

ZCTM ZERO COMPROMISE OPTICTM

Manual



www.zcompoptic.com

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WARNING



Make sure your firearm is unloaded before working on your firearm/rifle scope. If you stop the procedure and leave, reconfirm the firearm is unloaded upon returning.



Never look at the sun or other bright lights through your rifle scope. Permanent eye damage or blindness can occur.

CAUTION



The import or export of the product in question may be subject to the export control regulations of the respective country (e.g. approval according to the Foreign Trade Act, Dual-Use Regulation, etc.). It is the buyer's responsibility to comply with these regulations.

ZC 527



ZC 420



Welcome to

Zero Compromise Optic (ZCO) is a true specialty scope company where our passion, dedication, and complete focus is building nothing but the highest quality rifle scopes. This can only be accomplished with the most modern and technologically advanced optical and mechanical designs which we have integrated into our products. We maintain an uncompromising dedication to superior design as well as outstanding quality, and we are completely committed to ultimate precision, performance, and reliability. Every aspect of our products is analyzed, designed, and produced to meet this objective. To meet our end goal, every single rifle scope is subject to extreme and intensive real-world testing such as impact and vibration prior to leaving the facility.

ZCO products are designed specifically for you, from aggressive styling and rugged performance, to extreme duty internal components engineered for unfailing reliability.

Due to **ZCO**'s involvement in many precision shooting applications, even seemingly insignificant details become increasingly important. We fully understand that dedicated lifelong customers will be the foundation and driving force for future innovations and product development. **ZCO** components are produced in Austria and hand-assembled in Austria or in the United States of America. The high quality and precision of **ZCO** rifle scopes will never be compromised nor sacrificed in favor of production quantity.

This philosophy is paramount.



supporting your precision

ZCO Specifications

	ZC 527	ZC 420
Magnification Objective	5-27	4-20
Objective \varnothing (mm)	56	50
Main Tube Diameter (mm)	36	36
Clic Value (MIL)	0.1	0.1
Elevation (MIL)	35	35
Elevation (m/100m)	350cm/100m	350cm/100m
Elevation lock	YES	YES
Windage (MIL)	20	20
Windage (cm/100m)	200cm/100m	200cm/100m
Windage lock	YES	YES
Field of View (ft/100yd)	21.0` - 4.50`	28.0` - 6.0`
Field of View (m/100m)	7m - 1,5m/100m	9,3m - 2m/100m
Eye Relief (inches)	3.54	3.54
Eye Relief (mm)	90	90
Parallax Compensation (m)	25 - ∞	25 - ∞
Length (inches)	15.24	12.8
Length (mm)	387	325
Weight (oz)	37.9	34.8
Weight (g)	1075	986
Illumination	red green	red green
Focal Plane	FIRST	FIRST

Mounting your ZCO rifle scope

1. Ensure your firearm is completely unloaded and pointed in a safe direction.
2. Place the lower half of the scope rings on the scope base, which should already be mounted to the firearm, and torque the lower half of the ring to the base with the manufacturers recommended value.
3. Set the magnification of the scope to the maximum setting and place the rifle scope into the lower half of the scope rings.
4. Place the top half of the scope rings over the scope and very lightly tighten the ring cap screws to the lower half of the rings. Tighten just enough to hold the scope in place but still allow smooth scope movement for final positioning and eye relief.
5. While holding the rifle in your most used position (prone, bench, standing, etc.) move the scope fore/aft as needed to obtain a full field of view through the scope without any shadow around the edges.
6. Since this rifle scope is built for the reticle and adjustments to be perpendicular to the flat on the bottom of the adjustment saddle, you can ensure this portion of the scope is level with the rifle by using feeler gauges between the adjustment saddle and scope base if appli-

cable. Otherwise, ensure the reticle is level with a plumb line placed from 50-100 yards away while the firearm is also level.

7. Tighten the ring cap screws according to the manufacturer's recommendations and torque values.

CAUTION



Ensure the rings will NOT clamp over a portion of the front objective bell.



Overtightening of the scoping cap screws can cause binding of the internal elements of the scope. DO NOT tighten ring cap screws more than 2,8 Nm or 25 in/lbs.

WARNING



Proper amount of eye relief should be maintained for hard recoiling rifles as well as high angle up/down hill shooting. Serious injury or even death can result from impact of the eye piece with the shooter during the recoil process.

Focusing the reticle

1. Set the parallax adjustment to the infinity setting and scope magnification to minimum power.
2. Loosen the diopter lock ring by turning counterclockwise and turn the diopter all the way in.



3. Look through the scope at a solid light-colored background such as a white wall or all blue sky and rapidly turn the diopter outward until you see a crisp reticle image.

4. Close your eye for about 4 seconds and look through the scope again at the light-colored background and make minor adjustments to the diopter as needed. Look at the reticle for not longer than 1 second as your eye will start to compensate.
5. Repeat step 4 until you see a crisp reticle image immediately upon opening your eye. At this point it is best to look at the fine detail portions of the reticle.
6. Hold the diopter in place and turn the lock ring clockwise by hand until snug. Verify the diopter did not shift.

CAUTION



The lock ring only needs to be lightly hand tightened. Damage to the threads can occur by over tightening.

Parallax adjustment

This rifle scope has a parallax adjustment that will provide for a parallax free image from 25 meters to infinity.

Parallax is an apparent change in the position of the crosshairs in relation to the target, when the observers eye moves in relation to the eyepiece. This is a simple byproduct of magnified optics that is accounted for with the parallax adjustment on the side of the scope. This same adjustment also brings the target into focus.



Shooting at a target when the parallax has not been eliminated may cause a shift in bullet impacts due to inconsistent stock weld which results in inconsistent reticle place-

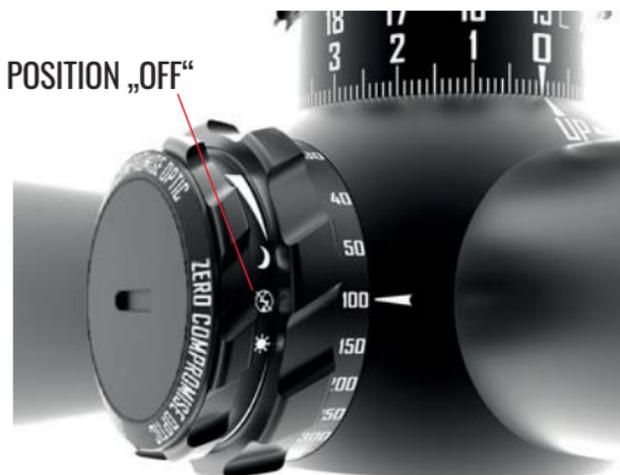
ment on the target. To verify the parallax is eliminated from the optical system, adjust the parallax turret until the target is in focus. While looking at the target with the firearm stable, slightly nod your head up-down or side to side and watch for an apparent corresponding movement of the reticle. If the reticle also shifts, continue adjusting the parallax until the crosshairs do not move while performing this test.

Our optical and mechanical engineers worked extremely hard to provide the finest optical sighting instrument in the world. The optical qualities of this rifle scope have a very generous depth of field and parallax is extremely forgiving at the further end of the target distances. Beyond a few hundred meters, parallax is kept to a minimum within a couple hundred-meter range, but the adjustment is still working. If you have a clear and focused target image, the parallax will be negligible to non-existent, but it should still be checked.

Reticle Illumination

The reticle illumination control is co-located with the parallax turret and is the outermost and smaller diameter ring. To activate, rotate the knob to the desired intensity level. Turning clockwise are levels compatible with Night Vision equipment and will not be visible with the unaided eye. Turning counter clockwise will increase lighting intensity to a brightness that is visible during most daytime light levels. Battery life is variable depending on amount of use and the level of intensity.

To turn the reticle illumination off, rotate the turret to the **OFF** position which has a detent.



Automatic Illumination Management™ (AIM) is located beneath the CR 2032 battery and is user selectable as well as provides color selection.

Select **“R”** for **Red** or **“G”** for **Green**.



Select **“I”** for **AIM-ON** or **“O”** for **AIM-OFF**.

AIM will automatically turn illumination off when the scope exceeds 45° to either side or 75° up or down.

AIM will turn off when there is no motion for 3 minutes and automatically turn on when motion is detected.

AIM will shut down if illumination dial is not adjusted for 2 hours and automatically return to last intensity level when the illumination dial is slightly adjusted. The reticle will flash 3 times each minute once turned on when the battery gets weak. This will indicate approximately 2 hours remaining of battery life.

To replace the battery

1. Rotate the illumination to the **OFF** position, and then unscrew counterclockwise the battery cap.
2. The CR2032 battery will be visible and easily pulled out from the scope.
3. Replace with a fresh CR2032 battery of good quality in the correct orientation (the + must be visible) and screw on the battery cover. Take care to NOT cross-thread the turret cap. Tighten only hand tight but snug. Turn the illumination ON and then verify reticle intensity as desired.



NOTE



The reticle will flash 3 times each minute once turned on when the battery gets weak. This will indicate approximately 2 hours remaining of battery life.

Zeroing the scope

It is best to bore sight your firearm/scope prior to firing the first round to zero.

NOTE



If you are unsure of this procedure, have a competent professional gunsmith do this for you.

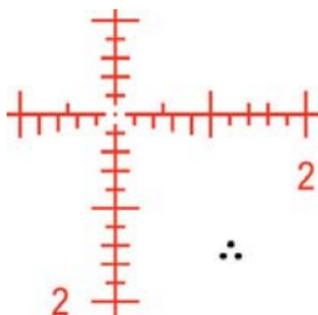
Pull the turrets away from the scope body to unlock in order to make an adjustment. Push them in to lock the turrets in position and prevent movement.

To zero your scope, use the reticle in the scope as a ruler.

Follow the steps below:

1. Fire a three-round group at your desired zero distance.
2. Looking through your scope, place the crosshairs at your aiming point and measure how many mils the center of the group is both vertically and horizontally from point of aim.
3. If the group needs to come up and left for example, dial the exact amount on the elevation turret in the **UP** direction and **LEFT** on the windage turret as measured with the reticle.

Example: Needs to come up
1.5 and left 1.2 MIL



4. Fire another three round group and your point of impact (POI) should be centered on your point of aim. If not, repeat the adjustment process until it is.
5. Finally, follow this three-step procedure for proper turret locking operation: First, in the unlocked position, loosen the turret set screws then rotate the turret clockwise and align the zero mark with the reference line on the scope body. Second, lightly tighten the turret set screws then push the turret inward to the locked position to ensure proper spline engagement. Third, loosen then retighten the turret set screws to 0,5Nm or 4,5 in/lbs. Your turret will now have proper spline engagement as well as alignment with the reference mark.

Setting the Return2Zero

The elevation turret has a Return2Zero (R2Z) built into it, you do not have to do anything. Once the elevation turret is set to “zero” at the bottom of the travel, you will have 0.5 MIL below this point under most scope mounting parameters.



Disengage the Return2Zero

To obtain full elevation travel for re-zeroing to a different weapon system, follow these procedures:

1. Unlock the turret and turn in the up direction until it stops.
2. Loosen the turret set screws then spin the turret up again (turret will **NOT** click) until it stops. Tighten the set screws.
3. Now turn the turret downward (turret **WILL** click) until it stops.
4. Loosen the set screws then spin the turret down again until it stops (turret will **NOT** click). Tighten the set screws.
5. You now have full elevation travel of the system. Conduct bore sighting and zeroing procedures for the new weapon system.

Cleaning your ZCO product

Your product will perform at peak efficiency by keeping it as clean as possible. We recommend the following steps as routine care for your rifle scope.

1. Remove any large dirt particles from the exterior of the rifle scope with a nylon bristle brush. Use this bristle brush also around the turrets removing any dirt particles between the turrets and scope body. **DO NOT** use the bristle brush on the optical lenses. Use a damp cotton cloth with warm water to wipe down the exterior of the scope body and a dry cloth to remove any traces of water.
2. Use a can of compressed air to blow off dust and dirt particles from the lenses. Take care to hold the can upright and not drip the fluid on the lenses as this can cause damage.
3. Hold the scope with the lens being cleaned facing downward to allow dirt to fall away from the lenses. Use an optical quality lens cleaning brush to remove the remaining dust and dirt particles from the lens.
4. If dirt particles are still stuck to the lens, flush the lens with distilled water allowing the water to drain away from the scope. Allow the lens and lens edges to completely dry before proceeding.

5. Use a high-quality micro-fiber lens cloth to remove any water stains or smudges from the lens surface. Keep this micro fiber cloth clean and protected to prevent abrasive particles from sticking to it.

CAUTION



Common firearm solvents cause damage to the lens coatings when the solvent splatters on the lens. Ensure the scope lenses are covered while cleaning the firearm.



The scope lenses have a durable coating for added protection, but proper routine cleaning will keep them in the best possible condition.

Warranty

All **ZCO** products are meticulously built by hand and undergo multiple tests and inspection points prior to packaging. Several components are in extremely close tolerances to each other to provide the highest quality precision possible. Great care has been taken to ensure this product will perform perfectly for a lifetime of service.

We are committed 100% to our customers and our products.

In the highly unlikely event you should experience a problem with your **ZCO** product, we are pleased to offer an owner transferrable **Lifetime Warranty** which covers mechanical and optical defects in materials and workmanship for the lifetime of this product from normal use. At our discretion, we shall either repair or replace (with a same or similar model) the defective product after a thorough inspection.

Exclusions to this warranty are intentional misuse or abuse of the product, unauthorized alterations or repairs, serial number modification or destruction, improper mounting, neglect, fire, flood, or other cataclysmic events.

The electronic components within this product have a **Limited Lifetime Warranty** of 2 years against defects in materials and workmanship, under normal use, from the date of purchase.

Returning your product for service

Follow these steps to ensure timely processing:

1. Remove any accessories such as scope rings, sunshades, or aftermarket lens covers.
2. Record and keep your product serial number on hand for future reference.
3. Complete the **Service Authorization Form** and include in the box with the scope. **The Service Authorization Form** can be found on our web site at: www.zcompoptics.com listed under “sales/support” or by calling the number listed below.
4. Place your well-padded and boxed scope inside an outer shipping box and secure it with good quality shipping tape. The original product box alone is not a sufficient shipping container.
5. Return your product to us, insured for replacement value, through a trackable carrier to the address listed below.

Only for North America Customers:

Zero Compromise Optic

Attn: Service Department
9190 Lower Fords Creek Rd
Orofino, ID 83544
USA

Zero Compromise Optic GmbH

Bäckerstraße 1
2433 Margarethen am Moos
Austria

NOTE



We will notify you through email (if provided) or by phone when we receive your product, as well as when it is returned.

Please ensure your email/phone information is available.

Please provide a good Shipping Address.

We are not able to ship to a P.O. Box.

Any obvious abuse or misuse will result in a repair as well as shipping charge.

We are NOT responsible for damage caused from shipping or packaging.



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