

## Global Professional RC Model Brand



## **Installation Manual**

OMPHOBBY 59"Challenger ARF Balsa Airplane

## OMPHobby 59" Challenger Balsa Airplane



OMPhobby 59" Challenger is a sport RC model airplane built in the traditional way: balsa and film cover. The airplane features light yet strong structure, low wing load, and abundant power, making the airplane easy to fly and capable of a lot of advanced aerobatics, such as all P3A and a few 3D maneuvers. This airplane performs very well in either low or high speed, with great authenticity and precision in response to radio stick movements, ideal for pilots who graduated from trainer airplanes to the next level of skills.

# OMPHobby 59" Challenger Balsa Airplane



#### Parameter Specification

Item:	59" Challenger	Color:	Red□ Green□
WingSpan:	1500mm(60in)	Full Length:	1220mm(49in)
Flight Weight:	1955-2180g	The Center of Gravity (CG):	Approx.70-75mm
Wing Area:	37.67dm²	Wing Load:	51.89-57.87g/dm²
Wing Angle of Incidence:	2°	Motor Thrust Angles:	Down 4° & Right 2°
Pack Dimension	130*44*22 (L*H*W)cm	Gross Weight:	8KG

Servo: OMPHOBBY Servo> 6Kg.cm\*4: (Aileron\*2, Elevator\*1, Rudder\*1)

**Electric Power (Recommended):** 

Motor: Sunnysky X3520 720KV ESC: 60A-80A Propeller: Eolo 14x8/12x6 Lipo battery:6s 2600-

4200mah

# OMPHobby 59" Challenger Balsa Airplane

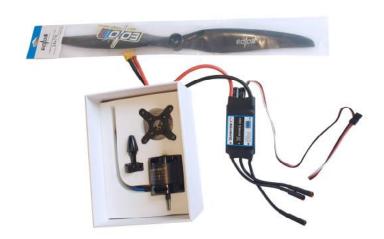
Package contents (ARF version)



Power System (Recommended)

Motor: Sunnysky X3520 720KV ESC: 60A-80A Propeller:

Eolo 14x8/12x6 Lipo battery:6s 2600-4200mah



Installation Video:
https://youtu.be/pPA4U1BBmTo

## **Landing gear Assembly**

### > Landing Gear Installation

1. Attach the axles first with the two belts, then slot the wheels on and use the cap and the bolt on that end.



2. Underneath the fuselage, undo three bolts, then attach the landing gear



## **Horizontal stabilizer Assembly**

1. Take out two bolts, attach the elevator with the two bolts through that, then drill a two mm hole through that, that's where the steerable tail wheel is going to pass through.



## **Horizontal stabilizer Assembly**

2. Slotted the steerable tail wheel through the hole, the top of the steerable tail wheel is going to go into the rudder.



3. Dry fit the rudder, then put the fuselage on its side and drip in just a small number of drops of thin CA glue.



## Wings, Elevator and Rudder serovs Assembly

1. Gluing the control horns into the control surfaces;

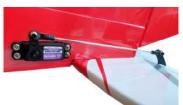


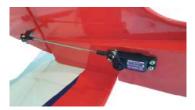
2. After the control horns are fixed, install the servos;



## Wings, Elevator and Rudder servos Assembly

2. Install the elevator servo, rudder servo, wings servo, the rudder servo connected up with the provided push rods and ball links.





### **Power Systems Assembly**

1. Taking the motor and attaching the back plate with the four screws. Take off the four bolts from the front of the fuselage and attach the motor with the three phase wires going downwards.



2. Flip over the fuselage and remove the front plate, this is where the speed controller can go and tie that in place, connect up the phase wires, recommend you put some electrical tape around the phase wires so that there's no danger of them coming disconnected from the wires from the speed controlle, close up the back plate.



## **Power Systems Assembly**

3. Attach the cowl, make sure that it have about two millimeters clearance from the back of the motor, inspect from the side and above to make sure you have the clearance and then attach the spinner and propeller.







4. Attach the back plate of the spinner first, make sure you use the spacer so that it's tight fit on the shaft of the motor.





4. Use the spacer for the propeller as well and slide the propeller onto the shaft and then use the provided washer and nuts to hold the propeller in place, finally attach the front of the spinner.







## OMPHobby 59" Challenger Balsa wood Airplane



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For customer support outside of the USA, please contact OMPHobby in China.
Email: store@omphobby.net
Website: www.omphobby.com

#### **Disclaimer and Safety**

- This product is not a toy. It is not recommended for children under age 14.
- Fly the airplane by abiding by local laws and rules.
- > Fly the airplane in a designated location, and always maintain visual contact of the aircraft.
- Avoid flying directly over unprotected people, moving vehicles, and occupied structures.
- Read the safe code of AMA before flight. The guideline can be downloaded from the foll owing link: www.modelaircraft.org/files/100.pdf