


510*140mm



MicroRadio 遥控器 使用说明书

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产品简介

Sub250 MicroRadio 遥控器是 Sub250 团队基于 ExpressLRS 开源项目所研发的最新一代遥控系统, ExpressLRS 具有长距离传输, 低延时, 最高 500Hz 刷新率等特点。

MicroRadio 采用了简约化设计, 最大程度地降低了使用难度; 人体工程学设计, 握持更舒服; 内置了 2.4G ELRS 模块, 最大 500mW 的可调功率搭配可更换天线设计, 理想条件下遥控距离可达 2KM 以上; 支持通过 USB 接口升级遥控器固件, 并可以通过 WIFI 升级 ELRS 模块固件, 也可通过蓝牙无线连接电脑模拟器; 支持两节 18650 电池供电, 超长续航飞行不停, 8 个低延时通道, 可满足初学者和专业人士大多数的需求。

(注意: 开机前必须安装天线)

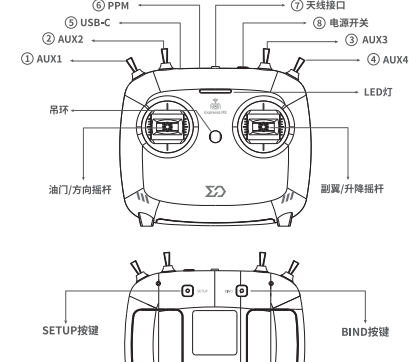
基本参数

尺寸: 147*135*71mm(不包括天线)
重量: 223g
适配类型: 穿越机, 固定翼
工作频段: 2.4GHz ISM
工作电压: 6-6.4V
天线接口: SMA
功率: 100/250/500mW
通道: 8 通道
充电接口: USB-C
固件升级: 支持
蓝牙模拟器: 支持

功能介绍

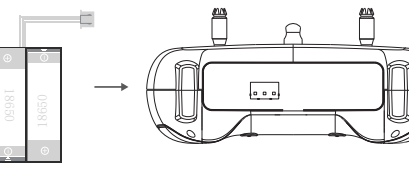
AUX1 解锁开关: 两推开关, 控制飞机解锁和上锁。
AUX2 三档开关: 辅助调速, 用户可自行设置。
AUX3 三档开关: 辅助调速, 用户可自行设置。
AUX4 三档开关: 辅助调速, 用户可自行设置。
USB-C 接口: 可用于充电和遥控器升级。
PPM 输出: 可连接加密器。
天线接口: SMA 接口, 可使用原装天线或更换定向天线。
电源开关: 开启/关闭遥控器。
SETUP 按键: 开机状态下长按校准摇杆。
BIND 按键: 长按开机, 进入对频状态。

MicroRadio 遥控器示意图



电池安装

打开底部电池盖, 装入两节 18650 电池或一块 2S 电池。(电池需另购) 注意:
1. 装入电池时必须以重电池正负极, 且不能装反。
2. 请勿混合使用新旧电池。
3. 请勿混合使用不同类型的电池。



LED灯含义

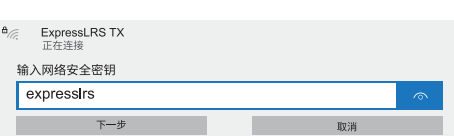
LED 灯状态	含义
红灯常亮	正常工作
红灯闪烁	对频中
红灯数量 1, 2, 3	对应功率 100-250-500mW
红灯常亮	电量低
红色流水灯闪烁	WiFi 升级模式
红色流水灯常亮	蓝牙模拟器模式
蓝灯常亮	充电中
蓝灯闪烁	检测到电池故障, 重新插接电池
充电指示灯熄灭	充电完成

调整功率

先长按 BIND 键, 然后短按 SETUP 键 1 秒, 可循环切换 100/250/500mW 功率, 通过指示灯可以观察当前高频头功率。

启动 WIFI

关机状态下, 长按 SETUP 键开机, 待指示灯变为快速闪烁的流水灯状态, 即进入 WIFI 更新模式, 找到名为 "ExpressLRS TX" 的 WIFI 名, 输入密码 "expresslrs", 连接后访问网址: 10.0.0.1, 便可进行 ELRS 高频头固件更新。



低电量警报及充电

当 MicroRadio 的指示灯变为慢闪状态时, 代表遥控器电量不足, 需要进行充电。MicroRadio 支持更换电池, 也支持通过 USB-C 接口进行充电, 充电方式如下:
1. 关闭遥控器;
2. 使用 USB-C 数据线连接遥控器和充电器;
3. 指示灯进行常亮, 表示正在充电中, 指示灯熄灭后则充电完成;
4. 若在充电过程中蓝灯闪烁, 则表明电池出现故障, 请重新插接电池, 若还是无法解决, 请更换电池进行使用。

关于 ELRS


由于 ExpressLRS 项目更新的速度比较快, 说明书中许多内容没法及时更新, 更多内容欢迎访问 ELRS 项目库, 项目库: [github](https://github.com/ExpressLRS/ExpressLRS) 地址: <https://github.com/ExpressLRS/ExpressLRS>

产品清单

1 x MicroRadio 遥控
1 x 使用说明书

联系我们

官网: <https://Sub250.com/>



MicroRadio Remote Controller User Manual

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Product Introduction

Sub250 MicroRadio Remote Controller is a new generation remote control system developed based on the ExpressLRS open source project. ExpressLRS sets new standards for long-range connection, low latency and Maximum refresh rate of 500Hz.

MicroRadio adopts a simplified design to minimize the difficulty of use. Ergonomic design, more comfortable to hold. Built-in 2.4GHz ELRS module, adjustable power of up to 500mW with replaceable antenna design, the remote control distance can reach more than 2KM under ideal conditions. Support upgrade remote control firmware through USB interface, and can upgrade ELRS module firmware through WIFI. Supports wireless connection to computer drone simulator via bluetooth. It supports two 18650 batteries for ultra-long battery life. 8 low latency channels can meet most of the needs of beginners and professionals.

(Notes: An antenna must be installed before Power On!)

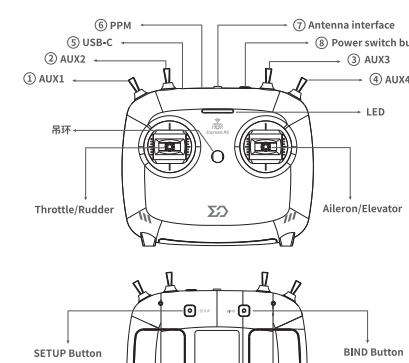
Specifications

Size: 147*135*71mm(Not including antenna)
Weight: 223g
Adapted Drone Type: Multicopter, Airplane
Frequency band: 2.4GHz ISM
Input voltage: 6.6-6.4V
Antenna interface: SMA
Power: 100/250/500mW
Channel: 8 channel
Charging interface: USB-C
Firmware upgrade: support
Bluetooth joystick: support

Function Guide

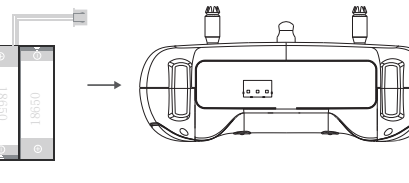
AUX1 Unlock Switch: Switch to control FPV Disarm and Arm.
AUX2 Switch: The AUX channel can be set by the user.
AUX3 Switch: The AUX channel can be set by the user.
AUX4 Switch: The AUX channel can be set by the user.
USB-C: Charge and upgrade firmware.
Antenna interface: SMA.
Power switch button: Turn the remote on/off.
SETUP button: Hold down to calibrate the Joystick
BIND button: Long press to start binding.

MicroRadio diagram



Battery installation

Open the bottom battery cover and insert two 18650 batteries or a 2S battery.(not included)
Notes:
1. Ensure the polarity symbols on the batteries match the symbols inside the battery compartment.
2. Do not mix new and old batteries.
3. Do not mix different types of batteries.



LED Status indication

LED Status	Meaning
Red light solid on	Working
Red light flashing quickly	Binding
Red light number: 1-2-3	Power: 100-250-500mW
Red light flash slowly	Battery low
Red running Led quick flashing	WiFi mode
Red running Led slow flashing	Bluetooth joystick
Blue light solid on	On charging
Blue light flash slowly	Faulty battery/reinsert battery
Blue light went out	Charge complete

Power On/Off

Long press the power button of the remote control for 2 seconds in the off state, and release the power button after the remote control vibrates, while the red LED lights up, the remote control is successfully powered on.
Long press the power button of the remote control for 2 seconds in the power on state, when the LED light goes out, the remote control is turn off successfully.

Binding

In the off state, long press the BIND button on the back of the remote control and then press the power button at the same time to turn it on. When the indicator light turns flashing, the remote control enters the binding status.
The binding status will last for 5 seconds, there will be no feedback when the binding is successful, and it will automatically exit the binding status after 5 seconds. Check whether the remote control is in binded with the receiver. If not, please repeat the binding operation.

Joystick Calibration


With the joystick back in the center and the throttle lever in the lowest position, long press the SETUP button on the back of the remote control for 4 seconds, and when the remote control vibrates and the buzzer beeps sound, the calibration is complete.

Power switching

First long press the BIND button, then short press the SETUP button for 1 second, the 100/250/500mW power can be switched cyclically, and the current high performance Radio control link power can be observed through the indicator light.


WIFI mode

In the off state, long press the SETUP button to turn it on, and when the indicator light turns into quickly flashing running led, it will enter the WIFI update mode. Find the WIFI name named "ExpressLRS TX", input the password "expresslrs", connect to the website: 10.0.0.1, then you can perform ELRS high-frequency firmware update.



Bluetooth joystick

In the off state, long press the BIND and SETUP buttons at the same time to turn on the device. When the indicator light turns into a slowly flashing running led, it will enter the Bluetooth simulator mode. Search for a Bluetooth device called "ExpressLRS Joystick" and connect it to practice on a computer simulator.



Charging

Plug in the USB-C cable in the off state, it will be in the charging state when the remote control indicator turns blue, and the indicator light will automatically turn off after charging is completed. According to the system, if the blue light blinks during charging, the battery is faulty, which means you plug it in or replace it.

About ELRS

ExpressLRS project is being constantly updated - the contents of this manual cannot be kept up-to-date in time. For more information, please visit the ELRS Project official github page: <https://github.com/ExpressLRS/ExpressLRS>

Product list

1 x MicroRadio
1 x Instruction manual

Contact

Website: <https://sub250.com/>