

Antigravity A1 User Manual

V 1.4

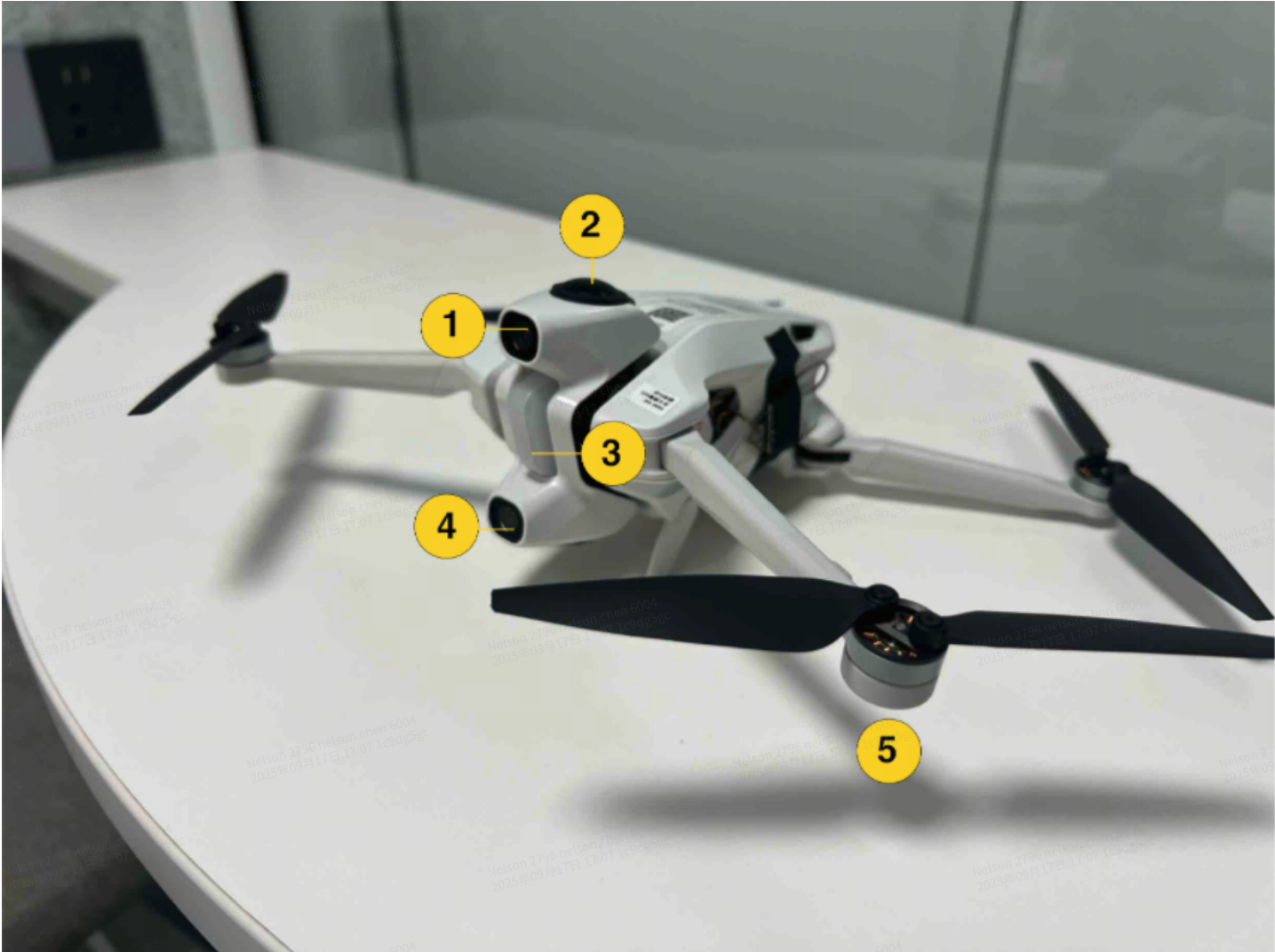
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Chapter 1 - Product Overview

1. 1 Product Overview

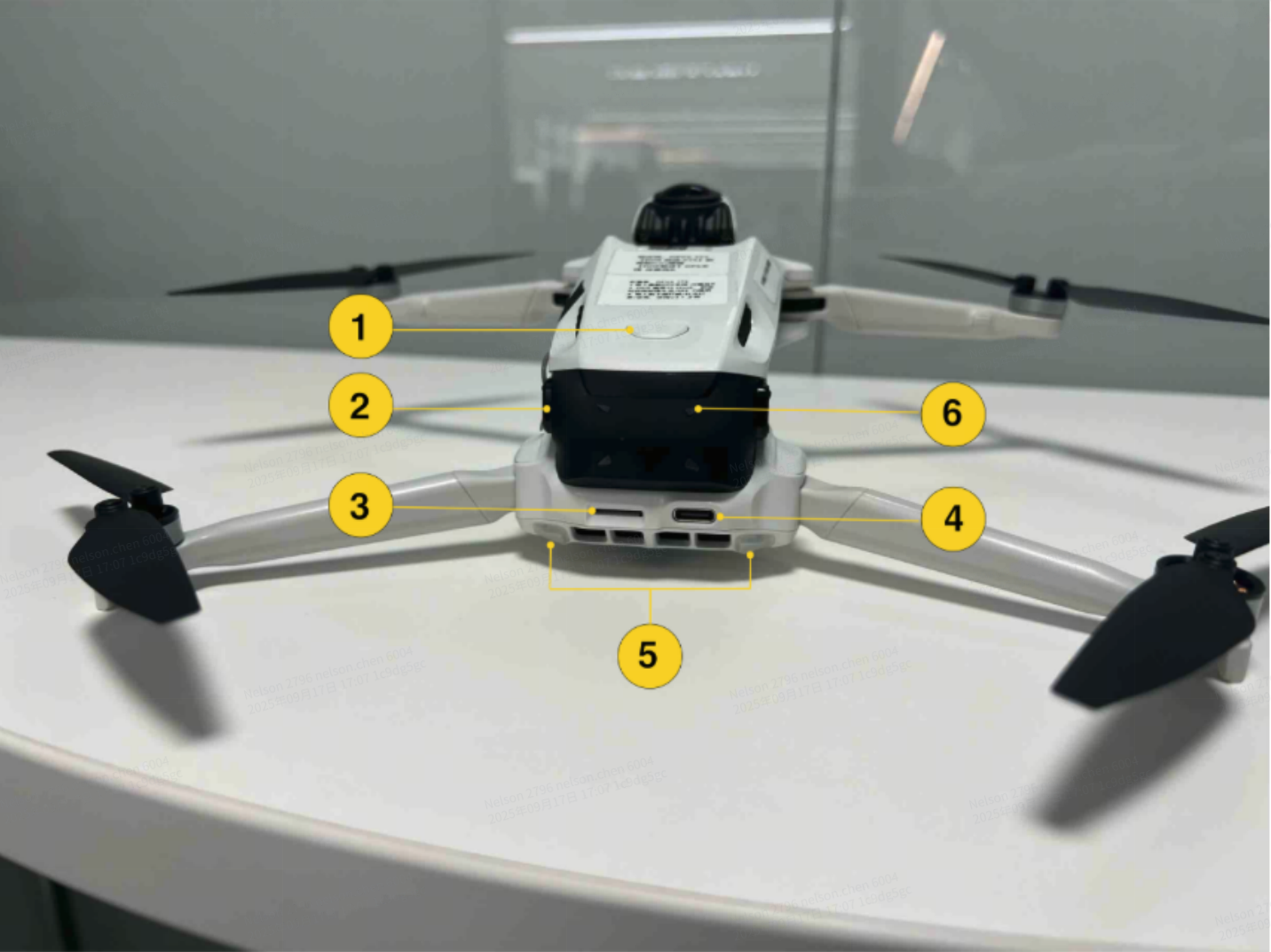
1.1.1 - A1 Drone

Front View



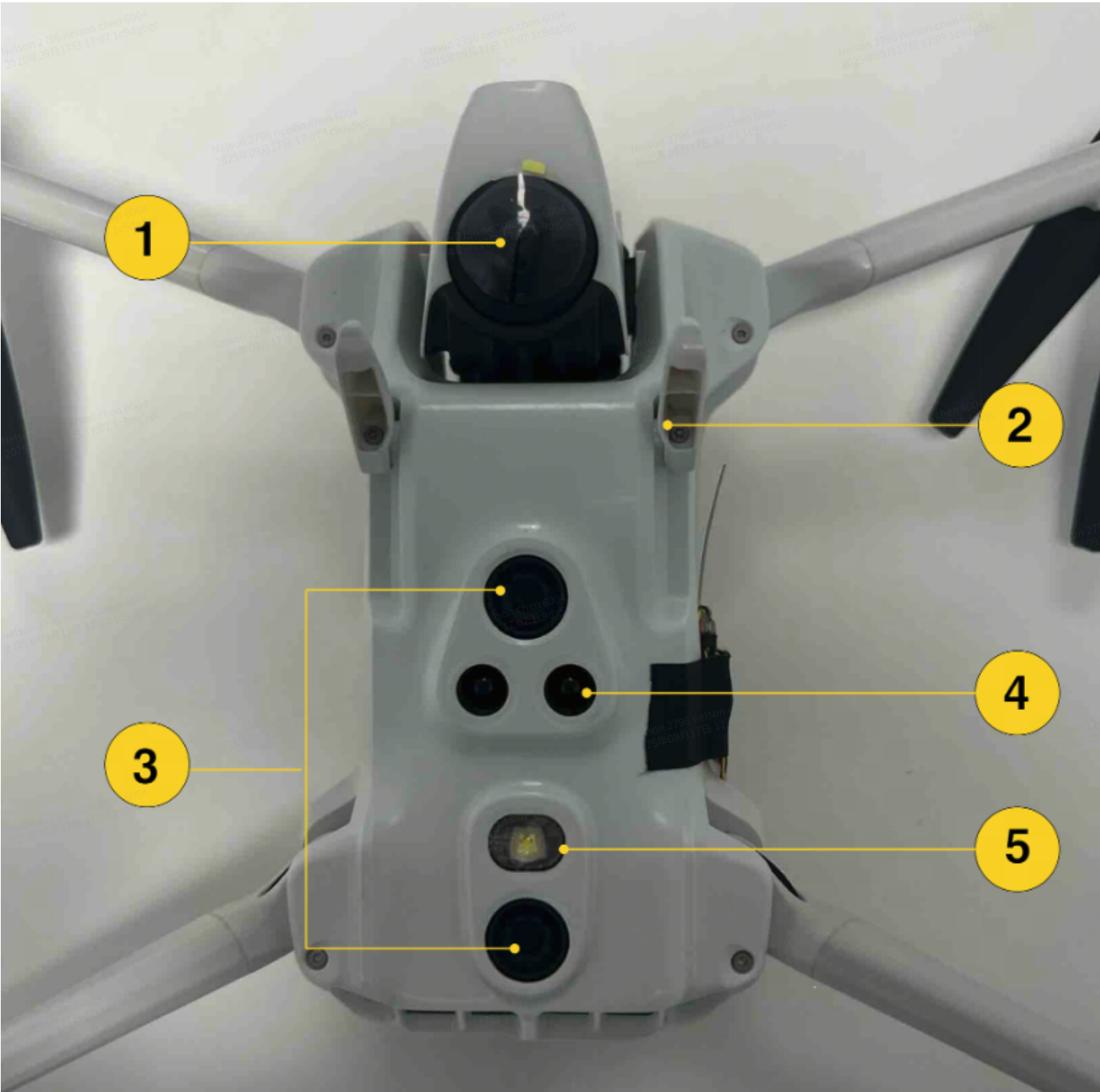
Item	Description
1	Vision Sensor
2	360 Camera Module
3	Aircraft Front Indicator
4	Vision Sensor
5	Motor

Rear View



Item	Description
1	Power Button
2	Flight Battery Latch
3	Micro-SD Card Slot
4	USB-C Port
5	Flight Status Indicator

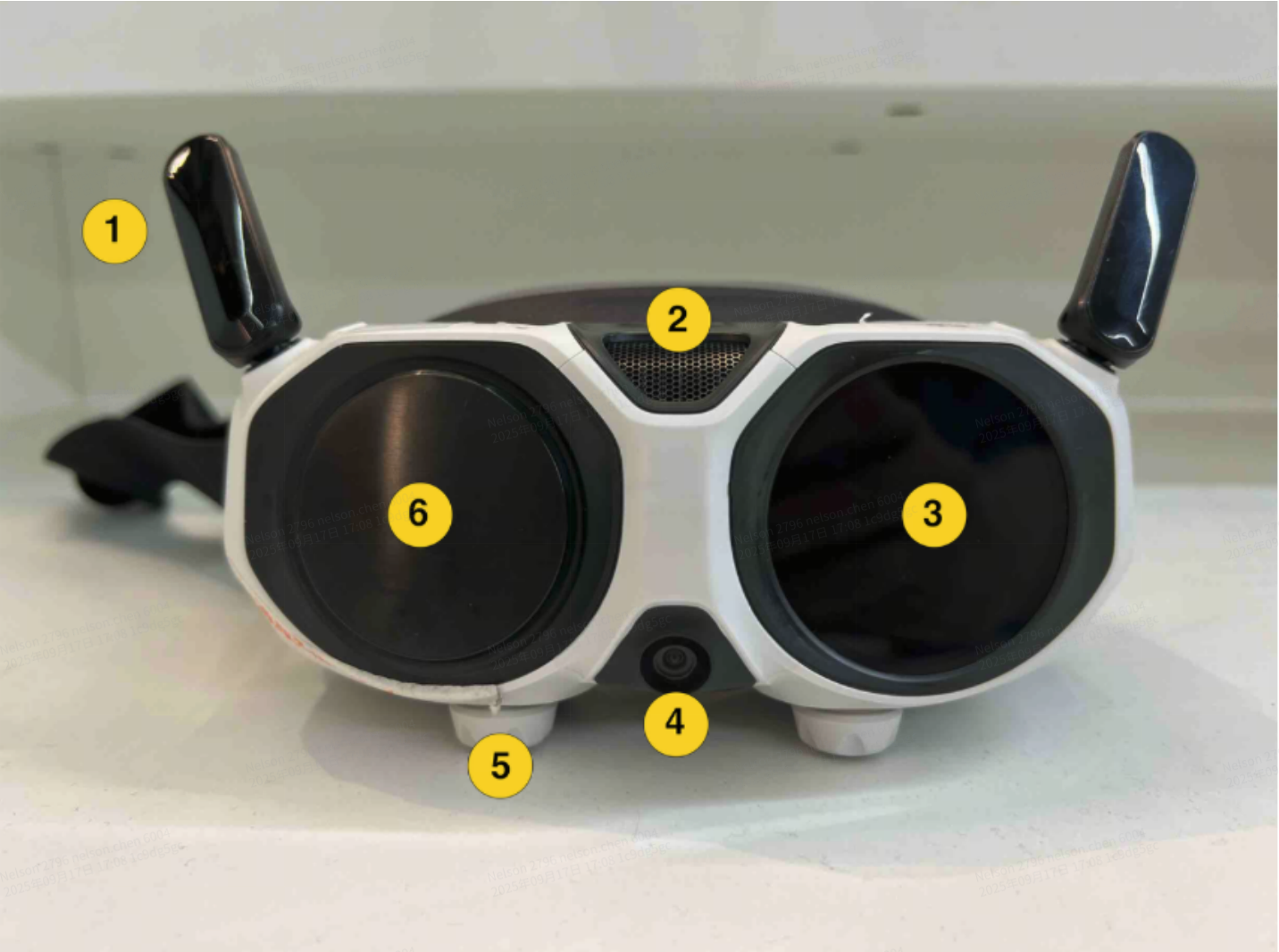
Bottom View



编号	描述
1	360 Camera
2	Landing Gear
3	Vision Sensor
4	Infra Red Sensor
5	Landing Light

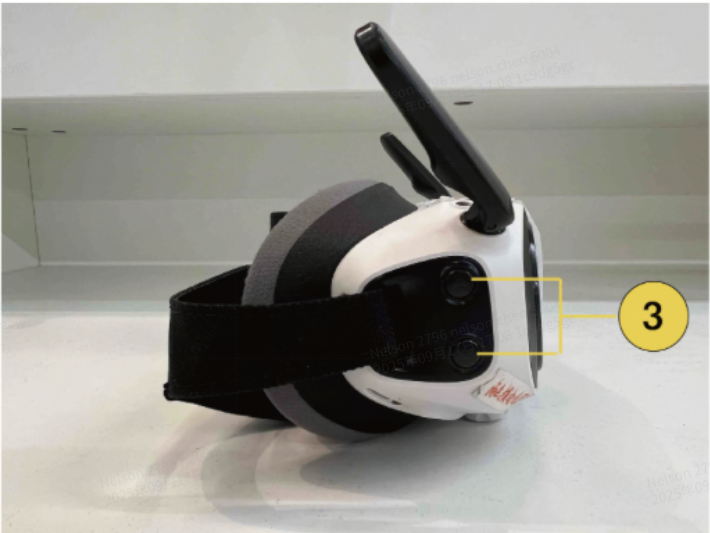
1.1.2 - Vision Goggles

Front View



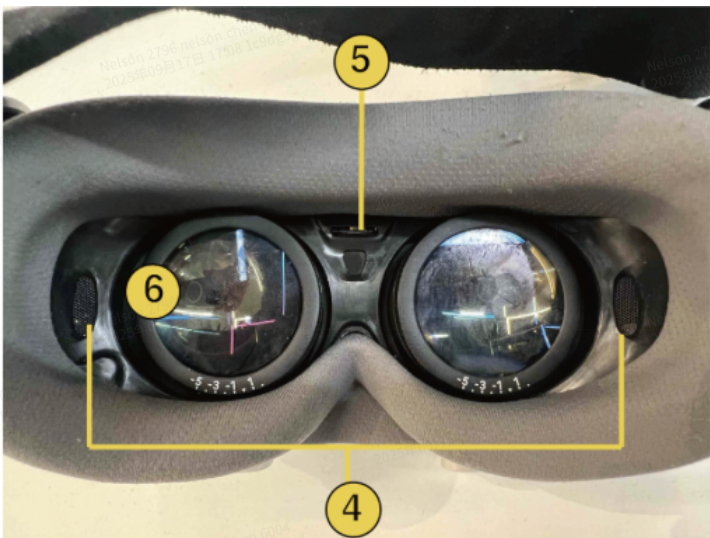
Item	Description
1	Antennas
2	Venting Port
3	Outer Display
4	See-Through Camera
5	Diopter Adjustment Knobs
6	Touchpad

Left and Right View



Item	Description
1	Home Button
2	Foam Padding
3	Volume Button

Bottom and Inside View



Item	Description
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1	Data Port
2	Diopter Adjustment Knobs
3	USB-C to DC Power Cable Port
4	Headphone
5	Memory Card Slot
6	Diopter Lens

1.1.3 - Grip Controller



No.	Description
1	Battery Indicator: Display the current battery level.
2	360 Dial Buton: Slide left or right to adjust the liveview and the heading of the drone. Press inward to recenter the perspective of the heading of the drone.
3	Power Button: - Press once then press and hold to power on the Grip controller. - When powered on, press and hold for 10 seconds to enforce shutdown. - Press and hold for 4 seconds to enter paring mode.
4	Menu Button: Short press to enter or exit the general menu of the Vision goggles; press and hold to activate the shortcut menu.
5	Shutter Button:

	• In default mode: Short press once to switch to photo mode. • In photo mode: Short press to capture an image.
6	Record Button: • In default mode: Short press once to switch to video mode. • In video mode: Press again to enable picture-in-picture (PIP) mode
7	Flight Slider: • Pre-flight: Push upward twice in short burst to start the motors (idle mode). Push downward twice to cancel. • When motor starts: Push the slider upward and hold for over 2 seconds to initiate slow ascent. • Mid-flight: Push upward to ascend the drone and downward to descend.
8	Emergency Brake / RTH Button: • Short press: Brakes and hovers. • Press and hold: Activates automatic RTH. During RTH, press twice rapidly to decelerate and exit RTH.
9	Throttle Trigger: • With FPV goggles: Briefly pull to confirm selections; press and hold to scroll menus.
10	C2 Button: • Press twice to retract the landing gear.
11	Flight Mode Toggle: Toggle to switch between N mode, S mode and C mode.
12	C1 Button: Press and hold to activate the Deep Track function.

Patterns	Interpretation
	Flight indicator blinks green slowly, indicating that strong Global Navigation Satellite System (GNSS) signal detected. The aircraft is clear to take off. After the take off, the flight status indicator also blinks slowly.
	The flight status indicator light blinks alternately in red and green, indicating that the motor is armed and the propeller start rotating. The aircraft is ready to take off.
	The flight status indicator blinks fast, indicates a loss of signal between the aircraft and the remote control. The flight status indicator blinks yellow twice over short period of time, indicates the aircraft entered level one low battery state, and user's desecration is required.

	The flight status indicator blinks red twice over short period of time, indicates the aircraft entered level two low battery state. User should land the aircraft immediately.
	The flight status indicator blinks solid red, indicating a serious system error detected. Power off and on the aircraft to restart.
	After the aircraft takes off, the indicator light on the front blinks green, indicating that the aircraft is flying normally.

Chapter 2 - First Use

2.1 Preparing for the First Flight

2.1.1 The arms of the aircraft is stowed upon delivery. Follow the instructions below to unfold the aircraft.

1. Unfold both the front and rear propeller arms

2. Detach lens protector case.
3. Peel off the protective films on the panoramic, forward, and downward camera lens.
4. Insert the intelligent flight battery into its position until you hear a 'click' .
5. Press once on the power button and then hold the button for two seconds to power on the aircraft .

Note: Before turning on the aircraft power supply, reserve space for the landing gear to allow it is fully extended. It is recommended to pick up the aircraft from the surface prior to power on the aircraft.

2.2 Preparing Flight Goggle

2.2.1 Power on the Flight Goggle

1. Press once on the power button on the battery to display the current battery level.
2. Press and hold on the power button for more than two seconds to power on the battery for the Flight Goggle.

2.2.2 Linking the Devices

Note: The aircraft, motion sensing remote control, and flight glasses in the flight suit have already linked when upon delivery, and no linking is required. Follow the instructions below if linking is required

1. Aircraft and The Flight Goggle Linking:
 - a. Press and hold the power button of the aircraft until the nose of the aircraft starts blinking green.
 - b. Press and hold the Home button on the left side of The Flight Goggle until you hear a continuous beeping sound.
 - c. After successful linking, the GUI of The Flight Goggle will display the real-time image transmission of the aircraft.
2. The Flight Goggle and Motion Sensing Controller Linking:
 - a. Press and hold the Home button on the left side of The Flight Goggle until you hear a continuous beeping sound.

- b. Power on the motion sensing controller and then proceed to press and hold the power button until you hear a continuous beeping sound and the battery indicator lights flash in a loop.
- c. After successful linking, the screen of The Flight Goggle will display a white circle indicating the motion controller, and it will move according to the direction of the controller.

2.2.3 Wearing The Flight Goggle:

1. Extend the antenna of the Flight Goggle.
2. Fasten the headband of the Flight Goggle.
3. After turning on, wear the Flight Goggle.

Note: The external battery of the Flight Goggle comes with a lanyard hook, it is recommended to hang the external battery in front of the chest.

4. Adjust the tightness of the headband to secure the position.

2.2.4 Adjusting Lens Distance

Rotate the knobs at the bottom of the Flight Goggle to adjust visual clarity based on your eyesight (+100 to -500 degrees).

1. Match lens distance to interpupillary distance for a clear view.
2. Use the knobs to adjust the diopter, which ranges from +100 degrees for farsightedness to -500 degrees for nearsightedness.

Note: The diopter adjustment knob has a limited range. Do not exceed the travel of the adjustment knob while adjust the range.

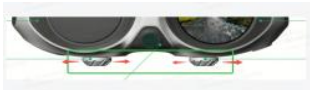
2.2.5 Using Forehead Spacer Pad

After wearing prescription lenses, the lenses are closer to the goggles. If you feel uncomfortable, such as lashes touching the lenses, you can use the forehead spacer pad to increase the distance between the goggles and lenses.

1. Remove the original pad on the Flight Goggle.
2. Attach the spacer pad between the forehead pad and the original pad using the Velcro.

2.2.6 Flight Goggle Button At a Glance

Position	Button	Functionality
	Home Button.	1. Press and hold for four seconds: Entering linking mode.
		2. Press once: Exit the linking mode.
	Volume Up	1. Press once: volume increased by 1 until max
		2. Press and hold: Continuously increase volume by 1 until max.
	Volume Down	1. Press once: Decrease volume by 1 until 0.
		2. Continuous Short Press: Continuously decrease volume by 1 until 0.

	Touch Screen	Coming Soon
	Knobs	Sideward : Adjust pupil distance.
		Rotation: Adjust diopter.

2.3 Prepare Motion Sensing Remote Control

2.3.1 Prepare Motion Sensing Remote Control

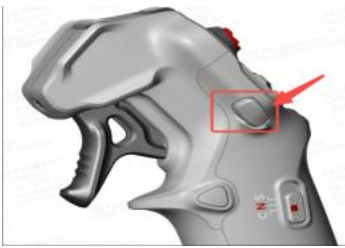
1. Press once on the power button, the battery indicator will display the current battery level. If the battery level is low, charge the Motion Sensing Remote Control.
2. Press once and then hold for two seconds on the power button of the Motion Sensing Remote Control to turn it on or off.

2.3.2 Motion Sensing Remote Control Button

Position	Button	Feature
	Power Button	1、 Press once and hold for two second:Power on / off the remote control. 2、 Press and hold for four seconds: Enter linking mode.

		3. Press once when power off: Show battery level.
	Lock Slider	1. Push and slide upwards when idling: Arm the motor. 2. Slide upward and hold for two second after arming the motor: Take off. 3. Slide downward while hovering near the ground: Landing. 4. Slide upward in the air: Ascend. 5. Slide downward in the air: Descend.
	Accelerator	1. Pull inward to gain forward speed. 2. Let go the trigger to allow hovering. 3. Press trigger once to confirm the selection in the menu of the Flight Goggle. 4. When entered the GUI of the Flight Goggle, pull the trigger and drag to select tracking object.
	360° Dial	1. Left/right scroll – Horizontal rotation of the goggle display's field of view 2. Short press the dial – White circle centers, aiming ray resets to center position

	Record	1. Press once to enter video shooting mode.短按--切换到录像模式
		2. When in the video shoot mode, press once to start and stop video shooting.
	Shutter	N/A
	Flight Pause /Return to Home (RTH)	1. Press and hold for more then two seconds to initiate RTH procedure.
		2. Press once to pause the flight.
		3. Press once to abort the RTH procedure.
	Menu Button	1. Press once to activate or deactivate the goggle's secondary menu. The motion sensing remote controller enters ray mode.
	Flight Mode Switch	1. Toggle between Cine / Normal / Sport mode.
	Customizable C1	N/A

	Customizable C2	1. Double tap to active Follow Me mode.
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2.4. Storage Media Installation

2.4.1 Drone Storage Installation

1. Insert a UHS-I/U3-rated microSD card.

2.4.2 Goggles Storage Installation

1. Insert a UHS-I/U3-rated microSD card in the slot at back of the Flight Goggle.



Note: Format the microSD card to exFAT format to obtain optimal performance.

2.5 Charging

2.5.1 Charging the Intelligent Battery

Option 1:

1. insert the battery to be charged into the slot of the Charging Hub, connect the Type-C port to power source. Type-C port, and connect the USB port to a 5V power adapter (It is recommended to use an adapter with an output current of 2A or higher);
2. When charging starts, the battery indicator blinks, and the Charging Hub will show the battery level progress. Charging stops when the battery is fully charged.



Option 2:

Installation:

1. Insert the battery into the aircraft.
2. Connect the Type-C connector of the USB-C cable to the tail port, then plug the USB-A end into a 5V power source

Note: Use adapters rated 2A or higher for optimal performance.

Charging Monitoring:

1. The battery's LED indicators blink during charging and turn off after the battery is fully charged.



2.5.2 Goggles Battery Charging Procedure

1. Use the provided USB-C cable to connect the goggles' battery to the charger.
2. During charging, the goggles battery LED will blink. Charging automatically stop when fully charged, indicated by the LED turning off.



2.5.3 Charging the Motion Controller

1. Plug the included USB-C into the controller's **USB-C port** (located on the bottom).
2. Power indicator blinks while charging and stops when the Motion Controller is fully charged.



Chapter 3 - Flight Operations

Flight Environment Safety Guidelines

- Do not take off from the moving platform, such as vehicle or cruise ship.
- Do not operate in the serve weather, and be caution when fly in the windy condition (wind speed greater than 10.4 meters per second) .
- Do not shake the aircraft violently after power on, as this may cause it to drift after takeoff.
- When powering off, do not directly remove the battery from the Flight Goggle. Press once and hold on the power button to power off the battery.
- Avoid taking off among buildings. Ensure the takeoff area is open, wait for the GPS signal to turn white or yellow after takeoff, refresh the return point, and then continue flying.
- Steer the aircraft away from tall buildings and avoid maneuvers such as flying through holes or clouds.
- Do not start the Return to Home feature when the aircraft is operating over the water surface as the reflection of the water may affected the vision position system.
- In case of disconnection or a black screen during the flight, wait for the aircraft to automatically return to the home point and the video transmission signal to resume.
- Maintain a distance of at least 200 meters from high-voltage lines, signal towers, communication base stations, substations, radar stations, microwave stations, and mobile communication base stations.
- After takeoff, start screen recording from the Flight Goggle to facilitate feedback.

Pre-flight Checklist

Battery Check: Verify the aircraft battery is fully inserted into the compartment with both side latches securely locked. Ensure the goggles' Type-C port and battery connector are firmly plugged. Confirm battery level is at lest 20%.

- **Motor Arm:** Ensure that the four arms are fully extended with the spring functioning and without looseness.

- **Motor and Propellers:** Check that the blades are intact and undamaged.

- **Landing Gear:** Ensure that the landing gear at the bottom is deployed.
- **Flight Goggle:** Live view signals are relayed from the aircraft.
- **Remote Controller:** A white circle cursor appear on the goggles screen, which can move synchronously with the direction pointed by the motion sensing remote controller.
- **Aircraft self-check:** If the aircraft self-check detects any abnormalities, the system will prompt the failure reasons on the goggles screen and prohibit takeoff.

3.1 Basic Flight Operation

3.1.1 Free Mode

The default control mode, called Freedom Mode, allows the aircraft's heading to be controlled by the rotation range of the Yaw axis on the motion sensing controller. The Pitch axis adjusts the pitch angle of the aircraft, while the Roll axis rotation does not impact the flight attitude.

Before taking off:

Aircraft Status Indicator : Observe for a solid green tail light with either two flashing lights or a solid green blinks, indicating that initialization is complete.

Check Flight Goggle : Watch for messages at the top of the screen notch saying "Ready to take off" or "Takeoff cautiously."

Quick Takeoff: Slide the Unlock Slider upward twice quickly to unlock. Confirm all four motors are idling before sliding up the Unlock Slider continuously until the UI prompt inside the flight goggles indicates completion. Release the slider to have the aircraft automatically take off and hover at a height of 1.2 meters.

Emergency Brake: In case of an emergency during flight, press the Brake/Return button on the motion controller to swiftly stop the aircraft.

Ascend and Descend: While the aircraft hovers, push up the Unlock Slider to ascend and pull down to descend.

Align White Circle: Click the Wheel Button to center the direction of the white circle.

Flying: After directing the white circle to a specific location, use the Throttle Stick to maneuver the aircraft forward in the direction of the circle. Release the Throttle Stick for automatic braking.

Manual Recording: Press the Record Button briefly to start or stop manual recording.

Auto Return: Hold the Return Button for 2 seconds to trigger automatic return, or press briefly to cancel the return.

Auto Landing: Lower the Unlock Slider to descend the aircraft to approximately 0.5 meters from the ground. Continue lowering the slider until the UI prompt is complete, then release to have the aircraft land autonomously and stop the propellers.

Speed Mode Switch: Toggle the three-step Flight Mode Switch to C/N/S mode.

3.1.2 Driving Mode

In Driving Mode, turning radius of the aircraft is controlled by the Roll axis rotation range of the motion controller, while the Yaw axis rotation range does not affect the aircraft's attitude. Identical to the Panoramic Mode, the Pitch axis rotation range of the motion controller adjusts the pitch angle of the aircraft.

Entering Driving Mode

Turn on the aircraft, FPV goggles, and Motion Sensing Controller, ensuring all connections are secure. Navigate to the main menu using the Motion Sensing Controller's menu button. Use the controller as a laser pointer to tap on the "Flight Control Mode" at the top right corner of the screen to switch the control mode to "Driving Mode".



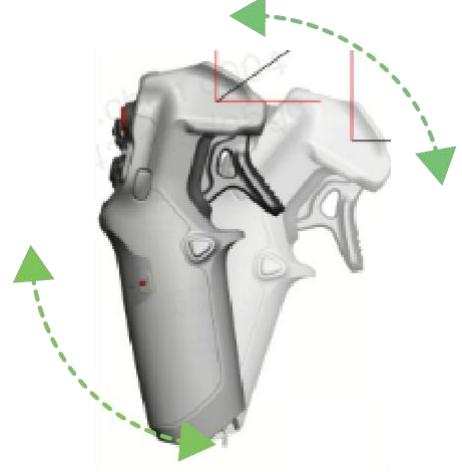
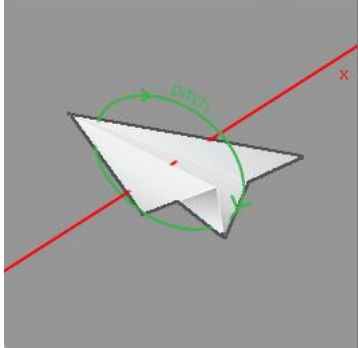
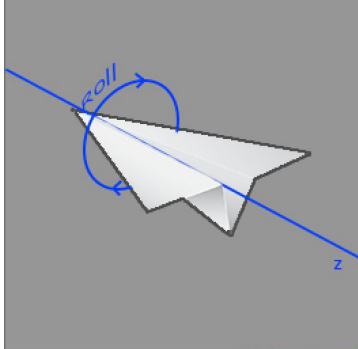
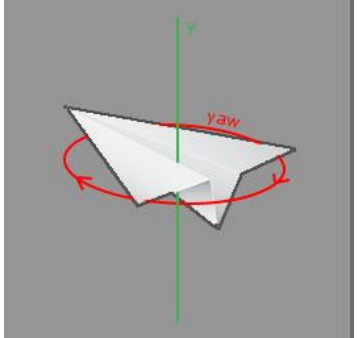
FPV Goggles Interface

In Driving Mode, the live playback interface of the aircraft differs from that of the Free Mode. Illustrated below, ① signifies Head Tracking, aligning with the user's visual direction. ② features a red dot indicating the flight direction and current attitude of the aircraft, with a dashed line representing the relationship of traction between them. Following major flight maneuvers, ① consistently converges towards ②.



In Driving Mode, the visual elements in the UI interface stay stationary and do not adjust based on changes in the visual direction indicated by ①.

3.2 Motion Sensing Controller Operation

Controller Movement	Aircraft Response	Remark.
		Pull the Motion Sensing Controller towards you to make the Aircraft ascend. Push the handle away from you to make the Aircraft dive.
		Tilting the grip left or right will make the aircraft roll sideways around its body axis. The aircraft will not react to the left and right roll commands when the accelerator on the grip is released.
		Turn the 360° Dial to adjust the heading of the aircraft. When the Accelerator is at 0, turning the dial allows for a pivot turn in place.

3.4 Return to Home (RTH)

Introduction of RTH

The Return to Home (RTH) function enables the aircraft to return to the last recorded Home point. We can engage RTH in three ways: the user actively triggers RTH, the aircraft's battery level is low, or the control signal between the remote controller, vision goggles, and the aircraft is lost. If the aircraft successfully records the Home point and the positioning system (GNSS) is operating normally, the aircraft will automatically return to the Home point and land when the RTH function is triggered.

Home Point

The position where the aircraft first receives a strong to medium-intensity satellite signal (represented by a white icon) will be recorded as the default Home point. As long as the aircraft receives another strong to medium-intensity satellite signal, the Home point can be updated and refreshed before takeoff. If the signal is weak, the Home point will not be refreshed.

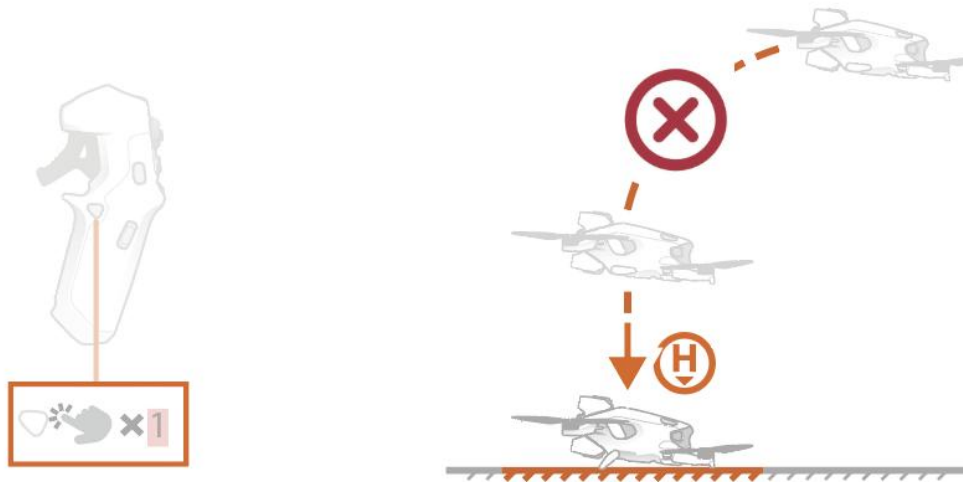
GNSS Signal		The white icon indicates that the satellite signal is good, and the aircraft can record or update the return point.
		The red icon indicates poor signal, and the aircraft is unable to record or update the return point
Return Point		When the satellite model is in good condition, the aircraft automatically updates the return point based on its current position, and at this time, the user can also manually update the return point. Attention: If the aircraft has already approached or entered a no-fly zone, even if the satellite signal is good, the return point cannot be refreshed or recorded.

Return process

1. The aircraft records the return point.
2. Trigger return, and the return behavior can be set in the return settings. The default return behavior is "return", and it can also be set to "brake to stop" according to the actual situation.
 - User automatically triggers return-to-home
 - Loss of control signal triggers automatic return

- Low flight battery triggers return-to-home

3. During the return process, if the user needs to cancel the return, they can briefly press the brake button on the remote control to cancel the return state.



During the descent phase of the return flight, if the user needs to urgently exit the landing state, they can interrupt the landing process by briefly pressing the C2 button on the remote controller. At this time, the flight will hover in place and wait for user instructions.

4. When the aircraft is in the return level flight phase, the user, while wearing flight goggles, can press the somatosensory throttle to increase the level flight speed and enable the aircraft to reach the safe landing range as soon as possible.

5. The return altitude is crucial for correctly guiding the aircraft to return, so the aircraft will select different return altitude strategies based on its different distances from the current return point.

- When the distance between the aircraft and the return point is less than 5 meters, the aircraft will land in place.

- When the aircraft is within 5 to 50 meters from the return point, it will execute the return mission at its current flight altitude. If the return altitude at this moment is less than 3 meters, the aircraft will first climb to 3 meters and then fly back to the return point.

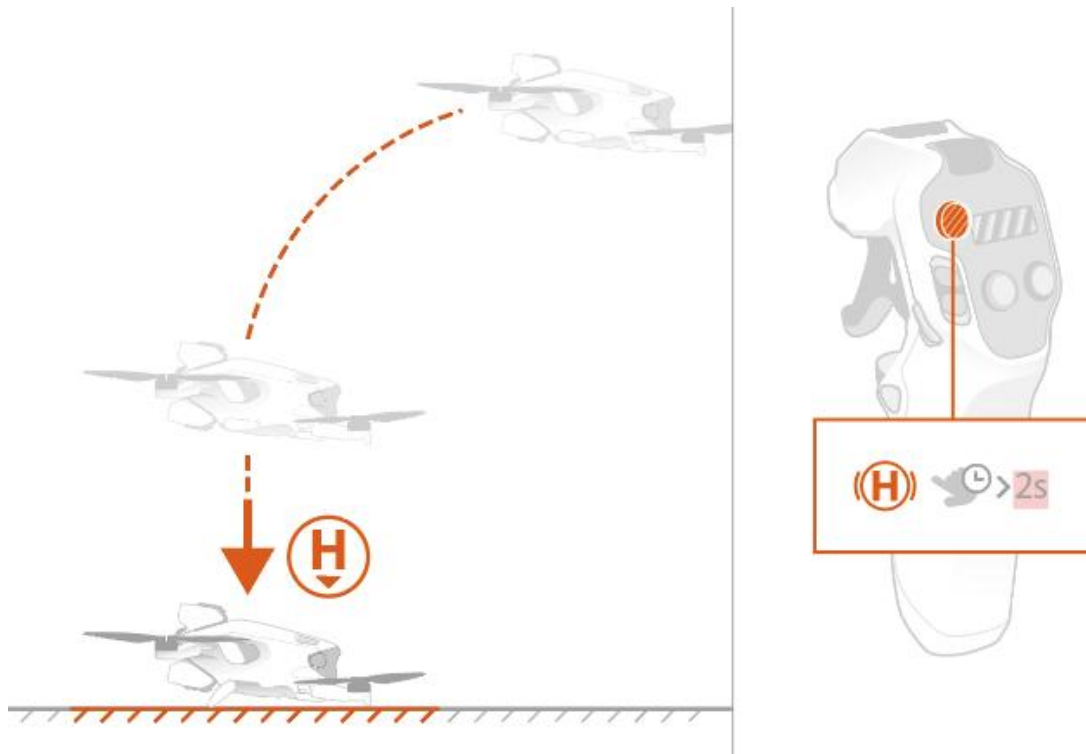
- When the distance between the aircraft and the return point is greater than 50 meters, if the current altitude of the aircraft is less than the preset return altitude, the aircraft will climb to the preset return altitude and then fly back to the return point. If the current altitude of the aircraft is already greater than the preset return altitude, the aircraft will fly back to the return point at the current altitude.

6. During the return flight, users can monitor the return trajectory of the aircraft via the small map interface in the flight goggles.

7. After reaching the airspace above the return point, the aircraft will land on its own and the motors will stop running.

Manually Trigger RTH

During flight, the user can trigger RTH by long-pressing the emergency brake/RTH button.



To prevent the aircraft from being unable to return to a safe location due to insufficient battery power, if the aircraft detects that the current flight battery charge cannot support flying back to the return point, the aircraft will automatically trigger the low-battery return mode.

During the flight of the aircraft, the aircraft will analyze in real time whether the current battery level supports a safe return. When it detects that the current remaining range is insufficient to return to the return point, it will issue a low-battery countdown reminder and simultaneously start a 10-second countdown. If the user does not perform any operations within the 10-second countdown, the aircraft will automatically return.

Warning: If the operator ignore the low battery level RTH warning, the aircraft will eventually enforced to land itself and may result in unplanned landing, which may damaged the property of others or even individuals.

During flight, the aircraft dynamically estimates its remaining range based on its current position, battery level, and environmental information. When the battery level reaches the corresponding warning level, it will prompts user with below warnings

1. Level 1 Low Battery Level Return: The aircraft returns from its current position and lands with 15% battery remaining
2. Level 2 Low Battery Level Return: The aircraft returns from its current position with 10% battery remaining upon landing
3. Level 1 Low Power Level Descent: The aircraft descends from its current altitude to the ground with 5% remaining power

Warning: The accuracy of the low battery warning RTH is subject to environmental factor such as strong wind conditions, it may affect the estimation of the remaining range. If the aircraft's current state does not support remaining range estimation (no return point, abnormal battery communication, no GNSS signal, etc.), the remaining range estimation will be invalid, and users need to pay attention to the flight distance and battery level .

User can adjust the threshold of the low battery level return in the menu of Vision

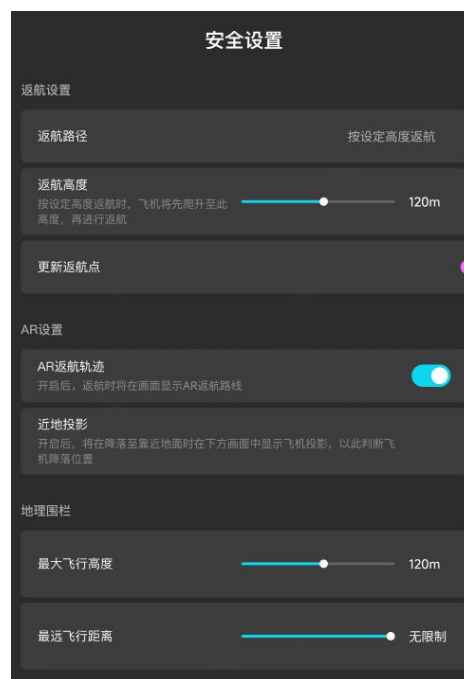
goggles once it is connected to the aircraft.

Return to Home due to Loss of Control Signal

When the video transmission signal of the flying goggles or the remote control signal of the motion sensing handle is lost, if the return point has been successfully recorded, then, if a signal loss timeout occurs, the automatic return function will automatically activate.

3.5 Optimal Altitude for Return Home

Users can set the optimal return altitude () through the setting option in the flight goggles menu. The access path is shown in the figure below.



3.6 Flight Goggle Operations

- Flight Goggle Main GUI



Number	Remark	Number	Remark
1	Recording time lapse	2	Controller operation prompt
3	Remain screen recording time for aircraft or flight goggle.	4	Battery level for aircraft and flight goggle
5	Map will display when the aircraft is in the middle of RTH when waypoint feature is use.	6	- GNSS signal level - Video transmission signal level - Bit rate

7	Flight mode Vertical flight speed Flight altitude	8	Camera profile
9	Aircraft current status	10	Cursor, indicating the heading of the aircraft.

- **Accessing Flight Goggle Setting Menu**

As depicted in the image, press the "**Menu Button**" on the Motion Sensing Controller to access the setting interface of the flight goggles. After entering the interface, the Aircraft will hover until the user exits the menu .

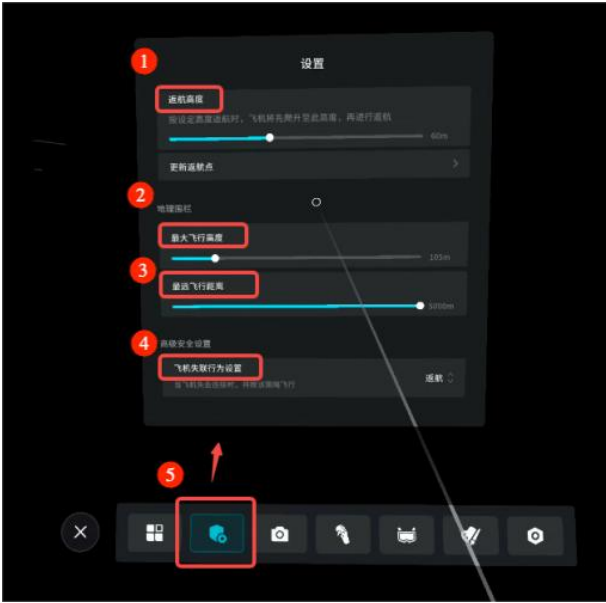


- Flight Goggle Menu at a Glance



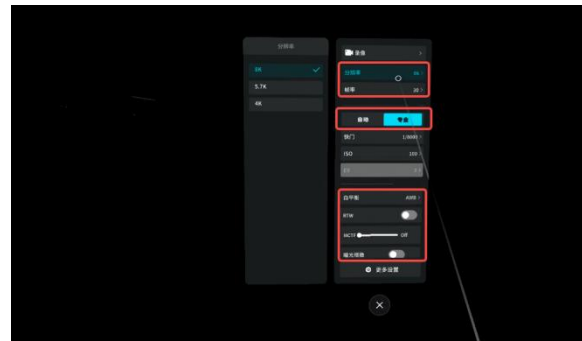
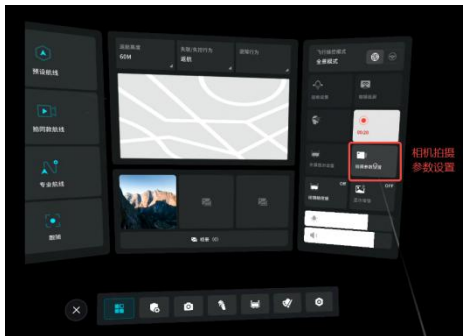
Number	Remark	Number	Remark
1	Start / pause video recording	2	Camera profile settings.
3	Enable / disable front touch panel	4	Flight goggle brightness and volume adjustment
5	Photo album entry	6	Flight settings
7	Camera advance setting.		

- Flight Safety Parameters Setting



Number	Remark	Number	Remark
1	RTH altitude	2	Maximum flight altitude
3	Maximum flight radius	4	Aircraft fail safe behavior
5	Flight settings entry point		

- **Camera Configuration**



Chapter 4 - Waypoint Flight

4.1 Waypoint Planning

Power on the Aircraft, Flight Goggle, and Motion Sensing Controller. Ensure the Flight Goggle is connected to the Aircraft. Press the menu button on the Motion Sensing Controller to access the Flight Goggle menu. Using the Motion Sensing Controller as the laser point to navigate in the menu, pull the trigger on “Waypoint Planning” on the upper left corner.



4.1.1 Create Waypoint Plan

1. Upon entered the secondary menu in the Flight Goggle, tap on the “**Create waypoint**” on the upper right corner.



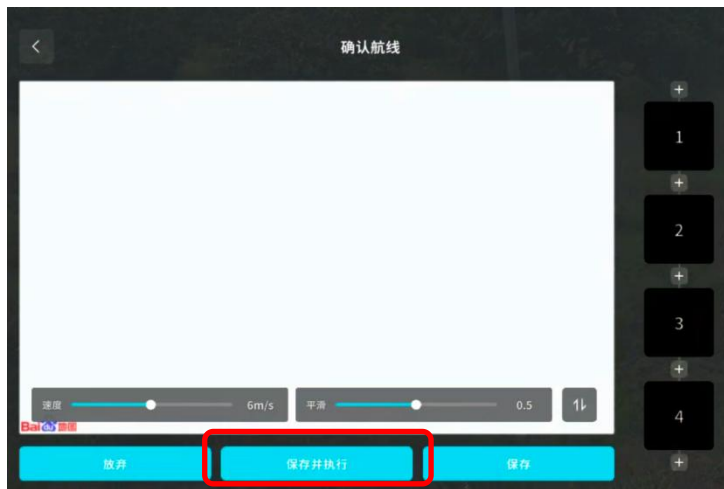
2. Control the aircraft to flight towards the starting point of the route and press C1 once to mark the current waypoint. The current position of aircraft will be saved as the starting point of the route and the waypoint number will be displayed in the queue at the bottom left corner.



3. Control the aircraft to fly to the next location, press the C1 button once to add the next waypoint.
4. After adding all the waypoints, press and hold the C2 button to exit the current interface.

4.1.2 Executing the Waypoint Plan

1. When all waypoints have been set up, press and hold the C1 button to enter the route confirmation menu. Users can adjust the waypoint sequence, add or delete waypoints from this menu.
2. After completing all adjustments, users can choose to save the current route or execute the current route. If the "**Save and Go**" option is selected, the aircraft will move to the first waypoint and wait for execution.



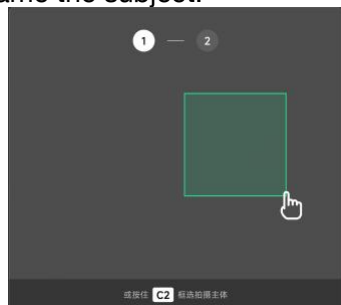
3. Upon completing the waypoint mission, users can regain control of the aircraft and flight it back.

4.1.3 Cinematic Shots

When using the Waypoints Plan feature, after selecting a subject for filming, users can activate the Cinematic Shots function. This allows the Aircraft to automatically execute a sequence of flight maneuvers aimed at the subject, recreating the preset cinematic effects. To use the Cinematic Shots feature, follow these steps.

Enter the Waypoints section from the Flight Goggle menu.

1. Press and hold the C2 button on the Motion Sensing Controller and move the controller simultaneously to frame the subject.



2. Once the filming subject is selected, the interface will prioritize displaying various supported Cinematic Shots. Select the Cinematic Shot you wish to execute.



3. Press once on the menu button on the Motion Sensing Controller to enter the route settings options. Taking the orbit shot as an example, the user can adjust the Aircraft's orbit direction in the route settings menu.
4. Once settings are adjusted, click “Go”, and the Aircraft will begin executing the planned route. The Aircraft will orbit the subject and start filming. Upon completing the preset shots, the Aircraft will stop filming automatically. To exit the current route, hold down C2 during execution.
5. To exit the current route during execution, press and hold the C2 button.

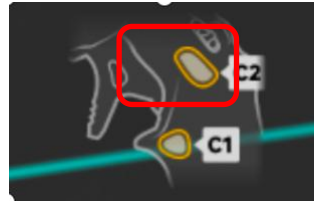


4.2 Follow Me



4.2.1 Activate Follow Me

1. During the the flight, press and hold the C2 button on the Motion Sensing Controller to activate the Follow Me function.



4.2.2 Tracking Subject

1. In Follow Me Mode, the Aircraft scans for the subject that can be tracked within its view.
2. Press C2 and use the Motion Sensing Controller to adjust the target box; it will turn green upon successfully locking the subject.



3. To select a different subject for tracking, press twice on the C2 button.
4. To exit Follow Me mode, hold down the C1 button.

Appendix I - Specifications

Aircraft

Specificati on	Parameter
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Specification	Parameter
Model	DE001
Dimensions (stowed)	141.3mm x 96.2mm x 81.4mm (L x W x H)
Dimensions (fully expanded)	308.6mm x 382.3mm x 89.2mm (L x W x H)
Takeoff Mass	249g (with standard battery), 291g (with high-capacity battery)
Maximum Ascent Speed	Cine Mode: 3 m/s, Normal Mode: 6m/s, Sport Mode: 8m/s
Maximum Descent Speed	Cine Mode: 3 m/s, Normal Mode: 6m/s, Sport Mode: 8m/s
Maximum Horizontal Speed (windless, near sea level)	Cine Mode: 3m/s, Normal Mode: 12 m/s, Sport Mode: 16 m/s
Maximum Takeoff Altitude	Approximately 4,000 meters
Flight Time (standard)	Approximately 23 minutes*
Maximum Wind Resistance level	Category 5 (10.4 m/s)
Operating Temperature	-10 °C to 40 °C
Hover Accuracy (GNDSS)	0.5 m
Hover Accuracy (vision positioning)	0.1 m

Specification	Parameter
Internal Storage	22 GB
Supported Storage Format	MicroSD, up to 512 GB
Sound Level	75 decibel

Camera

Specification	Parameter
ISO Range	100-6400
Shutter	1/8000
Maximum Resolution	Approx. 55 megapixels (10486 x 5248)
Maximum Resolution	Approximately 14 megapixels (52478 x 2624)

Video Transmission

Specification	Parameter
Real-time image transmission quality	2k@30fps
Operating frequency band	2400 MHz to 2483.5 MHz
	5150 MHz to 5350 MHz*
	5725 MHz to 5850 MHz*
Transmit power (EIRP)	2.4GHz: < 30dBm (FCC) , < 20dBm (CE/SRRC/MIC) 5.1GHz: < 21dBm (FCC) , < 23dBm (CE) 5.8GHz: < 30dBm (FCC/SRRC) , < 14dBm (CE)

Specification	Parameter
Maximum download rate	40Mbps
Minimum latency	120ms (2K@30fps)
Antenna	4. 2T 2R.

WiFi

Specification	Parameter
Protocol	802 .11a/b/g/n/ac
Operating frequency band	2400 MHz - 2483.5MHz
	5150 MHz - 5250MHz
	5275 MHz - 5850MHz
Transmit power (EIRP)	2.4GHz: < 20dBm (CE/SRRC/MIC/FCC) 5.1GHz: < 20dBm (FCC/CE) 5.8GHz: < 20dBm (FCC/SRRC) , < 14dBm (CE)
Maximum download rate	30MB/s

Bluetooth

Specification	Parameter
Protocol	BT5.0
Operating frequency band	2400MHz - 2483.5MHz
Transmit Power (EIRP)	< 10 dBm

Flight Goggle

Specification	Parameter
Model	DGS001
Weight	Approximately 295 grams (excluding external battery)
Dimensions	Antenna folded 174 mm x 106 mm x 92 mm (L x W x H)
	Antenna deployed 200 mm x 106 mm x 115 mm (L x W x H)
Inner Screen Size	1.03-inch Micro OLED
Inner screen refresh rate	100 Hz
Diopter adjustment range	From -6.00 to +2.00
Video format	MP4 1600 x 1600@30fps
Supported Playback File Formats	MP4, MOV, INSV, JPG, PNG, INSP
Live Window View	HFOV: 65° , VFOV: 65°, DFOV: 90°
Power	Only official special batteries are supported and must be used with the special charging cable.
Memory	32 GB
Operating frequency band	2400 MHz - 2483.5MHz
	5150 MHz - 5250MHz
	5275 MHz - 5850MHz
Transmit power (EIRP)	2.4GHz: <30dBm (FCC) , <20dBm (CE/UKCA/SRRC/MIC) 5.1GHz: <21dBm (FCC) , <23dBm (CE/UKCA) 5.8GHz: <30dBm (FCC/SRRC) , <33dBm (FCC) <14dBm (CE/UKCA)
WiFi protocol	802 .11a/b/g/n/ac/ax
WiFi operating frequency band	2400 MHz - 2483.5MHz
	5150 MHz - 5250MHz
	5275 MHz - 5850MHz

Specification	Parameter
WiFi Transmit Power (EIRP)	2.4GHz: < 20dBm (CE/SRRC/MIC/FCC) 5.1GHz: < 20dBm (FCC/CE/UKCA/SRRC/MIC) 5.8GHz: < 20dBm (FCC/SRRC) , < 14dBm (CE/UKCA)
WiFi maximum download speed	80MB/s
Bluetooth	
Protocol	5.2
Bluetooth Transmit Power (EIRP)	< 10dBm
GFSK	
GFSK Transmit Power (EIRP)	< 10dBm

Motion Sensing Controller

Specification	Parameter
Model	SRCSE001
Weight	Approximately 115 g
Dimensions	143 mm x 45 mm x 72.5 mm (L x W x H)
GFSK operating frequency band	2400 MHz - 2483.5MHz
Transmit power (EIRP)	< 10 dBm (FCC)
Transmission distance	<10 meters
Longest battery life	Approximately 4 hours
Input power	5V 2A
Battery capacity	2400 maH
Recommended charging ambient temperature	0 °C - 50 °C

Specification	Parameter
GFSK	
GFSK Transmit Power (EIRP)	< 10dBm

Appendix II - Compliance Information

MTOM Statement

The aircraft's Maximum Take-Off Mass (MTOM) is 249 g*, in compliance with the C0 classification requirements under EU 2019/947 Regulation.

The operator must observe the following instruction in order to maintain the C0 certification validity. Any deviation from the instructions constitute a breach of the C0 certification and will void the regulatory compliance.

1. DO NOT install any additional payload unless the item is qualified and approved by the manufacturer.
2. DO NOT apply replacement part (including flight battery or propellers) that are not qualified by the manufacturer.
3. DO NOT perform structural or software modification to the aircraft beyond the scope specified by the manufacturer.

Remote ID

Follow the instructions below to upload the remote ID of the aircraft operator.

1. Power on the goggle and then launch the app. Ensure the goggle is connected to the app.
2. Access to the “**Setting**” from the main menu of the app, then proceed to click on the “**Binding Operator Remote ID**”. Refer to the screenshot below.



3. Follow the on-screen instruction to complete the Remote ID registration. Upon the completion of Remote ID registration, the user's ID will appear in the “**Account Safety**” section.

GEO Awareness

Prerequisite:

Download the latest UGZ file from the EASA website (www.easa.europa.eu) and transfer the UGZ file to your mobile device.

Uploading UGZ:

Follow the instructions below to set up and refresh the UGZ database on the app.

1. Power on the aircraft, flight controller and the goggle. Ensure all devices are connected to each other.
2. Launch the app.
3. Go to “**Settings > UGZ File Management**”, tap “**Import**” to start importing the UGZ file. Follow the on-screen instructions to complete the process.
4. When importing of the UGZ is complete successfully, you may see the prompt successful message on both the app and the goggle UI.

When UGZ Enabled:

Upon the aircraft approaching the restricted areas that are defined in the UGZ file, a warning message will prompt on the goggle to alert that user that the aircraft is about to entering the restricted area.



While the operator is controlling the aircraft in FPV mode, it is essential to have a visual observer situated near the operator. The visual observer should be able to assist the operator in conducting the flight safely. Additionally, the visual observer must be able to communicate clearly with the operator.