



# Quick Guide & Safety Disclaimer

v2.0



# F11MINI

CONTACT US FOR MORE TECH SUPPORT

常 +1 (888)892-0155 │ Mon-Fri 7:00AM - 7:00PM (PST)





rukotoy.com

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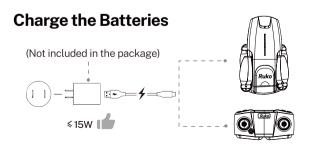




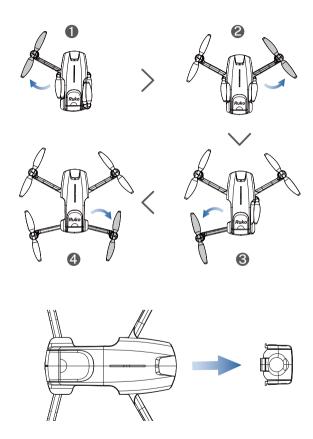
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# 1.Download App

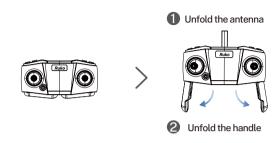


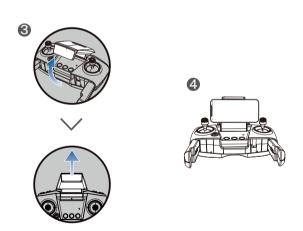


# 2. Unfold the 4 Arms of the Aircraft



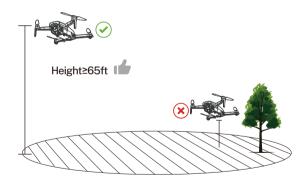
# 3. Unfold the Remote Controller





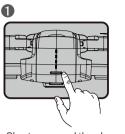
# 4. Select an Open Flying Area





Suggest to fly higher than the surrounding objects.

# 5. Pair the Remote Controller with the Aircraft



· Short press and then long press the button until the aircraft plays start-up sound.



· Press to power on the remote controller, the indicator light will flash



· Push up the left joystick and the remote controller makes a "beep" sound.



· Push down the left joystick and the remote controller makes a "beep" sound again.



Once successfully paired, the remote controller's indicator light will stay on.

### 6.Connect to Wi-Fi



Connect the mobile phone to the aircraft's Wi-Fi.



Enter the app operation interface, and tap the "Control" icon.



Please refer to user manual (page 43) for more details.

# 7. Calibrate the Compass



• Rotate the aircraft horizontally 360° until vou hear a "beep" sound. No fixed direction of rotation required (About 3 turns)



 Rotate the aircraft vertically 360° until vou hear a "beep" sound. No fixed direction of rotation required (About 3 turns)



Please keep the aircraft flat when rotating horizontally, otherwise it will take more turns to complete the calibration.

# 8. Calibrate the Gyroscope

• Click CALIBRATE in the app...





Put on a level ground

## 9. Start the Motors

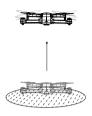
• Push up the left joystick.



### 10.Take off

• Push up the left joystick or press the "Auto Takeoff" button.





# 11.Landing



 Short-press the button to land the aircraft if it doesn't fly far. (Distance≤32.8ft)



·Short-press the button to make the aircraft return and land if it flies far.(Distance>32.8ft)



## **NEW TO FLYING DRONES?**



Check the Quick Start in the app



Search "Ruko F11MINI Quick Start" on YouTube for first flight



Scan OR code for more tech and video support

# **Common Problems and Solutions**

Question	Reason	Solutions
The motors cannot be started	Without GPS signal or weak GPS signal	Turn on the aircraft in an open area with strong GPS signal, becuase the aircraft will not be able to search for enough GPS signals When it is indoors or in a sheltered area
	The red light flashes	The aircraft has low battery. Please charge the battery in time
	The yellow light flashes	The compass is not calibrated. Please refer to the "Calibration Before Flight" section of the user manual
	Doesn't switch to the indoor mode when flying indoors	Switch to the indoor mode when flying indoors
	The positions of left and right joystick are not correct	Push the left and right joysticks simultaneously to 5 o'clock and 7 o'clock for 2 seconds
		Or push up the left joystick to unlock the motor
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 "Gyroscope Calibration" section of the user manual
	The propellers become deformed and incomplete	Replace the propellers with new ones
	GPS signal is unstable. Flying near buildings or in obstructed area.	Please fly the aircraft in an open area free of obstacles within the circle of radius 32.81 ft(10 meters)
Can't fly far or can only fly within a distance of 98ft (30 meters)	The beginner mode isn't turned off	Enter the app setting interface, turn off the beginner mode to set the flight distance and altitude, and save the settings
	Aircraft low battery	Charge the battery in time because it can only fly within a range of 98ft (30 meters) When the aircraft returns at low power
The aircraft will roll over or fail to take off after replacing the propellers	4 propellers are installed backwards or a wrong propeller is installed	When installing the propeller, install it according to the corresponding mark
Out of control, spinning around on its own, abnormal sound	The remote controller 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 aircraft 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

Question	Reason	Solutions
	The SD card is full	Delete SD card contents
SD card cannot store photos or videos	Incorrect storage file format settings	When formatting the SD card, select the FAT32 file format
	Problem of SD card	Try to format the SD card or replace the SD card
No photo or video storage on your phone	Album storage permission is not turned on	Please set it correctly when popping up album permissions
	After the SD card is installed, the phone does not store photos and videos, they are all stored on the SD card	Connect to aircraft Wi-Fi to download video from app to mobile phone
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
	Wi-Fi image transmission signal interference	Fly the aircraft in an unobstructed open area free of buildings, high-voltage wires and signal towers
	The remote controller and the mobile phone are not pointed at the direction of the aircraft	Point the remote controller and the mobile phone at the flying direction of the aircraft to maintain the strongest signal connection
	Phone lagging	Turn off unused applications on your phone to maintain the best performance of the phone.
App does not display the interface	The phone is not connected to Wi-Fi The phone version is too low	Connect your mobile phone to the Wi-Fi: Ruko_F11_Mini_5G-***** Android 6.0 and above, IOS 10.02 and
	When connecting to the	above Set the Wi-Fi correctly
	aircraft's Wi-Fi, the network is not set or set incorrectly	Turn the phone to airplane mode
	The reason why the iPhone can connect to Wi-Fi, but cannot see the image is that the network permission popped up by the app is not set to allow	Reinstall the app and select allow when the network permission pops up
	VPN switch is turned on	Turn off the VPN switch
App crash or its functions are abnormal	Wrong app downloaded  The phone version is old and not compatible with the app	Download the correct app Give us your mobile phone version model and we will give you a corresponding solution
Phone cannot connect to Wi-Fi	It is the first time to connect your phone to the Wi-Fi	Try connecting a few more times or restart the phone
The Wi-Fi name is not displayed	The phone is a single band phone	Use the dual band devices that support both 2.4 GHz and 5 GHz/5.8 GHz
	Wi-Fi has not been activated	Wait for about 30 seconds after turning on the aircraft and keep refreshing the Wi-Fi list while the Wi-Fi is activated
GPS signal is weak	Turning on the aircraft indoors	GPS signals cannot be found indoors.Please search for GPS signals in an open area outdoors
	Under the tree, next to the building, in an obstructed area	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
The aircraft automatically flies upwards when pressing one key return home	Set safe return altitude	When the flight altitude is less than 65.6ft (20 meters), the aircraft will automatically rise to the height of 65.6ft (20 meters) before returning home
The aircraft cannot be paired with the remote controller	Doesn't push up and down the left joystick to pair the remote controller with aircraft	Turn on the aircraft and remote controller, push up the left joystick to 12 o'clock and then pull down to 6 o'clock position to pair remote controller with aircraft
Cannot charge battery/Cannot	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)
fully charge battery	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
	The battery is not fully charged	Please use a charger with 5V/3A to charge it
	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 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

## Safety at a Glance



The Ruko F11MINI is NOT a toy and is NOT suitable for people under the age of 14.

### 1. Legend

• The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product:



× Warning



Hints & Tips



Reference

# 2. Disclaimer and Warning

- This product is NOT a toy and is NOT suitable for people under the age of 14. Keep the aircraft out of the reach of children and exercise caution when operating this aircraft in the presence of children.
- This product is a flying camera that offers easy flight when in good working order as set forth below. Read the materials associated with the product before using for the first time. These documents are included in the product package.
- Inappropriate use of the product could result in personal injury or property damage.
- The information in this document affects your safety and your legal rights and responsibilities. Read this entire document carefully to ensure proper configuration before use. Fail to read and follow the instructions and warnings in this document may result in product loss, serious injury to you, or damage to your aircraft.
- By using this product, you hereby signify that you have read this disclaimer carefully and that you understand and agree to abide by the terms and conditions herein. Please be sure to strictly abide by the specification requirements and safety guidelines stated in this document.

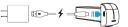
- You agree to use this product only for purposes that are proper and in accordance with local regulations, terms and all applicable polices and guidelines Ruko may make available.
- Any personal injury property damage, legal disputes and all other adverse events caused by the violation of the safety instructions or due to any other factor, WILL NOT be Ruko's Responsibility.
- Ruko reserves the right to update this disclaimer and safety guide.

### 3. Intelligent Flight Battery Safety Guide

#### **Charging Precautions**

- It is recommended to use USB 5V/2A or 5V/3A wall chargers. Do not use charger with more than 5V/3A, otherwise the battery may be damaged, reduce performance or cause a fire.damaged, reduce performance and cause a fire.
- It is forbidden to overcharge the Intelligent Flight Battery, please remove charging cable in time after fully charged to avoid damage due to overcharge.
- It is strictly forbidden to use batteries or charging cables that are not officially provided by Ruko. We are not responsible for any damage caused by charging cables that are not from Ruko.
- **DO NOT** charge the Intelligent Flight Battery immediately after the flight as the temperature may be too high. Wait until it cools down to room temperature before charging again, Due to the battery current output, slight heating is normal while flying.

(Not included in the package)



Original charging cable









#### **Battery Safety and Maintenance Precautions**

• Keep the product in a cool environment, avoid high temperature. exposure to the sun, water suction, pressing and descent from high altitude. Do not place the model in a high temperature, humid and direct sunlight environment.



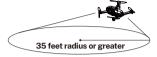
• It is recommended to charge and discharge the battery once a month, do not store it fully charged, keep 50%-60% of the electricity, and stored in a dry and cool environment.



- · Remove the USB charger after the battery is fully charged.
- Fully charge the battery at least once per month to keep it healthy.
- It is forbidden to disassemble or pierce the battery with sharp objects in any way, otherwise, battery leakage will cause fire or even explosion.
- Do not touch the electrolyte in the damaged battery, otherwise it might harm your skin or eyes.
- Be sure to keep away from fire before discharging.
- Store the battery in a dry and ventilated place.
- Keep the battery out of the reach of children and animals.

### 4. Flight Environment Requirements

• Only fly in an open area (radius of 35 feet or more) without obstructions to ensure stable image transmission.



Fly in open environment

· Flight Safety.



- Only fly in an open area without magnetic fields or radio interference, obstacles, trees, high-tension wires, tall buildings and other obstacles.
- · Do not fly above or near crowds.



- · Do not fly the aircraft in bad weather.
- Only fly in a mild weather condition where the temperature is between 10° and 40° C (50°F and 104°F).
- United States: Only fly in authorized areas. To learn more about aircraft requirements, please visit the Federal Aviation Administration's aircraft page:https://www.faa.gov/

### 5. Flight Operation Guidelines

#### Pre-Flight Checklist

- ①Ensure that the Intelligent Flight Battery, remote controller, and mobile phone are fully charged.
- 2) Make sure that the battery compartment cover is fastened firmly and the Intelligent Flight Battery is installed firmly.
- (3) Ensure that the arms of the aircraft are fully extended.
- @Ensure that the camera cover was moved before turning on the aircraft.
- ⑤ Please make sure that nothing obstructs the motors.
- @Please make sure the camera lens and sensor are clean and without stains
- (7) Ensure that the propeller is free from damage, aging, deformation, no foreign matter entanglement, and firm installation.
- ® Make sure to complete the pre-flight checklist before flying.
- warnings.

### **Operation Safety Guidelines**

- ①Please unfold the arms of the aircraft and turn on the power before flight.
- 2) Please pay attention to the direction of the aircraft when flying. The camera direction is the forward of the aircraft.





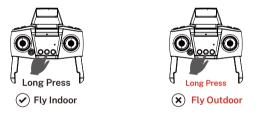




Stay away from People



- ③Do not answer calls, text messages, or do anything that may distract you from operating your mobile phone to control the aircraft during the flight.
- (4) Make sure that you are not under the influence of alcohol, drugs or anesthesia, nor are you experiencing dizziness, fatigue, nausea, or any other conditions, which may impair your ability to operate the aircraft safelv.
- (5) It is important to set an appropriate RTH altitude before each flight. Make sure your phone has permission to access the Wi-Fi "Ruko\_F11\_Mini\_5G\_\*\*\*\*\*\*" and connect successfully.
- (6) Make sure to fly outdoors in an environment with strong GPS signals.
- (7) Please do not long-press the button on the remote controller when flying, otherwise GPS Mode will be turned off.



- ® After turning off the GPS, the aircraft cannot realize one-botton return to home, low power return, or out of control.
- (9) After turning off the GPS, GPS follow, surround mode, route planning, and aircraft finding functions cannot be realized.
- (10) Do the compass and gyroscope calibration each time before flying, or it maybe can't work normally.
- (1) Pay attention to control the aircraft at all times during flight. Don't just rely on Ruko Mini APP.
- @GPS flight assistance features and app are meant to assist the pilot, not replace their control of the aircraft. When returning, pay attention to the flight, operate the aircraft carefully to avoid hitting obstacles.

### 6. Problems You May Encounter

#### Wi-Fi Guidelines

• The operating system required for the phone must be iOS 9.0 or higher/Android 5.0 or above. The aircraft will be compatible with WLAN-capable phones that broadcast dual-band Wi-Fi (2.4GHz and 5.8GHz).

#### For iOS System:

· Connect the Wi-Fi " Ruko F11 Mini 5G \*\*\*\*\*\* to your mobile phone.



#### For Android System:

- Please wait about 10-30 seconds after connecting the aircraft's Wi-Fi "Ruko F11 Mini 5G \*\*\*\*\*\*".Please pay attention to whether there is an internet settings to pop up, please keep connected, otherwise there will be no pictures after entering the app.
- Please turn on airplane mode on your phone, and open the Wi-Fi list to reconnect if you can't find the Wi-Fi.







↑ Turn off the VPN because it will affect Wi-Fi connection.

#### Remote Controller Guidelines

- After fully charged, if the app shows that the transmitter battery is low, please try to pair the remote controller with the aircraft again, then connect to Wi-Fi and open the app to check it.
- Please charge the remote controller in time when the battery is low to avoid automatic shutdown of the remote controller during flight.
- Please turn off the remote controller in time when it is not in use to avoid running out of battery power.

#### Camera Guidelines

- Do not place the aircraft on rough ground, please place it horizontally and make sure there is enough clearance under the camera, otherwise the camera will be stuck.
- Please take off the camera cover before flight.



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