Volans

User's Manual



Foreword

General

This manual introduces the functions and operations of Volans Digital Night Vision Camera (hereinafter referred to as "the Camera"). Read carefully before using the device, and keep the manual safe for future reference.

Safety Instructions

The following signal words might appear in the manual.

Signal Words	Meaning
	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
	Indicates a potential risk which, if not avoided, could result in property damage, data loss, reductions in performance, or unpredictable results.
	Electrostatic Sensitive Devices.
ESD ESD	Indicates a device that is sensitive to electrostatic discharge.
	Indicates dangerous high voltage.
ELECTRIC SHOCK	Take care to avoid coming into contact with electricity.
	Indicates a laser radiation hazard.
LASER RADIATION	Take care to avoid exposure to a laser beam.
© <u>∽∿</u> TIPS	Provides methods to help you solve a problem or save time.
	Provides additional information as a supplement to the text.

Revision History

Version	Revision Content	Release Time
V1.0.0	First release.	February 2025

Privacy Protection Notice

As the device user or data controller, you might collect the personal data of others such as their face, fingerprints, and license plate number. You need to be in compliance with your local privacy protection laws and regulations to protect the legitimate rights and interests of other people by implementing measures which include but are not limited: Providing clear and visible identification to inform people of the existence of the surveillance area and provide required contact information.

About the Manual

• The manual is for reference only. Slight differences might be found between the manual and the

product.

- We are not liable for losses incurred due to operating the product in ways that are not in compliance with the manual.
- The manual will be updated according to the latest laws and regulations of related jurisdictions. For detailed information, see the paper user's manual, use our CD-ROM, scan the QR code or visit our official website. The manual is for reference only. Slight differences might be found between the electronic version and the paper version.
- All designs and software are subject to change without prior written notice. Product updates might result in some differences appearing between the actual product and the manual. Please contact customer service for the latest program and supplementary documentation.
- There might be errors in the print or deviations in the description of the functions, operations and technical data. If there is any doubt or dispute, we reserve the right of final explanation.
- Upgrade the reader software or try other mainstream reader software if the manual (in PDF format) cannot be opened.
- All trademarks, registered trademarks and company names in the manual are properties of their respective owners.
- Please visit our website, contact the supplier or customer service if any problems occur while using the device.
- If there is any uncertainty or controversy, we reserve the right of final explanation.

Important Safeguards and Warnings

This section introduces content covering the proper handling of the device, hazard prevention, and prevention of property damage. Read carefully before using the device, and comply with the guidelines when using it.

Transportation Requirements

- Transport the Camera within the allowed humidity and temperature conditions.
- Do not fall, squeeze, violently vibrate or immerse the device in liquid when transporting. Gently pick and place the Camera when moving, prevent the internal equipment becoming damaged or cable connection becoming loose.
- Do not transport the Camera without package. Use the factory default package or material of equal quality to pack the Camera when transporting it, otherwise the Camera can become easily damaged.

Storage Requirements

- Store the Camera within the allowed humidity and temperature conditions.
- Do not place the device in a humid, dusty or extremely hot or cold site that has strong electromagnetic radiation or unstable illumination.
- Do not squeeze, violently vibrate or immerse the device in liquid.
- Do not mechanically vibrate or crash when storing.
- Store the Camera in a ventilated place that has no strong electromagnetic radiation.
- For long-term storage of the battery, make sure that it is fully charged every half year to ensure the battery quality. Otherwise, damage may occur.

Operation Requirements

A DANGER

- Prevent liquid from flowing into the Camera to avoid damage to the internal components.
- Do not stuff foreign materials into the Camera to prevent a short circuit which could result in the Camera being damaged or people becoming injured.
- Do not expose the device to high electromagnetic radiation or dusty environments.
- Do not aim the lens at the sun or any other bright light.
- Improper use or replacement of the battery may result in explosion hazard.
- Do not charge other battery types with the supplied charger. Confirm there is no flammable material within 2 m of the charger during charging.
- Make sure that the plug is properly connected to the power socket.
- Do not connect multiple devices to one power adapter, to avoid over-heating or fire hazards caused by overload.
- If smoke, odor, or noise arises from the device, immediately turn off the power, unplug the power cable, and contact the service center.



- Do not dismantle the Camera. The internal components can only be repaired by a qualified professional. Dismantling it without professional assistance might cause water seeping in or might result in the Camera producing poor quality images.
- Operating temperature: -30 °C to +55 °C (-22 °F to +121 °F), and the operating humidity shall be 95% or less.

Maintenance and Repair Requirements

Anger

- Prevent liquid from flowing into the Camera to avoid damage to the internal components. In case the liquid enters the Camera, immediately stop using the Camera, cut off the power, and disconnect all the cables, and then contact your local customer service center.
- Use the accessories regulated by the manufacturer. The Camera should be maintained by qualified professionals.
- Make sure to cut off the power before cleaning the Camera, to prevent electric shock.

If the Camera malfunctions, contact your local customer service center. Do not dismantle the Camera.

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- Clean the Camera body with a piece of soft dry cloth. For any dirt that is hard to remove, pick up a piece of clean and soft cloth, dip it into a little neutral detergent and gently wipe the dust away. After that, wipe away all the remaining liquid on the Camera with another dry cloth. Never use volatile solvents such as alcohol, benzene and thinner, or cleaners that are strong and abrasive. Otherwise, the Camera's surface coating will be damaged and its working performance will be encumbered.
- Save the factory package of the Camera. When the Camera malfunctions, pack the Camera with the factory package and send to the dealer.

Laser Requirements

Laser can cause damages to eyes. Do not look directly at the laser beam or observe the beam with optical devices when the laser is on.

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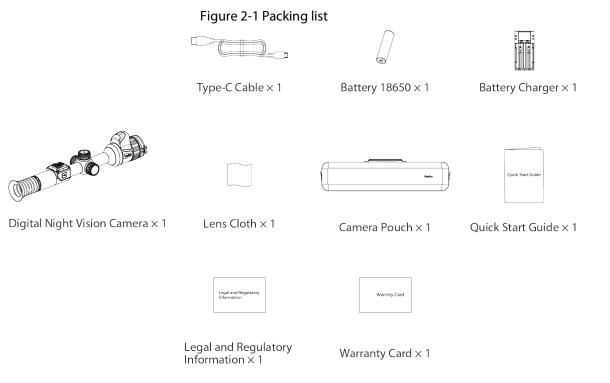
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1 Product Introduction

Volans digital night vision camera captures sharp imaging at a fast frame rate for smooth, impeccable vision on running targets and from moving vehicles. Designed to increase situational awareness at any time of day, the Camera can detect humans, animals, and objects in day and night, equipping law enforcement professionals, hunters, and outdoor enthusiasts with reliable imaging. Featuring the laser range finder, the Camera with LRF can accurately measure the target distance. It is widely used in outdoor scenarios for hunting, animal observation, and more.

2 Structure

2.1 Packing List



2.2 Device Description

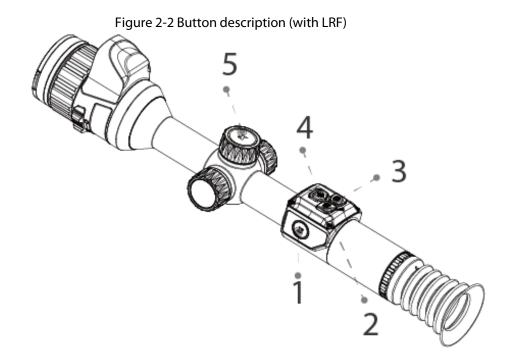


Figure 2-3 Button description (without LRF)

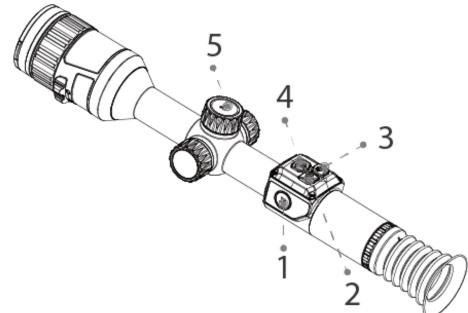


Table 2-1 Button description (with LRF)

No.	Name	Description
1	Power button	Press and hold the button to start or shut down the Camera.Press the button to enter the sleep mode.
2	Capture button	Press and hold the button to record videos.Press the button to capture images.
3	Day/Night button	Press the button to select the scene mode.
4	Laser button	 Press the button to enable the laser ranging mode. Press and hold the button to enter the PIP mode. DANGER Laser can cause damages to eyes. Do not look directly at the laser beam or observe the beam with optical devices when the laser is on. Make sure that you have set the laser ranging mode before enabling the function. For detail, see "3.3.3.7 Setting Laser Ranging". The ranging function is only available when the distance is longer than 10 m.
5	Knob	 Press and hold the knob to go to the standard menu. Press the knob to go to the brief menu. Rotate the knob for digital zoom. Double-press the knob to do the flat-field calibration for the image.

No.	Name	Description	
1	Power button	Press and hold the button to start or shut down the Camera.Press the button to enter the sleep mode.	
2	Capture button	Press and hold the button to record videos.Press the button to capture images.	
3	Day/Night button	Press the button to select the image mode.	
4	Zoom button	Press the button the button for the digital zoom.Press and hold the button to go to the standard menu.	
5	Knob	 Press and hold the knob to go to the standard menu. Press the knob to go to the brief menu. Rotate the knob the button for digital zoom. 	

Table 2-2 Button description (without LRF)

Figure 2-4 Component description (with LRF)

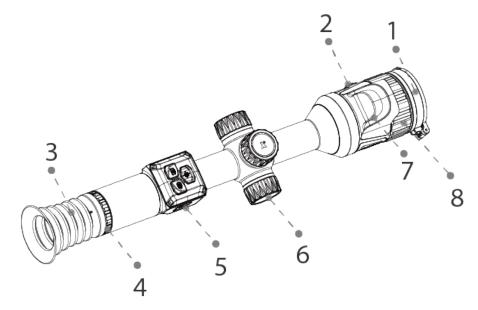
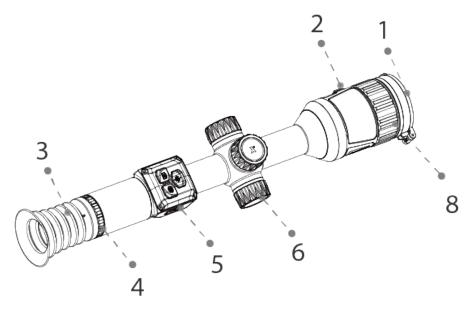


Figure 2-5 Component description (without LRF)



No.	Name	Description
1	Protective cover	Dust prevention. Close the cover when not using the Camera.
2	Aperture control ring	Adjusts the aperture size.
3	Eyeshade	Protects the eyes from glare.
4	Diopter adjustment ring	Adjust the ring according to your eyesight.
5	Type-C port	Connects to a data cable for charging.Connects to the Camera to a computer for exporting files.
6	Battery compartment	The place for holding the battery.
7	Laser module	Measures the distance between the Camera and the target. It is only supported by the Camera with LRF. DANGER Laser can cause damages to eyes. Do not look directly at the laser beam or observe the beam with optical devices when the
8	Focus ring	laser is on. Manually rotate the ring to adjust the focus for a clear image.
U	i ocus inig	manually rotate the mig to adjust the rocus for a clear image.

Table 2-3 Component description

3 Basic Operation

3.1 Starting and Shutdown

3.1.1 Manual Starting and Shutdown

Press and hold the power button to start or shut down the Camera; press the power button to suspend the Camera.

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After starting the Camera, remove the protective cover of the lens.

- When the Camera is off, press and hold the power button to start it.
- When the Camera is on, press and hold the power button to shut down it.
- When the Camera is on, press the power button to suspend the Camera.
- When the Camera is in suspend mode, press the power button to weak up it.

3.1.2 Auto Shutdown

- <u>Step 1</u> Press and hold the knob to go to the standard menu.
- Step 2 Rotate the knob to select 🙆.
- <u>Step 3</u> Press the knob to go to the **System Set** configuration screen.
- <u>Step 4</u> Rotate the knob to select 🕐.
- <u>Step 5</u> Press the knob to go to the **Auto shutdown** configuration screen.
- Step 6Rotate the knob to select the auto shutdown time, and then press the knob.If there is no operation in the configured time, the Camera will automatically shut down.

3.2 Image Adjustment

3.2.1 Adjusting Diopter

To get clear images, rotate the diopter knob to fit your eyesight.

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For the first-time use, adjust the diopter before configuring the functions.

- <u>Step 1</u> Aim the lens at the target, and then make your eyes close to the eyeshade.
- <u>Step 2</u> Adjust clockwise or counterclockwise the eyepiece to your eyesight.

Figure 3-1 Adjust diopter



3.2.2 Adjusting Focus

Manually rotate the focusing ring to adjust the focus for a clear image.

- <u>Step 1</u> Aim the thermal lens to the target.
- <u>Step 2</u> Adjust clockwise or counterclockwise the focusing ring until the view is clear.

 \square

During the adjustment, do not touch the lens to avoid smudging it; otherwise it may affect the image quality.

Figure 3-2 Adjust focusing (with LRF)

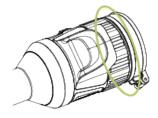
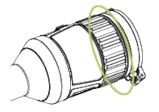


Figure 3-3 Adjust focusing (without LRF)



3.2.3 Setting Scene Mode

<u>Step 1</u> Press the knob to go to the brief menu.

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You can also press and hold the knob to go to the standard menu or press () to select the mode.

<u>Step 2</u> Rotate the knob to select 🔂.

- <u>Step 3</u> Press the knob.
- <u>Step 4</u> Rotate the knob to select the scene mode, and then press the knob.

3.2.4 Setting Digital Zoom

Digital zoom helps to zoom in the image.

On the viewing screen, rotate the knob to do digital zoom, and the image changes.

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For the camera without LRF, you can also press 👫 to select the digital zoom.

3.2.5 Setting Screen Brightness

Adjusts the overall screen brightness. The higher the level is, the brighter the screen will be.

- <u>Step 1</u> Press the knob to go to the brief menu.
 - \square

You can also press and hold the knob to go to the standard menu

- Step 2 Rotate the knob to select 🙀
- Step 3 Press the knob.
- Step 4Rotate the knob to set the screen brightness level, and then press the knob.The higher the level is, the brighter the screen will be.

3.2.6 Setting Image Brightness

Adjusts the image brightness. The higher the level is, the brighter the image will be.

- <u>Step 1</u> Press and hold the knob to go to the standard menu.
- <u>Step 2</u> Rotate the knob to select 🔆.
- <u>Step 3</u> Press the knob.
- <u>Step 4</u> Rotate the knob to set the image brightness level, and then press the knob. The higher the level is, the brighter the image will be.

3.2.7 Setting Contrast

Adjusts the contrast of the picture. The higher the level is, the more the contrast will be between bright and dark areas.

- <u>Step 1</u> Press the knob to go to the brief menu.
 - \square

You can also press and hold the knob to go to the standard menu.

- <u>Step 2</u> Press the knob to select 🔘.
- Step 3 Press the knob.
- Step 4Rotate the knob to set the contrast level, and then press the knob.The higher the level is, the more the contrast will be between bright and dark areas.

3.2.8 Setting Sharpness

<u>Step 1</u> Press the knob to go to the brief menu.

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You can also press and hold the knob to go to the standard menu.

- <u>Step 2</u> Press the knob to select **A**.
- Step 3 Press the knob.
- Step 4Rotate the knob to set the sharpness level, and then press the knob.The higher the level is, the clearer the picture edges will be.

3.2.9 Setting Status Bar

- <u>Step 1</u> Press hold the knob to go to the standard menu.
- <u>Step 2</u> Rotate the knob to select \mathbb{R} > **OSD**.
- <u>Step 3</u> Press the knob to enable OSD, and the status bar is displayed.

lcon	Name	Description
B1-100	Zeroing profile	Displays the current zeroing profile.
((r-	Wi-Fi	The Wi-Fi function is enabled.
د	Scene mode	Displays the current scene mode.
	Battery level	Displays the battery level in real time.

Table 3-1 Description of s	status bar
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3.3 Configuring the Camera

3.3.1 Menu Description

When the Camera is on, press and hold the knob to go to the standard menu. Functions of all buttons are as follows.

- Rotate the knob to move upward or downward the cursor.
- Press the knob to set the parameters and confirm.
- Press and hold the knob or press the power button to exit.

3.3.2 Brief Menu

Press the knob to go to the brief menu. You can set scene mode, screen brightness, contrast, sharpness and enable the anti over exposure function.

<u>Step 1</u> Press the knob to go to the brief menu.

 $A_{1}h_{0}h_{0}$ $A_{1}h_{0}h_{0}$ $A_{1}h_{0}h_{0}$ $A_{1}h_{0}h_{0}$ $A_{2}h_{0}$ $A_{2}h_{0}$ $A_{1}h_{0}h_{0}$

Figure 3-4 Brief menu

<u>Step 2</u>	Rotate the knob to sele	act the narameters to	he configured
<u>step z</u>	notate the knob to sele	ect the parameters to	be configured.

Parameters	Description	
Scene mode (🚷)	Press the knob, and then rotate the knob to select the scene mode. For details, see "3.2.3 Setting Scene Mode".	
Screen Brightness	Press the knob, and then rotate the knob to select the brightness level of the screen. For details, see "3.2.5 Setting Screen Brightness".	
Contrast (💽)	Press the knob, and then rotate the knob to select the contrast level. For details, see "3.2.7 Setting Contrast".	
Sharpness ()Press the knob, and then rotate the knob to select the sharpness level. For details, see "3.2.8 Setting Sharpness".		
Anti Over exposure	Press the knob to enable the function, to prevent overexposure of the image.	

<u>Step 3</u> Press and hold the knob to exit and save the configuration.

3.3.3 Standard Menu

3.3.3.1 Setting Zeroing Profile

- <u>Step 1</u> Press and hold the knob to go to the standard menu.
- <u>Step 2</u> Rotate the knob to select 😂.
- <u>Step 3</u> Press the knob, and then rotate the knob to select the zeroing profile as needed.

The Camera supports multiple zeroing profiles.

3.3.3.2 Setting Zeroing

Prerequisites

Before setting zeroing, make sure that you have selected the zeroing group in **Zeroing Profile**. For details, see "3.3.3.1 Setting Zeroing Profile".

Procedure

- <u>Step 1</u> Press and hold the knob to go to the standard menu.
- Step 2 Rotate the knob to select 🚳.
- <u>Step 3</u> Press the knob to go to the zeroing configuration screen.
- <u>Step 4</u> Rotate the knob to configure the reticle parameters.
 - Reticle No. (三): Press the knob to select a number as the reticle number.

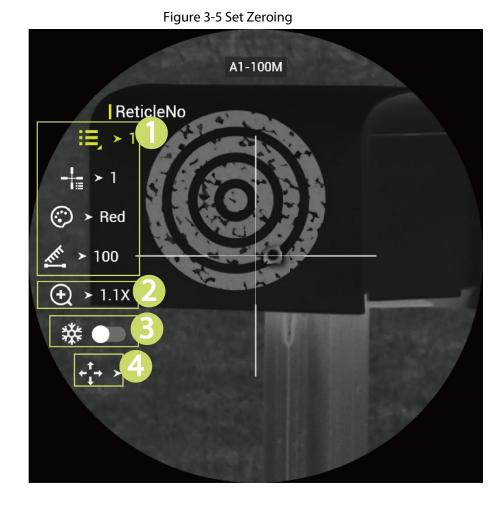
\square

The Camera supports multiple reticles.

- Color (③): Press the knob select the reticle color.
- Distance (): Press the knob, and then rotate the knob to set the distance between the target and the Camera.
- <u>Step 5</u> Rotate the knob to select O and then press the knob to set the digital zoom ratio.

Step 6 Adjust the reticle

- 1) After shooting at the target, rotate the knob to select 🗱, and then press the knob to freeze the image.
- 2) Select 🔂 and then press the knob to select X-axis and Y-axis.
- 3) Rotate the knob to move the reticle to the shooting point, and then press the knob.
- 4) Rotate the knob to select **Confirm** to save the configuration.



3.3.3.3 Setting Power Light

Adjusts brightness of the power light. The higher the level is, the brighter the light will be.

- <u>Step 1</u> Press and hold the knob to go to the standard menu.
- Step 2 Rotate the knob to select
- Step 3 Press the knob.
- Step 4Rotate the knob to set brightness of the power light, and then press the knob.The higher the level is, the brighter the light will be.

3.3.3.4 Setting PIP

After enabling PIP, the target with the reticle can be magnified in the OSD image, which offers a closer view of the target with the whole visual scene.

- <u>Step 1</u> Press and hold the knob to go to the standard menu.
- <u>Step 2</u> Rotate the knob to select **□**.
- Step 3 Press the knob to enable or disable PIP.
 - On: An OSD image is displayed on the screen, and the target with the reticle can be magnified in the OSD image.
 - Off: Disable the PIP.

3.3.3 Setting Wi-Fi Connection

After enabling Wi-Fi connection, you can connect your phone to the hotspot of the Camera, and

then access the Camera with the app.

The frequency bands and modes and the nominal limits of transmitted power (radiated and/or conducted) applicable to this radio device are the following:

Wi-Fi 2.4 GHz (2.4 GHz to 2.4835 GHz)	20 dBm
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Some cameras will automatically disable the Wi-Fi function when the battery level is lower than 15%. <u>Step 1</u> Scan the QR code with your smart phone to install the app.

Figure 3-6 QR code





- <u>Step 2</u> Press and hold the knob to go to the standard menu.
- <u>Step 3</u> Rotate the knob to select O > R.
- <u>Step 4</u> Press and rotate the knob to set the password.
- Step 5 Rotate the knob to select 🛜.
- <u>Step 6</u> Press the knob to enable the Wi-Fi function. Wi-Fi name: Model number + serial number.
- Step 7Log in to the app.Add access devices according to the prompt.

3.3.3.6 Setting Ranging Mode

After setting the ranging mode, the Camera can measure the range towards targets. This function is only available on the Camera without LRF.

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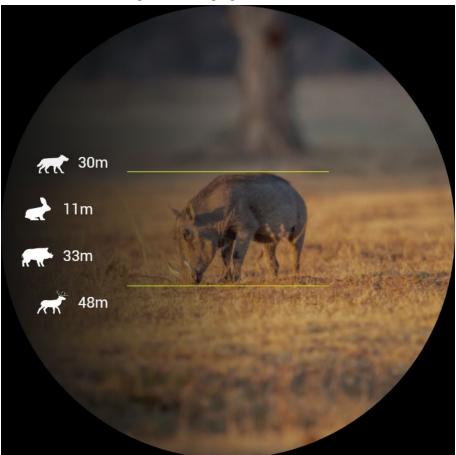
To guarantee the measurement accuracy, keep your hand steady when measuring the range.

- <u>Step 1</u> Press and hold the knob to go to the standard menu.
- <u>Step 3</u> Press the knob to enter the ranging mode.
- <u>Step 4</u> Press the knob to move the green lines to the top and bottom of the target to get the distance between the target and the Camera.

Use the following figure as an example:

- If the target is a wolf, it is 0.7 m away from Camera.
- If the target is a rabbit, it is 0.3 m away from Camera.
- If the target is a wild boar, it is 0.9 m away from Camera.
- If the target is a deer, it is 1.3 m away from Camera.

Figure 3-7 Ranging Mode



3.3.3.7 Setting Laser Ranging

This function is only available on the Camera with LRF.

Laser can cause damages to eyes. Do not look directly at the laser beam or observe the beam with optical devices when the laser is on.

3.3.3.7.1 Measurement Considerations

Measurement targets

The Camera is suitable for measuring the distance between the camera and the targets with high reflectivity (such as road signs on highways), the targets with moderate reflectivity (such as wall) and the targets with low reflectivity (such as tree, golf flag, utility pole, and animal). When the reflectance is reduced to a certain extent, the range will be reduced accordingly.

Factors that influence ranging capability

- Target reflectivity: Generally, the higher the reflectivity of the target, the better the ranging ability. For example, the measuring range of the Camera is 1,500 m for a target with moderate reflectivity, which can be up to 1,800 m for a target with high reflectivity, and 600 m for the targets with low reflectivity. (It might fail to measure the target that hardly generates diffuse reflection, such as water surface.)
- Target shape: When a target is too small or uneven, the ranging ability will decrease.

- Measuring angle: The measurement is more accurate when the reflection surface of target is vertical to the laser emission's direction. If you use the Camera under some extreme conditions, the measurement might be inaccurate.
- Measuring environment: The environment factors include sunshine intensity, the concentration of water vapor in the air and suspended particles (such as rain, fog, snow, fog and haze).

The range ability of the Camera defined under the following conditions:

- The measurement target is with moderate reflectivity, such as walls.
- The reflection surface of target is vertical to laser emission direction.
- The weather condition is sunny but not under the condition of direct sunlight.
- The reflection area is larger than $2 \text{ m} \times 2 \text{ m}$.

3.3.3.7.2 Setting Laser Ranging Mode

After setting the laser ranging mode, the Camera can measure the range towards targets.

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To guarantee the measurement accuracy, keep your hand steady when measuring the range.

- <u>Step 1</u> Press and hold the knob to go to the standard menu.
- <u>Step 2</u> Rotate the knob to select
- <u>Step 3</u> Press the knob, and then rotate the knob to select the laser ranging mode.
 - Once: After pressing the laser button, the Camera measures the distance between the camera and the target once.
 - Continue: After pressing the laser button, the Camera continuously measures the distance between the Camera and the target in specific duration, such as 15 s,30 s,45 s and 60 s.

3.3.3.8 Setting Smart Ballistics

Prerequisites

Before setting smart ballistics, make sure that you have configured zeroing in **Zeroing**. For details, see "3.3.3.2 Setting Zeroing".

Procedure

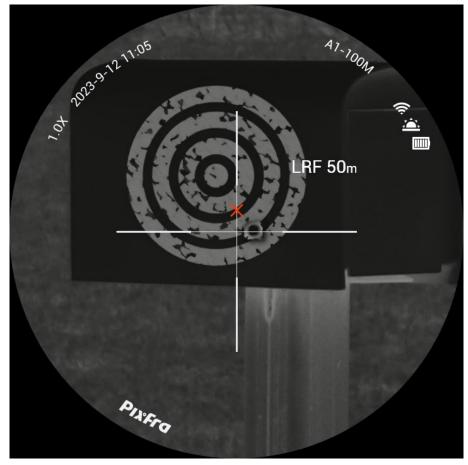
- <u>Step 1</u> Press and hold the knob to go to the standard menu.
- <u>Step 2</u> Rotate the knob to select .
- <u>Step 3</u> Press the knob to set smart ballistics.
 - Select i and press the knob to enable or disable smart ballistics.
 - Select 🛞 and press the knob to set the parameters.
 - 1. Rotate the knob to select the parameter to be configured.
 - 2. Press the knob to go to the configuration screen.
 - 3. Rotate the knob to set the value.

Parameters	Description	
Zeroing profile	Displays the zeroing profile that you selected in"3.3.3.1 Setting Zeroing Profile".	
Zero Range	Displays the distance that you configured in "3.3.3.2 Setting Zeroing".	
Ballistic Coefficient	Enter according to the parameters on the bullet package.	
Ballistic Profile		
Ballistic Weight	The weight of the bullet.	
InitVelocity	Enter the parameter according to the actual situation.	
Sight Height	The distance from the muzzle axis to the camera axis.	
Altitude	The altitude of the current location.	
Temperature	The current ambient temperature.	
Pressure	The current ambient pressure.	
Wind Speed		
Wind Direction Angle	Enter the parameter according to the actual situation.	

Table 3-3 Parameters of ballistic calculations

4. Press and hold the knob to save the configuration.

Figure 3-8 Calculation result (target distance ≤ configured distance)



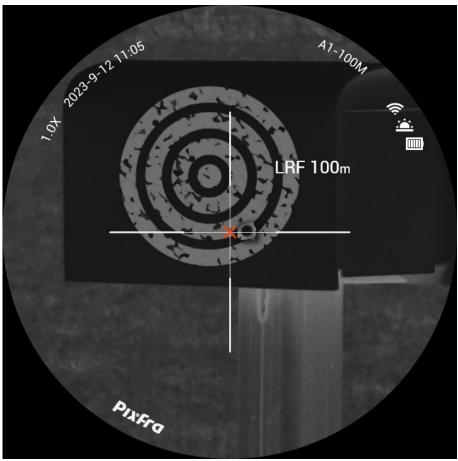
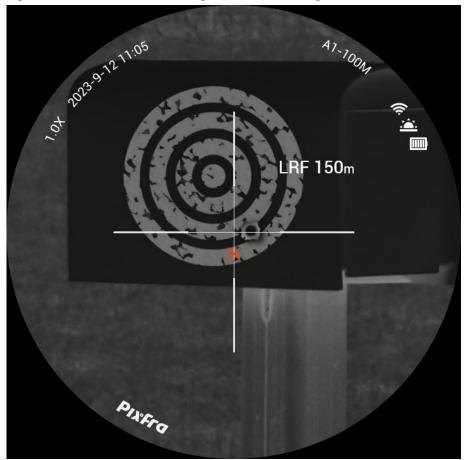


Figure 3-9 Calculation result (target distance = configured distance)

Figure 3-10 Calculation result (target distance \geq configured distance)



3.3.3.9 Function Settings

- <u>Step 1</u> Press and hold the knob to go to the standard menu.
- Step 2 Rotate the knob to select 🔡.
- <u>Step 3</u> Press the knob to go to the **Function Set** screen.
- <u>Step 4</u> Rotate the knob to select function to be configured.

Table 3-4 Function settings

Function	Description
Compass (🔕)	Press the knob to enable the Compass function, and the location information is displayed on the screen.
Compass Calibration	Press the knob to initialize the location. In 15 s, rotate the Camera as the instruction on the screen. After 15 s, the calibration completes automatically and exit to the main menu.
Logo (Pix)	Press the knob to enable logo display, and the logo will be display on the left lower corner of the screen.
OSD (OSD)	Press the knob to enable OSD display, and the status bar is displayed.
Auto REC 回	When the impact sensor of the Camera detects impact, it will automatically record the video, recording the wonderful moment of hunting. For details, see "3.4.1.1 Auto Recording".
міс (👤)	 Press the knob to enable or disable the microphone. On: The videos are recorded with sound. Off: The videos are recorded without sound.

3.3.3.10 System Settings

- <u>Step 1</u> Press and hold the knob to go to the standard menu.
- <u>Step 2</u> Rotate the knob to select 🙆.
- <u>Step 3</u> Press the knob to go to the **System Set** screen.
- <u>Step 4</u> Rotate the knob to select the parameter to be configured.

Table 3-5 System	settings
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Parameter	Description
Wi-Fi Password	Set the Wi-Fi Password of the Camera.
Auto Standby	Press the knob to set the auto standby time. The Camera will automatically standby in the configured time.
Auto Shutdown	Press the knob to set the auto shutdown time. For details, see "3.1.2 Auto Shutdown".
USB Mode (📳)	Press the knob to select the USB mode.ON: The Camera can be used as a storage device.OFF: Charge the Camera.
Language (🜐)	Press the knob to select the language as needed.
Unit Set (📻)	Press the knob to select the unite from m and yd .
Version (🛈)	Press the knob to view the device information

Parameter	Description
Restore Default	Press the knob to restore the parameters to the defaults.
Time Set (💽)	 Time Display (): Press the knob to display the time.
	 Time: The time is displayed on the screen.
	 Date&Time: The date and time is displayed on the screen.
	 OFF: The date and time is not displayed on the screen.
	Time Set:
	 Press the knob to select the time format to be displayed.
	 Press the knob to select the time to be configured; press the
	knob to select year, month, day, hour or minute, and then rotate the knob to set the value.

3.4 Video and Snapshot

3.4.1 Recording Videos

3.4.1.1 Auto Recording

When the impact sensor of the Camera detects impact, it will automatically record the video, recording the wonderful moment of hunting.

- <u>Step 1</u> Press and hold the knob to go to the standard menu.
- Step 2 Rotate the knob to select 🔡 > 📴.
- <u>Step 3</u> Rotate the knob to select **D**, and then press the knob.
 - On: The Camera will record videos when the impact sensor of the Camera detects impact.
 - Off: The Camera will not record videos any time.

3.4.1.2 Recording Videos

Before recording video, make sure that you have disabled the USB mode.

On the viewing screen, press and hold *for* 3 seconds to start recording a video. The green icon and the recording time is display.

Press and hold *again* for 3 seconds to stop the recording. When the recording stops, the recording time will display normally.

3.4.2 Capturing Images

Before capturing images, make sure that you have disabled the USB mode.

On the viewing screen, press in to capture images.

The screen will display an icon when the capturing succeeds.

3.4.3 Viewing Videos and Images

- <u>Step 1</u> Press and hold the knob to go to the standard menu.
- Step 2 Rotate the knob to select 🔀.
- <u>Step 3</u> Press the knob to enter the gallery.
- <u>Step 4</u> Rotate the knob to select the video or image, and then press the knob to view it.

3.4.4 Exporting File

Exports the recorded and captured files.

<u>Step 1</u> Connect the Camera to the computer through Type-C data cable.

The driver will automatically be installed for first-time connection.

 \square

- Connect the cables before starting the Camera. Do not hot swap the Type-C port of the Camera.
- Enable USB mode on the **USB Mode** configuration screen after connecting the Camera to the computer.
- <u>Step 2</u> On the computer desktop, double-click **My Computer**, and then open the Camera disk at a mobile storage device.
- <u>Step 3</u> Select the files to export and copy them to the computer. The specific computer client is required for playing the exported files.
- Step 4Disconnect the Type-C data cable with the computer.After connecting the Camera to the computer, images can be displayed on the Camera,
but the functions of recording and capturing will not be available.

3.5 Power Supply

You can supply power to the Camera through the rechargeable battery coming with the Camera or charging with the Type-C cable.

3.5.1 Installing the Battery

- <u>Step 1</u> Open the cover of the battery compartment.
- <u>Step 2</u> Put one battery into the battery compartment.

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Make sure that the battery is installed with the positive electrode downward.

<u>Step 3</u> Tighten the cover.

3.5.2 Charging

The start bar will display battery information after the Camera starts. When the battery is low, charge the Camera timely to make sure the normal function.

• During charging, keep the battery temperature 0 °C to +60 °C (+32 °F to +140 °F).

- Charge the Camera with the data cable that comes with the delivery.
- <u>Step 1</u> Open the sealing cover of the port when charging.
- Step 2Connect the Type-C cable to the port to charge the Camera.The charging indicator states:
 - Red and green lights flashing alternately: charging error.
 - Red light on: charging.
 - Green light on: fully charged.
 - Off: not connected to data cable to charge.

4 System Update

Update the Camera manually or through the app.

4.1 Upgrading Manually

- <u>Step 1</u> Press and hold the knob to go to the standard menu.
- Step 2 Rotate the knob to select 🙆.
- <u>Step 3</u> Press the knob to go to the **System Setting** configuration screen.
- <u>Step 4</u> Rotate the knob to select 💾.
- <u>Step 5</u> Press the knob to enable USB mode.
- <u>Step 6</u> Copy the upgrading file (.bin).
- <u>Step 7</u> Restart the Camera.

4.2 Upgrading through App

When the app detects new program for upgrading, it will prompt a notification. Tap **Upgrade** to upgrade the system.

Appendix 1 Compliance Notice

The thermal series products might be subject to export controls in various countries or regions, including without limitation, the United States, European Union, United Kingdom and/or other member countries of the Wassenaar Arrangement. Please consult your professional legal or compliance expert or local government authorities for any necessary export license requirements if you intend to transfer, export, re-export the thermal series products between different countries.