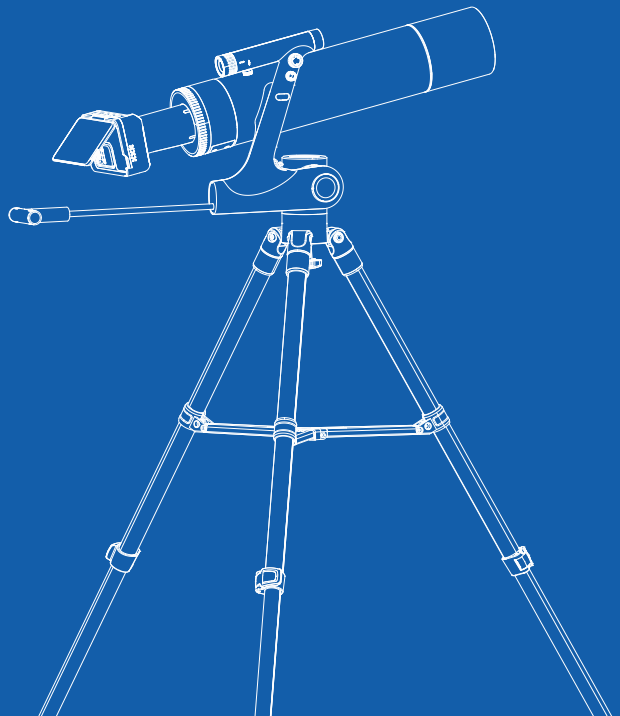
SMART TELESCOPE（FINDER TW2）

DDL-TW2 Instruction Manual

Please read the instructions in detail
Please keep this instruction manual in a safe place

Beaverlab



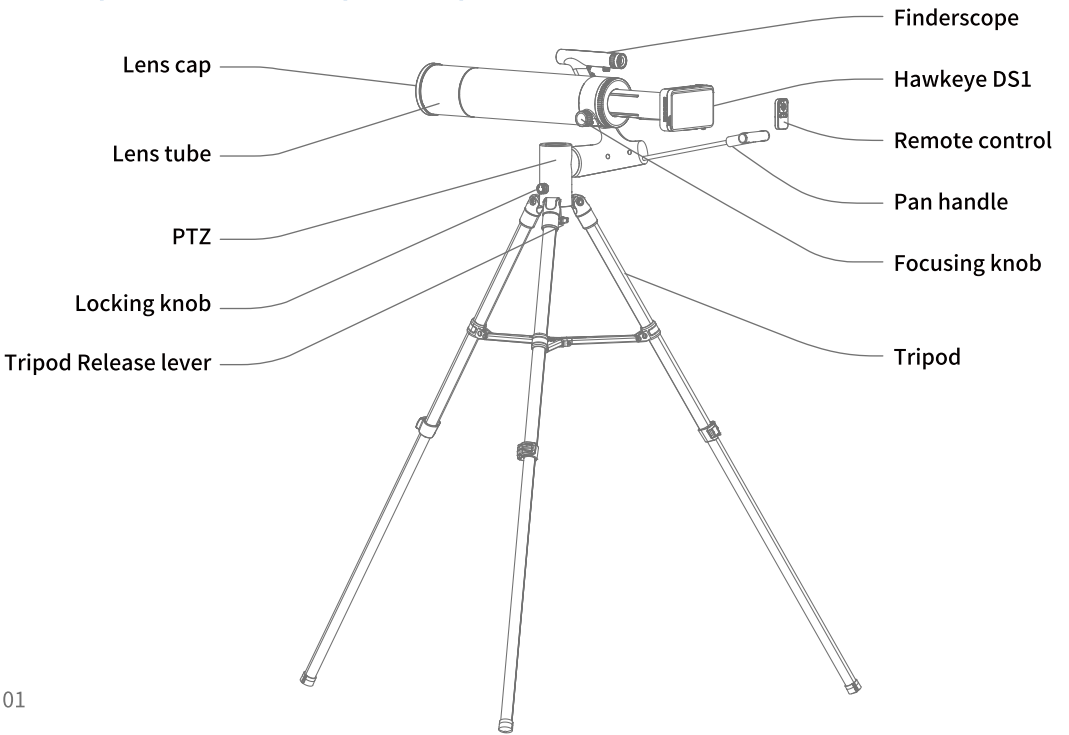
Special Reminder
Do not look directly at the sun when it is not used together with the "Solar Filter". Otherwise, the image sensor may be burnt.
WiFi password：12345678

Contents

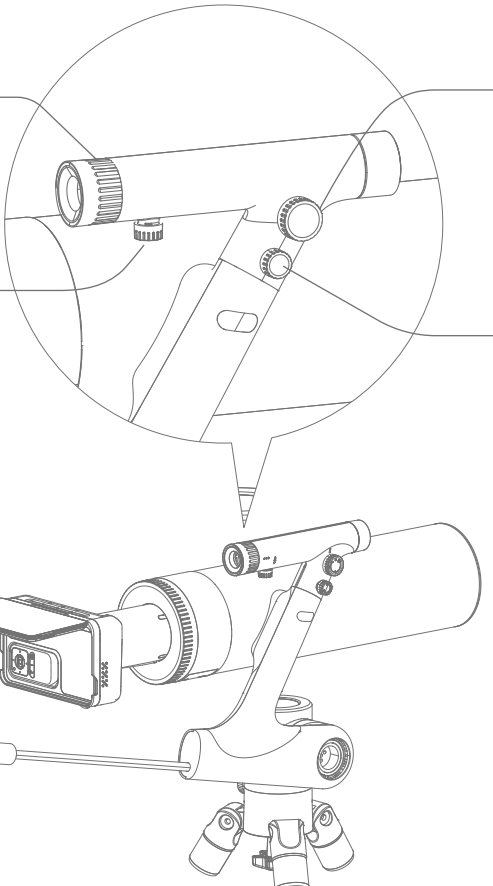
01 Product Overview

Thank you for purchasing the Beaverlab Smart Telescope Finder TW2. Please read the instructions carefully before use and keep it properly.
For ease of reading, the Hawkeye DS1 will be referred to as DS1 throughout this manual.

Description of Telescope Composition



Description of Telescope Knob



Left/right fine-tuning knob for finderscope red dot

Fine-tuning of red dot to the left in clockwise.
Fine-tuning of red dot to the left in counterclockwise.

Upper and lower fine-tuning knobs of finderscope red dot

Fine-tuning of red dot to upward in clockwise.
Fine-tuning of red dot to downward in counterclockwise.

Finderscope red dot switch

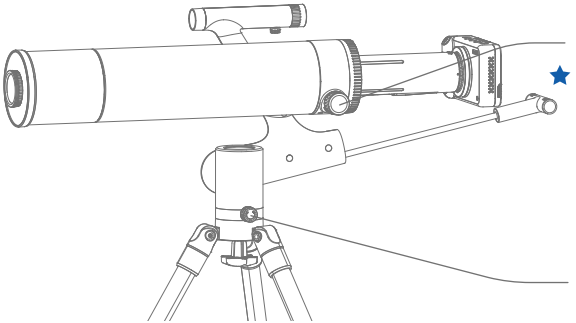
Brightness fine-tuning knob.
Red dot is brighten for fine-tuning in clockwise.
Red dot is darken for fine-tuning in counterclockwise.
OFF.

Fixed locking knob of finderscope

Lock the finderscope in clockwise.
Release the finderscope in counterclockwise.

Pan handle

Locking pitch in clockwise/ release in counterclockwise, pitch operation can be conducted via holding the handle.



Fine-tuning knob of focus length telescoping

★ Grease is applied to the rack at the bottom of the focusing seat, do not touch it.

Horizontal locking knob of PTZ

Lock the horizontal turning in clockwise/release in counterclockwise

02 Operation Instruction

- When the telescope is not in use, please cover the lens cap and camera cover to keep the equipment clean.
- If not used, lock the mechanisms of the PTZ tightly so that the astronomical telescope does not rotate under the force of gravity.
- Please use it at a temperature of -10°C-45°C.
- The product is not waterproof, please avoid getting wet with any liquid.
- Please keep away from flames and heat.
- The product is a precision instrument, please avoid impact and severe vibration.
- In the case of low temperature, the battery's available capacity will be attenuated to varying degrees, which is the characteristic of lithium battery so that it is a normal phenomenon.

Special Warning

- Do not observe the sun directly when the solar filter is not installed, which will cause the chip of DS1 to burn out.
- Minors should use it accompanied by an adult.
- Do not modify the telescope without authorization.

03 Installation Description

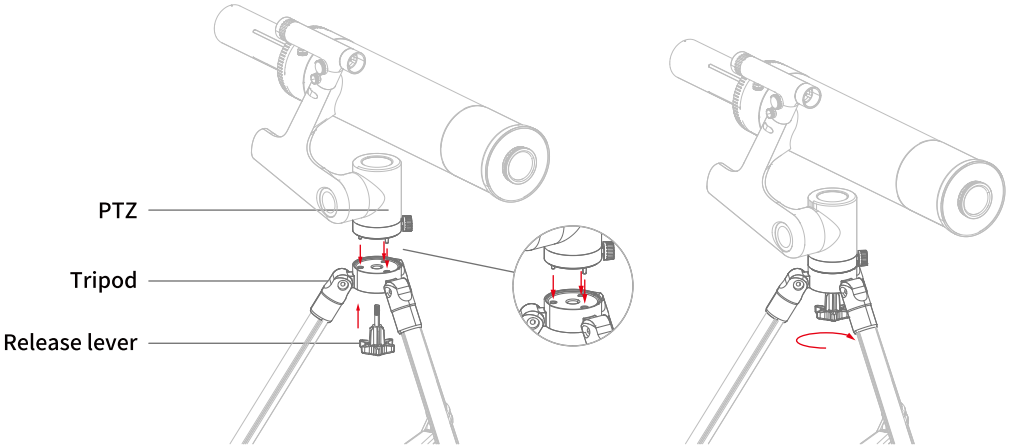
Upon receipt of the product, the user is required to complete the overall assembly of the product.

Install the Tripod

1.Remove the tripod, loosen the tripod tightening knob and pull out each leg to a uniform length.
2.Spread the folded structure in the centre of the tripod.

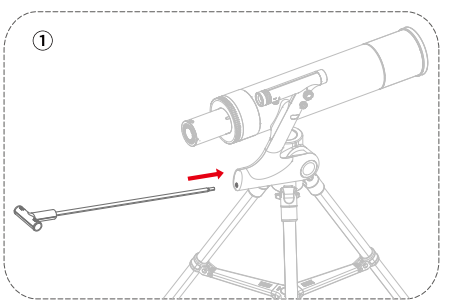
Install the Lens Tube and Tripod

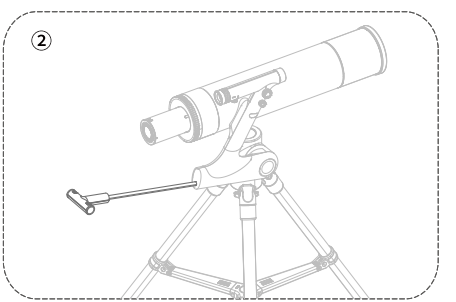
1.Prepare the lens tube and PTZ, tripod, release lever, as shown in the Fig. below.
2.Remove the master lens and PTZ, and align the three locating pins in the base of the PTZ into the three holes corresponding to the tripod.
3.Insert the release lever through the hole at the bottom of the tripod and tighten it clockwise.



★ During the removal process, hold the PTZ and the lens tube with hands while releasing the release lever to prevent falling.

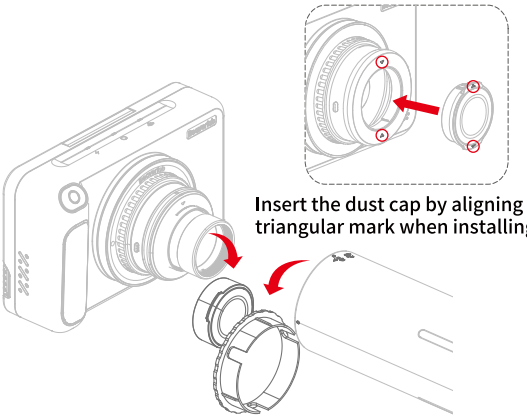
Install the Pan Handle





Align the pan handle with the locking hole and screw it in clockwise

Install the DS1

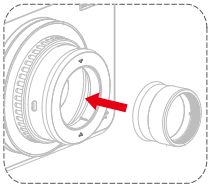


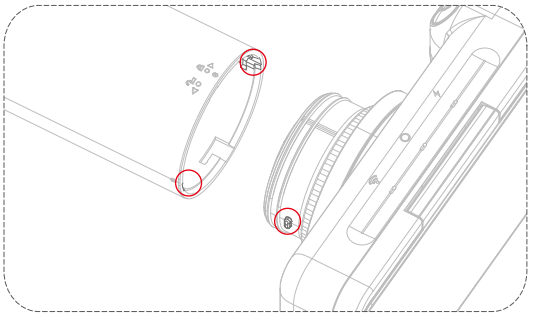
Insert the dust cap by aligning the triangular mark when installing it.

①Remove the dust cap

0.5x Focal Reducer

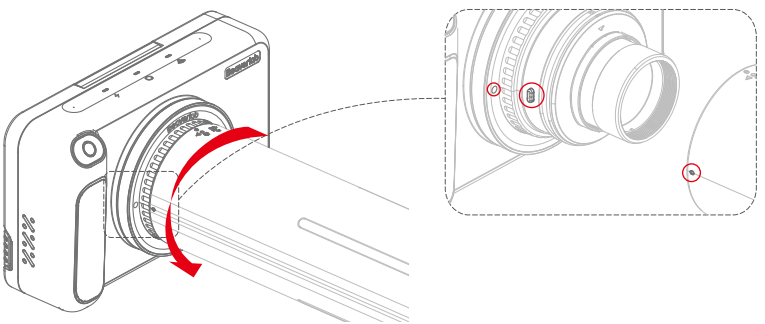
Note: The field of view multiplier is perpendicular to the plane of the mounting port.





②Align the bayonet position

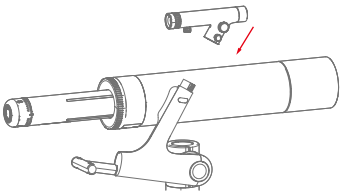
★ Reminder: Note that the interface is only suitable for 1.25-inch interface, please confirm before use.



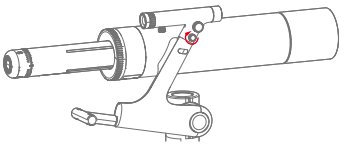
③After the DS1 is snapped into the lens tube, align the marker clockwise

Install the Star Finder

1. Prepare the star finder and align the star finder with the support port. Note the gap in the port.
2. Tighten the fixing knob of the star finder.
Tip: Pay attention to the installation direction of the star finder.



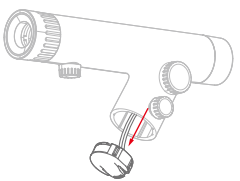
① Insert the star finder into the support interface



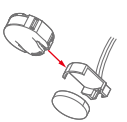
② Tighten the fixing knob of the star finder

Replace the Battery

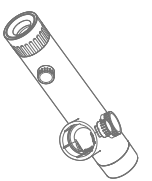
1.Remove the finderscope, place the battery in the connector where the finderscope is inserted in the holder, and the whole battery holder is removed with your fingers or tweezer.
2.The model of battery used for the finderscope is CR-2032. When replacing the button battery, the positive and negative terminals of the battery should be noted.



①Remove the battery holder together (Note to loosen the locking knob)



②Replace the battery, and the positive and negative terminals of the battery should be noted



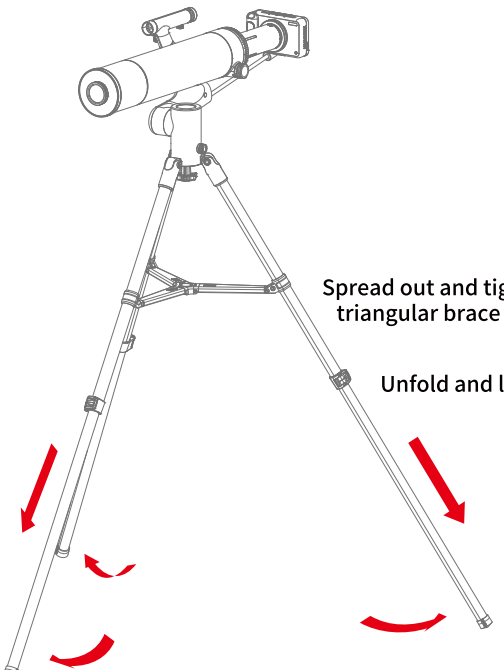
③Install the battery holder, and the direction and position should be noted

Calibrate Red Dot Finderscope

1.Find a target 100m or more away with the naked eye.
2.Adjust the lens tube of telescope to find the target, and move it to the centre of the field of view.
3.Switch on the red dot switch of finderscope and dim the light.
4.Find the red dot inside the circular viewing port on the back side of the finderscope.
5.Adjust the position of the red dot by using the knob next to the finderscope until the red dot coincides with the target. Upon the calibration, the entire assembly is finished.
Tip： Please switch off the red dot of the finderscope after observing.

04 Description of Operation Steps

Place the Tripod Smoothly



Spread out and tight the middle triangular brace

Unfold and lock the tripod legs

Remove the Lens Cap