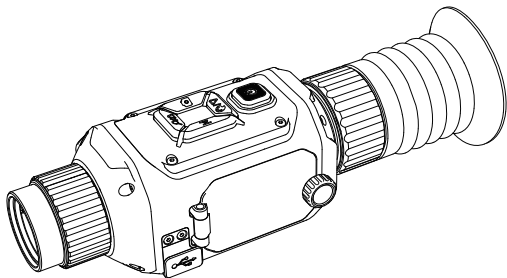


TESLONG

Thermal Imaging Riflescope User Manual



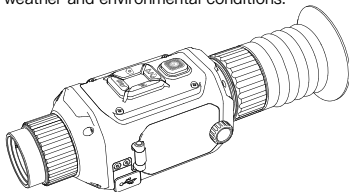
Model: TTRS260/390/640

Catalogue

Product Introduction	1
Product Features	1
Product Specifications	2-4
Product Instructions	5-6
Function Introduction	7-11
Transfer Files	12
Charging	13
App Download & Use	14-15
Safety Warnings	16
Troubleshooting	17
Regulatory Information	18

Product Introduction

The TTRS260/390/640 Thermal Imaging Riflescope is a high-precision infrared thermal imaging device that utilizes high-quality thermal sensors to provide users with high-definition infrared images. Its compact design makes it lightweight and portable, enabling infrared imaging and multi-mode professional thermal analysis of target objects anytime, anywhere. It includes a large-capacity rechargeable lithium battery that can operate continuously in various complex weather and environmental conditions.



Product Features

- High-quality thermal sensors paired with a high-definition display.
- Adjustable lens focal length.
- Compact design.
- Diopter adjustment (Note: Limited to prescriptions <300°).
- Image magnification (1X–4X or 1X–8X depending on the model).
- Supports photo capture and video recording.
- Two image modes and seven color palettes.
- Type-C port for data transfer (Note: The Type-C port of the device does not support charging the battery).
- Wi-Fi functionality allows connection to a mobile app for.

Product Specifications

1. Product Specifications

Physical Properties				
Model	TTRS260	TTRS390	TTRS640-35	TTRS640-50
Product Dimensions (excluding eyepiece)	166x65.5x61.5 mm	196x65.5x63 mm		
Net Weight	540 g	580 g		
Product Color	Black			
Product Material	Aluminum alloy + ABS + silicone			
Guide Rail	Picatinny			
Dust and Waterproof	IP67 (Note: IP67 refers to the effect of having the waterproof plug securely in place.)			
Storage Size	Built-in 32GB memory card			
Working Temperature	-20-50°C (-4-122°F)	-25-50°C (-13-122°F)		
Storage Temperature	-40-60°C (-40-140°F)			
Impact Resistance	800G			
Display Type	OLED			
Resolution	1024x768			
Type-C	Directly supply the device with 5V power (Note: This is not for charging) Connect to a computer for data transfer			

Product Specifications

Infrared Thermal Imaging				
Model	TTRS260	TTRS390	TTRS640-35	TTRS640-50
Resolution	256x192	384x288	640x512	640x512
Lens Focal Length	25 mm	35 mm	35 mm	50 mm
Field of View (FOV)	7.0° x5.3°	7.5°x5.6°	12.5°x10°	8.5°x6.7°
Thermal Sensitivity (NETD)	≤40mk	≤30mk	≤25mk	≤25mk
Pixel Size	12um	12um	12um	12um
Frame Rate	25Hz	50Hz	50Hz	50Hz
Digital Zoom	1X-4X	1X-4X	1X-8X	1X-8X
Detection Range (Person, 1.8 meters)	1000M	1800M	1800M	2600M
Photo Format	JPG	JPG	JPG	JPG
Image Resolution	960x720	1024x768	1024x768	1024x768
Video Format	AVI	AVI	AVI	AVI
Video Resolution	960x720	1024x768	1024x768	1024x768
Video Frame Rate	25fps			
Lens	VOx Uncooled			
Exit Pupil Distance	48 mm			
Diopter	±4			

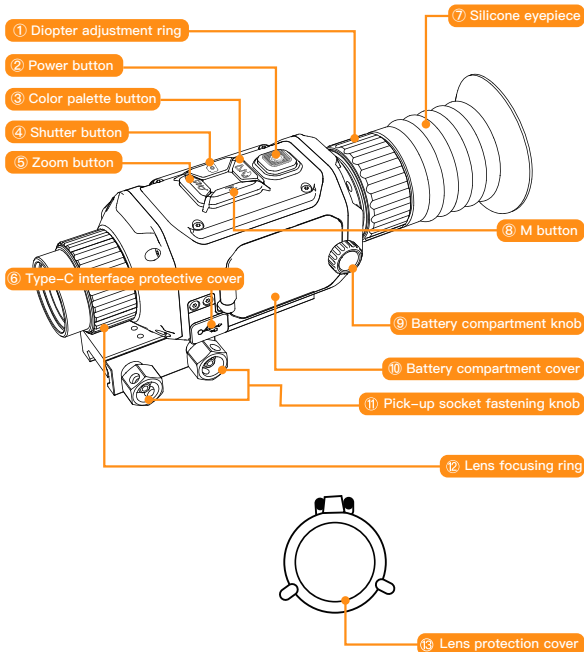
2. Functional Parameters

Product Features				
Model	TTRS260	TTRS390	TTRS640-35	TTRS640-50
Color Palettes	Seven color palettes: White Hot, Black Hot, Ironbow, Glowbow, Sepia, Red Hot, and Green Hot			
Image Mode	Supports two image modes, selectable in the settings menu: Mode 1: Uniform grayscale distribution display, suitable for observing sky scenes or high-temperature difference targets Mode 2: High contrast display mode, ideal for making the target more distinct			
Photo and Video Capture	Press the photo button to take a photo. Long press to start recording video, and press again to stop recording			
Diopter Adjustment	Adjust the diopter based on vision needs			
Lens Focusing	Adjust the lens focusing ring to get a clear image			
Brightness Adjustment	Brightness can be adjusted in the settings			
Wi-Fi Function	2.4G Wi-Fi, can connect to mobile app for use, Wi-Fi range $\leq 10\text{m}$			

3. Working Parameters

Electrical Parameters				
Model	TTRS260	TTRS390	TTRS640-35	TTRS640-50
Discharge Duration	Approximately 6 hours	Approximately 4.5 hours	Approximately 4 hours	Approximately 4 hours
Battery Capacity	900mAh polymer lithium battery			
Output Voltage	Nominal 7.4V (range 6V to 8.4V)			
Charging Voltage	DC-5V			
External Power Supply Voltage	DC-5V			
Indicator Light	The device has no indicator light, but the battery has an indicator light that flashes when the battery is charging			

Product Instructions

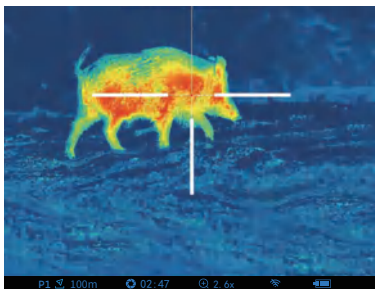


Product Instructions

Function Description	
①	Adjust the diopter until the bottom menu indicators on the screen are clear.
②	Power on: Long press the power button for 3 seconds until the screen lights up, displaying the startup screen. Power off: Long press the power button to enter a 3-second shutdown countdown, Release the power button after the countdown ends to turn off the device and turn off the screen. If the power button is released before the countdown ends, the shutdown status will be exited, and the device will return to normal function. Note: A short press of the power button can be used to calibrate the image.
③	Press to switch between seven color palettes: White Hot, Black Hot, Ironbow, Glowbow, Sepia, Red Hot, and Green Hot.
④	Press to take a photo, Long press to start video recording, and press again to stop recording.
⑤	Press to zoom in on the image, cycling between 1X–4X or 1X–8X (magnification varies by model).
⑥	After opening the protective cover, photo and video files can be exported through the Type-C interface.
⑦	Provides light gathering and eye protection can be installed or removed as needed.
⑧	Menu button: Long press to enter the menu. Long press again to exit the menu.
⑨	Secures the battery compartment cover with a manual knob for locking.
⑩	Battery compartment installation protective cover, with waterproof functionality.
⑪	Lock the knob after installing the thermal sight.
⑫	Adjust until the observed thermal imaging image is clear.
⑬	Protects the lens and can be installed or removed as needed.

Function Introduction

1. Main Interface



Function Description

①	Ballistic Configuration Parameters	Select ballistic configuration parameters (P1 indicates the current configuration table, with a total of five available configurations—P1 to P5. 100 m indicates the current binding distance.)
②	Refresh Mode	Select automatic calibration. The countdown timer for automatic calibration is displayed.
③	Magnification Factor	The default at startup is the product's own 2.6X magnification (i.e., 1X).
④	Wi-Fi Switch Status	The default at startup is that Wi-Fi is off(indicated by a slash).
⑤	Battery Level	Displays the real-time battery level of the device. When the battery icon is empty and starts to flash, charge the battery in a timely manner.

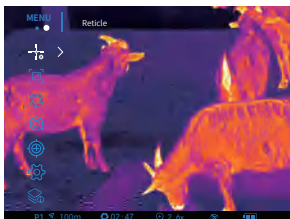
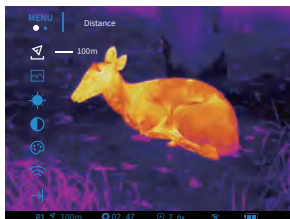
Function Introduction

2. Main Menu

In the main interface, long press the M button to enter the main menu, where the menu bar is displayed on the left side of the screen.

If no button is pressed for 60 seconds, the menu bar will automatically disappear.

Note: In menu mode, select options using the color palette button or the magnification button, and press the M button to confirm.



Function Description

	Binding Distance	Select the required distance value based on the target distance. You can only choose between distance values that already exist in the current configuration table
	Image Mode	Mode 1: Uniform grayscale distribution display, suitable for observing sky scenes or high-temperature target scenes. Mode 2: High contrast display mode; select this image mode if you want the target to be more distinct

Function Introduction

Function Description		
	Brightness	Adjust the brightness value between 1–20
	Contrast	Set the contrast value between 1–20
	Color Palette	Press to switch between seven color palettes: White Hot, Black Hot, Ironbow, Glowbow, Sepia, Red Hot, and Green Hot
	Wi-Fi	Turn Wi-Fi on and off
	Quick Distance Measurement	For targets with a known height, this function allows for quick distance estimation. Select this function, set the target's predicted height, use the calipers to lock onto the target, and press the control button briefly to obtain the predicted distance
	Reticle Settings	Set the type and color of the reticle. Each grid with markings represents 1 mile
	Picture-in-Picture	Open or close picture-in-picture mode
	Image Auto Calibration Time Interval	There are four options: Off, 1 min, 3 min, and 5 min
	Configuration Table Selection	Select a ballistic configuration table (P1–P5). Each table can save calibration data for one firearm
	Zero Calibration	If there is a significant deviation between the point of impact and the aiming point during the initial installation or shooting of the scope, select this function. Click to enter zero calibration mode
	General Settings	Enter the general settings submenu
	Device Information	Display device information