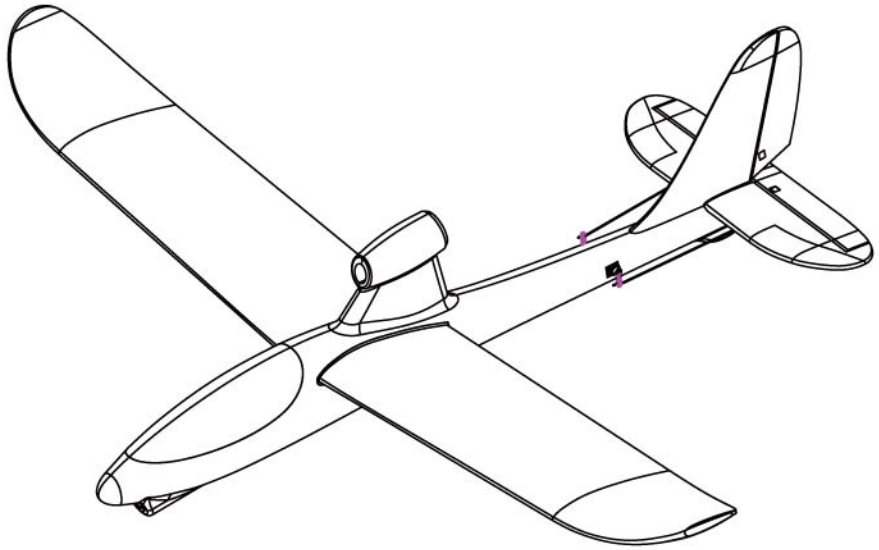
# INSTRUCTION MANUAL

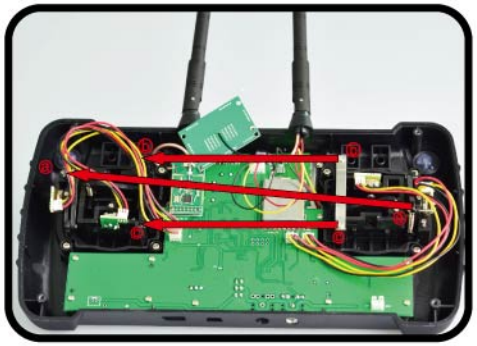
## FPV AIRPLANE



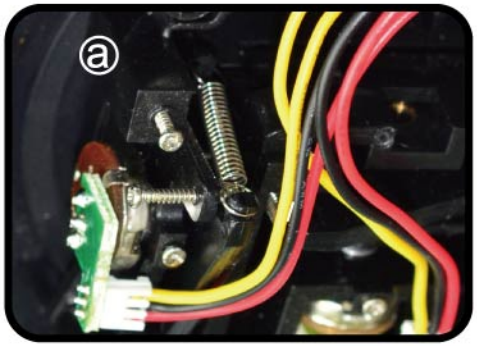
- ☐ video recording
- ☐ 3 Axis gyro autopilot system
- ☐ GPS return module

# 6.MODE1 AND MODE2 REVERSE SETTING

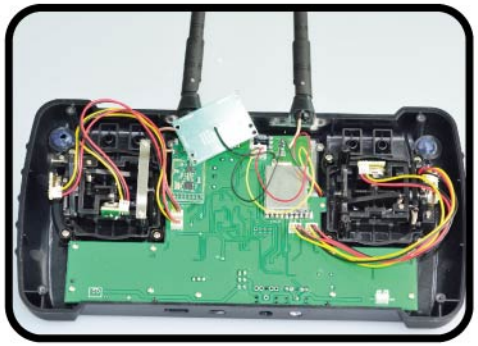
6.1.Open the cover of Transmitter by unscrewing the 4 screws as picture shows



6.2.Unscrew a,b,c screws and move screw b,c and the spring to another side and fix it with screws, please test the stick if smooth or not.

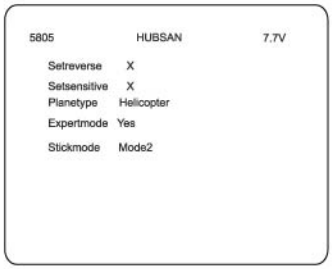



6.3.Important.
Lift the arm and insert the screw a from left side.

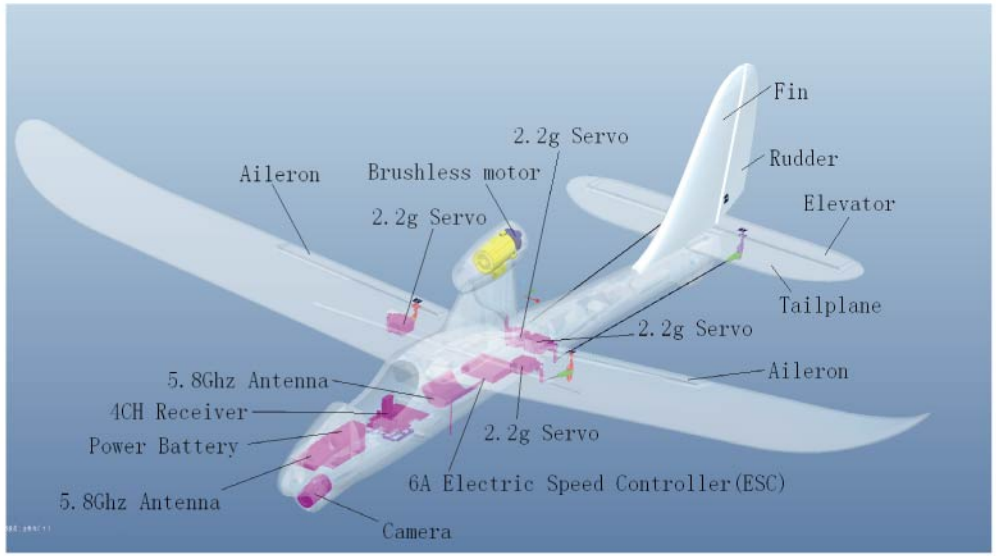


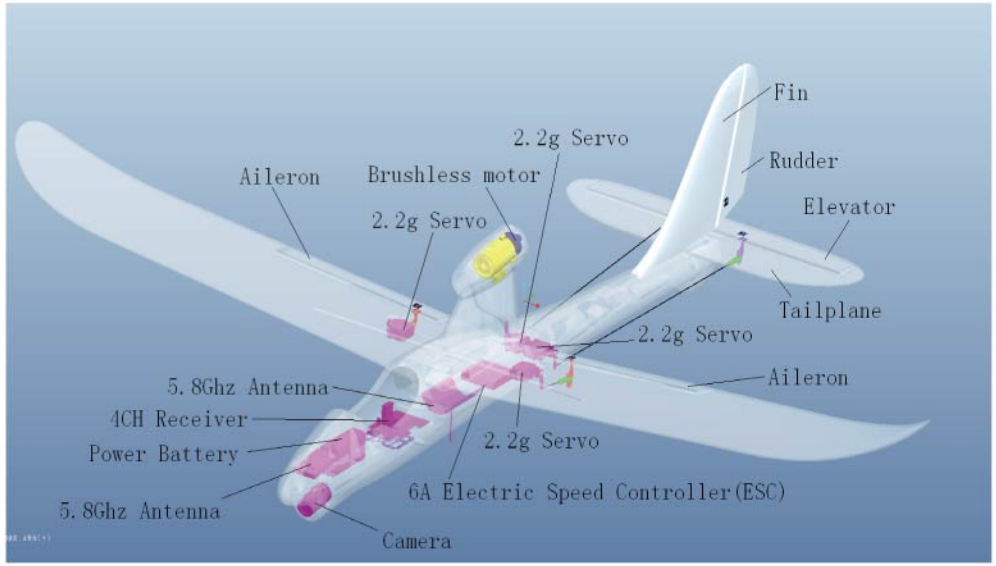
6.4.Finished

6.5
Hold down ENT key for 1 second to enter setting status. Press ENT key to enter reverse setting status. Move arrow to Stick mode by up/down key, shake the move sticker from up to down by 6 times, the Mode 2 will change to Mode 1 automatically, Press EXT key to confirm and exit, Power on again then it works.





# 1.Assembly Chart.

The airplane already pre-assembled almost 90% in factory and Little to do before flight.
Please refer to the following assembly steps if you need to check or repair your aeroplane.

1.At the tailpalne evenly coated with adhesive white glue

2. The tailplane bonding to the body firmly

3. At the bottom of the fin evenly coated with white glue

4.Bonding the fin to the body firmly


5.Adjust the fin and tailplane in vertical 90 degree

6.Srewing the chuck onto the Servo rod



Insert the plug into the power jack

Return the holder back to the compartment

Fasten the screw

# 4 Li-Po Battery Charging

**4.1 The helicopter is equipped with a LiPo battery:**

7.4V 2 Cell 650mAh x 1 unit (Fixed Pitch System)


**4.2** Connect battery to balance charger and wall charger,The two led lights is red whilst charging and turns green when charging is finished.

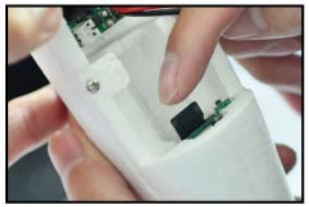
**4.3.Please refer to 2.2. Safety Advisory Notice**

Always partially charge your LiPo battery before storage. LiPo batteries retain a charge over a reasonable period; It is not normally necessary to recharge stored LiPo batteries unless stored for periods longer than 3-6 months.

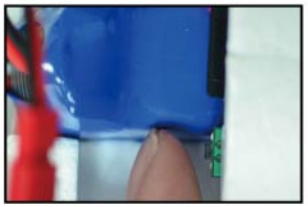
If your LiPo battery has been over-discharged, it will not be possible to recharge it again.

# 5 Video Recording

5.1 Insert the SD card



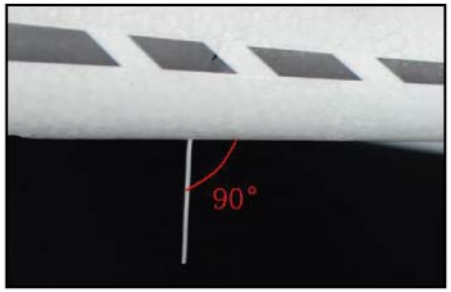
5.2 Push down the button, then the video starts recording



5.3 Video recording time begins to calculate while pressing the button mentioned above

## 3. 5.8Ghz Technical Tips.

**3.3.1** Keep the FPV 5.8Ghz antenna straight downward as possible as you can to ensure the live video more clear and lower ther interference from others, please see the picuture shows.




**3.3.2.** Live video distance is around 300-400 meters,Please keep your transmitter antenna point to the Airplane as possible as you can so that you can have more clear and continuing live video.

**4.1 Battery Mounting**

Notice:

>Do not mix old and new batteries

>Do not mix different types of batteries

>Do not charge non-rechargeable battery.

Open the cover

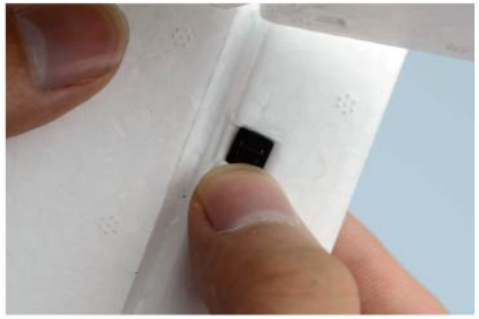
Take out the holder

According to the correct polarities,install 8 x AA battery



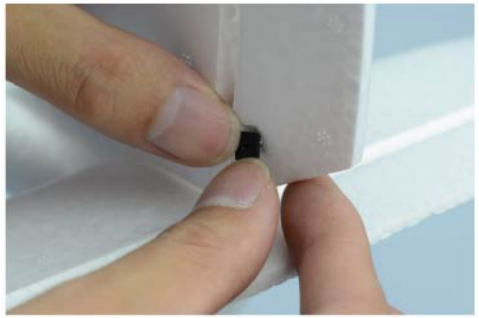
7.Prepare 2 short servo rods and 4 long server rods

8.Insert the servo angle to the Elevator



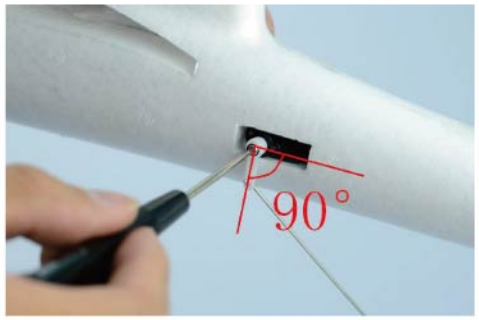
9.Fixing the servo angle with plastic panel

10. Insert the server angle to the Rudder



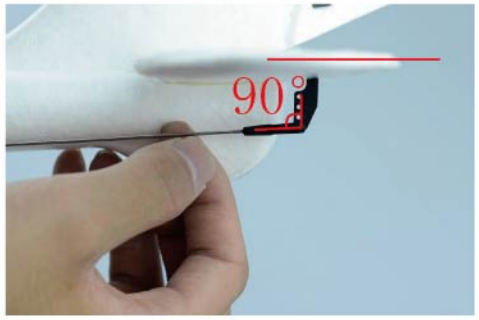
11.. Fixing the servo angle with plastic panel

12.Insert the servo rod to the servo arm

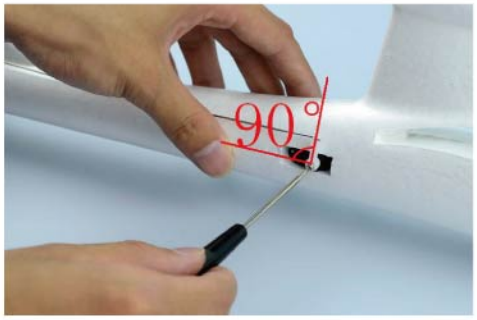



13. Screw the servo arm onto the Elevator servo, keep the servo arm in vertical as picture shows

14.Connect the servo rod to the Elevator servo angle

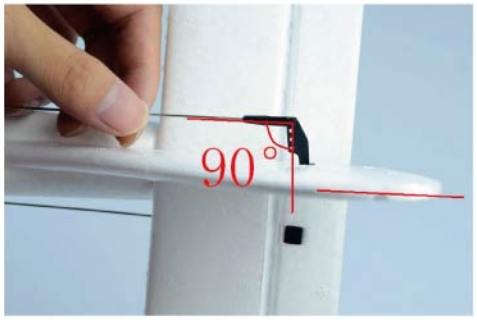



15.Adjust the servo rod and servo angel in vertical




16. Screw the servo arm onto the Rudder servo,keep the servo arm in vertical as picture shows

17. Connect the servo rod to the Rudder servo angle




18. Adjust the servo rod and servo angel in vertical



## 2.3 SENSITIVITY SET UP

### 2.3.1 RUDDER SENSITIVITY SET UP- NOR MODE

Hold down ENT key for 1 second to enter setting status.Enter set sensitive status by up/down key,Press RUDDER TRIM KEY to idea sensitivity and then hold EXT key for 2 seconds to confirm and exit.

| 5805 | HUBSAN | 7.7V |
|---|---|---|
| Set reverse | X | |
| Set sensitive | - | |
| Elevator | 40 | |
| Aileron | 50 | |
| Rudder | 50 | |
| Plane type | Helicopter | |
| Expert mode | No | |
| Stick mode | Mode 2 | |

### 2.3.2. ELEV SENSIVITY SET UP- NOR MODE

Hold down ENT key for 1 second to enter setting status.Enter set sensitive status by up/down key,Press ELEVATOR TRIM KEY to idea sensitivity and then hold EXT key for 2 seconds to confirm and exit.

| 5805 | HUBSAN | 7.7V |
|---|---|---|
| Set reverse | X | |
| Set sensitive | - | |
| Elevator | 40 | |
| Aileron | 50 | |
| Rudder | 50 | |
| Plane type | Helicopter | |
| Expert mode | No | |
| Stick mode | Mode 2 | |

### 2.3.3 AILE SENSIVITY SET UP- NOR MODE

Hold down ENT key for 1 second to enter setting status.Enter set sensitive status by up/down key,Press AILERON TRIM KEY to idea sensitivity and then hold EXT key for 2 seconds to confirm and exit.

| 5805 | HUBSAN | 7.7V |
|---|---|---|
| Set reverse | X | |
| Set sensitive | - | |
| Elevator | 40 | |
| Aileron | 50 | |
| Rudder | 50 | |
| Plane type | Helicopter | |
| Expert mode | No | |
| Stick mode | Mode 2 | |

### 2.2.4. RUDD REVERSE SET UP

Hold down ENT key for 1 second to enter setting status.Press ENT key to enter reverse setting status.Move arrow to Rudder by up/down key ,Press ENT key to choose reverse and then hold EXT key for 2 seconds to confirm and exit.

```
5805          HUBSAN          7.7V
  Set reverse       -
    Elevator     Normal
    Aileron      Reverse
    Throttle     Normal
  →Rudder        Normal
  Set sensitive     X
  Plane type     Helicopter
  Expert mode    No
  Stick mode     Mode 2
```

### 2.2.5. EXPERT MODE REVERSE SET UP

Hold down ENT key for 1 second to enter setting status.Press ENT key to enter reverse setting status.Move arrow to Exper mode by up/down key ,Press ENT key to choose reverse and then hold EXT key for 2 seconds to confirm and exit.

```
5805          HUBSAN          7.7V
  Set reverse       X
  Set sensitive     X
  Plane type     Helicopter
→ Expert mode    Yes
  Stick mode     Mode 2
```

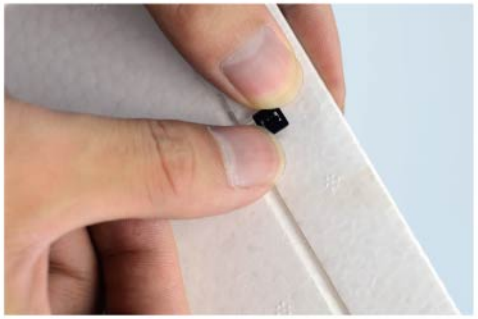
### 2.2.6 Plane/Helicopter MODE REVERSE SET UP

Hold down ENT key for 1 second to enter setting status.Press ENT key to enter reverse setting status.Move arrow to Plane type or Helicopter type by up/down key ,Press ENT key to choose reverse and then hold EXT key for 2 seconds to confirm and exit.

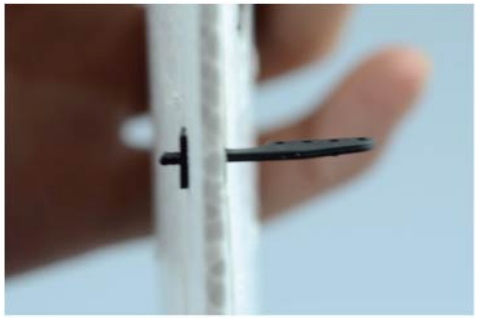
```
5805          HUBSAN          7.7V
  Set reverse       X
  Set sensitive     X
→ Plane type     Helicopter
  Expert mode    Yes
  Stick mode     Mode 2
```



19. Insert the server angle to the Aileron



20. . Fixing the servo angle with plastic panel



21.Left Aileron and Right Aileron same installation metod

22.Insert the Aileron rods into servo arms

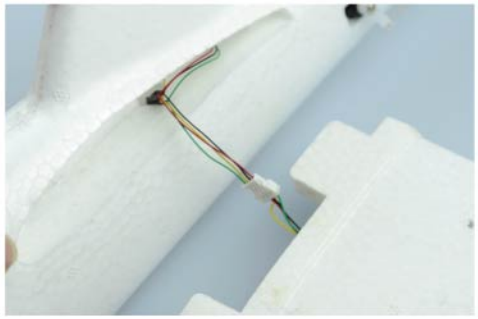

23. Screw the servo arm onto the Aileron servo, keep the servo arm in vertical as picture shows

24. The backside of servo coated with white glue

25.Bonding the Aileron servo to the housing firmly

26. Connect the servo rod to the Aileron servo angle


27. Adjust the servo rod and servo angel in vertical



28.Connect Aileron servo electrical wire

29. Connect another Aileron servo electrical wire

30. Connect two wings, ensure the bolt to be inserted into the strengthening tube.



## 2.2 Reversing channel setup

### 2.2.1.ELEV REVERSE SET UP

Hold down ENT key for 1 second to enter setting status,Press ENT key to enter reverse setting status,Press ENT key to choose reverse,and then hold EXT key for 2 seconds to confirm and exit.

```
5805          HUBSAN          7.7V
  Set reverse        -
  →Elevator      Normal
   Aileron       Reverse
   Throttle      Normal
   Rudder        Normal
  Set sensitive      X
  Plane type     Helicopter
  Expert mode    No
  Stick mode     Mode 2
```

### 2.2.2. AILE REVERSE SET UP

Hold down ENT key for 1 second to enter setting status.Press ENT key to enter reverse setting status.Move arrow to Aileron by up/down key ,Press ENT key to choose reverse and then hold EXT key for 2 seconds to confirm and exit.

```
5805          HUBSAN          7.7V
  Set reverse        -
   Elevator      Normal
  →Aileron       Reverse
   Throttle      Normal
   Rudder        Normal
  Set sensitive      X
  Plane type     Helicopter
  Expert mode    No
  Stick mode     Mode 2
```

### 2.2.3. THRO REVERSE SET UP

Hold down ENT key for 1 second to enter setting status.Press ENT key to enter reverse setting status.Move arrow to Throttle by up/down key ,Press ENT key to choose reverse and then hold EXT key for 2 seconds to confirm and exit.

```
5805          HUBSAN          7.7V
  Set reverse        -
   Elevator      Normal
   Aileron       Reverse
  →Throttle      Normal
   Rudder        Normal
  Set sensitive      X
  Plane type     Helicopter
  Expert mode    No
  Stick mode     Mode 2
```

## Input Key Function

| S/N | Identification | Function |
|---|---|---|
| 1 | Throttle/Rudder Stick | Forward and backward movement of the stick makes the helicopter ascend and descend respectively. Left and right movement of the stick will rotate the helicopter's fuselage left/right respectively. |
| 2 | Elevator/Aileron Stick | Forward and backward movement of the stick makes the helicopter move forward and backward respectively. Left and right movement of the stick makes the helicopter drift sideways left/right respectively. |
| (1) | Throttle /Aileron stick | Forward and backward movement of the stick makes the helicopter ascend and descend respectively. Left and right movement of the stick makes the helicopter drift sideways left/right respectively |
| (2) | Elevator/Rudder Stick | Forward and backward movement of the stick makes the helicopter move forward and backward respectively. Left and right movement of the stick will rotate the helicopter's fuselage left/right respectively. |
| 3 | Aileron Trim | Aileron trim subsidiary adjusts left and right drift. |
| 4 | Elevator Trim | Elevator trim subsidiary adjusts forward and backward movement. |
| 5 | Rudder Trim | Rudder trim subsidiary adjusts left and right rotation. |
| 6 | Throttle Trim | Throttle trim subsidiary adjusts ascent and descent. |
| 7 | Power SW | Pushing up switches on the power transmitter, pulling down switches it off. |
| 8 | Neck Strap Eyelet | For the attachment of a neck strap which eases the tension of your hands from holding the transmitter. |
| 9 | Antenna | Transmits wireless signal |
| 10 | CHG<br>(Optional) | Can be used to charge the rechargeable battery pack (excluded) inside the transmitter (at charge current 50mA, Voltage ≤ 12V.)<br>Notice: It is dangerous to charge a non-rechargeable battery pack via this charge port.<br>It is dangerous to use the accompanied wall adapter as a DC power supply. |
| 11 | DSC (Optional) | Connects to the data cable of computer simulator. |



31.Ensure the wings to be mounted properly

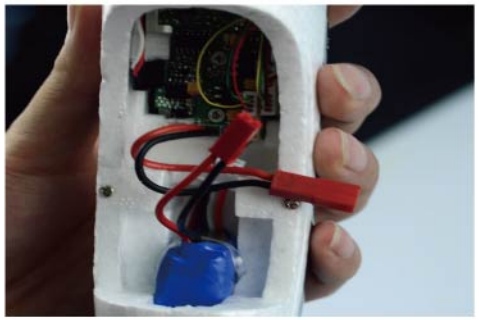
32. Install the propeller to the motor axis,please check the positive and negative on propeller.

33.Press the propeller into the motor shaft(O ring on need)

34. Paste the stickers

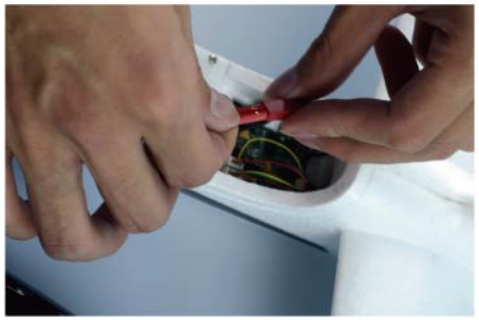
35.Fuselarge Sticker

36.Tailplane sticker



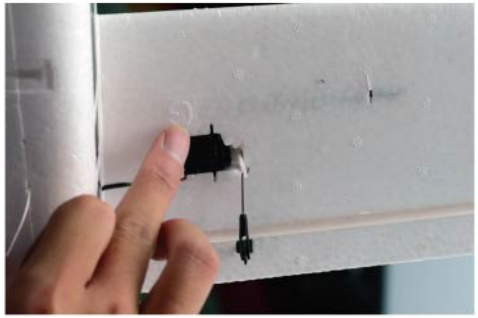
37.Install the battery

38.Miniumize the throttle and power on.



39. Connect battery after the transmitter red LED flashing

40.Return the canopy



50. The center of gravity of the airplane should be in the range of 'G' ,which marked under the wing.

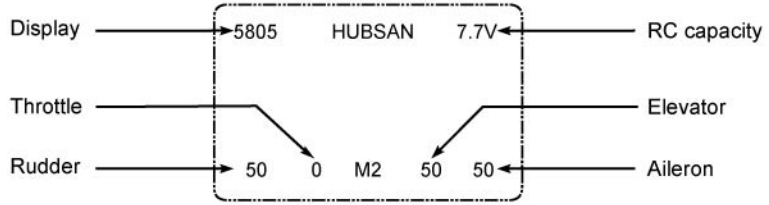
51. Moving the position of the battery forward or backward to ensure the center of gravity on 'G' point by your finger testing



# 2. 2.4Ghz/ 5.8Ghz Transmitter

## 2.1 Identification and functional keys

### Main Menu




### TRANSMITTER


**(MODE 1)**


**(MODE 2)**