BRESSER 50/600 AZ

BRESSER Junior Lens Telescope 50/600 AZ User Manual

Model: 50/600 AZ

Introduction

This manual provides comprehensive instructions for the assembly, operation, and maintenance of your BRESSER Junior Lens Telescope 50/600 AZ. Please read these instructions carefully before using your telescope to ensure proper setup and optimal viewing experience. This telescope is designed for observing celestial objects such as the Moon and bright planets, as well as terrestrial objects.

Image: The BRESSER Junior Lens Telescope 50/600 AZ, fully assembled and ready for observation. It features a red optical tube, a finder scope, and is mounted on a black altazimuth tripod.

Safety Information

- **Never look directly at the sun** through the telescope or its finder scope, even for an instant, without a professionally made solar filter. Permanent and irreversible eye damage, including blindness, can result.
- Do not leave the telescope unsupervised, especially when children are present.
- Handle optical components with care to avoid scratches or damage.
- Ensure the tripod is stable on a level surface to prevent tipping.

What's in the Box

Your BRESSER Junior Lens Telescope 50/600 AZ package includes the following components:

- Telescope Optical Tube
- Tripod with Accessory Tray
- 2 Eyepieces (e.g., 20mm, 4mm)
- Erecting Lens (1.5x)
- Moon Filter
- Finder Scope
- Instruction Manual (this document)

Assembly Instructions

1. **Set up the Tripod:**
   Carefully spread the tripod legs apart until they are fully extended and stable. Secure the accessory tray to the center brace of the tripod legs if applicable.

2. **Attach the Telescope Optical Tube:**
   Locate the mounting screw on the tripod head. Align the telescope tube's mounting bracket with the tripod head and secure it using the screw. Ensure it is firmly attached but do not overtighten.

Image: A close-up view of the red optical tube of the BRESSER Junior Lens Telescope, showing the focuser and finder scope attachment point.

3. **Install the Finder Scope:**
   Slide the finder scope into its bracket on the main telescope tube. Tighten the small screws on the

bracket to hold it in place. The finder scope helps in locating objects before viewing them through the main telescope.

4. **Insert the Diagonal Mirror or Erecting Lens:**
   Unscrew the small thumb screw on the focuser tube. Insert the diagonal mirror (for astronomical viewing) or the 1.5x erecting lens (for terrestrial viewing) into the focuser. Tighten the thumb screw to secure it.

Image: A black diagonal mirror, used to redirect the light path for more comfortable viewing through the telescope.

Image: A 1.5x erecting eyepiece, which corrects the inverted image typically seen through astronomical telescopes, making it suitable for terrestrial observations.

5. **Insert an Eyepiece:**
   Select an eyepiece (e.g., 20mm for lower magnification, 4mm for higher magnification). Insert it into the diagonal mirror or erecting lens and secure it with the thumb screw.

Image: Two telescope eyepieces, typically used to adjust the magnification of the telescope.

Operating Instructions

1. **Aligning the Finder Scope:**
   Before observing, align the finder scope with the main telescope. Point the main telescope at a distant, stationary object (e.g., a distant tree or building) during daylight hours. Look through the main telescope with a low-power eyepiece (e.g., 20mm) and center the object. Then, look through the finder scope and adjust its alignment screws until the same object is centered in the finder scope's crosshairs.
2. **Locating an Object:**
   Use the finder scope to locate the desired object. Once the object is centered in the finder scope's crosshairs, it should be visible in the main telescope's eyepiece.
3. **Focusing:**
   Look through the eyepiece and slowly turn the focusing knob until the image is sharp and clear. For astronomical observations, you may need to adjust focus slightly as objects move across the sky.
4. **Changing Magnification:**
   To change magnification, replace the eyepiece with one of a different focal length. A lower focal length eyepiece (e.g., 4mm) provides higher magnification, while a higher focal length eyepiece (e.g., 20mm) provides lower magnification and a wider field of view. Always start with a low-power eyepiece to locate and center objects, then switch to higher power if desired.
5. **Using the Moon Filter:**
   For observing the Moon, screw the moon filter onto the bottom of your chosen eyepiece. This filter reduces the Moon's brightness, making details more visible and comfortable to observe.

Maintenance

- **Cleaning Lenses:** Use a soft, lint-free cloth specifically designed for optical lenses. For stubborn

smudges, use a small amount of optical cleaning fluid. Avoid touching the lens surfaces with your fingers.

- **Storage:** When not in use, store the telescope in a dry, dust-free environment. Keep all caps on the optical tube and eyepieces to prevent dust accumulation.
- **General Care:** Avoid exposing the telescope to extreme temperatures or humidity. Do not disassemble the optical components beyond what is described in this manual.

Troubleshooting

Problem	Solution
Image is blurry or out of focus.	Adjust the focusing knob slowly until the image becomes sharp. Ensure the eyepiece is fully inserted and secured.
Cannot find objects easily.	Ensure the finder scope is properly aligned with the main telescope. Start with a low-power eyepiece for a wider field of view.
Image is upside down or reversed.	This is normal for astronomical telescopes. For terrestrial viewing, use the 1.5x erecting lens to correct the image orientation.
Dark or dim image.	Ensure the objective lens cap is removed. Avoid observing through windows or in areas with significant light pollution. Use a lower magnification eyepiece.

Specifications

- **Optical Design:** Refractor Telescope
- **Aperture:** 50 mm
- **Focal Length:** 600 mm
- **Focal Ratio:** f/12
- **Mount Type:** Altazimuth Mount
- **Eyepieces:** Various focal lengths (e.g., 20mm, 4mm)
- **Erecting Lens:** 1.5x
- **Finderscope:** Reflex
- **Product Dimensions:** Approximately 27.56 x 7.87 x 3.15 inches (Telescope tube)
- **Item Weight:** Approximately 3.74 pounds (Total package)
- **Model Number:** 8850600E8G000

Warranty and Support

For warranty information, technical support, or service inquiries regarding your BRESSER Junior Lens Telescope 50/600 AZ, please refer to the warranty card included with your product or visit the official BRESSER website. You may also contact BRESSER customer service directly for assistance.
BRESSER Official Website: www.bresser.de