

# Wind S 50E ARF

### ASSEMBLY MANUAL

The new *Wind S 50E ARF* was designed by Italy aerobatic pilot Sebastiano Silvestri, it is the replica of his 2 meter size F3A competition airplane, 4<sup>rd</sup> at the F3A World Championships in Portugal 2009.

This professional ARF kit is the result of Sebastiano's 20 years experience in F3A world and his research in best F3A performances. This innovative design combined with the extremely lightweight structure all wood airframe, give the *Wind S* 50E ARF an impressive precision and smoothness at any airspeed and flight condition.

The *Wind S 50E ARF* will be your F3A practice dream plane!

.....the only aerobatic limit is your fantasy!

### Specifications:

### Recommended Set Up:

Radio: 6-ch with 3 std. servos for ailerons & rudder
+ 2 mini digital servos for elevators
Motor:Hacker A50-16S + Jeti Master Basic 70A
Prop:APC 16x12E or 17x8E
Motor battery:4000-6S or 4500-6S Top Fuel

Wingspan:.	158 cm
Length:	166 cm
Wing Area:	52 dm <sup>2</sup>
Weight:	2.300-2.400 g.
(RT	F less motor battery)

### **Required radio, motor and battery**

Radio equipment:

- Minimum 6-channel radio system
- 5 digital servo: 3 JR DS 9511 or DS 9401 (ailerons and rudder) + 2 JR DS 3201 (elevators)
- 2 servo extensions 900mm, for elevator's servos
- 1 extension 500mm, for rudder servo

### Recommended electric motor for best performance:

- Hacker A50-16S + Jeti Master Basic 70A SBec + APC 16 x 12E or 17x8E
- Battery pack Top Fuel 4000-6S or 4500-6S

### Additional required item, tools and adhesives

Tools:

- Drill
- Drill bits: 1,5mm; 2mm; 2,5mm; 3mm
- Phillips screwdriver
- Hobby knife
- Masking tape
- Paper towels
- Rubbing alcohol
- Sand paper
- Soldering iron
- synthetic oil

### Adhesives:

- 5-minute epoxy
- thin CA
- medium CA

### <u>Warning</u>

This RC aircraft is not a toy!

If misused, it can cause serious bodily harm and damage to property.

Fly only in open areas, preferably in official flying sites, following all instructions included with your radio and motor.

This plane is a compromise between Aerobatics and 3D flying, and not a pylon racer.

It is built with a very light structure and for this reason we hardly recommend:

## $\rightarrow$ <u>Do NOT fly your airplane at high speeds</u>, because this may cause structural failures or flutter due to the extremely large control surfaces.

#### **Before starting assembly**

Before starting the assembly of your Wind S 50E, remove each part from its bag and protection for a prior inspection. Closely inspect the fuselage, wing panels, rudder, and stabilizer for damage. If you find any damage or missing parts, contact the place of purchase.

If you find any wrinkles in the covering, use a heat gun or covering iron to remove them. Use caution while working around areas where the covering material overlap to prevent separating the covers.

### **Warranty information**

SebArt garantees this kit to be free from defects in both material and workmanship at the date of purchase.

This warranty does not cover any parts damage by use or modification, and in no case shall SebArt's liability exceed the original cost of the purchased kit.

Further, SebArt reserve the right to change or modify this warranty without notice.

In that SebArt has no control over the final assembly or material used for the final assembly, no liability shall be assumed or accepted for any damage of the final user-assembled product. By the act of using the product, the user accepts all resulting liability.

If the buyer is not prepared to accept the liability associated with the use of this product, the buyer is advised to return this kit immediately in new and unused condition to the place of purchase.

### **Control throws**

Please, follow the recommended linkage setups:

For the AILERONS we recommend the following throws: *High rate: 40° left & right*  **Normal flight: D/R: 30% Expo: 20% Snap: D/R: 100% Expo: 90% Spin & 3D: D/R: 100% Expo: 90%** 

For the ELEVATOR we recommend the following throws: *High rate: 40° up & down*  **Normal flight: D/R: 30% Expo: 30% Snap: D/R: 40% Expo: 50% Spin & 3D: D/R: 100% Expo: 95%** 

For the RUDDER we recommend the following throws: *High rate: 40° left & right*  **Normal flight: D/R: 40% Expo: 60% Snap: D/R: 50% Expo: 70% Spin & 3D: D/R: 100% Expo: 90%** 

Note: the Expo is (+) for JR systems, and (-) for Futaba systems.

### Mixing

For best performance, we recommend a linear-mix\*:

**Rudder**  $\rightarrow$  **Elevator UP** 

When you give full rudder to the right or left side, the elevator have to go up (positive) approx. 2% **Rudder**  $\rightarrow$  **Ailerons** 

When you give full rudder to right the ailerons need to go left approx. 1% When you give full rudder to left the ailerons need to go right approx. 1%

\* if you have a programmable computer radio.

### **NOTE: Elevator trim**

For a vertical straight downline the elevators need to be trimmed down (negative) approx. 2mm, this is NORMAL !

### **Recommended CG**

The recommended **Center of Gravity** location is **205mm** behind the leading edge of the wing against the fuselage.

- > 200mm is good for windy condition.
- > 210mm is good for no wind condition.

You can use the battery pack, moving it forward or backward, to achieve the correct balance.

### Range test your radio

- ✓ Before fly, be sure to range check your radio as manufacturer's instruction manual of you radio-system recommend.
- ✓ Double-check all controls (aileron, elevator, rudder and throttle) move in the correct direction.
- ✓ Be sure that your batteries are fully charged, as per the instructions included with your batteries and that your radio is fully charged as per its instructions.

... good flights!

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