Quick Start Guide

Saim SCT Series

Thermal Imaging Riflescope

1. Description

The Saim series is a low-cost Thermal Imaging Riflescope, which can be mounted on various firearms for night hunting and target observation. Its compact size and lightweight design make it easy to carry. What makes it outstanding is long operation hours, good concealment and great ability to detect, recognize and identify objects or targets fast and easy. The Saim series effective at close and long ranges irrespective of light and harsh weather conditions, that is, in total darkness, through heavy smoke, haze, fog, and dust.
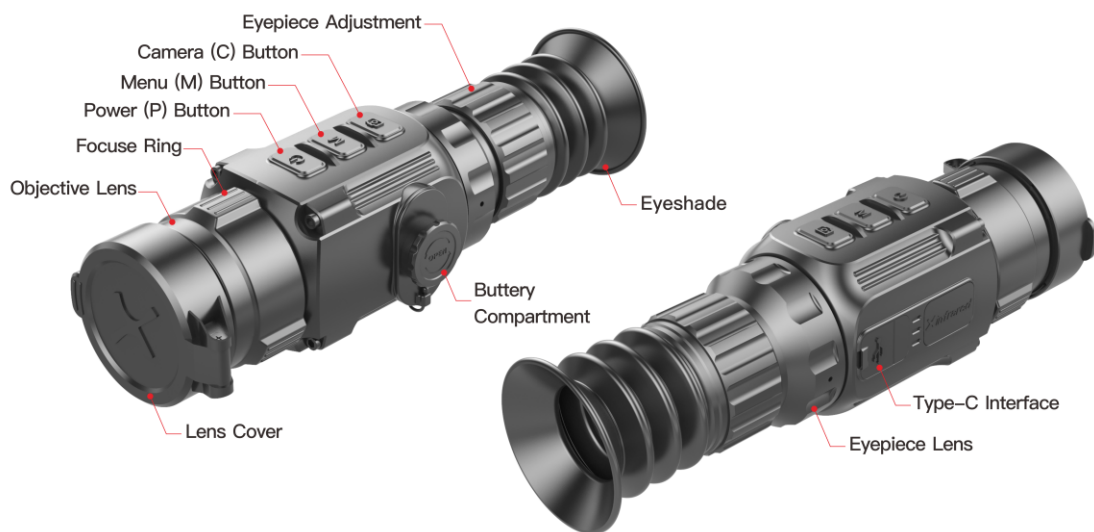

Fig.1 Units and controls

2. Battery Assembling

Fig.2 Battery installation
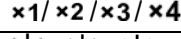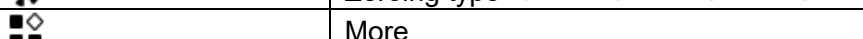
➢ Open the battery compartment cover anticlockwise according to the schematic diagram on the cover.

➤ Install the batteries correctly as shown in Figure 2.

➤ When done, covering and pushing the battery cover till you hear "click" to ensure both sides of the cover is installed correctly.

Attention!

● Disposable batteries are ONLY supported! Risks are existing to use rechargeable batteries due to nonstandard quality.

● Please do not use different types of batteries or batteries with different power levels.

● The Saim series supports external power supply via Type-C cable with a USB icon displayed on the screen.

3. Icons Instructions

Icon	Description
☀	Image mode: **White hot**
☾	Image mode: **Black hot**
🔥	Image mode: **Red hot**
▮▮▮	Image mode: **Color**
×1/ ×2 /×3/ ×4	E-zoom
☀ ☀ ☀ ☀	Display brightness
⛰ ⛰ ⛰ ⛰	Image sharpness
⏱	Time and date
👁	Ultraclear mode
📶	Wi-Fi
Ⓐ	Auto correction mode
▦▶ ▦Out	Video out
▣	PIP
Ⓐ	Digital compass
⚕	Motion sensor
🔋	Battery type
❄	Zeroing type ❄ G1 ❄ G2 ❄ G3 ❄ G4
▪◇	More
⊕	Zeroing
⊞	Defective pixels calibration
Ⓐ	Compass calibration
ⓘ	System information
↻	Factory reset
◀	Return to the Main Menu
▭▭▭▭▭▮	Battery indicator

4. Operation

4.1 Power On/Off

When the device is off, long press the **P** button for 3s and wait for 6s until the thermal image appears to start up the device.

When the device is on, long press **P** button for 5s until the shutdown option menu appears, select the "√" to shut down and "×" to cancel. Then short press **M** button to confirm the selection.

Fig.3 Power off interface

4.2 Diopter adjustment

Rotate the focus ring and eyepiece adjustment to get the clearest image after booting up the device.

4.3 Focal length setting

Focus operation is performed by rotating the objective lens adjusting ring.

4.4 Calibration

Short press **M + C** button for shutter correction and long- pressing for background correction.

4.5 Photographing and video recording

Short press the **C** button to take a photo. The image will freeze for 0.5s, and a camera icon shows in the upper-right of the screen when the function performs.

Long press the **C** button for video recording, and the recording time is indicated in the

upper right corner. Press the **C** button again to exit the recording when done (Note that the video will not be saved if you skip the process and shut down the device suddenly instead).

The photos and videos can be read on the computer via the USB cable.

4.6 Reticle On/Off

➢ Firstly, press and hold down the **P+C** button and simultaneously click the **M** button four times to invoke the reticle function for the first time use.

➢ Then, long press **P** + **M** + **C** button simultaneously for 7 seconds to active the Shortcut button for switching the reticle on/off. This function should be activated when the reticle is enabled initially.

Notes

● When the reticle is turned off, all the operations related to it in the menu will be hidden, including the setting of the reticle color and pattern (in shortcut menu 3), the operation of zeroing and defective pixels correction in the main menu.

5. Stadiametric Rangefinder

➢ Long press the **P** + **M** button to enter the stadiametric ranging interface, and two horizontal lines will appear on the upper and lower positions of the cursor.

➢ Adjust the horizontal lines to the target position by the **P** or **C** button.

➢ The icon on the left shows the approximate distance of the corresponding target.

➢ Long press the **M** button to exit to the stadiametric ranging interface.
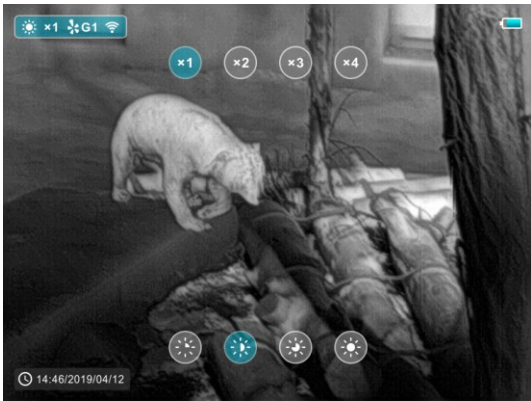
Fig.4 Stadiametric rangefinder interface

6. Shortcut Menu

In the normal display mode, short pressing the **M** button to bring up the shortcut menu. The page includes image mode, image sharpness, E-zoom, display brightness, reticle color, reticle pattern, for detail as shown in table1.

Table1. Shortcut Menu

Times to press **M** button	Shortcut Menu	Operation
1 time	E-zoom and brightness setting (in shortcut menu1) 	➢ Short pressing the **P button** to perform E-zoom value setting, ranging from level one to four. ➢ Short pressing the **C button** to perform 1 to 4 brightness level setting.
2 times	Image mode and sharpness setting (in shortcut menu2) 	➢ Short pressing the **P button** to perform image mode setting-white hot, black hot, red hot and color. ➢ Short pressing the **C button** to perform 1 to 4 sharpness level settings.

3 times	Reticle color and pattern setting (in shortcut menu3)	➢ Short pressing the **P button** to perform reticle color setting-white, black, red and green. ➢ Short pressing the **C button** to perform the reticle pattern settings.
4 times	Exit Shortcut Menu and return to the previous page	——

7. Main Menu

➢ In the normal display mode, long-pressing the **M** button to enter the main menu. The items from up to down are: Ultraclear mode, auto-correction, Wi-Fi, video out, PIP, compass, motion sensor, battery type, zeroing type, more.

➢ Scroll up and down to toggle among the functional items by short pressing the **P** or **C** button while the item background will turn blue.

➢ Short press the **M** button to set the parameters of the current option, or open the menu item.
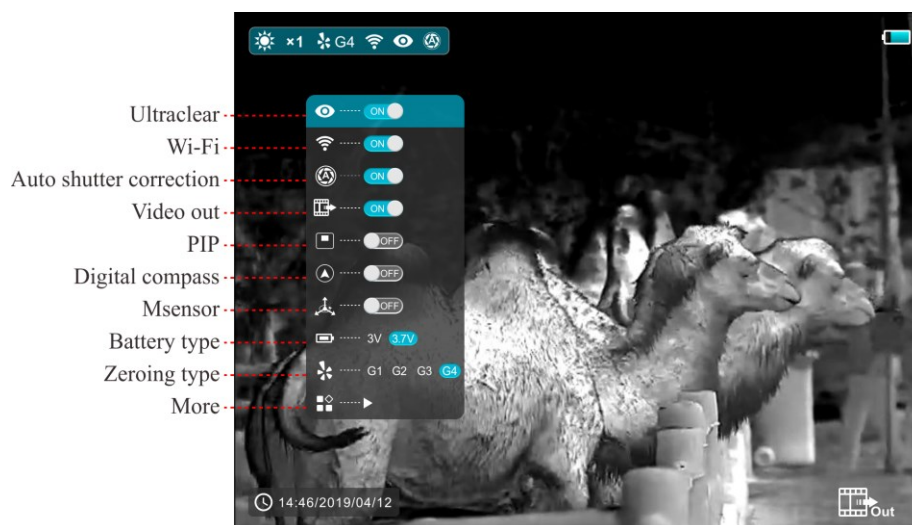
Fig.5 The Main Menu

7.1 Ultraclear mode

Ultraclear Mode will give more image details in harsh weather such as heavy fog, rain and snow.

7.2 Wi-Fi

The Saim SCT series is equipped with wireless communication with external devices (computer, smartphone) via Wi-Fi.

➢ Turn on Wi-Fi in the main menu. Then the device will be recognized by an external device.

➢ Enter the password on an external device, and establish a connection. The initial password is 12345678.

➢ And then, the device can be controlled through APP such as taking pictures and recording. Meanwhile, photos and videos will be stored in the external device.

7.3 Battery Type

3.7v is selected for rechargeable batteries, and 3V is for normal-dry batteries.

7.4 More(advanced)

Under the main menu interface, select the "More" option, click **M** button to enter the secondary menu for more settings, which include zeroing, defective pixels calibration, compass calibration, system information, factory settings, and return to the main menu.
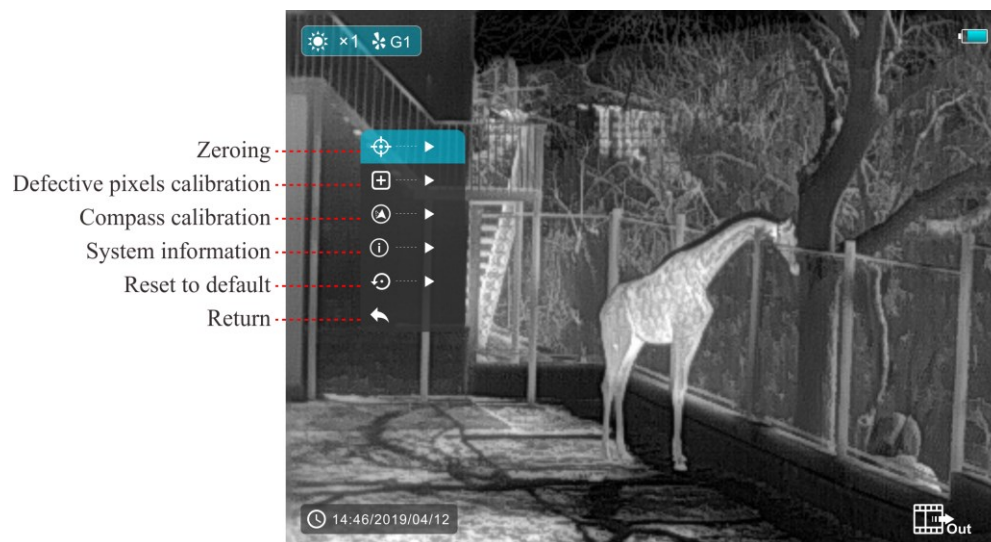
Fig. 6 The secondary menu for more

7.4.1 Zeroing

Before implementing zeroing setting, please make sure that the reticle is on and zeroing type is selected in advanced menu.

➢ Select the 'Zeroing' option by P or C button, and short press the **M** button to enter the interface as shown in figure 7. In the Zeroing interface, the reticle is shown as a small cross for position adjustment.
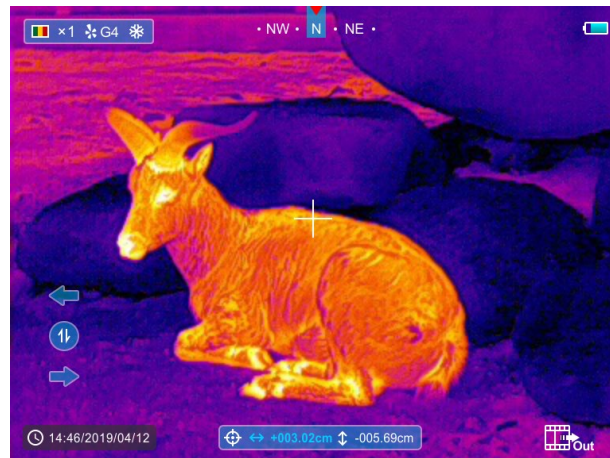
Fig. 7 Zeroing interface

➢ Then aiming the center of the reticle at the bull's-eye 100 meters away and shooting.

➢ Locating the bullet hole after shooting.

➢ **If the bullet hole can be seen on the display screen:**

● Keeping the position of the device fixed, long press the **M + C** button at the same time to freeze the image, and a snowflake icon appears on the upper-left corner of the screen.

● Move the reticle to the position of the actual impact point by the **P** or **C** button. Short press the **M** button to switch the movement direction between up/down and left/right.

● Press and hold down the **M** button to save and exit when done.

➢ **If the bullet hole cannot be seen on the display screen:**

● Keeping the position of the device fixed, measure the horizontal and vertical distance between the bull's eye and the bullet hole.

● According to the measured distance, move the reticle position by pressing the **P** or **C** button until the distance marked on the scale plate consistent with the measured

distance. Short press the **M** button to switch the movement direction between up/down and left/right.

● Press and hold down the **M** button to save and exit when done.

Notes:

➢ To ensure the accuracy of the position, aiming the bull's-eye again and repeat the operations until the bull's-eye is hit.

➢ In the zeroing interface, the reticle moves one pixel with a short pressing **M** or **C** button to the corresponding direction while ten pixels movement with a long-pressing. The scale plate on the top and left of the screen shows the reticle movement distance. The digit of scale plate changes by 1.71cm with each one-pixel movement. The number in the scale plate changes by 1.71cm at a distance of 100 meters with each pixel movement or changes by 0.62 inches at a distance of 100 yards.

➢ Short press the **P + M + C** buttons at the same time to switch units (cm/m, inch/yard).

➢ In the zeroing interface, there is a white dot that represents the original position of the reticle before calibration implement.

➢ After zeroing, the center of all reticle will be changed accordingly.

7.4.2 Defective pixels calibration

➢ Select the 'Defective Pixels Calibration' option by **P** or **C** button. Then, short press the **M** button to enter the interface, as shown in figure 8.
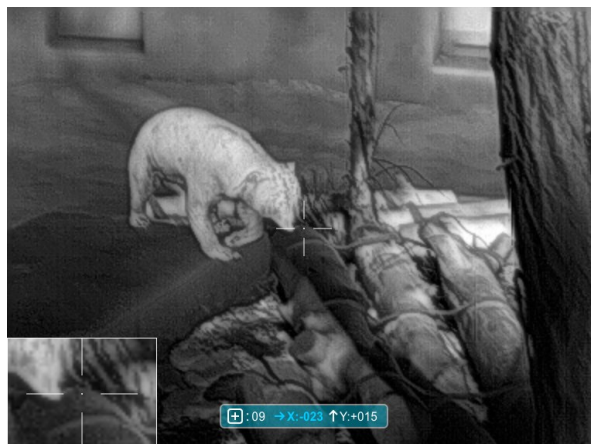

Fig.8 Defective pixels calibration interface

➢ In the defective pixel calibration interface, short press the **P** or **C** button to move the reticle up/down or left/right. Short press the **M** button to switch the movement direction

between up/down and left/right.

➢ After selecting the defective pixels, press and hold down the **P** and **C** button at the same time to perform calibration, and press the same button again at the same position for cancellation. The number of the defective pixels calibrated is displayed at the bottom of the screen.

➢ Repeat the above process till all defective pixels are calibrated, then long press the **M** button to save and exit.

7.4.3 Compass Calibration

➢ Select the 'Compass Calibration' option by **P** or **C** button, and short press the **M** button to enter the compass calibration interface (as shown in figure 9).

➢ Rotate the device in three axial directions in 30 seconds according to the shown direction to complete the calibration.

Fig.9 Compass calibration interface

7.4.4 System Information

➢ Select the 'System Information' option by **P** or **C** button。

➢ Short press the **M** button to bring up information about the software version.

7.4.5 Reset to Default

➢ Select the 'Reset to Default' option by **P** or **C** button.

➢ Short press the **M** button to enter the resetting interface as shown in figure 10.

Fig.10 Default resetting interface

➢ Short press the **P or C** button to make a choice. The "√" is to reset to the default, and the "×" is to cancel.

➢ When done, short press the **P** button to confirm the selection and the device will restart.

7.4.6 Return to the main menu

➢ Select the 'Return' option by **P** or **C** button

➢ Short press the **M** button to return to the main menu.

8. Shortcut Buttons Instructions

To quickly realize the frequently used functions, the Saim SCT series made the default shortcut buttons of the most commonly used functions in the observation interface.

Table 2. The shortcut button instructions

Button	Short press	Long press
P button	E-zoom	Power on /off
M button	Open the shortcut menu	Open the main menu
C button	Take a photo	Video recording
M + C button	Shutter correction	Background correction
P + M button	Standby function on/off	stadiametric rangefinder function
P + M + C button	Switch the units between cm/m and inch/yard	--

9. Specification

Model	Saim SCT35
Resolution, pixels	384×288
Pixel size, μm	12
Frame rate, Hz	50
Objective lens, mm	35
Field of view	7.5°× 5.7°
Display	1280×960 LCOS
Magnification, x	2.86-11.44
Battery type	CR123×2
Max. Operation time, h	3.5
Wi-Fi & Recorder	√
Compass & Msensor	√
Weight (without batteries), g	＜410
Dimension, mm	195×61×61
Detective range, m (Target size:1.7m*0.5m, P(n)=99%)	1818
Built-in memory, GB	8
USB type	Type C