

FlameWheel550

User Manual

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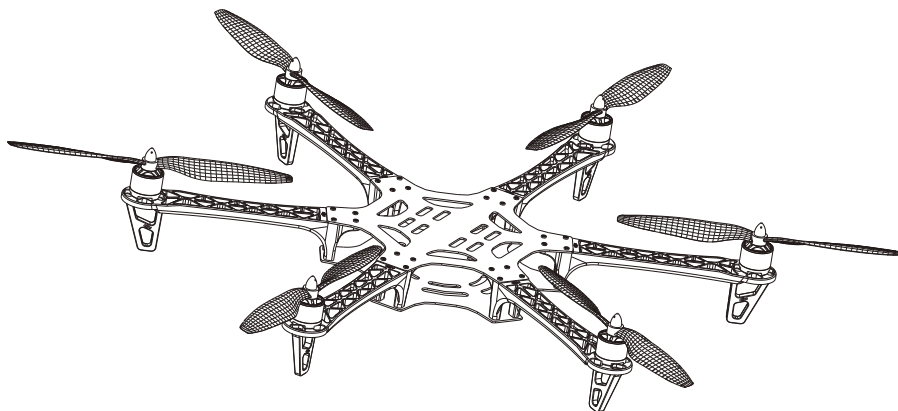
Disclaimer

Read this disclaimer carefully before using FlameWheel550. By using this product, you hereby agree to this disclaimer and signify that you have read them fully. FlameWheel550 is an excellent multi-rotor. With a good autopilot, it will even offer tremendous flight features for low altitude flight working in restricted space. Despite the controller of autopilot operates in the safest manner when the main power battery is connected, we strongly recommend customers to remove all propellers, use power supply from R/C system or flight pack battery, and keep children away during system calibration and parameter setup. Please respect the AMA's National Model Aircraft Safety Code. DJI Innovations assumes no liability for damage(s) or injuries incurred directly or indirectly from the use of this product.

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F550 Profile

FlameWheel550 (F550) is a multi-rotor designed for all pilots for fun or AP. With DJI WKM or NAZA autopilot system, it can achieve hovering, cruising, even rolling and other flight elements. It can be applied for entertainment, aerial photography, FPV and other aero-modeling activities.



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Product Usage Cautions

When flying, the fast rotating propellers of FlameWheel550 will cause serious damage and injury. Therefore, please fly with a high safety consciousness.

1. **Keep flying multi-rotor away from objects, such as obstacles, children, human beings, high-voltage lines and so on.**
2. **Do not get close to or even touch the working motors and propellers, which will cause serious injury.**
3. **Do not over load the multi-rotor.**
4. **Check that the propellers and the motors are installed correctly and firmly before flight.**
5. **Make sure the rotation direction of each propeller is correct**
6. **Check whether all parts of multi-rotor are in good condition before flight. Do not fly with old or broken parts.**
7. **Use DJI parts as much as possible.**

If you have any problem you cannot solve during installation, please contact our customer service.

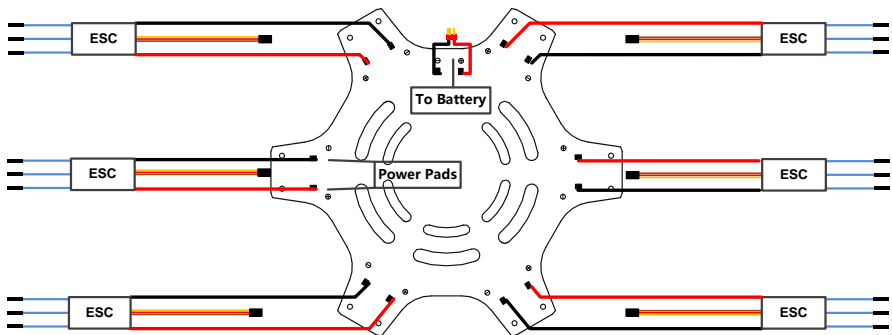
In Box

Top Board 550FBT x1	Bottom Board 550FBB x1
Arms 550FAC x4	550FAW x2
10in Propeller Pairs 550P10 x4	8in Propeller Pairs 550P08 x4
Motors 550MOT x6	ESC 550ESC x6
Screws 550-M3x8 x24	Screws 550-M2.5x6 x36
Magic Strap 550MSX x1, Battery Band 550BBX x1, Power Line Pair 550PLP x1	

Tools Needed

2.0mm Hex Wrench	For frame and motors installation.
Screw Glue	For fastening screws.
Nylon Cable Tie	
Scissors	For binding devices and wires.
Diagonal Cutting Pliers	
Foam Double Sided Adhesive Tape	For fixing receiver, controller and other modules.
Soldering-iron & Wires	For connecting ESCs' power cables to bottom board.

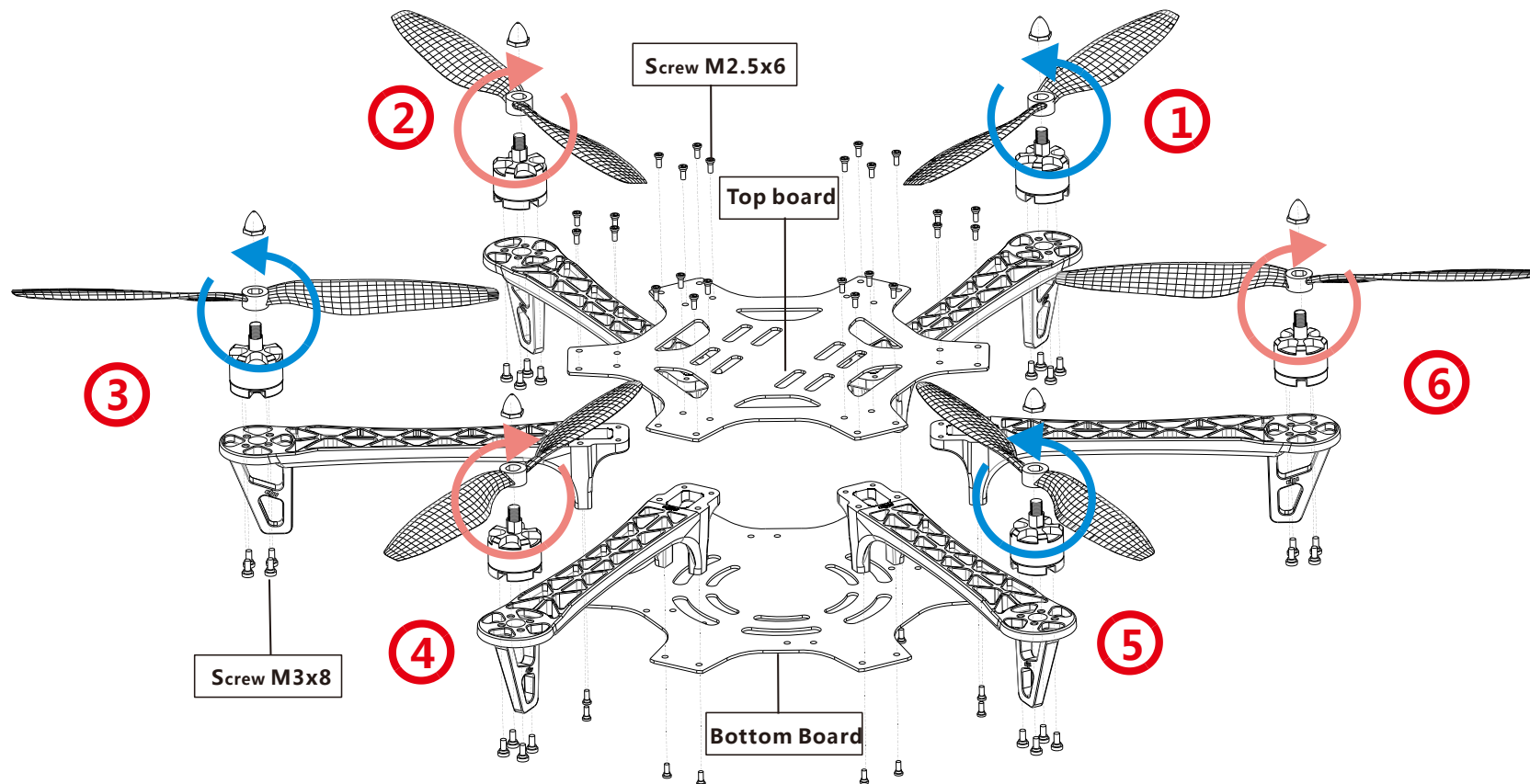
ESC Wiring




Important

- Please solder ESCs to power pads on bottom board as the figure shows.
- Use any insulating method at all soldering spots. Make sure there is no short or open circuit.
- Make sure the side of power pads is upward.
- Make sure the rotation direction of each motor is the same as the way in the figure of “**Assembly**” shows. If not, switch any of two wire connections of the incorrect motor to change its rotation direction.

Assembly



- Install screws by appropriate force to prevent breaking threads.
- Use adequate screw glue for installing screws. 

- Please wire neatly. Make sure wires will not be cut by frame boards and propellers.
- Smooth out the boards edge if necessary.

- Please install propellers after autopilot system configuration procedure.
- Make sure the rotation direction of propellers are the same as the figure shows.
- When mounting the propellers, do not use any thread locker, just tighten the nuts to the end manually then use the wrench to tighten it about 50°.

In up figure, arms ③③ front of craft, arms ②⑤ are back of craft. See from top, motors on arms ①③⑤ rotate counter-clock wise, use propellers 1038; motors on arms ②④⑥ rotate clock wise, use propellers 1038R.

ESC Sound Introduction

ESC State	Sound
Ready	J1234567
Throttle stick is not at bottom	BBBBBB...
Input signal abnormal	B-----B-----B...
Input voltage abnormal	BB---BB---BB---BB...

Tips:

DJI ESCs are specially designed for multi-rotors. When use with DJI autopilot systems, you do not have to setup any parameters or calibrate travel range.

Specifications

Frame	
Diagonal Wheelbase	550mm
Frame Weight	478g
Takeoff Weight	1200g ~ 2400g
ESC	
Current	30A OPTO
Signal Frequency	30Hz ~ 450Hz
Battery	3S ~ 4S LiPo
Motor	
Stator size	22×12mm
KV	920rpm/V
Propeller	10 × 3.8in (@3S); (Optional 8 × 4.5in (@4S))