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› [DARKBEAM](#) /

› DARKBEAM 501BX IR 850nm Infrared Flashlight User Manual

DARKBEAM 501BX

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Model: 501BX

INTRODUCTION

Thank you for choosing the DARKBEAM 501BX IR 850nm Infrared Flashlight. This device is specifically designed as an infrared illuminator to enhance night vision equipment, such as night vision scopes or cameras. It emits 850nm infrared light, which is largely invisible to the naked human eye. This manual provides essential information for the safe and effective use of your infrared flashlight.

Important Note: This is not a standard visible light flashlight. You will only see a faint red glow from the LED when it is on. A night vision device is required to utilize its illumination capabilities.

SUPER BRIGHT & LONG RANGE

IR 850NM LED

Specially designed LED circuit, more concentrated light and longer irradiation distance, up to 500 meters.



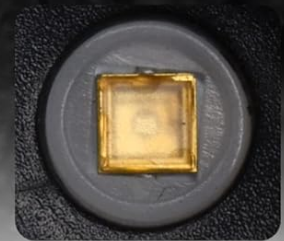
SUPER
BRIGHT



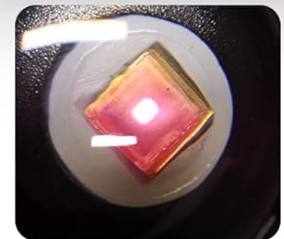
IR
850NM



500M
LONG RANGE



Switch off



Switch on

by the naked eyes, you can see
the weak red light on the bulb.

Image: The DARKBEAM 501BX IR 850nm Infrared Flashlight, designed for night vision applications.

PRODUCT OVERVIEW

Key Features

- **850nm Infrared LED:** Provides powerful, invisible infrared light for night vision devices.
- **Adjustable Focus Lens:** Allows adjustment of the beam width from a focused spot to a wider floodlight, extending illumination range up to 500 meters.
- **Rechargeable Battery:** Powered by an included Lithium-ion rechargeable battery, offering approximately 3 hours of continuous use.
- **Durable Construction:** Made from waterproof and drop-resistant aluminum alloy, suitable for various weather conditions.
- **Emergency Head:** Designed to protect the lens and can be used for emergency car escape or outdoor survival.

Package Contents

Upon unpacking, please ensure all the following items are present:

- 1 x DARKBEAM 501BX IR 850nm Infrared Flashlight
- 1 x High-Capacity Rechargeable Lithium-ion Battery
- 1 x USB Battery Charger
- 1 x Flashlight Cloth Holster
- 1 x Portable Lanyard



Image: All items included in the DARKBEAM 501BX package.

SETUP

1. Battery Installation

1. Unscrew the tail cap of the flashlight.
2. Insert the provided rechargeable Lithium-ion battery with the positive (+) terminal facing towards the flashlight head.

3. Screw the tail cap back on securely.

2. Initial Charging

Before first use, fully charge the battery.

1. Connect the USB charger to a 5V/1A USB power source (e.g., power bank, laptop, USB wall adapter).
2. Insert the rechargeable battery into the USB charger.
3. The charger's indicator light will show charging status (typically red for charging, green for fully charged).
4. Charging typically takes approximately 3 hours.

OPERATING INSTRUCTIONS

1. Power On/Off

- To turn the flashlight on, press the button on the tail cap.
- To turn the flashlight off, press the button again.



Image: The LED emits a faint red glow when the IR flashlight is active, visible to the naked eye.

2. Adjusting Focus (Zoom)

The flashlight features a telescopic focusing head to adjust the beam.

- **To Zoom In (Narrow Beam):** Extend the flashlight head forward. This concentrates the IR light for a longer, more focused beam, ideal for distant targets (up to 500 meters).
- **To Zoom Out (Wide Beam):** Retract the flashlight head backward. This spreads the IR light for a wider area of illumination, suitable for closer observation.

zoom out



zoom in



Stretch the flashlight to adjust the focus

ZOOM OUT



ZOOM IN



Image: The flashlight's telescopic head allows adjustment between a wide beam (zoom out) and a narrow, focused beam (zoom in).

3. Usage with Night Vision Devices

The DARKBEAM 501BX is an infrared illuminator, meaning it provides supplemental IR light for night vision devices. It does not produce visible light for general illumination.

- Ensure your night vision scope or camera is active.
- Turn on the IR flashlight.
- Adjust the focus of the flashlight to match your observation distance and field of view.
- This setup is ideal for activities such as hunting, wildlife observation, outdoor search, and photography in low-light or no-light conditions.

Infrared light is invisible to human eyes

Not suitable for general lighting.



It is designed to be used with a night vision device



Image: The infrared flashlight is designed for use with night vision devices, not as a standalone visible light source.

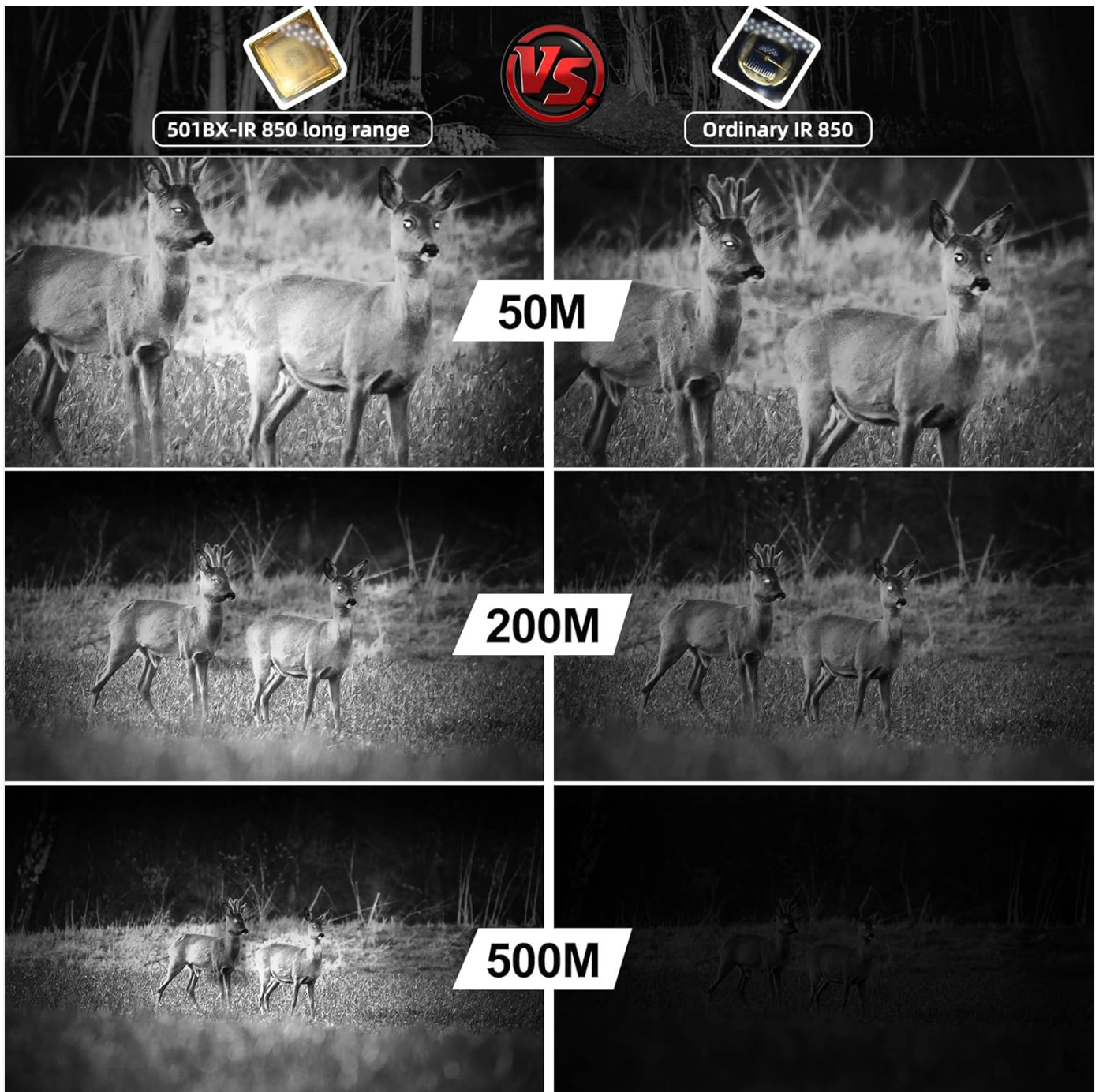


Image: Range comparison of the DARKBEAM 501BX IR flashlight at various distances with a night vision device.

MAINTENANCE

Battery Care

- To preserve battery life, charge the battery every two months if the flashlight is not in regular use.
- Avoid fully discharging the battery frequently, as this can reduce its overall lifespan.

Cleaning and Storage

- Wipe the flashlight body with a soft, damp cloth. Do not use abrasive cleaners.
- Keep the lens clean for optimal performance. Use a lens cleaning cloth if necessary.
- Store the flashlight in a cool, dry place away from direct sunlight and extreme temperatures.

Water Resistance

The flashlight is designed to be water-resistant (IP65X standard met), making it suitable for use in wet environments.

However, it is not intended for submersion. Ensure the tail cap is securely tightened to maintain water resistance.

Water-Resistant

IP65X waterproof, suitable for wet working environment



Natural observation



Infrared camera auxiliary



Outdoor search

Image: The flashlight is water-resistant, suitable for use in damp conditions.

TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Flashlight does not turn on.	<ul style="list-style-type: none"> Battery is depleted. Battery is incorrectly inserted. Loose tail cap. Faulty battery or charger. 	<ul style="list-style-type: none"> Charge the battery fully. Ensure the battery is inserted with the correct polarity (+ towards head). Tighten the tail cap securely. Test with a different battery or charger if available.
Weak or inconsistent IR light.	<ul style="list-style-type: none"> Low battery charge. Dirty lens. 	<ul style="list-style-type: none"> Recharge the battery. Clean the lens with a soft cloth.
Cannot see IR light with naked eye.	This is normal behavior.	The 850nm infrared light is largely invisible to the human eye. It requires a night vision device to be seen. You should only observe a faint red glow from the LED itself.

SPECIFICATIONS

Feature	Detail
Model Number	501BX
IR Wavelength	850nm
Power Output	10 Watts
Material	Aluminum Alloy
Dimensions (L x W x H)	12.2 x 3 x 2.4 cm (4.80 x 1.18 x 0.94 inches)
Weight	110 Grams
Power Source	1 x Lithium-ion Rechargeable Battery (included)
Run Time	Approx. 3 hours
Beam Distance	Up to 500 meters (with night vision device)
Water Resistance	IP65X (Water-resistant)
Special Features	Adjustable focus, emergency head, compatible with night vision devices

WARRANTY AND SUPPORT

DARKBEAM provides a 180-day refund/replacement policy and a one-year warranty for this product.

For any questions, issues, or support needs, please contact DARKBEAM directly. Our customer service team is ready to assist you.

You can typically find contact information on the official DARKBEAM website or through your purchase platform.

