V1100

QUICK START GUIDE V1.0

December 20, 2019
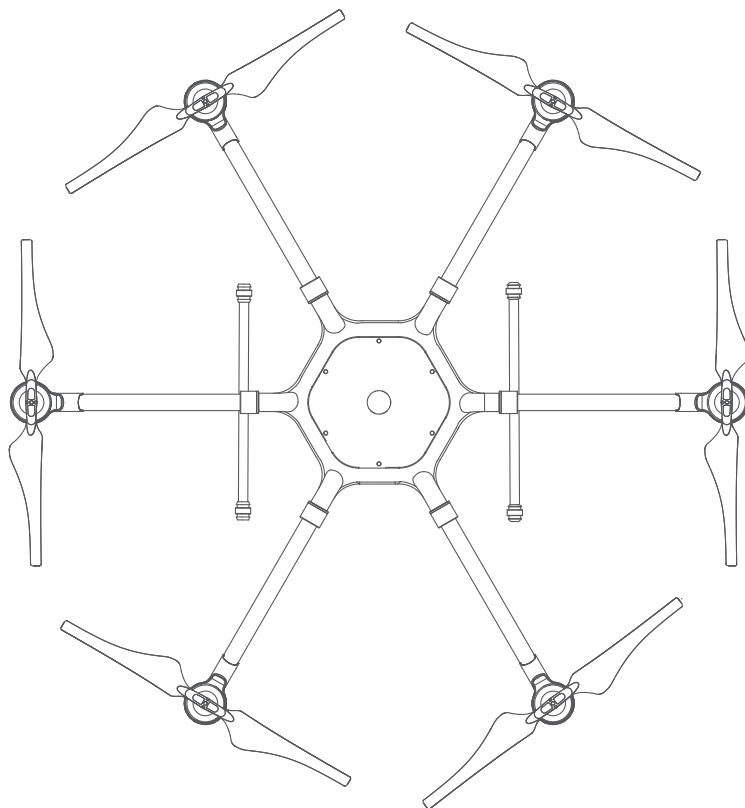
Contents

1.0 Summary of flight safety

⚠️ **The use of V1100 has a certain security risk and is not suitable for people under 18 years of age. The safety summary contains only part of the flight safety knowledge. Please read the Quick Start Guide carefully to avoid property damage or even personal injury caused by improper operation.**

1.1 Environment
• This product uses 2.4G / 5.8G dual frequency image transmission technology, flying in an open and unobstructed field, far from the crowd and must without electromagnetic interference.
• Flying under 5000 meters sea level.
• Flying in a legal area, please consult your local flight management department before flying to comply with local laws and regulations.
• Do not fly in bad weather, such as high winds, snow, foggy weather, etc.
• When flying, please keep control within the line of sight to keep the aircraft at least 10 meters away from obstacles, people, water and other objects.
• Do not operate the aircraft indoors.

1.2 Inspect
• Make sure that the antennas of the remote control and the aircraft are installed firmly and not loose before take-off.
• Adjust the resolution and bit rate of the camera before take-off. It is recommended that IPAD for large screens use 1080P and 2M to 4M bit rates, and small screen phones generally use 720P and 1M to 2M bit rates.
• Make sure the image is not frozen and the data link is normal before takeoff.
• Make sure each device is fully charged before takeoff.
• Make sure all parts are intact before take-off. If parts are worn or damaged, please replace them before flying.
• Before take-off, make sure that the propellers are not damaged, the propellers and arms are unfolded, and the arms are tightened.
• Before take-off, make sure that the motors are clean and undamaged.
• Before take-off, make sure that all screws are locked to ensure that screws and nuts are not loose.
• Make sure the GPS stand is up and the GPS antenna is up before taking off.

1.3 Operation
• Keep away from propellers, motors when they are working.
• Try not to move the antenna of the remote control during the flight. If the image signal is weak, you should adjust the direction of the remote control slightly and swing it slightly until you find the best direction.
• If the GPS is disturbed during the flight and cannot be located, the drone will automatically switch the flight mode to fixed altitude mode. Before the GPS signal is restored, the drone will not be able to hover automatically. The pilot should use the returned flight data and objectives. Depending on aircraft position
• Performing a stick action or stopping the motor in other ways during flight will cause the aircraft to fall. Use this feature only in an emergency
• Do not answer or make phone calls during the flight. Never operate the aircraft under the influence of alcohol or drugs.
• After landing, turn off the aircraft first and then turn off the remote control, so as not to lose the signal of the remote control and cause the aircraft to automatically start the home mode.
• Please maintain control of the aircraft throughout the process, and do not rely on the information provided by the APP. Please rely on the naked eye to judge the flight condition reasonably, avoid obstacles in time, and set the corresponding flight and return altitude based on the flight environment

2.0 Get to know your aircraft

• The innovative design makes the aircraft arms foldable and portable.
  Easy assembly generates quick operation.
• The fuselage adopts closed design, IP43 three-proof capability, and has industrial-grade waterproof dust-proof
  and anti-corrosion ability.
• Equipped with 30X optical zoom camera, which can observe the front environment in real time and provide
  real-time reference for rescue work.
• The battery system is comprised of three 22000mAh batteries, providing a maximum of 60-min flight duration
  (empty payload, zero wind and hovering conditions).
• Adopting 2.4GHz&5.8GHz dual-band long-distance digital encryption transmission technology,
 which makes the maximum video transmission range as long as 6km.
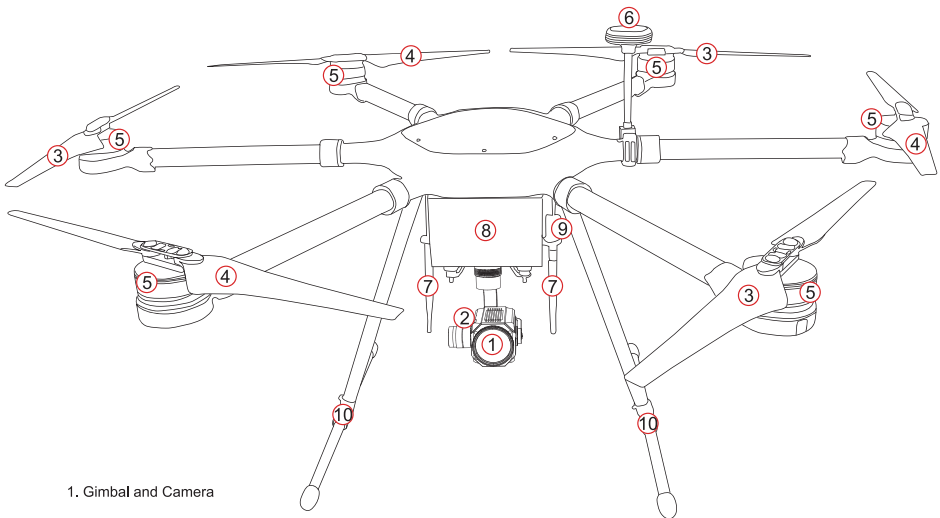
1. Gimbal and Camera

2. Micro SD card slot

3. CW propeller

4. CCW propeller

5. Brushless motor

6. GPS antennas

7. Image transmission antenna

8. Battery box

9. GPS indicator

10. Landing gear

* 1) To avoid property loss and personal injury caused by wrong operation, please read the manual carefully, upgrade the firmware
     and calibrate the related items by watching the tutorial video at www.walkera.com before using V1100.
  2) Rotating propellers are dangerous. Do not start the motors when there are people nearby.

3.0 Get to know your Remote Controller

Remote controller uses 2.4GHz&5.8GHz dual-band long-distance digital encryption transmission technology, with complete function buttons to complete various operations and settings of the aircraft and camera within a maximum distance of 10KM, and can be real-time on the remote control screen. Display HD pictures.
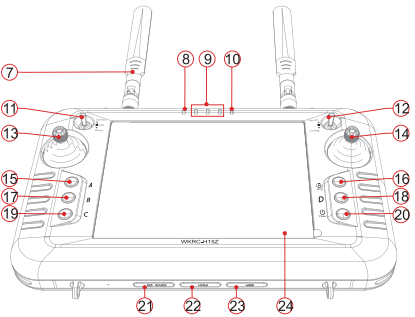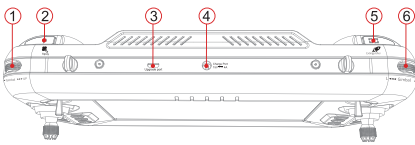
1. Gimbal Pitch Dial
2. Not Enabled
3. Upgrade Remote Control Port
4. Charging Socket
5. Not Enabled
6. Gimbal Horizontal Dial
7. Antenna
8. Charging Completion Indicator
9. Battery Level Indicator
10. Charging Indicator
11. Flight Mode Switch
12. Auto Take Off/Landing Switch

13. Left Stick
14. Right Stick
15. Not Enabled
16. Return To Home Button
17. Not Enabled
18. Thrower button
19. Control landing gear button
20. Power Button
21. SD Card Slot
22. HDMI Output Port
23. Upgrade Android System Port
24. Touch Screen

Manual of remote control power switch:

Power on: Press and hold the power switch to turn on the remote control.

Shutdown/Restart:
Press and hold the power switch, the "Shutdown" and"Restart" operation interface will pop up on the remote control screen. Click "Shutdown" to turn off the remote control; click "Restart" to restart the remote control;

**Turn off the screen:** Press the power switch once to turn off the screen;

Turn on the screen: Press the power switch once, the remote control screen will light up after 4 seconds;

Forced shutdown: In special cases, press and hold the power switch, and press the return button after 8 seconds to force the shutdown.

※ **Warning:**

Forced shutdown may lead to the loss the data of remote controller. Forced shutdown is used only in special cases and the use of forced shutdown function is prohibited in general.

Take "American hand (left hand throttle)" as an example. The left stick controls the aircraft's altitude and heading, while the right stick controls its forward, backward, left and right movements.

Left Stick

Up

Down

Turn Left

Turn Right

Right Stick

Forward

Backward
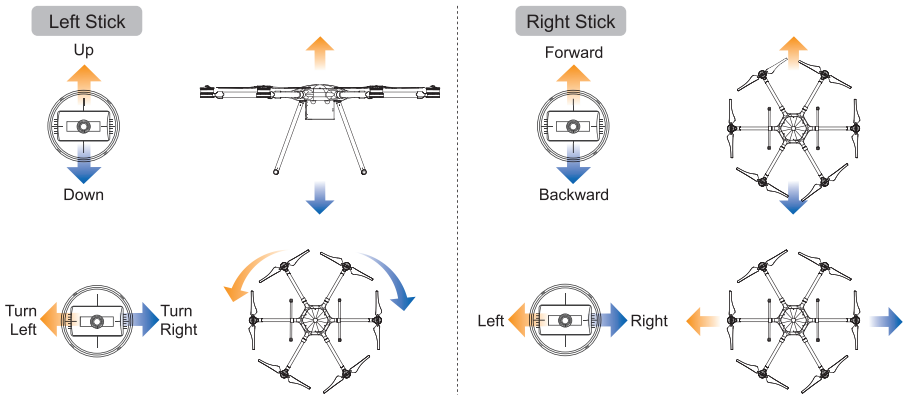
Left

Right

* 1) The Remote Controller has Japanese hand and American hand, please select the MODE in the APP.
    American hand is better for Beginners.
 2) American hand (left hand throttle): Left stick—THRO/RUDD; Right stick —ELEV/AILE.
 3) Japanese hand (right hand throttle): Left stick--ELEV/RUDD; Right stick--THRO/AILE.
 4) Please fly your aircraft in the open air without shelter and electromagnetic interference.
    The maximum signal range for the remote controller being about 6km is tested in experiment and only for reference.

4.0 Specifications

• Aircraft

Propeller size	21x7 inch
Symmetrical motor wheelbase	1133mm
Fuselage size	Unfold: 1200 x 1050 x 480mm / Folded: 600 x 480 x 480mm
Weight	Standard takeoff weight 10kg (including battery) / Maximum takeoff weight: 15kg
Remote Controller	WKRC-H15Z
Max. ascending speed	5m/s
Max. descending speed	2m/s
Max. horizontal flight speed	GPS Mode:5m/s; Common Mode:8m/s; Pose Mode:15m/s
Max Angle Of Inclination	GPS Mode: 30°，Common Mode: 30°，Pose Mode: 30°
Max Speed Of Rotation Angle	120°/s
Max Wind Resistance	8m/s
Hovering Accuracy	vertical : ±0.5m(when GPS positioning working)
	Horizontal: ±1.1m(when GPS positioning working)
Flight Time	No payload: standard flight time 60 minutes
	Payload: maximum flight time 25 minutes (load 5kg)
Working temperature	-10°C to +40°C
Satellite positioning module	GPS / GLONASS or BDSS / GLONASS dual-mode and dual-sink

• Gimbal

Stabilization System	3 axis (Pitch, Roll, Horizontal)
Controllable Accuracy	Static: ±0.008°; Motion: ±0.02°; Shake-proof: ±0.008°
Controllable Range	Pitch: -110°~ +60°; Horizontal: ±150°; Roll: ±10°
Max Controllable Speed	Pitch: 30°/s; Horizontal: 30°/s; Roll: direct control angle

• Camera

Sensor	1/2.3 SONY IMX117 CMOS
ISO Range	100-3200(Video) / 100-1600(Image)
Video Resolution	4K 30fps
Photo Resolution	3840 x 2160
Focal Length	6.7-134.5mm
Zoom Ratio	30x optical zoom
Zoom Speed	About 2.0s
Horizontal View	59.8°- 3.0°(Wide Angle-Telescopic)
Close-shot Distance	10 - 1500mm(Wide Angle-Telescopic)
Video Storage Maximum	64Mbps
Compress Standard	H.264 / H.265
Files Format	JPG/MP4
Support Micro-SD	Micro-SD Card (maximum 128G, transmitting speed is C10 and above or UHS-1)

• Aircraft Battery

|	
Voltage	22.8V*2
capacity	22000mAh
Discharge rate	25C
Type of battery	LiHV 12S

• Remote Controller

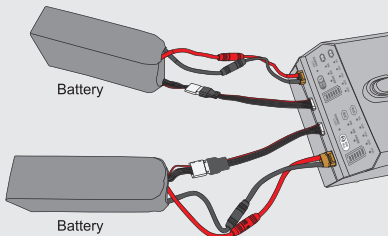|	
Screen	7.86inch; Resolution: 2048×1536; Brightness: 2000 cd/m2
Working frequency	2.4GHz & 5.8GHz dual frequency
Internal storage	RAM: 4G; ROM: 16G
System	Android 5.1
Signal effective distance	About 6KM (open, no occlusion, no electromagnetic interference)
Video output interface	HDMI
Built-in battery	7.4V 9000mAh LiPo 2S
Memory card type	Maximum support for 64GB microSD card

5.0 Aircraft battery charging

- **Charger can charge 2pcs aircraft batteries at the same time.**
- **2pcs batteries maintain charge and discharge at the same time, to ensure best performance.**
- **When charging, put it in a dry, ventilated place, keep away from the heat source and flammable and explosive.**
- **Each time the charger starts, the default battery type is LiPo.**
- **For details, please refer to the charger User Manual.**

1) Connect the conversion wire: connect the battery power wire and balanced charging wire to the conversion wire – connect the black wire to the black wire, and connect the red wire to the red wire (as shown below)

Balanced Charging Wire
Conversion Wire
Battery Power Wire
Conversion Wire
Battery
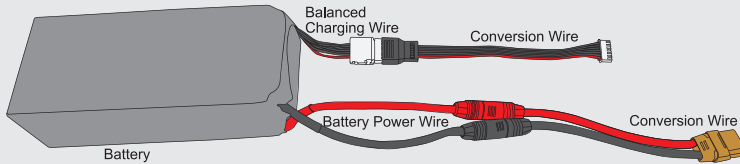
2) Connect the battery: Please connect the battery according to the following connection method. (Note: The battery charging wire and balanced charging wire must be connected to the charger at the same time.)

Battery

Battery

6) High-voltage lithium battery (LiHV) switching:
Press the 电流 and 模式 keys at the same time for 5 seconds until the high-voltage lithium battery indicator lights up.

电流   5A 10A 15A 20A 25A
模式   充电 存储 充电管家
高压锂电池 LiHV   ①启动停止

3) Power on: Connect AC power supply (100 ~ 240V 50 / 60HZ), turn on the power switch, the charger beeps, and the fan self-test turns.

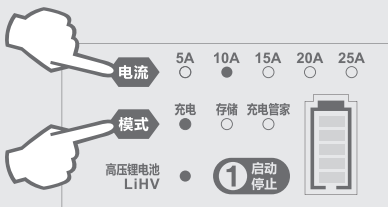**4) Set current:** press 电流 key to set the current to 10A (recommended value).

电流   5A 10A 15A 20A 25A
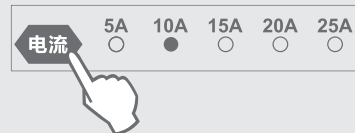
5) Set the working mode: press the 模式 key to set the working mode to "Charging".

模式   充电 存储 充电管家

7) Start charging: long press the ①启动停止 key for 2 seconds to start, display screen of the battery level starts to flash.

高压锂电池 LiHV   ①启动停止

6.0 Check Battery Levels

Please turn on the remote controller battery to check the battery level. Be sure to fully charge the first time you use it.

Press and hold the power switch of the remote controller for 2~3 seconds to turn on the remote controller (Repeat this operation to turn off the remote controller).

Low ➤ High
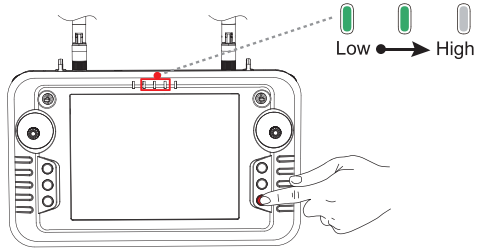
7.0 Remote controller charging

Tip: This device has a built-in lithium battery 7.4V 9000mAh, Available DC 12~15V for charging.

1) Connect the charger to the AC power (100 ~ 240v 50/60Hz).
2) Please turn off the remote controller before charging.
3) The charging completion indicator of remote controller turns green means remote controller charging finished completely.

Power Outlet
100~240V

Power Adapter
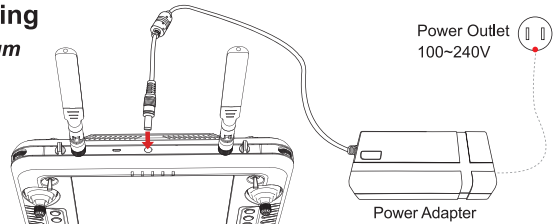
8.0 APP Interface Instructions

On the interface, HD video and photographs can be previewed in realtime and you can set the dynamic parameters, such as aircraft, remote controller, gimbal and fuel.

8
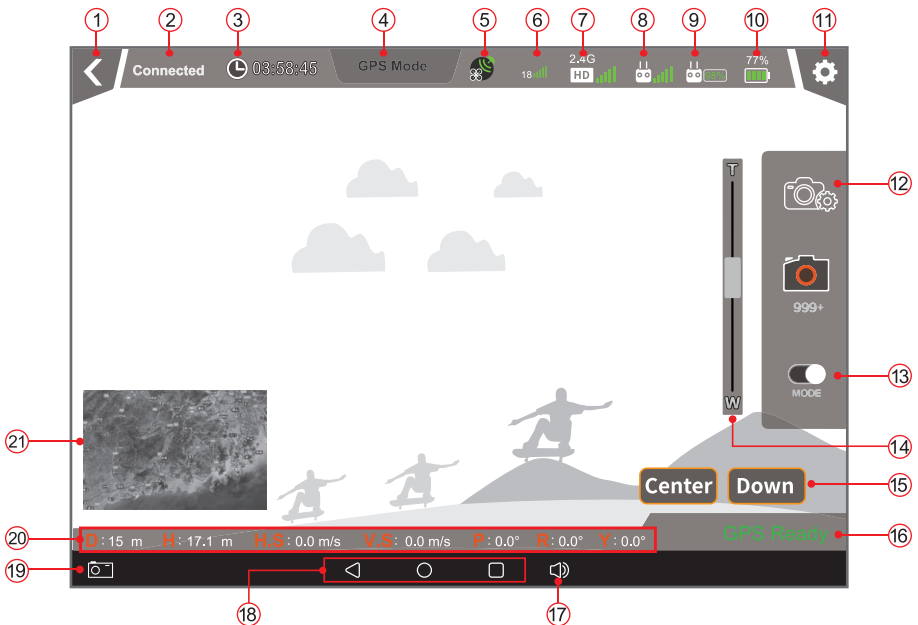
1. Back: Back to last step.
2. Device connection status: Display Aircraft connected or disconnected.
3. Flight time: Aircraft flight time.
4. The aircraft Mode: Displays aircraft's flight mode.
5. Numbers of aircraft satellite: Display the received satellites of aircraft.
6. Positioning accuracy : Display aircraft positioning accuracy.
7. High-definition image transmission signal strength: Shows the strength of the video signal transmitted between the aircraft and the remote control.
8. Remote signal strength: Displays the control signal strength between the remote control and the aircraft.
9. Remote battery level: Displays the current remaining battery power of the remote control in real time.
10. Battery Level: Real-time display of current aircraft battery's remaining level (Voltage cam be customizable)
11. Setting: Click the icon" ⚙ "to open the Setting menu, Normal setting, aircraft, remote control, gimbal and battery can be set.
12. Camera Settings:
    Touch Camera icons" 📷 "it has preview settings, recording settings and so on. Under identical Video Size, the larger the stream Rate, the better the picture quality, meanwhile, the video transmission distance is shortened accordingly.
13. Camera Working Mode Switch: click the" ⬇MODE "icon once, and the camera working mode will switch between photo& video modes once.
    When switching to taking photos: tap the" 📷 " icon to trigger the camera to take photos.
    When switching to recording: tap" ⦿ " icon to start/stop recording.
14. The camera zoom control: divided into wide Angle (W) and Telescope (T).
15. Gimbal shortcut operation: Center and Down.
16. GPS positioning" appears when GPS connected; "GPS not positioning" appears when GPS disconnected.
17. Volume Adjustment: tap the icon to pop-up the tone volume adjustment switch.
18. Remote control system navigation icon:
    "◁ "Returns: tap the icon to return to the previous level;
    "○ "Returns to the system desktop: Tap the icon to return to the system desktop;
    "□ "Task Management: Tap the icon to display all taskscurrently running;
19. Screen capture: Tap the icon to save an image of what is currently displayed on the entire screen.
20. Flight status parameters:
    Distance(D): horizontal distance between aircraft and returning point.
    Height(H): vertical distance between aircraft and returning point.
   Horizontal speed(H.S): speed of aircraft in a horizontal direction.
    Vertical speed(V.S): speed of aircraft in the vertical direction.
    Pitch angle(P): The front and rear tilt angles of the aircraft.
    Roll angle(R): The left and right tilt angle of the aircraft.
    Heading angle(Y): The left and right steering angle of the aircraft.
21. Map thumbnail icon: Click the map thumbnail icon to quickly switch to the map interface **(please turn off the aircraft power before flight and click "map thumbnail" when networking.)**
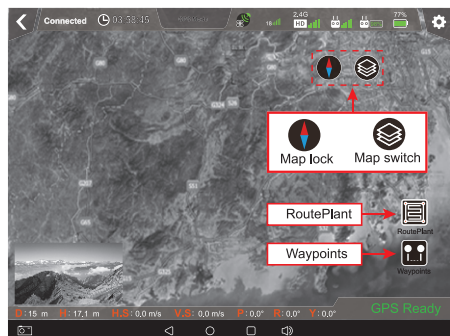
9.0 Prepare for Remote Controller

Install the antenna and adjust
the antenna position.
The signal strength received
by different antenna positions
is different.

Strong

Weak

⚠
- Ensure that the aircraft is flying within the optimal transmission zone. To achieve the best transmission performance, maintain the appropriate relationship between the operator and the aircraft.
- Do not use other communication devices in the same frequency band at the same time, so as not to interfere with the remote controller signal.

Optimum communication range
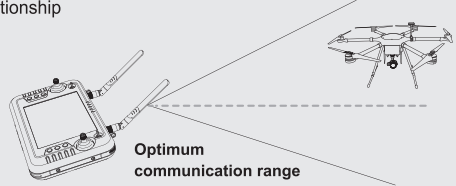
10.0 Prepare for Aircraft
Unfolded the arm, blade, GPS antenna
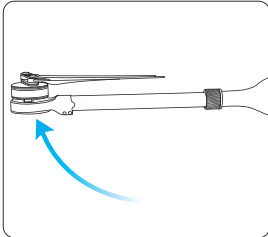
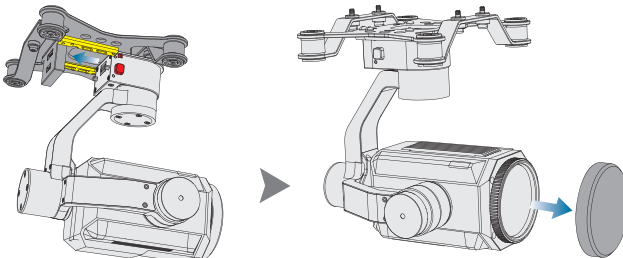1. Unfolded the arm upwards, then tighten the arm locking buckle clockwise.
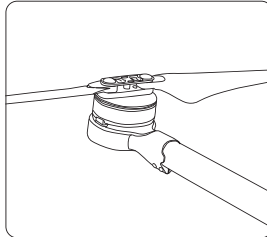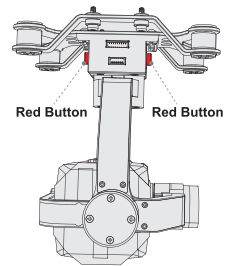
2. Unfolded the blade.
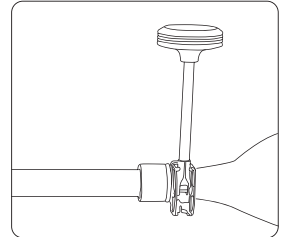
3. Unfolded the GPS antenna upwards.

Install the gimbal and camera

Red Button　　**Red Button**

Installation method:
Slide the gimbal and camera along the chute, and the gimbal will automatically lock, and then remove the camera cover.

Removal method: Press the red button on both sides to remove it along the chute.

10

11.0 Ready for Flight

Before you plan to fly, please download the map in the APP (turn off the aircraft power,and connect internet, click the "A thumbnail map icon" to download the map).Place the aircraft in an open outdoor area, with its tail facing the operator.
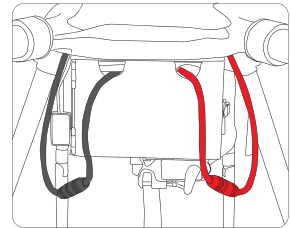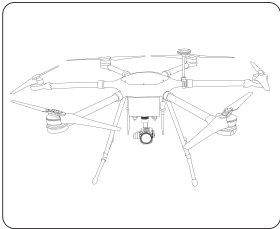
11.1 Aircraft Starting / Code-matching
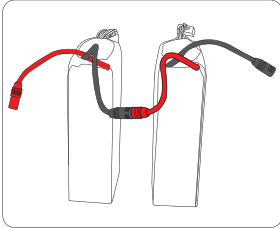
1. Connect the positive (red wire) of one battery to the negative (black wire) of the other battery.
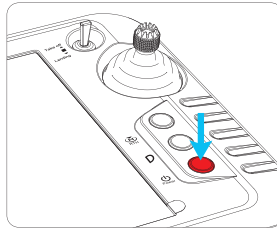
2. Turn on the remote controller.

3. Open the battery box cover, install the battery, and then lock the battery box cover.

⚠️
- Make sure to use 2 sets same flight batteries to power on the aircraft.
- **Connect the aircraft power supply:**
  First connect the negative pole (black wire to black wire), then connect the positive pole (red wire to red wire)
- **Disconnect aircraft power:**
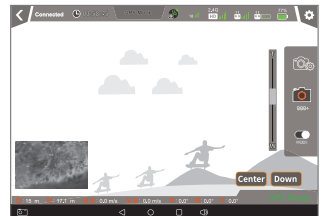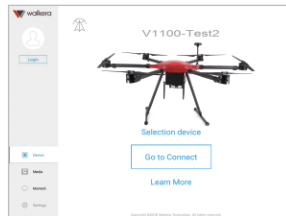 First disconnect the positive (red wire), then the negative (black wire)

4. Place aircraft at horizontal position, the blue LED light flashes fast to slow indicates completion of IMU prewarming & code-matching. (Check with APP)

11.2 Connect the APP

V1100

1. Click "V1100" icon on touch screen.

2. Click "Selection device"; Select "V1100-Test2"; Click "Go to Connect".

3. Enter main interface.

11.3 GPS Indicator Lights

The GPS signal has been received when the GPS lights slow flashing. The aircraft can fly only after the APP shows the number of satellites is enough and the positioning accuracy is high.

GPS light
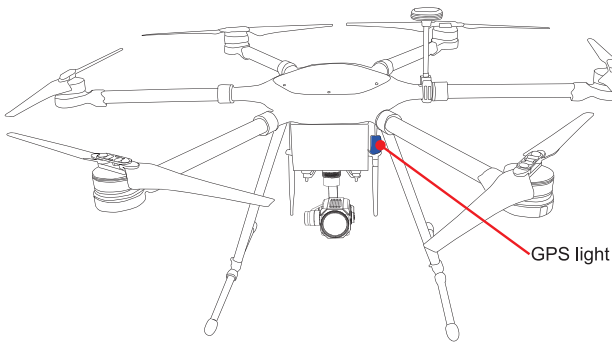
11.4 Motor Unlock/Lock

Motor Unlock: After successful code-matching, move the left & right sticks down and toggle them outward until the motor rotates. After the motor rotates, please immediately release sticks.

Motor Lock: When the aircraft is landed, move the throttle stick down and hold for 5 seconds. The motors will then stop.
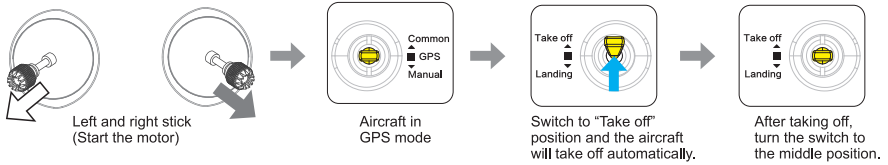
12.0 Flight Control

1) Make sure that the GPS signal is received (GPS blue LED light flashes slowly and check the number of satellites and positioning accuracy in combination with APP).
2) Only when "Connected" displays on the upper bar of the main interface of the APP, you can perform APP operation.
3) Please unlock motors before takeoff.
4) **There is no low-voltage protection for the aircraft. Please check the flight battery voltage at any time in conjunction with the APP. When the voltage is lower than 44V, please land as soon as possible.**

Manual Takeoff or AUTO Takeoff (Remote Controller Operation)

Manual takeoff: Perform a combination stick command to start the motor and then slowly push the throttle stick upward to take off.

Left and right stick
(start the motor)

Throttle stick
(American hand is left stick)
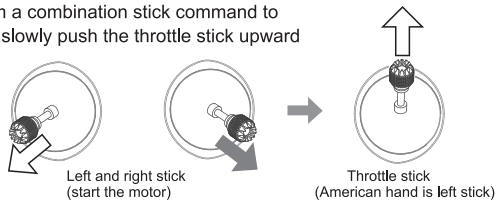
AUTO Takeoff: After the motor is unlocked, the flight mode switch In GPS mode, the auto take-off/landing switch to the "Take off" position and the aircraft automatically takes off. Hover 3 meters from the ground, please turn the auto take-off/landing switch back to the middle position.

Left and right stick
(Start the motor)

Aircraft in
GPS mode

Switch to "Take off"
position and the aircraft
will take off automatically.

After taking off,
turn the switch to
the middle position.

⚠ • Auto Takeoff is active only under GPS mode.
• Auto takeoff default to 3m altitude, and it can be removed by pushing the throttle to midpoint or
above,whenever manual control over the throttle is needed.
• After Auto takeoff, please switch the flight mode of the remote control according to your needs.

Manual Landing or AUTO Landing (Remote Controller Operation)

Manual Landing: To land, pull down on the throttle stick to descend until the aircraft touches the ground. After landing, push and hold the throttle stick down. The motors will stop after 5 seconds.

Throttle stick

AUTO Landing:

The flight mode switch in the GPS mode, the auto take-off/landing switch to the "Landing" position and the aircraft automatically landed. After landing on the ground, please turn the aauto take-off/landing switch back to the middle position, then push and hold the throttle stick down, the motors will stop after 5 seconds.

Aircraft in
GPS mode

Switch to "Landing"
position and the aircraft
will land automatically.

After landing on the
ground, turn the switch
to the middle position.

Throttle stick
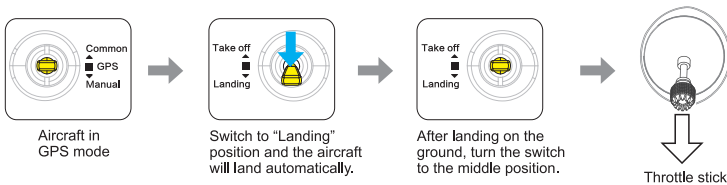
⚠ • During landing, you can operate the aircraft forward, backward, rightward and leftward.
• During the landing process, please switch the flight mode of the remote controller
if landing needs to be cancelled.

13

GPS mode (Remote Controller Operation)

Switch to "GPS" position.

Throttle stick return neutral, The aircraft will enter GPS mode.
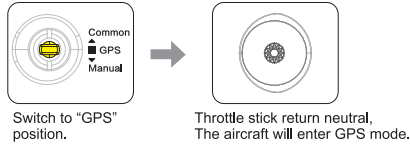
⚠️ • The first flight default to GPS Mode after each power on.
   • In the GPS mode, there are Altitude hold, fixed point, brake function, the flight speed is slower.
   • If the GPS signal is weak or no signal, can only be Altitude hold, but not fixed point.
   • Switch to manual mode can not be fixed point.

Motion mode (Remote Controller Operation)

Switch to "Common" position and the aircraft will enter motion mode.

⚠️ • In the Motion mode, there are Altitude hold, fixed point, brake function, the flight speed is faster.
   • If the GPS signal is poor or no signal, can only be Altitude hold, but not fixed point.
   • Switch to manual mode can not be fixed point.

Waypoints Flight (APP Operation)

on the map interface, click icon 🎮 to enter the waypoints flight interface.

Clear ➤ Click this icon to clear waypoints

Add ➤ Click this icon to add waypoints

Start ➤ Click this icon to start waypoints flight

Exit ➤ Click this icon to exit

Route Planning (APP Operation)

on the map interface, click icon 📋 to enter the route planning interface.

Set fore-and-aft course overlap — Angle: ✚
Angle: ➡

CLEAR ➤ Click this icon to clear waypoints

GENERATE LINE ➤ Firstly, set the waypoint on the map interface and touch this icon to generate the route.

H: Set waypoint height

H 30

ALIGN EDGE ➤ Touch this icon to align the edges after the route is generated.

START ➤ Touch this icon to start flying.

W 4

W: Set sidelap

EXIT ➤ Click this icon to exit

⚠️ The aircraft can enter waypoints flight in GPS mode.

RETURN TO HOME (Remote Controller Operation)

The process by which an aircraft automatically returns to the last recorded return point is called return flight.
Aircraft provides users with two different return modes: intelligent return and runaway return.
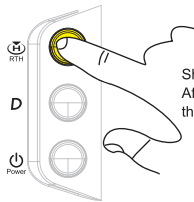
Short press the RTH button, the aircraft will automatically return to home.
After the auto return home is over, short press the RTH button again to cancel
the return home mode.

Horizontal distance between aircraft & Home point＞30m
a. When the flight altitude is over RTH Height, the aircraft will keep the current altitude and automatically fly back above the Home
   Point, then descend vertically.
b. When the flight altitude is below RTH Height, the aircraft will ascend vertically to 25m high, then automatically fly back above
   the Home point, and descend vertically.

Horizontal distance between aircraft & Home point＜30m
a. When the flight altitude is over RTH Height, the aircraft will keep the current altitude and automatically fly back above the Home
   Point, then descend vertically.
b. When the flight altitude is below RTH Height, the aircraft will keep the current altitude and automatically fly back above the Home
   Point, then descend vertically.

Horizontal distance between aircraft & Home point＞30m or ＜30m

Height over HP＞25m

Horizontal distance between aircraft & Home point＞30m

Height over HP ＜25m

Descend vertically

25m (25-100m customizable)

Elevate
to 25m

Horizontal distance between aircraft & Home point＜30m

Descend vertically

Home Point
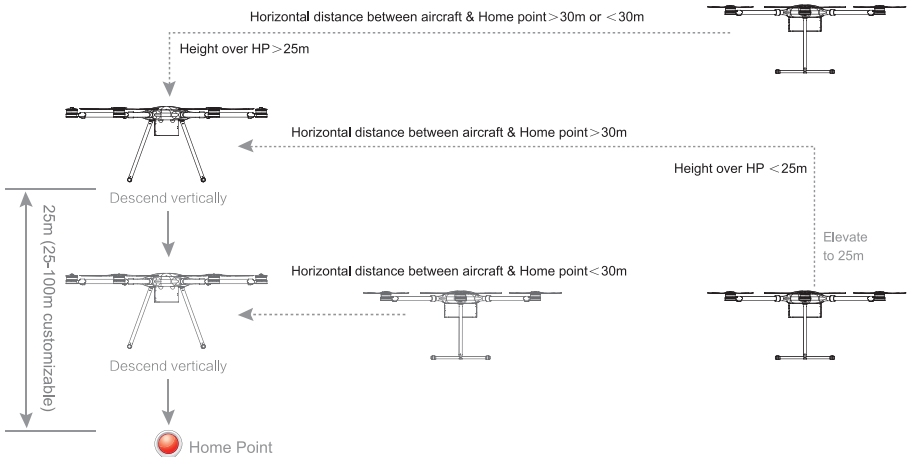
• Do not operate other switches or buttons after pressing the RTH button shortly.
• When the aircraft loses the signal of the remote controller, it will automatically enter
  the Uncontrolled RETURN TO HOME.
• When the GPS signal is abnormal or GPS doesn't work, the RETURN TO HOME is unusable,
  Please manually control the landing.
• Press the RTH button once again during the RETURN TO HOME to cancel the RETURN TO HOME.
• During the Uncontrolled RETURN TO HOME, after the remote control signal returns to normal,
  the RETURN TO HOME process will continue, but you can switch to manual mode to
  cancel the RETURN TO HOME.

Throw Mode (Remote Controller Operation)

Press the key "D" to throw automatically, **then press the key "D"** to shut down automatically.

"C" key   "D" key
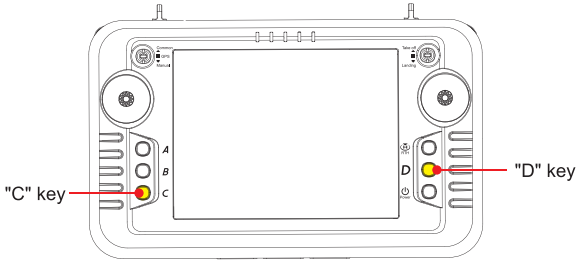
Landing gear control (remote controller operation)

Short press the "C" key on the remote controller to retract or Extend the landing gear.

> • The remote control can only be operated if it is equipped with the function of
>   retracting and extending the landing gear.
> • Make sure the landing gear retracted after the aircraft takes off.
> • When the aircraft lands manually, extend the landing gear.
> • In the "RETURN TO HOME" Mode, the landing gear will extend automatically till the flight end.

13.0 Photo & Video (APP Operation)

Note: The APP main interface has an image display transmitted by the aircraft before it can be manipulated using the touch screen.

Photo and video need to be operated in the APP interface.
1) Touch the icon"⬭MODE"to select working mode: photo or video.
2) Touch the Photo icon"📷"take photo or touch the video icon"⬤" to video.

Zoom adjustment: telescope and wide angle.
Telescope: push the scroll bar to T end.
Wide angle: pull the scroll bar to W end.

T end
Scroll bar
W end

Camera Settings
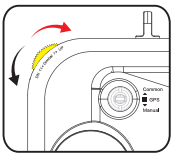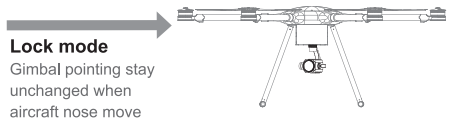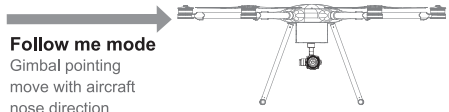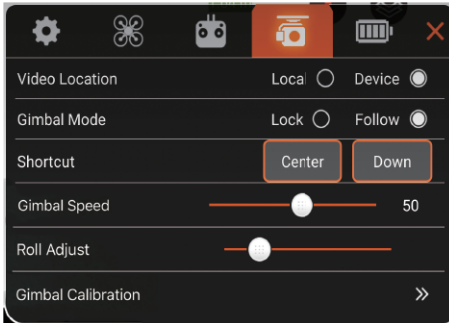Photo icon
Working mode switch

Video icon
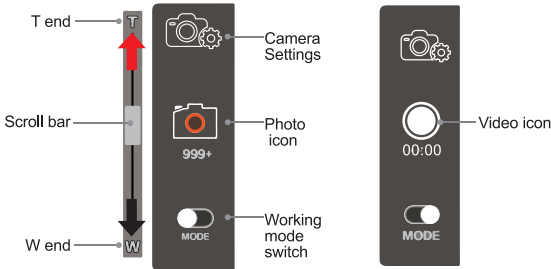
> The video defaults to be stored in Micro SD card. You can also change it to be stored
> in your remote controller. (Method: App main interface → Setting → Gimbal → Location)

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14.0 Control the gimbal (remote controller or APP operation)

Three-axis stabilization gimbal makes the camera steady so that it can shoot stable photos even fly with hight altitude. And you can control pitch and horizontal angle of the gimbal by Gimbal dial on Remote Controller or operate in the APP interface.
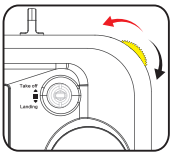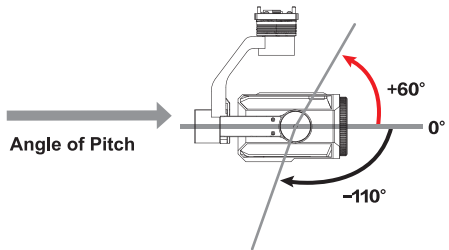
**Gimbal have two modes: Follow me mode and Lock mode, please choose the mode you need.**

Follow me mode
Gimbal pointing move with aircraft nose direction

Lock mode
Gimbal pointing stay unchanged when aircraft nose move

Gimbal Pitch Dial up or down.

In APP image interface swipe up or down.

Angle of Pitch

+60°
0°
−110°

Gimbal Horizontal Dial Left or Right.

In APP image interface swipe left or right.

Angle of horizontal

+150°
−150°
0°
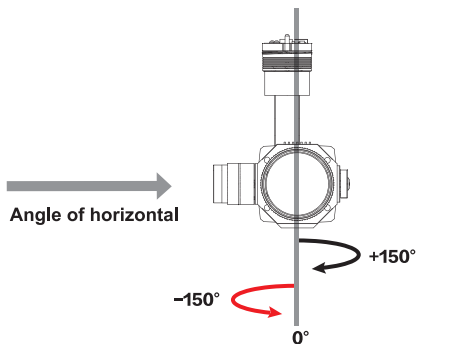
⚠️ • You must select the mode first and then adjust the angle. In follow me mode, the horizontal angle (YAW) is not adjustable.
• Gimbal stick position determines the rate of change of the gimbal: when the stick located at the midpoint the velocity is zero, the greater the offset of the stick gimbal changes faster, whereas the slower.

15.0 End flight

1. Manual Landing or AUTO Landing or Returning function landing, lock the motor after landing.
2. First, turn off the power supply of the aircraft(you need to disconnect the positive pole of the power supply first, and then the negative pole of the power supply), and then turn off the remote controller.
3. Remove the flight battery from the aircraft.

16.0 Aircraft Battery Safety Guidelines

> ⚠️ • Store Intelligent Flight Batteries in a ventilated location.
> • To avoid fire, serious injury, and property damage, observe the following safety guidelines when using, charging, or storing your batteries.

16.1 Battery Use

1) DO NOT allow the batteries to come into any kind of liquid. DO NOT leave batteries out in the rain or near a source of moisture. DO NOT drop the battery into water. If the inside of the battery comes into water, chemical decomposition may occur, potentially resulting in the battery catching on fire, and may even lead to an explosion.

2) Never use non-walkera batteries. Go to www. walkera.com to purchase new batteries. Walkera takes no responsibility for any damage caused by non-walkera batteries.

3) Never use or charge swollen, leaky, or damaged batteries. If your batteries are abnormal, contact Walkera or a walkera authorized dealer for further assistance.

4) Never install or remove the battery from the aircraft when it is turned on. DO NOT insert or remove batteries if the plastic cover has been torn or compromised in any way.

5) The battery should be used in temperatures from $0\,℃$ to $40\,℃$. Use of the battery in environments above $50\,℃$ can lead to a fire or explosion. Use of battery below $0\,℃$ the life cycle of battery will be damaged.

6) DO NOT use the battery in strong electrostatic or electromagnetic environments. Otherwise, the battery control board may malfunction and cause a serious accident during flight.

7) Never disassemble or pierce the battery in any way or the battery may leak, catch fire, or explode.

8) Electrolytes in the battery is highly corrosive. If any electrolytes contacts with your skin or eyes, wash the affected area with fresh running water at least 15 minutes, and then see a doctor immediately.

9) DO NOT use the battery if it was involved in a crash or heavy impact.

10) If the battery falls into water with the aircraft during flight, take it out immediately and put it in a safe and open area. Maintain a safe distance from the battery until it is completely dry. Never use the battery again and dispose it properly.

11) DO NOT put batteries in a microwave oven or in a pressurized container.

12) DO NOT place loose battery cells on any conductive surface, such as a metal table.

13) DO NOT put the loose cells in a pocket, bag or drawer where they may short-circuit against other items or where the battery terminals could be pressed against each other.

14) DO NOT drop or strike batteries. DO NOT place heavy objects on the batteries or charger. Avoid dropping batteries.

15) Clean battery terminals with a clean, dry cloth.

16.2 Battery Storage

1) Do not expose the battery to sources such as open flames or heaters.
2) Keep the battery out of the reach of children.
3) Make sure the battery is stored at room temperature: around 25 degrees Celsius.
4) For batteries that are not used for a long time, please save the voltage between 22.8V and 23.1V.
5) When not in use for a long time, check the battery storage status every two weeks for abnormality. Charge and discharge activation every two months to maintain battery stability.
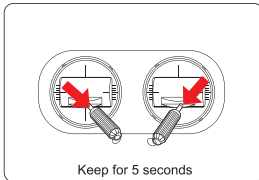
17.0 Additional remarks

17.1 Compass Calibration

⚠ • If there is circles or drift in flying, please calibrate the compass.**(the motor must be locked)**
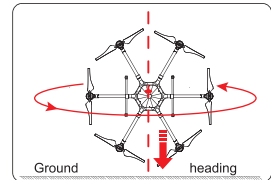• Please calibration outdoors and far away from strong electromagnetic interference.

The compass calibration steps are as follows:

Keep for 5 seconds

Tail toward operator

Ground   heading

Place right/left sticks at lowest location, toggle them inward and keep for 5 seconds.
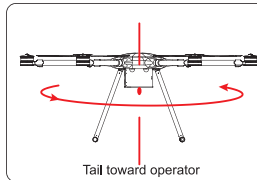
Horizontal 360°rotation of aircraft

Vertical 360° rotation of aircraft (heading down), and place aircraft at a horizontal location

**In case of failure to calibrate, please follow above procedure to repeat calibration.**

17.2 Stick Mode Switch & Stick Calibration

• **Factory setting of remote controller stick mode & stick calibration has been determined; please refer to the following operation method for switching and calibration.**
• **Be sure to switch off the aircraft power or lock motor before operation.**

Stick Mode Switch

1. Click the "⚙" icon on the APP interface, then click "🎮" to enter the remote controlLER settings interface.
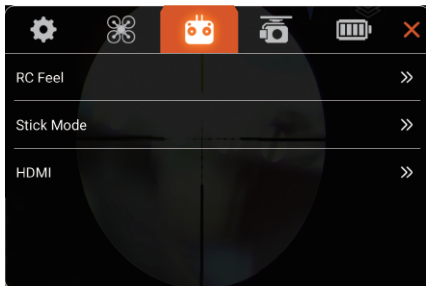
2. Click on "Stick Mode" to enter the stick mode option and select the mode you want.
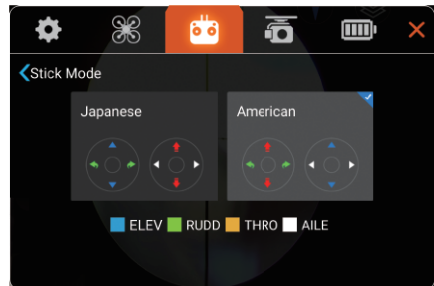
Stick / thumbwheel calibration

Long press " 🔘 " button for 3 to 5 seconds, four lights flash alternately to enter stick / thumbwheel calibration. Operate the stick /thumbwheel several times within mechanical tuning range and then back in the middle. Long press the " 🔘 " button for 3 to 5 seconds again, four indicator lights turn on, then exit stick /thumbwheel calibration.

When you exit if vibrate alert, then the calibration fails, please recalibrate.

Long press this button to enter the stick/thumbwheel calibration

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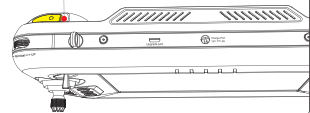
walkera

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