

# X-Sight II HD Series

## DAY/NIGHT RIFLESCOPES



## MANUAL

X-SIGHT II USER'S GUIDE (REV. 5, MARCH 2019)



**AMERICAN  
TECHNOLOGIES  
NETWORK  
CORP.**

## X-Sight II HD 5-20



## X-Sight II HD 3-14



**IR850  
Infra-Red illuminator  
(included)**

### CAUTION!

**THIS PRODUCT CONTAINS NATURAL RUBBER LATEX WHICH MAY CAUSE ALLERGIC REACTIONS**

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## FEATURES

-  RECORD HD VIDEO
-  WiFi
-  SMOOTH ZOOM
-  E-COMPASS
-  SMART RANGE FINDER
-  SHOOTING SOLUTIONS
-  BLUETOOTH
-  DAY/NIGHT MODE
-  3D GYROSCOPE
-  RECOIL ACTIVATED VIDEO (RAV)

## APPLICATION

The first digital scope to break the true HD barrier! Gone are the grainy black and white images – the X-Sight II takes digital imaging to a whole new level. Crystal clear images and millions of colors will have you forgetting that you are looking through a digital scope. Immerse yourself in an advanced cockpit like experience. Take advantage of the suite of sensors and advanced processing power for an entirely new shooting experience like never before.

Share the fun with your friends and family with HD video and photos that you can take day or night. No more forgetting to record those “perfect shots” with ATN’s RAV (Recoil Activated Video) feature that automatically records videos before and after you pull the trigger.

X-Sight II – the most powerful shooting solution on the market that will not break the bank.

## SPECIFICATIONS

Item	ATN X-Sight II 3-14x	ATN X-Sight II 5-20x
Generation	Smart HD Optics	
Magnification	3-14x	5-20x
Eye relief	65 mm	
IR Illuminator 850	Detachable - 850 mW	
Sensor	HD 1080p ATN L130 Sensor	
Ports	Micro HDMI, Micro USB, microSD	
Power	4 AA type batteries (lithium recommended)	
Compatible mounts	A.R.M.S.® #17® (single lever), A.R.M.S.® #35® (double lever), LaRue LT270, American Defense (AD-170)	
MicroSD Card	Up to 64 Gb	
Video Out	1080p at 30 fps	
Remote View Finder	via IOS or Android app	
Dimensions	11.56" x 3.1" x 3.4" 294 x 79 x 87 mm	11.36" x 3.50" x 3.45" 289 x 90 x 88 mm
Weight	2.15 lb / 0.98 kg	2.55 lb / 1.16 kg

\* ATN reserves the right to change the above specifications at any time without notice

## PREPARING THE DEVICE

### UNPACKING

- The following steps must be performed before using the device.
1. Open packaging box, remove X-Sight II and check the contents.
  2. Make sure that nothing is missing.
  3. Inspect the device for damage to optical surfaces, body, eyecups, operation buttons, etc.
  4. Ensure that all optical surfaces are clean and ready for use.

#### NOTE

**If any accessories are missing or broken contact ATN's Customer Service.**

### INSTALLATION OF BATTERIES

The X-Sight II will operate on four AA-type Lithium batteries.

#### NOTE

**We highly recommend using lithium AA batteries. They will provide much longer battery life. Use only 1.5 V batteries. Or if possible use Kentli Lithium-Ion Rechargeable batteries.**

Install batteries as follows:

1. Remove the battery cap by unscrewing it counter clockwise.
2. Insert batteries as shown.
3. Return the battery cap into the housing (screw clockwise until finger tight).



Do not over tighten as it will be difficult to remove the next time you replace batteries. But make sure that the Red O-Ring is not visible, after the battery cap is reinstalled. This will prevent shut off issues due to recoil.

#### NOTE

**Make sure that the device is turned off before changing source of energy (batteries or USB in power supply mode).**

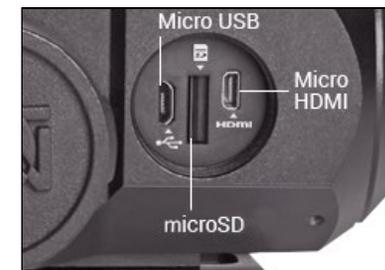
### MicroSD, USB AND HDMI PORTS

The device is equipped with a microSD Card, Micro USB and Micro HDMI ports. You can find them under the cap near the battery block (we marked the cap with appropriate icons).

To open the cap you should unscrew it counterclockwise.

#### NOTE

**Make sure that the device is turned off before inserting the card into the slot.**



1. A new card should be formatted before using.
2. Insert microSD card as shown.



3. To lock when inserting card in the slot, push it with a thin object (a small coin, paper clip, toothpick, etc.).

4. Return the cap into the housing (screw clockwise until finger tight).

**NOTE**

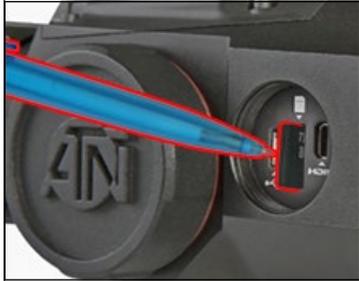
*There is only one correct direction to insert the microSD Card.*

*Do not force the card into the slot as it may damage both the scope and the card itself.*

To remove the microSD Card from the slot, push it in using the same thin object. When it pops up a few millimeters, it can be pulled with your fingers or tweezers.

**NOTE**

*If you are going to record video the microSD Card should be a Class 10 (10 Mb/sec) or faster and have capacity from 4 to 64 Gb.*



## FIRMWARE UPDATE

Before operating your device please update the firmware to the latest version.

To receive a notification of new firmware updates, please register your device on our website (you'll receive an email letting you know, when new firmware becomes available).

To update the new firmware you will need a microSD Card and fully charged lithium-ion batteries.

**NOTE**

*In the event of a power failure during an update the device may crash corrupting its system files and will need to be sent back to the ATN factory for service.*

Update the new firmware as follows:

1. Download the \*.bin file from <https://www.atncorp.com/firmware> (You may need to create an account, if you didn't create it earlier) and copy to your microSD Card — root directory.

2. Insert the card into the device.

3. Turn ON the device.

4. In the "Firmware Update" dialog box select "Yes" to start the update.

5. When the update counter reaches "100%" the device will automatically restart.

6. Once the device is powered up it will enter self configuration mode.

7. After completing it will automatically restart and will be ready for use.

8. Motion Sensing platform will be configured when first turned on.

9. Once the Firmware update completes, please do a factory reset before using the product.

10. Please remember to delete the Firmware File off of the microSD card after all steps are completed.

**NOTE**

*If the device does not restart within 30 seconds, remove and re-insert the batteries and power-up the device.*



## ON/OFF

To TURN ON the device press and hold the POWER button until you see the ATN splash screen.

To TURN OFF the device press and hold the POWER button, until the dialog box "Shut down the device?" appears. Choose "Yes" to turn off.



## USING YOUR KEYPAD

The KEYPAD is programmed to be used in two different ways:

- Short and Quick Taps — used for most functions and to get around the menu;
- Press and Hold — designed to be used in the following situations — ON/OFF, ZOOM, SHORTCUT MENU.

**NOTE**

*Using LEFT or RIGHT buttons in the Menu. You can quickly choose Exit Shortcut from any position.*



## FOCUSING

### DIOPTRER ADJUSTMENT

By rotating the Diopter Adjustment Ring you will achieve optimal sharpness for your vision. Look through the eyepiece while focusing on the reticle on the screen.

Do not take the rubber cap off the objective lens.

**NOTE**

*You should not need to re-adjust the Diopter Adjustment unless another user with different vision then yourself will be using the scope.*



### DISTANCE FOCUS

Remove the cap from the objective lens and rotate the Adjustment Dial as necessary to achieve proper focus at various distances.





## MOUNTING

Mount your X-Sight II as follows:

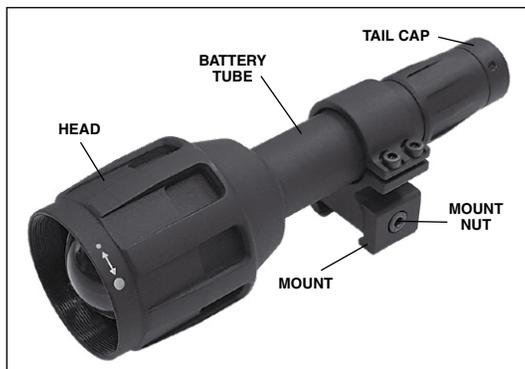
1. Slightly loosen the fixing screws on the 7/8" Picatinny Mount built into the scope.
2. Place the scope on the Picatinny rail of the firearm.
3. Tighten the fixing screws.

### NOTE

*Fixing screws may need to be retightened after continuous shooting.*

**We recommend using "Loctite" to make sure the screws will not loosen during shooting.**

## LONG RANGE 850 mW INFRA-RED ILLUMINATOR



## INTRODUCTION

ATN IR850 an extremely powerful, long range 850 mW infra-red illuminator for hunting, law enforcement, search & rescue and military use.

Before using your IR850, please read this manual carefully. If a problem occurs, refer to the troubleshooting tips.

## SPECIFICATIONS

LED Module	Using high power emitter with the IR850 driver
Output	Dual lithium batteries that drives the emitter at 1~1.8A
Lens	Aspherical glass
Eye relief	65 mm
Material	Constructed using aircraft grade aluminium
Surface	Type III hard anodized with highly durable finish
Waterproof	IPX-8
Battery type	2 x 3V (CR123A)
Dimensions, mm	155 (length) x 49 (head) x 22 (body) x 24 (tail)
Weight, g	240
Color	Black

\* ATN reserves the right to change the above specifications at any time without notice.

## FEATURES

- Constructed using aircraft grade aluminium.
- Waterproof to IPX-8 standard
- Flawless white beam
- Easy rail mounting system
- One-year Warranty

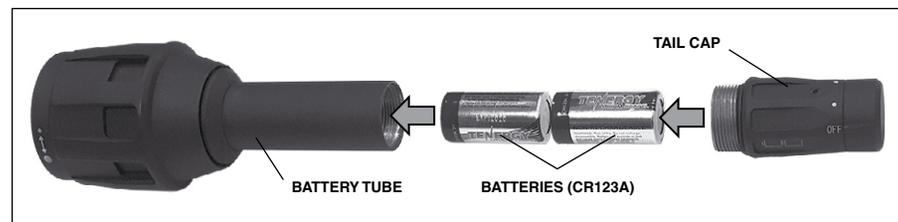
## BATTERY

### NOTE:

**Please hold the battery tube (not the flashlight head or neck) when tightening/loosening the tail-cap.**

The IR850 IR Illuminator uses two CR123A batteries.

1. Remove the tail cap unscrewing it until it is free of the body.
2. Install the battery in the body, observing proper battery polarity.
3. Install the tail cap back on the body.



## MODES

The IR850 has three stage output — Low, Medium and High system. Low at 5%, 20 h. Medium at 30%, 8 h. High at 100%, 1.6 h.

### General Mode:

The factory preset modes control the brightness of the IR850 illuminator.

The three modes are designated on the tail cap that activates the modes. The modes are distinguishable by the size of the dot on the tail cap. The small dot indicates the lowest power output setting. The medium dot indicates the medium output power setting. The large dot indicates the strongest output power setting.

To activate the desired mode, turn the end of the tail cap, so that the dot indicator is aligned with the desired power output. This will turn on the required output for your needs.

To turn off the IR850 illuminator, simple turn the tail cap so that the dot indicator is positioned on the off setting.

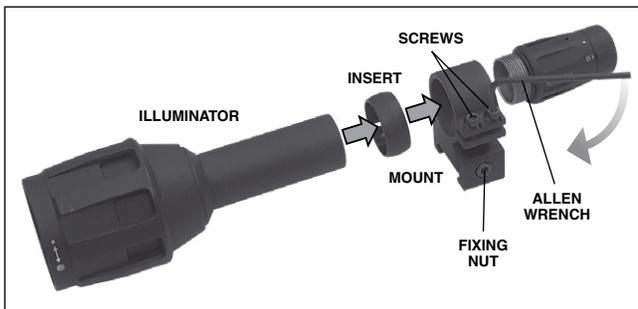
## FOCUS

Turn the light on maximum output and shine it on a wall 8~10 m away. To focus the beam, hold the head in one hand and turn the neck section with your other hand turn clockwise or anti-clockwise.

## MOUNT

Attach the IR850 to adjustable mount as follows:

1. Unscrew the two screws.



2. Place the insert in the mount.
3. Insert the illuminator into the mount with insert.
4. Secure the two screws using an align wrench. Do not apply excessive torque.

## ALIGNING THE IR BEAM

In order to Align the IR850 illuminator to your scope. After the IR850 is assembled into the mount. Place it on the X-Sight side accessory rail or on your rifles accessory picatinny rail. Once mounted securely, slightly loosen the two screws on top of the mounting ring.

While looking through the X-sight at night with night mode activated. Move the IR850 around in the mount until you see the IR light covering your entire field of view in the X-sight view finder. Once you have adjusted your IR light to be aligned with your X-Sight FOV, gently tighten the two screws on top of the mounting ring with an align wrench.

## MAINTENANCE

To prevent wear and retain water-resistance it is a good idea to lubricate the threads and o-rings if they become dry.

## TROUBLESHOOTING

Light dimming

1. Battery may be faulty. Try another fully charged battery.
2. Battery may need charging. Charge your battery and re-try.

## COMPASS CALIBRATION



When the compass needs to be calibrated the word "CAL" appears instead of the Compass Scale. To calibrate you should rotate the device in three axis as pictured on the left.

### NOTE

**After calibrating the device please remember that the compass will work best when holding the X-Sight parallel to the ground.**

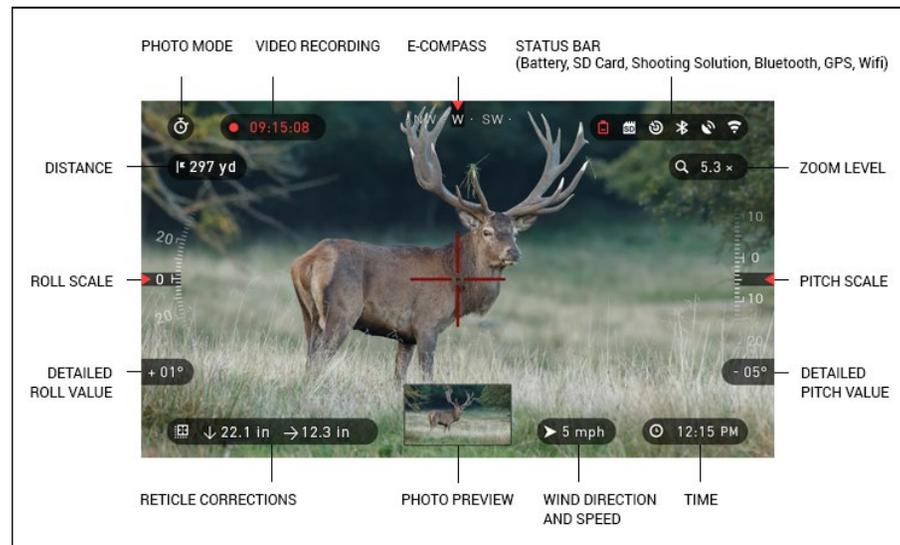
Other possible abbreviations:

- ERR — an error was detected;
- SMF — your device is under Strong Magnetic Field;
- UPD — your firmware needs to be updated.

# INTERFACE

## HOMESCREEN

The first screen you'll see after switching on the device is Homescreen. It consists of Scales, Status Bar icons and different Information Widgets.



## SCALES

E-Compass Scale shows yaw angle based on e-Magnetometer data.

Roll Scale shows rifle cant based on internal 3D Gyroscope.

Pitch Scale shows rifle inclination based on internal 3D Gyroscope.

## STATUS BAR

Its job is to display information about the current state of the system.

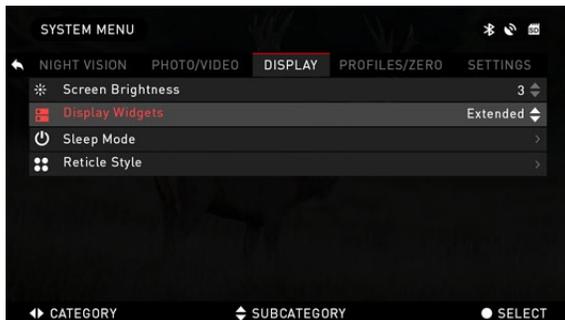
Currently inactive icons become invisible, so you may see only the important information at the moment:

- Battery — appears when energy level is low;
- SD Card — shows the presence or absence (red icon) of memory card;
- Shooting Solution, Bluetooth, GPS and WiFi — shows when a function is enabled.

## WIDGETS

They are interface elements which provide quick access to useful information. There are several types of widgets:

- icons without value — is used for mode displaying (Photo and Video Modes);
- only numerical value (Detailed Roll and Pitch Values);
- icons with a numerical value; Range, Zoom, Time, Reticle Correction, Wind Speed.
- Photo Preview (appears in the bottom of the homescreen, after the photo was taken).



Display widgets can be disabled from the System Menu.

To enter System Menu you should click on the CENTER button  from Homescreen and access the Shortcut Carousel.

Then select the wrench icon with RIGHT or LEFT buttons  and push CENTER button  to enter the menu.

Select Display tab with RIGHT button  and choose subcategory Display Widgets with DOWN button .

Press the CENTER button  to select the Display Widgets. Use the UP or DOWN buttons  to



change from Extended to Minimal.

## MAIN OPERATIONS



ZOOM LEVEL

By pressing and holding the UP or DOWN button  on the keypad you will be able to Zoom IN and OUT.

Current Zoom Level is displayed in the Zoom widget on the Homescreen.

### NOTE

**When the device is activated for the first time you need to configure the lens option in the pop-up window before zooming.**

While using Smart Shooting Solution your reticle can be off set from the center point of the screen. Then during Zoom In action it will move to the center.



TAKING PHOTOS

Press the LEFT button  to TAKE A PHOTO.

Depending on the selected mode you will make one or several photos. You can choose from various photo modes in the System Menu.



VIDEO RECORDING

By pressing the RIGHT button  you will be able to RECORD VIDEO (if you use Normal Mode) or START RAV (if Recoil Activated Video mode is on).

You can switch the video recording modes in the System Menu.

### NOTE

**Your recording will automatically stop when the memory card is full or the battery is out of power.**



SHORTCUT CAROUSEL

The CENTER button  opens the menu and closes it down when pressed again.

## SHORTCUT CAROUSEL

The Carousel is your access to a number of Shortcuts that allows you quick access to your scope's features. Just click on the CENTER button  from Homescreen to access the Carousel.

Buttons highlighted in Red are the only ones that activate a particular shortcut.

Movement between the items is carried out using the LEFT & RIGHT buttons , except the group of ON/OFF switches (WiFi, GPS, Bluetooth, Shooting Solution, RAV).

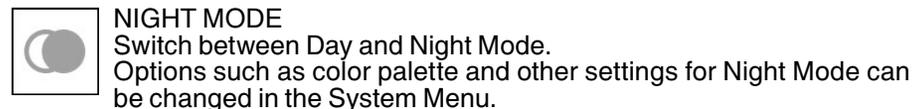


You should use the UP & DOWN buttons  between switches.

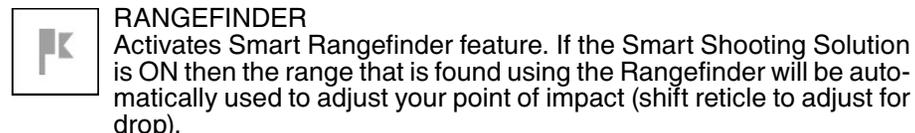
To turn ON or OFF a particular switch you should click the CENTER button  while having the switch selected. Example — WiFi.



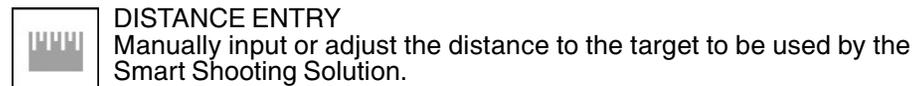
EXIT  
Exit Carousel.



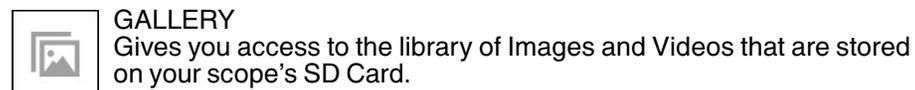
NIGHT MODE  
Switch between Day and Night Mode. Options such as color palette and other settings for Night Mode can be changed in the System Menu.



RANGEFINDER  
Activates Smart Rangefinder feature. If the Smart Shooting Solution is ON then the range that is found using the Rangefinder will be automatically used to adjust your point of impact (shift reticle to adjust for drop).



DISTANCE ENTRY  
Manually input or adjust the distance to the target to be used by the Smart Shooting Solution.



GALLERY  
Gives you access to the library of Images and Videos that are stored on your scope's SD Card.



### ENVIRONMENT

Allows for input of various environmental data to improve ballistic correction, such as wind speed and direction.



### SYSTEM MENU

Allows access to various system options and adjustments.

The grouped switches consist of these next items:



WiFi module



GPS module



Bluetooth module



Smart Shooting Solution



RAV (Recoil Activated Video)

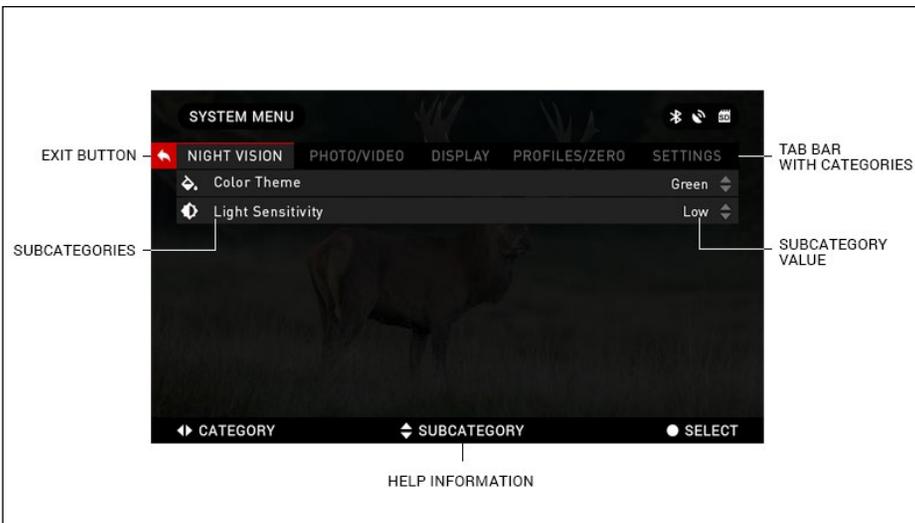
## USING SYSTEM MENU



To enter the System Menu you should open Shortcut Carousel with CENTER button and select the wrench icon with RIGHT or LEFT buttons .

Then push CENTER button to enter the menu.

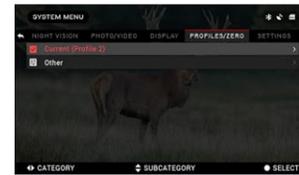
The System Menu consists of a Tab Bar at the top of the screen, list of subcategories in the center and Help Information at the bottom.



On the left side of the Tab Bar you will find the Exit (with arrow icon). Pressing it with CENTER button will bring you back to the Homescreen.

Movement between the tabs is carried out using the LEFT and RIGHT buttons .

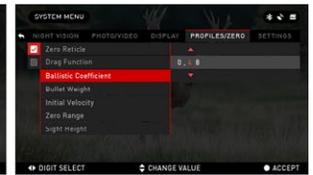
Each tab includes subcategories. To select a particular subcategory you should use the UP and DOWN buttons and press CENTER button to select it.



FIRST LEVEL



SECOND LEVEL

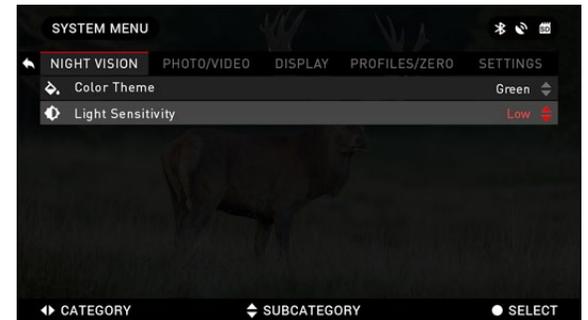
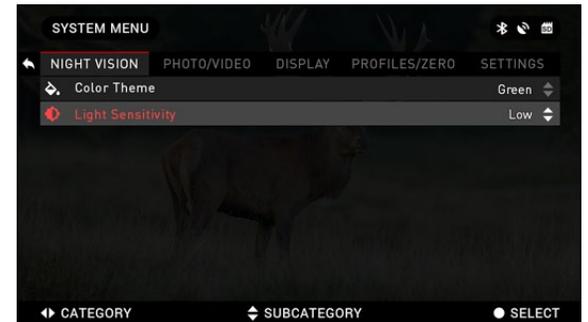


THIRD LEVEL

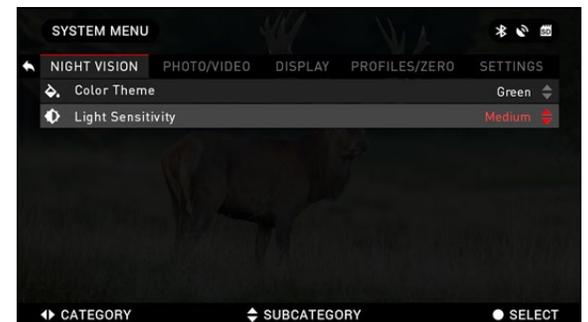
To change a particular value you should follow the next few steps. Select the subcategory you need with the UP or DOWN buttons .

Press the Center button to select a particular value (once selected it will turn red).

Change the value with the UP and DOWN buttons .



To select a new value press CENTER button to confirm the change.



# FUNCTIONS



## NIGHT VISION

To switch between Day and Night Mode you should choose NIGHT MODE in Shortcuts.

Shortcuts allow you quick access to the Carousel that contains quick access to your scope's features. Just click on the CENTER button  to access the Carousel.

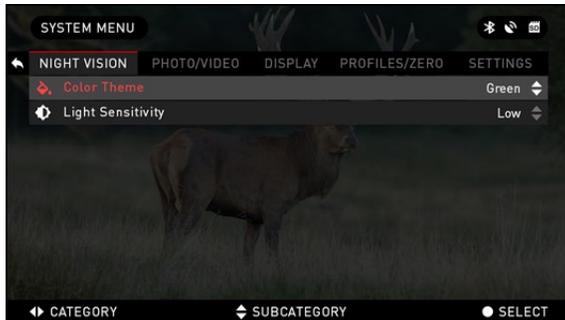
Buttons highlighted in Red are the only ones that activate a particular shortcut. Movement between the items is carried out using the LEFT & RIGHT buttons .

### NOTE

**Remember that turning on Night Mode during daylight will not harm your device, however you may not be able to see anything due to the image being too bright.**

You can choose preferred Color Theme or adjust the Light Sensitivity in the System Menu (Night Vision section).

To enter the System Menu you should open Shortcut Carousel with CENTER



and Black&White modes follow the next few steps.



next time you activate Night Vision Mode from the

button  and select the wrench icon with RIGHT or LEFT buttons .

Then push CENTER button  to enter the menu.

Choose Night Vision in the Tab Menu. Movement between the tabs is carried out using the LEFT and RIGHT buttons .

To switch between Green and Black&White modes follow the next few steps. Select Color Theme subcategory in Night Vision Tab by pressing UP and DOWN buttons .

Then Press the Center button  to select a particular value (once selected it will turn red). And choose Green or Black&White mode, confirm it by pressing CENTER button .

Your preferred Color Theme will be used the next time you activate Night Vision Mode from the Shortcut Menu.

### NOTE

**Light Amplification does not change when changing color modes.**

**For the best video quality while recording in Night Vision mode. We suggest having your Light Sensitivity settings on Medium.**

## PHOTO MODES

Press the LEFT button

 while staying on the Homescreen to TAKE A PHOTO.

You must have a microSD card inserted in the device for these features to work. All files will be stored on the microSD card.

Depending on the selected mode you will make one or several photos. You can choose from various photo modes in the System Menu.

To enter the System Menu you should open Shortcut Carousel with

CENTER button  and select the wrench icon with RIGHT or LEFT buttons .

Then push CENTER button  to enter the menu. Use the Right button till you select Photo/Video tab.

There are three photo modes to choose from. Switching between modes is done in the System Menu from Photo/Video tab, subcategory Photo Mode.

Use UP or DOWN buttons  to switch between modes. Press the CENTER button  to select a particular value (once selected it will turn red).



### NORMAL

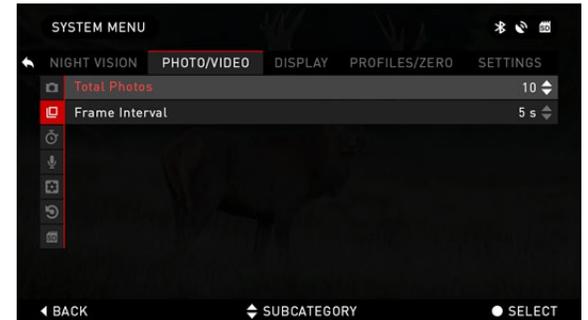
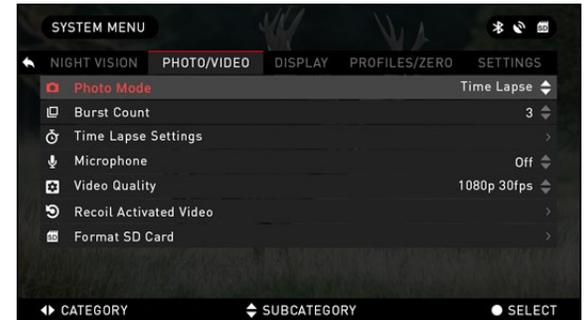
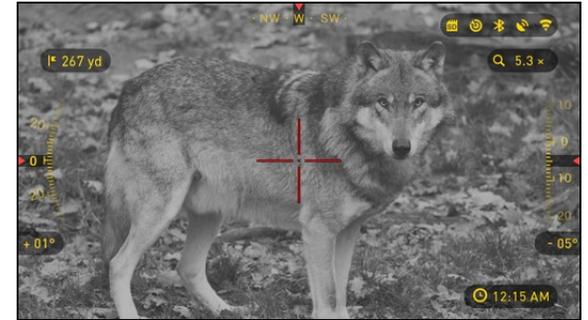
This default mode allows you to take one photo at a time.

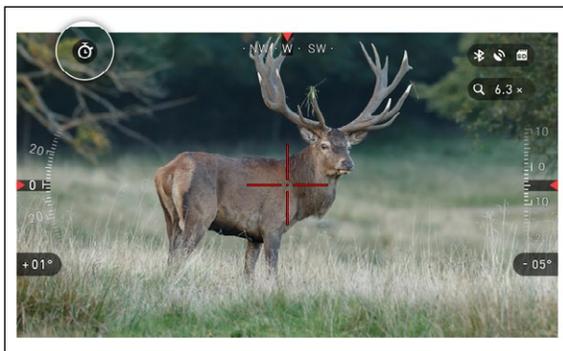


### TIME LAPSE

Time-lapse is where the device takes a sequence of images of a subject with an interval of time between each image.

The interval and the number of photos taken can be changed in the System Menu.





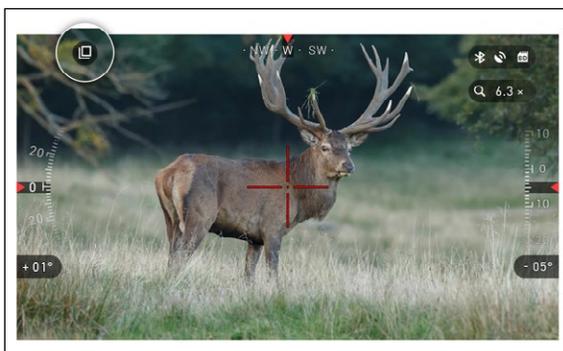
To make changes choose Photo/Video Tab in System Menu, then use UP or DOWN buttons  to select Time Lapse Settings.

Press the Center button  to enter the mode settings. While you are in this mode, the Time Lapse widget appears.



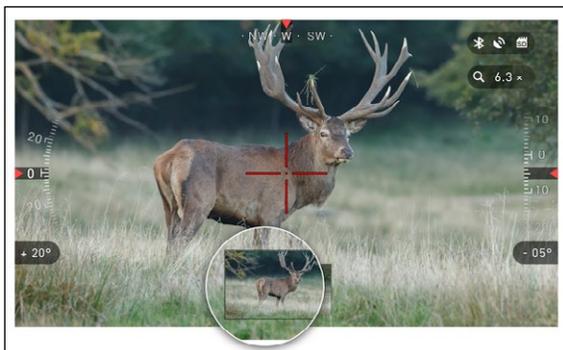
## BURST

Burst mode captures a series of photos.



You can select the best image of the group or arrange them in a sequence to study the transitions in detail.

The number of the photos taken can be changed in the System Menu. While you are in this mode, the Burst widget appears.



Regardless of which mode you are using the preview appears after a photograph is taken on the bottom of the screen for several seconds.

## RECOIL ACTIVATED VIDEO

Recoil Activated Video (patent pending) offers a unique approach to taking videos with your Smart Sight. RAV offers you an ability to take a video of before, during and after your shot has been fired.

Perfect for those hunting moments when getting your target far outweighs the importance of remembering to turn on your video record. Simply set your RAV to ON, set your parameters and anytime you Pull the Trigger (RAV is acti-

vated from the recoil of your weapon) the sight will record a number of seconds before your shot, and a number of seconds after.

All conveniently organized as one continuous video.

Press the RIGHT button  to Activate RAV from the Homescreen in order to Start Video recording. Press RIGHT button  again to stop Video recording.

### NOTE

***It may be best to turn OFF the Microphone in conditions of extreme wind.***

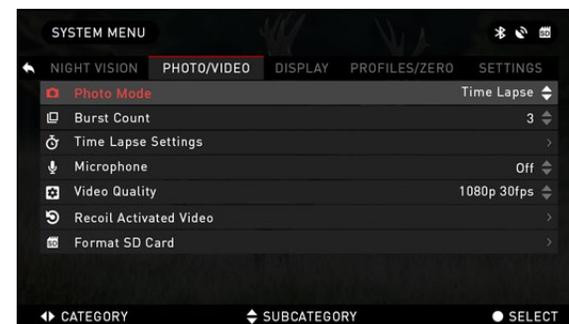
You can turn on the microphone and switch the quality of the video in the System Settings (Photo/Video tab).

To enter the System Menu you should open Shortcut Carousel with

CENTER button  and select the wrench icon with RIGHT or LEFT buttons .

Then push CENTER button  to enter the menu.

You must have a microSD card inserted in the device for these features to work. All files will be stored on the microSD card. Recorded videos you can find in the Gallery on your device.



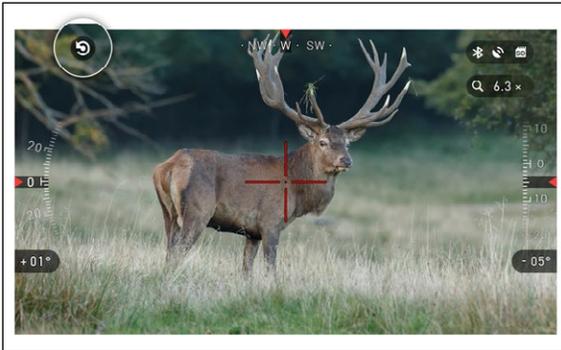
The scope allows you to record videos in two modes.



## NORMAL

The default mode. While recording the Counter widget and Time Stamp appear.





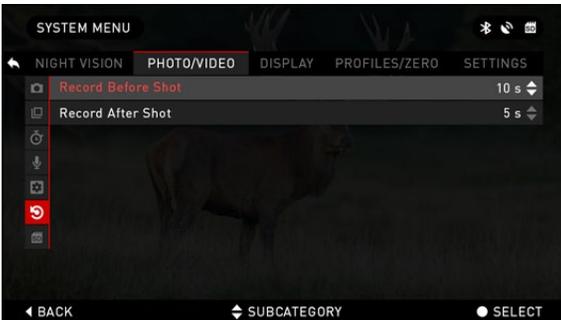
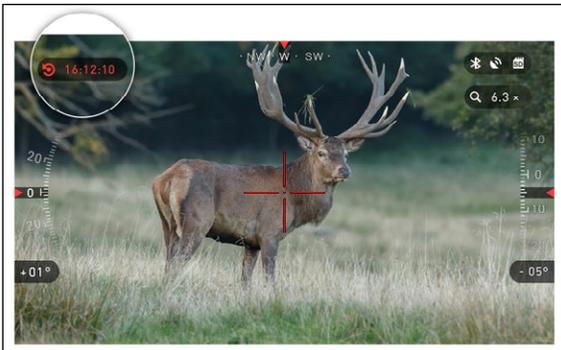
## RECOIL ACTIVATED VIDEO (RAV)

When you set your video record to RAV mode (from Shortcut Menu), the system buffers everything your scope sees.

While you are in this mode, the RAV widget appears and then after starting record the Time Counter appears.

After activating the RAV function in the Shortcut Carousel, return to the Homescreen. Continue the activation process by press the Right button that activates Video. Also, make sure you see the RAV icon on the Home screen upper left corner.

When a shot is fired and your scope experiences recoil (some airguns may not provide enough recoil for RAV to be activated) the scope will record video prior to the shot being taken, the moment of, and some time after. Exact settings may be adjusted in the System Menu.



## RANGEFINDER

Using the Smart Range Finder you will quickly be able to estimate the distance to your target as long as you have reasonable knowledge of the size of your target.

### NOTE

**Once the distance is measured the value will be automatically integrated into your Smart Shooting Solution.**

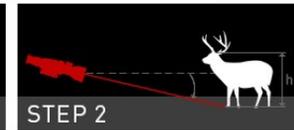
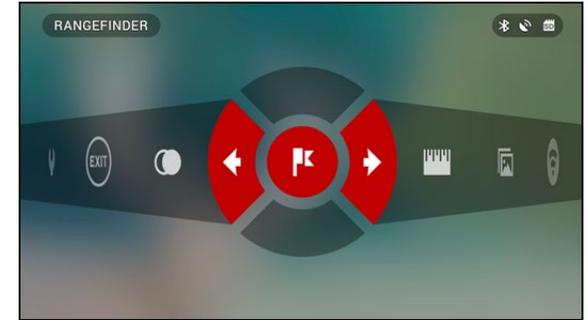
### RANGEFINDER

To use select the Flag Icon from the Shortcut Carousel.

Pressing the CENTER button  will take you to the Main Screen of the Rangefinder feature.

To measure the distance, follow the next steps:

- put the arrow-mark on the top of the target and press the CENTER button , wait for the scope to take the readings (it will take a number of readings so try to keep your weapon steady);
- put the arrow-mark under the target and press the CENTER button ;
- if satisfied with the value press the LEFT button  to go back to the Homescreen or repeat steps 1 and 2 if necessary.



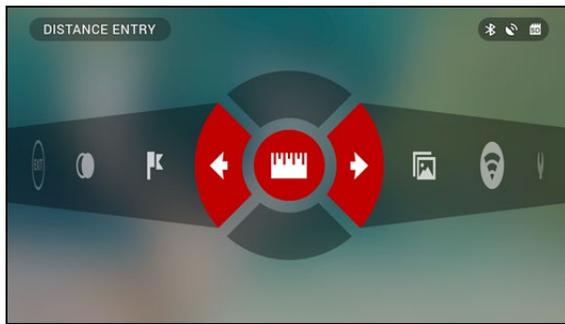
### NOTE

**During the measurement process, you can zoom in and out using standard buttons (UP and DOWN).**

If the Target Height is incorrect you can change it:

- press the RIGHT button  to enter the Menu;
- choose one of the presets or input the height manually;
- accept the height with CENTER button  and go back to the Main Screen.

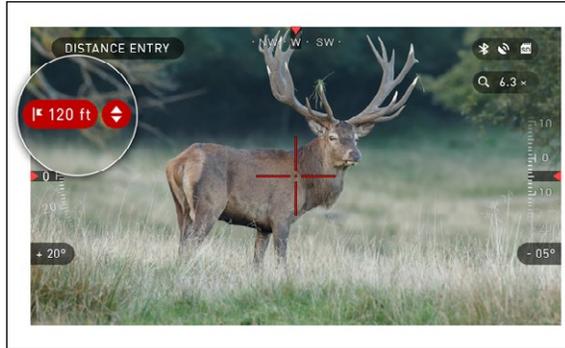




## DISTANCE ENTRY

Allows you to input or correct the distance manually. To launch you should choose it in the Shortcuts.

Change distance value using UP and DOWN buttons . To accept the new distance press CENTER button .



## ZEROING

To Zero in your scope you will need to go to the Profile/Zero section of the System Menu.

To enter the System Menu you should open Shortcut Carousel with CENTER button and select the wrench icon with RIGHT or LEFT buttons .

Then push CENTER button to enter the menu.

Before you begin the Zeroing process you will need to either create a new Profile or utilize an existing one. We recommend to create a new one to understand the process better.

Under the Profiles/Zero Category you will find Current, Other, Import from SD card, Export to SD card. Select Other. There you will see Profile 1 and Create New Profile. You can select Profile 1 and edit it. Or Create a new one and make changes to it. Once you selected a profile press the Center button to load it. Once you Load the profile it becomes your current profile.



Under the Profiles/Zero Category you will find Current, Other, Import from SD card, Export to SD card. Select Other. There you will see Profile 1 and Create New Profile. You can select Profile 1 and edit it. Or Create a new one and make changes to it. Once you selected a profile press the Center button to load it. Once you Load the profile it becomes your current profile.

Profiles are primarily used in order to utilize your scope on various weapons. This way when moving your scope from one gun to the next you can simply select the Profile that you have already created for this gun. Another reason to use multiple profiles is to be able to zero in the scope on the same gun but at different ranges. For example one Profile may be called AR 50 yards and another AR 200 yards. Allowing you to create two separate profiles to better fine tune your shooting solutions for both shorter and longer range shooting.

In order to change the profile name to what you want. You will have to do this via the ATN Obsidian app and connect your Phone/Tablet to your scope.

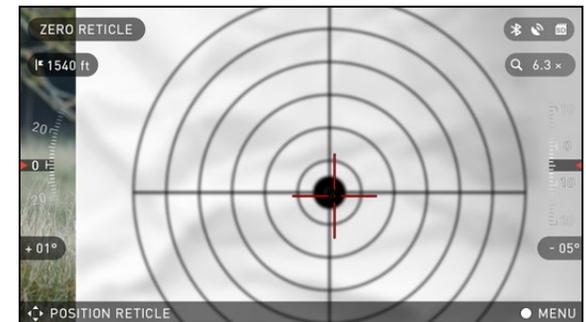
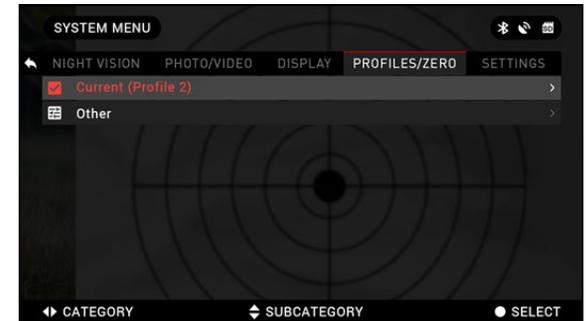
To zero your rifle with the ATN device you should follow the few next steps.

In the System Menu Select the Profiles/Zero Tab. The main Subcategories of the Profiles/Zero are Current, Other, Import from SD card, Export to SD card. Select Current, by pressing the Center Button. There you will see Zero Reticle. We suggest you fill out all the ballistic info to the best of your ability before proceeding to Zero. This will save you time when you want to use the Ballistic Calculator at a later time.

Proceed to Zero the Reticle. Press the CENTER

button to select Zero

Reticle. You will see on your screen a cross hair reticle. While keeping the gun as steady as possible fire a round. Use the key pad to move the Red cross hair to the point of impact. While keeping the White crosshair in the same place you where aiming. Once you have placed the Red crosshair on the POI press the center button. A dialogue box will appear with options. Select Save & Exit.



## NOTE

**Although you may not need more then one shot to Zero in your scope we do recommend that you repeat the process several times to make sure that you truly are Zeroed in. As you gain experience in Zeroing in your scope it should take you no time at all to Zero it.**



**NOTE**  
*In order to fine tune your zero. Select Zero Reticle once more. Press the Center Button and select Zoom. Zoom in all the way and fire the weapon. If your POI is not where you had aimed. Move the Red reticle to the POI and Exit & Save. This will insure your POI is the same on optical and maximum magnification.*



**NOTE**  
*Before Zeroing your scope, please make sure the correct lens type is selected. You can check this by going to the System Settings and selecting Settings. You will see the subcategory Device Type. Please make sure you select the lens type of your scope.*

*This lets the system know which Scope you are actually using (example: X-Sight II 3-14 or 5-20).*

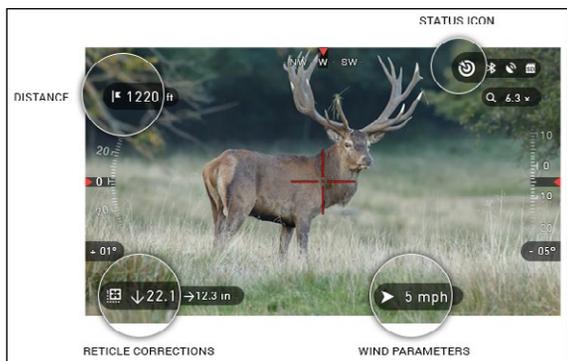
## SMART SHOOTING SOLUTION



Smart Shooting Solution is a fully integrated Ballistics Calculator that enables your scope to seamlessly adjust its point of impact. The first step in utilizing this function requires you to enter all relevant information into the Profile that is being used.

**NOTE**  
*If you do not know all or part of this info (example: Initial Velocity) we recommend that you contact the manufacturer of the ammunition and/or the weapon that you are using. Generally this info should be found on the manufacturer's website.*

Once your profile has been setup you are ready to activate the Shooting Solution on your sight.



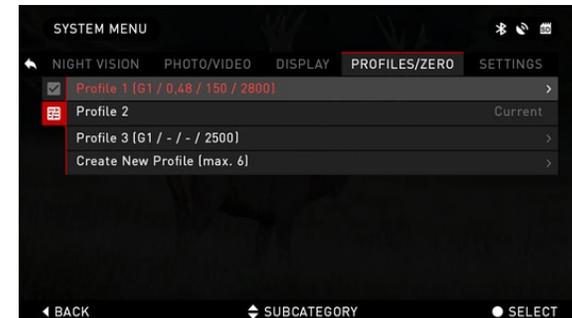
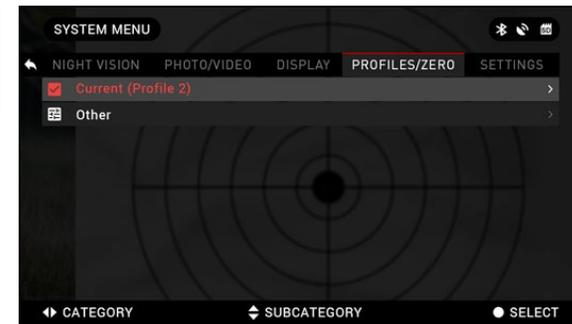
Open the Short-cut Carousel and locate the following set of icons.



You will need to scroll with UP and DOWN buttons to find the Shooting Solution bullseye icon and if it is off (indicated by a diagonal line running through the icon), you will need to turn it on by pressing CENTER

button while having the icon selected. You will see the diagonal line disappear and a Smart Shooting Solution icon will appear in the top right corner of the screen.

Profiles which are not in use are situated in the Other section. You can use an existing profile or create up to 6 new user profiles.



To edit a Profile you should select it (highlighted in red), press CENTER button and choose the action you want done: Load, Copy (Duplicate) or Delete the selected profile.



## ENVIRONMENT

There are a number of Environmental elements that may be entered to increase the precision of your shots.





### Wind:

Generally speaking Wind strengths and direction are by far the most important of the group, especially during medium to heavy winds. We highly recommend that if you plan to shoot at ranges of over 300 yards you take wind readings and enter the information into your sight.

Both wind speed and wind direction are needed if you plan to make accurate shots. You can enter the information through the Environment shortcut or you can utilize your mobile device (running the Obsidian App with a WiFi connection to your scope) whichever you find easier.

### Humidity:

Humidity must also be entered through the Environment shortcut or by utilizing your mobile device.

### Barometer Pressure, Altitude and Temperature:

Both Pressure, Altitude and Temperature will be set automatically using your sight's internal sensors.

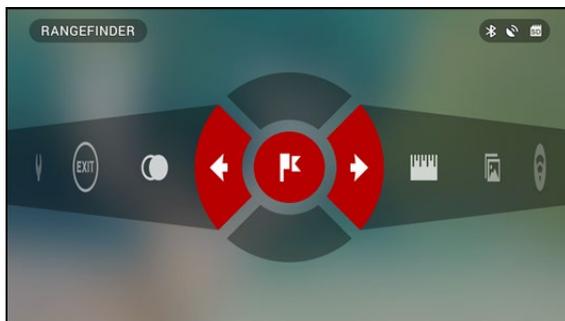
### Other Data Collected:

The angle of your scope as in relation to your target is also noted and the Smart Shooting Solution takes the information into its calculations.

### RANGING IN ON YOUR TARGET

Clearly the number one priority to achieve accuracy in long range shooting is to know the range to your target.

The Smart Shooting Solution will make your adjustments for you but only after you have entered the range to your target.



follow the next steps:

1. Put the arrow-mark on the top of the target and press the CENTER button , wait for the scope to take readings (it will take a number of readings so try to keep your weapon steady);
2. Put the arrow-mark under the target and press the CENTER button 

Your sight offers several ways to accomplish this task.

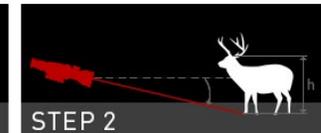
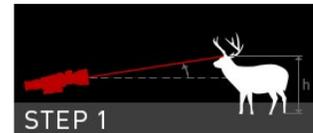
### RANGEFINDER

Select the Flag Icon from the Shortcut Carousel.

Pressing the CENTER button  will take you to the Main Screen of Range-finder feature.

To measure the distance,

3. If satisfied with the value press the LEFT button  to go back to the Homescreen or repeat steps 1 and 2 if necessary.



### NOTE

**During the measurement process, you can zoom in and out using standard buttons (UP and DOWN).**

**While using Smart Shooting Solution your reticle can be displaced from the center point of the screen. Then during Zoom In action it will move to the center.**

If the Target Height is incorrect you can change it:

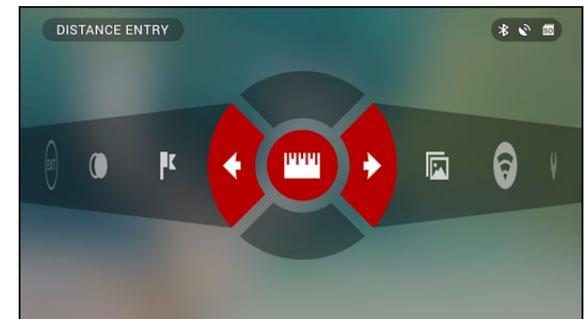
- press the RIGHT button  to enter the Menu;
- choose one of the presets or input the height manually;
- accept the height with CENTER button  and go back to the Main Screen.



### DISTANCE ENTRY

If you are using other means such as a Laser Range Finder you may enter the distance manually using the Distance Entry shortcut.

Change distance value using UP and DOWN buttons . To accept the new distance press CENTER button .

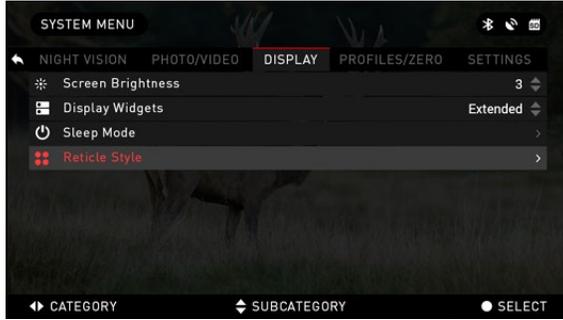


## RETICLE STYLE ADJUSTMENT

You can manage reticle style in the System Menu (Display section).

To enter the System Menu you should open Shortcut Carousel with CENTER button  and select the wrench icon with RIGHT or LEFT buttons .

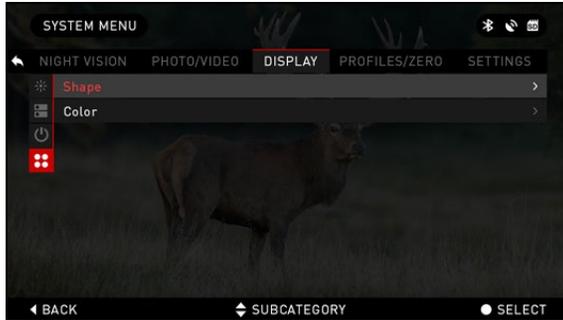
Then push CENTER button  to enter the menu.



Choose Display in Tab Menu. Movement between the tabs is carried out using the LEFT and RIGHT buttons .

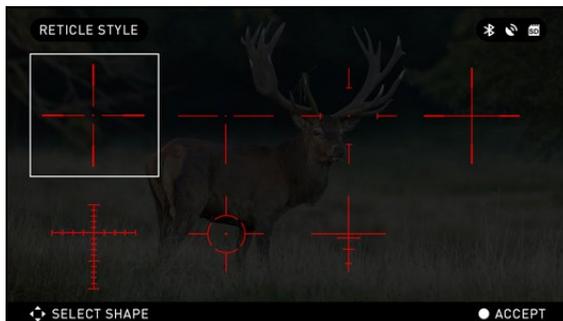
Using the UP or DOWN buttons  select the Reticle Style subcategory. Press the Center button to select it.

To change the Reticle Shape press the CENTER button .

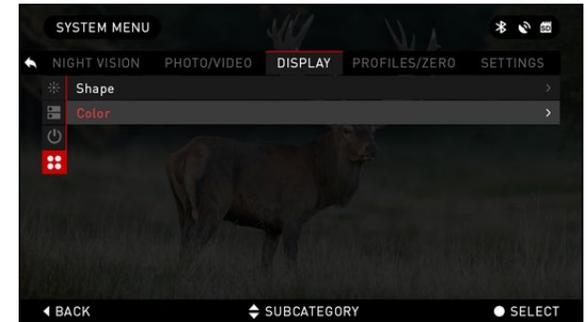


You can select the preferred Reticle style based on your preference. Use the scopes Key Pad arrows to switch between shapes.

To accept the Reticle you want press the CENTER button .



You can change Reticle Color depending on circumstances.

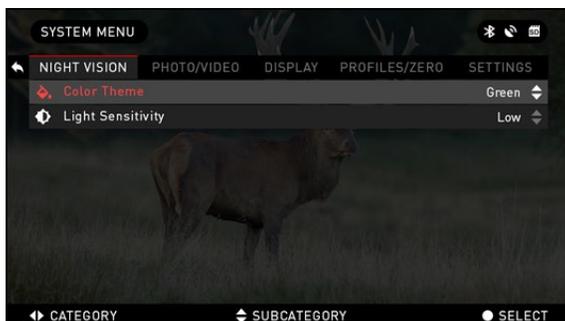


Movement between the colors is carried out using the LEFT and RIGHT buttons . Then press CENTER button  to accept your color.



# SYSTEM MENU

## NIGHT VISION



**COLOR THEME** — the color of Night Mode (Green or Black & White). There is NO difference in light gain from Green to B&W.

**LIGHT SENSITIVITY** — can be set to Low, Medium or High. At high your frame rate will be 7.5 per seconds. You will experience more light gain but at the expense of lower frame rate. We recommend Medium setting for most uses.

## PHOTO/VIDEO

**PHOTO MODE** — includes Single (capture a single photo), Time Lapse (series of photos at timed intervals) and Burst (up to 10 photos in one second) modes.



**BURST COUNT** — amount of photos in one second (2 – 10).

**TIME LAPSE SETTINGS**

- Total Photos — amount of photos in a series (2 – 10).

- Frame Interval — length of the interval (2 – 15 sec).

**MICROPHONE** — sound recording (ON/OFF).

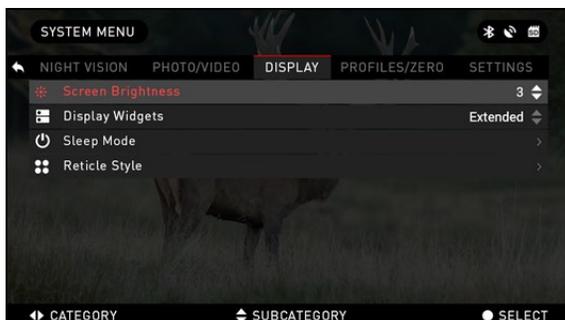
**VIDEO QUALITY** — can

be 1080p30 or 720p60.

### RECOIL ACTIVATED VIDEO

- Record Before Shot — the time before pulling the trigger (5 – 30 sec).
- Record After Shot — the time after pulling the trigger (5 – 30 sec).

**FORMAT SD CARD** — after you choose this subcategory you'll see a pop-up window asking you about formatting.



## DISPLAY

**SCREEN BRIGHTNESS** — 1 – 5 with 1 being the dimmest and 5 the brightest. It is recommended that you use the brightest setting during the day for optimal performance.

**DISPLAY WIDGETS** — allows you to disable several widgets (Minimal/Extended).

## SLEEP MODE

- Mode — allows you to switch the mode (ON/OFF)
- Hibernation Time — can be 1 – 60 min

## RETICLE STYLE

- Shape — you can choose the shape of your Reticle.
- Color — you can choose the color of your Reticle.

## PROFILES/ZERO

### CURRENT

• Zero Reticle — allows to enter zeroing mode.

- Drag Function — the flight path and characteristics of bullets divided into types (G1 – G8, GL).

- Ballistic Coefficient — measure of bullet's ability to overcome air resistance in flight.

- Bullet Weight — influences the kinetic energy of the bullet downrange.

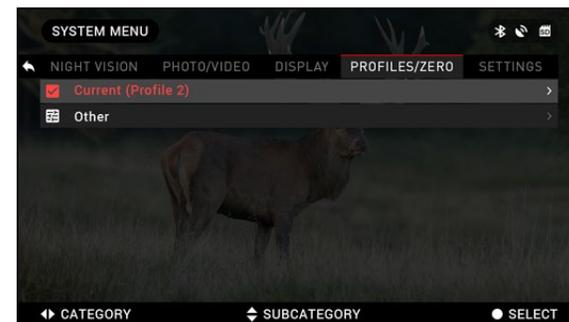
- Initial Velocity — is the velocity of the projectile as soon as it leaves the barrel.

- Zero Range — is the range that a firearm is sighted at.

- Sight Height — is referring to the distance between the center of the optics and the center of the barrel.

### OTHER

- Profile Name — list of existing profiles.
- Create New Profile — allows to create up to 6 profiles.



## SETTINGS

**UNITS** — can be Metric or Standard system.

### DATA AND TIME

- Clock Source — allows you to choose different types of sources to improve the accuracy (Manual, WiFi or GPS).

- Date Format — can be YYYY-MM-DD, MM-DD-YYYY, DD-MM-YYYY.

- Time Format — form of stating the time (24-hour or 12-hour).

- Date — enter the date.
- Time — enter the time.

- Time Zone — allows you to choose a geographical region with standard time.

**WIFI AND BLUETOOTH** — WiFi values are not changeable.

- Remote controller — Allows for pairing of X-Trac remote.
- Remote Controller Orientation — Allows you to choose the orientation of the remote, changing the direction of the scroll wheel.



- Rangefinder — Allows for pairing of the LBRF.
- ABL — Allows for pairing of the ABL Rangefinder.
- ABL Mode — Allows you to change the mode in which the ABL will function. Standard or Fog mode.
- SSID.
- Password.
- MAC Address.

RECORD GEO-TAGGING — adding geographical identification to your videos (ON/OFF).

LENS TYPE — to make all features work correctly you need to choose the type of lens you have. (Example: 3x stands for 3-14 and 5x stands for 5-20).

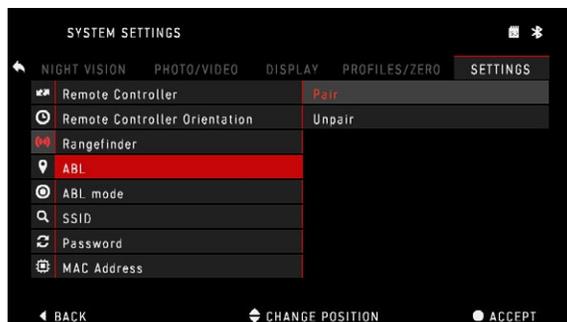
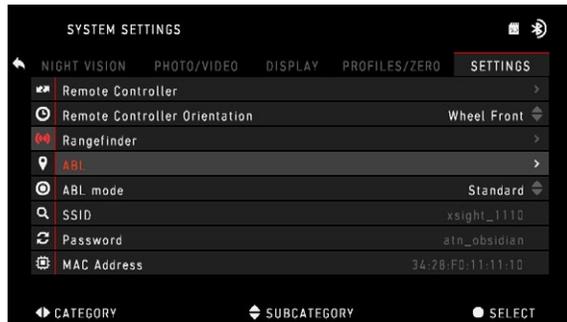
ZOOM — allows you to choose different types of zoom (Standard, Extended). Extended Zoom will give an electronic zoom of 10x your optical Zoom. Example: 3-14 in Extended mode becomes 3-30x. However, we would like to caution you that you will begin to see considerable pixelation at such a zoom.

RESTORE FACTORY SETTINGS — allows to reset all the settings to default.

FIRMWARE VERSION — allows you to learn the firmware version currently running on your sight. We recommend that you register your product on our home page ([www.atncorp.com](http://www.atncorp.com)) in order to make sure that you are getting emails when new firmware versions become available. We are constantly working on new features, functions, and improvements that we provide to you free of charge via firmware upgrades.

## ABL PAIRING

- Insert battery into ABL and turn unit on via power switch.
- Activate Bluetooth within the carousel menu in the scope.



- Enter the System Settings menu via carousel menu at far right.

- Navigate to settings menu at far right.

- Select WiFi and Bluetooth option.

- Select ABL option in the menu.

- Select pair from the ABL dropdown menu.

- You'll notice the Bluetooth icon, in the upper right of the display, will now have a swirling circle around it. This indicates the scope is searching for available Bluetooth devices.

- Short press the small button on the ABL with the Bluetooth symbol.

- You'll now see that the Bluetooth icon in the up-

per right of the display is enveloped in a colored circle. White in day mode and yellow in night mode. After the pairing has completed, the ABL menu option will display "Paired", to the right.

- Exit the setting menu and proceed to the PROFILES/ZERO menu.

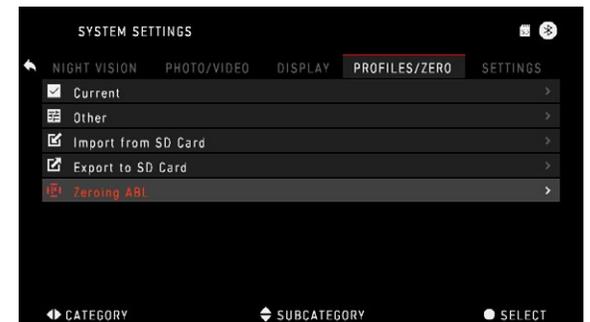
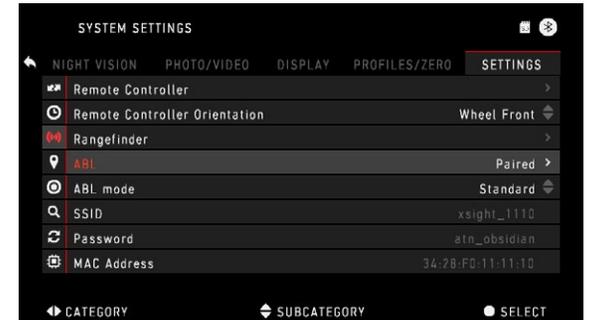
- Navigate down to the Zeroing ABL menu option and select it. The ABL reticle will now appear on screen.

- Having previously remove the Allen screw that covers the visible red laser, you can now move the ABL reticle to the correct area of the display to align the reticle with the infrared ranging laser. The visible red laser is used as a visual reference point for zeroing. Use the arrow keys on the keypad to move the reticle to the correct position.

- Once the box area of the ABL reticle is centered around the red laser, press to Enter button to confirm the reticle correction.

- Exit the menu and return to the Homescreen/Main reticle screen of the scope.

- To range a target, press and release the power button. The ABL reticle will instantly appear on screen. Place the box area of the ABL reticle on the desired target and hold it there until the ranging process times out. You'll now see the range in the upper left of your extended widgets has updated and indicates the correct range to the target you just ranged.



## SERVICING

### CLEANING EYEPIECE



Over time debris or dust particles may find themselves on the micro display in your eyepiece.

Please follow the following instructions to remove the debris:

1. Remove the Eyepiece — by first loosening the two Set Screws that hold the Eyepiece in place (you will need a 1.5 mm hex key). Then unscrew the eyepiece and remove it entirely.

Once the set screws have been loosened the eyepiece should be relatively easy to unscrew, do not use excessive force.

2. To clean the Micro Display — we recommend using a compressed air canister. Just blow the air all around the micro display and then blow the air on the display itself.

The plastic screen covering the display will bend under the air pressure and will allow burst of air inside of the micro display housing.

3. Replace Eyepiece — check if all debris have disappeared from your view. If more debris remain Repeat Step 1 and Step 2.

Do not forget to re-tighten the Set Screws after completing your cleaning.

### WARNINGS AND CAUTIONS

- Always remember to turn off the device when it is not in use. If you do not plan on using it for a period of more than 10 days, you should remove the batteries.
- Do not disassemble, drop, open, crush, bend, deform, puncture, shred, microwave, incinerate, paint or insert foreign objects: it will void your warranty.
- Keep Lens Cap on when not in use.
- Avoid contact with dust, steam, and gas.
- This product contains natural rubber latex which may cause allergic reactions.
- The scope is a precision electro-optical instrument and must be handled carefully.
- Do not scratch the external lens surfaces or touch them with your fingers.

#### CAUTION

**Failure to follow these safety instructions could result in damage to the device!**

## MOBILE APPLICATIONS



By utilizing the  ATN Obsidian app, you can control your device and view live streaming. Connect a phone or tablet and view everything simultaneously.



Want to see what you've recorded so far? No problem, once connected to the app via WiFi, open up the Gallery and playback your latest adventures. All your photos and videos are right at your fingertips.

In order to download the latest version of the ATN Obsidian App. Please visit the iOS store or Google Play store. Search for "ATN Obsidian" install the application.

Make sure to enable WiFi on your Device in the Shortcut Carousel.

Make sure your smart phone or table is not connected to any other WiFi connection.

In your Smart Phone/Tablet go to your WiFi connections and select SSID for example (DeviceName\_XXXX).

Password is "atn\_obsidian".

Once you connect to your device with your Smart Phone/Tablet.

Open the application. You should see the device which you are connected to in the app.

Select the Device Name. This will allow you to control your ATN device with your Smart Phone/Tablet.

 [iOS Application](#)

 [Android Application](#)



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