LONGING

LY-i6

Digital proportional radio control system

INSTRUCTION MANUAL

用户手册

2.4Hz 01010101 AFHDS AUTOMATIC FREQUENCY HOPPING DIGITAL SYSTEM 2A

WARNING:
This product is suitable for 15 years old and above
本产品不适合15岁以下儿童使用

15+

CE 0700 RoHS

FCC ID: 2AIWS160116

1 Special symbols 特殊标志

Please pay attention to the following symbols when they appear in the manual and read carefully.

当以下标志出现在说明书的时候请注意并且仔细阅读。

Danger: Not following these instructions may expose the user to serious injuries or death.

如果使用者不按照说明方法操作，有可能导致使用者严重受伤，甚至致命的危险。

Warning: Not following these instructions may expose the user to serious injuries.

如果使用者不按照说明方法操作，有可能导致使用者严重受伤。

Attention: Not following these instructions may expose the user to minor injuries and even to serious injuries.

如果使用者不按照说明方法操作，有可能导致使用者外伤，甚至严重受伤。

Prohibited 禁止

Mandatory 强制

2 Safety guide 安全指导

Don't fly at night or in bad weather like rain or thunderstorm as this can cause erratic operation or loss of control.

请不要在夜晚或者雷雨天使用此产品，因为恶劣的天气环境有可能导致遥控设备失控。

Make sure moving direction of all motors be same with the operating direction. If not, please adjust direction first.

操控时，请先确认模型所有舵机的动作方向与操控方向一致。
如果不一致，请调整好正确的方向。

The shutdown sequence must be to first disconnect the receiver battery then to switch off the transmitter,if the transmitter is switched off while the receiver is still powered, it may lead to uncontrolled movement or engine start and may cause an accident.

关闭时，请务必先关闭接收机电源，然后关闭发射机，如果关闭发射机电源时接收机仍然在工作，将有可能导致遥控设备失控或者引擎继续工作而引发事故。

In particular, the 2.4G RC system will affect the plane or the car nearby after you turn on the transmitter.

特别要注意，如果附近有汽车正在运行或飞机正在飞行，开机后2.4 GHz RC系统可能会影响到他们。

Do not operate outdoors on rainy days, run through puddles of water or use when visibility is limited.Should any type of moisture (water or snow) enter any component of the system, erratic operation and loss of control may occur.

不要在户外雨天，有水的地方或当能见度有限的时候使用。

可能水分(水或雪)会进入到系统内部，不稳定的运行和失控可能发生。

Do not operate in the following places:
Near other sites where other radio control activity may occur,
Near people or roads,
On any pond when passenger boats are present,
Near high tension power lines or communication broadcasting antennas,
Interference could cause loss of control,
Improper installation of your Radio Control System in your model could result in serious injury.

不要操作在以下的地方：

基站附近或其他无线电活跃的地方，人多的地方或道路附近，

有客船的水域，高压电线或通信广播天线附近，干扰可能导致失控，

安装不正确，无线电控制系统可能导致模型发生严重的伤害。

Do not operate this R/C system when you are tired, not feeling well or under the influence of alcohol or drugs.Your judgment is impaired and could result in a dangerous situation that may cause serious injury to yourself as well as others.

当你感到疲倦，饮酒或吸毒后，不舒服的影响下，不要操作这个R / C系统。

判断力下降，而且可能发生危险的情况下，对自己或他人可能造成严重的伤害。

Do not touch the engine, motor, speed control or any part of the model that will generate heat while the model is operating or immediately after its use.These parts may be very hot and can cause serious burns.

当模型操作或使用后，请勿触摸发动机、电机、定速设定或任何可能发热的部分，

这些部分可能非常热，会造成严重的烧伤。

Please have an overall check about the model before any operation.
Any problem in radio control system or improper installation may cause out of control.
Simple distance test methods:
One hold the model, and the other one carry the transmitter to a proper place to check the servo system condition.
Please stop operation if any exceptional case occurs.
Please check the model memory to make sure the matching is right.

总是在操作模型之前进行全面的检查。

无线电控制系统出现问题以及不正确安装，都有可能导致模型失控，

简单的距离测试方法：一个人把持模型另一个人持发射机走开，检查该伺服系统运转情况。

测试时要注意到若有异常出现，请不要操作模型。

也检查模型的记忆，以确保模型的匹配是适当的。

Turn on the power, please check if the throttle neutral position is in its lowest position while turning on the transmitter every time.When making adjustments to the model, do so with the engine not running or the motor disconnected, you may unexpectedly lose control and create a dangerous situation.

开机时，每次都要检查发射器的油门中位是否是最低。

当发射机作出调整时，可能模型的引擎没有运行或电机没有连接，可能会发生失控或意外事故的情况。

AFHDS2A stands for "Automatic Frequency Hopping Digital System 2A". This highly sophisticated radio transmission system will guarantee you a long range, jamming free and long battery life experience. This is the result of years of research and testing and makes Fly Sky one of the world leader in the market.

AFHDS2A是第二代增强版自动跳频数字系统的简写。它是一个高度精密的遥控信号传播系统，这个系统能够提供良好的距离，抗干扰能力强并且耗电量低。它是世界领先的遥控制造商之一——富斯遥控模型技术有限公司研发并测试多年的成果。

RF specifications:
RF range: 2.408-2.475GHz
Channel bandwidth: 500KHz
Number of channels: 135
RF power: less than 20dBm
RF mode: AFHDS 2A(Automatic Frequency Hopping Digital System 2A)
Modulation type: GFSK
Antenna length: 26mm*2(dual antenna)
RX sensitivity: -105dBm

参数说明：

频率范围： 2.408-2.475GHz
波段宽度： 500KHz
波段个数： 135个
发射功率： 不高于20dBm
发射模式： AFHDS2A(第二代增强版自动跳频数字系统)
编码方式： GFSK
天线长度： 26毫米*2（双天线）
接收机灵敏度： -105dBm

Danger:

Misuse of this radio system can lead to serious injuries or death. Please read completely this manual and only operate your radio system according to it.

警告!

错误使用遥控设备将导致严重的伤害甚至死亡。请在使用前完整阅读这本使用手册，并且在使用过程中严格按照此手册的说明操作。

The 2.4GHz radio band has a completely different behavior than previously used lower frequency bands. Keep always your model in sight as a large object can block the RF signal and lead to loss of control and danger. The 2.4GHz RF signal propagates in straight lines and cannot get around objects on its path. Never grip the transmitter antenna when operating a model as it degrades significantly the RF signal quality and strength and may cause loss of control and danger

该2.4G无线电波段完全不同于之前所使用的低频无线电波段。使用时要保持您的模型产品飞行在您的视线范围内，因为大的障碍物将会阻断无线电频率信号从而导致遥控失控和危险。2.4G无线电频率信号是沿直线传播的，它不能绕过障碍物进行传播。在使用过程中，严禁紧握发射机天线，否则将会大大减弱无线电传播信号的质量和强度，导致遥控设备失控和危险。

Danger:

Always turn on the transmitter first then the receiver. When turning off the system, always turn off the receiver first then the transmitter. This is to avoid having the receiver on itself as it may pick a wrong signal and lead to erratic servo movements. This is particularly important for electric powered models as it may unexpectedly turn on the motor and lead to injuries or death.
A separation distance of at least 20 cm from all persons is required during operation.

警告!

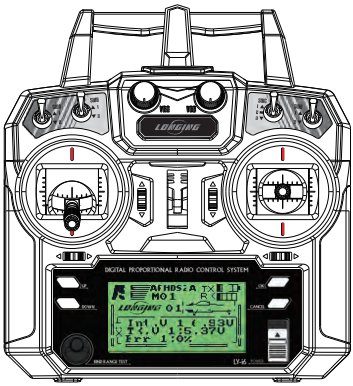
每次使用时,必须先打开发射机，然后再给接收机通电。停止使用时，必须先断开接收机电源，然后再关闭发射机。 这样操作可以避免接收机接收到错误信号而导致的伺服器无规律的抖动。这对于电动模型来说尤为重要， 因为它有可能导致马达突然转动而致使人员伤亡。

多人一起操作的时候 间距至少要20CM以上。

4 Transmitter specifications 发射机参数

Transmitter specifications:

Number of channels: 6
Model type: fixed-wing/glider/ helicopter
Channel resolution: 1024 steps
Power supply: 7.2V (3.6V AA x 2)
Modulation : GFSK
System type: AFHDS2A
Low voltage warning: Icon blinks and alarm less than 4.2V
Icon blinks and short alarm less than4.0V
No-operation warning: The transmitter will alarm if there is no operation more than one minute.
Antenna length: 26mm*2 (dual antenna)
Color: Black
Size: 174*89*190mm
Weight: 392g
Certification: CE、FCC



机种参数

1. 通道个数：6
2. 适合机种：固定翼/滑翔机/直升机
3. 数据分辨率: 1024级
4. 输入电压:7.2V (3.6V AA x 2)
5. 调制方式: GFSK
6. 系统模式: 第二代增强版自动跳频数字系统
7. 低电压报警功能: 低于4.2伏图标闪烁并且长报警
   低于4.0伏图标闪烁并且短报警
8. 关机报警功能: 开机无操作1分钟后蜂鸣器报警
9. 天线长度: 26毫米*2(双天线)
10. 外观颜色: 黑色
11. 外形尺寸: 174*89*190毫米
12. 整机重量: 392克
13. 安规认证: CE、FCC

5 Receiver 接收机

5.01 Receiver Specification 接收机参数

SPECIFICATIONS :

Number of channels: 6
Model type: fixed-wing/glider/ helicopter
RF receiver sensitivity: -105dBm;
Modulation : GFSK
System type: AFHDS2A
Channel resolution: 1024 steps
Bind port: yes
Power port: yes(VCC)
Power: 4.0-6.5VDC
Weight: 6.4g
Antenna length: 26mm
Size: 40.4*21.1*7.35mm
Color: black
Certification: CE、FCC.

机种参数：

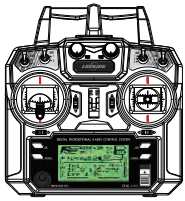
1. 通道个数： 6个通道
2. 适合机种： 固定翼/滑翔机/直升机
3. 接收灵敏度： -105dBm
4. 调制方式: GFSK
5. 系统模式: 第二代增强版自动跳频数字系统
6. 数据分辨率: 1024级
7. 对码接口: 有
8. 电源接口: 有(VCC)
9. 电源标准: 4.0-6.5V DC
10. 整机重量: 6.4克
11. 天线长度: 26毫米
12. 外型尺寸: 40.4*21.1*7.35毫米
13. 外观颜色: 黑色
14. 安规认证: CE、FCC。

6 ON OFF 开机 关机

Power on 开机

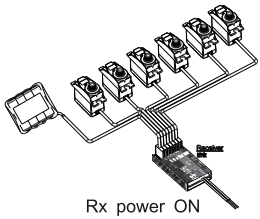
1. Connnect all parts
2. Switch on the transmitter
3. Connect the receiver battery
4. The receiver red LED indicator is solid indicating the presence of a correct signal
5. Use the radio system

1. 连接好所有部件
2. 打开发射机
3. 接通接收机电源
4. 接收机红色指示灯常亮说明信号连接正常.
5 操作系统可以使用



Tx power ON

Power on

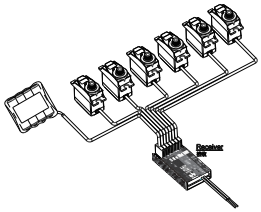


Rx power ON

Shut down 关机

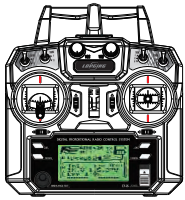
1. Disconnect the receiver battery
2. Switch off the transmitter

1. 断开接收机电源
2. 关闭发射机



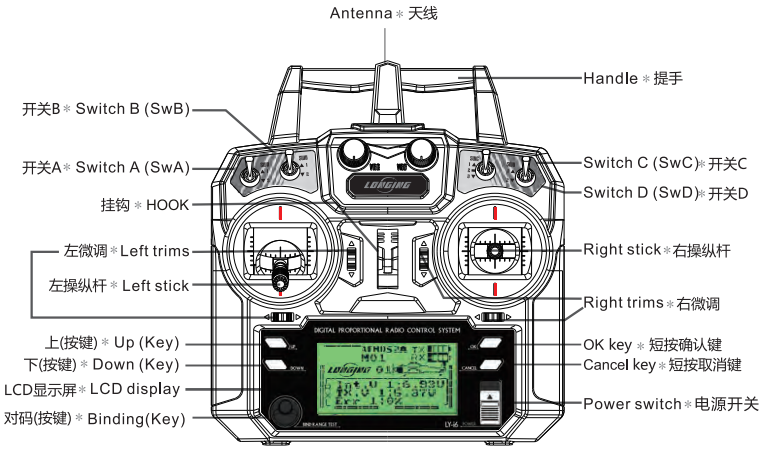
Rx power off

Shut down

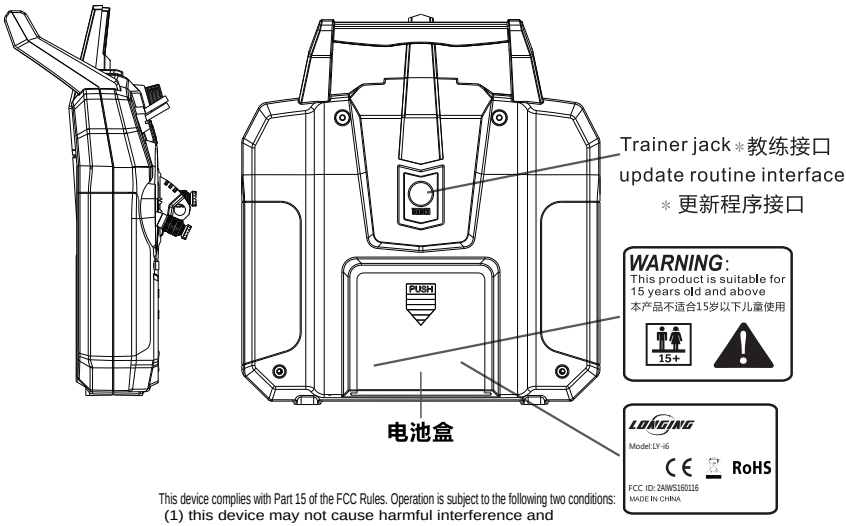


Tx power off

7 Definition of key functions 按键定义

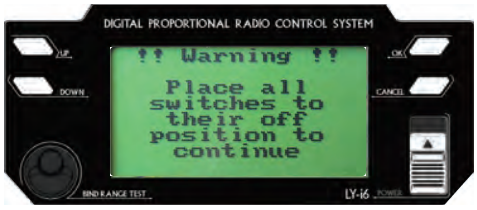


Definition of key functions 按键定义



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.

8 Warning 警告



For your safety, the 4 switches of the transmitter must be in their off position and throttle stick must be the lowest position when turning the transmitter on.
If not, a warning screen will be displayed until all switches are in the right position.

为了您的安全，开机时发射机上面的四个拨动开关必须在关闭位置，油门摇杆必须在最低位置。如果没有在关闭位置或最低位置，显示屏将会出现报警提示直至所有开关关闭。

9 Right and left stick be adjustable 左右手摇杆模式调整

Function discription:

This feature is set for different operating habits of different users , and the user can adjust by the following operation.

How to interchange right and left stick mode of transmitter

1. Open the transmitter battery cover, and remove the battery;
2 .Use a screwdriver to remove 4 screws that the locking back cover of transmitter (Figure 13.1), and properly placed;
3.Gently unplug the plug wires of transmitter cover , and you can see layout like (figure 13.2) shown.
4.Remove 8 screws from the seat assembly with a small screwdriver , and properly placed;
5 .Rotated transposition of the left and right seat assembly to 180 degrees, and organize line wire well, and locking the screws;
6. Plug wires of the transmitter cover carefully into the mainboard, re-close the transmitter cover and locking the screws;
7. Install the battery and then turn on the receiver. Select the proper "stick mode" based on the previous modification and save it.（Please refer to the P24 stick mode）
8. Check the operation stick and trim button position and direction.

功能说明 ：

此功能是针对不同用户的不同操作习惯而设定的，用户可通过以下操作方式进行调整。

发射机左右手摇杆模式互换的步骤如下：

1、打开发射机的电池盖，取下电池；

2、用螺丝刀卸下锁住发射机后盖的4颗螺丝 (如图13.1)，并妥善放置；

3、轻轻地拨下发射机后盖电线插头，即可看到和 (图13.2) 一样的布局；

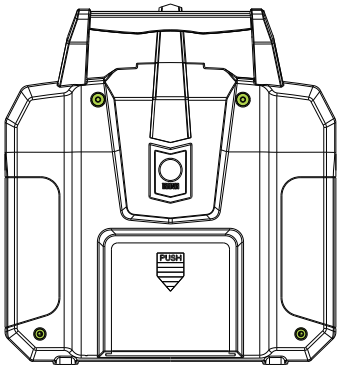
4、用小型十字螺丝刀卸下总成8颗螺丝，并妥善放置；

5、将左右总成座互换位置旋转180度，排好电线，并锁紧螺丝；

6、将发射机后盖电线插头小心地插入主板，重新合上发射机的后盖，并锁紧螺丝；

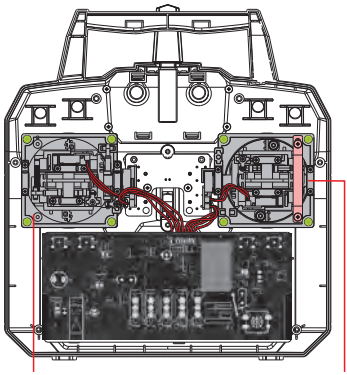
7、装入电池，盒上电池盖，开机，根据刚刚的修改选择合适的“sticks mode”类型并保存,(参考P24 操纵杆模式)；

8、检查操纵杆和微调按键的位置及方向,是否正确。



● 4颗螺丝 4 screws

(图 13.1)



右总成座 right seat assembly

● 8颗螺丝 8 screws (图 13.2)

左总成座 left seat assembly

10 Main screen 开机画面（双向）

Besides the longingi logo and modulation type (AFHDS2A), the main screen displays the following information:

1. Selected model number (1 to 20): 20 different models can be saved in the transmitter allowing you to instantly switch to 20 different models.
2. Model name: each model can be named with 8 characters name that allow you to easily recognize the associated model.
3. An aircraft or helicopter picture that indicates the type of the selected model.
4. The four electronic trims position.
5. The battery status and voltage. Icon blinks and alarm when the battery voltage drops below 4.2V. Below 4.0V, Icon blinks and alarm shortly.
6. Feedback sensor data from RX(unique character of two-way communication system).

除了龙云商标和AFHDS2A跳频方式外，开机画面还显示以下内容：

1. 选择模型编号(1到20): 发射机可以存储20组不同模型，用户可立即转换20组不同数据。
2. 模型名称: 每一组模型的名称由8个字符组成，用户可以根据模型的名称很容易的找到相关的模型。
3. 所选择的飞机或者直升机的种类的标志。
4. 四个电子微调的位置。
5. 电池的电量状况和电压。当电池电压低于4.2V时，图标闪烁并且长报警,当电池电压低于4.0V时，图标闪烁并且短报警。
6. 接收机反馈的传感器数据（双向特有）。

10.01 Main screen 开机画面（单向）

11 Main menu 主菜单

The main menu is separated into two main sections, system setup and functions setup.The system menu allows you to set up the transmitter and manage the 20 models. The function menu is used to set up each model separately.To enter the main menu, long press the “OK” key. Use the “Up” and “Down” Key to select the desired section and press “OK”. Then, use the“Up” and“Down” Key to select the desired submenu and press again“OK”. Most of the following screen work according to this simple scheme:

1. Use the“OK”key to select the parameter to modify.
2. Use the “Up” and “Down”key to modify the value of the selected parameter.
3. Long press the “Cancel” key to exit and save the new parameters .
4. Short press the “Cancel” ke toyexit without savin thge new parameters.

To return to the previous screen, press the “Cancel” key. You can repeat that operation until the main screen.

主菜单分为两部分，系统设置和功能设置。用户可以进入系统菜单设定发射机和选择20组模型。功能菜单中可分别设置每个模型的功能。

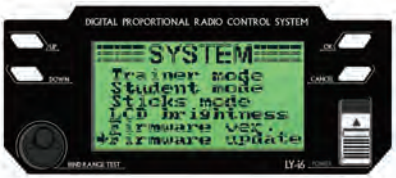
长按 “OK” 键进入主菜单，按 “Up” 和 “Down” 按键选择想要的功能，短按 “OK” 键确认。然后按 “Up” 和“Down” 按键选择想要的子菜单，再次短按 “OK” 键确认。

接下来大多数的屏幕操作都是按照这个简单的步骤进行：

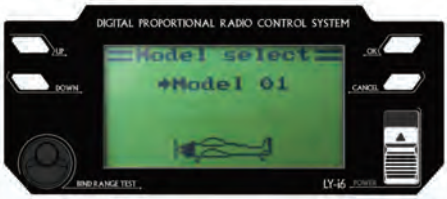
1. 通过 “OK” 键选择需要修改的参数。
2. 按 “Up” 和 “Down” 按键修改参数的数值。
3. 长按 “Cancel” 键退出并保存新的参数。
4. 短按 “Cancel” 键退出不保存新的参数。

按 “Cancel” 键返回上一级菜单。用户可以重复这个操作直至回到主菜单。

12 System settings 系统设置



12.01 Model select 模型选择



Use this function to select the active model among the 20 available models. Doing so, you can set up and save all required parameters to fly 20 different models and switch instantly between them.

此功能是从存储的20组模型中选择一个当前使用的，用户可以设定和存储所需要的20组不同模型的数据，用户可立即转换不同数据.