# PARD

**Rangefinder Version**

# Scan To Enjoy Privilege



**Scan The QR Code To Join Our Membership**

1 Extend warranty
2 Enjoy 1 on 1 expert service
3 Get the product experience officer opportunity

# CONTENTS ///////////////////////

## TO USERS //////////////////////////////

Thank you for your continued support and for choosing PARD TA32/62-LRF thermal monocular 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 thermal monocular 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℃/-4℉) or higher than (50℃/122℉).
- 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 !** Export of all PARD night-vision and thermal imaging devices outside your country requires a license .

## PACKAGE CONTENTS /////////////////////

| Icon | Contents | Quantity |
|------|----------|----------|
|  | Thermal monocular | 1 |
|  | 3.7V 18650 Rechargeable lithium-ion battery | 1 |
|  | Hand strap | 1 |
|  | Type-C cable | 1 |
|  | Shoulder bag | 1 |
|  | Cloth bag | 1 |
|  | Lens cap | 1 |
|  | Oxford fabric bag | 1 |
|  | User's manual | 1 |
|  | After sales card | 1 |

# DESCRIPTION & KEY FEATURES //////////////////////////

The TA32/62-LRF is a top-of-the-line thermal monocular with a laser range finder that's both compact and lightweight, making it the perfect tool to take with you on-the-go. This device is designed to fit comfortably in your palms and is equipped with an eyepiece resolution of 1024 x 768 OLED, which produces crystal-clear images with fine details. Depending on your needs, you can choose from two different thermal imaging sensors: the 640 x 480 (TA62-LRF) or the 384 x 288 (TA32-LRF). Thanks to its next-generation vanadium oxide IR sensor pixelization of 12 micrometers and a noise equivalent temperature difference (NETD) of ≤25mK (TA32-LRF NETD ≤35mK), this device is incredibly sensitive and can detect even the slightest thermal contrast in low-light environments, even at great distances.

## Key Features

1. Small enough to put in pocket
2. Hunt smarter with 1000m rangefinder
3. Extremely sensitive sensor 12μm
4. Infrared image enhancement algorithm (IREA)
5. 3 Scene modes
6. Multi-color palettes
7. Photo & video recording
8. Optional lens and magnification
9. Mute button
10. IP67 rating

# SPECIFICATIONS ////////////////////////

| Model | TA32-LRF | TA62-LRF |
|---|---|---|
| **Sensor** | | |
| Resolution(pixel) | 384*288 | 640*480 |
| Pixel size(μm) | 12*12 | 12*12 |
| NETD(mK) | 35(0.035℃) | 25(0.025℃) |
| Frame rate(Hz) | 50 | 50 |
| Human detection distance(m) | 800/1100/1400/1700 | 1200/1500/1800 |
| Vehicle detection distance(m) | 1800/2200/2600/3000 | 2500/2900/3300 |
| **Optics** | | |
| Objective lens(mm) | 19/25/35 | 25/35 |
| Optical magnification(x) | 2/2.6/3.7 | 1.6/2.2 |
| Digital zoom(x) | 2/4/8 | 2/4/6/8 |
| Field of view (horizontal) | 13.8°/10.5°/7.5° | 17.5°/12.5° |
| Field of view (vertical) | 10.4°/7.9°/5.6° | 13.1°/9.4° |

| Model | TA32-LRF | TA62-LRF |
|---|---|---|
| **Field of view (diagonal)** | 17.2°/13.1°/9.4° | 21.7°/15.6° |
| **Eye relief(mm)** | 20 | 20 |
| **Diopter adjustment(D)** | ±5 | ±5 |
| **Display** | | |
| **Resolution(pixel)** | 1024*768 | 1024*768 |
| **Scene mode** | City/Rain/Forest | City/Rain/Forest |
| **Image mode** | WhiteHot/BlackHot/RedHot/Fusion1 /Fusion2/Iron Red1/IronRed2 | WT-HOT/BK-HOT/EDGE/RD-HOT/IN-HOT/SKY |
| **Photo / Video** | | |
| **Photo resolution(pixel)** | 2592*1944 | 2592*1944 |
| **Photo format** | .JPG | .JPG |
| **Video resolution(pixel)** | 1024*768 | 1024*768 |
| **Video format** | .MP4 | .MP4 |

| Model | TA32-LRF | TA62-LRF |
|---|---|---|
| Storage(GB) | TF card max(128 ) | TF card max(128 ) |
| Image Engine | Pard IREA | Pard IREA |
| **Main Function** | | |
| LRF detection range(m) | 1000 | 1000 |
| PIP | Yes | Yes |
| Gyroscope | No | Yes |
| Loop recording | Yes | Yes |
| Red dot | Yes | Yes |
| Hot track | No | No |
| Shutter | Mechanical shutter | Mechanical shutter |
| Microphone | Yes | Yes |
| Firmware upgrade | Yes | Yes |

| Power Supply | | |
|---|---|---|
| **Battery type** | Li-ion Battery 18650*1 | Li-ion Battery 18650*1 |
| **Output voltage(V)** | 3.7 | 3.7 |
| **Operating time(h)** | ≤6 | ≤6 |
| **External power supply** | Type-C | Type-C |
| **Environmental Characteristic** | | |
| **Degree of protection** | IP67 | IP67 |
| **Operating temp(°C/°F)** | -20°C ~ 50°C/-4°F ~ 122°F | -20°C ~ 50°C/-4°F ~ 122°F |
| **Material** | | |
| **Housing** | Aluminum Alloy+Composite | Aluminum Alloy+Composite |
| **Eyepiece** | All-glass multi-coated lens | All-glass multi-coated lens |
| **Measurement** | | |
| **Product dimension (L * W * H, mm)** | 182*57*71 | 182*57*71 |
| **N.W/pcs (with/without battery, g)** | 312/330 | 340/345 |

| NO. | Name | No. | Name |
|---|---|---|---|
| ❶ | LRF module | ❼ | Menu button |
| ❷ | Objective lens | ❽ | Eyepiece focusing |
| ❸ | Power/ Sleep button | ❾ | TF Card slot |
| ❹ | + button | ❿ | Type-C charging port |
| ❺ | LRF button | ⓫ | HDMI port |
| ❻ | -Button | | |

## INSTALLATION ///////////////////////

### 1.Unboxing

Before using this device, please do the following:
❶ Open the box and remove the device.
❷ Check to ensure that the package contents listed above are all included in the box.
❸ Check the device for any damage to the display, body, lens, buttons, etc.
❹ 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:

2.1 Push the battery cap downwards to open battery compartment and remove the battery.
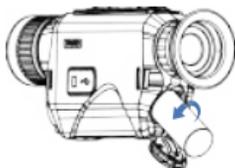


2.2 Remove the insulating tape.



2.3 Insert the battery, ensuring that the positive (+) side goes in first and then push and pull the battery buckle backward to lock the battery cover.



2.4 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:**

❶ Please use a single 18650 rechargeable lithium-ion battery rated 3.7V voltage.

❷ Please pay attention to align the buckle interface.

❸ Do not put battery into fire.

❹ Do not put device into water when the battery cap is open.

❺ Do not disassemble the device without authorization.

❻ Do not pierce the device with sharp objects.

❼ Battery should be kept out of reach of children, and the positive and negative terminals of the battery should be installed correctly.
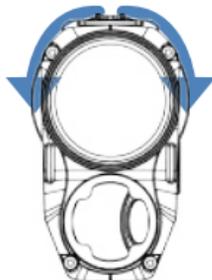
## 3. Diopter focusing

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.

❶ After power on the device, rotate the diopter focusing wheel until you can see the screen clearly.

❷ 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.
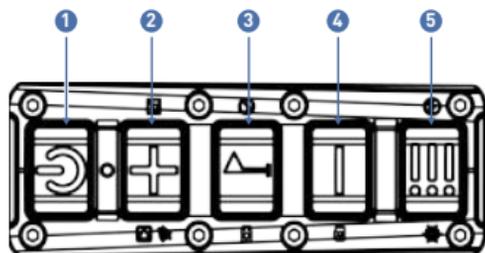


Picture 1                                        Picture 2

## 4. Objective lens focusing

❶ Before you focus the objective lens, ensure that the diopter focusing has been completed.

❷ Target an object and adjust the objective focusing wheel until you can see the target image clearly , as shown in picture 2.

## Operation Instruction：

### 1. Shortcut Mode



Picture 3

| | Single press | Press and hold | Double press |
|---|---|---|---|
| Key1 | Power/Sleep | Power on/off | - |
| Key2 | Up/Zoom | File / (turn off WiFi) | Turn on/off PIP |
| Key3 | LRF | Record video/Save video | Shutter correction |
| Key4 | Down/Switch image modes | Take a photo | - |
| Key5 | Menu/Back | Red dot pointer | Switch scene modes |

# Explanation

## Key 1

**1. Single press:**

Press [Key 1] to put device into sleep mode when the device is on. Press [Key 1] again to wake up device from sleep mode.

**2. Press and hold:**

Press and hold [Key 1] to turn on / turn off the device.

## Key 2

**1. Single press:**

① **Home screen mode:** press [Key 2] to zoom in 2x/4x/8x times. (TA62-LRF: 2x/4x/6x/8x).

② **Menu mode:** press [Key 2] to scroll up or adjust the relevant option settings.

**2. Press and hold:**

**Home screen mode:** press and hold [Key 2] to enable playback function. After entering this interface, the video and picture files stored on the memory card will be displayed.

- Press [Key 2]/[Key 4] to switch between files.
- Press [Key 3] to play/pause the saved videos.
- When playing videos, press [Key 2]/[Key 3] to fast forward or rewind 2x/4x/8x times.
- Press the [Key 5] button 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:
- Two seconds
- Five seconds
- Eight seconds

- Press and hold the [Key 5] button to return.
- When the WiFi is turned on: Menu interface cannot be opened when the Wi-Fi is turned on, press and hold the [Key 2] to turn off WiFi and then enter the menu interface.

### 3. Double press：

**Home screen mode:** double press [Key 2] to turn on/off the picture-in-picture function.

### Key 3

### 1. Single press:

**Home screen mode:** press [Key 3] to start the LRF range detection function. The distance will be measured and displayed automatically.

### 2. Press and hold：

**Home screen mode:** press [Key 3] to record a video. Press and hold [Key 3] again to save the video and exit.

### 3. Double press：

**Home screen mode:** double press [Key 3] to execute manually the shutter correction function .

## Key 4

**1. Single press:**

① **Home screen mode:** press [Key 4] to switch image modes :

- TA32-LRF： WhiteHot/BlackHot/RedHot/Fusion1/Fusion2/IronRed1/IronRed2
- TA62-LRF： White hot/Sky/Edge/Black hot/Red hot/Iron mode.

② **Menu mode:** press [Key 4] to scroll down or adjust the relevant option settings.

**2. Press and hold：**

Press and hold [Key 4] to take a photo.

## Key 5

**1. Single press:**

① **Home screen mode:** press [Key 5] to open/close the menu interface.

② **Menu mode:** in menu mode press [Key 5] to go back to the home screen.

**2. Press and hold：**

**Home screen mode:** press and hold the [Key 5] to enable/disable the red dot pointer.

**3. Double press：**

**Home screen mode:** double press [Key 5] to switch between city/forest/rain scene modes.

## 2. Menu Mode

**Home screen mode:** single press [Key 5] to enter the menu setting mode to set various function options (the shortcut key function is invalid at this time), as shown in Picture 4.

### 1. Image setting

Users can adjust the image contrast, brightness, sharpness and mode under this setting.
- Press [Key 2]/[Key4] move the cursor to the image setting option, press [Key 3] to enter the sub-menu.
- Press [Key 3] to switch between contrast / brightness / sharpness / mode options, and press [Key 2]/[Key 4] to adjust the option value.
- Press and hold [Key 3] to exit. Upon the next startup, the device will maintain the saved image settings.

**Image default settings:** contrast value is 50, brightness value is 50, sharpness is 2 and the mode value is 0.

### 2. Display setting

Users can adjust the contrast, brightness of the screen, to adapt to different surroundings.
- Press [Key 4] to move the cursor to the display setting options and press [Key 3] to enter the sub-menu.
- Press [Key 3] /[Key 5]to switch the contrast/ brightness option. Press [Key 2]/[Key 4] to adjust the value.
- Press and hold [Key 3] to exit.
Default value: contrast is 4, brightness is 3.

### 3. Scene

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.
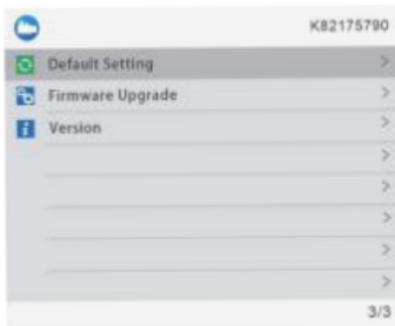
Picture 4

- Press [Key 2]/[Key 4] to move the cursor to the scene option, press [Key 3] to enter the sub-menu.
- Press [Key 2]/[Key 4] to move the cursor to select "City", "Forest" or "Rain" mode. Press [Key3] to save and return to the previous page.

## 4. Magnify center position

- Press [Key 2] /[Key 4]to move the cursor to magnify center position, and press [Key 3] to switch the X / Y axis option.
- Press and hold [Key 2 ] / [Key 4] to adjust the option value.
- Long press [Key 3] to exit.

## 5. Picture in picture (PIP)

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 4] to move the cursor to the PIP setting option, and press [Key 3] to enter the sub-menu.
- Press [Key 2]/[Key 4] to move the cursor to select "PIP OFF" or "PIP ON", "Shortcut Key OFF" and "Shortcut Key ON" setting you prefer.
- After selection, press [Key 3] to save and exit.

## 6. Shutter Mode

**TA62-LRF Yes**
The heat generated by the detector itself will affect the imaging effect of the device. Through the shutter mode, the

device will detect any slight heat changes which exceed a set range, deviation will cause the shutter to automatically close and the device will perform self-calibration. This will improve edge to edge clarity on the image.

**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.

**Manual:** 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 4] to move the cursor to the shutter mode setting option, and press [ Key 3] to enter the sub-menu.
• Press [Key 2]/[Key 4] to move the cursor to select "Auto shutter" and "Shutterless" option.
• Press [Key 3] to save and return to the previous page.

  **TA32-LRF No**

  **Shutter Correction**：  Yes
• Double press [ LRF ] key to manually execute the shutter correction.

## 7. Hot Track

**TA32-LRF  No**

**TA62-LRF  Yes**

• Press [Key 4] to move the cursor to the hot track option, and press [ Key 3] to enter the sub-menu.
• Press [Key 2]/[Key 4] to move the cursor to select "Off" and "On" option.
• Press [Key 3] to save and return to the previous page.

## 8. Center  marking

• Press [Key 4] to move the cursor to the center marking option, and press [ Key 3] to enter the sub-menu.

• Press [Key 2]/[Key 4] to move the cursor to select "Off" and "On" option.
• Press [Key 3] to save and return to the previous page.

## 9. Auto recording

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

• Press [Key 4] to move the cursor to the auto recording setting option and press [Key 3] to enter the sub-menu.
• Press [Key 2]/[Key 4] to select "Off" or "On" options, press [Key 3] to save and return to the previous page.

## 10. 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 2] /[Key 4]to move the cursor to the loop recording setting option, and press [Key 3] to enter the sub-menu.
• Press [Key 2]/[Key 4] to move the cursor to select preferred loop time duration "Off", "Three minutes", "Five minutes" or "Ten minutes". Press [Key 3] to save and return to the previous page.

## 11. Date stamp

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

• Press [Key 4] to move the cursor to the date stamp option, press [Key 3 ] to enter the sub-menu.
• Press [Key 2] / [Key 4] to select on / off date stamp, and press [Key 3] to confirm and exit.

## 12. Record audio

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

- Press [Key 4] to move the cursor to the recording audio setting option, press [Key 3] to enter the sub-menu.
- Press [Key 2] / [Key 4] to move the cursor to select "Off" or "On" option, after selection, press [Key 3] to save and return to the previous page.

## 13. 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 4] to move the cursor to the WiFi setting option, and press [Key 3] to enter the sub-menu.
- Press [Key 2] / [Key 4] 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.

## 14. Language

Users can choose their preferred language.

• Press [Key 4] to move the cursor to the language setting option, press [Key 3] to enter the sub-menu.
• Press [Key 2] / [Key 4] to move the cursor to select the desired language. Press [Key 3] to switch the system language and return to the previous page.

## 15. Date/Time

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

• Press [Key 4] to move the cursor to the date/time setting option, press [Key 3] to enter the sub-menu.
• Press [Key 2] / [Key 4] to adjust the setting date and time value, press [Key 3] to switch options, press [Key 5] to save and return to the previous page.

## 16. 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 4] to move the cursor to the format option, press [Key 3] to enter the sub-menu.
• Press [ Key 2] / [Key 4] to select Cancel / Ok, and press [Key 3] to confirm and exit the menu interface.

## 17. Blind pixel compensation

The blind pixel compensation algorithm enables automatic compensation for blind spots that no longer respond to light and also reduces image distortion, as shown in Picture 5 and Picture 6.

**TA32-LRF**

• Press [Key 4] to move the cursor to the blind pixel compensation option, press [Key 3] to enter the sub-menu.

  You will see an important reminder: please put on lens cap, long press the menu key to execute, short press the ranging key to exit.

• Put on lens cap, press and hold [Key 5] to start the blind pixel compensation, press [Key 5] switch between "X" and "Y", locating the blind spot by " X "/ " Y " , press [Key 3] to confirm the elimination of blind pixel, and press and hold [Key 5] to exit .



Picture 5

**TA62-LRF**

• Press [Key 4] to move the cursor to the blind pixel compensation option, press [Key 3] to enter the sub-menu.

You will see an important reminder: please put on lens cap, long press the menu key to execute, short press the ranging key to exit.

• Press [Key 3] to exit. Press and hold [Key 5] to start the blind pixel compensation. After the process is completed, you can press [Key 2] and [ Key 4] to move the cursor to backup: "Yes" or "No".



Picture 6

## 18. Default setting

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 4] to move the cursor to restore default setting option, press [Key 3] to enter the sub-menu.
- Press [Key 2] / [Key 4] to move the cursor to select "Cancel" or "OK" option. After selection, press [Key 3] to confirm the relevant operation and return to the previous page.

## 19. Firmware upgrade

System firmware can be updated to maintain an optimized current version.
Notes： Before upgrading operation, please insert the TF card with the upgrade software.
- Press [Key 4] to move the cursor to the firmware upgrade option, and press [Key 3] 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 3] to confirm and 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.

## 20. Version

This function displays the device's version.

- Press [Key 4] to move the cursor to the version option, press [Key 3] to enter the sub-menu to view.
- Press [Key 3] again to exit and return to the previous page.

## Statement : //////////////////////

### 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.

# Follow Us

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|----------|-----------|---------|----------|

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