



# STARGAZER



The Evostar-90 can also be used for terrestrial observations

## Sky-Watcher Evostar-90 (AZ PRONTO)

To go from looking at your TV to looking at the night sky has never been easier with this excellent starter telescope

### Telescope advice

**Cost:** £259.00 (approx \$350)

**From:** Optical Vision Ltd

**Type:** Refractor

**Aperture:** 3.54"

**Focal length:** 35.43"

### Best for...



Beginners



Medium budget



Planetary viewing



Lunar viewing



Bright deep-sky objects



Terrestrial viewing

Winter has finally arrived, an astronomer's favourite time of the year. The nights are longer, the air is colder and beautiful scenes return in the form of Orion, Gemini and Canis Major. Now is the best time to utilise the long nights, and the Sky-Watcher Evostar-90 (AZ Pronto) is the best way to do that. This new range of Sky-Watcher telescopes take the old models, and modernise them with a new AZ Pronto alt-azimuth mount. This telescope is incredibly easy to assemble and use, so if you look outside the window and see that it's a clear night, you don't have to spend valuable time setting up a complex telescope. This is why it's ideal for an amateur astronomer, but it can also be suitable for high-power daytime terrestrial observations.

For the sake of simplicity, the telescope package contains the standard accessories necessary for the average observing session. Along with the prime telescope tube,

tripod and accessory tray is a 6x30 finderscope, two Sky-Watcher Super eyepieces, a 90 degree erect image diagonal and a mount extension. The two eyepieces supplied have a 10mm and 25mm focal length, which when combined with the telescope provides a magnification of x90 and x36 respectively. These magnifications allow you to get a respectable field of view, which can bring the exciting celestial landmarks into view. For example, if you attach the 25mm eyepiece, an entire full Moon can fit in the field of view. Navigating to the full Moon may be a bit more trickier for the beginner at the start, as the mount of the telescope is comprised of an manual alt-azimuth mount. This

mount will allow you to manually move the telescope horizontally and vertically using slow-motion cables. This requires a careful hand to navigate to a certain spot in the sky - particularly because of the flexible handles - especially when you attempt the harder-to-find deep-sky objects, but that comes with practice. When the celestial object has been centred into the field of view, it was quickly discovered that the tripod and mount combination give excellent stability and support.

This telescope has been primarily advertised as a 'Grab-and-Go' telescope, and it has lived up to the hype. The ease to assemble this lightweight telescope proved to be

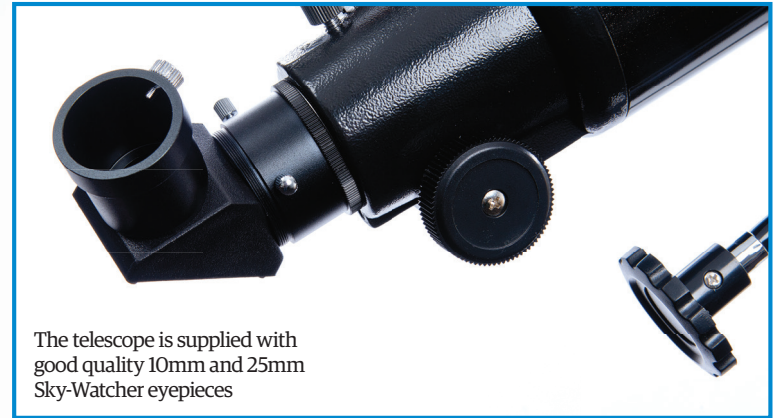
"It has been primarily advertised as a 'Grab-and-Go' telescope, and it has lived up to the hype"



quick and painless, which certainly helps when you may have a tight time frame to work with. The total weight of the telescope is close to six kilograms, which makes it incredibly easy to move around, and also means if you have to hike up a hill to get away from the light pollution of the suburbs, you will certainly be pleased you have this telescope. Preparing the telescope for observation should take only a matter of minutes, but there is a clear and concise instruction manual that includes diagrams to help you if there are any issues. We also recommend that you attach the mount extension at the same time, because although it is not essential, it raises the eyepiece so there is less crouching when observing objects closer towards the zenith - the point directly above the observer.

Once the telescope was ready for observing, we were excited to test out the famous Sky-Watcher optics. The optics of the telescope are considered the 'old' aspect of the telescope, as it uses similar refracting lenses as the Sky-Watcher Evostar-90 (AZ3). What makes the Sky-Watcher refractor optics so special is that they are made up of an air-spaced, two-element achromatic refractor. Normal refractors use the one single lens to bend the light, but this causes chromatic aberration, meaning that different coloured light doesn't converge at the same focus point. However, Sky-Watcher add a second lens to correct for this, meaning that all the colours converge at the same focal point, bringing the crispest and clearest views of the winter sky.

We put this to the test on an autumn night, where we started with

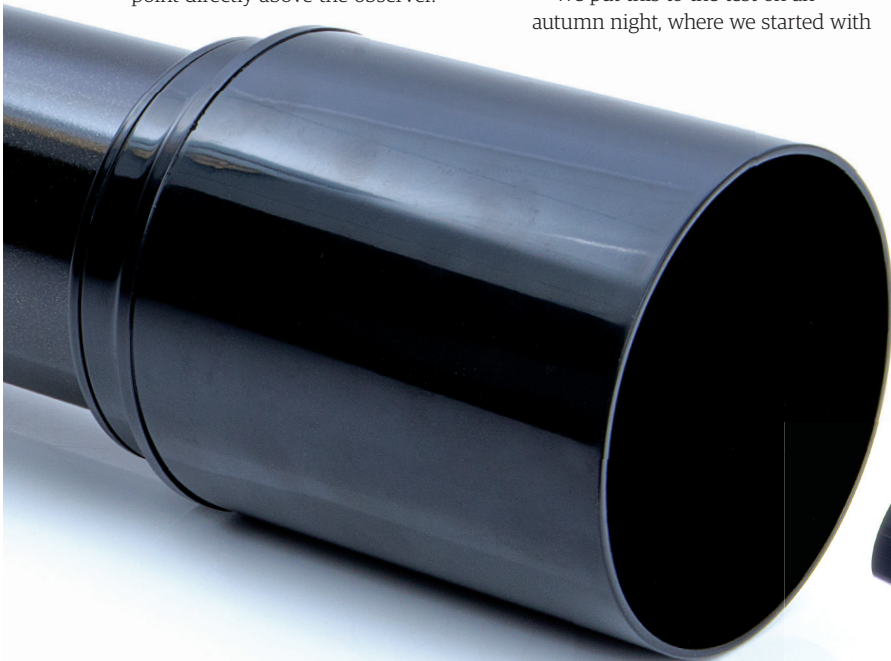


The telescope is supplied with good quality 10mm and 25mm Sky-Watcher eyepieces

the brightest star in the sky, Arcturus of the constellation Boötes. This star was flickering brightly at an apparent magnitude of -0.04, which made it the perfect starter star to locate within the field of view and focus upon. Using the 25mm eyepiece, Arcturus was centred and it revealed a wonderful twinkling view. The star was close to the horizon at the time, so the twinkling was due to the atmospheric interference. We decided to head more towards the zenith to attempt to view a more difficult celestial object. After a fair amount of manual slewing, we finally gazed upon the sights of M13, also known as the Great Cluster of Hercules, shining at a dimmer magnitude of 5.8. Once we arrived at M13 it was a spectacular sight using both the 10mm and 25mm eyepieces, as you could clearly see the collection of stars becoming more concentrated towards the centre of the cluster. We finished

by observing the second-brightest star in the sky, which was Vega of the constellation Lyra, and its close companion the Epsilon Lyrae. Both views were great through the 10mm eyepiece, as Vega showed as a fine-white star with a slight-bluish hue, and we could also decipher the two stars of Epsilon Lyrae.

After sampling the new Sky-Watcher Evostar-90 (AZ PRONTO), the main point to take away was that this telescope is great value for the money. It would be perfect for a beginner, as it is a simple piece of equipment that has great light gathering capabilities. It can also be utilised for terrestrial viewing as well, but for the astronomer it does a great job of resolving many novice celestial objects. Even though it has similar optics as the cheaper Evostar-90 (AZ3), the improved mount does indeed make a noticeable difference, as it makes the manual slewing fairly simple... Once you have the hang of it!



The newest feature of this telescope is the AZ Pronto mount



The telescope is incredibly lightweight, at roughly six kilograms