

# OTX1600™ 6x21mm Laser Rangefinder Owners Manual





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### Welcome

On behalf of the Astra Optix family, we want to thank you for your purchase of your new Astra Optix OTX-1600 Laser Rangefinder.

The Astra Optix OTX-1600 Rangefinder features a 6x21mm, all glass optical system with fully multi-coated lenses and a ranging distance of up to 1760 yards on reflective targets.

**REMINDER**: Please register your product to activate our Handshake Warranty on line at www.astraoptix.com so it is covered in case anything happens to your product.



Scan our warranty QR code to go directly to our Handshake Warranty registration page.

Don't hesitate to reach out to us if you have any questions or concerns about our products.

Also, we ask that you share your adventures with us on social media, and even help outdoor enthusiasts with their purchasing decisions by writing an authentic review about your experience with us at: www.amazon.com/ryp.

On behalf of the Astra Optix family, we want to thank you for your purchase and support.

Like us on Facebook to see the latest news for our Astra Optix rangefinders!



Follow us on Instagram to see our product photos and videos.





### What's in the Box?

- ♦ 6 Power x 21mm Laser Rangefinder Monocular
- ◆ Soft Premium Carry Case
- ◆ Microfiber Lens Cleaning Cloth
- ◆ Adjustable Neck-style Lanyard
- ◆ Astra Optix™ Decal Sticker
- CR-2 3-volt Lithium Battery (Battery Pre-Installed)
- ◆ Quick Start Guide





### **Features**

The Astra Optix OTX-1600 is our purposeful and superior optical quality rangefinder designed to fit your budget without sacrificing quality. In addition to accurate and fast ranging capabilities, the OTX-1600 features fully multi-coated and rain repellent lens coatings to increase light transmission and resolution performance. The clear and functional OLED reticle with multiple brightness adjustability allows for quick target acquisition even in low light conditions.

- ◆ **FAST RANGING:** Our Standard Ranging Mode provides accurate and ultrafast ranging speeds as fast as 0.1 seconds.
- ◆ ACCURATE LONG RANGING CAPABILITIES: With long distance ranging capability, this rangefinder is accurate and versatile for various objects at short distance or long distances: Reflective: Up to 1760 yards, Tree: Up to 1000 yards, Deer: Up to 800 yards.
- ◆ REFLECTIVE OLED DISPLAY: Provides a projected red color reticle allowing increased light transmission in low light conditions. Adjustable display brightness. Choose from 5 different brightness intensity levels.
- ◆ PREMIUM OPTICAL QUALITY: Our All Glass Optical System provides better light transmission vs. lesser quality plastic lens systems. 6 times magnification brings you up closer to your viewing target. Fully Multi-Coated Optical system features an optical lens system with one or more anti-reflective coatings on each air to glass lens surface to ultimately increase resolution and overall light transmission. Rain Repellent Protective Coating protects lenses from dust, debris, moisture and scratches.
- ◆ ADVANCED TECHNOLOGIES: Packed with featured technologies including Scan Mode, Horizontal (Angle Corrected) Mode also know as angle compensation mode, Angle Mode (with LOS), Archery Mode, Gun Mode, and Golf Mode.

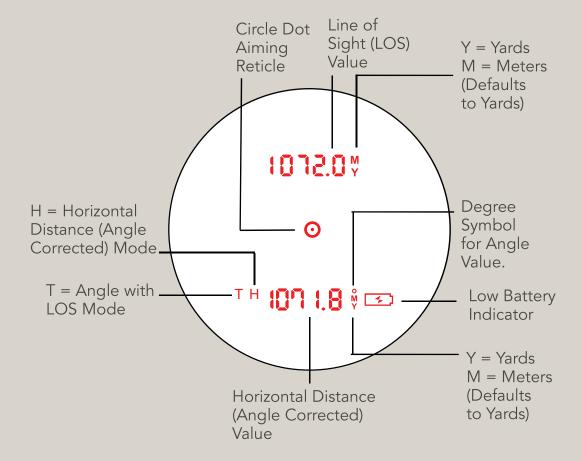


# Your Rangefinder at a Glance





# **OLED Reflective Display**





### **Quick Start**

**1. Connect the Battery:** Open the **Battery Cover** and remove the plastic insert from the top of the battery.



2. Turn on unit and Adjust Eyepiece
Diopter Focus: Press the Power (Range)
Button to turn on the rangefinder Red
Reflective OLED display.

Turn the **Eyepiece Diopter Focus** until both the image in the field of view and **Aiming Reticle** are clear and focused.

Press the
Power Button Rotate Eyepiece





3. Adjusting the Red OLED Display Brightness: Hold the Mode Button to enter the menu setting, Press the Power Button to cycle between 5 different brightness levels. Press the Mode Button to select.

**Brightness Setting** 



- ◆ 1 = Lowest brightness setting
  ◆ 5 = Highest brightness setting
- NOTE: For some Astra Optix models, the display brightness setting is the last item in the menu. If the brightness setting is not the first item in the menu, then press the Mode Button to advance through all the menu items until you see the brightness setting.



### **Quick Start**

**4. Measuring Distance:** Aim the **Aiming Reticle** on the object you want to range and press the **Power Button** to display the distance. Your unit factory default setting is the **Horizontal (Angle Corrected) Mode**.

The Line of Sight (LOS) value is displayed at the top of the display for 2 seconds.



The angle-corrected Horizontal Distance (H) value is displayed at the bottom of the display for up to 8 seconds or until you take a new measurement.



5. Menu Settings - Button Operation Summary





### **Quick Start**

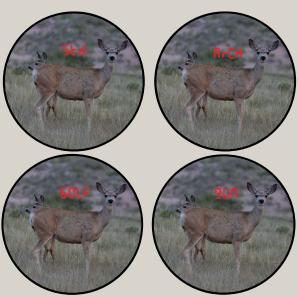
# 5.1. Menu Settings - Menu Operation Summary

- Distance Units SelectionY / M
- ◆ Standard Mode (Std)
  - Horizontal (Angle Corrected) with Line of Sight
  - Angle with Line of Sight
  - OFF (Only Line of Sight)
- ◆ Archery Mode (ArCH)
- ◆ Golf Mode
- ◆ Gun Mode
- Brightness Setting-1 thru 5

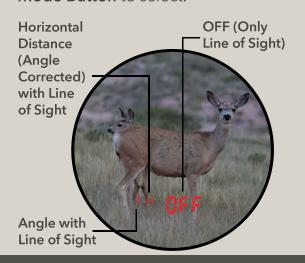
**5.2. Yards & Meters Selection:** In the menu press the **Power (Range) Button** to cycle between Yards (Y) and Meters (M). Press the **Mode Button** to select.



5.3. Select the Operation Mode:



**5.4. Sub-Modes under Standard Mode:** Press the **Power Button** to cycle between each sub-mode. Press the **Mode Button** to select.



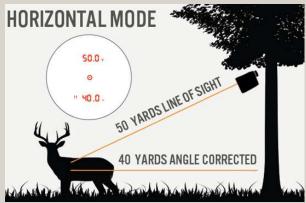


## **Operation Modes**

# HORIZONTAL (ANGLE CORRECTED) MODE

Also known as angle compensation mode, will give you the angle-corrected shoot-at distance no matter the terrain. Aim the reticle at the target. Press the power (range) button to measure the distance.

- ◆The top line shows the LOS distance for 2 seconds.
- ◆The bottom line shows the Horizontal Distance for the remaining time (8 seconds).

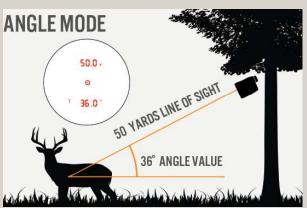




#### ANGLE MODE WITH LINE OF SIGHT

Angle Mode displays the Line of Sight (LOS) distance and the angle value. For long range shooting, you can use this information to calculate holdover using a ballistics calculator (ballistics calculator not included with product). Aim the reticle at the target. Press the power (range) button to measure the distance.

- ◆The top line shows the LOS distance for 2 seconds.
- ◆The bottom line shows the Angle value for the remaining time (8 seconds).







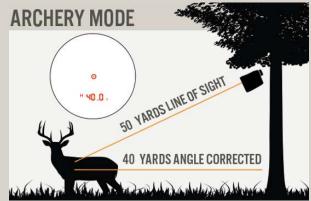


### Operation Modes - Continued

#### **ARCHERY MODE**

Archery Mode gives you accurate and simple ranging information with ultimate confidence. In Archery Mode, the Horizontal Angle-Corrected (also known as angle compensation)
Distance provides a true shoot-at distance no matter the terrain or hunting style. This mode is very beneficial when hunting from a tree stand or rigorous up-hill or down-hill terrain. Aim the reticle at the target.
Press the power (range) button to measure the distance.

- ◆The top line is blank.
- ◆The bottom line shows the Horizontal Distance for 10 seconds.



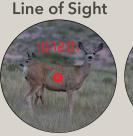


#### **GUN MODE**

Gun Mode is optimized so that the range displayed will be the farthest distance value of a group of targets that are within your field of view. This mode is very beneficial if you are trying to range a target through trees or other obstructions. Aim at a group of targets and press the power (range) button to measure the distance.

- The line of sight will be displayed for 2 seconds on the top line.
- ◆The horizontal value will be displayed for 2 seconds on the bottom line of the screen.









◆The angle value will display for the remaining amount of time (6 seconds).



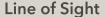
## Operation Modes - Continued

#### **GOLF MODE**

Golf Mode displays the nearest distance value (Golf Flagstick) of a group of targets that are within your field of view. Aim at a group of targets, and press the power (range) button to measure the distance.

- ◆The line of sight will be displayed for 2 seconds on the top line.
- The horizontal value will be displayed for 2 seconds on the bottom line of the screen.
- ◆The angle value will display for the remaining amount of time (6 seconds).







Horizontal



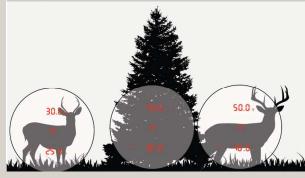


Scan Mode provides continuous ranging measurements so that you can always identify the distance to your target.

To take continuous measurements, enter the SCAN mode by pressing and holding down the Power (Range) Button.

- When scanning, regardless of what operation mode you are in, only the Line of Sight (LOS) Value is displayed at the top of the display.
- ◆To exit the SCAN mode, just stop holding the Power (Range) Button, and you will return to your original operation mode.

#### **SCAN MODE**





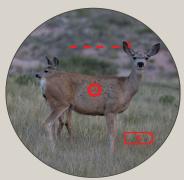


## How to Use - Installing the Battery

Your Astra Optix<sup>™</sup> Laser Rangefinder comes with one CR-2 (3-volt) lithium battery preinstalled.

**REMEMBER:** Remove the battery cap and take out the plastic spacer from the top of the battery before using. The spacer prevents the battery from activating during shipment. Your battery life will depend on the mode you are using and the outside temperature. Your battery should last approximately 10,000 measurement readings. Colder environments will cause the battery life to be shorter. Your rangefinder will automatically shut off after 10 seconds of nonuse.

**LOW BATTERY ICON** will display when you are nearing the end of your battery life. At this time we suggest changing the battery.



- ◆ To change the battery, place a flat-head screwdriver or coin in the battery cover slot. Unscrew the battery cover in the counter-clockwise direction. Remove the cap and dispose of the used battery. When disposing of the battery, follow your local area regulations.
- ◆ Place the battery in the compartment so the battery's positive side is facing up. There is also a positive symbol etched into the underside of the battery cover indicating the positive side should be facing up towards the battery cover.
- Replace the battery cover back on the battery housing by screwing on clock-wise to tighten.

**REMEMBER:** Ensure the battery cover is secured in place in order to preserve the waterproof capability. Do not overtighten the battery-cover.





## How to Use - Rangefinder Focusing

When just starting to use your rangefinder, you will need to focus the aiming reticle and image that you see in your field of view. Anytime your image and reticle are not in focus, follow the below instructions for focusing your rangefinder.

**TIP:** If you are an eyeglasses wearer, you can wear your eyeglasses while using the rangefinder. You can also use the rangefinder without your eyeglasses.

- ◆ To focus your range finder, first turn on your rangefinder by pressing the Power (Range) Button so that you can see the circle dot aiming reticle in your field of view. You can focus the aiming reticle and the optical image both at the same time.
- ◆ Turn the Eyepiece Diopter Focus either left (counterclockwise) or right (clockwise) until the image in your field of view and the Circle Dot Aiming Reticle are clear and in focus with each other. It is best to turn the focus ring until you reach a balance so the reticle is focused and your target in your field of view is focused.
- ◆ Your rangefinder optical system is a fixed focus system and is focused from 6 yards to infinity.

**TIP:** When using the rangefinder as a monocular only (without the rangefinder turned on), you can still further focus your optical image more fine by turning the Eyepiece Dioper Focus as described above.

**TIP**: When using the rangefinder aiming reticle (when the display is turned on), you will need to focus the reticle by turning the Eyepiece Diopter Focus as described above. Depending on your eyes and the viewing conditions, you will need to focus the aiming reticle and optical image so that both are in focus.

Out-of-Focus Image
In-Focus Image





# How to Use - Lanyard

Your Astra Optix™ Laser Rangefinder comes with an adjustable neck-style lanyard.

- ◆ To attach the lanyard to the laser rangefinder, thread the small loop located at the end of the lanyard through either one of the lanyard attachment holes on the laser-rangefinder body. There is a lanyard attachment hole located on each side of the laser-rangefinder body.
- ◆ To adjust the length of the lanyard, push down the button located on the lanyard, and slide the cord-lock adjuster either down or up depending on what is most comfortable for you.







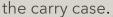






## How to Use - Carry Case

Your Astra Optix™ Laser Rangefinder comes with a soft premium carry case to both protect your rangefinder and to provide a convenient way to carry your rangefinder. This case features a soft belt loop for easily attaching to your belt. Just slide the end of your belt through the soft belt loop located on the back of





Carry-Case Soft Belt Loop





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# Tips for Using your Rangefinder

- ◆ Your laser rangefinder comes defaulted to the Horizontal Distance mode. For archery or shooting, this mode will give you the angle-corrected shoot-at distance to use. Select your bowsight aiming pin based on this distance (distance shown at the bottom half of the display). For Archery only, use the Archery Mode (ArCH).
- ◆ This rangefinder also has an Angle with LOS mode. In this mode, it will display the Line of Sight (LOS) Value for 2 seconds at the top of the display followed by the Angle Value at the bottom of the screen. Shooters can use this information to calculate holdover using a ballistics calculator.
- ◆ For shooting, use the Gun Mode (gun). The Gun Mode is optimized so that the value displayed will be the farthest distance value of a group of targets that are within your field of view. This is good if you are trying to range a target through trees or other obstructions.
- ◆ If using this rangefinder on the golf course, choose the Golf Mode (GOLF). The Golf Mode will display the nearest distance value (Golf Flagstick) of a group of targets that are within your field of view.
- ◆ Under ideal conditions, your Astra Optix<sup>™</sup> Laser Rangefinder can measure the distance of reflective objects out to 1,760 yds. It can also measure a deer out to 800 yds. The type of target you are ranging strongly impacts the maximum ranging.
- ◆ Shiny reflective objects such as metal buildings will range much better than less-reflective objects such as trees, animal fur, bushes or grass.
- Objects that are more dense, such as trees or rock, will range better than bushes or grass.
- ◆ Bright-colored objects normally range better than dark-colored objects.
- Rain, fog, snow, bright sunny days and dusty days will reduce the overall ranging.
- Cloudy days without fog, without snow, without rain or dust blowing in the air provide the best ranging conditions.
- ◆ Targets that have a flat surface 90° to the laser emitting from the laser range-finder range better than targets that have a curved surface, or are positioned at an angle in relation to the emitted laser.
- ◆ If the Battery Symbol flashes, we recommend that you change the battery as soon as posssible.
- ◆ If you have problems ranging your target, using the SCAN feature which takes continuous measurements can help you quickly range a hard to range target. Your rangefinder will display continuous readings (4 readings per second), making it easier to locate your target's distance.



# **Specifications**

Objective Lens Diameter . . . . . . . . . . . . 21 mm Lens Coating . . . . . . . . . . . . . Fully Multi Coated with Rain Repellent Housing Material . . . . . . . . . . . . . . . . . . Composite with Rubber Armoring Display Type . . . . . . . . . . . . . . . . . OLED Reflective Display Range Response Time . . . . . . . . . . . 0.25 seconds Battery Life . . . . . . . . . . . . . . . . Approximately 10,000 Readings Laser Range (Reflective) . . . . . . . . . . . . . 6-1,760 yds. Laser Range (Tree) . . . . . . . . . . . . . . . . 6-1000 yds. 



### **Troubleshooting**

- ◆ If at any time, your rangefinder freezes or is not responsive after turning it on, reset the rangefinder by removing the battery. Wait 10 seconds and then replace the battery. This will usually fix the issue.
- ◆ If you are trying to range a target and you are seeing dashes (----) in the display, it is possible that you are either too close (less than 6 yards) or too far away from your target. In addition, your laser rangefinder's laser maybe missing the target and aimed towards an open sky which will also show a non-reading (----).
- ◆ If you can not see a full image (all of the field of view) when looking though your laser rangefinder, your eyes may be positioned either too far away or too close to the eyepiece. Move your head back a little from the eyepiece or move towards the eye-piece a little until you can see the full circular field of view.
- ◆ Your rangefinder can operate between temperatures of 23° F and 120° F. If temperatures are lower than 23° F, and if your rangefinder is not responding, just bring the product to a warmer location. After the rangefinder warms back up and is within the normal operational temperatures, it will be operable again.



# Care for your Rangefinder

You can ensure your rangefinder will last for years to come by keeping in mind a few care tips below.

- ◆ Take care not to drop your laser rangefinder. It is best to prevent any forceful impacts that could damage your laser rangefinder.
- First, pull on the end of the lanyard to ensure that it is secured to the laser rangefinder.
- Store your laser rangefinder in a cool and dry location.
- Blow dirt, dust or debris off the lenses.
- ◆ To clean your laser rangefinder lenses, use the included premium microfiber lens cloth to lightly wipe away dirt, fingerprints or debris.
- ◆ Do not use strong liquid cleaners or chemicals to clean the lenses, as these could damage your lenses or lens coatings.
- ◆ If your laser rangefinder is covered in dirt, mud or liquid, you can use a damp warm softcloth to clean your rangefinder. Lightly wipe with the cloth to remove the dirt or residues.

# Safety and Warnings

- ◆ Do not look directly at the sun with your rangefinder, as it could cause serious damage to your eyes.
- ◆ Do not aim the rangefinder directly at a person's eyes, and do not look directly into the lenses on the objective lens side of the product when you are pressing the power button.
- ◆ Keep out of reach of small children.
- ◆ Only use a CR2 3-volt battery and do not use any outside power source.
- ◆ Do not attempt to open or take apart your laser rangefinder, as this will void your lifetime warranty, may damage your product and could cause electric shock.
- Class 1 Laser Product. Product complies with IEC60825-1: Ed. 3: 2014-05 and 21CFR1040. 10/11.





## Our Handshake Lifetime Warranty

In our world, relationships are built on trust, loyalty and a commitment that was solidified in a handshake. We take our products seriously, and back them with our generous Handshake Warranty. Our Handshake Warranty is a commitment to you that no matter what, we got your back. If for any reason our products fail you in any way, we are determined to make it right with you. We want you to feel confident in your purchase with us, and to ultimately be your trusted resource for your optics needs.

Please register your product to activate our Hanshake Warranty on line at www.astraoptix.com so it is covered in case anything happens to your product.





Like us on Facebook to see the latest news for our Astra Optix rangefinders!



Follow us on Instagram to see our product photos and videos.

Scan our warranty QR code to go directly to our Handshake Warranty registration page.

Our Handshake Lifetime Warranty is fully transferable!

Our warranty does not cover cosmetic damage, theft, unauthorized modification or intentional misuses/damage.

Don't hesitate to reach out to us if you have any questions or concerns about your product. We are here to help!

We want to thank you again for your purchase of your new Astra Optix OTX1600 Laser Rangefinder.

