

# CRONUS ATS PRO THERMAL SCOPE

35-400 | 50-640



**USER MANUAL** 

athlonoptics.com

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### **DISCLAIMERS**

This product is for civilian use only and shall not be used for infringing the rights of third parties, medical, safety equipment or other applications where product failure may cause danger to life or personal injury. In the event of a conflict between the foregoing and applicable law, the law shall prevail.

### **IMPORTANT INSTRUCTIONS**

This manual is a general manual for a series of products, which means that the product of a specific model you receive might differ from the picture herein. Please refer to the actual product received.

This user manual is prepared for the convenience of users to use and know our products. We have tried our best to ensure the accuracy of its contents, but we are still unable to guarantee its completeness since our products can be continuously updated and upgraded. Athlon Optics reserves the right to modify the manual at any time without notice.

### **CAUTIONS**



### DANGER

- 1) Please charge the battery with the method described in this guide and follow the charging procedure and precautions. Improper battery charging will cause heating, damage and even physical injury.
- 2) Do not try to open or disassemble the battery at any time.
- 3) The internal battery can only be charged through the USB-C port and the external battery does not charge the internal battery. The optic draws current from external battery first and the internal battery when external one runs out power.

### A

### WARNING

- 1) This scope contains advanced electronics. To prolong the life of this optic, avoid any undue physical damage or violent actions.
- 2) Do not use or store the equipment in an environment that exceeds the allowable operating or storage temperature.
- 3) Do not directly aim the equipment at high-intensity thermal radiation sources, such as the sun, lasers, spot welding machines, etc.
- 4) Avoid allowing debris to enter any ports in this optic.
- 5) Do not knock, throw or vibrate instruments and accessories to avoid damage.
- 6) Any modification, alterations or attempts to dissassemble this scope will void the user's warranty. All repairs must be made through Athlon Optics.
- 7) Avoid contaminating this scope with oils or solvents.
- 8) Please observe the following measures when wiping this Scope:
- · Non-optical surface: Use a clean and soft cloth to wipe the non-optical surface of the thermal scope.
- Optical surface: When using the thermal scope, avoid contaminating the optical lens surfaces of this scope. Avoid touching the objective lens with your hands.
   Oils and solvents can degrade the lens coatings. When the surface of the optical lens is polluted, use special lens paper to wipe it carefully.
- 9) Do not place the battery in a high temperature or near a high-temperature object.
- 10) Do not short circuit the positive and negative poles of the battery.
- 11) Do not expose the battery to moisture or water.
- 12) Only use the original chargers and adapters provided with this scope.

### **CHAPTER 1 - PRODUCT INTRODUCTION**

Athlon Optics thermal scope retains the appearance of a traditional daylight scope and perfectly incorporates latest premium thermal imaging technology. The design of this scope accommodates traditional hunters' habits of handling the scope and rifle. ATS series adopts  $400 \times 300/640 \times 480$  12 µm high- sensitivity thermal detector with two different lens options of 35mm, 50mm, and its 10 sets of zero profiles that make it convenient to switch between different calibers of rifles.

### **CHAPTER 2 - STORAGE AND TRANSPORTATION**

In order to prevent danger and property loss, please read this manual carefully before using the scope and strictly abide by it during its use.

### STORAGE

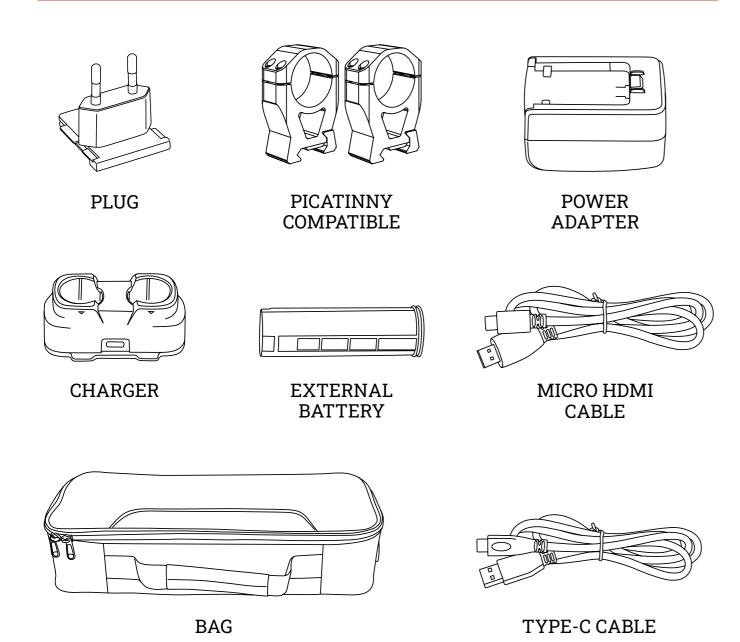
- 1) The packaged product shall be stored in well-ventilated and clean rooms at -22°F  $\sim$  122°F (-30°C 50°C), without condensing or corrosive gas, under relative humidity of no more than 95%.
- 2) Please regularly charge it every 3 months.

### TRANSPORTATION

The product shall be protected from rain and water. This optic contains advanced electronics. To prolong the life of this optic, avoid any undue physical damage or violent actions.

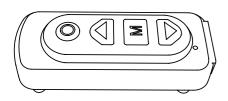
### **CHAPTER 3 - LIST OF ITEMS**

### **CHAPTER 4 - TECHNICAL SPECIFICATION**



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### Optional:



REMOTE CONTROL

Product Name		Thermal Imaging Riflescope	
	Model	35 - 400 PRO	50 - 640 PRO
	Total Resolution	400×300 @12μm	640×480 @12μm
<b>5</b>	Scope Material	Aluminum	
Detector	Effective Resolution	400×300	640×480
	Spectral	8-14µm	
	Focal length	35mm F1.0	50mm F1.0
Lens	Focusing	Mar	nual
	FOV	7.8° × 5.9°	8.8° × 6.6°
Image	Frame Rate	50Hz	
Image	Electronic Amplification	1x - 4x	1x - 8x
	Battery	1 Built-in Battery, and 2 Spare External Batteries	
Power	Charging	Chargeab	le, USB-C
	USB	USB-C (2.0) can power the Scope and charge both interna and external battery; can transmit data	
	Video Interface	Micro HDMI	
WIFI Realtime video transmission, 2.4G frequ		ion, 2.4G frequency range,	
Interface	Bluetooth	Bluetooth remote control, which can connect to Scope for wireless control	
	External Extension	External monitor through USB-C	
	Tube Diameter	30mm	

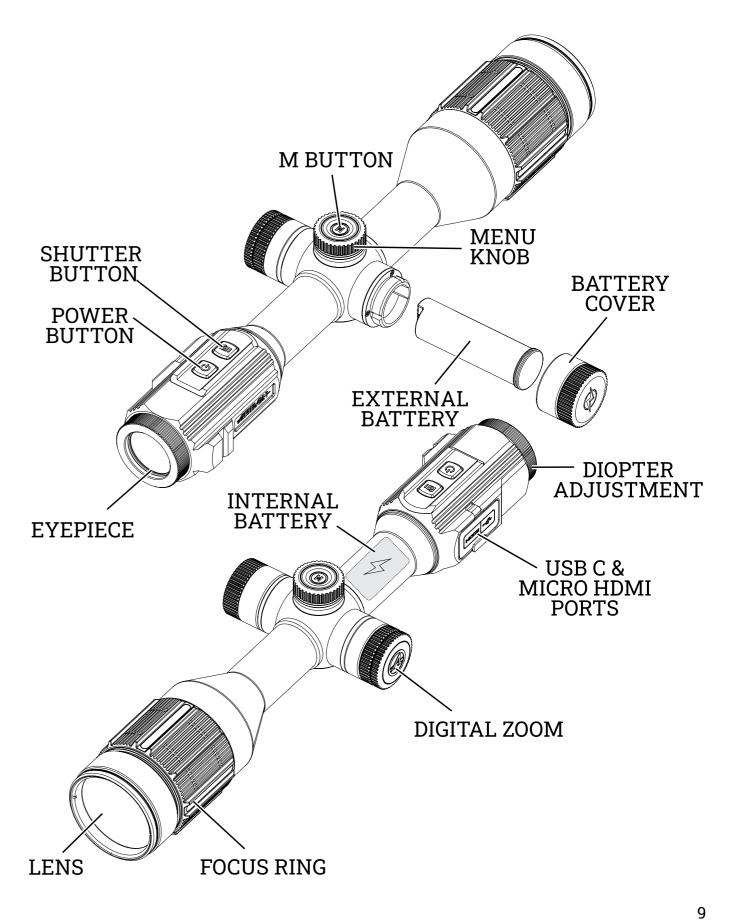
Pı	Product Name 35 - 400 PRO 50-640 I		50-640 PRO
	OLED	0.49 Inches OLED	
	Resolution	Resolution 1440x1080, Full screen display  Diopter -4 - +4	
	Diopter		
Display	Distance of exit pupil	<b>4</b> 8r	nm
System	Diameter of exit pupil	8mm	
	Eyepiece magnification	14	1×
	Scope Magnification	3.3 - 13.2x	2.95 - 23.66x
	Video Output Standard	HD	MI
	Power on/off	Ye	es
	Menu knob (pressable)	Yes	
Button	Photo/Recording	Yes	
	Zoom-in knob	Ye	es
	Linear Magnifying	Yes	
	Screen Brightness	10 levels	
	Detector Brightness	10 levels	
	Detector Contrast	10 levels	
	Image Enhancement	Yes	
Function	Scene Mode	Natural, Enhanced, Highlight	
	Stadiametric Rangefinder	Yes	
	Eco Mode	Ye	es
	Photo Capturing	Yes Yes, through both Scope and APP	
	Video Recording		

Pro	Product Name 35-400 PRO 50-640 P		50-640 PRO	
	Video Recording with Audio	Y	es	
	Color Palettes	White Hot, Black Hot, Red Hot, Green Hot, Iron Red, Blue Hot, Sepia		
	Hotspoting Track	Yes		
	Compensation Mode	Shutter Cor	npensation	
	Automatic Power-off	Off, Automatic power-	off in 15/30/60 minutes	
	Auto Sleep	Off, Auto sleep in	1 5/10/15 minutes	
	Charging Indicator Light	Light that indicates	if scope is charging	
	Language Settings	English/French/Ger	man/Italian/Spanish	
	Time Settings	Upper Left/Upper Middle/Upper Right, Closed  Yes  Yes, can be formatted (128GB capacity)		
	Watermark Settings			
Function	PIP			
(Continued)	Restore Default			
	Internal Memory			
	Unit of Measurement			
	Bluetooth			
	Zero Setting			
	Reticle type	10 types	in total	
Reticle color Black/Whi		Black/White/Yello	ck/White/Yellow/Green/Red/Blue	
	Reticle Brightness	in Yes ic Yes		
	One Shot - Zero in			
	Built-in Ballistic Calculator			
	Firmware Upgrade			

	I		
Product Name		35 - 400 PRO	50 - 640 PRO
System	Power-on Time	≤12s@77°F ≤12s@25°C	
	Working Temperature	-22°F $\sim$ 122°F (external power supply only below -4°F) -30°C $\sim$ 50°C (external power supply only below -20°C)	
	Storage Temperature	-49°F ~ 158°F -45°C ~ 70°C	
	Humidity	10% - 95% no condensing	
Environment Adaptation	Impact	800G/1ms	
	Vibration	10Hz - 150Hz - 10Hz 0.15mm IEC60068-2-6	
	Dust-proof / Water-proof	IP67 RoHS, CE, FCC, UKAC, UN 38.8	
	Certificate		
	Items Included	Thermal Scope, USB-C cable, Eyepiece Rubber Cover, 5V2A adapter (US/EU/AU/EU), External Battery ×2, Batter charger, micro HDMI video cable, Scope Ring, Manual, Warranty Card	
Package	Color		
	Weight	37.4	4 oz
	Dimensions	14.3" x 4.2" x 2.35"	14.7" x 4.2" x 2.35"

### **CHAPTER 5 - PRODUCT COMPONENTS**

This manual is applicable to many models of this series, and the illustration may not perfectly match your product.



### **CHAPTER 6 - OPERATION INSTRUCTION**

### **6.1.3 LANGUAGE SETTINGS**

### **6.1 QUICK START**

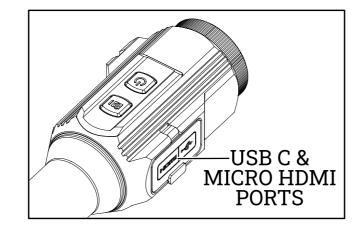
### **6.1.1 USB TYPE C & MICRO HDMI**

### **USB-C PORT**

The external port with USB cable can be connected to the external power supply to charge the product. The output of the external power supply is 5V2A.

### MICRO HDMI •

A micro HDMI to HDMI cable can be connected to the optic to provide a live feed to an external monitor equipped with HDMI.



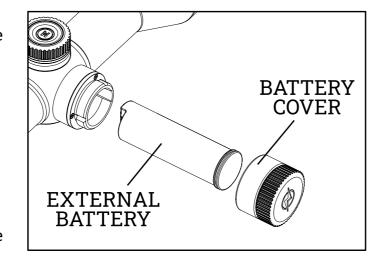
### **6.1.2 POWER SUPPLY**

### **POWER CHARGING**

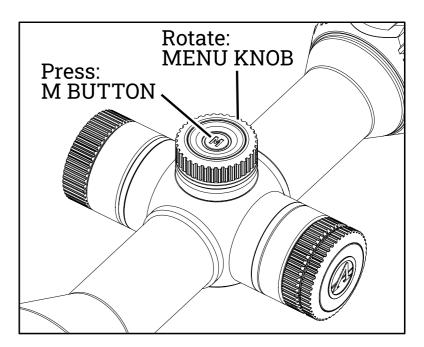
When using the product for the first time, be sure to charge the Scope for at least 4 hours. When charging, please leave the USB cover open, use the provided Type C USB charging cable and power adapter. The charging indicator light stays red, then turns green when charging is completed.

### **BATTERY COVER**

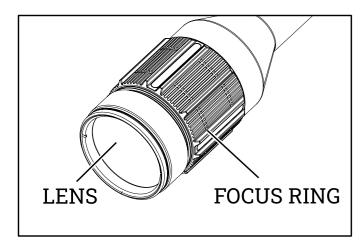
To install or remove the battery, please remove the battery cover on the right side. Please insert the battery in the direction shown in the figure, do not force the battery in.

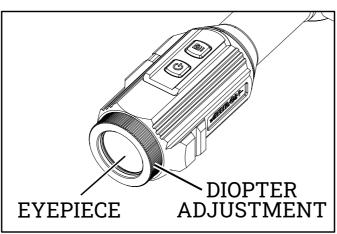






When the scope is powered on for the first time to select the language, rotate the "Menu Knob" to scroll up and down to select the language; Short press the "M Button" to confirm the language selection and jump to the Home interface; long press The "M Button" to return to the language scrolling selection.



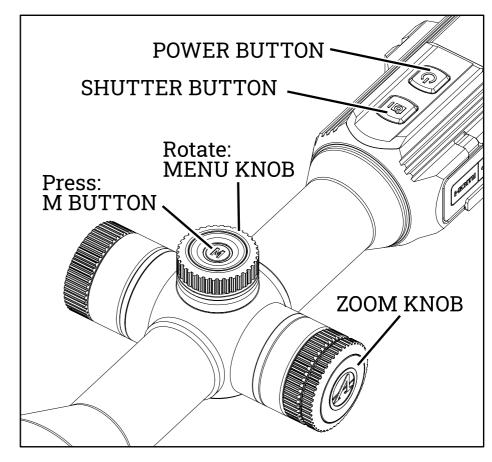


### DIOPTER ADJUSTMENT:

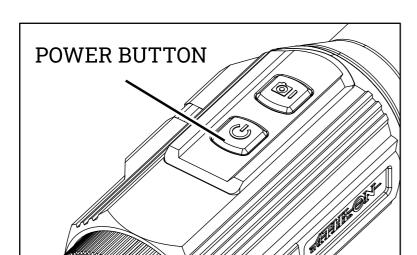
After the thermal scope is powered on, rotate the diopter adjustment knob to correct differences for each individual's eye sight until a clear image is observed.

### FOCUS:

After the thermal scope is powered on, rotate the focus ring until the target image becomes clear. Repeat this step when distance to the target changes.



Button	Current device status	Rotation	Short Press	Long Press
	Power on	/	Compensation	Display on/off
Power Button	Power off	/	/	Power on
Dutton	Display off	/	Display on	/
	Menu bar not shown	Switch to color palettes	/	/
Menu Knob	Menu bar displayed	Toggle options	/	/
	Menu bar not shown	/	Shortcut menu	Menu
M Button	Menu bar displayed	/	Select current option	Return to previous option
Zoom Knob	Menu bar not	Zoom	/	/
	shown	/	Quick Zoom	Holdover distance menu



### POWER ON:

Long press and hold the power button until the startup picture appears in the eyepiece. If internal battery is completely discharged, the device can not be turned on with external battery only. It can be turned on with the included power adapter through USB-C port.

### POWER OFF.

**a. Manual power-off:** long press and hold the power button, the power-off progress bar will be displayed, and the power-off is completed after the progress bar is finished.

**b. Automatic power-off:** in the set automatic power-off time, without any button operation, the scope will power down.

### DISPLAY ON:

In display off mode, press any button to wake the screen.

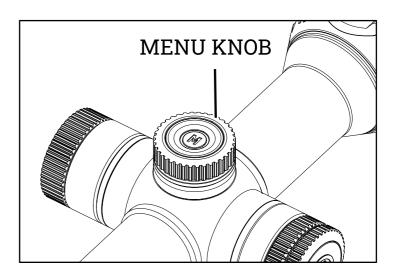
### **DISPLAY OFF**

Press and hold the power button, the progress bar of power-off will be displayed. Before the progress bar is finished, release the power-off button to cancel the power off process and activate the display off mode.

### COMPENSATION:

When it is turned on and the menu is not activated, short-press the power on/ off button to refresh the thermal sensor. Two Compensation modes, manual and automatic, can be set through the Main Menu.

### **6.2.2 MENU KNOB**



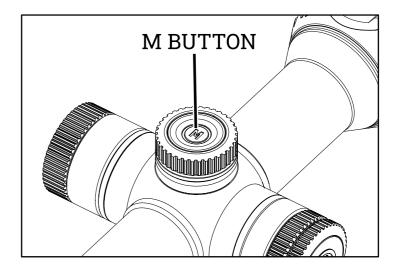
### **QUICK COLOR PALETTE SWITCHING**

When the scope is turned on and the menu is not activated, turn the menu knob to switch between white hot, black hot, red hot, iron red, blue hot, green hot, and sepia color.

### **MENU MOVEMENT**

When the menu is activated, turn the menu knob clockwise to move menu or option down/to the right; Turn the knob counterclockwise to move menu or option up/to the left.

### **6.2.3 M BUTTON**



### SHORTCUT MENU-

When it is powered on and the menu is not activated, short-press the "M" button, and the shortcut menu option will appear.

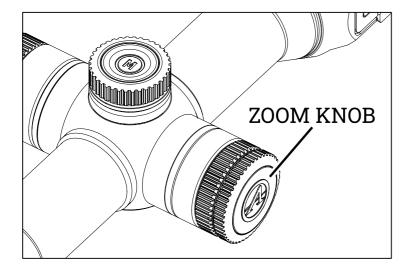
### MAIN MENU-

Main menu option is activated by long-pressing the "M" button.

### **CONFIRM AND BACK/EXIT**

When it is powered on and the menu is activated, short-press the "M" button to confirm the current selection and return to the previous menu; Press and hold the "M" button to return to or exit the menu without saving the current settings.

### **6.2.4 ZOOM KNOB**



### ZOOM-IN-

When it is turned on, rotate the zoom knob counter-clockwise to enlarge the image in 0.1X steps, and zooming stops when the maximum magnification is reached.

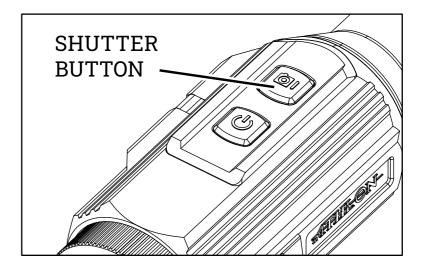
### ZOOM-OUT:

When it is turned on, rotate the zoom knob clockwise to shrink the image by 0.1X, and stop when it reaches the minimum value.

### **OUICK ZOOM**

The quick zoom can be obtained by short-pressing the button on the zoom knob.

### **6.2.5 SHUTTER BUTTON**



### TAKE PHOTOS:

When it is turned on, rotate the zoom knob counter-clockwise to enlarge the image in 0.1X steps, and zooming stops when the maximum magnification is reached.

### VIDEO RECORDING.

When it is turned on, rotate the zoom knob clockwise to shrink the image by 0.1X, and stop when it reaches the minimum value.

### **CHAPTER 7 - FUNCTION DESCRIPTION**

# 7.1 HOME SCREEN LIST 2 3 4 5 6 7 8 9 10 1.0x 30° 2024-01-01 12:12:00

18)

19

1) PIP: left top, middle top, right top display

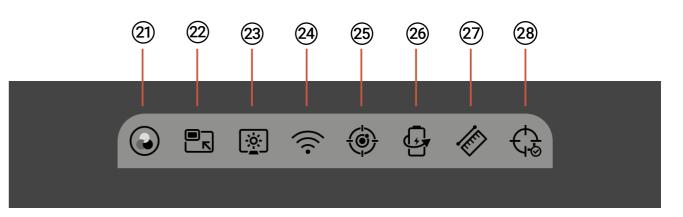
13 14

15(16(17)

- 2) Recording duration
- 3) Magnification power
- 4) Video Recording Failed
- 5) Comensation Mode Indicator
- 6) Video Recording Successful
- 7) Audio Input Indicator
- 8) WiFi connected
- 9) Bluetooth on
- 10) Auto-shot Record
- 11) Eco-mode on
- 12) Battery capacity indication
- 13) Ballistic Calculator Indicator
- 14) Zero in distance / Zero profile
- 15) Internal memory full warning
- 16) USB Mode
- 17) Serial Port Connection Mode
- 18) Date
- 19) Time
- 20) Ranging Angle Indication

### **7.2 SHORTCUT MENU**

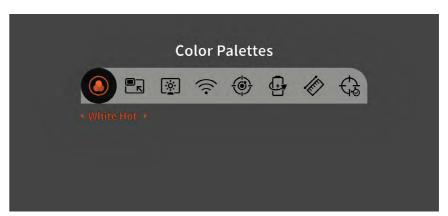
When the power is turned on and the menu is not activated, short press the "M Button" to display the shortcut menu options.



### COLOR PALETTES



Switch among seven color palettes (white hot, black hot, red hot, iron red, blue hot, green hot, and sepia).



### 22 PIP



Choose from top left, top middle, and top right positions.

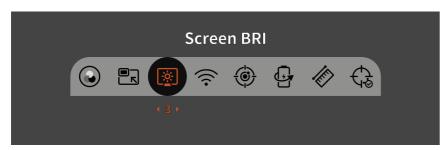


19

### 23 SCREEN BRIGHTNESS



1-10 Screen Brightness level can be adjusted.



### 24 WIFI



WiFi can be used to transmit real-time video to the mobile phone after the mobile phone is connected to your device, and the device can be operated through the Athlon Thermal APP to access the photos/videos of the device; photos/videos can be played, shared, deleted, etc.

▲ NOTE: Search and download Athlon Thermal APP in the mobile phone APP store, open the APP, find the WiFi name 'Cronus ATS PRO XX-XXX' in the settings of mobile phone WiFi, and enter the password '12345678', to start remote operation after successful connection.



### =25= HOT TRACK •



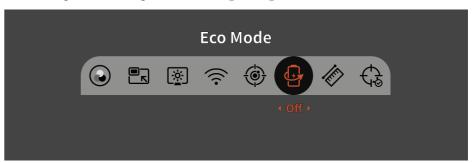
A white cross cursor is displayed when it is turned on to trace the highest temperature point in the full image.



### 26 ECO MODE



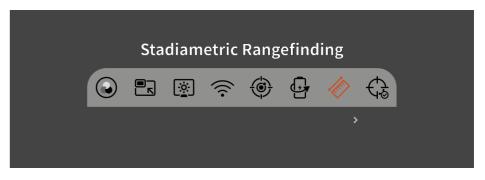
After being turned on, the scope will switch to power-saving mode, under which OLED brightness will be fixed to 20% and cannot be adjusted, and WIFI will not be turned on. If the current WIFI is already on, WIFI will be turned off, and the shooting record function cannot be turned on. If you are currently in shooting recording mode, the prompt is turned off.

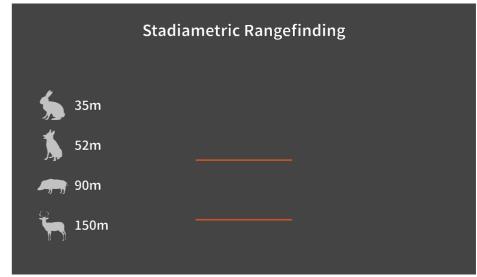


### 27 STADIAMETRIC RANGEFINDING



The position of the lower horizontal line remains unchanged and rotate the Menu knob to move the upper horizontal line until the spacing between the two lines is equal to the image height of the target. The distance from the target can be estimated by referring to the approximate ranging values of the four animals (rabbit - 14", coyote - 21", wild boar - 30", and deer - 36") in the upper left corner.







7.3 MAIN MENU OPERATION

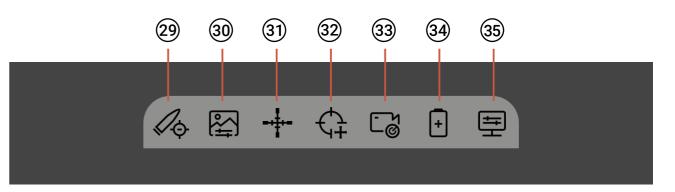


The preset zero distances under the profile selected in the main menu must match zero calibration in short menu.

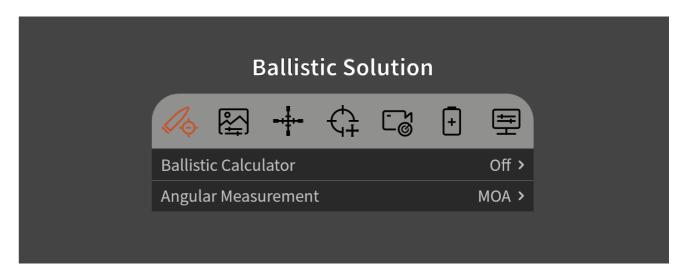
▲ NOTE: Only select the distances that have been zeroed, and do not select the distance still set at default factory x/y value (0,0).



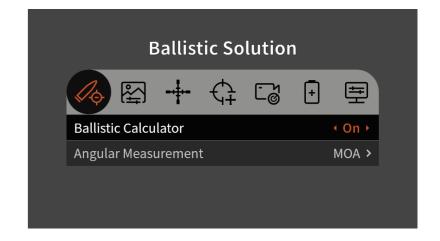
After scope is turned on, long press M Button to activate main menu, exit, and go back to main category level after saving a setting change. Short Press M Button to select a category or a setting, and save changes and exit a setting. Rotate Menu Knob to cycle through categories, individual settings, and values of individual settings. Main menu stays on and turns off if no any input is made within 12 seconds, long press M Button to reactivate it.



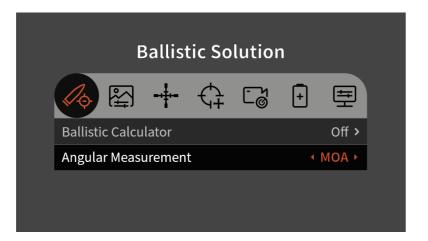
### 29 BALLISTIC SOLUTION



profiles must be created in the Athlon Ballistics APP first. Long press zoom button to set holdover distances. Holdover points for up to 4 different distances can be adjusted through this menu.

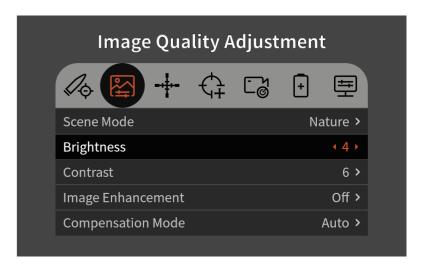


**Angular Measurement:** Select between MOA and MIL units of measurement.

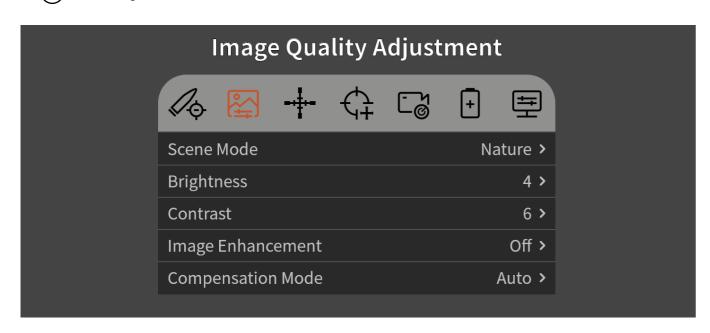


**Brightness:** Brightness can be adjusted within 1-10 levels.

♠ NOTE: The value of adjusted brightness will be saved in the current scene mode.

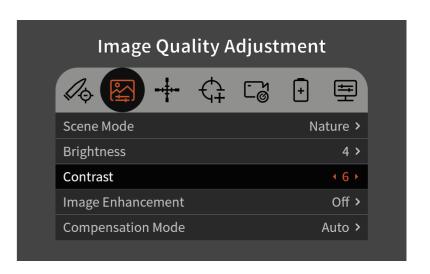


30 IMAGE QUALITY ADJUSTMENT

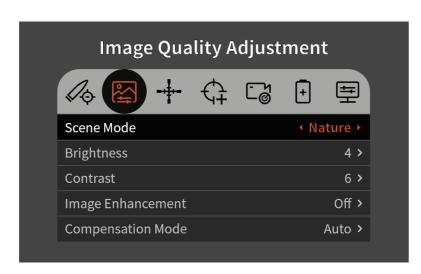


**Contrast:** Contrast can be adjusted within 1-10 levels.

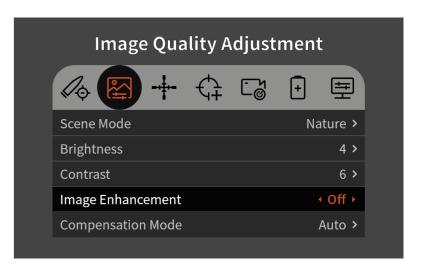
▲ NOTE: The value of adjusted contrast will be saved in the current scene mode.



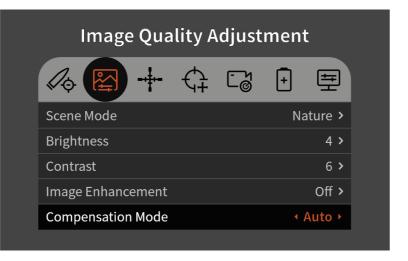
**Scene Mode:** Three scene modes, natural/enhanced/highlight, can be set.



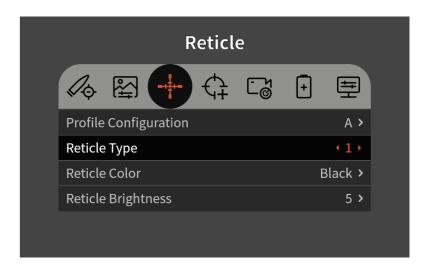
**Image Enhancement:** Turn on to enhance the image quality.



Compensation Mode: Shutter Mode can be set through the Main Menu. Scene Mode sets short pressing the power button to capture an even temperature surface to refresh the thermal sensor. The best way to perform Scene Mode compensation is doing it with the lens cap closed. Shutter Mode sets short pressing the power button to close the device shutter and create an even temperature surface to refresh the thermal sensor.



**Reticle Type:** 10 reticle types in total can be selected.



Reticle

Profile Configuration

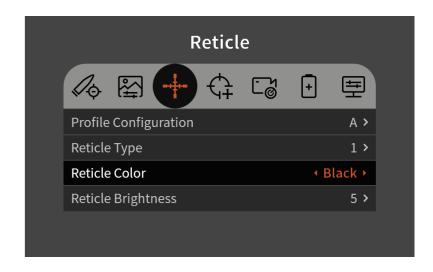
Reticle Type

Reticle Color

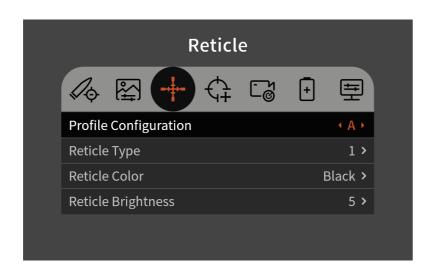
Reticle Brightness

5 >

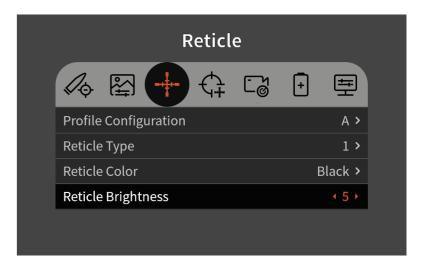
**Reticle Color:** Can be selected in black/white/yellow/green/blue/red.

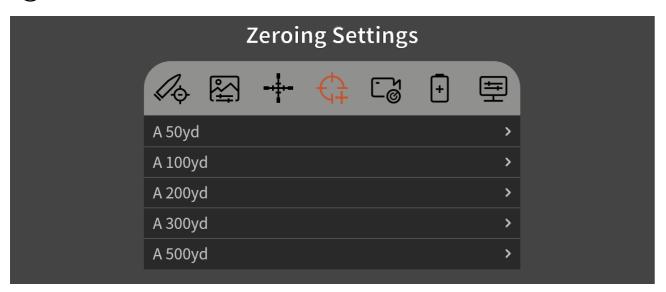


**Profile Configuration:** 10 groups of zeroing profiles, from A-J can be saved. The zeroing distance, zeroing location, reticle type, reticle color and reticle brightness are saved for each profile.

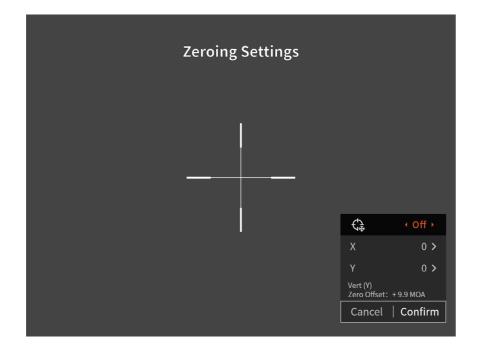


**Reticle Brightness:** Can be adjusted within 1-10 levels.

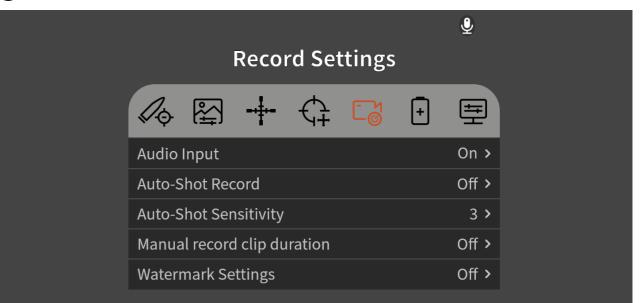




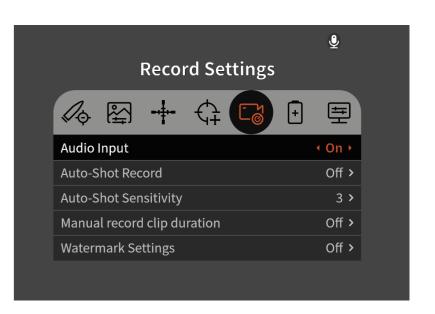
Zeroing Settings: This is the user interface for one-shot zeroing. 50/100/200/300/500 yards or meters can be selected for zeroing under each group of profiles. After zero is set, use the shortcut menu to select the preset zero distance under each profile.





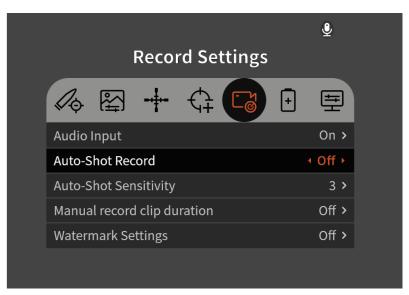


Audio Input: When the microphone is turned on, you can record audio while recording video, so that the sound is integrated into the video files.

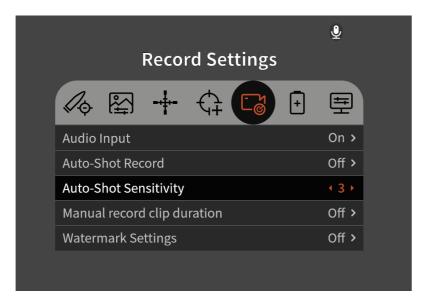


Auto-Shot Record: When this function is turned on, it will automatically record a video and 5 images when the user shoots (video: 3 seconds before shooting ~ 7 seconds after shooting).

If a shot is made within the 7 seconds, the device will continue recording for 30 minutes.

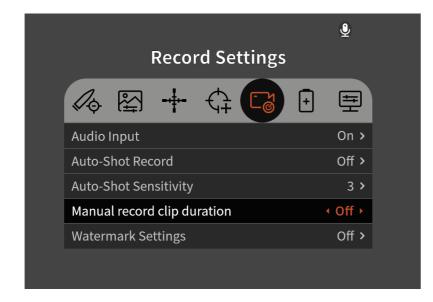


**Auto-Shot Sensitivity:** Shooting trigger sensitivity, divided into 1-5 settings; the 5th setting is the most sensitive setting.

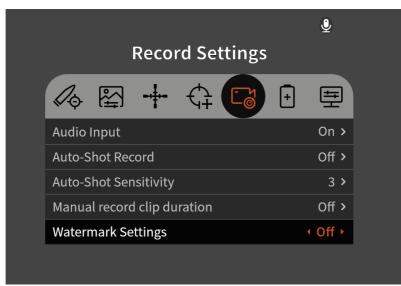


### **Manual Record Clip Duration:**

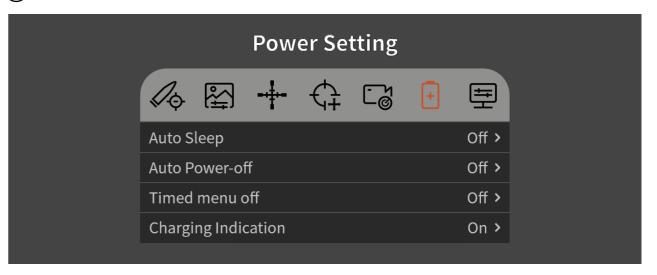
15/60 second clip duration can be selected to automatically end video recording within the time selected.



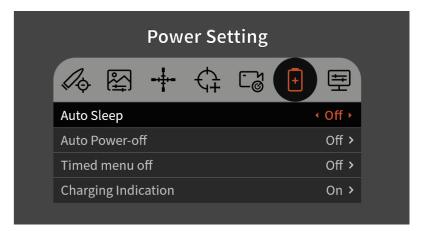
**Watermark Settings:** Support time and date.



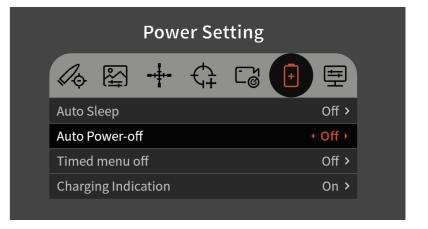
34 POWER SETTINGS



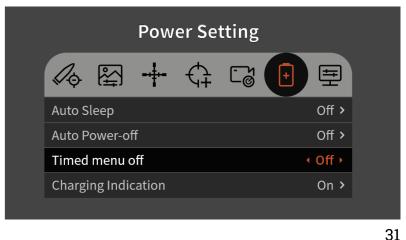
**Auto Sleep:** The Auto Sleep time can be set to 5/10/15 min. If there is no operation within the set time, the scope will enter sleep mode.



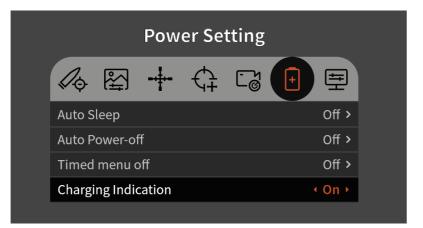
Auto Power-Off: The automatic Power-off time can be set to 15/30/60 minutes. If there is no operation within the set time, the power-off will be activated, and the scope will be powered off.



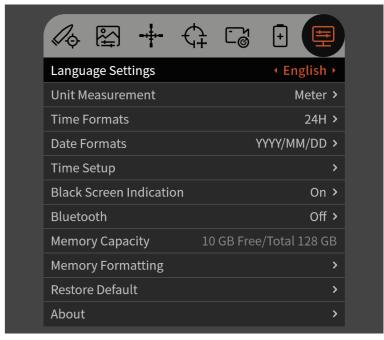
**Timed Menu off:** the menu can be turned off automatically within 10/20/60 seconds.



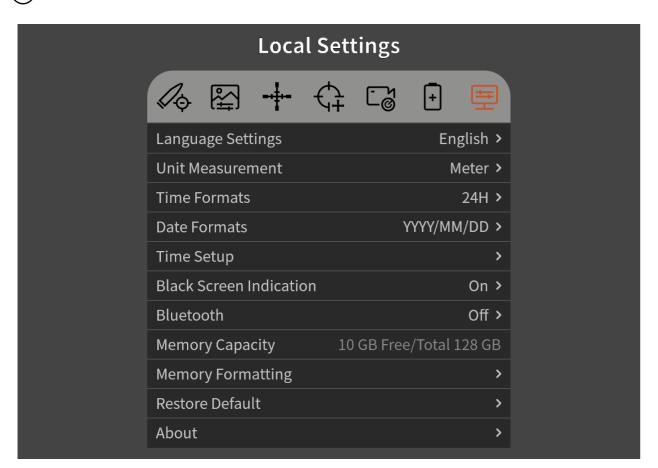
**Charging Indication:** Switch that turns On/Off the charging port indication light



**Language Settings:** Available in English/French/German/Italian/Spanish



35 LOCAL SETTINGS



Unit Measurement: yard or meter

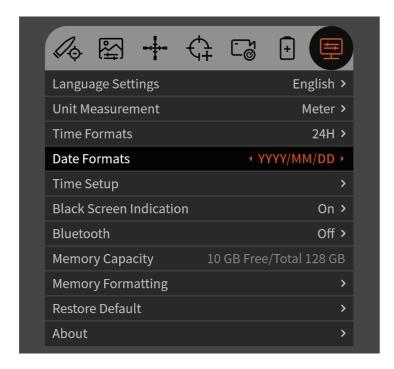


**Time Formats**: selectable between 12H / 24H

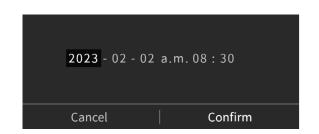


### **Date Formats:**

Optional from: MM-DD-YYYY YYYY-MM-DD DD-MM-YYYY

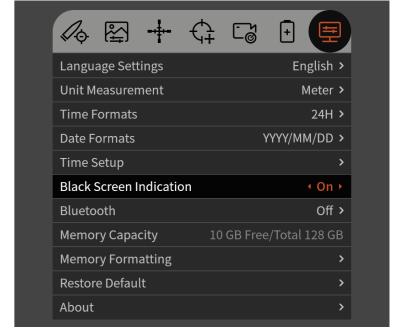


**Time Setup:** Enter the Time Setup, rotate the Menu knob to move among different options, and press the "M" button to enter the next level adjustment, and then rotate the Menu knob to move between the specific time values





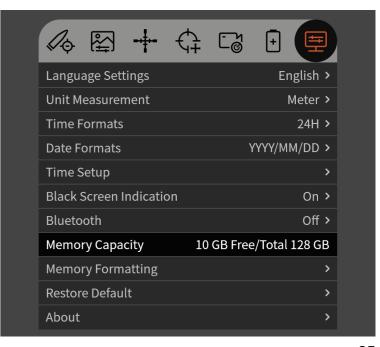
**Black Screen Indication**: black screen indication icon can be turned on and off



**Bluetooth:** Can be turned on and off

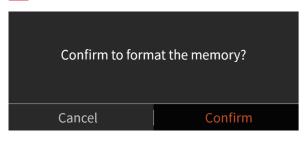


**Memory Capacity:** free memory capacity/total capacity



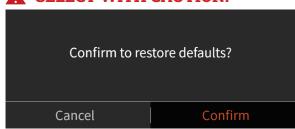
**Memory Formatting:** Select Memory Formatting. Select "Confirm" to confirm formatting, and select "Cancel" to cancel the operation

### **A** SELECT WITH CAUTION!



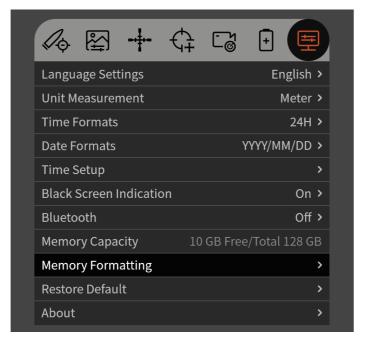
**Restore Default:** You can choose to restore the factory settings. Select "Confirm" to restore all parameters to factory settings; Select "Cancel" to cancel the operation

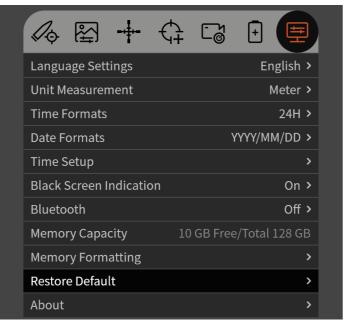
### **▲ SELECT WITH CAUTION!**



**About:** Check the current device in the APP version number and MAC address

SN	: ZG26E11YYWW0001
MAC	: 00-00-00-00-00
ASIC	: V1.0.0.20220630
ARM	: V1.0.0.20220630
MCU	: 21.1.11.1
APP	: V1.0.0.20220630





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Language Settings	Eng	;lish >
Unit Measurement	М	eter >
Time Formats		24H >
Date Formats	YYYY/MM	/DD >
Time Setup		>
Black Screen Indication		On >
Bluetooth		Off >
Memory Capacity	10 GB Free/Total 1	28 GB
Memory Formatting		>
Restore Default		>
About		>

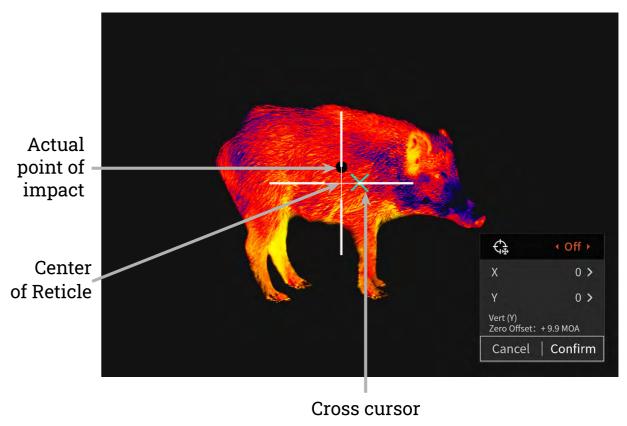
### 7.4 ONE SHOT ZERO CALIBRATION

To sight in the rifle to your zero position please follow the steps as below:

Go to Zeroing Settings interface via the main menu to start zeroing in process. Aim the reticle center to the center of the target, and hold the rifle as stable as possible and fire a bullet. Rotate the menu knob to turn on the freeze option in the pop-up window showing "X" and "Y" while making sure the light green X (cross cursor) still pointing at the center of target.

After the image is frozen, short press M Button and then rotate the Menu knob to select and adjust the value of "X" (move left and right) or "Y" (move up and down) to move the center of the reticle until it overlaps with the actual point of impact. Use menu knob to select the "Confirm" option in the Pops up window, and short press the M button to confirm it. Each rotation of the Menu knob moves the center of the reticle by 1px. The cross cursor represents the original aiming point before any adjustment was made. Each rotation of the Menu knob moves the center of the reticle by 1px. The cross cursor represents the original aiming point before any adjustment was made.

The verticle zero offset value can only be set through Athlon Ballistic APP.



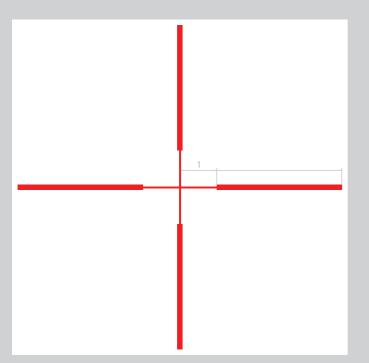
### MOA RETICLES

# 3

### #01 - MOA

1 - 20 MOA 2 - 68 MOA 3- 4 MOA

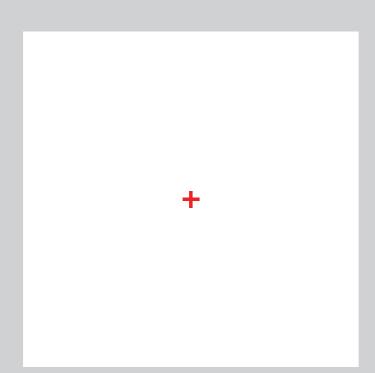
thin line - 2 px thick line - 6 px dot - 4 px



### #02 - MOA

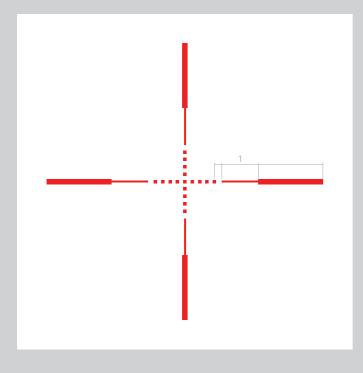
1 - 20 MOA 2 - 68 MOA

thin line - 2 px thick line - 6 px



### #03 - MOA

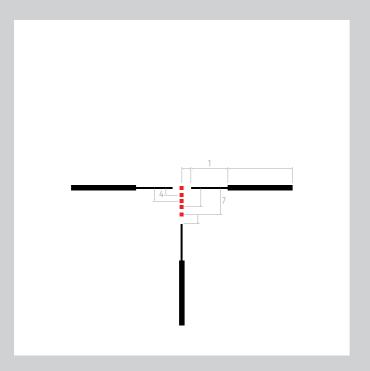
20x20 px floating cross 4px line thickness



### #04 - MOA

1 - 20 MOA 2 - 35 MOA 3- 4 MOA

thin line - 2 px thick line - 6 px dots - 4 px



### #05 - MOA

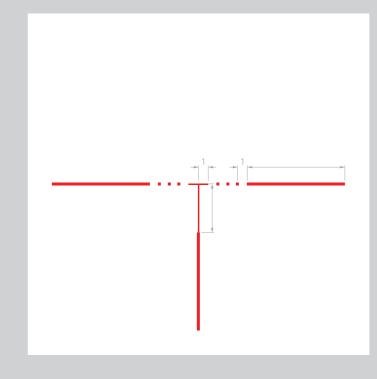
1 - 20 MOA 2 - 35 MOA

3 - 5 MOA 4 - 4 MOA 5 - 7.3 MOA

6 - 10.4 MOA 7 - 14.6 MOA

thin line - 2 px thick line - 6 px dots - 4 px

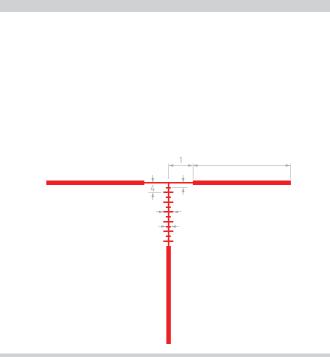
### MIL RETICLES



### #01 - MIL

1 - 2 MIL 2 - 20 MIL 3 - 10 MIL

thin line - 2 px thick line - 4 px dots - 4 px



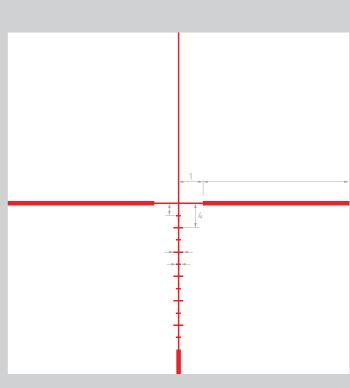
### #02 - MIL

1 - 5 MI L 2 - 20 MIL

3 - 1 MIL

4 - 2 MI L 5 - 2 MIL 6 - 1 MI L

thin line - 2 px thick line - 6 p x

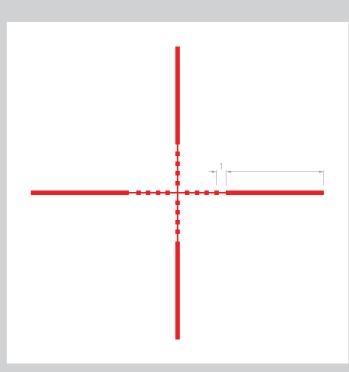


### #03 - MIL

1 - 5 MI L 2 - 20 MIL 3 - 2.5 MIL

4 - 5 MI L 5 - 2 MIL 6 - 1 MI L

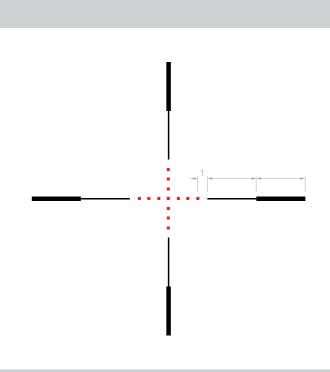
thin line - 2 px thick line - 6 p x



### #04 - MI L

1 - 2 MIL 2 - 20 MIL

thin line - 2 px thick line - 6 px dots - 6 px



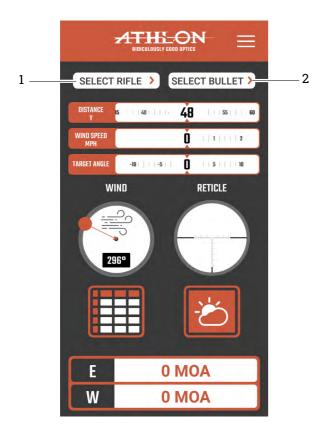
### #05 - MIL

1 - 2 MIL 2 - 10 MI L 3 - 10 MI L

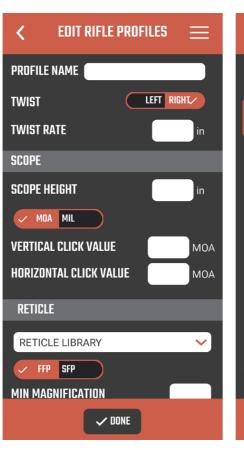
thin line - 2 px thick line - 6 px dots - 4 px

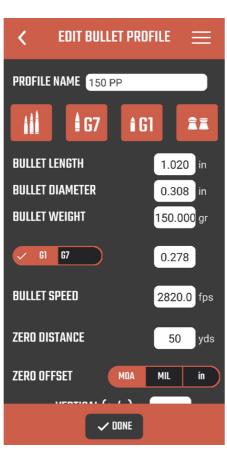
### **CHAPTER 9 - BALLISTICS APP**

In order to get ballistics on your thermal device, you will need to download the Athlon Ballistics app to your phone. Here you will create your rifle and bullet profiles to transmit to your thermal device.

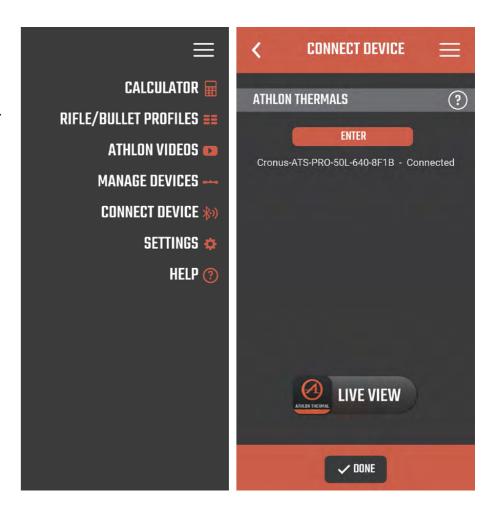


- 1) Create a rifle profile.
- 2) Create a bullet profile.
  Once the fields have
  been completed, clicking
  DONE will save your
  profile.
- ▲ NOTE: When creating these profiles, ensure you are providing accurate details in order to get accurate ballistics.





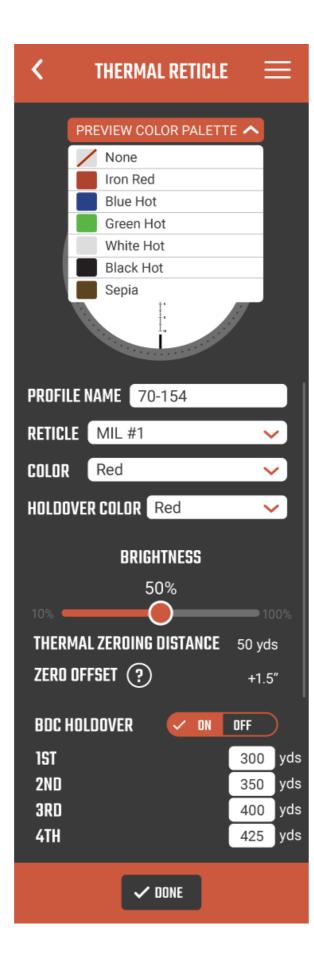
- Turn on the thermal devices WiFi, and connect your cellular device to the thermal devices WiFi connection.
- 4) Open the hamburger menu and select CONNECT DEVICE.
- 5) Once in CONNECT DEVICE, the thermal device will be displayed. Click ENTER and then EDIT PROFILES.



- 6) Select the Rifle and Bullet profiles that you want to associate with the corresponding thermal Profile Configuration.
- 7) Clicking DONE will save the changes and transfer the data.



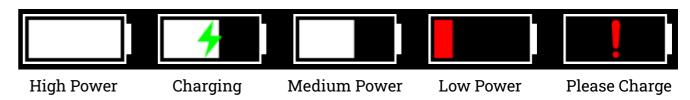
8) The Thermal Reticle page allows you to preview the color palettes of your main reticle, holdover reticle, as well as the crosshairs. You can fine tune the brightness and determine what ranges you want the holdovers to be at.



### **CHAPTER 10 - OTHER INSTRUCTIONS**

### **10.1 POWER DISPLAY**

**Power Display:** When the thermal scope is turned on and the battery level changes, the battery indicator is displayed in the lower left corner of the screen, and the highlighted part of the battery indicator shows the remaining battery capacity.



NOTE: When the internal battery is low, please charge it as soon as possible. The scope can not be turned on when the internal battery is out of power, and can only be turned on with external power supply through the USB-C port.

### **10.2 SOFTWARE CONNECTION**

### **WiFi Connection:**

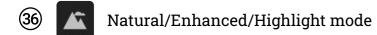
- 1) Download the 'Athlon Thermal ' APP on your mobile phone;
- 2) Turn on product's WiFi via main menu
- 3) Enter the mobile phone WiFi setting, select the WiFi name of "CRONUS ATS PRO XX-xxxx', enter the password '12345678' to connect;
- 4) Return to "Athlon Thermal" APP on your mobile phone
- ▲ NOTE: In order to ensure reliable Wi-Fi signal connection and stable data transmission, please keep the scope and the phone within 15 yard, and there are no obstacles (such as partition walls, etc.).

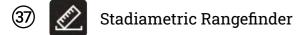
### **App Function Description:**

Control the Scope on the APP: After the APP is successfully connected to the device's WiFi, the Scope can be remotely controlled.



### **Function Icons:**





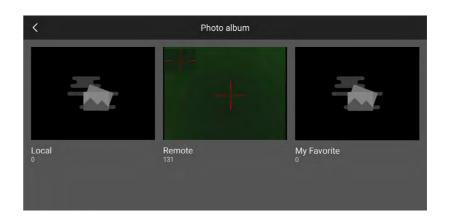


39 Not track, PIP, Image Enhancement

40 Reticle Settings, Common Settings

### **Other Icons:**

- (41) Shooting Status Display
- White Hot/Black Hot/Red Hot/Iron Red/Blue Hot/Green Hot/Sepia
- 43 Shooting/Recording Control Key
- Recording Status Display
- 45 APP Gallery entry



### Access files on the APP

Control the scope on the APP: After the APP is successfully connected to the device's WiFi, the scope can be remotely controlled.

- Local album: after the APP is connected to the scope's WIFI, the location of the file will be stored on the APP after pictures/videos are taken, and the files will be automatically saved to the local photo album of the mobile phone; the pictures/videos can be collected, shared and deleted.
- **Remote Scope**: after the APP is connected to device's WIFI, the location of the file will be stored on the APP after pictures/videos are taken; the photos/videos can be downloaded, deleted and so on. The files will be automatically saved to the local photo album of the mobile phone.
- **My Favorites:** The location where the pictures/videos are stored after they are added to my favorites.

### **CHAPTER 11 - FIRMWARE UPDATE**

It is recommended for end users to get the latest version of firmware for improved performance and better image quality. Please follow either of the following methods to complete the update:

### 11.1 UPDATE VIA APP

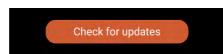
- 1) Power on the thermal optic and turn on the scopes WiFi through main menu.
- Connect the thermal optic to your mobile device using this WiFi connection.
- 3) Open the Athlon Thermal mobile APP and click "About Device" in the upper right corner.

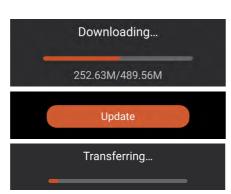


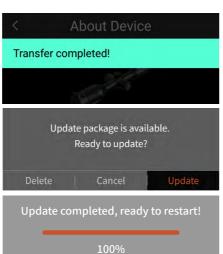
- 4) Make sure the mobile device has cellular data connection and then tap the "Check for updates" button.
- 5) If there is an update available, it will appear on the screen. Tap the "Download" button and wait for 100% completion.
- 6) After the download is completed, tap the "Update" button to start the transferring process.
- 7) Once the firmware transfer is completed, the APP will show "Transfer completed!" on the top of the screen.

The screen of the thermal scope will show the options "Delete" "Cancel" and "Update." Rotate the menu knob and press the M button to select "Update."

Once the progress bar shows 100% completion, power off and on the thermal scope to begin enjoying the new firmware.







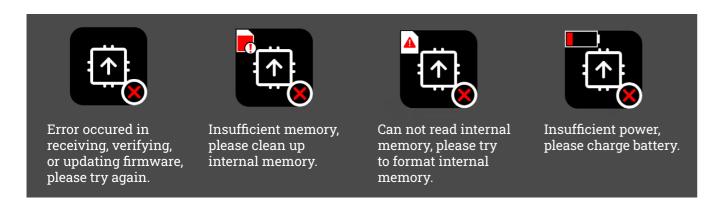
### 11.2 UPDATE VIA COMPUTER

- 1) Download the firmware package to your computer.
- To download the firmware package, visit the following URL: https://athlonoptics.com/thermal-firmware-update/

Thermal Model	What's the update	Firmware Package	ASIC
CRONUS ATS PRO 35-400	Color sensitivity	<u>V.X.X.X</u>	V1.X.X.XXXXXXXX
CRONUS ATS PRO 50-640	Color sensitivity	<u>V.X.X.X</u>	V1.X.X.XXXXXXXX
CRONUS ATS PRO 35L-400	Color sensitivity	<u>V.X.X.X</u>	V1.X.X.XXXXXXXX
CRONUS ATS PRO 50L-640	Color sensitivity	V.X.X.X	V1.X.X.XXXXXXXX

- ▲ NOTE: if you accidently download the update package twice, please use the first download file named ota-asic.img not ota-asic(1).img. The exact file name must be used.
- 2) Turn on thermal device to "Com Mode."
- On the thermal device, long press the power button and M button at the same time when the device powers on, then release the power button while continuing to press the M button.
- Check the device LED screen to ensure it is in "Com Mode."
- 3) Connect the thermal device to your computer.
- Use type C cable to connect the thermal device to your computer.
- 4) Copy the downloaded firmware package to your computer.
- On your computer, copy the downloaded firmware package (ota-asic.img) to the root directory of the Thermal USB drive.
- Turn off the thermal device, then turn it back on. The firmware will update automatically.
- 5) Check if firmware updated successfully.
- Long press the M button until the Menu appears
- Select the Local Settings by turning M button. Go to the About screen and confirm the ASIC number matches the number listed with the update package. If it matches, then the firmware has updated successfully.

6) Below warning messages will be displayed if the thermal device has insufficient power, internal memory, or failed receiving and updating the firmware.



▲ NOTE: If the updating failed and the thermal unit cannot be operated normally, please hold the M button and the power button simultaneously for 15 seconds to perform a hard power off and then power on the unit normally to restart the updating process.

### **CHAPTER 12 - COMMON TROUBLESHOOTING GUIDE**

1) The device failed to be powered on.

**Solution**: Replace the battery or connect charger.

2) The device has trouble taking pictures/videos.

**Solution**: The internal storage space of the device is full and/or the memory card needs to be formatted.

- 3) The time displayed on the device does not match the actual time.
  - **Solution**: Reset the time and date of the device in the menu.
- 4) The screen goes off during the use.

**Solution**: Short press any button to wake up from sleep and light up the screen.

- 5) Image displayed on the device is blurry during operation.
  - **Solution**: Turn the lens to focus manually until the image is clear.
- 6) The device is in deadlock stage and cannot be powered off normally.

**Solution**: Long press the M button and the power button simultaneously for 15 seconds to have a hard power off and then power the unit on normally.



## PRODUCT WARRANTY CARD

### **Warranty Registration Required**

This product carries a 5-year warranty from the date of purchase. For your product to qualify for this warranty, you must provide proof of purchase, the model and serial number of the device. Once activated, the device is warrantied 5 years from the date of purchase.

- 1) This warranty does not cover damages caused by deliberate damage, misuse, theft or maintenance provided by someone other than the Athlon Authorized Service Department.
- 2) Please note that any altering of the products, such as Duracoat, hyrdo dipping or spray painting, will void the warranty on all thermal devices.

Scan the QR code to complete the online form to register your device.



# SHARP, TIGHT AND PRICED JUST RIGHT!

Toll free: 1-855-913-5678

contact@athlonoptics.com

10817 RENNER BLVD, LENEXA, KS 66219

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