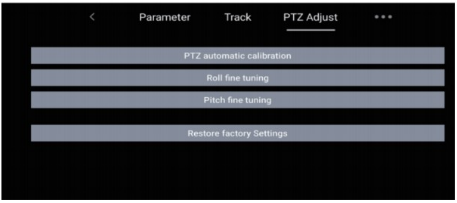
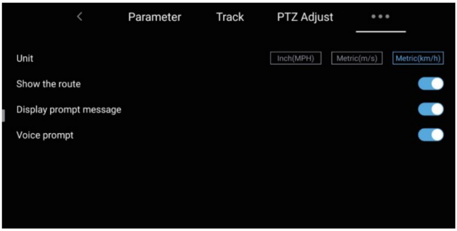
- **Gimbal Back to Factory Setting**

  Get the gimbal back to factory setting, access to "PTZ adjust", click "Restore factory setting"



- **How to change units**

  This function enables to switch the units between Inch(MPH), Meter(m/s), Metric(km/h).



Unit  Inch(MPH)  Metric(m/s)  [✓ Metric(km/h)]

Show the route ●

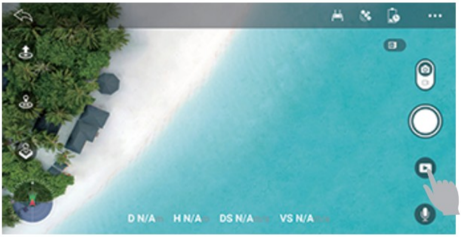
Display prompt message ●

Voice prompt ●

# 13 APP Functions

## 13.1 App One Key Share Function

- Open the app, click ▶ , enter into the file (Pic 1.)



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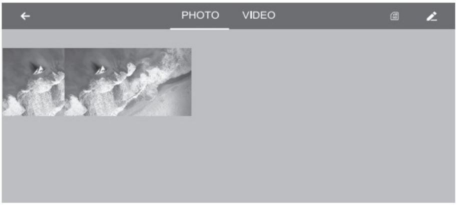
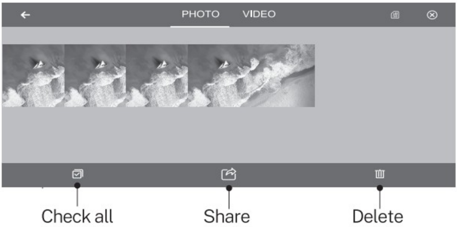
Pic 1

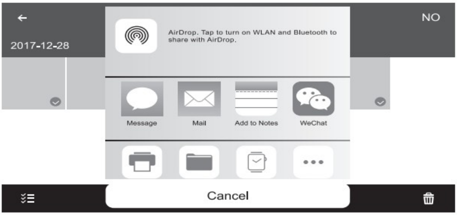


- Click once or press ☑ to select the photos which to share, click ↗, choose the media to be shared (Pic 3)

Pic 2



Pic 3



AirDrop. Tap to turn on WLAN and Bluetooth to share with AirDrop.

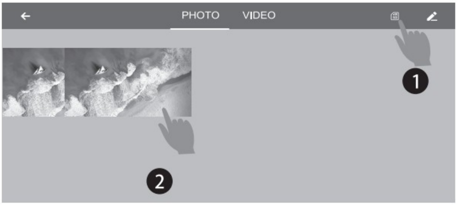
⚠ • It is only allow to share 9 pictures or 1 video the maximum at one time.

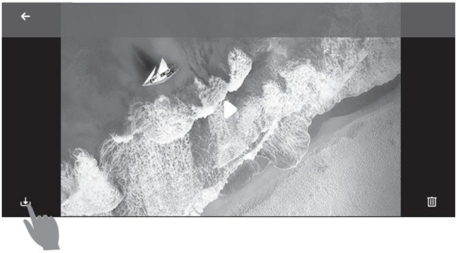
## 13.2 How to Download the Pictures and Videos

After shooting and recording were completed, photo and video save to both the app album and miroSD card, to download the files:

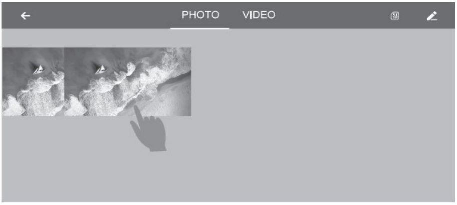
- Connect the drone's WiFi on the phone, access to the app "control" interface, click ▶ , either choose to download the picture and video from SD card or app album :

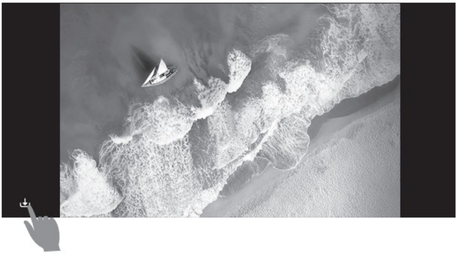
① Download the picture and video from SD card, click SD ,choose files and click ⤓ save to the mobile album.



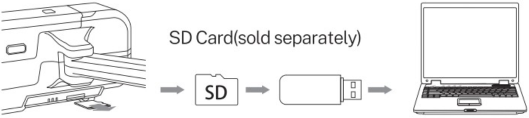


② Download the picture and video from app album, choose files and click ⤓ to save to mobile album.





- Take out the SD card from drone, insert the card into a card reader and read the data on computer, download the video and photo into a computer.

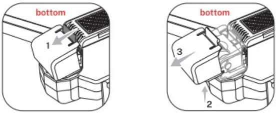


> ⚠ • Video be stored in the app album will be compressed, thus always suggest to download the video from the SD card to get the best resolution.

# 14 Flight

## 14.1 Takeoff/Landing Procedures

- Place the drone in an open, flat area, remove the gimbal cover.

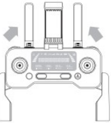


- Power on the remote controller and the drone.
- Wait until the remote controller and drone connectted, connect the app, complete the calibration process.
- Keep the drone camera facing forward, start the motors.
- Gently push the throttle joystick up to take off.

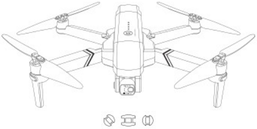
- Pull the throttle joysticks down to land the drone.
- Stop the motors after landing.
- Power off the drone remote controller, replace the gimbal cover.

## 14.2 Quick Start

- **Step 1: Turn on the controller**
  Power on the controller, lift up the antenna to receive signal.

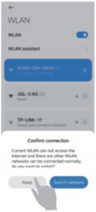


- **Step 2: Turn on the drone**
  Remove the gimbal cover gently, place the drone on a level surface, power on the drone. All lights blinking red. Drone and remote controller connects successfully, all lights flashing white and blue then turn to flashing white and pink.



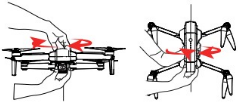
⚠ • This connect process take around 40seconds.

- **Step 3: Connect the app**
  Open the phone's WiFi list, connect the drone's WiFi which names "RUKO-GIM-XXXX", open the "RUKO DRONE" app.

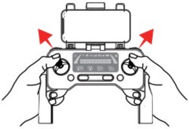


Current WLAN can not access the Internet and there are other WLAN networks can be connected normally, do you want to switch?

- **Stpe 4: Complete compass Calibration**
  Pick up the drone and hold it levelly, rotate the drone in one full circle (360°), until hear a “beep” sound reminder. Hold the drone vertically with camera facing to the sky, rotating a full circle (360°), there are two “beep” sound reminder.



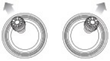
- **Step 5: Complete the gyroscope calibration**
  Put the drone on a level surface, push the left and right joysticks to the 11' and 1' o'clock positions, lights flashing white and blue quickly.



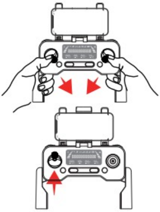
- Drone searches for GPS signal automatically, when lights turn to solid blue and white, drone is ready to fly.
- App drone status: "Fly" is displayed in the app, drone is ready to fly.

⚠ • When it is needed to manually trigger the compass calibration to adapt to the enviroment, please push the joystick to 1 & 11 o'clock position, follow the above steps to rotate the drone.

- To trigger the Gyroscope Calibration, please push the joystick to 11 & 1 o'clock position, drone auto-complete the Gyroscope Calibration.

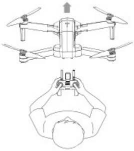


- **Stpe 6: Start and Stop the Motors**
  Push the joysticks into 5 & 7 o'colock position, motors start.
  Push the Throttle Joystick up to get the drone take off, or you can press ⬆ in the app to take off. Push the joysticks into 5 & 7 o'colock position again, motors stop.



⚠ • The motors will stop running if no operation after 20 seconds.

- **Step 7: 3 Ways to land the drone**
  Press the RTH button 📍, drone will return to the Home Point.
  Press the land button ⬇ on the app, the drone will land directly.
  Keep pulling Throttle Joystick down until the drone lands and motors stop.



Always keep the head of drone facing forward

⚠ • If the drone keep searching for GPS but no success because of weak GPS signal, keep pressing the button to turn off the GPS Mode and switch to Manual Control mode, so that it is able to get the drone take-off. Howerer, under Manual Control mode, there is high risk that the drone will fly away with the wind, as no GPS positioning assisted.

# 15 Specifications

## 15.1 Drone

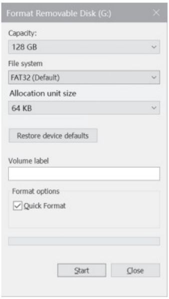
- MODEL: F11 GIM2
- Weight (Including Battery): 585g/20.6oz
- Flight Time: About 28 mins
- Motor Model: 1806
- Operating Temperature Range: 32° to 104° F ( 0° to 40° C)
- Satellite Systems: GPS/GLONASS
- Dimensions (LxWxH): Unfolded: 45X40.5X8(cm)
  Folded: 17.6X10.5X8(cm)

## 15.2 Gimbal Stabilization

- Machanical Range: Tilt About -100°TO+70°, Roll About -35°TO+35°
- Controll Range: Adjusted angle of camera (up and down): About -80°TO+0°

## 15.3 Camera

- Lens:FOV:100°
- Equivalent Focal Length: 60CM
- Focus range: Fixed-focus
- Resolution of photo: Phone 3840X2160P
  SD card 3840X2160P
- Resolution of video: Phone 1280X720P
  SD card 3840X2160P
- Photo Format: JEPG
- Video Format: MP4
- Supported File Systems: FAT32
- Supported SD Cards: Micro SD card (Class 10/U1 or later) 32G-128G



Format Removable Disk (G:)

Capacity:
128 GB

File system
FAT32 (Default)

Allocation unit size
64 KB

Volume label

Format options
☑ Quick Format

## 15.4 5G Transmission

- Operating Frequency: 5.15-5.35 GHz; 5.725-5.825 GHz
- Supported Transmission Protocol: 802.11a; 802.11n20; 802.11n40
- Video Transmission Frame Rate: 30FPS

## 15.5 APP / Live View

- Mobile App: RUKO DRONE
- Live View Quality:

| CONFIGURATION | STORAGE METHOD | | RESOLUTION | TRANSMISSION FRAME RATE |
|---|---|---|---|---|
| 4K | Phone | Photo | 3840X2160P | |
| | | Video | 1280X720P | 30fps |
| | SD card | Photo | 3840X2160P | |
| | | Video | 3840X2160P | 30fps |

- Required Operating System: IOS 9.0 or later/Android 5.0 or later

## 15.6 Remote controller

- Operating Frequency: 2.4G + 5G bridge
- Max operating distance: Up to 3KM (Outdoor and Unobstructed)
- Battery: 1500mAh Li-polymer
- Charging time: about 2 hours
- Operating time: about 2.5 hours
- Operating Voltage: 3.7V
- Mobile Device Holder: 4.7 ”to 6.5” Smart Phones
- Operating Temperature: 32° to 104° F ( 0° to 40° C )

## 15.7 Intelligent Flight Battery

- Capacity: 2500 mAh
- Voltage: 11.1V
- Battery Type: Li-polymer
- Energy: 27.75Wh
- Net Weight: 195 g / 6.8 oz
- Max Charging Power: 15W

- Max Charging Time: About 4.5 hours (Depending on Charging Power)
- Charging Temperature Range: 32° to 104° F ( 0° to 40° C )

## 15.8 Charging cable: Type-C

- Compatible Charger (not included): Output currency 5V/3A
- Rated Power: ≤15 W

# 16 COMMON PROBLEMS

| Question | Reason | Solutions |
|---|---|---|
| The motors cannot be started | Weak GPS signal | Turn on the Aircraft in an open area with strong GPS signal |
| | The red light stays on | The Aircraft has low battery. Please charge the battery in time |
| | The pink light stays on | The compass is not calibrated. Please refer to the "Calibration Before Flight" section of the user manual |
| | The left and right joystick are not in place | Push the left and right joysticks simultaneously to 5 o'clock and 7 o'clock for 2 seconds |
| Unstable flight | Flying too low, affected by Aircraft airflow | Please fly the Aircraft above 9.84ft(3 meters) |
| | The gyroscope is not calibrated | Place the Aircraft on a horizontal surface and conduct gyroscope/horizontal calibration. Please refer to the "Calibration Before Flight" section of the user manual |
| | The propellers become deformed and incomplete | Replace the propellers with new ones |
| | GPS signal is unstable. Flying near buildings and in obstructed places | Please fly the Aircraft in an open area free of obstacles within the circle of radius 32.81 ft(10 meters) |
| Out of control, spinning around on its own, abnormal sound | The Transmitter signal is interfered or the Aircraft exceeds the range of remote control | Please fly the Aircraft outdoors without interference, and ensure that it is within a controllable range |
| | Compass interference | Please manually land the drone in time and calibrate the compass. Please make sure to fly away from the buildings, trees, power lines, and signal towers |
| | The propellers become deformed and incomplete | Replace the propellers with new ones |

| | | |
|---|---|---|
| The camera is tilted/Gimbal is not working/ Can't adjust the camera angle | The drone was placed on an unlevel surface such as grass and sand and so on | Place the drone on landing pad or cardboard horizontally, and ensure a gap between the camera and the surface |
| | The drone was placed on the surface which transfer samll vibration, such as hollow wooden floor, desk and so on | Place the drone on a solid level ground |
| | Keep touching the camera and gimbal or holding the drone before all set | Never touch the camera when the power is on, place the drone on a level ground until the gimbal complete self-check |
| | The compass is in calibrating | After complete the compass calibration, place the drone on a level ground |

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| Question | Reason | Solutions |
|---|---|---|
| Video freezes, image transmission distance is short | The Aircraft is out of Wi-Fi range | Fly the Aircraft within the range of the Wi-Fi |
| | WiFi image transmission signal interference | Fly the Aircraft in an unobstructed open area free of buildings, high-voltage wires and signal towers |
| | The transmitter and the mobile phone are not pointed at the direction of the drone | Point the Transmitter and the mobile device at the flying direction of the Aircraft to maintain the strongest signal connection |
| | Phone performance freezes | Close unused apps running in the background to maintain the best performance of the phone |
| Video is not clear | if use APP storage, the pixels are 1920×720P | Insert the memory card and storage the video on the memory card |
| App does not show what the drone's camera is taking | The phone is not connected to the drone's Wi-Fi | Connect the drone's Wi-Fi :<br>Ruko-GIM-****** on the phone |
| | The phone operating system version is too low | The required device operating system to work with the app is Android 6.0 and above, IOS 10.02 and above |
| | Certain phones' setting preventing the app working normally | Set the phone to airplane mode |
| | The VPN app block the connection of the phone and the drone | Turn off the VPN |
| | Didn't keep the drone's network when trying to connect the drone's WiFi | Please do keep the drone's WiFi connectted when the phone pop up reminder that "This network has no internet access" |

| | | |
|---|---|---|
| APP crashes or functions abnormally | Wrong app downloaded | Download the correct App |
| | A few mobile phone versions are old and incompatible with APP | Provide mobile phone version and model, we will adapt and solve it |
| Phone cannot connect to the drone's Wi-Fi | It will take longer time for certain phone to connect with the drone's Wi-Fi for the first time | Try several times or restart the phone |
| The drone's WiFi name is not displayed in the list | WiFi has not been activated | The WiFi will be available when the drone and the transmitter connected, which take around 40 seconds |
| GPS signal is weak | Turning on the drone indoors | GPS signals cannot be found indoors. Please search for GPS signals in an open place outdoors |
| | Under the tree, next to the building, in an obstructed place | Please stay away from obstacles for more than 32.81 feet(10 meters), and search for GPS signals in an open area |

| Question | Reason | Solutions |
|---|---|---|
| Unable to return home, drifting and flying away | GPS signal was turned off during the flight | Please don't turn off GPS suddenly during outdoor flight. Switch back to GPS mode in time |
| Cannot charge battery/Cannot fully charge battery | Using inferior charger or charging on the computer with unstable voltage output | Use a mobile USB charger that ensures constant stable voltage output(5V) and amperage output(2-3A) |
| | Using inferior charging cables | Please use the original factory charging cable to charge |
| Short battery life | Flying in windy weather | Flying in windy weather will accelerate power loss |
| | Flying in cold weather | In low temperatures, the chemical reaction of the lithium battery is slowed down and the energy cannot be fully released |
| | The battery is not fully charged | Fully charged with the correct USB charger before flying |
| The product has slight marks | We tested all Aircraft before shipping | In order to give you the best experience, we tested functions of all Aircraft before shipping. Therefore, it is inevitable that there will be slight traces. However, it can be guaranteed that all Aircraft are 100% brand new |

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# 17 Accessories Support

Battery

Propeller

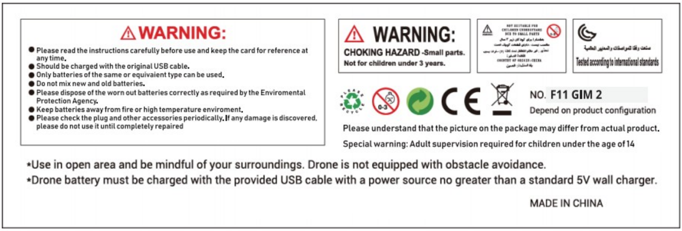
Landing Gear

Arm

Transmitter

All of the above accessories can be searched and purchased on Amazon, and you can enter the Ruko store to buy them yourself.

Be sure to use original accessories. The use of non-original accessories may cause danger to the safe use of the aircraft.



**⚠WARNING:**

- Please read the instructions carefully before use and keep the card for reference at any time.
- Should be charged with the original USB cable.
- Only batteries of the same or equivaient type can be used.
- Do not mix new and old batteries.
- Please dispose of the worn out batteries correctly as required by the Enviromental Protection Agency.
- Keep batteries away from fire or high temperature enviroment.
- Please check the plug and other accessories periodically. If any damage is discovered, please do not use it until completely repaired

**⚠ WARNING:**

**CHOKING HAZARD** -Small parts.

Not for children under 3 years.

صنعت وفقا للمواصفات والمعايير العالمية

Tested according to international standards

NO. **F11 GIM 2**

Depend on product configuration

Please understand that the picture on the package may differ from actual product.

Special warning: Adult supervision required for children under the age of 14

*Use in open area and be mindful of your surroundings. Drone is not equipped with obstacle avoidance.

*Drone battery must be charged with the provided USB cable with a power source no greater than a standard 5V wall charger.

MADE IN CHINA

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The distance between user and device should be no less than 20cm.

## CONTACT US FOR MORE TECH SUPPORT

✉ Rukobrandstore@gmail.com

☎ +1 ( 626 ) - 215 - 4337 ( Available from 6pm to 3am PDT)

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