




# 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 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:

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.

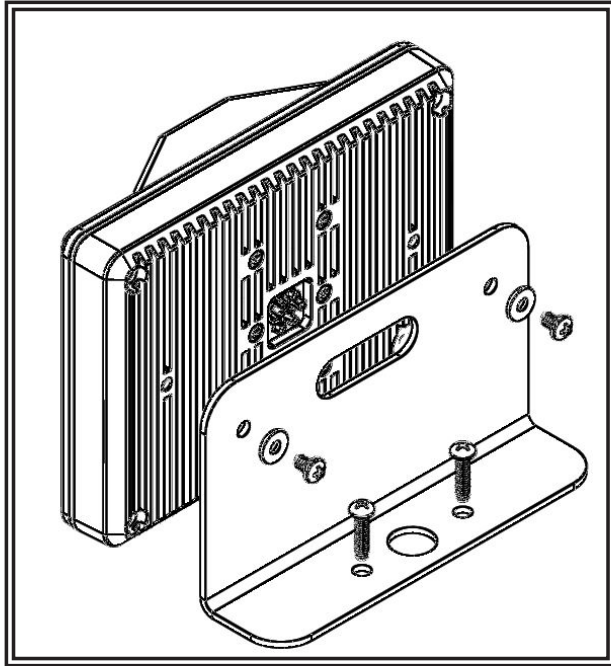


FIGURE 1

## 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.

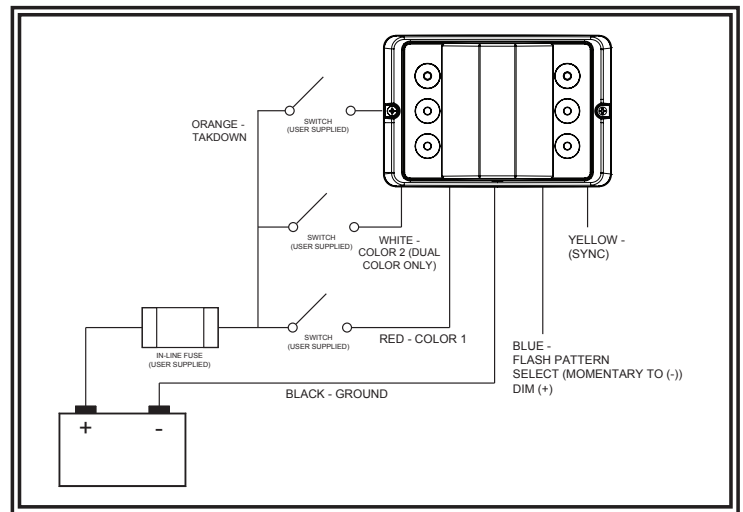


FIGURE 2

SINGLE COLOR Flash Pattern Chart/DE UN SOLO COLOR Tabla de patrones de destello/COULEUR UNIQUE Tableau des effets clignotants				
PATTERN	Flash	sim. Phase1	sim. Phase2	Alt.
1	Single Flash 75FPM	S1,R/B/A/W for J1*,G for J3*,C	S1,R/B/A/W for J1*,G for J3*,C	N/A
2	Single Flash 120FPM	S1,R/B/A/W for J1*,G for J3*	S1,R/B/A/W for J1*,G for J3*	N/A
3	Double Flash 75FPM	S1,R/B/A/W for J1*,G for J3*,C	S1,R/B/A/W for J1*,G for J3*,C	N/A
4	Double Flash 120FPM	S1,R/B/A/W for J1*,G for J3*,E2	S1,R/B/A/W for J1*,G for J3*,E2	N/A
5	Quad Flash 75FPM	S1,R/B/A/W for J1*,G for J3*	S1,R/B/A/W for J1*,G for J3*	N/A
6	Quad Flash 150FPM	S1,R/B/A/W for J1*,G for J3*	S1,R/B/A/W for J1*,G for J3*	N/A
7	Triple 75FPM	S1,R/B/A/W for J1*,G for J3*	S1,R/B/A/W for J1*,G for J3*	N/A
8	Quint Flash 150FPM	S1,R/B/A/W for J1*,G for J3*	S1,R/B/A/W for J1*,G for J3*	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 : Single Flash 75FPM Sim. Phase1

REMARK : S1 : SAE J595 Class 1      S2 : SAE J595 Class 2      C : CA T13 Class B  
J1 : SAE J845 Class 1      J2 : SAE J845 Class 2      J3 : SAE J845 Class 3  
E1 : ECE R65 Class 1      E2 : ECE R65 Class 2

\*The directional angle compliance for J845 is indicated by the colors red for 140 degrees, blue for 120-140 degrees, amber for 100-140 degrees, white for 80-140 degrees, and green for 180 degrees.

DUAL COLOR Flash Pattern Chart/COLOR DOBLE Tabla de patrones de destello/BICOLORE Tableau des effets clignotants						
Pattern	MODE 1 Color 1 & Color 3 (Red Wire)	MODE 2 Color 2 & Color 4 (White Wire)	MODE 1 Color 1 & Color 3 MODE 2 Color 2 & Color 4 (Red Wire & White Wire)	PATTERNS	SYNC.	COMPLIES WITH
1	1-Default		1	SAE/T13 SAE/T13 Single 75FPM Ph1 Color 1 Synchronous Color 3	yes	S1,R/B/A/W for J1*,G for J3*,C
	2		2	SAE/T13 SAE/T13 Single 75FPM Ph2 Color 1 Synchronous Color 3	yes	S1,R/B/A/W for J1*,G for J3*,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,R/B/A/W for J1*,G for J3*,C
		2	6	SAE/T13 Single 75FPM Ph2 Color 2 Synchronous Color 4	yes	S1,R/B/A/W for J1*,G for J3*,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	
2		5	9	SAE/T13 Single 38FPM (Color 1 Alternately Color 2) Alternately (Color 3 Alternately Color 4)	yes	
	6		10	Single 375FPMFPM Ph1 Color 1 Synchronous Color 3	yes	
	7		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	
3	9	9	17	Single 187FPMFPM Ph2 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	10	10	18	Single 187FPMFPM (Color 1 Alternately Color 2) Alternately (Color 3 Alternately Color 4)	yes	
			19	SAE/T13 Double 75FPM Ph1 Color 1 Synchronous Color 3	yes	S1,R/B/A/W for J1*,G for J3*,C
	12		20	SAE/T13 Double 75FPM Ph2 Color 1 Synchronous Color 3	yes	S1,R/B/A/W for J1*,G for J3*,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,R/B/A/W for J1*,G for J3*,C
		12	24	SAE/T13 Double 75FPM Ph2 Color 2 Synchronous Color 4	yes	S1,R/B/A/W for J1*,G for J3*,C
4	13	13	25	SAE/T13 Double 38FPM Ph1 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	14	14	26	SAE/T13 Double 38FPM Ph2 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	15	15	27	SAE/T13 Double 38FPM (Color 1 Alternately Color 2) Alternately (Color 3 Alternately Color 4)	yes	
			28	ECER65/SAE Double 120FPM Ph1 Color 1 Synchronous Color 3	yes	S1,R/B/A/W for J1*,G for J3*,E2
	17		29	ECER65/SAE Double 120FPM Ph2 Color 1 Synchronous Color 3	yes	S1,R/B/A/W for J1*,G for J3*,E2
			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,R/B/A/W for J1*,G for J3*,E2
5		17	33	ECER65/SAE Double 120FPM Ph2 Color 2 Synchronous Color 4	yes	S1,R/B/A/W for J1*,G for J3*,E2
	18	18	34	ECER65/SAE Double 60FPM Ph1 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	19	19	35	ECER65/SAE Double 60FPM Ph2 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	20	20	36	ECER65/SAE Double 60FPM (Color 1 Alternately Color 2) Alternately (Color 3 Alternately Color 4)	yes	
	21		37	SAE/T13 Triple 75FPM Ph1 Color 1 Synchronous Color 3	yes	S1,R/B/A/W for J1*,G for J3*
	22		38	SAE/T13 Triple 75FPM Ph2 Color 1 Synchronous Color 3	yes	S1,R/B/A/W for J1*,G for J3*
			39	SAE/T13 Triple 75FPM Ph1 Color 1 Alternately Color 4	yes	
			40	SAE/T13 Triple 75FPM Ph2 Color 1 Alternately Color 4	yes	
6		21	41	SAE/T13 Triple 75FPM Ph1 Color 2 Synchronous Color 4	yes	S1,R/B/A/W for J1*,G for J3*
		22	42	SAE/T13 Triple 75FPM Ph2 Color 2 Synchronous Color 4	yes	S1,R/B/A/W for J1*,G for J3*
	23	23	43	SAE/T13 Triple 38FPM Ph1 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	24	24	44	SAE/T13 Triple 38FPM Ph2 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	25	25	45	SAE/T13 Triple 38FPM (Color 1 Alternately Color 2) Alternately (Color 3 Alternately Color 4)	yes	
	26		46	SAE/T13 Quad 75FPM Ph1 Color 1 Synchronous Color 3	yes	S1,R/B/A/W for J1*,G for J3*
	27		47	SAE/T13 Quad 75FPM Ph2 Color 1 Synchronous Color 3	yes	S1,R/B/A/W for J1*,G for J3*
			48	SAE/T13 Quad 75FPM Ph1 Color 1 Alternately Color 4	yes	
7			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,R/B/A/W for J1*,G for J3*
		27	51	SAE/T13 Quad 75FPM Ph2 Color 2 Synchronous Color 4	yes	S1,R/B/A/W for J1*,G for J3*
	28	28	52-Default	SAE/T13 Quad 38FPM Ph1 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	29	29	53	SAE/T13 Quad 38FPM Ph2 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	30	30	54	SAE/T13 Quad 38FPM (Color 1 Alternately Color 2) Alternately (Color 3 Alternately Color 4)	yes	
	31		55	ECER65/SAE Quad 120FPM Ph1 Color 1 Synchronous Color 3	yes	S1,R/B/A/W for J1*,G for J3*
	32		56	ECER65/SAE Quad 120FPM Ph2 Color 1 Synchronous Color 3	yes	S1,R/B/A/W for J1*,G for J3*
8			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,R/B/A/W for J1*,G for J3*
		32	60	ECER65/SAE Quad 120FPM Ph2 Color 2 Synchronous Color 4	yes	S1,R/B/A/W for J1*,G for J3*
	33	33	61	ECER65/SAE Quad 60FPM Ph1 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	34	34	62	ECER65/SAE Quad 60FPM Ph2 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	yes	
	35	35	63	ECER65/SAE Quad 60FPM (Color 1 Alternately Color 2) Alternately (Color 3 Alternately Color 4)	yes	
			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	36		68	Steady burn-Color 1 & 3	no	
		36	69	Steady burn-Color 2 & 4	no	

REMARK : S1 : SAE J595 Class 1 S2 : SAE J595 Class2 C : CA T13 Class B J3 :  
J1 : SAE J845 Class 1 J2 : SAE J845 Class 2 SAE J845 Class 3  
E1 : ECE R65 Class 1 E2 : ECE R65 Class 2

\*The directional angle compliance for J845 is indicated by the colors red, blue and amber for 140 degrees, white for 120-140 degrees, and green for 180 degrees.

**Manufacturer Limited Warranty and Limitation of Liability:**

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), and Manufacturer further warrants that this product is free from defects in materials and workmanship. This Limited Warranty extends for three (3) years from the date of purchase. Other warranties may apply, call Manufacturer for details. Manufacturer will, at its discretion, repair or replace any product found by the Manufacturer to be defective and subject to this Limited Warranty.

**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.**

**ORAL STATEMENTS OR REPRESENTATIONS ABOUT THE PRODUCT WHICH MAY HAVE BEEN MADE BY SALESPeOPLE, DEALERS, AGENTS OR OTHER MANUFACTURER'S REPRESENTATIVES DO NOT CONSTITUTE WARRANTIES. THIS LIMITED WARRANTY MAY NOT BE AMENDED, MODIFIED, OR ENLARGED EXCEPT BY A WRITTEN AGREEMENT SIGNED BY AN AUTHORIZED OFFICIAL OF MANUFACTURER WHICH EXPRESSLY REFERS TO THIS LIMITED WARRANTY.**

**Exclusion of Other Warranties: MANUFACTURER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. THE IMPLIED WARRANTIES FOR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY EXCLUDED AND SHALL NOT APPLY TO THE PRODUCT. BUYER'S SOLE AND EXCLUSIVE REMEDY IN CONTRACT, TORT, OR UNDER ANY OTHER THEORY AGAINST MANUFACTURER REGARDING THE PRODUCT AND ITS USE SHALL BE THE REPLACEMENT OR REPAIR OF THE PRODUCT AS DESCRIBED ABOVE.**

**Limitation of Liability: IN THE EVENT OF LIABILITY FOR DAMAGES ARISING OUT OF THIS LIMITED WARRANTY OR ANY OTHER CLAIM RELATED TO THE MANUFACTURER'S PRODUCTS, MANUFACTURER'S LIABILITY FOR DAMAGES SHALL BE LIMITED TO THE AMOUNT PAID FOR THE PRODUCT 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 state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages.



833 West Diamond St, Boise, Idaho 83705  
**Customer Service** USA 800-635-5900  
UK +44 (0)113 237 5340 | AUS +61 (0)3 63322444  
**ECCOESG.com**

---

An ECCO SAFETY GROUP™ Brand  
**ECCOSAFETYGROUP.com**