

Hello dear customer,

In the large box you will find a tripod. Before you can use it, you have to fix the eyepiece holder with the central tightening screw. This is used to spread the three tripod legs. Do not tighten it completely as you will also need to attach the mount.

On the mount, please unscrew the two M6 plastic thumbscrews so that the north pin on the tripod can dive through.



Now please screw two toggle screws into the bottom of the mounting foot.

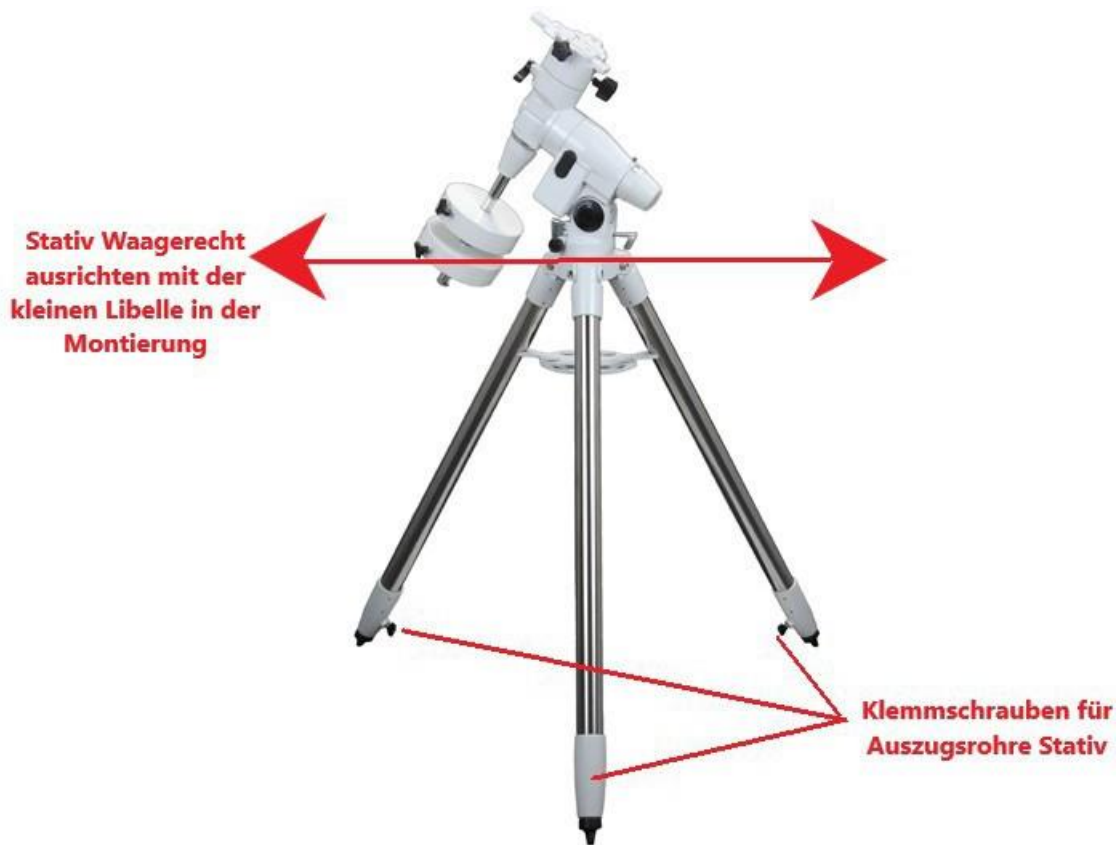
The one with the short thread goes in the front and the one with the long thread in the back.

Now set the northern height of 50° with the two tommy screws and lock them. Now the mounting system can be fixed to the tripod with the central tightening screw. Allow the tripod support to brace against the tripod legs from below. Now the system is ready for alignment and balancing.

Now please bring the system into balance and roughly adjust the tripod and mounting head towards the north.

If you want you can now press the two plastic knobs onto the shaft ends (brass) of the worm gears of the tracker and the whole thing is finished.

Please now put the counterweights on the counterweight rod and secure it with the end screw of the rod. Remember... everything falls down...i.e. onto your feet.



Please use the elevation adjustment screws to set the elevation to 50° for Frankfurt. By loosening one screw and screwing in the other, the inclination can be adjusted and set. If you live and observe somewhere else, set a suitable value accordingly.





Since the earth rotates and the sky rotates from east to west, we can now easily track the celestial objects with the lower rotation axis of the mount. The more precisely you align the mount, the less you have to correct the tracking later with the upper rotation axis.



Now you are connecting the optics to the mount.

Let us help you to use the system the first few times.

The whole thing is quite awkward and difficult to see, so there is always the danger that the optics are not properly attached. In the course of time, however, the whole thing becomes routine.



In order to use the system comfortably and safely, you must balance the weight of the optics on the mount. To do this, use the counterweights and prism rails/tube clamps as shown in the photos.

After everything is balanced, you can start observing. The mount will now be able to compensate for the earth's rotation as long as you properly track the object in the eyepiece. This is also a matter of practice and experience. At the end of the description, I will add a small guide to star hopping.

1.)

By moving the weights up/down I can now balance the system. **When** the axle clamp is loosened, the option should no longer be available. but in the Remain position



2.)

By sliding the optics in the rear clamps or the prismatic rail in the Clamping block of the Mounting; this allows the optics to be balanced. This prevents the system from twisting **when** the axle clamps are loosened.

The optics must therefore be designed in such a way that nothing turns away after the axle damper has been loosened. Only in this way can now with lotless al^{1s} Set axle emissions conveniently and-s cher objects.



Shift report for balancing right/left

Finding objects with the starhopping method

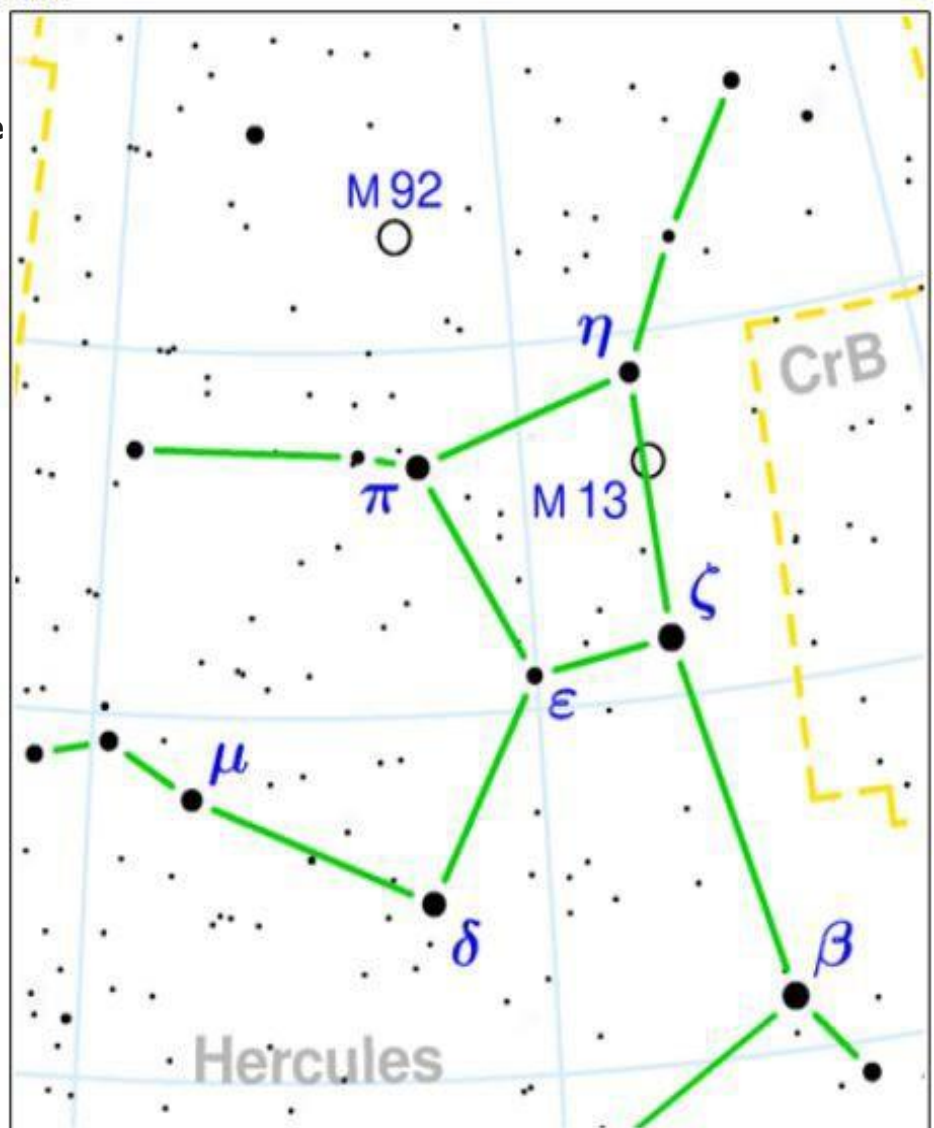
In star hopping, the observer hops or shimmies his way to the objects he is looking for in the sky, using the constellation and imaginary lines and divisions within it.

This technique is particularly useful for learning the basics of orientation in the sky (**constellations** or individual **stars**) and when there are no **bright stars** in the direct vicinity of the object that can be aimed directly with the viewfinder or red dot finder. With this method, the user learns very quickly to orientate himself in the sky and to locate and observe objects with pinpoint accuracy.

So the starhopper first roughly orients himself to the constellations or stars he already knows. For my part, I connect stars in my mind with imaginary lines for orientation. When the objects are located on these imaginary lines, I divide the route into imaginary sections. Helpful

For this purpose, I use star charts or star maps in which the faint objects that I would like to find are marked.

A simple example is finding the famous globular cluster **M 13** in Hercules. Once the observer has located the constellation in the sky, I orientate myself to the longest side of the trapezium that makes up the constellation of Hercules. Now the imaginary connecting line between the two stars Eta (η) to Zeta (ζ) Herculae comes into use. From the upper star then about 1/3 of the way in the direction of the other star. Zack we have found M 13.



In addition to the classic viewfinder, I also use a rear sight system. Means ... first aim with the viewfinder and set the target range, then locate the object with the viewfinder and then set it in the eyepiece. Basically the aiming device on the rifle. Fortunately, all viewfinders have the adjustment screw right in the centre.

Once you have adjusted the viewfinder to the telescope, i.e. in alignment, you can attach a small front sight to the front of the viewfinder at the appropriate height.

However, I have already produced this as a self-luminous system for your observation night...whoever likes... can be helped :-)

Mind you, the Reddot is also a very useful addition when star-hopping.



Have fun hopping and tinkering

Giovanni Donelasci