

FIRST light

An in-depth look at this month's hottest new product

WORDS: PAUL MONEY

VITAL STATS

- **Price** £1,699
- **Optics** Two elements, air-spaced; FPL-53 ED glass; STM coatings
- **Aperture** 120mm (4.7 inches)
- **Focal length** 900mm; f/7.5
- **Focuser** 3.5-inch Linear DDG, dual-speed
- **Extras** Tube rings; soft carry case; 1.25- and 2-inch adaptors
- **Length** 760mm retracted, 880mm extended
- **Weight** 6kg
- **Supplier** The Widescreen Centre
- **Tel** 020 7935 2580
- **www** www.widescreen-centre.co.uk

William Optics Megrez 120 DDG

William Optics is renowned for its high-quality refractors and the Megrez 120 DDG certainly has the looks to follow suit, with its white livery, gold-coloured dewcap and black focuser with gold trim. Supplied as a tube on its own, its main objective lens is a multicoated air-spaced doublet made from a high-quality glass called FPL-53 ED. The tube comes with a quality soft carry case and tube rings, but you will need a suitable dovetail plate to sit between these and your mount. No finderscope, star diagonal or eyepieces are supplied, presumably as this telescope would be suitable as an upgrade to any existing setup. At just 6kg, the scope is also quite

light for its size so it won't put too much strain on your mount – we used it on both our EQ5 and NEQ6 mounts. There is a retractable dew shield and a solidly built focuser too, with 1.25- and 2-inch and adaptors for your eyepieces.

This is the real highlight of the scope – the DDG (Digital Display Gauge) focuser. Its red-illuminated readout tells you the amount of focus travel to one-hundredth of a millimetre. You can even account for the effects of temperature on the focuser with a neat temperature gauge. See 'Digital delight' on ▶

SKY SAYS...

The Digital Display Gauge focuser's illuminated readout helps you find that all-important point of focus.

DOUBLET LENS

The optics of the Megrez 120 comprise a multicoated air-spaced doublet objective lens using FPL-53 ED glass. This produces pin-sharp, colour-corrected stars and a crisp field. The focal length of 900mm gives a focal ratio of f/7.5, producing a relatively wide field of view.



DIGITAL DELIGHT

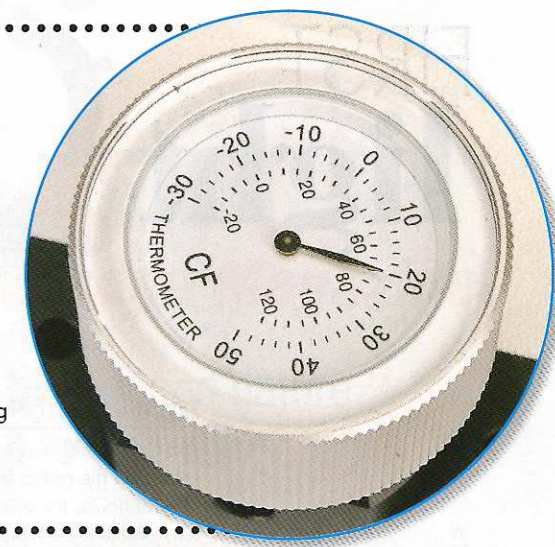
At first glance the Digital Display Gauge (DDG) appears to be a bit of a gimmick – after all, anyone can read the scale on a standard focuser. But far from it – the DDG proved very handy and made the Megrez 120 a joy to use.

It can be fiddly manoeuvring a red-light torch to read a focuser's scale in the dark, of course, and this is part of the DDG's attraction; it has a handy button that illuminates its display in red light. As well as display illumination there are buttons for on/off and reset to zero.

The readout shows the amount of actual focus travel in mm to two decimal places,

from 0 to 100.00mm. With it we could change eyepieces and quickly set the correct focus for each by taking a note of the focus and then reading the exact figure on the display again, making the task easy.

There was a slight variation in the readings over different nights. These fluctuations are due to temperature variations that can have a subtle effect in expanding the tube and focuser. A simple extra that's been included deals with this: a temperature gauge on one of the focusing knobs, pictured right. By taking note of the temperature when you record the focuser readings, you can compensate for temperature variations on other nights.



TUBE AND INTERNAL BAFFLING

At just 6kg, the tube is lightweight but still robust and easy to use. It is 760mm long, extending to 880mm when the dew shield is in use. Three knife-edge internal baffles reduce internal reflections that could spoil contrast in faint deep-sky objects.



DDG

The focuser assembly's Digital Display Gauge (DDG) is the star of this telescope. The red-light display shows the amount of actual focus travel so you can easily find the correct focus for viewing or imaging.

FOCUSER

The 3.5-inch twin-speed focuser handles smoothly and locks into position easily for astro imaging. The focuser can also be rotated through 360° to better frame your celestial subjects and has a standard graduated scale as well as the DDG.

