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INFITAC

IOTS Thermal Sight User Manual

IOP25/IOL25

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WARNINGS AND PRECAUTIONS

WARNING! ITAR REQUIREMENTS
These products may be subject to export and foreign trade control laws of the United States and may not be exported without prior approval of the U.S. Department of State.
Learn more at *www.infitacusa.com*.

WARNING! CHOKING HAZARD
Children under 3 years old can choke or suffocate on small parts of this product. This product is not a toy, keep out of reach of children.

WARNING!

The lens of the product must not be pointed at any sources of intense radiation energy, such as laser-emitting devices or the sun. This may damage the electronic components in the device. Damage caused by failure to comply with this User Manual is not covered under warranty.

IMPORTANT NOTICES!

- Before installing the optic on a firearm, ensure the firearm is UNLOADED.
- If you need to make a product warranty claim, please keep the product packaging and warranty card.

PRECAUTIONS

- The lens is an important optical component. When installing and using it, avoid contamination and damage to the lens surface from oil and various chemicals.
- Do not use chemical solvents or diluents to clean the surface of the device shell. You can use a clean, soft, dry cloth to wipe it.
- Remove the battery when the device is not in use, and store the device in its provided protective case. For long-term storage, keep the device in a dry, well-ventilated environment.
- Do not expose the device to temperatures below -4°F or above +122°F for extended periods.
- If the device malfunctions or is damaged, please send it to our after-sales service department for repair. Unauthorized disassembly, modification, or repair by anyone other than authorized INFITAC personnel is prohibited.

1 OVERVIEW

Introducing the INFITAC IOTS Thermal Sights: IOP25 & IOL25. The IOTS series is designed for multi-purpose uses , featuring handheld, standalone, and Clip-On modes, along with a 45° offset mount for red dot sights. It harnesses advanced IoT connectivity with the DNVS-14 Pro for real-time shared vision, enabling seamless collaboration in the field. Enjoy a large exit pupil and long eye relief for comfortable extended viewing, while a wide field of view (7.0°×5.3° / 10.5°×7.9°) provides heightened situational awareness. Each sight is equipped with a high-resolution detector and a 25mm F1.0 lens, delivering crystal-clear imaging under challenging conditions. Built to last with an IP67 rating, these sights stand up to the toughest environments.

2 FEATURES

- 3 +1 multi-purpose uses:
  Handheld, Standalone, and Clip-On modes
  45° Offset Mount for red dot(RMR platform)
- High-sensitivity 256×192/384×288, 12μm detector, NETD≤25mk.
- Powerful IoT Wireless Interconnection
- Super Resolution Engine
- Tactical design, Ultra Compact & Light Weight
- Flash killer
- Multi Color Palette & Reticle type
- Focus Free
- Replaceable 18650 Battery ＞6h

3 TECHNICAL SPECIFICATIONS

Model	IOP25	IOL25
Resolution，pixels	256×192	384×288
Pixel Size, μm	12	
Frame Rate, Hz	50Hz	
NETD, mK	≤ 25	≤ 20
Objective Lens, mm	25 F1.0	
Base Magnification	3x	2x
Field of View (H×V), °	7.0×5.3	10.5×7.9
Focus Range，yds	5yds~∞	5yds~∞
Eye Relief, mm	52	
Diopter Range	-4SD ~ +2SD	
Display Type	0.39inch 1024×768 AMOLED	
E-zoom	1x/2x/4x	1x/2x/4x/8x
Color Palettes	White Hot, Black Hot, Red Hot, Color, Iron	
Reticle Types	7	
Reticle Colors	Red, White, Black, Green	

Onboard Recording	Video and Image	
Onboard Storage	32GB	
IoT Wireless Connectivity	Image and Video via App.	
Power Supply	18650 Battery x 1	
Max. Operation Time (at temp.=71.6ºF) h*	Thermal mode >9h	Thermal mode >6h
External Power Supply	USB Type-C, 5V	
Data/Power Connector	USB Type-C	
Material	AL6061-T6	
Mechanical Interface	Picatinny Rail Interface	
Second Mechanical Interface	45° RMR Mount	
IP Rating	IP67	
Max. Recoil	1200 g/s²	
Operating Temperature	-4ºF~+122ºF（-20ºC~ +50ºC）	
Weight	≤17.7oz（500g）	≤18.3oz（520g）
Dimension	≤5.6×2.7×3.5inch (141×68×89mm)	

*The actual working time depends on the use intensity of the product.
Improvements may be made to the design and software of this product to enhance its features without prior notice.
You can download this User Manual at our official website: *www.infitacusa.com*.

4 PACKAGE CONTENTS

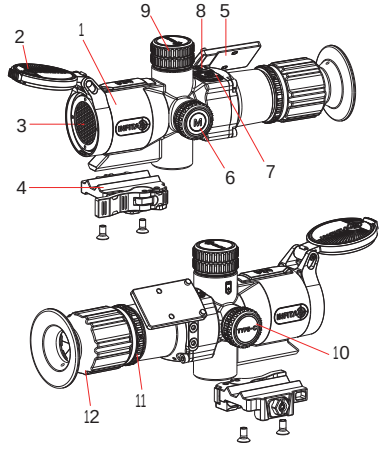
- IOP25 / IOL25 Thermal sight
- Picatinny mount
- 45° Offset mount for red dot
- M4 L-shaped Hex Wrench ×1
- M3 L-shaped Hex Wrench ×1
- M4×10 Hex Screws ×2
- M3×8 Hex Screws ×2
- Shorter Battery Cover
- Rechargeable 18650 batteries x2
- Rubber Eyeguard
- Objective lens cap
- Flash Killer(Anti-Reflection device)
- Lens Cloth
- USB Type-C Cable
- INFITAC Brand Sticker
- INFITAC Hook and Loop Fastener
- Heated Target for Zeroing ×2
- User Manual
- Warranty Card

Note:

- To accommodate variations in the length of 18650 batteries, the product comes with two battery covers. If the 18650 battery used is shorter than the provided one, please use the shorter battery cover.
- The included 45° red dot mounting adapter features a standard RMR interface, compatible with most RMR-interface red dot sights.

5 COMPONENTS AND CONTROLS

1. Objective Lens
2. Objective lens cap
3. Honeycomb anti-reflection device
4. Picatinny mount
5. 45° offset mount
6. Menu Button (Rotary Encoder)
7. Power Button
8. Photo Button
9. Battery Cover
10. USB Type-C Port and Cover
11. Eyepiece / Diopter Adjustment Ring
12. Rubber Eyeguard



5.1 Models

You can find the product model and SN information on the IOTS thermal sight body.

You can also enter information menu according to the instructions in **Chapter 12.3** to view the product model and SN information.

6 TECHNICAL INSPECTION

Perform a technical inspection to check the following items each time before you use the device.

- Device Appearance: The shell should be free of visible cracks and damage.
- Objective Lens Condition: The lens surface should be free of cracks, oil, stains, or other sediments.
- Device Installation Status: Securely mounted with no signs of loosening.
- Battery Status: The battery is fully charged and there is no foreign matter in the battery compartment.
- The device can be turned on and used normally.
- The device image is clear and free of interference.
- Check that the device's thermal imaging settings are correct.

7 BUTTONS FUNCTIONS

Power Button

Current status	Short Press	Long Press
Device off	/	Power on the device
Home screen	Enter Standby mode	Power off the device
standby mode	Exit standby	/

Power Button +Photo Button

Current status	Short Press	Long Press
Home screen	/	Switch the device into the Clip-On mode or the standalone mode

Photo Button

Current status	Short Press	Long Press
Standby mode	Exit standby	/
Home screen	Take a photo	Start/Stop video recording

Menu Button

Current status	Short Press	Long Press	Clockwise Rotate	Counterclockwise Rotate
Standby mode	Exit Standby	/	/	/
Home Screen	Shutter Calibration	Enter the Main Menu	Zoom In	Zoom Out
Main Menu	Next menu	Return Home Screen	Move cursor right	Move cursor left
Parameter interface	Confirm	Save and return to previous menu	Increase Number/Value	Decrease Number/Value

8 BATTERY

The IOTS thermal sight is powered by one 18650 battery, providing up to 6+ hours of normal operation. Before first use, please insert a new or fully charged 18650 battery.

8.1 Battery Installation and Replacement

- Make sure that the IOTS thermal sight is turned off.
- Remove the battery cover by turning it counterclockwise.
- Insert one 18650 battery into the battery compartment, following the polarity note (positive end inwards).
- Replace the battery cover.

WARNING:

Use only INFITAC-approved 18650 batteries. Using any other battery may cause irreparable damage to the rifle sight or cause a fire. Any damage from using an improper battery will not be covered by warranty.

8.2 Remove The Battery

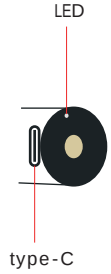
To remove the battery from the IOTS:

- Remove the battery cover by turning it counterclockwise.
- Remove the battery and replace the battery cover.

8.3 Charging The Battery

The IOTS sight comes with two 18650 lithium-ion batteries, each equipped with a built-in USB Type-C port.

- For charging, please use a standard certified mobile power adapter (5V/2A) and USB cable.
- Insert the USB connector into the USB type-C port of the positive terminal of the 18650 battery, then connect it to the power adapter. During charging, the LED indicator at the positive end of the battery will turn red and switch to green once fully charged.



8.4 Battery Safety Warnings

WARNINGS:

- If the device is not in use for a long time, the battery shall be taken out of the device and stored in a dry place.
- The battery compartment is equipped with battery reverse connection protection, but it is best to avoid incorrect installation.
- Do not expose the battery to high temperatures or flames, and do not immerse in water.
- Do not leave the battery unattended while charging.
- Disconnect the battery promptly after it is fully charged. Charging time should not exceed 24 hours.
- Keep the battery pack out of the reach of children and pets.
- The battery is equipped with short-circuit protection. However, any situation that may cause short-circuiting should be avoided.
- Do not disassemble, modify, hit, or drop the battery pack.
- Do not connect the battery to any external device with an electrical current that exceeds permitted levels.

To maintain optimal battery capacity and service life:

- Avoid storing a fully charged or discharged battery for long periods. Partial charging of the battery is necessary if the battery will be stored for an extended period.
- Do not charge an extremely cold battery without bringing it into a warm environment. Let the battery warm up for 45 minutes before charging.
- Charge the battery at a temperature range from 32 °F to 113 °F, otherwise, the service life of the battery may be reduced.
- The recommended operating temperature range is -4 °F to 122 °F. Avoid using the battery above the maximum or below the minimum recommended temperature range as this may decrease the battery capacity or service life.
- When the device is used under sub-zero temperatures, the battery capacity drops. This is normal and does not indicate a defect.

9 EXTERNAL POWER SUPPLY

The IOTS thermal sight supports external power supply, such as using a phone charger (5V) or a computer USB interface.

Steps for Use:

- Connect the external power source to the IOTS USB Type-C port using a USB cable.
- If the device is powered on, it will automatically switch to the external power supply and stop using the battery.
- When the external power is turned off or disconnected, the device will switch to the battery for the power supply.

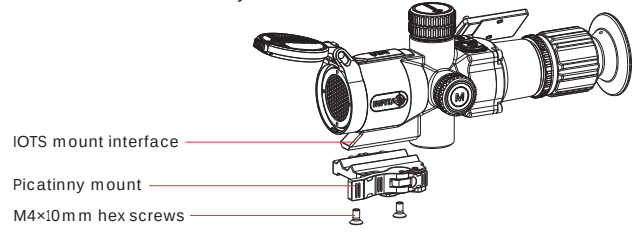
Precautions:

- When the USB interface is used for the power supply, the default power will come from the power supply, and the internal battery power will be stopped.
- Using a USB interface for power will not charge the battery inside the device.
- Do not leave the device unattended for extended periods when using an external power supply.

10 INSTALLATION AND USAGE

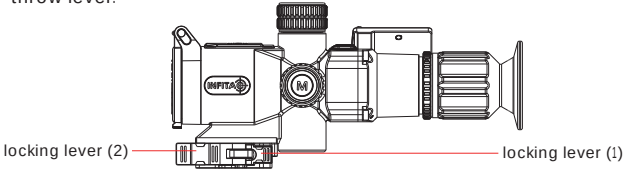
To ensure shooting accuracy, first fix the IOTS to an appropriate position on the firearm. Please install the picatinny mount on the IOTS sight mount interface first. The steps are as follows:

1. Install the picatinny mount onto the IOTS mount interface as shown below using the included two M4×10mm hex screws. It is recommended to apply a small amount of blue Loctite 242 Threadlocker to the screw threads.
2. Tighten each screw to 20 in/lbs.
3. Allow the thread locker to fully cure.

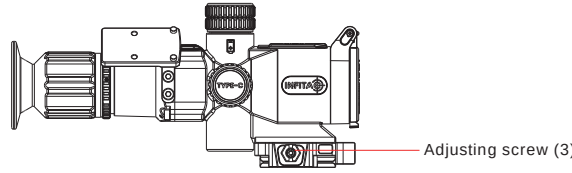


After the thread locker has cured, install the IOTS thermal sight onto the firearm's Picatinny rail.

4. Press the **locking lever (1)** and pull the **locking lever (2)** , thereby opening the throw lever.



5. Install the mount onto the Picatinny rail.
6. Push the lever closed to lock the mount in place. You will hear a click from the lever and the locking lever.
7. After installation, check that the picatinny mount is stable. If there is any shaking, please remove the picatinny mount, slightly tighten the adjusting screw (3), and repeat the above steps until the IOTS sight is firmly secured on the Picatinny rail.



Note: Please do not unscrew the adjusting screw completely to avoid the internal spring popping out.

Precautions:

- It is recommended to apply a small amount of blue Loctite 242 threadlocker to the screws for enhanced stability.
- It is recommended to use a torque wrench to tighten the screws of the installation clamps, so as to avoid damaging the support locking mechanism due to being over-tightened, and the recommended torque shall not exceed 20 in/lbs.
- When the IOTS sight is used for shooting, please carry out the zeroing operation first according to the instructions as specified in **Chapter 13** Zeroing in this User Manual.

11 OPERATION INSTRUCTIONS

WARNING!

The lens of the product must not be pointed at any sources of intense radiation energy, such as laser-emitting devices or the sun. This may damage the electronic components in the device. Damage caused by failure to comply with this User Manual is not covered under warranty.

11.1 Power On

Refer to **Chapter 8** to install the battery.
Long press the **Power button** for 3 seconds. The device will start up, and the INFITAC logo will appear on the display.

11.2 Power Off

Long press the **Power button** for 2 seconds. The power-off countdown screen will appear, counting down from 2. Continue long pressing the **Power button**. Release the button when the countdown reaches 1, the device will power off.
Note: If you release the **Power button** before the countdown reaches 1, the power-off process will stop, and the device will return to the previous screen.

11.3 Standby Mode

You can manually enter Standby mode to save battery power.

- On the home screen, short press the **Power button**. The display will turn black, and the device will enter Standby mode.
- Short press the **Power button** again to exit Standby mode.

Note: After entering Standby mode, if the device stays in Standby mode for 4h, it will automatically power off to save more battery power.

11.4 Selecting a Working Mode

The IOTS features two working modes: standalone and Clip-On mode. The IOTS is in standalone mode when powered on for the first time. After the first use, the last-used working mode is the default.

Standalone Mode

In standalone mode, the IOTS can be used as a standalone rifle sight or it can be used as a handheld imager. In standalone mode, the IOP25 has a base magnification of 3.0x, while the IOL25 has a base magnification of 2.0x.

Clip-On Mode

In Clip-On mode, the IOTS can be mounted in front of a rifle scope. In Clip-On mode, the screen size is reduced to be in unity (1x). The X/Y position of the screen may be adjusted so that the center of the screen matches up with the rifle scope reticle. Refer to Chapter 11.12 for details.

Switching a working mode

- Enter the main menu, select the Clip-On option, and choose to enter or exit Clip-On mode.
- On the home screen, long press the Photo button and the Power button. simultaneously for 2 seconds to switch between Clip-On mode and standalone mode.

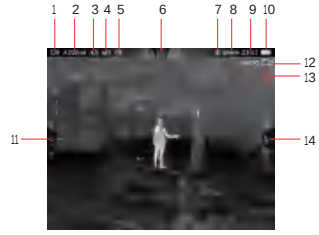
NOTES:

- An abbreviated menu appears in Clip-On mode. Refer to Chapter 12 for details.
- When using Clip-On mode, it is recommended to mount the IOTS in front of a rifle scope with magnification of 6× or lower, otherwise the image performance will become unsatisfactory.

11.5 Status Bar Overview

The status bar at the top of the screen displays operating status information for the IOTS.

The status bar overview in standalone mode:



The status bar overview in Clip-On mode:

1. **Digital Zoom**: Shows the real-time amplification, IOP25: 3×, 6×, or 12×. IOL25: 2×, 4×, or 8×,or 16×.
2. **Zero Profile & Distance**: Shows the selected zero profile(A, B, or C) and distance in standalone mode.
3. **Non-Uniformity Correction (NUC) Mode**: Shows the icon for the selected non-uniformity correction (NUC) mode, Automatic A or Manual M. Automatic is selected by default. A countdown timer icon will appear when 3 seconds remain until an automatic NUC.
4. **IoT**: Shows the IoT status, on IoT or off IoT .
5. **Image Enhancement**: Shows the image enhancement mode status. on or off .
6. **Digital Compass**: The digital compass displays at the top of the screen when turned on.
7. **Microphone**: Shows the microphone status, on or off .
8. **Color Palette**: Shows the current color palette, White Hot White, Black Hot Black, Red Hot Red , Color Color , Iron Iron .
9. **Time**: Shows the current time in 24-hour format.
10. **Battery**: Shows the current battery status, 1–100% , from 0 bars to 5 bars . When an external power source is connected, the USB connection icon will be displayed.
11. **Tilt Angle**: The tilt angle displays when the compass is turned on.
12. **Camera and Video Icon**: Camera Icon briefly appears when taking a photo. Recording icon appears during video recording.
13. **Storage Full Icon**: Appears when the device storage space is insufficient.
14. **Pitch Angle**: The pitch angle displays when the compass is turned on.
15. **Zero Profile**: Shows the selected zeroing profile in Clip-On mode, A, B, or C.

Note:

- When the battery icon shows more than 1 bars, it indicates the battery level is above 20%.

- When the battery icon shows 1 bar in red , it indicates low battery, please replace the battery soon. When the battery icon shows 0 bar in red , it indicates critically low battery and imminent power off.

11.6 Non-Uniformity Correction

A non-uniformity correction (NUC) allows a thermal imager's sensors to correct its pixels and eliminate any image defects caused by pixel drift. The device automatically performs a NUC each time it is powered on.
The IOTS Series has two NUC modes, Automatic (A) and Manual (M).

Auto Mode

- In Auto mode, the IOTS automatically performs NUC according to its internal software algorithm. There is no need to close the lens cover as the internal shutter covers the sensor.
- When the system determines that a NUC is required, a countdown (3, 2, 1, 0) will appear next to the NUC icon in the status bar, and the correction is executed when the countdown ends.
- Before the countdown finishes, you can short press the **Menu button** to cancel the NUC.

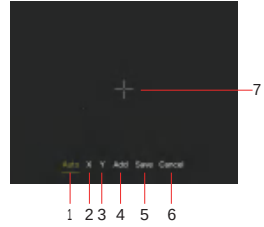
- In the Auto option, you can still manually perform a NUC by short pressing the **Menu button**.

Manual Mode

- On the home screen, short press the **Menu button** to perform a manual NUC.

11.7 Pixel Defect Correction

Defect pixels are pixels that do not change correctly compared to the other image pixels--they are either brighter or darker than surrounding pixels. The IOTS Series has a tool for correcting defective pixels on the sensor using its internal software.
In advanced settings, select pixel defect correction item and short press the **menu button** to enter the defective pixel correction interface.



1 **Auto**: Automatic pixel defect correction
2 **X**: Move cursor along X-Axis
3 **Y**: Move cursor along Y-Axis
4 **Add**: Add a defective pixel marker
5 **Save**: Save and exit
6 **Cancel**: Exit screen without saving
7 **Cursor**: Pixel position

In pixel defect correction menu, rotate the **menu button** to switch options (Auto, X, Y, Add, Save, Cancel), short press the **menu button** to confirm the selected option, Long press the **menu button** to exit without saving.
The IOTS supports both automatic and manual pixel defect correction:

Automatic correction

- Select Auto and short press the **menu button** to start automatic correction. Before using the automatic correction, please close the objective lens cover.

Manual correction

- Select X to move the cursor along X-Axis, or select Y to move the cursor along Y-Axis.
- Rotate the **menu button** to move the reticle in the corresponding direction by 1 pixel
- Select the Add to confirm the location of a defective pixel and add it to a "to be corrected" list.
- Repeat above steps to add any additional defective pixels.
- Select Save to correct the saved list of defective pixels and exit the interface.
- Select Cancel or long press the **menu button** to exit the interface without performing pixel corrections.

Note: Even after automatic correction, some defective pixels may remain. Manual correction may still be necessary.

11.8 Digital Zoom

To adjust the digital zoom on Standalone Mode:

- From the home screen, rotate the **menu button** toggle through the digital zoom levels.
- The IOP25 provides digital magnification at 1×, 2×, and 4×, with the real-time amplified factor (3×, 6×, 12×) shown on the left side of the status bar.
- The IOL25 provides digital magnification at 1×, 2×, 4×, and 8×, with the real-time amplified factor (2×, 4×, 8×, 16×) shown on the left side of the status bar.

Note: Digital zoom is disabled in Clip-On mode,

11.9 Photography and Video Recording

IOTS supports video recording and image capture functions. All videos and photos are automatically saved to the built-in 32 GB memory storage.

Note: Photo and video files are named with the time and date, therefore, it is recommended to set the date and time before using the photo and video functions.

Photography

- Short press the Photo button to take a photo.
- The camera icon will appear on the right side of the screen.

Video Recording

- Long press the Photo button to start a video recording. Turn on the microphone in the advanced settings menu if desired.
- When the video recording starts, the video icon 00:00 and the recording timer appear on the right side of the screen.
- When recording, short press the Photo button to take a photo.
- Long press the Photo button to stop and save the video recording.

Note:

- If the available storage space is less than 500M, the insufficient storage icon appears in the upper right corner of the image. It will disappear only when the storage space is cleared and exceeds 500M.
- If the available storage space is 0, when starting photography or video recording, the insufficient storage icon will flash for 3 seconds, and a prompt "Storage full, unable to record video!" will appear in the center of the screen.

11.10 Accessing The internal Memory

When the IOTS is turned on and connected to a computer via the included data cable, it is recognized by the computer as a flash memory (USB) drive. This allows the user to access the saved multimedia files and copy or delete any desired files.

To access the internal memory

1. Turn on the IOTS .
2. Connect the USB-C cable to the USB-C port of IOTS.
3. Connect the standard USB end of the data cable to your computer.
4. Double-click My Computer on your computer desktop.
5. Double-click to open the device named IOP25 or IOL25 to access the internal memory. Recorded photos and videos are separated into PHOTOS subfolders by date.
6. Select the desired files or folders to copy or delete.

NOTES:

- The number of recorded files is limited only by the capacity of the internal memory.
- Regularly check the available memory storage space and move video footage and images to other storage media to free up space on the memory card.

- The internal memory may be reformatted in the advanced settings menu.
- Do not use a formatting application or tool to format the internal storage.
- When connected to a computer as a USB flash drive, taking photos and recording videos will stop and become unusable.

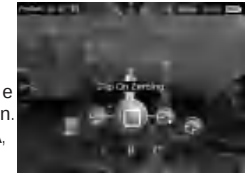
11.11 IoT Connection

The IOTS supports IoT wireless connectivity via Wi-Fi, allowing it to connect with mobile devices (tablet, smartphone, or DNVS device). Once connected successfully, you can view the IOTS image on a DNVS device or operate the IOTS through the INFITAC APP on your smartphone.

Operation Steps:

- On the IOTS device, enter the main menu, select the IoT option, rotate the **Menu button** to enable the IoT function, then short press the **Menu button** to confirm and return to the previous menu. When the IoT is enabled, the IoT icon in the status bar will change to IoT.
- On the DNVS or mobile device, search for Wi-Fi devices and select IOP25-XXXX or IOL25-XXXX as the target device. Enter the password 12345678 to connect. (XXXX represents a 4-digit number.)
- After successful connection, the IOTS image can be viewed on the DNVS or mobile device.

11.12 Clip-On Zeroing



In Clip-On mode, the display size is reduced to be in unity (1x). On your first use, it may be necessary to adjust the X/Y of the screen to collimate IOTS to the reticle of your rifle scope. If your POI and POA differ in Clip-On mode, adjust the screen as you would adjust the reticle in the zeroing section. In Clip-On mode, the IOTS supports three zeroing profiles: A, B, and C.

Refer to Section 11.4 to switch to Clip-On mode. Long press the **Menu button** to enter the main menu, select Clip-On Zeroing option, then short press to enter the profile submenu. Three profile options (A, B, C) will be displayed, then select one profile and short press the **Menu button** to enter the Clip-On Zeroing interface.

Clip-On Zeroing interface

1. Zeroing Profile: Current zeroing profile, A, B, or C, the default is A.
2. X: +000px: Current horizontal position of the image (left/right). Text turns green when selected, white when not selected.
3. Y: +000px: Current vertical position of the image (up/down). Text turns green when selected, white when not selected.
4. Freeze: Image freeze
5. X-axis selection icon (left/right): Turns green when selected; white when not selected.
6. Y-axis selection icon (up/down): Turns green when selected; white when not selected.

In the Clip-On Zeroing interface, the image is frozen. Short press the **menu button** to switch between X and Y axes. Rotate the **menu button** to move the image screen horizontally or vertically. Long press the **menu button** to choose whether to save the current adjustment.

Clip-On Zeroing Steps:

- Before performing Clip-On Zeroing, first zeroing the reticle of your rifle scope.
- Ensure the firearm is unloaded, not chambered, and safe.
- Install the IOTS in front of the rifle scope. Refer to **Chapter 10** for installation instructions.
- Switch to Clip-On mode as described in **Chapter 11.4**.
- Select a suitable target at the desired distance (e.g., a shooting target 50 yds away). Adjust the IOTS eyepiece until the target is clear. Fire one shot at the target. The bullet will impact or near the target. If the point of impact does not coincide with the reticle center, adjustment is required.
- Keep the IOTS device stable. Short press the **menu button** to open the main menu, select Clip-On Zeroing menu, short press again to enter the Profile menu, select one of the profile files, and short press again to enter the Clip-On Zeroing interface.
- At this point, the image will freeze, and the image coordinate position (X, Y) will be displayed in the upper-left corner of the screen. Adjust the X/Y values to move the entire image (point of impact) toward the reticle center until the point of impact overlaps with the reticle. Long press the **menu button** to save the parameters and exit.
- Ensure firearm safety, reload ammunition, aim at the set target, and fire another shot. Check on the screen whether the point of impact coincides with the reticle center.
- If it still does not match, repeat the adjustment steps above until the point of impact matches the reticle center.

12 INSTALLATION AND USAGE

On the home screen, long press the Menu button to enter the main menu.
In all menu interfaces:

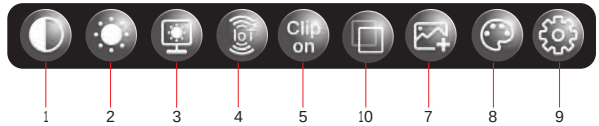
- Rotate the Menu button to switch menu items.
- Short press the Menu button to adjust the parameters or enter the subsequent parameter menu.
- Long press the Menu button to save changes and return to the previous menu.

Notes: If no operation is performed within 60 seconds in certain menus, the device will automatically return to the home screen without saving parameter changes.

12.1 Main Menu

Standalone Mode Main Menu

Clip-On Mode Main Menu



① Contrast

In the contrast menu, you can adjust the image contrast.

- There are ten levels available: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 .
- The default is 5.

② Image Brightness

In the image brightness menu, you can adjust the image brightness.

- There are ten levels available: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9.
- The default is 5.

③ Screen Brightness

In the contrast menu, you can adjust the screen brightness.

- There are ten levels available: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9.
- The default is 5.

④ **IoT**

In the IoT menu, you can switch the IoT function ON or OFF.

- The default is OFF.

⑤ **Clip-On Mode**

- In the Clip-On menu, you can switch to Clip-On mode (ON) or exit Clip-On mode (OFF).
- The default is OFF.

⑥ **Image Enhanced**

In the Image Enhanced menu, you can turn the Image Enhancement function ON or OFF.

- The default is OFF.

⑦ **Color Palettes**

In the Color Palette menu, you can select different image color palettes.

- There are five image color palettes available: White Hot, Black Hot, Red Hot, Iron, and Color.
- The default is White Hot.

⑧ **Reticle Settings**

Enter the reticle menu, you can adjust the reticle type, reticle color, and reticle brightness. Refer to **Chapter 12.2** for details.

⑨ **Advanced Settings**

Enter the Advanced Settings menu to adjust additional parameters.

⑩ **Clip-On Zeroing**

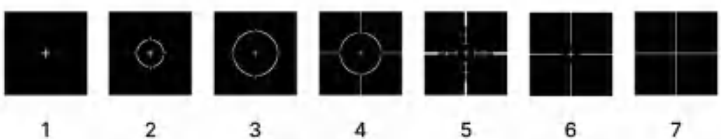
Enter the Clip-On Zeroing menu, you can select a zeroing profile (A, B, or C). The default profile is A.
You can also adjust the screen image position. Refer to **Chapter 11.12** for details.

12.2 Reticle Menu

1. Reticle Color: Change the reticle color. Four options are available: Black, White, Red, Green. Default is Red.
2. Reticle Style: Change the reticle style. Seven options are available: 1, 2, 3, 4, 5, 6, 7. Default is 3.
3. Reticle Brightness: Adjust the reticle brightness. Six levels are available: 0, 1, 2, 3, 4, 5. Default is 3.

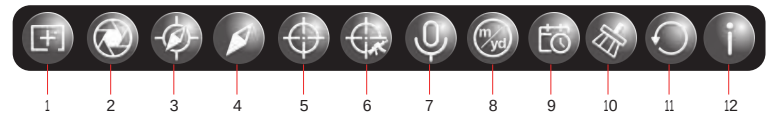
Note: When brightness is set to 0, the reticle will not be displayed.

Reticle Styles



12.3 Advanced Settings Menu

Standalone Mode Advanced Settings Menu:



Clip-On Mode Advanced Settings Menu:

① Pixel Defect Correction

Enter Pixel Defect Correction menu,and you can select and correct defective pixels.

② Calibration(NUC Mode)

In the calibration menu, you can select the NUC mode Auto or Manual.
The default calibration mode is Auto.

③ Compass Calibration

Enter Compass Calibration menu, you can calibrate the compass's parameters.

- After entering the menu, follow the on-screen arrows to rotate the device along the X, Y, and Z axes. Each rotation must exceed 360° to complete calibration.
- Once calibration is complete, the parameters are automatically saved, and the device returns to the previous menu. The screen will display: "Compass Calibration Successful!"

Note: If calibration is not completed or 30 seconds pass without input, the menu will exit automatically without saving the compass's parameters.

④ Compass

In the Compass menu, you can turn the digital compass ON or OFF.
The digital compass is ON by default.

⑤ Zeroing Settings

Enter the Zeroing Settings menu, you can modify or customize the zeroing distance of the selected zeroing profile and perform zeroing. Refer to **Chapter 12.4** for details.

⑥ Zeroing Profile

In the Zeroing Profile menu, you can select the zeroing profile

- There are three profiles available, A, B, or C. Each profile allows one customized zeroing distance.
- The default profile is A.

⑦ Audio Recording

In the Audio Recording menu, you can turn the microphone ON or OFF.

⑧ Unit Settings

In the Unit Settings menu, you can select the measurement unit: meters (m) or yards (yd).

- The default unit is yards (yd).

⑨ Date and Time Settings

In the Date and Time Settings menu, you can set the current date and time.

⑩Formatting

In the Formatting menu, you can erase the internal memory card.
WARNING: Before formatting make sure to back up any photos and videos you want to keep. All files saved on the internal memory card will be permanently deleted.

⑪Factory Reset

In the Factory Reset menu, you can reset all device parameters to factory defaults.

Notes:

- Settings reset cannot be undone.
- The settings listed below will be reset to the factory defaults:

  - Digital Zoom: 1x
  - Screen Brightness: 5
  - Image Brightness: 5
  - Contrast: 5
  - Palette: White Hot
  - IoT: OFF
  - Clip-On Mode: OFF
  - Calibration Mode: Auto
  - Image Enhanced: OFF
  - Reticle Color: Red
  - Reticle Style: Style 3
  - Reticle Brightness: 3
  - Compass: ON
  - Audio Recording: OFF

⑫ Device information

In the Device information menu, you can view the relevant information of the current device (device model, storage capacity, PN, SN, software version, hardware version and IoT information).

12.4 Zeroing Settings Menu

In the Zeroing Settings menu, you can modify or customize the zeroing distance of the selected zeroing profile and perform zeroing.

- Zeroing Distance: Change or customize the selected zeroing distance. The adjustment range is 000–999 yd or 000–900 m.
- Zeroing: Adjust the reticle position of the selected zeroing distance.Refer to Chapter 13 for details.

13 ZEROING

The IOTS must be in **Standalone Mode** to perform zeroing.
In the reticle zeroing interface, the X/Y position of the reticle may be adjusted to match the point of impact.

1. **Freeze**: Freeze the current image.
2. **Reticle**: Current reticle position.
3. **White Cross**: Original reticle position.
4. **X**: Reticle position on the horizontal axis; rotate the **Menu button** to move the reticle left or right.
5. **Y**: Reticle position on the vertical axis; rotate the **Menu button** to move the reticle up or down.

After entering the zeroing interface, the screen image will freeze , and the image freeze icon will appear in the upper left corner of the screen.
The reticle is initially located at the middle of the screen, with its coordinate position displayed as (0,0) at the bottom of the screen.

- X is selected by default (X icon shown in green).
- Rotate the **Menu button** to switch between X and Y. The selected axis icon turns green, while the unselected one remains white.
- Short press the **Menu button** to enter X/Y axis adjustment mode. Rotate the **Menu button** to move the reticle left/right (X-axis) or up/down (Y-axis). Each step moves by 2 screen pixels.
- Long press the **Menu button** to save the parameters and return to the previous menu.

Zeroing steps

1. Select a suitable target at the desired distance (e.g., a shooting target 50yds away).
2. Ensure the firearm is unloaded, not chambered, and safe.
3. Mount the IOTS on the firearm following the installation instructions in **Chapter** 10.
4. Power on the sight and adjust the relevant settings according to the operating instructions in **Chapter** 11.

5. Select a zeroing profile (A, B, or C). See Chapter 12.3 for zeroing profile settings.
6. Select or customize the desired zeroing distance. See Chapter 12.4 for zeroing distance settings.
7. Ensure the firearm is safe, load the ammunition, aim at the target, and fire one shot. Observe the point of impact on the screen.
8. If the point of impact does not coincide with the reticle center, keep your IOTS steady and enter the Zeroing menu (see Chapter 12.4.). The image will freeze.
   - Move the reticle center along the X and Y axes until the reticle aligns with the observed point of impact.
   - Long press the Menu button to save the current reticle position and return to the previous menu.
9. Ensure the firearm is safe, load the ammunition, aim at the set target, fire another shot, and observe whether the point of impact matches the reticle position.
10. If it still does not match, repeat the above steps until the point of impact matches the reticle position.

14 USING THE INFITAC APP

The IOTS can be operated by using the INFITAC App when connected to a tablet or smartphone.

Install the APP

- Download and install the INFITAC APP for free from the App Store or Google Play.
- Visit *infitacusa.com* for the latest version links.

Connect your mobile device to IOTS

- Turn on the IOTS IoT function.
- On your mobile device, search for Wi-Fi networks and select IOP25-XXXX or IOL25-XXXX.
- Enter the password 12345678 to connect. (See Chapter 11.11.)

After the APP connects to the IOTS, you can:

- View the IOTS real-time image and take photos and videos.
- View, download, share, and delete photos and videos saved on the IOTS.
- Adjust IOTS settings such as the image color palette and digital zoom level.
- Synchronize the date and time from the mobile device.
- Update the IOTS firmware.

15 BUTTON CELL BATTERY WARNINGS

- Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do not dispose of batteries in household trash or incinerate.
- Even used batteries may cause severe injury or death.
- Call a local poison control center for treatment information.
- Compatible battery type MS621T. Nominal battery voltage 3.0V.
- Non-rechargeable batteries are not to be recharged.
- Do not force discharge, recharge, disassemble, heat above (manufacturer's specified temperature rating) or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.
- The product contains a non-replaceable battery.

16 FCC REGULATIONS

FCC ID: 2BRRE-IOTST1

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.

CAUTION: Any changes or modifications to this device not expressly approved by INFITAC for compliance could void the user's authority to operate the equipment.

Radiation Exposure Statement

The SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue. This device was tested for typical body-worn operations with the device kept 0mm from the body.

17 CLEANING & GENERAL CARE

The maintenance should be carried out at least twice a year and includes the following steps:

- Use a clean, soft, dry cotton cloth to wipe the external surfaces of the product's metal and plastic parts, removing dust and dirt.
- Clean the electric contact and battery slots on the device using a non-greasy organic solvent.

- Check the glass surface of the eyepiece and lens. If necessary, clear off the dust and sand on the lens (it is perfect to use a non-contact method). Use a specialized wiping tool and solvent to clean the optical surfaces.

18 GENERAL TROUBLESHOOTING

The following table lists some potential issues when operating the device and their corresponding solutions. If you encounter these issues while using the product, please follow the suggestions and solutions in the table to troubleshoot and fix them. If the issue persists or an unlisted fault occurs that cannot be self-repaired, contact the supplier for factory repair immediately. You can also visit *www.infitacusa.com* for solutions to your product problems, or email us at *support@infitacusa.com* for more detailed information. Do not disassemble and repair it yourself or have it repaired by a third party not authorized by INFITAC, as this will void your product warranty.

Fault	Possible Causes	Solutions
The IOTS cannot turn on.	The battery is low or completely discharged.	Charge the battery.
The IOTS can not connect to a computer or external power supply.	The USB cable is damaged.	Replace the USB cable.
	The Computer is turned off.	Power on the computer.
	The external power supply is insufficient.	If necessary, check the external power supply.
Images are unclear or the background is not even.	Non-uniformity correction is required	Perform a non-uniformity correction per Chapter 11.6.
The image is too dark.	The screen brightness is insufficient.	Adjust the screen brightness in the main menu.
The reticle shifts after firing rounds.	The IOTS is not mounted securely or the mount is not secured on the IOTS.	Check that the IOTS has been securely mounted.
		Make sure you are using the same brand, type, and weight of the bullets as when the IOTS and firearm were initially zeroed. If the IOTS was zeroed in different environmental conditions, a slight zero shift is possible.
The icons are clear but the image is fuzzy.	There is dust or ice on the exterior optical surfaces of the lens.	Check the objective lens surface and wipe off dust or frost with a soft cloth.
The IOTS can not focus.	Image settings are not optimal for environmental conditions or object being observed.	Adjust the image and device settings. Refer to Chapter 12.
	Exterior contaminants on the lens.	Check the external surface of the objective lens and eyepiece and, where necessary, wipe away any dust, condensation, frost, etc. In cold weather, you can use special anti-fogging coatings, such as those made for corrective glasses
The IOTS can not connect to mobile device (smartphone or tablet).	IoT is not turned on in IOTS.	On the IOTS device, enter the main menu, select the IoT option, and turn on IoT. Refer to Chapter 12.1.
	Wi-Fi password is not entered correctly.	Enter correct password 12345678.
	Too many Wi-Fi signals around the device.	Move the device to an area with no or fewer Wi-Fi signals.

Fault	Possible Causes	Solutions
Wi-Fi signal has been lost or interrupted.	Smartphone or tablet is out of range of a strong Wi-Fi signal, or there are obstacles between the device and the smartphone.	Try again when the Wi-Fi signal is stable. Relocate the mobile device closer to the IOTS.
When the IOTS is used in low-temperature conditions, the image quality of the surroundings is worse than in warm-temperature conditions.	Environmental conditions.	In warm-temperature conditions, objects being observed (surroundings and background) heat up differently because of thermal conductivity, thereby generating a high-temperature contrast. Accordingly, image quality produced by the rifle scope will be higher. In low-temperature conditions,the background will cool down to roughly the same temperature, and thus the temperature contrast is substantially reduced and image detail can go down as there is less contrast in the scene. This is a normal function of a thermal imager and is no indicator of actual detector performance.

19 WARRANTY POLICY

Under normal use and maintenance conditions, if this product experiences performance failure due to material, workmanship, or manufacturing issues within the warranty period, we promise to provide warranty service.
Our warranty follows the product. During the announced warranty period, at our sole discretion, INFITAC will repair or replace products found defective under normal use without charge, excluding any delivery costs, which will be borne by purchaser. We will not be liable for incidental, consequential, or special damages arising out of or in any connection with the use or performance of this product.
Our warranty covers only normal use and does not include normal wear and tear of the device's appearance, theft, loss, intentional damage, any force majeure, or any situation arising from unexpected use. Visit *www.infitacusa.com/pages/warranty-policy* for the latest complete warranty information and other conditions.

20 TRADEMARKS

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