

**DNT Optics ZHD312**

# Zulus HD Digital Night Vision Rifle Scope 3-12x N0 LRF User Manual

Model: ZHD312 | Brand: DNT Optics

## PRODUCT OVERVIEW

The Zulus HD Digital Night Vision Rifle Scope is an advanced optical device designed for both day and night use, offering exceptional clarity and performance. It features a Sony STARVIS 2 chipset and a high-definition 1920x1080 Micro-OLED HD display. This compact and lightweight scope is built for durability and reliability in various weather conditions.



Figure 1: Zulus HD Digital Night Vision Rifle Scope (3-12x N0 LRF model).

## PACKAGE CONTENTS

Upon unboxing your Zulus HD Digital Night Vision Rifle Scope, verify that all components are present:

- Zulus HD Digital Night Vision Rifle Scope unit
- IR 850nm Illuminator
- P-Mount (5.2", 0 MOA, Matte Black, 6061-T6 Aluminum)
- Rechargeable Batteries (18650) x2
- Battery Charger x1
- USB Type-C Cable
- Microfiber Cleaning Cloth
- Allen Key and Mounting Screws
- User Manual (this document)



Figure 2: Main scope unit, detachable mount, and eye cup.

## SETUP AND INSTALLATION

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### 1. Battery Installation and Charging

The Zulus HD scope uses two 18650 rechargeable batteries. Before first use, fully charge the batteries using the provided charger and USB Type-C cable. Insert the charged batteries into the designated compartment on the scope.

### 2. Attaching the IR Illuminator

The IR 850nm illuminator attaches to the side of the scope. Align the illuminator with the mounting point and secure it firmly.



Figure 3: Zulus HD scope with the IR illuminator installed.

### 3. Mounting the Scope

The included P-Mount is designed for secure attachment to your rifle's Picatinny rail. Use the provided Allen key and screws to attach the mount to the scope, then secure the entire assembly to your rifle. Ensure the mount is tightened to the recommended specifications (30 in/lbs as indicated on the mount).



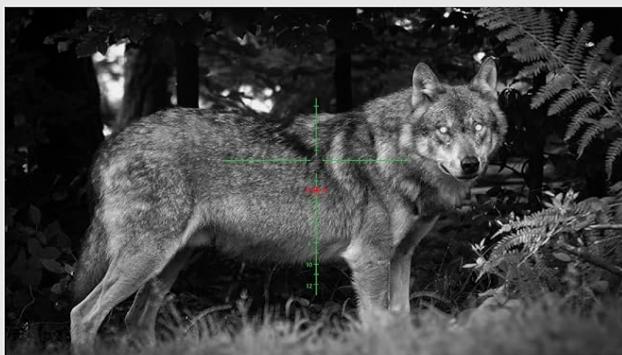
Figure 4: Underside of the scope showing the P-Mount attachment.



Figure 5: Close-up of the mount indicating 30 in/lbs torque specification.

#### 4. Attaching the Eye Cup

The detachable eye cup threads onto the eyepiece of the scope for comfortable viewing and to block ambient light. Secure it by rotating clockwise until snug.



Equipped with the highly sensitive SONY STARVIS 2 sensor and an integrated 850nm illuminator, the compact DNT ZULUS HD has the best visual sensitivity and illumination to see potential targets.

Whether they be coyotes, wild hogs, or other game, you will be able to see them as far as 450 yards.

Figure 6: Detachable eye cup for secure attachment.

## OPERATING INSTRUCTIONS

### Controls Overview



Figure 7: Top-down view of the Zulus HD scope controls.

- **Power Button:** Located on the top left, press and hold to power on/off the device.
- **Zoom Dial:** The rotary dial on the side adjusts the digital magnification (3-12x for this model).
- **Settings Button:** Access the device settings menu.
- **Day/Night Mode Button:** Toggles between day vision and night vision modes.
- **Brightness Adjustment:** Adjusts the display brightness.
- **IR Light Activation:** Activates the integrated IR 850nm illuminator for enhanced night vision.
- **Record Button:** Initiates and stops video recording.
- **Focus Ring:** Located on the objective lens, rotate to achieve a clear image.
- **Diopter Adjustment:** Located on the eyepiece, rotate to adjust the focus for your eye.

### Smart Features and Connectivity

- **Wi-Fi Capability:** Connect the scope to your smartphone via Wi-Fi for data sharing and live streaming through the dedicated app.

- **Over-the-Air Software Updates:** The device supports software updates to enhance features and performance.
- **Micro SD Card Slot:** Supports 32-128 GB Micro SD cards for ample storage of recorded videos and images.
- **Type-C USB Port:** Used for external power and connecting to a computer to transfer data.



Figure 8: Patented App reticle zeroing with one-click functionality.

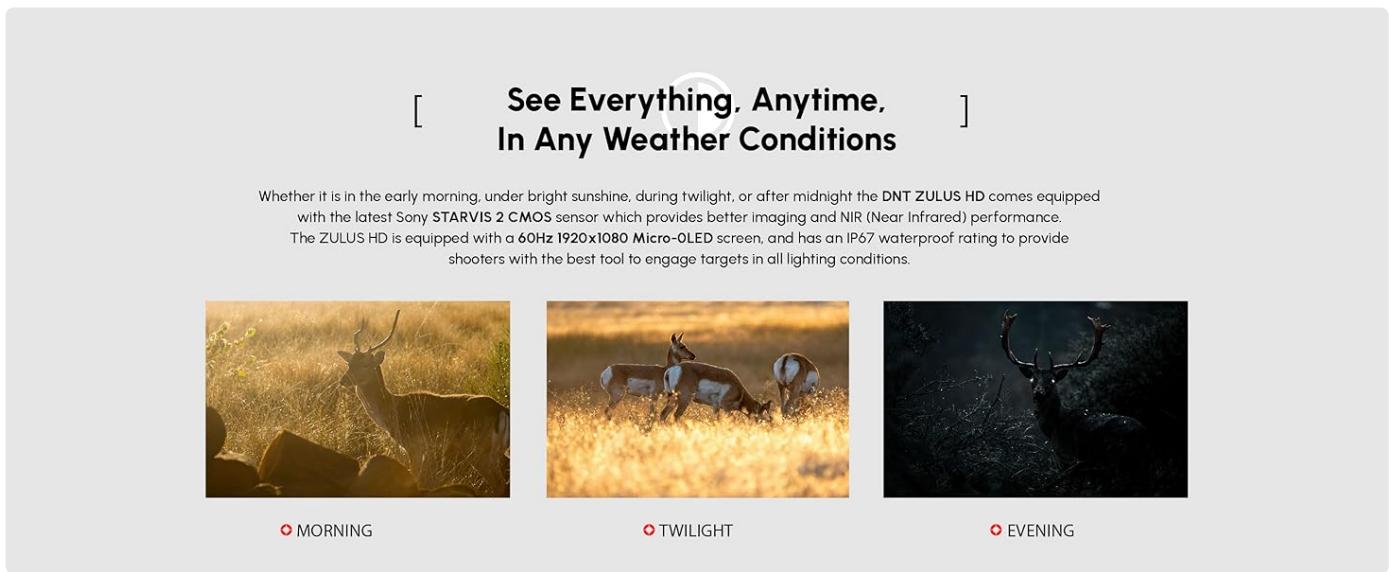


Figure 9: Digital zoom adjustment wheel for precise magnification control.

## MAINTENANCE

- **Cleaning:** Use the provided microfiber cloth to gently clean the lenses and exterior surfaces. Avoid abrasive materials or harsh chemicals.
- **Battery Care:** Ensure batteries are fully charged before extended use. Store the scope and batteries in a cool, dry place when not in use. The hot-swappable battery design allows for easy replacement.
- **Durability:** The Zulus HD is IP67 rated, making it fully dustproof and waterproof. It is also rated for 0.5BMG recoil, ensuring robust performance.

## TROUBLESHOOTING

If you encounter any issues with your Zulus HD Digital Night Vision Rifle Scope, consider the following common solutions:

- **No Power:** Ensure batteries are fully charged and correctly inserted. Check the battery charger and cable for

damage.

- **Poor Image Quality:** Adjust the focus ring and diopter. Ensure lenses are clean. Check ambient light conditions and adjust brightness or switch between day/night modes. Activate the IR illuminator in low-light conditions.
- **Connectivity Issues:** Verify Wi-Fi settings on both the scope and your smart device. Ensure the app is up to date.
- **Recording Problems:** Check if the Micro SD card is properly inserted and has sufficient free space. Ensure the card is formatted correctly (refer to the full manual for formatting instructions).

For persistent issues, please refer to the comprehensive user manual or contact DNT Optics customer support.

## SPECIFICATIONS

Feature	Specification
Brand	DNT Optics
Model Name	ZHD312
Magnification	3-12x
Display	1920x1080 Micro-OLED HD
Sensor	Sony STARVIS 2 chipset
IR Illuminator	Integrated 850nm
Connectivity	Wi-Fi, Type-C USB
Storage	Micro SD card slot (32-128 GB supported)
Operating Time	Up to 8 hours (continuous use)
Waterproof Rating	IP67
Recoil Rating	0.5BMG
Dimensions (L x W x H)	7.9" L x 2" W x 3" H
Item Weight	14.8 Ounces
Material	Aluminum
Mounting Type	Picatinny Mount

## WARRANTY AND SUPPORT

The Zulus HD Digital Night Vision Rifle Scope comes with a **2-Year Manufacturer Warranty**. For warranty claims, technical support, or any inquiries, please contact DNT Optics directly. Their contact information can typically be found on their official website or through your purchase platform.

DNT Optics is committed to providing accessible technology for day and night vision, and they regularly provide firmware updates and usage tips.

Documents - DNT Optics – ZHD312

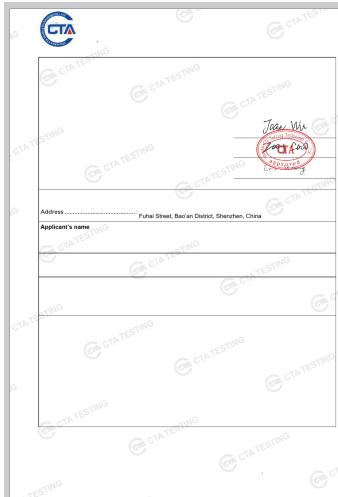


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[\[pdf\] Specifications Test Report](#)

Test report part1 Pangao Photoelectric ZHD520R V2 Digital DAY NIGHT SCOPE 2BA4J  
2BA4JZHD520RV2 zhd520r v2

Shenzhen CTA Testing Technology Co., Ltd. Room 106, Building 1, Yibaolai  
Industrial Park, Qiaotou Co ... .....: ZULUS HD 5-20X V2, ZULUS HD 3-12X LRF  
V2, ZULUS HD 3-12X V2, ZHD520R-V2, ZHD520-V2, **ZHD312R-V2**, **ZHD312-V2**  
Modulation Type .....: CCK/DSSS/OFDM Operation Frequ...  
lang:en score:12 filesize: 5.48 M page\_count: 28 document date: 2025-04-15



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[\[pdf\] Specifications Test Report](#)

Test report part3 Pangao Photoelectric ZHD520R V2 Digital DAY NIGHT SCOPE 2BA4J  
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Shenzhen CTA Testing Technology Co., Ltd. Room 106, Building 1, Yibaolai  
Industrial Park, Qiaotou Co ... RF V2, ZULUS HD 3-12X V2, Listed Models  
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