



5th Gen. Range Estimating/Reticle Intensified Adjustable Objective Scope

**R
G
B**
(Red Green Black Reticle)



Major Features:

- **Rugged One Piece Tube Construction for All Terrains/Weather**
 - Precision machined to exact tolerances from aircraft-grade aluminum alloy.
 - Completely sealed and nitrogen filled to stop moisture ingress.
 - Perfect for all terrains and all weather conditions.
- **Sealed Windage and Elevation Housing with Tru-Hunter Turrets**
 - Windage and elevation housing features machine plate controlled seals, to eliminate risk of water ingress and fogging.
 - Tru-Hunter Turrets are manufactured in brass with easy to grip rings making adjustments simple even whilst wearing gloves.
 - Positive and precise 1/4 MOA for accurate and consistent shooting.
- **Multi Layer Lens Coating for Optimum Light Transmission**
 - Unique high tech coating applied to lens elements ensure much better light transmission to optimize optical performance.
 - Multi layer coatings ensure maximum utilization of all ambient light to optimize resolution and clarity.
- **Wide Field of View with Tactical Mil-Dot Reticle**
 - Wide field of view and edge to edge lens clarity allow for clearly picking up quarry on the peripheral edge of the sight picture.
 - The precise Tactical Mil-Dot reticle allows the shooter to estimate ranges and enhance accuracy.
- **High Quality Precision Machined Parts**
 - Guarantees smooth and accurate operation, and deliver consistent and reliable performance.
- **Power Illuminated Reticle with Red/Green Dual Illumination**
 - Adjustable intensity of the illuminated reticle gives optimum reticle clarity in variable light conditions, increasing accuracy in daylight and twilight environments.

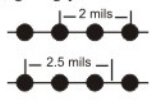


Model	Magnification	Tube Dia.	Objective Dia.	Field of View @100 yards	Eye Relief	Exit Pupil	Click Value @100 yards	Length	Weight	Parallax Setting	Batteries
6-24X50 Full Size	6X-24X	1"	50 mm	16.1'-4.0'	3.3"-3.1"	8.3-2.1mm	1/4"	15.9"	26.3oz	15yds - infinity	CR2032 3V Lithium
4-16X50 Full Size	4X-16X	1"	50 mm	24.2'-6.0'	3.3"-3.1"	10.0-3.1mm	1/4"	15.2"	25.7oz	10yds - infinity	CR2032 3V Lithium
3-8X50 Full Size	3X-8X	1"	50 mm	39.3'-13.1'	3.3"-3.1"	10.0-5.6mm	1/4"	13.5"	22.4oz	5yds - infinity	CR2032 3V Lithium
3-8X40 Full Size	3X-8X	1"	40 mm	39.0'-13.0'	3.3"-3.1"	10.0-4.4mm	1/4"	13.5"	20.3oz	5yds - infinity	CR2032 3V Lithium
4X32 Mini	4X	1"	32 mm	28.0'	3.5"	6.0mm	1/4"	7.7"	10.7oz	5yds - infinity	CR2032 3V Lithium

A. Range Estimating

Regular mil-dot reticle found on the market usually has 4 dots on each direction of the cross hair, giving you 9 different aiming points for either windage or elevation. If you count the 2 inner tips of the opposite duplex cross hairs, you get 11 aiming points. Leapers's own 24 Mil-Dot Reticle (TRE) has 6 dots on each direction of the cross hair, giving you 13 aiming points or 15 including the inner tips of the duplex cross hairs.

- Range estimating requires common knowledge/experience about your target's actual width or height.
- 1 mil in a scope reticle is the distance from the center of one dot to the center of the next dot.
- Set your scope at the highest power. View the target through the scope. Place the center of the dot against one edge of the target and measure to the opposite edge of the target.
- Once the target has been measured in mils, depending on the scope model, a formula is available to estimate the distance of the target. An example formula for 4X32 Mini is provided here for your reference:



$$\frac{\text{Height or Width of Target in Meters} \times 333}{\text{Height or Width of Target in Mils}} = \text{Range in Meters (1M = 1.0936 Yards)}$$

- For accurate range estimating the size of the target must be known.
- Below is an example of range estimate chart for reference:

Range in Meters (1M=1.0936 Yards)

Target Size	Inches	9	12	16	18	20	22	24	28	32	36	60	66	69	72
Reticle Measurements (mils)	Meters	0.229	0.305	0.406	0.457	0.508	0.559	0.610	0.711	0.813	0.914	1.524	1.678	1.753	1.829
	0.75	101.7	135.4	180.3	202.9	225.6	248.2	270.8	315.7	361.0	405.8	676.7	744.1	778.3	812.1
	1.00	76.3	101.6	135.2	152.2	169.2	186.1	203.1	236.8	270.7	304.4	507.5	558.1	583.7	609.1
	1.25	61.0	81.3	108.2	121.7	135.3	148.9	162.5	189.4	216.6	243.5	406.0	446.5	467.0	487.2
	1.50	50.8	67.7	90.1	101.5	112.8	124.1	135.4	157.8	180.5	202.9	338.1	372.1	389.2	406.0
	1.75	43.6	58.0	77.3	87.0	96.7	106.4	116.1	135.3	154.7	173.9	290.0	318.9	333.6	348.2
	2.00	38.1	50.8	67.6	76.1	84.6	93.1	101.6	118.4	135.4	152.2	253.7	279.1	291.9	304.5
	2.25	33.9	45.1	60.1	67.6	75.2	82.7	90.3	105.2	120.3	135.3	225.6	248.0	259.4	270.7
	2.50	30.5	40.6	54.1	60.9	67.7	74.5	81.3	94.7	108.3	121.7	201.0	223.2	231.5	243.6
	2.75	27.7	36.9	49.2	55.3	61.5	67.7	73.9	86.1	98.4	110.7	184.5	202.9	212.3	221.5
	3.00	25.2	33.9	45.3	50.7	56.1	62.0	67.9	78.3	90.0	101.3	166.0	186.0	194.6	203.0
	3.25	23.4	31.1	41.6	46.8	52.0	57.2	62.5	72.9	83.3	93.6	156.2	173.7	179.6	187.4
	3.50	21.8	29.0	38.6	43.5	48.3	53.2	58.0	67.7	77.4	87.0	145.0	159.5	166.8	174.0
	3.75	20.3	27.1	36.1	40.6	45.1	49.6	54.2	63.1	72.2	81.2	135.3	148.8	155.7	162.4
	4.00	19.1	25.4	33.8	38.0	42.3	46.5	50.8	59.2	67.7	76.1	126.9	139.5	145.9	152.3
	4.25	17.9	23.9	31.8	35.8	39.8	43.8	47.8	55.7	63.7	71.6	119.4	131.3	137.4	143.3
	4.50	16.9	22.6	30.0	33.8	37.6	41.4	45.1	52.6	60.2	67.6	112.8	124.0	129.7	135.3
	4.75	16.1	21.4	28.5	32.0	35.6	39.2	42.8	49.8	57.0	64.1	106.8	117.5	122.9	128.2
	5.00	15.3	20.3	27.0	30.4	33.8	37.1	40.4	47.4	54.1	60.9	101.5	111.6	116.7	121.8
	5.25	14.5	19.1	25.8	29.0	32.2	35.5	38.7	45.1	51.6	58.0	96.7	106.3	111.2	116.2
5.50	13.9	18.5	24.6	27.7	30.8	33.8	36.9	43.0	49.2	55.3	92.3	101.5	106.1	110.7	
5.75	13.3	17.7	23.5	26.5	29.4	32.4	35.3	41.2	47.1	52.9	88.3	97.1	101.5	105.9	
6.00	12.7	16.9	22.5	25.4	28.2	31.0	33.9	39.5	45.1	50.7	84.6	93.0	97.3	101.5	
6.25	12.2	16.3	21.6	24.3	27.1	29.8	32.5	37.9	43.3	48.7	81.2	89.3	93.4	97.4	
6.50	11.7	15.6	20.8	23.4	26.0	28.6	31.3	36.4	41.7	46.9	78.1	85.9	89.8	93.7	
6.75	11.2	15.0	20.0	22.5	25.1	27.6	30.1	35.1	40.1	45.1	75.2	82.7	86.5	90.2	
7.00	10.9	14.5	19.3	21.7	24.2	26.6	29.0	33.8	38.7	43.5	72.4	79.8	83.4	87.0	
8.00	9.5	12.7	16.9	19.0	21.1	23.3	25.4	29.6	33.8	38.0	63.4	69.8	73.0	76.1	
9.00	8.5	11.3	15.0	16.9	18.8	20.7	22.6	26.3	30.1	33.8	56.4	62.0	64.9	67.7	
10.00	7.6	10.2	13.5	15.2	16.9	18.6	20.3	23.7	27.1	30.4	50.7	55.8	58.4	60.9	
11.00	6.9	9.2	12.3	13.8	15.4	16.9	18.5	21.5	24.6	27.7	46.1	50.7	53.1	55.4	
12.00	6.4	8.5	11.3	12.7	14.1	15.5	16.9	19.7	22.6	25.4	42.3	46.5	48.6	50.8	
13.00	5.9	7.8	10.3	11.7	13.0	14.3	15.6	18.2	20.8	23.1	39.0	42.8	44.9	46.9	
14.00	5.4	7.3	9.7	10.9	12.1	13.3	14.5	16.9	19.3	21.5	36.2	39.9	41.7	43.5	

Note: Each model will come with its own formula and a pre-calculated mil-dot table of most used distance estimates to aid the user.

36 inch actual size (0.914M) target, measured w/3 mils. = 101 meters range est. (1 meter = 1.0936 yards).

B. Mounting the Scope:

CAUTION: Always ensure your rifle is UNLOADED, UNCOCKED and, where fitted, the safety catch is applied before fitting the scope. Practice safe handling procedures at all times.

1. Ensure you have top quality rings from LEAPERS, buying cheap rings is a false economy and can result in poor performance from your combo.
2. Fit the ring bases to the mount rail of the rifle.
3. Remove the top piece of the ring and place the scope on the exposed fitted ring bases. Replace the top piece of the ring and finger tighten.
4. Put the rifle to your shoulder in your natural shooting position and adjust the scopes eye relief until you achieve a full field of view.
5. When you have found the ideal eye relief rotate the scope so the reticle cross hairs are vertical and perpendicular to the rifle.
6. Tighten the screws on the ring to ensure a firm grip on the scope. **WARNING:** Do not overtighten the screws as you could cause damage to the scope body.
7. The scope is now ready to be zeroed.



C. Zeroing the Scope:

The purpose of zeroing the scope is to ensure that the scope is aligned with the impact point of the pellet or bullet from the rifle.

1. Place a target 100 yards away. (25 yards for airgun scopes)
2. Ideally use a steadying device such as a bipod or shooting stand, set the scope at the highest magnification, aim at the center of the target and fire a test shot, if safe to do so.
3. If the impact point of the pellet or bullet is exactly in the center of the target then the scope is zeroed. If it is not, you will need to adjust the reticle using the elevation and / or windage adjusters as follows:
 - 1) Vertical Adjustment (Elevation) - Unscrew the protective cover on the top of the scope. Use your fingers to turn the adjusting knob as required. One click in either direction equals approximately 1/4 inch at 100 yards. Re-attach and tighten the protective cover.
 - 2) Horizontal Adjustment (Windage) - Unscrew the protective cover on the right side of the scope. Use your fingers to rotate the adjusting knob as required. One click in either direction equals approximately 1/4 inch at 100 yards. Re-attach and tighten the protective cover.
4. Having adjusted the windage and elevation as required, fire, if safe to do so, another test shot. Keep adjusting and test firing until the test shot impacts on the center of the target when the reticle is on the center of the target. This can seem a tedious process but is vital for accurate shooting.



Note: Each click of adjustment moves the impact point by the amount shown in the table below:

Inches of Movement per Click in Windage/Elevation Models with 1/4 in. Per Click @ 100 Yards				
25 yds	35 yds	50 yds	100 yds	200 yds
1/16	7/80	1/8	1/4	1/2

Note: Since climatic conditions such as altitude, temperature, wind and rain can affect the pellets or bullets trajectory, you may experience some deviation in the exact settings during different shooting sessions.

D. Adjusting Parallax and Focus:

Leapers's 5th Gen Adjustable Objective scopes allow for parallax/focus adjustment to sharpen the target image and greatly enhance shooting comfort and performance:

1. Aim the scope at your target.
2. Rotate the objective focus ring to the desired distance setting until the target is in the sharpest focus and the center of the crosshair stays on the target while you examine the image by slightly moving your head.
3. Adjust the eyepiece until both the crosshair and the target are in sharpest focus.



Note: Please note that there is a fine balance between the eyepiece and the parallax adjustment ring. Different individuals will have different eye focus which will result in different Parallax setting. A person will have different parallax settings with or without eye glasses.

E. Installing Sunshade (Optional):

1. Remove the front objective edge protective ring.
2. Screw on the proper sunshade to the front of the objective.



F. Adjusting Reticle Illumination: (For Reticle Intensified Models Only)

Turn the illumination adjustment control to adjust the intensity of illumination. The rheostat is located on the top of the ocular tube. The battery (included with the scope) is a coin style lithium battery (CR2032 3V). When replacing battery, insert it with the positive (+) side uppermost in the battery compartment.



G. Care and Maintenance:

1. Take care not to drop or knock the scope once it is zeroed.
2. Keep the protective lens covers in place when the scope is not being used.
3. Maintain the metal surface of the scope by removing any dirt or sand with a soft brush so as to avoid scratching the finish.
4. Wipe the lens with a clean flannel cloth to keep it clean and dry. In order to avoid scratching the glass, ensure both the lens and cloth are clean.
5. Store the scope in a cool dry place when not in use. Be careful to avoid contact with acid, alkaline or corrosive chemicals.
6. Do not attempt to lubricate any part of the scope.
7. Do not disassemble the scope. Do not loosen or remove screws or parts. Any such or similar actions will void the warranty.

H. Limited Lifetime Manufacturer's Warranty

Warranty against material or workmanship defects applies based on the following conditions -

- Scope was purchased new. Evidence of purchase is required for warranty service.
- Scope was not disassembled, parts / screws not removed or loosened, and the scope was not tampered with in any way. Any evidence of such interference will void the warranty.
- Scope has not been abused, maliciously damaged or treated in a manner not in keeping with the purpose it was designed for.

For Warranty service, please contact the scope distributor and provide a written problem description to obtain a Return Authorization Number before returning the product for repair or replacement.

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