H·KING

CE 14

MINI SKY HUNTER

Specs

Wingspan: 1238mm
Length: 855mm
Weight: 830g
Wing Area: 19.5DM²

Required

4 Channel Transmitter and Receiver
3S 11.1V 2200~4200mAh Lipoly Battery
3 x 12g Servos
2212 1400kv Brushless Motor
30A Brushless ESC
8x4 Propeller

Features

- Molded EPO Airframe
- Bolt together construction
- Modular 2 piece canopy for sport FPV use
- Plywood under wing tray for flight controllers
- Optional Rudder
- Molded equipment bays in wing

Thank you for purchasing your HobbyKing Mini SkyHunter FPV plane. We hope you enjoy assembling and flying it as we did creating it. A mini sized FPV plane designed for short to mid range flying.

The large fuselage bay accomodates from small to larger battery packs, plus a under wing plywood tray can be used to mount flight controllers, OSD, or other equipment. Recesses molded into the wings allow you to mount sensitive FPV equipment far away from radio equipment.

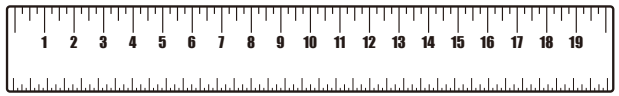
HobbyKing aircraft follow an extensive design, development, and testing process to bring reliable and user friendly products to the masses. They undergo extensive quality control checks at the factory.

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.

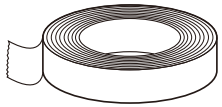
Warnings

- 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 spinnging 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

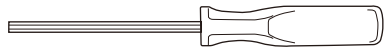


Ruler

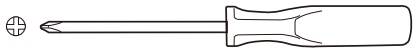


Clear Tape

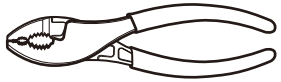
Hobby Knife



2.5mm Hex Driver



Phillips Screwdriver

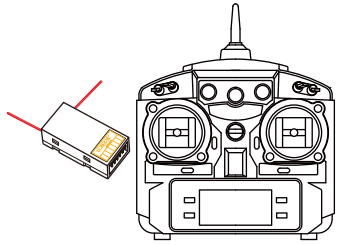


Pliers

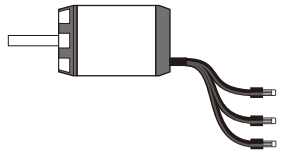
Thread Lock
(Removable Stength)

Foam Glue

Required Items

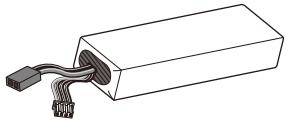


4+ Channel Transmitter + Receiver

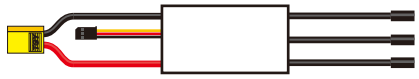


2212 1400kv Motor

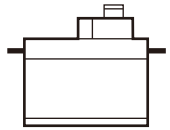
LiPo Charger



3S 11.1V 2200~4200mAh LiPo



30Amp Brushless ESC



3* 9g Servos
2* 5g Servos (Optional)

8x4 Propeller

Contents

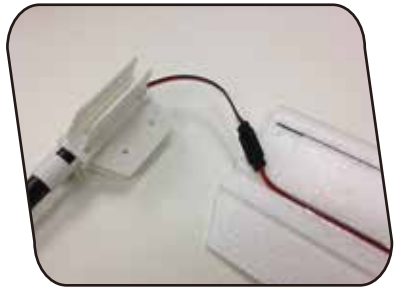
*Photo shows PNP airframe. Plywood FPV tray and decal set not shown.

Airframe Assembly

1) Locate elevator servo extension and insert through the left tail boom. The female servo plug should be toward the tail.

***Note* For optional rudders, insert rudder servo leads at this time. See page 8 for rudder installation.**

2) Connect elevator servo plug to servo extension. Secure with tape or servo clip.



3) Attach horizontal stabilizer to tail booms using 4 * M2x16mm screws and nuts. Secure with blue thread lock.

4) Attach vertical fin using 4 * M2x16mm screws and nuts. Secure with blue thread lock.

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 2200mAh
Sku: 9472000003

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

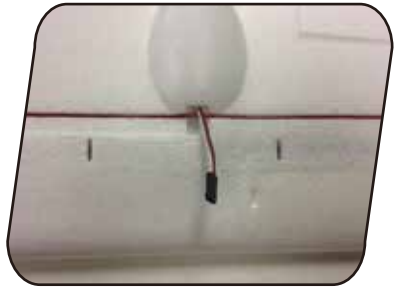
Quanum Complete FPV Bundle
Sku: 9171000553

Turnigy Reaktor 30A 1000W
Balance Charger
Sku: 9466000002

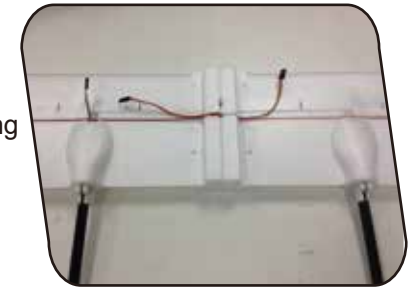
HKPilot Mega 2.7 Master Set
Sku: 387000054 (433Mhz)
38700053(915Mhz)

5) Insert wing spar into wing halves. Push together until ends touch.

6) Feed elevator servo lead into boom housing in wing. There is a slot already molded to allow the connector to pass easily.



7) Pull connector through opening in wing housing. This wire can be pressed into the same channel as the aileron servo wire.



8) Insert both tail booms into the wing housing equal distances.

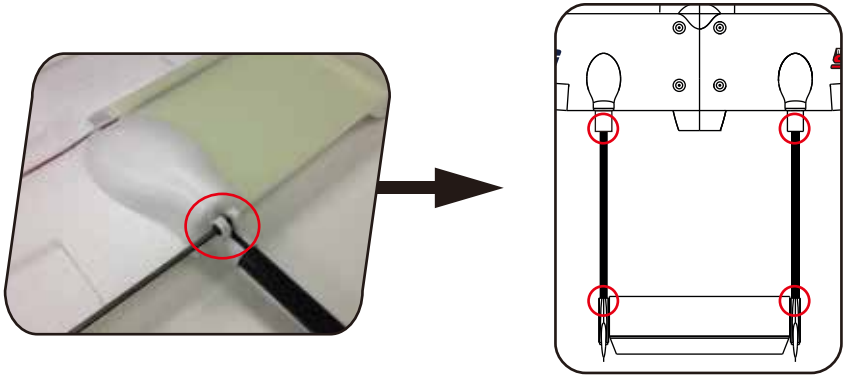
9) Glue fiberglass wing inserts to wing using contact cement or your favorite choice of glue.

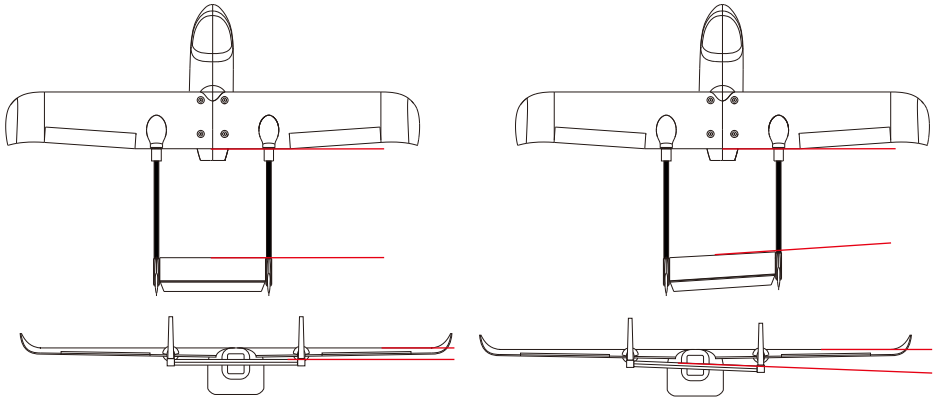
***Note* If you plan to break down your Mini Skyhunter, run the elevator servo wire outside of wing. Secure wire using clear tape.**

10) Install M3x10 screws and nuts into the plastic tail boom anchors in the wing. Leave loose for now.

11) Attach motor to plywood firewall with four self tapping screws.

12) Tighten the four tail boom clamps. Check to make sure tail boom lengths are the same, and that the horizontal stabilier is parallel to the wing. Use blue thread lock to secure.





Correct - Wing/Tail Parallel

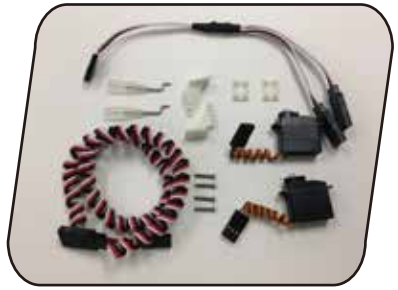
Incorrect - Wing/Tail Not Parallel

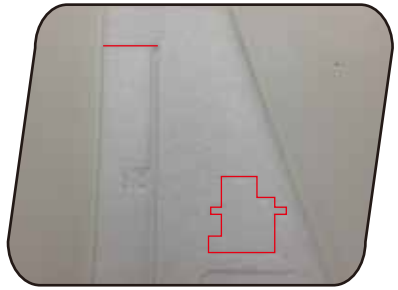
13) Attach propeller and prop adapter to motor. Propeller should have molded lettering facing forward. Tighten propeller fully.

14) Attach wing to fuselage using M3 screws, using the shorter screws in the aft mounting holes. If you plan to mount your receiver under the wing, we suggest doing this now.

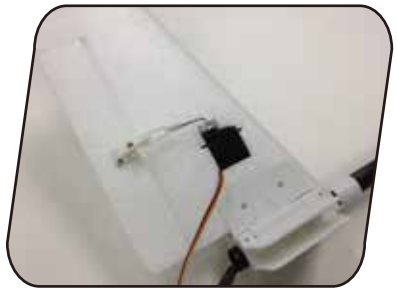
Optional

To add functional rudders you will need 2 x 5g servos, servo extension, Y-harness, and control hardware.

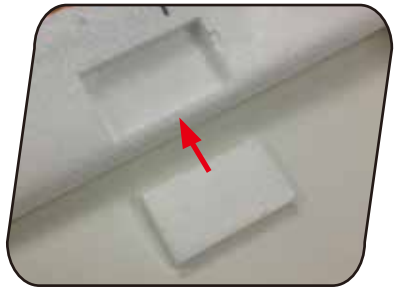




1) Start by cutting along molded servo cutout lines. Check your servo size relative to this cutout as your servo may be smaller than template. Cut top of rudder line to allow rudder to flex.

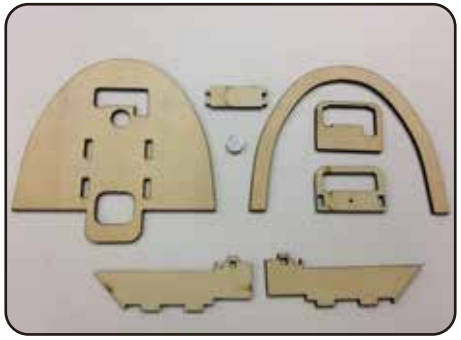


2) Glue servo into rudder with foam safe glue. If you opted for adding rudders, you would have pre-installed servo leads into the booms in step 1 of General Assembly.

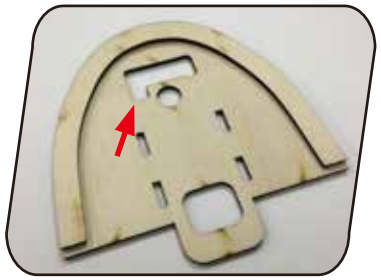


3) For equipment cutouts in the wing, if you do not plan to use, suggest gluing in place or securing with tape.

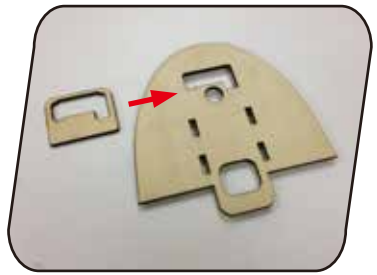
Plywood FPV Tray

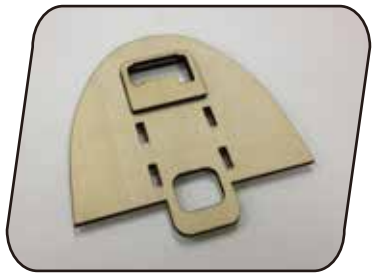


1) Plywood FPV Tray (PNP version) works with the 480TVL Sony CCD FPV camera. Requires medium CA glue for assembly.



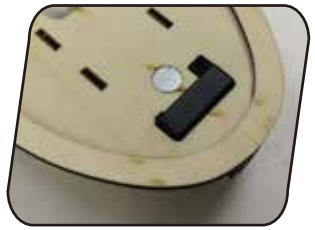
2) Glue tray doubler to bottom of main tray piece. Make sure the camera cut out is oriented, so the large cable cut out is on the left as shown. (bottom view)





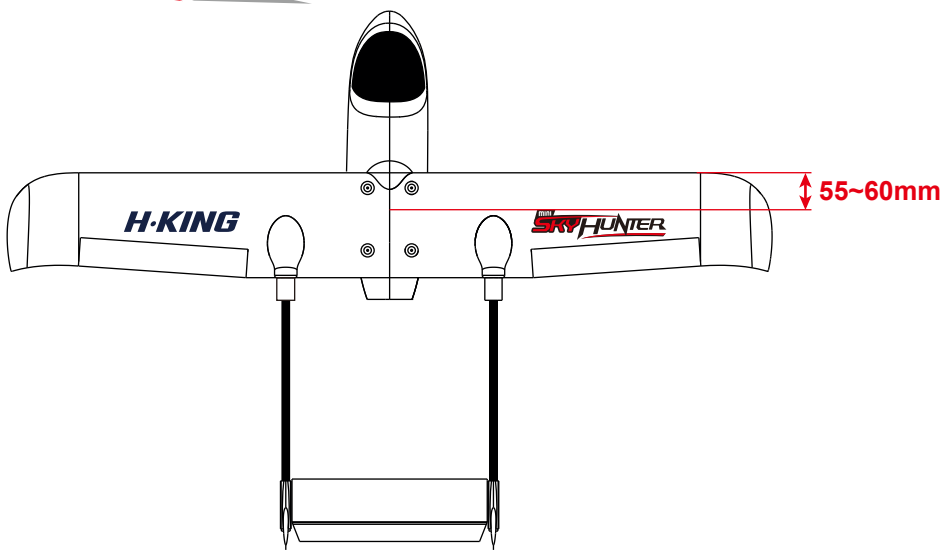
3) Glue camera doubler to top of main tray. Align with camera hole on main tray.

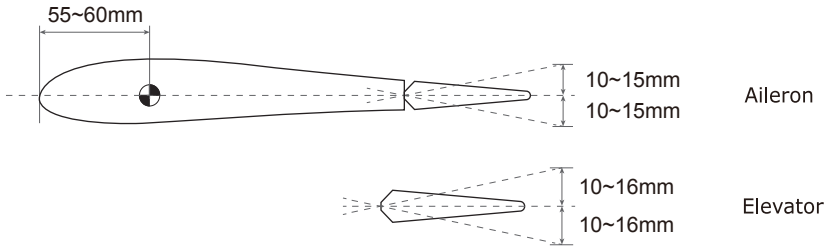
4) Glue guide rails and cross member in place. Camera should slide into hole as shown. The retainer plate can be screwed in place or glued.



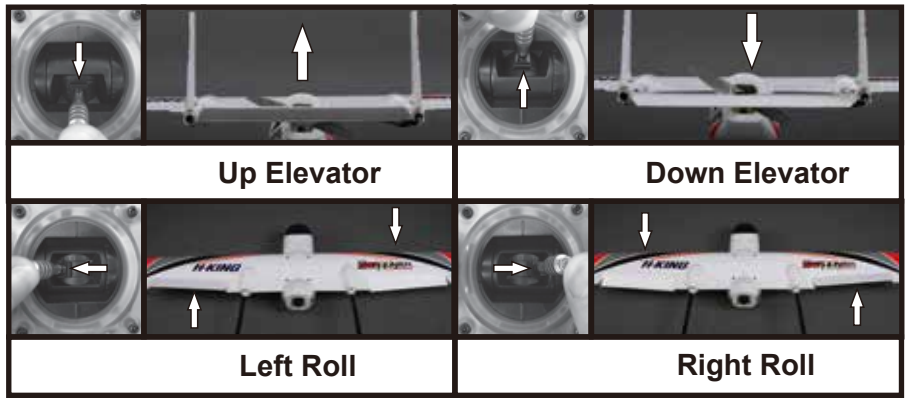
5) Glue magnet to bottom of tray, orienting the magnet pole relative to the foam canopy tray.

Setup





Control Check



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 occured 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 and launch model with a firm forward toss. 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.

11) Test fly the model line of sight before attempting to fly it FPV.

12) Always use a spotter when flying FPV in case of video transmission trouble.