ELEMENT



NEXUS 5-20X50 FFP

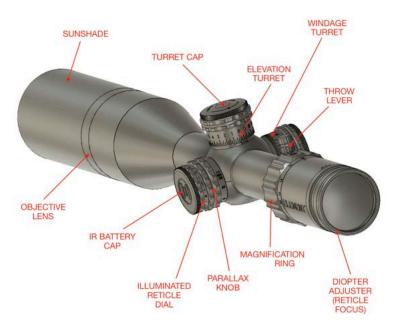
OWNER'S MANUAL & RETICLE INFORMATION

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MEET THE NEXUS.

The word "NEXUS" means "focal point", and that is what this model is to the ELEMENT OPTICS range. The Nexus combines intuitive features like tool-free tactical turrets, zero stop and a removable throw lever with precision engineering to bring you the ultimate 30mm riflescope. A variety of different reticle designs in both MOA and MRAD cater to all shooters: Simplified options are easy on the eye, while more complex designs allow experienced shooters to hold off with precision. Our design team of global competition winners & hunters understand optics, and have introduced strict quality control measures to ensure perfect operation under testing conditions. And if something goes wrong? We'll replace it for free. That's service.



MOUNTING YOUR RIFLESCOPE

Your rifle system is only as good as its weakest point, and so mounting of a riflescope is a very critical process that requires time and precision. If you feel uncomfortable doing this yourself we suggest visiting a gunsmith, as incorrect mounting can cause many issues down the line.

Choosing Rings

The NEXUS requires 30mm rings. When purchasing rings for this riflescope, choose a quality product – Inferior rings may not align correctly and can damage your scope.

Ensure that your rings are the correct height above the bore & action for safe clearance and a comfortable cheek weld.

We recommend using a 20 MOA base, or adjustable rings if shooting at extended ranges. NEVER USE SCOPE SHIMS, as these can cause damage to your body tube and void your warranty.



Alignment & Eye Relief

- 1) When fitting the riflescope to your rifle, ensure that the rings are firmly attached to the rifle BEFORE you tighten the top screws down.
- 2) With the riflescope in place, torque the screws down until you begin to feel some resistance, but make sure you are still able to move the riflescope back and forth.
- 3) Get behind the rifle in a shooting position and move the riflescope forward or backward until the eye relief is best suited to your position.
- 4) With the eye relief set, use a set of bubble levels or a plumbline to ensure that the riflescope is level. A canted reticle will cause point of impact drift to the left or right, and affect accuracy.



5) Once you are happy with the position of your riflescope, begin to torque down your rings in a criss-cross pattern, moving between screws and turning small amounts at a time. This will ensure that the riflescope does not shift position while tightening.

Tip: Use a small amount of loc-tite on the threads of your ring screws to keep them from coming loose, and adhere to the suggested torque specs of your rings.

RIFLESCOPE ADJUSTMENTS

Diopter - Focusing the Reticle

Everybody's eye is different, and the ocular lens will need to be adjusted for your eye in order for the reticle to appear in focus.

To do this, point the riflescope towards a blank or featureless background (i.e. a white wall or blue sky) and turn the ocular adjustment ring clockwise and counterclockwise until the reticle appears in optimum focus.



Tip: Your eye will try to compensate for an out-of-focus reticle, so it may help to turn your parallax to minimum and look towards a far-off background. This will blur the background and allow your eye to focus on the reticle itself.

Parallax Knob - Focusing the Target

A well-adjusted parallax is crucial for optimum precision, as it places the reticle in the exact same focal plane as the target and "fixes it in place", eliminating the possibility of parallax error. And, of course, it allows you to see your target clearly.

To adjust parallax, rotate the parallax knob until your target is in focus. The parallax wheel is marked for different distances between 10yds/m to infinity. These markings provide an indication of where your optimum parallax setting might be for a given distance, but will not always be 100% accurate as your ocular lens adjustment will affect the location of the focal plane. It is better to use your eye for such adjustments.



Tip: Place your riflescope in a fixed position and change the position of your eye (up/down, left/right) while adjusting parallax. If parallax is not set correctly, there will be apparent movement of the reticle in relation to the target. Adjust the parallax until this movement is eliminated.

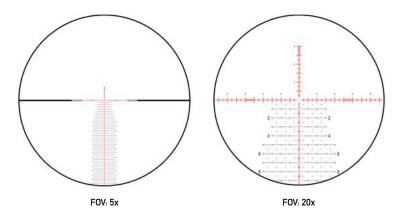
Adjusting Magnification

The NEXUS features a magnification of 5–20x, and can be adjusted using the magnification ring near the rear of the riflescope.

The ring is marked with magnification powers from 5x up to 20x, and will line up precisely with the arrow on the ocular tube to indicate magnification.



The NEXUS is a First Focal Plane riflescope, which means that the subtensions of the reticle will remain the same regardless of the magnification. In other words, the magnification setting is not crucial for precision when using the reticle.



Fitting/Removing the Throw Lever

Each NEXUS riflescope comes standard with a throw lever that enables fast adjustment of the magnification ring. This can be removed simply by unscrewing and replacing with the included hex screw.



Your NEXUS will need to be zeroed after it has been fitted to your rifle. The first step is to remove your turrets and remove the zero stop mechanism to allow a full range of adjustment.

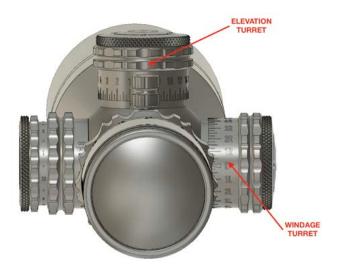
- 1) Remove the Turret Housing
 The NEXUS is fitted with tool-free turret
 housings that can be removed by hand.
 With one hand holding the turret firmly in
 place, turn the knurled portion of the
 locking cap anticlockwise with your other
 hand until it lifts out. With this piece
 removed, you can lift off the turret housing
 to expose the zero-stop mechanism.
- 2) Remove the Zero-Stop Mechanism
 To remove the zero-stop mechanism, use a
 1.5mm hex key to loosen the three locking
 screws, and then lift the zero-stop
 mechanism off. Keep it somewhere safe!
 Replace the turret housing to continue.





Adjusting the Turrets

Your NEXUS will either be an MOA model, or an MRAD (MIL) model. These are two different angular units of measurement that are used by precision shooters. For indepth information on these different units, see the guide on page??. If you have an MRAD model, your turrets should read "1 Click = 1/10 MRAD", while MOA models should read "1 Click = 1/4 MOA". In simple terms, 1 click on an MOA turret will move the reticle 1/4" at 100 Yards, and 1 click on an MRAD turret will move the reticle 1cm. at 100 Meters



- -To move your Point of Impact UP, turn ANTI-CLOCKWISE on your ELEVATION TURRET.
- -To move your Point of Impact DOWN, turn CLOCKWISE on your ELEVATION TURRET.
- -To move your Point of Impact RIGHT, turn ANTI-CLOCKWISE on your WINDAGE TURRET.
- -To move your Point of Impact LEFT, turn CLOCKWISE on your WINDAGE TURRET.

Boresighting

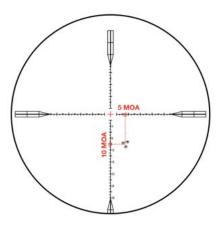
The NEXUS is optically zeroed at the factory, so it should be close to center when fitted. Even so, it is important to check that you are "on paper" to avoid frustration. Bore-sight your rifle to ensure that your reticle is roughly aligned before fine-tuning. If using an airgun, shoot a large target at a close distance to check basic alignment.

Fine-Tuning your Zero

We've designed the NEXUS with reticle and turret units matching each other, which will make fine-tuning your zero an easy process. You can use your reticle to measure your Point of Impact offset from your target, and adjust accordingly.

For example, if your POI is 10 MOA Low and 5 MOA Right, you will adjust your turrets 40 clicks (10 MOA) UP and 20 clicks (5 MOA) LEFT to shift your reticle position to match your POI. Some reticles even feature a small 1–click scale so you can measure to the nearest click!

We recommend taking a 3-shot group to confirm your zero before continuing to the next step.



Tip: We recommend a zero distance of 100yds/m for centerfire rifles, 50yds/m for rimfires and 20–50yds/m for airguns. If you cannot boresight your rifle, start at a closer distance to get on paper, and then move out further to make precise adjustments.

Setting your Zero-Stop

The NEXUS is fitted with a zero-stop mechanism to make returning to zero an easy process. After dialling your elevation turret for a long-range shot, the zero stop will allow you to return to zero without even looking at your turrets.

- Once your turrets have been zeroed, remove the turret housing and fit the zerostop mechanism in place, with the steel pin facing DOWN. Make sure that your turrets do not rotate at all (click) during this step.
- 2) Rotate the zero–stop ring <u>clockwise</u> while maintaining downward pressure. <u>You will</u> feel a hard stop as the pins engage.
- Tighten the three locking screws with the included 1.5mm hex key to lock in position.



Setting the Position of the Turret Housing

You will want to set your turret housing so that the "O" on your turret lines up with the indicator.

- Line up the "O" on the turret housing with the indicator line and push it down into position. The teeth on the turret housing will match up with the teeth on the turret rod.
- With one hand holding the turret firmly in place, screw the turret cap firmly down to lock it into place.



With your turrets set, you will now be able to use data from ballistics calculators and dial your turrets for long-range shooting instead of using reticle holdover!

UNDERSTANDING UNITS: MRAD & MOA

While it is possible to use your riflescope without understanding how these systems work, it is best to know the basic concepts, as they are an integral part of "Shooting Education", and will help you get the best out of your riflescope.

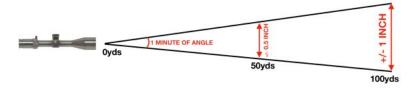
The two units we use in the shooting world are <u>Milliradians</u> (MRAD or MIL for short) and <u>Minutes of Angle</u> (MOA for short). The concept behind these two is very similar: They are angular units of measurement, meaning they can be used at any distance to quantify the distance between turret clicks and reticle markings.

<u>Technically speaking, one MRAD = 1/1000 of a Radian, and one MOA = 1/60 of a Degree.</u> But that doesn't help us.

Let's look at these units in terms of how they correspond to reticle divisions at different distances. In simple terms, $\underline{ONE\ MRAD} = \underline{10cm\ at\ 100m}$, and $\underline{ONE\ MOA} = \underline{1.047''\ at\ 100yds}$. This makes these two units very useful, because we can relate them to units of measurement we use every day.



A shooter practicing at a 100m range can easily measure his group size in cm through the scope using his MRAD reticle, and a shooter at a 100yd range can estimate his group size in Inches using an MOA reticle.



This is also incredibly useful for measuring your POI offset when zeroing your scope, or even measuring the size of an animal when hunting. But there is some mental maths involved. Because these are <u>angular</u> units of measurement, the corresponding length units will change depending on your distance from the target. For example, at 1000 Meters, one MRAD will now span 100cm (1m) instead of 10cm, and at 1000 Yards, 1 MOA will span 10.47" instead of 1.047".

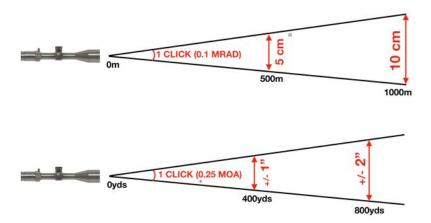
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And the same applies the other way round: <u>at 50m, one MRAD will span 5cm and 1 MOA will span approximately half an inch.</u>

Most riflescope turrets are divided up into smaller units for more precise adjustments.

The NEXUS features 1/10 MRAD and 1/4MOA click adjustments. Again, let's break that down:

MRAD model: 1 Click at 100m = 1cm MOA model: 1 Click at 100yds = Approx. 1/4"



The NEXUS is available with 4 different reticle options.

MOA: EHR-1C and EHR-1D MRAD: APR-1C and APR-1D

These can be easily categorised into two categories: Simple and Complex. The "simple" reticles (APR-1C and EHR-1C) are better suited to shooters that prefer dialling their turrets and don't plan to hold over much. The "complex' reticles, (APR-1D and EHR-1D) are better suited to shooters who prefer to use the reticle for hold-off shooting and need more aim points.

A long-range hunter who has time to dial the turret precisely will not need any aim points besides the centre crosshair, while a NRL or PRS shooter competing under time pressure may prefer to hold instead of dial. The choice is yours!

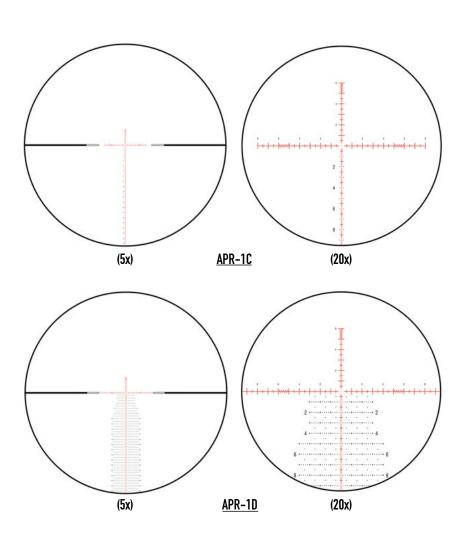
MRAD Reticles: APR-1C & APR-1D

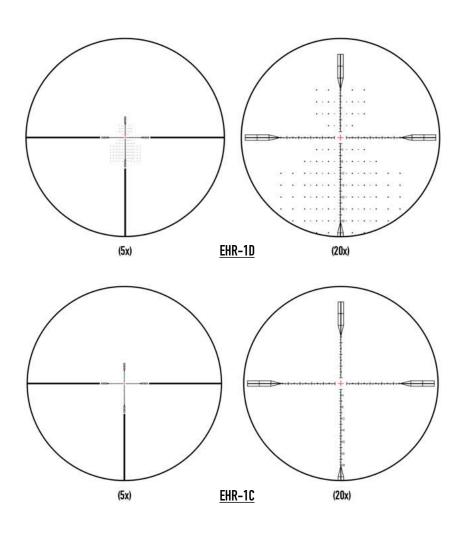
With so many reticle options nowdays, it is difficult to find something that can be used for all situations. Element's reticles have been designed by hunters, competition shooters and plinkers – We do it all, and we've done our best to design all-purpose reticles that are useful without being too "cluttered". APR stands for "All-Purpose Reticle", and has been designed with some intuitive features:

- -1/10 MRAD scale on the vertical & horizontal axis for measuring group size
- -Center dot for clarity when engaging small targets
- -Numbered markings for fast holds in stressful situations
- -Holdover markings down to 38 MRAD for ELR shooting when the turret is maxed out
- -Windage dots below the crosshair for more precise wind holds (APR-1D)

MOA Reticles: EHR-1C and EHR-1D

"EHR" stands for Expedited Hold Reticle, and is designed to help the shooter find his hold point faster & easier by implementing three different shapes (circle, large hash, small hash) on the X and Y axes. The same applies to the differently-sized floating dots on the EHR-1D. Reticle dimensions were carefully selected to achieve clarity without sacrificing precision. The Illuminated, floating centre crosshair creates a clean aim-point for target shooting.





As shooters, we know that there is nothing worse than being let down by your equipment. We have made every effort to build a rugged, reliable product that will not break under any normal circumstances, and have implemented some of the strictest quality control measures in the industry. However, we know that things can go wrong, and therefore ALL ELEMENT Riflescopes are covered by our PLATINUM LIFETIME WARRANTY. This includes lifetime cover for any riflescopes damaged through normal use, and requires no registration, proof of purchase or transfer. If you have a problem, we will fix it – It's that easy!

For any warranty claims, please contact support@element-optics.com

USA:

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ELEMENT OPTICS EUROPE Västerängsvägen 10 54235 Mariestad SWEDEN

The Element Optics PLATINUM LIFETIME WARRANTY applies to riflescopes only, and does not cover accessories. Theft, loss, deliberate damage and cosmetic damage that does not hinder the operation of the riflescope is not covered. If your product can not be repaired and a replacement model is no longer in production, a model of equal value will be substituted.

SPEC SHEET

MAGNIFICATION RANGE	5-20x		
TUBE DIAMETER	30mm		
OBJECTIVE LENS DIAMETER	50mm		
EXIT PUPIL	8-2.5mm		
EYE RELIEF	77-93mm		
FIELD OF VIEW	@100yds: 23.3-5.8 ft	@100m: 7.8-1.9m	
CLICK VALUE	1/4 MOA (20 MOA / REV)	1/10 MRAD (10 MRAD / REV)	
ELEVATION ADJUSTMENT RANGE	80 MOA	23.2 MRAD	
WINDAGE ADJUSTMENT RANGE	50 MOA	14.5 MRAD	
MINIMUM PARALLAX	10 YDS	10 METERS	



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