Thank you for purchasing the Radiomaster ER4 ExpressLRS receiver. The ER4 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.

⚠ Important:

1.The recommended ELRS LUA settings on the remote-control end are:

- 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

2: The maximum input voltage for the EXT-V (external voltage input) telemetry reading is 35V. Do not exceed 35V or the receiver will be damaged.

3: The EXT-V (external voltage input) of the ER4 is accessed via the EXT-V solder pad on the PCB. A single wire must be soldered to this pad and connected to the positive wire of the battery or ESC. If no EXT-V power source is found, the ER4 will default to reading the voltage on the receiver pins, only one voltage input can be used at the any given time.

4: If the power supplied is 7.4V or higher, please ensure that the receiver is in an open and ventilated area of the model for better heat dissipation.

5: 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.

6: ExpressLRS Arming requirements and the use of Channel 5. The ER4 receiver has 4 channels and does not require any channel outputs to be re-mapped however it is still recommended to assign CH5 on your radio to a switch such as your throttle cut switch so the RF module in your radio can be armed and disarmed which will provide benefits such as dynamic power.

Please visit https://www.expresslrs.org/ to learn more on the importance of setting up arming.

The Radiomaster ER4 receiver can drive 4 servos simultaneously. Designed with a very small volume, it is suitable for small aircraft models, ship models, car models and other models that require a small or lightweight receiver while still providing full range.

Product Features:

Power supply: DC 4.5 - 8.4V
Antenna type: 15cm high sensitivity antenna
Wireless protocol: ExpressLRS 3.3.0 pre-installed
Output channel: 4CH PWM
Telemetry power: 100mw
Battery voltage detection range: DC 4.0 - 35V
Weight: 3.0 grams
Dimensions: 30*15*5mm

Firmware:

Device Category: Radiomaster 2.4Ghz
Device: RadioMaster ER4 2400 PWM RX
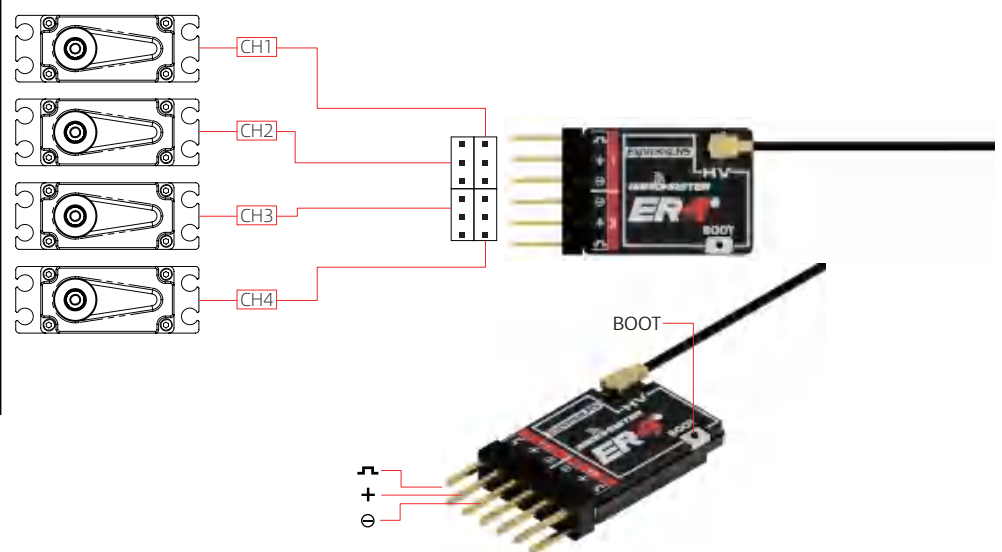
Binding method (Traditional):

1. The first time you power on your receiver, the LED will double blink. This indicates that the receiver is in bind mode. If this is not the case, hold down the boot button for 10 seconds to reset the receiver.
2. Open the ExpressLRS LUA on your remote controller and select [BIND], then confirm.
3. A successful bind is indicated by the light being a steady on, indicating that frequency binding was successful.

⚠ Note: To bind the receiver a second time or to another radio, power cycle the receiver 3 times. On the third power cycle, the LED will double blink indicating bind mode. If you cannot successfully enter bind mode with the 3 power cycle method, you can hold down the boot button for 10 seconds to reset the receiver to bind mode or use the passphrase method below.

WARNING: All previous settings in the receiver will be erased and need to be set again when using the reset button.

Binding method (Passphrase).

1. Open the ExpressLRS LUA and navigate to the Wifi Connectivity page. Select the Enable Wifi option and connect to your radios wifi with a mobile phone, tablet or PC (See TX Wifi notes below). Open the WebUI (Express LRS web page on http://10.0.0.1/) and choose a unique bind phrase. 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 receivers Wifi (See TX Wifi notes below). Open the WebUI (Express LRS 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 :	RX Wifi notes:
WiFi default network name: ExpressLRS TX	WiFi default network name: ExpressLRS RX
WiFi default password: expresslrs	WiFi default password: expresslrs
Default URL: http://10.0.0.1/ (Open in browser)	Default URL: http://10.0.0.1/ (Open in browser)