

QooCam 3 Ultra User Manual

Reading Tips

Read before First Use

Please read the following document carefully for full understanding and reasonable and safe usage of QooCam 3 Ultra:

1. Safety Guidelines
2. Quick Start Guide of QooCam 3 Ultra
3. QooCam 3 Ultra User Manual

Please read the Quick Start Guide of QooCam 3 Ultra and QooCam 3 Ultra User Manual carefully, and watch the tutorial videos on QooCam 3 Ultra Product Page on KanDao's official website. Please read the Safety Guidelines carefully to learn about your legal rights and responsibilities.

Download QooCam 3 App

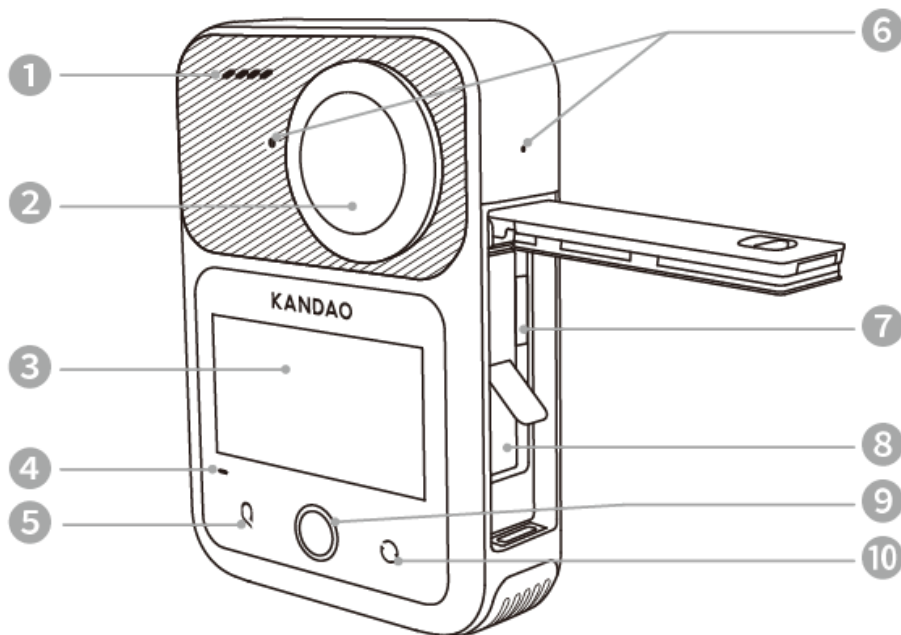
To use this product, you will need to download and install QooCam 3 App. Please search "QooCam 3" in the App store on your mobile device or scan the following QR code to install the App.



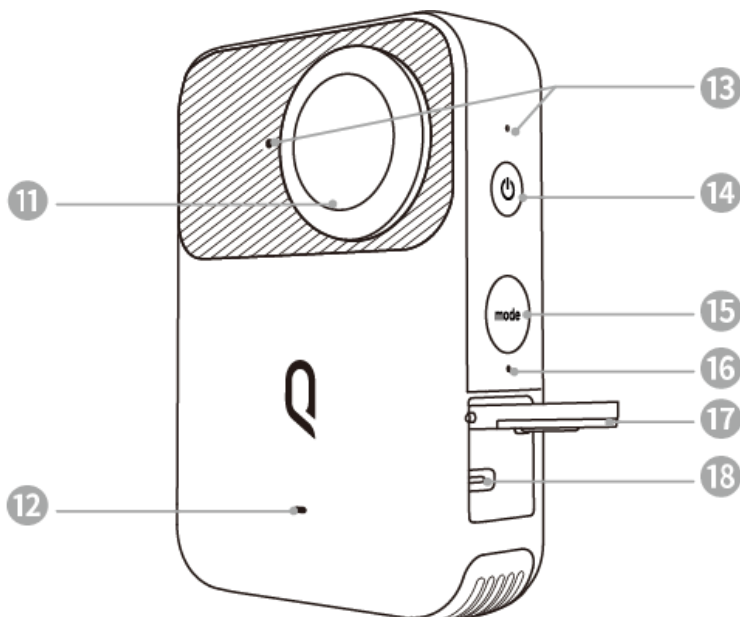
Note: QooCam 3 App supports iOS 13.0 or above, or Android 9.0 or above versions.

Product Profile

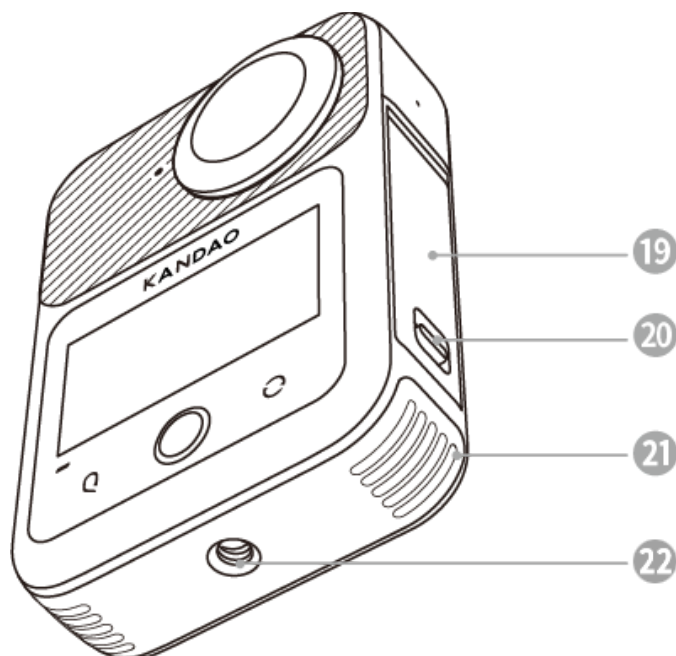
About the Camera



- 1. Speaker
- 2. Lens 2 (Screen Side)
- 3. Touch Screen
- 4. Status Indicator
- 5. Q Function Button
- 6. Microphone Pickup Hole
- 7. microSD Card Slot
- 8. Battery
- 9. Shutter Button
- 10. View Switching Button



- 11. Lens 1 (Non-Screen Side)
- 12. Status Indicator
- 13. Microphone Pickup Hole
- 14. Power Button
- 15. Mode Button
- 16. Air Pressure Balancing Hole
- 17. USB-C Cover
- 18. USB-C Port



- 19. Battery Cover
- 20. Battery Cover Latch
- 21. Cooling Fan Air Vent
- 22. 1/4 Screw Hole

*Please avoid obstructing the Microphone Pickup Hole of the camera during video recording as it may impact the audio recording quality

Preparations before Use

microSD Card

QooCam 3 Ultra has about 98.2GB of internal storage available, so you can start using it without an additional storage device.

If you need to do a lot of shooting, the camera supports expanding its storage via a microSD card. Here are the requirements for the additional microSD card:

- Speed level of UHS-I V30 or higher
- Support a maximum capacity of 1TB
- File system: exFAT

For the list of recommended microSD cards, please visit:

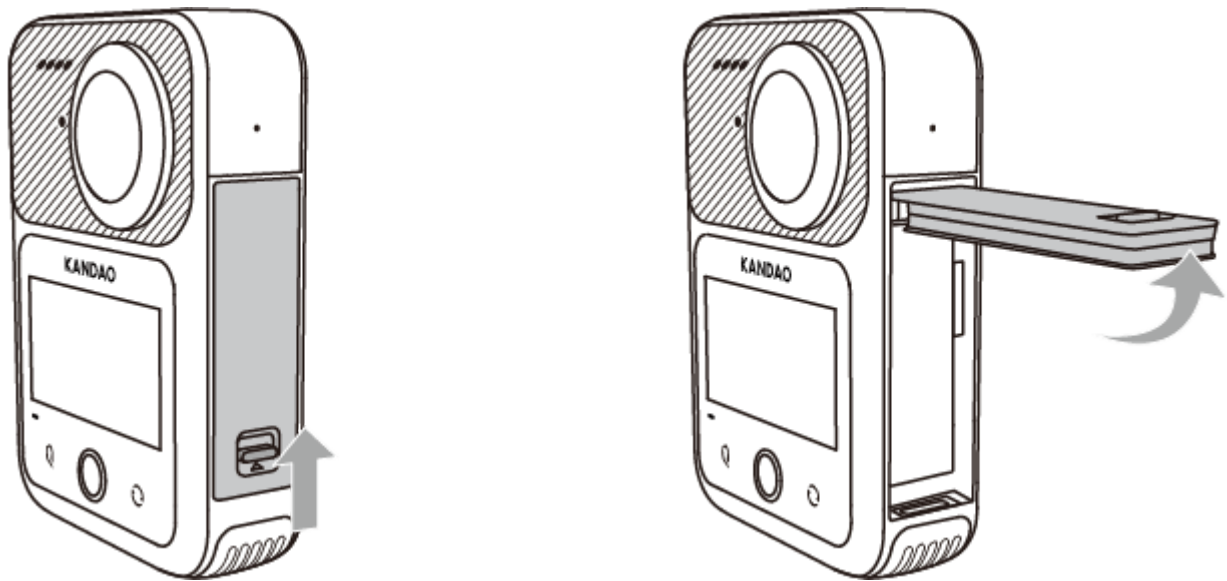
<https://www.kandaovr.com/support/qoocam-3-ultra>

Note:

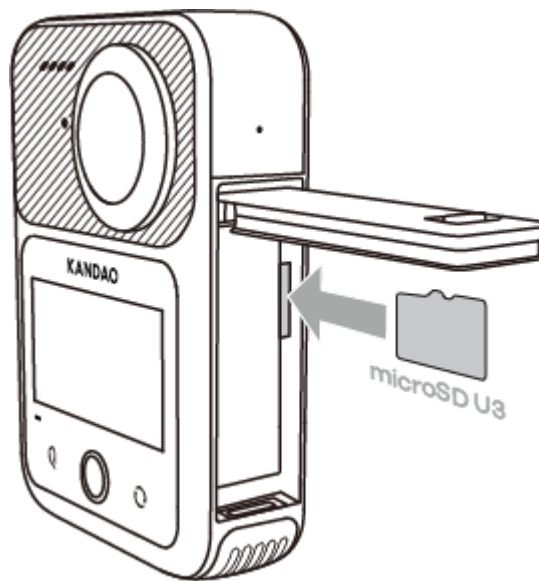
- *Ensure your hands are clean and dry before handling the microSD card. Avoid touching the metal parts of the microSD card. If there is dust or dirt on the microSD card or the camera, gently wipe it with a soft cloth or eraser, but do not use chemical or liquid cleaners to avoid damage to the camera and microSD card.*
- *Avoid removing the microSD card while the camera is recording video, capturing photos, or viewing playback to prevent file loss or camera damage.*
- *When inserting the microSD card into other devices, avoid formatting or modifying files on the card. It is recommended to back up files before transferring them between different devices to avoid file loss or damage.*
- *The performance of the microSD card may degrade over time, affecting the camera's ability to save media files. If you encounter issues, consider replacing the card with a new one.*
- *Regularly formatting the microSD card helps maintain its good condition. However, formatting the microSD card will erase all media files on it, so be sure to back up any important files beforehand.*
- *If needed, refer to the manufacturer's guidelines for the microSD card to understand the acceptable temperature range and other important information.*

Install microSD Card and Battery

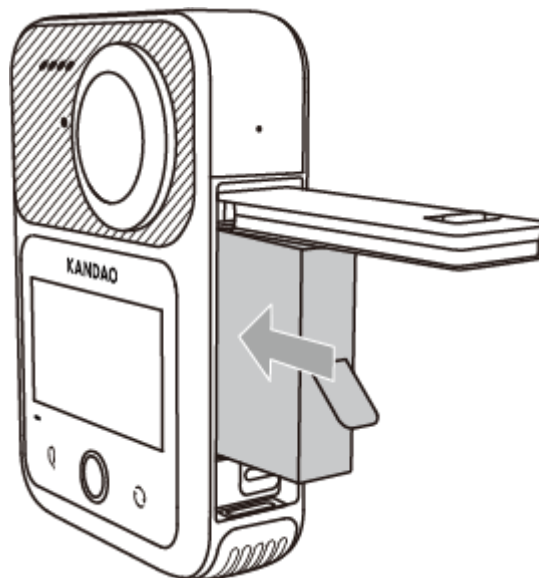
1. Hold the battery cover latch and push it outwards.



2. Insert the microSD card.

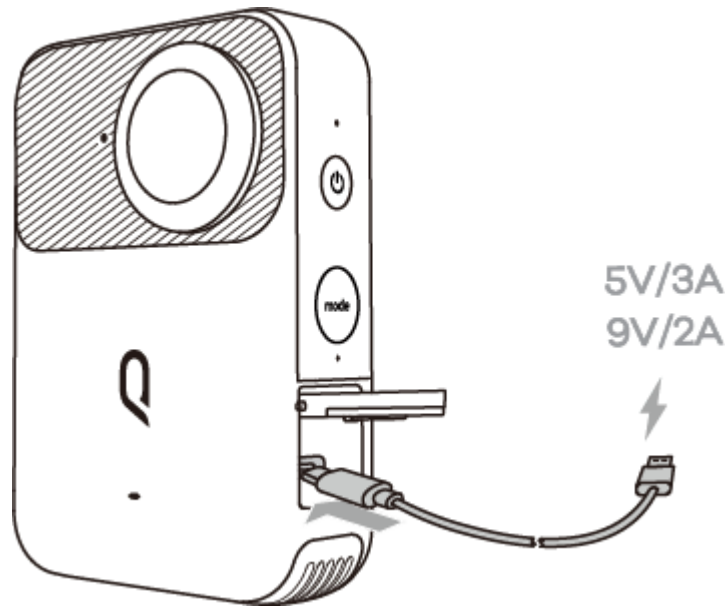


3. Insert the battery.

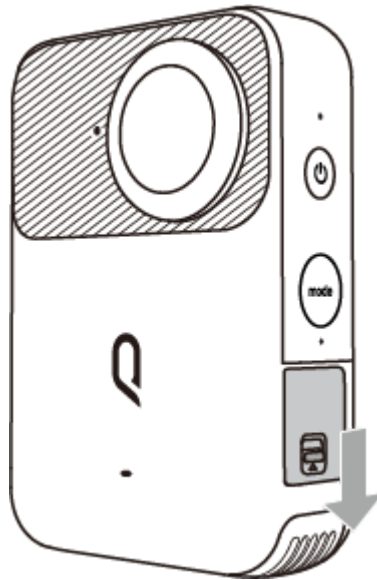


Charging

1. Connect the USB-C port to a PD-compatible charger (not included) using the provided charging cable. When the camera is off and charging, the status indicator will be solid red and will turn off once fully charged. Full charging takes approximately **75 minutes**.



1. After charging is complete, disconnect the charging cable and close the USB-C cover. Before using the camera, ensure that the USB-C cover is closed and locked.



*In a controlled lab environment, using a standard PD charger while the camera is off, the battery charges fully in approximately 75 minutes, reaches 50% in about 30 minutes, and 80% in about 45 minutes. This information is for reference only.

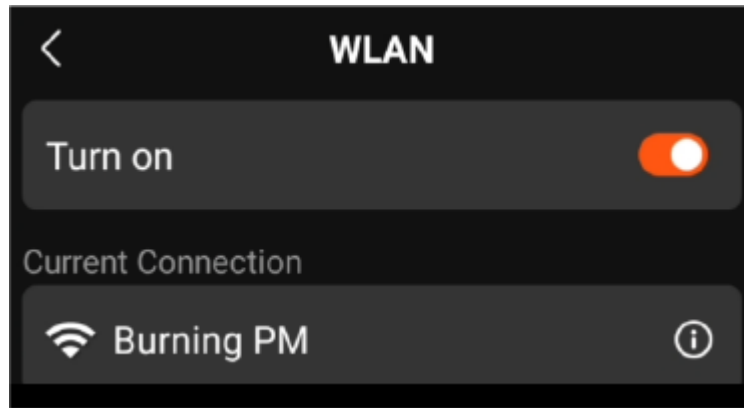
*Do not use QooCam 3 Ultra when the battery cover or USB-C cover is removed. A missing battery cover may cause the battery to slide out during use. The camera is not waterproof when the battery cover or USB-C cover is loose or open.

Update Camera's Firmware

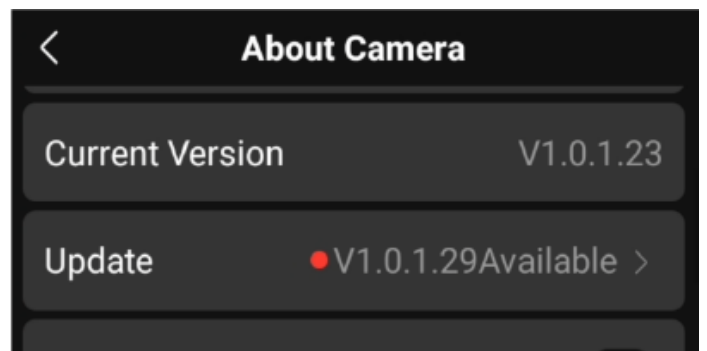
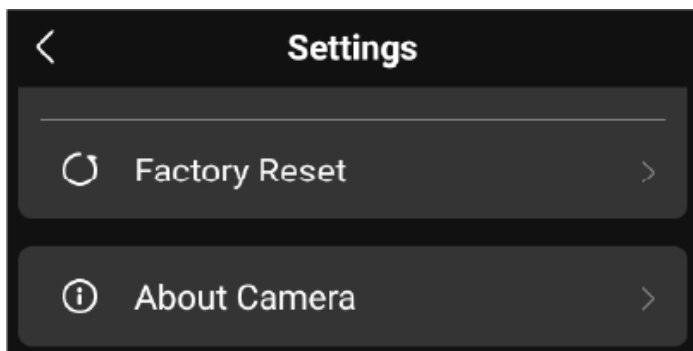
To get the latest features and best performance from your QooCam 3 Ultra, please make sure the camera is using the latest version of firmware.

Download updates via QooCam 3 Ultra over the Internet.

1. Connect QooCam 3 Ultra to a secure and available WLAN network.



2. Navigate to Camera Settings -> About Camera ->Update.

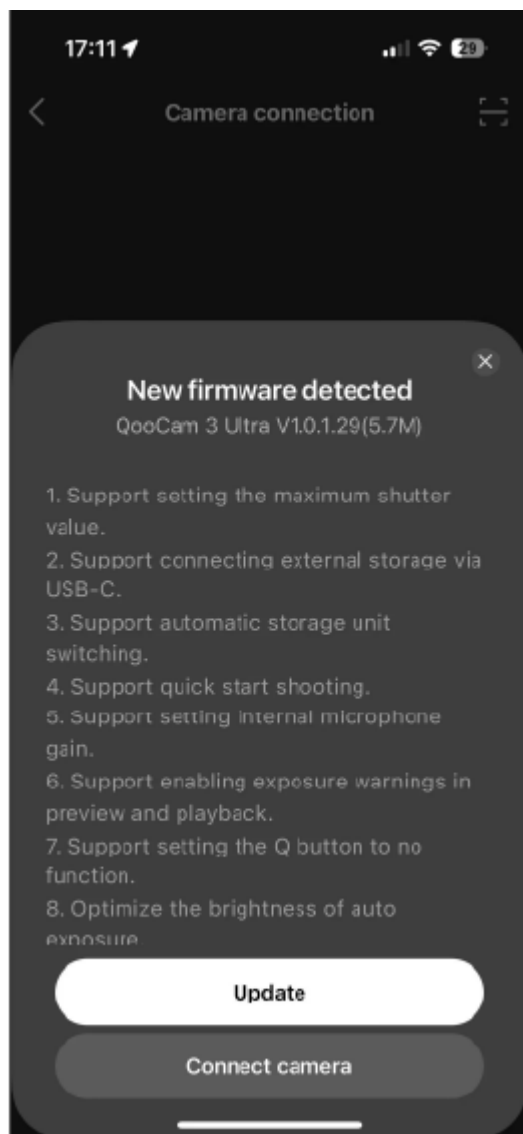
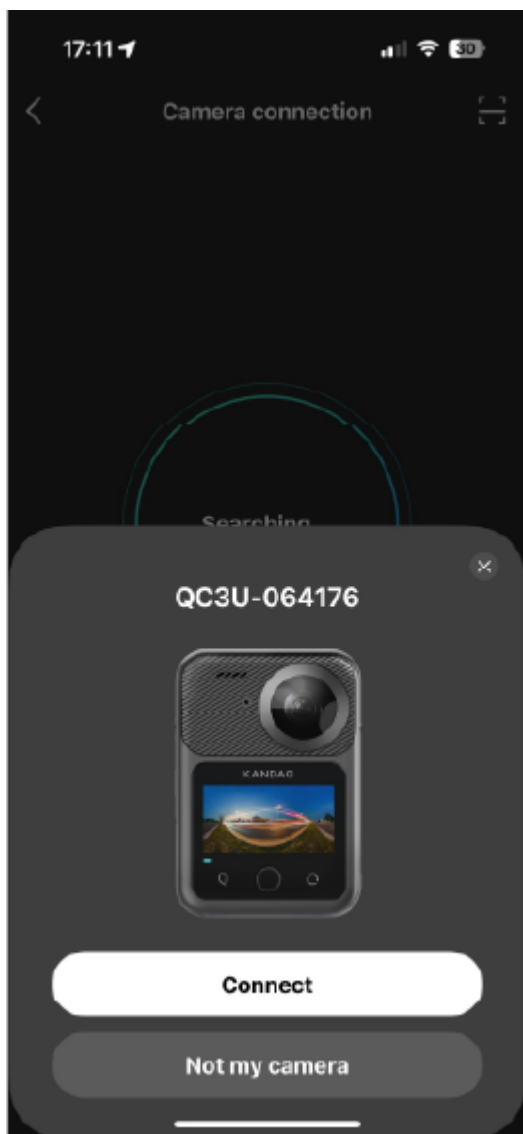


1. Follow the prompts to complete the update.



Update via QooCam 3 App

1. Download QooCam 3 App from the smartphone app store.
2. Follow the instructions displayed in QooCam 3 App to connect the camera to the mobile device. When new firmware is available, QooCam 3 App will guide you through the installation process.



Note:

- Ensure QooCam 3 Ultra has more than 30% battery before upgrading. We recommend using a fully charged battery.
- If the upgrade is unsuccessful, please contact Kandao Technology's customer service at service@kandaovr.com

Operations

Buttons

Power Button

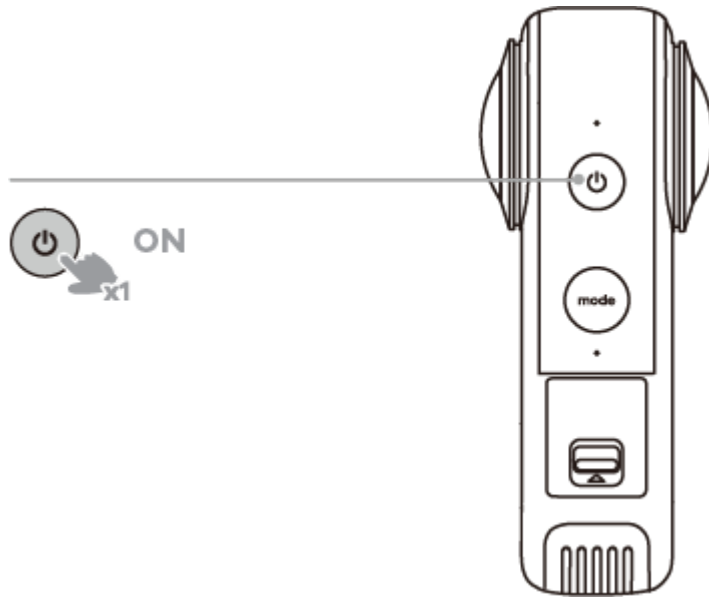
Power On

Press the power button briefly to turn on the camera.

The camera has two startup modes: Quick Start and Slow Start.

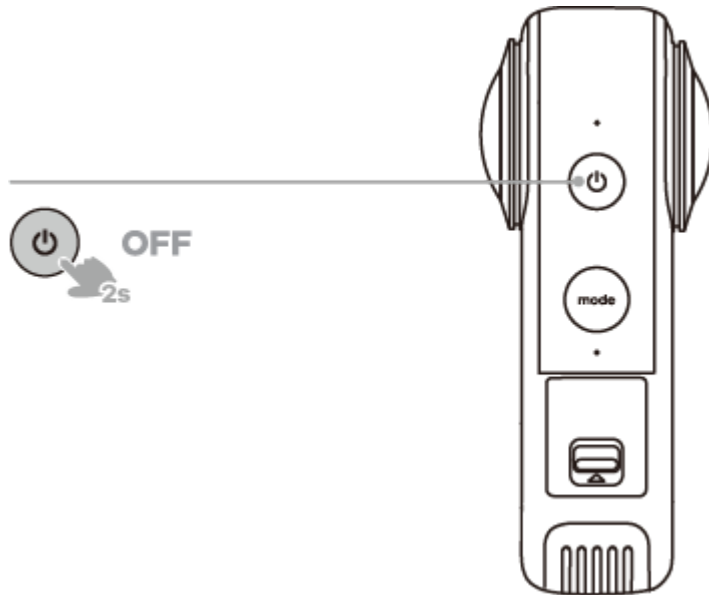
Slow Start takes approximately 20 seconds, while Quick Start takes only about 1 second. If the battery is replaced or the camera has been off for more than 8 hours, a Slow Start is required

before Quick Start can be used.



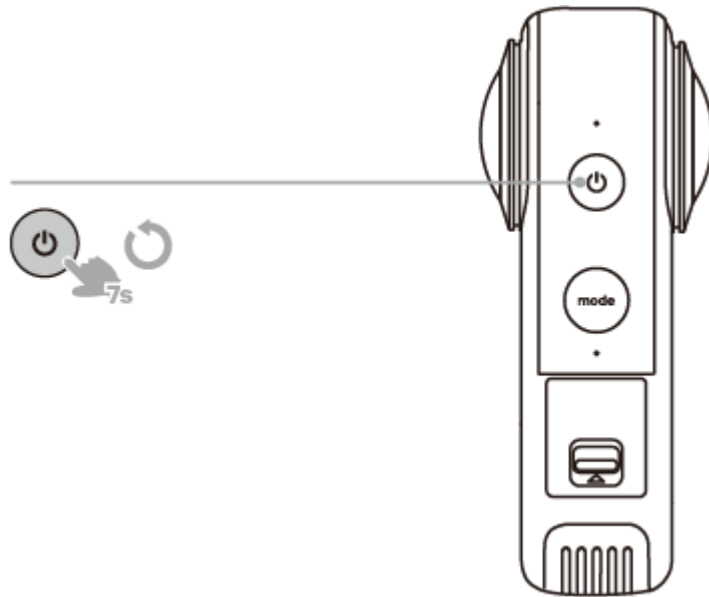
Power Off

While the camera is on, press and hold the power button for 2 seconds to turn it off.



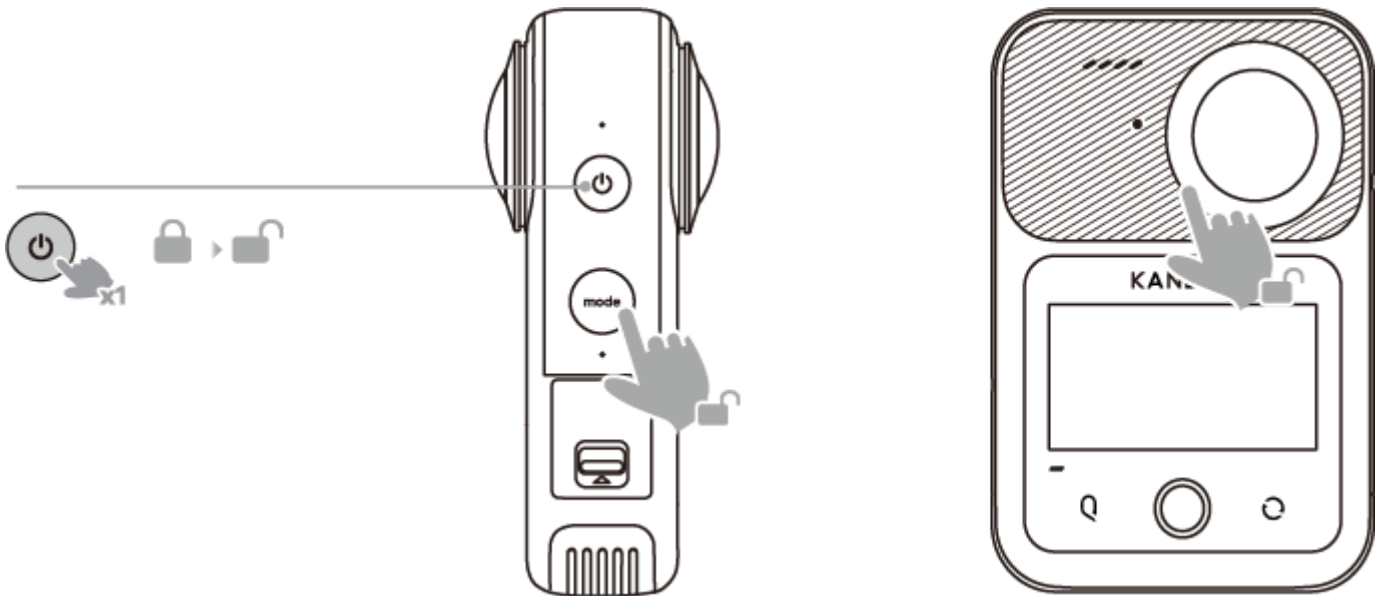
Force Restart

Hold the power button for more than 7 seconds to force a restart, which takes approximately 30 seconds.



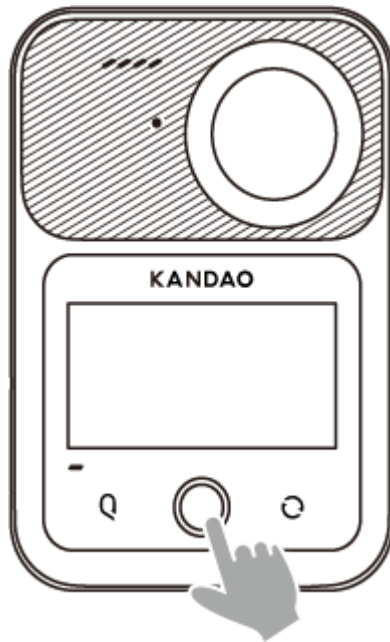
Enter/Exit Lock Screen

Regardless of whether the camera is recording, press the power button briefly to enter or exit the lock screen. During the lock screen, the camera can be awakened by pressing any physical button. Entering or exiting the lock screen does not start or stop the recording process.



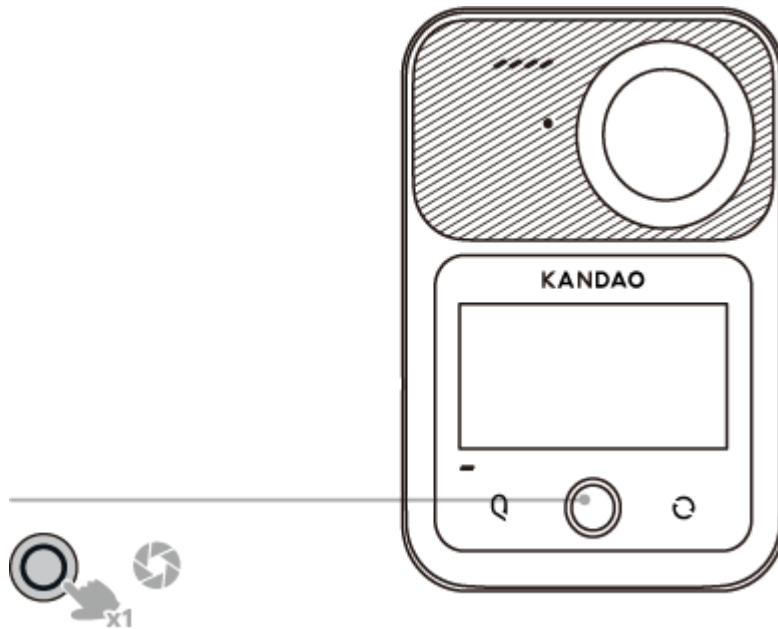
Shutter Button

The shutter button has two functions depending on the current state:



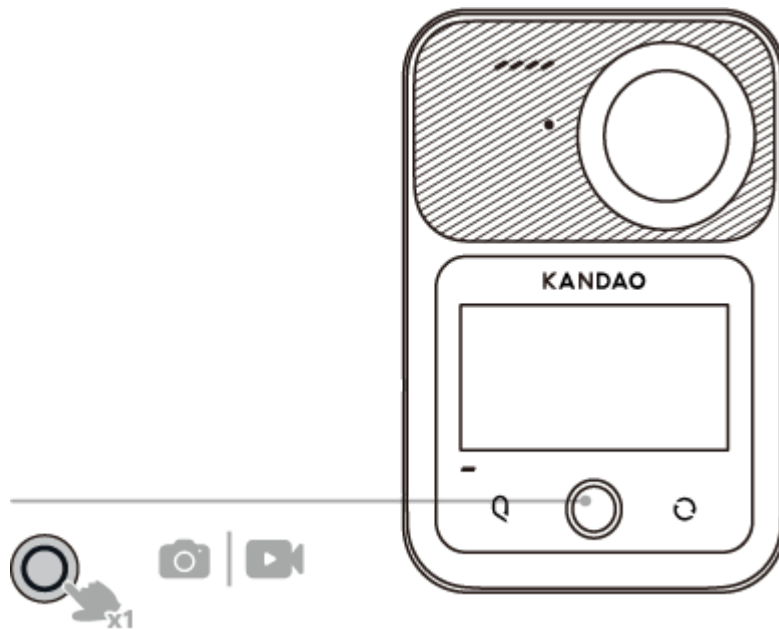
Return to Preview Page:

Regardless of whether you are on the settings, playback, or any other page, pressing the shutter button will immediately return you to the preview page. Press it again to start shooting.



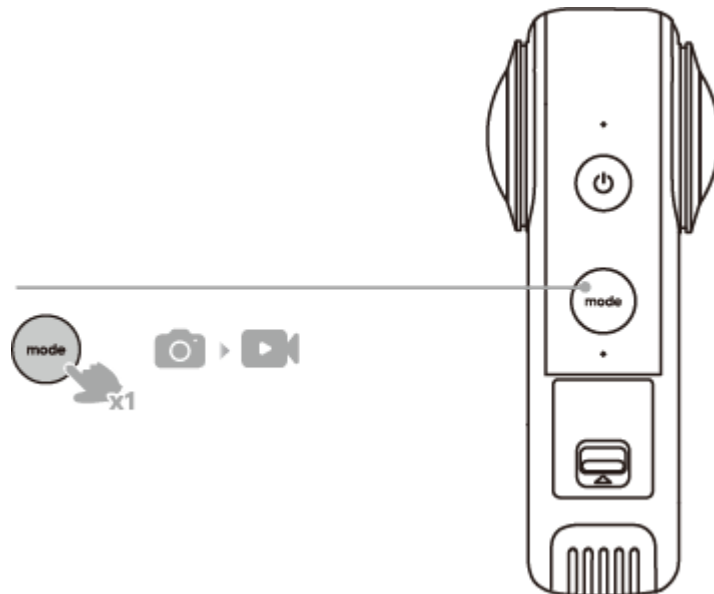
Start and Stop:

In preview mode, a short press of the shutter button will start or stop photo capture, video recording, or interval shooting.



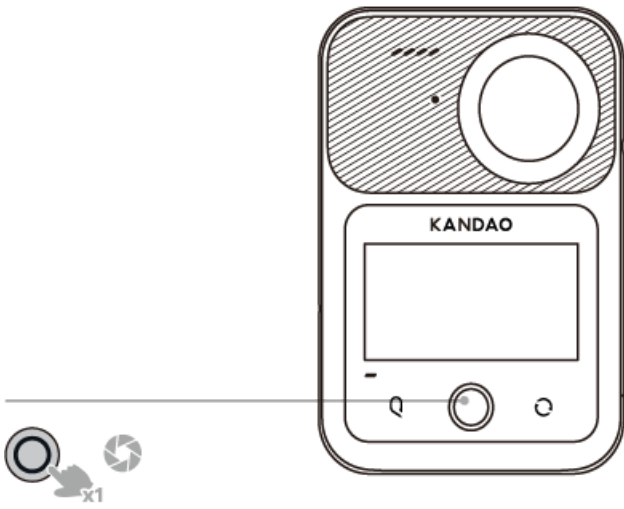
Mode Button

Press the mode button once to bring up or hide the mode switching page.



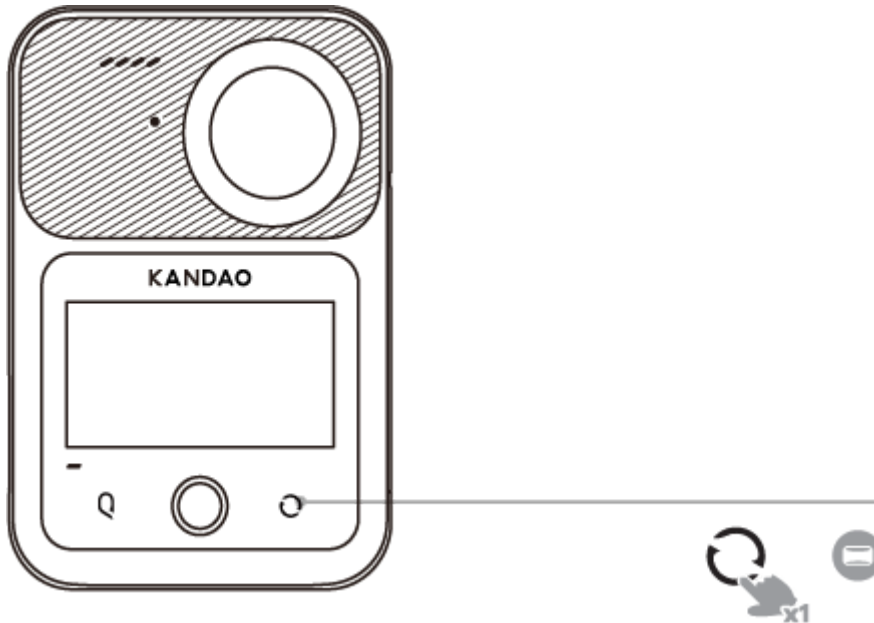
Q Function Button

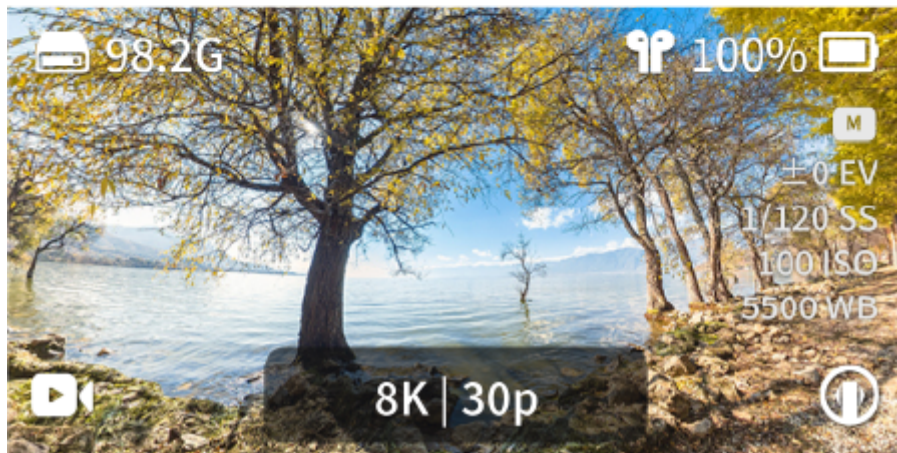
Q Function button is a virtual touch button that allows you to configure custom functions. For example, you can use the Q Function to enter playback or switch modes. You can view all available shortcut options in the system settings.



View Switch Button

In VR view, you can drag with one finger to see different directions of the image. You can also pinch in or out with two fingers to adjust the field of view, allowing you to preview different composition effects.

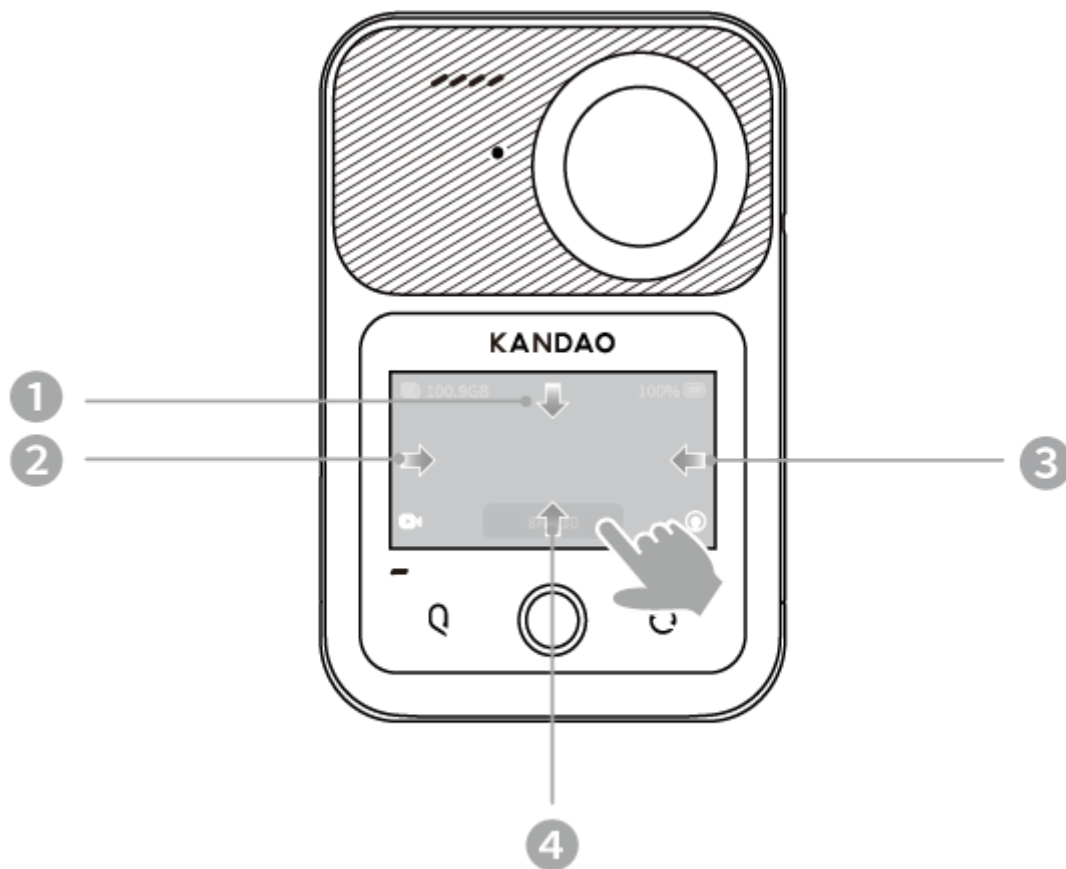




Basic Operations

Touch Screen Operations

Power on the camera, then you can try various functions by tapping or swiping the touch screen.

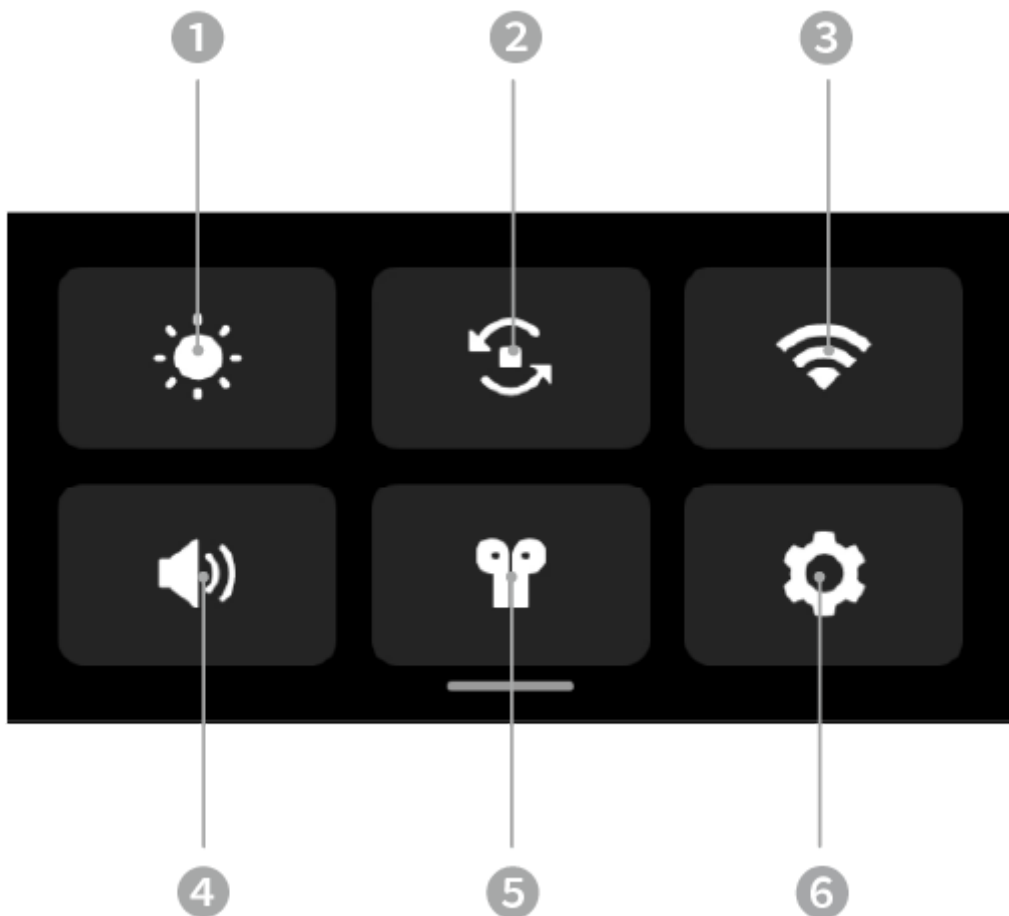


1. **Swipe Down from the Top Edge**
2. Control Center
3. **Swipe right from the left edge to access**
4. Album Playback
5. **Swipe up from the bottom edge / Tap the bottom parameter area to**
6. access Shooting Specifications
7. **Swipe left from the right edge to**
8. access Exposure Settings

Swipe Down from the Top Edge · Control Center

Control Center

Swipe down from the top of the screen to access the Control Center.



1. Brightness Adjustment:

2. Tap to open the brightness adjustment slider, then slide to adjust the screen brightness.

3. Screen Orientation Lock:

4. Tap to lock or unlock the screen orientation.

5. WLAN Toggle:

6. Tap to turn WLAN on or off. Long press to access the WLAN connection page.

7. Speaker Volume:

8. Tap to open the alert volume adjustment slider, then slide to adjust the alert volume.

9. Bluetooth Microphone Connection:

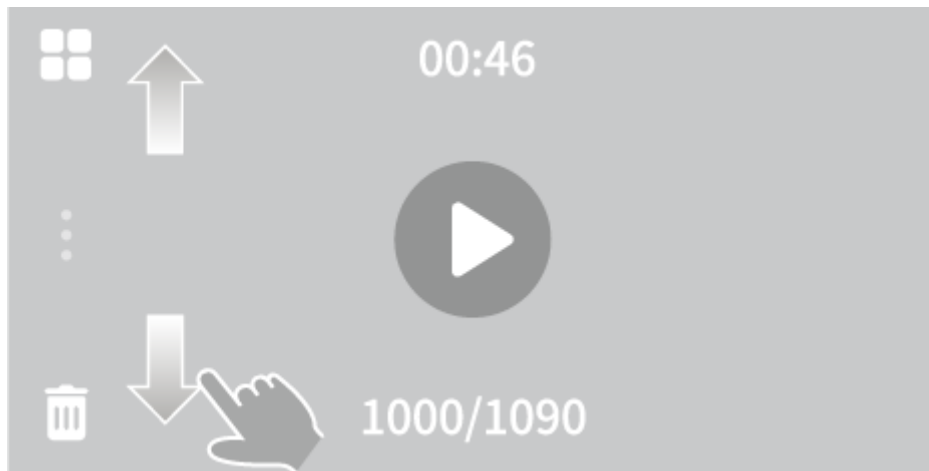
10. Tap to access the Bluetooth audio connection list for pairing and connecting audio devices.




11. Settings Menu:

12. Tap to enter the camera system settings.

Swipe right from the left edge to access Album Playback

Enter the album to view captured media.



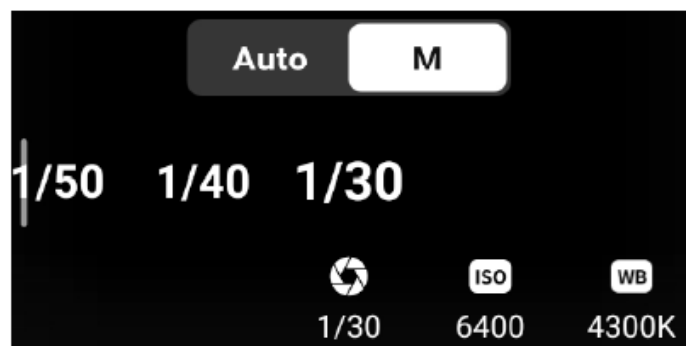
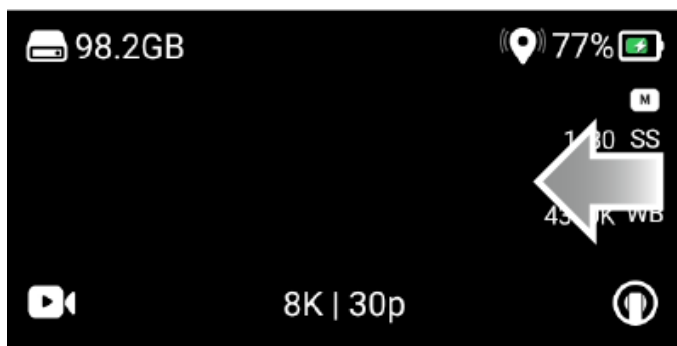
-  Swipe up or down to view the previous or next set of media.
-  Tap this icon to view detailed information of the current media.
-  Tap this icon to switch to the grid view, where you can filter by specific media types.

Tap this icon to enter the group view for interval shooting, AEB, or DNG8, and view each image in the group.

In the playback screen, you can preview the stitched effect. During the first video playback, it will take some time to preprocess the stabilization preview. Generally, the longer the video, the longer the preprocessing time. Each video requires preprocessing only once; subsequent playbacks do not need preprocessing.

Swipe left from the right edge to access Exposure Settings

Enter settings for exposure, color temperature, image format, and other related parameters.



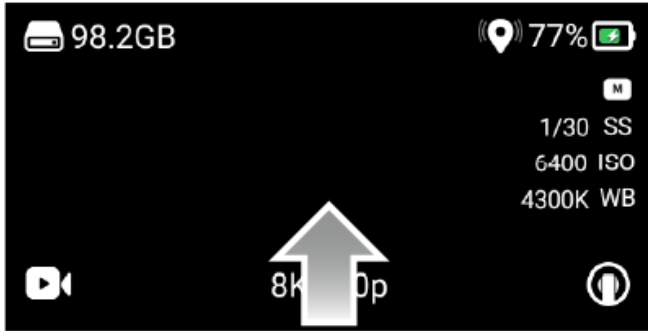
In Auto mode, you can adjust the EV value for automatic exposure compensation and set white balance.

In Manual mode, you can manually set the shutter speed and ISO value. You can also set the shutter to automatic and manually adjust the ISO, or set the ISO to automatic and manually adjust the shutter speed. In Manual mode, you can choose one of the following three methods for setting: manually adjust both shutter speed and ISO value; set the shutter to automatic and manually adjust the ISO value; or set the ISO to automatic and manually adjust the shutter

speed. The available range of settings may vary depending on the shooting mode. Please adjust according to the actual settings available on your camera.

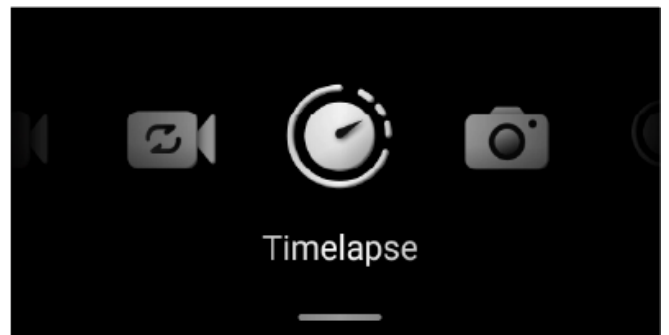
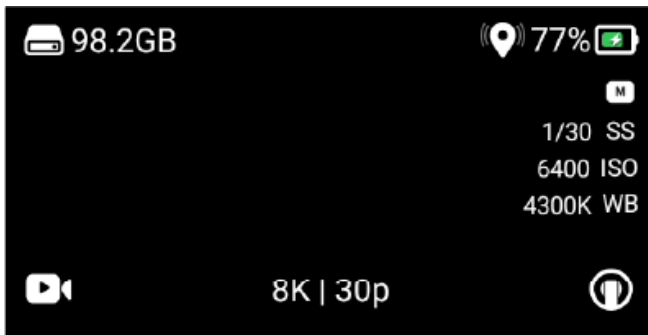
Swipe up from the bottom edge / Tap the bottom parameter area to access Shooting Specifications

Enter settings for resolution and frame rate. Here you can select the specifications for the current mode. Refer to the table at the last:



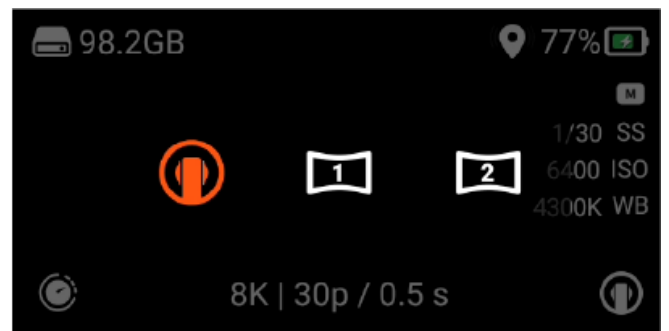
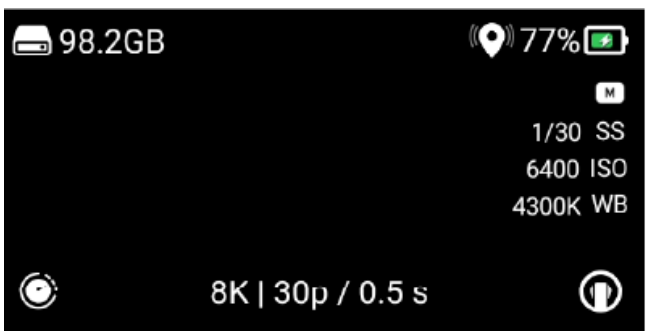
Tap the shooting mode icon on the bottom left.

Enter Shooting Mode Selection.



Tap the icon on the bottom right to switch between single-lens and dual-lens shooting modes or to set a shooting timer.

In video and loop recording modes, you can tap this icon to switch between 360° dual-lens mode and 180° single-lens mode for shooting.

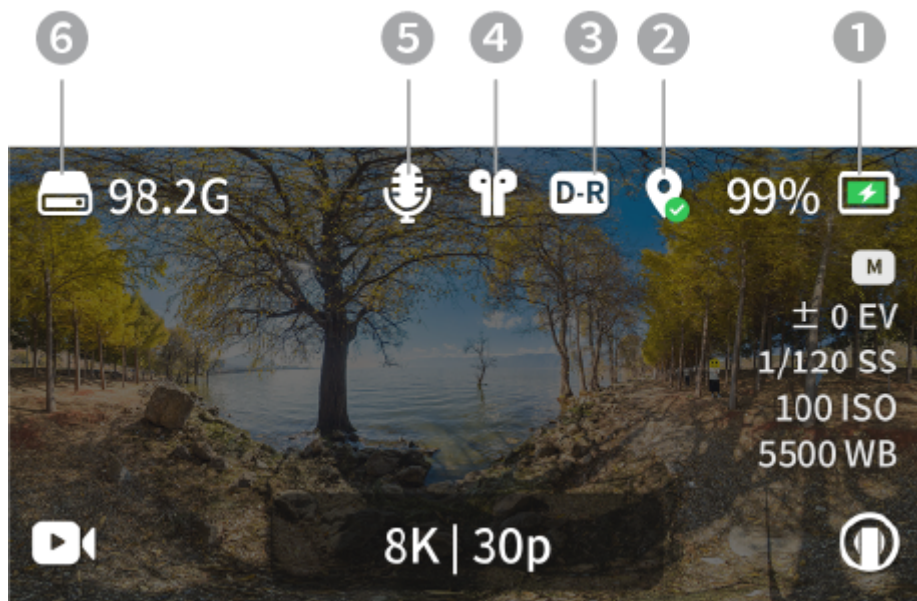


In Photo, Interval, AEB, and DNG8 modes, you can use the icon in this position to set the shooting timer.



Camera Home Screen Basic Icons

After the camera is turned on, the touchscreen displays the camera's status and a real-time preview, making it easy for you to capture the perfect shot.



1. Battery Status and Power Level

2. Current Location Information Status:
 - a. indicates that the camera has acquired the current location information;
 - b. indicates that the camera is currently acquiring location information; typically, location information is obtained outdoors.
3. When you see this icon in the preview interface, it means you have enabled Dynamic Range Boost.
4. When you see this icon in the preview interface, it means the camera is currently using a wireless Bluetooth microphone.
5. When you see this icon in the preview interface, it means the camera is currently using a wired external microphone.



6. Current Selected Storage Unit and Remaining Available Capacity.

- a. Indicates the current storage unit is built-in storage
- b. Indicates the current storage unit is an microSD card
- c. Indicates the current storage unit is external storage



7. Current Shooting Mode

8. Shooting Parameters

9. Timer

10. Current Camera Exposure Parameters

- a. “A” indicates the current auto exposure mode
- b. “M” indicates the current manual exposure mode.
- c. “SS” Indicates the current shutter speed, “ISO” Indicates the current ISO value, “WB” Indicates the current white balance value.

Using Shooting Features

Dynamic Range Boost

Before you start shooting, we must introduce you to a standout feature of QooCam 3 Ultra: **Dynamic Range Boost.**

In bright scenes, enabling Dynamic Range Boost allows for maximum retention of highlights in the scene. Using Dynamic Range Boost mode, you can capture 14-bit DNG files with a single click.

Dynamic Range Boost is supported in the following shooting modes:

Mode	Resolution	Shutter Range	ISO Range
Video	4K/5.7K/8K @24/25/30p	1/800-Framerate limit shutter speed	6-100
Loop Recording	4K/5.7K/8K @24/25/30p		
Timelapse	4K/5.7K/8K @30p		
AEB	24MP	1/800-30s	
Photo	24MP	1/800-30s	
Interval	24MP	1/800-30s	
DNG8	24MP	1/800-30s	

Shooting Mode



Tap this icon, then swipe the screen to select a shooting mode.

Shooting Mode	Description
Video	Suitable for recording ultra-high-definition panoramic videos at up to 10-bit 8K resolution in most scenes. Supports switching to 180° single-lens mode.
Loop Recording	Continuously records and saves the last fixed duration of panoramic video. New recordings constantly overwrite the oldest recorded content. Supports switching to 180° single-lens mode.
Time-lapse	Converts long-duration footage into panoramic time-lapse videos based on the set interval time. Supports switching to 180° single-lens mode.
Photo	Captures single panoramic photos, supporting 96MP and 24MP, with the option to set a shooting timer.
Interval Shooting	Continuously captures photos at set intervals, ideal for post-production to manually create high-quality time-lapse videos, with the option to set a shooting timer.
Auto Exposure Bracketing	Based on the current exposure parameters, captures multiple panoramic photos with different exposures in a single shot according to the set exposure level and quantity, with the option to set a shooting timer.

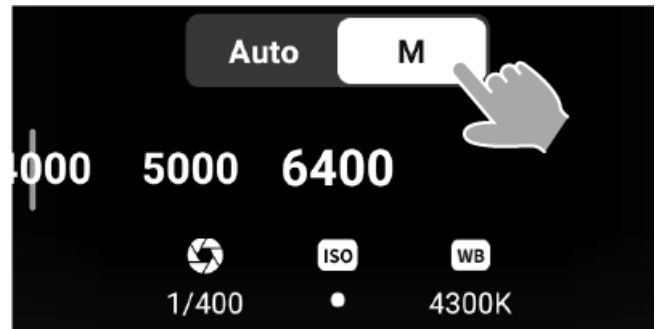
DNG8

Continuously captures 8 photos in DNG format with the same exposure parameters in a single shot, which can be merged into high-quality images using QooCam Studio, with the option to set a shooting timer.

Image Parameters

Exposure Mode

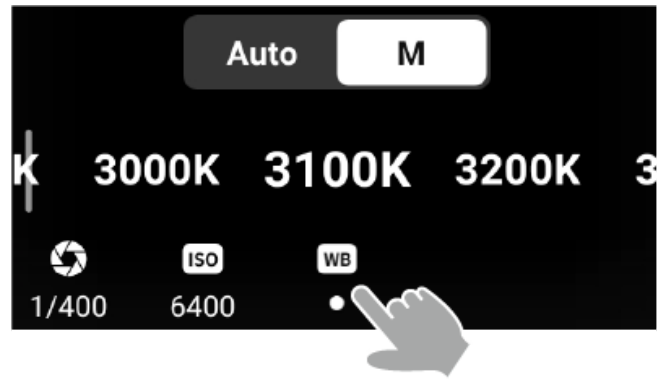
Swipe from the right edge of the screen to the left and set the camera's exposure mode.



Exposure Mode	Description
Auto Mode	The camera automatically adjusts the shutter speed, ISO sensitivity, and white balance by measuring the brightness and color temperature of the environment to achieve optimal exposure. In this mode, you can manually adjust the [Exposure Compensation Value] to control the brightness offset of the image.
	<p>Max Shutter Speed:</p> <p>When you set the shutter to automatic, by configuring the maximum shutter speed (the longest exposure time), you can limit the maximum value reached during the automatic adjustment of the shutter.</p>
Manual Mode	You can precisely control the camera's [Shutter Speed] and [ISO Sensitivity] to achieve the desired exposure effect. You can also set either [Shutter Speed] or [ISO Sensitivity] to auto and manually adjust the other, achieving a semi-automatic effect.

White Balance

Swipe from the right edge of the screen to the left to select White Balance and set the camera's white balance.



White Balance Mode	Description
Auto White Balance	Automatically optimizes white balance for the scene's lighting conditions.
Manual White Balance	Allows you to manually adjust the color temperature.

Format

Swipe up from the bottom of the screen to set the file format.

Shooting Mode	Description
Photo/Interval /DNG8/AEB	<ul style="list-style-type: none"> ● JPG: Digital image files processed and compressed by the camera, offering the best compatibility;
	<ul style="list-style-type: none"> ● DNG: Stores unprocessed raw image files from the camera and takes up the most storage space.
Video/Time-lapse/Loop Recording	All videos on QooCam 3 Ultra use H.265 encoding format and MP4 container format.

System Settings

Items	Description
Dynamic Range Boost	Enable/disable Dynamic Range Boost. When enabled, it enhances the dynamic range for videos below 30p in 10bit Rec. 2020 or 24MP photos.
Color Range	<p>A. 8bit Rec. 709 Normal</p> <p>This mode uses the Rec. 709 color space and Gamma, offering the best compatibility across major video platforms. However, due to the 8-bit color depth, the flexibility for color adjustments is limited, providing minimal room for</p>

post-production grading. It is suitable for shooting content that requires little to no post-processing.

B. 10bit HLG Normal

The HLG output mode is based on the standard "Hybrid Log-Gamma" (HLG) and includes ISP effects for enhanced visual quality. This mode delivers good results without post-production and is ideal for HDR shooting where no additional editing is needed.

C. 10bit HLG Pro

The HLG Professional mode uses the standard "Hybrid Log-Gamma" (HLG). Compared to the 10bit HLG Output mode, it is better suited for HDR shooting that requires post-production processing.

D. 10bit K-Log

The 10bit K-Log mode is designed to maximize dynamic range, making it suitable for professional post-production workflows. Similar to other Log formats (e.g., Sony's S-Log, Canon Log), K-Log produces flat colors and low contrast while preserving more details for color grading in post-production. This mode is ideal for professional users seeking greater flexibility in color and exposure adjustments.

Anti-Flicker	Set the anti-flicker frequency according to your region's power grid: 50Hz, 60Hz, Auto, or Off. Effective only when the shutter is set to Auto.
Video Segments	Set the duration of video segments to automatically segment long recordings. This will not affect recording continuity or loop recording functionality.
Video Bitrate	Set the video bitrate to "Standard" (~100Mbps) or "High" (~150Mbps).
Microphone Gain	<p>Set the gain for the camera's built-in microphone. For general scenarios, it is recommended to set it to "High," such as when recording speech. In noisy environments, such as concerts, "Standard" is recommended. If unsure, keep the default "Standard" setting.</p> <p>Standard: 124dB SPL reaches 0dBFS</p> <p>High: 104dB SPL reaches 0dBFS</p> <p>This setting does not affect external microphones.</p>
Lens Protector	Enable this option when using lens protectors to avoid affecting stitching quality. Disable when not using lens protectors.
Location Info	Enable/disable GPS data storage. When enabled, GPS data is embedded in photos and videos. GPS data may not be recorded in enclosed, indoor, or weak signal areas.
Storage	View, switch, and format the camera's storage units. Formatting erases all media files on the selected unit.

Quick Capture	With Quick Start enabled, press the shutter button while the camera is locked to wake it and start shooting in the current mode.
USB	Set USB connection options: A. Charging only, B. File transfer (default).
Q Function	Assign commonly used functions to the Q button. Options include: quick menu, playback, mode switch menu, exposure settings, and resolution settings.
Mode Function	Similar to the Q function button, you can customize it with your frequently used functions.
Indicator	Enable/disable the camera status indicator lights. See table for indicator meanings.
Fan Settings	<p>There is a built-in fan, and by navigating to Camera Settings - Fan Settings, you can choose from the following three modes:</p> <p>Silent Recording: The fan is completely turned off during recording, ensuring no fan noise. Once the recording stops, it reverts to "Cooling Priority."</p> <p>Silent Priority: During recording, the fan operates at a lower speed when the temperature rises, producing minimal noise. After recording stops, it reverts to "Cooling Priority."</p> <p>Cooling Priority: In all situations, cooling efficiency is prioritized, with the fan running at a higher speed, resulting in louder noise.</p> <p>If your fan malfunctions, please contact after-sales service for repair to avoid affecting your normal usage.</p>
Gyroscope Calibration	Calibrate the gyroscope to maintain optimal stabilization.
Network Connection	Camera Hotspot: Enable/ disable, view hotspot info, reset password (8-16 characters).
	WLAN: Connect to wireless networks.
	Hotspot Frequency : Switch between 2.4G and 5G (default).
Auto Lock Screen	Set the time for the camera to lock and turn off the screen when idle. Recording continues during auto lock. Wake the camera with any physical button.
Auto Power off	Set the time for the camera to power off automatically when idle.
USB Powered Startup	When enabled, the camera powers on automatically when USB power is connected. If the camera is not used for a long time or after battery replacement, it will enter a charging-only state.
Auto Stop Rec Temp	

	Default is High. Monitor the camera temperature in hot environments or during prolonged use. Switch to Standard to maintain lower operating temperatures.
Language	Set the camera's interface language.
Date & Time	Set local time. Connect to the internet to update the current time, or sync with the QooCam 3 App. Sync time when first using QooCam 3 Ultra.
Factory Reset	Reset all camera settings and clear all connections.
About Camera	Display device information, serial number, and firmware version.
	Connect to the internet to update firmware from this page.

Status Indicator

QooCam 3 Ultra is equipped with two LED status indicators. They display the same information. You can toggle the indicator lights on or off via the camera's control center.

Camera Status	Indicator Light Status
Ready/Idle	Green light steady
Photo Capture	Blue light steady
Saving	Blue light flashes slowly
Recording Video	Blue light flashes slowly
Updating Firmware	Red and blue lights flash alternately slowly
Charging	Red light steady
Low Battery	Red light flashes slowly
Camera Error	Red light flashes quickly


Connect to QooCam 3 App

Connecting the Camera

Using QooCam App, you can control QooCam 3 Ultra for shooting, recording, file transfer, and media processing.

Connection Steps:

1. Power on QooCam 3 Ultra camera.
2. Enable Wi-Fi and Bluetooth on your mobile device.

- 
3. Open QooCam 3 App, tap this icon, and follow the on-screen instructions to connect the camera.

Camera Hotspot (AP) Mode:

When the camera's WLAN (Station) mode is not enabled and it is not connected to the same local network as your phone, QooCam 3 App will default to connecting to the camera via the camera's created hotspot.

Camera WLAN (Station) Mode:

The camera and phone connect to the same WLAN network, establishing communication between QooCam 3 App and the camera. This mode allows you to extend the connection range by using other WLAN networks or Ethernet. This mode also supports connecting the camera to the personal hotspot created by your phone, forming a local network for QooCam 3 App and camera connection.

Note:

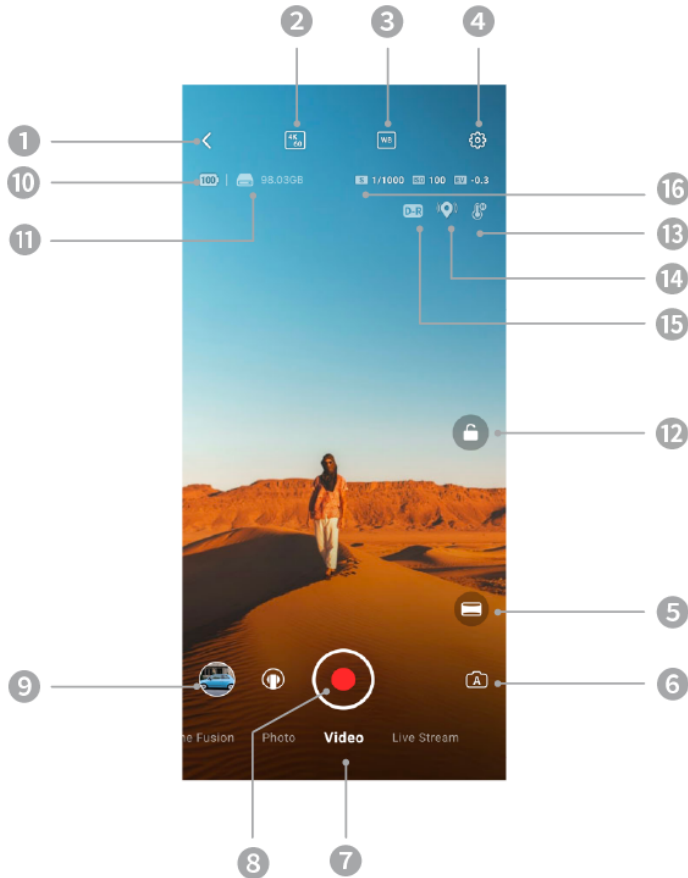
When the Camera's Hotspot (AP) Mode Fails to Connect to QooCam 3 App, Please Follow These Steps:

1. Ensure that WLAN and Bluetooth functions are enabled on your mobile device.
2. Ensure that QooCam 3 App is updated to the latest version.
3. Ensure that QooCam 3 Ultra firmware is updated to the latest version.
4. For Android devices, make sure QooCam 3 App has the following permissions enabled:
 - a. **Bluetooth Permission:** Required to obtain the device information of QooCam 3 Ultra and establish a wireless connection.
 - b. **WLAN Permission:** Required to establish a WLAN connection between the Android device and QooCam 3 Ultra.
 - c. **Location Permission:** Required to ensure the Android device can detect nearby QooCam 3 Ultra cameras.
5. For iOS devices, make sure QooCam 3 App has the following permissions enabled:
 - a. **Bluetooth Permission:** Required to obtain the device information of QooCam 3 Ultra and establish a wireless connection.
 - b. **Wi-Fi Permission:** Required to establish a Wi-Fi connection between the iOS device and QooCam 3 Ultra.
 - c. **Local Network Permission:** Required to ensure the device and QooCam 3 Ultra are communicating on the same network.
 - d. **Location Permission:** Required to ensure the iOS device can detect nearby QooCam 3 Ultra cameras.

When the **Camera's WLAN (Station)** Fails to Connect to QooCam 3 App, Please Follow These Steps:

1. Ensure that the mobile device and the camera are connected to the same local network.
2. Ensure that QooCam 3 App is updated to the latest version.
3. Ensure that QooCam 3 Ultra firmware is updated to the latest version.

Remote Control Interface



1. Homepage
2. Back to the homepage of the App.
3. Resolution and Frame Rate
4. White Balance
5. Camera Settings
6. Projection Mode
7. Exposure Mode
8. Shooting Mode
9. Shutter Button
10. Playback
11. Battery Level
12. Current storage unit

13. Current Auto Stop Recording status:
- a. Indicates that the camera's Auto Stop Recording temperature is set to "High".
 - b. Indicates that the camera's Auto Stop Recording temperature is set to "High" and the camera surface temperature is $\geq 48^{\circ}\text{C}$.

14. Current Dynamic Range Boost status:
- a. Indicates the camera has obtained location information.
 - b. Indicates the camera is acquiring location information.

15. Display of current real-time exposure parameters:
- a. Indicates Dynamic Range Boost is active.
 - b. Indicates the selected specification does not support Dynamic Range Boost.

16. Display the current real-time exposure parameters.

in-camera stitching

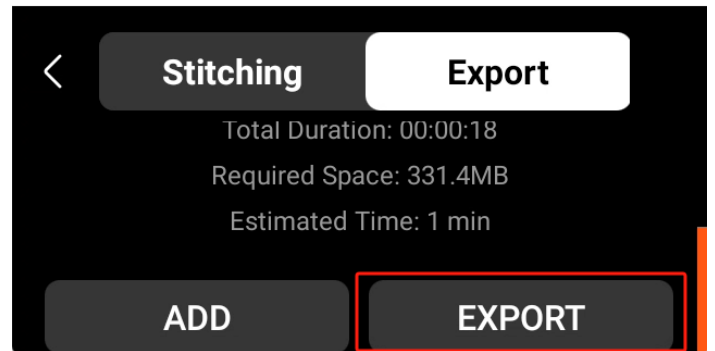
Non-real-time stitching of captured videos on the album page

QooCam 3 Ultra supports non-real-time video stitching export in-camera starting from **FW V1.1.0**, supporting 360 ° panoramic export and 180 ° single-lens export of image-stabilized flat videos.

How to use it

1. Direct stitching:

After completing the shooting, click this icon to enter the stitching parameter selection. You can also use the default parameters for stitching, and click "Export" to start stitching.

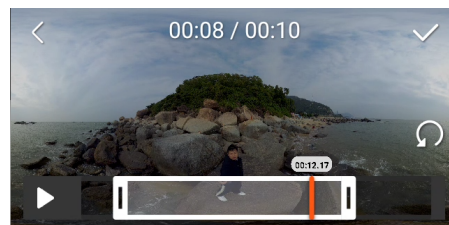


2.1 Cut first and then stitch

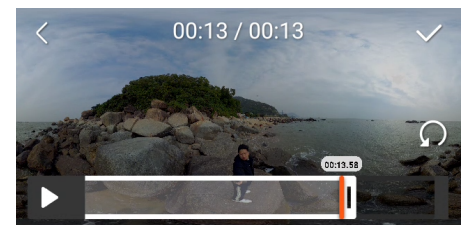
For longer videos, you can use the "cut" function to cut and stitching clips; click the cut icon --- adjust the length of the selected clip through the sliders on both sides of the slide, and click the "✓" in the upper right corner to enter the stitching export parameter selection.



Click the cut icon to cut



Slide the sliders to adjust the cutting range




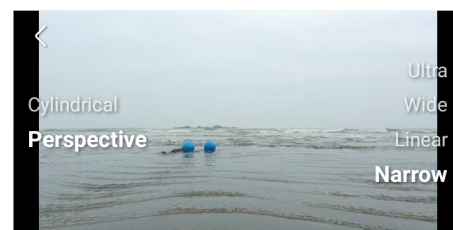
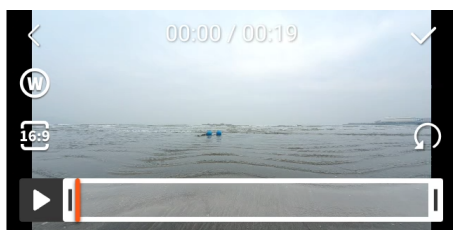
Long press the slider for finer adjustments

2.2 More settings for exporting flat video with 180 ° single lens

After clicking the cut button, you can also adjust the exported image scale, projection, and field of view (FOV).

Click on this icon to select different proportions.

 Click this icon to choose different projections and field of view (FOV).

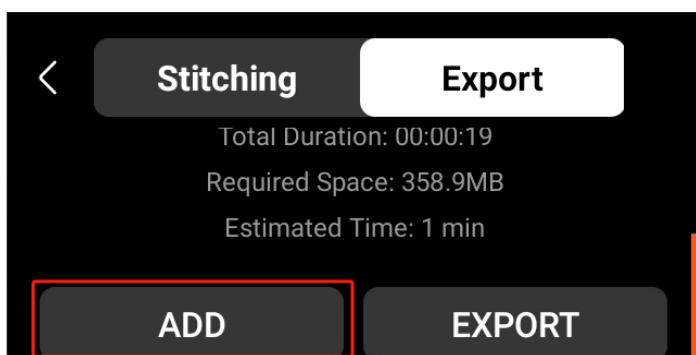


Switching ratio

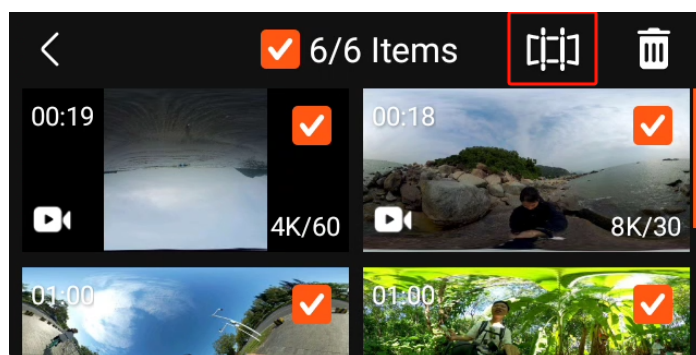
Switch projection mode and field of view (FOV)

3. Queue function

After shooting a large amount of footage, after setting up multiple footage one by one, you can add them to the queue and then start batch stitching and exporting to improve efficiency.



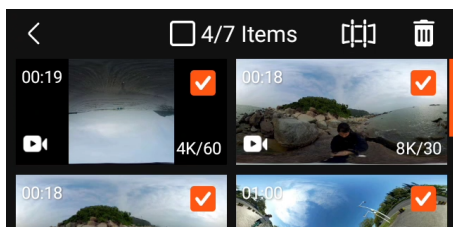
"Add" the required export fragment to the queue



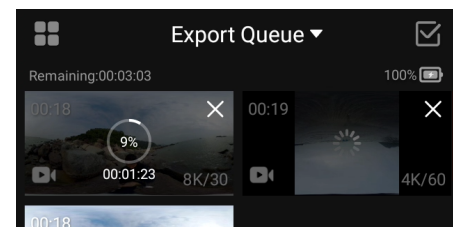
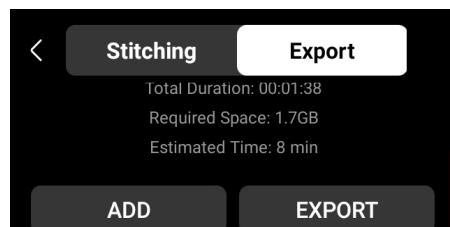
Select multiple tasks in the queue and click the export button in the upper right corner.

4. Batch processing

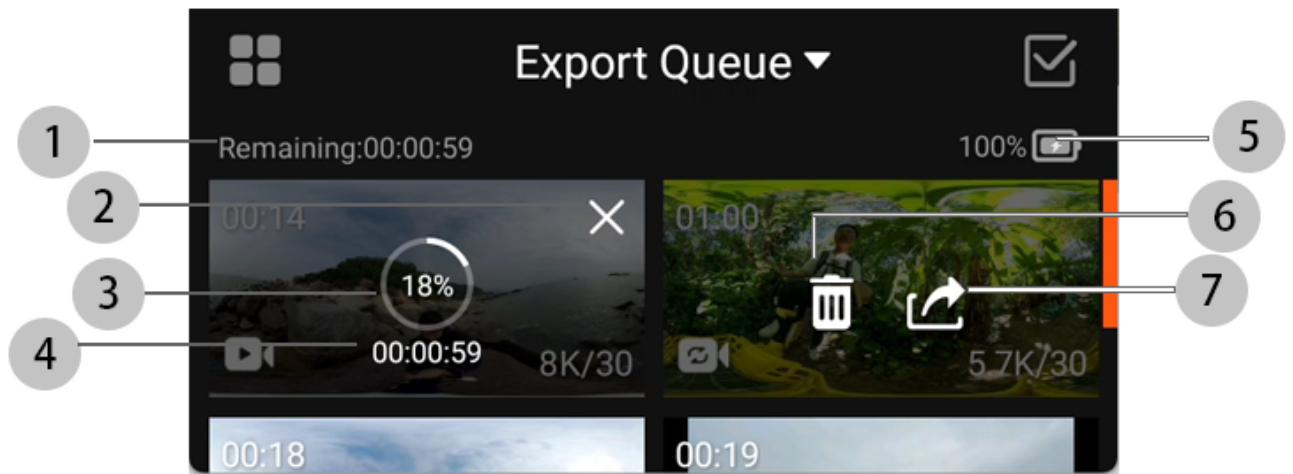
In the album list, select multiple footages, click stitching settings, and export directly after completing the basic settings.



multi-select

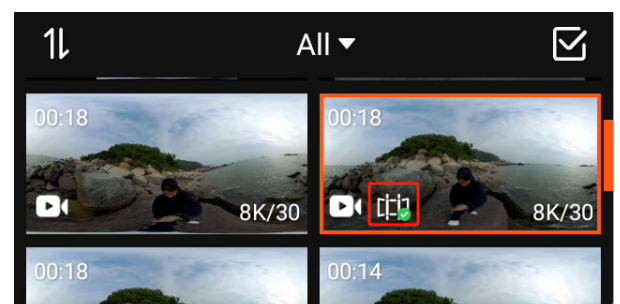


5. Status description



1. Complete the total time of tasks that have been started + queued.
2. Stop the current task.
3. Percentage of current task completed.
4. Current task completion countdown.
5. Remaining power and charging status.
6. Delete the current task from the task list without deleting the source footage.
7. Start the current task. If there is a task being exported, it will enter the queue state.

8. If this logo appears in the lower left corner of the footage, it means that the current footage has been stitchingd.



6. Parameter setting instructions

Type	Explanation
Storage location	You can select a specified storage unit, and the camera will create a KDOOutput first-level directory in the corresponding storage unit.
Audio	Spatial Audio is exported by default when using the built-in microphone. Stereo Audio is exported by default when using an external microphone.

Export format	Same format as the source file.
Export bit rate	The original video has a standard bit rate, and the exported bit rate is about 100Mbps; the original video has a high bit rate, and the exported bit rate is about 150Mbps.
Color range	Consistent with the source.
Resolution	The resolution and frame rate exported from 360 ° video are consistent with the source video. The frame rate exported from 180 ° single lens is consistent with the source, and the resolution varies according to the ratio. Please refer to the table below.

180 ° single lens export resolution list

Proportion	Cylindrical / Perspective	Resolution	UI display
16:9	Ultra, Wide, Linear, Narrow	3840*2160	4K
9:16	Ultra, Wide, Linear, Narrow	2160*3840	4K
4:3	Ultra, Wide, Linear, Narrow	3840*2880	4K
1:1	Ultra, Wide, Linear, Narrow	3840*3840	4K

File Transfer

Transfer Files to Mobile Devices

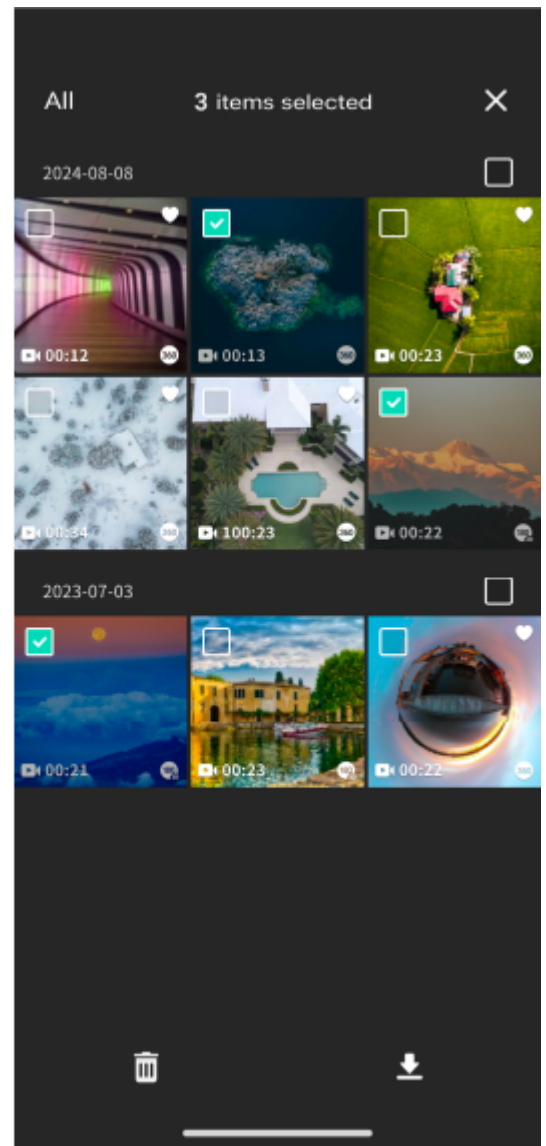
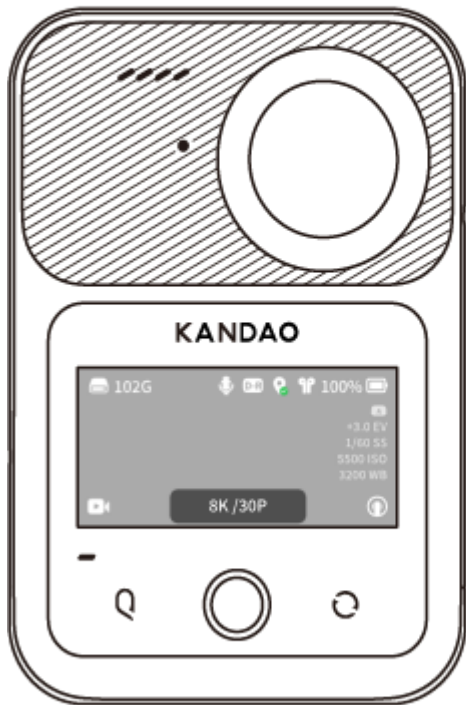
Wireless Transfer:

Wirelessly connect QooCam 3 Ultra to QooCam 3 App

In QooCam 3 App, tap the Playback or Album icon to view captured photos and videos.

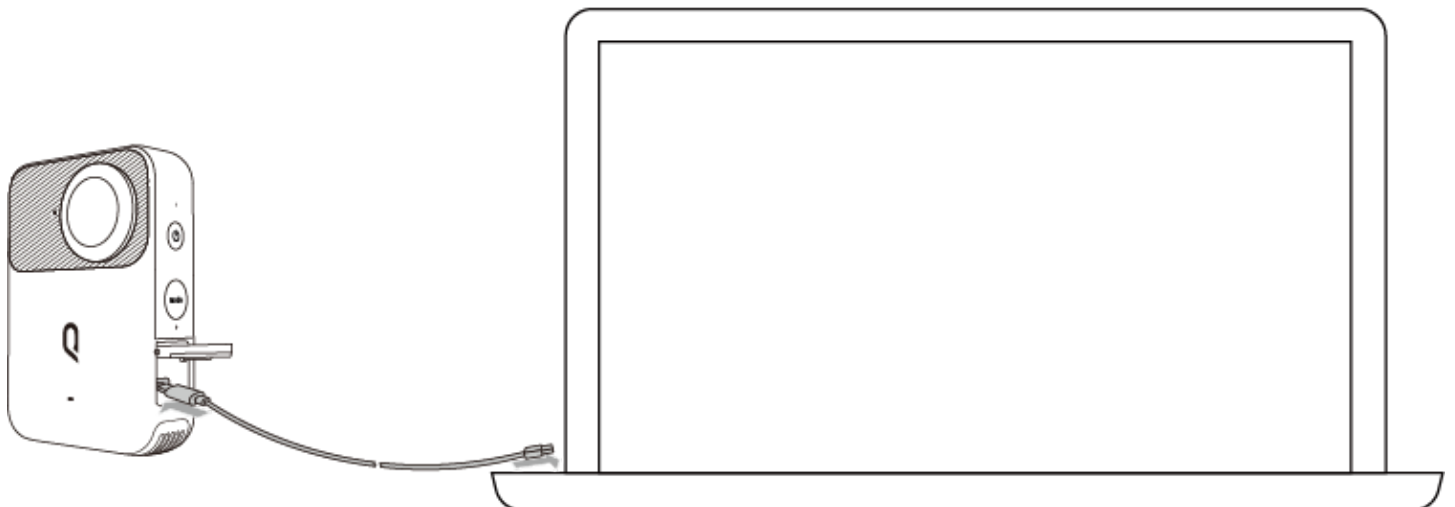


Tap this button to directly download the media from the camera to your mobile device. Once the media is downloaded, you can edit and share it on social media platforms using QooCam 3 App.



Transfer Files to Computer

Turn on QooCam 3 Ultra and connect it to your computer using a USB-C cable. You can then transfer files from the camera to your computer. Note that the camera cannot be used for shooting while connected to the computer.



Note:

1. Do not turn off the camera during the transfer process.
2. If the data transfer is interrupted, disconnect and reconnect the USB cable to the computer.

Connecting QooCam 3 Ultra to Mac OS:

Since QooCam 3 Ultra is not directly recognized by Mac OS, please install Android File Transfer on your Mac. After installation, connect QooCam 3 Ultra to your Mac computer.

Android File Transfer Download Link:

<https://v3.kandaovr.com/resource/kandao/app/2024/08/01/16/21/13/AndroidFileTransfer.dmg>

Maintenance and Care

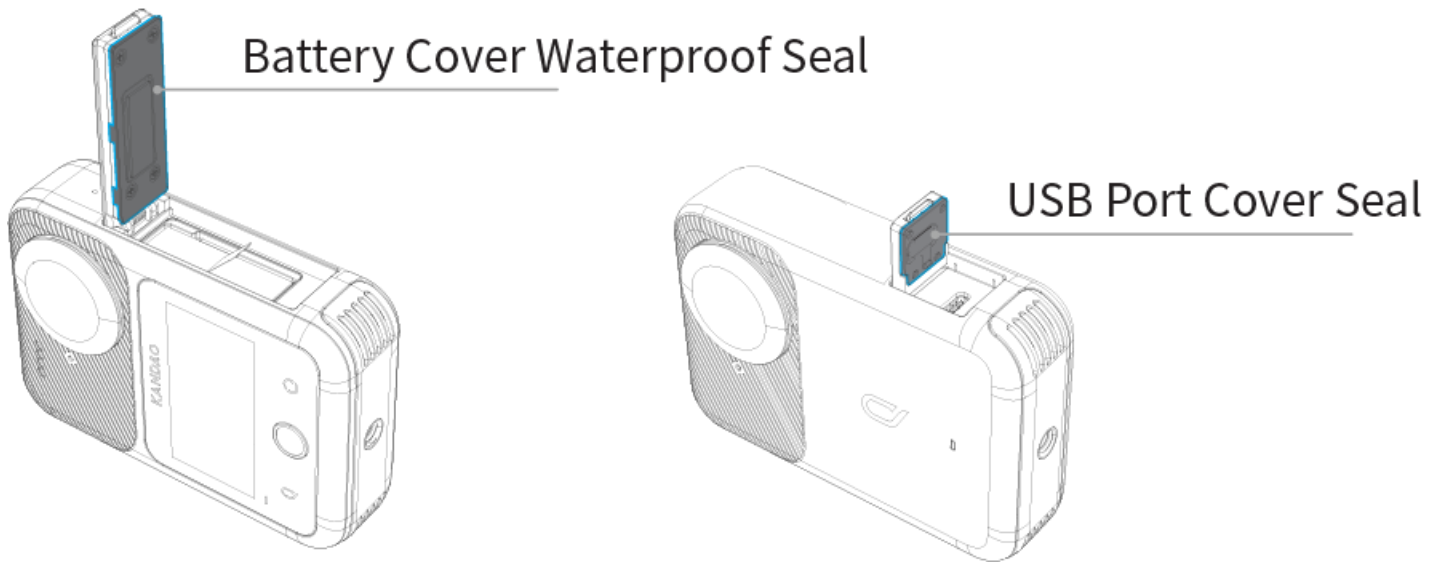
Camera Maintenance

1. Dropping or external impact may damage QooCam 3 Ultra, causing malfunction.
2. QooCam 3 Ultra lenses are made of highly durable reinforced glass but can still be scratched or cracked by foreign objects.
3. If the lens protection glass is damaged, handle it carefully to avoid injury.
4. Protect QooCam 3 Ultra from dust and sand during use. If the microphone hole or other parts are blocked by debris, rinse with fresh water while the camera is in its waterproof state.
5. Do not poke the USB-C port or microSD card slot with sharp objects.
6. Avoid placing QooCam 3 Ultra in extremely cold or hot environments. Extreme temperatures can shorten battery life or cause temporary malfunction.
7. Do not use QooCam 3 Ultra during thunderstorms.
8. Do not disassemble or repair QooCam 3 Ultra yourself.
9. When mounting QooCam 3 Ultra on a car roof or window, ensure it is securely fixed. High speeds, surface impurities, strong winds, or heavy rain can affect the mount and cause the camera to fall.
10. Keep the camera away from magnets, motors, or other devices that produce strong electromagnetic fields. Exposure to strong magnetic fields can cause malfunction or damage recorded data.

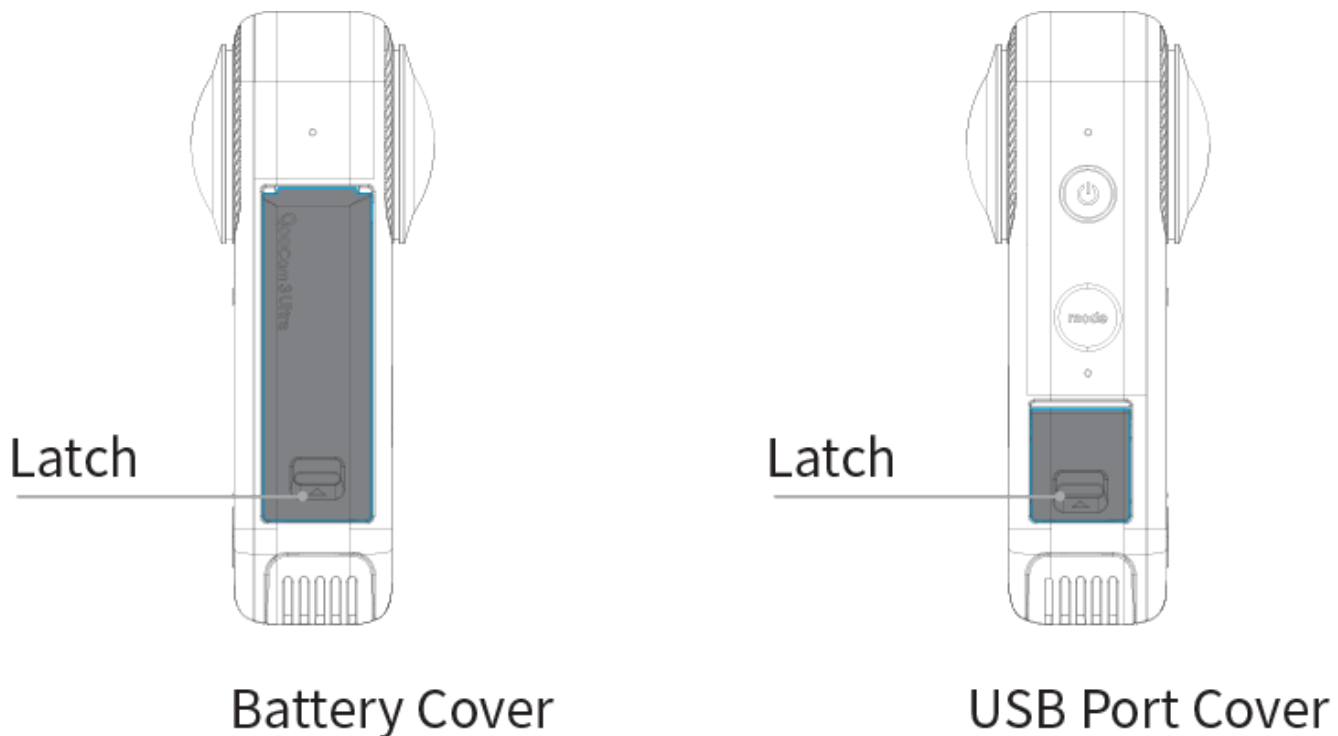
Waterproofing: What to Know

1. The waterproof depth of QooCam 3 Ultra is 10 meters, but underwater shooting without a case may affect image stitching quality.

2. Before use, please check and ensure the waterproof seals on the battery cover and USB port cover are undamaged and free from sand or other debris, as this could compromise waterproofing. If needed, clean with a dust-free cloth.



1. Before use, ensure the battery cover and USB port cover are fully locked (the latch must be completely engaged), otherwise the camera will not be waterproof.



1. To maintain optimal waterproof performance, do not operate the camera for extended periods (>1 hour) outside the recommended temperature range or in extremely humid environments, such as saunas, steam rooms, or hot springs. Note: The recommended operating temperature for the camera is -20°C to 40°C.
2. Avoid sudden changes in temperature or humidity when using the camera, as this may cause condensation on or inside the camera, affecting image quality.

3. If the camera is equipped with a lens protector, remove it before underwater use.
4. After using the camera underwater, dry it thoroughly with a soft cloth and then air dry. Ensure the camera is completely dry before removing the battery or other components. If there is water around the battery cover or USB port cover, dry and wait before using.
5. After each use in seawater, rinse the camera surface with fresh water, soak the camera in fresh water for 5-10 minutes, then dry with a soft cloth and air dry in a ventilated place.
6. Do not use QooCam 3 Ultra in hot springs or corrosive liquids. It is not recommended to use QooCam 3 Ultra in extreme water environments or unknown liquids.

Battery Information

Extending Battery Life

1. Record videos at lower frame rates and resolutions.
2. Enable auto power-off.
3. Use an external USB power source to power the camera during use.
4. Recharge the battery promptly when low; long-term (over 4 months) storage at low charge levels can affect battery lifespan.

Battery Storage

1. If QooCam 3 Ultra will not be used for over 10 days, charge or discharge the battery to 40%-60% before storing to extend battery lifespan.
2. Extreme temperatures may temporarily shorten battery life or cause the camera to malfunction. Avoid rapid changes in temperature or humidity to prevent condensation on or inside the camera.
3. Do not use external heat sources such as microwaves or hair dryers to dry the camera. Damage caused by liquid contact to the camera or battery is not covered under warranty.
4. Do not store the battery with metal objects such as coins, keys, or necklaces. Contact between the battery terminals and metal objects can cause a fire.

Tech Specifications

items	Specs
CMOS	1/1.7"
Aperture	F1.6
35mm Equivalent Focal Length	9.36mm

Exposure Compensation	±2EV
ISO Range	100-6400
Shutter Speed	Photo: 1/6400s-50s Video: 1/6400s to the limit of frames per second
White Balance	Auto, 2500K-10000K
Resolution of Photos	96MP (13888×6944)24MP (6944x3472)
360° Video Resolution@Frame Rate	8K@24/25/30fps5.7K@24/25/30/50/60fps4K@100/120fps
Single-Lens Video Resolution@Frame Rate	4K@24/25/30/50/60fps3.4K@100fps
Video Bitrate	150Mbps
Photo Modes	Standard Panoramic Photo, Interval Photo, DNG8, AEB
Video Modes	Standard Panoramic Video, Timelapse, Loop Recording
Image Format	JPG/DNG
Video Format	MP4
Color Range	8bit Rec. 70910bit Rec. 2020 (HLG)
Audio Output	AAC (Built-in microphone: 16 bit/Quadraphonic/48 KHz; External microphone: 16bit/Stereo/48KHz)
Charging Port	USB-C
Battery Capacity	2280mAh
Dimensions	71.5mm x 103.2mm x 26.6 mm
Weight	296g(without battery)336g(with battery)
Water and Dust Resistant	IP68 Waterproofup to 10 meter depth
Touch Screen	2.19"
Gyroscope	6-axis gyroscope
Microphone	4
Speaker	1

Wi-Fi	2.4 GHz/5 GHz802.11a/b/g/n/ac/ax(WiFi6)
Bluetooth	BLE 5.2
GPS Module	Built-in GPS Module
Storage	128GB internal storage, expandable via microSD card
MicroSD Cards	Support microSD cards with a speed class of UHS-I V30 or higher, up to 1TBFile system: exFAT
Ambient Temperature for Working	-20°C ~ 40°C
Ambient Temperature for Charging	5°C-40°C
Charging Voltage and Current	9V/2A; 5V/3A

Appendix

1-1 Room Temperature 25°C Battery Life

Shooting Mode	Battery Life
8K@24/25/30p、 5.7K@50/60p、 4K@100/120p、 180° Single-Lens 3.4K@100p	Approximately 50 minutes
5.7K@24/25/30p、 180° Single-Lens 4K@50/60p	Approximately 60 minutes
180° Single-Lens 4K@24/25/30p	Approximately 100 minutes

1-2 Internal Storage Capacity for Photos/Videos

Shooting Mode	Format	Duration/Quantity
Photo@96MP	JPG	Approximately 2490
Photo@96MP	DNG	Approximately 549
Photo@96MP	DNG+JPG	Approximately 450
Photo@96MP	JPG	Approximately 9200
Photo@24MP	DNG	Approximately 2191
Photo@24MP	DNG+JPG	Approximately 1770

DNG8 96MP	8DNG+1JPG	Approximately 67
DNG8 24MP	8DNG+1JPG	Approximately 266
Videos@8K@30p	Standard video bitrate 100Mbps	Approximately 137 minutes
Videos@8K@30p	High video bitrate 150Mbps	Approximately 91 minutes

1-3 Resolution/Frame Rate

Shooting Mode	Resolution Options	Frame Rate	Resolution (W)	Resolution (L)
Videos	8K	24/25/30	7680	3840
	5.7K	24/25/30/50/60	5760	2880
	4K	100/120	3840	1920
	4K (180° Single-Lens)	24/25/30/50/60	3840	3840
	3.4K (180° Single-Lens)	100	3472	3472
Photos	96MP	-	13888	6944
	24MP	-	6944	3472

This manual is subject to change without prior notice.

You can check the latest version of the 《QooCam 3 Ultra User Manual》 on the Kandao Technology official website.

If you have any questions or suggestions regarding this manual, please contact us at: service@kandaovr.com

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