



Installation and Operation Instructions

Outliner Series

Dual Color Versions

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

Extreme Voltage: 10-16VDC

Temp. Range. -40°C to 65°C
-40°F to 149°F

	Max Current @ 12VDC Nominal (A)	Max Power @ 12VDC Nominal (W)
C3RNRDC - 24L	0.5	6.4
C3RNRDC - 24R	0.5	6.4
C3RNRDC - 36L	0.7	9.2
C3RNRDC - 36R	0.7	9.2
C3RNR - 60L	1.1	13.8
C3RNR - 60R	1.1	13.8
C3RNR - 72L	1.3	16.6
C3RNR - 72R	1.3	16.6

2013-2019 Ford Explorer

The Running Board lights for the 2013-2019 Ford Explorer fit under the vehicle's running board and provide a lateral facing signal from the side of the vehicle.

WARNING: Install hardware 36" away from radio equipment.

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.

Step 4. Repeat the process for the opposite side running board.

Step 5. Route the lights wiring as desired.

Note: Instructions are made using Driver's Side as example. To Reproduct results, revisit each step for Passenger Side.



Figure 1

2020+ Ford Explorer

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.

WARNING: Install hardware 36" away from radio equipment.

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.

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.



Figure 1



Figure 2

2015-2020 Chevy Tahoe / 2014-2019 Chevy Silverado

The Running Board lights for the 2015-2020 Chevy Tahoe / 2014-2019 Chevy Silverado fit under the vehicle's running board and provide a lateral facing signal from the side of the vehicle.

WARNING: Install hardware 36" away from radio equipment.

Step 1. Remove three (3) 13mm bolts and one (1) 10mm bolt from under the rocker panel. (See Figure 1 & 2)

Step 2. 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 tightened bolts loosened in Step 2.

Step 7. Repeat the process for the opposite side running board.

Step 8. 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



Figure 3



Figure 4



Figure 5



Figure 6

2020 Chevy Silverado

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

WARNING: Install hardware 36" away from radio equipment.

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.

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.



Figure 1

2021 Chevy Tahoe

WARNING: Install hardware 36" away from radio equipment.

Step 1. Remove the factory side step mounting bracket bolt indicated in Figure 1 from all four locations.

Step 2. Fasten the mounting brackets in position using the bolts removed in Step 1.

Step 3. Fasten the running board to the brackets using the supplied hardware as shown in Figure 2.

Note: The mounting brackets are slotted to allow the use of existing mounting holes in the product.

Step 4. Route product wiring as desired.

Note: Instructions are made using driver's side as example. To reproduce results, revisit each step for passenger side.

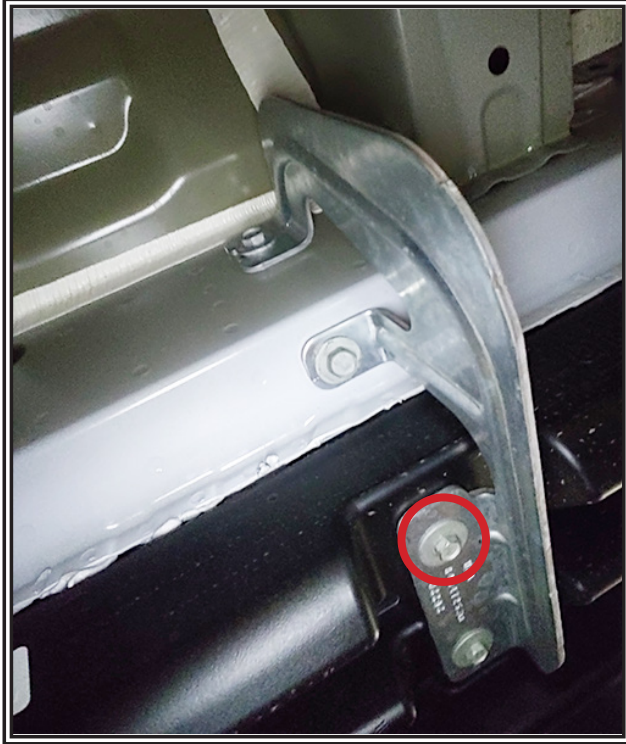


Figure 1

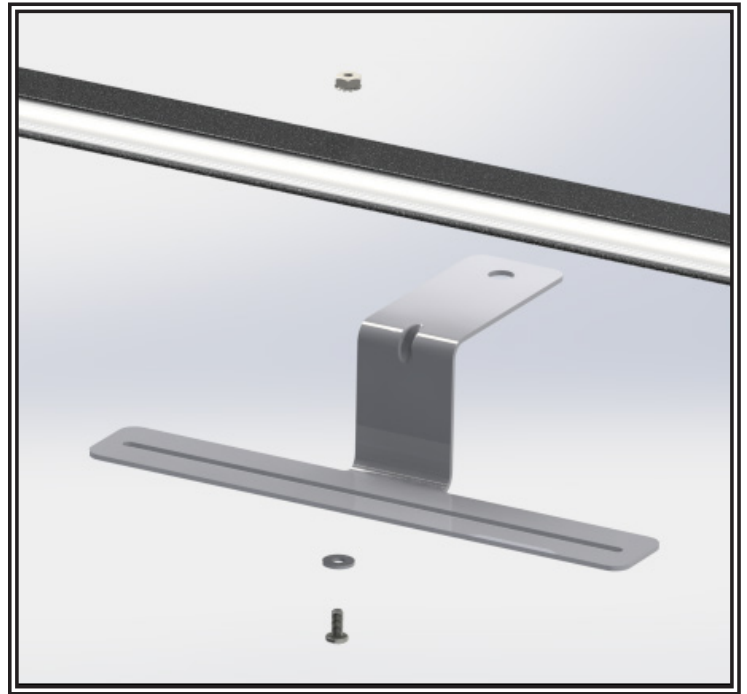


Figure 2

2017 & 2019 Dodge Ram Series

The Running Board lights for the 2017 & 2019 Dodge Ram Series fit under the vehicle's rocker panels and provide a lateral facing signal from the side of the vehicle.

WARNING: Install hardware 36" away from radio equipment.

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.

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.



Figure 1



Figure 2

2015-2020 Ford F-Series

The Running Board lights for the 2015-2020 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.

WARNING: Install hardware 36" away from radio equipment.

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.



Figure 1



Figure 2

2019+ Ford Ranger

The Running Board lights for the 2019+ Ford Ranger 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.

WARNING: Install hardware 36" away from radio equipment.

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.



Figure 1

2017 Ford Fusion

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.

WARNING: Install hardware 36" away from radio equipment.

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).

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.



Figure 1



Figure 2

2016 Ford Taurus

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.

WARNING: Install hardware 36" away from radio equipment.

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.

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).

Step 5. 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.

Note: Instructions are made using Driver's Side as example. To Reproduce results, revisit each step for Passenger Side.



Figure 1



Figure 2



Figure 3

2018 Dodge Durango

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.

WARNING: Install hardware 36" away from radio equipment.

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).

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.



Figure 1



Figure 2

2021 Ford Expedition

WARNING: Install hardware 36" away from radio equipment.

Step 1. Fasten the mounting brackets to the vehicle using the pre-existing holes in the pinch weld of the vehicle shown in Figure 1. Fasten using the provided 1/4"-20 hardware.

Step 2. Fasten the running board to the brackets using the supplied hardware #8-32 as shown in Figure 2.

Note: The mounting brackets are slotted to allow the use of existing mounting holes in the product.

Step 3. Repeat this process for the opposite side of the vehicle.

Step 4. Route product wiring as desired.

Note: Instructions are made using driver's side as example. To reproduce results, revisit each step for passenger side.

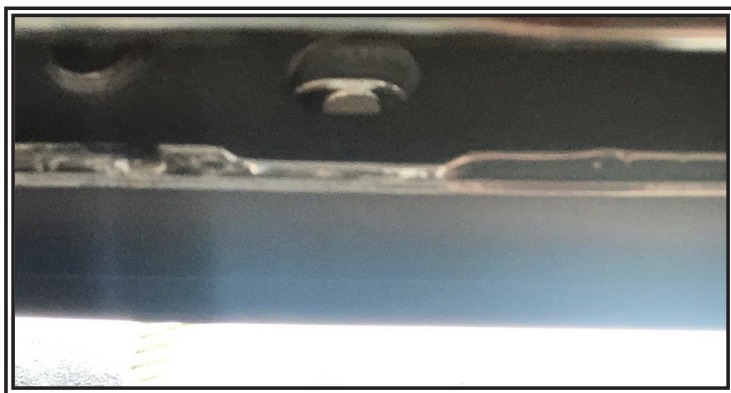


Figure 1



Figure 2

Wiring Instructions

Red - Positive (12V)

Black - Negative

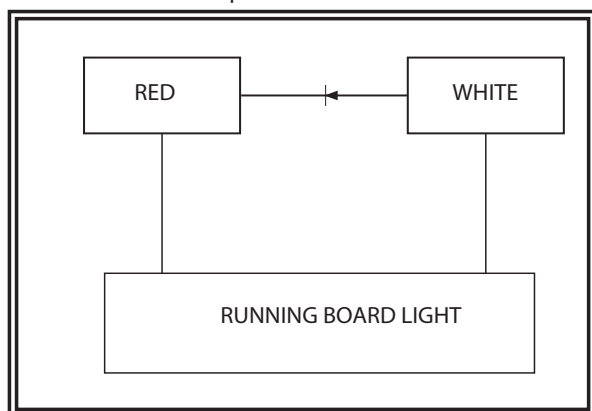
White - Steady Secondary Color Override (Cut white wire for all models WITHOUT white lights)

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.

Figure 1

Flash Patterns

Flash Pattern #	Description	FPM	Color	SAE J595				CA T13
				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			Color 2, Color 1	CLASS 2	-	CLASS 2	CLASS 3	-
4	Single	350	Color 1, Color 1	-	-	-	-	-
5			Color 1, Color 2	-	-	-	-	-
6			Color 2, Color 1	-	-	-	-	-
7	Double	70	Color 1, Color 1	-	-	-	-	-
8			Color 1, Color 2	-	-	-	-	-
9			Color 2, Color 1	-	-	-	-	-
10	Quad	80	Color 1, Color 1	CLASS 2	-	CLASS 2	CLASS 3	-
11			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	Single	113	Color 1, Color 1	CLASS 2	CLASS 3	CLASS 2	CLASS 2	CLASS E
17			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	Quint	60	Color 1, Color 1	-	-	-	-	-
20			Color 1, Color 2	-	-	-	-	-
21			Color 2, Color 1	-	-	-	-	-
22	Double	95	Color 1, Color 1	CLASS 2	CLASS 3	CLASS 2	CLASS 2	CLASS E
23			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	Arrow	117	Color 1, Color 1	-	-	-	-	-
26			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 Burn	N/A	Color 1, Color 1	-	-	-	-	-
32			Color 2, Color 2	-	-	-	-	-

Troubleshooting

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.

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.

Exclusion of Other Warranties:

MANUFACTURER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. THE IMPLIED WARRANTIES FOR MERCHANTABILITY, QUALITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICE ARE HEREBY EXCLUDED AND SHALL NOT APPLY TO THE PRODUCT AND ARE HEREBY DISCLAIMED, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW. ORAL STATEMENTS OR REPRESENTATIONS ABOUT THE PRODUCT DO NOT CONSTITUTE WARRANTIES.

Remedies and Limitation of Liability:

MANUFACTURER'S SOLE LIABILITY AND BUYER'S EXCLUSIVE REMEDY IN CONTRACT, TORT (INCLUDING NEGLIGENCE), OR UNDER ANY OTHER THEORY AGAINST MANUFACTURER REGARDING THE PRODUCT AND ITS USE SHALL BE, AT MANUFACTURER'S DISCRETION, THE REPLACEMENT OR REPAIR OF THE PRODUCT, OR THE REFUND OF THE PURCHASE PRICE PAID BY BUYER FOR NON-CONFORMING PRODUCT. IN NO EVENT SHALL MANUFACTURER'S LIABILITY ARISING OUT OF THIS LIMITED WARRANTY OR ANY OTHER CLAIM RELATED TO THE MANUFACTURER'S PRODUCTS EXCEED THE AMOUNT PAID FOR THE PRODUCT BY BUYER 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 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.



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