Manuals+

Q & A | Deep Search | Upload

manuals.plus /

- Morimoto /
- Morimoto M LED 2.0 Bi-LED Projector Instruction Manual

Morimoto PR353

Morimoto M LED 2.0 Bi-LED Projector Instruction Manual

Model: PR353 | Brand: Morimoto

INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Morimoto M LED 2.0 Bi-LED Projector. Designed for custom automotive retrofits, this universal projector lens offers both low beam and high beam functionality with an ECE-compliant RHD (Right-Hand Drive) beam pattern and cutoff. Please read this manual thoroughly before beginning any installation or operation to ensure proper function and safety.



Image: The Morimoto M LED 2.0 Bi-LED Projectors, showcasing the compact design and the product packaging.

WHAT'S INCLUDED

Verify that all components are present and undamaged before proceeding with installation.

• Projector: 1x Morimoto M LED 2.0 Bi-LED RHD Projector

• Driver: 1x M LED 1.0 Driver

• Hardware: 1x Threaded shaft with lock ring



Image: Exploded view of the projector components, illustrating the lens, housing, and associated hardware.

SETUP AND INSTALLATION

The Morimoto M LED 2.0 Bi-LED Projector is designed for universal fitment in custom automotive retrofit applications. Due to the specialized nature of headlight retrofitting, professional installation is highly recommended. This section provides general guidance.

Pre-Installation Checks

- Ensure the vehicle's battery is disconnected before starting any electrical work.
- Confirm the projector fits within the intended headlight housing.
- Inspect all components for any signs of damage.

Mounting the Projector

The projector utilizes a threaded shaft for secure mounting. This allows for precise adjustment and locking into place within the headlight assembly.

- 1. Carefully insert the projector into the headlight housing opening.
- 2. Secure the projector using the provided threaded shaft and lock ring from the rear of the housing.
- 3. Ensure the projector is oriented correctly for the RHD beam pattern.

Electrical Connections

Connect the M LED 1.0 Driver to the projector and then to the vehicle's electrical system. The system operates on a 9-30V DC input.

- Connect the projector's cable to the input port on the M LED 1.0 Driver.
- Connect the driver's power input to the vehicle's low beam and high beam wiring. Consult a vehicle-specific wiring diagram if unsure.
- Ensure all connections are secure and properly insulated to prevent short circuits.

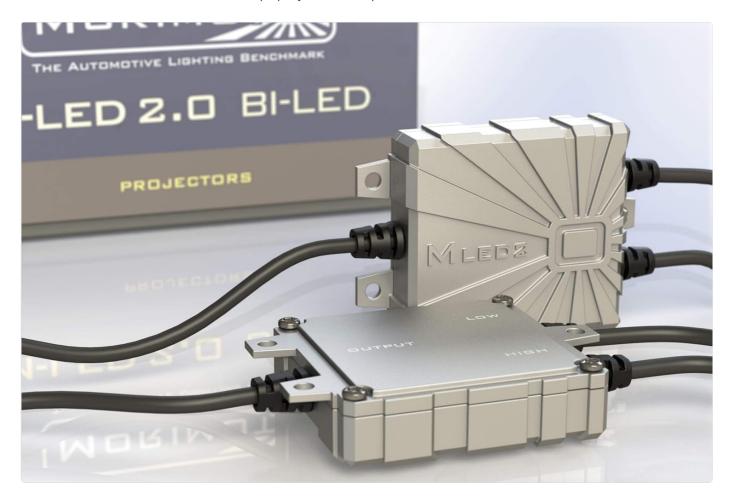


Image: The M LED 2.0 Bi-LED drivers, essential components for power regulation and function of the projectors.

OPERATION

The Morimoto M LED 2.0 is a Bi-LED projector, meaning it provides both low beam and high beam functionality from a single projector unit. The transition between low and high beam is controlled by an internal cutoff shield mechanism.

Low Beam Function

When the low beams are activated, the internal cutoff shield is in place, creating a sharp, ECE-compliant RHD cutoff line. This prevents glare for oncoming traffic while providing ample illumination of the road ahead.

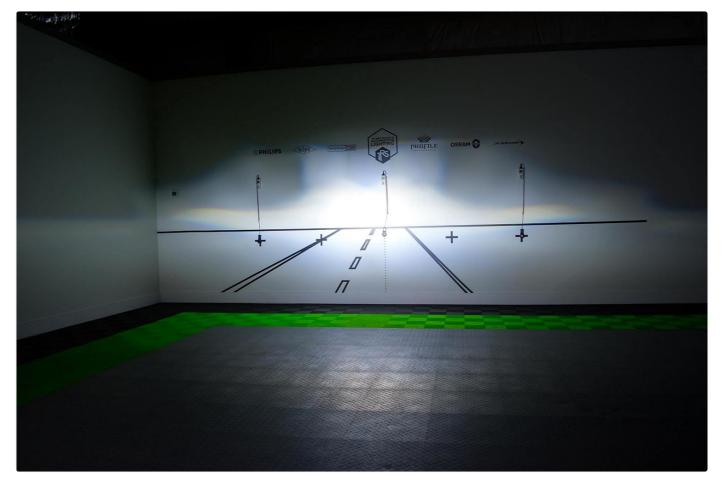


Image: Example of the RHD beam pattern with a distinct cutoff line, as projected on a test wall.

High Beam Function

When the high beams are activated, the cutoff shield retracts, allowing the full light output to be projected. This provides maximum illumination for increased visibility during night driving in areas without oncoming traffic.

Light Path and Cutoff Mechanism

The projector utilizes a sophisticated optical system, including a sub-reflector and cutoff shield, to precisely control the light output and beam pattern. The RHD beam pattern ensures proper illumination for right-hand drive vehicles.

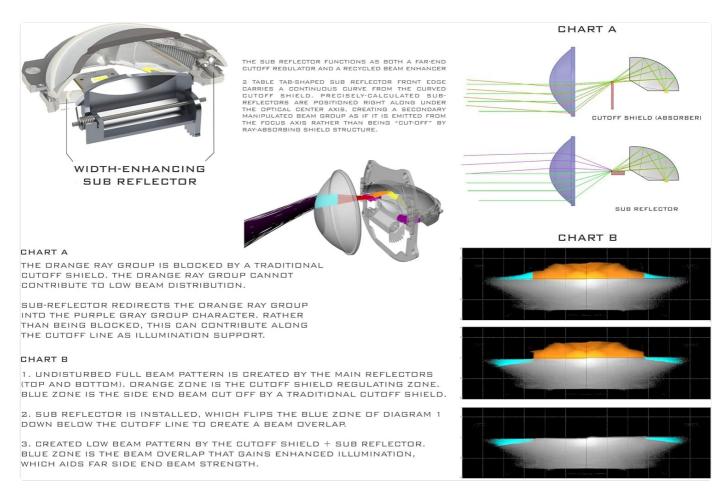


Image: Technical diagram explaining the internal optics and how the light is managed to create the desired beam patterns.

MAINTENANCE

The Morimoto M LED 2.0 Bi-LED Projector is designed for long-term, maintenance-free operation. However, periodic checks can help ensure optimal performance.

- Cleaning: Keep the exterior lens of the headlight assembly clean from dirt and debris. Use a soft cloth and mild cleaning solution. Do not use abrasive cleaners.
- Inspection: Periodically check the wiring connections for any signs of wear or corrosion.
- Waterproof Feature: The projector is designed to be waterproof. Ensure that the headlight housing itself is properly sealed after installation to protect the internal components from moisture.

TROUBLESHOOTING

If you encounter issues with your Morimoto M LED 2.0 Bi-LED Projector, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Projector does not illuminate	No power, loose connection, faulty driver.	Check all wiring connections. Verify power supply to the driver. Test the driver if possible.
High beam not activating	Wiring issue to high beam trigger, faulty driver.	Ensure high beam trigger wire is correctly connected to the driver. Check driver functionality.
Improper beam pattern/cutoff	Projector not seated correctly, internal component misalignment.	Re-check projector mounting and orientation. If issue persists, contact support.

For issues not listed here or if troubleshooting steps do not resolve the problem, please contact Morimoto customer support.

TECHNICAL SPECIFICATIONS

Feature	Detail
Model	PR353
Light Source	HML-3 7545 LED
Color Temperature	6300K
Function	Bi-LED (Low Beam & High Beam)
Traffic Pattern	RHD (Right-Hand Drive) with ECE Cutoff
Intensity	70,000cd
Power	29.5W
Input Voltage	9-30V DC
Lens Diameter	3.0 inches
Lens Material	Sapphire Glass
Dimensions (H x W x D)	82mm x 95mm x 124mm (150mm with shaft)
Shaft Diameter	35mm
Item Weight	1 pound
Special Features	Waterproof
Automotive Fit Type	Universal Fit

WARRANTY AND SUPPORT

Warranty Information

The Morimoto M LED 2.0 Bi-LED Projector comes with a **5 Year Warranty**. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims. For full warranty terms and conditions, please refer to the official Morimoto website or contact their customer service.

Customer Support

For technical assistance, troubleshooting, or warranty inquiries, please contact Morimoto customer support. You can typically find contact information on the official Morimoto website or through your authorized dealer.

Online Resources: Visit the Morimoto Store on Amazon for additional product information and resources.

© 2023 Morimoto. All rights reserved.



Morimoto Mini H1 7.0 Stage III Kit Installation Guide

Detailed installation guide for the Morimoto Mini H1 7.0 Stage III HID projector kit, covering various wiring configurations, component installation, and sealing procedures for automotive lighting upgrades.



Morimoto 4Banger Flush Mount Pod Light Kit Installation Guide

Detailed installation guide for the Morimoto 4Banger Flush Mount Pod Light Kit, covering package contents, tools required, and step-by-step instructions for mounting and adjustment.



Morimoto BAF132H/BAF133H BigBanger Wire Harness Installation Guide

Comprehensive installation guide for Morimoto BigBanger and BangerBar wire harnesses (models BAF132H, BAF133H), covering wiring diagrams, switch connections, fuse tap usage, and optimal routing for automotive LED lighting.



Morimoto Install Guide: 15-20 GMC Yukon Tail Lights

Step-by-step installation guide for Morimoto XB LED Tail Lights for 15-20 GMC Yukon models. Includes disassembly, optional boost bar install, and final installation.



2021+ Ford F-150 XB LED Tail Lights Installation Guide by Morimoto

A comprehensive installation guide for Morimoto XB LED Tail Lights for the 2021 and newer Ford F-150. This guide covers installation for OEM LED, OEM Incandescent with BLIS, and OEM Incandescent without BLIS configurations, along with instructions for installing the optional Boost Bar License Plate Light. Includes required tools and troubleshooting tips for turn signal errors.



Morimoto Boost Bar License Plate Light Installation Guide

Step-by-step installation guide for the Morimoto Boost Bar License Plate Light, including package contents, required tools, and wiring options for automotive lighting upgrades. Features detailed instructions for tapping into stock wiring or direct connection to Morimoto XB LED tail lights.