# SebArt professional line

## Avanti S Jet 2.2m ARF

#### **ASSEMBLY MANUAL**

The all new *Avanti S Jet 2.2m ARF* was designed by Italy aerobatic pilot, Sebastiano Silvestri for the new FAI F3S jet class.

This sport ARF jet-model design is based on Hawk real aircraft design and modifided adding the ultimate aerodynamically ideas of the modernst pattern models and using the 15 years experience in flying jets of Seba.... the result is surprising!

This innovative design combined with the lightweight structure, the full composite fuselage and all wood airframe wings and stabs, give the *Avanti S Jet 2.2m* ARF an impressive precision and smoothness at any airspeed and flight condition. Thanks of his low wingload and equipped with P100 turbine, it can be a fantastic aerobatic trainer jet or equipped with a P180 turbine or more, in expert pilot's hands, it can be a 3D jet monster!

Let you surprise from your new Avanti S Jet 2.2m ARF!

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

#### Specifications: Recommended Set Up:

Wingspan:	200 cm	Turbine:	from P100 to up
Length:	222 cm	Radio:	minimum 9-ch
Weight RTF dry (P100)	):10,5 kg.	Servo: 8 digital	l, metal gear, power servo

#### Required radio, batteries and turbine

#### Radio equipment recommended:

- minimum 9-channel radio system
- digital servo: 5 JR DS 8411 (ailerons, elevators, steering wheel)
  - 3 JR DS 8911 (flaps, rudder)
  - + 2 JR DS 8915 (vectoring thrust OPTIONAL)
- SET servo extensions (**OPTIONAL** available)
- for pneumatic landing gear operation: 1 air dual valve (not included in box)
- or pneumatic wheel brakes operation: 1 air single valve (not included in box)
- Power Box Cockpit + Power Box iGyro + Power Box Smokepump
- For receiver two (2) 2500-2S lipo battery

#### Recommended Turbines:

- for Jet beginners: P100
  - + thrust tube (A200-13 OPTIONAL)
- for FAI F3S aerobatic class: P140 / P160
  - + thrust tube (A200-14 OPTIONAL)
- for 3D unlimited flight: P180 or more
  - + vectoring thrust tube (A200-15 OPTIONAL)

#### Recommended Tank:

• sebart Tank for Kero + UAT + Smoke (A200-16 OPTIONAL)

#### Additional required item, tools and adhesives

- Drill and 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:

- thin CA
- medium CA
- 5 minute epoxy
- 20 minute epoxy
- Silicon adesive

#### **Warning**

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 turbine.

This plane is a compromise between aerobatics jet and 3D jet, it is NOT a pylon racer or speed jet and it is built with a very light structure and for this reason we hardly recommend:

 $\rightarrow$  <u>Do NOT fly your airplane at to high speeds</u>, because this may cause structural failures or flutter due to the extremely large control surfaces. The plane has been tested until 250 km/h, flying the plane over this speed is not recommendable.

#### Before starting assembly

Before starting the assembly, 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 garanteees 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 FLAPS we recommend the following throws:

Normal & pattern flight:  $0^{\circ}$  (full UP)

**Start:** 20° down (mix elevator down 8%)

**Landing:** 50° down (mix elevator down 20%)

□ For the AILERONS we recommend the following throws:

High rate left & right: 30°up, 25° down (differential)

Normal & pattern flight: D/R: 50% Expo: 20%

**Start & landing: D/R:** 100% **Expo:** 60%

**3D flight: D/R:** 100% Expo: 40%

□ For the ELEVATOR we recommend the following throws:

High rate: 30° up & down

Normal & pattern flight: D/R: 50% Expo: 40%

**Start & landing: D/R:** 100% **Expo:** 80%

**3D flight: D/R:** 100% **Expo:** 60%

□ For the RUDDER we recommend the following throws:

High rate:  $30^{\circ}$  left & right

Normal & pattern flight: D/R: 80% Expo: 60%

**Start & landing: D/R:** 100% **Expo:** 80%

**3D flight: D/R:** 100% **Expo:** 60%

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

#### **Mixing**

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

#### Rudder $\rightarrow \Box$ Elevator DOWN

When you give full rudder to right or left side, the elevator have to go down (negative) 1%

\* if you have a programmable computer radio.

#### **Recommended CG**

The recommended Center of Gravity location is 250mm behind the leading edge of the wing against the fuselage.

- > 240mm is good for Jet beginners.
- ➤ **260mm** is good for unlimited 3D aerobatic.

You can use the turbine 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 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.

### Finally... have nice flights!

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