

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.**

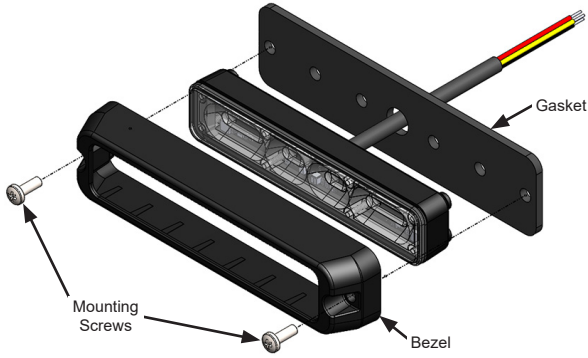
1. Proper installation combined with operator training in the use, care, and maintenance of emergency warning devices are essential to ensure the safety of emergency personnel and the public.
2. Emergency warning devices often require high electrical voltages and/or currents. Exercise caution when working 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

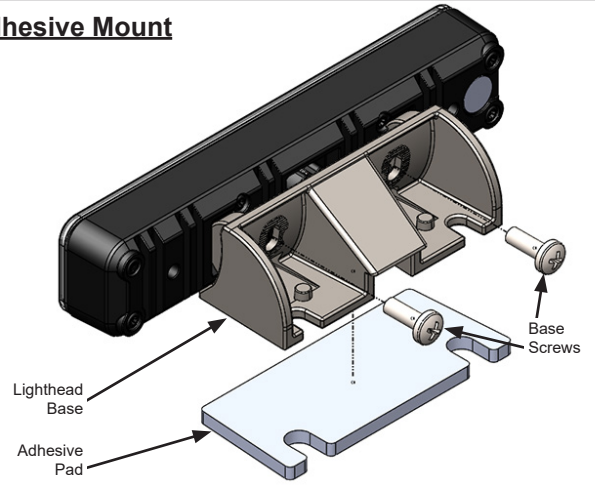
	MR6X	MR6MC-XX	MR24Q-XXXX
Size:	4.3" x 0.7" x 0.9"		
Size w/ Bezel:	5.1" x 0.7" x 1.1"		
Weight:	0.48 lbs.		
Input Voltage:	12-24 VDC		
Current:	0.9 A @ 12 VDC	1.3 A @ 12 VDC	0.9 A @ 12 VDC
Power:	11.6 W	16.7 W	11W
Temp. Range:	-40° to 65°C -40° to 149°F		

Installation and Mounting

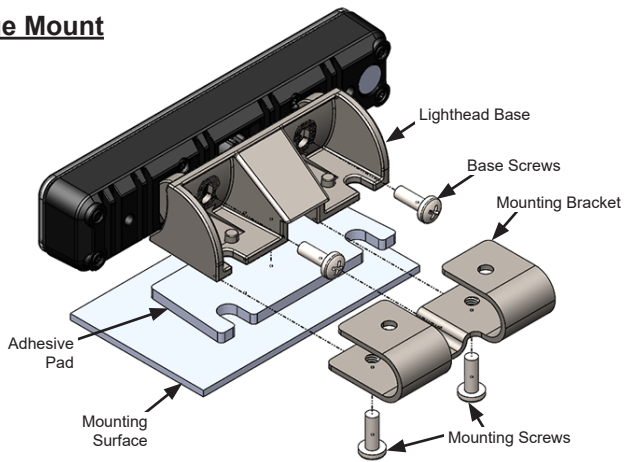
Bezel Mount



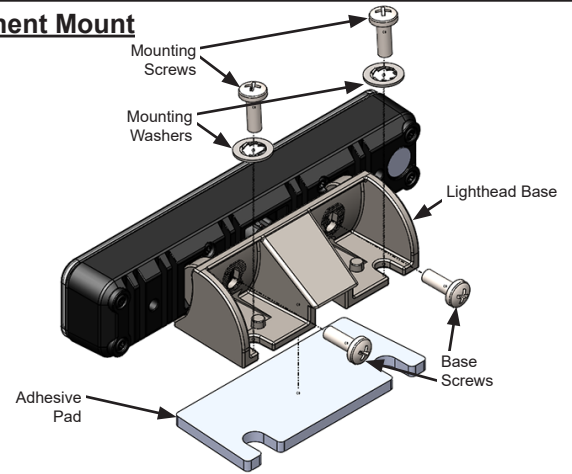
Adhesive Mount



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
- More than 5 sec. for Steady Burn Color 1 (See attached Flash Pattern Chart for specification)

Flash Patterns

SINGLE COLOR DIRECTIONAL [MR6X] 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 : Quad Flash 75FPM Sim. Phase1

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

DUAL COLOR DIRECTIONAL [MR6MC-XX] Flash Pattern Chart

Pattern	LED Color 1 & Color 3 Red Wire	LED Color 2 & Color 4 White Wire	LED Color 1 & Color 3 LED Color 2 & Color 4 Red & White Wire	PATTERNS	SYNC.	COMPLIES WITH
1	1-Default		1	SAE/T13 SAE/T13 Single 75FPM Ph1 Color 1 Synchronous Color 3	yes	S1,C
	2		2	SAE/T13 SAE/T13 Single 75FPM Ph2 Color 1 Synchronous Color 3	yes	S1,C
			3	SAE/T13 Single 75FPM Ph1 Color 1 Alternately Color 4	yes	
			4	SAE/T13 Single 75FPM Ph2 Color 1 Alternately Color 4	yes	
		1-Default	5	SAE/T13 Single 75FPM Ph1 Color 2 Synchronous Color 4	yes	S1,C
		2	6	SAE/T13 Single 75FPM Ph2 Color 2 Synchronous Color 4	yes	S1,C
	3	3	7	SAE/T13 Single 38FPM Ph1 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
4	4	8	SAE/T13 Single 38FPM Ph2 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes		
5	5	9	SAE/T13 Single 38FPM (Color 1 Alternately Color 2) Alternately (Color 3 Alternately Color 4)	yes		
2			10	Single 375FPMFPM Ph1 Color 1 Synchronous Color 3	yes	
			11	Single 375FPMFPM Ph2 Color 1 Synchronous Color 3	yes	
			12	Single 375FPMFPM Ph1 Color 1 Alternately Color 4	yes	
			13	Single 375FPMFPM Ph2 Color 1 Alternately Color 4	yes	
		6	14	Single 375FPMFPM Ph1 Color 2 Synchronous Color 4	yes	
		7	15	Single 375FPMFPM Ph2 Color 2 Synchronous Color 4	yes	
	8	8	16	Single 187FPMFPM Ph1 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
9	9	17	Single 187FPMFPM Ph2 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes		
	10	18	Single 187FPMFPM (Color 1 Alternately Color 2) Alternately (Color 3 Alternately Color 4)	yes		
3			19	SAE/T13 Double 75FPM Ph1 Color 1 Synchronous Color 3	yes	S1,C
			20	SAE/T13 Double 75FPM Ph2 Color 1 Synchronous Color 3	yes	S1,C
			21	SAE/T13 Double 75FPM Ph1 Color 1 Alternately Color 4	yes	
			22	SAE/T13 Double 75FPM Ph2 Color 1 Alternately Color 4	yes	
		11	23	SAE/T13 Double 75FPM Ph1 Color 2 Synchronous Color 4	yes	S1,C
		12	24	SAE/T13 Double 75FPM Ph2 Color 2 Synchronous Color 4	yes	S1,C
	13	13	25	SAE/T13 Double 38FPM Ph1 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	14	26	SAE/T13 Double 38FPM Ph2 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes		
	15	27	SAE/T13 Double 38FPM (Color 1 Alternately Color 2) Alternately (Color 3 Alternately Color 4)	yes		
4			28	ECER65/SAE Double 120FPM Ph1 Color 1 Synchronous Color 3	yes	S1,E1
			29	ECER65/SAE Double 120FPM Ph2 Color 1 Synchronous Color 3	yes	S1,E1
			30	ECER65/SAE Double 120FPM Ph1 Color 1 Alternately Color 4	yes	
			31	ECER65/SAE Double 120FPM Ph2 Color 1 Alternately Color 4	yes	
		16	32	ECER65/SAE Double 120FPM Ph1 Color 2 Synchronous Color 4	yes	S1,E1
		17	33	ECER65/SAE Double 120FPM Ph2 Color 2 Synchronous Color 4	yes	S1,E1
	18	18	34	ECER65/SAE Double 60FPM Ph1 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	19	35	ECER65/SAE Double 60FPM Ph2 (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		
5			37	SAE/T13 Triple 75FPM Ph1 Color 1 Synchronous Color 3	yes	S1,C
			38	SAE/T13 Triple 75FPM Ph2 Color 1 Synchronous Color 3	yes	S1,C
			39	SAE/T13 Triple 75FPM Ph1 Color 1 Alternately Color 4	yes	
			40	SAE/T13 Triple 75FPM Ph2 Color 1 Alternately Color 4	yes	
		21	41	SAE/T13 Triple 75FPM Ph1 Color 2 Synchronous Color 4	yes	S1,C
		22	42	SAE/T13 Triple 75FPM Ph2 Color 2 Synchronous Color 4	yes	S1,C
	23	23	43	SAE/T13 Triple 38FPM Ph1 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	24	44	SAE/T13 Triple 38FPM Ph2 (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		
6			46	SAE/T13 Quad 75FPM Ph1 Color 1 Synchronous Color 3	yes	S1
			47	SAE/T13 Quad 75FPM Ph2 Color 1 Synchronous Color 3	yes	S1
			48	SAE/T13 Quad 75FPM Ph1 Color 1 Alternately Color 4	yes	
			49	SAE/T13 Quad 75FPM Ph2 Color 1 Alternately Color 4	yes	
		26	50	SAE/T13 Quad 75FPM Ph1 Color 2 Synchronous Color 4	yes	S1
		27	51	SAE/T13 Quad 75FPM Ph2 Color 2 Synchronous Color 4	yes	S1
	28	28	52-Default	SAE/T13 Quad 38FPM Ph1 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	29	53	SAE/T13 Quad 38FPM Ph2 (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		
7			55	ECER65/SAE Quad 120FPM Ph1 Color 1 Synchronous Color 3	yes	S1
			56	ECER65/SAE Quad 120FPM Ph2 Color 1 Synchronous Color 3	yes	S1
			57	ECER65/SAE Quad 120FPM Ph1 Color 1 Alternately Color 4	yes	
			58	ECER65/SAE Quad 120FPM Ph2 Color 1 Alternately Color 4	yes	
		31	59	ECER65/SAE Quad 120FPM Ph1 Color 2 Synchronous Color 4	yes	S1
		32	60	ECER65/SAE Quad 120FPM Ph2 Color 2 Synchronous Color 4	yes	S1
	33	33	61	ECER65/SAE Quad 60FPM Ph1 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	34	62	ECER65/SAE Quad 60FPM Ph2 (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	1 Double 1 Triple 1 Quad (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	no	
12			68	Steady burn-Color 1 & 3	no	
	36	36	69	Steady burn-Color 2 & 4	no	

REMARK : S1 : SAE J595 Class 1 S2 : SAE J595 Class2 C : CA T13 Class B
 E1 : ECE R65 Class 1 E2 : ECE R65 Class 2

Quad-COLOR DIRECTIONAL [MR24Qxxxxx] Flash Pattern Chart

PATTERN GROUP	Group 1 (Red wire)	Group 2 (Green wire)	Group 3 (Orange wire)	Group 4 (White wire)	Group 5 (Red+Green wire)	Group 6 (Red+Orange wire)	Group 7 (Red+White wire)	Group 8 (Green+Orange wire)	Group 9 (Green+White wire)	Group 10 (Orange+White wire)	Group 11 (Red+Green+Orange wire)	Group 12 (Red+Green+White wire)	Group 13 (Red+Orange+White wire)	Group 14 (Green+Orange+White wire)	Group 15 (Red+Green+Orange+White wire)	FLASH PATTERN	SYNC.	COMPLIES WITH
	Color1	Color2	Color3	Color4	Color 1 & 2	Color 1 & 3	Color 1 & 4	Color 2 & 3	Color 2 & 4	Color 3 & 4	Color 1&2&3	Color 1&2&4	Color 1&3&4	Color 2&3&4				
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Single 75FPM Ph1	yes	S1,C
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	Single 75FPM Ph2	yes	S1,C
2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	Single 120FPM Ph1	yes	S1
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Single 120FPM Ph2	yes	S1
3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	Single 375FPM Ph1	yes	S1,C
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	Single 375FPM Ph2	yes	S1,C
4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	Double 75FPM Ph1	yes	S1,C
	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	Double 75FPM Ph2	yes	S1,C
5	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	Double 120FPM Ph1	yes	S1,E1
	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	Double 120FPM Ph2	yes	S1,E1
6	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	Triple 75FPM Ph1	yes	S1,C
	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	Triple 75FPM Ph2	yes	S1,C
7	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	Quad 75FPM Ph1	yes	S1,C
	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	Quad 75FPM Ph2	yes	S1,C
8	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	Quad 150FPM Ph1	yes	S1
	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	Quad 150FPM Ph2	yes	S1
9	17	17	17	17												NFFA-Quad Flash 90FPM	no	S1,C
10	18	18	18	18												ModuFlash sim	no	
11	19	19	19	19												2 Double Flash, 2 Quad Flash	no	
12	20	20	20	20												4 Single Flash, 2 Triple Flash	no	
13	21	21	21	21	18	18	18	18	18	18	18	18	18	18	18	Autotun	no	
	22				19	19	19	19	19	19	19	19	19	19	19	steady burn	no	
14		22			20	20	20	20	20	20	20	20	20	20	20	steady burn	no	
			22		21	21	21	21	21	21	21	21	21	21	21	steady burn	no	
				22	22	22	22	22	22	22	22	22	22	22	22	steady burn	no	

Default Pattern : Single Flash 75FPM Sim. Phase1

REMARK : S1 : SAE J595 Class 1 S2 : SAE J595 Class2 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.

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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.



10986 North Warson Road, St. Louis, MO 63114 USA

Technical Service USA (314) 996-2800

c3_tech_support@code3esg.com

CODE3ESG.com

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