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› Diode Dynamics HitchMount Reverse Light Kit, C1R + Brake User Manual

Diode Dynamics DD7422

Diode Dynamics HitchMount Reverse Light Kit, C1R + Brake User Manual

Model: DD7422

1. PRODUCT OVERVIEW

The Diode Dynamics HitchMount Reverse Light Kit, C1R + Brake, is designed to integrate powerful auxiliary lighting into your vehicle's 2-inch trailer hitch receiver. This kit provides enhanced visibility for reversing, acts as an additional running light, and functions as a fourth brake light, significantly improving safety and utility.

Key Features:

- Allows for installation of SSC1 or C1R LED pods directly into the trailer hitch.
- Provides high-power reverse light for superior rearward illumination.
- Functions as a red accent light and a fourth brake light for increased visibility to following traffic.
- Features an optional SafetyStrobe brake light strobing function (C1R + Brake model).
- Designed for simple, 5-minute installation with a plug-and-play wiring harness, eliminating the need for custom wiring or routing.
- Engineered and assembled in the USA, ensuring high quality and reliability.

DIODE DYNAMICS

HITCHMOUNT LED POD

THE EASIEST 3-IN-1 LIGHTING UPGRADE

- POWERFUL REVERSE LIGHT
- 4TH BRAKE LIGHT
- ADDITIONAL RUNNING LIGHT



Image: Overview of the Diode Dynamics HitchMount LED Pod's 3-in-1 lighting capabilities.

2. WHAT'S IN THE BOX

Upon opening the package, verify that all components are present and undamaged:

- Diode Dynamics - HitchMount LED Pod Reverse Kit C1R
- Associated wiring harness for plug-and-play installation
- Mounting hardware (e.g., zip ties, as seen in product images)



Image: All components included in the Diode Dynamics HitchMount Reverse Light Kit.

3. SETUP AND INSTALLATION

The Diode Dynamics HitchMount kit is designed for a quick and straightforward installation process, typically taking around 5 minutes. No cutting or splicing of factory wires is required.

Installation Steps:

1. **Prepare Vehicle:** Ensure your vehicle is turned off and the parking brake is engaged. Locate your vehicle's trailer wiring harness connector, typically near the hitch receiver.
2. **Unplug Factory Connector:** Disconnect the factory trailer wiring connector.

EASY SNAP-IN INSTALL

1

Unplug the
factory
connector

2

Install the
Plug-&-Play
connector

3

Snap it in!

Image: Easy Snap-In Installation Guide.

3. **Install Plug-and-Play Connector:** Connect the provided Diode Dynamics wiring harness between the vehicle's factory connector and the trailer wiring. The harness is designed to be plug-and-play, ensuring a secure and proper connection without modification.
4. **Mount LED Pod:** Insert the HitchMount LED pod assembly into your vehicle's 2-inch trailer hitch receiver. Ensure it snaps securely into place. The design allows for easy removal when towing is required.



Image: The HitchMount LED pod securely installed in a vehicle's trailer hitch.



**LOCKABLE
DESIGN**



**EASY REMOVAL
FOR TOWING**



**NO CUTTING
OR SPLICING**

Image: Features of the HitchMount system, including lockable design and easy removal.

5. **Secure Wiring:** Use the provided zip ties to neatly secure any loose wiring, keeping it away from moving parts or heat sources.
6. **Test Functionality:** Turn on your vehicle and test all light functions: reverse light, running light, and brake light (including strobing if applicable).

Note: Some late model vehicles, particularly certain Ford models, may experience fast turn signals or error messages due to sensitive Body Control Modules (BCMs). If this occurs, consult the Diode Dynamics support for potential solutions or alternative wiring methods.

4. OPERATING INSTRUCTIONS

The HitchMount Reverse Light Kit operates in conjunction with your vehicle's existing lighting system, providing three distinct functions:

- **Reverse Light:** When the vehicle is shifted into reverse, the LED pod illuminates brightly, significantly enhancing rearward visibility.
- **Running Light:** When your vehicle's tail lights are on, the LED pod provides a red accent light, increasing your vehicle's presence.
- **Fourth Brake Light:** Upon application of the brake pedal, the LED pod illuminates as an additional brake light. The C1R + Brake model includes an optional SafetyStrobe feature, causing the brake light to strobe for increased attention.

EVERYDAY OPERATION



REVERSE LIGHT



RUNNING LIGHT



BRAKE LIGHT

Image: Visual representation of the HitchMount LED pod's everyday operation modes.



ADDS A HIGH-POWER REVERSE LIGHT

Image: Demonstration of the high-power reverse light capability provided by the kit.



68% INCREASE IN REVERSE LIGHT BRIGHTNESS

Image: Illustrating the significant increase in reverse light brightness with the new SSC1R.



4TH BRAKE LIGHT (AVAILABLE W/ C1R)

Image: The HitchMount LED pod operating as a fourth brake light.

5. MAINTENANCE

The Diode Dynamics HitchMount LED Kit is designed for durability and minimal maintenance. Follow these guidelines to ensure optimal performance and longevity:

- **Regular Cleaning:** Periodically clean the lens of the LED pod with a soft cloth and mild soap and water to remove dirt, mud, or road grime that may obstruct light output. Avoid abrasive cleaners or harsh chemicals.
- **Inspect Wiring:** Annually inspect the wiring harness for any signs of wear, fraying, or damage. Ensure all connections remain secure.
- **Check Mounting:** Verify that the LED pod remains securely seated in the hitch receiver. If removed for towing, ensure it is reinstalled correctly.
- **Environmental Exposure:** While the unit is waterproof, prolonged exposure to extreme conditions (e.g., deep water submersion, harsh chemicals) should be minimized.

6. TROUBLESHOOTING

If you encounter issues with your HitchMount Reverse Light Kit, consider the following troubleshooting steps:

- **Light Not Illuminating:**
 - Check all connections in the wiring harness to ensure they are fully seated.
 - Verify that your vehicle's trailer wiring harness is functioning correctly (e.g., by testing with a trailer).
 - Inspect vehicle fuses related to trailer lighting or reverse lights.
- **Intermittent Operation:**
 - Ensure the LED pod is firmly seated in the hitch receiver and not loose.

- Check for any loose or corroded connections in the wiring harness.

- **Vehicle Error Messages / Fast Turn Signals:**

- Some modern vehicles with sensitive Body Control Modules (BCMs) may detect the LED light as an incorrect load, leading to "bulb out" warnings, fast turn signals, or trailer disconnection messages.
- This is more common in certain vehicle makes/models (e.g., late model Fords, BMW X5 as per customer feedback).
- Contact Diode Dynamics customer support for specific guidance or potential solutions, such as load resistors or alternative wiring configurations for your vehicle.

- **Brake Light Strobing Not Working (C1R + Brake model):**

- Ensure the correct C1R + Brake model was installed.
- Verify the brake signal is correctly reaching the unit.

If these steps do not resolve the issue, please contact Diode Dynamics customer support for further assistance.

7. SPECIFICATIONS

Brand	Diode Dynamics
Model	DD7422
ASIN	B0BKQY67ZF
UPC	195995129451
Product Dimensions (L x W x H)	5 x 11.25 x 3.5 inches
Item Weight	1.43 pounds
Color	Red (for C1R + Brake model)
Lens Material	Polycarbonate
Wattage	14.1 watts
Special Feature	Waterproof
Vehicle Service Type	Car (Universal Fit)
Assembly Required	No

8. WARRANTY AND SUPPORT

Diode Dynamics products are known for their quality and reliability. For specific warranty information regarding your HitchMount Reverse Light Kit, please refer to the official Diode Dynamics website or the documentation included with your product. Warranty terms typically cover manufacturing defects.

Customer Support:

If you require technical assistance, have questions about installation, or need to address a warranty claim, please contact Diode Dynamics directly:

- **Manufacturer:** Diode Dynamics
- **Website:** www.diodedynamics.com (Please visit the official website for the most current contact information and support resources.)

When contacting support, please have your product model number (DD7422) and purchase information readily available.

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This manual is for informational purposes only. Specifications are subject to change without notice.