

S50 PRO hunting sight.

Contents:

- 1 The description of the sight.
- 2 Characteristics.
- 3 Complete set.
- 4 Design of the sight.
- 5 The sight set-up.
- 6 Operation.
- 7 Service.
- 8 Warranty.

1. Description of a sight.

The S50 PRO (in a further sight) is 1st Gen night vision hunting sight with the built-in infra-red (IR) illuminator. It's intended for orientation on terrain and supports of aiming fire from the hunting weapon in conditions of low intensity of illumination. Interval of operation temperature is from - 20°C up to + 40°C. The target vision distance depends on conditions of observation and target nature. The applying of the IR-illuminator is effective on distances up to 75 m. The device has following features:

- modern design;
- 1 click = 1/2 MOA
- an all-metal high-strength body;
- is water-tight;
- the aiming reticule always is in center a field of vision;
- brightness control of an aiming reticule;
- ergonomic attachment;
- the silent converter of voltage.

2. Characteristics.

Amplification of light.....	1000 times
Resolution , not less.....	35 lines/mm
Magnification.....	2.5 ^X
Objective aperture.....	57 mm
Angular field of vision.....	10°
Eye relief.....	50 mm
Diopter adjustment.....	± 4
Power of the IR- illumination not less.....	25 mW
Supply voltage.....	3 V (CR123)
Overall dimensions with rubber eyepiece.....	275x100x95 mm
Mass no more.....	1,2 kg

3. Complete set.

- Sight 1 pcs.
- The operation manual1 pcs.
- Canvas case.....1 pcs.
- Box1 pcs.



Fig. 1 The S50 PRO sight

1- rubber eye-shield; 2- battery compartment; 3- elevation adjustment; 4- reticule brightness control ; 6 - lens; 7- IR-illuminator; 9- diopter adjustment; 10- power switch ; 11-weaver mount; 12- accessories rail; 13- fixing screws; 14- windage adjustment.

4. Design of the sight.

The device has aluminium housing, to which one the main clusters and gears fasten: lens 5, gears of ret adjustments, IR-illuminator 7, eyepiece with tuning rings 9, eye-shield 1 and bracket 11.

The actuation of the device implements the rotary switch 10, which one has six positions: **OFF** - is switched off, **ON** - is switched on without the IR-illuminator, **IR** - is switched on with the IR-illuminator. The battery of CR123 type is pasted into a battery compartment arranged under the cover 2. Attention! Abide polarity!

The rubber cover is intended for protection of the lens against impacts. Also it allows to use the sight in daylight. The focusing of the eyepiece is made by rotation of a ring 9. Brightness of the ret changes by rotation of the handle 4. Sight set-up on zero by rotation of handles 3 and 14.

5. Set-up on zero.

- to insert battery in the sight and fix it on weapon.
- to fix weapon with the sight on the aiming machine tool. In the sight field of view there should not be bright light sources. If intensity of the target illumination is high, the lens rubber cover not remove;
- establish the target on distance, with which one you will shoot on hunting;
- to aim the rifle on center of the target by the iron sight and do a trial shot;
- to switch-on the sight and to rotate the eyepiece 9 for achievement sharp vision of the ret;
- to rotate the lens 6 for achievement sharp vision of the target;
- impose the central Red Dot of the ret on the shot hole by rotation of handles 3 and 14;
- check up adjustment by control shooting.

6. Operation of the sight.

Before operation to be convinced that the bright light sources (lanterns, headlights) miss in a field of view. Remove the protective cover and to switch-on the sight by the switch 10. Switch-on the IR-illuminator, if it's necessary. Make sharp vision of the ret by rotation of the ring 9. Make sharp vision of the target by rotation of the lens 5. For exact shooting brightness of the ret should be least of possible. Guide the sight at the target. Shoot. After operation switch off the scope and put on the rubber cover. Take the battery before long storage.

It's forbidden:

- to actuate the sight in light time without the lens cover;
- to look through the sight at bright light sources;;
- to look on IR- illuminator from spacing interval less than 0,5 m;
- to look in the sight from spacing interval less than 50 mm;
- to store the sight with battery.

It is necessary to remember!

The attribute of battery discharge is the decrease of brightness of the IR-illuminator and aiming ret. On a frost the capacitance of batteries is notably reduced. Therefore you need to have a padding battery and to store it in heat.

7. The service.

Please make following operations before each usage:

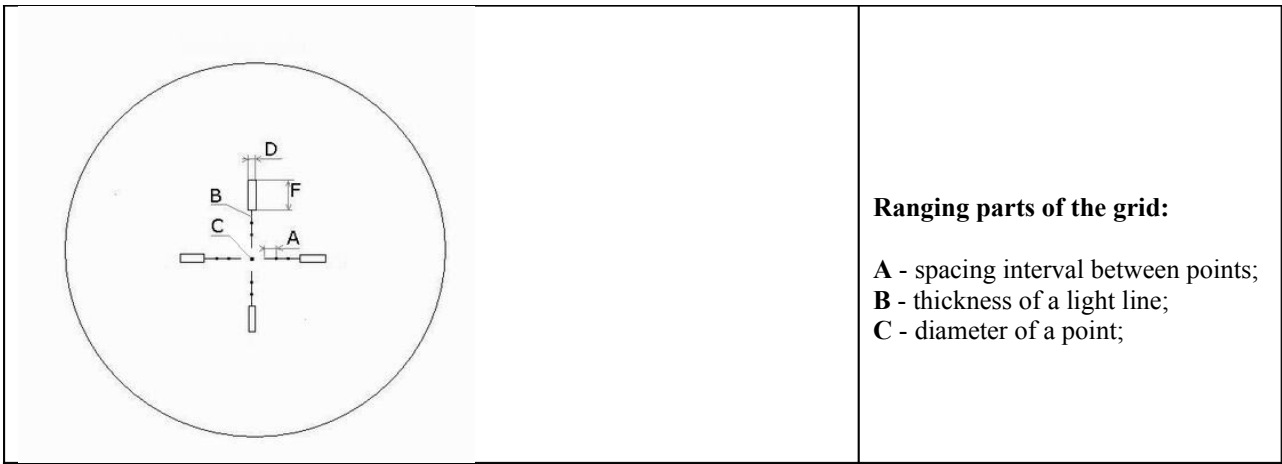
- to detect mechanical damages and corrosion;
- to test the sight mount;
- to test a condition of battery and contacts in the battery pod.

8. Warranty of the manufacturer.

The sight is made according to Standards of Belarus. The effective life of ICT (image converter tuber) of the sight is 1000 hours of continuous work. The charge-free warranty service and repair is made within twelve months from the moment of sale.

Addition to the operation manual of the sight Falcon NCS-03.

The delineation of the ret is shown in the figure 1. The alphabetic indexes are assigned to all parts of the ret, by which one it is possible to estimate spacing interval. Their angular sizes and linear dimensions of the target apart 100 m applicable to them are indicated in the table 1.



Ranging parts of the grid:

- A - spacing interval between points;
- B - thickness of a light line;
- C - diameter of a point;

The table 1. The sizes of ranging parts of the grid.

Parts of the grid	The angular sizes			The linear size of the target applicable part of the grid on a distance of 100 m, sm
	MIL	MOA	Grades	
A	5	17.189	0.2865	50
B	0.5	1.719	0.0287	5
C	1	3.438	0.0573	10
D	2	6.876	0.1146	20
F	10	34.378	0.5730	100

Spacing interval up to the target is determined under the formula:

Width or altitude of object in centimeters x 10	= Distance in meters
Width or altitude of object in MIL	

The carry of an aiming point from intersection on an adjacent point (part of the grid such as C) changes a angle of targeting on 0.2865 grades.

The disassembly of the mount clamp for adjustment.

