

22.DIGITAL ZOOM

The BOLT TL35 V2 uses stepped zoom and can quickly increase the base magnification from 3.0× to 12.0× by enlarging the image from 1 to 4 times digitally.

To use digital zoom:

1. From the home screen, rotate the control turret to zoom in and out on the observed object.
 - a. Rotate clockwise to zoom in and counterclockwise to zoom out.
 - b. Each rotation click zooms in / out in increments of 0.3×.
2. The real-time amplification number, 3.0× – 12.0×, appears on the left side of the status bar.



23.PICTURE IN PICTURE (PIP)

The PIP (Picture in Picture) function opens a small floating window with a magnified image-view at the top of the screen. PIP allows for improved aiming while still being able to see the wide field of view in the main body of the screen.

To activate PIP mode:

1. From the home screen, long press the **Palette**  **Button**. A 2× zoomed image, centered on the reticle, will appear at the top of the screen. Please note that the PIP image is 2× that of the real-time amplification number shown on the left side of the status bar.
2. To exit PIP mode, long press the **Palette**  **Button**.

NOTE: When the image in the main body of the screen is magnified via digital zoom, the PIP image will enlarge accordingly.



24.ULTRA-CLEAR MODE

Ultra-Clear mode improves the image quality in inclement weather conditions, such as rain, fog, high humidity, or high temperatures as these conditions all result in lower thermal contrast. Ultra-Clear mode enhances the NETD value of the thermal sensor and improves the sensor's response rate to these challenging environmental conditions.

Ultra-Clear mode provides:

- Improved image quality and clarity; images are crisper and sharper.
- Increased image detail.
- Improved recognition of observed targets.

See **Main Menu > Ultra-Clear** on page 29.

25.BLUETOOTH LASER RANGEFINDER

The BOLT TL35 V2 is compatible with the IRAY-AC96 ILR-1200-1 Bluetooth Laser Rangefinder Module (optional/not included). Please consult the documentation included with the ILR-1200-1 for information on its operation.

When the optional ILR-1200-1 is connected to the TL35 V2 via Bluetooth, the stadiametric rangefinder is unavailable.

26.STADIAMETRIC RANGEFINDER

The BOLT TL35 V2 is equipped with a stadiametric rangefinder which allows the user to calculate the approximate distance to an object if its size is known.

To enter the stadiametric rangefinder:

1. From the home screen, long press the **Brightness**  **Button**.
2. The stadiametric rangefinder interface has the following features:

- 1 Stadia Lines:** The two horizontal lines in the center of the screen can be adjusted to measure the size of the target object.
- 2 Icons and Distances:** Icons and distance values for three pre-configured objects will be displayed on the right side of the screen. The pre-configured objects are Deer: 5.6' tall, Hog: 3.0' tall, and Rabbit: 0.7' (7.9") tall.



Calculate the approximate distance of the observed object:

3. Rotate the **Control Turret** to expand or contract the space between the horizontal lines until they touch the top and bottom edges of the target object.
 - a. Rotate clockwise to expand the space between the lines.
 - b. Rotate counterclockwise to shrink the space between the lines.
 - c. As you adjust the space between the horizontal lines, the rangefinder distance values on the right side of the screen are automatically recalculated.
4. Long press the **Brightness**  **Button** to exit the stadiametric rangefinder mode.

NOTES:

- The horizontal stadia lines are centered on the reticle, which remains onscreen.
- To change the units of measurement (meters or yards), see **Settings Menu > Units of Measure** on page 40.

27. MAIN MENU OPTIONS AND DESCRIPTIONS

Menu and submenu options, from top to bottom are:

- **Main Menu:** Ultra-Clear, Wi-Fi, Bluetooth, Calibration, Compass, Motion Sensor, Rifle Selection, Reset Zeroing Distance, Standby Settings, Laser Calibration, Pixel Defect Correction, Compass Calibration, Settings.
 - **Reset Zeroing Distance Menu:** Three preset zero distances.
 - **Zeroing Distance Submenu:** Reticle Zeroing, Custom Zero Distance.
 - **Settings Menu:** Date, Time, Language¹, Units of Measure, Status Auto Hiding, Factory Reset, Info.

Menu option details, descriptions, and navigation instructions are listed in order on the following pages.

¹. English is the only language available.

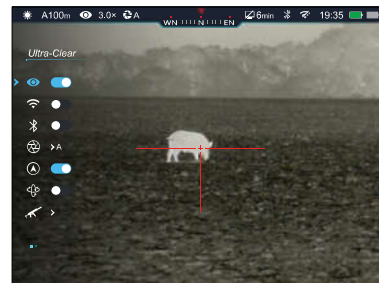
Ultra-Clear

Turn Ultra-Clear mode on / off

When Ultra-Clear mode is turned on, the image contrast is enhanced, which is suitable for rainy, foggy, or low-contrast conditions.

1. Long press the **Control Turret** to enter the main menu.
2. Rotate the **Control Turret** to move through the menu to select the Ultra-Clear  menu item.
3. Short press the **Control Turret** to turn Ultra-Clear on / off. Ultra-Clear is off by default.
4. The Ultra-Clear status, on  or off , appears on the left side of the status bar.
5. Long press the **Control Turret** to return to the home screen.

NOTE: When Ultra-Clear mode is turned on and off, the TL35 V2 will automatically perform a shuttered non-uniformity correction.

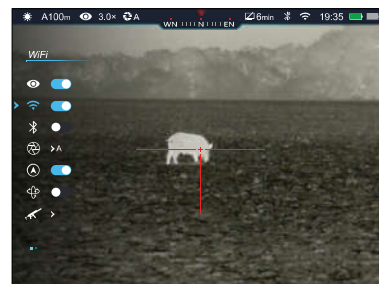


Wi-Fi

Turn Wi-Fi on / off

Turn on Wi-Fi to manipulate the TL35 V2 via the InfiRay Outdoor App.

1. Long press the **Control Turret** to enter the main menu.
2. Rotate the **Control Turret** to move through the menu to select the Wi-Fi  menu item.
3. Short press the **Control Turret** to turn Wi-Fi on / off. Wi-Fi is off by default.
4. The Wi-Fi status, on  or off , appears on the right side of the status bar.
5. Long press the **Control Turret** to return to the home screen.



Bluetooth

The Bluetooth function of the BOLT TL35 V2 requires an IRAY-AC96 ILR-1200-1 Laser Rangefinder Module (optional/not included). Please consult the documentation included with your ILR-1200-1 for more information on its operation.

Calibration

Select non-uniformity correction mode

The BOLT TL35 V2 has three non-uniformity correction (NUC) modes: Automatic (A), Manual (M) and Background (B).

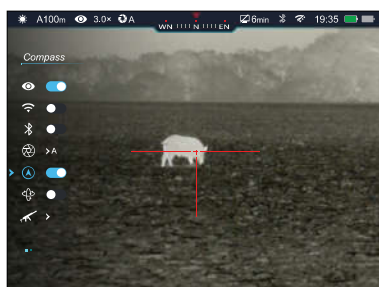
1. Long press the **Control Turret** to enter the main menu.
2. Rotate the **Control Turret** to move through the menu to select the calibration  menu item.
3. Short press the **Control Turret** to enter the calibration submenu.
4. Rotate the **Control Turret** to move through the submenu options, Automatic (A), Manual (M), and Background (B). Automatic (A) is selected by default.
5. The selected NUC mode, A, M, or B, appears on the left side of the status bar.
6. Long press the **Control Turret** to confirm the selection and return to the home screen.



Compass

Turn the digital compass on / off

1. Long press the **Control Turret** to enter the main menu.
2. Rotate the **Control Turret** to move through the menu to select the compass  menu item.
3. Short press the **Control Turret** to turn the digital compass on / off. The digital compass is off by default.
4. When the compass is on, it appears in the center of the status bar.
5. Long press the **Control Turret** to return to the home screen.

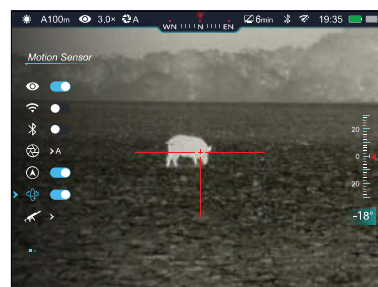


Motion Sensor

Turn the motion sensor on / off

1. Long press the **Control Turret** to enter the main menu.
2. Rotate the **Control Turret** to move through the menu to select the motion sensor  menu item.
3. Short press the **Control Turret** to turn the motion sensor on / off. The motion sensor is off by default.
4. When the motion sensor is on, the pitch angle appears on the right side of the screen and the tilt angle appears on the left side of the screen.
5. Long press the **Control Turret** to return to the home screen.

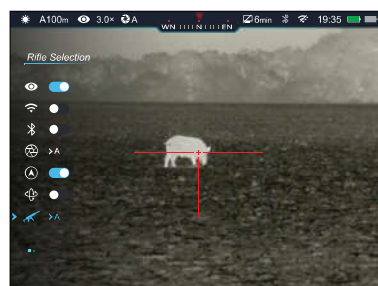
NOTE: The tilt angle is not shown in the figure above because it is hidden by the menu.



Rifle Selection

Select the zeroing profile

1. Long press the **Control Turret** to enter the main menu.
2. Rotate the **Control Turret** to move through the menu to select the rifle selection  menu item.
3. Short press the **Control Turret** to enter the submenu.
4. Rotate the **Control Turret** to move through the rifle zeroing profile options, A, B, and C. The default is A.
5. The selected rifle zeroing profile, A, B, or C, appears on the left side of the status bar.
6. Long press the **Control Turret** to confirm the selection and return to the home screen.



Reset Zeroing Distance

Select or customize zero distance

In the reset zeroing distance menu, you can select a preset zero distance, customize a preset zero distance, and adjust the reticle position for the selected zero distance. The TL35 V2 supports custom zero distances of 1 to 999 yards or 1 to 999 meters.

NOTE: Before selecting or customizing a zero distance, you must select a rifle zeroing profile, A, B, or C. See **Main Menu > Rifle Selection** on the previous page.

1. Long press the **Control Turret** to enter the main menu.
2. Rotate the **Control Turret** to move through the menu to select the reset zeroing distance  menu item.
3. Short press the **Control Turret** to enter the zeroing submenu. There are three zero distances available in the submenu.

ZEROING MENU > ZERO DISTANCE SUBMENU 100m

Select or customize a preset zero distance

1. In the zero distance submenu, rotate the **Control Turret** to select a zero distance.
2. Short press the **Control Turret** to enter the submenu for the selected zero distance.
3. In the submenu for the selected zero distance, you may:
 - a. Enter the reticle zeroing interface  to adjust the X/Y position of the reticle at the selected zero distance. See **Reticle Zeroing** on the next page.
 - b. Customize the selected preset zero distance, as needed. See **Zeroing Menu > Customize Zero Distance** on page 34.



ZEROING MENU > ZERO DISTANCE SUBMENU > RETICLE ZEROING

Adjust the reticle position of the selected zero distance.

In the reticle zeroing interface, the X/Y position of the reticle may be adjusted to match the point of impact. Refer back to **Zeroing the BOLT TL35 V2** on page 21, if necessary.

1. In the submenu for the selected zero distance, the reticle zeroing  menu item is selected by default. Short press the **Control Turret** to select and enter the reticle zeroing interface.
2. The reticle zeroing interface has the following features:

- 1 **X:** Horizontal point of impact change (in cm or inches).
- 2 **Y:** Vertical point of impact change (in cm or inches).
- 3 **Freeze Icon:** Appears when the image is frozen.
- 4 **Reticle:** Shows the new reticle position.
- 5 **White Dot:** Indicates the center of the initial reticle position.

NOTE: The red "X" indicates the point of impact. It is shown in the figure for illustration purposes, and is not an interface element.

3. Center the reticle on the aiming point and long press the **Photo**  and **Palette**  Buttons at the same time to freeze the image. The image freeze  icon will appear below the X/Y coordinates.
4. Select the axis (X or Y) along which to move the cursor:
 - a. Short press the **Control Turret** to toggle between X and Y. The selected axis is indicated by blue text. X is selected by default.
5. Adjust the X/Y position of the reticle until the reticle matches the point of impact.
 - a. X (horizontal) is the windage and Y (vertical) is the elevation.
 - b. Upon moving the reticle, a white dot appears onscreen, representing the original position of the reticle.



c. Rotate the **Control Turret** counterclockwise to move in the positive direction: X= Right and Y= Up.

d. Rotate the **Control Turret** clockwise to move in the negative direction: X= Left and Y= Down.



e. Rotate one click to move the reticle in the corresponding direction by 1 pixel. One full rotation (20 clicks) is equivalent to 20 pixels.

f. When adjusting your zero at a distance of 50 yards, one click will change the impact point by 0.15" as shown in the X and Y coordinate displays. At 100 yards that same click moves 0.31". At 200 yards one click moves 0.62".

g. Changing your zero distance will change the distance of your X/Y adjustments automatically. If your selected zero distance has a correction of 1.70" at 100 yards, it will automatically change to 3.39" if you change the zero distance to 200 yards.

6. Short press the **Power** **Button** to clear the reticle position and exit the reticle zeroing interface; **OR**
7. Long press the **Control Turret** to save the reticle position and return to the home screen.
 - a. A 5-second countdown appears on the screen, followed by "Saved Successfully."
8. Take a confirmation shot—the point of impact should now match the point of aim. If not, adjust the X/Y position of the reticle again.

ZEROING MENU > ZERO DISTANCE SUBMENU > CUSTOMIZE ZERO DISTANCE

Customize a preset zero distance

The BOLT TL35 V2 supports custom zero distances of 1 to 999 yards or 1 to 999 meters.

1. In the zero distance submenu for the selected zero distance, the reticle zeroing menu item is selected by default. Rotate the **Control Turret** to move to the zero distance you wish to customize.
2. Short press the **Control Turret** to customize the zero distance. White triangle icons will appear above and below the first digit.

3. Rotate the **Control Turret** to increase or decrease the value of the first digit, from 0–9.

NOTE: A red warning icon appears to the right of the zero distance if the value entered is 000.

4. Short press the **Control Turret** to switch between the three digits. The two triangle icons will move to indicate the selected digit.
5. Long press the **Control Turret** to save the custom zero distance and return to the zero distance submenu.
6. The new zero distance appears on the left side of the status bar.



Standby Settings

Set the rifle scope to enter standby automatically

To conserve battery, the TL35 V2 may be set to automatically enter standby mode after a specified length of inactivity (2, 4, or 6 minutes).



1. Long press the **Control Turret** to enter the main menu.
2. Rotate the **Control Turret** to move through the menu to select the standby menu item.
3. Short press the **Control Turret** to enter the standby submenu.
4. Rotate the **Control Turret** to move through the standby options, 2min, 4min, 6min, or off. Standby is off by default.
5. The standby icon and selected status (2min, 4min, 6min, or off) appear on the right side of the status bar.
6. Long press the **Control Turret** to confirm the selection and return to the home screen.
7. When 2, 4, or 6 minutes is selected, the TL35 V2 will automatically enter standby mode after the set length of inactivity to conserve battery life.
8. When in standby mode, short press the **Power** **Button** to exit and return to the home screen.

NOTES:

- When **2min**, **4min**, or **6min** is selected:
 - The TL35 V2 will enter standby mode automatically when it is tilted up or down at an angle of more than 70° or left or right at an angle of more than 30°.
 - The TL35 V2 will not enter standby mode while it is in a level firing position.
- When **off** is selected, standby mode is turned off and the rifle scope will operate until the battery runs out.
- Standby mode may be manually activated from the home screen at any time:
 - From the home screen, long press the **Power**  **Button** and release the button before the 3-second countdown finishes to enter standby mode.
 - Short press the **Power**  **Button** to exit standby and return to the home screen.

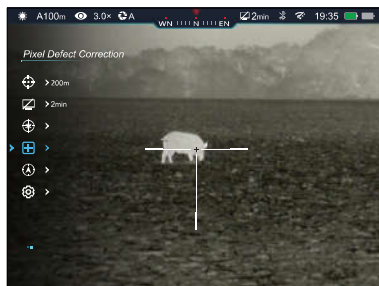
Laser Calibration

The laser rangefinder function of the BOLT TL35 V2 requires an IRAY-AC96 ILR-1200-1 Laser Rangefinder Module (optional/not included). Please consult the documentation included with your ILR-1200-1 for more information on its operation.

Pixel Defect Correction

Select and correct defective pixels

Defective pixels are pixels that do not change correctly compared to the other image pixels—they are either brighter or darker than surrounding pixels. The BOLT TL35 V2 has a tool that corrects defective pixels on the sensor using its internal software.

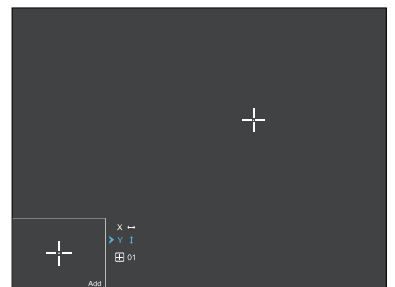


- Long press the **Control Turret** to enter the main menu.
- Rotate the **Control Turret** to move through the menu to select the pixel defect correction  menu item.
- Short press the **Control Turret** to enter the defective pixel correction interface.
- The pixel correction interface has the following features:
 - Cursor:** A cursor appears in the center of the screen in place of the reticle. Move the cursor to the position of the defective pixel.

- X:** Select to move the cursor horizontally.
- Y:** Select to move the cursor vertically.
- PIP Window:** The Picture in Picture window appears in the lower-left corner.
-  **00:** Shows the number of defective pixels in the “to be corrected” list.



- Select the axis (X or Y) along which to move the cursor:
 - Short press the **Control Turret** to toggle between X and Y. The selected axis is indicated by blue text. X is selected by default.
- Move the cursor along the selected axis to the location of the defective pixel:
 - Rotate the **Control Turret** counterclockwise to move in the positive direction: X= Right and Y= Up.
 - Rotate the **Control Turret** clockwise to move in the negative direction: X= Left and Y= Down.
 - Rotate one click to move the reticle in the corresponding direction by 1 pixel. One full rotation (20 clicks) is equivalent to 20 pixels.
- Repeat steps 5–6 to move the cursor along the second axis.
- With the cursor in position, short press the **Power**  **Button** to add the defective pixel to the “to be corrected” list.
 - Add** will briefly appear in the bottom-right corner of the PIP window.
 -  **00** will change to  **01** to indicate that one pixel has been added to the correction list.
- If the defective pixel has been added in error, short press the **Power**  **Button** a second time from the same X/Y coordinates (do not move the cursor) to remove the pixel from the “to be corrected” list. **Del** will briefly appear in the PIP window.
- Repeat steps 5–9 to add additional defective pixels, as needed.
- When all defective pixels have been added to the list, long press the **Control Turret** to confirm changes.



- A popup window shows the message “Do you want to keep these settings?” and two options, Yes and No. Yes is selected by default.
- Short press the **Control Turret** to select **Yes** to correct the saved list of defective pixels and exit to the home screen.
A 5-second countdown appears on the screen, followed by “Saved Successfully” ; **OR**
- Rotate the **Control Turret** to move to **No** and short press the **Control Turret** to exit to the main menu without correcting any defective pixels.



NOTES:

- The PIP window and interface controls move to the upper-left corner when the cursor moves into the lower-left corner of the screen.
- After 15 seconds of inactivity, the system will automatically exit the defective pixel interface.

Compass Calibration

Calibrate the digital compass

- Long press the **Control Turret** to enter the main menu.
- Rotate the **Control Turret** to move through the menu to select the compass calibration  menu item.
- Short press the **Control Turret** to begin compass calibration. A triaxial coordinate prompt will appear on the screen.
- Follow the prompt to rotate the TL35 V2 at least 360 degrees along each axis, X, Y, and Z. Rotations must be completed within the 45-second calibration time.
- After 45 seconds, the calibration is finished and the system will automatically exit to the home screen.



Settings

Adjust the general settings

- Long press the **Control Turret** to enter the main menu.
- Rotate the **Control Turret** to move through the menu to select the settings  menu item.
- Short press the **Control Turret** to enter the settings submenu.
- There are seven submenu items: date, time, language, units of measure, status auto hiding, factory reset, and info.



SETTINGS MENU > DATE

Set the date

- In the settings submenu, rotate the **Control Turret** to select the date  menu item.
- Short press the **Control Turret** to edit the date. White triangle icons will appear above and below the year value. The date is displayed in YYYY.MM.DD format.
- Rotate the **Control Turret** to select the correct value for each digit (year, month, and day).
- Short press the **Control Turret** to switch between digits. The two triangle icons move to indicate the selected digit.
- Long press the **Control Turret** to save the date.



SETTINGS MENU > TIME

Set the time

- In the settings submenu, rotate the **Control Turret** to select the time  menu item.
- Short press the **Control Turret** to edit the time. White triangle icons will appear above and below the hour value. Time is displayed as HH.MM, in 24-hour format.

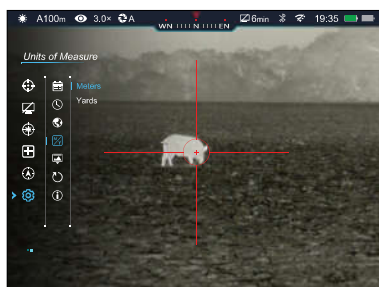


3. Rotate the **Control Turret** to select the correct value for each digit (hour and minute).
4. Short press the **Control Turret** to switch between digits. The two triangle icons move to indicate the selected digit.
5. Long press the **Control Turret** to save the time.
6. The time appears on the right side of the status bar.

SETTINGS MENU > UNITS OF MEASURE

Set the units of measurement

1. In the settings submenu, rotate the **Control Turret** to select the units  menu item.
2. Short press the **Control Turret** to enter the units of measure submenu.
3. Rotate the **Control Turret** to move through the unit options, meters and yards. Meters are selected by default.
4. The selected units, m (meters) or y (yards), will display, along with the selected zero profile and distance, on the left side of the status bar.
5. Short press the **Control Turret** to confirm the selection and return to the Settings menu.



SETTINGS MENU > STATUS AUTO HIDING

Turn status auto hiding on / off

This function enables all interface information, aside from the reticle, to be automatically hidden for unobstructed image-view.

When auto-hide is turned on, after 8 seconds of inactivity the status bar, digital compass, and all interface icons will be automatically hidden. Shortcut buttons and the menu are disabled until the entire interface is again displayed. Press any button to un-hide the user interface. When off is selected, auto-hiding the status bar is turned off.

NOTE: When the menu is open, the status bar will not auto-hide.

1. In the settings submenu, rotate the **Control Turret** to select the status auto hiding  menu item.



2. Short press the **Control Turret** to enter the submenu.
3. Rotate the **Control Turret** to move through status auto hiding options, on and off. Off is selected by default.
4. Short press the **Control Turret** to confirm the selection and return to the Settings menu.

SETTINGS MENU > FACTORY RESET

Restore factory default settings

1. In the settings submenu, rotate the **Control Turret** to select the factory reset  menu item.
2. Short press the **Control Turret** to enter the factory reset submenu.
3. Two options, Yes and No, appear; Yes will restore factory settings and No will cancel the operation. No is selected by default.
4. Short press the **Control Turret** to confirm cancellation of the factory reset and return to the Settings menu; **OR**
5. Rotate the **Control Turret** to select **Yes** and short press the **Control Turret** to select **Yes** to confirm the factory reset. Factory settings will be restored and the TL35 V2 will reboot automatically.



NOTES:

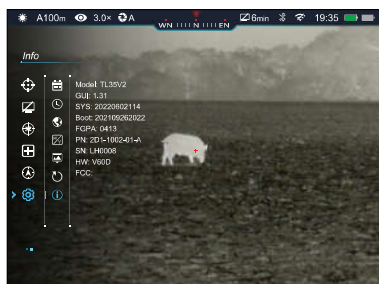
- There is a pause of about 15 seconds before the factory restart begins. Do not press any buttons during this time.
- A factory reset cannot be undone.
- The settings listed below will be reset to the factory defaults:

• Color Palette: White hot	• Zeroing Profile: A
• Display Brightness: 3	• Reticle Type: 1
• Image Sharpness: 3	• Reticle Color: Black
• Magnification: 3.0x	• Standby Settings: Off
• Ultra-Clear mode: Off	• Date: 2020:01:01
• Wi-Fi: Off	• Time: 00:00
• Bluetooth: Off	• Status Auto Hiding: Off
• Calibration: Automatic	• Wi-Fi SSID: Infray-TUBE-XXXXXX
• Digital Compass: Off	• Wi-Fi Password: 12345678
• Motion Sensor: Off	

SETTINGS MENU > INFO ⓘ

Show device information

1. In the settings submenu, rotate the **Control Turret** to select the info ⓘ menu item.
2. Short press the **Control Turret** to enter the info submenu.
3. The info submenu will display the following information: the model number, GUI version, SYS Info, boot and FGPA version, PN, and SN numbers, hardware version, and FCC ID.
4. Long press the **Control Turret** to return to the previous menu.



28. BASIC INSPECTION

It is recommended to carry out a technical inspection before each use. Please check the following:

- The rifle scope appearance: there should be no cracks in the body or visible damage.
- The condition of the objective lens and eyepiece: there should be no cracks, greasy spots, dirt, or other deposits on the lens.
- The internal rechargeable battery pack should be fully charged.
- The control buttons should be in working order.

29. BASIC MAINTENANCE

Always replace the objective lens cap (15) after use to avoid damaging or scratching the lens. Never touch the lens directly; oil from your skin can damage the lens coating and surface.

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

- Wipe the surface of the external metal and plastic components with a clean, dry cotton cloth. Do not use chemical, corrosive, or abrasive cleaners. Canned air may also be used to clean the external components.
- Clean the electric contacts and battery slots on the rifle scope using a non-greasy organic solvent.
- Check the lens and eyepiece. If necessary, remove any dirt or sand from the optics; a non-contact cleaning method is preferred.
- Cleaning the exterior of the lens should only be done with the included microfiber lens cloth or a similar product. Only clean the lens when it is visibly soiled. Frequent wiping or cleaning can degrade the anti-reflective lens coating.

30. WARRANTY

At iRayUSA we're first and foremost hunters and users of our products and we understand that failure isn't an option. We also understand that having to wait extended periods for repair isn't something that a customer should have to put up with when something does go wrong. During your published warranty period, iRayUSA will repair or replace, at its discretion, any optic that becomes defective during normal use. Additionally, if we cannot fix your optic in less than one week, we will offer to replace it with a replacement product in like or better condition. If you would rather wait for your specific optic to be repaired, we can handle that too.

We know you've never seen this from a thermal manufacturer, neither have we, and that's why we started iRayUSA.

Our warranty follows the product and is not tied to the original owner. The warranty period is tied to the date of sale to the dealer. This warranty only covers normal use and does not cover cosmetic damage, normal wear, intentional damage, theft, loss, any act of God, or a condition caused by use other than intended. Any product that is modified, opened, or tampered with will void any warranty coverage. Any serial number damage or alteration on the product will be considered a modification. Be sure to register your BOLT TL35 V2 rifle scope at irayusa.com/register.

To return a product for repair:

1. Go to irayusa.com/warranty and click the **Request an RMA button** to request an RMA number. Returns will not be accepted without an RMA.
 2. The customer is responsible for shipping the product to iRayUSA, per the instructions included with the RMA. iRayUSA will return the product at no cost.
- The one-week timeline starts from the time of receipt of the product at iRayUSA.
 - iRayUSA is not liable for any damages or loss incurred when shipping to iRayUSA.
 - This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Please give us a call at **800-769-7125**, visit irayusa.com/warranty, or email info@irayusa.com with any questions.

31. GENERAL TROUBLESHOOTING

The troubleshooting table below lists issues that may occur when operating the BOLT TL35 V2. Carry out the recommended troubleshooting steps in the order shown in the table. Please contact iRayUSA at 800-769-7125 or irayusa.com/support or an authorized vendor for assistance before attempting to perform any modifications or repairs beyond the scope of the troubleshooting procedures in this manual. Unauthorized repairs or modifications will void your warranty.

ISSUE	POSSIBLE CAUSES
The TL35 V2 will not turn on.	The built-in battery pack is very low or has completely discharged.
The TL35 V2 can not connect to a computer or external power supply.	External power supply has completely discharged.
	Computer is turned off.
	Data cable is damaged.
The TL35 V2 can not connect to the mobile device (smartphone or tablet).	Wi-Fi is not turned on.
	Wrong Wi-Fi password entered.
	Too many Wi-Fi signals near the TL35 V2.
Wi-Fi signal is lost or interrupted.	Smartphone or tablet is out of range of a strong Wi-Fi signal, or there are obstacles between the TL35 V2 and the mobile device.
The image is fuzzy, not clear, not balanced, with artifacts.	Non-uniformity correction is required.
The image is too dark.	Display brightness level is too low.
The GUI is clear, but the image is fuzzy.	The lens is not focused.
	There is dust on the interior or exterior optical surfaces of the lens.
	There is condensation on the interior or exterior optical surfaces of the lens.

TROUBLESHOOTING STEPS
Charge the built-in battery pack.
Check the external power supply and charge it if necessary.
Power on the computer.
Replace the data cable.
Turn on the Wi-Fi in the main menu. See Main Menu > Wi-Fi on page 29.
On the mobile device, go to Settings > Wi-Fi and enter the correct password. The default password is 12345678. See Main Menu > Wi-Fi on page 29.
Move the TL35 V2 and mobile device to an area with no or fewer Wi-Fi signals.
- Try again when Wi-Fi signal is stable. - Relocate the TL35 V2 closer to the Wi-Fi signal.
Perform a non-uniformity correction. See Non-uniformity Correction on page 22 and Main Menu > Calibration on page 30.
Adjust the display brightness in the quick menu. See Using the Quick Menu on page 19.
- Adjust the focus on the target by rotating the Objective Focus Ring (14) - Adjust the image sharpness in the quick menu. See Using the Quick Menu on page 19.
Wipe the outside optical surfaces with the included microfiber lens cloth.
- Wipe the outside optical surfaces with the included microfiber lens cloth. - Allow the TL35 V2 to dry by leaving it in a warm, dry environment for at least 4 hours.

ISSUE	POSSIBLE CAUSES
The aiming reticle shifts after firing rounds.	The TL35 V2 is not mounted securely or the mount is not secured on the TL35.
The image of the object being observed is missing.	Looking through glass.
The TL35 V2 will not focus.	Image settings are not optimal for the current environmental conditions or the object being observed.
Image quality is too low or the detection range is reduced.	These issues may occur due to the weather conditions, such as snow, rain, humidity, and fog.
When the TL35 V2 is used in low temperature conditions, the image quality of the surroundings is worse than in warm temperature conditions.	Environmental conditions.

32.NOTES

TROUBLESHOOTING STEPS
• Check that the TL35 V2 has been securely mounted. • Make sure you are using the same brand, type, and weight of the bullets as when the TL35 V2 and weapon were initially zeroed. • If the TL35 V2 was zeroed in different environmental conditions, a slight shift of the zero is possible.
Remove any glass windows from the field of view.
• Check the outer surfaces of the objective lenses 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 as for corrective glasses. • Adjust the focus on the target by rotating the Objective Focus Ring (14). • Adjust the image sharpness in the quick menu. See Using the Quick Menu on page 19. • Adjust the image and device settings. See Quick Start Guide on page 8. • Turn on Ultra-Clear mode. See Main Menu > Ultra-Clear on page 29.
Turn on Ultra-Clear mode. See Main Menu > Ultra-Clear on page 29.
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.

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