Vixen[®] Instruction Manual for XY Red Dot Finder I



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Checking Contents

Thank you for your purchase of a Vixen XY red dot finder II.

This product contains the parts listed below. Check if all the items are included. Note: It may be necessary to use a Phillips-head screwdriver for taking the XY red dot finder II apart as it is not included in the contents.



Components Guide

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Specifications

Model	LED Red Dot Sight (Designed primarily for nighttime use.)
Magnification	1X
Adjustment range	About +/- 1.5 degrees in vertical direction and about +/- 2.0 degrees in horizontal direction with fine adjustment knobs*
Battery	CR3032 battery (for checking purpose only)
Continuous illumination duration	About 20 hours (Maximum brightness at 20 degrees C.)
Dimensions	97mm x 97mm x 37mm (3.81" x 3.81" x 1.45")
Weight	185 g (6.52 oz)

*Note: Do not turn the fine adjustment knobs over the extent of the adjustment range. The metal fittings may come off.

Identification of Each Part

Zero-power Objective Window

This is a window glass made of a half mirror with no magnifying power. Find your target through the window while watching the red dot reflected by the half mirror. The red ray is not a laser and it does not harm your eyes.

Sight Line

The white sight line and sight index guide your viewing position. The red dot can be seen in the center of the window glass as you look along the white sight line to overlap the sight index on the center bottom of the window frame.





Brightness Adjustment Dial

This dial adjusts the brightness of the red dot light combined with the on-off switch. Turning the dial clockwise will gradually increase the brightness. The red dot will go off as you turn the dial to 180 degrees. Turning the dial counterclockwise will loosen the brightness. Set the white dot mark engraved on the side of the dial to the white dot mark on the side of the finder body to turn off the red dot light. Be sure to turn off the red dot light if you are finished using the XY red dot finder II.

Fine Adjustment Knobs

Turning the fine adjustment knobs will change the position of the finder body in the vertical and/or horizontal direction. The fine adjustment knobs are used to bring the finder body to be parallel to your telescope.

Mounting Block

Used to install the XY red dot finder II to the finder bracket shoe of Vixen astronomical telescopes. It has a 1/4 inch camera thread socket on its bottom.

Brightness Adjustment Dial Dial Diright Diright Dial Diright Diright dim Diright dim Diright Diright Diright Diright Horizontal Nounting Block Diright Diright Vertical Vertical Diright Diright Diright

Alignment Clamp

It is used to widely change the direction of the finder body for optical alignment. It will allow you to turn the finder body to 180 degrees as the need arises.

Low-profile Finder-base (For your Option)

This allows the finder to attach directly with a 1/4 inch camera thread socket. Replace the mounting block with it to attach your finder directly.



Low-profile Finder-base



Attaching to the Optical tube Assembly

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Use this instruction manual in conjunction with your telescope manual. The ED81SII optical tube is shown here as an example

- ① Loosen the finder bracket lock screw fully to allow insertion of the mounting block of the XY red dot finder.
- 2 Slide the XY red dot finder into the finder bracket shoe from the visual back side of the telescope so that the zero-power objective window comes in front as shown in the figure on the right. Tighten the finder bracket lock screw securely. (The mounting block is made of plastic and over-tighten the lock screw may cause damage.)





Aligning the XY Red Dot Finder II

It is recommended to make adjustments in daytime by choosing a terrestrial obiect.

- (1) Attach an evepiece of low magnification to your telescope. Choose a conspicuous target in the distance (over 200m) and place the target in the center of a field of view of the telescope
- 2 Turn on the red dot finder II by turning the brightness adjustment dial to light a red dot. You will see the red dot in the center of the zero-power objective window when you look along the white sight line. The intensity of the brightness can be changed by turning the brightness adjustment dial. Choose the brightness you prefer



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 $\ensuremath{\mathfrak{3}}$ While holding the finder body with fingers, loosen the alignment clamp and view the red dot (3-1). Locate the target in the field of view of the zero-power window glass (3-2) and adjust the direction of the finder body so that the red dot and the target overlap each other (3-3). Tighten the alignment clamp securely. It is not problem if tightening the alignment clamp shifts the target a little at this stage



- (4) While looking through the zero-power objective window adjust the target accurately with the vertical and horizontal fine adjustment knobs so that the red dot overlaps the target.
- (5) Aim at another distant object with the aligned red dot finder II to make sure that the same object is brought into the field of view of the telescope





Replacing the Battery

The red dot finder II is supplied with a CR2032 battery installed. Replace the battery with a new one according to the procedure below when necessary

- ① Make sure that the brightness adjustment dial is in the off position. Open the cover on the top of the battery compartment by turning counterclockwise while holding down the brightness adjustment dial.
- 2 Push down the rim of the battery to squeeze it out from the battery compartment. Insert a new battery with the positive polarity turned up
- 3 Put the cover back in place and close



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About View of the Red Dot

- 1 The red dot may not be seen as a tight point image or blurred if you are near-sighted or astigmatic. If this is the case, wear your eyeglasses when making adjustment to the brightness.
- ② Fixing a viewpoint is not necessary as the red dot can be used for sighting regardless of the position of view whenever it is seen in the zero-power objective window.
 - The red dot may not be seen when you stand beside the finder body. If you are unable to find the red dot, view again from an area nearer to the white sight line.



Attaching the Low-profile Finder-base (For your Option)

(1) Image

You will need a Philips screwdriver to exchange the mounting block for the low-profile finder-base.

- (1) Loosen the two screws on the side of the finder body. Remove the mounting block from the finder body by sliding the mounting block forward
- O With the projection on the low-profile finder-base facing up, slide it onto the bottom of the finder body. The low-profile finder base is attached in either direction. Securely tighten the two screws





