

Group test

ALTAZIMUTH MOUNTS FROM £199

Mount up

Paul Money checks out four altaz mounts for a quick and easy way to enjoy the night sky

In these high-tech times, it's easy to assume that you'd need a Go-To mount – or at least a motorised one – to get the most out of astronomy. But if you want to enjoy the night sky with gear that's quick to set up, an altazimuth, or 'altaz', mount is the perfect piece of kit.

Altaz mounts are simple in design and function; ideal if you're new to astronomy. With a small telescope like a short-focus refractor you'll be observing in no time. You'll be able to catch that brief gap in the clouds, or show friends, family and neighbours the highlights of the night sky without them getting bored while you attempt to align a Go-To telescope.

If you have more than one telescope, our *Group test* this month will be a real help too, because we're looking at double altaz mounts as well as single versions. These double mounts allow you to attach two telescopes, so you can have a wide-field as well as a more magnified view without having to swap the eyepiece in and out every time. In this *Group test* we tried out each mount with two scopes, a lightweight Sky-Watcher Equinox 80ED and a heavier unbranded 5-inch refractor. Find out how the mounts did over the page.

ALL PHOTOS PAUL WHITFIELD

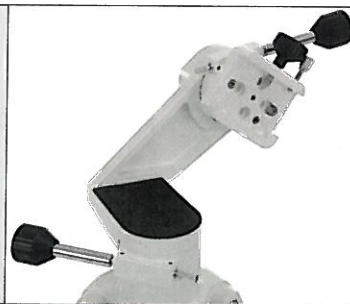
An altazimuth mount is an inexpensive way to get hassle-free views of the night sky

How we tested

The four altaz mounts were tested using the same criteria: **build and design**, **ease of use**, **features**, **stability** and **value for money**. These criteria were given a percentage rating and the average was taken to give an overall score. The features we looked at included:

CONTROLS

Adjustment knobs allow you to control the telescope in both axes and should enable you to operate it without slippage. They should be easy and fluid to turn, as well as offering the ability to make fine adjustments.



DOVETAIL CLAMP

This is the standard way to attach a telescope tube to a mount: the tube has a dovetail bar that fits into the mount's dovetail clamp. We checked how easy it was to attach our test telescopes securely to the mount.



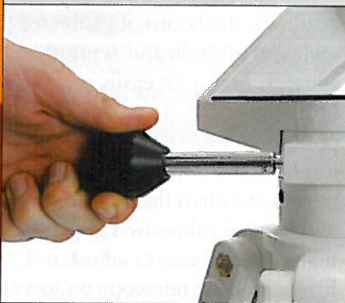
MOUNT HEAD

As well as checking that the scope was firmly supported on the mount head, we looked at its freedom of movement. A good mount will allow a scope to be tilted vertically without it or the tripod getting in the way.



MOVEMENT

We checked what the movement was like in both axes using our lightweight and heavier telescopes. We looked for smoothness as well as slack in the bearings and signs of backlash once we'd settled on a target.



TRIPOD

We kept an eye on the stability of the tripod as we moved the telescope into different observing positions. Its legs need to be steady and any vibrations should quickly dampen out before they spoil the view.



Group test

Sky-Watcher SkyTee

ALTAZIMUTH MOUNTS FROM £199

VITAL STATS

- **PRICE** £249
- **SLOW-MOTION CONTROLS** No
- **WEIGHT** 8kg (17.5lb)
- **MIN HEIGHT** 103.5cm (3.5ft)
- **MAX HEIGHT** 136cm (4.5ft)
- **MAX HOLDING WEIGHT** 2x 3kg (6.5lb)
- **SUPPLIER** Optical Vision Ltd
- **TEL** 01359 244200
- **WWW** opticalvision.co.uk

FOR Space for two small telescopes
AGAINST Metal knobs lacked grip

The SkyTee mount comes with a strong tubular steel tripod and has two dovetail clamps on either side of its T-shaped head. This lets you attach up to two scopes pointing at the same place in the sky.

Its appearance is sleek with a black and silver livery that matches the style and design of

Sky-Watcher's Equinox series of refractors. We found the tripod very sturdy; any vibrations quickly dampened down. The tripod also came with a useful accessories tray with eight holes for placing your eyepieces ready for use.

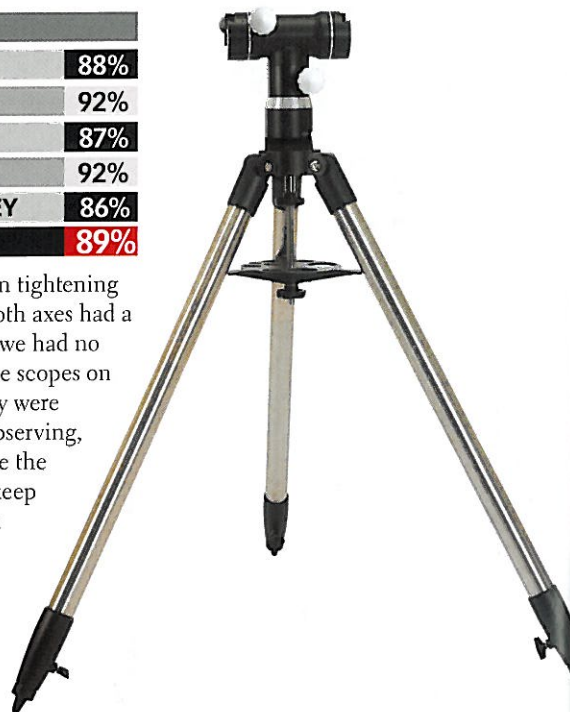
The official load capacity quoted by Optical Vision is up to two 3kg (6.5lb) telescopes, but we found it could easily cope with the 10kg (22lb) bulk of the 5-inch refractor as well as the 3kg Sky-Watcher Equinox. Even with this weight, the SkyTee was easy to move around the sky and we could aim the scopes at the zenith by rotating the tripod so that the tubes lay on either side of one of the tripod legs.

The knobs that controlled and clamped the axes were effective but, being bare metal, our fingers often slipped on their bare, cold

VERDICT

BUILD & DESIGN	88%
EASE OF USE	92%
FEATURES	87%
STABILITY	92%
VALUE FOR MONEY	86%
OVERALL	89%

circumferences when tightening them up. Overall, both axes had a smooth motion and we had no trouble balancing the scopes on either axis when they were horizontal. When observing, we were able to move the scopes smoothly to keep objects in view, even with medium to high magnification eyepieces fitted. So the SkyTee provided enjoyable observing.



William Optics EzTouch

VITAL STATS

- **PRICE** £399.50
- **SLOW-MOTION CONTROLS** No
- **WEIGHT** 8kg (17.5lb)
- **MIN HEIGHT** 108cm (3.5ft)
- **MAX HEIGHT** 156cm (5.1ft)
- **MAX HOLDING WEIGHT** 2x 10kg (22lb)
- **SUPPLIER** Ian King Imaging
- **TEL** 01892 834004
- **WWW** iankingimaging.com

FOR Can take a lot of weight
AGAINST Expensive

The EzTouch comes as a mount head on its own or complete with a William Optics tripod. We reviewed the complete system to maintain a fair comparison, getting hold of the tripod from the Widescreen Centre and the mount head itself from Ian King

Imaging. The tripod is solid wood and has the greatest extendable height of all the systems reviewed.

On the EzTouch mount, the axes have the bonus of graduated scales for altitude and azimuth, which is useful for easily moving the setup exactly to a known position to find the object you want. The axis tensioning knobs were better than the SkyTee's, with a good rubberised grip making them easy to adjust or firmly lock the telescope on to a particular night-sky target.

The T-shaped mount head accepts dovetail bars on one side with a dovetail clamp, while the other side has a range of screw holes that allow you to bolt adaptor plates from other types of mounting systems, such as those with Losmandy telescopes.

VERDICT

BUILD & DESIGN	91%
EASE OF USE	92%
FEATURES	87%
STABILITY	96%
VALUE FOR MONEY	88%
OVERALL	91%

The EzTouch allowed us to reach all parts of the sky and we were impressed with the amount of weight it could take. William Optics states that it can take up to two 10kg (22lb) telescopes. Our 5-inch refractor came in at 10kg and the mount handled it with ease. The only downside is the high cost, but it might be worth it if you have two hefty telescopes.



Orion VersaGo

VITAL STATS

- **PRICE** £229
- **SLOW-MOTION CONTROLS** No
- **WEIGHT** 5.5kg (12lb)
- **MIN HEIGHT** 87.6cm (2.8ft)
- **MAX HEIGHT** 138.5cm (4.5ft)
- **MAX HOLDING WEIGHT** 6.8kg (15lb)
- **SUPPLIER** Widescreen Centre
- **TEL** 020 7935 2580
- **WWW** widescreen-centre.co.uk

FOR Very smooth operation
AGAINST Slightly loose panning shaft

The VersaGo is a sturdy mount that comes with an aluminium tripod. Don't be fooled if the tripod seems a little lightweight for the purpose: in practice we found the VersaGo stable and fully capable of handling our test refractors, as well as being easy to assemble and extremely portable.

It is designed for one telescope up to at least 6.8kg (15lb). However, we found that the VersaGo could easily accommodate the 10kg (22lb) 5-inch refractor without any wobbles. Even with the heaviest scope attached, any vibrations dampened down fairly quickly.

The mount is well designed and allows a telescope to point up to the zenith without touching the tripod as long as you position the legs correctly. Movement in both axes was smooth, partly because of the Teflon bearings and partly because of the large aluminium axis tensioning knobs, which give good control over how tight you clamp the axes. This smooth motion allowed us to keep our selected objects in the field of view, easily handling the apparent motion of the sky.

VERDICT

BUILD & DESIGN	82%
EASE OF USE	92%
FEATURES	86%
STABILITY	92%
VALUE FOR MONEY	88%
OVERALL	88%

On the downside, the tightening knobs on the dovetail clamp were on the underside of the vertically arranged assembly. They would be much easier to get to if they were on the upper side on the clamp. We also found the panning shaft, which you hold to move the mounted telescope around, was loose, even when seemingly fully tightened. However, these are minor quibbles for a mount that certainly does its job capably.



Vixen Porta

VITAL STATS

- **PRICE** £199
- **SLOW-MOTION CONTROLS** Yes
- **WEIGHT** 5.5kg (12lb)
- **MIN HEIGHT** 88cm (2.8ft)
- **MAX HEIGHT** 138cm (4.5ft)
- **MAX HOLDING WEIGHT** 5kg (11lb)
- **SUPPLIER** Widescreen Centre
- **TEL** 020 7935 2580
- **WWW** widescreen-centre.co.uk

FOR Excellent value for money
AGAINST Flimsy control knobs

Vixen's Porta is similar in design to the VersaGo: it can carry one telescope on its vertically angled extended bracket. It's a good design that allows a telescope to miss the tripod and reach the zenith. Unlike the others in this test, the mount and tripod are one

unit, so the mount head can't be attached to another tripod.

There are no axis tensioning knobs to control the amount of movement, but you can tighten the axes if you have a heavy telescope to attach. Near each slow-motion control knob is a well hidden Allen bolt that controls axis tension with the help of two Allen keys hidden below the rubber cover of the mount head. We found that there was no need for any adjustments, even with the 10kg (22lb) 5-inch refractor fitted.

When moving the telescope around the sky with this mount, we found any vibrations quickly dampened down. The whole system was very stable, even when the tripod was at its maximum extended height. The dovetail clamp fitted our test scopes and

VERDICT

BUILD & DESIGN	89%
EASE OF USE	94%
FEATURES	92%
STABILITY	92%
VALUE FOR MONEY	96%
OVERALL	93%

the clamp tightening knobs were on top, which we found much easier to use when setting up.

But the best thing about the Porta is its slow-motion controls. Once we pointed the telescope at an object, we could simply turn the slow-motion controls to keep it in view, gradually moving the scope. The control knobs were a little flimsy, but even so, it's a great feature considering this was the cheapest mount in the test.



Group test

ALTAZIMUTH MOUNTS FROM £199

Overall winner Vixen Porta

Altazimuth mounts have really come into their own, allowing reasonably sized telescopes to be set up quickly. You're now able to take advantage of their portability to catch that break in the clouds, or take the system to an observing site or even on holiday.

All of the models we tested did the job they were designed to do very well. It came down to which proved the quickest to set up and dismantle after an observing session, ease of use, and the useful extras that make observing with them more rewarding.

Although it came last, the Orion VersaGo mount was only just behind the next contender. With slow-motion controls and a stronger panning handle, it would definitely have scored higher. The SkyTee's two dovetail clamps were useful, but its smooth metal knobs

didn't seem to have as much grip for the fingers as we'd have liked, and it would have been useful to have had graduated scales on the axes, like the EzTouch.


William Optics's EzTouch oozed class and performed extremely well. It was the little touches that pushed it ahead: the graduated scales, the rubberised knobs. The only reason it didn't win was its high cost.

However, the Vixen Porta had that extra little thing that made observing so much easier – slow-motion controls. It was quick to set up and attach a telescope and easy to follow any object. It's this month's deserved winner. ★

Next month

We test four spotting scopes from £190 with integrated cameras



At-a-glance guide				
MANUFACTURER	Sky-Watcher	William Optics	Orion US	Vixen
MODEL	SkyTee	EzTouch	VersaGo	Porta
PRICE	£249	£399.50	£229	£199
SLOW-MOTION CONTROLS	No	No	No	Yes
MIN HEIGHT	103.5cm	108cm	87.6cm	88cm
MAX HEIGHT	136cm	156cm	138.5cm	138cm
DOVETAIL FITTING	Yes (2x)	Yes (1x) + optional adaptor	Yes	Yes
WEIGHT	8kg	8kg	5.5kg	5.5kg
MAX HOLDING WEIGHT	2x 3kg	2x 10kg	6.8kg	5kg
SUPPLIER	Optical Vision Ltd	Ian King Imaging	Widescreen Centre	Widescreen Centre
VERDICT	89%	91%	88%	93%