2. Now look through the finderscope. If the object seen through the telescope is not visible, then release the adjusting screws and move the finderscope until the object can be seen. Now retighten the adjusting screws while ensuring that the object remains visible in the center of the finderscope. To simplify this procedure, use the adjusting screws to adjust the object in the center. The finderscope will move in the direction of the screw in which it is being turned. All screws can be finally tightened as soon as the setting with the eyepiece coincides with that of the finderscope.

HOW TO ADJUST THE FOCUS

Although it appears easy to adjust the focus, it is rather laborious in practice until one gets used to it. Focus on any distant image in the daytime and repeat this practice to develop skill in it.

1. Adjust the focus by moving the Focusing Tube (B) back and forth. This may be done by turning the Focus Knob (A).
2. Since stars are always moving, focus on a neon sign or lamp over 1,000meters away. When the image is focused roughly, adjust the focus by moving the Focusing Tube (B) back and forth slightly until the image is made clear. Then, without shifting the tube, point it to catch a star, and the focus will normally be found to be correct.
3. First adjust the focus with an eyepiece of lower magnification and then change it to another one having the required magnification.
4. Whenever the eyepiece is changed, readjust the focus by moving the Focusing Tube (B) slightly.

BEFORE OBSERVATION

Try to focus the telescope . It is advisable to start by using a low powered eyepiece on a distant terrestrial object. The image given by an astronomical telescope will appear erect but as a mirrored image. Remove the diagonal and insert the erecting eyepiece to correct the mirrored image.

SPECIAL NOTES

Your telescope is a precision optical instrument, that is like any other optical instrument, it should be kept away from dust and moisture which are bad for all optical systems. When lenses get dirty, blow off the dust particles before cleaning the lenses, then clean the lens gently with moistened lens tissue. The lenses should not be taken apart, and the surface of the lenses should be kept free of finger smudges. After the observation, keep the telescope in a dry dust free place. Avoid sudden temperature fluctuations as the moisture in the air will condense on the objective lens. Should this happen, then place the objective lens not too close to a source of heat and allow the moisture to evaporate slowly. With this care, your telescope will become a friend for life.

P38-TS763-81001000

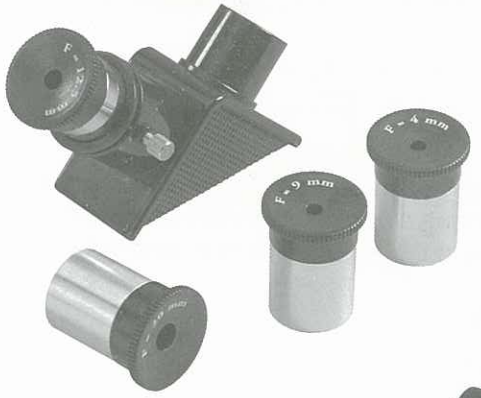
TELESCOPE INSTRUCTION MANUAL

525 POWER

Technical Specifications

Objective Diameter	60mm (2.36")
Focal Length	700mm
Eyepieces	20mm, 12.5mm, 9mm, 4mm
Barlow	3X
Maximum Magnification	525X
Finderscope	6X 25mm

Your telescope features the following:



- Diagonal Viewer
- 4 Interchangeable Eyepieces
  20mm,12.5mm, 9mm and 4mm eyepieces produce powers of 35X, 56X, 78X and 175X respectively.

- 3X Barlow Lens
  The Barlow lens increases the magnification of the telescope. A 3X magnification can be increased to 525X with a 3X Barlow lens. The highest magnification power of the Barlow lens should only be used for large and bright objects such as the moon and the brightest planets, as well as for nights with optimal observation conditions. Do not use the Barlow lens and the erecting eyepiece in conjunction with the diagonal as this produces a particularly low resolution level with the result that the image can no longer be sharply focused.

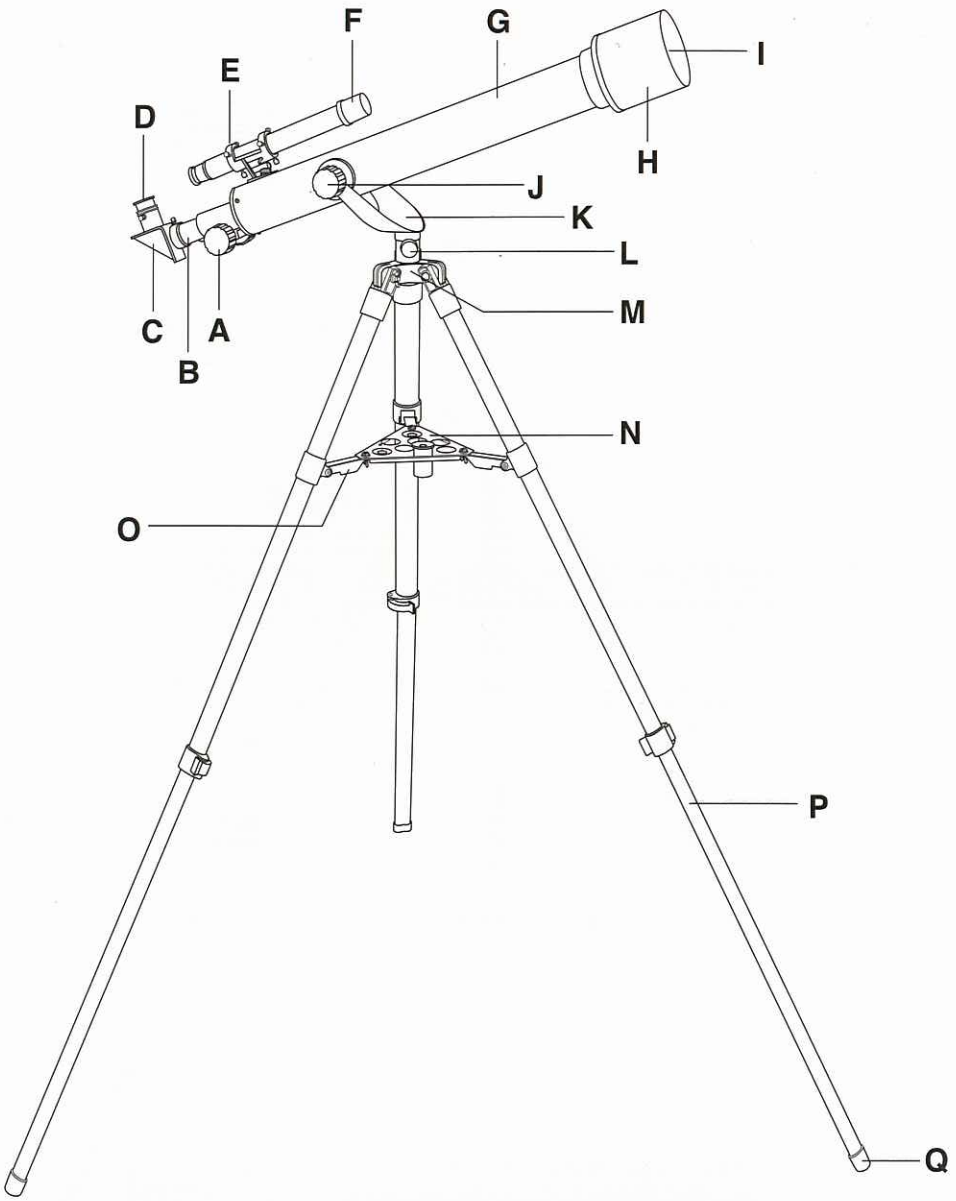
- 6X 25mm Finderscope with crosshairs (Refer to later detailed explanation)

- 1X Erecting Eyepiece
  When using an astronomical telescope, image will appear erect but as a mirrored image. The erecting eyepiece serves to correct the mirrored image.
- Aluminum Tripod/Screwdriver
- Instruction Manual
- Space Map
- Accessory Tray

- Alt-Azimuth Mount
  The telescope is fitted with an Altitude(Alt)-Azimuth mount. "Altitude" refers to the vertical movement of the telescope, while "Azimuth" refers to the horizontal movement. The Altitude-Azimuth mount, in conjunction with the Azimuth Lock (L) enables you to observe the entire night sky, or any celestial body, without having to move the tripod.

The following magnification values are achieved when using the Barlow eyepiece extensions and the exchangeable eyepieces:

Eyepiece Chart and Theoretical Power Limits:		
Eyepiece	**Power**	**Power with 3x Barlow**
20mm	35x	105x
12.5mm	56x	168x
9mm	78x	233x
4mm	175x	525x



A. Focus Knob
B. Focusing Tube
C. Diagonal
D. Eyepiece
E. Finderscope Bracket
F. Finderscope
G. Telescope Main Body
H. Sun Shade
I. Objective Lens (not shown)
J. Yoke Locking Knob
K. Yoke
L. Azimuth Lock
M. Tripod Head
N. Accessory Tray
O. Flange
P. Tripod Leg
Q. Rubber Tipped Feet

DIRECTIONS FOR USE

1. To extend the three Tripod Legs (P), release the locking tab, extend to desired length and lock tab (1). (Fig. 1)

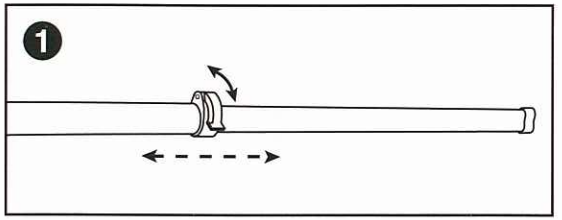
NOTE: When attaching tripod legs, be sure that hinged flange on each tripod leg faces inward. The tripod accessory tray (N) will attach to these flanges.

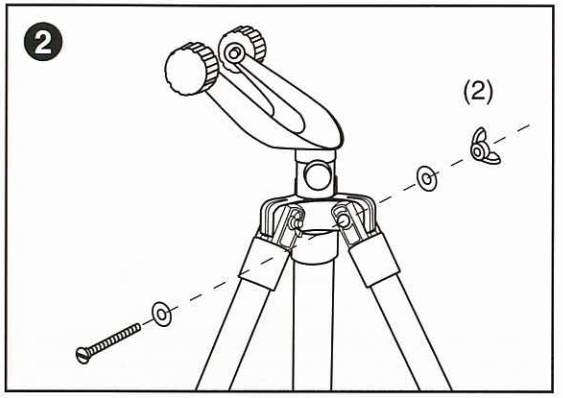
2. Connect all three tripod legs to the Tripod Head (M) with the wingnuts and screw (2). Before tightening the wingnuts check that there is a washer underneath. (Fig. 2)

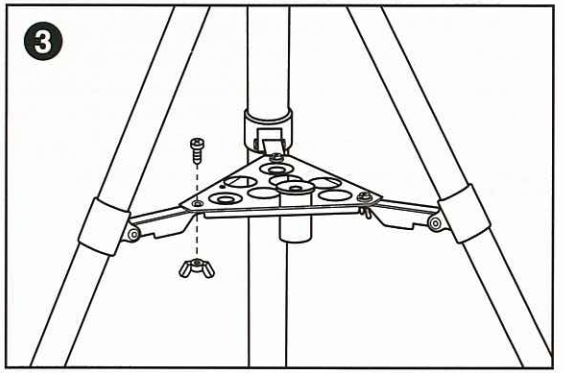
3. Now fasten the Accessory Tray (N) to the flanges of the tripod legs with the supplied screws and wingnuts. (Fig. 3)

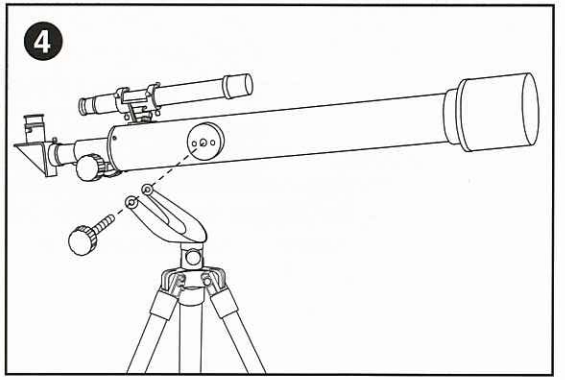
NOTE: Flange fits under accessory tray when attached. (Fig. 3).

4. After all screws have been firmly tightened, the telescope can be connected to the Yoke (K) of the tripod head. Mount the Telescope Main Body (G) in the yoke (K), and adjust with the large Yoke Locking Knob (J). (Fig. 4)

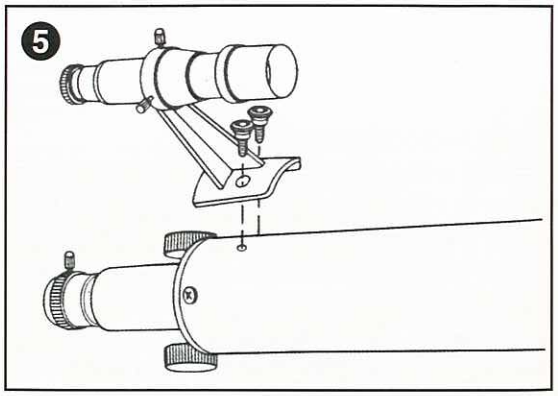




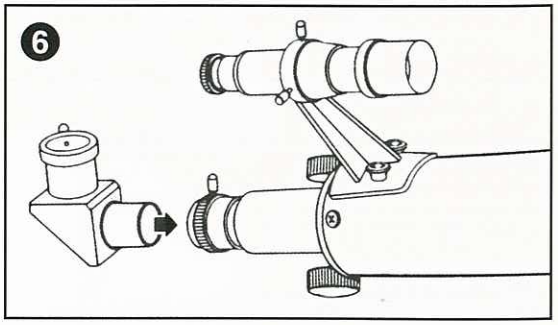




5. Remove the Finderscope (F) with Finderscope bracket (E) from the box. Then remove the two knurled thumb screws from the Telescope Main Body (G). Position the finderscope bracket on the telescope main body so that the holes in the base of the bracket line up with the exposed holes in the telescope main body. Return the two knurled thumb screws and tighten securely. (Fig.5)

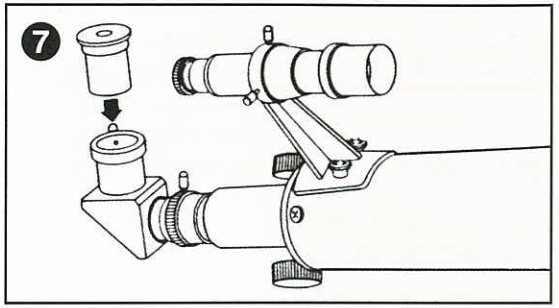


6. Insert the Diagonal (C) into the Focusing Tube (B). Secure by tightening the corresponding fastening screws. (Fig. 6)

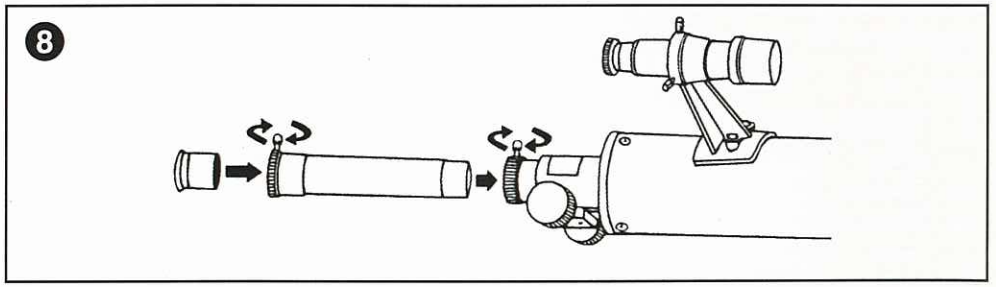


7. Insert the Eyepiece (D) into the Diagonal (C). This also has to be adjusted with the small fastening screw. (Fig. 7)

NOTE: View will appear erect but as a mirrored image. Remove the diagonal and insert the erecting eyepiece to correct the mirrored image.



8. For use of the Barlow, remove the diagonal and insert Barlow into Focusing Tube (B). Secure by tightening small retaining screw. Insert Eyepiece (D) into open end of Barlow. (see Fig. 8)



Your telescope is now fully assembled and ready for use. For maximum enjoyment and full utilization of your telescope, please refer to the "SPACE MAP" included in the box.

CAUTION: Viewing the sun can cause permanent eye damage. Do not view the sun with the Telescope Finderscope or even with the naked eye.

BEST USE OF THE TELESCOPE

Since astronomical telescopes are high in magnification and narrow in field of view, it is rather difficult to catch a particular star among a great number of stars and to follow its movement. The crux of succeeding in the observation is to master the use of an astronomical telescope.

HANDLING

Do not handle the telescope violently. In particular, when the body tube is carried, be sure not to bump or drop it.

ASSEMBLING

If the star is difficult to catch and, when caught, is swinging and hardly observable, this is most often due to poor assembly of the telescope.

1. Check closely to make sure that the clamp screws of the footings as well as the screws of the stage are kept tight.
2. Adjust the balance of the body tube so that its front and rear parts are equalized in weight.

OBSERVATION SITE

Since it takes considerable time to observe a star, the telescope should be set at a properly selected site.

1. Select an open site where light is at a minimum and the largest possible celestial area can be seen.
2. Place such parts as the eyepiece on the Accessory Tray (N), or keep them in a small box.

ADJUSTING THE FINDERSCOPE

Since the telescope has a limited field of view, it can be quite difficult to locate a given star or planet. For this reason the telescope is fitted with a Finderscope (F) with reticule for orientation. It is advisable to complete the following settings in daylight:

1. Insert the Eyepiece (D) with the lowest magnification in the Diagonal (C). Look at a stationary, easily recognizable object that is not further away than 300 m. Turn the telescope with the horizontal axle, and move the vertical axle until the object is in the middle of the field of view, and then focus the image. Tighten the adjusting screw on the mount so that the telescope remains in this position (the higher the object is above the horizon, the easier it is to locate).