Sky-Watcher Explorer-150PL Newtonian OTA



Ah, nostalgia. That's what I felt when I first saw an advert for the Sky-Watcher Explorer-150PL, a Synta-made 6-inch f/8 Newtonian imported into the U.K. by Optical Vision Ltd. and sold through their network of stockists. I regard such instruments with affection since it was with a self-built Newtonian of just this size that I had my first detailed views of the Moon. In the 1970s, a 6-inch reflector was an instrument to be reckoned with. Sadly, many contemporary observers severely underestimate what a quality telescope of this size is capable of revealing. Optical Vision sells this 'scope mounted on an EQ3-2 German equatorial with eyepieces and a 2x Barlow for a SRP of £249, but the company has recently offered the OTA plus tube rings, a long Vixen dovetail, 10mm and 25mm eyepieces, 6x30 finder and a coated 2x achromatic Barlow for just £99. At that price I was sceptical of the optical and build quality, but I was pleasantly surprised.

The fit and finish of the Explorer-150PL is typical of Synta's contemporary products - in other words, extremely good for the money. The rigid yet lightweight rolled steel tube has an unobtrusive seam and the gorgeous slightly metallic sky blue paint finish contrasts nicely with the rounded black tube end castings.



The lockable rack and pinion focuser has a generous 6cm of smooth travel and the 1.25-inch drawtube unscrews to reveal a T-mount camera thread.

(Astrophotographers may care to note that one of the tube rings has a 1/4-20 thread for piggy-backing a camera). I had no problems bringing any of my 1.25-inch eyepiece collection to focus. The 6x30 finder is surprisingly bright for its aperture and of good optical quality. I was pleased to see that the finder's adjustment consisted of just two screws at right angles to one another acting against a springloaded third; aligning it with the main 'scope is therefore an easy and precise process.



Synta doesn't seem keen for inexperienced users to tinker with the factory settings of their primary mirrors (which is a good thing), hence they like to put a steel cover plate on the bottom of their Newtonians. This is retained by three easily removed Phillips screws revealing a 148mm clear aperture primary supported by cork shims at its periphery. With the back of the mirror exposed in this fashion, cool down time is particularly rapid (I chose to leave the cover off). Collimation of the primary is similarly straightforward.

Sky-Watcher advertising makes a point about the 'ultra-thin' secondary mirror supports used on their Newtonians, and it has to be said that the diffraction impact of the 0.5mm thick spider vanes is minimal. The 'scope was perfectly aligned out of the box, but should you ever need to adjust the secondary mirror then you will need a small Allen key in order to do so. The primary mirror is also centre marked for ease of collimation.

Optical tests



At the time of the Explorer-150PL's evaluation I fortunately still had the Orion Optics OD150L De-luxe 6-inch f/11 Dobsonian, so it made for an interesting comparison. Late into the evening of July 7th, I used both 'scopes to scrutinise Jupiter under surprisingly good seeing for a planet at such a low altitude. At close to 21h UT I watched the start of a transit of Ganymede, Jupiter's largest moon, which appeared like a bright bead against the dusky limb of its parent planet. Both 'scopes revealed much detail along the border of the North Equatorial Belt and North Tropical Zone in moments of excellent seeing.

The smaller central obstruction (25mm vs. 36mm) and Hilux coatings of the OD150L gave it the edge for planetary work, but the Explorer-150PL held up against its more expensive competitor staggeringly well. Star testing of the 150PL revealed a tiny amount of overcorrection, but with smoothly polished mirrors. M13, the great Hercules globular cluster, was a magnificent sight despite urban light pollution with resolved components across the core with innumerable peripheral stars.

Verdict

A reborn classic that I can't recommend highly enough for the price.