OBSBOT

v1.0

User Manual

English

Reading Guide

Note

⚠ Important consideration

Recommendation

We recommend that users watch instructional videos and read the user manual first to understand the usage process.
https://obsbot.com/download

Tutorial Video

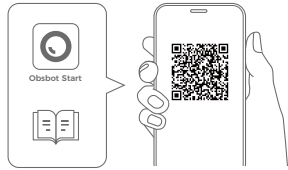Users could access and watch tutorial videos through the following link to use the product correctly.
https://www.obsbot.com/explore/obsbot-tail-air

Contents

Obsbot Start APP

https://www.obsbot.com/support/obsbot-tail-air

1. Scan the QR code or search for the 'Obsbot Start' APP in the app store to download the Obsbot Start App.
2. Power on your Tail Air.
3. Turn on Bluetooth and Wi-Fi on your phone.
4. Open the App and tap on your camera (the default name is "Tail Air_XXXXXX"), then follow the APP instructions to connect your Tail Air.

⚠ System Requirements
iOS 11.0 or later
Android 8.0 or later

OBSBOT Tail Air Overview

About Tail Air

Integrating OBSBOT's latest AI technology and professional imaging system, the OBSBOT Tail Air seamlessly provides real-time monitoring and comprehensive control of live broadcasts through the intelligent AI director grids. Its outstanding AI Auto Tracking features cover the tracking for human, animal and even objects without external help. Additionally, Gesture Control 2.0 allows remote conveyance of control commands, unlocking creative possibilities.

Parts Info
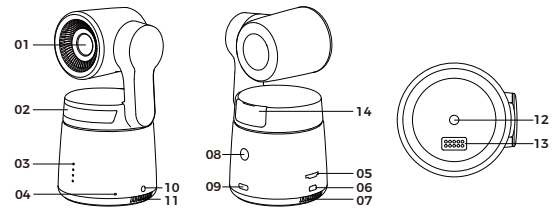
|	
01. Camera Lens	08. Power Button
02. Status Indicator	09. USB-C Port
03. Battery Indicator	10. 3.5 mm Audio Jack
04. Dual Build-in Microphone	11. Cooling Inlet
05. Micro SD Card Slot	12. UNC 1/4-20 Interface
06. Micro HDMI Port	13. Extension Pin Interface
07. Cooling Outlet	14. Wireless Module Slot

Setting Up Tail Air

Placement Instructions

OBSBOT Tail Air is equipped with a standard UNC 1/4-20 nut connector on the base for mounting the camera to a tripod or direct placement on a flat surface.

Gimbal

OBSBOT Tail Air is equipped with a 2-axis brushless motor gimbal. The controllable rotation range for the pan is ±150°, and for the tilt is -65° to 32°.

Power On/Off

Press and hold the power button until the indicator light flashes blue in a cycle to power on/off.
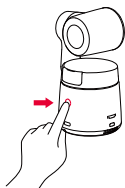
⚠ If the product is in working condition for a long time, the bottom of the product will heat up, which is normal situation.

Inserting the Micro SD Card

The Tail Air lacks built-in storage, so insert a Micro SD card into the designated slot to enable photo and video capture. To remove the card, gently push to partially eject it. Afterwards, transfer the media to a mobile device or computer.

⚠ It is recommended to use a UHS-I Speed Grade 3 rated Micro SD card (need to be purchased separately).

Gesture Control

Turn On/Off Human Tracking
To enter human tracking mode, perform the gesture shown in the figure. The current status indicator light will flash twice and then turn to a steady blue state, indicating that you have successfully entered human tracking mode.
To exit human tracking mode, perform the same gesture again. The blue status indicator light will flash twice and then turn green or purple, indicating that you have successfully exited human tracking mode.

Zoom to 2x (default) / Cancel
Perform the gesture control shown in the figure. The status indicator light will flash twice to indicate that the zoom in/out has been performed.

Start/Stop Recording
Perform the gesture control shown in the figure. The status indicator light will flash twice to indicate that the video recording has started or stopped.

Dynamic Zoom
Perform the gesture control shown in the figure until the status light starts flashing, indicating that the dynamic zoom function has been activated. Adjust the zoom by moving your hands closer together or further apart, zoom in/out will stop until no gesture is detected or the zoom status can no longer be adjusted.

⚠ Please be careful not to cover your face with your hands and keep your fingers open for gesture control.
⚠ Please go to the link below to find the tutorial video for gesture control.
 https://www.obsbot.com/explore/obsbot-tail-air

Indicator Description

Equipment Status	Indicator Statuses
Powering on and initializing	Blue lights flash circularly
Executing gesture control features	The lights flash in their current color twice together means your gesture is recognized successfully
Streaming or recording-Tracking target unselected	Breathe in green light
Streaming or recording-Tracking target selected	Breathe in blue light
Streaming failed and retrying	Flash in yellow light
STA mode - Tracking target unselected	Solid green light
AP mode - Tracking target unselected	Solid purple light
STA/AP mode - Tracking target selected	Solid blue light
Tracking target losing	Solid yellow light
Taking a picture	The lights flash once in their current color
Camera in fault	Solid red light
Camera errors, including SD card full or update failures, and so on	Breathe in red light
Upgrading the firmware	The lights flash in yellow and blue alternatively

Buzzer

Explanation	Tweet Mode
Powering on or off	DDD
Taking a picture	D
Starting to Stream & Record	D
Battery level is low and camera is about to power off	DDD
Upgrading the firmware	D···D···D···
Camera errors, including SD card full or update failures, and so on	DDDDDD

Charging Instructions

Please use the provided USB-C cable for charging during the initial use to ensure normal operation.
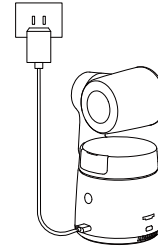
⚠ It is recommended to use an FCC/CE certified USB charger rated 5V/2A.

Battery Indicator

● Steady blue   ◎ Flashing blue   ● OFF

Type	Capacity	LED 1	LED 2	LED 3	LED 4
Battery Detection Upon Pressing the Power Button	0%-10%	◎	OFF	OFF	OFF
	11%-25%	●	OFF	OFF	OFF
	26%-30%	●	◎	OFF	OFF
	31%-45%	●	●	OFF	OFF
	46%-60%	●	●	◎	OFF
	61%-75%	●	●	●	OFF
	76%-95%	●	●	●	◎
	96%-100%	●	●	●	●
Discharging	0%-10%	◎	OFF	OFF	OFF
	11%-25%	●	OFF	OFF	OFF
	26%-45%	●	●	OFF	OFF
	46%-75%	●	●	●	OFF
	76%-100%	●	●	●	●

Charging		LED 1	LED 2	LED 3	LED 4
	0%-25%	○	●	●	●
	26%-45%	●	○	●	●
	46%-75%	●	●	○	●
	76%-95%	●	●	●	○
	96%-100%	●	●	●	●

⚠ Charging will stop when the battery temperature exceeds 45˚C. For example, when connected to an external power supply, if the battery temperature exceeds 45˚C, the camera will stop charging and will be powered directly from the external power supply.

Obsbot Start APP

Software Overview

When used with the Obsbot Start App, users can control the camera on their mobile devices and manually adjust image parameters. The app also supports one-key live streaming and accessing AI director grids, providing a more convenient and effortless live streaming experience.

Connect Obsbot Start APP

1. Press and hold the power button on Tail Air to turn it on.
2. Enable Bluetooth and Wi-Fi on your mobile device.
3. Launch the Obsbot Start app and select the corresponding Tail Air.
4. Tail Air supports three connection methods: Wi-Fi connection, cellular data connection, and wired network connection.
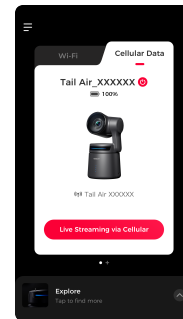
(1) Wi-Fi Connection
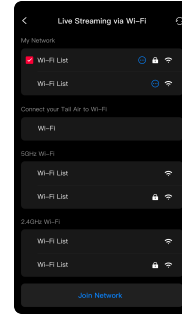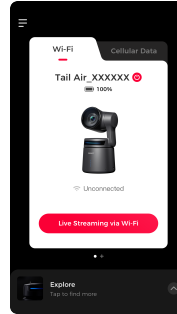
① Tap "Wi-Fi";
② Tap "Live Streaming via Wi-Fi", select the Wi-Fi network you want to use and enter the password to connect. (The Wi-Fi list includes two frequency bands: 5GHz and 2.4GHz. It is recommended to use 5GHz.);
③ Once connected, it will automatically enter the shooting view.

(2) Cellular Data Connection
If you do not have a local Wi-Fi network, you can connect to the Tail Air's hotspot through AP mode and stream over your mobile device's network.

① Tap "Cellular Data";
② Tap "Live Streaming via Cellular", and connect to the Tail Air hotspot;
③ Once connected, it will automatically enter the shooting view.
⚠ The live streaming quality may not be as reliable as Wi-Fi connection.

(3) Wired Network Connection
Connect Tail Air to the router or switch via a USB-C to Ethernet Adapter.
Once your mobile device is on the same local network, you can establish
the connection.
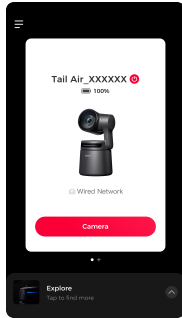
⚠ After connecting the USB-C to Ethernet Adapter, Tail Air will
automatically reboot for configuration.
⚠ The USB-C to Ethernet Adapter need to be purchased separately on
http://www.obsbot.com.

Shooting View

1. Home Button
Tap to return to the home screen.

2. Gimbal Control
Hold and drag on the screen to control the gimbal.

3. AI Tracking
Double-click to select/deselect human/animal for tracking.

4. On Air Window
Display the real-time output image. Tap to zoom in.

5. Audio Settings
Display real-time volume. Tap to access the audio panel and adjust the
corresponding parameters.

6. Recording/Livestreaming
For the first use, tap to enter the recording/live configuration. After
configuration, you can tap to quickly start recording or live streaming. See
"Recording & Live Streaming Configuration" for details.

7. Preset Positions
Tap to add a preset position. Long press the button to update/delete after
adding.

8. Reset/Initial Position
Tap to reset Tail Air to its initial position. Long press to set the initial position.

9. Image Cropping
Tap to enter the cropping screen.

Fullscreen: Tap to switch to full screen/preset view.

Preset Zoom Ratio: Set the size of the red frame that appears when
the screen.

Preset Positions：Tap to add preset positions. Long-press to
update/delete after adding.

10. Gimbal and View
Tap to bring up the gimbal control and zoom panel, enabling manual
control of the gimbal and zoom.

11. Object Tracking
Tap to enter the object tracking, box-select the object for tracking, and
double-tap to cancel tracking.

12. AI Settings
Tap to bring up the settings list.

Auto Framing: Tap to switch AI framing and real-time output screen.

Tracking Speed: Tap to switch tracking speed (Slow/Standard/Fast).

Composition Lines：Tap to enter the composition lines setting, and
adjust the positioning of the target in the frame.

Object Tracking: Tap to enter the object tracking.

13. More settings
Tap to bring up the settings panel.

Device status bar：

🔋80% :Display camera battery level, 📶 OBSBOT :Displays current network status, 🔴 :allows for camera power-off, 📷 👤 🔋:Display the connection status of relevant accessories.

Gesture Control：Support enabling/disabling gesture control.

Audio：Adjust audio parameters.

Face Auto Exposure：Enable (global exposure) / Disable (face automatic exposure).

ISO Upper and Lower Limits : Adjust ISO upper and lower limits, range: 100~6400 (ISO Upper Limit＞ISO Lower Limit).

Output: Can enable UVC / NDI / RTSP modes, default is Disabled.
UVC Mode: After enabling UVC mode, NDI / Recording / Live Streaming / HDMI / RTSP will not be available.
NDI Mode: After enabling NDI mode, UVC / Live Streaming / HDMI / RTSP will not be available.
⚠ NDI mode needs to be activated manually, and the NDI License Key must be purchased separately at http://www.obsbot.com.
RTSP Mode: After enabling RTSP mode, UVC / NDI / Live Streaming will not be available.

Media Settings：Adjust frame rate, encoding format, bit rate, resolution, and other parameters.

Tail Air Settings: Set camera functions.
Power-on Shooting: Default disable. When enabled, you can set up power-on recording/live streaming (requires configuring live streaming information).
Auto Power Off: Tap to set Tail Air's duration. If there is no operation on the camera within the set duration, the camera will automatically power off.
Timed Power Off: Default disable. When enabled, you can set the scheduled power-off time and date.
Timed Power On: Default disable. When enabled, you can set the scheduled power-on time and date.
Status Light: Default enable, adjustable status light brightness.
Buzzer: Default enable, audible prompts help determine the camera's status.
Plug/Unplug to Power On/Off: Default disable, when enabled, the camera will automatically power on when powered, and power off when disconnected.

Customize Buttons： Set the functions of the customize buttons: None (default)/ Mute Output / One-key Wide / On/Off Status Light，used in conjunction with the Tail Air Smart Remote Controller.
⚠ Tail Air Smart Remote Controller need to be purchased separately on http://www.obsbot.com.

SD Card：View the total capacity and current remaining memory of the SD card, and format the SD card.

Video Segmentation：4G / 8G / 16G / 32G(default) / 64G.
⚠ Only exFAT-formatted SD cards support this function.

Reset All Connections：Clears all connection records for the camera.

Restore Factory Settings : Tap to restore the camera to its original factory settings. This will delete all the current settings, and the camera will be restored to the original factory settings and restart.

Feedback：Enter user descriptions to submit feedback to the backend.

About Device：Display camera information, including device name, device model, serial number, Wi-Fi/Bluetooth MAC address, RTSP information, network configuration, firmware version, etc.

14. Album
Tap to enter the album to manage captured videos and photos.

15. Camera Settings
Tap to enter the camera settings.

Exposure Mode：Tap to switch exposure modes between A (Automatic mode) and M (Manual mode).

Exposure Parameters：Adjustable ISO, Shutter Speed, EV, and Focus methods.

Focus Mode：AF-S / AF-C / MF.

Anti-Flicker: Off (default) / 50Hz / 60Hz. Set the anti-flicker frequency to reduce flickering caused by fluorescent lights or TV screens when shooting indoors.

Direction Flip: Tap to horizontally flip the image.

Grids：Tap to enable grid lines to assist in framing.

HDR: Disable (default) / Enable.

AE Lock：Disable (default) / Enable.

Style：Switch image styles, Standard(default) / Outdoor / Pastel / Custom (adjustable sharpness, contrast, saturation, hue, brightness).

White Balance：Adjust white balance parameters, Auto (default) / Daylight / Fluorescent / Tungsten / Cloudy / Custom (adjustable color temperature).

16. AI Director Grids
Tap to enter the AI director interface to preview and manage output views.

Face View: On (default) / Off. When AI tracking is not enabled, it will crop a close-up shot based on the recognized faces, displaying a maximum of 3 face views.

Recording & Live Streaming Configuration

1. Recording
Selecting recording displays SD card information. Tap the "Start" button in the upper right corner to start video recording.
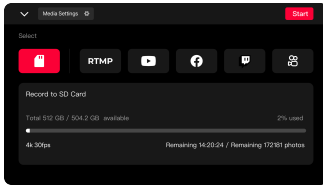

2. RTMP
Selecting RTMP requires manually entering RTMP information, including RTMP name, RTMP URL, and stream key (optional). After successful creation, tap "Start" in the upper right corner to start live streaming.
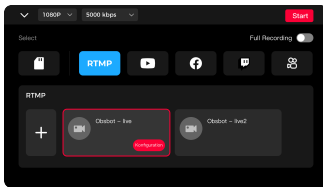
3. Live Streaming Platform
When selecting third-party live platforms (including Facebook, YouTube, Twitch, and Kwai, log in to the respective platform account and configure live streaming information. After successful setup, tap "Start" in the upper right corner to start live streaming.
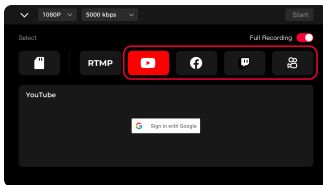
⚠ When choosing RTMP or a third-party live platform, you can enable continuous recording throughout the entire process. Recording will synchronize with live streaming, and you can manually stop recording during the live broadcast. It also supports adjusting live streaming resolution and bitrate during the process.

Firmware Upgrade

Firmware Upgrade Overview

① During the upgrade, the yellow and blue lights will flash alternately.
② After a successful upgrade, the status indicator light changes to normal operating mode. You can connect to the APP to check the upgrade results.
③ If the upgrade fails, the light will turn red, and the camera will emit a beeping sound.

Upgrade via Obsbot Start APP

Connect the OBSBOT Tail Air to your phone via Obsbot Start APP. The APP will give you an upgrade notice when you are due an upgrade. Then follow the APP instructions to upgrade.

Using Micro SD Card to Upgrade

Please download the latest upgrade package on OBSBOT's official website and copy the .bin file to the SD card root directory. Insert the SD card into your Tail Air. Once Tail Air reads the SD card, it will restart and upgrade.
⚠ Before upgrading, please make sure the SD card has more than 1GB of usable capacity, and the camera battery needs to be more than 25%.
⚠ After completing the upgrade, you can check the result through the .txt file in the SD card root directory.

Specifications

Product	OBSBOT Tail Air	
Model	OSB-2108-CW	
Size	69.65*73.25*132.5mm	
Weight	344.5g	
AI chip	Integrated AI chip, Trillions of calculations per second	
Camera	Image sensor	1/1.8" CMOS
	Effective pixels	8.4 million
	Effective pixel resolution	3856 x 2176
	Lens system	8 Optical Lenses
	Zoom range	4X digital zoom
	ISO range	100~6400
	Exposure value	±3 EV
	Electronic shutter speed	1/8000s to the limit of frames per second
	Focus	Auto Focus/Manual Focus
	Aperture	f/1.8
	Equivalent focal length	23mm
	White balance	2000K-10000K
	Gyroscope	6-axis Gyroscope
	Photo resolution	4K, 1080P
	Video resolution	4K@30/25/24 fps 1080P@60/50/48/30/25/24 fps
	Video format	MJPEG, H.264, H.265
	Max video storage bit rate	H.264: 100Mbps, H.265: 80Mbps
2-axis gimbal	Gimbal installation	Non-removable
	Controllable range	Pan: ±150˚; Tilt: -65˚~32˚
	Mechanical range	Pan: ±160˚; Tilt: ±90˚
	Max controllable speed	120˚/s
	Angle jitter	±0.02˚

Audio	Audio input	Built-in Two MEMS Microphones Built-in 3.5mm TRS Connector (AUX) Support MIC IN/LINE IN
	Audio modes	Noise Reduction/Stereo Sound
	Audio format	AAC/PCM
Wi-Fi	Operating frequency	2.4 G/5.8 GHz
	Signal transmission range	2.4G 140m；5.8G 80m
	Transmission power	2.4 GHz: <18 dBm (FCC/CE/SRRC/MIC) 5.1 GHz: <15 dBm (FCC/CE/SRRC/MIC) 5.8 GHz: <15 dBm (FCC/CE/SRRC)
Bluetooth	Bluetooth protocol	BLE 5.0
	Bluetooth operation frequency range	2.400 GHz to 2.4835 GHz
Charger & Battery	Battery type	Lithium Polymer(Li-po)
	Battery capacity	1500mAh
	Battery energy	11.4Wh
	Battery voltage	7.6V
	Input	5V/2A
	Operating time	154 minutes *Tested in a laboratory environment while recording 1080p/30fps video and should be used for reference only
	Charging time	90 Minutes (Power off status)
Memory card	Type	Micro SD (Up to 512 GB)
Operating environment	Camera working environment temperature	-10℃~40℃
	Battery charging ambient temperature	-10℃~40℃
	Battery operating ambient temperature	-10℃~40℃

Please note that the content may be updated without prior notice. To access the most recent version of the manual book, please download it from:https://www.obsbot.com