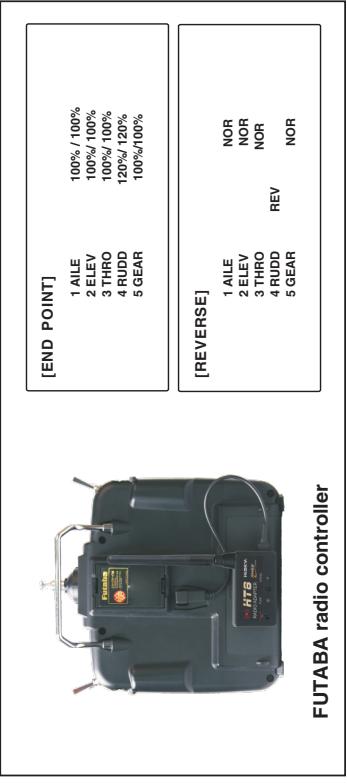


## 2. Advice parameters to RF Module with FUTABA radio controller

First, set FUTABA radio controller to Plane Mode, then adjust the radio controller to PPM transmit format.



## 7.2 Matters needing attention

- (1) Please follow this rules: "Open the radio first, connect the Quadcopter FF120 power last". After open the radio power button, please connect the FF120 power in 10S, the signal indicator light begins flashing, the light will solid after 1-3 seconds, and the four motor will self-checking rotation, then the receiver has received the signal of the radio successfully, binding finished.
- (2) If more than 10 seconds passed before the power cable was connected binding will fail. When binding fails, disconnect the battery.

## 7.3 Trouble shooting a flashing receiver LED after connecting the power cable

Possible causes	Solutions
Code paring failed	Turn transmitter off then on and re-connect FF120 power cable
The throttle stick of transmitter is not at the lowest position	Pull down the throttle stick to the lowest position and re-code pair
The transmitter battery is low and empty	Replace transmitter battery and re-codepair(re-bind)
The FF120 battery is low and empty	Replace the FF120 battery with a fresh pack and re-code pair
No function in receiver or transmitter	Replace faulty receiver or transmitter and re-code pair

## 6. Instruction for XC-IS2 Charger

1. XC-IS2 Charger is suitable for 1 or 2 cell (3.7V) Li-ion or li-polymer battery.

Please plug the pin of your battery into the jack of the XC-IS2 Charger.

2. Please plug the pin of your battery into the jack of the USB first and then connect to the power. Otherwise, the LED may not become red and the voltage may be higher than 3.8V. You need to disconnect the USB power supply and reconnect it.

3. When USB power supply is well connected and battery is charging, the LED will become red. After your battery is full charged, the LED will not become Green.

## 7. Steps of flight

### 7.1 Installation of battery pack

Install the battery to the pack



1. Install the battery pack in the battery compartment

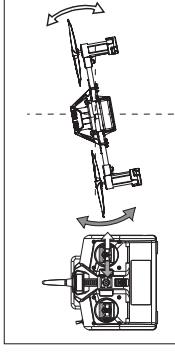
2. Connect the power cable of FF120 to receive signal from transmitter

4. When moving the elevator stick up or down, the FF120 accordingly flies forward or backward.

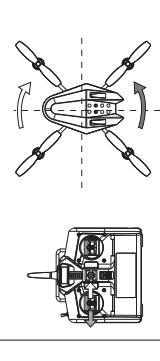
## 8. Flight Control diagram

### 8.1 Flight in Normal Status

#### Mode 1 (throttle stick at right hand)

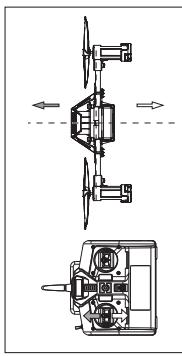


1. When moving the aileron stick left or right, the FF120 accordingly flies left or right.

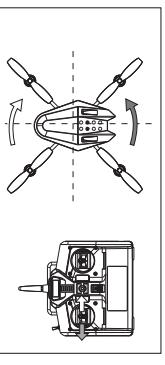


2. When moving the throttle stick up or down, the FF120 accordingly flies up or down.
3. When moving the rudder stick left or right, the head of FF120 accordingly flies left or right.

**Mode2 (throttle stick at left hand)**



- When moving the aileron stick left or right, the FF120 accordingly rolls left or right.
- When moving the elevator stick up or down, the FF120 accordingly flies up or down.



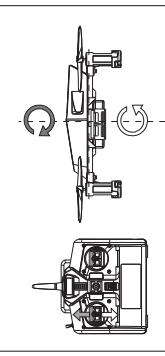
**8.2 Roll flight practice**

FF120 can finish excited stunts actions, such as the front and back, right and left rolls. Matters need to be attention when the first flight

- Choose a spacious ground with soft grass to practice.
- Select roll flight mode
- Advise beginner to increase servo distance of ELEV and AILE of the transmitter to 100%-110%. And can adjust according to personal skill level. The default setting is 100%.

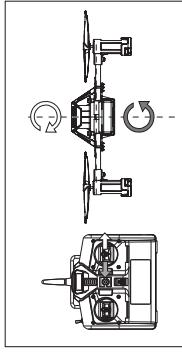
4. Practice of throttle stick: when FF120 roll from normal status, the throttle stick need to be pulled down slowly, push up the throttle when it exchanged normal status to roll. Please adjust according to personal skill level.

**Mode 1 (throttle stick at right hand)**



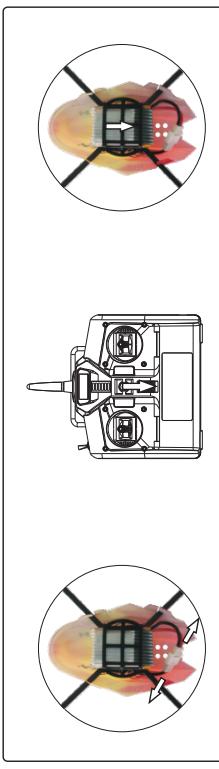
- When moving the aileron stick left or right, the FF120 accordingly rolls left or right.
- When moving the elevator stick up or down, the FF120 accordingly rolls forward or backward.

**Mode 2 (throttle stick at left hand)**

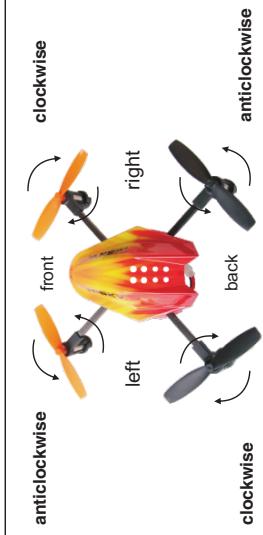


- When moving the aileron stick up or down, the FF120 accordingly rolls left or right.
- When moving the elevator stick up or down, the FF120 accordingly rolls forward or backward.

**9. Steps of Ending flight**

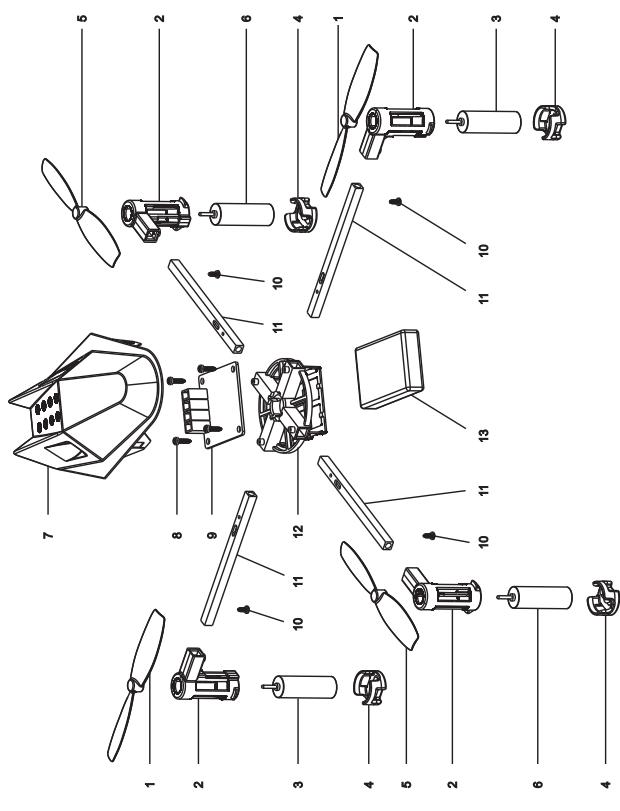


**10. Addition Instruction**



- The front propellers are in orange color while the rear propellers are in black.
- After connecting the power of the FF120, left rear / right front blade rotates clockwise, left front / right rear blade rotates Counterclockwise.
- You can adjust the radio trim button(except the throttle trim) if the quadcopter flight drift.

## 11.Exploding View



## 12.Parts List

No	Part Name	Quantity
1	Quadcopter inverted blade	2
2	Quadcopter motor pedestal	4
3	Quadcopter inverted motor φ70*20mm	2
4	Quadcopter pedestal plug	4
5	Quadcopter positive blade	2
6	Quadcopter positive motor φ70*20mm	2
7	Quadcopter canopy	1
8	Quadcopter screws ST 1.2*5PA	4
9	Quadcopter receiver board	1
10	Quadcopter screws ST 1.2*3PA	4
11	Quadcopter carbon fibre pipe 3x3x50	4
12	Quadcopter pedestal	1
13	Li-po battery 3.7V 250mAh 25C	1

## 13. Accessories list

Parts No:800045 Parts Name: FF120 Quadcopter pipes Quadcopter pedestal	Parts No:800046 Parts Name: FF120 Quadcopter green positive inverted blade	Parts No:800047 Parts Name: FF120 Quadcopter green positive inverted blade
Parts No:800048 Parts Name: FF120 Quadcopter motor pedestal	Parts No:800049 Parts Name: FF120 Quadcopter Canopy	Parts No:800050 Parts Name: FF120 Quadcopter Canopy
Parts No:800051 Parts Name: FF120 Quadcopter positive motor	Parts No:800052 Parts Name: FF120 Quadcopter inverted motor	Parts No:800053 Parts Name: FF120 Quadcopter motor pedestal plug
Parts No:800054 Parts Name: FF120 Quadcopter Canopy	Parts No:800055 Parts Name: FF120 Quadcopter positive motor	Parts No:800056 Parts Name: FF120 Quadcopter inverted motor
Parts No:800057 Parts Name: FF120 Quadcopter Li-Po battery	Parts No:800058 Parts Name: FF120 Quadcopter wire	Parts No:800059 Parts Name: FF120 Quadcopter Lipos
Parts No:800060 Parts Name: FF120 Quadcopter XC-1S2 Charger	Parts No:800061 Parts Name: FF120 Quadcopter screws bag	Parts No:800062 Parts Name: FF120 Quadcopter Canopy
Parts No:800063 Parts Name: FF120 Quadcopter receiver board	Parts No:800064 Parts Name: FF120 Quadcopter cross screwdriver	Parts No:800065 Parts Name: FF120 Quadcopter receiver board
Parts No:800066 Parts Name: FF120 Quadcopter XC-1S2 Charger	Parts No:800067 Parts Name: FF120 Quadcopter screws	Parts No:800068 Parts Name: FF120 Quadcopter receiver board
Parts No:800069 Parts Name: FF120 Quadcopter server and motor accessories	Parts No:800070 Parts Name: FF120 Quadcopter black positive inverted blade	Parts No:800071 Parts Name: FF120 Quadcopter orange positive inverted blade
Parts No:800072 Parts Name: FF120 Quadcopter positive motor accessories	Parts No:800073 Parts Name: FF120 Quadcopter black positive inverted blade	Parts No:800074 Parts Name: FF120 Quadcopter orange positive inverted blade

## FF120



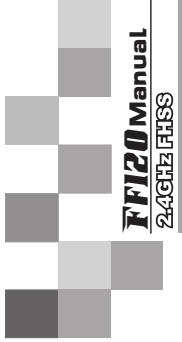
## Quadcopter

### Specifications and Features

#### Specifications and features:

Overall Length: 127.7mm  
Overall height: 36mm  
Main rotor blade Dia: 56mm  
Overall rotation Dia: 176mm  
Battery: 3.7V 250mAh 20c  
Radio controller: CY400  
Flight time: 6~7min

1. Adapt the newest stable six-axis system, high sensitivity and efficiency.
2. Mini body design, light and anti-throw
3. Stable flight, can realize front and back, left and right rolls



**FPI20 Manual**  
2.4GHz FHSS

FCC Caution: Any changes or modifications not expressly approved by the party responsible

for compliance could void the user's authority to operate this equipment.

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, and (2) this device must accept any interference received, including interference that may cause undesired operation. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.