

[Manuals.plus](#) /

› [BRESSER](#) /

› 70mm Refractor Telescope with Panhandle Mount User Manual

BRESSER 80-50070

BRESSER 70mm Refractor Telescope User Manual

Model: 80-50070

1. INTRODUCTION

Thank you for purchasing the BRESSER 70mm Refractor Telescope. This manual provides essential information for the proper assembly, operation, and maintenance of your new telescope. Please read this manual thoroughly before using the product to ensure safe and optimal performance. This telescope is designed for observing celestial objects such as the Moon, planets, and brighter deep-sky objects, as well as terrestrial viewing.

2. SAFETY INFORMATION

- **Never look directly at the Sun** through the telescope or its finderscope, even for an instant, without a professionally made solar filter that covers the entire front of the telescope. Permanent and irreversible eye damage may result.
- Do not leave the telescope unsupervised, especially when children are present.
- Handle optical components with care to avoid scratches or damage.
- Keep the telescope away from moisture and extreme temperatures.
- Ensure the tripod is stable on a flat, firm surface before use to prevent tipping.

3. PACKAGE CONTENTS

Verify that all components listed below are present in your package:

- 70mm Refractor Telescope Optical Tube
- Adjustable Aluminum Tripod with Accessory Tray
- Panhandle Altazimuth Mount
- 20mm Kellner Eyepiece
- 10mm Kellner Eyepiece
- 90-degree Diagonal Mirror
- Red Dot Viewfinder
- Smartphone Adapter
- Carrying Bag



Image: All telescope components neatly packed in the included carrying bag.

4. SETUP

Follow these steps to assemble your telescope:

1. **Set up the Tripod:** Carefully remove the tripod from its packaging. Extend the tripod legs to a suitable height and spread them apart until they are fully extended and stable. Secure the accessory tray to the center brace of the tripod.





Image: The telescope tripod with its legs fully extended, ready for mounting the optical tube.

2. **Attach the Optical Tube:** Locate the panhandle altazimuth mount on top of the tripod. Align the telescope optical tube with the mounting bracket on the tripod head. Secure the optical tube to the mount using the provided screws or quick-release mechanism. Ensure it is firmly attached.



Image: The fully assembled 70mm Refractor Telescope with the optical tube mounted on the tripod.

3. **Install the Diagonal Mirror:** Insert the 90-degree diagonal mirror into the focuser drawtube of the telescope. Tighten the thumbscrew on the focuser to secure the diagonal.



Image: A close-up view of the 90-degree diagonal mirror, which redirects the light for comfortable viewing.

4. **Insert an Eyepiece:** Choose an eyepiece (e.g., 20mm for lower magnification, 10mm for higher magnification) and insert it into the diagonal mirror. Secure it with the thumbscrew on the diagonal.



Image: The two included Kellner eyepieces, 20mm and 10mm, offering different magnifications.

5. **Attach the Red Dot Viewfinder:** Slide the red dot viewfinder onto its mounting base near the focuser. Tighten the small screw to hold it in place.

5. OPERATING THE TELESCOPE

5.1 Aligning the Red Dot Viewfinder

The red dot viewfinder helps you locate objects quickly. To align it:

1. Point the main telescope at a distant, stationary object (e.g., a tree or building) during daylight hours.
2. Look through the main telescope with the lowest power eyepiece (20mm) and center the object in the field of view.
3. Turn on the red dot viewfinder. Look through the viewfinder and use its adjustment screws to move the red dot until it is centered on the same object you see in the main telescope.
4. Once aligned, the red dot will indicate where the main telescope is pointing.

5.2 Finding and Focusing Objects

1. Use the red dot viewfinder to aim the telescope at your desired celestial or terrestrial object.
2. Look through the eyepiece. You may see a blurry image.
3. Slowly turn the focuser knobs until the image becomes sharp and clear.
4. For higher magnification, replace the 20mm eyepiece with the 10mm eyepiece. You will need to re-focus slightly.

- 5. Use the panhandle mount to make fine adjustments to track moving objects like the Moon or planets.

5.3 Using the Smartphone Adapter

The smartphone adapter allows you to capture images through the telescope:

- 1. Attach your smartphone to the adapter, ensuring the phone's camera lens is aligned with the adapter's opening.
- 2. Carefully slide the adapter with your phone onto the eyepiece.
- 3. Open your phone's camera app. Adjust the phone's position on the adapter until the telescope's field of view is visible on your screen.
- 4. Use the telescope's focuser to achieve a sharp image on your phone screen, then capture photos or videos.

6. 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 applied to the cloth, not directly to the lens.
- **Cleaning the Body:** Wipe the telescope body and tripod with a soft, damp cloth. Avoid abrasive cleaners.
- **Storage:** When not in use, store the telescope in its carrying bag in a cool, dry place, away from dust and direct sunlight. Replace all lens caps.
- **Moving Parts:** Periodically check all screws and knobs to ensure they are secure. Do not overtighten.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Image is blurry	Out of focus; Eyepiece not fully inserted	Adjust focuser knobs; Ensure eyepiece is fully seated and secured
Cannot find objects	Red dot viewfinder not aligned; Pointing at wrong area	Align red dot viewfinder (see Section 5.1); Use lowest power eyepiece to find object, then switch to higher power
Image is dim or dark	Light pollution; High magnification on faint object	Observe from darker locations; Use lower power eyepiece for faint objects
Telescope shakes easily	Tripod not stable; Loose connections	Ensure tripod legs are fully extended and spread; Tighten all mounting screws

8. SPECIFICATIONS

- **Model Name:** National Geographic 70mm refractor telescope
- **Item Model Number:** 80-50070
- **Brand:** BRESSER
- **Manufacturer:** National Geographic
- **Objective Lens Diameter:** 70 Millimeters
- **Aperture Diameter:** 70 Millimeters
- **Eye Piece Lens Description:** Kellner (20mm, 10mm)
- **Telescope Mount Description:** Altazimuth Mount
- **Focus Type:** Manual Focus

- **Finderscope:** Reflex
- **Item Weight:** 4.01 pounds
- **Package Dimensions:** 23 x 8.5 x 4 inches

9. WARRANTY AND SUPPORT

This BRESSER telescope is covered by a manufacturer's warranty. For detailed warranty information, product registration, or technical support, please refer to the warranty card included in your product packaging or visit the official BRESSER website. Keep your proof of purchase for warranty claims. For further assistance, you may also contact the retailer where the product was purchased.

© 2024 BRESSER. All rights reserved.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Open the live page

<https://manuals.plus/asin/B09PFF27LN>

More documents and user manuals: <https://manuals.plus/>