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S900 ESC Firmware Version :	3.6

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## August 4, 2014 DJI Spreading Wings S900

### S900 Overview

#### 1. Safe and stable

- (1) The S900's V-type mixer design provides large amounts of propulsion while improving power efficiency. Combined with DJI flight controllers like the A2, it is guaranteed to remain stable even with the loss of a rotor.
- (2) A more reliable, safe, and simplified power wiring system is easy to setup, and eliminates the need for soldering. The main power cord uses an AS150 spark-proof plug and an XT150 plug, preventing creators from mixing up polarity when plugging in the battery, and also helping prevent short circuits.
- (3) All frame arms and the retractable landing gear are made from carbon fiber, ensuring light weight and high structural stability.

#### 2. Professional hexacopter

- (1) Weighing approximately 3.3kg with a maximum takeoff weight of about 8.2kg, the S900 can easily carry equipment such as the Zenmuse gimbal systems and a set of shooting equipment. Used with a 6S 15000mAh battery it can fly for up to 18 minutes.
- (2) The gimbal is mounted low on the frame on a specifically designed bracket. When combined with our retractable landing gear, you have very wide range of possible shooting angles.
- (3) The gimbal and battery are mounted to the same bracket, with dampers placed between the bracket and the frame. This significantly reduces high-frequency vibrations and makes shots clearer and sharper. The battery tray's position also makes it more stable and convenient for mounting and dismounting.
- (4) The S900 supports most of the Zenmuse series of gimbals. **(The Z15-5D gimbal is not currently supported by the S900. Please use the S1000 platform when using the Z15-5D.)**

#### 3. Portable and easy to use

- (1) All six arms can be folded down, and the 1552 folding propellers can be tucked away, minimizing the S900's size during transport.
- (2) To fly, simply lift the frame arms up, lock them in place with the red clips, and power up the system. This greatly saves on pre-flight prep time and you can be ready to fly in less than 5 minutes.
- (3) The upper center plate can be removed quickly, making it convenient and efficient to arrange or change the power system, control system, and other accessories.

#### 4. Easy to control and fly

- (1) Each frame arm is designed with an 8° inversion and a 3° inclination, making the aircraft more stable when rolling and pitching, and more flexible when rotating.
- (2) Each frame arm has a built-in 40A electronic speed controller (ESC). When combined with the 4114 pro motor and high performance 1552 folding propellers, the S900 is capable of a maximum thrust of 2.5Kg.

## New Product Specification

<b>Frame</b>	
Diagonal Wheelbase	900mm
Frame Arm Length	358mm
Frame Arm Weight (with Motor, ESC, Propeller )	316g
Center Frame Diameter	272mm
Center Frame Weight (with Landing Gear Mounting Base, Servos)	1185g
Landing Gear Size	460mm(Length)×450mm(Width)×360mm(Height)
<b>Motor</b>	
Stator Size	41×14mm
kV	400rpm/V
Max Power	500W
Weight (with Cooling Fan)	158g
<b>ESC</b>	
Working Current	40A
Working Voltage	6S LiPo
Signal Frequency	30Hz ~ 450Hz
Drive PWM Frequency	8KHz
Weight (with Radiators)	35g
<b>Foldable Propeller (1552/1552R)</b>	
Material	High strength performance engineered plastics
Size	15×5.2 inch
Weight	13g
<b>Flight Parameters</b>	
Takeoff Weight	4.7Kg ~ 8.2Kg
Total Weight	3.3Kg
Power Battery	LiPo (6S, 10000mAh ~ 15000mAh, 15C(Min))
Max Power Consumption	3000W
Hovering Power Consumption	1000W (@6.8Kg Takeoff Weight)
Hovering Time	18min (@12000mAh & 6.8Kg Takeoff Weight)
Working Environment Temperature	-10 °C ~ 40 °C