



**ECCO**<sup>®</sup>

# Installation and Operation Instructions ED3779 Series Directionals

**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 bodily/personal injury, and/or death to you and 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 warning devices are essential to ensure the safety of you and those you are seeking 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 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 s/he can operate the system without losing eye contact with the roadway.
5. 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.
6. The use of this or any other warning 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, or walking on or around traffic lanes.
7. 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 warning device.

### **Specifications:**

Size:	5.1" W x 3.4" H x 1.3" D	Current Draw at 12.8 VDC:	1.7 A Max.
Weight:	0.62 lbs.	Flash Rate:	See flash pattern charts.
Input Voltage:	12-24 VDC	Temperature Range:	-22°F to 122°F

### **Installation & Mounting:**

Carefully remove the unit from its packaging. Examine the unit for transit damage. If damage is found, return the product to your local dealer for warranty replacement. Do not use damaged or broken parts.

The ED3779 series directionals should be mounted to a flat surface or one with the least amount of curvature. The mounting location should allow the maximum visibility of the warning device to other road users, while allowing for sufficient wire access.

### **Surface Mounting:**

1. Mark drill hole locations on the mounting surface using the directional and bezel as a template.
2. Drill mounting holes using a 3.74 mm drill bit. Drill a 10 mm hole for routing the wires as needed.
3. Mount the directional with the bezel and gasket, routing the wires through the 10 mm hole using additional grommets or cable protection as necessary to protect the wiring from any sharp edges. Secure the directional to the surface using the supplied thread forming screws.

**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.

## L-Bracket Mounting:

1. Mark drill hole locations on the mounting surface using the short leg of the bracket as a template.
2. Drill mounting holes using a 3.74 mm drill bit. Drill a 10 mm hole for routing the wires as needed.
3. Attach the bracket to the directional with the supplied machine screws.
4. Mount the directional and bracket to the mounting surface, routing the wires through the 10 mm hole using additional grommets or cable protection as necessary to protect the wiring from any sharp edges. Secure the directional to the surface using the supplied thread forming screws. See Figure 1.

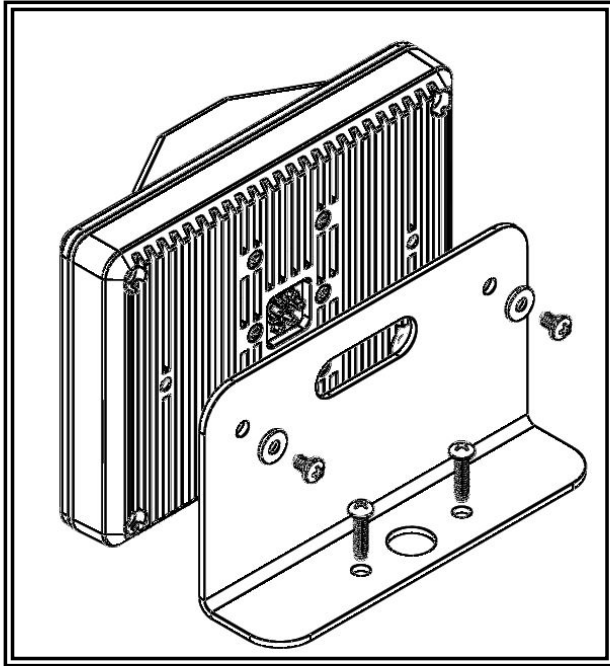


FIGURE 1

## Flash Pattern Selection:

The ED3779 series directionals can be configured to flash the following patterns (in the order below) by momentarily applying ground to the blue wire. The directional must be powered through the ground and power wires to allow pattern selection.

## Wiring Instructions:

**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.

The ED3779 Series of directional LED light heads are self flashing. All wiring should be a minimum of 20 AWG. The positive line must have an in-line 3 amp slow-blow fuse for each directional as shown. Set each unit to the same flash pattern before syncing. Synced units will flash simultaneously when set to the same phase or alternating when set to A and B. Note: Only flash patterns with an A or B phase identified are capable of being synced. Isolate the yellow and blue wires when not in use.

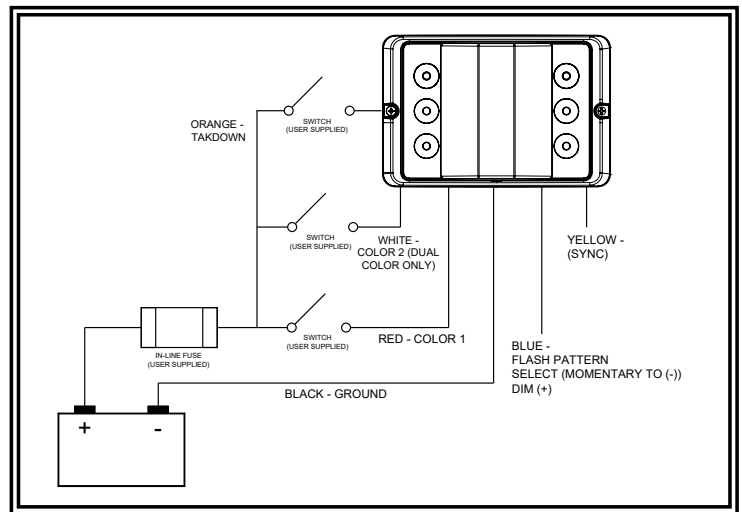


FIGURE 2

**ED3779X SINGLE COLOR FLASH PATTERN CHART**

Pattern	Description	FPM	Sync	SAE J595		CA T13		SAE J845		ECE R65	
				A	R	A	R	A	R	A	R
1	Single Flash	75	A	Class 1	Class 1	Class B	Class B	140°	160°	N/A	N/A
2	Single Flash	75	B	Class 1	Class 1	Class B	Class B	140°	160°	N/A	N/A
3	Single Flash - Alternating	75	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4	Single Flash	120	A	Class 1	Class 1	N/A	N/A	140°	160°	N/A	N/A
5	Single Flash	120	B	Class 1	Class 1	N/A	N/A	140°	160°	N/A	N/A
6	Single Flash - Alternating	120	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7	Double Flash	75	A	Class 1	Class 1	N/A	N/A	140°	160°	N/A	N/A
8	Double Flash	75	B	Class 1	Class 1	N/A	N/A	140°	160°	N/A	N/A
9	Double Flash - Alternating	75	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10	Double Flash	120	A	Class 1	Class 1	N/A	N/A	140°	140°	Class 2	Class 2
11	Double Flash	120	B	Class 1	Class 1	N/A	N/A	140°	140°	Class 2	Class 2
12	Double Flash - Alternating	120	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
13 - Default	Quad Flash	75	A	Class 1	Class 1	N/A	N/A	120°	140°	N/A	N/A
14	Quad Flash	75	B	Class 1	Class 1	N/A	N/A	120°	140°	N/A	N/A
15	Quad Flash - Alternating	75	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
16	Quad Flash	150	A	Class 1	Class 1	N/A	N/A	100°	120°	N/A	N/A
17	Quad Flash	150	B	Class 1	Class 1	N/A	N/A	100°	120°	N/A	N/A
18	Quad Flash - Alternating	150	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	Triple Flash	75	A	Class 1	Class 1	N/A	N/A	140°	140°	N/A	N/A
20	Triple Flash	75	B	Class 1	Class 1	N/A	N/A	140°	140°	N/A	N/A
21	Triple - Alternating	75	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
22	Quint Flash	150	A	Class 1	Class 1	N/A	N/A	100°	120°	N/A	N/A
23	Quint Flash	150	B	Class 1	Class 1	N/A	N/A	100°	120°	N/A	N/A
24	Quint Flash - Alternating	150	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
25	Steady Burn, Single Flash - Split			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
26	Steady Burn			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
27	Modulation			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
28	Double, Triple Flash - Alternating			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
29	Single, Quad Flash - Alternating			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Patterns			Red & White Wires	Description	FPM	Sync	SAE J955			CAT 13			SAE J845 Class 15			ECE R65		
Red Wire	White Wire	A					B	R	W	A	B	R	A	B	R	A	B	R
1-Default		1	Single Flash - Color 1	75	A	Class 1	Class 1	Class 1	Class 1	Class B	Class B	140"	140"	160"	140"	N/A	N/A	
2		2	Single Flash - Color 1	75	B	Class 1	Class 1	Class 1	Class 1	Class B	Class B	140"	140"	160"	140"	N/A	N/A	
		3	Single Flash - Color 1, 2 - Split Alternating	75	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		4	Single Flash - Color 1, 2 - Split Alternating	75	B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
1-Default		5	Single Flash - Color 2	75	A	Class 1	Class 1	Class 1	Class B	Class B	Class B	140"	140"	160"	140"	N/A	N/A	
		2	Single Flash - Color 2	75	B	Class 1	Class 1	Class 1	Class B	Class B	Class B	140"	140"	160"	140"	N/A	N/A	
		3	Single Flash - Color 1, 2	75	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		4	Single Flash - Color 1, 2	75	B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		5	Single Flash - Color 1, 2 - Alternating	75	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		6	Single Flash - Color 1, 2	375	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		7	Single Flash - Color 1	375	B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		12	Single Flash - Color 1, 2 - Split Alternating	375	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		13	Single Flash - Color 1, 2 - Split Alternating	375	B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		6	Single Flash - Color 2	375	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		7	Single Flash - Color 2	375	B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		8	Single Flash - Color 1, 2	375	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		9	Single Flash - Color 1, 2	375	B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		10	Single Flash - Color 1, 2 - Alternating	375	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		11	Single Flash - Color 1	75	A	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	140"	140"	160"	140"	N/A	N/A	
		20	Double Flash - Color 1	75	B	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	140"	140"	160"	140"	N/A	N/A	
		21	Double Flash - Color 1, 2 - Split Alternating	75	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		22	Double Flash - Color 1, 2 - Split Alternating	75	B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		23	Double Flash - Color 2	75	A	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	140"	140"	160"	140"	N/A	N/A	
		24	Double Flash - Color 2	75	B	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	140"	140"	160"	140"	N/A	N/A	
		25	Double Flash - Color 1, 2	75	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		26	Double Flash - Color 1, 2	75	B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		27	Double Flash - Color 1, 2 - Alternating	75	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		28	Double Flash - Color 1	120	A	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	140"	120"	140"	120"	N/A	N/A	
		37	Triple Flash - Color 1	75	A	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	140"	140"	160"	140"	N/A	N/A	
		38	Triple Flash - Color 1	75	B	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	140"	140"	160"	140"	N/A	N/A	
		39	Triple Flash - Color 1, 2 - Split Alternating	75	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		40	Triple Flash - Color 1, 2 - Split Alternating	75	B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		21	Triple Flash - Color 2	75	A	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	140"	140"	160"	140"	N/A	N/A	
		22	Triple Flash - Color 2	75	B	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	140"	140"	160"	140"	N/A	N/A	
		43	Triple Flash - Color 1, 2	75	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		44	Triple Flash - Color 1, 2	75	B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		45	Triple Flash - Color 1, 2 - Alternating	75	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		46	Triple Flash - Color 1	75	A	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	140"	120"	140"	120"	N/A	N/A	
		47	Triple Flash - Color 1	75	B	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	140"	120"	140"	120"	N/A	N/A	
		48	Triple Flash - Color 1, 2 - Split Alternating	75	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		49	Triple Flash - Color 1, 2 - Split Alternating	75	B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		50	Triple Flash - Color 2	75	A	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	140"	120"	140"	120"	N/A	N/A	
		51	Triple Flash - Color 2	75	B	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	140"	120"	140"	120"	N/A	N/A	
		52 - Default	Quad Flash - Color 1, 2	75	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	140"	140"	160"	140"	N/A	N/A
		29	Quad Flash - Color 1, 2	75	B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		30	Quad Flash - Color 1, 2 - Alternating	75	A	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	140"	140"	160"	140"	N/A	N/A	
		54	Quad Flash - Color 1	120	A	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	140"	140"	160"	140"	N/A	N/A	
		55	Quad Flash - Color 1	120	B	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	140"	140"	160"	140"	N/A	N/A	
		56	Quad Flash - Color 1	120	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		57	Quad Flash - Color 1, 2 - Split Alternating	120	B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		58	Quad Flash - Color 1, 2 - Split Alternating	120	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		59	Quad Flash - Color 2	120	A	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	140"	140"	160"	140"	N/A	N/A	
		60	Quad Flash - Color 2	120	B	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	140"	140"	160"	140"	N/A	N/A	
		33	Quad Flash - Color 1, 2	120	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Patterns				Description	PPM	Sync	SAE J595			CA T13			SAE J845 Class 15			ECE R65		
Red Wire	White Wire	Red & White Wires	A				B	R	W	A	B	R	A	B	W	A	B	R
34	34	62	Quad Flash - Color 1, 2				120	B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
35	35	63	Quad Flash - Color 1, 2 - Alternating	120	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		64	Modulation - Color 1, 2			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		65	Double, Quad Flash - Color 1, 2			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		66	Single, Triple Flash - Color 1, 2			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		67	Double, Triple, Quad Flash - Color 1, 2			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		68	Steady Burn - Color 1			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		69	Steady Burn - Color 2			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
36	36	69	Steady Burn - Color 2			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		