## 10mm ETHOS EYEPIECE INSTRUCTIONS

Warning: Do not unscrew any sections of the eyepiece, as the lenses may fall out, thereby voiding the warranty.
Tele Vue 10 mm ETHOS Specifications:


TeleVue

| Apparent Field: | $100^{\circ}$ |
| :--- | :--- |
| Focal length: | 10 mm |
| Effective Field Stop: | 17.7 mm |
| Eye Relief: | 15 mm (accepts Tele Vue's Dioptrx astigmatism corrector) |
| Barrel Size: | $2 " / 114^{\prime \prime}$ |
| Weight: | 1.1 lbs |

Thank you for purchasing the Tele Vue 10 mm ETHOS, which nicely fills the focal length gap between 8 mm and 13 mm models. It also becomes the centerpiece of a great $6 \mathrm{~mm}, 10 \mathrm{~mm}$ and 17 mm ETHOS set.

The 10 mm ETHOS fits both 2 " and $11 / 4$ " focusers or diagonals. Typically, in a 2 " focuser, you will focus "out" a bit (about 3/8" further than a 26 mm Nagler Type 5), and in a $11 / 4$ " focuser, you'll focus "in" about $1 / 2$ " inch further than a 25 mm Plössl.
The 10 mm is parfocal with the 13 mm ETHOS.
Note: the in-travel may prevent focusing in some refractors when using the Tele Vue $60^{\circ}$ Everbrite diagonal, which has an unusually long optical path.

Since it is designed as a $11 / 4$ " eyepiece, there is NO optical benefit by using a 2 " holder. The 2" barrel is included just for convenience, but it is also threaded to accept our EBX-2120 2" extension tube, which allows the use of 48 mm filters.

Its 59 mm rubber grip diameter makes this model usable in binocular viewers -- for most people.

## For $11 / 4$ " holders:

1) Back off the lock screw in the 2 " barrel section of the eyepiece so it can be fully inserted into the holder.
2) If the holder has a lock screw, rotate the eyepiece so that the screw slips into the slot in the 2 " section of the eyepiece barrel. Your holder lock screw clamps to the $1 \frac{1}{4}$ " barrel of the eyepiece, while the eyepiece lock screw clamps (if desired) to the outside of your holder for maximum safety.
3) If your holder doesn't have a lock screw, be sure to clamp the eyepiece lock screw onto the outside of the holder. Please note that this eyepiece is heavy, and can fall out of holders with a "slip fit" unless the lock screw is used!

## For 2" holders:

1) Remove the eyepiece lock screw (Don't lose it!)
2) Use the lock screw on your 2" holder, being careful not to let it slip into the slot in the 2" barrel of the eyepiece.
3) The eyepiece will not "bottom" on Tele Vue 2" diagonals. Be careful if using diagonals by other manufacturers.

For Newtonians/Dobsonians, we recommend our Paracorr coma corrector to eliminate the mirror coma in $f / 5.5$ or faster scopes. This permits the same kind of full field sharpness routinely seen in Tele Vue's NP-Series refractors. You can use the 10 mm ETHOS 2" barrel in the Paracorr with the tunable top raised to its maximum, mark 1 on Paracorr slot. However, you can get closer to ideal coma correction by using the 10 mm ETHOS in a high-hat 2 " to $11 / 4$ " adapter (part ACR-2125 or satin finish ASF-8125) and setting the Paracorr to its full down position, mark 5 on Paracorr slot.

Note: when using a $1 \frac{1}{4}$ " filter in ETHOS, be careful not to accidentally set the Paracorr's tunable top to its lowest setting, as the bottom of the filter might contact the Paracorr's upper lens. It's best to thread a 2" filter onto the front of the Paracorr, or add our EBX-2120 2" extension tube to the 2" barrel of ETHOS, for general use. For higher magnifications with a $100^{\circ}$ field, use Tele Vue Barlows and Powermates. When using ETHOS in 2" Powermates, use its $2 "$ barrel.

Note: As with the Paracorr, do not use a $11 / 4$ filter when using a 2 X Powermate, as it will contact the upper lens in the 2X Powermate. Again, the best solution is to use 2 " filters in front of the Powermate.

If you have eyesight astigmatism, you can add Tele Vue's Dioptrx Astigmatism Corrector to ETHOS, instead of using eyeglasses, to get the sharpest view possible (check dioptrx.com for more details).

We wish you years of exciting viewing with ETHOS, and we welcome comments on your personal experiences.

| Telescope | Magnification $(\mathbf{x})$ | True Field $\left({ }^{\circ}\right)$ | Exit pupil (mm) |
| :---: | :---: | :---: | :---: |
| TV-60, TV-60is | 36.0 | 2.82 | 1.67 |
| TV-76 | 48.0 | 2.11 | 1.59 |
| NP-101, NP-101is | 54.0 | 1.88 | 1.85 |
| TV-85 | 60.0 | 1.69 | 1.43 |
| NP-127is | 66.0 | 1.54 | 1.92 |
| TV-102, TV-102iis | 88.0 | 1.15 | 1.16 |



## Approximate dimensions of 10 mm ETHOS

A. Length of barrel above reference surface (3.8")
B. Overall length below reference surface (1.6")
C. Length of 2" barrel (1.1")
D. Diameter of black barrel (2.3")
E. Depth of $1 \frac{1}{4}$ " barrel (1.1")
F. Approx. location of field stop ( $0.27^{\prime \prime}$ )

Reference surface is location of 2" barrel seat

