



Kalinka Optics Warehouse User Manual

POSP Fixed Magnification Rifle Scope Manual



INTRODUCTION

Before using the scope carefully read this instruction manual. The scope is equipped with built-in mount that can incorporate three different types of clamps designed to mount on distinct types of rails. Before attempting to mount the scope learn which type of mount your plate will accept as it is crucial for proper function of the scope. The scope is designed with extended eye relief and has a range finding capability. The red illuminated reticle will ensure target acquisition in low light conditions. The 'D' model denotes a diopter adjustment which allows you to independently focus the scope to adjust for your specific eyesight characteristics. As the design is constantly being updated the actual scope may slightly differ from this manual. The scope can be used in a variety of climatic conditions with temperatures ranging from -50°C to +50°C (-50°F to +120°F). The scope is also sealed against sand and dust as well as filled with Nitrogen to prevent fogging. The POSP fixed magnification series includes 4x24, 6x24, 6x42, 8x42 versions.

There are three basic mounting versions. The AK or 'V' version will fit any AK-style side rail including AK, VEPR, SAIGA, AK's manufactured by K-Var, KBI, Hesse, Century, Arsenal USA, etc., WASR, SLR-93, SLR-95, SLR-101, MK-11, SAR, WUM, SA85M, Maddi, Norinco, Poly-Tech and others. On some AK and AK variants, such as the WASR, a side rail may not be preinstalled on the rifle. The AK version additionally comes in two types, one which screws up from the bottom and connects to the side rail by bending the bottom of the mount up to create a tight fit. The other type is an eccentric bar with a half moon that is turned 180 degrees to put pressure on the side of the rail. Both are equally effective. The SVD/SKS version will fit any SVD style rail including SVD, NDM-96, Tigr, and Romak-3/SSG-97/PSL rifles. On the SKS, it is necessary to install a side rail. Kalinka Optics carries both side rails and mounting instructions for the SKS. The Weaver version will fit any standard Weaver-style or Picatinny rail.

Turret click on a regular POSP is 5 cm at 100 meters while on PRO models it is 1.25 cm at 100 meters. POSP scopes come in either a dark or light grey hammer finish or an advanced black baked enamel finish. Some older POSP's use a 1.5v AA battery while most POSP's use a brighter 3v bulb and power source. The D-357 button batteries are common watch batteries available at www.kalinkaoptics.com, or any local store. On older POSP's that have an extended battery compartment, an AA battery adapter can be purchased to convert a 3v model to use a 1.5v AA battery. On the newest POSP's, the battery compartment is sunk into the back column of the side mount and the AA battery adapter will not fit.

SPECIFICATIONS

Magnification	4x, 6x, 8x
Objective Aperture	24 or 42 mm
Illuminated Reticule	Built-in (red)
Reticule Style	1000m Dragunov or 400m Simonov
Supply Voltage	2 x D-357 button batteries
Waterproof	Yes
Nitrogen Filled	Yes
Operating Temperature	-50 to +50oC

Standard Accessories

Scope w/ illuminated reticule – 1 Rubber eyepiece – 1 Manual – 1 Carry case – 1. All scopes come with flip-up objective cap

Optional Accessories

Colored bulbs
Light filters
Mounting plates
Rubber eyepieces
Winter battery pack adapters
Protective mounted scope covers

ALL AVAILABLE AT www.kalinkaoptics.com

GENERAL DESCRIPTION

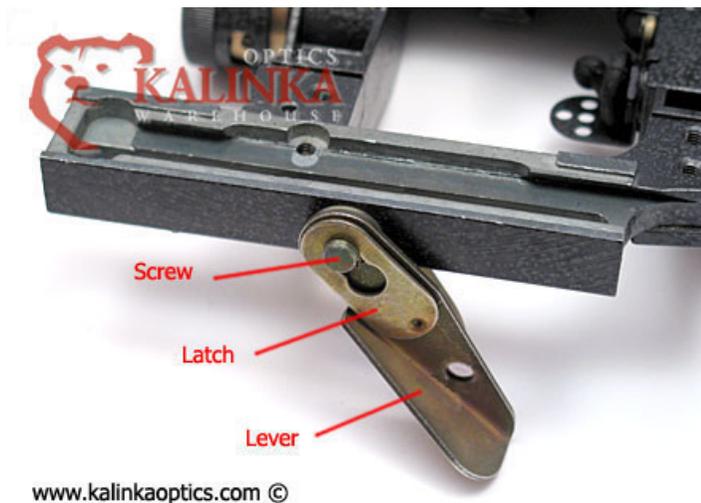
The Battery

The scope is equipped with a reticule illumination system that uses two D-357 silver-oxide batteries. Radio Shack carries these and they are Radio Shack # 23-105. Our web site also lists possible battery types, www.kalinkaoptics.com. To replace battery remove cover from the battery compartment, by pressing it down and twisting it counter clockwise. Install new battery keeping the polarity, close the battery compartment. The battery goes in counter-intuitively. The side with the writing, the + side, goes in first. If reticule loses its brightness over time, replace the battery.

Mounting the Scope

If you are not careful to ensure you have the correct model for you specific side rail it is possible to mount the scope on the wrong rail. While it may seem to 'fit', you will encounter problems such as too much or not enough of eye relief, or the scope won't hold its "zero" if removed. Often you can tell that the scope isn't designed to fit the rail on your gun by mounting the scope and firing a few shots. If the clamp on your scope doesn't match the rail, the scope will fall off after the third or fourth shot, no matter how tight it is locked. To avoid this, you should learn about the three types of Russian rifle scope clamps and which rails should be used with each type of clamp.

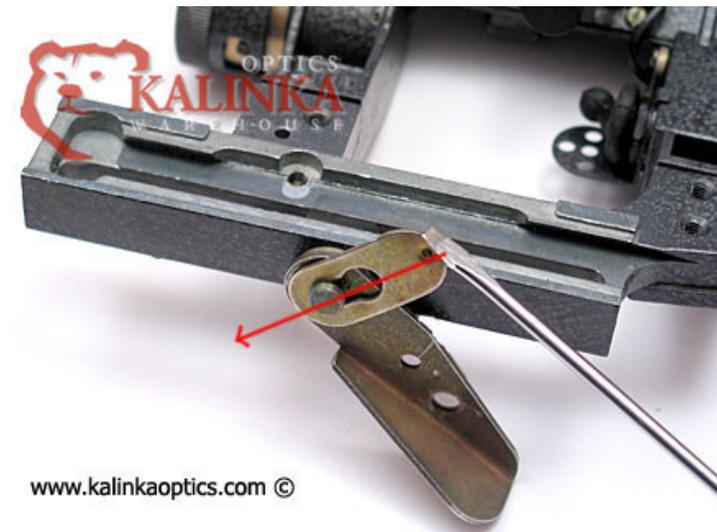
Clamp Adjustment



Step 1: As with all directions read through the directions in their entirety before even thinking of touching anything. Then re-read them. Sit down and place the top of the scope between your legs so that the scope is inverted. Locate the retaining clip that is holding the lever onto the scope. Place a small flat screwdriver blade on the edge of the retaining clip, and using your thumb rotate the retainer out of its indentation.



Step 2: Once the retaining clip is rotated 90 degrees, you can easily slide it off of the center shaft of the clamp lever. It will now pull off of the scope.



Step 3: Once the clip is removed, you can disengage the lever from its gear on the center shaft. Be sure not to lose the clip or the washer underneath the lever.



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Step 4: Slide the scope onto your side rail and then reposition the lever so that you have a nice tight fit. Be careful not to over-tighten!



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Step 6: After reassembling, replace the lever retaining clip by inserting the center shaft into the large hole in the clip.



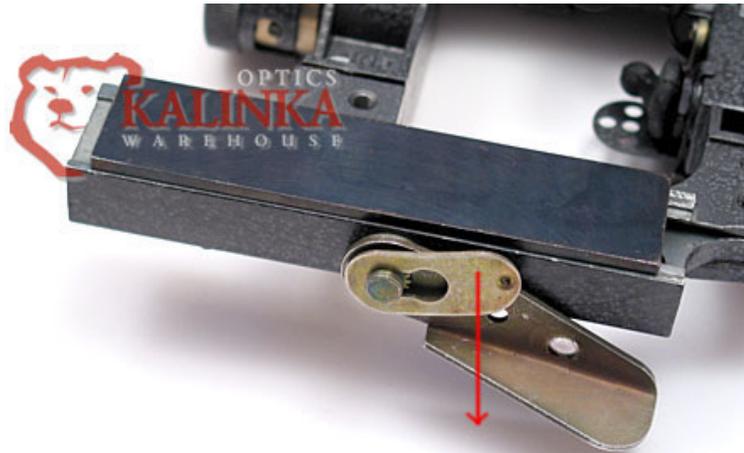
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Step 5: Once the proper tension is obtained, replace the lever onto the gear, making sure to relocate the stem of the bushing arm in the hole in the lever flag. Also make sure you have not lost the special washer that fits under the lever.



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Step 7: Simply slide the clip back into the indentation. Try the fit, make sure the scope will slide onto the plate easily, and will also tighten up. There should be a moderate amount of tension on the lever when it is about 85 percent closed, and it should take mild pressure to lock it completely. Do not over-tighten. Repeat the procedure to adjust the tension if needed.



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WINDAGE AND ELEVATION

Elevation Turret

Since the range calibrations for both the AK and SVD versions on both the 1000 meter Dragunov and 400 meter Simonov models are measured in equal amounts of MOA, all versions of the POSP can be used effectively with any caliber of weapon including 7.62x39mm, .308, .223 NATO, 5.45x39mm and 7.62x54R. The 1000m Dragunov rangefinding reticle includes extended distance inverted chevrons providing aiming points for 1000, 1100, and 1200 meters making it perfect for use on the .308 versions which require longer range reticules to make full use of their capabilities. After 850 meters you'll have to use the consequently following chevrons for each 100 m of the distance for up to 1200 meters. Remember that actual bullet drop depends on many factors, such as the ammo, rifle, surrounding environment, air temperature, etc.

The POSP 4x24 additionally is available with a 400 meter rangefinder. It is the only version available with the 400 meter reticle. The 400 meter reticle has an extremely effective and useful height-based rangefinder for dual use, with graduated scales for both standing and prone figure estimation. The military style reticle has a 400 meter height based gradient (choke style) rangefinder with holdover aiming marks for quick reaction shooting at 100, 200, and 300 meters, when used with 7.62x39mm. Once the primary inverted chevron aiming mark is adjusted for zero at 100 meters, the next two lower chevrons are bullet drop compensated for shots at 200 and 300 meters automatically.

The dial on the top of the scope is for adjusting for range. Again each number indicates 100 meters of range. Hence if you are firing at a target 200 meters distant you would set the dial on "2". The dial adjusts in 50 meter increments. Setting it on "0" would be for close in firing of less than 50 meters.

POPS/PSO Dial Settings										
Scale fractions	1	2	3	4	5	6	7	8	9	10
Angles of aim (MOA) (in min)	3.6	7.1	11	14	18	22	25	29	32	36
Line of sight movement at 100 meters in cm	10	21	31	42	52	63	73	82	94	104
Scale fractions	11	12	13	14	15	16	17	18	19	20
Angles of aim (MOA) (in min)	39	43	47	50	54	57	61	65	68	72
Line of sight movement at 100 meters in cm	115	125	136	146	156	167	177	188	198	201



Windage

The dial on the side of the scope is for adjusting for wind effects. The numbers in black move the reticle to the left which you would do if the wind was blowing from right to left across your line of fire. The numbers in red are just the opposite and move the reticle to the right. The movement direction of line of site is shown on the nut of the turret.

Each movement of the dial one full notch is equal to 0.1 meters line of site movement at 100 meters and 0.3 meters at 300 meters. The lock, which is located on the turret, allows the turret to be set in between two notches.

RETICULE FOR 7.62X54R IN DEPTH Rangefinder

The rangefinder works by placing the target (1.7 m or 5'8" in height) between the

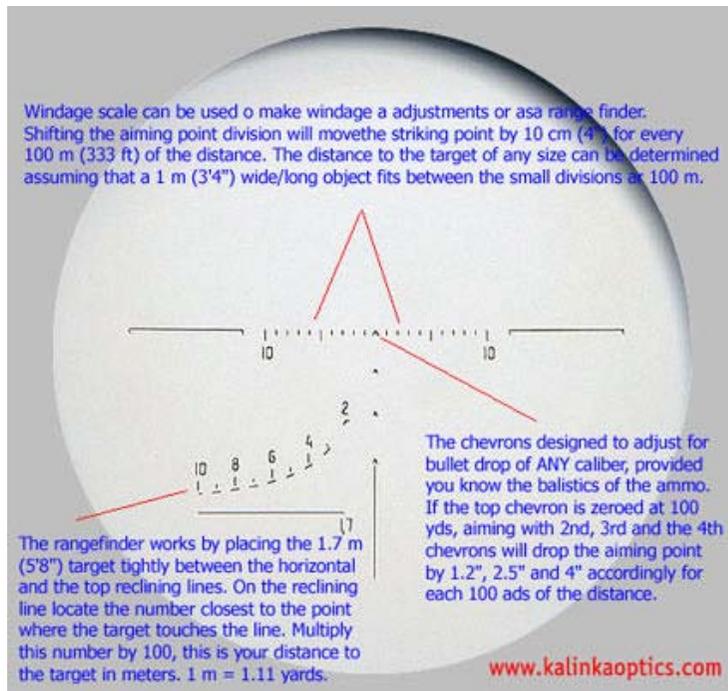
horizontal and the top reclining line with numbers. On the reclining line locate the number closest to the point where the target touches the line. Multiply that number by 100; this is the distance to the target in meters. 1meter = 1.11 yards

Windage Scale

Windage scale can be used to make horizontal adjustments or as a rangefinder. Shifting the aiming point by one division left or right will move the point of impact by 10cm / 4" for every 100m / 333 ft of the distance. The distance to the target can be determined by assuming that a 1m / 3'4" wide/long object fits between the small divisions at 100 m / 333 ft.

Aiming chevrons

The chevrons designed to adjust for bullet drop at 1000, 1100 and 1200 meters, aiming with 2nd, 3rd and the 4th chevrons accordingly.

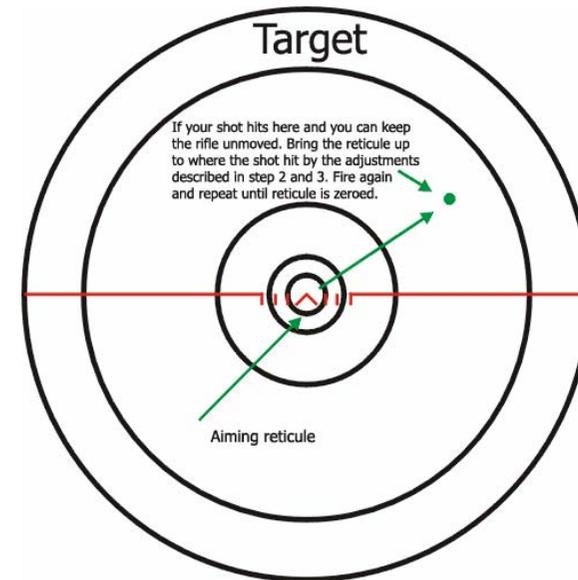


Sighting and Zeroing the Scope

Step 1: The first step is to ensure that the rifle is zeroed with the iron sights. Also this process is much easier with little wind effects so do this on a day that isn't windy if possible. Set up the rifle on a firm and solid base and aim at a target with the iron sights at a distance of 50 meters. At this point attach the scope and set the range on the tick between the "0" and the "1" which is the 50 meter mark. Set the windage to "0". Now

see if the aiming reticle is lined up with the target. If it is then your sight is considered an adjusted one. If it is not in line then rotate the dials (range and/or windage as necessary) to bring the reticle onto the target. At this point if you have had to move the dials away from the 50 meter mark and "0" then you will have to move the dial back to 50 meter mark and "0" without changing the position of the aiming reticle. Go to step 3 if this is your situation. For those of you who cannot bring the reticle into position because the range of motion of the range dial will now allow it another step is required (this was the case with me - since the dial cannot move to the left of the "0" far enough for my situation). For those unable to move the reticle into the proper position return the dials to their default at the 50 meter mark for range and "0" for windage and go to step

Step 2: If you were unable to bring the reticle into proper position you should have the range dial set to 50 meters (between the 0 and the 1) and the windage set to "0". Take aim at a target and fire the rifle. If the results are not dead on (see figure below) then you will need to adjust the reticle.



To move the reticle to the shot (assuming you can keep the rifle in the same position as you make adjustments - otherwise trial and error will do the same thing...just take more ammo) you have to loosen the two silver screws on each dial. Loosen the screw but do not remove them. As an example we will walk through the above example. We need to move the reticle over to the right since the rifle is hitting to the right. Rotate the windage dial clockwise until the reticle is approximately under the bullet hole when looking through the scope (make sure the silver part of the dial with the numbers on it does not move (I had to hold the range dial with pliers)). If you have to pick up the rifle to do this or otherwise can't keep it on target you will have to do guess work when

moving the reticle. This may cause you to overcompensate but several iterations of firing and adjusting should zero the rifle. Then rotate the range dial counterclockwise to raise the reticle. Once you believe that you are close to where the bullet hit, screw the silver screws back in and repeat firing the rifle. Repeat this process until the rifle is zeroed. When you have a good zero at 50 meters set the range to "1" and move the target to 100 meters. Fire again to confirm your zero is still good. You should only have fine tuning to do at this point but you may have to repeat the above steps to refine the settings. Now go shoot something with confidence!



Step 3: If you believe you have an adjusted sight (but the dial numbers are not on 50 meters for range and "0" for windage then proceed as follows. Take aim at a target at 50 meters. If you hit the bull's eye then you need to only change the silver dial position. If however the sight needs further adjusting rotate the dials per the instructions in step 1 to bring the reticle to the bullet hole. Once you have the sight zeroed unscrew the silver screws for range and windage (assuming both need fixing - see figure below). Rotate the SILVER portion of the dial until it is at the correct setting (i.e. 50 meters for range and "0" for windage). Prevent the black top from moving or you will move the reticle thus ruining the zero. Once you have a good zero at 50 meters move the target out to 100 meters and repeat the process. You should only have minimal changes to make.

Dragunov/POSP zeroing:

Set the range to 1 to test fire at 100 m. There are half marks between the numbers which correspond to 50 m. After you test fire, loosen the silver screws (not the black center screw) and rotate the dial to move the reticle up or down to zero the reticle. Range: Rotating the dial clockwise moves the reticle down (for elevation). Secure the scope on a solid base and move the reticle to match your entry point for the test-fire round. Be sure to tighten the silver screws between each test-fire round. Be sure not to let the silver part of the dial rotate when adjusting the top black dial.

Don't unscrew the center screw
Loosen the side screws to adjust

Rotating clockwise will move the reticule down

Decreasing range
Increasing range

Set the sight at "1" for a 100 m distance. Each number represents 100 m and the half-marks are 50 m

Windage:



RETICULE FOR 7.62X39

Rangefinder

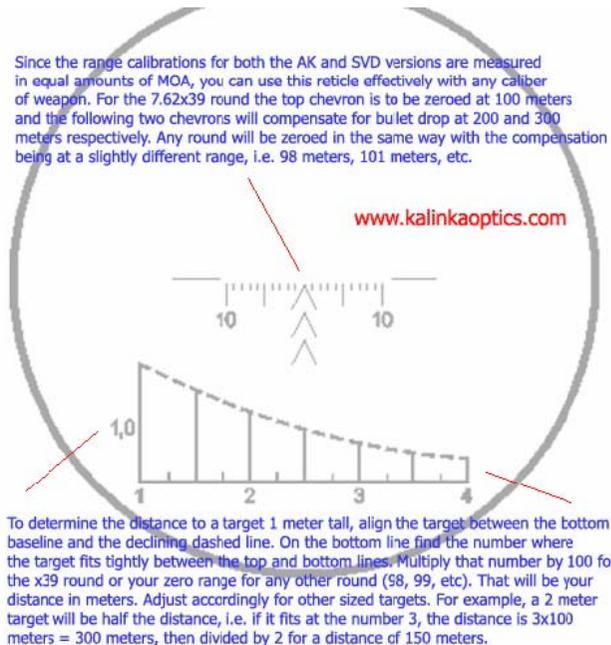
The rangefinder works by placing the target (1 m or 3'4" in height) between the horizontal and the top reclining line with numbers. On the reclining line locate the number closest to the point where the target touches the line. Multiply that number by 100; this is the distance to the target in meters. 1 meter = 1.11 yards.

Aiming Chevrons

The chevrons designed for aiming at 100, 200 and 300 meters for the 1st 2nd and the 3rd chevron accordingly.

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Using the scope

While aiming you must put your eye on the optical axis of the scope so the image appears flat and without shadows on the edges. Using the rubber eyepiece will help you to properly align your eye on the optical axis and ensure the proper eye relief. Use the extendable shade available on some models for shooting at bright daylight conditions to

prevent sunshine directly striking the objective lens and preventing excessive glare.

Aiming and shooting at fixed targets.

Adjust the elevation turret or chose the appropriate chevron with respect to the range to the target. Assuming there is no cross wind, keep the windage turret at the "0" position.

Aiming and shooting at moving targets

While shooting at moving targets it is necessary to aim ahead of the target. To determine how far the aiming point has to be taken out you'll need to estimate the speed of the target and the distance to it. The faster the target moves and the further the distance to it the further ahead you'll have to aim. Have the moving target aligned with horizontal hairs of the reticle as you aiming.

SAFEKEEPING

Avoid hard strikes to the scope or dropping it. After using the scope in wet conditions wipe it with dry soft cloth and live it to dry out at a temperature not exceeding 112 F°. To protect the glass surfaces of the scope always use objective lens and eyepiece cups when the scope is not in use. When not in use keep the scope in a dry place at room temperature with humidity not exceeding 80%.

NEVER ATTEMPT TO FIX THE SCOPE YOURSELF OR TAKE IT APART FOR WHATEVER REASON. VIOLATION WILL VOID THE WARRANTY.

WARRANTY

The scope meets or exceeds the quality standards set forth by the manufacturer and its technical specifications match those listed in this manual. The scope carries a 12 month limited warranty against manufacturing defects from the date of sale. If the scope fails during the warranty period the customer is entitled to have the scope repaired or fixed at the discretion of Kalinka Optics. Each party is responsible for shipping cost of the scope at their end. The scope must be shipped to Kalinka Optics per the return/warranty policies set out at www.kalinkaoptics.com. Absolutely no returns or warranty claims will be processed without a Return Authorization Number, see the site for details. If maintenance or feasible and justifiable repairs have to be done upon expiration of the warranty period, all costs related to these services is responsibility of the customer.

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