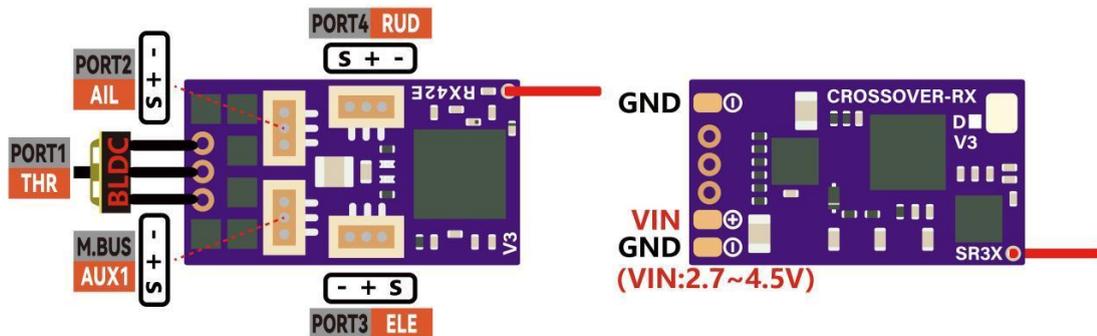# Ma-RX42E-X V3.0 Series RX Manual

Thanks for using CROSSOVER-RX receivers, please read the manual carefully before use!

Ma-RX42E-X V3.0 is an ultra-micro receiver that integrates 5A/1S brushless ESC. Its volume is only 22.5*12.0*6.5mm. The built-in DCDC boost circuit provides excellent low-voltage performance for the receiver. A total of 6 versions are currently available.

Features：

- ✦Ultra-small size: 22.5*12.0*6.5mm (without antenna);
- ✦Ultra-light weight: 1.35g (not including power cord and motor terminals);
- ✦Working voltage: 2.7~4.5V;
- ✦Built-in 4.5V boost circuit;
- ✦Support double aileron servo mode (reverse phase, need to use GUI setting);
- ✦Built-in 5A/1S brushless ESC;
- ✦Excellent low-voltage working performance;
- ✦Auto Binding；
- ✦D, F2, A,H versions support TELEM function;
- ✦1.00mm 3P steering gear interface;
- ✦Support online firmware upgrade;
- ✦Support GUI setting function;

Interface：

Double-Aileron Mode：

Double-aileron mode is developed for those model airplanes using double ailerons. This function can simplify servo wiring connection and transmitter set up. The user can set the M.BUS port on the GUI as the AIL channel of the inverted output, then the double aileron servo mode can be turned on.

Auto Binding：

As it is difficult to reach the binding button when the receiver has been installed inside the plane, we developed self-binding function, it works like this: The receiver will enter binding mode automatically after powered and no signal for 15 seconds (slow flashing LED light turns to fast flashing), then complete the binding operation according to your transmitter binding manual.

TELEM Function (only D, F2, A, H version support)：

TELEM function is useful on monitoring battery voltage, receiver working voltage and its signal strength as well as its working temperature in real time, through which customer can get working state of receiver and battery discharging state under control, so flying out of control range and over discharging will rarely happen (for brushless motor rotation speed or flight height monitoring, customer needs to choose a more advanced receiver)

NOTE: The effective control range of TELEM function depends on transmitter, it is possible that this would happen: the working range of the receiver is far more than TELEM function effective range, it is normal and alright!
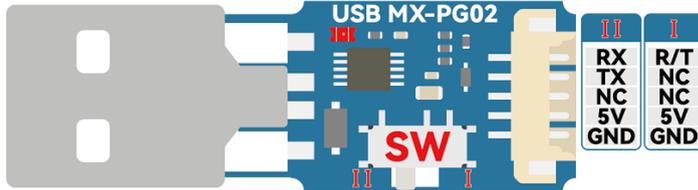
M.BUS Interface：

M.BUS interface is a multi-function interface: 1) FW upgrade/Function setting interface; 2) Output channel signal; 3) Output SBUS signal; 4) Connect other sensors (under development);

How to connect RX to GUI software(Download link：update.crossover-rx.com/mxo.zip)：

The user needs a USB programmer (USB MX-PG02, when used on Ma-RX42E-X V3.0, the switch on the programmer is set to the **I** position) before using the GUI software to configure the receiver function or upgrade the firmware. Connect one end of the USB programmer to the M.BUS port of the receiver, and the other end to the PC. After opening the GUI software, select the correct port, click "Connect", and then the various configurable function modules on the receiver will be loaded and displayed. The current setting information of the machine.

Parameter setting (using CrossOver-RX Tool software):

Please refer to "About RX Function Setting Instructions".

If you need a version with built-in SR3X system (flight stabilization system), please look for Ma-RX42E-X-G V3.0.

Product Versions：

Model	Compatible Protocol	Brushless ESC (5A/1S)	TELEM	SR3X	Note
Ma-RX42E-D V3.0	DSMX/2	✔	✔	✘	
Ma-RX42E-S V3.0	SFHSS	✔	✘	✘	
Ma-RX42E-F1 V3.0	FRSKY-D8	✔	✘	✘	
Ma-RX42E-F2 V3.0	FRSKY-D16	✔	✔	✘	
Ma-RX42E-A V3.0	AFHDS-2A	✔	✔	✘	
Ma-RX42E-H V3.0	HOTT	✔	✔	✘	Developing

If you have any feedback or suggestions, please contact us!
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