RAZOR HD RIFLESCOPES

1-4 X 24

30MM TUBE

Vortex breaks new ground with the introduction of our Razor[™] HD tactical riflescopes. Engineered literally from the ground up to meet the demanding needs of military and law enforcement precision shooters, the all-new Razor HD 5-20x50mm is a state-of-the-art, long-range performer built on a 35mm one-piece tube and packed with more than a dozen unique performance and optical features. Our equally advanced Razor 1-4x24mm is built on a 30mm one-piece tube for fast handling and deadly accuracy when it gets up-close and personal. Together, they form the most impressive offering in combat-ready tactical riflescopes available.

KEY FEATURES

Fully multi-coated with XR multi-layer anti-reflective coatings.

XD (extra-low dispersion) glass objective lens.

Waterproof/dustproof/shockproof construction.

Exterior lenses protected by ArmorTek[™] lens coating.

Choice of matching mrad or MOA turrets/reticles.

Illuminated, glass-etched reticle is located in first focal plane.

RZR[™] Zero Stop adjustment (patent pending) prevents turret from rotating below sight-in zero. (5-20x50mm only).

Machined one-piece tube features a type-3 hard-anodized Stealth Shadow Black finish.



5-20 X 50

35MM TUBE

THE VORTEX HD SYSTEM: The sophisticated Vortex[®] HD System delivers razor-sharp images with the latest optical engineering, high-definition glass technology, multi-layered lens coatings and the addition of an ultra-hard proprietary coating on glass surfaces: XT optical design, XD objective lens elements, XR lens coatings, ArmorTek top coat.

OPTICALLY INDEXED LENSES: All Razor HD lenses are optically indexed and matched using state-of-the-art computer-controlled equipment to assure optimum alignment. The result is an optical image that is uniformly brighter and sharper without degradation or fringing around the edges. This quality allows the entire reticle to be used in extra-long-range shooting situations.

SHOCKPROOF CONSTRUCTION: Every lens is locked in place, fore and aft, with machined locking rings that resist impact from every angle. All lenses remain in perfect alignment after the roughest field use – including extreme recoil, dropping and miscellaneous impacts.



WATERPROOF/FOCPROOF/DUSTPROOF INTECRITY: The Razor HD's one-piece tube is 0-ring sealed and purged with inert argon gas for absolute waterproof/dustproof performance in every conceivable hostile environment – including the harshest (cold and wet) shooting conditions, extreme altitudes and high humidity.

RAZOR HD RIFLESCOPES

	MAGNIFICATION X OBJECTIVE LENS	RETICLE Options	WEIGHT	LENGTH	FIELD OF VIEW At 100 Yards	EYE RELIEF Adjustment	TURRET STYLE	
35mm Tubes	* 5-20 x 50	EBR-1 MOA, EBR-2 MRAD, EBR-3 MRAD	35.2 oz	15.8"	13.6 - 5.2'	3.9"	Tall Uncapped	$\left \right\rangle$
30mm Tubes	* 1-4 x 24	CQMR-1, EBR-556	20.2 oz	10.3"	94.5 - 24.2'	3.9"	Tall Uncapped	WA







1. 3.9 IN. EYE RELIEF: The Razor[™] HD provides generous and consistent eye relief at all magnifications for faster target acquisition when shooting in a wide variety of positions and situations. The considerable eye relief eliminates eyestrain during extended viewing while protecting from recoil on large caliber rifles.

2A. OFFSET ILLUMINATION CONTROL: The control knob features an "OFF" position between each intensity level so the illuminated reticle can be turned on or off with a single click. There's no need to progress through every intensity level or return to zero with multiple clicks in order to access a preferred illumination setting.



2B. OFFSET ILLUMINATION

3. MAGVIEW SYSTEM:

KNOB POSITION: The position of the control knob at a 45° angle on the left side of the scope's eyepiece allows for easy adjustment without blocking the view of turret, parallax and magnification settings.

A fiber optic magnification indicator (patent

pending), combined with raised rear-facing

magnification references on the zoom dial,

provides fast visual confirmation of magnification

from the shooting position in low light





4. RADIUS BAR:

conditions.

The Razor HD's patent-pending fiber optic turret rotation indicator provides an easy-to-see illuminated and tactile point of reference for

counting turret rotations in all light conditions.

5A. MATCHED TURRETS AND RETICLES: The subtensions on MOA and mrad version reticles match the subtension markings on the turrets to make range calculation and shooting adjustments faster and more accurate.

5B. 125 MOA/36 MRAD WINDAGE AND ELEVATION: The Razor HD offers an incredible 125 MOA / 36 mrad adjustment range for both windage and elevation – more than 25% greater than most competitors. The greater adjustment range easily accommodates for bullet drop at extreme ranges.

6. PARALLAX ADJUSTMENT: Located on the left side of the turret housing, the parallax setting can be observed and adjusted from the shooting position.

7. RZR™ ZER0 STOP

TURRET DIAL : Vortex's patent-pending RZR[™] (Rapid Zero Return) Zero Stop mechanism prevents the turret from dialing below sight-in range for fast, precise returns to zero after temporary elevation corrections. Once set, (during sight-in) the turret can be quickly spun and stopped at the zero setting without counting clicks. The patent-pending



rotational blocking steel mechanism is more reliable and accurate than other systems that block the downward movement of the turret. Completely sealed at all times, even when setting the zero-stop position, all internal parts and components stay clean and dry – absolutely free of sand, dust, moisture and other foreign material. After removing the turret cap, all that's required to reset the mechanism for fast re-adjustment at the range or in the field is to loosen three screws and adjust with the standard issue Allen wrench included with the scope.

8. HARD ANODIZED FINISH: The Type-3 hard-coat anodized finish features a low-glare matte surface in Vortex's proprietary Stealth Shadow Black color. This color absorbs less light than jet black so it is more difficult to see in all light conditions. The hard-coat anodization resists scratching and abrasion while maintaining a dull, durable, glare-free finish.





1. 3.9 IN. EYE RELIEF: The Razor 1-4x24 provides generous and consistent eye relief at all magnifications for faster target acquisition when shooting in a wide variety of positions and situations. The considerable eye relief eliminates eyestrain during extended viewing while protecting from recoil on large caliber rifles.

2. SIDE-MOUNTED ILLUMINATION CONTROL: The side-



mounted control knob features an "OFF" position between each intensity level so the illuminated reticle can be turned on or off with a single click. There's no need to progress through every intensity level or return to zero with multiple clicks in order to access a preferred illumination setting.



3. MAGVIEW SYSTEM:

A fiber optic magnification indicator (patent pending), combined with raised rear-facing magnification references on the zoom dial, provides fast visual confirmation of magnification from the shooting position in low light conditions.



4. RADIUS BAR: The Razor HD's patent-pending fiber optic turret rotation indicator provides an

easy-to-see illuminated and tactile point of reference for counting turret rotations in all light conditions.

5. BDC TURRET ELEVATION KNOB (CQMR-1 model)

The Razor 1-4x24mm features a customized elevation knob with etched drop references for two popular loads of the 5.56x45



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cartridge (XM193 & M855). These allow rapid and accurate adjustments for shot ranging out to 700 yards with less than one turn of the elevation knob.

6. HARD ANODIZED FINISH: The Type-3 hard-coat anodized finish features a low-glare matte surface in Vortex's proprietary Stealth Shadow Black color. This color absorbs less light than jet black so it is more difficult to see in all light conditions. The hard-coat anodization resists scratching and abrasion while maintaining a dull, durable, glare-free finish.

2.

ERECTOR TUBE ASSEMBLY: The Razor HD's Erector Tube is precisionmachined from premium brass to precise tolerances and fitted with Vortex's patent-pending Friction Reduction System to assure smooth, reliable operation in the harshest conditions.

1. FRICTION REDUCTION SYSTEM: Heat-treated, highly polished hardened steel pads float on the end of the turret screws to interface with a hardened steel ring on the erector tube for steel-on-steel contact when adjusting windage and elevation. This patent-pending Friction Reduction System prevents galling or deformation of the erector screw contact point by preventing wear on the turret screw and erector tube. The result is superior durability and consistently repeatable accuracy for the life of the product.

2. MACHINED BRASS ERECTOR TUBE: The erector tube is precision-machined from premium brass alloy for greater strength and durability compared to aluminum and other metals commonly used. Consistently performs smoothly and reliably – without galling – even after many years of hard use.

3. CHROMIUM VANADIUM ERECTOR SPRING: The Razor HD's chromium vanadium erector spring has high fatigue resistance and is tumble-polished to a mirror finish for consistently smooth performance during micro-precise elevation and windage adjustments. The chromium vanadium spring will withstand a lifetime of compression with zero memory.

4. SINGLE SPRING CONSTRUCTION: The Razor HD's single erector spring system fully constrains (without over-constraining – a common problem with dual-spring systems) the optical system for predictable tracking throughout the entire range of windage and elevation adjustment.

RIFLESCOPES



RETICLES FOR RAZOR RIFLESCOPES

See pages 32-33 for more detailed information on Razor riflescope reticles.



EBR-2 MRAD RETICLE

Hashmarked ranging reticle using mrad-based subtension lines for ranging, holdover, and windage corrections. Includes windage reference dots on drop lines.

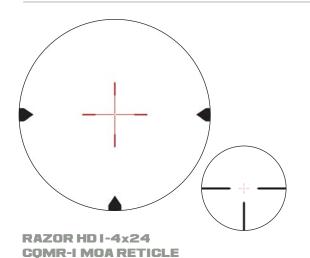
RAZOR™HD 5-20x50mm

ILLUMINATED CENTER CROSSHAIRS:

To aid in low-light visibility, the center portion of the EBR-2 mrad reticle can be illuminated using the offset control knob located on the left side of the Razor HD's eyepiece. The illumination offers 11 levels of intensity and has an "OFF" position between each intensity level, allowing a shooter to instantly return to a preferred brightness level. Illumination is powered by a long-life, low-cost and easily-obtained CR2032 lithium battery.



RETICLE LOCATED IN THE FIRST FOCAL PLANE: The Razor HD's EBR-2 mrad reticle enlarges and shrinks proportionately with the zoom magnification so the scale of the reticle remains in proportion to the zoomed image - this allows accurate ranging and holdover at all magnifications and prevents any shift in the point of impact during zoom.



First Focal Plane crosshair reticle intended for rapid close and mid-range shooting. Designed to

work well with BDC turret caps.

RAZOR HD 1-4x24mm

ILLUMINATED CENTER CROSSHAIRS:

To aid in low-light visibility, the center portion of the CQMR-1 MOA reticle can be illuminated using the control knob located on the left side of the Razor HD's turret housing. The illumination offers 11 levels of intensity and has an "OFF" position between each intensity level, allowing a shooter to instantly return to a preferred brightness level. Illumination is powered by a long-life, low-cost and easily-obtained CR2032 lithium battery.



RETICLE LOCATED IN THE FIRST FOCAL PLANE: The Razor HD's reticles enlarge and shrink proportionately with the zoom magnification so the scale of the reticle remains in proportion to the zoomed image - this allows accurate ranging and holdover at all magnifications and prevents any shift in the point of impact during zoom.



TO VIEW ALL RETICLE OPTIONS FOR THE RAZOR HD, SEE PAGES 32-33 >