

FIRST light

See an interactive 360° model of this mount at www.skyatnightmagazine.com/360/swazeq6



Sky-Watcher AZ-EQ6 GT mount

A multi-purpose mount that gives you the best of both worlds

WORDS: PAUL MONEY

VITAL STATS

- Price £1,499
- Load capacity 25kg
- Hand controller SynScan Handset with dual AZ/EQ firmware
- Database 42,900 celestial objects
- Flash upgradable Yes
- Tripod 2-inch stainless steel, adjustable legs
- Telescope connection Two dual-fit saddle plates accepting 45mm and 75mm dovetail bars
- Tracking speeds Lunar, solar and sidereal
- Power requirements 12V DC 3A
- Weight Mount 15.4kg, tripod 7.5kg
- Extras Two 5kg counterweights and counterweight bar
- Supplier Optical Vision
- www.opticalvision.co.uk
- Tel 01359 244200

Go-To mounts are typically available in one of two formats, equatorial or altazimuth. Usually, these mounts serve different purposes – altaz mounts are best suited for visual observing, but equatorial mounts can be used for imaging as well. Sometimes, though, it's useful to have one mount that can do both. Manufacturers have clearly taken note of this, because mounts offering both altaz and equatorial modes are becoming ever more common.

Sky-Watcher's AZ-EQ6 GT mount is the latest entry to this new market. Based on the successful NEQ6, the AZ-EQ6 GT looks sleek in its white livery. It's supplied with a sturdy stainless steel tripod, a second telescope mounting saddle, two 5kg counterweights, counterweight extension rod, power cable, SynScan hand controller and a camera control cable.

The built-in and secondary mounting saddles accept 45mm and 75mm dovetail bars, so they can accommodate both Vixen- and Losmandy-mounted telescope tubes. In the altaz dual telescope configuration, we were pleased to see how easy it was to attach the second saddle to the counterweight bar.

There are several tweaks that make this mount both interesting and useful. Firstly, it has dual encoder technology on both axes. This allows you to

select an object from the database, slew to it, then manually move the mount to another area of sky without losing positional information. We slewed to M27 in Vulpecula using the handset, then manually moved on to M81 across the sky in Ursa Major. We then used the handset to go back to M27 – for most of our tests it was in the field of view, if not always quite centred. Accuracy improved when we chose objects closer to each other in the sky.

SKY SAYS...
All in all, the mount performed very well and is going to be a hard act to beat

Altitude adjustment

Another innovation is the way that the mount's latitude/altitude is adjusted. This is usually done by turning two altitude bolts either side of the mount, which often aren't all that easy to adjust. Sky-Watcher has fitted this mount with a single altitude adjustment bolt that has a tommy bar at the end. This gives much smoother, finer control over adjustment, and the bar is hinged so it can slide neatly away into the bolt itself – a brilliant upgrade. This adjustment bar also allows you to set the mount to its altaz configuration, but to avoid strain on the bolt it is always best to remove the counterweights before proceeding. The RA and dec. clamps have also been redesigned, making them easy to operate even with gloves on. ▶

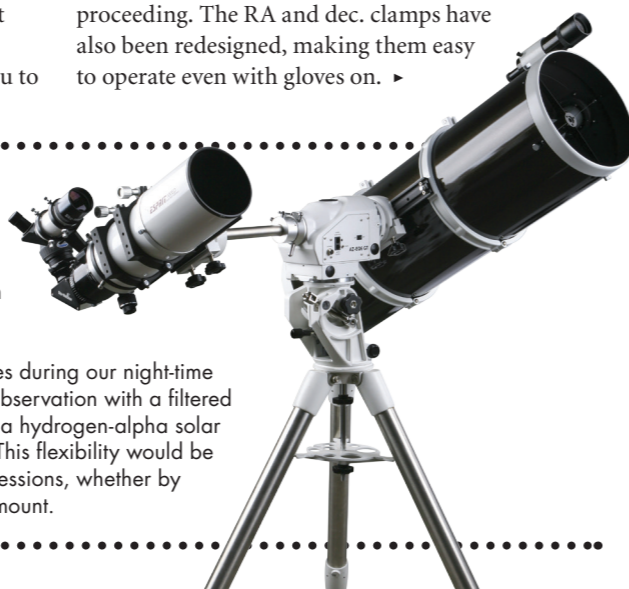
A MOUNT OF MANY TALENTS

The AZ-EQ6 GT technically gives you three mounts in one package – it depends on how you configure it. It can be set up as a typical EQ mount so you can undertake long-exposure astrophotography: in this mode, it resembles the Sky-Watcher NEQ6. Switch it to its altaz mode for simple viewing sessions with either a single telescope or a dual setup with the supplied second mounting saddle.

The mounting saddle takes the place of the counterweights and we found it very easy to attach. Changing from equatorial to altaz is relatively

straightforward and we found we could swap between configurations in around 10 minutes.

We tried several combinations of telescopes during our night-time sessions, and also solar observation with a filtered white light telescope and a hydrogen-alpha solar scope as the secondary. This flexibility would be ideal for public viewing sessions, whether by night or day – all in one mount.



DUAL ENCODERS

Dual encoders allow you to move the telescope in either axis manually, without the mount losing its positional information. This means you can track to an object, then aim the mount to another object without losing alignment.

HAND CONTROLLER

The SynScan hand controller has a multitude of functions and can be operated in either altaz or equatorial mode, selectable on startup. It has a database of over 42,000 objects including the Messier, NGC and IC catalogues, variable stars, double stars, named stars and planets. The handset is flash upgradable.



LATITUDE/ALTITUDE ADJUSTMENT

Sky-Watcher has redesigned how you make the latitude/altitude axis adjustment. The typical pair of adjustment knobs have been replaced by a single bolt with a tommy bar at the end, hinged so it can slide neatly away into the bar itself. We found that adjustment was smooth and easy.



FIRST light

PORTS

The mount body comes with a range of ports and connectors, plus the usual on-off power switch. These ports include an improved power connector, a hand controller port for the SynScan handset, a standard ST4 autoguider port, and a snap port to connect a camera for astrophotography.



► We came across a minor quirk when polar aligning the mount. If you power it up and then rotate the dec. axis so that you can view and align Polaris through the polarscope, you also activate the dual encoders. On successive attempts we found the scope always pointed 90° away from the first alignment star. We found that it was better to do the polar alignment, turn the power off and line up the scope north, then power back up again. After doing this we could align every time.

We tested the Go-To and tracking accuracy in both EQ and altaz modes with our Sky-Watcher SkyMax 180 Maksutov-Cassegrain and a 9mm illuminated reticule eyepiece attached, giving us 300x magnification. The latter helped us achieve three-star alignment. Using a 26mm 2-inch eyepiece, we selected several deep-sky objects and stars to check how accurately the mount slewed to each, and can report that the mount placed them consistently near the centre of the field of view. For our dual telescope tests we added a 3-inch apo with a 26mm eyepiece.

We chose Altair in Aquila to check how well the mount tracks celestial objects: it was able to keep the bright star close to the centre of the view for 45 minutes in both configurations, with only slight drift. All in all, the mount performed very well and is going to be a hard act to beat. **S**

AXIS CLAMPS

Another improvement is the way the RA and dec. axis clamps work. The dec. axis has a capstan-style clamp with three prongs, while the RA axis has a single-handle capstan-style clamp. Both are much easier to operate than the standard design, especially in the dark with gloved hands.

SKY SAYS...

Now add these:

1. Esprit-150ED f/7 super apo triplet refractor
2. Sky-Watcher 17Ah power tank
3. Sky-Watcher EQ6 extension tube

VERDICT

ASSEMBLY	★★★★★
BUILD AND DESIGN	★★★★★
EASE OF USE	★★★★★
GO-TO ACCURACY	★★★★★
STABILITY	★★★★★
OVERALL	★★★★★

ALL PHOTOS: WWW.THESCRESTUDIO.NET