TS-RC-Teleskope

Contents

General information

The information on the following pages applies to all TS-RC telescopes except the „Pro“ models.

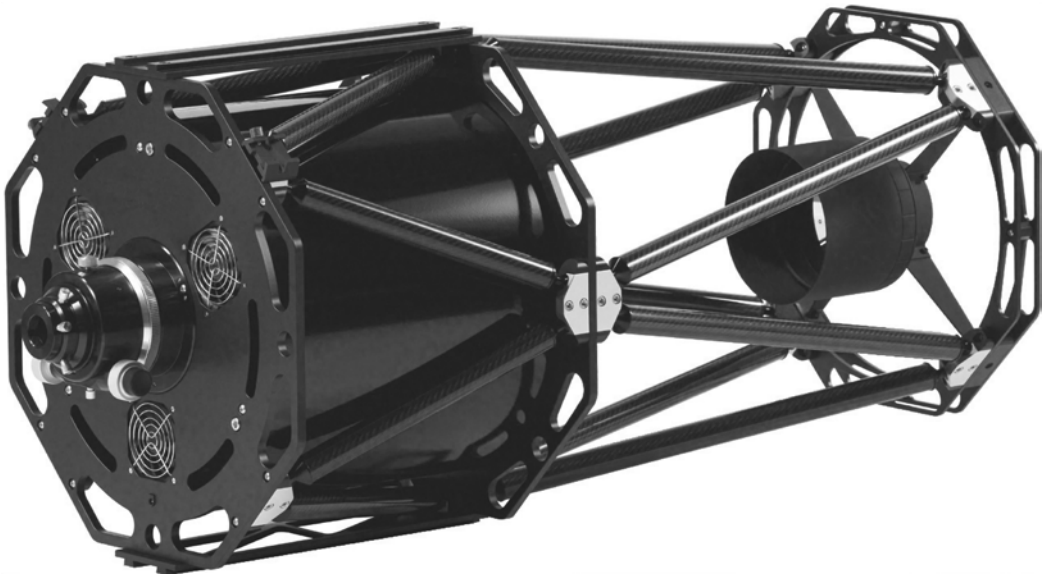
Different telescope models are shown in this manual. They differ in terms of technical features and accessories.

There are differences in ...
· Tube material (carbon, metal)
· Focuser (monorail or R&P, adjustable or fixed)
· Main mirror fan (yes/no)
· Dovetail bar (Losmandy or Vixen standard, one or more available)
· Reducer (yes/no)

Scope of delivery

Depending on the model and version, the scope of delivery includes an adapter from 2“ to 1.25“ (inserted into the focuser), extensions M90 or M117 and a battery holder for 8 AA batteries. With this power source you can power the main mirror fans.

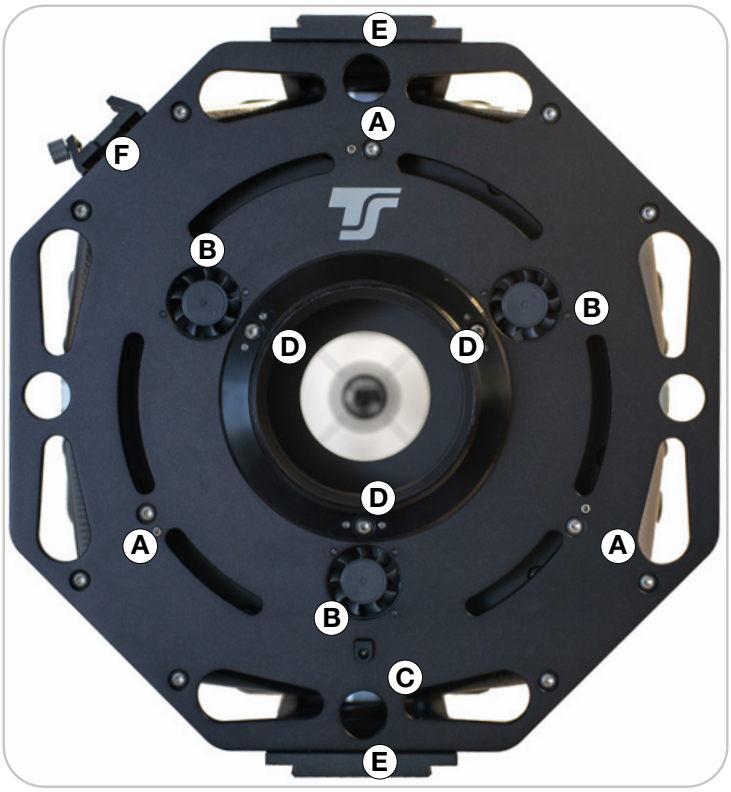
Not shown are the covers for the main and secondary mirrors. These are mounted on delivery and fastened with adhesive tape.

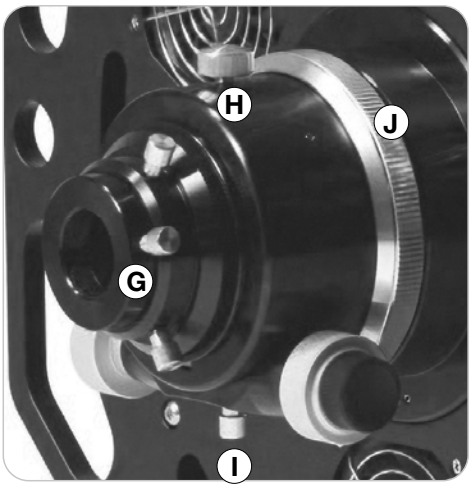


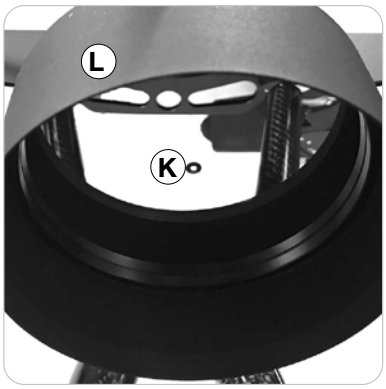
Features and functions overview

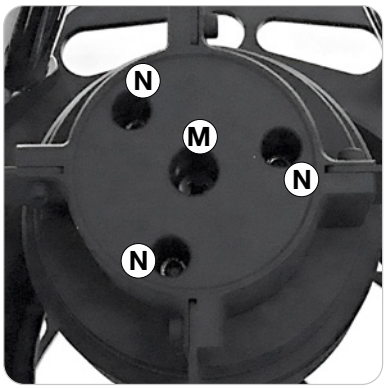
Shown and named are mainly the elements important for adjustment as well as details whose function may not be obvious.

For collimation, we recommend the TS collimating telescope TSCOLLIT: https://www.teleskop-express.de/shop/product_info.php/language/en/info/p16757









A - Main mirror adjustment screws
B - Main mirror fans
C - Power supply connection for main mirror fans
D - Focuser adjustment screws
E - Dovetail bars
F - Viewfinder shoe
G - Adapter 2“ to 1.25“.
H - Focuser locking screw
I - Pressure adjustment of the focuser drive
J - Focuser mounting ring
K - Center marking of the secondary mirror
L - Stray light protection of the secondary mirror
M - Secondary mirror mounting screw
N - Secondary mirror adjustment screws

Attaching the telescope to the mount

For attaching the telescope to the mount, one or two dovetail bars are provided. These can be either in the smaller Vixen or in the Losmandy standard.

When placing the tube on the mount, make sure that the dovetail bar is correctly seated in the clamp. If necessary, have a second person help you, at least at the beginning.

When balancing, loosen the clamp only enough so that the telescope can be moved but cannot fall out of the clamp.

Focuser

1. Using the extensions

The large backfocus makes it possible to install several accessories such as a filter wheel, off-axis guider or rotator.
If you use few accessories, you should mount one or more of the extensions between the telescope and the focuser, so that the focuser has to be extended as little as possible to reach the focus.
This increases stability and thus reduces the risk of the drawtube moving sideways due to the leverage effect.

2. Pressure screw (I)

You can use the pressure screw to adjust the contact pressure of the drive axis on the focuser rail.
If the weight of the accessories is low and you prefer a particularly smooth drive, a low pressure is sufficient.

If the weight of the mounted accessories is higher, you must increase the pressure, otherwise there is a risk that the draw tube will slip when you point the telescope at a region of the sky near the zenith.

3. Locking screw (H)

You can use the locking screw to lock the focuser in the set position. Loosen this screw if you want to adjust the focuser.

The set screw is not an alternative to the pressure screw!

In case the focuser is hard to move, check if the locking screw is tightened. Do not attempt to move the locked focuser!

If you are using a focus motor, you should not use the locking screw. The motor can be damaged if you forget to loosen the locking screw.

Adjusting the RC telescope

Even small alignment errors lead to poorer image quality with RC telescopes. Precise alignment therefore requires not only a systematic procedure, but also tools that are suitable for making minimal deviations visible.

The TSCOLLIT collimating telescope was developed specifically for this purpose. Information on this device as well as the link to detailed instructions can be found in the TS Shop at https://www.teleskop-express.de/shop/product_info.php/language/en/info/p16757