

Pietenpol

Air Camper



Specs:

Wingspan: 1370mm

Length: 860mm

Weight: 1600g



Thank you for purchasing your HobbyKing Pietenpol Aircamper. We hope you enjoy assembling and flying it as we did creating it. This sport scale model was created in the true spirit of Bernie Pietenpol, easy to build, and fun to fly.

Like the full size Aircamper, the airframe is all wood, this time balsa and plywood, with an epoxy fiberglass cowl, aluminum wing mount struts, and wire landing gear. The large wing area, and light weight makes the Pietenpol Aircamper perfect for those lazy days at the field, flying low and slow.

HobbyKing aircraft follow an extensive design, development, and testing process to bring reliable and user friendly products to the masses. They undergo extensive quality control checks at the factory.

Please read this instruction manual thoroughly before assembling and flying this model. It is not a toy and if mistreated has the potential to inflict bodily injury or damage property. It is your responsibility to complete final assembly, setup, and routine pre-flight checks. Always make sure to check for any loose screws or parts, and that the airframe is free from damage that may cause failure in flight. HobbyKing is not responsible for any injury or property damage inflicted due to negligence in assembly or maintenance.

Warnings

- Select your flying area carefully. Always choose an open space that is unobstructed from trees, buildings, and away from crowded areas. Avoid flying in areas with roads, electric or telephone wires, or close proximity to full size air traffic.
- Do not fly this model in poor weather including high winds, low visibility, rain, or thunderstorms.
- Never attempt to catch this model whilst in flight. Even a slow moving model can cause harm to yourself or others.
- This model is recommended for children no younger than 14 years old. All children should always be supervised by a capable and responsible adult when operating this model.
- Always unplug your model battery when not in use. Do not leave the battery installed in the model when not in use.
- Remain clear from the propeller at all times when the flight battery is connected. A spinning propeller can cause bodily injury.
- Before flying always turn ON your transmitter first, then connect your flight battery to the model.
- After flying, always disconnect your flight battery first, then turn OFF your transmitter.
- Always exercise caution when charging batteries. Follow the recommended charging instructions from your battery manufacturer, and use a charger with charging parameters that match your battery type.

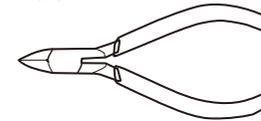
Tools Required



Ruler



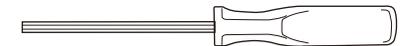
Clear Tape



Phillips Screwdriver



Hobby Knife



Hex Driver 1.5mm 2.5mm



Drill Bit - 2mm



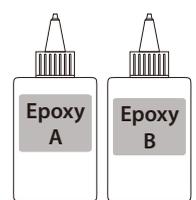
Pliers



Thread Lock

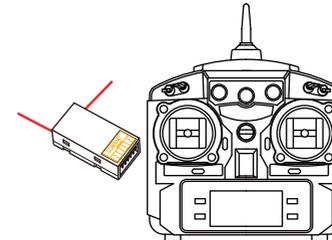


Thin/Thick CA

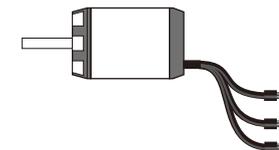


5 Min Epoxy

Required Items



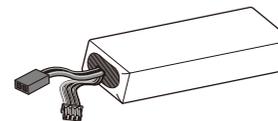
4+ Channel Transmitter + Receiver



3648 850kv Motor



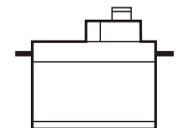
LiPo Charger



3S 11.1V 3000mAh LiPo



40Amp Brushless ESC



2* 9g Servos
2* 17g Servos



12x6 Propeller



2* 500mm Servo Extensions

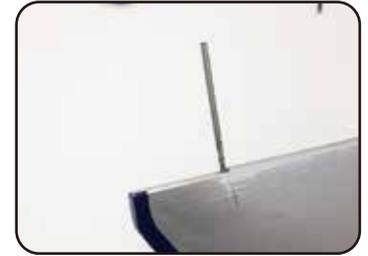
Contents



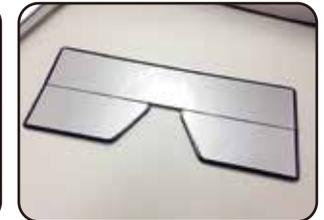
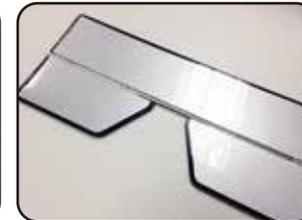
Airframe Assembly



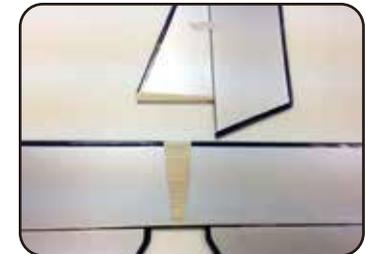
1) Assembly starts with installing the elevator joiner wire. Lay it in place on the elevator halves, centering it. Mark the location of the wired bends with a pen.



2) Cut a channel to allow the wire joiner to sit even with the leading edge of the elevator. Then, drill a 2mm hole, centered on the hinge line at the location you marked with the elevator joiner bends.



3) Cut hinge slots in each elevator half, and the stabilizer. Use two hinges per half. Carefully fit the parts together. The CA style hinges are held by applying thin CA to the hinges after you have set them in place.

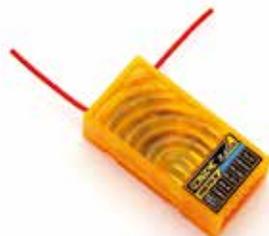


4) Insert tail parts to the fuselage, keeping the horizontal stabilizer perpendicular to the centerline. Mark these locations with pen, then remove the covering from the area that will later be glued.

Recommended Accessories



Orange Tsix 6 Ch Transmitter
Sku: 9403000063 (Mode 1)
9403000064 (Mode 2)



Orange RX R615X DSM2/DSMX
Sku: 9442000031



Turnigy NanoTech A-Spec G2
3S 11.1V 3200mAh
Sku: 9472000007



Turnigy Screwdriver Set
Sku: 9442000031 (Philips/Flat Head)
9442000031 (Hex driver - Metic/Imperial)



Turnigy Reaktor 30A
1000W Balance Charger
Sku: 9466000002

Other Great HobbyKing Airplanes



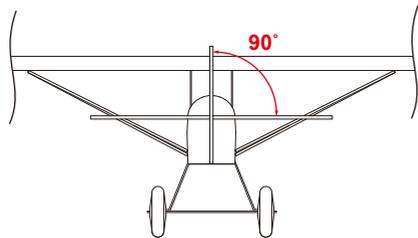
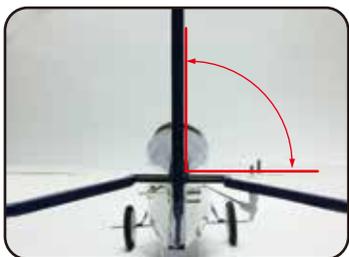
Avios Hawker Sea Fury 1200mm
Sku: 9306000067



Duraflly ME-163 Komet 950mm
Sku: 9306000109



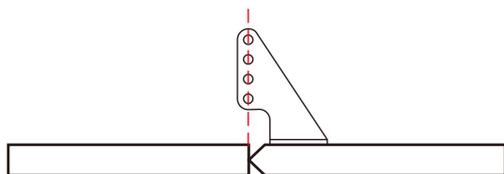
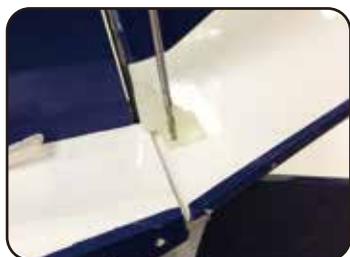
HobbyKing DC-3 Empire Airlines/Finnair 1600mm
Sku: 9306000074



5) Insert the tail parts back to the fuselage and then glue stabilizer and vertical fin in place with 5 min. epoxy or thick CA. Keep fin 90 degrees to the stabilizer



6) Insert rudder and elevator pushrods through the front of the fuselage, then use it to poke through the covering. Tail not shown for clarity.



7) Drill holes in right elevator half for elevator control horn. Use pushrod to help align for drilling. Align control horn so holes for clevis are directly over the hinge line itself. Repeat for the rudder.



8) Install clevises to the pushrods. Install rudder horn on the left, and the elevator horn on the right half. Rudder will be installed permanently after installing tail wheel.



9) Attach tail wheel bracket to fuselage. Hole for tail wheel wire should be in line with the rudder hinge.



10) Insert tail wheel wire into bracket. Mark location of the 90 degree bend in wire on the rudder.

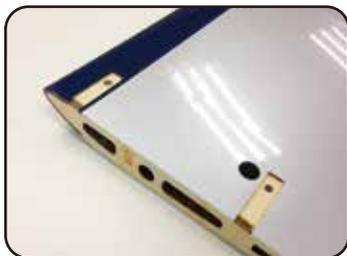


11) Cut a channel for the tail wheel wire in the rudder. Drill 2mm hole at the location you marked in step 10. Reinforce this hole with thin CA.



12) Install rudder, glue hinges with thin CA. Push tailwheel wire into rudder, gluing in place with thick CA or 5 min. epoxy. Install tailwheel, securing set screw on collar with removable thread lock.

Wing Assembly



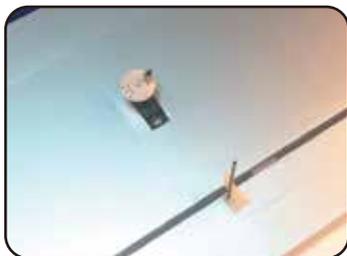
1) Remove covering from servo mounts, strut mounts, and servo lead exit holes.



2) Install aileron servos into each wing half. Run servo leads through the wing, and out the exit holes. Later, the servo leads can be taped to the inside of the strut effectively hiding them.



3) Cut aileron hinge slots on each aileron. Use 3 hinges per aileron. Glue hinges with thin CA. Flex the hinges a few times after the glue dries to free up the surfaces.



4) Drill holes in aileron with 2mm drill for control horn. Line up control horn clevis holes with the hinge line.



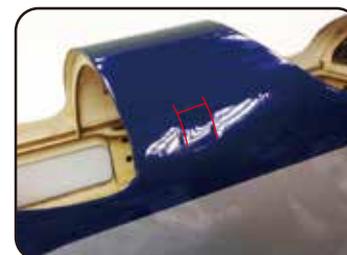
5) Center aileron servo and aileron. Install pushrod, securing set screw on pushrod connector with thread lock. Cut away excess pushrod material.



6) Glue anti-rotation pin into one wing panel, allowing half the pin to extend from the wing.



7) Slide wing panels together on the wing spar tube.



8) Cut the covering at the four wing strut locations on the fuselage. Just slice the covering, but do not remove completely. Slice the covering in an "H" pattern as indicated in the photo above. This hides the holes better after the wing struts are installed.



9) Screw aluminum wing mount struts to wing with M3x12mm machine screws. The longer strut is for the front, with the shorter strut on the back. Using clear tape, secure aileron servo leads to the inside of the rear struts.



10) Mate the wing to the fuselage, securing the struts with M3x16mm screws with washers. Feed servo leads through rear wing mount strut holes in fuselage.



11) Slice the covering on the fuselage bottom where the landing gear will attach. Then mark locations for landing gear straps and drill 2mm holes. Secure landing gear with four plastic straps.



12) Secure wheels to landing gear with wheel collars on the inside and outside of the wheels. Secure set screws with thread lock. Ensure wheels spin freely.



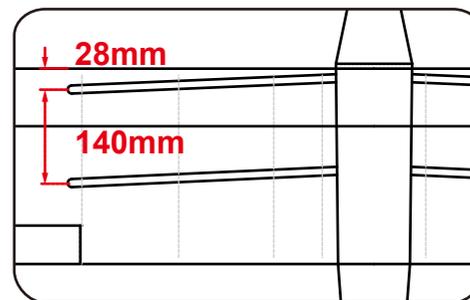
13) Set your motor over the motor box. Align the motor mounting holes to the laser etched lines on mounting box, and mark those locations. Drill holes, and attach motor.



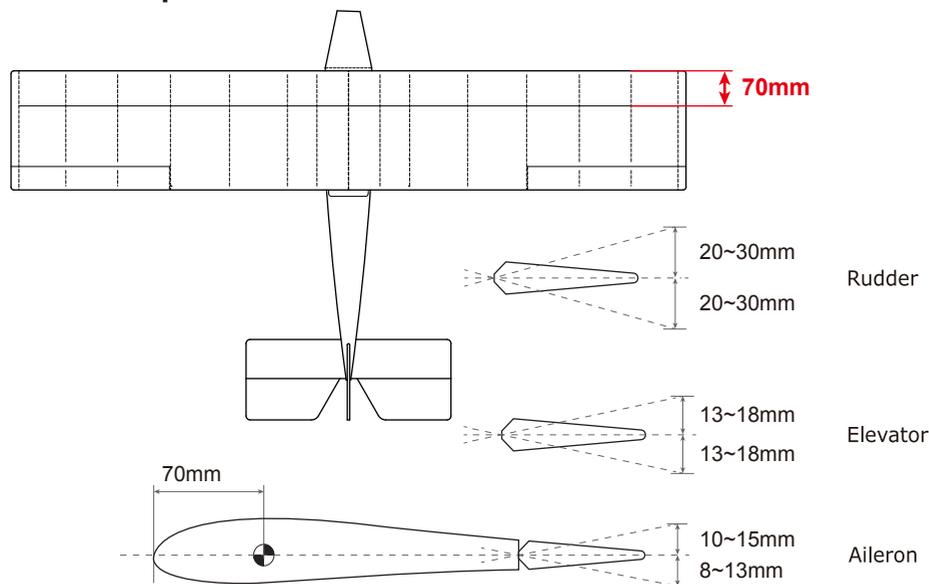
14) Mount cowl to fuselage. Center motor shaft with the cowl. The cowl is designed such that you can mount it even with the front of the fuselage or it can slip over the fuselage slightly to accommodate shorter motors.

Wing Struts

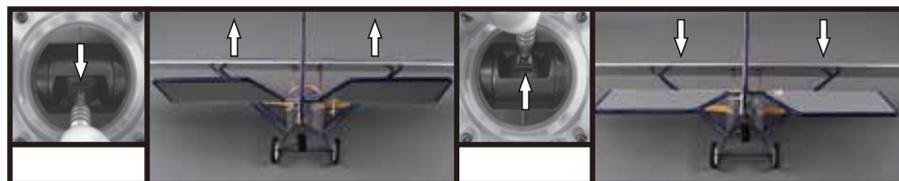
The wing struts of the AirCamper are non functional and therefore not required. There are two different lengths. The short struts are for the front, the long for the rear. Mounting does not have to be exact. The measurements provided are a close guide.



Final Set Up

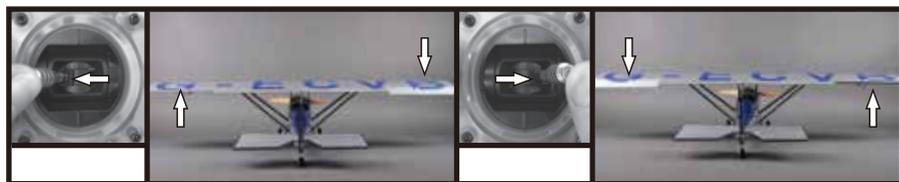


Control Check



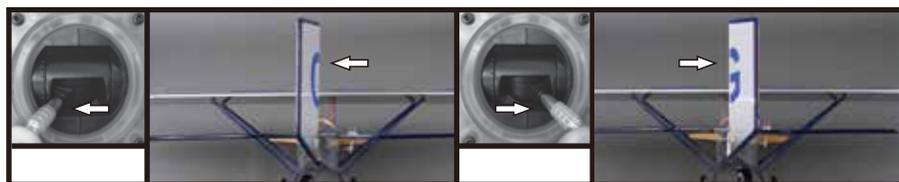
Up Elevator

Down Elevator



Left Roll

Right Roll



Left Rudder

Right Rudder

Pre-Flight

- 1) Before flying this model, check that the model is assembled per this manual and is free from any damage that may have occurred during transport.
- 2) Insert flight battery and check for proper center of gravity. Secure battery with velcro on the bottom of pack and velcro strap around it. If the battery shifts in flight it could cause a loss of control.
- 3) Ensure that pushrods and control surfaces move freely with no binding. For best results, disconnect pushrods and flex the surfaces by hand to free up the hinges. Reconnect control rods prior to first flight.
- 4) After turning On the transmitter and connecting the flight battery, perform a full range test and finally, check control direction per the guide on previous page.
- 5) Conduct a full power test. If there are excess vibration, inspect the propeller for damage or a bent propeller shaft.
- 6) Inspect your flight location, making sure it is free from trees, vehicles, people, or other obstructions before taking off.
- 7) Set timer on your transmitter for 10 minutes for your first few flights. Check capacity of battery used on these flights and adjust your timer accordingly.
- 8) Apply power smoothly, the tail should come up on its own. Allow airspeed to build sufficiently before applying up elevator. Failure to do so may result in loss of control. Fly on low rate for first flight until you are comfortable with the model.
- 9) Test how the model reacts during a stall at a high altitude before committing to landing. Reduce power, apply up elevator to induce a stall. Upon the stall break, release elevator, apply power and recover.
- 10) For landing, reduce power, using the elevator to control the pitch attitude, and use power to control your descent rate. Cut power to motor before touch down to prevent propeller strikes.