### **Nikon BUCKMASTERS Riflescope**

3-9x50 3-9x40 4x40 4.5-14x40 SF 4-12x50 SF 6-18x40 SF 1x20

#### Instruction manual

Congratulations on your choice of a Nikon BUCKMASTERS Riflescope. Your new scope is the finest example of Nikon's rugged and durable construction and precision bright optics; important qualities for a serious shooter's riflescope.

Whether you use your scope for hunting or for target shooting, the procedure for mounting is identical. You should acquire a set of high quality steel mounting rings which have a standard diameter of 25.4 mm (1inch). Follow the ring manufacturer's instructions for mounting procedures. After mounting the scope on your rifle, follow the procedures for reticle alignment.

When setting the reticle for hunting, you should determine your standard range and then adjust the reticle based upon that target distance. For targets which vary from that standard distance you may simply adjust the position of the reticle in relation to your target, or you may wish to use the procedure for trajectory compensation. It's up to your personal preference.

We hope that you will enjoy your new Nikon BUCKMASTERS Riflescope for many years to come. Enjoy using it, and above all, always follow safe shooting procedures

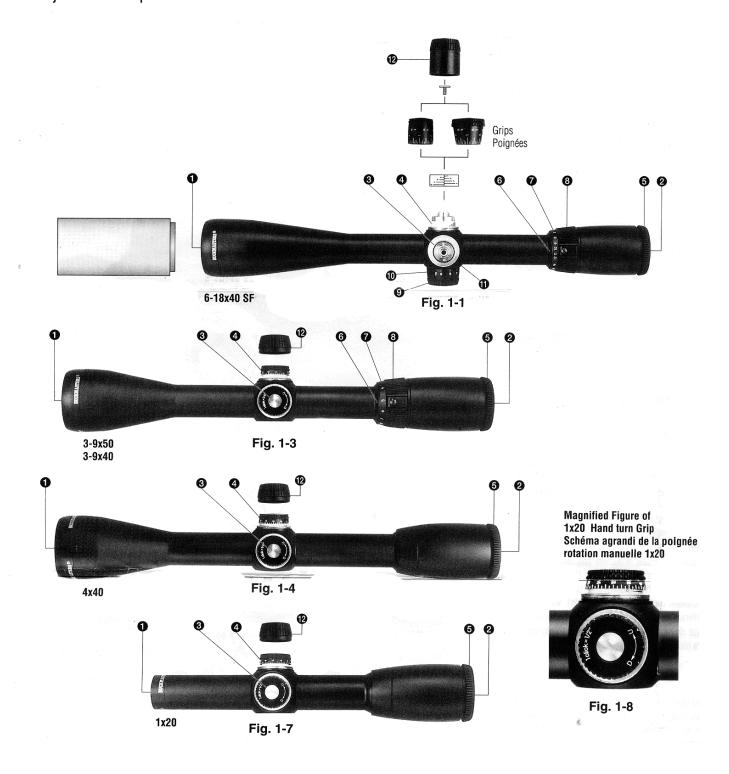
#### !Caution

- (1) Do not look at the sun through the riflescope. It will permanently damage your eye. This precaution applies to all optical devices such as cameras and binoculars.
- (2) The riflescope is effectively sealed against moisture and dust. You may use your scope safely either in the rain or in dusty climates. To preserve the appearance of the scope, we suggest that it be dried and cleaned prior to storage. Use a soft cloth for cleaning metal surfaces and use photographic lens tissue to clean the scope's lenses.

#### 1. Nomenclature

- 1. Objective Lens
- 2. Eyepiece Lens
- 3. Elevation Adjustment
- 4. Windage Adjustment
- 5. Eyepiece Adjustment
- 6. Power Index Dot

- 7. Power Scale
- 8. Power Selector Ring
- 9. Side Focus Adjustment
- 10. Distance Scale
- 11. Distance Index Dot
- 12. Adjustment Cap



#### Grip for Elevation Poignée pour lâ élevación

Standard Grip Poignée standard



Easy Grip Poignée ergonomique Standard Grip Poignée standard Grip for Windage Poignée pour la dérivation





Easy Grip Poignée ergonomique

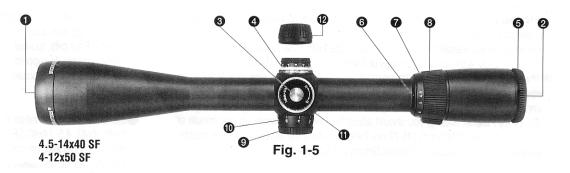


Index Ring Bague d'index

Bague d'index

Index Ring





Magnified Figure of 3-9x50,3-9x40,4x40,4.5-14x40 SF, 4-12x50 SF Hand turn Grip Schéma agrandi de la poignée à rotation manuelle 3-9x50,3-9x40,4x40,4.5-14x40 SF,4-12x50 SF



Fig. 1-6

# 2. Specifications

Model		3-9x50	3-9x40	4x40	4.5-14x40 SF	4.5-14x50 SF	6-18x40 SF	1x20
Actual Magnification		3-9x	3-9x	4x	4.5-14x	4-12x	6-18x	1x
Objective Diameter	(mm)	50	40	40	40	50	40	20
	(in)	1.97	1.58	1.58	1.58	1.97	1.58	0.79
Exit Pupil	(mm)	5.6☆	4.4☆	10.0	2.9 ☆	4.2 ☆	2.2☆	20
	(in)	0.22☆	0.17☆	0.39	0.17 ☆	0.17 ☆	0.09☆	0.79

Eye Relief	(mm)	91-91	91-91	91	93-91	93-93	93-90	109-330
	(in)	3.6-3.6	3.6-3.6	3.6	3.7-3.6	3.7-3.7	3.7-3.5	4.3-13
Field of View at 100yds.	(m)	10.9-3.6	10.9-3.6	8.1	6.1-2.1	7.4-2.5	4.9-1.8	16.0
	(ft)	35.7-11.9	35.7-11.9	26.5	19.9-6.8	24.3-8.0	16.1-5.9	52.59
Tube Diameter	(mm)	25.4	25.4	25.4	25.4	25.4	25.4	25.4
	(in)	1	1	1	1	1	1	1
Objective Tube Diameter	(mm)	61.7	49.3	49.3	49.3	61.7	49.3	25.4
	(in)	2.43	1.94	1.94	1.94	2.43	1.94	1.00
Length	(mm)	340	332	332	365	352	372	231
	(in)	13.39	13.07	13.07	14.37	13.86	14.64	9.09
Weight	(g)	510	455	420	500	585	550	300
	(oz)	18.0	16.1	14.8	17.7	20.7	19.4	10.6
Adjustment Graduation	* (moa)	1/4:1 click	1/4:1 click	1/4:1 c	lick	1/4:1 click	1/8:1 click	1/2:1 click
Maximum Internal Adjustment (Elevation & Windage)	* (moa)	80	80	80	50	60	50	80
Parallax Setting * * (at factory)	(m)	91.44	91.44	91.44	91.44* * *	91.44* * *	91.44* * *	68.58
	(yards)	100	100	100	100* * *	100* * *	100* * *	75
Outside Diameter of	(mm)	43	43	43	43	43	43	42
Eyepiece	(in)	1.69	1.69	1.69	1.69	1.69	1.69	1.65

 $<sup>\</sup>stackrel{\sim}{\sim}$  When maximum magnification (9x/12x/14x/18x) is selected.

### **ITEM SUPPLIED**

Body	1pc.
Eyepiece cap —	1pair
Objective cap —	
Hood(6-18x40 SF)	1pc.
(Option for3-9x50,3-9x40,	
4x40,4.5-14x40 SF,	
4-12x50 SF)	

### 3. Instructions

<sup>\*</sup> moa=minute of angle

<sup>\* \*</sup> Nikon BUCKMASTERS Riflescope are factory set to be parallax free at 100 yards (91.44m). 1x20 is factory set to be parallax free at 75 yards (68.58m).

<sup>\* \* \*</sup> Nikon BUCKMASTERS Riflescope 4.5-14x40 SF, 4-12x50 SF and 6-18x40 SF allow free adjustment from 50 yards (45.72m) up to infinite point.

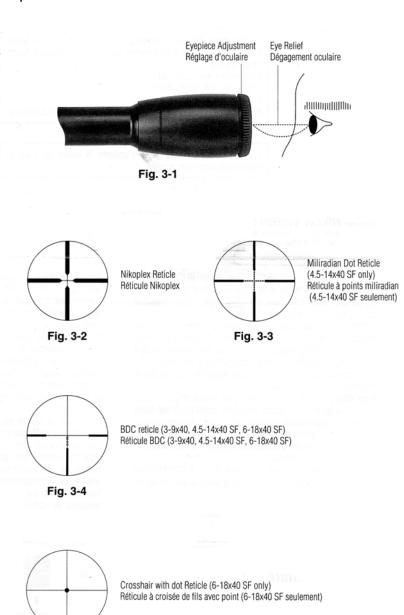
# (1) Focusing

Fig. 3-5

1. Look through the eyepiece with your eye positioned about 10cm (4 in) away from the eyepiece lens (Fig. 3-1), and you will see the Nikoplex reticle (Fig. 3-2), or the Miliradian Dot reticle (Fig. 3-3), or the BDC reticle (Fig. 3-4), or the Crosshair with dot reticle (Fig. 3-5).

Be sure your eye is positioned within proper alignment and proper eye relief otherwise the view will "black out".

• Point the objective end of the scope at the sky (Do not point at the sun) or at a plain unpatterned wall. Turn the eyepiece adjustment counter-clockwise and then turn it clockwise until the reticle appears sharp.



# (2) Magnification

- The BUCKMASTERS Riflescope 4x40 has a fixed magnification of 4x, 1x20 of 1x.
- The BUCKMASTERS Riflescope 3-9x50 and 3-9x40 have a variable magnification from 3 to 9X, 4.5-14x40 SF from 4.5 to 14x, 4-12x50 SF from 4 to 12X, 6-18x40 SF from 6 to 18x.

To change powers, just rotate the power selector ring until the desired magnification appears adjacent to the power index dot (Fig. 1-1, 1-3, & 1-5).

### (3) Adjustment of the riflescope

Sighting through the riflescope, align the rifle with your aiming point on the target and shoot a trial round. If the bullet does not hit the aiming point, adjust the elevation and windage after removing the Adjustment cap, as follows:

3-9x50, 3-9x40, 4x40, 1x20, 4.5-14x40 SF, 4-12x50 SF

- For the BUCKMASTERS Riflescope adjustment is made by turning the grip by hand. If the bullet hits under the aiming point, turn the grip in the direction of the arrow marked "U" (Fig. 3-6). If the bullet hits to the left of the aiming point, turn the grip in the direction of the arrow marked "R" (Fig. 3-6).
- After the reticle has been adjusted to the point of impacts, with the gip held with your fingers to avoid shifting of the aligned grip, turn the grip screw in top of the grip counterclockwise with a coin. Then lift the grip up and align the " " with the index mark. It may happen that the " " could not align with the index mark exactly because of the coupling pitch of the grip with the shaft. And by securing the grip with your fingers to avoid shifting of the grip, turn the grip screw clockwise with the coin until the grip in firmly secured. (Fig. 3-7)



#### 6-18x40 SF

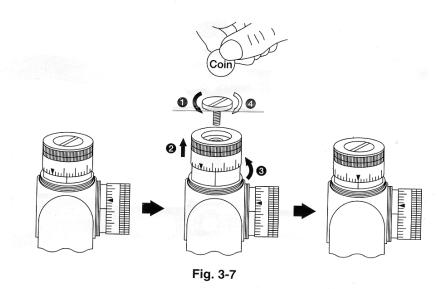
- For the BUCKMASTERS Riflescope 6-18x40 SF adjustment is made by turning the grip by hand. If
  the bullet hits under the aiming point, turn the grip in the direction of the arrow marked "U" (Fig. 38). If the bullet hits to the left of the aiming point, turn the grip in the direction of the arrow marked
  "R" (Fig. 3-8).
- Changing the grip

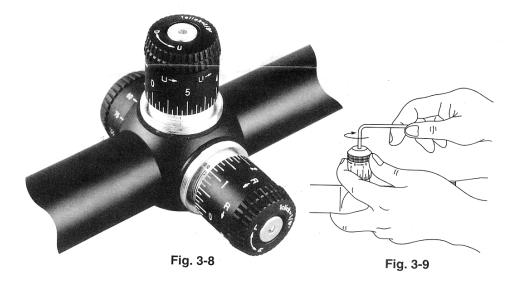
Remove the protective cap of the grip by turning it counterclockwise. Align the grip to the 0 (zero) position of the scale ring. This is to assure that the scale ring will be correctly aligned to the new grip (the alignment position should be remembered).

With the grip held with your fingers to avoid shifting of the aligned scale ring, turn the bolt in the top of the grip counterclockwise with the hex key supplied until the bolt comes out. Then remove the grip (Fig. 3-9).

Insert the grip into position and align the scale ring to 0.

Insert the bolt. By securing the grip with your fingers to avoid shifting of the scale ring, turn the bolt clockwise with the hex key supplied, until the grip is firmly secured.





### (4) Adjustable focus

The BUCKMASTERS Riflescope 4.5-14x40 SF, 4-12x50 SF and 6-18x40 SF can be more precisely focused within the range of at least 50 yards (45.72m) to infinity by rotating the Side Focus adjusting ring.

Parallax can be eliminated and sight alignment will be accurate.

Use its distance scale as a reference guide.

#### Note:

- The windage and elevation scales of the BUCKMASTERS Riflescope 3-9x50, 3-9x40, 4x40, 4.5-14x40 SF and 4-12x50 SF are calibrated in divisions of 1/4 minute of angle with a click at intervals of 1/4 minute of angle (half division).
  - The windage and elevation scales of the BUCKMASTERS Riflescope 6-18x40 SF are calibrated in division of 1/8 minute of angle with a click at intervals of 1/8 minute of angle (one division). The windage and elevation scales of the riflescope 1x20 is calibrated in division of 1/2 minute of
  - angle with a click at intervals of 1/4 minute of angle (half division).
- When adjusting the reticle to the point of aim, remember that one minute of angle equals approximately one inch (2.54cm) at 100 yards (91.44 m). Therefore, if the impact point is two inches (5.08 cm) low and one inch (2.54 cm) right at 100 yards (91.44 m) Parallax Setting, you should adjust two minutes of angle up one minute of angle left. In case of 50 yards (45.72m). Parallax Setting the adjusting value is double. In case of 75 yards (68.58m) Parallax Setting is 1.5 times.

#### Maintenance

# (1) Lens cleaning

To remove dirt or fingerprint, soak gauze or lens cleaning paper (silicon-free paper sold at camera shop) with a small quantity of absolute alcohol (available from drugstore) and lightly wipe off. Wiping with leather chamois is not recommended as it is likely to damage the lens surface.

Dust may scratch the lens surface or corrode the lens.

Brush dust off using a soft oil-free brush.

### (2) Scope Exterior

Use a soft dry cloth to wipe off any dirt or finger-prints that might accumulate.

It is not necessary to oil the scope's surface.

## (3) Windage/Elevation Adjustments

These adjustments are permanently lubricated. Do not attempt to lubricate them. Cover with caps supplied, except when adjusting, to keep out dust and dirt.

# (4) Eyepiece Adjustment

This adjustment is permanently lubricated. Do not attempt to lubricate.

# (5) Power Selector Ring

No lubrication is required on the power selector ring.

Do not loosen or remove screws in power selector ring.

The product(s) described herein may be subject to export control regulations in the relevant country(ies). It (they) should not be exported without authorization of the exporting governmental authority if the regulations apply.

In the event that you should require service for your Nikon RIFLESCOPE, in case of USA market, please send it directly to:

Nikon Scope Service
841 Apollo Street, Suite 100
El Segundo, CA. 90245-4721
1-800-Nikon SV.

In other market, please bring it to dealer from which you purchased it.

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