

SHIMANO IRDRX815

Shimano GRX RD-RX815 Di2 Rear Derailleur Instruction Manual

Model: IRDRX815

INTRODUCTION

The Shimano GRX RD-RX815 Di2 Rear Derailleur is an 11-speed electronic shifting component designed for gravel and road cycling. It features a long cage to accommodate a wide range of cassette sizes, a clutch mechanism for chain stability on varied terrain, and Di2 electronic precision for consistent shifting performance. This derailleur is compatible with 1x and 2x drivetrain setups and integrates Shimano's Shadow RD+ technology, positioning the derailleur closer to the frame for enhanced protection.

SAFETY INFORMATION

Always wear appropriate safety gear when working on your bicycle. Ensure all components are installed correctly and securely tightened to specified torque values. Incorrect installation or adjustment can lead to serious injury or damage to the bicycle. Consult a professional bicycle mechanic if you are unsure about any installation or adjustment procedures. Keep the Di2 battery charged and avoid exposing electronic components to extreme temperatures or moisture.

SETUP

1. Installation to Frame

Attach the RD-RX815 rear derailleur to the bicycle's derailleur hanger. Ensure the B-axle unit is correctly seated. Tighten the fixing bolt to the manufacturer's specified torque. The derailleur is designed for standard derailleur hanger mounting.

2. Chain Routing

Route the bicycle chain through the derailleur's guide and tension pulleys. Ensure the chain follows the correct path as indicated by the markings on the derailleur cage.

3. Di2 Wiring Connection

Connect the Di2 E-Tube wire to the port on the rear derailleur. Ensure the connection is secure and protected from environmental elements. Refer to the Shimano E-Tube Project software for system configuration and firmware updates.

4. Limit Screw Adjustment

Adjust the High (H) and Low (L) limit screws to prevent the chain from overshifting off the smallest and largest cogs of the cassette. These adjustments are critical for proper shifting and to prevent the chain from falling into the spokes or frame.

5. B-Tension Adjustment

Adjust the B-tension screw to set the proper distance between the guide pulley and the largest cog of the cassette. This adjustment ensures smooth shifting across all gears and prevents the guide pulley from rubbing against the cassette cogs.



This image displays the main body of the Shimano GRX RD-RX815 Di2 Rear Derailleur, highlighting the electronic shifting mechanism and the GRX branding. Key components such as the pivot points and the Di2 wire port are visible.

OPERATING

1. Electronic Shifting

The RD-RX815 uses Shimano Di2 electronic shifting. Press the shift buttons on your shifters to initiate gear changes. The system provides precise and consistent shifts with minimal effort.

2. Clutch Mechanism (Shadow RD+)

The derailleur is equipped with a clutch mechanism to reduce chain slap and improve chain retention on rough terrain. The clutch can be engaged (ON) or disengaged (OFF) using the lever located on the derailleur body. For optimal chain stability, ensure the

clutch is in the ON position when riding on uneven surfaces.

3. Synchro-Shift Modes

If configured via the E-Tube Project software, the Di2 system supports Synchro-Shift modes. These modes allow the system to automatically shift the front derailleur (if present) in conjunction with rear shifts to maintain optimal chain line and gear progression. Refer to the E-Tube Project manual for detailed configuration.



This image provides a detailed look at the long cage of the Shimano GRX RD-RX815 Di2 Rear Derailleur. It shows the design of the cage, which accommodates a wide range of cassette sizes, along with the guide and tension pulleys responsible for chain management.

MAINTENANCE

1. Cleaning

Regularly clean the derailleur body, pulleys, and cage to remove dirt and grime. Use a mild detergent and water, avoiding high-pressure washing directly on electronic components. Dry thoroughly after cleaning.

2. Lubrication

Apply a small amount of bicycle-specific lubricant to the pivot points of the derailleur and the pulley bearings periodically. Avoid over-lubrication, which can attract dirt.

3. Di2 Battery Charging

Monitor the Di2 battery level and charge it as needed using the official Shimano Di2 charger. Refer to your Di2 system manual for specific charging instructions and battery life indicators.

4. Firmware Updates

Periodically check for and install firmware updates using the Shimano E-Tube Project software. Updates can improve performance, add features, or resolve issues.

5. Inspection

Regularly inspect the derailleur for any signs of wear, damage, or loose bolts. Pay attention to the pulley wheels, cage, and electronic wire connections. Replace worn or damaged parts promptly.

TROUBLESHOOTING

1. Shifting Issues (Slow, Inaccurate)

- **Check Di2 Battery:** Ensure the battery is sufficiently charged.
- **Inspect E-Tube Wires:** Verify all Di2 wire connections are secure and undamaged.
- **Adjust Limit Screws:** Re-check H and L limit screw settings.
- **Adjust B-Tension:** Ensure correct B-tension for optimal pulley-to-cog distance.
- **Clean Derailleur:** Remove any accumulated dirt or debris from the derailleur and pulleys.
- **Perform Micro-Adjustment:** Use the E-Tube Project software or the junction box button to perform fine-tuning adjustments to the shifting position.

2. Noise

- **Chain Rub:** Check for chain rub against the derailleur cage or adjacent cogs. Adjust shifting or limit screws as needed.
- **Loose Components:** Ensure all bolts, including the derailleur fixing bolt and pulley bolts, are tightened to specification.
- **Worn Pulleys:** Inspect pulley wheels for wear and replace if necessary.

3. Di2 Connectivity Problems

- **Check All Connections:** Disconnect and reconnect all E-Tube wires to ensure proper seating.
- **Inspect Wires for Damage:** Look for cuts, pinches, or fraying in the E-Tube wires.
- **Reset System:** Perform a system reset via the E-Tube Project software or junction box.

4. Clutch Issues

- **Clutch Lever Position:** Ensure the clutch lever is fully engaged (ON) for maximum chain tension.
- **Clutch Adjustment:** If the clutch tension feels too loose or too tight, it may require adjustment. Consult a professional mechanic or Shimano's technical documentation for specific adjustment procedures.

SPECIFICATIONS

Model Number	IRDRX815
Material	Aluminum

Capacity	38t
Cassette Range	11 - 34t
Gearing	2 x 11-speed
Compatibility	Shimano GRX Di2 drivetrain
Mounting Type	Braze-On Mount (<i>Note: Typically refers to a standard derailleur hanger mount for rear derailleurs</i>)
Product Dimensions	11"L x 8"W x 3"H
Included Components	Rear Derailleur
UPC	192790443188

WARRANTY

This Shimano GRX RD-RX815 Di2 Rear Derailleur is covered by a **Limited Warranty**. For specific terms, conditions, and duration of the warranty, please refer to the warranty documentation included with your purchase or visit the official Shimano website. The warranty typically covers manufacturing defects and material flaws under normal use.

SUPPORT

For further assistance, technical support, or to locate an authorized service center, please visit the official Shimano website or contact Shimano customer service. Detailed technical documents, FAQs, and E-Tube Project software downloads are available online.

Shimano Official Website: <https://bike.shimano.com/>