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› BLACK DIAMOND Storm 500-R Rechargeable Headlamp Instruction Manual

BLACK DIAMOND Storm 500-R

BLACK DIAMOND Storm 500-R Rechargeable Headlamp Instruction Manual

Model: Storm 500-R

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1. SETUP

The BLACK DIAMOND Storm 500-R headlamp is designed for immediate use with its integrated rechargeable battery.

1.1 Initial Charge

Your headlamp includes a BD 2400 Li-ion rechargeable battery. Before first use, ensure the battery is fully charged using the provided Micro-USB charging cable. The charging port is located on the side of the headlamp, protected by a rubber flap.

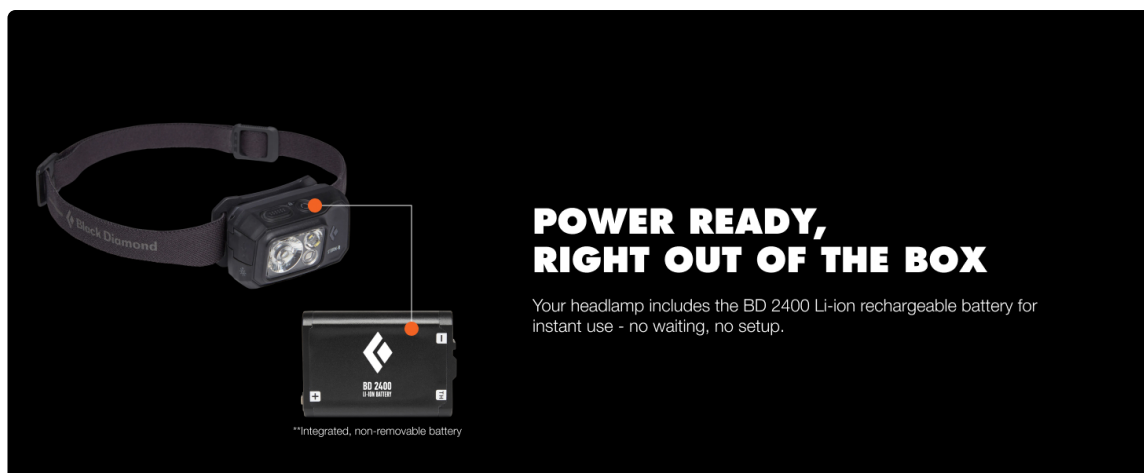


Image: The BLACK DIAMOND Storm 500-R headlamp shown with its integrated BD 2400 Li-ion rechargeable battery and the included USB charging cable, highlighting its 'power ready' status.

1.2 Battery Level Indicator

Check the battery charge level by briefly pressing the power button. Blue indicator lights on the

underside of the headlamp will illuminate to show the remaining power. Three dots indicate a full charge, while fewer dots indicate a lower charge.

1.3 Adjusting the Headband

The headlamp features an adjustable elastic headband for a secure and comfortable fit. Adjust the strap to fit snugly around your head or over a hat. The thin strap design enhances comfort and reduces bulk.

2. OPERATING INSTRUCTIONS

The Storm 500-R offers multiple lighting modes and features for various outdoor activities and tasks.

2.1 Power On/Off and Mode Selection

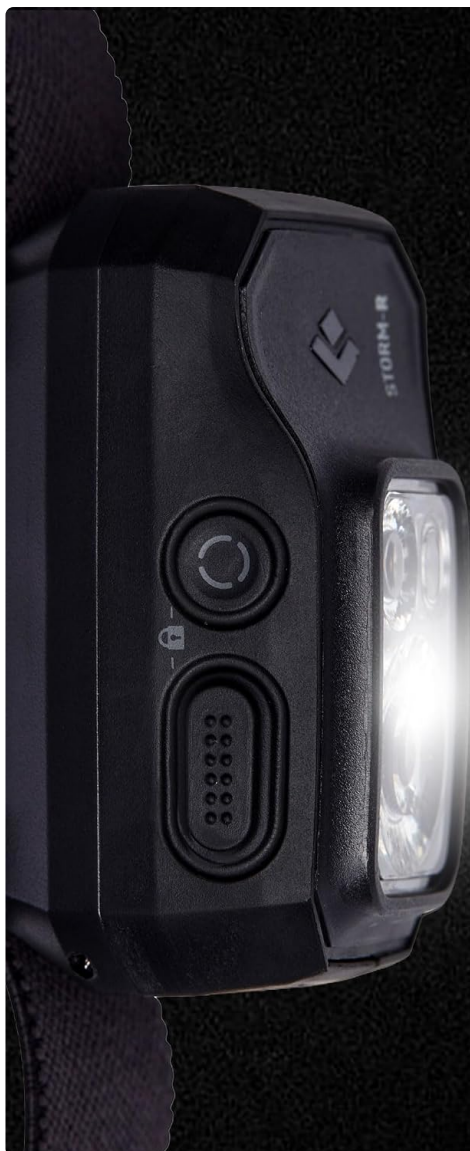
- **Power On/Off:** Press the main power button once to turn the headlamp on or off.
- **Cycle White Light Modes:** With the headlamp on, press the main power button repeatedly to cycle through full strength, dimming, and strobe modes for the white light.
- **Cycle Color Light Modes:** To access red, green, or blue night-vision modes, press and hold the secondary button (often marked with a light icon) for 2 seconds. Press the secondary button repeatedly to cycle through the available colors.



Image: An overview of the BLACK DIAMOND Storm 500-R headlamp, illustrating its PowerTap Technology, Night Vision modes, Brightness Memory, IP67 waterproof rating, patented digital lockout, and rechargeable battery.

2.2 Dimming and Brightness Memory (PowerTap Technology)

- **Dimming:** In any white light mode, press and hold the main power button to dim the light. Release when the desired brightness is reached.
- **PowerTap Technology:** For instant adjustment between maximum output and dimmed power, simply tap the side of the headlamp. This allows quick transitions without cycling through all modes.
- **Brightness Memory:** The headlamp remembers your last used brightness setting for each mode. When you turn the light on and off, it will revert to the chosen brightness without defaulting to maximum.



POWERTAP™ TECHNOLOGY

Allows instant adjustment between max output and dimmed power

 **BRIGHTNESS MEMORY**

Allows you to turn the light on and off at a chosen brightness without reverting back to default setting

 **NIGHT VISION**

Settings include proximity and distance modes, dimming, strobe, red LED night-vision, and lock mode

 **Black Diamond®**

Image: A detailed view of the BLACK DIAMOND Storm 500-R headlamp, emphasizing its PowerTap Technology for instant brightness adjustment and Brightness Memory feature.

2.3 Digital Lockout Feature

To prevent accidental activation and battery drain when stored in a pack or pocket, the Storm 500-R includes a digital lockout feature.

- **To Lock:** With the headlamp off, press and hold both the main power button and the secondary button simultaneously for 2 seconds until the indicator light flashes.
- **To Unlock:** Repeat the same process (press and hold both buttons for 2 seconds) until the indicator light flashes, signaling it's unlocked.

3. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your headlamp.

3.1 Charging

Regularly charge your headlamp using the provided Micro-USB cable. Ensure the rubber flap

covering the charging port is securely closed when not charging to maintain its waterproof rating.

3.2 Cleaning

Wipe the headlamp body and lens with a soft, damp cloth. Avoid using abrasive cleaners or solvents that could damage the polycarbonate material or seals. The headband is washable; remove it from the headlamp unit before washing and allow it to air dry completely.

3.3 Water Resistance

The Storm 500-R is IP67 rated, meaning it is waterproof and dustproof, capable of submersion in 1 meter of water for up to 30 minutes. No special maintenance is required after submersion, but ensure all ports are sealed before exposure to water.

**PRECISION OPTICS
HIGH OUTPUT**

**MULTI-COLOR
NIGHT VISION**

Dimming, strobe, and red, green, and blue night-vision are all included, along with a useful lock mode

WATERPROOF

IP67: Waterproof and dustproof, completely sealed and tested to operate up to 1 meter underwater for 30 minutes

STORM-R

Image: The BLACK DIAMOND Storm 500-R headlamp showcasing its precision optics for high output and its IP67 waterproof and dustproof rating, indicating it can operate submerged up to 1 meter for 30 minutes.

4. TROUBLESHOOTING

If you encounter issues with your Storm 500-R headlamp, try the following solutions:

- **Headlamp Not Turning On:**

- Check the battery level indicator. If low, recharge the battery.
- Ensure the digital lockout feature is not activated. Unlock by pressing and holding both buttons simultaneously for 2 seconds.

- **Difficulty Changing Modes:**

- Familiarize yourself with the button functions. The main button cycles white light modes, while the secondary button (held for 2 seconds) accesses and cycles color light modes.
- Some users find the secondary button slightly recessed. Practice identifying its location by feel.

- **Light Output is Low:**

- Check if the headlamp is in a dimmed setting. Use PowerTap technology or press and hold the main button to increase brightness.
- Ensure the battery is fully charged, as low battery can reduce maximum output.

5. SPECIFICATIONS

Feature	Detail
Model	Storm 500-R
Brightness (White Max)	500 Lumens
Brightness (Red Low)	6 Lumens
Power Source	Integrated 2400 mAh Rechargeable Lithium Battery
Runtime (High)	7 hours
Runtime (Medium)	19 hours
Runtime (Low)	350 hours
Distance (Max)	120 meters
Distance (Medium)	60 meters
Distance (Low)	12 meters
Water Resistance	IP67 (Submersible 1 meter for 30 minutes)
Material	Polycarbonate
Weight	120 Grams
Dimensions (L x W x H)	2.5" x 1.5" x 1.5"

Included Components	USB Charging Cable
Special Features	Dimmable, Rechargeable, Waterproof, PowerTap Technology, Brightness Memory



Image: A visual representation of the BLACK DIAMOND Storm 500-R headlamp's technical specifications, including IP67 rating, weight, lumens, burn time, and light path distance.

6. WARRANTY & SUPPORT

6.1 Manufacturer's Warranty

The BLACK DIAMOND Storm 500-R Rechargeable Headlamp comes with a 3-year manufacturer's warranty. Please retain your proof of purchase for any warranty claims.

6.2 Customer Support

For further assistance, technical support, or warranty inquiries, please contact Black Diamond Equipment directly. Visit their official website or refer to the contact information provided in the product packaging.

7. PRODUCT VIDEOS

7.1 Black Diamond R Series Headlamps Overview

Video: An official overview from Black Diamond Equipment introducing the R Series headlamps, including the Storm 500-R, highlighting their rechargeable nature, features, and design.

