**BINOCULAR TELESCOPE - BT80M-A**

**SPECIFICATIONS**

**Objective**
- Aperture: 80mm
- Focal length: 900mm
- Aperture ratio: 1:11.2
- Optical composition: 2 air-spaced components with built-in tele-extender
- Coatings: Magenta-coated

**Eyepiece**
- Optical composition: 2-group 4-element OR-25mm
- Coatings: Multi-coated

**Performance**
- Magnification: 36X
- Angular field of view: 1.11°
- Linear field of view: 19m at 1000m
- Exit pupil: 2.22mm
(Magnification can be changed variously by using optional Vixen LV series eyepieces.)

**Measurements**
- Size: Length - 58cm, Width - 19cm, Height - 21.5cm
- Weight: 5kg

**USING THE BINOCULAR TELESCOPE**

1. **Installing on a photo tripod**
   Screw the photo tripod adapter on the pan head of the photo tripod.

2. **Aligning three dots**
   Align the three dots marked on the eyepiece, focusing ring and prism housing in red for the right side of the binocular telescope and in green for the left side. Optical axis is now collimated, and focus is adjusted to infinity.

3. **Adjusting the interpupillary distance**
   Hold the right and left prism housings with your hands, and look through the binocular telescope while turning those until one clear circle of image is seen.

4. **Focusing**
   Close your left eye and look through the right eyepiece with your right eye. Rotate the focusing ring of the right eyepiece until the image appears in sharp focus. Next, close your right eye and look through the left eyepiece with your left eye. Rotate the focusing ring of the left eyepiece until the image appears in sharp focus.

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Magnification can be changed variously by using a pair of the optional LV series eyepieces with the same focal length. However, those are not marked with an aligning dot. For collimating the optical axis, the following adjustment may be required.

1. Look through the left eyepiece and find an object in excess of 1000m away. Bring the object to the right edge at the horizontal center in the field of view. Then look through the right eyepiece. If the object is seen at a level with the image of the left eyepiece, the optical collimation is good. If not, rotate the right eyepiece slowly clockwise or counterclockwise until it is seen at a level with the image of the left eyepiece.

2. If it is not possible to level it with the image of the left eyepiece by rotating the right eyepiece, try to do the same adjustment as the above by rotating the left eyepiece.

Note: At a low power, an object can be seen clearly and brightly. It is advisable to begin with a low-power eyepiece having a long focal length and to change it gradually to a high-power eyepiece having a short focal length. In case of using the LV-25mm eyepiece on the binocular telescope, power will be 36X which is fairly high in comparison with magnification of the ordinary binoculars.
1. To collimate the optical axis, rotate the right and left eyepieces as shown in the explanatory note on "Using Optional LV Series Eyepieces".

2. If you cannot collimate the optical axis by rotating the eyepieces, use adjustment screws on the prism housings after taking off the cover plates which are just attached with an adhesive tape.

3. There are three pairs of the adjustment screws on each prism housing. Each pair of the adjustment screws consists of (1) Pushing Screw and (2) Pulling Screw.

   **Prism Housing**
   
   Left
   
   Right

   ① Pushing Screw - If it is tightened, the image will move toward the screw you tighten.

   ② Pulling Screw - If it is tightened, the image will move in an opposite direction to the screw you tighten.

   (Note: When tightening the pulling screw, loosen the pushing screw. When tightening the pushing screw, loosen the pulling screw.)