

# USER MANUAL U88S

# Note

- ▲ This product is suitable for users over 14 years old.
- ▲ Stay away from the rotating propeller
- ▲ Read the "important statement and safety guidelines" carefully.



#### Drone Battery Li-Po Battery Disposal & Recycling

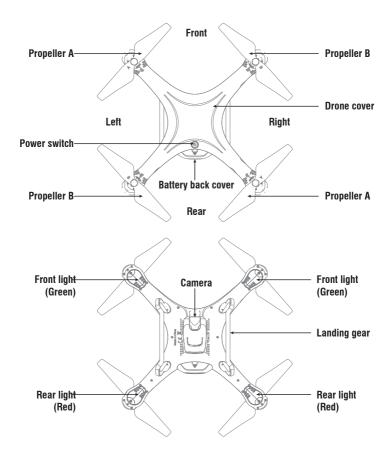
Wasted Lithium-Polymer batteries must not be placed with household trash. Please contact local environmental or waste agency or the supplier of your model or your nearest Li-Po battery recycling center.



Important Notice Our company's products are improving all the time, design and specifications are subject to change without notice. All the information in this manual has been carefully checked to ensure accuracy, if any printing errors, our company reserve the final interpretation right.

# **Ready before take off**

#### **Drone preparation**



#### **Battery charging**

Battery power is low in the original factory, It must be fully charged before use.

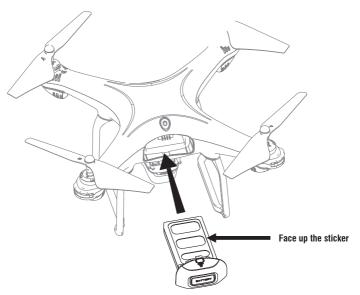
Connect the original charging cable with the drone battery, and then connect other USB charging port. The charger line indicator is red when charging and the light turns green when fully charged.



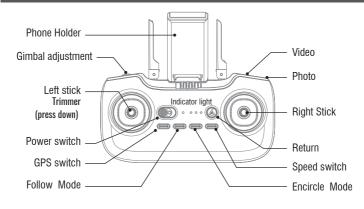
▲ Only use the original charging line; suggest select adapters with output current of 5V 2A.

#### The installation method of battery

When installing, it's a must to press down two buckets of the battery cover, then push the battery box into the right place. When disassembling, press down two buckets of the battery box, then pull the battery box out.



#### Transmitter

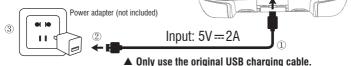


#### Transmitter charging

Battery power is low in the original factory, It must be fully charged before use.

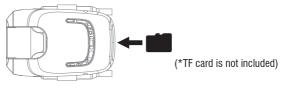
Connect the transmitter with the charging line of the original plant, and then connect other USB charging outlets.

When charging, the transmitter indicator flashes circularly, and when charging is completed, the indicator will be on for a long time.

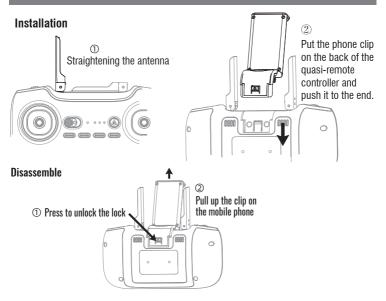


#### **Installation of TF Card**

Insert the TF card to the slot in accordance with, and pay attention to the metal contact surface orientation of the TF card.

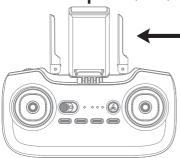


## The installation methods of mobile phone holder



## The installation methods of mobile phone

 $\blacklozenge$  (1) Pull up the clip on the mobile phone.





② Place the phone in the upper and lower clamps Between, the clamp will automatically clamp the mobile phone.



Notice: Don't clip the buttons on the side of the phone.

# **Flight Operations**

### Mobile phone connect with Drone

#### Download and install APP: UDIGPS

This software is suitable for mobile phones in the IOS 9.0 or later and Android 4.4 or later system. For detailed operation, please check the system "HELP" of APP.



#### Transmitter connect with Drone



### **Frequency Pairing**



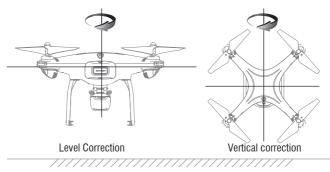


- ② Pull the left stick to the lowest position and let go, the light goes off slowly. it indicates the transmitter enters the frequency state.
- 1 Turn on the power.
- ③ Press the key of power for two seconds to start the drone, it makes the right frequency successfully. Then the left navigation light keeps shiny, while the right navigation light is off. Thus shows that it enters the state of compass level calibration.



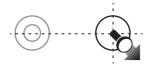
#### **Compass calibration**

Rotate the drone horizontally until the transmitter sound "di..." Level correction to complete. When the front navigation light turns to long light and the rear navigation light flashes, enter vertical correction. rotate the vehicle vertically until the transmitter sound "di...", vertical correction over. The lights are spinning and flashing.



Tips: It's a must to have the right compass adjustment first each time you start the drone, or it can't work normally.

#### Calibration (This action is used when flying abnormally)



After the calibration of the compass, the right stick of the transmitter is pushed to the lower right corner by 45°, and the transmitter emits sound "di", and the drone light flashes and releases, indicating that the gyroscope has been calibrated. (drone should be placed on horizontal ground)

Tips: When the drone doesn't appear to use the trim correction flight status, or being hit hard (or falling abnormally). Thus cause the difficulties in controlling. Now frequency making and adjustment are needed again, drone should be placed on horizontal ground.

## GPS Signal Search

After the successfully right frequency, the drone enters the search of GPS signal automatically.

When the left blue indicator of transmitter turns from shiny to long bright, it indicates the connection to GPS signal is successful finished. If not, the drone can't fly up

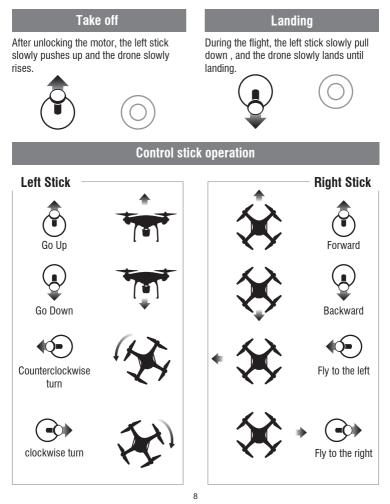
## Unlocking the drone



Push the left and right stick inward to the 45° angle simultaneously.

 On standby drone, motor rotation, drone Unlocked.
 When the drone is not take off, the motor stops rotating and the drone is locked.

#### The drone can only take off when the motor is unlocked.

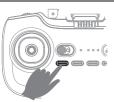


#### Return

During the flight, press the " sutton, and the transmitter will sound "di", and the drone will automatically return to the take-off point. (during returning, the transmitter will continuously sound "di". To stop homing, just press this button again.)



Notice: While returning, the control lever of the transmitter can not control the drone, it must be waited for the drone to go back to the take-off point. And after the direction of the drone is directed at the direction of taking off, in this way right stick can control the drone.



### GPS ON / OFF

GPS is on by default.

GPS OFF: Press the " 🔊 "button ,the transmitter will sound "di"and the blue indicator of the transmitter will go off, it means GPS will be off.

GPS ON: Press the " 🔊 button and the blue indicator of the transmitter will keep bright. It means GPS restart.

Note: this function is only used when the motor is locked.

#### **Following Function**



While flying, press the " $\stackrel{\text{\tiny IM}}{\longrightarrow}$  " botton, the transmitter sounds "di", the drone enters "following mode". Now it can be controlled by the user.

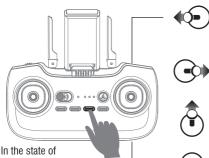
OFF: Press the "

The function is standard by the mobile phone APP signal, so it's a must to make the drone and APP connected normally, turn on the mobile location service at the same time, otherwise this function is invalid

Note: follow the maximum range distance, within 1000m of the take-off point.

## Encircling flight

In flight, press the " button, and the transmitter will make the sound of "di". Then it goes to the function of encircling flight. The drone will fly to a default radius then it waits for the direction controlled by the user. Adjust the speed and direction of the drone by manipulating the right stick. It is the minimum radius of the default radius acquiescently, so drone flies only in the sub range.



Turn left, the drone flies clockwise; Move further, the flying speed will become faster.

Turn right, the drone flies counterclockwise; Move further, the speed will become faster.

Go upward to narrow the radius of

encircling. Go downside to enlarge the radius

of encirclina.

In the state of encircling flying, the left stick could only control the height of the drone.

# •

#### Speed mode switch

Medium speed default

Press "H/L" button, the transmitter will sound "di.di.di" to enter high speed mode "H".

Press it again, the transmitter will sound "di" to enter low speed mode "L".

Press it again, the transmitter will sound "di.di" to enter medium speed mode "M".

Low speed: suitable for beginners to practice without wind. Medium speed: suitable for skilled operator operating in light breeze. High speed: suitable for professional operation in outdoor wind resistance



## **Gimbal Adjustment**

Slide the key of gimbal adjustment, the gimbal begins to swing up and down, with video in your phone, you can turn it to the angle you want, loose the key, the gimbal function stops. You can take photos and video at this angle.

#### Photo

Press the " I button once to take a picture and the transmitter will sound "di".

#### Video

Press the " I button, the transmitter will sound "didi" to start recording. Repeat this action to stop recording and save the video.

#### Notes for Filming

- ① Photos taken will be saved to mobile picture library and aircraft TF card; Video can be saved in TF card first, which can be downloaded to mobile picture library for viewing. Please download video according to APP prompt. When downloading, maintain the normal connection between the mobile phone and the flyer, and the TF card is in the card slot.
- 2 The APP must be authorized to read the phone gallery to view the aerial photos.
- 3 Turn off the power supply of the drone before taking out the TF card.
- 4 When aerial video is read by computer, it must have corresponding playback software.

# Intelligent Hover

Intelligent flight control can calculate the suspended height ,the visual system points the ground position, GPS coordinates allow the vehicle to stay in your desired position Buy. The drone is like a camera fixed in the air. Aerial photography and control are very convenient.

Notice: Drone must be connected to GPS properly in order to give full play to fixed-point hovering function. Atmospheric pressure or wind force affects hovering stability.

## Low Battery Alarm

When the transmitter in low battery, the transmitter will continues to sound "di...di...di...." to remind the user to return home and charge the batteries of the transmitter as soon as possible.

#### **Fixed Point Mode**

Intelligent flight control can calculate the suspended height.

Fixed Point Mode+altiude hold mode = spot hover, make the flight more stable, take photos more clear, and operate more easily.

The drone comes with GPS location and fixed-point.So before flying, please make sure that it has connected to GPS signal normally. Or it will become invalid.

## **Out of Range Alarm**

When the drone is out of the remote control distance, the transmitter will continues to sound "didi...didi...didi..." to alarm the user to return the drone immediately.

## **Stuck Protection**

- 1. When the propellers get stuck ,then the drone LED will flash quickly and activate stuck protection function and the motors stop running.
- 2. Pull down the left stick to the lowest position and back to the centre, the drone LED will get a solid light and stuck protection will be released and the drone can fly again.

## **Out of Control Protection**

Out of control protection refers to the flight control system automatically controls the drone to fly back to the return point after receiving the remote control signal (ie, out of control), the drone does not have the function of avoiding obstacles during the uncontrolled return flight. The user can set the return altitude value to avoid obstacles on the way back.

### Possibility of entry into runaway protection mode

- \* The remote control is off.
- \* Flight distance exceeds the effective distance of remote control signal transmission.
- \* There is an obstacle between the transmitter and the drone.
- \* Transmitter signal is disturbed.







#### Forward / Backward Trimmer

When flying, if the drone tilts forward , push the left stick down and push the right stick down. Otherwise push it up.

#### Left / Right Tilts Trimmer

When flying, if the drone tilts to the left, push the right stick down,meantime push the right stick to the right. Otherwise push it to the left.



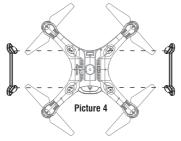
#### Left / Right Rotates Trimmer

When flying, if the drone head rotates to the left, push the right stick down , meantime push left stick to right. Otherwise push it to the left.

# Landing Gear Installation and Disassembly

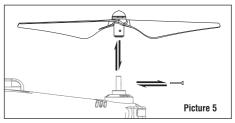
As the diagram shows, aim the landing gear pillar to the body hole and press down, then tighten the screws on the landing gear. When disassembling, loose the screws and pull out the landing gear(Picture 4).

#### Note: Make the landing gear close to the drone level,otherwise it will be unstable and affect the stability of the drone.



## **Propeller Installation and Disassembly**

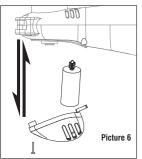
- 1. Use the screw driver counter-clockwise to off the screw and then lift out the damaged propeller (picture 5).
- 2. Replace with the same new rotating direction propeller, aim at the screw hole to install it, then tighten the screw in clockwise.



Notice: When installing, please make sure the right installation, or the drone can not fly normally.

# **Diagram of Motor Replacement**

- Remove the screw and the lampshade with a screwdriver counter-clockwise, and remove the damaged motor after disconnect the motor terminator.
- 2. Replace with the same new motor, connect the motor wire, put on the lampshade, then tighten the screws in clockwise.



Warning: Please take care and do not to damage the LED board when taking out the motor.

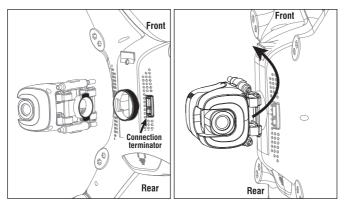
Notice: Please make sure the motor you install is the same rotating direction as the original one. Otherwise, your drone will not fly normally.

Suggestions for motor using:

It's normal that after using for a period of time, the motor performance will decrease, so please purchase a new one for replacement.

# **Camera Box Installation Diagram**

When installing the camera box, connect the drone and camera box socket, aim the camera buckle at the drone bottom position(picture 11), and then push in and rotate 90 degrees.



## Attention

- ① Switching sequence. At first, turn on the power of the transmitter, then turn on the power of the drone. After the end, turn off the power of the drone first, and then turn off the power of the transmitter.
- ② Improper operation caused the crash. It is necessary to check and confirm the connection of the motor, blade or electric pool of the aircraft and the damage degree, so that the aircraft can fly again. If it is damaged, please replace it with new accessories, otherwise it will easily cause flight accidents.
- ③ Battery must be removed when the drone is not in use.

# Troubleshooting

No.	Problem Problem		Problem	Cause	Solution	
1	The controller indicator light is off.	1. Low b	attery.		1. Replace the controller battery.	
		2. The ba	atteries are ind	correctly positioned.	2. Install the batteries following the polarity indicators.	
		3. Poor (	Contact.		3. Clean the dirt between the battery and the battery contacts.	
2		1. Indicator light is off.			1. The same as above.	
	Failed to pair the drone with the controller.	2. There	is an interferii	ng signal nearby.	2. Restart the drone and power on the controller.	
		3. Mis-operation.			3. Operate the drone step by step in accordance with the user manual.	
		<ol> <li>The electronic component is damaged for fiercely crash.</li> </ol>			<ol> <li>To buy spare parts from local seller and replace damaged parts.</li> </ol>	
3	The drone is under- powered or can not fly.	1. The propeller is seriously deformed.			1. Replace the propeller.	
		2. Low b	attery.		2. Charge the drone battery.	
		3. Incorr	ect installatior	of propeller.	3. Install the propeller in accordance with the user manual.	
4	The drone could not hover and tilts to one side.	1. Improper Calibration.			1. Please refer to the Calibration Instruction.	
		2. The propeller is seriously deformed.			2. Replace the propeller.	
		<ol> <li>The motor holder is deformed after violent crash.</li> </ol>			3. Replace the motor holder parts.	
		4. The gyroscope did not reset after a serious crash.			<ol> <li>Put the drone on the flat ground for about 10 minutes or restart the drone to calibrate again.</li> </ol>	
		5. Motor is damaged.			5. Replace the motor.	
		6. No proofreading compass.			6. Re proofreading the compass.	
5	The drone indicator light is off.	1. Low battery.			1. Recharge the drone battery.	
		2. The battery is expired or over discharge protection.			<ol> <li>Buy a new battery from local seller to replace the battery or charge the battery in accordance with the use manual.</li> </ol>	
		3. Poor o	contact.		3. Connect and disconnect the battery.	
6	Could not see the	1. There is an interfering signal nearby.			1. Practice and read the cellphone controlling instruction carefully.	
	picture.	2. Camera is damaged.		l	2. Replace Camera.	
7	Hard to cor cellphone.	itrol by	Not experien	ced enough.	Practice and read the cellphone controlling instruction carefully.	
8	Can't altitude hold.	1. The propeller is seriously deformed.			1. Replace propeller.	
		2. The motor is damaged.			2. Replace the motor.	
		3. Atmospheric pressure is not stable.			3. Refer to "Altitude Hold Mode"instruction.	
9	Can't	1. Whether the GPS has connected or not.			1. Search again to connect the GPS signal.	
	position hold.	2. Disorder after taking				se the compass again; If not, new geomagmetic plate.
10	Searched but could not find the GPS signal			GPS module is damaged. Please replace a new one.		

# **FCC** Note

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving a ntenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

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

The equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. Modifications not authorized by the manufacturer may void user's authority to operate this device.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

#### FCC Radiation Exposure Statement

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition with out restriction.

# A WARNING

Warning: The product should only be used by adults and children over 14 years. Adult supervision is required for children under 14 years.

Hinweis: Dieses Produkt ist für die Erwachsene und die Kinder ab 14 Jahren. Die kinder unter 14 Jahren müssen von Erwachsenen beaufsichtigt werden.

Avertissement: Ce produit est destiné aux adultes et aux enfants de plus de 14 ans. Les enfants de moins de 14 ans doivent être surveillés par des adultes.

Avvertimento: Questo prodotto è destinato all'uso per i adulti e bambini di età superiore ai 14 anni. I bambini di età inferiore ai 14 anni devono essere sorvegliati da un adulto.

Advertencia: Este producto es para adultos y niños mayores de 14 años.

Los niños menores de 14 años deben ser supervisados por adultos.

警告:この製品は、大人と14歳以上の子供には使用対象です。14歳未満の子供は大人の監視が必要です。



#### Manufacturer company: SHANTOU CITY CHENGHAI UDIRC TOYS CO., LTD

Manufacture address: Guangfeng Industrial Zone, Guangyi Street, Chenghai District, Shantou City, Guangdong Province, China

Model: U88S

Manufacture time:

MADE IN CHINA



#### DANGER! Only suitable for age 14+

