

ARES

Alara

**Owner's Manual &
Technical Information (RTF)**



Specification

Wingspan: 54in. (1380mm)

Wing Chord: 7.9in. (200mm)

Wing area: 512sq.in (3,361sq.cm)

Fuselage length: 36in. (920mm)

All-up weight: 24oz (620g)

Battery: 3S 11.1V 1500mAh LiPo

Motor: 4200kV brushless

ESC: 20A brushless

Propeller: 6-blade

Contents

| | |
|-----------------------------------------|----|
| Introduction | 4 |
| Safety precautions | 4 |
| FCC information..... | 5 |
| LiPo battery warnings | 5 |
| Contents | 6 |
| Required to complete..... | 7 |
| Transmitter details | 7 |
| Transmitter functionality..... | 8 |
| Charging the supplied LiPo battery..... | 9 |
| Final assembly | 10 |
| Flying your Alara | 15 |
| Transmitter pairing..... | 16 |
| Replacement parts | 17 |
| Warranty, support and service UK | 18 |

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.

Introduction

Thank you for purchasing the Ares Alara. As an aspiring R/C pilot, you need an airplane that checks off a number of crucial boxes. You need it to be easy to fly and forgiving of basic errors. You'll want it to be tough, able to withstand some punishment, and you'll demand solid everyday reliability. In addition, a good flight duration, speedy assembly, convenient transport and easy storage will be high on your list. To coin a phrase, a 'beginner friendly' airplane is what you're looking for, and the Ares Alara is the perfect choice.

Supplied 100% factory-assembled, the Alara's advanced EPO airframe is both strong and light, while the rear-mounted motor protects the power system from inevitable heavy landings. Offering superb low-speed handling characteristics and a benign stall, this is an airplane that's been designed to look after you, give you time to react, and learn at a comfortable pace.

Technically advanced, the Alara incorporates a Hitec Red 2.4GHz radio system that's compatible with all current 2.4GHz Hitec aircraft transmitters. Moreover, to suit your needs, two convenient versions of the model are available, both incorporating 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 transmitter). Every Alara comes with a powerful factory-installed motor and ESC, a quiet and efficient 6-blade propeller, quality servos, a 1500mAh 3S Li-Po battery, plus a DC balancing charger and AC adapter.

So, for first-time flyers looking to get started, the Alara is the perfect choice. Sport flyers, meanwhile, will appreciate its gentle, glider-like characteristics and basic aerobatic ability.

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, UK, AU and EU

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.

LiPo Battery Warnings

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. 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.

Contents

- 1x Alara RTF airframe, comprising fuselage assembly, wing panels (left and right), horizontal stabiliser, fin and carbon spar.
- 1x 4-channel Hitec Red enabled transmitter.
- 1x 3S 11.1V 1500mAh LiPo battery.
- 1x 12V DC 3S LiPo charger.
- 1x AC power adapter.
- 1x Hardware pack/screw pack.
- 1x 6-blade propeller and adapter.
- 1x Quick-start guide.



Required To Complete

- 4 x AA alkaline cells for the transmitter



Transmitter Details (Mode 2)



Transmitter Functionality

- 1. Digital trims:** Your Alara 4-channel transmitter has digital trims on all four primary controls – aileron; elevator; rudder; throttle. Each movement of the trim button is audibly highlighted by a single beep, whilst trim center is highlighted by two beeps.



- 2. Servo reverse:** The rotation direction of the servos can be individually reversed in the following manner:
 - Aileron – Push and hold the aileron trim button to the right while switching ON the transmitter. Two beeps will immediately be heard indicating that the travel direction of the aileron servo has been reversed.
 - Elevator – Push and hold the elevator trim button forward while switching ON the transmitter. Two beeps will immediately be heard indicating that the travel direction of the elevator servo has been reversed.
 - Rudder – Push and hold the rudder trim button to the right while switching ON the transmitter. Two beeps will immediately be heard indicating that the travel direction of the rudder servo has been reversed.
 - Throttle – Push and hold the throttle trim button forward while switching ON the transmitter. Two beeps will immediately be heard indicating that the travel direction of the throttle servo has been reversed.
- 3. Dual rates:** The rate function is a great beginner feature that's used to decrease the sensitivity of the aileron and elevator control surfaces by reducing servo movement. The reduced rate setting can be switched on or off using the two position aileron and elevator dual rate switches.



- Dual rate switch in the UP position = full rate and full servo movement
- Dual rate switch in the DOWN position = reduced rate / reduced servo movement

To adjust the rates insert a small flat-bladed screwdriver into the appropriate dual rate hole (on the fascia of the transmitter) to engage with the underlying potentiometer. Twist counterclockwise to reduce the rate and clockwise to increase the rate.

Charge The Supplied Lipo Battery

Read and fully understand the section headed LI-PO BATTERY WARNINGS and never leave Li-Po batteries unattended whilst charging.

- Plug the mains power adaptor into a wall socket and connect the charger to the power adaptor using the circular DC socket. Note that the green LED 'Power' indicator on the charger will light.



- Place the charger on a flat, heat resistant surface (not carpet) with a good airflow all around. Ensure the vent openings on the bottom and sides of the charger are not blocked. Connect the supplied 3S 1500mAh Li-Po battery to the charger using the white three pin balance plug, ensuring the correct orientation of the plug. The red 'Charger' LED will light indicating that the battery is charging. When fully charged the red LED will stop glowing, whereupon the battery can be disconnected.



NOTE: It will take approximately 1 to 1.5 hours to fully charge a mostly discharged 1500mAh Alara flight battery.

Airframe Assembly

1. Slot the fin and stabilizer together.



2. Position the fin and stabilizer assembly in its molded recess at the tail end of the fuselage.



3. Insert the two M3 x 40mm machine screws from the underside and tighten until the tail assembly is securely fixed.



4. Slide the carbon spar into the right-hand wing panel and push to the end stop.



5. Offer the right-hand wing panel to the fuselage, plug the aileron servo lead into its female fuselage socket and ensure the lead-lock catch is engaged. Push the wing panel home.



6. Slide the left-hand wing panel onto the carbon spar. Connect the servo lead as before and push the panel firmly home.



7. Insert one M3 x 10mm machine screw in the underside of each wing panel and tighten to securely clamp the spar. Take care not to over-tighten the screws.



8. Remove the fuselage canopy hatch, slide the LiPo into the front section of the fuselage and secure it to the battery mounting platform using the hook and loop tape supplied.



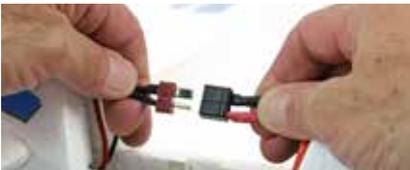
9. Remove the transmitter battery cover and insert four AA alkaline cells taking care to observe the correct polarity.



10. Switch ON your transmitter and ensure the LED is lit solid red. Keep the throttle stick at its low position. **IMPORTANT:** Do not adjust the digital trims while switching on the transmitter as these are used in the servo reversing procedure (see Transmitter Functionality).



11. CHECK THAT THE PROPELLER IS REMOVED then connect the battery to the Electronic Speed Controller (ESC). A series of 3 audible beeps will be heard indicating that the ESC is armed and operational. Stow the leads within the fuselage and replace the canopy hatch. In the unlikely event that the servos do not operate, see the section entitled Transmitter Pairing (page 16).



12. Center the transmitter controls using the digital trims then connect the elevator and rudder clevises to the outer hole of each control horn noting that you may have to screw the clevis in or out to ensure that the control surface remains in the neutral position.



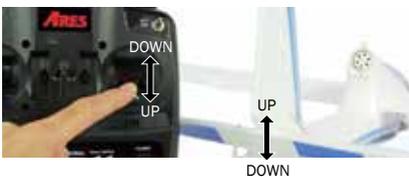
13. Now connect the aileron clevises to the outer hole of each control horn and note, again, that you may have to screw the clevis in or out to ensure that the control surface remains in the neutral position.



14. Ensure that the control surfaces operate in the right direction. With the model in front of you, facing away, move the rudder stick to the left and check that the rudder moves left in response. Right rudder stick will move the rudder to the right. In the unlikely event that the rudder responds in the opposite direction, use the servo reverse function to alter the direction of travel.



15. 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. In the unlikely event that the elevator responds in the opposite direction, use the servo reverse function to alter the direction of travel.



16. Moving the aileron stick to the right should cause the right-hand aileron to move in an upward direction whilst the left-hand aileron moves downward. Moving the aileron stick to the left will have the opposite effect. In the unlikely event that the ailerons respond in the opposite direction, use the servo reverse function to alter the direction of travel.



17. Open the throttle slowly and check that the motor shaft turns in a clockwise direction (when viewed from the rear).



18. Remove the canopy, unplug the Li-Po battery and switch OFF the transmitter. Slide the propeller over the motor shaft, position the Allen screw directly above the flat section of the shaft and securely tighten it.



19. Check that your Alara sits level when balanced on either side of the fuselage at a point 65 – 70mm back from the leading edge. Adjust the position of the battery to ensure that the balance point is achieved.



20. With the throttle stick in the low position, switch ON the transmitter once more and connect the battery to the ESC whilst keep well clear of the live propeller. Refit the canopy and check once more that the control surfaces move in the correct manner. Your Alara is now ready to fly.



Flying Your Alara

Where model flying is concerned, it's not possible to have too much space! So, we recommend flying your Alara in a large enough area to ensure that control is relaxed and that you have time to think. The area required will be free of obstructions and at least the size of a ball field. We suggest that early flights be carried out when the wind conditions are light, however once you're familiar with your Alara you will easily be able to fly in less favorable conditions. If you're new to model flying we strongly recommend that the services of an experienced model pilot be employed to assist with your first flight.

Existing RC pilots will be able to solo launch the Alara to get it airborne. Novice pilots, however, should employ the services of a second person and note the following:

- Always launch your Alara **DIRECTLY INTO WIND**
- Smoothly **APPLY FULL POWER** immediately before launching
- Always launch the model with the **WINGS STRAIGHT AND LEVEL**
- Launch the model with the **NOSE POINTING SLIGHTLY UPWARD**, never downward
- Make your launch positive and **GIVE THE MODEL FLYING SPEED**

With the Alara airborne, ease the elevator stick back to smoothly climb out and when good altitude has been achieved initiate a gentle aileron turn whilst continuing to climb. At cruising height you can reduce the throttle and perform some relaxed familiarisation circuits whilst keeping the model well within visual range.

Landing can be intimidating for novice pilots, however given that the Alara has no undercarriage to bend and a high mounted pusher propeller that's well clear of the ground, it's perfectly able to look after you. Even so, make sure your turn onto final approach positions the nose of the airplane directly into wind, ease the power back to reduce altitude and keep the wings straight and level all the way down. As the ground approaches, a final application of elevator to flair will ensure a gentle touchdown and the culmination of a perfect flight.

The Alara offers beautifully smooth flying characteristics that suit pilots of all abilities. What's more, with its gentle performance it would make a superb FPV platform. We're sure you'll thoroughly enjoy learning to fly your Alara and will reach for it even when you're confidence peaks.



Transmitter Pairing

In the unlikely event that your Alara's radio does not operate straight out of the box (i.e. the transmitter is not paired with the receiver), use this guide to rectify the problem. Once a receiver has been paired to the transmitter, it should not be necessary to complete this procedure again as the ID code is stored in the receiver.

1. If already fitted, REMOVE THE ALARA'S PROPELLER. Place the transmitter and receiver within 1m of each other. Hold down the the transmitter's PAIR button, then switch ON the transmitter. The red LED (power) indicator will light solid whilst the green LED will flash slowly.



2. Power the receiver ON noting that the LED will initially flash red / blue, then change to fast flashing red. For initial pairing the receiver must be powered on within 5 seconds of the transmitter. Once paired this time constraint is no longer necessary.



3. Pairing will be complete when the receiver's fast-flashing red LED turns solid red. You should now have full control of your Alara. Reboot the system by switching the receiver OFF then the transmitter, and switching back on again, transmitter first.



4. Refit the Alara's propeller.



Replacement Parts

| | |
|-----------------|-----------------------------------------------|
| AZSA1707T | 9g tail servo (150mm wire) |
| AZSA1707W | 9g Wing Servo (400mm wire) |
| AZSA1708 | 4-channel transmitter with Hitec Red protocol |
| AZSA1710 | 18A brushless ESC with BEC |
| AZSA1712 | Servo covers (pair) |
| AZSA1713 | Wing set with decals |
| AZSA1714 | Horizontal and vertical tail with decals |
| AZSA1715 | Fuselage set with decals |
| AZSA1716 | Aluminum prop adapter |
| AZSA1718 | Canopy |
| AZSA1719 | Pushrod set |
| AZSA1724 | Decal set |
| AZSA1728 | Motor holder set |
| AZSA1729 | Brushless outrunner motor 2630-1050kV |
| AZSA1731 | 1500mAh 3S 11.1V 20C LiPo battery |
| AZSAP5570 | 6-blade 5.5 x 7" propeller |
| KNNA0004 | KA-6 Receiver |

Warranty, support and service (UK)

This product is covered by the current statutory guarantee regulations. If you wish to make a warranty claim, please contact the model shop where you originally purchased the product from. You should also present your proof of purchase.

- The guarantee does not cover faults or damage caused by:
- Incorrect handling or operation
- The use of incompatible accessories
- Modification or unauthorised repairs
- Accidental or deliberate damage
- Normal wear and tear
- Using the product outside of its stated specification

Firelands Group LLC accepts no liability for loss, damage or costs which are incurred due to the incorrect or incompetent use of the product.

CE Conformity Declaration

This device has been tested in accordance with the relevant harmonised European directives. This product's design fulfils the protective aims of the European Community relating to the safe operation of this equipment.

For a copy of the Declaration of Conformity, please visit:
www.ikonnik-rc.com/support



Disposal

Electrical equipment marked with the crossed out wheellie bin symbol must not be disposed of in household waste, but must be taken to a specialist disposal or recycling system. In EU member countries, electrical equipment must not be discarded via the normal domestic refuse channels (WEEE - Waste Electrical and Electronic Equipment Directive 2002/96/EG). You should take unwanted electrical equipment to your nearest local authority waste collection point or recycling centre.

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