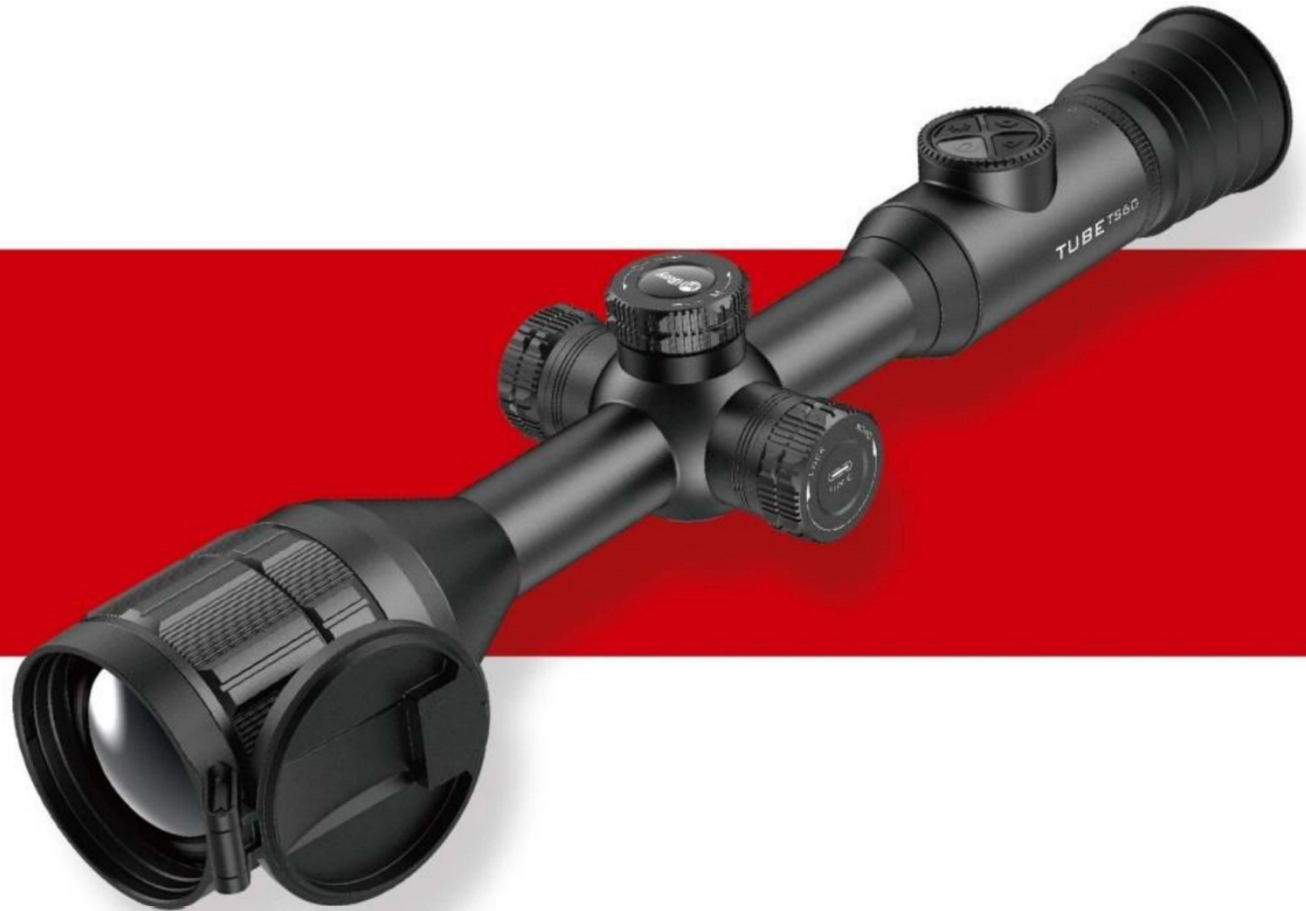# TUBE
Thermal Imaging Scope

THERMFOX

User Manual

TS60

IMPORTANT SAFETY INFORMATION

Environmental influences

– Never point the camera lens directly at intense heat sources
such as the sun or laser equipment. The lens and eyepiece
can act as an amplifier and damage internal components.

– Do not touch the cooling device after exposure to sunlight or
cold.

Notes on possession

Take breaks after prolonged use to avoid wrist pain.

Risk of ingestion

Do not place the device in the hands of small children. Improper

handling can cause small parts to come loose and be swallowed.

Safety instructions for use

– Handle the device with care: rough handling can damage the
internal battery.

– Do not expose the device to fire or high temperatures.

– Install the batteries correctly as instructed. Any other
installation is prohibited.

– The battery capacity decreases if the device is used at low
ambient temperature. This is not a fault and is due to technical
reasons.

– The recommended temperature for use of this product is -20° to
+50°. Otherwise, it will affect the life of the product.

– Do not store the device for long periods of time at temperatures below -20 °C or above
50 °C, otherwise the battery capacity will be permanently reduced.

– Always store the device in a dry, well-ventilated area.

– If the device is damaged or the battery is faulty, please send the
device to our after-sales service for repair.

Safety instructions for the power supply unit

– Before use, check that the power unit, cable and adapter
are not visibly damaged.

– Do not use any unofficial spare parts. Defective parts must be replaced.

– Do not use the power supply unit in damp or wet environments.

– Only charge the device at temperatures between 0 °C and 50 °C.

– Do not make any technical adjustments.

Disposal of batteries

Directive 2006/66/EC (Battery Directive): this product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. Details of the the battery can be found in the documentation for the specific product. The battery is marked with this symbol, which may contain Cd (indicating cadmium), Pb (indicating lead) or Hg (indicating mercury). For proper recycling, take the battery to your supplier or send it to a designated collection point. For more information, visit www.recyclethis.info.

Information for users on the disposal of electrical and electronic equipment (households)

2012/19/EU (WEEE Directive): products bearing this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, please take this product to the WEEE waste management unit when purchasing an equivalent new device.

to your local supplier or drop it off at designated collection points places. For more information, please visit: www.recyclethis.info.

For business customers in the European Union

Contact your dealer or supplier for disposal of electrical and electronic equipment. They will provide you with further information.

Information on disposal in other countries outside the European Union This symbol is valid only in the European Union. If you wish to dispose of this product, please contact your local authority or retailer and ask for disposal options.

Intended use

The device is designed for imaging thermal objects for nature observation, hunting or civilian use. This device is not a toy for children.

Use the device only as described in this manual. Neither the manufacturer nor the dealer shall be liable for any damage resulting from unintentional or improper use.

Functionality test

– Before use, make sure that the device is not visibly damaged.

– Make sure the device displays a clear and unobstructed picture.

– Check that the thermal imaging monocular settings are correct. See the notes in **Turning on and setting up the image**.

Installing/removing the battery

The Tube TS60 thermal imaging rifle scope is equipped with two power systems - one built-in battery and one replaceable 18650 battery. The built-in battery cannot be removed.

1 Specifications

Model	TS60
Sensor Specifications	
Type	Vox
Resolution, pixels	1280 × 1024
Pixel size, μm	12
NETD, mk	≤ 18
Frame rate, Hz	50
Optical specifications	
Lens, mm	60mm/F1.0
Field of view (H×E), º	14.7 × 11.7
Linear field of view (H×V), m at 100 m	25.6×20.5
Magnification, ×	2 ~ 16
Eye relief, mm	50
Output pupil diameter, mm	6
Diopter, D	-5 ~ +3.5
Detection range, m (Target size: 1.7 m × 0,5 m, P(n)=99%)	3100
Display Specifications	
Type	AMOLED 1.03"

Resolution	2560 × 2560
Battery power supply	
Batteries	Built-in battery / 6600mAh + replaceable 18650 battery / 3200mAh
Max. Operating time (22ºC), h*	9
External power supply	5V (type C)
Physical specifications	
Wi-Fi / APP	Support (InfiRay outdoor)
Photo/video	Support Support
recorder MIC	Support
Bluetooth	
Video Activated Pingback bump	Support
Memory	
8 GB	capacity12
Degree of protection IP	IP67
Operating temperature，?	-20~+50
Weight，g	1000
Connectivity and compatibility Dimension，mm	384×104×77
Maximum recoil of a rifle with bullets (Eo), joules	6000
Click value@100m, cm	2
Compatible holder	Standard 30mm rings

☐Actual uptime depends on the level of use of features such as Wi-Fi, video recording, etc.

➢ The design and software of this product may be modified without prior

alerts improved and its functionality expanded.

➢ You can download the latest user guide on our official website: www.infirayoutdoor.com.

2 Contents of the package

- Tube TS60 thermal imaging rifle scope
- Eyeshade
- Picatinny rail mounting
- Carrying case
- Type C cable
- Power adapter
- Lens cloth
- 2*18650 batteries
- Target for shooting
- Brief instructions

3 Home

Tube TS60 is a thermal imaging rifle scope for outdoor hunting. It is designed on the principle of infrared thermal imaging and requires no external light sources day or night, in all adverse weather conditions (such as rain, snow, fog). It can be used without being affected by strong light and can even observe targets behind obstacles (such as branches, grass and bushes).

The TUBE TS60 with its long operating time can be widely used for hunting, observation and positioning in low visibility.

TUBE TS60 uses a standard 30mm diameter to meet the requirements of of general dimensions for mounting on a weapon.
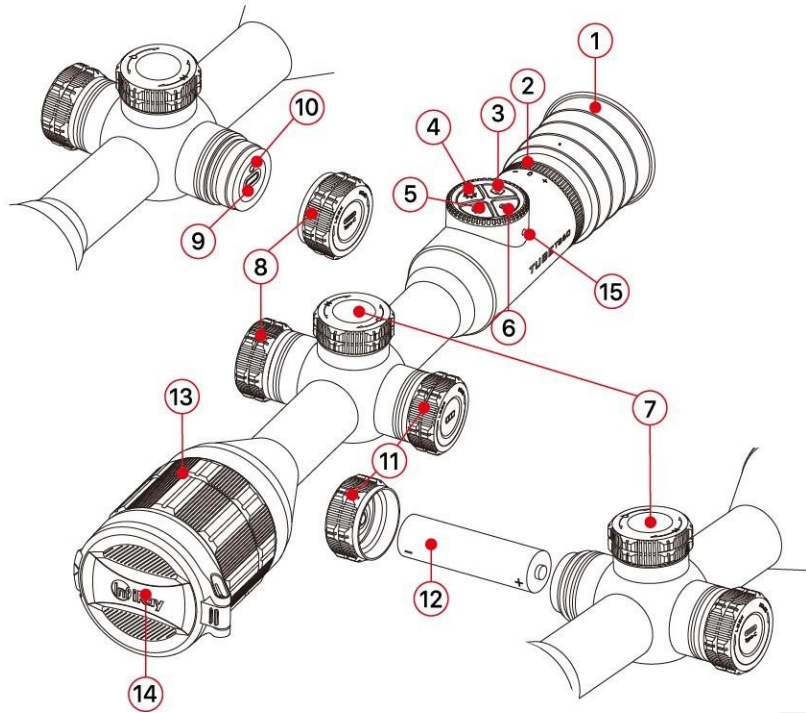
4 Functions

- 12μm detector
- High image quality

- "Infinite" zoom
- Dual power system with long battery life
- Standard diameter 30 mm
- Expandable laser rangefinder function
- Long detection range
- 50Hz frame rate
- Built-in memory with support for photography, video recording and

  simultaneous audio and video recording.
- Built-in Wi-Fi module supporting connection to the app
- Built-in compass and motion sensor
- PIP (Picture in Picture) function
- Pixel defect correction
- Convenient control interface

Components and controls

1. Eye shade

2. Eyepiece diopter adjustment ring

3. Camera button

4. Button to change display brightness

5. Power button

6. Picture mode button

7. Driver

8. USB cover

9. Type C port

10. LED indicator

11. Battery slot cover

12. 18650 battery

13. Lens focus ring

14. Lens cap

15. Microphone
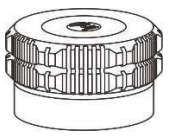
6 Controls

Button	Current status	Short press	Long press	Turning
⏻	Off	--		Turning on the device--
	Home screen Standby	Image calibration	Shutdown / standby mode facilities	--
	mode Individual ranges on	Wake up the device		----
	Main menu interface	Implementation of individual ranges		----
P	Pixel Calibration Interface	Return to the interface without Retrieved from Add/remove defective pixels		----
☼	Home screen	Switching the picture mode	Turning PIP on/off-- **Default settings:** switching the function on/off of the stadiametric rangefinder. **When connecting the module**	
	Home screen	Setting the display brightness	**Laser rangefinder**: switch the	--

laser

gefinder

indicator

module

on

on/off.

the

ran

Button	Interface	Short press	Long press	Rotate
📷	Home screen	Take a photo	Start/stop recording videos	--
P+☀	Laser rangefinder	Switch distance measurement mode between single and continuous distance measurement.	---	
P+📷	The splash		screen-- Image freeze--	
📷+☀	Home screen Splash	--	Switching the cross and its functions on/off	--
	screen Home screen	--	Return the cross to the centre	--
	Menu interface Shortcuts	To enter the shortcut menu interface	Enter the main menu interface	Image magnification setting
	Main menu interface	Modifying function parameters	To save and return to the home screen	Switch menu options
	Pixel defect calibration/spray interface	Confirm selection / Enter sub-offer		Move the position of the cross: **Clockwise** - left / down **Counterclockwise** - right / up
		Switching direction		

7 Power

The Tube TS60 uses a dual power system - a built-in

rechargeable lithium-ion battery and a replaceable 18650 battery,

with the dual power supply allowing up to 8.5 hours of normal

operation. The battery must be fully charged before first use.

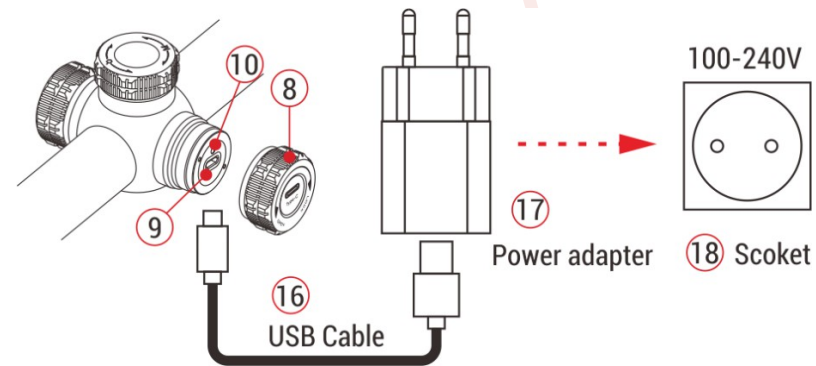## Charging the built-in battery

If the battery icon changes colour to red during use

, it means that the battery power is not sufficient. Charge the
battery in time to avoid shortening its life.

- Turn counterclockwise to open the USB cover **(8)**.

- Plug the end of the USB Type-C cable **(16) into the** USB Type-C
  port **(9)** on the

  facility.

- Plug the other end of the USB cable **(16)** into the power adapter
  (17)

  and plug the adapter into a 100-240 V **(18)** socket for charging.

- When charging, a charging icon appears on the battery icon and

 The LED indicator (**10**) on the device lights up red. When

indicator **(10)** turns green, this means that charging is complete.

Note: Only supports charging the built-in battery,

not a replaceable 18650 battery.

Installing a replaceable 18650 battery

- Turn counterclockwise to open the battery slot cover (**11**).

- Insert the 18650 battery **(12) into** the battery holder according

  to the indicator plate, i.e. with the positive electrode in and the

  negative electrode out.

- Close the battery slot cover **(11)** and turn clockwise

  hand tighten it.
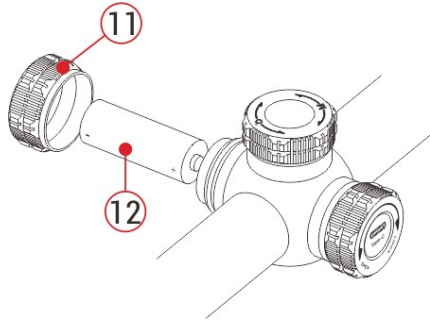
Security measures

- When charging, use a 5V2A power adapter

  compatible with the device. Using a different type of

  adapter may cause irreversible damage to the

  battery or the adapter itself.

- If the device is not used for a long time, the battery should

  be partially charged, not fully charged or discharged.

- Do not charge the device immediately after moving it from

  a cold to a warm environment. Allow 30 to 40 minutes for

  acclimatization.

- Do not use the charger if it is modified or damaged.

- The device should be charged at a temperature of 0 °C to +40

  °C. Otherwise, the battery life will be significantly reduced.

- Do not leave the device unattended while charging.

- Do not connect the battery to a power source for more than 24
  hours after it is

  already fully charged.

- It is not recommended to connect third-party devices

  that consume more power than the allowed value.

- The instrument is equipped with a short circuit protection system,

  but conditions that could lead to a short circuit should be avoided.

- Use the device at the recommended operating temperature of -20
  °C to

  +50 °C. Do not use the device outside this temperature range or

  battery life may be reduced.

- When using the device at temperatures below freezing, the

battery capacity. This is normal and does not mean that it is

faulty or damaged equipment.

Switching between two battery types

The Tube TS60 supports a dual-power system: a built-in

lithium-ion battery and a replaceable 18650 battery, while

supporting USB power.

- If both batteries are

  installed in the Tube

  TS60, the

  two battery icons on

  either side of the

  image, with the

  removable battery on

  the left side and the

  built-in

  batteries on the right

side. Green

color indicates that the device is powered, and gray color

indicates that the device is not powered.

- If the removable battery is not installed, it will appear on the right

  side, only the green built-in battery icon.

- If a replaceable battery is installed and fully charged, it will be

  prioritized. If the removable battery is discharged, the device will

  automatically switch to the built-in battery.

- When the device is connected to USB, it automatically switches to

external power supply. At this point, the built-in battery icon displays a lightning-like charging icon, indicating that the built-in battery is charging.

- The replaceable battery can also be replaced while the device is in use. During this time, it automatically switches to the built-in battery and automatically switches back to the replaceable battery after replacement.

8 External power supply

The TS60 supports external power supplies such as a portable

power supply for a mobile phone (5 V) - the so-called power bank.

- Connect an external power supply to the USB port **(9)** of the device.
- The device then automatically switches to an external power source and simultaneously charges the built-in battery.
- When the external power source is switched off, the device switches to the 18650 replaceable battery. If there is no replaceable 18650 battery installed or the battery charge level is low, it will switch to the built-in battery instead of shutting down.

Installation and use

Mounting on the weapon

To ensure accuracy, mount the device in the designated

location on the weapon.

- The TS60 Tube needs to be fixed with a clamp, for

  example with the simple Picatinny rail clamp

  included in the package. Tube TS60 has a 30mm

  diameter tubular body design that is compatible with

  standard 30mm diameter clamps,

  such as the clamps of a conventional day scope.

  Suitable tools can be used to install the device.

- During installation, the position of the Tube device

  should be adjusted according to the distance

  between the eye and the eyepiece (eye relief) as

  specified in the specifications, and according to the

  sense of use and comfort. If this suggestion is not

  followed, the eyepiece may injure the shooter when

  shooting.

- We recommend to mount the rifle scope as low as possible, but
  keep it away

from the barrel or other devices.

9 o tighten the mounting clamp screws, it is recommended to use

torque wrench to prevent damage to the body of the rifle scope due

to over-tightening and the recommended torque must not exceed

2.5 Nm.

- If the device is used for hunting, first shoot the

  as described in **the chapter "Spraying"** in this manual.

- When using the riflescope at night or in a dark environment,

  it is recommended to use the visor (**1) to** avoid possible

  game strike.

## Switching on and setting the picture

- Remove the lens cap **(14)**.

- Press and hold the **power button (5)** for 2 s

  to start the device. Wait 3s for the process to complete.

- Rotate the eyepiece diopter adjustment ring (**2)** to adjust the

  brightness of the icons on the display according to personal

  preference.

- Rotate the lens focus ring **(13)** to focus the lens

  on the observed object.

- **Image mode settings:** From the home screen, press the

  Picture Mode button (6) to set the picture mode, whose

options include: white hot - black hot -

Color

the device switches off and the button

will change from 3 to 0,

- **To adjust the brightness of the display,** press the **Display brightness** button **(4)** on the home screen to adjust the brightness of the display from level 1 to 5.

- From the home screen, you can press the **rotary pushbutton (7)** short or long to enter the general menu or the main menu for further operations.

- From the home screen, press the **power button (5)** for image calibration. When performing background calibration, cover the lens cap **(14)**. Set the calibration mode in the main menu.

-
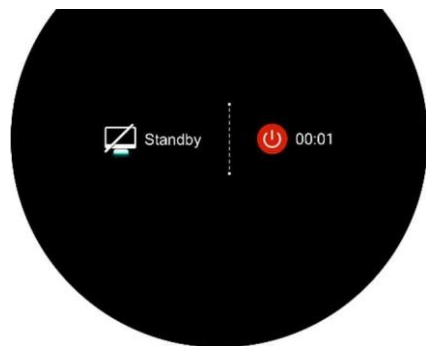
- After use, hold down the **power button (5)** for 3 seconds to enter the shutdown interface. Once the countdown icon

the device switches off and
the button

relax. The

interface

will then

prompt

you to

Save   DataAfter saving

the display

goes black
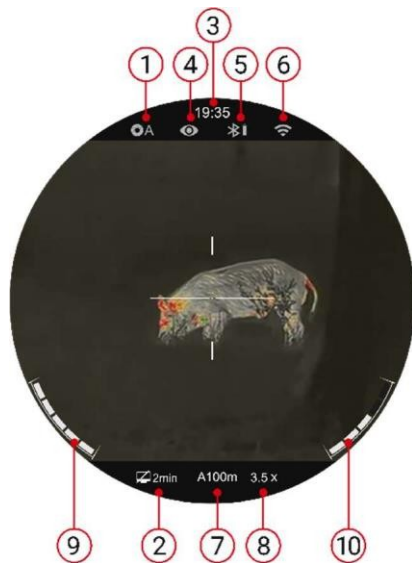
and the

device

switches

off. **When**

the device

turns off and saves data, do not disconnect it from the power source. V

Otherwise, the data cannot be saved.

:coloured

- By releasing the button during the countdown, the device enters

  standby mode. Press the **power button** again

 **(5)** Wake up the device.

Status bar

The status bar is located at the top of the image interface and

displays information regarding the current operating status of the

device. The current image mode (: white hot; : black hot; : red hot;

10. Power status of the built-in battery.

; :Violet; : Crimson; : Viridian).

1. Current image calibration mode (A is auto calibration

   mode; M is manual calibration mode; B is background

   calibration mode. Lens must be covered during

   background calibration)

2. Standby status and time (off by default)

3. Clock (set it in the main menu or

   sync the time in the InfiRay Outdoor app)

4. Ultraclear mode status: (: Ultraclear mode is

   off; : Ultraclear mode is on)

5. Bluetooth status (: Bluetooth is off. : Bluetooth is on, but

   is not successfully connected to the laser rangefinder module.

   : Bluetooth is on and successfully connected to the laser

   rangefinder module; : Power status of the rangefinder

   module).

6. Wi-Fi status (: Wi-Fi OFF; : Wi-Fi ON)

7. Currently selected rifle and range (Selected rifles:

   Range: 1~999m, customized; for example

   A100m).

8. Actual visual magnification (TS60: 2× ~ 32× adjustable)

9. Replaceable battery power status (18650 battery)

Left side - Replaceable Battery

100% 80% 60% 40% 20%

Right side - Built-in Battery

20% 40% 60% 80% 100%
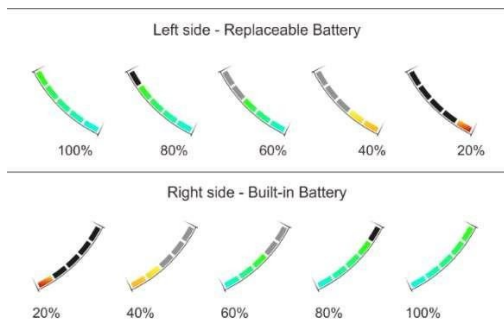
15 s to activate the hidden

Shot

Tube TS60 uses the "freeze" method. It is preferable to shoot in an environment of appropriate operating temperatures for the equipment.

- Mount the device on the weapon according to the instructions in **section 9 Mounting the device on the weapon.**

- The first time you use the device, press and hold **the Camera (3)** + **Brightness button displays (4)** for more than

> X=4.00cm
Y=4.00cm

sighting and related functions.

- ~~Select a target at a certain distance, for example 100 m, 200 m.~~

- Set the range according to **Chapter 9** Turning on **and adjusting the image**.

- Select a spray profile (see "**Main menu - Spray profile**").

- Press and hold the **rotary pushbutton (7)** to enter the function

  of the main menu.

- Turn the **rotary pushbutton (7)** to select **Reset**

  shooting distance ( ). Press the **rotary**

  pushbutton (7) briefly to enter the submenu.

- Select or add a new target distance according to the

  preset target distance (see "**Main menu - Reset**

  target distance").

- After selecting the firing distance, rotate the **rotary**

  pushbutton (7) to select the Firing( ) function and

  press the **rotary pushbutton (7)** to enter the firing

  interface. The coordinate positions of the crosshairs

  (X-axis and Y-axis) are displayed at the bottom of the

  screen.

- Aim and fire at the target.

- Keep track of the location of the actual hit site. Assume that the red × mark in the picture on the right is the position of the impact point (**this mark is for illustration only, it should actually be the hit after the shot**).

- If the hit point does not coincide with the e aiming point (centre of the aiming field/crosshairs), keep the aiming position still and then press and hold the **image mode button (6) + camera button (3)** simultaneously until the bottom of the the screen does not freeze with a snowflake icon and the image does not stop.

- Turn the **rotary pushbutton (7)** to move the cross until the cross to coincide with the location of the hit. Rotate clockwise to move the cross left or down and counterclockwise to move the cross right or up.

- Press the **rotary pushbutton (7) briefly** to switch the direction of movement between X and

Y. The background of the selected item is highlighted in green.

- When the crosshairs are moved, a small white dot will appear on the screen to indicate the position of the sight before moving.

- After moving the cross to the actual impact location, press and hold the **rotary pushbutton (7) to** save the current cross position and return to the home screen.

- Repeat aiming and firing until the hit matches the position of the cross.

-

Calibration

If the image is degraded or uneven, it can be improved by calibration.

Calibration can equalize the background temperature of the detector and remove image defects

Three calibration modes are available: automatic calibration (A),

manual calibration (M) and background calibration (B).

- Select the desired calibration mode from the main menu.

- **Automatic calibration (A): the** device calibrates automatically according to the software algorithm. No need to close the lens hood

  (the internal shutter covers the sensor). Before automatic calibration, a 5 second countdown prompt appears behind the shutter icon on the status bar, which can be cancelled during the countdown by briefly pressing the **power button (5)**. In this mode, the user can also complete the calibration manually by briefly pressing the **power button (5)**.

- **Manual calibration (M):** from the home screen, briefly press the **power button (5)** to manually calibrate the shutter without closing the lens hood (the internal shutter covers the sensor).

- **Background Calibration (B):** Press the **power button (5)** on the home screen**, then** the display will prompt "cover lens during calibration". Cover the lens cap and background calibration will be performed for 2 s. After calibration, remove the lens cover.

13 Digital zoom

The TUBE TS60 binoculars support image magnification from 1x to 4x, increasing the basic magnification capability.

- From the home screen, turn the **rotary pushbutton (7)** to smoothly increasing the base magnification.

- Turn clockwise to move closer, counterclockwise to move further away.

- The magnification is shown on the status bar of the display in real time.
- The device supports magnification from 2x to 32x

Photography/video recording

The Tube TS60 features 128GB of built-in memory that can be used for photography and video recording. Photo and video files will be named by time, so we recommend setting the system date and time in the main menu before use (see **Main Menu - Settings - Date/Time)** or synchronise the system date and time in the InfiRay Outdoor app e.g. with a mobile phone.

Photography

- From the home screen, press the **Camera** button **(3) to** take a photo. The picture is freeze for 0.5 s and in the left [O] The camera icon appears in the top corner of the screen.

- Photos are stored in the internal memory.

- If an exclamation mark icon appea (!) to the right of the camera icon, it means that the memory space is full. Check and transfer videos and images to other media to free up space.

Video recording

- From the home screen, press and hold the **Camera button (3)** and start recording the video.

- A recording icon and a window with the recording time in the format 00:00:00 (hour: minute: second).

- You can also take photos while recording by pressing the **camera button (3)**.

- Press and hold the **camera button** again **(3)** stop recording and save the video.

- All videos and photos are stored in the built-in storage.

●

I can tel.

– You can open and control the menu while the video is being recorded.

– Captured images and recorded videos are stored in the built-in memory in the format IMG_HHMMS.jpg (snapshot) and VID_HHMMSS.mp4

(video), where HHMMSS stands for hour/minute/second.

– The maximum length of a video recording is 10 minutes. If

the duration is longer than 10 minutes, the video is

automatically uploaded to a new file.

– The number of files is limited by the internal memory space of the

device. Check the remaining space regularly and transfer videos

and pictures to other media to free up space on the memory card.

– On uploaded videos and photos, only the cross and the data will be
displayed

(status bar, icons and menu) are not displayed.

– We are working on something that can display GUI

information on recorded videos and photos, which can be

implemented by a software update in the future.

Memory access

When the device is turned on and connected to the computer, the

computer recognizes it as a flash memory card. You can then access

the device's memory and copy pictures and videos.

- Connect the device to your computer using a USB cable;

- Switch on the device.

- Click the My Computer icon - click to open the device with
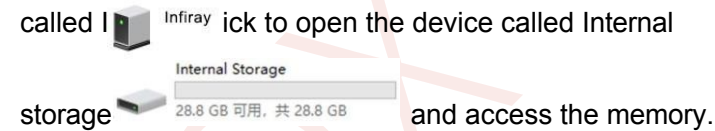
called I Infiray ick to open the device called Internal

storage Internal Storage 28.8 GB 可用，共 28.8 GB and access the memory.

- There are different folders in the memory named according to time in the format

xxxx (year) xx (month) xx (day).

- The photos and videos recorded on a given day are stored in

folders

- Select the files or folders you want to copy or delete.

15 PIP function

PIP (picture-in-picture) provides a small window independent of the entire

screen. This window displays a small part of the image that is enlarged to 2x

- From the home screen, press and hold the **Picture Mode

button (6) to** turn on the PIP function.

- At the same time as the main screen, the top of the display

a separate "window" will appear.

- When you turn **the rotary pushbutton (7)** to enlarge the main image, the image displayed in the PIP window is enlarged 2 times synchronously.

- Press and hold the **Picture Mode button (6)** to turn off the PIP function.

16 Rangefinder functions

The TS60 tube is equipped with stadiametric rangefinder function and also supports an external laser rangefinder module. The stadiameter function will be temporarily disabled when connected to the laser rangefinder module via Bluetooth.


Stadiametric rangefinder

The function of the stadiametric rangefinder is to calculate the approximate distance targets of known size.

- From the home screen, press and hold the **Display brightness button (4),** to activate the stadiametric rangefinder function.

- Then two horizontal lines for measurement are displayed symmetrically above and below the cross and three icons are displayed on the left side

the preset objects and the measured distance value.

- There are three predefined target values:

    - **Deer:** 1,7 m tall

    - **Wild boar:** 0,9 m tall

    - **Hare:** 0.2 m tall

- Aim for the target to be in the middle of the measuring lines.

- Turn the **dial (7) clockwise** to increase the width of the

    measuring lines or counterclockwise to decrease the

    width of the measuring lines so that the target is

    completely

    between the measuring lines.

- When adjusting the width of the measuring lines, they are automatically recalculated

    rangefinder values.

- The color and center position of the measuring

    line are synchronized with the color and center

    position of the cross.

- To change the unit of measurement (metres or yards),

    go to **Main Menu-Settings-Measurement Units** to edit**.**

- To exit this function, press and hold **the Display

    Brightness button (4).**
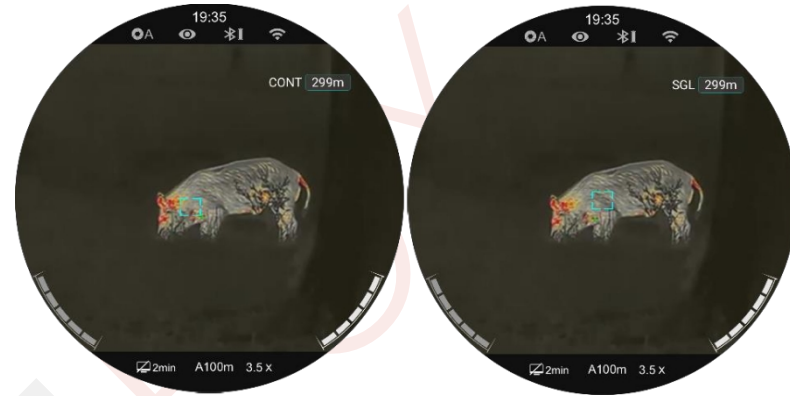
Laser rangefinder (ILR-1200-1, can be purchased separately)

The Tube TS60 supports an external laser rangefinder module

(ILR- 1200-1), which is supplied separately.

For a detailed description of how to install and use the laser

rangefinder module, please refer to the laser rangefinder manual

in the laser rangefinder package.

Compared to a stadiametric rangefinder, a laser rangefinder is more

accurate and there is no need to determine the type of object (deer,

wild boar, rabbit).

- Press and hold the Power button on the laser rangefinder

  module to turn on the laser rangefinder. The LED on the laser

  rangefinder module will flash.

- Long press the **rotary pushbutton (7)** to enter the main

  menu.

- Select **Bluetooth** and make sure Bluetooth is turned on.

- The laser rangefinder module automatically connects to the rifle
  scope.

- After a successful connection, the LED on the laser rangefinder

  module turns off and the battery icon appears in the status bar to

  the right of the Bluetooth iconindicating that the riflescope has

  successfully connected to the laser rangefinder module.

- After successfully connecting the laser rangefinder module, press

and

hold down the **Display Brightness button (4)** for 3 seconds to

turn on/off the **laser indicator** on the laser module

rangefinder.

- There are two distance measurement modes to

  choose from - Continuous Distance (CON) and

  Single Gauge Distance (SGL).

- The default distance measurement mode is

  continuous distance measurement mode. Briefly

  press the **Image Mode button (6) + Display**

  Brightness button (4) simultaneously to switch

  the distance measurement mode.

- In continuous measurement mode, the measurement is real-time
  and takes place

  automatically without any action.

- In simple distance measurement mode, briefly press

  power button (5) to perform the distance measurement operation.

- The measurement mode and the measurement value are
  displayed in the upper right

  corner of the screen.

- If MAX appears on the display, it means that

  the target distance has exceeded the

  maximum distance (999 m) of the laser

  rangefinder.

- Switch the unit of measurement according to **Main**

  menu - Settings - Units of measurement.

- No other functions during continuous distance measurement, such as photography and video recording are affected.

- When the laser rangefinder module is mounted on the riflescope and successfully connected via Bluetooth, the laser rangefinder replaces the stadiametric rangefinder, which turns off.

colours in the following order

17 Shortcuts menu

The menu allows you to quickly reset basic settings, including sight style, sight colour, image sharpness and target distance.

- From the home screen, press the **rotary pushbutton (7)** to enter shortcut menu interface.

- Turn the **rotary pushbutton (7)** to toggle between the following function options and the selected option will be highlighted in the background.

  - **Cross type ( ):** Turn the **rotary pushbutton (7)** to select the cross type and press the **rotary pushbutton (7)** to switch between 7 styles.

  - **Cross colour ( ):** Turn the **rotary pushbutton (7)** to select an option and press the **rotary pushbutton (7)** to set the

white, black, red and green.

– **Image contrast ( ):** Turn the **rotary pushbutton (7)** to select an option and press the **rotary pushbutton (7)** to adjust the image contrast from level 1 to 5.

– **Image sharpness ( ):** Turn the **rotary pushbutton (7)** to select an option and press the **rotary pushbutton (7)** to adjust the image sharpness from level 1 to 5.

– **Shooting distance ( ): For the** Type A **rifle**, only the distance values stored for Type A will be available after selecting the option).

–

- Press and hold the **rot(⬤ ushbutton (7)** or press the **power button (5)** to save your changes and return to the home screen.

▲◣

⊕

operation, the device automatically saves the changes and returns

to the home screen.

-

Main offer

- From the home screen, press and hold the **rotary pushbutton (7)** to

to enter the main menu interface.

- Turn the **rotary pushbutton (7)** to toggle the function options -
  turn clockwise to move down and counterclockwise to move up.

- Press the **rotary pushbutton (7)** to adjust the parameters of
  the current option or enter the submenu.

- The icon for the selected option will change from white to green.

- The operations with partial bids are the same as above.

- From any menu interface, press and hold the **rotary
  pushbutton (7) to** save your changes and return to the home
  screen. Press the **power button (5)** to return to the top menu
  without

Main menu functions and descriptions

saving the change.

- If you do not perform any operation in any menu interface within
  15 seconds, you will automatically return to the home screen
  without saving.

- During continuous operation, the selected option remains in the pre-
  exit position (i.e., until the riflescope is turned off) when exiting the
  main menu. When the riflescope is restarted and the main menu is
  entered for the first time, the cursor remains at the first menu option
  (Ultraclear mode).

Ultra-Clear mode 	**Ultra-Clear mode on/off** • Press and hold the **rotary pushbutton (7)** to enter the main menu interface. • Select the **Ultra-Clear** option (selected by default in the menu after startup). • Press the **rotary pushbutton (7)** to turn the Ultra-Clear shooting mode on/off, during which you will hear the shutter calibration click. • When the function is switched on/off, the icon in the status bar changes accordingly.
Wi-Fi	**To turn Wi-Fi on/off** • Press and hold the **rotary pushbutton (7)** to enter the main menu interface. •

(Wi-Fi icon)	• Turn the **rotary pushbutton (7)** to select the **Wi-Fi** function**.** • Press the **rotary pushbutton (7)** to switch the Wi-Fi function on/off. • When Wi-Fi is turned on, the Wi-Fi icon is followed for 3 seconds by a prompt to enter the default password. • The password will only be displayed on the first three entries. After changing the password, it is no longer displayed. • When the function is switched on/off, the icon in the status bar changes accordingly.
Bluetooth (Bluetooth icon)	**Switching Bluetooth on/off** • Press and hold the **rotary pushbutton (7)** to enter the main menu interface. • Turn the **rotary pushbutton (7)** to select **Bluetooth**. • Press the **rotary pushbutton (7)** to switch the Bluetooth function on/off. • When the function is switched on/off, the icon in the status bar changes accordingly.
Video recoil **activated** (Video recoil icon)	**Turning the recoil-activated video function on/off** • Press and hold the **rotary pushbutton (7)** to enter the main menu. • Turn the **rotary pushbutton (7)** to select **Video recoil activated.** • Press the **rotary pushbutton (7)** briefly to switch the function on/off. • If the **video recoil** function is enabled**, the** TS60 will automatically record when shooting 3 seconds of video footage before shooting and 2 minutes 57 seconds after shooting. • A recording icon and a window with the recording time in the format 00:00:00 (hour: minute: second). The video is stored in the built-in storage. If there is continuous shooting for 3 minutes, only one video is saved.

Motion sensor	**Switching the motion sensor and compass function on/off**
	• Press and hold the **rotary pushbutton (7)** to enter the main menu interface.
	• Turn the **rotary pushbutton (7)** to select **Motion sensor**.
	• Press the **rotary pushbutton (7)** to switch the motion sensor and compass function on/off.
	• When the motion sensor is on, two scales appear on the right side of the display.
	• The horizontal scale represents the angle of inclination and the vertical scale represents the angle of inclination.
	•

|	
Ballistic calculation ⌐	**Enabling/disabling the ballistic calculation function** Note: The ILR-1200-1 is required to use the ballistic calculation function. • Press and hold the rotary pushbutton (7) to enter the main menu interface. • Turn the rotary pushbutton (7) to select Ballistic calculation. • Press the rotary pushbutton (7) to switch the ballistic calculation function on/off. • There are 5 groups of ballistic models from profile 0-4. • Ballistic parameters can be set using the Infiray Outdoor APP or the TUBE device itself. • Once the setup is complete, the system automatically displays the designed crosshair position in a single measurement distances. •
Laser calibration ✳	If the target position locked by the laser pointer is not aligned with the center of the rangefinder cursor on the screen, you need to calibrate the position of the laser pointer cursor using this function (laser pointer module required). • Install the laser rangefinder module on the device. • Connect the laser rangefinder module to the Tube via the Bluetooth function in the main menu.

•
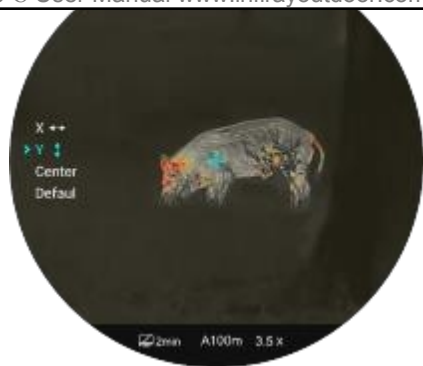
Bluetooth.

- Press and hold the **image brightness button (4)** to turn on the laser indicator on the laser rangefinder module.

- Press and hold the **rotary pushbutton (7)** to enter the main menu interface.

- Turn the **rotary pushbutton (7)** to select **Laser Calibration.**

- Press the **controller** button **(7)** to enter the laser calibration interface.

- A cross will appear on the screen and the information below will be displayed in the top left corner:

  - X is the X axis (horizontal)

  - Y is the Y axis (vertical)

  - Center means returning the cursor to the center of the screen.

- Assume that the red "×" in the figure represents the position of the target locked by the laser pointer (it is actually shown as a red dot).

- Press the **rotary pushbutton (7)** briefly to select X, Y or Center.

- When X or Y is selected, turn the **rotary pushbutton (7) to** move the laser cursor until the center of the laser cursor is aligned with the red "×" (the position where the laser pointer is pointing). Turn clockwise to move left/down and turn counterclockwise to move right/up.

- When Center is selected, briefly press the **power button (5)** to center the laser cursor on the screen.

- When X or Y is selected, briefly press the **power button (5)** to exit laser calibration without saving.

- After calibration, press and hold the **rotary pushbutton (7)** to save and go to the home screen.

Shot profile	Selection

- Press and hold the **rotary pushbutton (7)** to enter the main menu interface.

- Turn the **rotary pushbutton (7)** to select the **Shooting profile** option.

- Press the **rotary pushbutton (7)** to open the submenu**.**

- Turn the **rotary pushbutton (7)** to select one of the three rifles (A, B, C).

- Press the **rotary pushbutton (7)** to confirm the selection and return to the main menu.

- The name of the selected profile is displayed in the status bar at the bottom of the display.

-

|	Before zeroing, select the shot profile and set the shot distance.
Resetting the distance shot ⊕	The TUBE TS60 supports any shooting distance from 1 to 999 meters. • Press and hold the **rotary pushbutton (7)** to enter the main menu interface. • Turn the **rotary pushbutton (7)** to select **Reset distance.** • Press the **controller** button **(7)** to enter the submenu where the shot distances are displayed. • Turn the **rotary pushbutton (7)** to select one distance to be shot based on the preset target distance. • Press the **rotary pushbutton (7)** to confirm the distance shot and enter the distance shot submenu, which contains two options listed below, i.e. Shooting and **resetting the distance shot**.
	Shot ─¦─	If the preset distance is the same as the distance displayed on the instrument, you can do the firing directly according to the following procedure: • Turn the **rotary pushbutton (7)** to select the **shooting** option. • Press the **rotary pushbutton (7)** to enter the shooting interface. •

		- The X and Y coordinates of the sight are displayed at the bottom of the screen. - Aim the center of the crosshairs at the target distance, fire, and then observe the position of the actual hit point. - Keep the focus position steady while pressing and holding the **shooting mode button (6) + camera button (3)** simultaneously until the freeze icon appears below the Y coordinate on the left side of the screen. The image is frozen. - Turn the **rotary pushbutton (7)** to move the cross position until the centre of the cross points to the site of the hit. For details, see **section 11 Shooting**.
	Resetting the distance shot ▼ 000 ▲	If the distance shot does not match the preset target distance, this option can be used to re-shoot the distance. - Select an invalid distance and briefly press the **rotary pushbutton (7)** to enter its submenu. - Turn the **rotary pushbutton (7)** to select **Reset distance**. - Press the **controller** button **(7)** to activate the distance shooting function and then above and below the number will display two small triangular symbols. - Turn the **rotary pushbutton (7)** to set the numeric value of the current position, which can be switched between 0 and 9. - Press the **rotary pushbutton (7)** to switch between the hundreds, tens and ones positions. - After setting, press and hold the **rotary pushbutton (7)** to save the settings and exit. In the meantime
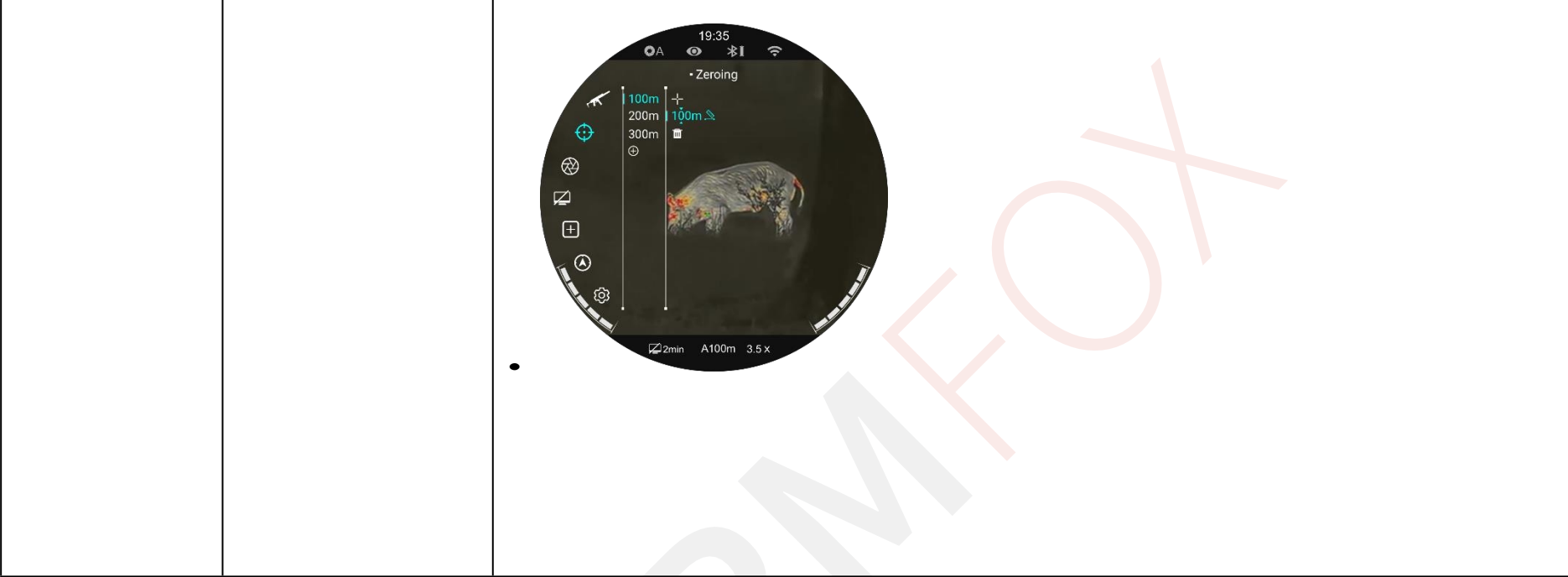
	the distance shot will change accordingly. • In addition, the status bar is synchronously updated to the new distance shot.

Calibration
 	
⊗
	Calibration mode selection
	
	Three calibration modes are available: auto calibration (A), manual calibration (M) and background calibration (B).
	
	• Press and hold the **rotary pushbutton (7)** to enter the main menu interface.
	
	• Turn the **rotary pushbutton (7)** to select **Calibration**.
	
	• Press the **rotary pushbutton (7)** to open the **Calibration** submenu.
	
	• Turn the **rotary pushbutton (7)** to select one of the following options:
	
	  – **Auto Calibration: in this** mode, images are calibrated automatically.
	
	  – **Manual calibration:** images are calibrated by the user according to the effect of the image.
	
	  – **Background calibration:** In this mode, the lens must be covered by the lens hood.
	
	• Confirm the selection by pressing the **rotary pushbutton (7). The** icon in the status bar will change accordingly.
	
	•

Setting the **standby mode** ⊠	**Setting the standby mode** • Press and hold the **rotary pushbutton (7)** to enter the main menu interface. • Turn the **rotary pushbutton (7)** to select **Standby settings.** • Press the **rotary pushbutton (7)** to enter the **Standby Settings** submenu**,** which contains four options, namely 2min, 4min, 6min and off. • Turn the **rotary pushbutton (7)** to select and press the **rotary pushbutton (7) to** confirm the selection. • The selected option is displayed in the top status bar. •

	• If Off is selected, the standby function is disabled. **Remark:** – Standby mode is activated automatically when the device is tilted up or down at an angle greater than 70° and to the left or right at an angle greater than 30°. – When the device is in the shooting state, the standby mode is turned off.
Defectiv e pixel correcti on ⊞	Pixel defects, such as visible light spots or dark spots with stable brightness. To fix this problem, use Pixel Defect Correction to remove the pixel defects. • Press and hold the **rotary pushbutton (7)** to enter the main menu interface. • Turn the **rotary pushbutton (7)** to select **Pixel Defect Correction**. • Press the **Controller** button **(7)** to enter the **Pixel Defect Correction** interface**.** • The PIP feature is automatically turned on and is displayed at the bottom of the screen by default. The motion directions (X-axis and Y-axis) and the number of corrected pixels are displayed at the top of the screen. • The pixel defect correction interface has a small cursor instead of a cross. • Turn the **rotary pushbutton (7)** to move in the selected direction, turn clockwise to move to the left or down, and turn counterclockwise to move right or up. • Press the **Controller** button **(7)** to save the motion data and switch the motion direction between the X-axis and Y-axis. • When the cursor moves to the position of the faulty pixel, press the **power button (7) to** add and correct it. At the same time, **Add** flashes in the PIP window**, indicating that the** defective pixel has been added. • In the same position, press the **power button (7)** again to cancel the defective pixel correction and the PIP window will flash

Del.

- Repeat the above steps to complete the repair of additional defective pixels.

- Each time you add or remove a defective pixel, the number of defective pixels changes accordingly.

- When the cursor approaches the PIP window, the PIP window will automatically move up.

- After making the correction, press and hold the **rotary pushbutton (7) until** the prompt **"Do you want to keep these settings?" appears. (Do you want to keep these settings?)**.

- Turn the **rotary pushbutton (7)** to select **"Yes" to** save and exit, or select **"No" to**

  cancellation of saving and termination.

- Press the **rotary pushbutton (7)** briefly to confirm the selection.

- When you sel a **five-second** countdown will appear on the screen. When prompted, **Saving**

  suc me screen.

-

Calibrating the compass	**Digital compass calibration** • Press and hold the **rotary pushbutton (7)** to enter the main menu interface. • Turn the **rotary pushbutton (7)** to select **Compass calibration.** • Press the **rotary pushbutton (7)** to enter the **compass calibration** interface. • The tri-axial coordinate system icon appears on the screen. • Within 15 seconds, rotate the sight along the three axes indicated by the icon, with each axis rotating at least 360°. • After 15 seconds, the calibration will automatically complete and go to the home screen.

•
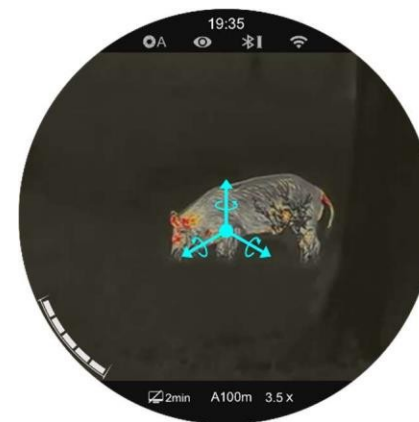
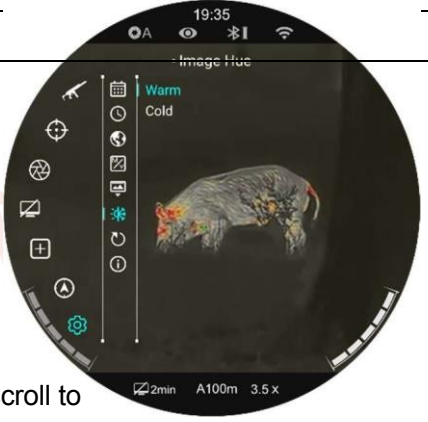|		
Settings ⚙️	This function is used to set the date, time, language, unit of measure, reset to factory settings and display information about the her. device. • Press and hold the **rotary pushbutton (7)** to enter the main menu interface. • Turn the **rotary pushbutton (7)** to select **Settings.** • Press the **rotary pushbutton (7)** briefly to enter the submenu. • This menu item allows you to configure the following settings.	
	Date 🗓️	**Setting the system date** • Turn the **rotary pushbutton (7)** to select **Date**. • The date is displayed in yyyy/mm/dd format. • Press the **rotary pushbutton (7)** to activate the date reset function. • By default, two small triangular symbols appear above and below the **"Year"** number. • Press the **rotary pushbutton (7)** to switch the year, month and date. • Turn the **rotary pushbutton (7)** to set the correct number. • After setting, press and hold the **rotary pushbutton (7) to** save and exit the date setting function.

Time ![clock icon]	**Setting the system time** • Turn the **rotary pushbutton (7)** to select **Time**. • The time is displayed in 24-hour format as hour: minute. • Press the **rotary pushbutton (7)** to activate the time reset function. • By default, above and below the **"Clock"** number shows two small triangular symbols. • Turn the **rotary pushbutton (7)** to set the correct number. • Press the **rotary pushbutton (7)** to switch between hours and minutes. • After setting, press and hold the **rotary pushbutton (7)** to save the changes and exit the time reset function. • After resetting, the time displayed in the status bar is updated accordingly.	
Language ![globe icon]	**Setting the system language** • Turn the **rotary pushbutton (7)** to select **Language**. • Press the **rotary pushbutton (7)** to enter the **Language** submenu. • Turn the **rotary pushbutton (7)** to switch between the different languages. • Press the **rotary pushbutton (7)** to confirm the selection and the system language will will automatically change.	

Units of measurement ⌷M/Y	**Unit of measure settings** ● Turn the **rotary pushbutton (7)** to select **Measurement units.** ● Press the **rotary pushbutton (7)** to enter the **units of measure** submenu. ● Turn the **rotary pushbutton (7)** to switch between meter and yard. ● Press the **rotary pushbutton (7)** to confirm the selection and go to the top menu interface.	
Automatically hide the status bar 🖼	**Enable/disable the automatic status bar hiding feature** ● Turn the **rotary pushbutton (7)** to select **Auto hide the status bar**. ● Press the **rotary pushbutton (7)** to open the **Auto hide status bar** submenu. ● Turn the **rotary pushbutton (7)** to select **View** or **Hide**. ● Press the **rotary pushbutton (7)** to confirm the selection and return to the top menu interface.	
Image shade 🔆	**Adjusting the tint of the image**	

	• Turn the rotary **pushbutton (7)** to select **Image Hue.** • Press the rotary **pushbutton (7)** to enter the submenu "the shade of the image". • Turn the rotary **pushbutton (7)** to switch between the **Warm and Cold**. • Press the rotary **pushbutton (7)** to confirm the selection and scroll to to the top menu interface.	
	Restore factory settings • Turn the **rotary pushbutton (7)** to select **Reset to factory settings**. • Press the **rotary pushbutton (7)** to open the **Factory Reset** submenu. • Turn the **rotary pushbutton (7)** to select **Yes** to restore the factory settings or **No** to cancel the operation. • Press the **rotary pushbutton (7)** to confirm the selection. • If **Yes is selected, the** device automatically restarts. • If **No** is selected**,** it will automatically return to the top Offers.	

Restore factory settings

↻

The following functions will be restored to their default settings:

– **Image mode**: White Hot	**- Shutter Calibration** Mode**:** A	– **Motion sensor**: **Off**
– **Distance Shooting** : A100	**- Compass** : **Off**	– **Language**.
	- Standby mode: **Off**	– **Units of measurement:** metre
– **Mode** **Ultra-Clear**:	**- Wi-Fi**: Off Off	– **Automatic Hide**
– **Magnification**: <mark>2×</mark>		**status**: Off

View information about the device

Information ⓘ	• Turn the **rotary pushbutton (7)** to select **Info**. • Press the **driver** button **(7)** to display system information about the riflescope, including product model, GUI version, SYS Info, Boot version, FPGA, PN and SN numbers of the riflescope, hardware version. • Press and hold the **rotary pushbutton (7)** to exit and return to the top menu.

19 Automatic GUI hiding
- icons and information bar

This function is used to automatically hide the GUI and display only the sight/crosshairs to avoid blocking the image.

- Press and hold the **rotary pushbutton (7)** to access the main menu on the home screen.

- Turn the **rotary pushbutton (7)** to select **Settings.**

- Press the **rotary pushbutton (7)** to enter the **Settings** submenu and turn the **rotary pushbutton (7)** to select **Auto hide GUI**.

- Press the **rotary pushbutton (7)** to enter the **Auto hide GUI** submenu and select **On.**

- Press the **rotary pushbutton (7)** to activate the **automatic GUI hiding** function**.**

- When the Auto Hide GUI feature is enabled, all GUI icons including the status bar are automatically hidden and only the image and cross are displayed if no operation is performed within 8 seconds.

- The graphical user interface is redisplayed when any button is pressed.

- Only after displaying the graphical user interface can manipulate buttons and menus.

Wi-Fi

The Tube TS60 has a built-in Wi-Fi module and can connect wirelessly to a mobile device (laptop or mobile phone) via Wi-Fi.

- Turn on the Wi-Fi function in the main menu (see **Main menu - Wi-Fi** for details**)**.

- After turning on the Wi-Fi function, look for a Wi- Fi signal on the mobile device called "TUBE_XXXXXX", XXXXXX is a 6-bit serial number code consisting of numbers and letters .

- Select Wi-Fi and enter your password to connect. The initial password is 12345678.

- Once successfully connected to a Wi-Fi network, the device can be controlled via the **InfiRay Outdoor** App downloaded on the mobile

facility.

Setting a Wi-Fi name and password

The Tube Series Wi-Fi name and password can be reset in the

InfiRay Outdoor app**.**

- After connecting, target if your mobile device, locate and click on the **"Settings"** icon on the **InfiRay Outdoor** image screen **to enter the Settings** interface**.**

- In the text box, type and send the new Wi-Fi name

- The device must be restarted take effect.
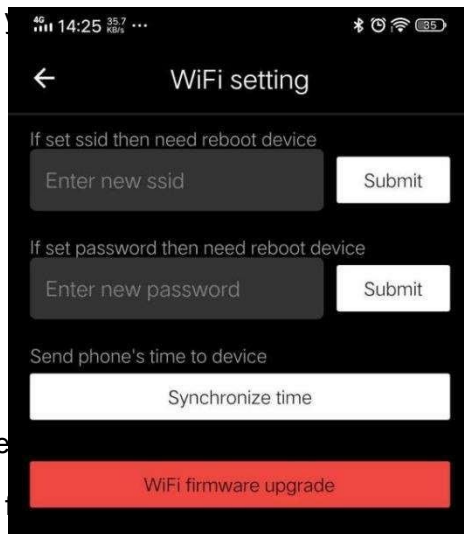
Note: If the device is reset to factory settings,

the Wi-Fi name and password will also be reset to the default settings.

21 Updates and InfiRay Outdoor

The Tube TS60 thermal imaging rifle scope supports connection to the **InfiRay Outdoor** app**,** which allows you to transmit images to your smartphone or tablet via Wi-Fi in real time.

You can download the InfiRay Outdoor User Guide on our

official website (www.infirayoutdoor.com).

Continuous improvements will be made to improve the user

experience. The latest software can be automatically detected and

updated via the InfiRay Outdoor app. Also at can be downloaded and

updated from the official website: www.infirayoutdoor.com.

or

- You can download the InfiRay Outdoor app

install on the official

website

(www.infirayoutdoor.c

om) or

in the app store. Alternatively, you can download it for free

by scanning the QR code below.

- After installation, open the InfiRay Outdoor app.
- If your device has been connected to a mobile device, turn on

  mobile data on the mobile device. Once connected, the app will

  automatically prompt you to update. Tap **Now** to download the

  latest version immediately or **Later** to update later.
- InfiRay Outdoor automatically registers the last connected

  device. So once you have connected to the InfiRay Outdoor,

  it will automatically detect the update even if the device is not

  connected to a mobile device.
- If the update is available and your mobile device has internet

  access, you can download it first. Then, when the device is

  connected to the mobile device, it will be updated automatically.
- After the update is installed, the device automatically restarts.

Technical inspection

Befo Perform a technical check every time the device is used and
re

check the following items.

- Outside of the device (no cracks on the cover);
- Lens and eyepiece (no cracks, grease, stains or other deposits);
- Status of rechargeable battery (pre-charged) and electrical contact

  (without salting or oxidation).

Maintenance

Maintenance should be carried out at least twice a year and

includes the following steps:

- Wipe the surface of the metal and plastic parts with a cotton

  cloth to remove dust and dirt. Silicone lubricant can be used for

  cleaning.
- Clean the electrical contacts and battery holes on the device

  with a non-greasy organic solvent.
- Check the glass surface of the eyepiece and lens. If necessary

Clean the lenses of dust and sand (ideally use the non-contact method). Use a specialised wiper tool and solvent to clean the optical surfaces.

Troubleshooting

The following table lists all the problems that may occur during the operation of the device. Check and solve the problems according to this table. If you encounter problems not listed in this table, or if you are unable to correct the problem, return the equipment to its dealer or supplier for correction.

Failure	Possible causes	Solution
The range cannot be started.	The battery's dead.	Charging the battery.
The device cannot be powered by external source.	The USB cable is damaged.	Replace the USB cable.
	External power supply is insufficient.	If necessary, check the external power supply.
The images are blurry, there are vertical lines or background is not uniform.	Calibration is required.	Calibrate your images according to the instructions in this User Guide.
The picture is too dark.	The screen is not bright enough.	Adjusting the brightness of the display.
Icons are clear, but image is blurry.	The lens is out of focus.	Rotate the focus ring of the lens to adjust the focus.
	The inner or outer optical surface of the lens is dusty or frosty.	Wipe the outer optical surface with a soft cotton cloth or leave the binoculars to dry in a warm, dry environment for more than 4 hours.

The position of the rifle scope changes after shooting shifts.	The rifle scope or clamp is not fixed mounted.	Check that the rifle scope is firmly mounted. Make sure that the type of bullet and calibre you are using matches the bullets used for the shot. If you shoot in the summer but use the telescope in the winter (or vice versa), the shot point may become slightly move it.
The lens can't focus.	Wrong setting.	Set the image according to the contents of the chapter **"Switching on and setting up" in** this User Guide. Check the outer surface of the lens and eyepiece and if to wipe off dust and frost. In cold weather, a special anti-fog coating can be used (like that used on glasses or car mirrors).
The device cannot connect to a mobile device.	The Wi-Fi password is incorrect.	Enter the correct password.
	Too many Wi-Fi networks around the device.	Move the device to an area with no Wi-Fi signal or with fewer Wi-Fi signals.
Loss or interruption of Wi-Fi signal.	The device is outside Wi-Fi coverage. There is an obstacle (e.g. a concrete wall) between the device and the receiver.	Move your device to a location where you can receive a Wi-Fi signal.

The observed target will disappear.	Observation through glass.	Observe the target directly without the presence of glass.
The picture quality is poor or is detection range shortened.	These problems can occur when using the device in inclement weather (for example, when it is snowing, rain and fog).	
When using the device at low temperature, the image quality is worse than at normal temperature.	At temperatures above 0 °C, the temperature rise varies depending on the observed objects (environment and surroundings) due to different thermal conductivity coefficients. As a result, high temperature contrast occurs and image quality is improved. At low temperatures, the observed targets (background) will usually cool to a similar temperature as the temperature contrast. Therefore, the image quality (detail) is low, which is characteristic of thermal imaging equipment.	

25.Legal and regulatory information

Frequency range of the wireless transmitter module:

WLAN: 2.412-2.472 GHz

Wireless transmitter module power < 20 dBm

CE   IRay Technology Co., Ltd. hereby declares that the TS60 type radio equipment complies with the directives of 2014/53/EU and 2011/65/EU.

FCC Statement

FCC ID: 2AYGT-2D-00

Labelling requirements

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

Information for users

Any changes or modifications not expressly approved by the party

responsible for compliance may result in the loss of the user's authority

to operate the equipment.

EMC: Class A

Note: This equipment has been tested and found to comply with the

limits for a Class A digital device under Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against

harmful interference when the equipment is operated in a commercial

environment. This equipment generates, uses, and can radiate radio

frequency energy and, if not installed and used in accordance with the

instructions for use, may cause harmful interference to radio

communications. Operation of this equipment in a residential area

may cause harmful interference, in which case the user will be

required to correct the interference at his own expense.

A minimum distance of 0.00 cm must be maintained between the user's

body and the handset, including the antenna, to meet the requirements

for exposure to radio waves.

InfiRay

IRay Technology Co., Ltd.

Tel : 0086-400-999-3800   **E-mail :** infirayoutdoor@infiray.com   **Website :** www.infirayoutdoor.com   **Address :** 11th Guiyang Street, YEDA, Yantai, P.R. China