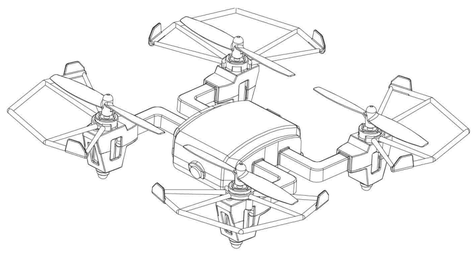
T901F



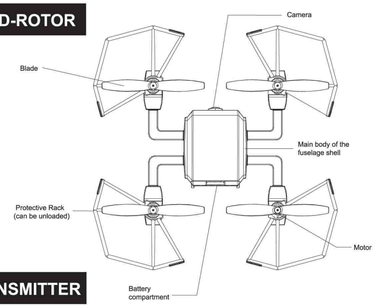
CE0890

MAIN CHARACTERISTICS

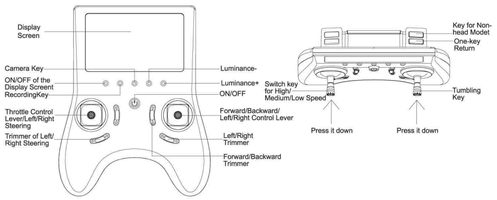
Driven by motor of Quad-rotor with stable flying performance, easily finish all kinds of flying actions. This product is novel in outer design, easy to be assembled and convenient for maintenance. Latest flying control system of Hexa-rotor Gyro makes the Quad-rotor more stable when flying and also easy to operate.

1.NAME OF EACH PART

QUAD-ROTOR



TRANSMITTER



2.PRECAUTION

1. Important statement:

(1)This product is not a toy but one precise equipment integrating the machinery and electronic with the high-frequency transmitting knowledge in Aerodynamics. It requires correct installation and debugging so as to avoid any accident. The holder of this product should operate and control in a safe way. Any incorrect operation may cause severe injury or property loss. We won't be responsible for this as we can not control their behaviors during the process of assembly, using and operating.
(2)This product is suitable for the players who are above 14 years old and have experience in operating the flying model.
(3)For flying place, legal flying ground in the local area is required.
(4)Once the product is sold out, we won't be responsible for any security problem relevant with or arising from the using, controlling or operating.
(5)In case there is any problem in using, operating or maintenance, please contact our sales agents for technical support and after-sale service as we have authorized our sales agents for this.

2. Caution on safety

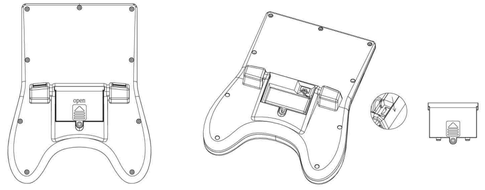
R/C flying model is one dangerous commodity. Please DO keep it far away from the crowd. Any incorrect installation or fuselage damage or bad performance of the electronic control equipment or unfamiliar with the operation, one of which may cause damaged to the flying model or personal injury or any unexpected accident. Please DO make sure safety and get to know what reason or negligence may cause accident.

(1) Please keep it far away from obstacle or crowd.
The flying model may have uncertainty with the flying speed and potential danger with its flying state. So please do keep it far away from the crowd or high-building or high-voltage wire when flying.
(2)Please keep it far away from the moisten environment
The inner side of this flying model is composed of many precise electronic components and mechanical parts. So please DO make sure there is no moistened water or moisture penetrating into the fuselage so as to avoid any breakdown of some mechanic or electronic components which may cause unexpected accident.
(3)Safe operation
Please operate the R/C Quad-rotor according to your own state and flying skill. Fatigue or bad mood or incorrect operation may increase the probability of the accidental risk.
(4)Please keep it far away from the high-speed rotating part
When the rotor is rotating in high speed, please keep the pilot, crowd or any other objects far away from the rotating part so as not to cause danger or damaged.
(5)Please keep it far away from heat source
This flying model is composed of metal, plastic, electronic parts. Please DO keep it far away from heat source and also avoid being deformed and damaged due to high-temperature or sunburned.

3.Caution before flying

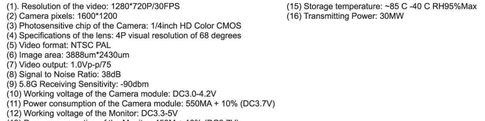
(1)The flying environment should be the spacious area with suggested size about 8M (L) *8M(W)*5M(H).
(2) Please confirm if the battery electricity of the transmitter and receiver are in the full state.
(3) Before switching on, please kindly confirm if the throttle lever of the transmitter is in the lowest position.
(4) Please follow the sequence of switch-on and switch-off when switching on the power. Incorrect sequence of Switch-on and Switch-off may cause the flying Quad-rotor out of control and thus affect other people's security and your own as well. Please form a good habit of switching on or switching off in a correct way.
(5) Please confirm if the connecting head between the battery and the motor are firmly connected or not as the power connecting head may loose during the course of flying and lasting vibrating, which may cause the flying model out of control.
(6)Incorrect operation may cause crashed. The unsmoothed running of the motor or noise produced may affect the flying state or even can not fly. It is highly recommended that you go to the local sales agent to replace it timely and restore your flying model to the best state.

3.ASSEMBLY OF THE TRANSMITTER



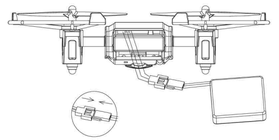
4.INSTRUCTION ON BATTERY CHARGING

1. First of all, please connect the battery of the Quad-rotor or battery of the transmitter with the USB wire and then connect either USB Port of the power as the charging method shown below. (Please select 5V 2A charger as the top priority for charging.)
2. The indicator of USB will be ON when charging the battery. When it is fully charged, the indicator will be OFF. The charging time of the battery in the fuselage is about 70 minutes. The charging time for the battery in the transmitter is about 65 minutes.
3.Built-in lithium battery is equipped in the part of this product. Please pay more attention to the safety issues.
4.Please DO NOT put the charged battery under the high-temperature or heating environment such as fire or electro thermal device. Otherwise it may cause damaged or even explosion.
5.Please DO NOT use the battery to strike or beat on the surface of hard object.
6.Please DO NOT soak the battery into the water. Battery should be placed on the dried place.
7.Please DO NOT decompose the battery.
8.Guardian should be on the spot when charging.



5.FLYING STEPS

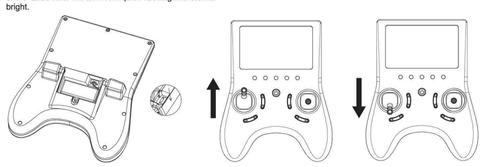
1. Please connect the battery of the flying Quad-rotor with the battery compartment of the Quad-rotor. Switch on the power of the Quad-rotor. Please put the Quad-rotors stably on the flat ground. This time the indicators on the fuselage of the Quad-rotor will be under quick- flashing state.



Important tips: Please make sure the Quad-rotor should be put on the level surface as the Gyro on the receiving board needs to be calibrated with the level surface after switching on. Only at this time can the Quad-rotor enter into the normal remote control state.

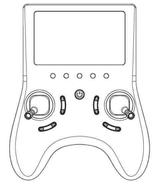
2. Please connect the battery of the transmitter with the transmitter. Switch it on and the indicator of the transmitter will send out sound of "di di" after flashing quickly for about 1-2 seconds. The indicator of the transmitter will keep eternal bright ON and the indicator of the Quad-rotor will turn from quick flashing into eternal bright.

3.Then push the throttle lever till the maximum travelling distance and then pull back to the bottom. This time the transmitter will enter into the normal remote controlling state



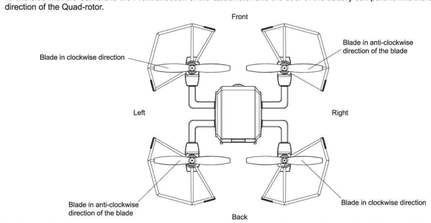
6.INSTRUCTION ON CALIBRATION OF THE QUAD-ROTOR

Pull the Throttle Lever on the left of the transmitter to the left down corner and pull the Throttle Lever on the right to the right down corner for about 2 seconds. This time the indicator on the Quad-rotor will be flashing "ON". Wait until the indicator restores back to eternal bright "ON", which represents the calibration is finished and you can use it normally.



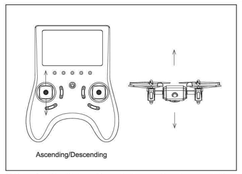
7.ADDITIONAL INSTRUCTION BEFORE FLYING

1. The side with the Camera is the Front direction of the Quad-rotor and the door of the battery compartment is the back direction of the Quad-rotor.

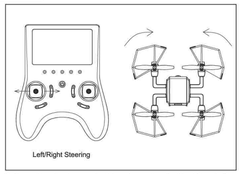


2. After the Quad-rotor is switched on, please check the rotating direction of the rotor. The rotor in Left Forward/Right Forward will rotate in clockwise direction. The rotor in Right Forward/Left Backward will rotate in anti-clockwise direction.
3. If the Quad-rotor flies deviating toward one side during the process of flying, please trim by adjusting the trimmer on the transmitter.
4. When there is insufficient power with the Quad-rotor during the process of flying, the LED indicators on the fuselage will turn from eternal bright into flashing "ON" for alarming. This time the player should retrieve back the Quad-rotor within 30 seconds and then replace with new battery or battery that fully charged so as to go ahead with flying.
5. The transmitter will send out sound of "didi, didi, didi" when working under the low-voltage state. This time the player should retrieve back its Quad-rotor within 30 seconds and then replace with new batteries or replace with batteries that fully charged so as to go ahead with flying.

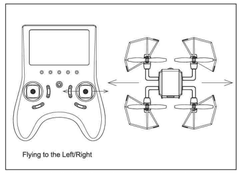
8.FLYING CONTROL & TRIMMING



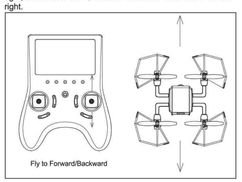
1.When the throttle lever is pushed upward or downward, the Quad-rotor will fly to upward or downward.



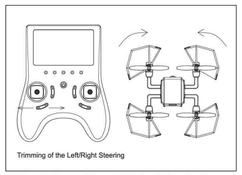
2.When the steering control lever is pushed to the left or to the right, the head of the Quad-rotor will rotate to the left or to the right.



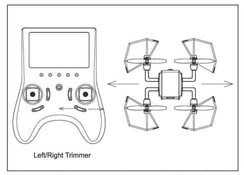
3.When the Left/Right Control Lever is pulled to the Left/Right, the Quad-rotor will fly to the left or to the right accordingly in the same time.



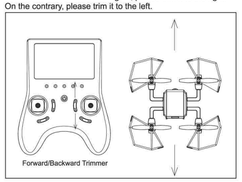
4.When the Forward/Backward Control Lever is pushed to Upward/Downward, the Quad-rotor will fly to Forward/Backward.



5.Adjust the Steering Trimmer, if the head of the Quad-rotor deviates to the left when taking off, please trim it to the right. On the contrary, please trim it to the left.



6.Trim the Left/Right Trimmer, if the fuselage of the Quad-rotor deviates to the left, please trim it to the right. On the contrary, please trim it to the left.

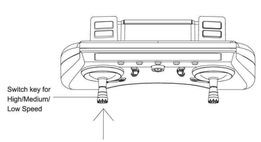


7.Forward/Backward Trimmer, if the fuselage of the Quad-rotor deviates to forward when taking off, please trim it downward. On the contrary, please trim it upward.

changes or modifications not expressly approved by the party responsible for compliance could void the user' s authority to operate the equipment.
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 antenna.
— 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.
— Consult the dealer or an experienced radio/TV technician for help.

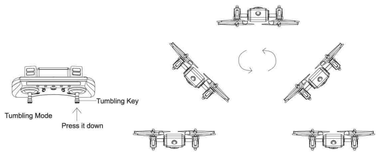
9.MODE OF HIGH/MEDIUM/LOW SPEED

There are 3 gears (i.e. High/Medium/Low Speed) available for this Quad-rotor. Press the key for High/Medium/Low Speed Mode on the transmitter, the transmitter will send out 3 different sound like di, didi, dididi, which represents separately for Low, Medium, High Speed Mode. (Medium Speed Mode is defaulted when switching on, the Medium and Low Speed Mode is suitable for the Players of Junior Level and the High Speed Mode is suitable for Players of Senior Level.)



10.TUMBLING MODE

When the Quad-rotor is flying in the air, press down the Control lever on the right of the transmitter and you will hear sound of di di di, which represents the Quad-rotor has entered into Tumbling State. Then please press down the Control Lever on the right once again and the sound of "di di di" will be cancelled and the Tumbling State of the Quad-rotor will be cancelled as well. Under the Tumbling State, operate the Direction Lever on the right and then push the Forward/Backward or Left/Right Control Lever to the maximum and then release, the Quad-rotor will fly to Forward/Backward or Left/Right and tumbling for 360 degree accordingly while the Tumbling Mode will be switched off automatically in the same time.(WARNING: This action requires that the flying room should be spacious enough. Otherwise it may cause danger.)

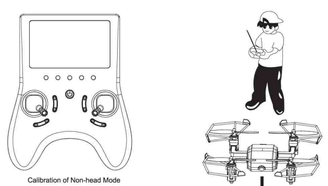


11. NON-HEAD MODE

Press the key for Non-head Mode on the Transmitter, it will send out sound of "di" and the indicator of the fuselage will appear quick flashing state and the Quad-rotor will enter into Non-head Mode.
Press the Key for Non-head Mode once again, it will send out sound of "di" and the indicator of the fuselage will appear eternal bright "ON" state, the Quad-rotor will exit the Non-head Mode.

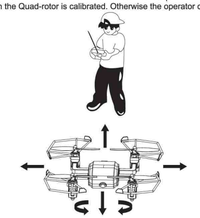
Calibration on the flying direction of the Quad-rotor under the Non-head Mode

When the Quad-rotor has entered into the Non-head Mode, first of all, please make calibration to the flying direction first and then put the head of the Quad-rotor toward the front side of the operator, and then pull the Throttle Lever on the left of the Transmitter to the down right corner in the same time while pulling the Throttle Lever on the right to the Left Down Corner for about 2 seconds, this time the indicator of the Quad-rotor will turn from eternal bright "ON" into Quick flashing for 2 seconds and then turn into Eternal Bright "ON", this time the flying direction of the Quad-rotor has been well confirmed.



The Steering Control of the Quad-rotor under the Non-head Mode

Under the Non-head Mode, the controlling direction of the Quad-rotor is taking the direction calibrated as the standard direction. The direction of the Quad-rotor head indicated is the Front Direction. When the operator is controlling this Quad-rotor, he or she should face the head direction when the Quad-rotor is calibrated. Otherwise the operator can not control the flying direction. The detailed control is as below:



(1)When pushing the control lever of the transmitter forward, the Quad-rotor will fly toward the front direction following the standard direction of the Quad-rotor when it is calibrated.
(2)When pulling the control lever to the right, the Quad-rotor will be steering to the right side of the operator.
(3)When pulling the control lever to backward, the Quad-rotor will fly to the operator following the standard direction of the Quad-rotor when it is calibrated.
(4)When pulling the Control Lever to the Left, the Quad-rotor will fly to the Left Side of the operator.
(5)When pulling the Control Lever to the Left for Side-flying, the Quad-rotor will fly to the left side of the operator following the standard direction of the Quad-rotor when it is calibrated.
(6)When pulling the Control lever to the Right for Side-flying, the Quad-rotor will fly to the right side of the operator following the standard direction of the Quad-rotor when it is calibrated.

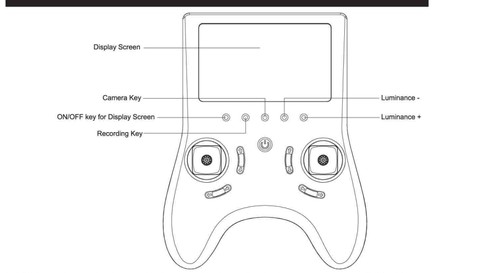
Caution:

1. When you are ready for flying under the Non-head Mode, please do confirm the controlling direction of the Quad-rotor first and then conduct the Direction Calibration. Moreover, the operator should face the direction of the head of the Quad-rotor following the standard direction of the Quad-rotor when it is calibrated. During the process of controlling, please do not change it so as not to affect the flying control of the Quad-rotor.
2. During the process of flying under the Non-head Mode, when you have found the flying direction of the Quad-rotor is not the same as the controlling direction of the operator or has some deviation, please stop flying. Please re-calibrate the direction of the Quad-rotor.

12. ONE-KEY RETURN

Under the Non-head Mode, during the process of flying, press the key for One-key Return, the Quad-rotor will iffy toward the operator. If you need to exit this function, please simply operate the Forward/Backward Lever once again or press once again the key for One-key Return and then you can cancel the function of One-key Return.

13. OPERATING INSTRUCTION ON TRANSMITTING OF 5.8G FPV PICTURE & VIDEO

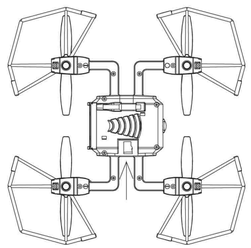


1. 5.8G Transmitting system is applied on this product for transmitting the images and video, also 720P HD Camera and 4.3 inch super-big screen Monitor is equipped. The main characteristics of this product is having strong anti-interfering performance, fast transmitting speed, easy to assemble and no need to make debugging, simply switch on and you can use it..

Parameter for transmitting the images and video

(1). Resolution of the video: 1280*720P/30FPS
(2) Camera pixels: 1600*1200
(3) Photosensitive chip of the Camera: 1/4inch HD Color CMOS
(4) Specifications of the lens: 4P visual resolution of 68 degrees
(5) Video format: NTSC PAL
(6) Image area: 3888um*2430um
(7) Video output: 1.0Vp-p/75
(8) Signal to Noise Ratio: 38dB
(9) 5.8G Receiving Sensitivity: -90dbm
(10) Working voltage of the Camera module: DC3.0-4.2V
(11) Power consumption of the Camera module: 550MA + 10% (DC3.7V)
(12) Working voltage of the Monitor: DC3.3-5V
(13) Power consumption of the Monitor: 450M + 10% (DC3.7V)
(14) Working temperature: ~55 degrees C -5 C RH95%Max
(15) Storage temperature: ~85 C -40 C RH95%Max
(16) Transmitting Power: 30MW

2. Loading of the Memory Card: After switching on, the red indicator will be flashing for a while. Then load the SD card and the green indicator on the Camera Board will keep eternal bright "ON". Please Load the SD card correctly into the groove for the SD card at the bottom of the Quad-rotor, slightly press it and then load into the SD card. Slightly press it once again and the SD card will pop out automatically.



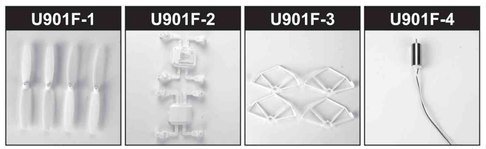
3. When taking picture, press the Camera key, the green indicator on the Camera Board will be OFF and the red indicator will be flashing for a while and then the green indicator will keep eternal bright "ON" (press it one time for one piece).
4. When recording, press the Video Key, the green indicator on the Camera Board at the bottom of the fuselage will be OFF and the red indicator will be flashing "ON". When you exit the Video Recording, the red indicator will be OFF and the green indicator will keep eternal bright "ON".
5. All the pictures taken and the video recorded are preserved in the SD card. When finish the aerial-photography, please remove the SD card on the Camera Board, and then load into the Card Reader and connect with the USB port of the computer and you can read the data during the course of aerial-photography on the computer.

14.TROUBLE-SHOOTING TO THE ORDINARY PROBLEM

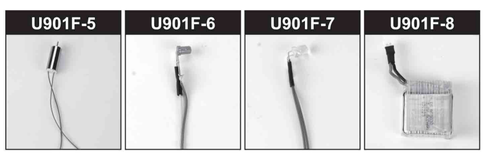
Problem	Reason	Trouble-shooting
The indicator of the Quad-rotor keeps flashing and no reaction when operating.	1.The Quad-rotor fails to make decoding with the transmitter. 2.Insufficient power with the Quad-rotor.	1.Follow (the operating steps of taking off) and conduct decoding once again. 2.Charge the battery.
The blade of the Quad-rotor can be rotating but can not take off.	1. Insufficient power with the battery 2. Deformation of the blade.	1. Charge the battery. 2. Replace the blade.
The Quad-rotor shocks too severely.	The blade is deformed.	Replace the blade.
The Quad-rotor can not fly stably even the trimmer has been well trimmed.	1.The blade is deformed. 2.The motor is under bad performance.	1.Replace the blade. 2. Replace the motor.
Take off once again after being collided but the Quad-rotor flies at will without following the command.	The Gyro may lose balance due to collision.	Make calibration to the fuselage by following the "Calibration of the fuselage".

15.PARTS (OPTIONAL)

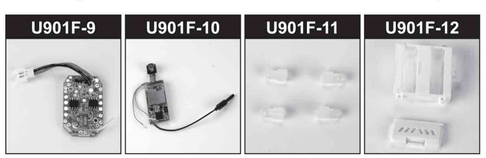
Below is the part available. For the convenience of the customers, we hereby have listed each part for your kindly reference and customer can purchase these parts from the local sales agent.



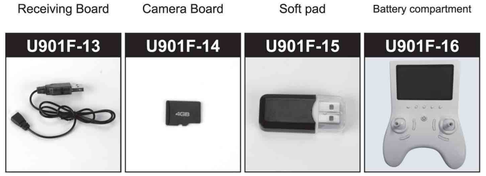
Blade | Fuselage shell | Protective Rack | Reversing Motor



Front-rotating Motor | Red LED indicator | Blue LED indicator | Battery



Receiving Board | Camera Board | Soft pad | Battery compartment



USB charging wire | Memory Card | Card Reader | Transmitter