Installation Instructions



C3RNRDC Series Lights

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 manufacturers 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 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 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 s/he can operate the system without losing eye contact with the roadway.
- 5. 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.
- 6. 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 your responsibility to be sure you can proceed safely before entering an intersection, drive against traffic, respond at a high rate of speed, or walk 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 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.

Running Board Specifications:

Compliance: SAE J595 compliant light. (Red: Class 2, Blue: Class 3, and White: Class 2) See flash pattern chart for more detail.

Extreme Voltage: 10-16VDC Temperature: -40C to 65C

	Max Current @ 12VDC Nominal (A)	Max Power @ 12VDC Nominal (W)
C3RNRDC - 24L	0.29	3.71
C3RNRDC - 36L	0.57	7.3
C3RNRDC - 60L	0.64	8.19
C3RNRDC - 60R	0.64	8.19
C3RNRDC - 72L	1.07	13.7
C3RNRDC - 72R	1.07	13.7

2013-2019 Ford Explorer

Specifications:

The Running Board lights for the 2017 Ford Explorer fit under the vehicle's running board and provide a lateral facing signal from the side of the vehicle.

Installation and Mounting:

Step-1. From under the vehicle: Test fit the provided brackets to achieve the location needed for the mounting hole on the vehicle. Mark all four (4) hole positions needed.

Note: Position brackets to avoid cutouts in pinch weld for jack clearance.

Step-2. Drill the mounting holes into the vehicle using a #34 drill bit.

Step-3. Using the provided screws, securely mount the bracket to the vehicle and the unit as shown in Figure 1.

<u>Step-4.</u> Repeat the process for the opposite side running board.

Step-5. Route the lights wiring as desired.

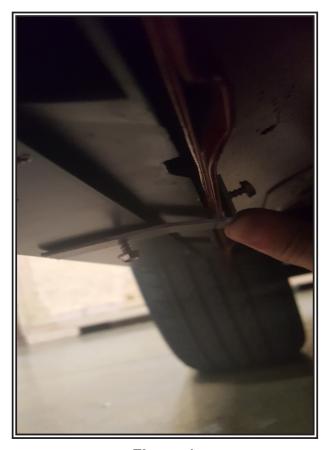


Figure-1

2020 Ford Explorer

Specifications:

The Running Board lights for the 2020 Ford Explorer fit under the vehicle's rocker panels and provide a lateral facing signal from the side of the vehicle.

Installation and Mounting:

Step-1. Mount the brackets to the light unit using the provided screws. (See Figure 1)

Step-2. From under the vehicle: Test fit the provided brackets to achieve the location needed for the mounting hole on the vehicle. Mark all four (4) hole positions needed.

Step-3. Drill the mounting holes into the vehicle using a #34 drill bit.

Step-4. Using the provided screws, mount the bracket to the vehicle using mount shown in Figure 2.

<u>Step-5.</u> Repeat the process for the opposite side running board.

Step-6. Route the lights wiring as desired.



Figure-1



Figure-2

2017 Chevy Tahoe

Specifications:

The Running Board lights for the 2017 Chevy Tahoe fit under the vehicle's running board and provide a lateral facing signal from the side of the vehicle.

Installation and Mounting:

- Step-1. Remove three (3) 13mm bolts and one (1) 10mm bolt from under the rocker panel. (See Figure 1 & 2)
- <u>Step-2.</u> Loosen, without removing, three (3) 13mm bolts (See Figure 3). Allowing the rocker panel assembly to lower ~1/4". (See Figure 4)
- **Step-3.** Using the provided screws, mount the provided brackets to the unit where shown in Figure 5. *Note: Bracket is slotted in order to use existing holes on the unit*
- Step-4. Slide the unit into position while guiding brackets to approximate locations. (See Figure 6)
- Step-5. Align brackets to existing mounting holes and fasten using three (3) 13mm bolts removed in Step 1.
- Step-6. Fasten remaining bolts removed in Step 1 and tighted bolts loosened in Step 2.
- <u>Step-7.</u> Repeat the process for the opposite side running board.
- **Step-8.** Route the lights wiring as desired.



Figure-1



Figure-3



Figure-5



Figure-2



Figure-4



Figure-6

2017 Dodge Charger

Specifications:

The Running Board lights for the 2017 Dodge Charger fit under the vehicle's rocker panels and provide a lateral facing signal from the side of the vehicle.

Installation and Mounting:

Step-1. Mount the brackets to the light unit using the provided screws. (See Figure 1)

Step-2. From under the vehicle: Test fit the provided brackets to achieve the location needed for the mounting hole on the vehicle. Mark all four (4) hole positions needed.

Note: Position brackets to avoid cutouts in pinch weld for jack clearance.

Step-3. Drill the mounting holes into the vehicle using a #34 drill bit.

Step-4. Using the provided screws, mount the bracket to the vehicle using mount shown in Figure 2.

<u>Step-5.</u> Repeat the process for the opposite side running board.

Step-6. Route the lights wiring as desired.







Figure-2

2017 Ford F-150, F250 & F350

Specifications:

The Running Board lights for the 2017 Ford F-150 fit under the vehicle's doors and above the running board (if equipped) and provide a lateral facing signal from the side of the vehicle.

Installation and Mounting:

Step-1. Mount the brackets to the light unit using the provided screws. (See Figure 1)

Step-2. From under the vehicle: Test fit the provided brackets to achieve the location needed for the mounting hole on the vehicle. Mark all four (4) hole positions needed.

Step-3. Drill the mounting holes into the vehicle using a 1/4" drill bit.

Step-4. Using the provided screws and binding barrels, securely mount the bracket to the vehicle using mount shown in Figure 2.

Step-5. Repeat the process for the opposite side running board.

Step-6. Route the lights wiring as desired.

NOTE: INSTRUCTIONS ARE MADE USING DRIVER'S SIDE AS EXAMPLE. TO REPRODUCE RESULTS, REVISIT EACH STEP FOR PASSENGER SIDE.





<u>Figure-1</u> <u>Figure-2</u>

2017 Ford Fusion

Specifications:

The Running Board lights for the 2017 Ford Fusion fit under the vehicle's rocker panels and provide a lateral facing signal from the side of the vehicle.

Installation and Mounting:

- Step-1. Mount the brackets to the light unit using the provided screws. (See Figure 1)
- <u>Step-2.</u> From under the vehicle: Test fit the provided brackets to achieve the location needed for the mounting hole on the vehicle. Mark all four (4) hole positions needed.
- Step-3. Drill the mounting holes into the vehicle using a #34 drill bit.
- **Step-4.** Using the provided screws, securely mount the bracket to the vehicle using mount shown in Figure 2. (Bracket will be oriented so that the slot is on the light side and the single hole on the vehicle side as shown in Figure 1.)
- <u>Step-5.</u> Repeat the process for the opposite side running board.
- Step-6. Route the lights wiring as desired.

NOTE: INSTRUCTIONS ARE MADE USING DRIVER'S SIDE AS EXAMPLE. TO REPRODUCE RESULTS, REVISIT EACH STEP FOR PASSENGER SIDE.





Figure-1 Figure-2

2016 Ford Taurus

Specifications:

The Running Board lights for the 2016 Ford Taurus fit under the vehicle's rocker panels and provide a lateral facing signal from the side of the vehicle.

Installation and Mounting:

- Step-1. Mount the brackets to the light unit using the provided screws. (See Figure 1)
- **Step-2.** From under the vehicle: Test fit the provided brackets to achieve the location needed for the mounting hole on the vehicle. Mark all four (4) hole positions needed. (~1" of the light will be tucked behind plastic molding; See Figure 3)
- Step-3. Drill the mounting holes into the vehicle using a #34 drill bit.
- <u>Step-4.</u> Using the provided screws, securely mount the bracket to the vehicle using mount shown in Figure 2. (Bracket will be oriented so that the slot is on the light side and the single hole on the vehicle side as shown in Figure 1.)
- <u>Step-5.</u> Repeat the process for the opposite side running board.
- Step-6. Route the lights wiring as desired.

OPTIONAL: Plastic Molding concealing lights, shown in Figure 3, can be cut to reveal remaining LEDs.



Figure-1



Figure-2



Figure-3

2018 Dodge Durango

Specifications:

The Running Board lights for the 2018 Dodge Durango fit under the vehicle's rocker panels and provide a lateral facing signal from the side of the vehicle.

Installation and Mounting:

- Step-1. Mount the brackets to the light unit using the provided screws. (See Figure 1)
- **Step-2.** From under the vehicle: Test fit the provided brackets to achieve the location needed for the mounting hole on the vehicle. Mark all four (4) hole positions needed.
- Step-3. Drill the mounting holes into the vehicle using a #34 drill bit.
- **Step-4.** Using the provided screws, securely mount the bracket to the vehicle using mount shown in Figure 2. (Bracket will be oriented so that the slot is on the light side and the single hole on the vehicle side as shown in Figure 1.)
- <u>Step-5.</u> Repeat the process for the opposite side running board.
- Step-6. Route the lights wiring as desired.

NOTE: INSTRUCTIONS ARE MADE USING DRIVER'S SIDE AS EXAMPLE. TO REPRODUCE RESULTS, REVISIT EACH STEP FOR PASSENGER SIDE.





Figure-1 Figure-2

Wiring:

Red - Positive (12V)

Black - Negative

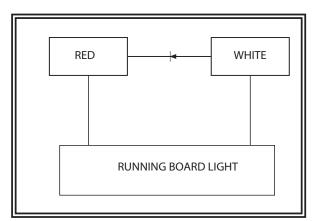
White - Steady Secondary Color Override (Cut white wire for all models WITHOUT white lights)

Yellow - Synchronized Function

Blue - Pattern Select to negative

Green - Phase Select to positive(with Synchronized Function activated using yellow wire)

Red/White - Dim Control to positive



**To be able to run steady secondary color without having red wire activated, a diode will need to be installed according to the diagram.

Suggested part: SB3100 from Diodes Incorporated (3AMP, 100V Schottky Diode) OR EQUIVALENT.

Slack Dattern #	D	ED8.4	C-l-:		SAE J595			CA T13
Flash Pattern #	Description	FPM	Color	Yellow	Blue	Red	White	Red
1	Quint	70	Color 1, Color 1	CLASS 2	-	CLASS 2	CLASS 3	-
2			Color 1, Color 2	CLASS 2	-	CLASS 2	CLASS 3	-
3	1		Color 2, Color 1	CLASS 2	-	CLASS 2	CLASS 3	-
4		350	Color 1, Color 1	-	-	-	-	-
5	Single		Color 1, Color 2	-	-	-	-	-
6	1		Color 2, Color 1	-	-	-	-	-
7		70	Color 1, Color 1	-	-	-	-	-
8	Double		Color 1, Color 2	-	-	-	-	-
9	1		Color 2, Color 1	-	-	-	-	-
10		80	Color 1, Color 1	CLASS 2	-	CLASS 2	CLASS 3	-
11	Quad		Color 1, Color 2	CLASS 2	-	CLASS 2	CLASS 3	-
12			Color 2, Color 1	CLASS 2	-	CLASS 2	CLASS 3	-
13	Single	180	Color 1, Color 1	CLASS 2	CLASS 3	CLASS 2	CLASS 2	-
14			Color 1, Color 2	CLASS 2	CLASS 3	CLASS 2	CLASS 2	-
15			Color 2, Color 1	CLASS 2	CLASS 3	CLASS 2	CLASS 2	-
16		113	Color 1, Color 1	CLASS 2	CLASS 3	CLASS 2	CLASS 2	CLASS E
17	Single		Color 1, Color 2	CLASS 2	CLASS 3	CLASS 2	CLASS 2	CLASS E
18			Color 2, Color 1	CLASS 2	CLASS 3	CLASS 2	CLASS 2	CLASS E
19		60	Color 1, Color 1	-	-	-	-	-
20	Quint		Color 1, Color 2	-	-	-	-	-
21			Color 2, Color 1	-	-	-	-	-
22	Double		Color 1, Color 1	CLASS 2	CLASS 3	CLASS 2	CLASS 2	CLASS E
23		95	Color 1, Color 2	CLASS 2	CLASS 3	CLASS 2	CLASS 2	CLASS E
24			Color 2, Color 1	CLASS 2	CLASS 3	CLASS 2	CLASS 2	CLASS E
25		117	Color 1, Color 1	-	-	-	-	-
26	Arrow		Color 1, Color 2	-	-	-	-	-
27			Color 2, Color 1	-	-	-	-	-
28	Cycle	50	Color 1, Color 1	-	-	-	-	-
29			Color 1, Color 2	-	-	-	-	-
30			Color 2, Color 1	-	-	-	-	-
31	Steady	N/A	Color 1, Color 1	-	-	-	-	-
32	Burn	,, .	Color 2, Color 2	-	-	-	-	-

TROUBLESHOOTING GUIDE

PROBLEM	QUESTIONS	POSSIBLE CAUSE	SOLUTION
Module Not Operating	N/A	a. Bad power/ground connection b. Defective module	a. Fix connection b. Replace module
Single Function not working	N/A	Bad connection for that function	Fix wire connection for the corresponding function
No functions	N/A	a. Bad power/ground connection b. Defective module	a. Fix connection b. Replace module

For any additional inquiries please contact our service department at 314-996-2800.

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 MODIFICA-TIONS, 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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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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