

# 280

## Instruction Manual

# PREPARE TO BE

# FIRST!

**2200MAH**  
11.1V LiPo Battery

**ULTRA FX**  
Carbon Body Shape

**FULL HD**  
Video Camera

**2300 KV**  
22Null4 BL Motors

**K-VIER**  
Quattro ESC

**CF**

**THE CROSSFIRE** is Adrenalin !

Pure speed - pure Power - pure Design - It will take your Breath!  
Prepare yourself for your first FPV-Race! Start your Engines!

Four powerfull Brushless Motors 22Null4 Type push you forward  
like a canon ball - the Area flies left and right side of the track - acceleration  
you never felt before. Feel the track - be First - with **THE CROSSFIRE**.



High Value Components for Production with an intelligent Design  
will Guarantee best Performance, easy maintenance and repair  
as well.



**WE SPIN THE WORLD**

**GUAV<sup>®</sup>**

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## 1.In box

Thanks for purchasing **280** series products, To ensure your safety, please read the whole instruction manual carefully before any assembly and use. Please keep the manual properly for future repair and adjustment refer.



Transmitter



Aircraft



Propeller



USB cable



Charger



Battery



Manual

Specifications:  
Main rotors:6045\*4  
Flight weight: 580g  
Motors: 2204 brushless motor \*4  
ESC: 15AM brushless ESC  
Receiver: 2.4Ghz,8 channel receiver  
Transmitter: 2.4Ghz,8 channel  
Battery: 3s,11.1V,2200mAh  
Camera : 720P

2.General safety precautions and warnings

- \*Always keep a safe distance in all directions around your model to avoid collisions or injury. This model is controlled by a radio signal subject to interference from many sources outside your control. Interference can cause momentary loss of control.
- \*Always operate your model in open spaces away from full-size vehicles, traffic and people.
- \*Always carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.).
- \*Always keep all chemicals, small parts and anything electrical out of the reach of children.
- \*Always avoid water exposure to all equipment not specifically designed and protected for this purpose. Moisture causes damage to electronics.
- \*Never place any portion of the model in your mouth as it could cause serious injury or even death.
- \*Never operate your model with low transmitter batteries.
- \*Always keep aircraft in sight and under control.
- \*Always move the throttle fully down at rotor strike.
- \*Always use fully charged batteries.
- \*Always keep transmitter powered on while aircraft is powered.
- \*Always remove batteries before disassembly.
- \*Always keep moving parts clean.
- \*Always keep parts dry.
- \*Always let parts cool after use before touching.
- \*Always remove batteries after use.
- \*Never operate aircraft with damaged wiring.
- \*Never touch moving parts.

3.Charging the flight battery

CHARGE PROCEDURES

E3 comes with the built in power supply. You can connect the AC power cord to the AC socket (100-240V AC) directly.

- 1) Insert the AC power cord into the charger.
- 2) Insert the AC cord into a wall socket (100-240V). ALL LEDs will green and flash red to indicate the charger is ready to charge.
- 3) Connect battery balance wire to balance port which is in front side of the charge, filter 2 seconds, the charge detects the voltage of the battery and starts to charge.
- 4) The charge starts charging. The LEDs will glow constant red. If the battery pack is 2-cell, Cell 1 and Cell 2 LEDs will glow constant red; if the battery pack is 3-cell, Cell 1, Cell 2 and Cell 3 LEDs will glow constant red.
- 5) When a cell is completely charged, its corresponding LED will glow constant green. A 2-cell pack is fully charged when LEDs 1 and 2 are constant green. For 3-cell pack, all LEDs will glow constant green to indicate the pack is fully charged.
- 6) Unplug the battery from the charge and the charge status LED will stay green and flash red which indicates the charger is ready to charge another battery.

**Specifications:**  
AC Input: 100-240VAC, 50-60Hz  
Battery Type: LiPo  
Cell Count: 2-3 cells  
Charge Current: 1.2A Max  
Cell Terminate Voltage: 4.2V ± 0.02V  
Circuit Power: 11W ± 10%  
Dimension: 88x57x35mm  
Weight: 103g



EXPLANATION OF LED STATUS

LED Indicator	Charger Status
LED stays green and flashes red.	The charger is ready to charge.
LED glows constant red.	The charger is charging.
LED glows constant green.	The charging process finishes.

**\* Error Message**  
If the charger encounters a problem, all LEDs will flash red to alert you the errors. In this case, please disconnect the power cord from the wall socket and unplug the battery from the charger.

LED Indicator	Cause of Error
All LEDs flashes red once and stop 1 second in cycle.	The battery connects incorrectly.
All LEDs flashes red twice and stop 1 second in cycle.	The charger encounters overload or short circuit.
All LEDs flashes red four times and stop 1 second in cycle.	The voltage of single cell is too high or too low.
All LEDs flashes red six times and stop 1 second in cycle.	There is a 300mv difference of voltage between battery pack.

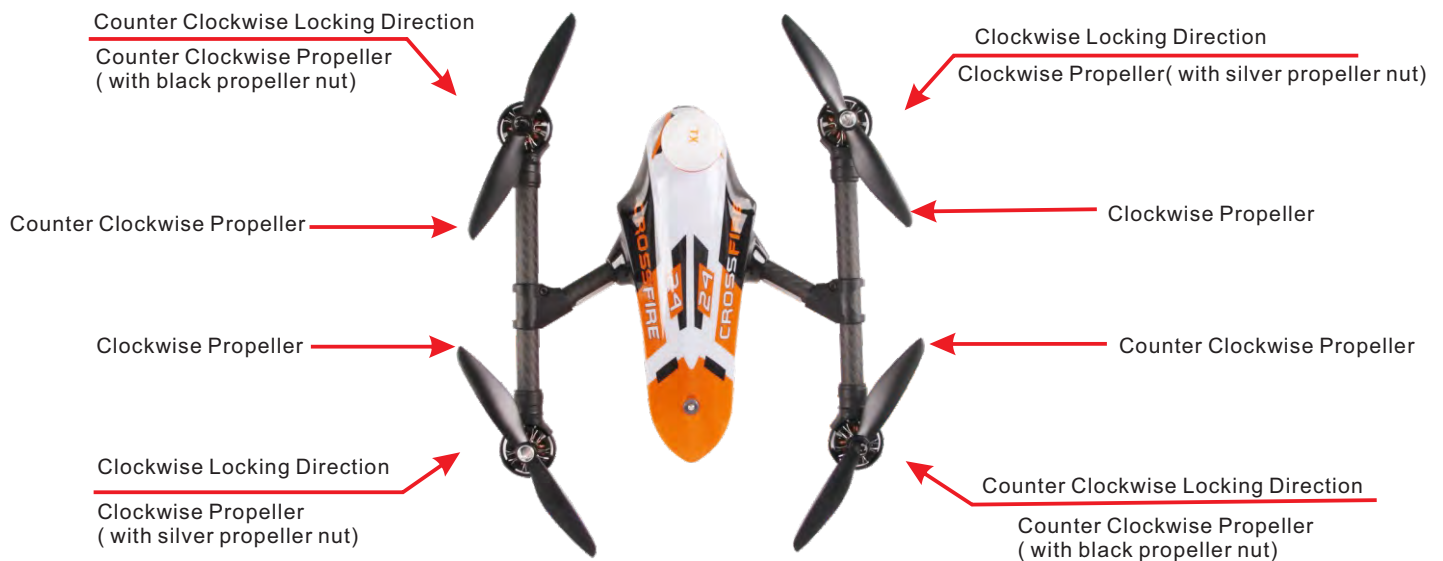


## 4. CROSSFIRE components introduction



## 5. The Propellers Assembly and Rotating direction check.

CROSSFIRE uses the original 6-inch propellers which are classified by the color of each central nut. Damaged propellers should be replaced by purchasing new ones if necessary. Prepare the two grey nut propellers and two black nut propellers. Make sure to match the black nut propellers with the correctly marked black dot motors. Tighten the propellers according to the following instructions. Please Attach the black nut to the motor thread and rotate to the counter clock-wise direction until tightly with motor. Shown as following picture. Please Attach the grey nut to the motor thread and rotate to the clock-wise direction until tightly with motor. Shown as following picture.



### NOTE:

1. Make sure to match the propeller nut colors with the corresponding motors.
2. It is advised to wear protective gloves during propeller assembly and removal.
3. Check that the propellers and motors are installed correctly and firmly before every flight.
4. Check that all propellers are in good condition before flight. DO NOT use any ageing, chipped, or broken propellers.
5. To avoid injury, STAND CLEAR of and DO NOT touch the propellers or motors when they are spinning.
6. ONLY use original propellers for a better and safer flight experience.

## 6. Transmitter Control layout

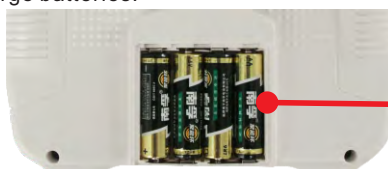


Bind	Press the button and power on the transmitter for binding.
Mode 1	Press the button, then there are Bi Bi Bi... sounds, it indicate the radio change to mode1mode.
Mode 2	Press the button, then there are Bi Bi Bi... sounds, it indicate the radio change to mode2 mode.
D/R	Power on the transmitter, then press the button, it indicate the travel value changed to 60%(slow flight) when the sound Bi. and it indicate the travel value changed to 100%(fast flight) when the sounds Bi Bi.



## Transmitter battery:

4 AA 5# batteries ,or optional Nidc or Nimh 1.5 volt AA recharge batteries.



4 AA 5# batteries

## 7. Binding

The transmitter is bound to the model at the factory. If for any reason the model needs to be re-bound, follow the directions below.

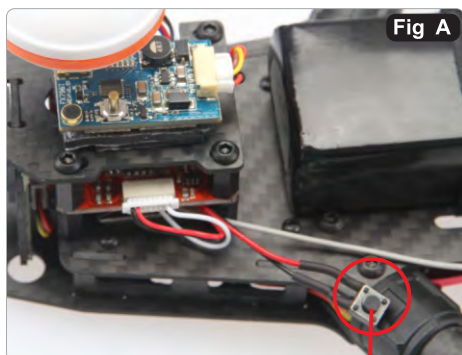
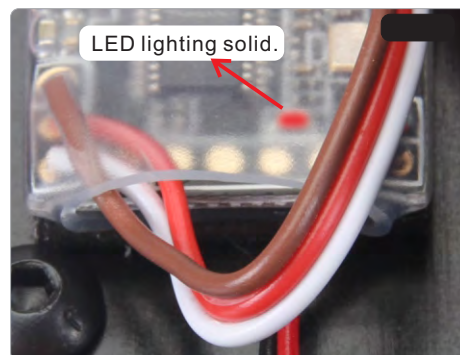


Fig A



Fig D



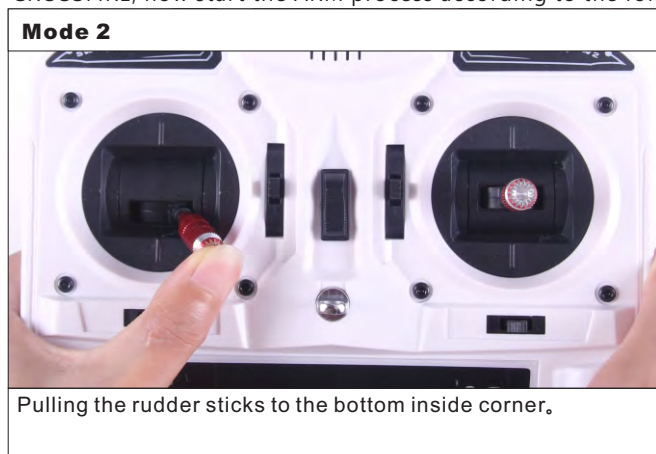
LED lighting solid.

PRESS the Binding button

1. With the transmitter and quadcopter powered off, connect the battery to the CROSSFIRE again..
2. Press the Binding button of 350X quadcopter, then connect the flight battery, Wait until the Red LED on the quadcopter flashes rapidly, signaling the quadcopter is initialized and start to binding.
3. It indicates the binding successfully when the LED of receiver lighting solid.

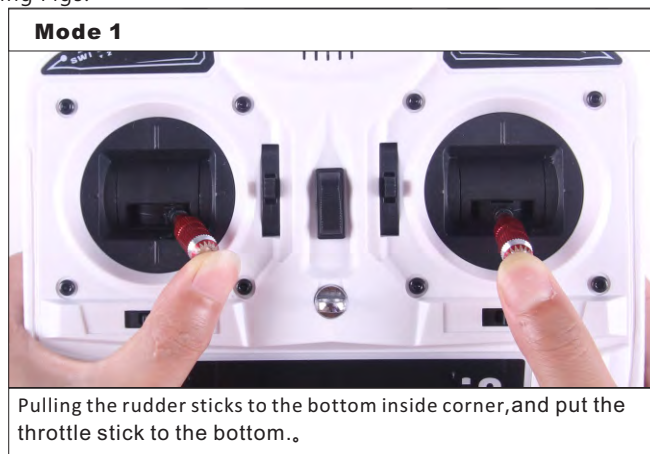
## 8. ARMED the main flight controller system

Firstly to install the battery(should well power) of transmitter, then power on the transmitter, next connect the flight battery to the CROSSFIRE, now start the ARM process according to the following Figs.



Mode 2

Pulling the rudder sticks to the bottom inside corner.



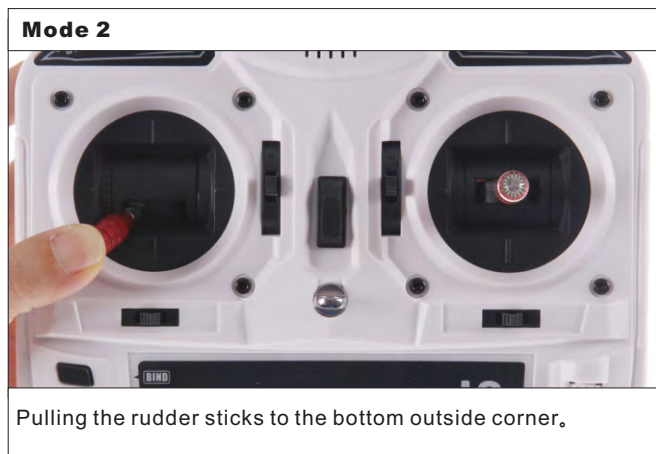
Mode 1

Pulling the rudder sticks to the bottom inside corner, and put the throttle stick to the bottom..

The 4 pieces of Motor start to spinning after armed the main flight controller.

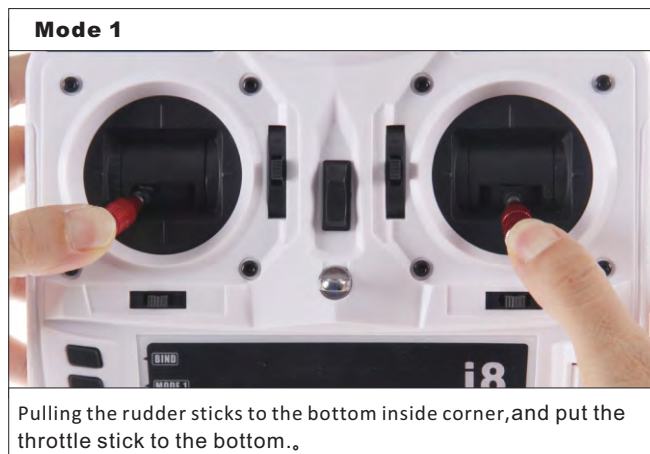
## 9. DISARM the main flight controller system

Please Disarm the main flight controller after landing, then the motors will stop to spinning, the Disarm process as below pictures shown.



Mode 2

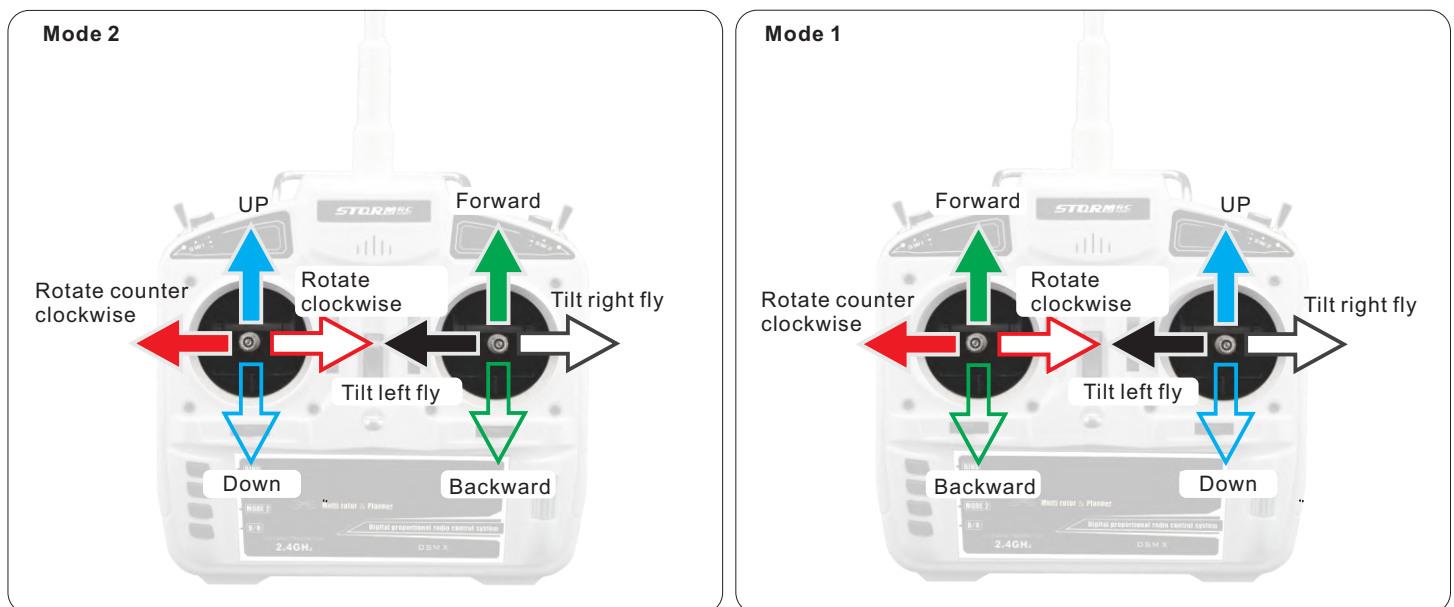
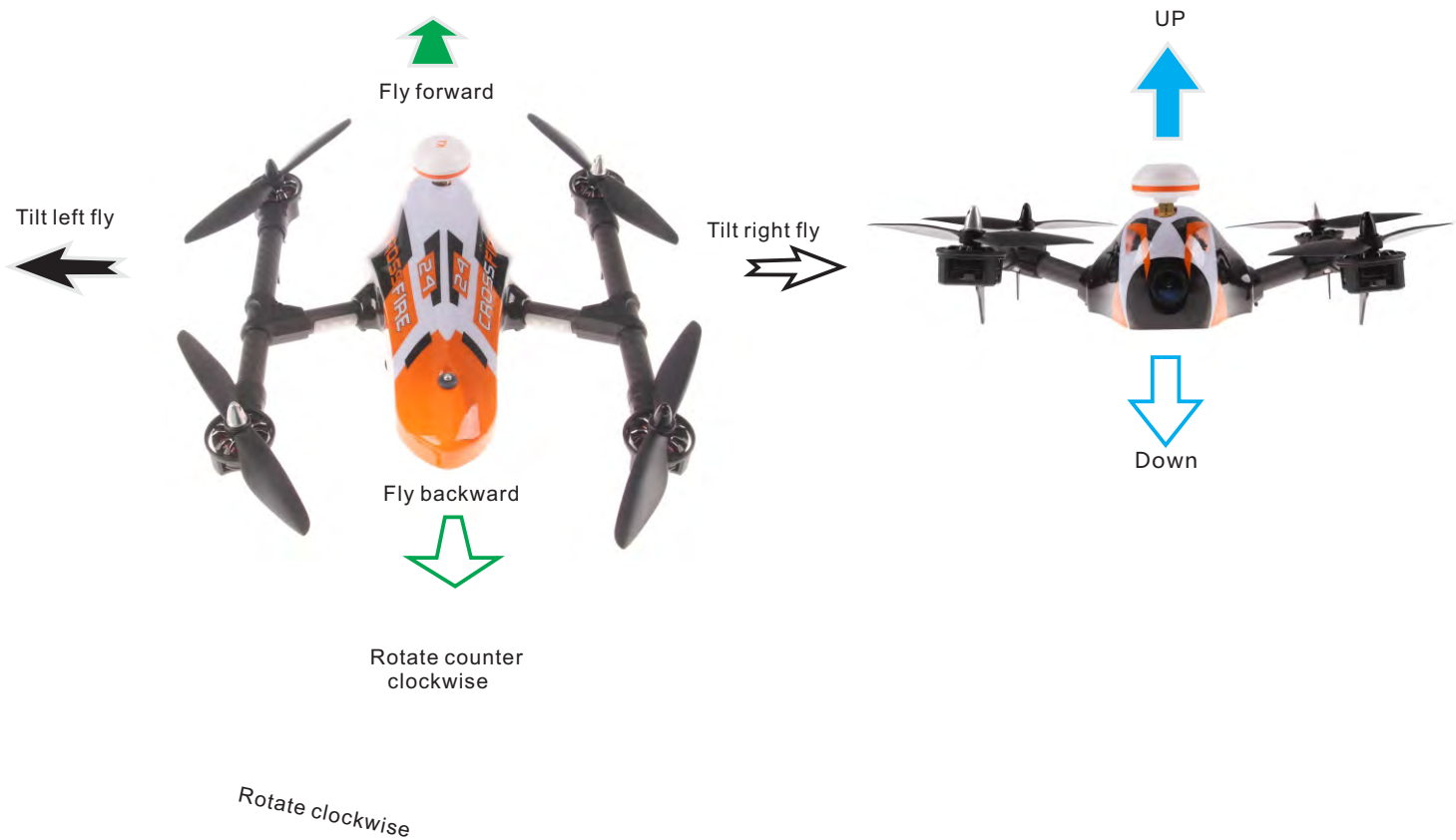
Pulling the rudder sticks to the bottom outside corner.



Mode 1

Pulling the rudder sticks to the bottom inside corner, and put the throttle stick to the bottom..

## 10. Remote Controller Operation



Mode2:  
The **left stick** controls altitude and rudder, while **right stick** controls the forward, backward, left and right flying direction.

Mode1:  
The **left stick** controls forward, backward and rudder, while **right stick** controls altitude, left and right flying direction.

## 11. Quick start flight procedures



1 Installed the four rotors in properly.



2 Installation the full charged flight battery into the CROSSFIRE.



3 Banding the flight battery in tightly with the battery band.



4 Cover on the canopy to the Crossfire



5 Power on the transmitter, and put the throttle stick to the bottom.



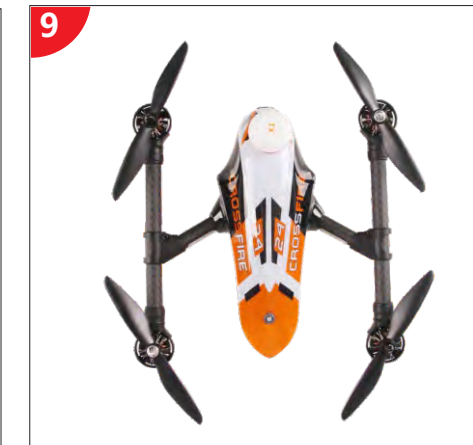
6 Connect the flight battery to the crossfire.



7 Check the video transmission working well with picture and video



8 ARM the main flight controller system



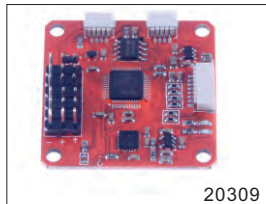
9 Start the four motors turning. please ARMED the main flight controller system after you landing. Then take off the flight battery from CROSSFIRE.



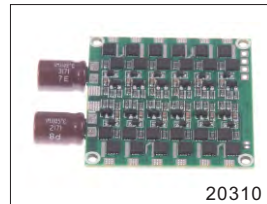
## 12. Parts list



Canopy



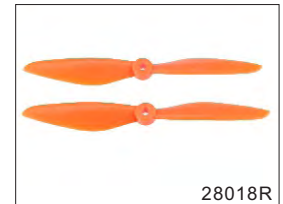
Main controller box



15A Speed controller (4in1 mix board)



Supporting Rod



6045 propellers/R\*2



6045 propellers\*2



Strengthen rod\*2pcs



2204# brushless motor/2300kv



2204# brushless motor/2300kv



Arm mount b



Arm mount a



Black propeller nut



Silver propeller nut



Top frame



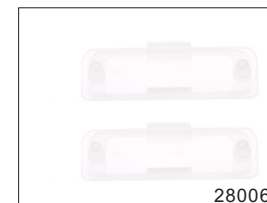
Bottom frame



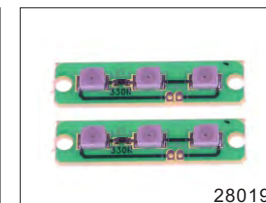
Short arm (carbon fiber)\*2pcs



Long arm(carbon fiber)\*2pcs



LED Cover\*2pcs



L E D



Sports camera



Fix pin for canopy



Fixed Bar



Landing stand set\*4pcs



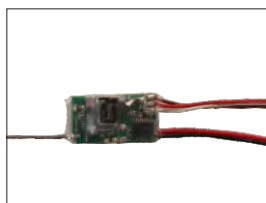
Motor mounting\*2pcs



Battery band



Transmitter



S803 Receiver



Charger



USB cable



2200mAh 3cells lipoly



Strengthen Rod

**FCC Compliance:**

1. 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.

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

**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 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.

**CE 1622**

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