



# CL-84 manual



深圳市优雷特航空模型有限公司

Shenzhen Unique Model Tech. Co., Ltd

[www.uniquemodelrc.com](http://www.uniquemodelrc.com)  
0755-27350973 0755-27350200

[www.unique-rc.net](http://www.unique-rc.net)  
[admin@uniquemodelrc.com](mailto:admin@uniquemodelrc.com)

## CL-84 Manual

规格数据: Specifications:

Materials: EPO

Wingspan: 950mm (37.41in)

Length: 1050mm (41.34in)

Height: 340mm (13.39in)

Flying weight: 1.7kg

Motor: 2pcs\*900KV brushless motor, 1pc\*850KV brushless motor

ESC: 2pcs\*40A brushless ESC, 1pc\*20A brushless ESC

Propeller: 2pcs\* 2 paddles 10\*4.5, 1pc \*2 paddle 7\*3.5

Servo: 4pcs\* 9g Servo

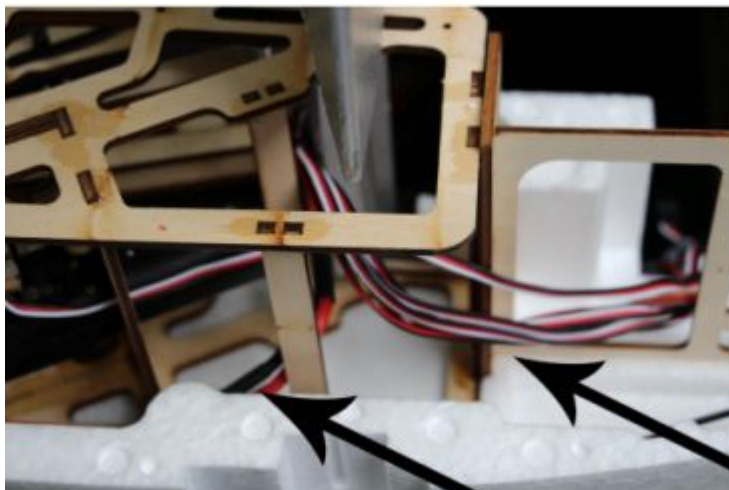
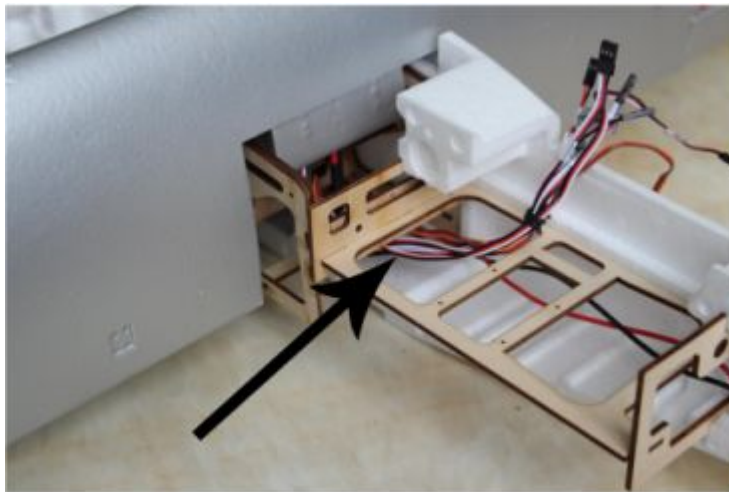
Battery: 14.8V/25C/2200-2600mah

Radio system: 6ch 2.4g Radio System

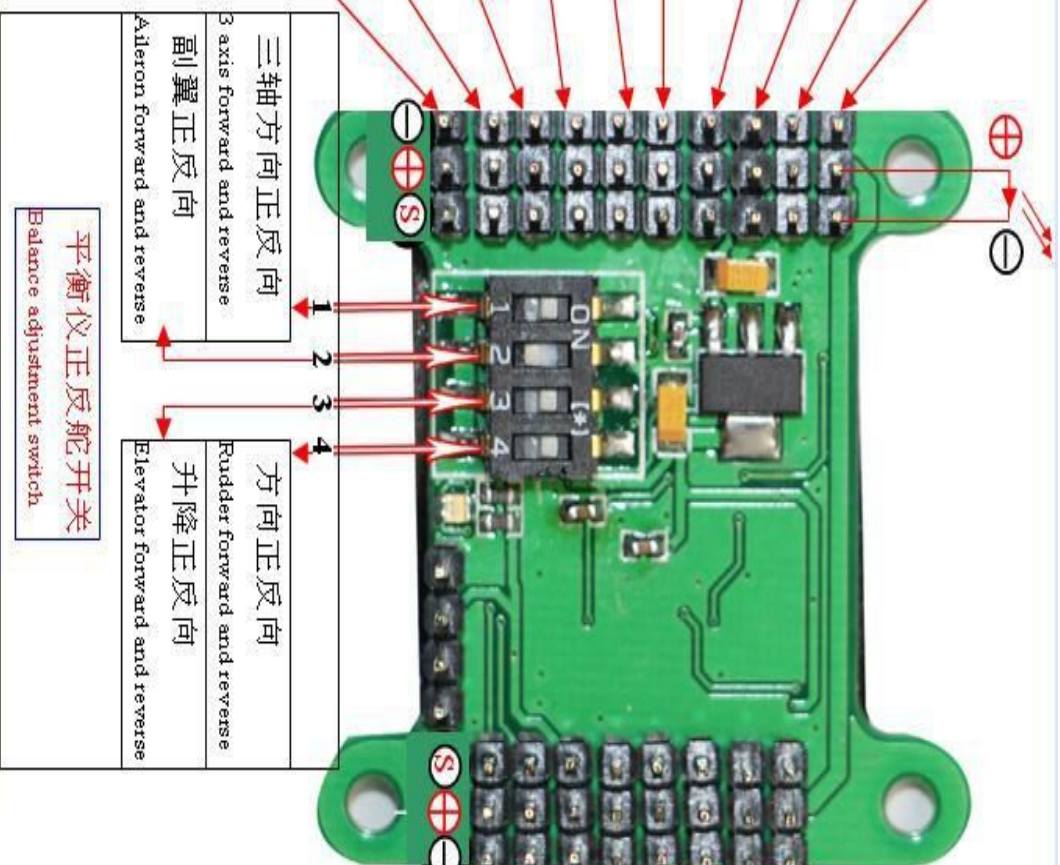
Patent rotation mechanism: 1set

Patent No.: 201420358276.2

机身接线图: How to handle the wires to cross the fuselage



机翼 LED 输出
Wing LED output
旋转机翼输出
Wing rotation output
空 NC
固定翼升降输出
Elevator output
固定翼副翼输出
Aileron output
空 NC
三轴方向输出
3 axis direction output
尾电机输出
Tail motor output
右电机输出
Right motor output
左电机输出
Left motor output



三轴方向正反向
3 axis forward and reverse
副翼正反向
Aileron forward and reverse
平衡仪正反舵开关
Balance adjustment switch

副翼输入
Aileron input
升降输入
Elevator input
油门输入
Throttle input
方向输入
Rudder input
机翼旋转输入
Wing rotation input
平衡仪输入
Balance input
切换开关输入
Transfer switch
遥控器校准
Remote calibration

## 遥控器和飞机飞行控制器的中立位匹配调校方法

### Radio system and control panel adjustment guidance

**特别提醒:** 调试飞机之前请不要安装螺旋桨, 避免危险发生!!

产品适用的电池是: 4S 14.8V 25C 2200 毫安时-2600 毫安时锂电池

**For your kindly reminder: for your own safety, pls do not install the propeller before you finish adjustment.**

**Battery specification: 4S/14.8V/25C/2200mah to 2600mah Li-polimer**

- 1: 遥控器各通道请微调到中立位置, 各通道大小舵量请调整到正负 100  
Trim the transmitter in neutral position, each channel adjusts to plus or minus 100.
- 2: 按图纸连接接收机到飞控各通道接线, 连接机翼各通道连接线,  
Connect the receiver to each channel on the control panel.
- 3: 连接电池, 拨动 5 通道开关, 将飞机置于固定翼状态, (注意: 连接电池后请保持飞机机身静止状态, 不要晃动机身)  
Connect to the battery, open channel 5 to make the plane under fixed wing mold.  
(Caution: keep the fuselage static after connecting the battery, do not shake the fuselage.)
- 4: 断开电池连接  
Disconnect the battery.
- 5: 插上校准线 (接线图所示)  
Plug to the calibration wire.(As page 3)
- 6: 再次连接电池  
Connect to the battery again.
- 7: 飞控板上绿色的灯会有节奏闪烁, 然后迅速将油门杆和升降杆同时打向 45 度左下方, 飞控上的灯会高频率快速闪动, 然后同时松开油门杆和升降杆, 校准完成。  
When the green lights on the control panel flashing rhythmically, then quickly lift both throttle and elevator 45 degrees to the lower left. After the light flash fast, release the

throttle and elevator, then calibration finished.

8: 断开电池电源

Disconnect the power.

9: 拔掉校准线

Pull out the calibration wire.

10: 再次连接电池

Connect the battery again.

11: 检查各通道反正舵面是否正确

方法是: 左打副翼摇杆, 左边副翼舵面上翘为正确

右打副翼摇杆, 右边副翼舵面上翘为正确

下拉升降摇杆, 升降舵面上翘为正确

上推升降摇杆, 升降舵面下翘为正确

Check each channel if it is correct.

Checking method:

Pull the aileron to the left, and then the left aileron surface will turn up. Pull the aileron to the right, the right aileron surface will turn up. Pull down the elevator, the elevator surface will turn up. Pull up the elevator, elevator surface will turn down.

12: 检查固定翼状态各舵面陀螺纠错舵面是否正确

方法是: 飞机左倾斜, 左边机翼低, 右边的副翼舵面上翘为正确。

飞机右倾斜, 右边机翼低, 左边的副翼舵面上翘为正确。

飞机俯冲, 机头低, 升降舵面会向上翘为正确。

飞机抬头爬升, 机头抬高, 升降舵面向下翘为正确。

Check the gyro error correction surface if it is right under fixed wing mold.

Checking method:

When plane turns left, the left wing is lower, right aileron surface should turn up, when plane turns right, the right wing is lower, left aileron surface should turn up. When the plane dives, the nose is lower, the elevator surface should go upward. When climbing, nose turns up, the elevator surface should go downward.

13: 检查油门解锁, 和上锁是否正常

方法: 向右打满方向舵遥控器摇杆 5 秒钟后, 机翼灯亮为解锁, 油门可以使用

向左打满方向舵遥控器摇杆 5 秒钟后, 机翼灯熄灭, 油门不可以使用

Check the throttle lock and unlock if they are correct.

Checking method:

After you pull the throttle to the right at biggest for 5 seconds, the wing LED lights, the throttle is unlock. Pull the throttle to the left at biggest for 5 seconds, then the wing LED goes out, the throttle is locked.

**特别提醒！！！！！！！！**

在油门解锁的情况下切换机翼模式尾电机会自动旋转，请注意安全，避免造成伤害！！！！！！！！！！

不正常问题的排除方法：

以上所有步骤调试后如果出现不正常现象，请对照接线图纸检查飞控的各连接线是否正确，如果接线正确，请按以上步骤重新调试，可以重新校准。

**Reminder!!!**

**When throttle is unlocked, the tail motor will rotate automatically once you change flying mold; take care of your safety to avoid any injury!**

**How to solve the problems:**

**If you finish all the steps and there are still unusual things happen, pls check if all wires on the control panel are correctly connected. If all the wires connect correctly, pls repeat all the steps to recalibrate.**

14: 以上所有步骤调试完毕，可以两个人操作试验飞机 3 轴模式是否正常  
方 法 是：在室内一个人手持飞机，另一个人加油门试验 3 轴模式飞行状态。  
正确方法是：当你有意倾斜机身的时候，电机会自动加速自动保持平衡  
当你有意让机身俯仰的时间，尾巴电机会做想对应的加速减速调整，保持飞机的俯仰平衡。

After all steps have finished, two people can work together to check if the three-axis mode is correct.

Checking method:

For indoor check up, one person hold the plane, the other checks the flight when up the throttle under three-axis mold.

How to do:

When you intend to tilt the fuselage, the motor will accelerate automatically to keep balance. When you intend to pitch, the tail motor will adjust correspondingly for acceleration and deceleration to keep balance in pitching.

## 飞行经验交流和注意事项 Experience sharing and warning

第一：请注意本产品适用的电池是：4S 14.8V 25C 2200 毫安时-2600 毫安时锂电池

1st, battery specification: 4S 14.8V 25C 2200Mah to 2600mah lip-polimer

第二：请注意按照螺旋桨标示安装螺旋桨。（很重要对飞行有很大影响）

2nd, install the propellers according to the marks. (Correctly installation is very important and will affect the flight performance)

第三，3轴模式飞行飞机会向机头方向倾斜飞行，此状态为正确状态，请不要微调升降通道微调。

3rd, the plane will fly to nose tilted under three-axis mode, which is correct, do not trim the elevator.

第四，如果在室内飞行微调了升降通道，特别提醒到户外飞行必须将升降微调至于中立位置，切记！！！！

4th, For your kindly reminder, if you trimmed the elevator for indoor flying, pls do remember to trim the elevator in neutral position when you change to outdoor flight.

第五：因为本产品是固定翼飞机和多旋翼飞机的混合体，结构比较复杂，飞机比较重，所以在3轴飞行中请不要大幅度收油门，会照成飞机下坠无法挽回。

5th, This item owns both fixed wing and multi-copter features, the structure is complicated, and the aircraft is heavy, pls do not close the throttle in a biggest way when it flies in 3-axis mold, otherwise the plane will falling and might be crushed.

第六：请不要在4级风以上的大风天气飞行，此款机在大风情况下降落需要一定的技术。

6th, pls do not flight under moderate breeze or above, as landing in windy requires skillful experience.

第七，请严格按照安装视频来操作。

7th, pls follow our build guide strictly.

## 飞行前请仔细阅读以下注意事项

**Pls read carefully and pay attention to the following points before flight**

1: 首先你不能用固定翼的降落习惯，因为这款机切换到三轴模式后机翼没有滑翔性能，所以在远处切换飞机不会降落到自己面前。

First, when you start to land the plane, pls don't follow the fixed wing landing process, as this plane has no gliding function once you change to three-axis mode, if you switch to three-axis mode when the plane is far away from you, the plane will not land at your feet.

2: 你应该用直升机的降落习惯，当固定翼飞过你眼前时候再切换到三轴模式，并且升降舵向前最大舵量。

Second, pls follow up as helicopter landing process. When the plane flies above you, pls change the plane from fixed wing mold to three-axis mode, meanwhile, put the elevator forward at biggest.

3: 如果风比较大，请最大向前升降舵，油门控制高度下降，因为低处风相对比较小，飞机低头需要克服机翼带来的风阻力。

Third, if you meet big wind, pls put the elevator forward at biggest. Pls control the throttle for descending, as the wind at lower place is relative smaller, nose down landing can avoid wind resistance.

4: 注意飞行时候要设定时间报警，5分钟内必须降落，如果电池电量太弱，会影响飞控对飞机的平衡控制。

Fourth, pls set up time limits when you flight the plane, you must land the plane in 5 minutes, if the battery is weak, it will affect the balance control performance.



shenzhen Uniquemodel Tech Co., Ltd AC10 Gyroplane

Te 1: +86-0755-27350973 Fa x: +86-0755-2735

Add: 3/F, Building C, Futai Industrial Area, Liaokeng Villiage, Shiyan Town, Bao'an District, Shenzhen, China