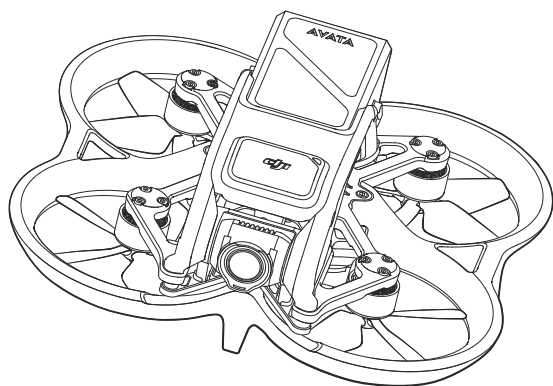




User Manual

v1.0 2022.08



Searching for Keywords

Search for keywords such as “battery” and “install” to find a topic. If you are using Adobe Acrobat Reader to read this document, press Ctrl+F on Windows or Command+F on Mac to begin a search.

Navigating to a Topic


View a complete list of topics in the table of contents. Click on a topic to navigate to that section.

Printing this Document

This document supports high resolution printing.

Using this Manual

Legend

-  Warning
-  Important
-  Hints and Tips
-  Reference

Read Before the First Flight

Read the following documents before using DJI AVATA™.

1. User Manual
2. Quick Start Guide
3. Safety Guidelines

It is recommended to watch all tutorial videos and read the safety guidelines before using for the first time. Prepare for your first flight by reviewing the quick start guide and refer to this user manual for more information.

Video Tutorials

Visit the link below to watch the tutorial videos, which demonstrate how to use DJI Avata safely:



<https://s.dji.com/guide24>

Download the DJI Fly App

Scan the QR code above to download DJI Fly.

The Android version of DJI Fly is compatible with Android v6.0 and later. The iOS version of DJI Fly is compatible with iOS v11.0 and later.

* For increased safety, flight is restricted to a height of 98.4 ft (30 m) and a range of 164 ft (50 m) when not connected or logged into the app during flight. This applies to DJI Fly and all apps compatible with DJI aircraft.

Download the DJI Virtual Flight App


Scan the QR code on the right to download DJI Virtual Flight.

The iOS version of DJI Virtual Flight is compatible with iOS v11.0 and later.



Download DJI Assistant 2 (Consumer Drones Series)

Download DJI ASSISTANT™ 2 (Consumer Drones Series) at <https://www.dji.com/avata/downloads>.

 The operating temperature of this product is -10° to 40° C. It does not meet the standard operating temperature for military grade application (-55° to 125° C), which is required to endure greater environmental variability. Operate the product appropriately and only for applications that meet the operating temperature range requirements of that grade.

Contents

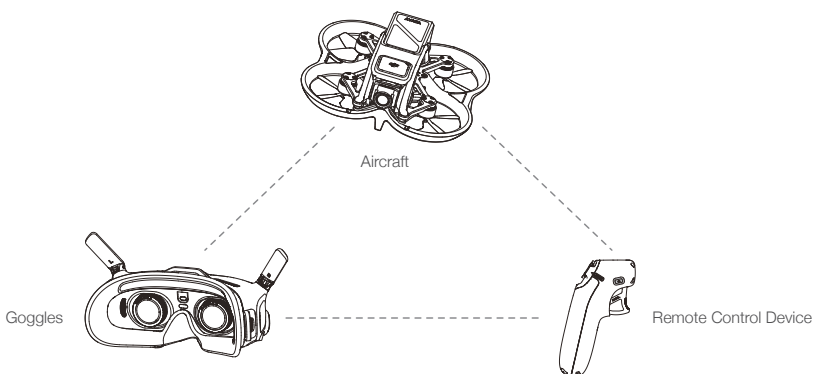
Product Profile

Introduction

DJI Avata features a compact and portable aircraft body, which is equipped with a propeller guard. With both a Vision System and an Infrared Sensing System, it can hover stably and fly flexibly indoors as well as outdoors, and automatically initiate Return to Home (RTH). With a gimbal and 1/1.7" sensor camera, the aircraft stably shoots 4K 60fps ultra-HD video and 4K photos. The aircraft has a maximum hover time of approximately 18 minutes.

DJI Avata uses DJI O3+ technology, when used with compatible goggles and remote control devices, it provides video transmission with a maximum range of 6 mi (10 km), and a bit rate of up to 50 Mbps, bringing an immersive flight experience.

The goggles are equipped with a high-performance display. By receiving the video signal from the aircraft, users can enjoy a first-person view of their aerial experience in real time. The remote control devices are equipped with a range of function buttons, which can be used to control the aircraft and operate the camera. DJI Goggles 2 and DJI Motion Controller can easily control the flight of the aircraft by tracking your head or hand movements, bringing a new and convenient flight control experience.



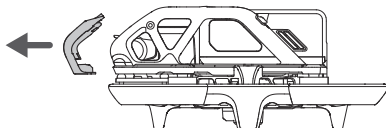
- Refer to the appendix for the goggles and remote control devices supported by DJI Avata. This manual only takes DJI Goggles 2, DJI FPV Goggles V2, DJI Motion Controller, and DJI FPV Remote Controller 2 as examples.



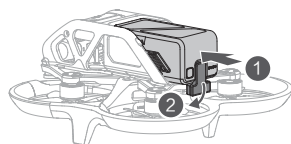
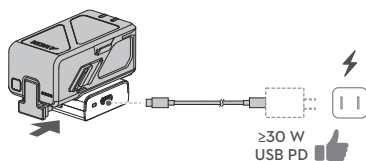
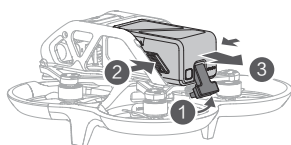
- The remote control devices reach their maximum transmission distance (FCC) in a wide open area with no electromagnetic interference at an altitude of about 120 m (400 ft). The maximum transmission distance refers to the maximum distance that the aircraft can still send and receive transmissions. It does not refer to the maximum distance the aircraft can fly in a single flight.
- Maximum hover time was tested in an environment with no wind or interference.
- Using the goggles does not satisfy the requirement of visual line of sight (VLOS). Some countries or regions require a visual observer to assist during flight. Make sure to comply with local regulations when using the goggles.

Preparing the Aircraft

1. Remove the gimbal protector from the camera.



2. Remove the Intelligent Flight Battery and use a USB charger to charge the battery. It takes approximately 90 minutes to fully charge an Intelligent Flight Battery.



- It is recommended to use the DJI 30W USB-C Charger or other USB Power Delivery chargers.
- It is recommended to attach a gimbal protector to protect the gimbal when the aircraft is not in use. Adjust the camera to the horizontal position, then install the gimbal protector and make sure it is secure.

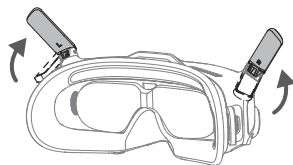


- Make sure to remove the gimbal protector before powering on the aircraft. Otherwise, it may affect the aircraft self-diagnostics.

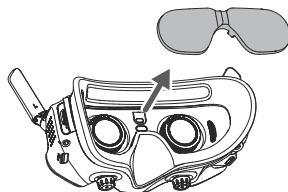
Preparing the Goggles

DJI Goggles 2

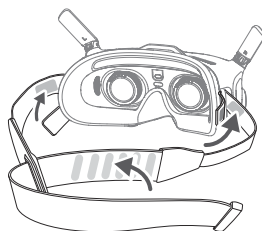
1. Unfold the antennas.



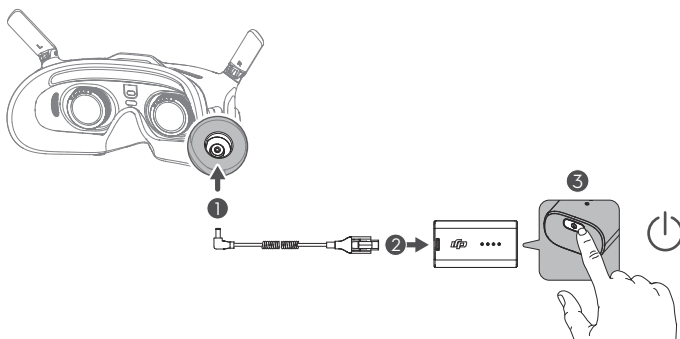
2. Remove the screen protector.



3. Attach the headband to the goggles.



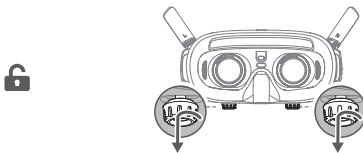
4. Use the power cable (USB-C) provided to connect the power port of the goggles to the goggles battery. Press the power button once, then press again and hold for two seconds to power the goggles on.



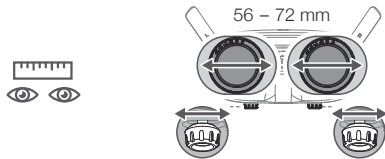
5. Wear the goggles and adjust the headband until the goggles fit comfortably.



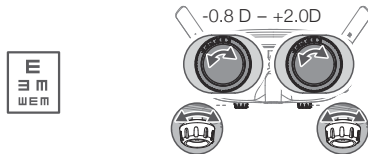
6. Use the IPD (Interpupillary Distance) Slider / Diopter Adjustment Knob (hereinafter referred to as "knob") to adjust the distances between the lenses and the diopter to get a clear view.
- a. Rotate both the knobs in the direction as shown to unlock them. Once unlocked, the knobs will pop out.



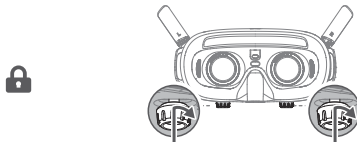
- b. Toggle the knobs left and right to adjust the distance between the lenses until the images are properly aligned.



- c. Slowly rotate the knobs to adjust the diopter. The supported adjustment range is from -8.0 D to +2.0 D.



- d. After you get a clear view, press the knobs in and rotate them in the direction as shown to lock in the lenses' position and the diopter.





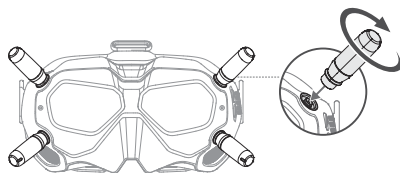
- The diopter lenses do not support astigmatism correction. If you require astigmatism correction or if the goggles' diopter is unsuitable, you can purchase additional lenses and use the eyeglass frames provided to install them on the goggles. Refer to the "Using the Eyeglass Frames" for more information.
- When adjusting the diopter for the first time, you are advised to adjust to a degree that is slightly lower than the strength of your actual eyeglasses. Give your eyes enough time to adapt, then adjust the diopter again until you get a clear view. Do not use a diopter higher than your actual eyeglass power to avoid eyestrain.



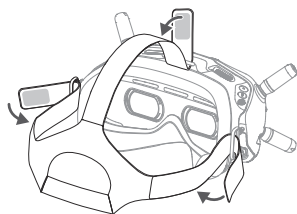
- Fold the antennas to avoid damage when the goggles are not in use.
- Re-attach the screen protector after use to protect the lens and prevent damage caused by direct sunlight.
- Only use the DJI goggles battery provided. DO NOT use non-DJI batteries.
- DO NOT use the goggles battery to power other devices.

DJI FPV Goggles V2

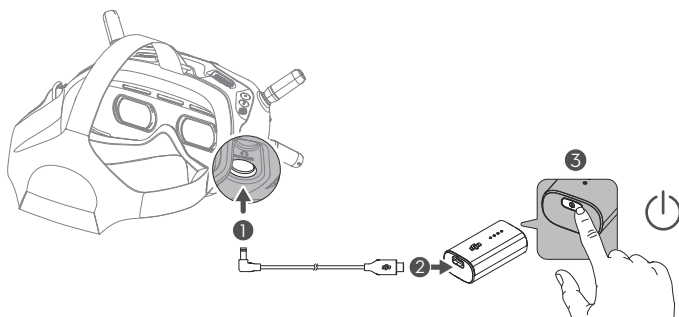
1. Install the four antennas to the mounting holes on the front of the goggles. Make sure that the antennas are installed securely.



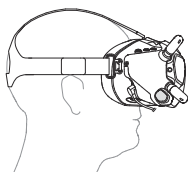
2. Attach the strap to the headband attachment on the top and sides of the goggles.



3. Use the included power cable to connect the power port of the goggles to the goggles battery. Press the power button once, then press again and hold for two seconds to power the goggles on.



4. Align the lenses over your eyes and pull the headband down. Adjust the headband size until the goggles fit securely and comfortably on your face and head.



5. Turn the IPD slider to adjust the distance between the lenses until the images are properly aligned.



58-70 mm



- The goggles can be worn over glasses.

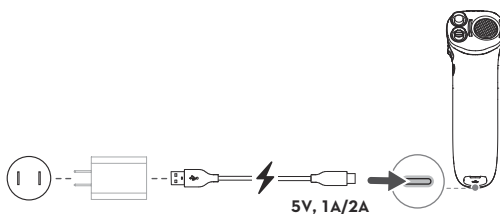


- DO NOT use the goggles battery to power other mobile devices.

Preparing the Remote Control Devices

Press the power button once to check the current battery level. Charge before using if the battery level is too low.

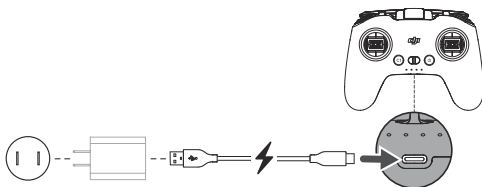
DJI Motion Controller



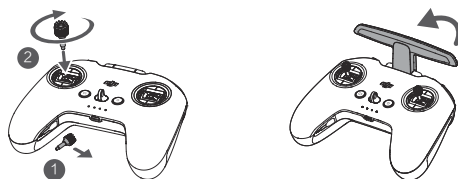
- USB Power Delivery chargers are not supported.

DJI FPV Remote Controller 2

1. Charge the battery.

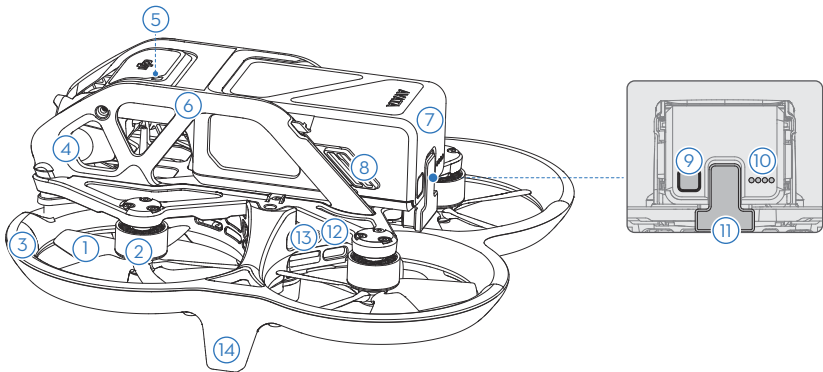


2. Remove the control sticks from the storage slots and mount them on the remote controller.
3. Unfold the antennas.

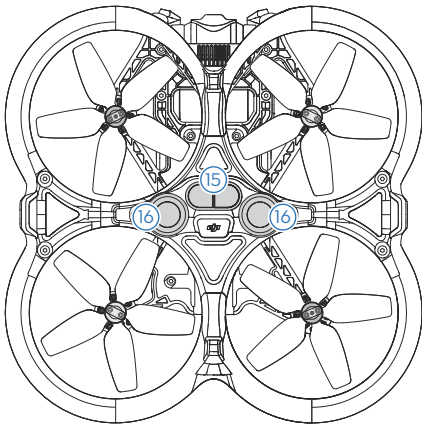


Diagram


Aircraft



- | | | |
|------------------------------|-------------------------------|--|
| 1. Propellers | 6. Upper Frame | 11. Power Port |
| 2. Motors | 7. Intelligent Flight Battery | 12. USB-C Port |
| 3. Propeller Guard | 8. Battery Buckles | 13. microSD Card Slot |
| 4. Gimbal and Camera | 9. Power Button | 14. Landing Gears
(Built-in antennas) |
| 5. Aircraft Status Indicator | 10. Battery Level LEDs | |

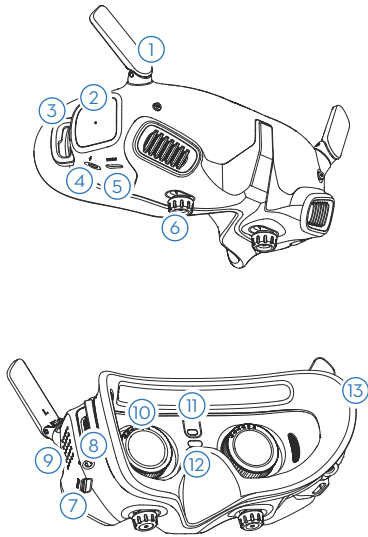


15. Infrared Sensing System
16. Downward Vision System

 • Before flying, make sure the USB-C port and microSD card slot cover is correctly and securely sealed to avoid interference with the propellers.

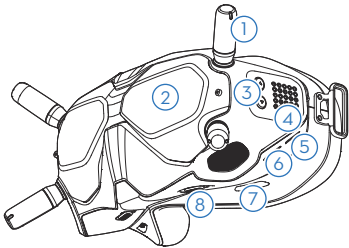
Goggles

DJI Goggles 2

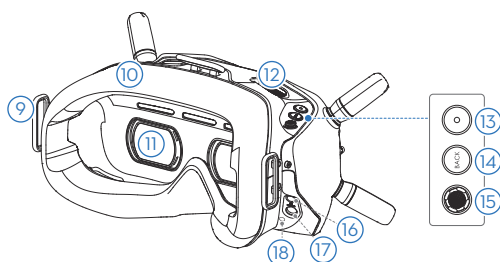


- 1. Antennas
- 2. Touch Panel
- 3. Headband Attachment
- 4. Power Port
- 5. USB-C Port
- 6. IPD Slider / Diopter Adjustment Knob
- 7. microSD Card Slot
- 8. 3.5 mm Audio Port
- 9. LED Dot Matrix Display
- 10. Lenses
- 11. Proximity Sensor
Detects whether the user is wearing the goggles and automatically turns the screen on or off.
- 12. Link Button
- 13. Foam Padding

DJI FPV Goggles V2



- 1. Antennas
- 2. Front Cover
- 3. Channel Adjustment Buttons
- 4. Channel Display
- 5. USB-C Port
- 6. microSD Card Slot
- 7. Air Intake
- 8. IPD Slider



9. Headband Attachment

10. Foam Padding

11. Lenses

12. Air Vent

13. Shutter/Record Button

Press once to take photos or start or stop recording. Press and hold to switch between photo and video mode.

14. Back Button

Press to return to the previous menu or exit the current mode.

15. 5D Button

Toggle the button to scroll through the menu. Press the button to confirm.

On the home screen, toggle left or right to adjust the screen brightness. Toggle up or down to adjust the volume. Press the button to enter the menu.

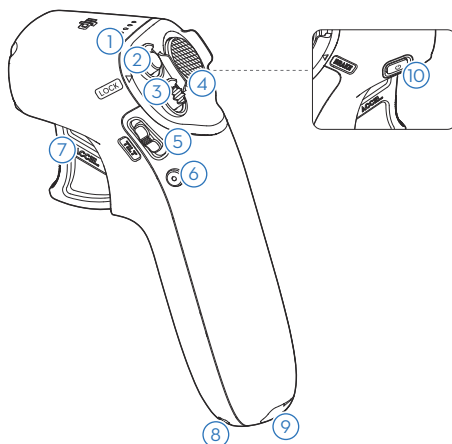
16. Audio/AV-IN Port

17. Power Port (DC5.5×2.1)

18. Link Button

Remote Control Devices

DJI Motion Controller



1. Battery Level LEDs

Indicates the battery level of the motion controller.

2. Lock Button

Press twice to start the motors of the aircraft.

Press and hold to make the aircraft automatically take off, ascend to approx. 1.2 m, and hover.

Press and hold while hovering to make the aircraft automatically land and the motors stop.

Press once to cancel Low Battery RTH when the countdown appears in the goggles.

3. Mode Button

Press once to switch between Normal and Sport mode.

4. Brake Button

Press once to make the aircraft brake and hover in place (only when GNSS or Vision System is available). Press again to unlock the attitude.

Press and hold to initiate RTH. Press again to cancel RTH.

5. Gimbal Tilt Slider

Push up and down to adjust the tilt of the gimbal. Only available before takeoff, during RTH, or landing.

6. Shutter/Record Button

Press once to take photos or start or stop recording. Press and hold to switch between photo and video mode.

7. Accelerator

Press to fly the aircraft in the direction of the circle in the goggles. Apply more pressure to accelerate. Release to stop and hover.

8. Lanyard Hole

9. USB-C Port

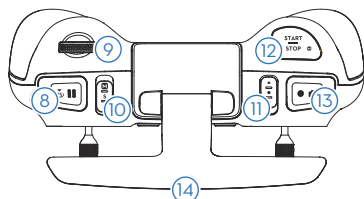
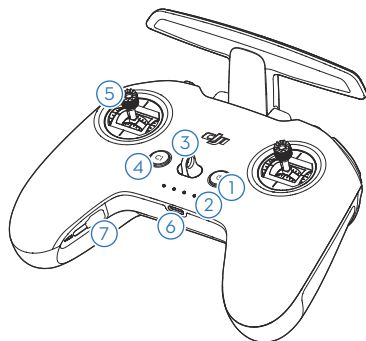
For charging and connecting the motion controller to a computer for firmware updates.

10. Power Button

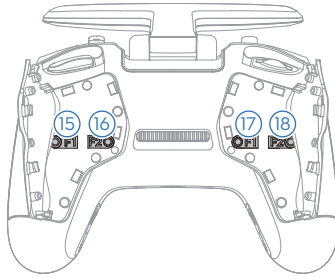
Press once to check the current battery level.

Press once then again and hold to power the motion controller on or off.

DJI FPV Remote Controller 2



- 1. Power Button**
Press once to check the current battery level. Press, and then press and hold to power the remote controller on or off.
- 2. Battery Level LEDs**
Displays the current battery level of the remote controller.
- 3. Lanyard Attachment**
- 4. C1 Button (Customizable)**
The function of this button can be adjusted in the goggles. By default, press once to enable or disable ESC Beeping.
- 5. Control Sticks**
Used to control the movements of the aircraft. The control sticks mode can be set in the goggles. The control sticks are removable and easy to store.
- 6. USB-C Port**
For charging and connecting the remote controller to your computer.
- 7. Control Sticks Storage Slots**
For storing the control sticks.
- 8. Flight Pause/RTH Button**
Press once to make the aircraft brake and hover in place (only when GNSS or Vision System is available). Press and hold to initiate RTH. Press again to cancel RTH.
- 9. Gimbal Dial**
Controls the tilt of the camera.
- 10. Flight Mode Switch**
Switch between Normal, Sport, and Manual mode. Manual mode is disabled by default and must be enabled in the goggles.
- 11. C2 Switch (Customizable)**
The function of this switch can be adjusted in the goggles. By default, toggle the switch to recenter the gimbal and adjust up and down.
- 12. Flight Pause/RTH Button**
When using Manual mode, press twice to start or stop the motor.
When using Normal or Sport mode, press once to cancel Low Battery RTH when the countdown appears in the goggles.
- 13. Shutter/Record Button**
Press once to take photos or start or stop recording. Press and hold to switch between photo and video mode.
- 14. Antennas**
Relay aircraft control wireless signals.



15. F1 Right Stick Resistance Adjustment Screw (Vertical)

Tighten the screw clockwise to increase the vertical resistance of the corresponding stick. Loosen the screw to decrease vertical resistance.

16. F2 Right Stick Recentering Adjustment Screw (Vertical)

Tighten the screw clockwise to disable the vertical recentering of the corresponding stick. Loosen the screw to enable vertical recentering.

17. F1 Left Stick Resistance Adjustment Screw (Vertical)

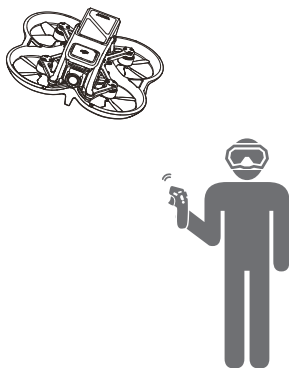
Tighten the screw clockwise to increase the vertical resistance of the corresponding stick. Loosen the screw to decrease vertical resistance.

19. F2 Left Stick Recentering Adjustment Screw (Vertical)

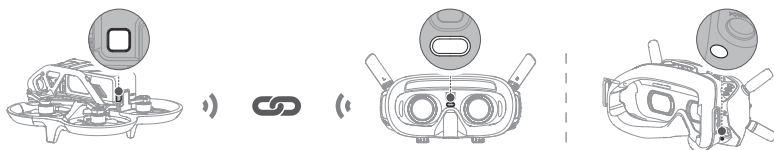
Tighten the screw clockwise to disable the vertical recentering of the corresponding stick. Loosen the screw to enable vertical recentering.

Linking

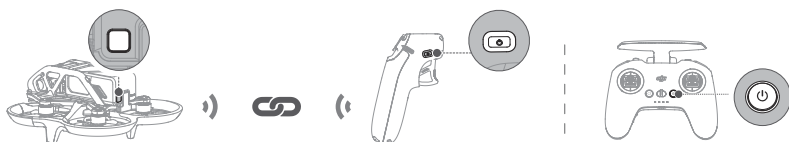
Follow the steps below to link the aircraft, goggles, and remote control devices. Make sure that the DJI devices used with the aircraft are activated through the DJI Assistant 2 (Consumer Drones Series) and updated to the latest firmware before linking.



1. Power on the aircraft, goggles, and remote control devices. Press and then press and hold the power button to power devices on or off.
2. Press the link button on the goggles. The goggles will start to beep continually.
3. Press and hold the power button on the aircraft until the battery level LEDs start to blink in sequence.



4. Once linking is completed, the battery level LEDs of the aircraft turn solid and display the battery level, the goggles stop beeping, and image transmission can be displayed normally.
5. Press and hold the power button on the aircraft until the battery level LEDs start to blink in sequence.
6. Press and hold the power button of the remote control device until it starts to beep continually and the battery level LEDs blink in sequence.



7. Once linking is successful, the remote control device stops beeping and both the battery level LEDs turn solid and display the battery level.



- Make sure the goggles and the remote control device are within 0.5 m of the aircraft during linking.
- To switch between the aircraft or air unit, enter the goggles menu and select before linking. For DJI Goggles 2, enter the Status page to select the aircraft or air unit. For DJI FPV Goggles V2, switch in Settings and then go to About page.



- The aircraft can be controlled with only one remote control device during flight. If your aircraft has been linked with multiple remote control devices, turn off other remote control devices before flight.

Activation

DJI Avata must be activated before using for the first time. Make sure all devices are linked after powering on the aircraft, goggles, and remote control device. Connect the USB-C port of the goggles to the mobile device, run DJI Fly, and follow the prompts to activate. An internet connection is required for activation.

