

FIRE PHOENIX

RADIO CONTROLLED AIRPLANE

ASSEMBLY AND OPERATION INSTRUCTIONS



YIN YAN MODEL TECH. MFT.

SPECIFICATIONS

Material	EPO
Plane Battery	Li-Po 1300mAh 11.1V
Radio	4 Channel
Wing Span	1200mm
Length	970mm/38.2 inch
Range	PPM \leq 500 meter 2.4G \leq 400 meter
Approximate Fly Time	8-20 minutes
Remote Batteries Required	8 "AA" (not included)
Weight	680g/23.98oz.

SAFETY WARNINGS AND PRECAUTIONS

! IMPORTANT SAFETY INSTRUCTIONS !

Read all instructions before using this product!

- 1、 **Keep work area clean.** Cluttered areas invite injuries.
- 2、 **Observe work area conditions.** Keep work area well lit. Keep work area uncluttered and free of debris. Cluttered areas invite injury.
- 3、 **Check for damaged parts.** Before using any product, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for any broken or damaged parts and any other conditions that may affect its operation. Replace or repair damaged or worn parts immediately.
- 4、 **Replacement parts and accessories.** When servicing, use only identical replacement parts.
- 5、 **Always check hardware and assembled parts after assembling.** All connections should be tight and hardware tightened.
- 6、 **Do not let children under 12-year old use the Airplane. Children between 12 and 15 years old can only use this airplane with adult supervision.** Failure to do so could result in personal injury and/or property damage.
- 7、 **Use eye protection.** Always wear ANSI-approved impact safety goggles when assembling this product.
- 8、 **Maintain products with care.** Keep the Airplane in a dry location. Do not expose it to prolonged moisture.
- 9、 **Store idle equipment.** When not in use always lock up the Airplane.
- 10、 **Dress properly.** Wear restrictive hair covering to contain long hair.
- 11、 **Use the right Airplane for the job.** Do not attempt to force a small Airplane to do the work of a larger Airplane. There are certain applications for which this Airplane was designed. Do not modify this Airplane and do not use this Airplane for a purpose for which it was not intended.
- 12、 **Do not use or assemble the Airplane if under the influence of alcohol or drugs.** Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not assemble or use the Airplane.
- 13、 **Do not pick up the Airplane while it is in motion.**
- 14、 **Use only batteries of the type recommended and do not mix old and new batteries.**
- 15、 **Do not incinerate batteries.** Batteries may burst, causing personal injury and/or property damage.
- 16、 **Remove batteries if the Airplane is not used for a long period of time.**
- 17、 **Do not recharge non-rechargeable batteries.**
- 18、 **Always keep an eye on the battery while charging.**
- 19、 **Keep an eye on battery life. Never charge or use a damaged, swelled or short-circuited battery pack.**

- 20、 Never try to disassemble or reassemble the battery packs.
- 21、 Make certain to use the Airplane in a large area free from interference from trees, electrical power lines and other obstacles.
- 22、 Airplane and Charger should always be used with adult supervision.
- 23、 Never fly near buildings, cars or busy streets and do not fly at or near people or animals.
- 24、 Do not fly the Airplane if wind speeds are above 10 MPH.
- 25、 Do not allow children to use glue without adult supervision. Make certain that all glue is stored out of reach of children and animals.
- 26、 If two airplanes with the same frequency are used (both with the same numbers on the transmitter and/or receiver) they must be at least 1,640 feet away from one another.
- 27、 Before flying, perform a distance check to be certain that you can maintain radio control at least 25 feet from the transmitter to the Airplane with the antenna collapsed.
- 28、 Do not trim the Airplane's antenna. Trimming the antenna will affect radio range
- 29、 People with pacemakers should consult their physician(s) before using this product. Electromagnetic fields in close proximity to a heart pacemaker could cause interference to/or failure of the pacemaker.
- 30、 **Warning:** The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

WHAT'S IN THE GIFT BOX

Part	Description	Q'ty	Remarks
1	Main wings (left & right)	2	Main wings plastic joint cover
2	Fuselage	1	well fixed
3	Tail boom & horizontal stabilizer, elevator and rudder pushrods set	1	assembled
4	Vertical stabilizer set	1	
5	landing gear & wheels set	1	
6	Servo	4	Combo-002,003,004 assembled
7	FM/PPM, 2.4G 4CH transmitter, 6CH receiver, Y-cable for aileron servos	2	Combo-002,003,004 assembled
8	CF2812 Brushless motor, propeller saver	1	propeller saver for Combo-002,003,004 assembled
9	18A Brushless ESC	1	Combo-002,003,004 assembled
10	1300 mAh 11.1V Lipo battery pack	1	For Combo-002,003,004
11	Charger with power cord	1	For Combo-002,003,004
12	Decal	1	
13	User instruction	1	
14	Wood part for assembling main wings	4	
15	Accessory pack	1	Rubber bond (4), Propeller 8040 (1), O ring rubber. (2), 502 strong glue (1), screws for servo arms (4)

Things you need to prepare before assembly

1. A clean work area of no less than 1 square meter.
2. Tools: 3.5mm cross screwdriver, hobby knife, 8 "AA" battery, transparent adhesive tape

ASSEMBLY

After reading all the safety warnings and precautions, you can start off a few easy assembling. Then you will have your gorgeous FIRE PHOENIX! The following assembly is dedicated to Fire Phoenix Combo-003.

Before assembling, be sure that you have all parts as described in the above WHAT'S IN THE GIFT BOX list. *Picture E-1 & Picture E-2* are what they come out of the box as. Any part missing, please contact our local dealer straight away.

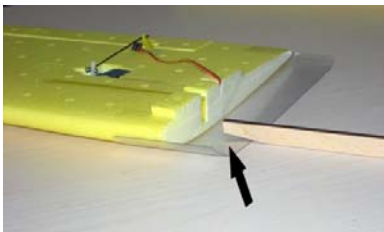


Picture E-1

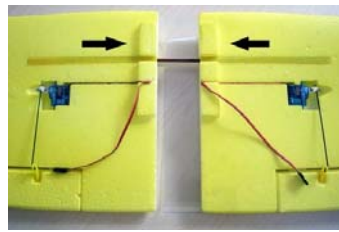


Picture E-2

1. Assemble the main wings and stick the decals: Insert the reinforced wood part into one main wing—see *Picture E-3*. Insert the free end of the reinforced wood through the other main wing connecting both main wings together—see *Picture E-4*. Cut out the decal and stick in the right place—see *Picture E-6 to E-10*. Slice the decal where the two main wings join for possible disassembly (for transport if necessary). —see *Picture E-5*.



Picture E-3



Picture E-4



Picture E-5



Picture E-6 decals for main wings NO.: ①②⑧⑨



Picture E-7 decals for horizontal stabilizer NO.: ⑤



Picture E-8 decals for fuselage NO.: ③⑥

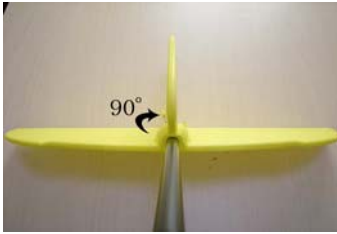


Picture E-9 decals for vertical stabilizer NO.: ④



Picture E-10 decals for air inlet NO.: ⑦

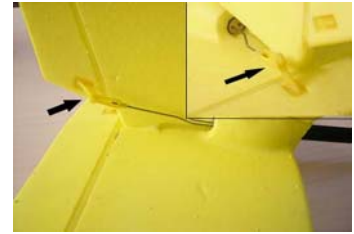
2. Assemble the vertical stabilizer and tail pushrods: Insert the vertical stabilizer into the horizontal stabilizer perpendicularly, adjust to a 90° angle—see *Picture E-11*, and glue with some 502 strong glue—see *Picture E-12*. Assemble the rudder and elevator pushrods fastener. The fastener should be assembled to the inside hole of the servo horn—see *Picture E-13*.



Picture E-11

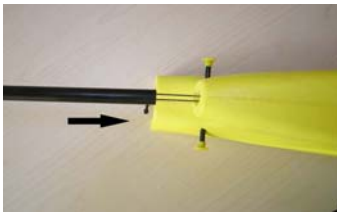


Picture E-12

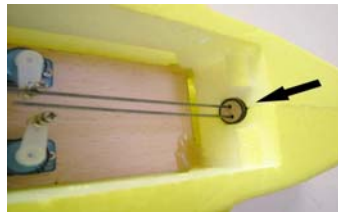


Picture E-13

3. Assemble the fuselage and tail set: Open the cover beneath the fuselage, insert the tail wing set from the prior step through the whole into the fuselage—see *Picture E-14*, do not penetrate the servo cabin wall—see *Picture E-15*. Rotate the tail boom to adjust the horizontal stabilizer and vertical stabilizer in the right angle—see *Picture E-16* & *Picture E-17*. Then drop some 502 strong glue to where the tail boom joins the fuselage—see *Picture E-18*. *Picture E-19* is what it looks like after the above assembly.



Picture E-14



Picture E-15



Picture E-16



Picture E-17



Picture E-18



Picture E-19

4. Assemble power system and pushrods: Remove the battery cover and install 8 cells of AA battery into the battery holder—see *Picture E-20*. Move the right control stick (MODE1), or the left control stick (MODE 2) to the bottom, move all trims to the center—see *Picture E-21*. Turn off the transmitter and unfold the antenna a little bit. The power indicate light is now on. Open the black hatch on the top of the fuselage—see *Picture E-22*, connect the lipo battery pack (—see *Picture E-23*. Please pay attention to both positive and negative poles). Then you would hear a long beep and three short beeps followed by three notes 1-2-3, thus indicates the accomplishment of self-check for both transmitter and ESC (electronic speed controller). Connect Channel one in the receiver with aileron servo extension leads by using Y-cable(—see *Picture E-24*. Please pay attention to positive and negative poles and the white signal wire). Then adjust the length of the aileron servo pushrods—see *Picture E-25*, and bring the aileron to the center position, make sure that the aileron is on the wing edge surface—see *Picture E-26*. Screw up so that the pushrods won't come loose.



Picture E-20



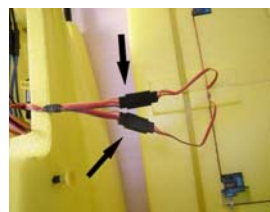
Picture E-21



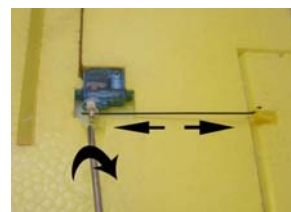
Picture E-22



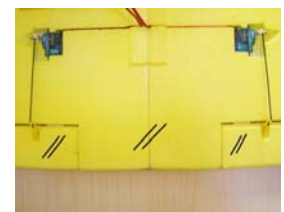
Picture E-23



Picture E-24



Picture E-25

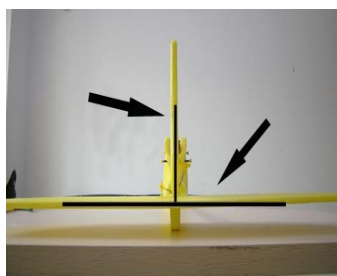


Picture E-26

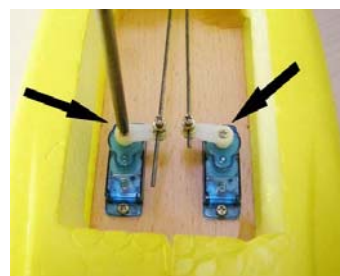
Then disassemble the main wings. Turn the fuselage bottom upwards, with the head facing towards you, insert the rudder and elevator servo pushrods through the right servo horn wholes—see *Picture E-27*, adjust the length of both pushrods, bring the elevator and rudder respectively to same surface of the Stabilizer and Vertical Fin—see *Picture E-28*. Screw up so that the pushrods won't come loose. Take out the last two screws for servo arms from the accessory pack, and screw the servo arms to the servos firmly—see *Picture E-29*.



Picture E-27



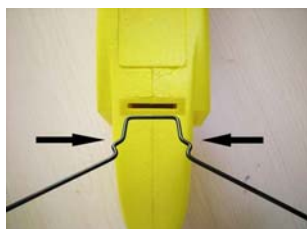
Picture E-28



Picture E-29

After all the above assembly work, disconnect the lipo battery in the cabin, turn off the transmitter and you can move on..

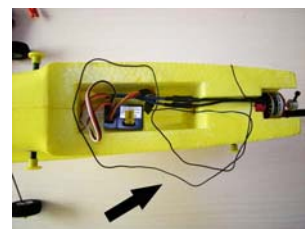
5. Assemble the landing gear, receiver antenna, propeller and rubber bonds: Squeeze the landing gear flanks and fit it into the slot at the fuselage bottom—see *Picture E-30*, let go off the landing gear so that it will fasten into the slot—see *Picture E-31*. Assemble the receiver antenna: Open the cabin and unfold the antenna—see *Picture E-32*, insert the antenna through the whole at the back of the fuselage—see *Picture E-33*, then stick the antenna to the tail boom by using adhesive tape —see *Picture E-34*, make sure that the antenna won't wind around the propeller when it is in action. Assemble the propeller: Install the propeller into the propeller saver on the motor, the projecting side should be facing the fuselage—see *Picture E-35*, then fasten by using the 2 pieces of O ring rubber—see *Picture E-36*. Rotate the motor slightly to see whether the propeller works well. Place the main wings onto the wing platform, make sure the wings fit well with the platform—see *Picture E-37*, wind the two rubber bonds so that the main wings are firm and safe to fly with—see *Picture E-38* (you have another two spare rubber bonds)



Picture E-30



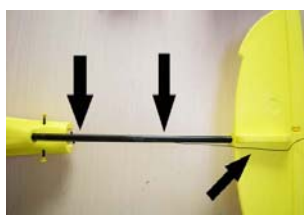
Picture E-31



Picture E-32



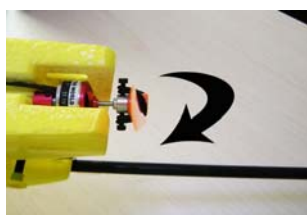
Picture E-33



Picture E-34



Picture E-35



Picture E-36



Picture E-37



Picture E-38

F Before fly adjustment

Since we have got all the assembly work done, we can now move on to the next step: adjustment and trim. Check the controls of ailerons, elevator, rudder, and make some necessary adjustments—see below pictures. If any of them move in the wrong direction, you can always correct it by shifting the reverse/normal switches on the transmitter.

A Right hand throttle (MODE 1) Channel 1: Aileron



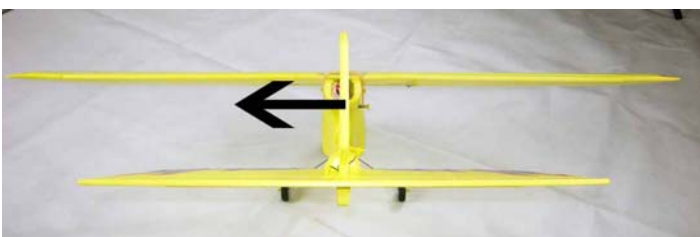
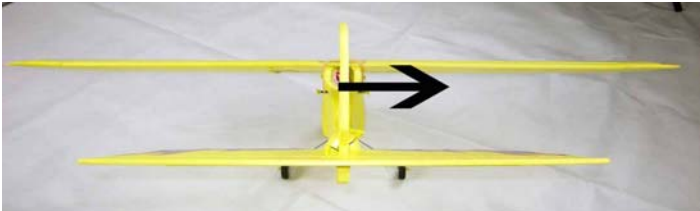
Channel 2: Elevator



Channel 3: Throttle (assemble the propeller in the right direction. Air flow should be backwards.)



Channel 4: Rudder



B Left hand throttle (MODE 2) Channel 1: Aileron



Channel 2: Elevator



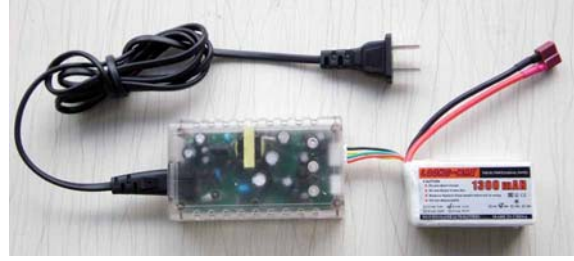
Channel 3: Throttle (assemble the propeller in the right direction. Air flow should be backwards.)



Channel 4: Rudder



G Charger & battery pack



1. Plug the balance connector of the battery into the charger; connect the charger to the electricity supply (110V-240V AC). The 3 LED on the charger will turn into red. When the battery is fully charged, the 3 LED will change from red to green.
2. Never over charge or over discharge a lithium polymer (Lipo) battery pack. Over charge or over discharge a lithium polymer battery pack will cause the battery to swell or self-ignite.

Disconnect the charger from the electricity supply when not in use or when the battery is fully charged.

H Flying the airplane

1. Choose a day when the wind is light.
2. Turn ON the Radio Transmitter. To avoid interference, always turn on the Transmitter before turning on the Airplane. Turn on the airplane.
3. Connect both main wings (Assembly 4), connect the two aileron servos with Y-cable (assembly 5). Cover the joint area where both wings meet by using the transparent plastic joint cover, and cross wind the two rubber bonds from the accessory pack to strengthen. Make sure that the wings are firmly fixed to the fuselage. (3-channel version does not include two aileron servos.)
4. Before each use check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged housing, damaged wiring, loose wheels and any other condition that may affect its safe operation. Do not use the Airplane if it is damaged.
5. Place the airplane on the flying field facing into the wind and stand right behind it. Slowly move the right control stick (MODE1) to the top and let the airplane accelerate along the ground for a while, move left control stick (MODE1) towards the center a little bit to let the plane take off.
6. Let the Airplane climb to and fly at about 50 to 300 feet high. By moving the right control stick (MODE1) up and down you can change speed, and move left control stick (MODE1) left and right to change direction.
7. To steer the Airplane, move the right control stick (MODE1) to the left to steer to the left, and right to steer it right. Move the elevator and rudder trims slightly to adjust for minor changes in direction and tilt of the Airplane.
8. Note that letting go of the control sticks will automatically bring them to a center position. This will cause the Airplane to resume normal flight if the trims are adjusted properly.
9. Flight time for one full charge battery is determined by the capacity of the battery and the flight intensity. Normally about 8-20 minutes. Never overuse the battery. Overusing a battery will cause the battery to swell or smoke.
10. To bring in the Airplane for landing, glide the Airplane down against the wind. Move the right control stick (MODE1) toward the center to slow the Propellers. Move the left control stick (MODE1) left and right to adjust for direction. Continue to decrease the Propeller speed and direction until you bring them to a stop and land the Airplane.
11. Turn OFF the Airplane and then turn OFF the Transmitter.

HAPPY FLYING!