

# FIRST light

# Bresser Messier 8-inch Dobsonian

A flexible instrument that can altaz or equatorially mounted

WORDS: PAUL MONEY

## VITAL STATS

- **Price** £333
- **Optics** Parabolic mirror
- **Aperture** 203mm (8 inches)
- **Focal length** 1,218mm (f/6)
- **Focuser** Single speed 2-inch Hex Focuser with 1.25-inch adaptor
- **Mount** Dobsonian altaz rocker box
- **Extras** Red-dot finder, 25mm 1.25-inch eyepiece, accessory rack
- **Weight** 21kg (telescope tube 11.5kg, mount 9.5kg)
- **Supplier** Telescope House
- **www**.telescopehouse.com
- **Tel** 01342 837098

For those just starting out on the adventure that is astronomy, buying a telescope can be quite daunting. One beginner option is an altaz Dobsonian telescope, a design where simplicity is the name of the game.

The Bresser Messier 8-inch, f/6 Dobsonian is firmly in this category. It is supplied with a red-dot finder, a single 25mm Plössl eyepiece, an extension tube for the focuser and an eyepiece rack that holds two 1.25-inch eyepieces and a single 2-inch eyepiece.

The telescope tube is delivered with tube rings attached, but the rocker box base comes flat packed and requires assembly. Bresser has taken the approach of using furniture style fittings, which allow you to build (and disassemble) the base quite quickly. We found the rocker box to be quite lightweight and not overly large, so there is no need to take it apart if you want to take it to a remote observing site.

We enjoyed the fact that you can be set up and observing within minutes – and be able to take advantage of breaks in the cloud. Due to

## SKY SAYS...

You can be set up and observing in minutes – and able to take advantage of breaks in the cloud

the size of the scope we also found we could sit in a chair to use it, which is great for your back.

The rack and pinion Hex Focuser is particularly interesting. It has a 65mm diameter, which caters for larger, wide-field eyepieces. Often, a smaller barrel size can cause some

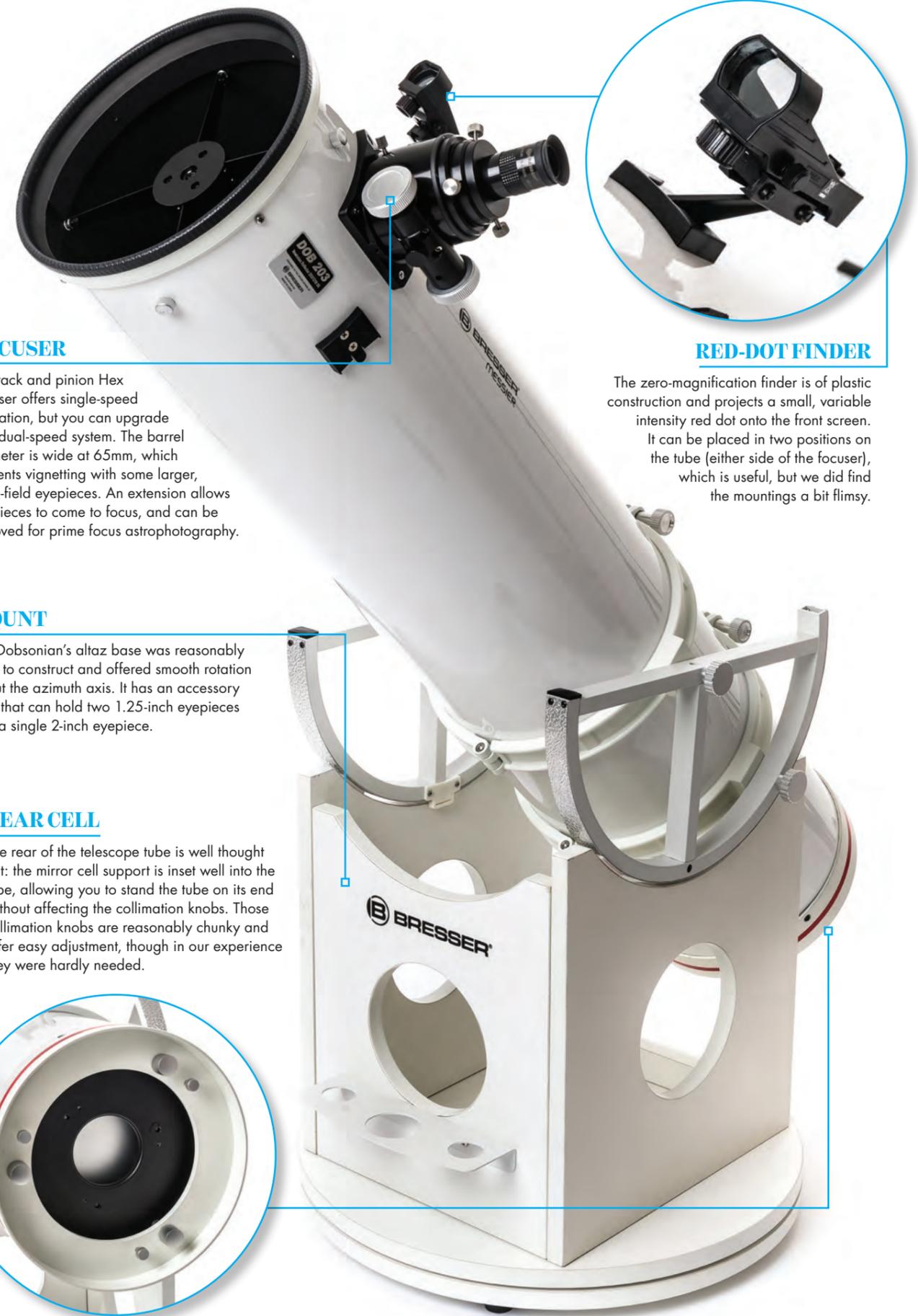
vignetting of the view, so this is a nice touch. There are two tension screws at the top of the focuser and a locking knob on the base, all of which help to prevent the eyepiece from slipping out.

## Finder frustrations

If there is one disappointment then it has to be the flimsy nature of the red-dot finder and the way it attaches to the telescope tube – a slot that the finder clips into. On a few occasions, we found it had partially slipped out, even though we'd checked to make sure it was firmly in place. On the bright side, there are actually two finder slots, one either side of the focuser, so in some positions you don't have to lean over the focuser to get to the finder.

In operation the 8-inch parabolic mirror gave clear and bright views with the supplied ▶

See an interactive 360° model of this scope at [www.skyatnightmagazine.com/Messier8](http://www.skyatnightmagazine.com/Messier8)



## FOCUSER

The rack and pinion Hex Focuser offers single-speed operation, but you can upgrade to a dual-speed system. The barrel diameter is wide at 65mm, which prevents vignetting with some larger, wide-field eyepieces. An extension allows eyepieces to come to focus, and can be removed for prime focus astrophotography.

## RED-DOT FINDER

The zero-magnification finder is of plastic construction and projects a small, variable intensity red dot onto the front screen. It can be placed in two positions on the tube (either side of the focuser), which is useful, but we did find the mountings a bit flimsy.

## MOUNT

The Dobsonian's altaz base was reasonably easy to construct and offered smooth rotation about the azimuth axis. It has an accessory rack that can hold two 1.25-inch eyepieces and a single 2-inch eyepiece.

## REAR CELL

The rear of the telescope tube is well thought out: the mirror cell support is inset well into the tube, allowing you to stand the tube on its end without affecting the collimation knobs. Those collimation knobs are reasonably chunky and offer easy adjustment, though in our experience they were hardly needed.

## CONVERTING TO EQUATORIAL

Bresser has improved the traditional Dobsonian system by adding tube rings to hold the telescope, a simple yet effective addition. The telescope's altitude wheels attach to them for Dobsonian usage; alternatively, the wheels can be removed and a Vixen dovetail bar attached in place of one or both.

This enables you to mount the telescope tube onto an equatorial mount, allowing you to track the night sky and use the scope for long-exposure astrophotography. The tube rings also mean you can rotate the tube and adjust the balance depending upon the configuration of the system. We also noted that by leaving one of the altitude

wheels in place, it became a convenient handle to hold the tube when fixing it on an equatorial mount. Note that the Vixen dovetail bar required has to be bought separately, but it's worth considering getting one if you have an equatorial mount going spare.



# FIRST light

## OPTICS

The 8-inch, f/6 parabolic primary mirror, made from H-PZ33 low-expansion glass, appeared clean and defect free. It possesses a central spot to aid collimation, produced bright views of a variety of objects and can handle high magnification as well.



▲ M42, comprised of 26 one-minute exposures at ISO 1600, taken with the Vixen-style dovetail bar installed and the scope fixed to an NEQ6 mount



◀ The Moon, stacked from 22 DSLR images taken with the Dobsonian in its altaz configuration

### SKY SAYS...

Now add these:

1. Revelation 4-in-1 colour filter kit
2. Bresser Messier 1:10 gear set for Hex Focuser
3. Explore Scientific 6.7mm nitrogen-purged 1.25-inch eyepiece

► 25mm eyepiece. This combination gave a magnification of almost 49x and allowed us to almost fit the main stars of the Pleiades star cluster into the field of view, with the Merope nebulosity nicely visible as a hazy teardrop. We could also just fit the galaxy pair of M81 and M82 into the view, and with our own 9mm eyepiece giving 135x magnification we could discern the knots along the edge of the latter.

We checked the quality of the optics using the bright star Capella in Auriga, and found the field



to be pretty sharp across 80 per cent of the view. Adding a 2x Barlow lens to our 9mm eyepiece allowed us to split Iota Cassiopeiae, a close knit triple star, as well as Gamma Andromedae, a lovely pale blue-orange pairing similar to Albireo

in Cygnus. The Moon was crisp with plenty of detail on show, while Jupiter looked lovely with its two primary belts and polar hoods visible.

With a DSLR, we were able to take images of the Moon with the scope in its altaz rocker box base, but after attaching the telescope tube to an equatorial mount (see page 90) we were able to take long exposures of the Orion Nebula and stack them for a pleasing result.

Bresser has come up with a system that can be adapted to either visual use or astro imaging, giving the Messier 8-inch Dobsonian an edge in the market. **S**

## VERDICT

ASSEMBLY	★★★★★
BUILD & DESIGN	★★★★★
EASE OF USE	★★★★★
FEATURES	★★★★★
OPTICS	★★★★★
OVERALL	★★★★★