Starscope telescopes on equatorial mount

Assembly and instruction manual

These instructions are valid for the telescope models shown in the illustration

Starscope 609

Starscope 709
„Jupiter“

Starscope 809

Starscope 1149

Starscope 1306

Starscope 1507

Megastar 1550

First information

Thank you for choosing a quality product from Teleskop-Service. With the purchase of this telescope you are now entering the fascinating world of hobby astronomy. With our beginner's set you can make your first experiences in the sky and take a look into the past of the universe.

In order to enjoy this optical instrument for a long time, we ask you to read these instructions carefully. The setup is sometimes not easy for beginners. Therefore we want to help you with this description to unpack your new telescope and to assemble it professionally.

Only then you will have a lot of fun observing celestial objects. Further helpful steps for finding celestial objects or also for the care of your telescope can be found at the end of this manual.

If you have any special questions, our staff will be happy to assist you. Just write an e-mail or call us and we will be glad to help you.

WARNING!

Never look at the sun with a telescope or any other optical device. Permanent and irreversible damage would be done to your eyes, which could lead to blindness.

For solar observation, there are special solar filters that are mounted in front of the front lens of the telescope. Please also consider the small finder scope, which must also be covered or equipped with a solar filter.

Do not use eyepiece solar filters, as they may crack and cause you to lose your eyesight.

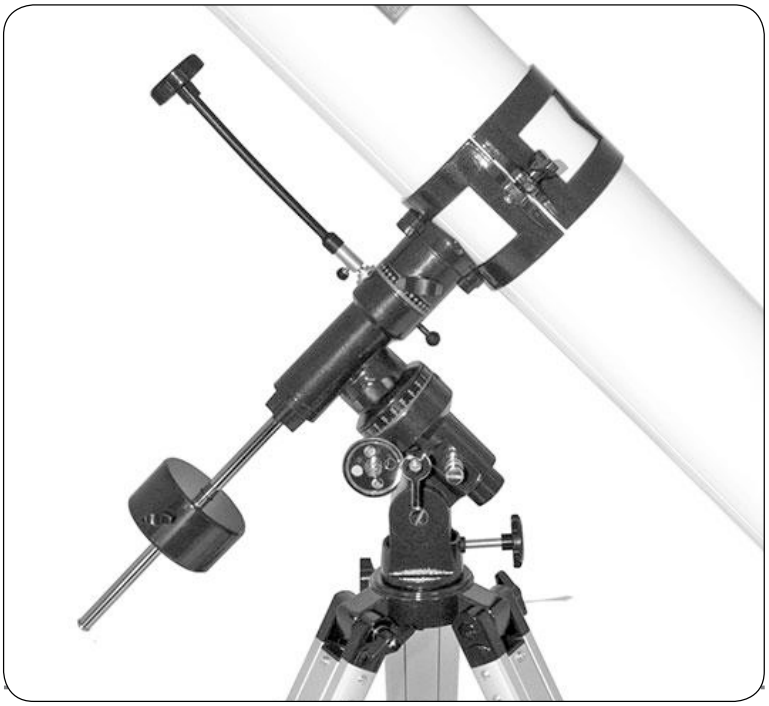
Also, please do not use the telescope for solar projection. The heat generated inside may destroy the telescope/eyepiece.

Never leave the telescope unattended, especially when children are around. They could endanger themselves and others through lack of knowledge.

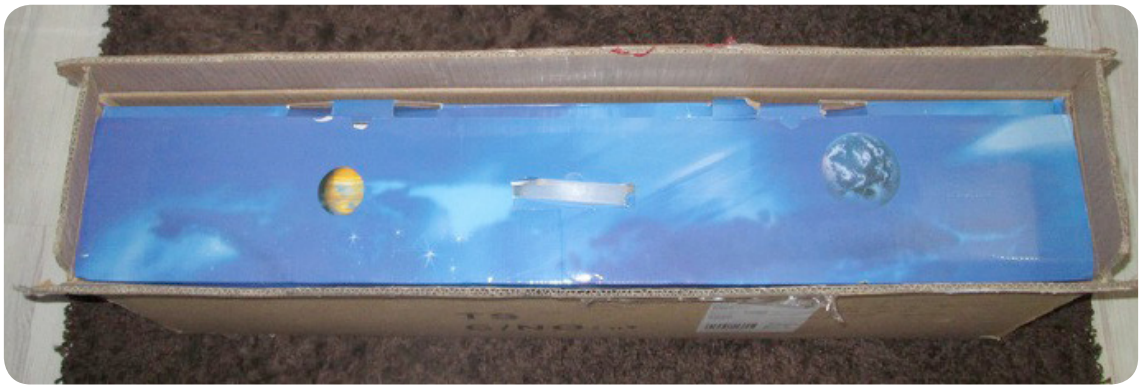
Only use the telescope for the type of observation described in these instructions.

Contents

Note: The pictures in this manual show different devices.



Unpacking and checking the contents of the package



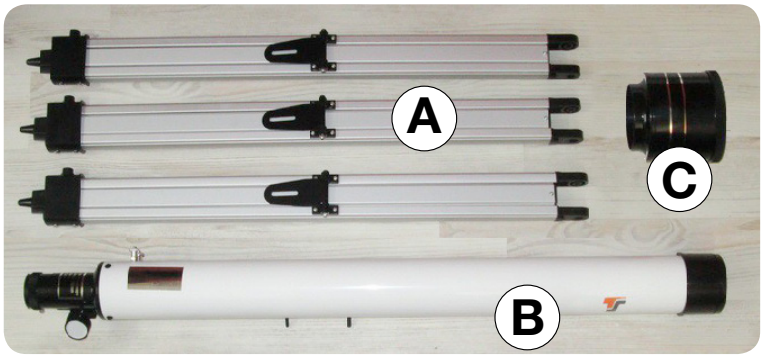
The outer packaging contains another box. This contains the individually packed parts for the telescope set.

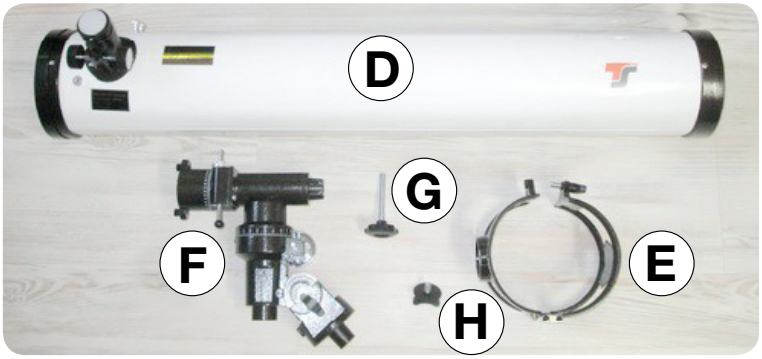
Please unpack the individual parts conscientiously and place everything carefully on the floor.

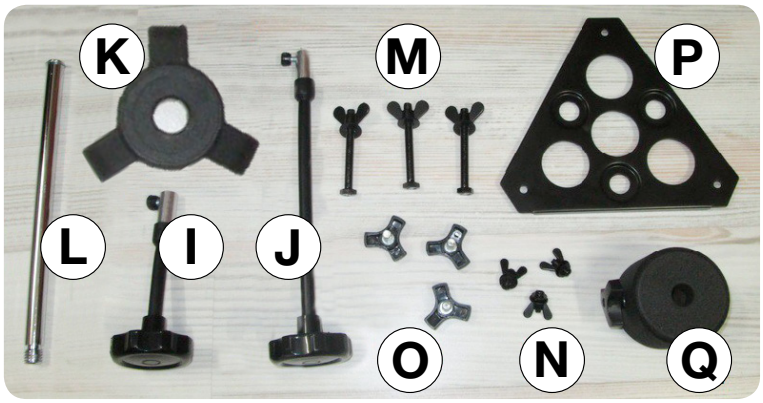
Before starting the assembly, please check all parts for their undamaged condition. Please also check whether all parts are present.

If you are setting up a telescope for the first time, please follow our assembly instructions carefully, as incorrect assembly can result in poor imaging of the optics or even damage to them.

If, contrary to expectations, you should ever notice damage to one of the parts when unpacking or checking, please contact us immediately before you finish assembling the complete set.







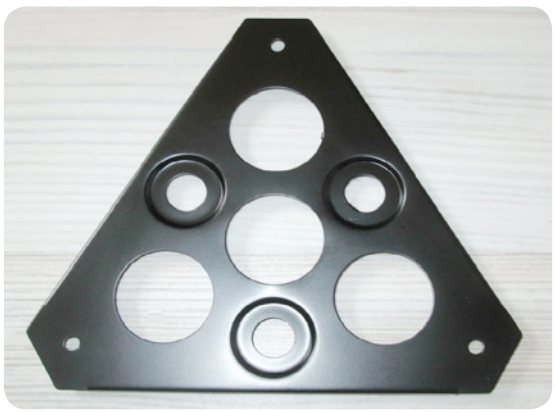
A - Tripod legs
B - Optical Tube (refacting telescope)
C - Dew cap (refacting telescope only)
D - Optical Tube (reflecting telescope)
E - Tube clamp(s) (except Starscope 609)
F - Mount head
G - Latitude screw
H - Mount screw
I - Flexible shaft for right ascension axis
J - Flexible shaft for declination axis
K - Mount base
L - Counterweight rod
M - Screws/wing nuts for tripod legs
N - Screws/wing nuts for support plate
O - Locking screws for tripod legs
P - Support plate
Q - Counterweight
R - Finder scope
S - Moon filter
T - Wing nuts for optical tube (only Starscope 609)
U - Barlow lens
V - Erect lens
W - Eyepieces (2 oder 3, depending on model)
X - Diagonal mirror (refacting telescope only)

Not shown:
Screwdriver and Allen wrench (except Starscope 609)

Assembly

Take the parts needed for this and place them ready for mounting. You will need the following parts for the mount:

- Mount base
- Tripod legs
- Screws for tripod leg clamping
- Screws with wing nuts for the tripod leg mounting
- Storage plate for eyepieces and accessories
- Screws with wing nuts for the storage plate

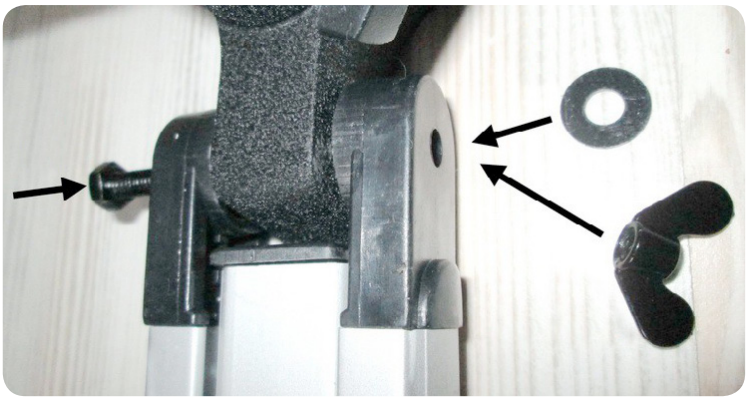


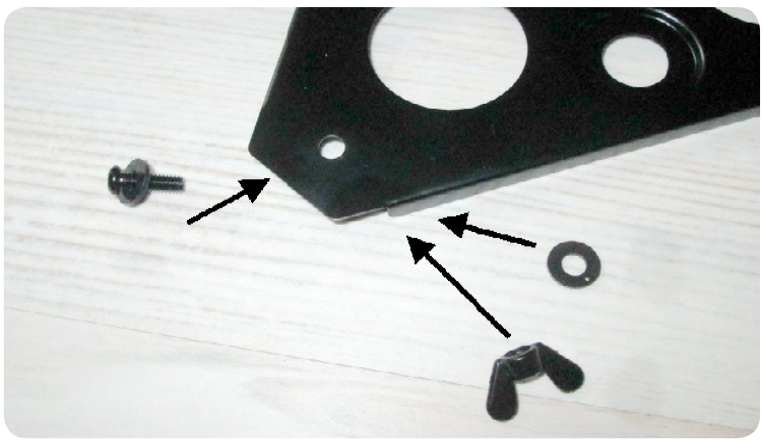
Assembling the Tripod

First screw the three screws ‚O' into the threads of the tripod legs, but do not tighten the screws too much, only „hand-tight". You can later use these three screws to change the „working height" of the tripod or to adjust the tripod to an uneven floor.

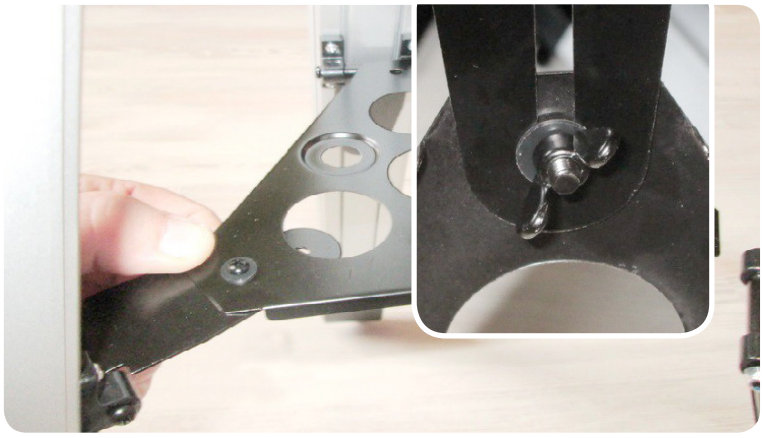
When mounting the tripod legs, make sure that the three retaining plates for the storage plate face inwards.

Then attach the tripod legs to the mount head using the three screws ‚M'. You should not tighten these screws too much yet.





Now fasten the storage plate to the retaining plates of the ripod legs using the three screws (N). To do this, insert the screws with a washer from above into the holes provided for this purpose in the storage plate ...



... and screw a wing nut together with a washer onto the screw from below. Do not tighten the nut yet.

Then spread the three tripod legs evenly and tighten the three screws (M) on the mount base hand-tight.

Now attach the storage plate to the other two holding plates.

Your AZ mount should now be secure and stable and is ready to receive the telescope.

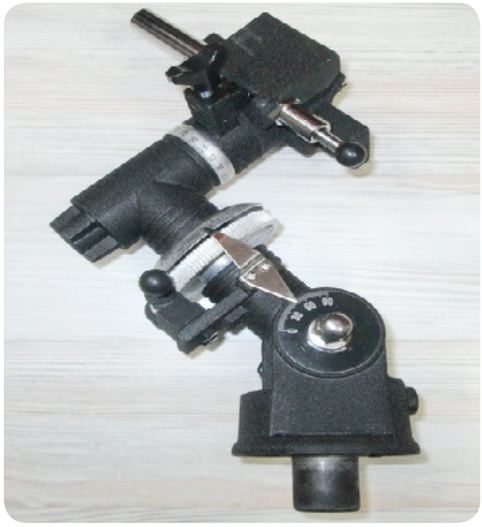
Attaching the dew cap to the optical tube (refracting telescopes only)

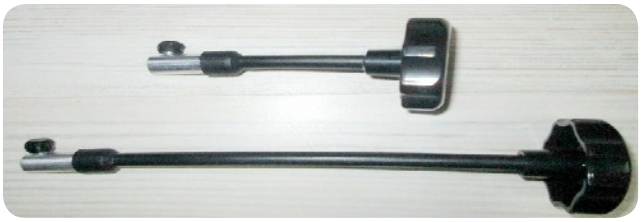
The dew cap protects the optics from dew. Mount the cap on the tube.

Assembing the Mount and mounting the optical tube

You will need the parts in the order mentioned:

- Mount head
- Screw for mount head
- Latitude screw
- Counterweight rod
- Counterweight
- Flexible shafts
- Tube clamp (except Starscope 609)
- Optical Tube
- Wing nuts fot optical tube (Starscope 609 only)

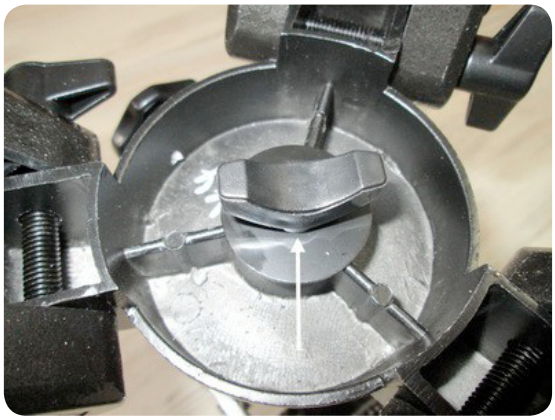




Parts for mounting the optical tube (all models except Starscope 609)

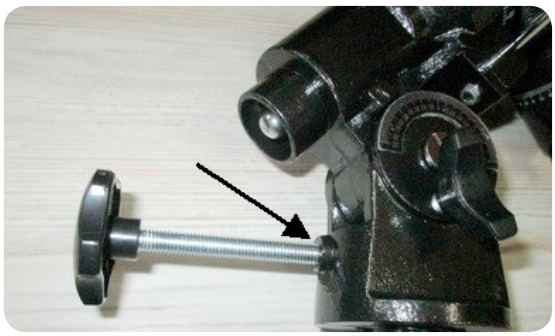
Parts for mounting the optical tube (Starscope 609)

For the following steps, make sure that the clamping screw of the pole block is tightened.



First spread the legs of the tripod for a secure stand. Then place the mounting head on top and secure it from below with screw „F“.

Attach the mount head so that the upper axis (declination axis) is in line with a tripod leg. This will make it easier for you to make the polar alignment.

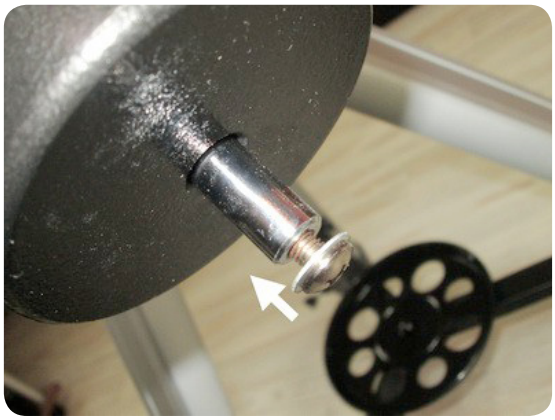


Now screw the latitude screw „G“ into the thread provided for this purpose on the mount. By means of this screw you can adjust the pole height.

Screw the counterweight rod into the mount.

Use the screwdriver to unscrew the locking screw at the end of the counterweight rod.

Now loosen the locking screw of the counterweight, slide the weight onto the rod and lock it with the locking screw.



Now reinsert the locking screw that prevents the counterweight from slipping out.

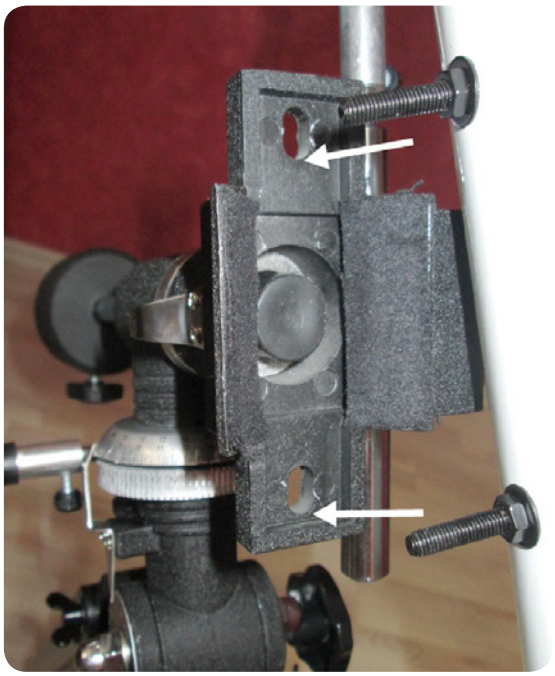
Next, attach the two flexible shafts to the mount. Attach the short shaft ‚I' to the lower axis (right ascension axis/RA axis). To do this, remove the protective rubber cap from the shaft axis of the mount.

Loosen the shaft clamping screw and slide the shaft onto the axis so that the clamping screw is on the flattened side of the axis.

Attach the long flexible shaft ‚J' to the upper axis (declination axis/dec axis) in the same way.

If necessary, loosen the clamping screws of the mountg axes, turn the axes so that the two screws or screw holes in the mounting surface for the tube are horizontal.

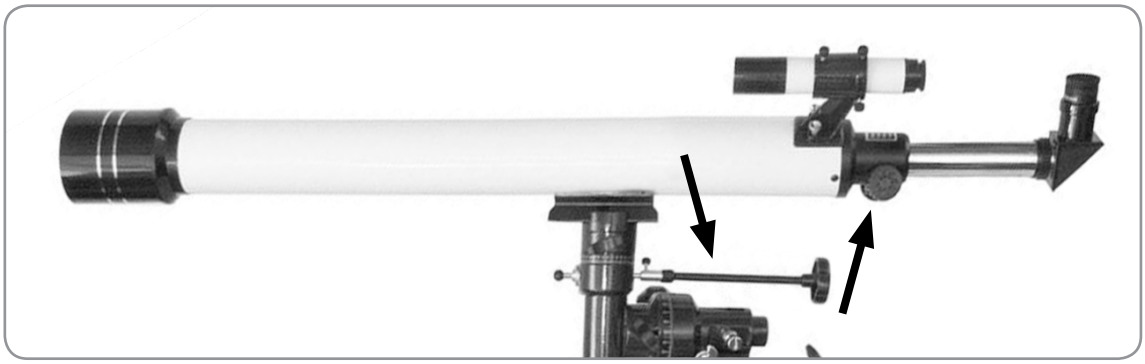
Attaching the optical tube to the mount (Starscope 609)



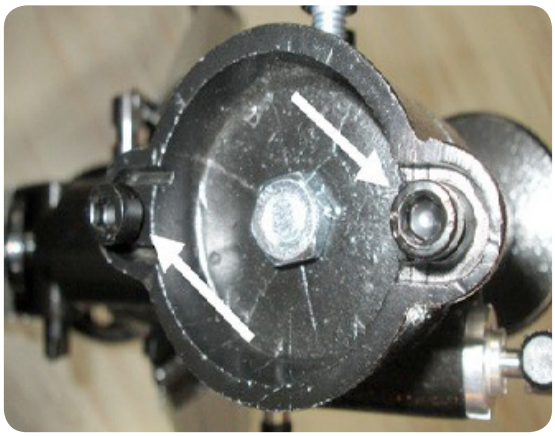
The telescope tube has two threaded bolts for mounting on the mount head.

Place the optical tube on the mount head and fasten it with the two wing nuts. Tighten the screws only hand-tight.

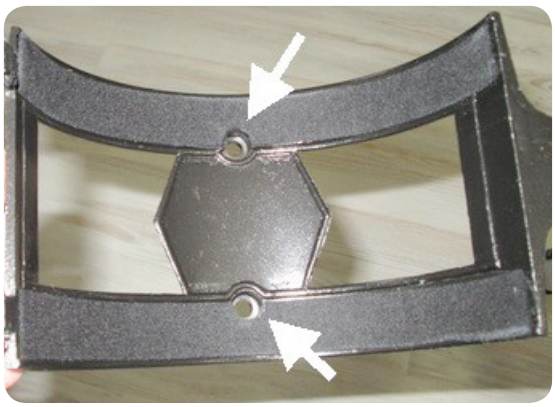
When mounting, make sure that the rear end of the telescope points in the same direction as the flexible shaft of the declination axis.



Attaching the tube clamp(s) to the mount (all models except Starscope 609)



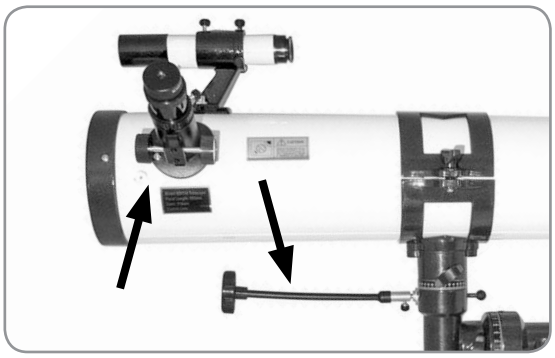
Using the enclosed Allen key, remove the screws provided for fastening the tube clamp(s).



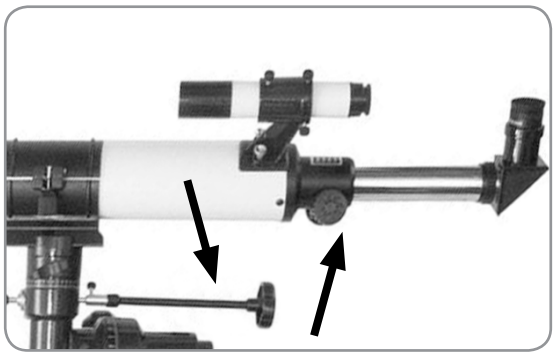
Fasten the tube clamp(s) with the aforementioned screws.

Placing the tube in the tube clamp(s)

Place the optical tube in the tube clamp(s). The end of the telescope with the focuser must point in the same direction as the flexible shaft of the declination axis.



Close the tube clamp(s) and tighten the toggle screw(s) until the tube can no longer be moved in the clamp(s).



Attaching the viewfinder telescope

The entry-level package comes with either an optical viewfinder or a so-called illuminated dot finder. Both variants are attached to the telescope.

First, remove the two knurled nuts so that only the screws protrude from the tube.

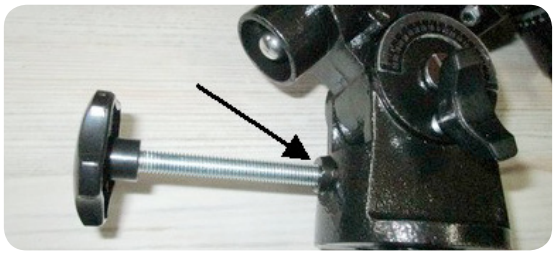
Now take the viewfinder and place it on the screws so that you can screw the knurled nuts back onto it.

After you have screwed both knurled nuts back onto the screws, the viewfinder is mounted. When mounting the viewfinder, make sure that the aperture of the viewfinder telescope points in the same direction as the aperture of the telescope.

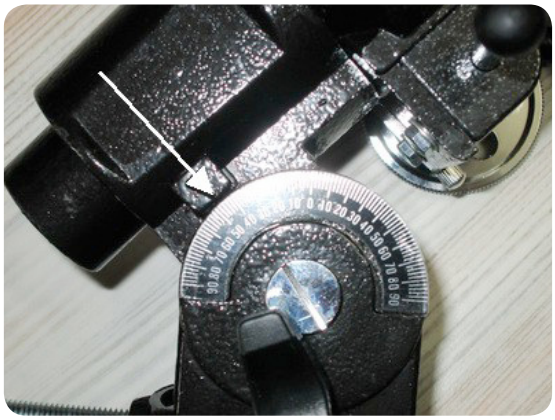
Adjusting the latitude

Now set the correct polar height on your mount. This corresponds to the latitude of your observation site. The latitude is set at the polar block.

Loosen the clamping screw on the pole block of the mount.



Turn the adjustment screw to change the tilt of the mount.



Support the mount/telescope with your other hand to relieve the pressure on the adjustment screw.

As soon as the desired value is reached (arrow marking on the mount), you can tighten the clamping screw on the pole block.

Balancing telescope and mount

In order to load the mount as little as possible and to be able to move the telescope as easily as possible, all parts on the mount (counterweight, tube with accessories on the eyepiece side, etc.) should be balanced, i.e. brought into equilibrium.

To do this, set up the telescope with the mount so that you have enough space to swivel the telescope without the tube hitting objects in the vicinity.

Now first open the clamping screw on the upper axis (Dec axis).

Move the counterweight to the lower end of the counterweight rod and clamp it there.

Rotate the RA axis so that the counterweight is at the lowest position and clamp the axis in this position.

Loosen the Dec axis clamp, bring the telescope tube to the horizontal position and check if the tube stays in this position or moves to one side due to an imbalance.

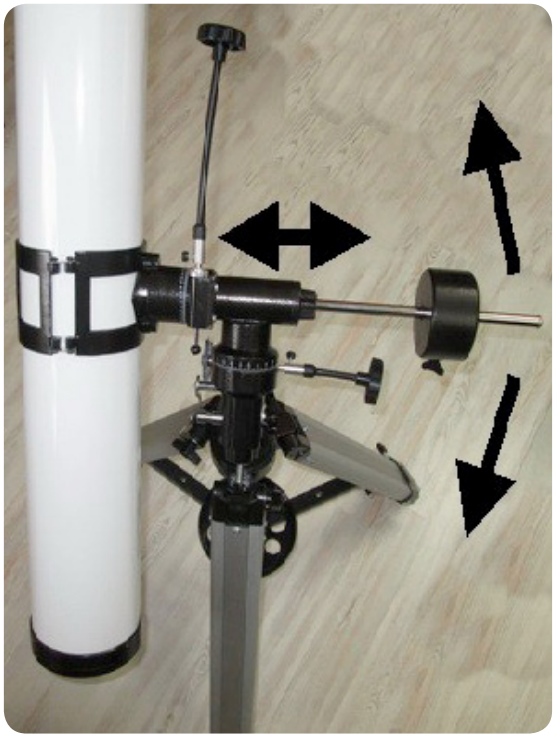
If the tube is not balanced, first clamp the Dec axis with the tube horizontal.

Slightly loosen the clamping screw of the tube clamp. Move the tube to compensate for the imbalance. To check, loosen the Dec axis again and again while holding the tube to prevent unintentional swiveling.

Tighten the tube clamp screw when the tube is balanced.

Now tilt the tube to the position shown in the adjacent image (parallel to the RA axis). The inclination may differ from that shown in the picture.

Make sure that the Dec axis is locked and open the clamping screw of the RA axis.



Loosen the clamping screw of the counterweight. Swivel the telescope until the Dec axis is horizontal. Hold the counterweight firmly to prevent it from slipping on the rod.

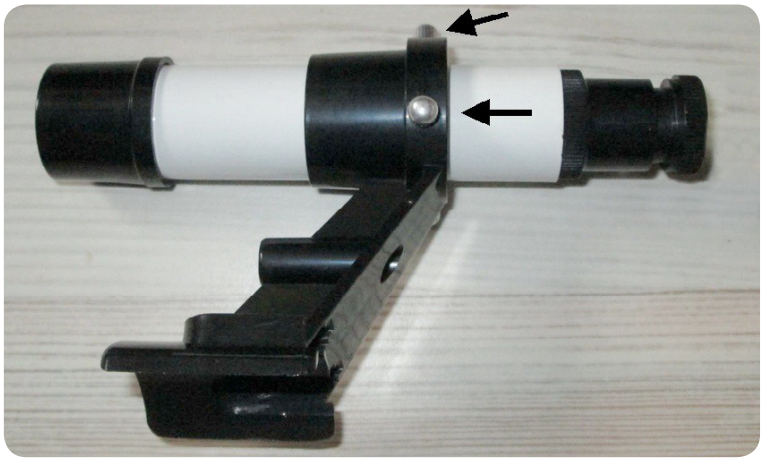
Find the counterweight position where the weight and telescope are balanced and clamp the weight at this position. It should no longer be possible to move it. Return the telescope to the position shown in the first image on this page and clamp the RA axis.

Your telescope is now balanced on the mount.

Aligning the viewfinder telescope

Now you have to align (adjust) the viewfinder to the telescope. To do this, first insert the eyepiece with the largest focal length into the focuser.

Now look for a distant, earthly object (church tower, high voltage pylon, chimney, etc.) and look through the eyepiece. Now align the telescope so that your selected object appears in the center of the eyepiece. For more detailed information on how to move the telescope on the mount, see page 16.

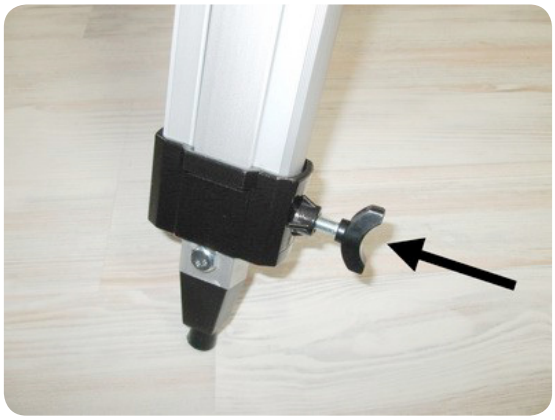


Now look into the finder telescope from behind (shown in the adjacent image on the right). Using the adjustment screws (2), adjust the finder until you see the same object as in the eyepiece. Focusing is done by rotating the eyepiece.

Adjust the viewfinder so that the selected object is exactly in the center behind the crosshairs or behind the illuminated dot.

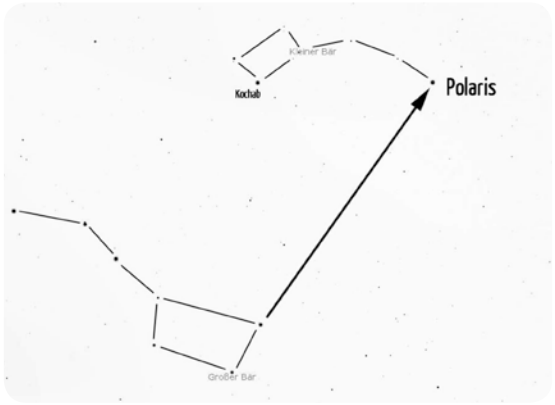
Now you have aligned your finder with the telescope. Your telescope is now ready for its first use.

Polar Alignment



A parallactic mount is set up so that the RA axis is parallel to the Earth‘s axis. With correct alignment, the apparent motion of the celestial bodies caused by the Earth‘s rotation can be compensated by moving only the RA axis.

When doing this, the tripod should be as level as possible (tripod head level). If the ground is uneven, you can extend the tripod legs to different lengths to compensate for the unevenness.



Set up the tripod with the mount so that the right ascension axis points as exactly as possible to the north. A compass facilitates the alignment.

Look for the constellation „Big Dipper“ in the night sky. The imaginary connecting line of the two rear stars points to the North Star („Polaris“).

The northern celestial pole is in the immediate proximity of this star.

Be careful when setting the latitude as well as the alignment to north, because the more precise the alignment is, the longer you can track the telescope to an object only by moving the RA axis.

It is best to look over the upper axis (Dec axis) like through a scope. If this axis points to Polaris, you have aligned your mount accurately enough for visual observing. You can now loosen the axis clamps and slew the telescope to the desired object. Then lock the axes. Now you can fine tune with the two flexible shafts and then use only the RA shaft to track the telescope.

On Earth, we have a coordinate system that can be used to accurately describe any location on Earth using two coordinates. These are latitude (north or south angular distance from the equator) and longitude (east or west angular distance from the prime meridian).

In the sky, north/south latitude is called declination, and east/west longitude is called right ascension. Right ascension is given in hours and minutes (0-24 hours).

In the past, only the pitch circles on the mount axes were used to locate celestial objects. With the help of star charts and books (available in our store) and the viewfinders used nowadays, it is usually possible to find celestial objects very quickly, even without a time-consuming search using coordinates.

Using accessories on the eyepiece side

To view the image captured by the telescope, you need the eyepieces. The telescope collects and focuses the light and creates an image that you view with an eyepiece. The focal length of the eyepiece determines the magnification factor. The lower the magnification, the larger the visible area (field of view).The higher the magnification, the smaller the field of view and the brightness of the image decreases. Therefore, there is a „useful magnification“ for each telescope. The possible magnification also depends on the so-called „seeing“ (air turbulence) as well as the transparency of the atmosphere (haze etc.).

The highest magnification can only be achieved on particularly clear nights with very calm, clear air. In addition to the eyepiece, there are magnification lenses (barlow lenses) which double the magnification value of the eyepiece, for example. A 2x Barlow lens thus turns a 12.5 mm eyepiece into a 6.25 mm eyepiece. The focal length is halved and the magnification is doubled!

It is not always advisable to use a Barlow lens, especially with high magnification eyepieces (e.g. 4 mm), because there is not enough collected light for this magnification in small telescopes. The image becomes very dark.

The moon is the brightest object in the night sky. Especially at low magnification, the brightness of the image in the eyepiece can be disturbing. In this case, screw the moon filter into the plug-in sleeve of the respective eyepiece.

If you also want to observe nature with your new telescope, you will quickly notice that the image is mirrored vertically and/or horizontally, unlike the image of binoculars.

This is not a problem when observing the sky at night, but an upright and laterally correct image is an advantage when observing nature. To achieve such an image, there are - depending on the type of telescope - so-called erect lenses or amici prisms. The upright lenses usually provide magnification at the same time. These optical elements are always inserted between the focuser and the eyepiece. If your complete package does not include these parts, you can order them in our online store.

f.l.: Eyepieces • Barlow lens • Erect lens

Useful magnifications and calculation formulas

The magnification in a telescope is calculated by dividing the focal length of the telescope by the focal length of the eyepiece.

Example:

Telescope focal length 700 mm

Eyepiece focal length 12.5 mm

700/12.5 = 56x magnification

This means that the smaller the eyepiece focal length, the higher the magnification.

With a 2x Barlow lens, the magnification doubles, in the example to 112x.

Examples for a telescope with 700 mm

Focal length (eyepiece focal length/magnification/magnification with 2x Barlow lens):

20 mm	35 x	70 x
12.5 mm	56 x	112 x
4 mm	175 x	350 x

Highest and lowest useful magnification

Theoretically, almost any magnification is possible with a telescope if you use the right eyepieces. As you can see in the table above, in the example with the 4 mm eyepiece and a 2x Barlow lens even a magnification of 350x can be achieved. With even smaller eyepiece focal lengths and stronger Barlow lenses (e.g. 3x, 5x) this could be increased almost arbitrarily. However, the useful magnification range is limited by the laws of optics.

For the highest useful magnification, the rule of thumb is that you should choose a maximum magnification of twice the diameter of the optics.

For example, if the telescope has an diameter of 76 mm, the highest magnification should the highest magnification should not be more than 76 x 2 = 152x. If you go beyond this range, the image will become dark and the sharpness will decrease, so you will see less detail despite the higher magnification.

Magnification is also often limited by what is called „seeing“ (air turbulence in the Earth’s atmosphere).

Depending on the night of observation, the air may be calmer or less calm. The highest useful magnification can only be achieved when the air is as calm as possible.

The lowest useful magnification is limited by the so-called exit pupil (EP). The exit pupil is the diameter of the light beam that is directed from the eyepiece into your eye.

Here’s how to calculate the exit pupil:

Aperture of the telescope / Magnification

= diameter of theexit pupil

If the exit pupil is larger than the pupil of your eye, light is lost and the image becomes darker. It is believed that the human pupil dilates to a maximum diameter of 5-7 mm in complete darkness. Therefore, avoid magnifications that result in an exit pupil that is too large.

Examples (aperture of the telescope and lowest reaonable magnification):

60 mm	8,5–12x
70 mm	10–14x
76 mm	11–15x

Observing with the telescope

1. Always set up the telescope outdoors. It is best to place the telescope outdoors about 30 minutes before observing so that the optics can adjust to the ambient temperature. Observing from inside a building through a window (whether open or closed) is not recommended, as the image quality deteriorates significantly due to air exchange.

2. Choose a location for observation that is as dark as possible. This is especially important if you want to observe faint objects such as star clusters, gas nebulae, or even galaxies. Spend some time in the dark before observing to give your eyes a chance to adjust to the dark. Avoid looking directly into bright light, as this will undo the dark adaptation. Use a red light lamp that is not too bright for orientation at night.

3. Remove the dust caps from the telescope before observing. On some telescopes (e.g., 76/700 mm Newtonian telescope), the cap is in two parts. Remove the entire cap, not just the inner part.

4. Always use the eyepiece with the lowest magnification first. Once you have centered the observation object in the telescope, you can slowly increase the magnification.

5. During observation, moisture (dew) may condense on the optics. If this happens, DO NOT clean the optics with a cloth as this will damage the optical surfaces. Instead, you should warm the optics slightly, e.g. with a hair dryer or with optionally available exchange heaters. Slight heating is completely sufficient! The optical elements must not become hot under any circumstances!

6. If you bring the telescope back into a closed room after observing, dew can form on the surface due to the difference in temperature and humidity. Short-term dew condensation is not a problem. However, the telescope should not be stored in a damp condition. Leave it open (without the dust cover) for about 1 hour until the optics have adjusted to the room temperature again and the moisture has disappeared. Only then should you place the dust covers on the telescope aperture and the focuser.

Optional accessories

TS Optics 8-piece eyepiece and accessory set in high-quality metal case
Useful and important accessories for nearly every telescope

TS Zoom Eyepiece
7mm to 21mm Focal Length
Change the magnification according to your needs - steplessly!

LED Red & White Light Lamp with Dimmer
Astro red light and white light
ready to use with battery

TS Cleaner Kit
Universal cleaning kit for almost all optical surfaces

All items are available in our online store: www.teleskop-express.de

Maintenance and cleaning

If the telescope needs to be cleaned, this should always be done with extreme care and the proper cleaning materials.

Some important rules:

• Clean the telescope as infrequently as possible. After frequent cleaning, the imaging quality of the telescope will increasingly suffer. Some dust or similar minor dirt on the optics does not negatively affect the imaging quality. Only when the optics are really heavily soiled should they be cleaned. It is recommended not to clean a telescope more often than once a year.

• The only exception to this rule: fingerprints and pollen from flowers can damage the coating of the mirror or lens. In this case, the optics should be cleaned.

• Store the telescope only with the dust covers attached. This is the best way to prevent dust from accumulating on the optics.

• It is best to remove dust on the optics without touching it using a bellows (available in our online store).

• To remove fingerprints, pollen or dust that cannot be removed with a bellows, you may ONLY use special cleaning agents, such as so-called „Lenspens“ (for eyepieces) or special microfiber cloths (for telescope optics). However, since this type of cleaning cannot be done without contact, it should be done as infrequently as possible.

• If you do not feel confident to clean the optics, you can contact our customer service.

Observation examples

A lot of interesting celestial objects are waiting to be viewed by you. A detailed listing would go beyond the scope of this guide. There is very good literature on this subject in our online store and, of course, a lot of free information on the Internet and astronomy forums. Nevertheless, here are a few examples, which are ideal especially for the beginner.

The Moon

The moon is the easiest and especially for beginners an extremely productive observation object. It is easy to find and shows a lot of details even for the untrained eye. Especially interesting is the observation of the light-dark boundary, the so called „terminator“.

There the sun casts long shadows, so that craters and mountains look especially vivid. At full moon no shadows can be seen, the moon then looks flat and overlit.

The planets

If you have some observing experience with the moon, the planets are the next interesting target. You can see especially much at Jupiter and Saturn. Saturn‘s rings, for example, or even Jupiter‘s four brightest moons can be seen without much experience.

With a little more practice you will be able to see many additional details, e.g. the cloud bands on Jupiter.

Venus (also known as the morning or evening star) already shows its phase shape even in small telescopes, similar to our moon.

Mercury, Mars and Uranus are also within reach of your telescope, but they show much less detail than the planets Jupiter and Saturn mentioned above. You should observe the planets during a so-called „opposition“, since they are closest to Earth then.

Note: Not all planets are visible in the sky at all times. A celestial calendar tells you which planets are visible and when and where they can be discovered.

Objects outside our solar system

There are also numerous objects which are within the range of your telescope.For the beginning the perhaps most interesting „Deep Sky Objects“.

- the „Ring Nebula“ M57 in Lyra
- the globular cluster M13 in Hercules
- the Andromeda Nebula M31, a huge galaxy at a distance of about 2.5 million light years (use as low magnification as possible).
- Open star clusters like the *Pleiades* in Taurus, *h and xi* in Perseus or *M11* in the constellation Scutum.

Frequently asked questions

1. How far can I see with my telescope?

That depends largely on how dark the sky is. From the city you can comfortably see the brightest planets (a few hundred million kilometers). Beyond the solar system, because of the huge distances, we no longer calculate in kilometers, but in light years. One light year is nearly 10 trillion kilometers! With the naked eye you can see stars which are some light years to some hundred light years away.

2. I see nothing when I look through my telescope, what am I doing wrong?

Observing through a telescope takes practice. Initially, you will notice detail only in the brightest objects. However, with each observation you will be able to see more detail and objects that were previously „invisible“ will suddenly become visible.

If you do not see anything at all, please check the following:

- Is the dust cover completely removed?
- Is the magnification too high?
- Is the object in the field of view?

If in doubt, point the telescope at an object that is easier to see to make sure there is no technical problem.

3. the image becomes very dark when I choose a high magnification. Why?

The higher the magnification, the darker the image will be for geometric reasons. If you find the image too dark, simply choose an eyepiece with lower magnification (= longer focal length).

4. The celestial objects move when I observe them through my telescope and disappear from the field of view. Why?

In truth, it is not the celestial objects that move, but it is our Earth itself that rotates on its own axis. Therefore, in 24 hours all celestial objects „wander“ once completely around the earth. With the naked eye this movement is not visible, but with a telescope you enlarge the image so much that the movement becomes clearly visible. To follow the celestial objects, you must therefore move the telescope along on the mount at regular intervals.

Technical Data

Starscope 609

Optics:	Achromatic doublet
Aperture:	70 mm
Focal length:	900 mm
Resolution:	1,92”
Limiting magnitude:	9,5 mag
Focuser:	1,25” gear drive
Mount:	Equatorial mount with height fine adjustment
Tripod:	Height adjustable aluminum tripod (up to 120 cm)

Starscope 709 „Jupiter“

Optics:	Achromatic doublet
Aperture:	70 mm
Focal length:	900 mm
Resolution:	1,64”
Limiting magnitude:	11 mag
Focuser:	1,25” gear drive
Mount:	Equatorial mount with height fine adjustment
Tripod:	Height adjustable aluminum tripod (up to 120 cm)

Starscope 809

Optics:	Achromatic doublet
Aperture:	80 mm
Focal length:	900 mm
Resolution:	1,44”
Limiting magnitude:	11,5 mag
Focuser:	1,25” gear drive
Mount:	Equatorial mount with height fine adjustment
Tripod:	Height adjustable aluminum tripod (up to 120 cm)

Starscope 1149

Optics:	Newton Dsign
Aperture:	114 mm
Focal length:	900 mm
Resolution:	1,03”
Limiting magnitude:	12,1 mag
Focuser:	1,25” gear drive
Mount:	Equatorial mount with height fine adjustment
Tripod:	Height adjustable aluminum tripod (up to 120 cm)

Starscope 1306

Optics:	Newton Dsign
Aperture:	130 mm
Focal length:	650 mm
Resolution:	0,88”
Limiting magnitude:	12,4 mag
Focuser:	1,25” gear drive
Mount:	Equatorial mount with height fine adjustment
Tripod:	Height adjustable aluminum tripod (up to 120 cm)

Starscope 1507

Optics:	Newton Dsign
Aperture:	150 mm
Focal length:	750 mm
Resolution:	0,77”
Limiting magnitude:	12,7 mag
Focuser:	1,25” gear drive
Mount:	Equatorial mount with height fine adjustment
Tripod:	Height adjustable aluminum tripod (up to 120 cm)

Starscope 1550

Optics:	Newton Dsign
Aperture:	150 mm
Focal length:	1400 mm
Resolution:	0,85”
Limiting magnitude:	13,1 mag
Focuser:	1,25” gear drive
Mount:	Equatorial mount with height fine adjustment
Tripod:	Height adjustable aluminum tripod (up to 120 cm)

Appendix: Models with preassembled tripod

Set up the tripod and ensure a secure stand.

Screw the storage plate to the threaded hole provided for this purpose.