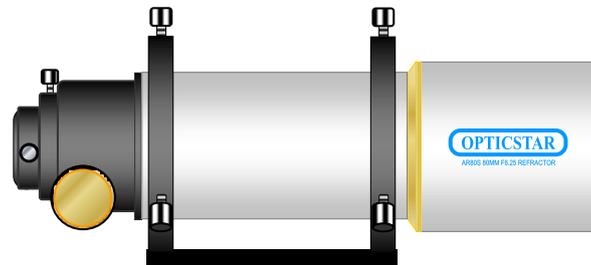


# OPTICSTAR AR80S GOLD GUIDE-SCOPE

80mm Achromatic Doublet Refractor Telescope & Collimating Rings

## Reference Sheet



Aperture	80mm
Focal ratio	F5
Objective	Achromatic doublet
Optical coatings	Broadband FMC (fully multi-coated)
Optical tube	Internally anti-reflection coated, knife-edge baffles
Dew shield	Retractable with metal screw-type cap
Finder-scope saddle	No
Focuser	Crayford
Focus adapter	Accepts 2" and 1.25" eyepieces and diagonals
Focal tube travel	70mm (marked in 1mm intervals)
Optical tube support	Rings & dovetail
Scope weight	2.3Kg
Minimum tube length	310mm retracted dew-shield
Maximum tube length	365mm extended dew-shield
Tube diameter	97mm
Frontal dew shield diameter	110mm (screw-type aluminium cap)
Construction	All metal construction
Tube design	Short, suitable for use with bino-viewers (1.25" diagonal required)

### **WARNING!**

DO NOT USE THE TELESCOPE OR FINDERSCOPE TO LOOK AT OR CLOSE TO THE SUN AS THIS WILL CAUSE INSTANT AND PERMANENT DAMAGE TO YOUR EYES. CHILDREN SHOULD AT ALL TIMES BE SUPERVISED BY A RESPONSIBLE ADULT WHILE OBSERVING.

**Do not disassemble your telescope, there are no user serviceable parts inside.  
Disassembling the lens cell will invalidate your warranty.**

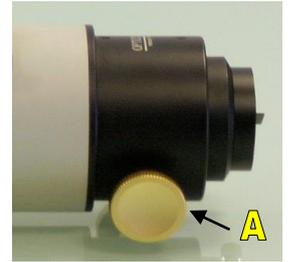
## APPENDIX

### Single-speed Focuser Adjustment

To set the single-speed AR80S focuser to a desired setting you will need to adjust the tension using the single thumb-screw that can be found under the focuser.

Simply turn the thumb-screw **A** one way to increase the Crayford focuser's holding capacity, turn the thumb screw the other way to reduce the holding capacity of the focuser.

Increasing the pressure will enable the focuser to hold more weight but the focuser will become slightly less sensitive. As such it is important not to unnecessarily over-tighten the thumb-screw.



### Optics Care

Lenses and corrector plates can be treated as camera lenses for cleaning purposes. What makes them difficult to clean is the large size of such optical elements.

The general rule is not to touch the optics and only clean them when absolutely necessary, dust on the objective lens could be removed with very gentle strokes of a camel hair brush available at camera shops.

Another way to remove dust from an optical surface is with compressed photographic air which is free of contaminants.



Be careful and always make certain that the nozzle is propellant free. Hold the compressed air-can the right way up as otherwise they can discharge liquid propellant which will stain the optics. Stains on optics can be removed with optical cleaners used to clean photographic lenses. Always use compressed air at very low pressure as contaminants that may have landed on the lens could scratch the glass surface, never rush the cleaning process.

**CAUTION:** You can remove condensation from the optics with a hair-dryer set to 'cold'. Otherwise bring the telescope inside and let condensation to dissipate before putting on the cover. Place the telescope on a table and not on the floor. Never try to remove condensation using a cleaning cloth or similar, this will most likely smear the optics.

### Applications

The AR80S Gold telescope can be used as a guide scopes for auto-guiding motorised/GOTO telescope mounts in conjunction with an appropriate guide camera and auto-guide controller. Complete auto-guide camera kits include the Opticstar AG130M CA, AG131M CA and AG131C CA. Such kits consist of a guide-camera, auto-guide controller, cables, adapters and software to auto-guide with. Depending on the camera you use an extension may be needed to bring the camera to focus.

The AR80S F5 is also suited for wide field deep-sky imaging due to its low focal ratio, solid structure and Crayford focuser. It is suited for deep sky imaging when coupled with DSLR cameras or light-weight cooled astronomical cameras.



87 Washway Road, Sale  
Greater Manchester  
M33 7TQ  
United Kingdom

WEB: [www.opticstar.com](http://www.opticstar.com) - EMAIL: [info@opticstar.com](mailto:info@opticstar.com)