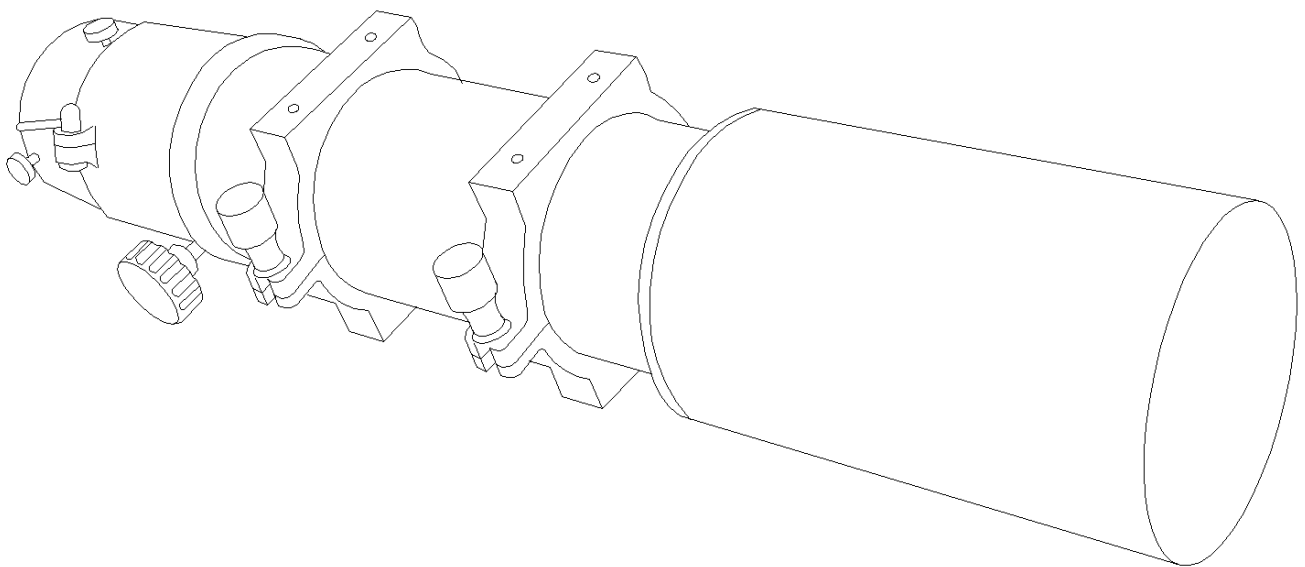


# FLUORO-STAR APO FLT-110

## INSTRUCTION MANUAL



**WILLIAM OPTICS**™

Crafting the Earth's Finest Astronomical Instruments

[www.william-optics.com](http://www.william-optics.com)



**Thank you again for purchasing the William Optics FLT-110 Triplet Apochromat Refractor.**

This simple step by step instruction guide is design to provide FLT owner with a better concept on how to operate the telescope with more precise updated information. This instruction will also guide you through on how to properly maintain your telescope and operate with utmost capabilities, please carefully familiarize your telescope parts and its function before operation.

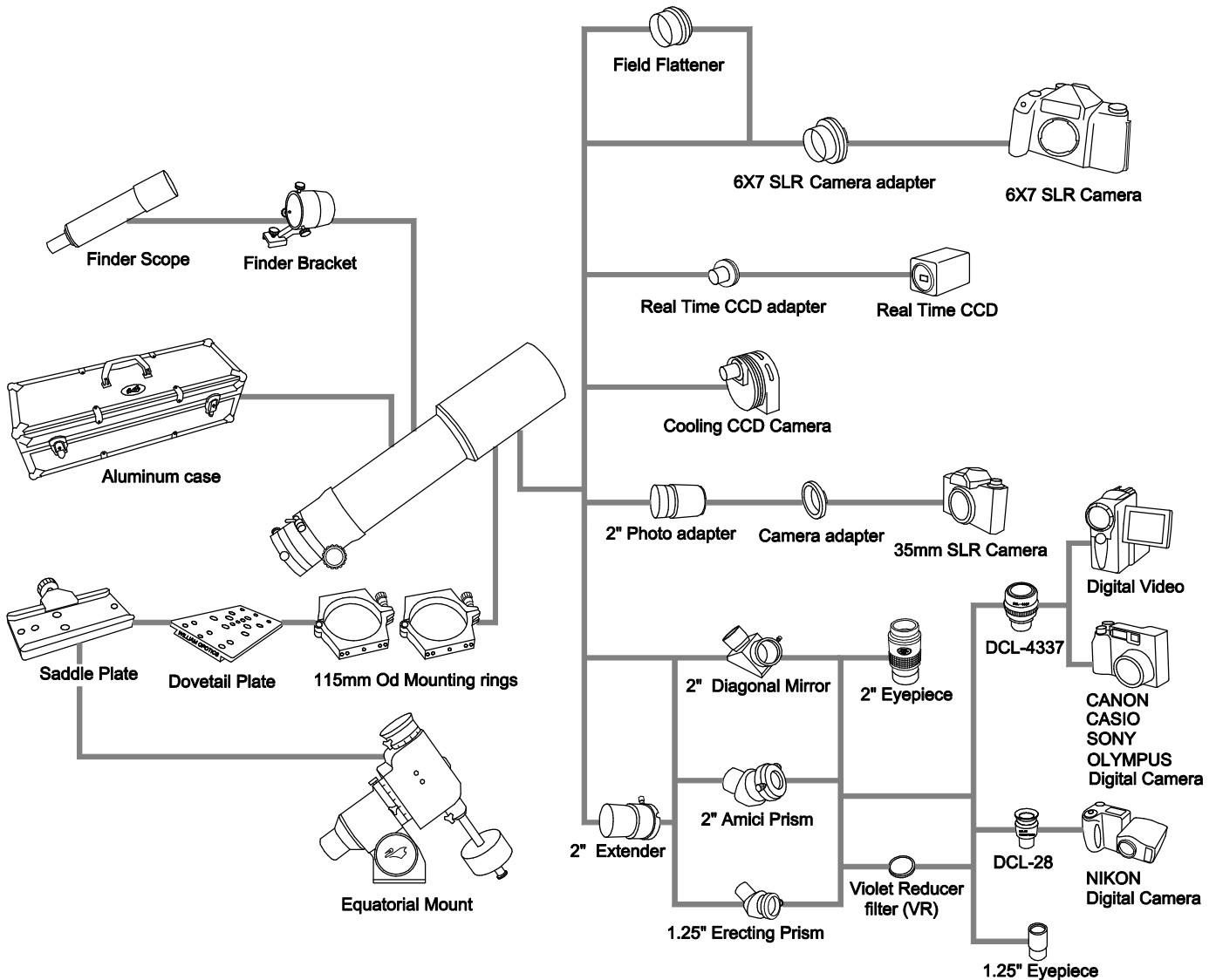
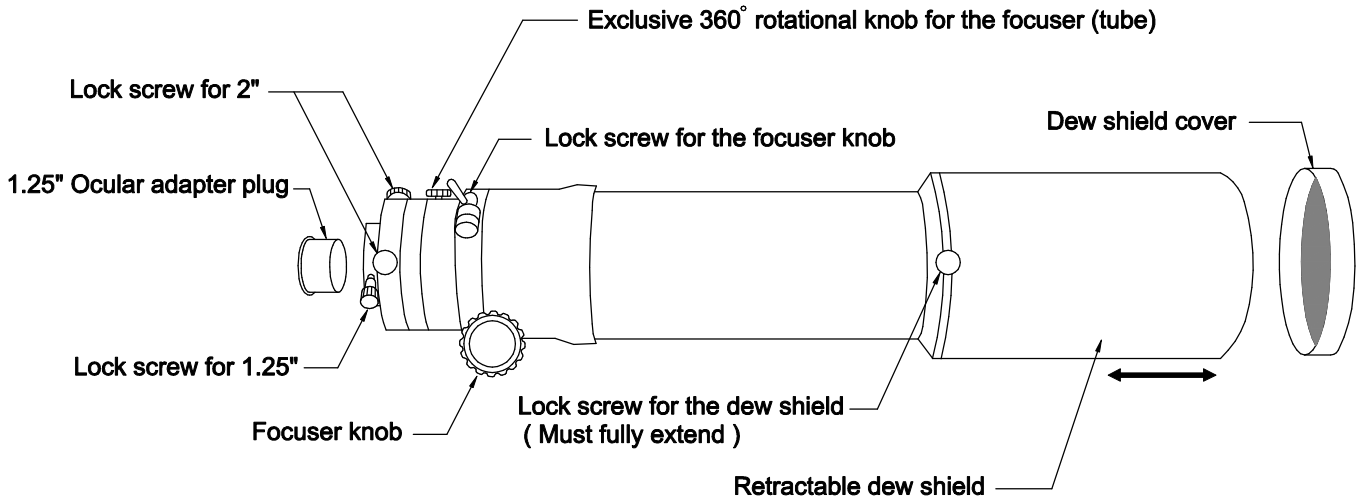
### **WARNING!**



**Do not use this telescope under any circumstances directly view the Sun.** It could easily cause instant blindness or serious damage to your eye. Use only appropriate designed solar filter that will rejects 99.96% of the sun light and heat before viewing the sun. Educate your children on how to use this telescope properly during day and nighttime observation. For further information please contact your local dealer.

FLT-110 Triplet Apochromat Specification	
Aperture	110mm
Focal Ratio	F/6.5
Focal Length	715mm
Objective Type	3 elements oil-spaced
Resolving Power	1.05"
Limiting Magnitude	12.0
Lens Shade	Retractable
Focusing system	4" 360 degree rotating angle adjuster focusing system
1.25" Adapter	Included
Case	Custom fitted Aluminum Case
Mounting Rings	115mm Od size
Tube Diameter	115mm
Tube Length	23" (585 mm) Fully Retracted
Tube Weight	6.5 kg (14.3 lbs)
Case Dimensions	68.5cm x 23cm x 22cm (27"x9.1"x8.7")

# Getting to know your telescope :

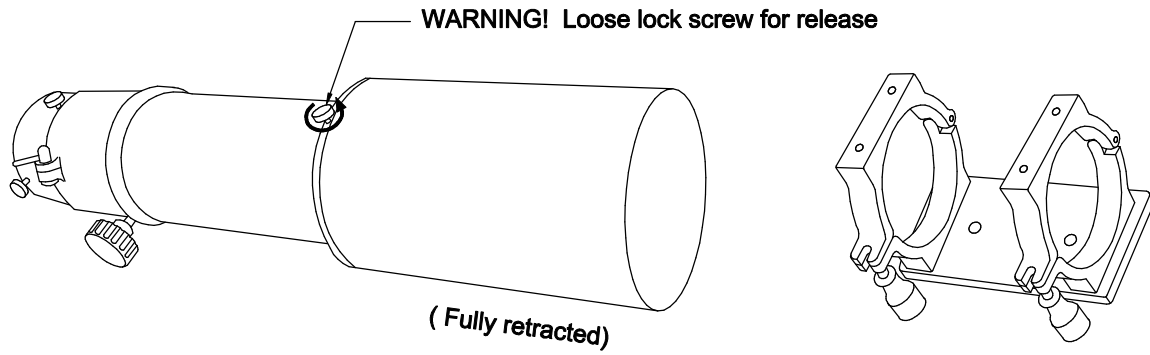


Above diagram is only for future connectivity reference. Please contact our authorizrd dealer for accessories purchase.

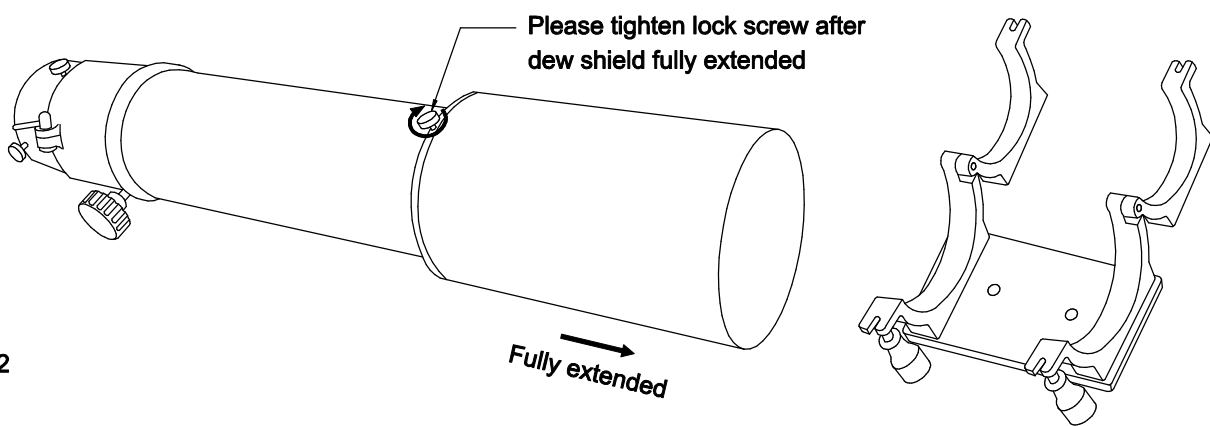
# Operation and safety Manual:

## Connection Instruction ( Mounting Rings )

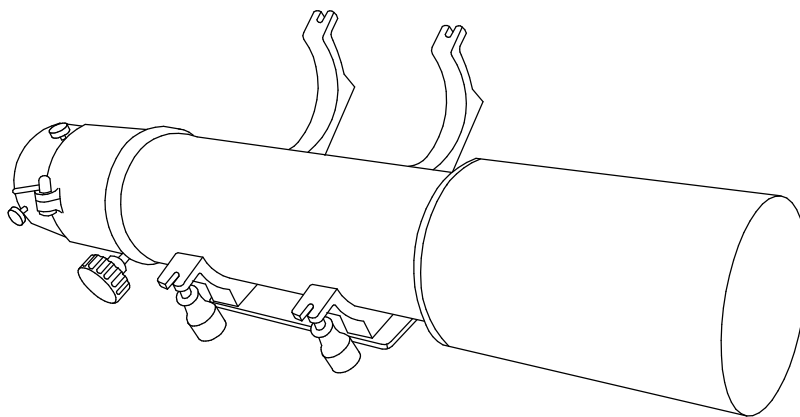
Step-1



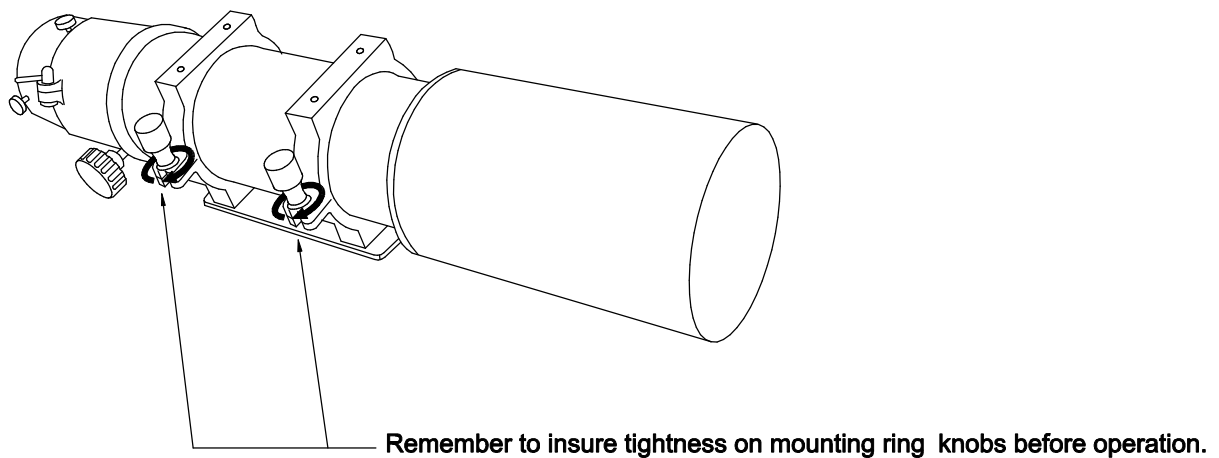
Step-2



Step-2



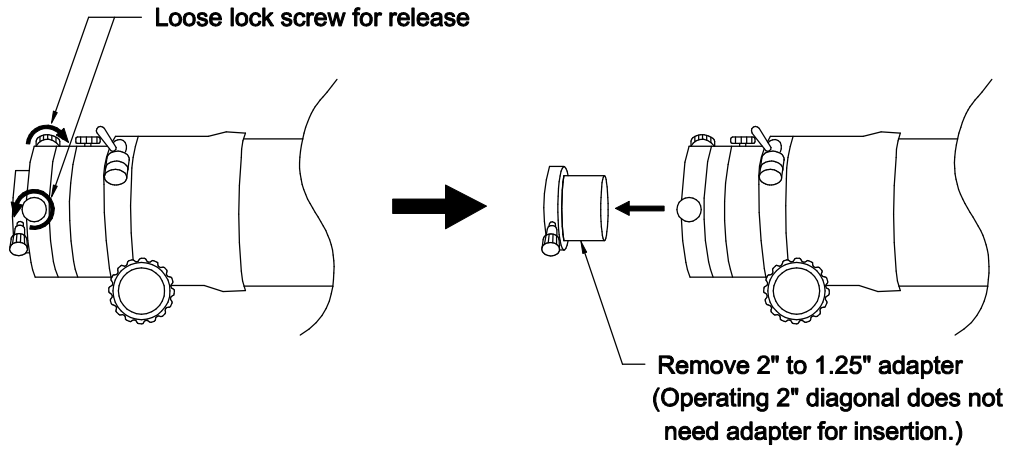
Step-3



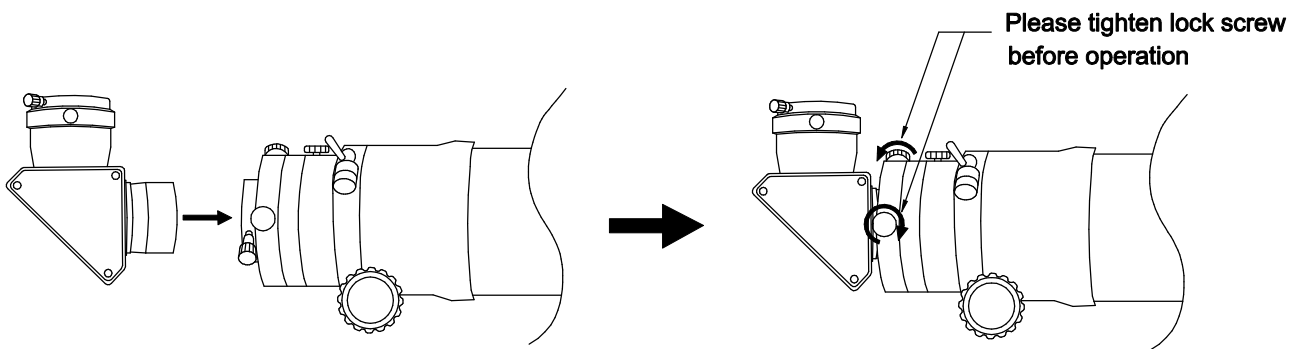
# Operation and safety Manual:

## Connection Instruction ( 2" Diagonal )

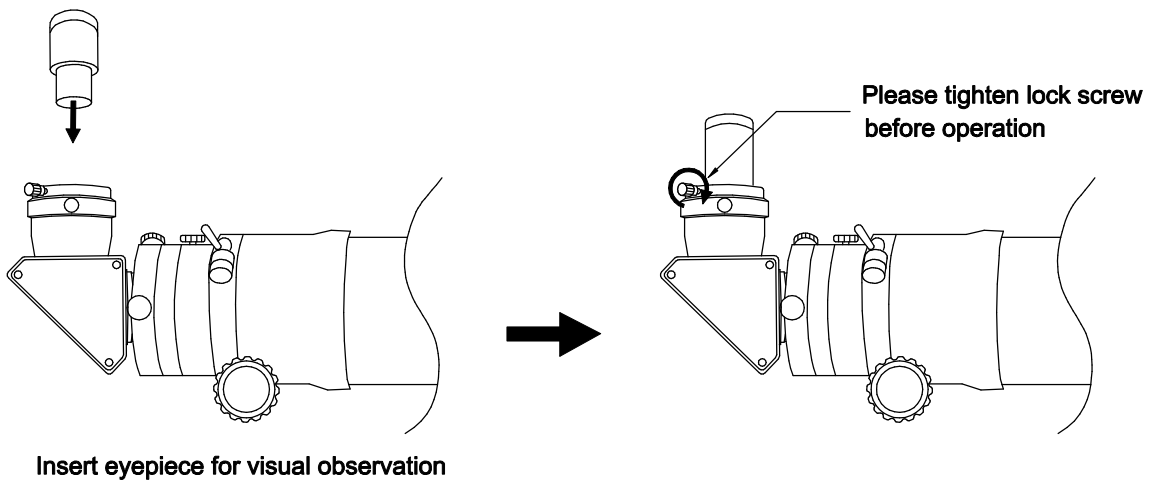
Step-1



Step-2



Step-3



## **Standard Equipment:**

1. Custom Fitted Aluminum Carry Case.
2. One pair of 115mm Mounting rings
3. New Innovative exclusive 360 degree superb focuser and zero shift focusing.
4. Standard 1.25" Ocular adapter.
5. Instruction Manual

## **Usage:**

In order to achieve the maximum color correction and ultra sharp images, we have selected the best "SD" materials to make our objectives, designed by TEC. The Fluoro-Star 110 lens is a 3 elements oil-spaced design. This design consists of a heart of super low dispersion glass surrounded by 2 elements of crown glass; this superb design reduces any secondary spectrum to an unbelievable degree. The excellent color correction allows for the use of extremely high magnification with image breakdown, challenge subjects such as the Moon or Venus.

During daytime usage and nighttime observation, depending on your range of applications, you have many choices that you can choose from, especially high precision eyepieces with different magnifications. The greatest flexibility range from 20 xs to 60x zoom eyepieces, it can easily locate an object in its surrounding with lower magnification, and then gradually zoom-in with any higher power ocular for maximum close-up and vivid details. The largest field of view is covered by 20x low power wide-angle ocular; ideally for brilliant and bright image that produces great magnification. Be sure to operate with rigid tripod, other options like German equatorial mount, which has been used by most amateur astronomer for precise tracking stability. Optional WO 2 inch star mirror diagonal is highly recommended for high quality image observing. FLT-110 is excellent and suitable for nebulae, clusters, large galaxies, comets or CCD imaging; we also suggest using low power wide-angle ocular for best result. When view the moon and planets up to 300X is quite impressive at stable seeing with no aberration.

Day-time sun observing, direct view the sun is prohibit, must use proper solar filter before operation, (e.g., H-alpha filter and other brands). For more detail information on proper solar filters and various brands, please visit our authorized dealer for more information.

## **Storage and Clean**

1. Suggest placing all accessories inside airtight container with desiccative control. Second, remember to store the telescope in non-humid environment, never leave your telescope in hot heated environment. If telescope is not properly store it may create fungus growth and other unnecessary build up.

- I In case if lens surface become dusty, smear, or gets fingerprints and fungus build-up. First by using air blower to remove surface particle, than carefully wipe the lens gently with proper soft cloth paring with lens liquid cleaner to get the best cleaning result. Indication mentioned above does not easily happen if you carefully protect your telescope with caution. ( Note: make sure to change new soft cloth momentarily for best cleaning result ) .
- I How to care for exterior body tube, always wipe down with a soft cloth with clean water, water would be enough to do the job. Please do not use any organic solvent on your telescope, example like alcohol, benzene and other hazardous chemical.
- I For collimation: please contact or via email the manufacture for service instruction.

## Caution for safety

- I **Caution!** Never directly view the sun light with your telescope. Loss of eyesight can occur when your telescope is not properly protected by solar viewing filter. (Solar filter can be easily purchase through our authorized dealer).
- I Always place the optical telescope assembly (OTA) on a completely flat surface, unstable placement of telescope may cause telescope to fall, and if treat your telescope without caution, it may easily injure yourself and others.
- I Never use your telescope under rainy condition, this telescope is not designed with water-proof. If your telescope accidental get caught in the rain, please wipe down the water with dry clean cloth, but if the lens is totally soak by water please contact your authorized dealer right away for detail service solution.
- I **Do not disassemble your telescope without authorization from the manufacture**, this will violate the warranty under the limited product warranty section. Always consult with your local retailer or manufacture for detail on how to care and service your telescope.

## Optional

- I Standard type ( 1.25" ) eyepiece and ( wide angel and super wide angel ) .
- I 2 inch star mirror diagonal ( High precision polish ) .
- I 2 inch super wide angel eyepiece ( need to operate with 2" diagonal or erecting prism ) .
- I DCL-28, 4337 (Digital Camera adapter Lens for Digital Camera and Digital Video) .
- I Filters : WO (VR-1) filter ( Violet-Reducer ) , light pollution filter, Solar Max H-alpha filter, etc.
- I (T-mount connection) for most camera brand.
- I Saddle plate and dovetail plate combo
- I WO Finder Bracket fits any 50mm finder scope.
- I WO 110mm Field Flattenner
- I WO 2" Extender