Before Getting Started

For your safety and the proper operation of this product, please read this manual thoroughly before using the product for the first time. Please retain this manual for future reference and troubleshooting.

Product Overview

LS-T22 is a smart electronic eyepiece with built-in Wi-Fi hotspots. It quickly attaches to a telescope and pairs with the NEEWER View App to give you the comfort and freedom of observing and taking astronomical photos and videos—all on your phone or tablet. With the app, you can select different camera modes, adjust image settings, and share your captures on social media. Ergonomically designed, it reduces eye and muscle strain compared to traditional eyepieces.
- 7 image settings: exposure, ISO, zoom, white balance, saturation, contrast, and sharpness.
- 3 camera modes: Photo, video, and time-lapse.

Safe Use of Battery

1. Do not attempt to disassemble, modify, or repair the battery. Doing so may cause the battery to leak, overheat, burn, or explode.
2. Always charge the battery with the original or certified charger to prevent overcharging, short circuits, and other risks.
3. If you notice an unusual charge speed and indicator status, please stop charging the battery immediately and contact our customer service.
4. Keep the product away from inflammable and explosive materials or substances.

Package Contents
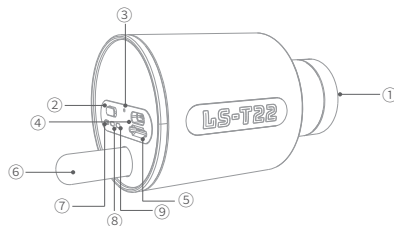

Electronic eyepiece ×1

USB-A to USB-C cable ×1

Cleaning cloth ×1

Storage Pouch ×1

Product Illustration

① Lens
② Power button: long press
③ Mic
④ USB-C port
⑤ Card slot
⑥ Antenna
⑦ Wi-Fi reset button: long press

⑧ Indicator
  Solid white: power on
  Solid red: charging
  Flashing red: low battery (<5%)
  Off: power off

⑨ Wi-Fi Indicator
  Flashing white: connecting
  Solid white: connected
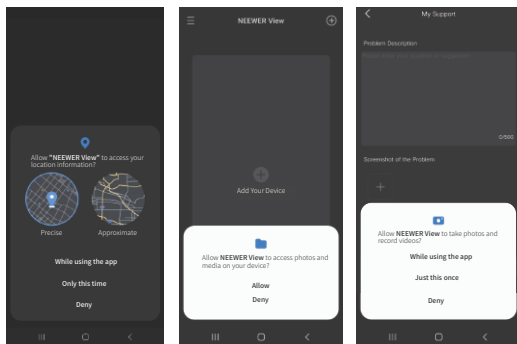 Off: power off or not connected

Instructions

Note: For telescope use, it requires a diagonal prism (sold separately).

I. Device connection (app permissions)

1. Download the NEEWER View App. Open the app and allow the app access to the following functions.
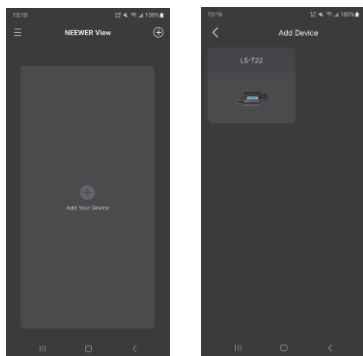

Access to location services
(choose precise location)

(Access to photos and media)

(Access to the camera)

II. Adding devices

1. In the Home UI, tap "Add smart devices" or the "+" button on the navigation bar to add devices.

(Home UI)

(Add Device UI)

2. Select a device to connect. If Wi-Fi is not enabled on your phone, a prompt will redirect you to connect a Wi-Fi network named "NW-LST22-XXXX" (password: 12345678). After the network is connected, a green dot and the network name will be displayed. If Wi-Fi is already enabled, tap "Please connect device" and follow the instructions above.
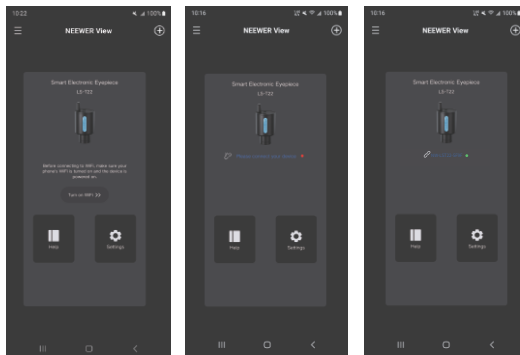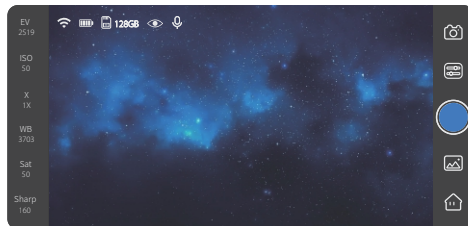

(Enabling Wi-Fi prompt)

(Wi-Fi enabled)

(Device connected)

III. Functions

1. After the device is connected, tap the device icon to enter Control UI. From left to right on the top status bar: Wi-Fi signal, battery status, app display on/off, mute on/off

(Control UI)

2. From the left side, users can make adjustment on exposure, ISO, zoom, white balance, saturation, sharpness, and contrast. Tap a setting and drag the slider for precise adjustment. To hide the slider, tap the blank area on the screen.

(1) Exposure (EV): 0-5000 (auto/manual adjustment, increment: 1 by default)
Definition: Exposure determines how bright or dark an image appears.

(2) ISO: 0-100 (increment: 1)
Definition: A higher ISO value allows more light in the image.

(3) Zoom (X): 100%-500% (1X, 2X, 3X, 4X, 5X, increment: 1X)
Definition: Brings subjects closer for a more detailed view.

(4) White balance (WB): 2800K-6500K (auto/manual adjustment,
   increment: 1 by default)
Definition: Adjusting white balance gives a more natural look to the image.

(5) Saturation (Sat): 0-128 (increment: 1)
Definition: Saturation refers to purity of colors in an image.
Higher saturation results in more vivid colors.

(6) Sharpness (Sharp): 1-100, (auto/manual adjustment,
increment: 1 by default)
Sharpness (Sharp): Increasing sharpness can add definition to the
edges of subjects.

(7) Contrast: 0-100 (increment: 1)
Definition: Contrast is how different the bright and dark areas of an image are.
More contrast brings out details and improves clarity.

3. From the right side, users can switch camera modes, adjust display
   settings, use shutter button, access gallery, and return to Home UI.

• Camera modes: Select between photo, video, and time-lapse.
 Settings on the left side remain the same in all modes.

(1) Photo: Take photos and adjust settings.

(2) Video: Take videos (play/pause), record sound
   (microphone is on by default), and adjust settings.

(3) Time-lapse: Take time-lapse videos and adjust settings.
Remaining time: Remaining time = Number of photos × shutter speed +
(number of photos-1) × interval (00:00:00, hh/mm/ss).
Final video length: Final video length = Number of photos/frame rate (s),
format: 00:00:00 (hh/mm/ss).
Interval: 1-60s (1s by default), adjust by sliding/clicking.
Number of photos: 10-2000, ∞ (unlimited), 10 (default), 30, 50, 70, 100, 130,
150, 170, 200, 230, 250, 270, 300, 330, 350, 370, 400, 430, 450, 470, 500, 550,
600, 650, 700, 750, 800, 850, 900, 1000, 1300, 1700, and 2000, adjust by
sliding/tapping.
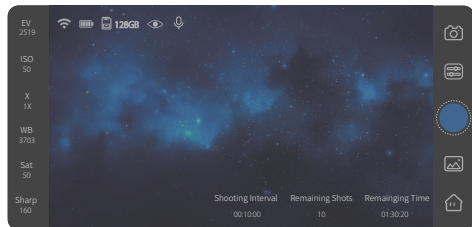Frame rate: 24 (default), 25, 30, and 60
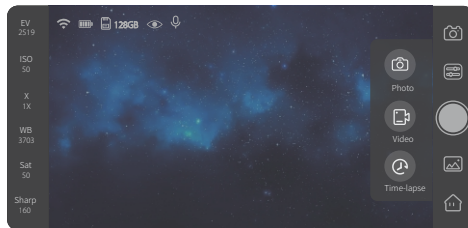
(Camera Mode Switch UI)
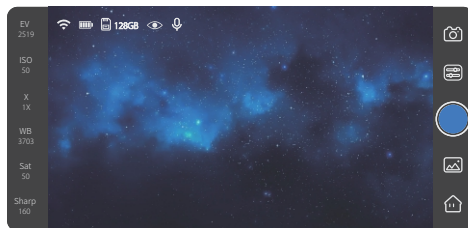
(Video UI)
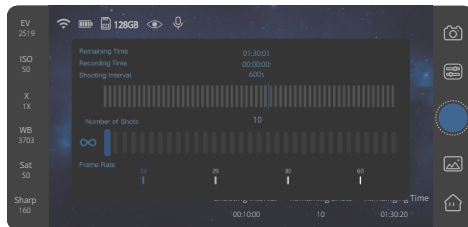
(Time-Lapse Settings UI)

(Time-Lapse Video UI)
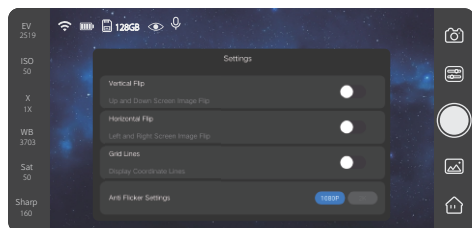
4. Display settings

Vertical flip: Tap the slider to turn on (off by default).
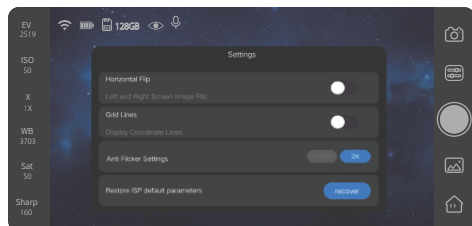Horizontal flip: Tap the slider to turn on (off by default).
Grid: Tap the slider to turn on (off by default).
Resolutions: 1080P/2K (2K by default).
Reset ISP settings: Tap "Reset" to restore default values.
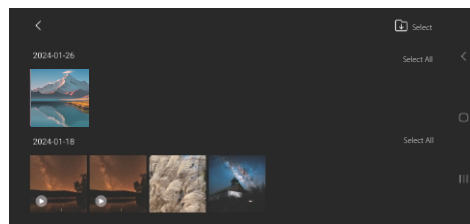

(Display Settings UI)

(Display Settings UI)

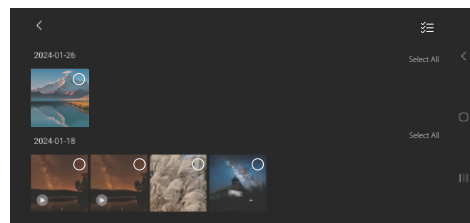## 5. Gallery

Return: Returns to Control UI.
Select: Selects multiple photos/videos.
Download: Saves selected photos/videos to local storage.
Delete: Deletes selected photos/videos.
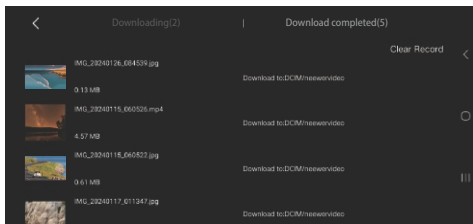

(Gallery UI)
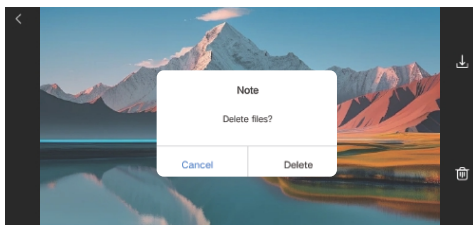

(Selecting UI)
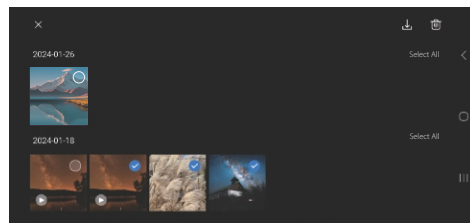
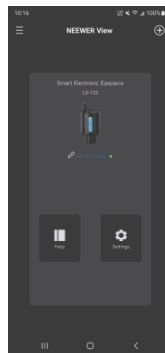(Selected UI)
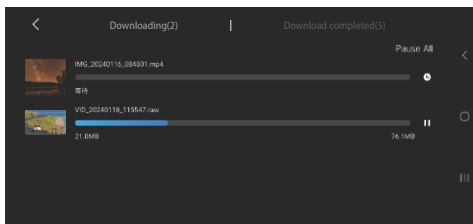
(Downloading UI)

(Downloaded UI)

(Deletion Confirmation UI)

To download/delete a certain photo/video, open the photo/video and tap the "download" or "delete" icon.
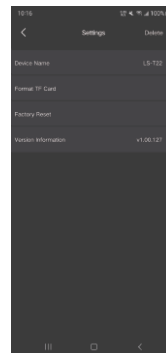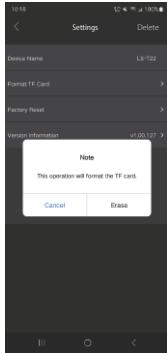

IV. Settings

1. In the Connected Device UI, tap "Settings" to view device name, format TF card, reset data, and check version information. A red dot will appear when a firmware update is available.
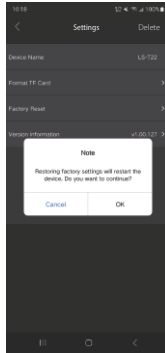

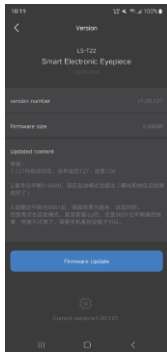(Connected Device UI)

(Settings UI)

(Format TF Card UI)

(Factory Reset UI)

2. When a firmware update is available, tap "Version", then "Firmware Update" to update. After the firmware is updated successfully, tap "Confirm" to restart the app. If the update fails, possible reasons for the failure will be displayed.


(Version UI)

V. Help

1. Tap "Help" button in the Home UI to go to the Help page and read the user manual.
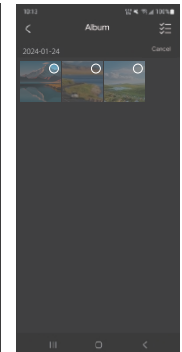
VI. Sidebar

1. In the Connected Device UI, tap the triple bar icon to expand the sidebar. Album, Settings, and My Customer Service are displayed.
Tap Album to go to the Album UI.
Tap Settings to go to the Settings UI.
Tap My Customer Service to go to the customer service UI, write and send your feedback,
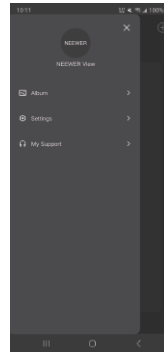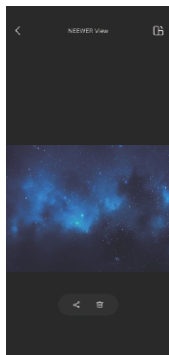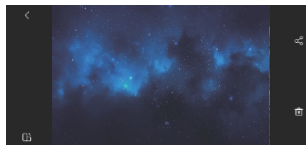

(Sidebar UI)
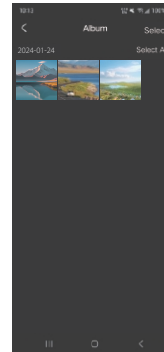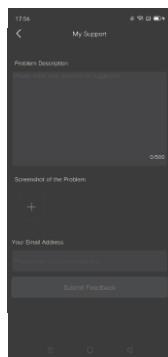

(Album UI)

(Album Selection UI)

Instructions

2. Open a photo in the album. The photo can be viewed in portrait/landscape mode, shared, and deleted.

(Landscape Mode)

(Portrait Mode)

(My Customer Service UI)

Safety Precautions

1. Handle with care when unboxing to prevent unwanted scratches.
2. Do not drop the product or subject it to severe impacts.
3. Keep it away from fire, inflammables, and explosives.
4. Keep away from strong acid liquid. Do not immerse in water or expose the product to moisture.
5. Do not dissemble the product, except for the steps mentioned in this manual.
6. Do not charge the product near fire or in heated environments.

Specifications

Model	LS-T22
Battery Capacity	3.7V 1900mAh 7.03Wh
DC Input	DC 5V, 2A
Size	Lens diameter: 31.6mm Eyepiece diameter: 54mm Height: 87mm (excluding antenna)
Materials	Aluminum alloy, silicone
Weight	184g
Operating Temperature	-10 ～40℃