VORTEX®

PRODUCT MANUAL

CROSSFIRE® HD 1400

LASER RANGEFINDER

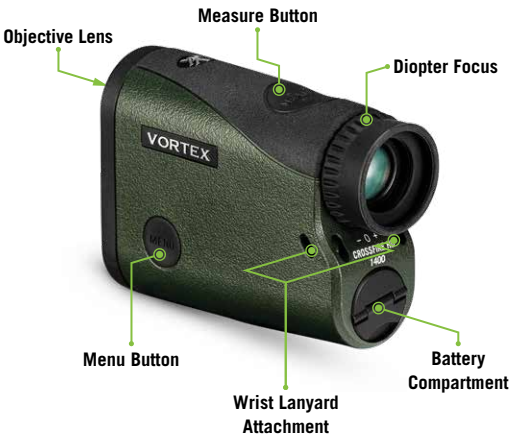
Specifications

MAGNIFICATION	5x	
OBJECTIVE LENS	21mm	
MAX REFLECTIVE RANGE	Up to 1400 yds.	
TREE RANGE	Up to 950 yds.	
DEER RANGE	Up to 750 yds.	
MINIMUM RANGE	5 yds. (4.5m)	
ACCURACY	± 1 yd @ ≤ 100 yds.	
	± 2 yds. @ ≥ 100 yds. & ≤ 1000 yds.	
	± 3 yds. @ ≥ 1000 yds.	
MAXIMUM ANGLE READING	± 89°	
FIELD OF VIEW	Linear @ 1000 yds.	367'
	Angular	7°
EYE RELIEF	16mm	
BATTERY TYPE	CR2	
LENGTH	4.0" (101.6mm)	
HEIGHT	2.9" (73.5mm)	
WIDTH	1.3" (33mm)	
WEIGHT W/ BATTERY	4.8 oz (136g)	

CROSSFIRE® HD 1400 LASER RANGEFINDER

If you're on the hunt for the perfect go-to laser rangefinder for bow and rifle hunters alike, you've found it in the Crossfire® HD 1400. It carries light and hits hard, offering up to 1400 yards of ranging capability through a crisp, HD optical system.

Images are for representation only. Product may vary slightly from what is shown.



BASIC OPERATION

Battery Installation and Replacement

To insert a new battery, flip up the finger tab on the Battery Cap located on the bottom of the unit and unscrew, counterclockwise, to remove. Insert CR2 battery with the positive side (+) facing outwards. Reinstall Battery Cap and ensure it is tightly closed.

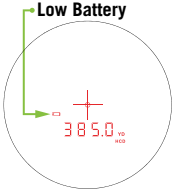
Power Up

Once the battery is installed, the Crossfire® HD 1400 is in ready condition – the normal power-off condition when not ranging. To power up the Crossfire® HD 1400 from ready condition and prepare for ranging, press and release the "Measure" button. The HCD or LOS ranging screen will display.

Note: While in the menu, the Crossfire® HD 1400 will auto-shutoff after 20 seconds if no buttons are pressed.

Low Battery Icon

The Low Battery Icon displays once the battery reaches 25% life and stays on until there is no power.



Focus

Adjust the Diopter until the image is sharp. Make note of this diopter setting in case you need to set it again.

Attaching the Wrist Lanyard

The Lanyard provides a secure way to carry your rangefinder.

MODE SELECTION

Changing Modes on the Crossfire® HD 1400

The Crossfire® HD 1400 is factory set to the angle compensating HCD range mode, Normal target mode, brightness level 3, default auto-shutoff at 20 seconds, and displayed in yards.

To Change Modes

Press and release the "Measure" button to power the unit On. To change modes, press and hold the "Menu" button until the Mode Selection screen appears (about 2 seconds).

Scroll through the mode options by clicking the "Menu" button. To adjust a mode, click the "Measure" button.

To save your settings and exit the Mode Selection screen, press and hold the "Menu" button for at least two seconds.

RANGING MODE SELECTION

Choose Between the HCD and LOS Modes

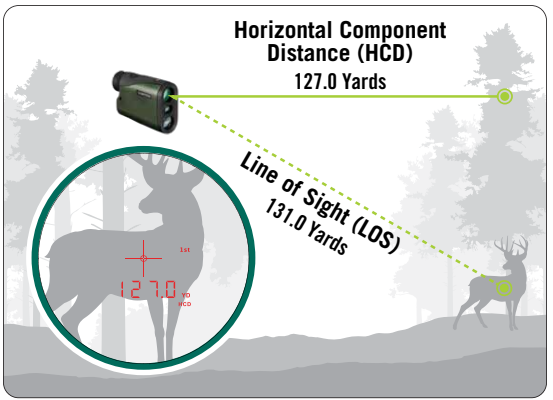
After activating the Mode/Display Selection, press the "Measure" button to toggle between the HCD and LOS displays. Press the "Menu" button to save your desired choice and move to the Yards/Meters selection screen.

HCD Mode

LOS Mode

HCD Mode

The Horizontal Component Distance (HCD) range display is intended to be the primary mode—used for most rifle and archery shooting applications. The yardage number displayed is the critical horizontal component distance.



Using the HCD Mode

Use the HCD range mode in the following situations:

- Rifle shooting on level ground at any range.
- Rifle shooting out to ranges of 800 yards with mild slopes (less than 15 degrees).
- Rifle shooting out to ranges of 400 yards with moderate slopes (15 to 30 degrees).
- For all archery shooting.

Note: To correctly account for wind, you need to know the Line of Sight distance to the target as it is based on how far the bullet travels to the target. This can be achieved using LOS mode.

LOS Mode

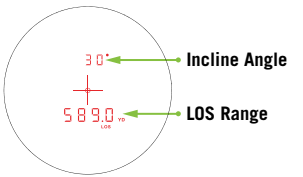
The LOS (Line of Sight) mode is intended for rifle shooters who are using slope correcting ballistic drop data cards, ballistic cell phone applications, or other devices with ballistic programs and who are shooting at distances beyond 500 yards with slopes greater than 15 degrees.

The range number displayed in LOS mode is the actual line of sight range with no ballistic correction for slope. Most of the commonly used ballistic devices can provide independent slope correction for bullet drop data and require actual line of sight range input. Using the LOS range when calculating bullet wind drifts under these steep slope/long range conditions will provide a higher degree of accuracy than using the HCD range.

To use, simply input the LOS range number into the electronic device, or use the LOS range when referencing ballistic drop cards with slope correction.

LOS Mode - Incline

When in LOS mode, an additional number is displayed above the yardage number. This number is slope incline shown in degrees.

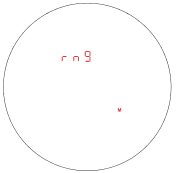


The slope incline number can be entered into ballistic programs or field cards to help calculate precise bullet drops in mountainous terrain.

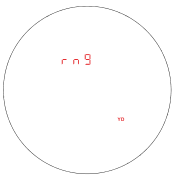
Range Selection

Choose between Yards and Meters

Press the “Measure” button to toggle between the Yards and Meters display. Press the “Menu” button to save your desired choice and move to the Brightness selection screen.



Meters



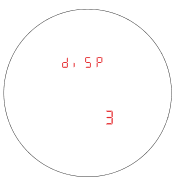
Yards

Brightness Selection

Choose between Five Brightness Settings

The Crossfire® HD 1400 provides five illumination settings. Press the “Measure” button to toggle through the five Brightness settings. Press the “Menu” button to save your desired setting and move back to the Range Mode Setting.

To exit Mode/Display Selection and save settings, press and hold the “Menu” button for two seconds. Settings will also save when the Crossfire® HD 1400 powers down automatically.



TARGETING MODE EXPLANATIONS

The Crossfire® HD 1400 provides three target modes: Normal Mode, First Mode, and Last Mode.

Normal Mode

Your Crossfire® HD 1400 comes preset to Normal target mode. This is the standard mode providing the range of the target with the strongest range result. Normal Mode is the recommended target mode for most situations.

First Mode

This mode displays the closest distance when ranging. This mode is ideal for ranging a smaller target in front of other larger or more reflective objects.

Note: If unsure about the range, simply range again.

Range captured on closer deer.

Last Mode

This mode displays the farthest distance when ranging. This mode is ideal for ranging a specific target behind a group of objects like brush, trees, rocks, etc.

Range captured on farther deer.

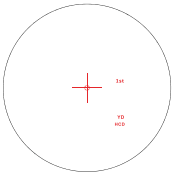
Note: If unsure about the range, simply range again.

For additional information on Targeting Modes, please visit **VortexOptics.com**

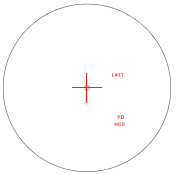
SETTING AND USING TARGET MODES

While in ready condition, cycle between target modes by pressing and releasing the “Menu” button. Once a target mode is selected, press the “Measure” button to activate the target mode.

When Normal Mode is selected, nothing will be displayed on the display. Once “Measure” is pressed, the unit remains in Normal Mode. If powered down in Normal Mode, the unit will be in Normal Mode when the unit powers back on.



First Mode



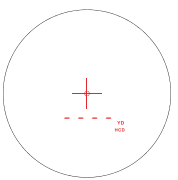
Last Mode

For First and Last Mode, “1st” and “Last” will always be displayed, signaling that you are in the respective target mode. The range measurement will display as the “Measure”button is pressed and released.

RANGING

Ranging in Normal Mode

With the Crossfire® HD 1400 powered up, position the reticle on the target object and press and release the “Measure” button to get the distance measurement. If the laser is not able to range due to the reflectivity of the target, you will

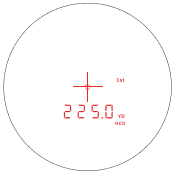


No Range Returned

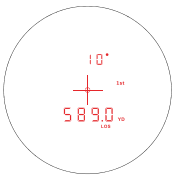
see a display similar to that shown here. To range a new target, simply re-aim and press the “Measure” button again.

Scan Feature

Activate Scan Feature by pressing and holding the “Measure” button. Keeping the button depressed will continuously measure distance as you pan back and forth across target objects. The reticle will blink as you pan. Releasing the “Measure” button will return laser to the Power Up condition.

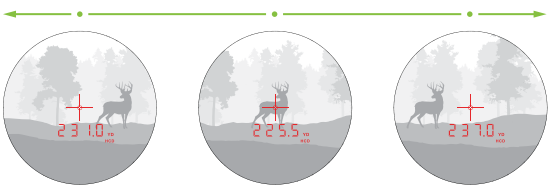


HCD Scan



LOS Scan

Scanning to get range:



Scan back and forth, watching for yardage number to display or change.

Rangefinding Tips

Laser rangefinders work by emitting a brief pulse of light aimed at a target object. Distance is determined by the amount of time taken for the light to emit and return to the laser’s internal receiver. A laser’s ability to read range can be affected by many things—mostly relating to the target objects.

- Light colors will usually reflect better than dark ones.
- Be aware that snow, rain, and fog will have adverse effects on ranging ability.
- Shiny, reflective surfaces will usually reflect better than dull, textured surfaces. Animal hair will not reflect as well as a hard surface.
- Ranging under cloud cover can improve laser performance compared to bright sunny conditions.
- The position of the sun compared to the rangefinder and/or range target will greatly affect performance.
- Solid objects, such as a rock, will reflect better than bushes.
- Flat surfaces perpendicular to the laser pulse will reflect better than curved surfaces or surfaces angled in relation to laser pulse.

- Ranging over water can sometimes cause false reflections and readings.
- At longer distances, large objects will be easier to range than small objects.
- If you are having difficulty ranging an animal or object, try ranging a different nearby object, using the Scan feature to pan back and forth while watching for changes in range number.

MAINTENANCE

Cleaning

Your Crossfire® HD 1400 requires very little routine maintenance other than periodically cleaning the exterior lenses. The exterior may be cleaned by wiping with a soft cloth. When cleaning the lenses, be sure to use products that are specifically designed for use on coated optical lenses.

- Be sure to blow away any dust or grit on the lenses prior to wiping the surfaces.
- Using your breath, or a small amount of water or pure alcohol, can help remove stubborn dried water spots.

Lubrication

All components of the Crossfire® HD 1400 are permanently lubricated, so no additional lubricant should be applied.

Note: Other than to remove the Battery Cap, do not attempt to disassemble any components of the rangefinder. Disassembling of rangefinder may void warranty.

Storage

If possible, avoid storing your rangefinder in direct sunlight or any very hot location for long periods of time.

FCC REQUIREMENTS

The user's manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

SAFETY AND PRECAUTIONS

Do not stare into beam or view directly without laser eye protection. Staring continuously into beam for prolonged periods of time could cause harm to your eyes. If used properly, this device is safe for your eyes and laser eye protection is not needed.

- Use the correct battery (CR2) and proper battery orientation.
- Do not look at sun.
- Do not activate Menu or Measure buttons while aiming at eye or looking into objective lens.
- Do not disassemble.
- Do not allow children to play with unit.
- Consumer laser product EN 50689:2021

Caution—Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous laser radiation exposure.

NOTICE

Virtual Patent Marking Notice by Vortex Optics

This product may be protected by patents in the U.S. and elsewhere for Vortex Optics. **vtx.legal** website is provided to satisfy the virtual patent marking provisions of various jurisdictions including the virtual patent marking provisions of the America Invents Act and provide notice under 35 U.S.C. §287(a). Please visit **vtx.legal** to view list of products that may be covered by one or more U.S./ Foreign patents or published patent applications.

VIP® WARRANTY

OUR UNCONDITIONAL PROMISE TO YOU.

We promise to repair or replace
the product. Absolutely free.

- **Unlimited.**
- **Unconditional.**
- **Lifetime Warranty.**

You do not have to register, save the box,
or a receipt for the Warranty to be honored.

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Note: *The VIP® Warranty does not cover loss, theft, deliberate damage, or cosmetic damage not affecting product performance.*

For the most up to date manual visit **VortexOptics.com**