# ELEPPENT





10x40 & 14x50

OWNER'S MANUAL & RETICLE INFORMATION

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## A WINDOW TO A NEW WORLD: THE IMMERSIVE SERIES

Traditional riflescopes have their place in the optics world, but new technology is allowing us to push the envelope of what is possible. The Immersive Series brings you range of ultracompact Prismatic Riflescopes with many unique properties, including market-leading field of view, drawing you in to your surroundings for a better perspective. Unlike conventional scopes, which present the image from the eyepiece as floating distantly in front of you, the image from an Immersive Series scope allows for vastly improved peripheral awareness, giving the impression that you are immersed in the scene – and with the optical clarity of ED Glass, there are no compromises.

The 10x40 and 14x50 are our SHORT EYE RELIEF models, built specifically for use with non-recoiling airguns and rimfires.



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.

#### Mount Information: We've Made it Easy!

Immersive Series Scopes are supplied with a set of tilt-adjustable mounts. The adjustable mounts allow the shooter to determine the tilt angle of the scope, which will enable improved optical centering (better image quality) and ensuring that you never run out of elevation travel. The mount is marked in MOA or MRAD (see explanation of units on page 9) and is pre-fitted to the scope for your convenience.

We've also included different lengths of Picatinny rails, allowing you to compensate for different lengths of pull and giving you more freedom to fine-tune your eye relief (Fir.1, Pos.4)

The scope comes with a pre-installed medium length rail, which is set at "O"MOA. The ring is pre-fitted, although you may need to adjust for can't error once fixed to your rifle.

#### To install another rail:

- -Undo the two screws below the rail (Fig.1, Pos.1), remove it and replace with desired rail.
- -Once completed, lock screws in place

#### To adjust tilt:

- -Loosen the two screws just enough to allow the upper mount to be lifted and repositioned (Fig.1, Pos 2.3).
- -Once you have the desired tilt, tighten the two screws in place.

We recommend a tilt of 20-30 MOA or 6-10 MRAD for most shooting applications. Only adjust further if you need extended travel for extreme range shooting.



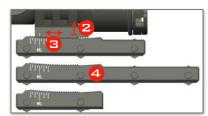


Fig. 1

#### **Alignment & Eye Relief**

- 1) Before torquing down your ring screws, first find the correct base mounting position..
- 2) Loosen the Base Nuts (Fig.2, Pos.1) and fit the mount to the rail, ensuring that the cross bolts fit correctly in the rail slots. Shoulder the rifle to check whether eye relief is correct, and adjust mount position accordingly. Torque the nuts down to 50 in.lbs (5.7Nm) using a 13mm or 1/2" Socket
- 3) If the scope needs to be levelled, loosen the ring screws and adjust the scope position until cant error is removed. Once you are happy with the position of your riflescope, begin to torque down your rings in a criss-cross pattern, moving between screws (Fig.2, Pos.2) and turning small amounts at a time. Use a torque of 1.2–1.5 Nm (10.6–13.3 in–lbs) for the ring screws.



FIG.2

All Immersive Series Riflescopes feature Illuminated Reticles with adjustable brightness. This improves reticle visibility in overcast or dim lighting conditions. Due to shipping restrictions, the battery may not be included in the box, but CR2032 batteries are very common and can be purchased almost anywhere.

#### **Battery Installation**

- -Unscrew the Battery Container Cover (Fig 3, Pos.1)
- -Insert a CR2032 Battery, ensuring the polarity of the battery is correct ("-"side facing out)
- -Screw the battery container cover back on



#### Operating the Illumination

To Activate the Reticle Illumination function, press the Illumination button (Fig.3, Pos.2). Brightness can be adjusted by repeatedly pressing the button.

The Illumination level cycles up until the brightest level is reached, then drops back down to the lowest level.

To switch the Illumination function off, press and hold the Illumination button for 3 seconds.

#### **Eyepiece - 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 counter-clockwise until the reticle appears in optimum focus (Fig. 4, Pos.1)



#### 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 (Fig.4, Pos.2) until your target is in focus. The parallax wheel is marked for different distances between 6yds/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.

Your Riflescope will need to be zeroed after it has been fitted to your rifle. The first step is to remove the windage turret cap (Fig.4, Pos.3) by turning it anticlockwise. With turrets exposed, you can begin the zeroing procedure.

#### **Adjusting the Turrets**

Your Immersive Series Riflescope 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 in-depth information on these different units, see the guide on page 9. If you have an MRAD model, your turrets should read "1 Click = 0.1 MIL", while MOA models should read "1 Click = 0.25 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.

WARNING: These are short eye-relief models, and should NEVER be used with heavy recoiling rifles. Recoil can result in serious injury to the eye and head.

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#### **Boresighting**

The riflescope 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.

#### Fine-Tuning your Zero

We've designed our Immersive Series Riflescopes 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 7 MRAD Low and 8 MRAD Right, you will adjust your turrets 70 Clicks (7 MRAD) UP and 80 Clicks (8 MRAD) LEFT to shift your reticle position to match your POI. We recommend taking a 3-shot group to confirm your zero before continuing to the next step.

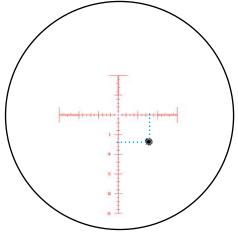


FIG.6

Tip: We recommend a zero distance of 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 the Position of the Turrets to Zero

Once zeroed, you will want to set your turret so that the "O" on your turret lines up with the indicator.

- Loosen the three grub screws holding the turret in place (Fig.7, Pos.1). Do not remove screws entirely.
- 2) Turn the turret until the "0" mark lines up with the indicator. (Fig.7, Pos.2)
- 3) Tighten the three grub screws in place (Fig.7, Pos.1)



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.

Tip: You do not need to apply much torque to the turret screws to keep them in place.

Overtorquing will cause the screw to bite into the material underneath and form "craters".

## **UNDERSTANDING UNITS: MRAD & MOA**



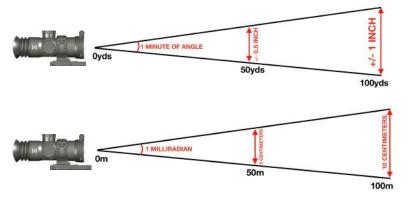
While it is possible to use your riflescope without understanding how these systems work, it is best to know the basic concepts, as they are an integral part of "Shooting Education", and will help you get the best out of your riflescope.

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.

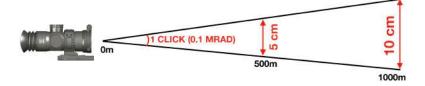
<u>Technically speaking, one MRAD = 1/1000 of a Radian, and one MOA = 1/60 of a Degree.</u> But that doesn't help us.

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

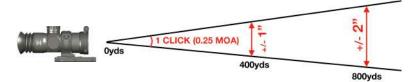
A shooter practicing at a 100m range can easily measure his group size in cm through the scope using his MRAD reticle, and a shooter at a 100yd range can estimate his group size in Inches using an MOA reticle.



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 <u>1000 Meters</u>, one MRAD will now span 100cm (1m) instead of 10cm, and at 1000 Yards, 1 MOA will span 10.47" instead of 1.047".



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 Immersive Series feature 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"

### **RETICLE OPTIONS**

Immersive Series Riflescopes are available with a number of reticle options.

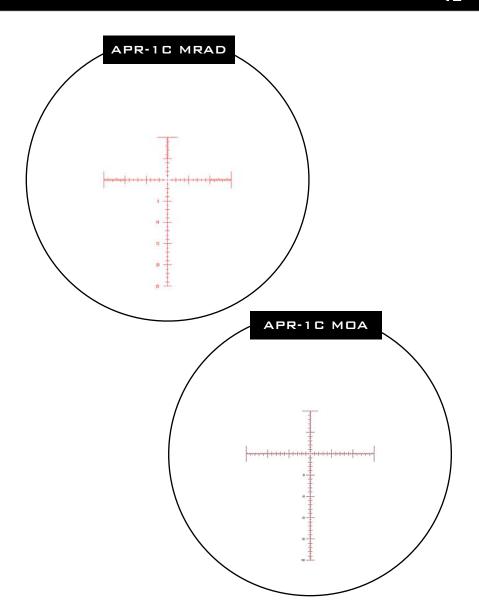
The 10x40 and 14x50 models feature APR reticles. The MRAD models are paired with APR-1C MRAD reticles, and the MOA models are paired with APR-1C MOA reticles.

These reticles are specifically designed to give you the aim points & features you need without cluttering your field of view with unnecessary markings. Many shooters will choose to use their turrets to compensate, however the reticle has enough hold points to be utilised as well, and is in the same units as the turrets for easy translation of movement.

#### APR RETICLE OVERVIEW

With so many reticle options nowadays, 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 intuitive reticles that are useful without being too "cluttered". APR stands for "All-Purpose Reticle", and has been designed with some intuitive features:

- MRAD or MOA 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
- -Illuminated hold points to allow for hold-offs in poor light conditions.



### **WARRANTY & SPEC SHEET**

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 our 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 <a href="mailto:support@element-optics.com">support@element-optics.com</a> or complete a claim form on our website.



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. For more details, visit www.element-optics.com/warranty

## **SPEC SHEET**

MAGNIFICATION	10x		14x	
OBJECTIVE LENS DIAM.	40mm		50mm	
EYE RELIEF	0.7" (18mm)		0.7" (18mm)	
FIELD OF VIEW	@100yds: 34ft	@100m: 11.4m	@100yds: 28ft	@100m: 9.6m
CLICK VALUE	1/4 MOA (15 MOA / REV) or 1/10 MRAD (6 MRAD / REV)			
ELEV. ADJUSTMENT	83 MOA	28 MRAD	83 MOA	28 MRAD
WIND. ADJUSTMENT	83 MOA	28 MRAD	83 MOA	28 MRAD
MINIMUM PARALLAX	6 YDS	6 METERS	6 YDS	6 METERS
LENGTH	5.31"	135mm	6.06"	154mm
WEIGHT (W/MOUNT)	17.1oz	485g	19.5oz	554g

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