

ARES

Fokker D.VII

Owner's Manual &
Technical Information (PTF)



Fokker D.VII

Specification

Wingspan: 398mm (15.63")

Wing chord: 72mm (2.87")

Wing area: 432sq.cm

Length: 305mm (12")

Flying weight: 29g (1oz)

Battery: 1S 70mAh LiPo

Motor: Brushed geared

Propeller: 4.7 x 2.75"

3-in-1 control unit: Hitec Red receiver; two servos; ESC

No. of channels: 3 (rudder, elevator, throttle)

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IMPORTANT! This radio control model is not a toy. It must be operated and flown according to these instructions and may cause serious injury to persons or damage to property if not used responsibly or if operated without due caution. Unsuitable for children under 14 years of age.

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Introduction

With sensitive controls and the ability to remain fully aerobatic at up to 15,000 feet, the World War I-era Fokker D.VII was so light and maneuverable that it became the first aircraft to land on a moving ship in 1917. Nearly 1,800 Fokker D.VIIs were built by Fokker D.VII and its sub-contractors between the years 1916 and 1917 when it was at the peak of its operational development.

The Ares [air-eez] Fokker D.VII is a lightweight, three-channel ultra-micro semi-scale model of the original. It features durable foam construction and numerous scale touches such as molded wing rib detail, an authentic trim scheme, plus a wood texture and color propeller and interplane struts. Technically advanced the Fokker D.VII incorporates a Hitec Red 2.4GHz receiver that's compatible with all current Hitec 2.4GHz aircraft transmitters. For convenience, two versions of this model are available both supplied with Hitec Red protocol: choose either Ready-To-Fly (including a Hitec Red-enabled transmitter and receiver) or Pair-To-Fly (supplied with a Hitec Red receiver that's compatible with your existing Hitec air transmitter). Weighing less than an ounce, the Fokker D.VII is ideal for indoor flight or outdoor flight in calm conditions.

- 100% ready to fly, straight out of the box
- Semi-scale appearance with molded wing rib detail
- The model's micro size and light weight make it ideal for indoor spaces
- Fully proportional throttle, elevator and rudder control for exceptional maneuverability
- The lightweight 1S LiPo flight battery attaches with magnets
- Slow flying characteristics mean the Fokker D.VII is ideal for the less experienced pilot
- Intermediate and expert pilots will enjoy the Fokker D.VII's exciting performance

Contents

1 x 100% factory assembled Fokker D.VII.

1 x 70mAh 3.7V 1S LiPo battery.



Required To Complete

4 x AA alkaline cells

1 x 4-channel Hitec Red-enabled transmitter.

FCC Information

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This product contains a radio transmitter with wireless technology which has been tested and found to be compliant with the applicable regulations governing a radio transmitter in the 2.400GHz to 2.4835GHz frequency range.

The associated regulatory agencies of the following countries recognize the noted certifications for this product as authorized for sale and use: USA

Safety Precautions

Failure to use this product in the intended manner as described in the following instructions can result in damage and / or personal injury. A Radio Controlled (RC) airplane is not a toy! If misused it can cause serious bodily harm and damage to property.

Keep items that could become entangled in the propeller away from the propeller, including loose clothing, tools, etc. Be especially sure to keep your hands, face and other parts of your body away from the propeller.

As the user of this product you are solely and wholly responsible for operating it in a manner that does not endanger yourself and others or result in damage to the product or the property of others.

This model is controlled by a radio signal that is subject to possible interference from a variety of sources outside your control. This interference can cause momentary loss of control so it's advisable to always keep a safe distance from objects and people in all directions around your model as this will help to avoid collisions and / or injury.

- Never operate your model if the voltage of the batteries in the transmitter is too low.
- Always operate your model in an open area away from obstacles, people, vehicles, buildings, etc.
- Carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable batteries, etc.).

- Keep all chemicals, small parts and all electronic components out of the reach of children.
- Moisture causes damage to electronic components. Avoid water exposure to all electronic components, parts, etc. that are not specifically designed and protected for use in water.
- Never lick or place any portion of your model in your mouth as it could cause serious injury.

LiPo Battery Warning

IMPORTANT NOTE: Lithium Polymer batteries are significantly more volatile than the alkaline, NiCd or NiMH batteries also used in RC applications. All instructions and warnings must be followed exactly to prevent property damage and / or personal injury as the mishandling of LiPo batteries can result in fire. By handling, charging or using the included LiPo battery you assume all risks associated with LiPo batteries. If you do not agree with these conditions please return the complete product in new, unused condition to the place of purchase immediately.

- You **MUST** charge the LiPo battery in a safe area away from flammable materials.
- **NEVER**, at any time, leave the LiPo battery unattended when it's being charged.
- When charging the battery you should **ALWAYS** remain in constant observation to monitor the charging process and react immediately to any potential problems that may occur.
- After flying / discharging the battery you must allow it to cool to ambient/ room temperature before recharging.
- To charge the LiPo battery you **MUST** use only the included charger in the transmitter. Failure to do so may result in a fire causing property damage and/or personal injury. **DO NOT** use a NiCd or NiMH charger.

If at any time during the charge or discharge process the battery begins to balloon or swell, discontinue charging or discharging immediately. Quickly and safely disconnect the battery, then place it in a safe, open area away from flammable materials to observe for at least 15 minutes. Continuing to charge or discharge a battery that has begun to balloon or swell can result in a fire. A battery that has ballooned or swollen, even a small amount, must be removed from service completely.

For best results, store the battery at room temperature – approximately 68 – 77° Fahrenheit (F) – and in a dry area.

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Preparing for Flight

1. Charging the flight battery. You must charge the included 70mAh 1-cell/1S 3.7V 15C LiPo battery (AZSB1803) using the USB battery charger (AZSC104USBC) supplied, or by using a suitably compatible LiPo battery charger. Charging the LiPo battery using an incompatible LiPo battery charger (such as a NiCd or NiMH battery charger), or even a different LiPo battery charger with the incorrect settings, may result in damage to the battery or even fire, resulting in property damage and/or personal injury.

Please follow these steps to charge the LiPo flight battery with the supplied 104C USB charger:

- Connect the 104C charger to a suitable 5V USB connection/port on a computer or other device. An alternative is to plug the optional 100 – 240V AC to 5V DC USB, 0.5-amp Power Supply/AC adapter (AZSC5005PS) into a compatible 100 – 240V AC outlet, then connect the 104C charger to the power supply/AC adapter. The power supply/AC adapter is powered ON when the LED indicator glows solid green.



- When the 104C charger is connected to a power source the LED indicator will blink/flash red. Attach the battery to the connector at the end of the charge lead extending from the transmitter. **YOU MUST BE CAREFUL TO ENSURE PROPER POLARITY BEFORE MAKING THE CONNECTION** by aligning the small red circle marking on the housing of the battery with the small red circle marking on the charge lead connector.



- While these ultra-micro connectors are keyed to minimize the risk of a reverse polarity connection, if you force them it is possible to make connection with the incorrect polarity, potentially causing damage to the battery and / or charger (transmitter). When the red circle markings are properly aligned for correct polarity joining the connectors should require only a minimal amount of pressure to achieve the light 'click' that

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indicates a secure connection.

- When the battery is connected to the charge lead securely, and with the proper polarity, the LED indicator on the charger will glow solid bright red. The battery will be charging anytime the LED indicator is glowing solid bright red.
- It will take approximately 30 -- 50 minutes to charge a mostly or fully discharged (not over-discharged) battery. When the battery is fully charged the LED indicator will dim significantly. When the LED indicator is dim you can disconnect the battery from the charger's connector / wire lead as it is now fully charged and ready for use.

NOTE: The LiPo battery included with each new model will arrive partially charged. For this reason the initial charge may only take 15 - 25 minutes. When the LED indicator is blinking / flashing red, the 104C charger is powered ON and ready to begin charging the next LiPo battery that's connected to it.

2. Pair your chosen Hitec air transmitter to the Fokker D.VII's 3-in-1 control unit. Start by following the pair / binding instructions supplied with your Hitec air transmitter making sure to select the Minima receiver option when prompted.



Having put your transmitter into pair / bind mode, pull the throttle stick back to its lowest position. Install the fully charged 70mAh LiPo battery in your Fokker D.VII by plugging the ultra-micro connector on the battery to the lead extending from the bottom of the aircraft. Make sure, once again, to match the red dots on the connectors to assure correct polarity. The battery attaches to the airplane with a magnet. So, simply place the battery in position with the plug end facing the tail. Slide the front of the battery into the notch to ensure that the airplane's Centre of Gravity is correct.



Pairing will commence as soon as the battery is connected.

Your Fokker D.VII Fokker D.VII is equipped with a compact and advanced 3-in-1 control unit. This control unit is a lightweight combination of a 2.4GHz receiver, two servos, and an electronic speed control (ESC). When the transmitter finds this unit and pairs with it, the unit will instruct the elevator and rudder control surfaces to move to indicate that the pairing process is complete and that the motor is now armed. When this happens, follow your transmitter's instruction manual for guidance on exiting the pairing process.

Having paired your transmitter the Fokker D.VII's 3-in-1 control unit will now recognise the Globally Unique Identifier (GUID) code of your transmitter and will automatically pair with it whenever you switch on and connect the flight battery.

Note: If you have servo movement but the motor is not working, unplug the flight battery, check that the throttle stick is at its lowest position, then re-plug in the flight battery. This should re-initialize and arm the electronic speed control.

3. Flight controls. Check the control surfaces, as below. Use the servo reversing instructions supplied with your Hitec transmitter if necessary should any control require reversing. Note, also, that on this 3-channel airplane the rudder function is controlled by the aileron stick on the transmitter. The pushrod for the elevator should be in the outermost hole on the control horn while the rudder pushrod should be in the hole before the outermost hole.

With the model in front of you, facing away, move the rudder stick to the right and check that the rudder moves right in response. Left rudder stick will move the rudder to the left.



Pull the elevator stick back and check that the elevator moves in an upward direction. Push the elevator stick forward and check that the elevator moves in a downward direction.



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With the propeller clear of obstructions and the model restrained, open the throttle slowly and check that it turns in an anticlockwise direction, when viewed from the front.



Check to see that the elevator and rudder are centered when the transmitter is on and the airplane is powered up. Adjust as necessary with the digital trim buttons adjacent to the control stick. For example, if the elevator is raised above neutral, push the upper elevator trim button several times until the surface is centered.



Your Fokker D.VII Fokker D.VII is now ready to fly. Choose a flat-calm day for the first flight or use a suitable indoor venue (a sports hall is ideal) that's free of obstructions.

Flying

The Fokker D.VII is designed primarily as an indoor model suitable for flying in a space at least the size of a basketball court. The airplane can, of course, be flown outside when there is little to no wind. Early morning Dawn Patrols and sorties flown near dusk are best.

Due to its light weight the Fokker D.VII flies easily and, as such, it is not necessary to fly at full throttle. Its light weight also keeps the model from incurring much damage in a crash. The airplane will fly at $\frac{1}{2}$ throttle and below and at these settings flights of seven or more minutes are common.

Initial flights can be made by rising off the ground or by hand launch however before your first flight double check that the flying surfaces are in neutral when the airplane is powered up and the transmitter is on. If not, trim them as described above. Once trimmed you are ready for flight. Smoothly advance the throttle to about $\frac{1}{2}$ to $\frac{3}{4}$ and the model will roll a few feet and take off without the addition of any elevator.

The Fokker D.VII is a very responsive airplane, so you need use only small movements of the control sticks. If additional trim is necessary for level flight, make those adjustments now. With a little practice you will be flying smoothly in no time. Remember, the Fokker D.VII flies best with minimal interference from the pilot and tiny control movements only when necessary.

Landings are best performed by reducing the power to a level where the airplane is descending, whereupon touch-down can be made by gently increasing the power a little.

We're sure you'll love your Fokker D.VII and hope you have many enjoyable flights.



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Propeller Replacement

Should the propeller need replacing, you will need to hold the prop shaft with a pair of needle nose pliers while you screw the propeller on in a clockwise direction. Screw the prop onto the shaft until the shaft is flush with the front of the propeller hub. The propeller should rotate without touching the cowl.



Replacement Parts

- AZSB180370mAh 1-cell/1S 3.7V 10C LiPo with ultra-micro connector
- AZSA1806.....Hitec Red 3-Ch, 3-in-1 Control Unit ; Rx/2 Servo/ESC
- AZSA1811.....Gearbox with Shaft
- AZSA1813.....Wing Set with Decals
- AZSA1814.....Tail Set with Decals
- AZSA1815.....Fuselage with Decals
- AZSA1816.....Main Landing Gear Set
- AZSA1817Pushrod Set
- AZSA1818.....Wing Strut Set
- AZSA1819.....Decal Set (Fokker DVII)
- AZSA1838M1Micro 4-channel airplane Tx with 100mA charger (Mode 1)
- AZSA1838.....Micro 4-channel airplane Tx with 100mA charger (Mode 2)
- AZS1107Replacement rotary servo mechanics

Warranty, support and service

30-Day Limited Warranty Term Period:

We warrant that the Product(s) purchased (the 'Product') will be free from defects in materials and workmanship when the product is new (before being used) for the limited warranty term period, 30 days, from the date of purchase by the Purchaser.

If you believe a defect in material, workmanship, etc. was not apparent when the Product was new and only became evident after the Product was used, take the following steps:

If you purchased the Product at a HobbyTown store, please contact your local HobbyTown store for warranty support and/or service.

If you purchased the Product from the Firelands website, use the contact information found under the Support heading to contact Firelands directly.

If you contact Firelands, you may be asked to send the product to Firelands, at your cost, for inspection. Provided the warranty conditions have been met within the warranty term period, the components that are found to be defective, incorrectly manufactured or assembled may be repaired or replaced, at the sole discretion of Firelands. Your warranty item will be returned to you at Firelands' expense. In the event your product needs repair or a replacement part that is not covered by this warranty, your local HobbyTown store or Firelands can assist you with support and in obtaining the genuine replacement parts to repair your Product. Firelands will charge \$40.00 per hour plus the cost of replacement parts to service your vehicle if after contacting you, you so authorize such repairs. Your product will be returned to you at your expense.

If you purchased your Product from a HobbyTown Internet site not affiliated with a local store, please consult that site for its support and service policies. You can also find more information at:

www.Hobbytown.com

by emailing customerservice@firelandsgroup.com

or by calling 800-205-6773

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