RED & GREEN & WHITE & ORANGE: Group 15 to Positive  
BLACK: Negative  
BLUE: Pattern Select to Negative  
Dimming to Positive (Optional)  
YELLOW: Synchronized Function

### Synchronization:

The directional is capable of syncing with other CODE 3 compatible products by following the steps below.

**Step 1.** Set the desired flash pattern on each unit individually. It is also strongly recommended that the same rate and style of flash pattern be used on all synced units to produce the most effective warning pattern. **Note: 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).**

**Step 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 or backward 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 other units connected to the yellow sync wire.**

### Pattern Selection:

#### For MR6 Series:

Apply BLUE wire to Negative:

- Less than 1 sec. for next pattern
- Between 1-3 sec. for previous pattern
- Between 3-5 sec. for factory default pattern
- More than 5 sec. for Pattern #13 (4 Single Flash, 2 Quad Flash Alt.)

#### For MR6MC & MR24Q Series:

Apply BLUE wire to Negative:

- Less than 1 sec. for next pattern
- Between 1-3 sec. for previous pattern
- Between 3-5 sec. for factory default pattern

## Flash Patterns

MR6 Flash Pattern Chart

Pattern	Flash	sim. Phase1	sim. Phase2	Alt.
1	Single Flash 75FPM	S1,C	S1,C	N/A
2	Single Flash 120FPM	S1	S1	N/A
3	Double Flash 75FPM	S1,C	S1,C	N/A
4	Double Flash 120FPM	S1, E1	S1, E1	N/A
5	Quad Flash 75FPM	S1	S1	N/A
6	Quad Flash 150FPM	S1	S1	N/A
7	Triple 75FPM	S1	S1	N/A
8	Quint Flash 150FPM	S1	S1	N/A
9	Steady - Single	N/A		
10	Steady Burn	N/A		
11	Modulation	N/A		
12	2 Double Flash,2 Triple Alt.	N/A		
13	4 Single Flash ,2 Quad Flash Alt.	N/A		

Default Pattern: Steady Burn

REMARK:

S1: SAE J595 Class 1

S2: SAE J595 Class 2

C: CA T13 Class B

E1: ECE R65 Class 1

E2: ECE R65 Class 2

MR6MC Flash Pattern Chart

Pattern	PATTERNS			SYNC.	COMPLIES WITH
	LED Color 1 & Color 3 Red line	LED Color 2 & Color 4 White line	LED Color 2 & Color 4 Red & White line		
1	1	1	SAE/T13 SAE/T13 Single 75FPM Phi Color 1 Synchronous Color 3	yes	S1,C
	2	2	SAE/T13 SAE/T13 Single 75FPM Phi2 Color 1 Synchronous Color 3	yes	S1,C
		3	SAE/T13 Single 75FPM Phi Color 1 Alternately Color 4	yes	
		4	SAE/T13 Single 75FPM Phi2 Color 1 Alternately Color 4	yes	
1	1	5	SAE/T13 Single 75FPM Phi Color 2 Synchronous Color 4	yes	S1,C
	2	6	SAE/T13 Single 75FPM Phi2 Color 2 Synchronous Color 4	yes	S1,C
	3	7	SAE/T13 Single 38FPM Phi (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	4	8	SAE/T13 Single 38FPM Phi2 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	5	9	SAE/T13 Single 38FPM (Color 1 Alternately Color 2) Alternately (Color 3 Alternately Color 4)	yes	
	6	10	Single 375FPMMPFM Phi Color 1 Synchronous Color 3	yes	
	7	11	Single 375FPMMPFM Phi2 Color 1 Synchronous Color 3	yes	
		12	Single 375FPMMPFM Phi Color 1 Alternately Color 4	yes	
		13	Single 375FPMMPFM Phi2 Color 1 Alternately Color 4	yes	
2	6	14	Single 375FPMMPFM Phi Color 2 Synchronous Color 4	yes	
	7	15	Single 375FPMMPFM Phi2 Color 2 Synchronous Color 4	yes	
	8	16	Single 1875FPMMPFM Phi (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	9	17	Single 1875FPMMPFM Phi2 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	10	18	Single 1875FPMMPFM (Color 1 Alternately Color 2) Alternately (Color 3 Alternately Color 4)	yes	
	11	19	SAE/T13 Double 75FPM Phi Color 1 Synchronous Color 3	yes	S1,C
	12	20	SAE/T13 Double 75FPM Phi2 Color 1 Synchronous Color 3	yes	S1,C
	10	21	SAE/T13 Double 75FPM Phi Color 1 Alternately Color 4	yes	
	22	23	SAE/T13 Double 75FPM Phi2 Color 1 Alternately Color 4	yes	
3	11	24	SAE/T13 Double 75FPM Phi Color 2 Synchronous Color 4	yes	S1,C
	12	25	SAE/T13 Double 75FPM Phi2 Color 2 Synchronous Color 4	yes	S1,C
	13	26	SAE/T13 Double 38FPM Phi (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	14	27	SAE/T13 Double 38FPM Phi2 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	15	28	ECER65/SAE Double 120FPM Phi1 Color 1 Synchronous Color 3	yes	
	16	29	ECER65/SAE Double 120FPM Phi2 Color 1 Synchronous Color 3	yes	
	17	30	ECER65/SAE Double 120FPM Phi1 Color 1 Alternately Color 4	yes	
		31	ECER65/SAE Double 120FPM Phi2 Color 1 Alternately Color 4	yes	
4	16	32	ECER65/SAE Double 120FPM Phi1 Color 2 Synchronous Color 4	yes	S1,E1
	17	33	ECER65/SAE Double 120FPM Phi2 Color 2 Synchronous Color 4	yes	S1,E1
	18	34	ECER65/SAE Double 60FPM Phi (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	19	35	ECER65/SAE Double 60FPM Phi2 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	20	36	ECER65/SAE Double 60FPM (Color 1 Alternately Color 2) Alternately (Color 3 Alternately Color 4)	yes	
	21	37	SAE/T13 Triple 75FPM Phi Color 1 Synchronous Color 3	yes	S1,C
	22	38	SAE/T13 Triple 75FPM Phi2 Color 1 Synchronous Color 3	yes	S1,C
		39	SAE/T13 Triple 75FPM Phi Color 1 Alternately Color 4	yes	
		40	SAE/T13 Triple 75FPM Phi2 Color 1 Alternately Color 4	yes	
5	21	41	SAE/T13 Triple 75FPM Phi Color 2 Synchronous Color 4	yes	S1,C
	22	42	SAE/T13 Triple 75FPM Phi2 Color 2 Synchronous Color 4	yes	S1,C
	23	43	SAE/T13 Triple 38FPM Phi (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	24	44	SAE/T13 Triple 38FPM Phi2 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	25	45	SAE/T13 Triple 38FPM (Color 1 Alternately Color 2) Alternately (Color 3 Alternately Color 4)	yes	

26		46	SAE/T13 Quad 75FPM Phi Color 1 Synchronous Color 3	yes	S1
27		47	SAE/T13 Quad 75FPM Phi Color 1 Synchronous Color 3	yes	S1
		48	SAE/T13 Quad 75FPM Phi Color 1 Alternately Color 4	yes	
		49	SAE/T13 Quad 75FPM Phi Color 1 Alternately Color 4	yes	
6	26	50	SAE/T13 Quad 75FPM Phi Color 2 Synchronous Color 4	yes	S1
	27	51	SAE/T13 Quad 75FPM Phi Color 2 Synchronous Color 4	yes	S1
	28	52	SAE/T13 Quad 38FPM Phi (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	29	53	SAE/T13 Quad 38FPM Phi 2 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	30	54	SAE/T13 Quad 38FPM (Color 1 Alternately Color 2) Alternately (Color 3 Alternately Color 4)	yes	
	31	55	ECER65/SAE Quad 120FPM Phi Color 1 Synchronous Color 3	yes	S1
	32	56	ECER65/SAE Quad 120FPM Phi 2 Color 1 Synchronous Color 3	yes	S1
		57	ECER65/SAE Quad 120FPM Phi Color 1 Alternately Color 4	yes	
7		58	ECER65/SAE Quad 120FPM Phi 2 Color 1 Alternately Color 4	yes	
	31	59	ECER65/SAE Quad 120FPM Phi Color 2 Synchronous Color 4	yes	S1
	32	60	ECER65/SAE Quad 120FPM Phi 2 Color 2 Synchronous Color 4	yes	S1
	33	61	ECER65/SAE Quad 60FPM Phi (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	34	62	ECER65/SAE Quad 60FPM Phi 2 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	35	63	ECER65/SAE Quad 60FPM (Color 1 Alternately Color 2) Alternately (Color 3 Alternately Color 4)	yes	
	8	64	Modulation (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	no	
	9	65	2. Double,2, Quad (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	no	
	10	66	4 Single,2, Triple (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	no	
	11	67	1Double,1Triple,1Quad (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	no	
	12	68-Default	Steady burn-Color 1 & 3	no	
		69	Steady burn-Color 2 & 4	no	

REMARK: S1: SAE J595 Class1 S2: SAE J595 Class 2 C: CA T13 Class B

E1: ECE R65 Class 1 E2: ECE R65 Class 2









## Warranty

### Manufacturer Limited Warranty Policy:

Manufacturer warrants that on the date of purchase this product will conform to Manufacturer's specifications for this product (which are available from the Manufacturer upon request). This Limited Warranty extends for Sixty (60) months from the date of purchase.

**DAMAGE TO PARTS OR PRODUCTS RESULTING FROM TAMPERING, ACCIDENT, ABUSE, MISUSE, NEGLIGENCE, UNAPPROVED MODIFICATIONS, FIRE OR OTHER HAZARD; IMPROPER INSTALLATION OR OPERATION; OR NOT BEING MAINTAINED IN ACCORDANCE WITH THE MAINTENANCE PROCEDURES SET FORTH IN MANUFACTURER'S INSTALLATION AND OPERATING INSTRUCTIONS VOIDS THIS LIMITED WARRANTY.**

### Exclusion of Other Warranties:

**MANUFACTURER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. THE IMPLIED WARRANTIES FOR MERCHANTABILITY, QUALITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICE ARE HEREBY EXCLUDED AND SHALL NOT APPLY TO THE PRODUCT AND ARE HEREBY DISCLAIMED, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW. ORAL STATEMENTS OR REPRESENTATIONS ABOUT THE PRODUCT DO NOT CONSTITUTE WARRANTIES.**

### Remedies and Limitation of Liability:

**MANUFACTURER'S SOLE LIABILITY AND BUYER'S EXCLUSIVE REMEDY IN CONTRACT, TORT (INCLUDING NEGLIGENCE), OR UNDER ANY OTHER THEORY AGAINST MANUFACTURER REGARDING THE PRODUCT AND ITS USE SHALL BE, AT MANUFACTURER'S DISCRETION, THE REPLACEMENT OR REPAIR OF THE PRODUCT, OR THE REFUND OF THE PURCHASE PRICE PAID BY BUYER FOR NON-CONFORMING PRODUCT. IN NO EVENT SHALL MANUFACTURER'S LIABILITY ARISING OUT OF THIS LIMITED WARRANTY OR ANY OTHER CLAIM RELATED TO THE MANUFACTURER'S PRODUCTS EXCEED THE AMOUNT PAID FOR THE PRODUCT BY BUYER AT THE TIME OF THE ORIGINAL PURCHASE. IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR LOST PROFITS, THE COST OF SUBSTITUTE EQUIPMENT OR LABOR, PROPERTY DAMAGE, OR OTHER SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES BASED UPON ANY CLAIM FOR BREACH OF CONTRACT, IMPROPER INSTALLATION, NEGLIGENCE, OR OTHER CLAIM, EVEN IF MANUFACTURER OR A MANUFACTURER'S REPRESENTATIVE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. MANUFACTURER SHALL HAVE NO FURTHER OBLIGATION OR LIABILITY WITH RESPECT TO THE PRODUCT OR ITS SALE, OPERATION AND USE, AND MANUFACTURER NEITHER ASSUMES NOR AUTHORIZES THE ASSUMPTION OF ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION WITH SUCH PRODUCT.**

This Limited Warranty defines specific legal rights. You may have other legal rights which vary from jurisdiction to jurisdiction. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages.

### Product Returns:

If a product must be returned for repair or replacement\*, please contact our factory to obtain a Return Goods Authorization Number (RGA number) before you ship the product to Code 3®, Inc. Write the RGA number clearly on the package near the mailing label. Be sure you use sufficient packing materials to avoid damage to the product being returned while in transit.

\*Code 3®, Inc. reserves the right to repair or replace at its discretion. Code 3®, Inc. assumes no responsibility or liability for expenses incurred for the removal and /or reinstallation of products requiring service and/or repair; nor for the packaging, handling, and shipping; nor for the handling of products returned to sender after the service has been rendered.



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