REELY

Operating Instructions

GPS Drone GeNii Mini RtF
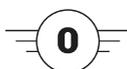
Item No. 2280967
Item No. 2282654 Super Combo

Download on the **App Store**

GET IT ON **Google Play**
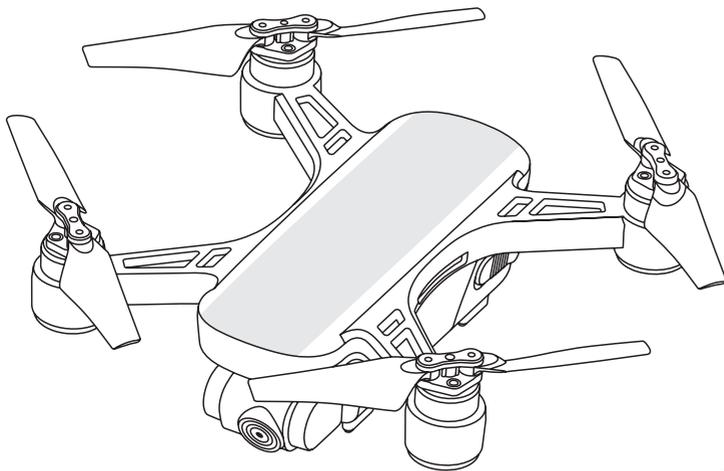
⚠ **WARNING**

Read the safety instructions before using the product!

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GeNii Mini

Table of contents

1. Intended use

The product is a ready to fly remote controlled quadcopter with camera.

It is suitable for persons aged 16 years or older.

The product can be controlled with the remote controller or with the mobile app. Use the mobile app to display real time flight data.

It can be used indoors and outdoors under moderate wind conditions. Contact with moisture must be avoided under all circumstances.

For safety and approval purposes, you must not rebuild and/or modify this product. If you use the product for purposes other than those described above, the product may be damaged. In addition, improper use can result in short circuits, fires, electric shocks or other hazards.

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App Store is a service mark of Apple Inc.

Safety instructions:

Download the safety instructions from www.conrad.com/downloads or scan the QR code shown. Follow the instructions on the website.

⚠ **WARNING: SAFETY AND OPERATING INSTRUCTIONS**

- Read to prevent accidents!
- Read safety instructions before using the product!
- Retain these operating instructions for reference!
- If you pass on the product to any third party also pass on safety and operating instructions.

2.Know the aircraft

2.1 Components
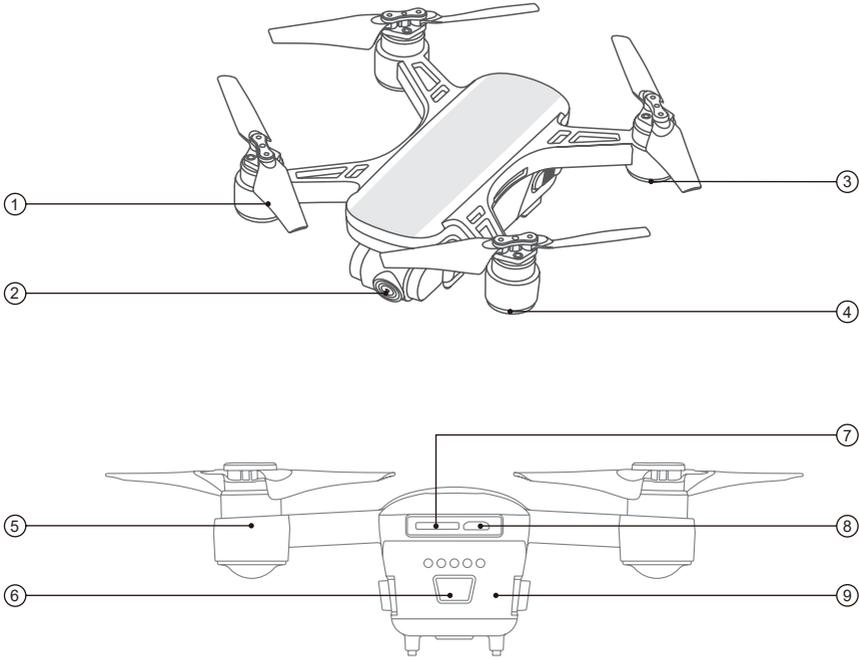
1 Propeller

2 Gimbal Camera

3 Flight Status Indicator Light

4 Optical Positioning Status Indicator Light

5 Motor

6 Power button

7 Memory Card Slot

8 Micro USB Interface (for manufacturer only)

9 Aircraft Battery

2.2 Flight Status Indicator Lights

Rear indicator lights (Quadcopter)			Status indication
B	———————	Solid blue light on start-up	Self-inspection
G	———————	Solid green light	• Remote controller and aircraft are paired • GPS is located
G	— — — — —	Flashing green light	• Remote controller and aircraft is paired • GPS is not located
B R	— — — — —	Blue and red light flashing alternately	Horizontal calibration process
G R	— — — — —	Red and green light flashing alternately	Vertical calibration process
B	— — — — —	Flashing blue light	No remote controller signal
B	———————	Solid blue light	• Remote controller and aircraft are not paired • GPS is located
R	———————	Solid red light	Serious error
R	—— —— ——	Double-flashing red light	Seriously low battery level
R	— — — — —	Flashing red light	Low battery level
B G	— — — — —	Blue and green light flashing alternately	Compass data error

3. Know the remote controller

3.1 Components

a

a

b

c

d

e

f

g

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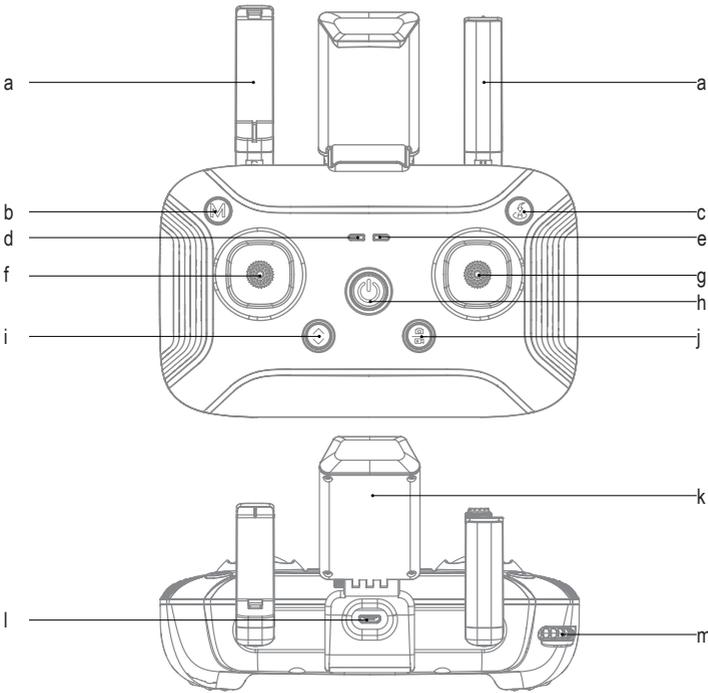
a   Antenna

b   Flight Mode Switch

c   One Key Return

d   Mode Indicator

e   Status Indicator

f   Left Joystick

g   Right Joystick

h   Power

i   One Key Take Off/Land

j   Picture/Video

k   Mobile Phone Bracket

l   USB Charge Port

m   Gimbal Adjustment

3.2 Indicator lights

3.2.1 Charging

Indicator light		Status indication
G − − − − −	Blinking green	Charging
G ⎯⎯⎯	Solid green	Charging completed

3.2.2 In operation

Indicator light		Sound	Status indication
G ⎯⎯⎯	Solid green light		Working normally.
R − − − − −	Slowly flashing red light	B-B-B...	Low battery warning. Immediately charge the battery.
R − − − − −	Quickly flashing red light	B-B-B...	Battery level critically low. Remote controller turns off when the sound stops.
R ⎯⎯⎯	Solid red light		Serious error
G −− −− −−	Double-flashing green light	BB-BB-BB...	If there is no input for 5 minutes the transmitter switches off automatically.

3.2.3 Flight mode indication

Indicator light		Sound	Status indication
G ⎯⎯⎯	Solid green light		GPS mode
R − − − − −	Slowly flashing red light	B-B...	Altitude hold mode

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3.3 Using the mobile support

Step 1
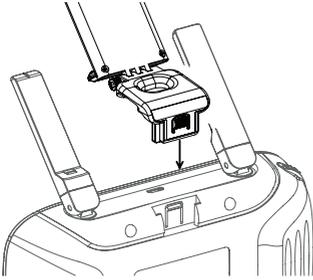
Install the mobile phone support in the slot of the back of the remote controller.

Step 2
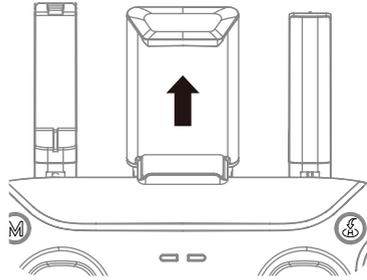
Pull the support up.

Step 3
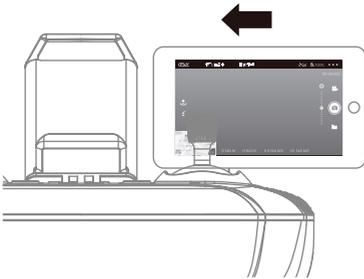
Put the mobile device on the mobile support.

Step 4
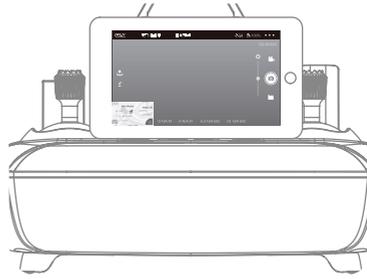
Adjust support and mobile phone to the right angle.

4. Before flying

4.1 Charging the aircraft battery

> **⚠ WARNING**
>
> - Make sure you have read and understood the safety instructions related to batteries.
> - Charge batteries in a well-ventilated environment and keep away from heat sources.
> - Do not charge batteries next to flammable or on the surface of electro-conductive objects.
> - Monitor batteries while they are charging.

1. Connect the USB charging cable to the flight battery charger.
2. Connect the end of the charging cable to a USB power supply. **CAUTION!** Do not charge on a computer USB port.
3. Insert the aircraft battery into the charger as shown below.
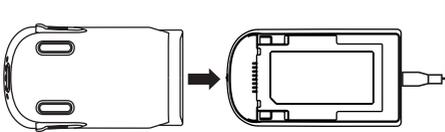
Indications

🔆 Blinking green light (Insert a battery)

🔴 Blinking red light (Charging)

🟢 Solid green light (Battery fully charged)

4.2 Installing (and removing) the flight battery

Installing   Removing
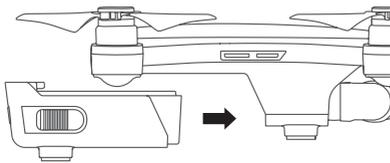
Push the battery into the battery compartment until it locks.
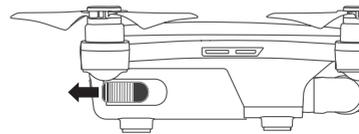
Unlock the battery and pull it out.

4.3 Getting the remote controller ready

If you intend to control the aircraft with the mobile app, you do not need to ready the remote controller.

4.3.1 Checking the battery level

On the remote controller, press the <power> button for 2 seconds to turn it on. Observe the indicator light:

Green solid: battery level is sufficient.

Green blinking: battery level is low. Charge the battery. See **4.3.2 Charging the battery**.

4.3.2 Charging the battery

Warning: Disconnect the charging cable before using the remote controller.

Indicator Light

USB charging cable   USB adapter   Household power socket
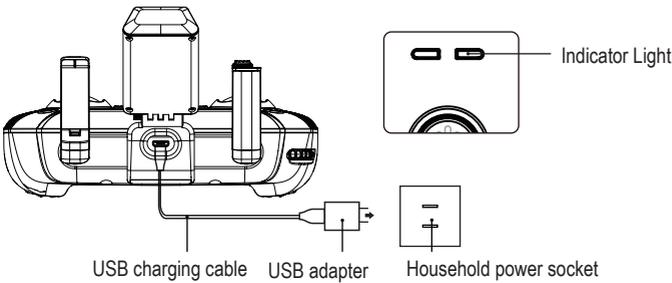
Indications

Blinking green light (Charging)

Solid green light (Battery fully charged)

4.4 Installing an SD card for media storage

Picture and videos are saved to the SD card for storage.

Insert a microSD card (max. 32 GB / class 10 or UHS-1 required) into the slot.

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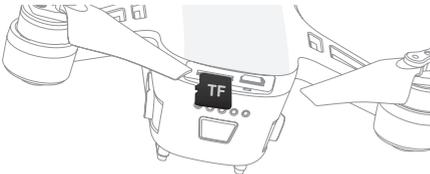
❶ NOTICE

Data loss: Before installing or removing the SD card turn the aircraft off.

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5. Flying with the Remote controller

5.1 Introduction

- You can take off and land *manually* or by using the *one-key program*.
- You can select between different flight modes.
- You can use the *Return-To-Home function* to let the aircraft return to the starting position automatically.
- Use the mobile app to monitor the real-time image and video footage and the flight status of the aircraft.

5.2 Understanding the controls

Mode 2

| Left Joystick | Ascend | | Right Joystick | Forward |

Mode 1

| Left Joystick | Forward | | Right Joystick | Ascend |
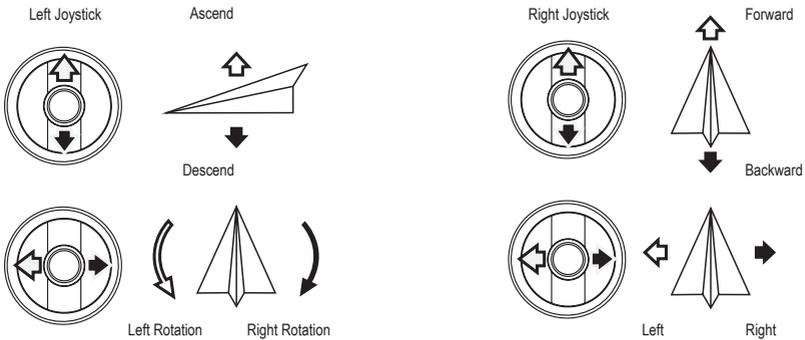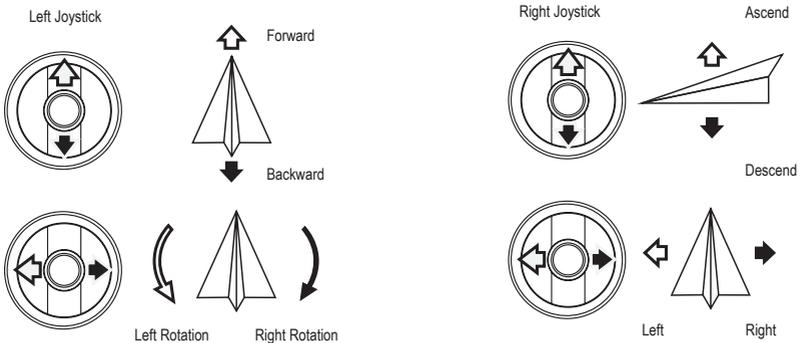
5.2.1 Switching modes (Mode 1/Mode2)

1. Initiate mode switching:

   - *For Mode 2:* Move the left joystick to the lowest position and hold down the <One Key Takeoff/Landing> button at the same time.

   - *For Mode 1:* Toggle the right joystick to the lowest position and hold down the <Photo/Video> button at the same time.

2. While holding down the button from step 1, turn on the remote controller by pressing the <Power> button until you hear a beep sound.

3. Release the joystick. The mode is changed.

5.3 Flying – Getting ready for take-off

> ☑ **Requirements**
>
> • The flight battery and the remote controller battery are fully charged.
> • You understand what the controls do.

5.3.1 Powering on and initializing the aircraft

> ⚠ **WARNING**
>
> Always power on the remote controller before you turn on the aircraft to prevent accidents.

1. Put the aircraft on a flat surface.

2. Power on the remote controller. Hold down the <Power> button for 2 seconds (Fig. A).

3. Power on the aircraft:

   - Push the <Power> button once (1x), then press again and hold for 2 seconds (Fig. B).

   - The initializing tune plays.

4. Wait for the self-check and frequency matching procedure to complete.

   - The procedure takes about 30 seconds.

   - When the indicator lights turn from flashing or solid blue to flashing or solid green the procedure is completed (Fig C).

Fig. A   Fig. B   Fig. C
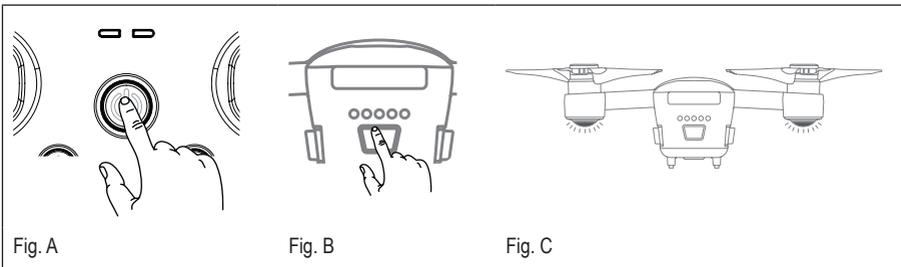
5.3.2 Linking mobile app and remote controller

> ☑️ **Requirements**
>
> - Your mobile device can connect to 5 GHz Wi-Fi networks.
> - You have installed the mobile app **GeNii Mini** (scan QR code to the right or download it from the respective app store).
> - (Recommended) You have installed the mobile support on the remote controller.

Link mobile device and remote controller:

1. Turn on Wi-Fi on your mobile device.

2. Select the **Controller-xxxxxx (serial number)** network to link your mobile device.

3. Open the app and select **Start Flying** to enter the operation interface. Note: It can take a while for the **Start Flying** button to show.
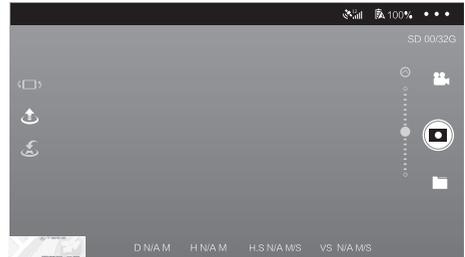
5.3.3 Calibrating the compass

Calibrate the compass whenever you change flying sites.

Refer to **7.2 Calibrating the compass** for instructions.

5.4 Flying – Taking off

> 🔆 **Remember**
>
> - When you turn on the aircraft the **Position Flight Mode** is activated by default.
> - It is highly recommended you only take off after the **indicator light on the aircraft turns solid green** (strong GPS signal).
> - Choose a wide and open flight environment. Tall buildings and metal materials may interfere with the compass and GPS equipment on the aircraft.
> - If you are a **beginner** you can enable Beginner mode in the mobile app, which only permits take-off when the GPS signal is sufficient.

5.4.1 Taking off via the one-key program

1. Hold down the <One Key Takeoff/Land> button for 2 to 3 seconds. When the remote controller beeps steadily, the aircraft will automatically take off and raise to an altitude of 1.2 meters and hover.

2. Control the aircraft with the joysticks.

5.4.2 Taking off manually

1. Start the motors by fully pushing the left and right joysticks outward into their bottom corners and holding them there for at least 3 seconds.

2. Use the throttle joystick to take off.

3. Control the aircraft with the joysticks.
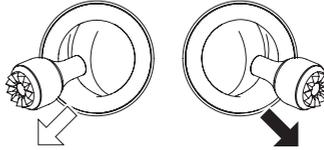
5.5 Flying – Landing

> **❶ NOTICE**
>
> **Prevent product damage:**
> - Choose an open and flat space as your landing site.
> - Be aware of obstacles and ensure the aircraft is hovering over the landing site before landing.

> **⚠ CAUTION**
>
> After landing, stay away from the aircraft until the propellers have stopped rotating to avoid injury.

5.5.1 Landing via the one-key program

Hold down the <One Key Takeoff/Land> button for 2 to 3 seconds. When the remote controller beeps steadily, the aircraft will land vertically.

5.5.2 Landing manually

Use the throttle joystick to land. When the drone lands on the ground, move the joystick to the lowest position and wait until the motors turn off.

5.6 Flying – Switching off

> **⚠ WARNING**
>
> Always turn off the aircraft before you turn off the remote controller to prevent accidents.

After the aircraft has landed and the propellers have stopped rotating do the following:

1. On the aircraft, hold down the <Power> button until the lights go out.

2. On the remote controller, hold down the <Power> button until you hear a beep and the lights go out.

3. Remove the battery from the aircraft and let it cool down. **DANGER!** Keep the battery out of the reach of children.

5.7 Flying – Using Return-To-Home

5.7.1 Introduction

Return-To-Home is a flight assistance feature: it returns the aircraft to base automatically. This is useful in case you lose control or sight of the aircraft.

How it works after activation:

• if the aircraft flies below 30 meters, the aircraft will automatically ascend to 30 meters before returning home.

• if the aircraft flies above 30 meters, the aircraft will return home at the current altitude.

5.7.2 Activating
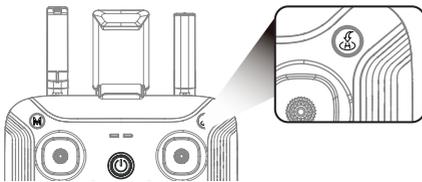
Activate and use the Return-To-Home function as follows:

1. In Position Flight Mode, press the <One Key Return> button to activate Return-To-Home.

   - A continous buzzer sounds.

   - Do not control any functions during the process of return or ascent.

   - If you want to cancel the function, hold down the <One Key Return> button until the buzzer stops.

2. When the aircraft is landing, you can use the joystick to guide it to the desired landing position.

3. After the aircraft has landed and the motors stopped, shut it off completely.

5.8 Flying – Using flight modes

5.8.1 Position flight mode

This mode is suitable for beginner pilots. It uses GPS to achieve accurate hovering, intelligent following and other assistance features.

> ☼ **Remember**
>
> - This mode supports Return-To-Home as long as the GPS coordinates are recorded before you take off.

Activating	Indicator lights	Notes
• It is the default mode after powering on the aircraft. • Press the <Flight mode switch> button on the remote controller until you hear a beep sound.	Left indicator light on the controller turns <u>solid green</u>.	• Wait until the GPS turns on before flying. • The aircraft automatically positions itself and hovers steadily.

5.8.2 Altitude flight mode

Altitude Flight Mode is for **experienced pilots**.

In this mode, you can fly the aircraft with or without GPS signal (flying with GPS is the recommended option). If GPS is turned off, you will fly the aircraft manually.

Activating	Indicator lights	Notes
Press the <Flight mode switch> button on the remote controller until you hear a beep sound.	The left indicator light on the controller turns <u>solid red</u>.	Certain environmental factors, such as airflow, might affect the flight, resulting in drifting or hovering failure.

5.9 Flying – When safety features take over

Built-in safety features protect the product and the pilot and automatically take over control when certain conditions are met.

5.9.1 When the aircraft battery runs out

Condition	Indication	Action
Battery is running out.	• Status indicator light of the aircraft turns slowly blinking red. • Alert on mobile app.	• Return-to-home is activated and cannot be disabled.
Battery level is critically low.	• Status indicator light of the aircraft turns quickly blinking red.	• Aircraft lands immediately.

5.9.2 When the remote controller signal is lost

Condition	Action
• **Position flight mode** is enabled. • GPS positioning is available.	• Aircraft hovers at current altitude for 5 seconds. • If no signal reconnection occurs, **Return-to-Home** is activated.
• No GPS positioning is available. • Signal is interrupted for **2 seconds**.	• Aircraft lands immediately.

5.10 Taking photos and recording video

> **🛈 NOTICE**
>
> **Prevent product damage:**
> - Ensure the camera can rotate freely.
> - Exposure to high temperatures can damage the camera and even cause injury.

5.10.1 Aerial photography tips
- Ensure a smooth flight.
- Shoot on sunny and breezy days.
- Take photos or videos when the drone is in Position Flight Mode.

5.10.2 Adjusting the camera angle

For best results, tilt the camera upward or downward when taking photos or videos.

On the remote controller, scroll the wheel to control the pitch angle. See below image.

Scroll the button upward to tilt the camera upward.

Scroll the button downward to tilt the camera downward.
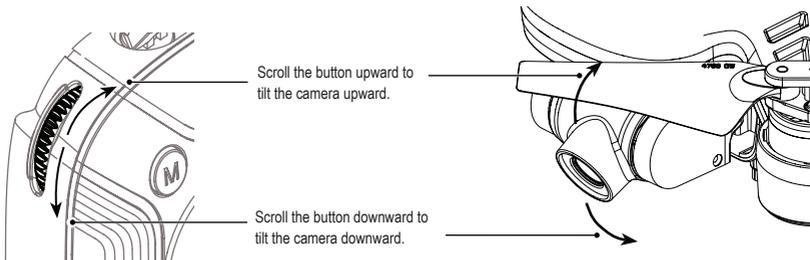
5.10.3 Taking pictures

Press the 🎥 button to take a picture. You will hear a confirmation sound.

5.10.4 Recording video

1. To start recording, hold down the 🎥 button until you hear two beeps. The mobile app shows the recording time.
2. To stop recording, hold down the 🎥 button until you hear two beeps.

5.10.5 Using gestures to take pictures or record video

1. Bring the aircraft into hover position.

2. Enable **Gesture Recognition** in the mobile app.

> ☼ **Remember**
>
> • Face the drone camera.
> • Fly the drone in well-lit environment.
> • Ensure a strong WiFi signal.
> • Use gestures when you stay around 2 meters away from the drone camera.

Victory gesture (picture)

1. Keep **2 meters** from the drone and face the camera.

2. Raise one of your hands in front of you and make a V shape.

3. If your gesture is recognized, an automatic **3-second countdown** is set before taking pictures.

Square gesture (video)

1. Keep **2 meters** from the drone and face the camera.

2. Make a square gesture for shooting **around your chin**.

3. If your gesture is recognized, video recording starts.

4. To stop recording (earliest 3 seconds after starting), repeat the same gesture.

Palm gesture (video)

1. Keep **2 meters** from the drone and face the camera.

2. Close your hand and raise it in front of you.

3. If your gesture is recognized, video recording starts.

4. To stop recording (earliest 3 seconds after starting), repeat the same gesture.

6.Flying with the Mobile app

6.1 Introduction

- You can take off and land *manually* or by using the *one-key program*.

- You can select between different flight modes.

- You can use the *Return-To-Home function* to let the aircraft return to the starting position automatically.

6.2 Understanding the controls

Mode 2

Left Joystick   Ascend   Right Joystick   Forward

Descend   Backward

Left Rotation   Right Rotation   Left   Right

Mode 1

Left Joystick   Forward   Right Joystick   Ascend

Backward   Descend

Left Rotation   Right Rotation   Left   Right
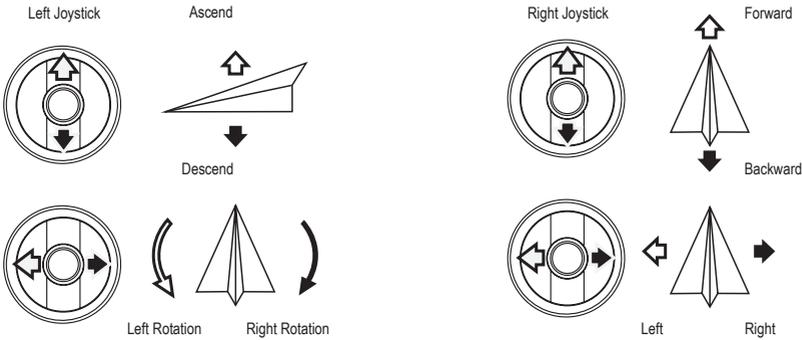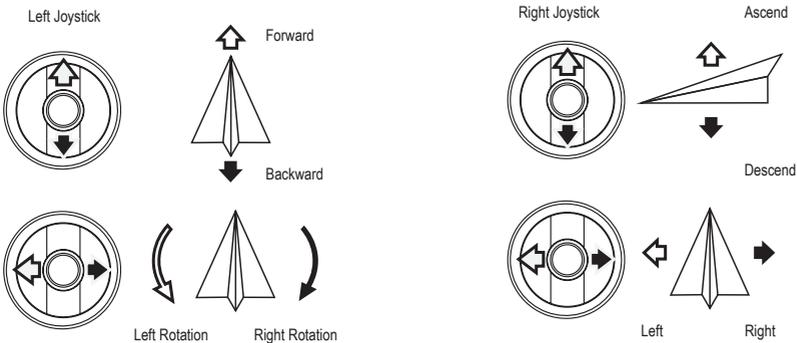
6.2.1 Switching modes (mode 1 / mode 2)

The default setting is Mode 2. Enter **General Settings** in the mobile app to switch the control mode:

• *Left hand:* Mode 2 (default)

• Right hand: Mode 1
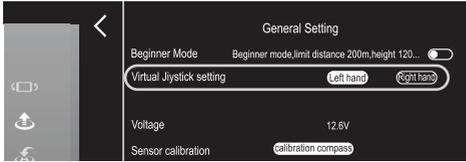
6.2.2 Controlling by gravitation

With gravitational control enabled in the app you can control the aircraft by tilting your mobile device.

✅ **Requirements**
• Your mobile device must support/has G-sensors.
• The aircraft is initialized and the mobile device linked. Go through section **6.3 Flying – Getting ready for take-off** before you enable gravitational control.

1. In the mobile app, select ⟨☐⟩ to turn on gravitational control.

2. Tilt your mobile phone to control the aircraft to move forward or backward, or turn left or right.

3. Select ⟨☐⟩ again to turn off gravitational control.

6.3 Flying – Getting ready for take-off

✅ **Requirements**
• The flight battery is fully charged and the mobile device battery is sufficiently charged.
• You understand what the controls do.

6.3.1 Powering on and initializing
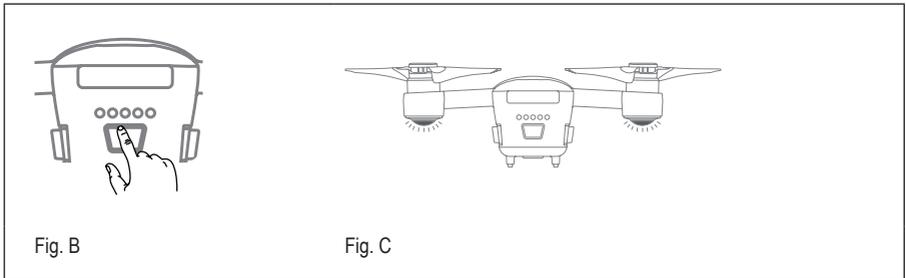
Fig. B   Fig. C

1. Put the aircraft on a flat surface.

2. Power on the aircraft:

    - Push the <Power> button once (1x), then hold down the <Power> button for 2 seconds (Fig. B).

    - The initializing tune plays.

3. Wait for the self-check to complete.

    - The procedure takes about 30 seconds.

    - When the indicator lights turn from flashing or solid blue to flashing or solid green the procedure is completed (Fig C).

6.3.2 Linking mobile app and aircraft

> ☑ **Requirements**
>
> • Your mobile device can connect to 5 GHz Wi-Fi networks.
>
> • You have installed the mobile app **GeNii Mini** (scan QR code to the right or download it from the respective app store).

Link mobile device and aircraft:

1. Turn on Wi-Fi on your mobile device.

2. Select the **Drone-xxxxxx (serial number)** network to link your mobile device.

3. Open the mobile app and select **Start Flying** to enter the operation interface. It can take a while for the **Start Flying** button to show.
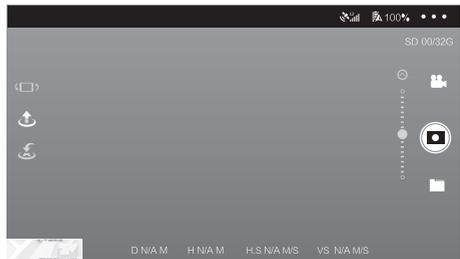
6.3.3 Calibrating the compass

Calibrate the compass whenever you change flying sites.

Refer to **7.2 Calibrating the compass** for instructions.

6.4 Flying – Taking off

> ### 🔆 Remember
>
> - When you turn on the aircraft the **Position Flight Mode** is activated by default.
> - It is highly recommended you only take off after the **indicator light on the aircraft turns solid green** (strong GPS signal).
> - Choose a wide and open flight environment. Tall buildings and metal materials may interfere with the compass and GPS equipment on the aircraft.
> - If you are a **beginner** you can enable Beginner mode in the mobile app, which only permits take-off when the GPS signal is sufficient.

6.4.1 Taking off via the one-key program

1. In the mobile app, tap on 🛫.
2. Confirm the pop-up message to initiate automated take-off. Stay away from the aircraft during take-off.
3. Control the aircraft with the joysticks.

6.4.2 Taking off manually

1. Click the blank area of the screen to pop up the joysticks.
2. Toggle the left and right joystick outward (see image) to start the motors.

3. ⬆ Slowly push the throttle joystick up to take off.
4. Control the aircraft with the joysticks.

6.5 Flying – Landing

NOTICE

Prevent product damage:

- Choose an open and flat space as your landing site.
- Be aware of obstacles and ensure the aircraft is hovering over the landing site before landing.

CAUTION

After landing, stay away from the aircraft until the propellers have stopped rotating to avoid injury.

6.5.1 Landing via the one-key program

1. In the mobile app, tap on .
2. Confirm the pop-up message to initiate landing. Stay away from the aircraft during landing.

6.5.2 Landing manually

 Use the throttle joystick to land . After the aircraft has landed, move the throttle to the lowest position and wait for the motors to turn off.

6.6 Flying – Switching off

After the aircraft has landed and the propellers have stopped rotating do the following:

1. On the aircraft, hold down the <Power> button until the lights go out.
2. Remove the battery from the aircraft and let it cool down. **DANGER!** Keep the battery out of the reach of children.

6.7 Flying – Using Return-To-Home

6.7.1 Introduction

Return-To-Home is a flight assistance feature: it returns the aircraft to base automatically.

How it works after activation:

•   if the aircraft flies below 30 meters, the aircraft will automatically ascend to 30 meters before returning home.

•   if the aircraft flies above 30 meters, the aircraft will return home at the current altitude.

> ☀ **Remember**
>
> •   Use the **Position Flight Mode** in combination with Return-To-Home.
>
> •   For Return-To-Home to work, the aircraft must be able to record the GPS coordinates before take-off, and be receiving a good quality GPS signal.
>
> •   Keep your flying path free of obstacles to avoid accidents. Fly the aircraft in open flat terrain (no tall buildings within a 50 meter radius and flat terrain within a 10 meter radius).

6.7.2 Activating

Auto Return To Home

The aircraft will ascend or descend to the altitude of 30 meters before returning back to home point. Please ensure there are no obstacles in the way of return. Select wide open area as the landing site. Do not attempt touch the aircraft before its propellers completely stopped.

Confirm   Cancel
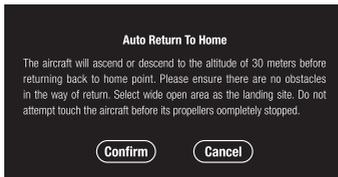
| RTH button | Confirmation box | Forward/Backward |

Activate and use the Return-To-Home function as follows:

1. In Position Flight Mode, tab on to activate Return-To-Home.

2. Confirm the pop-up message to initiate returning home.

    -   The aircraft does not react to joystick input as long as returning to home is in progress.

    -   If you want to cancel the function, tap on .

3. When the aircraft is landing, use the joysticks to guide the aircraft to the desired landing position.

4. After the aircraft has landed and the motors stopped, shut it off completely.

6.8 Flying – Using flight modes

6.8.1 Selecting a flight mode

6.8.2 Position flight mode

This mode is suitable for beginner pilots. It uses GPS to achieve accurate hovering, intelligent following and other assistance features.

> 🔆 **Remember**
>
> • This mode supports Return-To-Home as long as the GPS coordinates are recorded before you take off.

Activating	Indicator lights	Notes
• It is the default mode after powering on the aircraft. • Select the mode from the mode dropdown menu.	On aircraft: • Indicator light turns solid green or blue. • GPS signal is located.	• Wait until the GPS turns on before flying. • The aircraft automatically positions itself and hovers steadily.

6.8.3 Altitude flight mode

Altitude Flight Mode is for **experienced pilots**.

In this mode, you can fly the aircraft with or without GPS signal (flying with GPS is the recommended option). If GPS is turned off, you will fly the aircraft manually.

Activating	Notes
Select the mode from the mode dropdown menu.	Certain environmental factors, such as airflow, might affect the flight, resulting in drifting or hovering failure.

6.8.4 Point of Interest flight mode

In point of interest mode, the aircraft will circle around a definite subject.

You can control the aircraft position and the orbiting radius as follows:

1. Select the **Position flight mode** and take off.

2. In the mobile app, select **ORBIT** from the flights mode menu. The aircraft will start orbiting (Fig. C) about the set location.

3. Use the joystick(s) to:

   - Increase and decrease the orbiting radius (Fig. B, the image shows Mode 2 configuration).

   - Control the aircraft position (Fig. A).
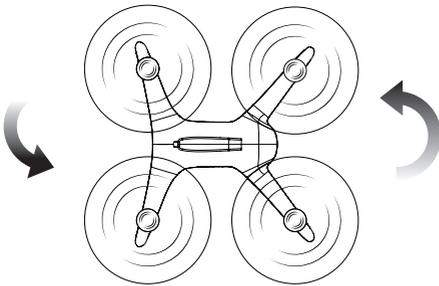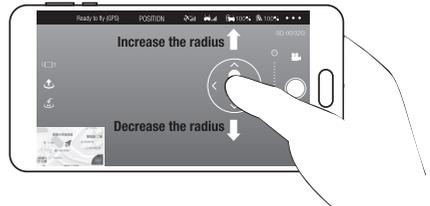
Fig. A   Fig. B
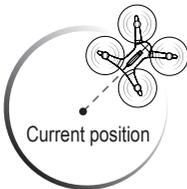
Fig. C

6.8.5 Follow me flight mode

The aircraft will automatically follow your mobile device.

⚠ CAUTION

Prevent injury

In this mode the aircraft circles around you.

It is necessary to maintain a good GPS signal at all times.

Observe the diagram below and follow the steps:

1. Ensure the GPS signal indicator shows all signal bars 📡 .ıll .

2. Take off and then select **TRACK** from the flights mode menu.

3. Select the desired altitude (5 – 50 m).

Aircraft maintains a 5 m horizontal distance to the mobile device.
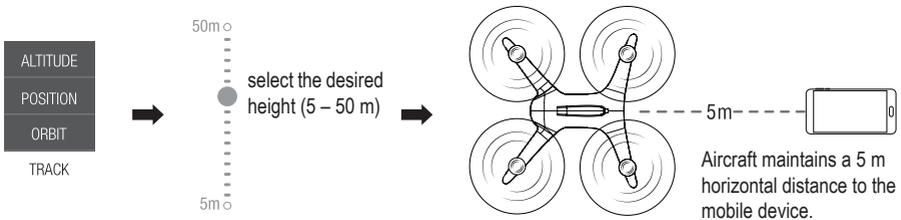
6.9 Flying – When safety features take over

Built-in safety features protect the product and the pilot and automatically take over control when certain conditions are met.

6.9.1 When the aircraft battery runs out

Condition	Indication	Action
Battery is running out.	• Status indicator light of the aircraft turns slowly blinking red. • Alert on mobile app.	• Return-to-home is activated and cannot be disabled.
Battery level is critically low.	• Status indicator light of the aircraft turns quickly blinking red.	• Aircraft lands immediately.

6.10 Flying – Using waypoints

Through waypoints you tell the aircraft where to go in sequence.

⚠ CAUTION

Prevent injury

Always choose open and spacious outdoor fields, away from crowds.

Pay attention to the flight environment and flight altitude.

Map
Waypoint flight
Route planning flight
Flight altitude
Start

Set course point
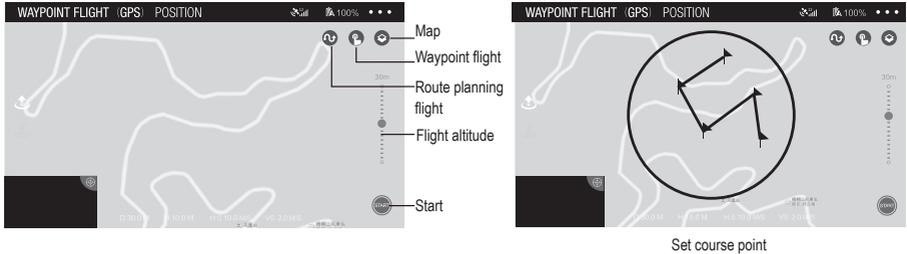
1. Take off and bring the aircraft into a safe hover position.

2. In the mobile app, tap on the map in the left bottom corner to bring up the waypoints.

3. Tap on 🔵 (Waypoint Flying) or 🔵 (Flight Planning) to start the configuration:

   - Read the important notifications.

   - Add waypoints to the map (within a 100 m radius) and set the altitude on the right side of the screen.

4. Tap on 🔵 to start the sequence. The aircraft sequentially flies to each set point.

   - Tap on 🔵 to exit the sequence. The aircraft will hover at its current location.

5. When the aircraft reaches the final waypoint it will hover at that point. You can now decide what you want to do next.

💡 Remember

- Waypoints must be located within a 100 meter radius.

- After you exit a waypoint sequence you can restart it by tapping on a new waypoint and re-enabling waypoint flying.

6.11 Taking photos and recording video

> **❗ NOTICE**
>
> **Prevent product damage:**
>
> • Ensure the camera can rotate freely.
>
> • Exposure to high temperatures can damage the camera and even cause injury.

6.11.1 Aerial photography tips

• Ensure a smooth flight.

• Shoot on sunny and breezy days.

• Take photos or videos when the drone is in Position Flight Mode.

6.11.2 Adjusting the camera angle

For best results, tilt the camera upward or downward when taking photos or videos.

In the mobile app, slide the scroll bar on the right side to control the pitch angle. See below image.

Slide up to tilt the camera upward.

Slide down to tilt the camera downward.
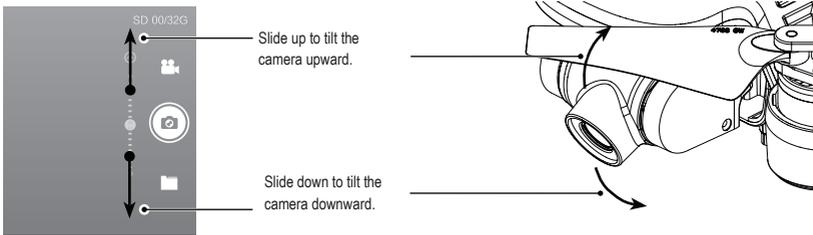
6.11.3 Taking pictures and recording video

Video

Photo

Album
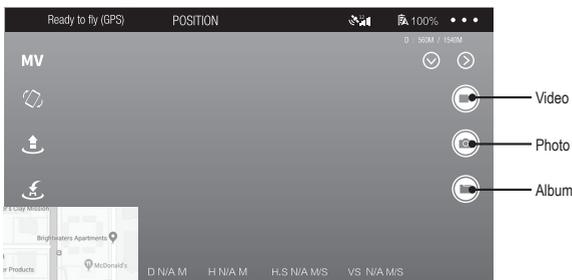
• To take a picture, tap on 📷 .

• To record a video, tap on 🎥 to start and tap a again to stop.

6.11.4 Using gestures to take pictures or record video

1. Bring the aircraft into hover position.

2. Enable **Gesture Recognition** in the mobile app.

> 🔆 **Remember**
>
> - Face the drone camera.
> - Fly the drone in well-lit environment.
> - Ensure a strong WiFi signal.
> - Use gestures when you stay around 2 meters away from the drone camera.

Victory gesture (picture)

1. Keep **2 meters** from the drone and face the camera.

2. Raise one of your hands in front of you and make a V shape.

3. If your gesture is recognized, an automatic **3-second countdown** is set before taking pictures.

Square gesture (video)

1. Keep **2 meters** from the drone and face the camera.

2. Make a square gesture for shooting **around your chin**.

3. If your gesture is recognized, video recording starts.

4. To stop recording (earliest 3 seconds after starting), repeat the same gesture.

Palm gesture (video)

1. Keep **2 meters** from the drone and face the camera.

2. Close your hand and raise it in front of you.

3. If your gesture is recognized, video recording starts.

4. To stop recording (earliest 3 seconds after starting), repeat the same gesture.

6.11.5 MV filming

Tap on MV to enter the MV filming mode.

Joystick On/ Off

Album

Filter

Turn off MV Mode

Image Rotation

Photo

Video

♪ Choose music > >

6s

30s

Recorded Time   Recording Progress Bar

Music Time
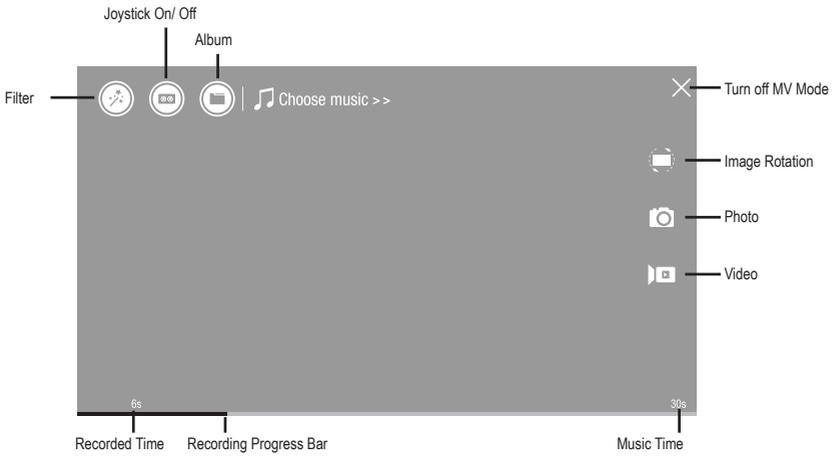
Image Rotation

1. Tap on ⬛ to turn on image rotation.

2. Use two fingers to rotate or zoom the image.

7. Maintenance

7.1 Pairing aircraft and remote controller

When you replace your remote controller, it is necessary to pair it with the aircraft before you can use it as follows:

1. Switch on the aircraft and the remote controller.

2. Go to the network settings on your mobile device and view available WiFi networks. Take down the serial number of the remote controller:

   - **Controller-xxxxxx** (hexadecimal)

3. Connect your mobile device to the **Drone-xxxxxx** (hexadecimal) network.

4. In the mobile app, tap on ● ● ● to open the menu.

5. Go to **Pair RC** then tap on **Pair**. A dialogue box will pop up.

6. Enter the previously recorded serial number then tap on **Pair** to confirm.

   Wait for the pairing to complete. Successful pairing is indicated as follows:

   - Your mobile device should list two networks: **Drone-xxxxxx** and **Controller-xxxxxx**. Both must show the same serial number.

   - The rear indicator lights on the aircraft flash green or are solid green.

7.2 Calibrating the compass

> ☀ **Remember**
>
> • Keep away from environments with magnetic interference to prevent failing.
>
> • During usage, if the aircraft indicates with "alternating flashing blue and green lights", which means that the compass is abnormal , please re-calibrate the compass.

7.2.1 When to calibrate the compass

Calibrate the compass if one of the following conditions is met:

• You are flying at a new site.

• The aircraft status indicator lights indicate a compass error.

• The mobile app prompts you to calibrate the compass.

• Erratic behaviour during flight (such as drifting) that cannot be explained.

7.2.2 Calibrating

The calibration procedure comprises two steps: (1) horizontal and (2) vertical calibration.

> ☑ **Requirements**
>
> - Your mobile device is connected to the **Drone-xxxxxx (serial number)** or **Controller-xxxxxx (serial number)** network.
> - Your environment is free from magnetic interference.

1. In your mobile app, tap on ● ● ● to open the menu.
2. Tap on **COMPASS CALIBRATION** to start calibrating.
   - The indicator lights on the aircraft alternately flash red and blue.
3. Follow the in-app instructions to complete the calibration procedure.

   The app will remind you which step to perform.

---
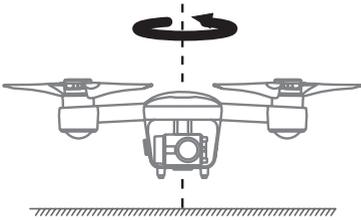
(1) Horizontal calibration

(2) Vertical calibration

1. Put the aircraft in your hand.
2. Rotate it horizontally until the indicator lights alternately flash red and green.
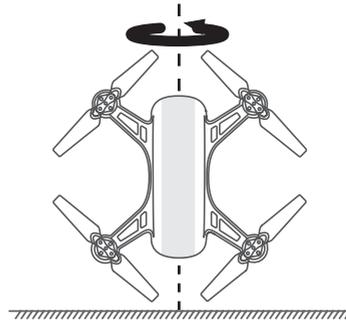
1. Put the aircraft in your hand.
2. Rotate it horizontally until the indicator lights alternately flash red and green.
3. Hold the aircraft in your hand with its nose facing up.
4. Place the aircraft on the ground and then rotate it horizontally until the indicator lights are green or flash green.

If you see red status indicator lights, the calibration procedure failed. Repeat the calibration procedure.

8. Technical data

8.1 General

Transmission frequency range ....5180 – 5240 MHz, 5745 – 5825 MHz

Transmission power...<14 dBm

Transmission distance ....Remote controller: max. 300 m (line of sight)
Wi-Fi: max. 100 m

8.2 Drone

Dimension...148 x 145 x 60 mm (L x W x H)

Main rotor diameter ....120 mm

Function..Follow me function, Waypoint function, Track mode, One key return,
Lost control return, Low battery return, Optical flow system

Ascent speed..max. 2 m/s in sport mode

Max. Descent speed..max. 1.5 m/s

Top speed ....18 km/h in sport mode (without wind)

Altitude above sea level...................................max. 4000 m

Front camera sensor ....1 / 3.2" CMOS ; Image format 4096 x 3072 (12 MP)

Video resolution..1920 x 1080 (front camera), 1280 x 720 (optical flow camera)

Image resolution..4096 x 3072 (12 MP) (front camera),
1280 x 720 (optical flow camera)

Video format MP4

Photo format...JPEG

Flight time...max. 21 min

Drone weight without battery............................165 g

Maximum take-off mass (MTOM) ....247 g

Micro SD card slot ....max. 32 GB. Class 10 or UHS-1 category required

Operating/storage conditions...........................0 to +40 °C; 10 – 70 % RH, non-condensing

Satellite positioning systems ....GPS / GLONASS

8.3 Remote control

Dimension...150 x 97 x 64 mm (L x W x H)

Weight ....202 g

Built in rechargeable battery............................Li-ion, 3.7 V, 2600 mAh, 9.62 Wh

8.4 Flight battery

Type..Li-ion 3S, 11.4 V, 1000 mAh

Rated energy...11.4 Wh

Charging time..90 min

Weight ....82 g

8.5 Balance charger (for drone battery charging)

Input voltage/current.......................................5 V/DC, 2 A

Output voltage...4.35 V/DC, 0.7 A x 3

8.6 App

Name..GeNii Mini

Operating system ....Android: supports 5G Wi-Fi; Version 6.0 or above
iOS: Version 9.0 or above

9. Disposal

9.1 Product

Electronic devices are recyclable waste and must not be disposed of in the household waste. At the end of its service life, dispose of the product in accordance with applicable regulatory guidelines.

Remove any inserted (rechargeable) batteries and dispose of them separately from the product.

9.2 (Rechargeable) batteries

You as the end user are required by law (Battery Ordinance) to return all used (rechargeable) batteries. Disposing of them in the household waste is prohibited.

Contaminated (rechargeable) batteries are labeled with this symbol to indicate that disposal in the domestic waste is forbidden. The designations for the heavy metals involved are: Cd = Cadmium, Hg = Mercury, Pb = Lead (name on (rechargeable) batteries, e.g. below the trash icon on the left).

Used (rechargeable) batteries can be returned to collection points in your municipality, our stores or wherever (rechargeable) batteries are sold.

You thus fulfill your statutory obligations and contribute to the protection of the environment.

10. Declaration of Conformity (DOC)

Conrad Electronic SE, Klaus-Conrad-Straße 1, D-92240 Hirschau, hereby declares that the

UAS "GeNii Super Combo" / "GeNii Mini" is of class C0 and in compliance with Directive 2014/53/EU and

EU regulations 2019/945 and 2020/1058.

Click on the following link to read the full text of the EU Declaration of Conformity:

www.conrad.com/downloads

Enter the product's order number in the search field; you can then download the EU Declaration of Conformity in the available languages.

11. Appendix – About optical flow positioning

11.1 Introduction

Placed on the bottom of the aircraft, the optical flow positioning system senses the movements of the aircraft with the assistance of the camera, and calculates the current altitude, helping to precisely locate the aircraft's position.

When the aircraft is ready to take off, the optical flow positioning function cannot be activated due to the low altitude with the aircraft's front indicator light blinking slowly. After the aircraft has taken off and the conditions are satisfied, the optical flow positioning function will automatically turn on and locate the aircraft's position as to enable hovering with the aircraft's indicator light turning solid red.

Attention: In mid-flight, the optical flow positioning function cannot be activated if the aircraft's front indicator light turns slow blinking red. Please pay proper attention for a safe flight.

The optical flow positioning system is significantly affected by the intensity of the light and the surface texture of the physical object. If the optical flow positioning system fails to work, its function of horizontal centered absolute positioning will be ineffective. In this situation, please manually control the aircraft and pay proper attention whist flying the aircraft in the following scenarios.

11.2 Usage Scenarios

- The optical flow positioning system is applicable for altitude between 0.5 and 4 meters and suitable for either indoor or outdoor windless environment.

- The aircraft's indicator light turns slow blinking red when the system fails to locate position and turns solid red when the system functions properly.

- Do not fly the aircraft if the app reminds you that the system is not able to function properly in the current environment (such as badly-lit environment).

- Do not cover up the camera. Keep the camera clean and in good condition at all times.

- The optical flow gives information about object movement within the environment based on moving object detection on the ground surface. Ensure the surrounding environment is brightly lit and rich in texture.

- The optical flow positioning system may fail to work in such conditions as water bodies, badly-lit environment or poorly-textured surfaces.

- The system may fail to locate position when the aircraft flies fast at a low altitude (0.5 meter below).

- The surfaces in pure colors (such as pure black, pure white, pure red, pure green).

- Highly reflective surfaces.

- Water bodies or the transparent surfaces.

- The surfaces of moving objects (such as the crowds, and bushes or brushwood with strong wind blowing).

- The environment where the light changes rapidly.

- Badly-lit (light intensity less than 300 lux) or brightly-lit (light intensity more than 10,000 lux) surfaces of the objects.

- Poorly-textured surfaces.

- The surfaces that have been featured with highly-repeated textures (such as same-colored checker bricks).

- Tiny barriers.

- Control the aircraft to fly at an appropriate speed of about 5m/s at the altitude of 1 meter.