



ECCO[®]

Installation and Operation Instructions ED3974 SERIES WINDOW SHROUD LIGHT

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: 2.1 H x 7.8 W x 1.6 D

Weight: 0.6 lbs.

Input Voltage: 12-24 VDC

Current at 12 VDC: 0.8 Amps

Power at 12 VDC: 9.6 Watts

Temperature Range: -40°C to 65°C

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. Determine a mounting location that ensures a clear line of sight for oncoming traffic.

Without removing the double sided tape liner, hold the product to the desired location.

Adjust the light head angle by loosening the nut on the back of the product using a wrench. When the desired angle is achieved, tighten the nut.

1. Clean mounting surface with supplied alcohol wipe.
* for extra adhesion, see notes below.
2. Peel-off double sided tape liner.
3. Apply product on to the treated surface. Apply light pressure for 20 seconds.



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.

All wiring should be stranded and a minimum of 22 AWG. The positive line must have an in-line 2 AMP slow-blow fuse for each unit as shown in FIGURE 1. Isolate the yellow and blue wires when not in use.

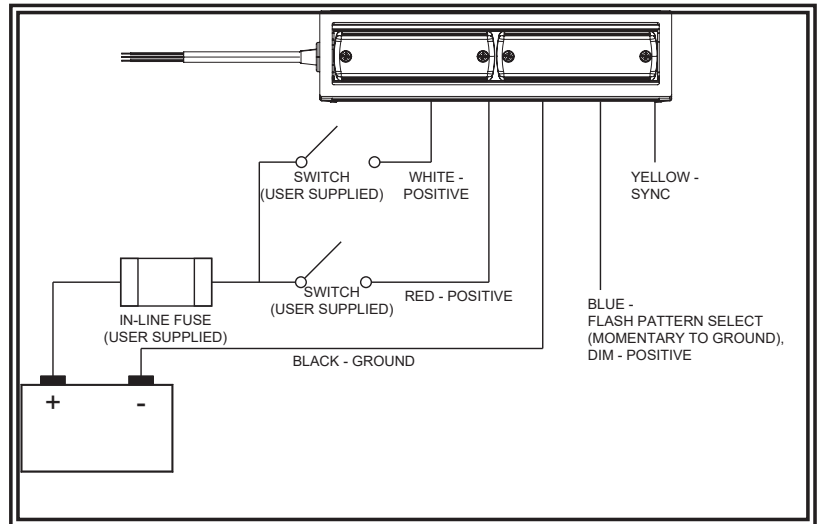


FIGURE 1

Flash pattern select:

To select a flash pattern, apply power to the RED or WHITE or both RED and WHITE wires.

Apply blue to black wire for flash pattern change:

Push Times	Function
0-1 sec	next pattern
1-3 secs.	previous pattern
3-5 secs.	factory default pattern
5+ secs.	last pattern

Dimming Function:

Connect blue wire to Red power wire.

Synchronization:

The ED3974 series is capable of syncing up to 8 (same product & other compatible ECCO products) by following the steps below:

1. Set the desired flash pattern on each unit individually. It is also strongly recommended 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 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.

Flash Pattern Chart

Pattern	Mode	Description	Phase	FPM	SAE J595				CA Title 13				ECE R65			
					RW	BW	AW	RWBW	RW	BW	AW	RWBW	RW	BW	AW	RWBW
1	1	Single Flash - Simultaneous Color 1	A	75	Class 1	Class 1	Class 1	N/C	Class B	Class B	Class B	N/C	N/C	N/C	N/C	N/C
	2	Single Flash - Simultaneous Color 1	B	75	Class 1	Class 1	Class 1	N/C	Class B	Class B	Class B	N/C	N/C	N/C	N/C	N/C
	3	Single Flash - Alternating Color 1	A	75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	4	Single Flash - Alternating Color 1	B	75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
2	5	Double Flash - Simultaneous Color 1	A	75	Class 1	Class 1	Class 1	N/C	Class B	Class B	Class B	N/C	N/C	N/C	N/C	N/C
	6	Double Flash - Simultaneous Color 1	B	75	Class 1	Class 1	Class 1	N/C	Class B	Class B	Class B	N/C	N/C	N/C	N/C	N/C
	7	Double Flash - Alternating Color 1	A	75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	8	Double Flash - Alternating Color 1	B	75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
3	9	Quad Flash - Simultaneous Color 1	A	75	Class 1	Class 1	Class 1	N/C	Class B	Class B	Class B	N/C	N/C	N/C	N/C	N/C
	10	Quad Flash - Simultaneous Color 1	B	75	Class 1	Class 1	Class 1	N/C	Class B	Class B	Class B	N/C	N/C	N/C	N/C	N/C
	11	Quad Flash - Alternating Color 1	A	75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	12	Quad Flash - Alternating Color 1	B	75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
4	13	Single Flash - Simultaneous Color 1	A	120	Class 1	Class 1	Class 1	N/C	N/C	N/C	N/C	N/C	Class 1	Class 1	Class 1	N/C
	14	Single Flash - Simultaneous Color 1	B	120	Class 1	Class 1	Class 1	N/C	N/C	N/C	N/C	N/C	Class 1	Class 1	Class 1	N/C
	15	Single Flash - Alternating Color 1	A	120	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	16	Single Flash - Alternating Color 1	B	120	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
5	17	Double Flash - Simultaneous Color 1	A	120	Class 1	Class 1	Class 1	N/C	N/C	N/C	N/C	N/C	Class 1	Class 1	Class 1	N/C
	18	Double Flash - Simultaneous Color 1	B	120	Class 1	Class 1	Class 1	N/C	N/C	N/C	N/C	N/C	Class 1	Class 1	Class 1	N/C
	19	Double Flash - Alternating Color 1	A	120	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	20	Double Flash - Alternating Color 1	B	120	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
6	21	Quad Flash - Simultaneous Color 1	A	120	Class 1	Class 2	Class 1	N/C	N/C	N/C	N/C	N/C	Class 1	Class 1	Class 1	N/C
	22	Quad Flash - Simultaneous Color 1	B	120	Class 1	Class 2	Class 1	N/C	N/C	N/C	N/C	N/C	Class 1	Class 1	Class 1	N/C
	23	Quad Flash - Alternating Color 1	A	120	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	24	Quad Flash - Alternating Color 1	B	120	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
7	25	Single Flash - Simultaneous Color 1	A	350	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	26	Single Flash - Simultaneous Color 1	B	350	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	27	Single Flash - Alternating Color 1	A	350	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	28	Single Flash - Alternating Color 1	B	350	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
8	29	Single Flash - Simultaneous Color 2	A	75	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	30	Single Flash - Simultaneous Color 2	B	75	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	31	Single Flash - Alternating Color 2	A	75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	32	Single Flash - Alternating Color 2	B	75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
9	33	Double Flash - Simultaneous Color 2	A	120	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	34	Double Flash - Simultaneous Color 2	B	120	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	35	Double Flash - Alternating Color 2	A	120	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	36	Double Flash - Alternating Color 2	B	120	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
10	37	Single Flash - Simultaneous Color 1 & Color 2	A	75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	38	Single Flash - Simultaneous Color 1 & Color 2	B	75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	39	Single Flash - Alternating Color 1 & Color 2	A	75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	40	Single Flash - Alternating Color 1 & Color 2	B	75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
11	41	Double Flash - Simultaneous Color 1 & Color 2	A	120	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	42	Double Flash - Simultaneous Color 1 & Color 2	B	120	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	43	Double Flash - Alternating Color 1 & Color 2	A	120	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	44	Double Flash - Alternating Color 1 & Color 2	B	120	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
12	45	Single Flash - Simultaneous Color 2 & Color 1	A	75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	46	Single Flash - Simultaneous Color 2 & Color 1	B	75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	47	Single Flash - Alternating Color 2 & Color 1	A	75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	48	Single Flash - Alternating Color 2 & Color 1	B	75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
13	49	Double Flash - Simultaneous Color 2 & Color 1	A	120	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	50	Double Flash - Simultaneous Color 2 & Color 1	B	120	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	51	Double Flash - Alternating Color 2 & Color 1	A	120	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	52	Double Flash - Alternating Color 2 & Color 1	B	120	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
14	53	Steady Burn - Color 1 & Single Flash - Color 1		75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	54	Single Flash - Color 1 & Steady Burn - Color 1		75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	55	Steady Burn - Color 1 & Single Flash - Color 2		75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	56	Single Flash - Color 1 & Steady Burn - Color 2		75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	57	Steady Burn - Color 2 & Single Flash - Color 1		75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	58	Single Flash - Color 2 & Steady Burn - Color 1		75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
15	59	Steady Burn - Color 1 & Quad Flash - Color 1		75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	60	Quad Flash - Color 1 & Steady Burn - Color 1		75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	61	Steady Burn - Color 1 & Quad Flash - Color 2		75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	62	Quad Flash - Color 1 & Steady Burn - Color 2		75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
16	63	Steady Burn - Color 2 & Quad Flash - Color 1		75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	64	Quad Flash - Color 2 & Steady Burn - Color 1		75	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	65	Steady Burn - Color 1		N/A	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	66	Steady Burn - Color 2		N/A	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
17	Off		N/A	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	