



# Firefield N.VADER

## I-3x Digital Night Vision

### Features:

- Enhanced low-light digital imaging
- See up to 150ft
- 1x optical with 3x digital zoom
- Adjustable gain control
- Use day and night
- Full color display
- Compact/Ergonomic Design
- Video output capability
- Powerful built-in InfraRed illuminator

### Includes:

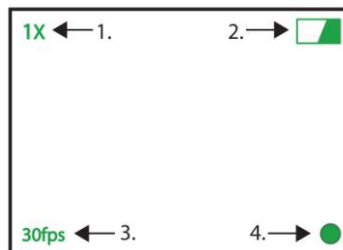
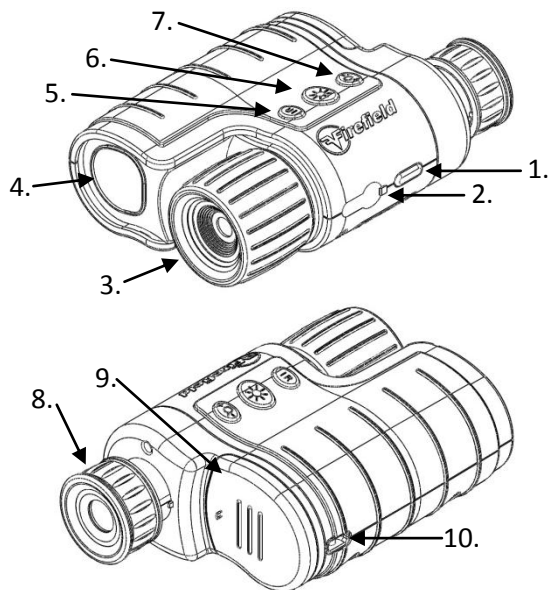
- Monocular
- Lanyard
- Instruction Manual

### Specifications:

Magnification, x	1
Digital zoom, x	3
Camera resolution	640x480
Display resolution	96x64
Video output resolution	640x480
Objective dia., mm	7.5
FOV, °, horizontal	12
Eye relief, mm	10
Exit pupil, mm	5
IR wavelength, nm	850
IR power, mW	1,000
Range of detection, ft	150
Dimensions, mm	130x90x50
Weight (w/batteries),oz	9.9
Battery type	4x AA
Battery life (w/o IR, w/IR)	12, 3 (HI) 6 (LO)
Operating temp, °F	14 to 104

### Diagram

1. On/Off Button
2. Video Output
3. Objective Lens
4. InfraRed Illuminator
5. IR control
6. Gain control
7. Digital zoom
8. Eyepiece
9. Battery cover
10. Lanyard eyelet



On-Screen Indicators

1. Digital Zoom
2. Battery Power
3. Frame Rate
4. IR Mode

### Battery Installation

To install, locate the battery cover (9). Slide the cover out. The cap will release and flip open. Insert four AA batteries into the compartment so that polarity of the battery matches the markings inside the compartment. Replace the battery cover. Battery charge level is identified in the upper right corner of the display. Note: Rechargeable batteries can be used with this device.

### On/off Operation

To activate the device, press the on/off button (1). While looking through the device, the "Firefield" splash screen will appear three seconds after pressing the on button. After another three seconds, the device will begin operating in the night vision mode. To turn the unit off, press the on/off button once more. Note: After 5 minutes of no button operation the unit will notify the user the unit will turn off. To continue operation, press any button.

### Focusing

To focus the device, locate an object 10 to 20 yards away. Rotate the eyepiece (8) until you clearly see the display screen. Next, rotate the objective lens (3) until the image of the object is sharp and crisp. When the viewing distance changes, the objective lens only needs to be rotated.

### Day/Night Vision Mode and IR Power

Day/Night Vision mode and the InfraRed illuminator power are controlled by the IR

control (5). Night Vision mode is equipped with two IR power settings: high (1 watt) and low (500mw). The current IR power setting is identified in the lower right corner of the display. A full circle represents high power. A checkered circle represents low power. Press the IR control (5) once to switch from high to low power. To switch from night vision mode to day vision mode, press the IR control once more. The display will change from black and white to color, the IR illuminator will automatically turn off, and the frame per second (fps) will increase to 30 fps. Note: A small click will be heard when activating and deactivating the day vision mode. This is normal and is not a defect. This click is an internal mechanism designed to enhance color imaging for daytime viewing.

#### **Gain Control**

To increase the brightness of the image and the nighttime viewing distance, the gain control button (6) should be used. Consecutively pressing the gain control will decrease the frames per second from 25 fps, to 15 fps, to 8 fps. The current fps setting is identified in the lower left corner of the display. To achieve maximum viewing distance, 8 fps should be used.

#### **Digital Zoom**

To digitally increase the magnification of the device, press the digital zoom button (7). Consecutively pressing the digital zoom will digitally increase the magnification from 1x, to 2x, to 3x magnification. The current magnification is identified in the upper left corner of the display.

#### **Video Output**

To attach the device to an external viewing monitor, plug in a composite video cable into the video output plug (2) on the side of the device. Once plugged in, the device will automatically send the video feed to the external device.

#### **Maintenance**

The Firefield NVader should be stored in a cool, dry place. Remove the batteries if the device is not to be used for 3 or more months. Debris and dust can be removed from lens surfaces with a lens cleaning cloth or soft brush. Oils can be removed with a small amount of denatured alcohol applied to a cotton swab.

#### **Troubleshooting**

If the image is not focused:

- Check the eyepiece is focused for the user
  - Check the objective lens is focused to the correct distance
  - Check no oils are on the objective lens
- If the device does not turn on or no image:
- Check the batteries are installed correctly
  - Check there is no obstruction blocking the objective lens or infrared illuminator

For further technical support, please visit:  
[www.fire-field.com/content/contact-us](http://www.fire-field.com/content/contact-us)

#### **Warranty**

Your Firefield NVader is covered for a period of 3 years. This includes mechanical parts and digital imaging sensors. In the event of a defect under this warranty, we will, at our option, repair or replace the product. This warranty does not cover damages caused by misuse or improper handling. Also, this warrant is null and void if modification or maintenance is provided by someone other than Firefield. This warranty is non-transferable and is only valid if the product is registered within 30 days after the product has been purchased.

For product registration please visit:  
[www.fire-field.com/content/product-registration-form](http://www.fire-field.com/content/product-registration-form)

For further warranty information please visit:  
[www.fire-field.com/content/firefield-warranty](http://www.fire-field.com/content/firefield-warranty)