



## HOW TO MOUNT A RIFLE SCOPE

### Mounting & Mounting Tips

Whatever the choice of ring/base system, make sure the rifle scope (optical axis) and rifle barrel (bore axis) are aligned as closely as possible. This alignment is critical to get sighted in properly and the scope performing to its maximum potential. This can best be thought of the process of aligning the reticle to where the rifle barrel is pointing. SWAROVSKI OPTIK rifle scopes are delivered with the reticle centered in its Range of Adjustment (ROA). In the vast majority of situations, a rifle scope is mounted, several clicks are made to get zeroed, and you're ready for the range or field.

Every rifle scope model has a unique Range of Adjustment (ROA). ROA is the limit a reticle can move inside the rifle scope. Generally, lower magnification rifle scopes have more ROA than higher magnification scopes. For example, a SWAROVSKI OPTIK Z6(i) 3-18x50 has a ROA of 65 inches of elevation, 36 inches of windage, at 100 yards. This model presents a rectangular shape box. When the scope is mounted on the rifle, the rifle barrel should be pointing somewhere within this "rectangular shaped box" or Range of Adjustment, preferably relatively close to the center.

Two mounting problems that can happen and to be aware of: After the reticle is adjusted to zero the rifle (aligning the reticle to the rifle barrel), if the reticle is positioned at the end, or very close to the end of its adjustment range (ROA), zeroing problems may occur. There may even be severe cases when after a scope is mounted, the rifle barrel is pointing "Outside" the Range of Adjustment of that individual scope, so that the reticle can not be aligned with the rifle barrel.

Rings and bases should be tightened to a specific torque measured in "Inch Pounds" to ensure proper functioning of the rifle scope. Scope Ring and Base materials used, such as steel or alloys, as well as individual screw sizes determine the appropriate "Inch Pound" specification. **Over tightening rings can adversely affect performance, especially the rifle scope's ability to hold zero.** These specs are provided by the Ring and Base manufacturer and should be closely adhered to.

### SWAROVSKI OPTIK Z3 Series – 1 inch (25.4 mm) tubes

Model	Maximum Range of Adjustment at 100 Yards	Point of impact (click) Adjustment at 100 Yards (per click)	Total no. of Clicks (approx)
Z3 3-9x36	57.6 inches elevation	.25 inches	230 clicks
	57.6 inches windage	.25 inches	230 clicks
Z3 3-10x42	50.4 inches elevation	.25 inches	202 clicks
	50.4 inches windage	.25 inches	202 clicks
Z3 4-12x50	43.2 inches elevation	.25 inches	173 clicks
	43.2 inches windage	.25 inches	173 clicks

### SWAROVSKI OPTIK Z5 Series – 1 inch (25.4 mm) tubes

Model	Maximum Range of Adjustment at 100 Yards	Point of impact (click) Adjustment at 100 Yards (per click)	Total no. of Clicks (approx)
Z5 3.5-18x44	57.6 inches elevation	.25 inches	230 clicks
	36 inches windage	.25 inches	144 clicks
Z5 5-25x52	43.2 inches elevation	.25 inches	173 clicks
	25.2 inches elevation	.25 inches	101 clicks

\* The BT models in the Z3 4-12x50, Z5 3.5-18x44 and Z5 5-25x52 will have the same Total no. of clicks, *with the coupling off* (as when making initial elevation adjustments when sighting in).

### SWAROVSKI OPTIK Z6 Series - 30 mm (1.18 inch) tubes

Model	Maximum Range of Adjustment at 100 Yards	Point of impact (click) Adjustment at 100 Yards (per click)	Total no. of Clicks (approx)
Z6 1-6x24	72 inches	.54 inches	133 clicks
Z6 1-6x24 EE	75.6 inches	.54 inches	140 clicks
Z6 1.7-10x42	54 inches	.36 inches	150 clicks
Z6 2-12x50	54 inches	.36 inches	150 clicks
Z6 2.5-15x44	64.8 inches elevation	.36 inches	180 clicks
	36 inches windage	.36 inches	100 clicks
Z6 2.5-15x56	64.8 inches elevation	.36 inches	180 clicks
	36 inches windage	.36 inches	100 clicks
Z6 3-18x50	64.8 inches elevation	.18 inches*	360 clicks
	36 inches windage	.18 inches	200 clicks
Z6 5-30x50	43.2 inches elevation	.18 inches*	240 clicks
	25.2 inches windage	.18 inches	140 clicks

\* BT turret - POI adjustment (elevation only) on this model is .36 inches at 100 yards or 1cm (10 mm) at 100 meters.

Model	Maximum Range of Adjustment at 100 Yards	Point of impact (click) Adjustment at 100 Yards (per click)	Total no. of Clicks (approx)
Z6 3-18x50 BT	64.8 inches elevation	.36 inches	180 clicks**
Z6 5-30x50 BT	43.2 inches elevation	.36 inches	120 clicks**

\*\* With BT coupling off. As the scope would be when sighting in.