User Manual

Product name: Multi spectral Digital Camera Model: Landsat 384 Compact FCC ID:2A3OF-LANDSAT

Multi-spectral Thermal/Night Vision

Landsat 384 /Landsat 640 Series

Quick Stard Guide

- 1. To Users
- 2. Precautions
- 3. Package Contents
- 4. Specifications
- 5. Description & Key Features
- 6. Components & Controls
- 7. Installation
- 8. Operation Instruction
- 1) Shortcut Mode
- 2) Menu Mode
- 9. FCC warning

To users

Thank you for your continued support and for choosing PARD TY32-70 multi-spectral digital camera series. Please read this manual carefully before using the device for the first time. Please follow the instructions in this manual to avoid any damage caused by improper use and to ensure that your device operates properly.

After reading, please keep this manual in a safe place, for future reference. This manual provides step-by-step instructions on how to use your multi-spectral digital camera and is intended for your reference only.

PARD reserves the right to amend this manual at any time without prior notice to individual users. For the most up-to-date information, we recommend visiting PARD's official website. PARD reserves the final right of interpretation of this manual.

Precautions

- Please remove the insulating tape on the battery before first use. It is recommended to use a fully charged lithium-ion battery with a rated voltage of 3.7V.
- Please turn off the device and remove the battery when it's not in use for more than 10 days, and store the device & battery in a dry and safe place.
- Be extra cautious and handle the device with care during use or transportation. It is recommended to use the original packaging during transportation.
- Do not use the device to focus directly on strong sources of light such as the sun or electric welding. The detector may be damaged and it will void the warranty.
- Avoid lens scratches and damage caused by oil or chemical contamination of the lens. Keep the lens cap on when not in use.
- The device should be placed in a cool, dry, and ventilated environment without strong electromagnetic fields, and the storage environment temperature should not be lower than $(-20^{\circ}C/-4^{\circ}F)$ or higher than $(50^{\circ}C/122^{\circ}F)$.
- Do not disassemble the device without authorization. If you encounter any problems, please contact our after-sales team and report them on our official website. Failure to do so will render the warranty service null and void.
- **Attention!** All PARD night-vision and thermal imaging devices require a license when exported to outside your country.

| lcon | Contents | Quantity | | |
|------|---|----------|--|--|
| | Multi-spectral digital camera | | | |
| | 3.7V 21700 Rechargeable lithium-ion battery | 1 | | |
| | Mount | 1 | | |
| | Type-C cable | 1 | | |
| | Rubber eye cup | 1 | | |
| | Protective case | 1 | | |
| | Allen Wrench | 2 | | |
| | User's manual | 1 | | |
| | After sales card | 1 | | |

Landsat 384/Landsat 640 is a multi-spectral digital camera, pioneered and released by PARD, which opened a new chapter in the field of hunting. It creatively combines the characteristics of thermal imaging long-distance detection with the characteristics of high-detail night vision, and can achieve 1 second Thermal imaging and night vision screen switching and picture-in-picture mode, thermal imaging module is equipped with NETD ≤ 25 mK (0.025 °C), 12µm high-performance sensor, night vision module is equipped with high-sensitivity CMOS detector, combined with 1200 yds LRF accurately measures the distance, making the ballistic calculation more accurate and accurately hitting the prey. In addition, Landsat 384/Landsat 640 maintains the feature of super long exit pupil distance, 800*800 IPS LCD ultra-high-definition circular screen, which upgrades your hunting experience.

Key Features

- Multi-spectral image observation mode
- Quick switch between thermal imaging screen and night vision screen in 1 second
- Ultra-long exit pupil distance display system
- 800*800 IPS LCD circular screen
- Image shift one-shot zeroing
- Ballistic calculation
- 12µm high sensitivity infrared sensor
- Infrared Image Enhancement Algorithm (IREA) & Visible Light Enhancement Algorithm (VLEA)
- 350m direction adjustable fill light
- 1000m/1200yds LRF
- Recoil-activated recording
- Upgraded UI Design
- WiFi
- IP67 rating
- 6000J recoil resistance

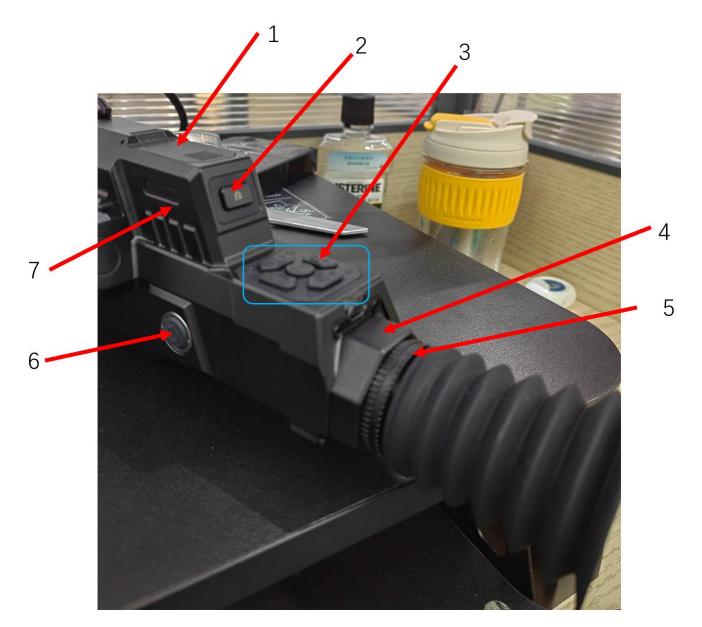
Specifications

| Model | | Landsat 384 | Landsat +640 | | |
|-------------------------------|------------|-------------------------------------|--------------------------------------|--|--|
| Classification | | Multi-spectral Thermal/Night Vision | | | |
| Thermal Sensor | | | | | |
| Туре | | Uncooled Vox IR Sensor | | | |
| Resolution(pixel) | | 384*288 | 640*512 | | |
| Pixel Size(µm) | | 12*12 | | | |
| NETD | | ≤25mK (0.025℃) | | | |
| Frame Rate(Hz) | | 50 | | | |
| Human Detection Distance(m) | | 1400 | 1800 | | |
| Vehicle Detection Distance(m) | | 2600 | 3300 | | |
| Image Engine | | PARD IREA | | | |
| Objective lens(mm) | | 35 | 45 | | |
| Optical Magnification(x) | | 3 | 2 | | |
| Digital Zoom(x) | | 2 | | | |
| Continuous Digital Zoom | | 3-6 | 2-4 | | |
| | Horizontal | 5.7° | 5.6° | | |
| Field of View (HxV) | Vertical | 5.7° | 5.6° | | |
| | Diagonal | 8° | 5.6° | | |
| Focus range | | 3m-∞ | | | |
| Visible Light Sensor | | | | | |
| Туре | | CMOS Sensor | | | |
| Resolution(pixel) | | 1920*1080 | | | |
| Pixel Size(µm) | | 2.9 | | | |
| Sensitivity(lux) | | 0.001 | | | |
| Frame Rate(Hz) | | 60/30 30 | | | |
| Image Engine | | PARD VLEA | | | |
| Objective Lens(mm) | | 70 | | | |
| Optical Magnification(x) | | 6.5 | | | |
| Digital Zoom(x) | | 2 | | | |
| Continuous Digital Zoom(x) | | 6.5-13 | | | |
| | Horizontal | | 2.6° | | |
| Field of View (HxV) | Vertical | | 2.6° | | |
| | Diagonal | | 3.6° | | |
| Focus range | | 3m-∞ | | | |
| Display | | | | | |
| Туре | | | IPS LCD | | |
| Resolution(pixel) | | 800*800 | | | |
| Reticle Style | | 6 | | | |
| Reticle Color | | 4(Red/White/Yellow/Green) | | | |
| Scene Mode | | City/Rain/Forest | | | |
| Image Mode | Image Mode | | WT-HOT/BK-HOT/EDGE/RD-HOT/IN-HOT/SKY | | |

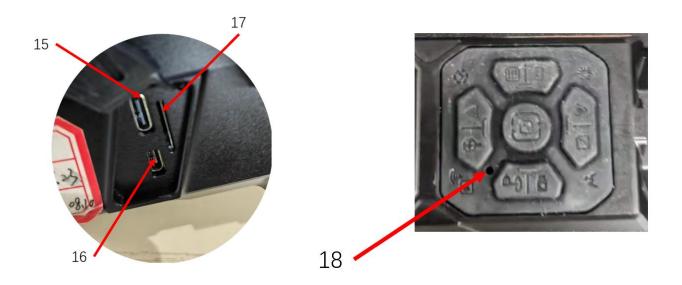
| Eye Relief(mm) | 100 | | | | | |
|----------------------------------|---|--|--|--|--|--|
| Diopter Adjustment(D) | -5~+3 | | | | | |
| Photo / Video | | | | | | |
| Photo Resolution(pixel) | 2592*1944 | | | | | |
| Photo Format | JPG | | | | | |
| Video Resolution(pixel) | Thermal: 1024*768/Night Vision: 1440*1080 | | | | | |
| Video Format | .mp4 | | | | | |
| Storage(GB) | Micro SD card (Max. 128) | | | | | |
| Main Function | | | | | | |
| LRF Detection Range(yd/m) | 1200/1000 | | | | | |
| PIP | Yes | | | | | |
| Gyroscope | Yes | | | | | |
| Loop Recording | Yes | | | | | |
| Red Dot | Yes | | | | | |
| E-compass | Yes | | | | | |
| Shutter | Mechanical shutter | | | | | |
| Microphone | Yes | | | | | |
| Firmware Upgrade | Yes | | | | | |
| IR Illuminator | | | | | | |
| IR Type | VCSEL | | | | | |
| IR power(W) | 5 | | | | | |
| IR Illuminating Level | 3 Levels | | | | | |
| IR Distance(m) | 350 | | | | | |
| IR Wavelength(nm) | 850/940 | | | | | |
| Interfaces | | | | | | |
| USB Type-C | Yes | | | | | |
| HDMI Output | Yes | | | | | |
| Connections | | | | | | |
| WiFi | Yes | | | | | |
| Supported Apps | PardVision | | | | | |
| Power Supply | | | | | | |
| Battery type | Li-ion 21700*1 | | | | | |
| Output Voltage(V) | 3.7 | | | | | |
| Operating Time(h) | ≤6 | | | | | |
| External Power Supply Type | Туре-С | | | | | |
| Environmental characteristic | | | | | | |
| Degree of Protection | IP67 | | | | | |
| Operating Temp(°C/°F) | -20 ~ +50 / -4 ~ +122 | | | | | |
| Recoil Resistance(J) | 6000 | | | | | |
| Material | | | | | | |
| Housing | Aluminum Alloy | | | | | |
| Objective lens | All-glass multi-coated lens | | | | | |
| Measurement | | | | | | |
| Product Dimension(L * W * H, mm) | 255*91*95 | | | | | |
| N.W/pcs(without battery, g) | 713 | | | | | |

- Components

Landsat 384/Landsat 640







- 1. Battery cap
- 2. Battery cap button (open)
- 3. Key Pad
- 4. Eyepiece
- 5. Focus ring
- 6. Power button
- 7. Battery compartment
- 8. LRF module
- 9. Thermal lens focus lever
- 10. Thermal lens
- 11. Night vision lens cap
- 12. Night vision lens focus lever
- 13. IR illuminator
- 14. Thermal lens cap
- 15. Type-C charging Port
- 16. HDMI Port
- 17. Micro SD Card Slot
- 18. Power indicator

1. Unboxing

Before using this device, please do the following:

- (1) Open the box and remove the device.
- (2) Check to ensure that the package contents listed above are all included in the box.
- (3) Check the device for any damage to the display, body, lens, buttons, etc.
- (4) Make sure that the objective lens and eyepiece are clean & functioning properly.

Note: If any accessories are missing or damaged, please contact our after sales service.

2. Battery installation and startup

The battery installation steps are as follows:

- (1) Push the battery cap button until it opens and remove the battery.
- (2) Remove the insulating tape.

(3) Put the positive pole(+) of the battery inwards, and then press the battery cap until the battery cap is locked.

(4) To turn on the device, press and hold the power button for about 3 seconds. (When the power light illuminates and the PARD Logo appears on the screen, the device is ready for use.

Note:

- Please use a single 21700 rechargeable lithium-ion battery rated 3.7V voltage.
- Do not put battery into fire.
- Do not put device into water when the battery cap is open.
- Do not disassemble the device without authorization.
- Do not pierce the device with sharp objects.
- Battery should be kept out of reach of children, and the positive and negative terminals of the battery should be installed correctly.

Mount Installation

To ensure optimal performance and user experience, we highly recommend using our original mount provided in the product packaging.

(1) Open the box and take out the night vision scope, 1 mount and 1 Allen wrench.

(2) The device features 5 mounting holes located at the bottom.

(3) Attach the mount securely to the bottom of the device using the Allen wrench and screws.

(4) The mount is compatible with Picatinny rail.

3. Diopter focusing

Diopter focusing is used to adjust users with different levels of corrected vision to clearly see the content displayed on the screen as shown in picture 1.

(1) After power on he device, rotate the diopter focusing wheel until you can see the screen clearly.

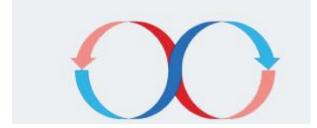
(2) Please note that the image may not be clearly visible before objective lens focus adjusted, only the wording and symbols on the display screen are clearly visible at this stage

Note: the image may not be clear when the objective lens is not well (focused), this procedure is done.

4.Objective lens focusing

(1) Before you focus the objective lens, ensure that the diopter focusing has been completed.(2) Aim at the target you want to see, and turn the focus lever of the objective lens until you can see the target image clearly;

Note: If the screen display is a thermal imaging image, please adjust the thermal imaging objective lens focus lever accordingly, if the screen display is a night vision device image, please adjust the night vision objective lens focus lever accordingly.



Compass calibration

After the eyepiece is focused, please use the "figure 8 pattern method" to calibrate the electronic compass. Users are required to tilt and move the device in a figure 8 motion until the compass is calibrated as shown in picture 3_{\circ}

Zeroing (Reticle adjustment)

Reticle Adjustment refers to aligning the reticle with the point of impact at a zeroing distance, so that the position of the aiming point at this specific distance corresponds with the point of impact of the bullet.



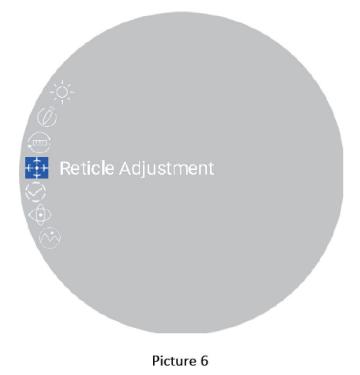
Interface explanation

- > The first item in the sub-menu represents the saved "zero" setting, there are five profiles A-E.
- ➤ "X" represents the X axis of the cross line.
- ➤ "Y" represents the Y axis of the cross line.
- Style corresponds to the crosshair type (6 options available).
- Color corresponds to the color of the cross line (red/white/yellow/green).
- ▶ Under the Save option, "Y" means to SAVE, and "N" means DO NOT SAVE.

Zeroing steps

Note: Under the premise of ensuring correct clamping, the dual-light fusion device needs to be reset twice. First, select the thermal imaging screen/night vision screen and follow the steps below to reset to zero. After completion, press [Key 5] to call out the night vision screen/Thermal imaging screen, follow the same operation steps to reset to zero.

- (1) Set the target. Set the target at the zeroing distance and ensure that the device can obtain a good image.
- (2) Enter to reticle adjustment (Zeroing page). In the home screen mode, press [Key 4] to enter the shortcut menu mode, and press [Key 1]/[Key 2] to move the cursor to the reticle adjustment setting option. Press [Key 5] to enter the sub-menu interface.

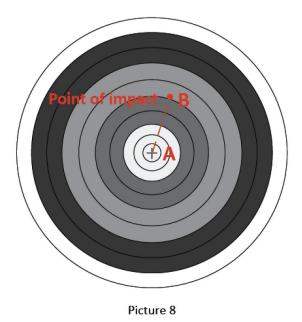


(3) **Profile setting.** After entering the zeroing page, press [Key 1]/[Key 2] to switch from A-E to create a new zeroing profile or edit an existing one.





(4) **Shoot.** Fire a 1st shot at the center of the target, ensuring that you can see a clear point of impact on the screen after the shot has been taken.



(5) Adjust zero value. Keep the scope steady after shooting, and then press the [Key 5] to move the cursor to the "X" and "Y" items. Press [Key 1] to freeze the screen and adjust the values of "X" and "Y" until the center point of the reticle is moved to the point of impact on the display screen.

Save and exit. Press [Key 1] to set the "Save" item to "Y". After the setting is completed, press and hold [Key 5] to save and exit. The actual point of impact is moved to the center

point of the reticle. (The reticle is always at the center of the screen, which can maximize the use of the whole observation field.)

Note: In the thermal imaging zero screen, the X-axis direction can achieve horizontal alignment with the impact point by moving the background image, the cross line is always horizontally centered, and the Y-axis direction can achieve vertical coincidence with the impact point by adjusting the position of the cross line; night vision reset Zero screen, X, Y axis directions are all achieved by moving the background image to achieve horizontal coincidence with the impact point, and the crosshairs are always centered.



Picture 10

- 1. Scene mode
- 2. Battery
- 3. WiFi
- 4. Profile
- 5. Compass
- 6. Time
- 7. Magnification
- 8. IR level
- 9. Gyroscope
- 10. Range
- 11. Color palette

| Keypad | Single press | Press and hold | 双击 |
|--------|-------------------------------------|---|-------------------------|
| ۵ | Sleep/Wakeup | Power on/off | Double click- |
| | Zoom/Up key | Browse files/ Disable WiFi | - |
| 2 | LRF on/ Down key | Record video | Open/Close hot point |
| 3 | Brightness of IR/ Color palettes | Switch between B&W/Color mode/ Switch scenes | - |
| 4 | Quick menu | Full menu | Take a photo |
| 5 | Switch spectral channels | | Open/Close PIP |

Key 1

Single press:

(1) Home screen mode: press [Key 1] to switch the magnification;

(2) Menu mode: press [Key 1] in the menu option interface to switch menu options upward. In the parameter setting interface under the sub-menu, press [Key 1] to increase the values.

Press and hold:

(1) Home screen mode: press and hold [Key 1] to enable the playback function. After entering this interface, the video and picture files in the memory card will be displayed.

Press [Key 1]/[Key 2] to switch between files.

- Press [Key 5] to play/pause the saved videos.
- ▶ When playing videos, press [Key 1]/[Key 2] to fast forward or rewind 2x/4x/8x times.
- Press [Key 4] to access the following settings;
- 1) Delete:
- Delete Current
- Delete All

2) File Protection:

- Lock Current
- Unlock Current
- Lock All
- Unlock All

3) Slide Show:

- 2 seconds
- 5 seconds
- 8 seconds
- > Press [Key 4] again to return to the files interface.
- ② Home screen mode: press and hold [Key 1] to turn off the Wi-Fi function.

Note: When the WiFi is turned on, you cannot access the menu. Press and hold [Key 1] to turn off the Wi-Fi and then enter the menu interface.

Key 2:

Single press:

① Home screen mode:

- Press [Key 2] to start the range detection function (For LRF version, the distance will be measured and displayed automatically. For non LRF version, the distance is not measured automatically and will display "[0]m or [0]yds". You need to manually input the target distance value by pressing [Key1] /[Key2]).
- Press [Key 2] a second time to turn on the ballistic indicator (when the ballistic calculator is turned off, the range indicator is turned off);
- Press [Key 2] a third time to turn off the ballistic indicator; (when the ballistic calculator is turned on)

② Menu mode:

• press [Key 2] to scroll down between menu options. In parameter setting interface under the sub-menu, press [Key 2] to decrease the values.

Press and hold:

• Home screen mode: press and hold [Key 2] to record a video. Press and hold [Key 2] again to save the video and exit.

Double press:

Home screen mode: double press [Key 2] to open/close the laser red dot.

Key 3:

Single press:

In the thermal imaging home screen mode, click [Key 3] to switch the image mode WT-HOT/BK-HOT/EDGE/RD-HOT/IN-HOT/Sky;

In the night vision home screen mode, and when the infrared fill light is turned on, click [Key 2] to switch the brightness of the infrared fill light from off--1 Level--2 Level--3 Level--off.

Press and hold:

In the thermal imaging home screen mode, press and hold [Key 3] to switch between City/Forest/Rain scene mode.

In the night vision home screen mode, press and hold [Key 3] to switch between night vision color mode and B&W mode.

Key 4:

Single press:

Home screen mode: press [Key 4] to enter the shortcut menu.

Press and hold:

Home screen mode: press [Key 4] to enter the full menu.

Double press:

Home screen mode: double press [Key 4] to take a photo.

;

Key 5:

Single press:

① Home screen mode: press [Key 5] to switch the spectral channel (the thermal imaging display and the night vision display are switched between each other).

② Menu mode: press [Key 5] to enter the sub-menu and confirm.

Double press:

Home screen mode: double press [Key 5] to turn on/off the picture-in-picture function

Home screen mode: press [Key 1] to enter the shortcut menu mode. Press and hold [Key 1] to enter the full menu setting mode to set various function options (the shortcut key function is invalid at this time).

1.Image Setting

Users can adjust the image contrast, brightness, detail, sharpness and mode under this setting.

- Press [Key 1]/[Key 2] to move the cursor to the image setting option, press [Key 1] to enter the sub-menu.
- Press [Key 5] to switch between contrast / brightness / detail / sharpness / mode options, and Press [Key 1]/[Key 2] to adjust the option value.
- Press and hold [Key 5] to save and exit. On the next startup, the device will maintain the saved image settings. Press [Key 4] to exit without saving.

2. Display Brightness

Users can adjust the display brightness of the screen to adapt to different surroundings.

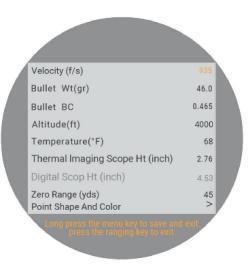
- Press [Key 1]/[Key 2] to move the cursor to the display brightness option, Press [Key 5]to enter the sub-menu.
- Press [Key 1]/[Key 2] to move the cursor to select "level 0"/ "level 1" / "level 2" / "level 3"/ "level 4"/ "level 5" / "level 6" options.
- Press [Key 5] to save and return to the previous page.

3.Ballistic Calculator

The ballistic calculator can calculate bullet trajectories and give you a precise aiming point enabling you to accurately place your shot. The device supports five profiles allowing you to use the scope on multiple rifles.

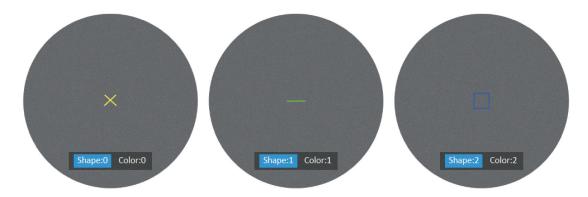
- Home screen mode: press [Key 4] to enter the shortcut menu mode.
- Press [Key 1]/[Key 2] to move the cursor to the ballistic calculator setting option, press [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to move the cursor to select "parameters" or "on/off" and then press [Key 5] to save or enter.
- After entering the ballistic calculator parameters sub-menu, press [Key 5] to scroll up or down to the parameters option you want to change. Press [Key 1]/[Key 2] to adjust the value of the corresponding parameter.

Parameter settings guide:



The first step in using ballistic calculator is to fill out the Profile that is being used with all relevant data such as target velocity, bullet weight and zero range.

- Velocity: is the measurement of bullet travel speed after it is fired from your rifle, expressed in "meters per second" (m/s) or "feet per second" (f/s), which can be measured by using professional testing equipment.
- Bullet Wt: refers to the weight of the bullet, expressed in "grams" (g) or "grains" (gr), which can be obtained from the manufacturer's specifications of the bullets purchased.
- Bullet BC: refers to bullet ballistic coefficient which is a measure of the bullet's ability to overcome air resistance in flight. Data can be obtained from the manufacturer's specifications of the bullets purchased.
- Altitude: refers to the altitude of the location, expressed in "meters" (m) or "feet" (ft), which is one of the important indicators affecting air density in ballistic calculation, which can be measured by using professional testing equipment.
- Temperature: refers to the local temperature, expressed in "Celsius" (°C) or "Fahrenheit" (°F), which is also one of the important indicators affecting air density in ballistic calculation, which can be measured by using professional testing equipment.
- Scope Ht: refers to the height difference between the optical axis of the sight and the barrel, expressed in "millimeters" (mm) or "inches" (inch), which can be measured by using professional testing equipment.
- Zero range: refers to the unit distance expressed in "meter" (m) or "yard" (yard), usually set to 100m or 100yds, users can adjust according to their own preferences.
- Point Shape and Color: There are three shape options as well as yellow/green/blue color options to customize the ballistic calculator to suit your personal needs.



- Press [Key 1] to enter the shape and color setting interface.
- Press [Key 5] to switch between shape options and color sub-options.
- Press [Key 1]/[Key 2] to select the desired shape and color.

- Press [Key 4] to confirm and return to the previous page.
- After adjusting your preferred settings, press and hold [Key 4] to save and return to the home screen. Press [Key 2] to exit without saving.

Note:

1. By setting the "meter" or "yard" in the range unit selection sub-menu, the metric or imperial units of the parameters related to the ballistic calculator will be updated automatically.

2. If you do not know all or part of this information (for example, bullet weight), we recommend contacting the manufacturer of the ammunition and/or weapon that you are using. In most cases, this information can be found on the manufacturer's specifications of the product purchased.

4.Range Unit Selection

Users can switch between "meter" or "yard" and the range unit can be updated instantly to meet the user's preference.

- Press [Key 1]/[Key 2] to move the cursor range unit selection option, and press [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to choose between "meter" or "yard", then press [Key 5] to save and return to the previous page.

5. Reticle Adjustment

Reticle Adjustment refers to aligning the reticle with the point of impact at a zeroing distance, so that the position of the aiming point at this specific distance corresponds with the point of impact of the bullet.

- Press [Key 1]/[Key 2] to move the cursor to the reticle adjustment setting option. Press [Key 5] to enter the sub-menu interface.
- Press [Key 5] to switch sub-menu options. Press [Key 1]/[Key 2 to adjust the value of the corresponding item (please see the detailed instructions from above zeroing steps).
- After selecting your preferred settings, there are two saving methods: 1. Set "Yes" under Save option, press [Key 5] to save and exit. 2. No matter whether "Yes" or "No" under Save option, press and hold the [Key 5] also means to save and exit.

6.Shutter Correction

The heat generated by the detector itself will affect the imaging effect of the device. Through the automatic shutter mode, when the temperature change exceeds the threshold, an instruction is issued to close the shutter to perform a self-calibration operation to obtain high-quality imaging effects; in the no-shutter mode, the system detects the temperature value in real time and optimizes the algorithm to ensure Imaging effect.

Auto shutter: The system detects the temperature value of the sensor simultaneously. When the change value exceeds the system setting, the shutter will close and pause the image for about 1 second to perform self-calibration operation.

Shutterless: The system detects the temperature value of the detector chip in real time, and uses the built-in algorithm to calibrate the image in real time.

- Press [Key 1]/[Key 2] to move the cursor to the shutter mode setting option, and press
 [Key 1] to enter the sub-menu.
- Press [Key 1]/[Key 2] to move the cursor to select "Auto shutter" and "Shutterless" option.
- Press [Key 5] to save and return to the previous page.

7. Gyroscope

This function measures the orientation of the device so that the yaw and pitch angles of the device can be displayed and calibrated.

- Press [Key 1]/[Key 2] to move the cursor to the gyroscope setting option, and press [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to select "Display" or "Calibration", and then press [Key 5] to enter.
- "Display" indicates whether (or not) to display the yaw and pitch angle of the device on the home screen. Press [Key 1]/[Key 2] to select "Off" or "On", and press [Key 5] to save and return to the menu.
- "Calibrate" means to enter the calibration state. After selecting, please place the device on a horizontal plane surface, and press [Key 5] to perform automatic calibration. After calibration, the device will automatically return to the home screen.

8.Scene Mode

There are three built-in scene modes, "City", "Forest" and "Rain". Users can choose any of the available scenes to achieve the best image display effect.

- Press [Key 1]/[Key 2] to move the cursor to the scene option, press [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to move the cursor to select "City", "Forest" or "Rain" mode. Press [Key 5] to save and return to the previous page.

9.Picture in Picture

The top center of the display can show a 2x magnified picture to improve aiming visibility, allowing you to see magnified target details without losing the field of view.

- Press [Key 1]/[Key 2] to move the cursor to the PIP setting option, and press [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to move the cursor to select "Off" or "On".
- Press [Key 5] to save and return to the previous page.

Note: For multi-spectral devices, the picture-in-picture displays the thermal imaging and night vision images respectively. In the picture-in-picture mode, press [Key 5] to quickly switch between thermal imaging and night vision images; and because of the multi-spectral, the imaging shows that the centers of the reticle in the two images do not point to the same position of the target.

10.Hot Track

The device can detect and display the highest temperature point on the screen, and automatically track this target heat source.

- Press [Key 1]/[Key 2] to move the cursor to the hot track setting option, and press [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to move the cursor to select "Off" or "On". Press [Key 5] to save and return to the previous page.

Note: This function can only be displayed in thermal image mode.

11.Self-activated Recording

When the device detects recoil, the whole shooting process will be recorded in 20 second intervals. The incremental 20-second video footage will be saved on the TF card.

- Press [Key 1]/[Key 2] to move the cursor to the self-activated recording setting, and press [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to select "OFF", "ON" and "Impact Sensitivity" options
- After selecting "Off" or "On", press [Key 5]to save and return to the previous page.
- After selecting "Impact Sensitivity", press [Key 5] to enter the sub-option menu of sensitivity level. Press [Key 1]/[Key 2] to select "Off", "Low", "Medium" or "High" mode. Press [Key 5] to save and return to the previous page.

12.Default magnification:

After turning on the device, users can use this function to select the default magnification of night vision channel.

- Press [Key 1]/[Key 2] to move the cursor to the default magnification setting option, and press [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to select the default magnification you want, and then press [Key 5] to save and return to the previous page.

13.Default color:

There are 4 built-in color modes of night vision channel, "Color"/ "Black & White"/ "Yellow" and "Green". Users can choose their preferred color settings.

- Press [Key 1]/[Key 2] to move the cursor to default color setting option, and press [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to select "Color"/ "Black & White"/ "Yellow" and "Green", and then press [Key 5] to save and return to the previous page.

14.Brightness of IR:

In the night vision working mode, users can choose the level of brightness of IR settings.

- Press [Key 1]/[Key 2] to move the cursor to the brightness or IR setting option, and press [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to select "Off", "1", "2","3" and then press [Key 5] to save and return to the previous page.

15.Auto Power Off

After selecting your preferred time duration, the device will sense the last point of operation before beginning the shutdown. Auto power off will start after the device has been idle then it automatically triggers the auto power off command.

- Press [Key 1]/[Key 2] to move the cursor to select the auto power off setting, and press [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to select "Off", "One minute", "Ten minutes" or "Thirty minutes" duration options. After selection, press [Key 5] to confirm and save, and return to the previous page.

16.Auto Recording

After auto recording is on, device will start recording and continue to record after the next startup.

- Press [Key 1]/[Key 2] to move the cursor to the auto recording setting option and press [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to select "Off" or "On" options, press [Key 5] to save and return to the previous page.

17.Loop Recording

Users can customize the segment recording duration. This can be set up under loop recording. When the capacity of the memory card is full, the new recording will automatically overwrite the previous saved files. When you select "Off", the recording will stop when the memory card is full, and the oldest video file will not be overwritten.

- Press [Key 1]/[Key 2] to move the cursor to the loop recording setting option, and press
 [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to move the cursor to select preferred loop time duration "Off", "Three minutes", "Five minutes" or "Ten minutes". Press [Key 5] to save and return to the previous page.

18.Date Stamp

Users can set whether to display the time stamp in the lower right corner of photos and videos taken.

- Press [Key 1]/[Key 2] to move the cursor to the date stamp setting option, and press [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to move the cursor to select "Off" or "On" options. After selection, press [Key 5] to save and return to the previous page.

19.Record Audio

User can set whether to record audio synchronously in the video.

- Press [Key 1]/[Key 2] to move the cursor to the recording audio setting option, press [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to move the cursor to select "Off" or "On" option, after selection, press [Key 5] to save and return to the previous page.

20.WiFi

Through the WiFi connection, you can use your phone, PC or tablet as an external viewfinder enabling users to synchronously see the photos and videos on a larger screen.

- Press [Key 1]/[Key 2] to move the cursor to the WiFi setting option, and press [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to move the cursor to select "On" or "Off" option. Select "Off", and return to the previous page. Select "On" to enable WiFi and return to the home screen.

Steps to connect to your mobile device:

- Download "PardVision" from the Apple App Store or the Google Play Store.
- Turn on the WiFi on your device and on your mobile device.
- Search the WiFi on your mobile device (the device WiFi network is a string of characters starting with PARD, which is a unique string of numbers). Please enter the password: 12345678 to connect.
- Enter the application to operate and use.

Note: After the WiFi is turned on, you cannot access the menu. Press and hold [Key 1] to disable the WiFi and then enter the menu interface.

21.Exposure:

In the night vision working mode, users can choose their preferred exposure settings.

- Press [Key 1]/[Key 2] to move the cursor to the exposure setting and press [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to select your preferred option. Press [Key 5] to confirm your selection.

22.Language

Users can choose their preferred language.

- Press [Key 1]/[Key 2] to move the cursor to the language setting option, press [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to move the cursor to select the desired language. Press [Key 5] to switch the system language and return to the previous page.

23.Date/Time

Users can set the system date and time of the device.

- Press [Key 1]/[Key 2] to move the cursor to the date/time setting option, press [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to adjust the setting date and time value, press [Key 5] to switch options, press [Key 4] to save and return to the previous page.

24.Format

If users want to reformat the TF Card, it will delete all the data on the TF card permanently. Data cannot be recovered after reformatting. **Please operate with caution!**

- Press [Key 1]/[Key 2] to move the cursor to the format setting option, and press [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to move the cursor to select "Cancel" or "OK" option. After selection, press [Key 5] to confirm the relevant operation and return to the previous page.

25.Blind Pixel Compensation

The blind pixel compensation algorithm enables effective compensation for blind spots that no longer respond to light and also reduces image distortion.

- Press and hold [Key 1] to enter the menu, press [Key 1]/[Key 2] to find the blind pixel compensation option, click [Key 5] to enter and you will see a prompt: Please put the lens cap on before performing blind pixel compensation process.
- Long press [Key 4] to execute the blind spot compensation function; short press [Key 2] to exit the blind pixel compensation function. After the compensation is completed, you can press [Key 1]/[Key 2] to move the cursor to select backup, save or cancel.

26.Default Settings

If users decide to reset the device, it will restore the device to the factory default settings and all of the user data and personalized settings will be deleted. **Please operate with caution!**

- Press [Key 1]/[Key 2] to move the cursor to restore default setting option, press [Key 5] to enter the sub-menu.
- Press [Key 1]/[Key 2] to move the cursor to select "Cancel" or "OK" option. After selection, press [Key 5] to confirm the relevant operation and return to the previous page.

27.Firmware Upgrade

System firmware can be updated to maintain an optimized current version.

- Press [Key 1]/[Key 2] to move the cursor to the firmware upgrade option, and press [Key 5] to enter the sub-menu. You will see an important reminder: Upgrading firmware may cause damage to the equipment, please operate with caution!
- Press and hold [Key 5] to confirm and short press [Key 5] to exit and return to the previous page.

Note: When performing this operation, please load the device with a fully charged battery and type-C power supply. Powering off the device during the firmware update process may cause damage to the device components. Please operate with caution.

28.Version

This function displays the device's version.

- Press [Key 1]/[Key 2] to move the cursor to the version option, press [Key 5] to enter the sub-menu to view.
- Press [Key 5] again to exit and return to the previous page.

FCC WARNING

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

Note: The Grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. such modifications could void the user's authority to operate the equipment.

The device has been evaluated to meet general RF exposure requirement. This equipment complies with FCC's RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna(s) must not be co-located or conjunction with any other antenna or transmitter.