

AYO II

AYOdigi II

Alt/azimutalmount

Usermanual

[AYO is Indonesian spoken and means „let's go!"]

The AYO mount

The AYO mount is a alt/az mount without any mechanical or electronically drive that transmit undesirable vibrations. The movements of both axis will by by hand like a bigger Dobsonian telescope. This make's the mount very vibrations dumping and very easy to use. Perfect for real „grab and go“ observing.

If ordered, the mount is equipped with an integral encoder unit which allow to connect a digital circles computer. This will help you to find more stuff at the sky.

When you make the set-up of the mount, you don't must adjust the axis to some position, just check if the mount is more or less horizontally – that's all. If encoder unit is installed, no sensitive parts of this will be outside and hesitate while observing, transport or storage. There's no additional setup time for the mount and if you will not use the digital circle unit, you have no limitation because this.

The parts of the mount

The mount is build up with azimuth axis and a altitude axis. At this axis you can fit at both sides a telescope. The AYOdigi II can lift up with a handle easy, the smaller AYO II will have no extra handle.

Because the different setup's of the mount, there's a choice of clamp's or flanges to fit your favorite scope mounting system.

The socket of the mount is formed to fit to most common standard tripod as for Vixen GP (or EQ4 / 5 / AZEQ/HEQ5 or similar brand names) and Vixen SX. You can replace the socket and than you will find a flange for photographic tripod's as well. So you can use normally your existing tripod. You must only make sure that your tripod is stable enough.

Because the mount is not driven by some mechanical system, you just move the scope at the end where your will go. To adapt the mechanical system to your scope, there are each a hand wheel to adjust the friction of each axis. So you can find the perfect friction for finding, guiding and selecting your eyepieces in once.

Setup of the mount

Take a tripod stable enough that will not limiting the mount with a head, fit to the mount. Make sure that the leg's of the tripod will be stable and can not slide away. At best you take a place is more or less horizontally and with a hard ground, patches of grass or similar are not so comfortable because dewfall. Set the mount of the tripod and make sure that the connection to the mount is rigid and the central screw will fit correctly.

You can fix a telescope tube at each side of the altitude axis. If needed, you can support the mount with a counterweight bar at one side to find a less tripod-stressing barycenter, but you can use your mount without a counterweight for your scope if the tripod is stable enough.

When fixing your telescope tube, find a balanced position in this axis. Don't forget, that a star diagonal, eyepiece and lens cover will change the balance maybe. Make sure, that the telescope is fixed well and can not slide out of the clamp.

Adjust the friction of the both axis as well, that you can change the eyepieces without chancing the selected friction. This give you more comfortable observing.

Instructions for use

Adjusting of the both flanges at the altitude axis:

The altitude axis supports at each end a flange to fit a telescope. It's necessary to adjust this two flanges together, so the both telescopes can show the same field at sky. For this, one of the flanges (the left one) can adjust. You will find four small screw's at outside of the flange for Allen key, (2 mm size). Unscrew this a bit and adjust the scope to the position of the other scope at the right flange/clamp. Tighten the screw's well – that's all.

Replace of the astro-tripod-socket:

When using a photographic tripod (on traveling for example), you must replace the socket at the bottom of the mount. Tighten the friction control screw for the azimuth axis well and turn-of the socket.

Counterweight's:

As equipment you can support your mount with counterweight bar (20 mm size) at the left flange. If you use heavy telescopes you better use a second telescope or a counterweight to bring the barycenter of all more to the center of the mount. This will unstressed the tripod as well and helps to minimize vibrations. But remember, the mount can use without counterweights up to 8 kg (AYO II) or 14 kg (AYOdigi II) if your tripod will handle this.

Storage and maintenance:

The handling of the mount is simple and will not take some special attention. When storage the mount for longer time, it's recommended to unloose the friction brakes.

If you will find some backlash at the altitude axis, you can readjust this as follow: unloose the four screws at the left flange and lift off. You will find a inner flange with three screws again. Unloose this screws a bit and turn the flange in a position you will get the right friction / backlash. Tighten the screws carefully and solid and set the outside flange again. Adjust this flange if necessary.