



# HR8EG

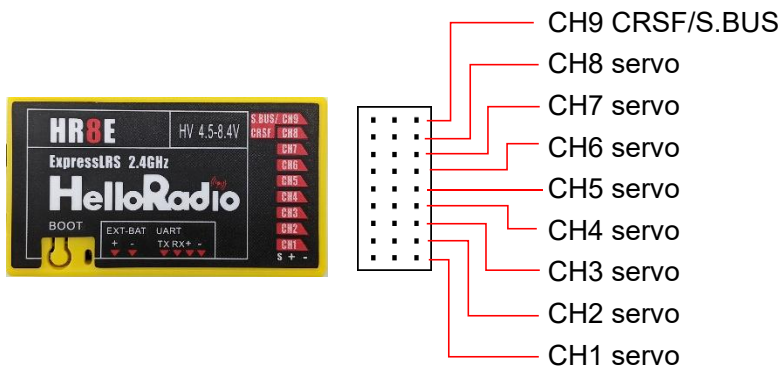
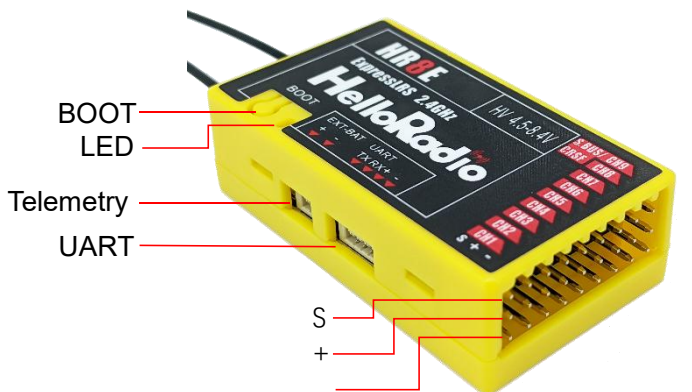
Receiver  
Quick Start Guide

[WWW.HELLORADIOSKY.COM](http://WWW.HELLORADIOSKY.COM)

# Introduction

Thank you for purchasing the HelloRadioSky HR8E ELRS receiver. The HR8E receiver is based on the revolutionary ExpressLRS system. It offers high performance, high reliability, flexible configuration, fast response speed and ultra-long range, bringing you brand new experience with your hobby. Please take a moment to read this quick start reference before using your new HR8E receiver.

## Overview



## Binding Method

Traditional Method:

1. Power on the receiver, its LED will turn on. Then power off the receiver.

2. Repeat Step one twice.
3. Power on the receiver for the third time, its LED will double blink. This indicates that the receiver is in bind mode.
4. Select [BIND] on the radio, then confirm.

Binding phrase:

1. Open the ExpressLRS LUA and navigate to the Wifi Connectivity page. Select the Enable Wifi option and connect to your radio's Wifi with a mobile phone, tablet or PC (See TX Wifi notes below). Open the WebUI (ExpressLRS web page on <http://10.0.0.1/>) and input a unique bind phrase of yours. (Note: Bind phrases are not secret and can be read). Save and Reboot.
2. Power up the receiver and wait 60 seconds for the LED to blink rapidly to indicate Wifi mode. Connect your phone, tablet or PC to the receiver's Wifi (See TX Wifi notes below). Open the WebUI (ExpressLRS web page on <http://10.0.0.1/>) and enter the matching bind phrase previously entered on your radio. (Note: Bind phrases are not secret and can be read). Save and Reboot. Once a radio and a receiver have the same bind phrase set, they will automatically bind.

TX Wifi notes:

WiFi default network name: ExpressLRS TX

WiFi default password: expresslrs

Default URL: <http://10.0.0.1/> (Open in browser)

RX Wifi notes:

WiFi default network name: ExpressLRS RX

WiFi default password: expresslrs

Default URL: <http://10.0.0.1/> (Open in browser)

## ELRS Lua Settings on the Radio

Standard servos:

Packet Rate: 100Hz Full

Telem Ratio: Std (1:32) (default if unsure)

Switch Mode: 8ch

Performance servos:

Packet Rate: 333Hz Full

Telem Ratio: Std (1:128)

Switch Mode: 8ch

## Other Important Notices

1. The maximum input voltage for the EXT-BAT (external voltage input) telemetry reading is 35V. Do not exceed 35V or the receiver will be damaged.
2. The EXT-BAT (external voltage input) of the ER8 is accessed via the EXT-BAT 2pin JST-GH connector. The red wire must be soldered to the positive of the battery or ESC. If no EXT-BAT power source is found, the HR8E will default to reading the voltage on the receiver pins, only one voltage input can be used at the any given time.
3. Please ensure that the power supply current of the ESC BEC matches the power consumption requirements of the servo used. If using high-voltage and high-torque servos, it is recommended to use a 2S 7.4V battery for direct power supply or a suitable high-current UBEC.
4. Calibration of the telemetry voltage will be required on your radio. Navigate to the telemetry page on your radio and locate the RxBt sensor. Edit the sensor settings and adjust the offset until the displayed reading matches the actual voltage of the battery in the model. If there is a large difference, adjustment of the ratio may also be required.  
  
\*For best results, calibrate the voltage of your radio using a fully charged battery of the correct cell count intended for use in the model.
5. ExpressLRS Arming requirements and the use of Channel 5: CH5 is required by ExpressLRS to set the Arm state of the RF module in your radio. It is recommended to assign CH5 to a switch such as your throttle cut switch as this will provide benefits such as dynamic power. Using the ExpressLRS LUA or the Wifi WebUI, you can assign different channels to the CH5 output of your receiver.  
  
Please visit <https://www.expresslrs.org/> to learn more on the importance of setting up arming.

## Specifications

The HelloRadioSky HR8E receiver has been specially designed for fixed-wing users. It can drive up to 8 servos and has built-in receiver voltage telemetry and flight battery telemetry with the ability to automatically detect which voltage input to use. A 4-wire CRSF interface is provided to facilitate later expansion of telemetry sensors. The HR8E features a dual-antenna with telemetry power up to 100mw.

## FCC Statement

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.

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.

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

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Power supply: DC 4.5 - 7.4V

Antenna type: 18cm high sensitivity antenna

Wireless protocol: ExpressLRS 3.3.0 pre-installed

Output channel: 9CH PWM

Telemetry power: maximum 100mw (LUA Adjustable)

Battery voltage detection range: DC 4.0 - 35V

Bus interface: CRSF

Weight: 13.7 grams

Size: 48\*27\*15mm

Firmware:

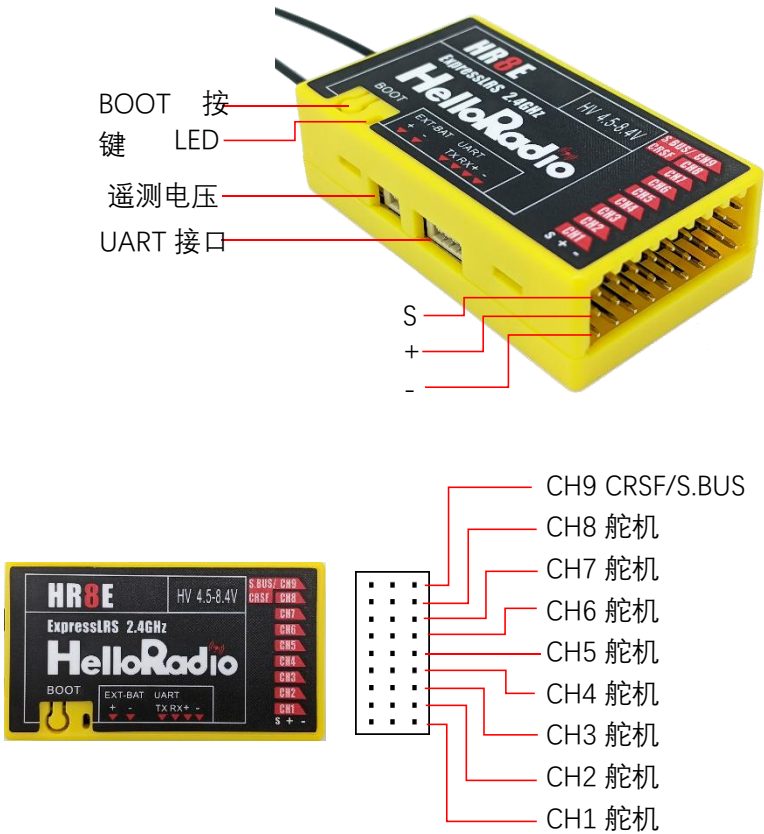
Device Category: HelloRadioSky 2.4GHz

Device: HelloRadioSky HR8E 2400 PWM RX

# 简介

感谢感谢您购买 HelloRadioSky HR8E 接收机，HR8E 接收机基于革命性的 ExpressLRS 系统，高性能、高可靠性、灵活配置、快速响应速度、超远航程，为您的航模爱好带来全新体验。为了确保正确、安全地使用本产品，请在使用前仔细阅读本使用说明书。

## 接收机概览



## 对频方法

传统方式：

1. 接收机上电，LED 灯会亮，然后断电。
2. 重复上述步骤 2 次。

- 3. 第三次给接收机上电，LED 灯快闪 2 次，表示进入对频模式。
- 4. 选择遥控器上的对频（BIND）操作。

对频短语方式 Binding phrase：

- 1. 打开 ExpressLRS LUA 脚本并导航到 WIFI 连接页面。选择启用 WIFI 选项，并通过手机、平板电脑或个人电脑连接到您的 ExpressLRS 发射机 WIFI（参见下面的 TX WIFI 说明）。打开 WebUI 网页（ExpressLRS 的默认网页地址为：<http://10.0.0.1/>），并输入一个独特的属于您自己的对频短语，保存并重新启动。
- 2. 打开接收机，等待 60 秒，LED 迅速闪烁以指示 WIFI 模式。将您的手机、平板电脑或个人电脑连接到接收机 WIFI（参见下面的 TX WIFI 说明）。打开 WebUI 网页（ExpressLRS 的默认网页地址为：<http://10.0.0.1/>），并输入与发射机中一致的对频短语，保存并重新启动。一旦发射机和接收机有相同的对频短语时，它们将自动连接而无需对频。

发射机 WIFI:

WIFI 默认网络名称: ExprsLRS TX

WIFI 默认密码: expresslrs

默认 URL: <http://10.0.0.1/>（在浏览器中打开）

接收机 WIFI:

WIFI 默认网络名称: ExprsLRS RX

WIFI 默认密码: expresslrs

默认 URL: <http://10.0.0.1/>（在浏览器中打开）

## 遥控器端设置

遥控器端推荐的 ELRS LUA 设置为：

标准舵机设置:

数据包传输速率: 100Hz Full

回传比例: Std (1:32)（如果不确定则默认）

开关模式: 8ch

高性能舵机设置:

数据包传输速率: 333Hz Full

回传比例: Std (1:128)

开关模式: 8ch

## 其他注意事项

- 1. EXT-BAT（外部电压输入）电压回读数的最大输入电压为 35V。不要超过 35V，否则会损坏接收机。
- 2. EXT-BAT（外部电压输入）通过 EXT-BAT 2 针 JST-GH 连接器访问。电线必须焊接到电池或电调的正负极线上。如果没有找到 EXT-BAT 电源，HR8E 将默认读取接收器引脚上的电压，任何情况下只能检测一个电池或电源的电压。
- 3. 请确保电调 BEC 的供电电流与所用舵机的功耗要求相匹配。如果使用高压大扭矩舵机，建议使用 2S 7.4V 电池直接供电或合适的大电流 UBEC。

4. 您的遥控器将需要校准回传电压。在遥控器的回传设置页面，找到 RxBt 传感器。编辑传感器设置并微调 偏移量 (Offset)，直到显示的读数与模型中电池的实际电压相匹配，如果差异较大，则可能还需要调整比例 (Ratio)。
5. ExpressLRS 需要 CH5 来设置遥控器中射频模块的锁定/解锁状态。建议在遥控器上给 CH5 分配给一个开关，例如油门切断开关，使用 ExpressLRS LUA 或 Wifi WebUI，您可以将不同的通道分配给接收器的 CH5 输出。请访问 <https://www.expresslrs.org/> 以了解更多关于设置解锁开关的重要性。

## 规格参数

HelloRadioSky HR8E 接收机专为固定翼用户设计。它最多可以驱动 8 个舵机，并具有内置的接收机电压回传和飞机电池电压回传功能，能够自动检测要使用的电压输入。提供了一个 4 线 CRSF 接口，以方便以后扩展传感器。HR8E 具有双天线，回传发射功率高达 100mw。

电源：DC 4.5 - 7.4V

天线类型：18cm 高灵敏度双天线

无线协议：预装 ExpressLRS 3.3.0

输出通道：9CH PWM

回传功率：最高 100mw (可在 LUA 中调节)

回传电池电压检测范围：DC 4.0 - 35V

总线接口：CRSF

重量：13.7 克

尺寸：48\*27\*15mm

固件选择：

设备类别：HelloRadioSky 2.4GHz

设备：HelloRadioSky HR8E 2400 PWM RX



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