

12.0. FPV Troubleshooting









12.1 There is no image on the glasses display screen:

- 1) Check the power supply of the glasses and the power supply of the aircraft if its ok and is the battery adequate or not .
- 2) Check whether the receiving channel of the glasses is consistent with the transmitter channel.

12.2 The image quality received by the glasses is poor or the wireless transmission distance is near:

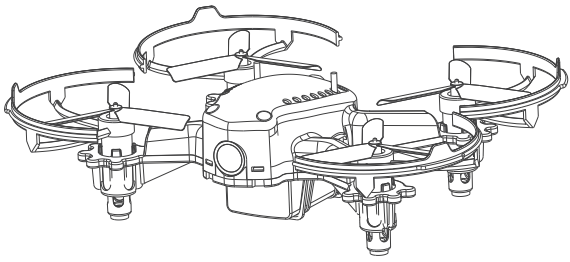
- 1) If there is a same frequency radio transmission equipment interference in near area ,the FPV system should select other frequencies,avoid the frequency of interference or avoid use in the same field.
- 2) If the glasses antenna has been installed
- 3) If there is a obstruction between the glasses and the aircraft, such as the mountain, house, tree, etc.

13.0. Accessories list

 Aircraft *1	 Remote controller *1	 Propeller A*2 Propeller B*2	 USB charging line *1
 Aircraft batteries *1	 Propeller guard *4	 Impeller *1	 Manual*1

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14+  
AGES

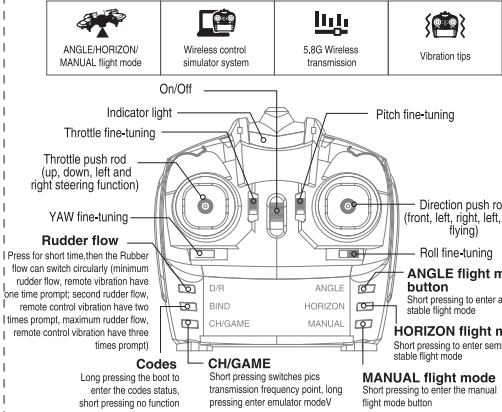


INSTRUCTION MANUAL

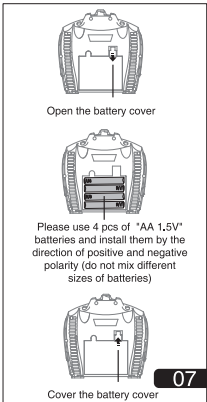
 Tips:Please charge before use!



4.2 Telecontroller function introduction

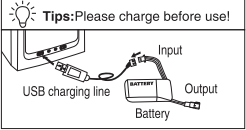


4.3 Battery installation for telecontroller



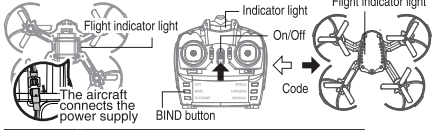
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5.0 Aircraft battery charge



Connect the charging cable to the USB port of the computer (or the USB port with DV5V output), the charging line indicates that the red light is on; then the balanced charging port of the battery end is connected to the balanced charging port of the charging line, Flashing, full green after the lights long; when the green light is long after the battery recharging for 20 minutes to achieve full full power.

**Checking codes methods:**  
① The terminal of the aircraft is connected with the power supply, and the state of the flight control indicates that the red light is flashing.  
② Connect the aircraft terminal power supply after 30 seconds and hold the BIND button on a telecontroller to open the telecontroller power source switch, then start to check code, after complete code, the aircraft Indicator light switch to slowly flashing, remote control Indicator light will keep shining.



**Note:**  
1. The aircraft receiver antenna should be erected before flighting , to increase the communication distance.  
2.Choose a larger space and soft ground for flying.

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6.0 Operation instructions

6.1 Boot program

1. The code of the aircraft and telecontroller (need check the codes when you use at first time,then open the telecontroller power source button,then turn on the aircraft power source to complete the code automatically.
2. Aircraft calibration
3. Aircraft unlock
4. Slowly push the accelerator from the rocker and take off.

Catalog

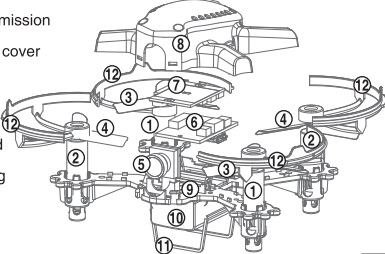
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01

1.0 Know your aircraft

The main structure is made of PC material, and the new industrial and modular design improves the product development, easy installation, maintenance, replacement and upgrade.  
Equipped with 5.8G real-time graphics transmission system, which gives you different visual effects

- 1. Forward motor
- 2. Reversing motor
- 3. Forward propeller
- 4. Reversing propeller
- 5. Camera
- 6. Flight control
- 7. Graphic transmission
- 8. Aircraft upper cover
- 9. Airframe
- 10. Batteries
- 11. Rubber band
- 12. Propeller ring



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6.2 Aircraft calibration and unlock

Calibration method

To make the throttle rocker and the pitching rocker under at the lowest position, then the vehicle can be calibrated.,When calibrating, the status indicator red light of aircraft will flash continuously for three times, that means calibrating is successful.

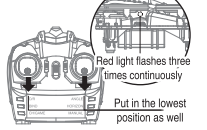
Unlock method

Put the throttle rocker at the lowest position and the roll rocker to the right

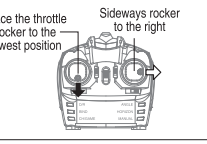
**Aircraft locking**  
Put the throttle in the lowest position and has no operation for 5 seconds.

**Tips:**  
Before the aircraft take off,make sure that the aircraft is placed on the horizontal surface for proofreading,ensure that the aircraft flies smoothly after take off,when aircraft deviation from impact or collision,it also can be calibrated in same way.

Calibration method



Unlock method



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7.0 Operation and control

7.1 Rocker operation method

As for the Sensitive induction,For beginners,suggest to operate joystick slowly.  
If the craft drops slightly during steering,can push the left joystick slowly so that can climb up to a certain height at the same time.  
When operating, avoid pushing the throttle substantially.

7.2 Fine-tuning operation method

Fine-tuning of aircraft movements

Lifting the throttle rocker slowly,When the aircraft leaves the ground,If the craft tends in different directions,can use fine-tuning to do corrected action.

1. Pitch fine-tuning

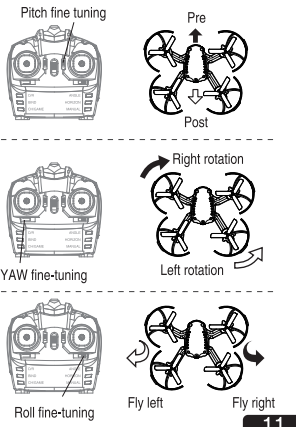
When the aircraft leaves the ground, tilt forward while flying,adjust slightly downward, tilt back while flying,adjust slightly upward.

2. YAW fine-tuning

When the aircraft leaves the ground, Rotate to the right while flying,adjust to the left slightly. Rotate to the left while flying,adjust to the right slightly.

3. Roll fine-tuning

When the aircraft leaves the ground, Fly to the right while flying,adjust to the left slightly. Fly to the left while flying,adjust to the right slightly.



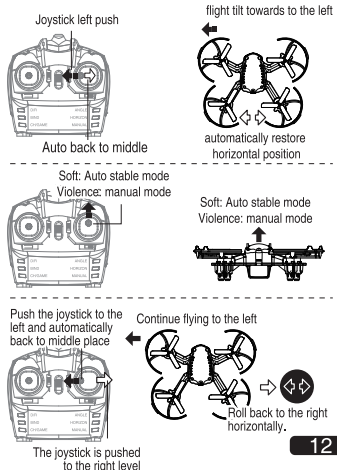
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8.0 Three flight modes

**Auto stable mode:** This mode is suitable for primary user. With this mode, the aircraft will automatically restore horizontal position according to the Roll, Pitch, and Yaw joystick back in middle. For example, when the Roll joystick is turned to the left and the Roll joystick automatically returns, the vehicle will automatically resume its horizontal position.

**Semi automatic stabilization mode:** This mode is suitable for intermediate user that can control of aircraft well. The joystick is "auto stable mode" before hitting a certain proportion, and exceeds this ratio will change to "manual mode". That means soft control is automatic stabilization, and violent operation is manual mode.

**Manual mode:** This model is suitable for advanced user that can control all kinds of stunt performance, showing its super reaction and control ability. Under this mode, the aircraft will automatically restore horizontal position according to the Roll, Pitch, and Yaw joystick back in middle. For example, when you hit the Roll joystick to the left, the Roll joystick automatically returns to middle, while the vehicle continues to roll to the left side without recovery. Only when the Roll joystick hits the same degree to the right, the vehicle will roll to the right to recover horizontally.

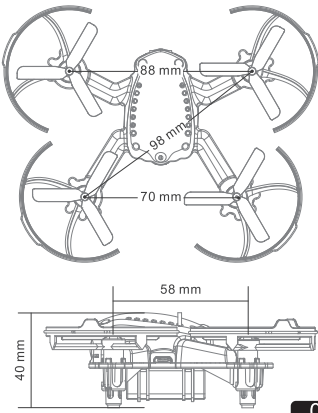


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2.0 Parameter

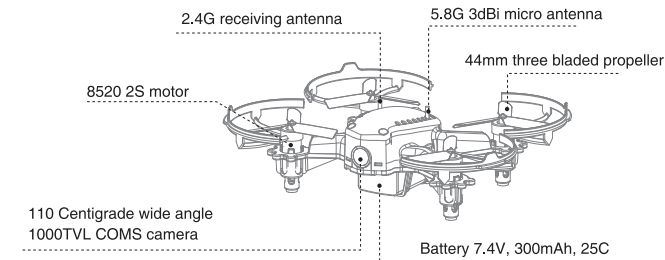
2.1 Vehicle parameters





- Propeller: 44mm (triple blade propeller)
- Fuselage (L \* w \* h): 88\*58\*40mm
- Weight: 42g (excluding battery)
- Flight control: customized version of steady flight control
- Motor: 8520 2S motor
- Battery: 7.4V, 300mAh, 25C
- Flight time: 6 minutes
- Working environment temperature: -10°C to +40°C



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2.2 Function features



 F P V	 Safely flight	 keep sailing for 6 minites	 2.4GHz multi-function remote control
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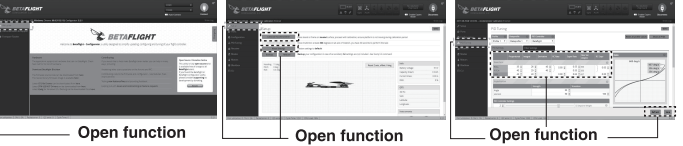
3.0 About flight control

3.1 Support Freerider simulator wireless control function



3.2 Support Betaflight software, PID parameters adjustable

- ☒ Adjustable parameters
- ☒ Adjustable parameters
- ☒ Adjustable parameters



05

 Tips: No indicating area not open yet.

3.3 Supports indication of current frequency points

Frequency (Unit:MHz)

CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
5658	5695	5732	5769	5806	5843	5880	5917

CH1, the frequency point indicates that the blue light (as shown on the right) flashes at intervals of 2 seconds; CH2 flashes 2 times per second for 2 seconds; CH3 blinks 3 times per second; CH4 flashes 4 times at intervals of 2 seconds; in turn, 2 times.

Adopt professional competition frequency points,No interference from one another will occur when multiple people use the same field.At the same time, this product can also supports 2.4G remote control switching frequency point function.

4.0 Remote control

4.1 Vibration alarm prompt

- \* Low vibration alarm for low voltage remote terminal of aircraft, Alarm voltage (single battery3.7V)
- \* Remote control low voltage vibration alarm, Alarm voltage (single battery 1.02V)

\* It will have vibration alarm once lose signal. When the remote control is out of contact with the aircraft signal, the remote control will send a vibration prompt.

\* The button can impels the vibration prompt. When the remote control button is operated at any time, the remote controller will send out a shock prompt!

\* **Support 3 rudder volume (D/R key) and three flight modes (ANGLE / HORIZON / MANUAL three keys).**  
The remote control panel function shows as below:



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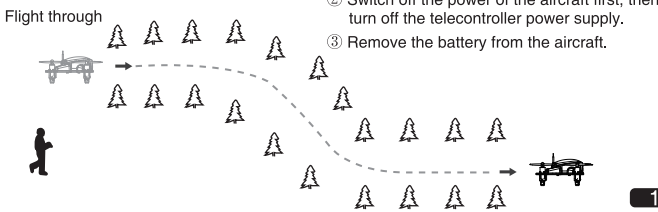
9.0 Flight environment



**Please do not use this product under below environment,avoid accidental injury or damaged aircraft.**

- 1) High voltage lines, parks, railways, highways and so on.
- 2) Thunderstorms,wind ,snow and rain, etc.

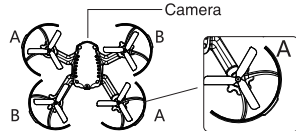
9.1 End flight



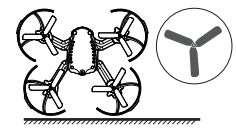
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10.0 Installation method of propeller

The propeller installation of aircraft has position requirements. Please install it according to the corresponding code,the codes shows as below.



**Propeller installation:** Hold the small cap of the propeller, press the motor shaft down, and be careful not to deform the propeller.



11.0 Troubleshooting

11.1 Remote control and aircraft unresponsive solutions:

- 1) Make sure the code successfully. see page 8 for codes.
- 2) Whether the battery is low.
- 3) Make sure that the remote control is the original one.
- 4) Confirm if is unlocked after code

11.2 Solution for airframe shaking

- 1) Check whether the propeller is deformed and replace the new propeller.
- 2) Calibrate the gyro by placing the aircraft at the horizontal plane.

11.3 Telecontroller vibration solutions:

- 1) When the telecontroller is vibrating, check the side of the aircraft and the telecontroller if have enough power, or if have object blocked between the aircraft and the remote controller that causes a weak reception signal.
- 2) The reason for the remote controller vibration occasionally is that the signal is weak or the battery is about to go into a low -voltage state .

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First-person perspective,  
experience more shocking

3-inch high-definition screen, whether it is to play through or look at the scenery, every detail is not missed.

01

**Description**

- 1. AV IN input port:** In AV IN mode can enter the video signal.
- 2. Antenna port:** thumb and forefinger pinch the antenna port, turn clockwise, twist it.
- 3. Ventilation holes:** all breathable (see page 6).
- 4. Snap-on head hole:** the headband from the eye lens with the middle of the gap in the hole into the hole. The side headband penetrates the side of the head hole, the top of the headband into the top of the head hole.
- 5. Charging indicator:** red light when charging light; full power, the indicator goes off.
- 6. [ + ]:** Key Function Details on page 7.
- 7. [ MENU ]:** Key Function Details on page 7.
- 8. [ - ]:** Key Function Details on page 7.
- 9. [ SCAN / ⏻ ]:** Key Function Details on page 7.
- 10. Micro USB charging port:** This product supports DC5V charging real-time standby function. When you are outdoors, you can use your charger or its mobile power while charging.
- 11. Eye ring:** eye ring is used to protect the surrounding parts of the eyes, so that the wearer wear more comfortable.

Positive Back Right side Left side

03

**AV IN function**

The video signals of external devices (such as DVD) can be input to the end of the glasses via the AV IN connector to display their images.

AV IN input port AV line

**Charging real-time standby function**

This product supports DC5V charging real-time standby function. When you are outdoors, you can use your charger or other mobile power while charging.

Built-in battery Working voltage: 1S battery (3.7 ~ 4.2V) Micro USB charging port DC 5V Charging indicator

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AGES 14+  
(Can optional)

Tips: Please charge before use!

FPV goggle instruction manual

02

**Features**

- HD display
- Mini type
- One key auto-search function
- First person view
- Real-time display of current frequency
- Adjustable head band

**Specifications**

Working voltage: 1s battery(3.7-4.2v)  
Working current: 350~450mA  
Receiving sensitivity: -95dBm  
Weight: 164.7g (without antenna and headband)  
Size:138\*129\*79mm( without antenna seat and antenna height)  
Receiver connector:RP-SMA male  
Built-in battery  
Receiving frequency:5.8G 40CH

138mm 79mm 129mm

02

**HD display**

- 3-inch high-definition screen, whether it is to play through or look at the scenery, every detail is not missed.
- Screen size:3 inch LCD display  
Screen resolution:500x300 pixels
- Support a key search frequency
- OSD Real-time display of battery voltage

Battery voltage display Frequency display

04

**Ventilation holes**

- All-round ventilation, the effective formation of convection.

**Stable display, reasonable focal length and perspective, even beginners can quickly adapt.**

Not halo screen

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**Key description**

[ + ]: In the menu mode for the down function. In the non-menu mode, press to adjust to the next frequency of the current frequency.  
[ MENU ]: menu switch.  
[ - ]: in the menu mode for the up function. In the non-menu mode, short press to adjust to the previous frequency point.  
[ SCAN / ⏻ ]: short press for the automatic frequency function, long press for the switch function.

MENU SCAN / ⏻

**Tips:**

Turn on the machine, long press [SCAN / ⏻] button, the indicator light from flashing to light is on, that is, complete the boot. When the camera is turned off, the indicator light turns off from flashing to complete shutdown.

Through the ventilation hole, can see the light flashes

07

**The menu adjustment uses the icon**

+ MENU - SCAN / ⏻

**Short press [MENU] key to enter menu option Function:**

**Brightness adjustment:** short press [ + ] or [ - ] button to adjust the brightness.

BRIGHTNESS 10 50 3.7 V

**Contrast adjustment:** Short press [ + ] or [ - ] button to adjust the contrast.

CONTRAST 10 50 3.7 V

**Saturation adjustment:** short press [ + ] or [ - ] button to adjust the color.

SATURATION 10 50 3.7 V

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**Adjust the frequency of use as follows**

[ SCAN / ⏻ ]: short press a key search frequency, long press for the switch function.

In the non-menu interface for the FM interface wake-up function, enter the FM interface, short press [ - ] to adjust to the current frequency of the previous frequency, short press [ + ] to adjust to the current frequency of the next frequency.

3.7 V 5.865 GHz 5.845 GHz

**Frequency table**

	1	2	3	4	5	6	7	8
A	5.865	5.845	5.825	5.805	5.785	5.765	5.745	5.725
B	5.733	5.752	5.771	5.790	5.809	5.828	5.847	5.866
C	5.705	5.685	5.665	5.645	5.885	5.905	5.925	5.945
D	5.740	5.760	5.780	5.800	5.820	5.840	5.860	5.880
E	5.658	5.695	5.732	5.769	5.806	5.843	5.880	5.917

Unit : GHz

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**Precautions**

Before use, make sure that the battery power of the device is saturated. To reduce the risk of fire, electric shock, or product damage, do not expose the unit to rain, moisture, dripping, or splashing water. Do not place liquid, such as a vase, on the unit. Please avoid falling or strong collision of the product, do not let the product was violent vibration, otherwise it may lead to product damage or display is not normal.

Do not use in particularly cold, hot, dusty and humid environments. In the following places, pay special attention, so as not to cause video goggles failure.

- (1) where there is a lot of sand or dust.
- (2) Exposure to water, such as in the rain or on the beach when the use of the machine, the product lens sticky dust or dirt, please use a professional lens cleaning paper clean.
- (3) Do not force the video goggles into stuffed or crowded package, so as to avoid damage to internal parts or personal injury.

**Tips:**

When you need to watch the video for a long time, we recommend that you take a video break every 50 minutes. If your eyes and other body parts feel unwell, please stop using this product. Eyes and other body parts of the original discomfort of the user, please consult the relevant medical institutions to obtain the use of recommendations.

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**Menu interface guide map**

Short press the "Menu" button

Loop switch

08

**The menu adjustment uses the icon**

**Short press [MENU] key to enter menu option Function:**

**AV / AV IN Mode setting:** When this option is selected, press the [ + ] or [ - ] button to select AV or AV IN mode.

INPUT 3.7 V AV IN 3.7 V

**To exit the menu:** Press the [MENU] button to exit the menu interface.

INPUT 3.7 V 3.7 V

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**Common troubleshooting**

**Goggles display screen No image:**

- (1) Check to confirm whether the correct boot (long press [SCAN / ⏻], turn on the light from the flash to light, that is, has been properly boot).
- (2) Check whether the frequency of the goggles and the transmitter frequency is consistent.
- (3) Check to see if the battery power of the aircraft or goggle is sufficient.
- (4) Check if the antenna of the goggle is properly installed.

**Goggles received the image signal quality is poor or wireless transmission distance near:**

- (1) Whether the same frequency of radio frequency transmission equipment interference, FPV system should choose other frequencies, to avoid the interference frequency or to avoid the use of a unified site.
- (2) Whether the antenna of the goggles and the transmitter is installed.
- (3) Whether the goggles and the transmitter between the mountains, houses, trees and other obstacles, should be used in the open space FPV system.

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**packing list**

Goggles\*1 Straight rod antenna\*1 Manual \* 1 Micro USB charging cable \* 1 Lens wipes \* 2

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