

PARACORR TYPE-2 INSTRUCTIONS

Model VIP-2010 (VisualImaging-Paracorr)

BACKGROUND

All Newtonian/Dobsonian telescopes can benefit from using a Tele Vue Paracorr (Parabola Corrector) to eliminate coma in the image. Coma is the effect that makes off-center stars appear like little comets (it becomes more apparent as stars move closer to the edge of the field). While a Newtonian/Dobsonian telescope will benefit from the use of Paracorr, those faster than f/5.0 will see the greatest results. Stars at the edge of the field will improve so dramatically, that when using top-notch Tele Vue eyepieces an object will be equally sharp anywhere in the field. It also prevents faint stars from disappearing at the edge of the eyepiece field. This is not only aesthetically pleasing, but it also greatly reduces the need to constantly nudge the scope to keep the object centered in the "sweet spot." Just insert Paracorr into your 2" focuser like a 2" Barlow (it has a 15% [1.15x] magnification factor) and add Tele Vue eyepieces to suit your needs. It's a recipe for perfection when combined with Tele Vue eyepieces.



The Paracorr Type-2 allows an f/3 parabolic mirror to perform like an f/12 without it. This permits development of a new generation of larger ladderless Dobs, with bigger, sharper fields than ever before. Indeed, it's already been successfully applied by Mike Lockwood to his 20" f/3 and 14.5" f/2.55!

This model Paracorr is dual function: the tunable top permits positioning all Tele Vue eyepieces for optimum performance (see eyepiece position chart on the other side), and the optical assembly can be removed for use in an imaging system with DSLR or CCD cameras along with Tele Vue Imaging System accessories.

VISUAL INSTALLATION

For visual use: Paracorr simply slips into your focuser like a 2" Barlow. Depending on eyepiece type and setting, you will need about 3/4" focuser in-travel compared to using the eyepiece alone.

USE

For 2" Eyepieces:

- 1) Make sure eyepiece lock screws (A) are loosened
- 2) Remove 1 1/4" adapter.
- 3) Slip 2" eyepiece into the Paracorr
- 4) Tighten eyepiece lock screws (A)
- 5) To adjust for eyepiece position,
 - a. Slightly loosen the height adjustment lock knob (B) that clamps on the slot.
 - b. Rotate the outer barrel to adjust the height of the eyepiece, following the guidelines in the eyepiece position chart on other side.
 - c. Tighten the height adjustment lock knob (B).

For 1 1/4" Eyepieces:

- 1) Slip the 2" to 1 1/4" reducing adapter into the Tunable Top and tighten lock screws (A).
- 2) Place the eyepiece in the adapter and tighten the lock screw (C)
- 3) Follow the adjustment procedures outlined above in step 4.

NOTE: Focus the telescope after properly setting the eyepiece position. Do not accidentally use the tuning feature for focussing.

The easiest method for finding optimal correction for other brand eyepieces is to first establish the focus position with a Tele Vue eyepiece at its known Paracorr setting. Then insert your other eyepiece and use the tunable top until focus has been reached. Note the mark on the Paracorr body for the setting. Use your telescope focuser to tweak the focus if necessary.

CAUTION: Avoid using 1 1/4" Barlows unless you are certain the barrel will not contact the Paracorr lens.

FOR IMAGING APPLICATIONS

- 1) Back off set screw under flange (D) so you can unscrew lens assembly.
- 2) For use with DSLR cameras (APS size chips recommended, as full-size chips will show vignetting). Tele Vue Canon Wide-T Adapter CWT-2070, or Standard T-Ring Adapter TRG-1072 attaches directly to the Paracorr Type-2 flange.
- 3) For CCD cameras, use Tele Vue Imaging System accessory tubes with Tele Vue camera adapters, or A2A-1107 adapter for cameras with 2" nosepieces. Best back focus is approximately 55mm from flange face.



PARACORR TYPE 2 EYEPIECE POSITION CHART

Position	A	B	C	D	E	F	G	H
2" Oculars (Dist. from Ref.)	-0.4"	-0.3"	-0.2"	-0.1"	0"	+0.1"	+0.2"	+0.3"
	31mm N T5 17mm Ethos 21mm Ethos	22mm N T4				17mm N T4 26mm N T5	35mm Pan 20mm N T5	41mm Pan 27mm Pan 13mm Ethos 10mm Ethos 3.7mm Ethos (w/incl. adptr)
1 1/4" Oculars (Dist. from Ref.)	0"	+0.1"	+0.2"	+0.3"	+0.4"	+0.5"	+0.6"	+0.7"
		8mm Ethos 6mm Ethos		32mm-to-8mm Plössls Radians (all) 24mm Panoptic 19mm Panoptic 16mm Nagler Type 5 Nagler Type 6 (all) 2-4mm Nagler Zooms 3-6mm Nagler Zooms 3.7mm Ethos 12mm Nagler Type 4				40mm Plössl

