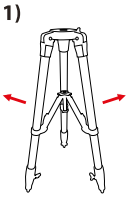
SPACE EXPLORATION COLLECTION

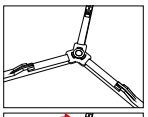
NANO NT-114/500 Teleskop / Telescope

Art. No. 9800770

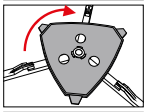
1)



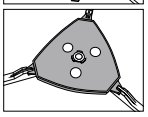
2a)



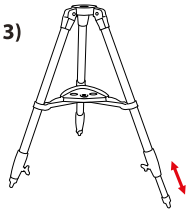
2b)



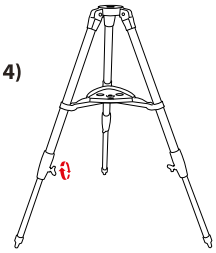
2c)



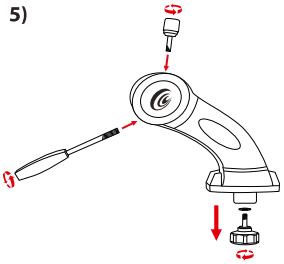
3)



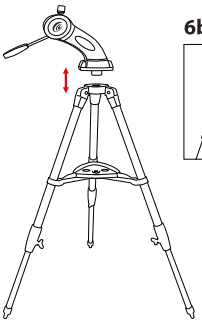
4)



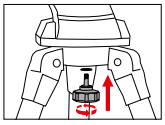
5)



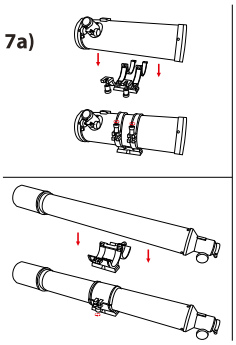
6a)



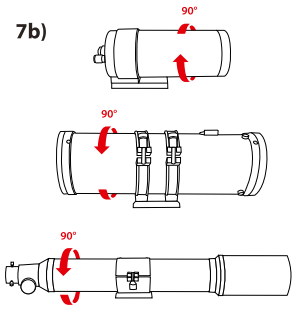
6b)



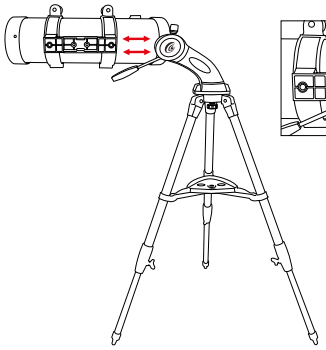
7a)



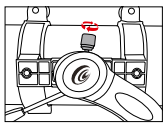
7b)



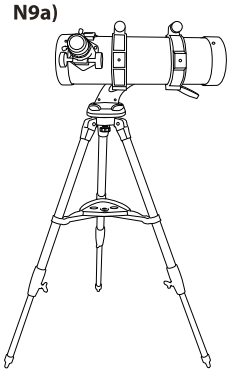
N8a)



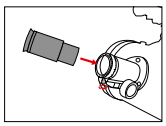
N8b)



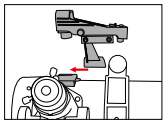
N9a)



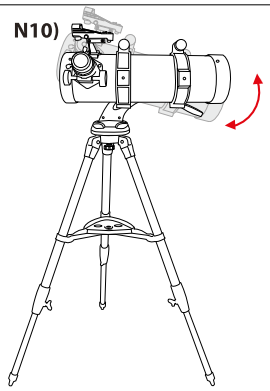
N9b)



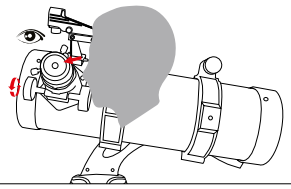
N9c)



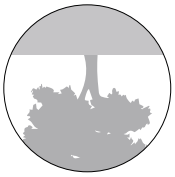
N10)



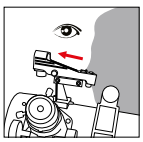
N11a)



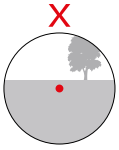
=



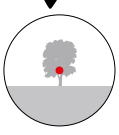
N11b)

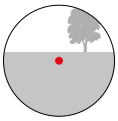


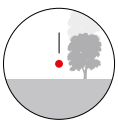
X



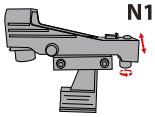
✓



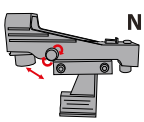




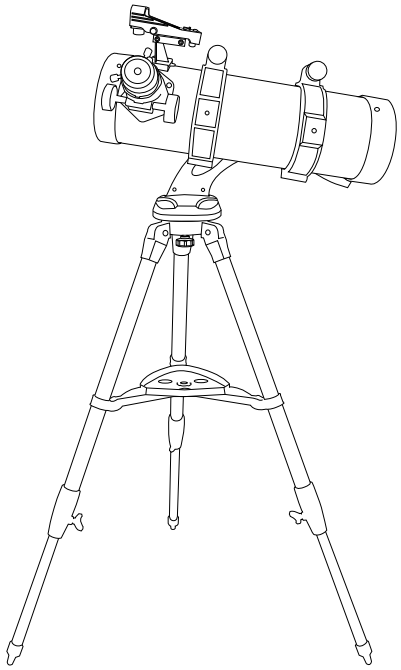
N11c)



N11d)



N12)



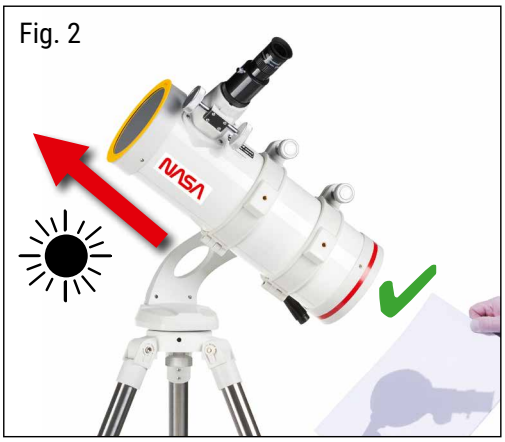
✓

International Space Archives logo © International Space Archives LLC.

DANGER!

Solar observation only by using the included solar filter and in combination with the dedicated telescope. The solar filter must be mounted in front of the lens, i.e., before the sunlight enters the telescope.
BEFORE EVERY SOLAR OBSERVATION:
Remove the optical finderscope from the telescope tube to avoid unintentional looking at the sun!

SOLAR FILTER INSTRUCTIONS:



Important safety information

- Check the solar filter before each solar observation to ensure it is undamaged. Hold it up to a bright light source to detect cracks and/or holes. Do not use the telescope for solar observation if the solar filter is even slightly damaged. In this case, contact the manufacturer to obtain the right spare parts.
- Always use the solar filter provided when observing the sun. Ensure it is correctly installed on this telescope according to the instructions. The usage of the solar filter is only recommended in combination with this telescope.
- Never look into the sun through an eyepiece/telescope without any certified solarfilter. A moonfilter can never be used to observe the sun. A moonfilter is only suitable for observing the moon. The solarfilter must be mounted onto the telescope aperture, not onto the eyepiece. Otherwise the ray of light bundled by the lens immediately destroys the filter foil and can instantly cause eye damage or even complete blindness.
- Before each sun observation, check that the sun filter is firmly in place. Accidental detachment from the lens opening can cause immediate and permanent eye damage and blindness.
- If the sun filter cannot be mounted firmly enough on the tube, improve the fit by applying several self-adhesive felt strips or similar between the sun filter and the lens aperture. Never use the solar filter if it cannot be properly attached to the telescope. In such a case, always contact our customer service first.
- Be careful when observing the sun. Even a brief glance through the unprotected lens may lead to major eye damage or even complete blindness.
- Children must not be allowed to use the telescope to look at the sun, even if the right filter is fitted. Children must be under constant supervision.
- Never leave the optics unattended. Children and inexperienced adults may use the telescope for solar observation without suitable safety measures and blind themselves.
- Do not observe without interruption. Make frequent breaks (approx. every three minutes).
- Do not look at the sun after an eye operation or other eye ailment without medical approval.
- Waves / creases in the foil are normal and not a product defect.
- Do not expose the device to high temperatures.

Installing the solar filter (Fig. 1)

1. Make sure the optics is turned away from the sun before and during the installation.
2. Hold the filter only on the external frame (1). Never touch the foil (2) to avoid any damages on it.
3. Insert the filter carefully with the clamp ring (3) first into the free opening (4) of the telescope.

NOTE!
Turn away the optics from the sun before removing the solar filter. The extremely powerful bundling of light and heat by a bare lens may damage the lens adhesive in the eyepiece.

Pointing the telescope at the sun
Start with checking the solar filter - it has to be completely intact and firmly installed onto the telescope. It is very easy to point the telescope to the sun - just hold a piece of white paper about 20cm behind the telescope tube and watch the shadow on the paper. See Fig. 2. Point the telescope to the approximate position of the sun and watch the outline of the telescope shadow on the paper. Move the telescope until the area of the shadow is at its minimum. Now the sun can be observed through the telescope with the 20mm eyepiece. For finding the sun, please only use the 20mm eyepiece and without the Barlow lens. After you have centered the sun in the field of view of the eyepiece you can increase power by using the Barlow lens to see more details.

Attaching and using the solar viewfinder (accessory depends on model)
Depending on the telescope type purchased and the scope of delivery, a special solar viewfinder is used. it works according to a simple projection method and can therefore be used safely to find the sun. To do this, remove the LED viewfinder for night observation from the optical tube and insert the solar viewfinder into the holder. Of course, this solar viewfinder must be adjusted with the telescope on one axis before first use. To do this, adjust the sun in the telescope as described above using the cast shadow method and then center the point-shaped sun projection with the viewfinder adjustment screws in the center of the viewfinder's lens.

Notes on use: Eyepiece magnification
Please use only the 20 mm eyepiece supplied for solar observation either by itself or together with the 2x Barlow lens to limit maximum magnification to 18x or 35x. Greater magnification, e.g. using the 4 mm eyepiece, yields blurred solar images. This is a design feature and not a defect.

Maintenance and cleaning
Clean the foil only if it is absolutely neccessary! For cleaning use a lint-free and soft cloth and moisten it with a little water. Then clean the foil with the cloth very carefully and without pressure. Note that the foil is very sensitive and it must not be used even with minor damages!

To avoid premature aging of the filter, it is recommended to store the filter in a light-protected environment when it is not in use.

Declaration of Conformity

Product Type:	Solar Filter
Product Name:	Solar Filter for Telescopes
Filter category:	E15, E16

Bresser GmbH declares that the above-named product corresponds to the following directives and relevant standards in its conception and design as well in the version marketed by us.

Directive:	Harmonized Standards:
PPE 89/686/EEC	EN 1836:2005, cl. 4.1.4.4
./.	ISO 12312-2:2015

This declaration is no longer valid in the event of a change to the product which has not been coordinated with us.

SERVICE AND WARRANTY:

www.bresser.de/warranty_terms

Bresser GmbH
Gutenbergstraße 2
46414 Rhede · Germany

www.bresser.de

@BresserEurope

Bresser UK Ltd.
Suite 3G, Eden House,
Enterprise Way
Edenbridge, Kent TN8 6HF
Great Britain

Irrtümer und technische Änderungen vorbehalten. · Errors and technical changes reserved.
Manual_9800770_NANO-NT-114-500-Telescope_multi-lingual_ISA_v052024a