

# INSTRUCTION MANUAL **THIS MODEL IS NOT A TOY!**

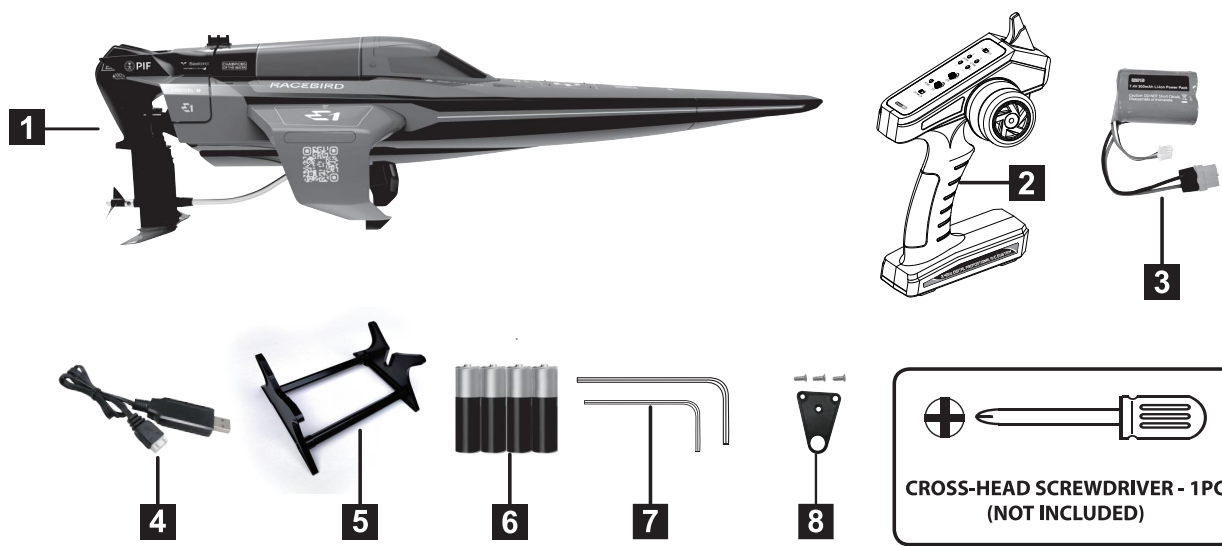
THESE INSTRUCTIONS SHOULD BE READ BY A SUPERVISING ADULT

## E1 RACEBIRD LITE RC HYDROFOIL BOAT RTR

ITEM NO. 8608

### CONTENTS OF SET

- 1) E1 RaceBird Lite RC Hydrofoil Boat
- 2) Transmitter
- 3) 7.4V 900mAh Li-Ion Battery
- 4) 2S USB balance charger
- 5) Boat Stand
- 6) 4pcs AA batteries(for transmitter)
- 7) 1.5mm Allen Key(for pushrod tighten)  
2.0mm Allen Key(for Grub Screws)
- 8) Radio hanger & screws



### IMPORTANT & USEFUL TIPS

1. Always switch on transmitter firstly, then connect battery with boat. After play, disconnect battery firstly, then switch off transmitter.
2. If transmitter battery weak power, replace fresh battery to ensure radio range and control.
3. If boat don't run straight, make steering trim, refer to page 5 for details.
4. Boat left and right steering angle suggest to be 30 degree, make steering angle trim, refer to page 5 for details.
5. RC hydrofoil boat might lose balance after cut through big wave, reduce boat speed to keep balance again, accelerate to foil again on water.
6. On left or right steering, reduce boat speed to allow smooth steering. If Full speed steering might cause boat lose balance, boat capsized.

#### IMPORTANT

This model is designed for use in fresh water only. It is not designed for use in salt water!  
This model is not intended for persons under 14 years of age, unless closely supervised by an adult.

## Caution for Li-Ion battery:

*ESC with low voltage protection, as soon as you notice boat speed slow down obviously, you should drive the boat back to shore and recharge battery. Do not keep playing the boat when ESC low voltage protection active, otherwise, battery will be over discharged and might be damaged and won't be recharged again.*

## Caution:

*1. Continuous running of the model will generate high heat levels, Which will lead to premature wear of the motor. Once your power pack is exhausted, we recommend that you open model's upper deck and let motor air cool for around 5 minutes before installing a fresh power pack. This action will protect motor and extend its working life.*

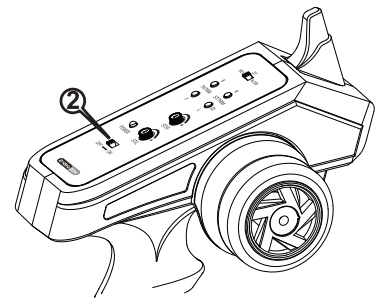
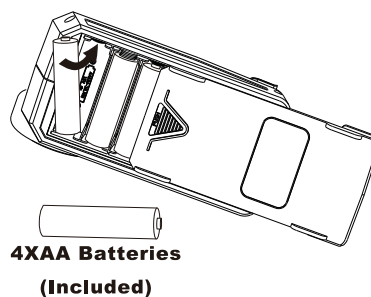
*2. Before racing your model boat, carefully check silicone tube for guarantee good water cooling system; otherwise, water cooling system failure, this may lead to ESC burned out and motor defected.*

## INSTALLING TRANSMITTER BATTERIES

NOTE: The transmitter is not water resistant and should never come in contact with water.

1. Install four fresh "AA" batteries. Follow the diagram located in the bottom of the battery tray for proper battery orientation

2. Switch on transmitter, transmitter make sound "Bi", LED power light will be flashing.



## RADIO HANGER

Triangle radio hanger and 3pcs screw are included in tool bag, use these to hang radio on your neck with ribbon.



## CHARGING THE 7.4V POWER PACK

1) Connect USB balance charger with USB port of computer equipment, mobile phone adapter or power bank. USB charger RED light solid on.

2) Connect battery's charging plug with USB charger's charging port. USB charger RED light solid on, GREEN light flash, this indicate that the battery is charging.

3) A fully discharged battery will take about 4 hours to be fully charged. Do not leave the battery unattended while charging.

4) The RED light turn to be off, GREEN light turn to be solid on when the charge is completed. Disconnect the 7.4V battery from the charger.



NOTE: Around 1.5 hours battery charging time, Battery can be charged around 80% capacity, then USB balance charger will continue to charge battery with low charging current, need around 3 hours, USB charger GREEN light turn to be solid on, means battery now is fully charged.

## CAUTION:

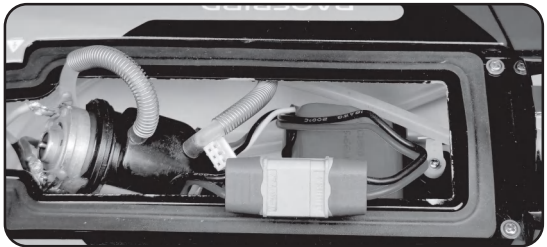
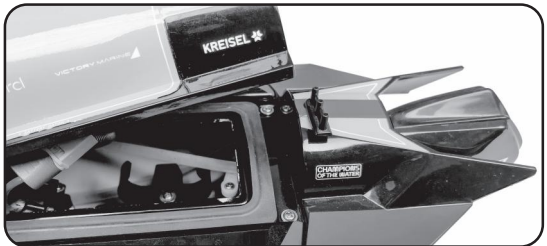
- 1) The 7.4V battery does not come pre-charged. You must fully charge the battery before using the boat
- 1) The 7.4V battery can be re-charged many times before it needs to be replaced. When the battery no longer holds a charge (is dead), it should be properly recycled.

NOTE 1: The boat will run for about 8 mins on a fully charged battery. As soon as you notice a drop off in speed, you should bring the model back to shore to recharge battery or you may lose control of the boat.

NOTE 2: Continuous running of the model will generate high heat levels, which will lead to premature wear on the motor. It is recommended to let the model cool down for about 5-10 min before installing a re-charged battery pack.

## INSTALLING THE 7.4V POWER PACK IN THE MODEL BOAT

1. Always switch on transmitter before connecting the battery with ESC.
2. Assemble boat stand easily as photo shown. Place boat on boat stand.
3. Firstly rotate the plastic lock latch at the rear of hatch to take out the hatch.
4. Fix the charged finished battery on the battery tray inside cabin.
5. Attach battery connector to the matching connector of ESC.
6. Re-position hatch on boat, rotate hatch lock latch to secure hatch tight on boat.



NOTE: There is a water proof rubber ring placed inside the slot of hull, always make sure it's secured positioned before re-position the hatch.

## TRANSMITTER/RECEIVER BINDING

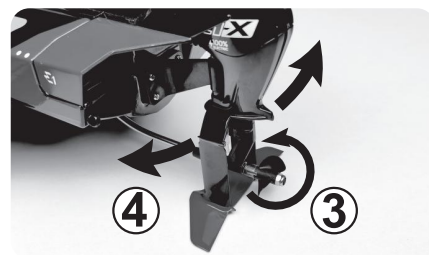
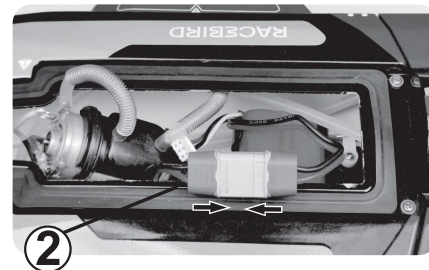
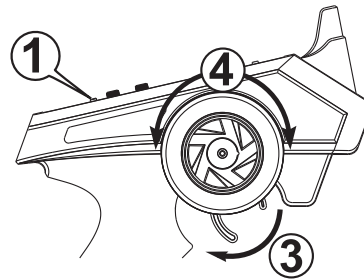
transmitter and receiver are automatically binding once they are power on. No need to press any bind button. Just make sure no other transmitter or receiver should be powered on near by.

- 1) Switch on transmitter, transmitter make sound "Bi", LED power light will be flashing.
- 2) Connect battery with boat's ESC, transmitter make sound "Bi Bi", LED power light turn to solid on, now transmitter have automatically bind with boat.

## CHECKING THE RADIO SYSTEM

1. Always switch on the transmitter before connecting the battery with the ESC.
2. Connect battery with boat's ESC
3. Pull the throttle & motor rotate in anticlockwise direction, your motor is now armed and ready for operation.
4. Check the direction of the rudder, the trailing edge of the rudder should turn right when right input is given, Conversely, when left input is given, the trailing edge of the rudder should turn left.

NOTE: The left and right steering angle are pre-set as standard angle to suitable for common boat driving style. If you want to change the turning radius, you can adjust the two knobs on transmitter "ST/R", "ST/L". more detail information refer to "EPA ADJUSTMENT".



## DRIVING YOUR BOAT

- 1) Switch on transmitter, transmitter power LED light flash.
- 2) Switch 'ON' the boat (connect the 7.4V Power Pack).
- 3) Check that the propeller and the rudder respond to transmitter inputs before placing the Boat on the water.

### AFTER USE

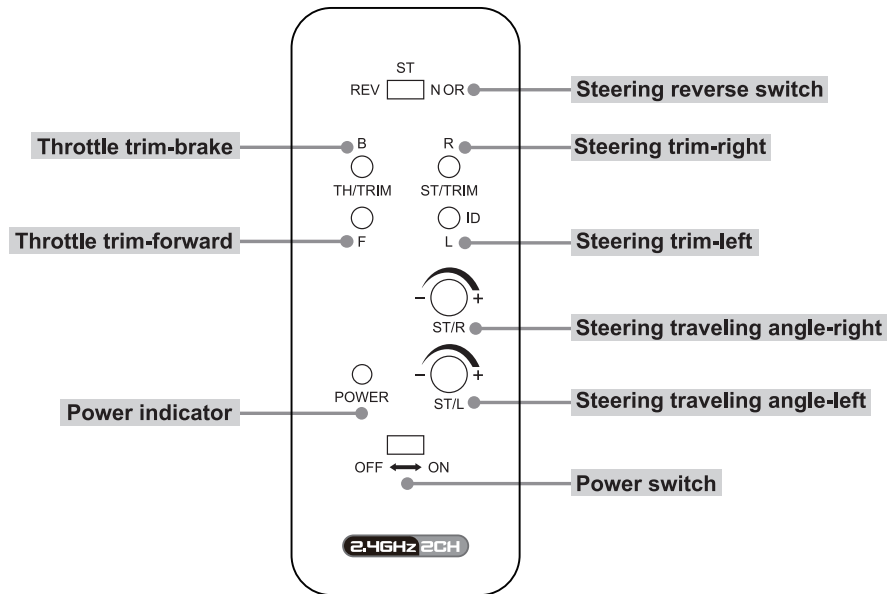
- 1) When you have finished using your Boat, you should first switch 'OFF' the model (disconnect the 7.4V Power Pack), then switch 'OFF' your transmitter.
- 2) Remove all batteries from the transmitter and model.
- 3) Leave the Boat's upper deck off to allow moisture to evaporate. Ideally, place the model in this way in a warm and dry place, like an airing cupboard, until you are sure it is dry and then store it away.

**NOTE:** If the Boat begins to bob when running, it may have taken on an excessive amount of water. In this case, you should immediately return to shore, Remove the water seal rubber plug at the rear of left bottom hull. Drain out water and re-position again the seal plug on boat.

**ATTENTION: ALWAYS REMEMBER TO POSITION WELL THE WATER SEAL PLUG. OTHERWISE, WATER GET INSIDE HULL.**



## TRANSMITTER INTRODUCTION



## EPA ADJUSTMENT

### Function

Use this when performing left and right steering angle adjustments. End Point Adjustment (EPA) adjusting value range: 0%-100%

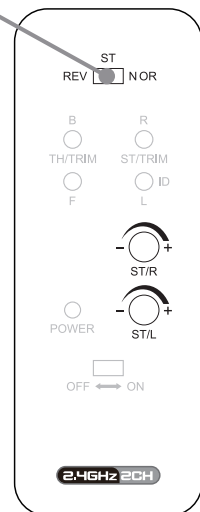
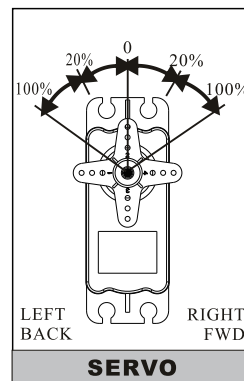
### Setting

1. Steering (right side) angle adjustment Rotate "ST/R" knob to the left end point means minimum value 0%, right end point means maximum value 100%.
2. Steering (left side) angle adjustment Rotate "ST/L" knob to the left end point means minimum value 0%, right end point means maximum value 100%.

### CAUTION:

When adjusting this function, make sure the direction is in agreement with the boat direction, you can adjust by the STEERING "REV-NOR" button.

### Steering reverse switch



## TRIM ADJUSTMENT

### Steering trim

Adjust "ST/TRIM" "R/L" so that rudder is centered prior to operation, you may adjust this control to make the boat run straight during operation.

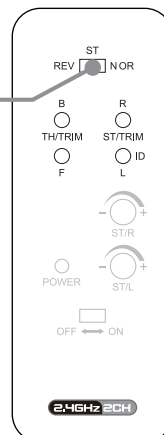
### CAUTION:

When adjusting steering trim, make sure the direction is in agreement with the boat direction, you can adjust by the STEERING "REV-NOR" button.

### Throttle trim

Adjust "TH/TRIM" "B/F" to stop propeller from turning while the throttle trigger is in the neutral position.

### Steering reverse switch

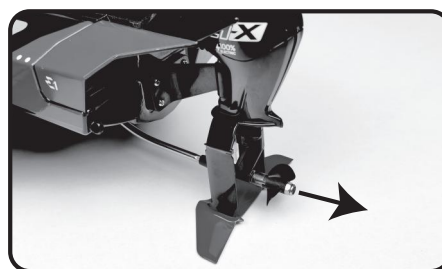
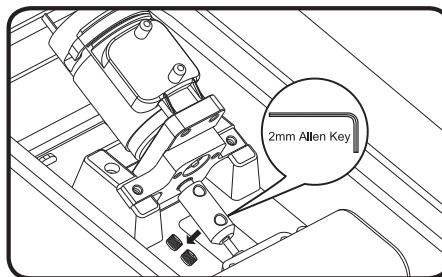




## LUBRICATING DRIVE SHAFT

Lubricating the flexshaft is vital to the life of the drivetrain. The lubricant also acts as a water seal, keeping water from entering the hull through the stuffing tube. Lubricating the flexshaft, propeller shaft after every 2 or 3 times of operation.

1. Use the 2mm Allen key to loose the two grub screws of the coupler which connects the flexshaft, then slide the flexshaft w/ prop shaft out of the stuffing tube.
2. Lubricate the flexshaft w/ prop shaft with the water proof marine grease, reinstall the flexshaft w/ prop shaft in reverse order, be sure to retighten the two grub screws of coupler.



## CAUTION!

### Please observe the following warnings. DURING OPERATION

- The transmitter's range will vary depending on your surroundings and battery strength. Do not operate MODEL too far away or control will be lost.
- Ensure that all batteries are correctly installed and that the 7.4V Power Pack is fully charged.
- Do not operate your MODEL in areas with strong currents, in salt water or areas of water with large waves.
- Do not touch moving parts during operation, especially the propeller.
- Do not let your MODEL run aground, as this can cause damage.
- If you lose control of your MODEL, never wade into deep water or water with strong currents to retrieve it. First, hold the transmitter as high as you can to try to re-establish control. If this does not work, find another way to move closer to the model, but do not endanger yourself in the process!

### GENERAL INFORMATION FOR THE SAFE OPERATION OF YOUR MODEL

Please follow these simple rules to ensure safe operation and gain the maximum enjoyment from your model.

- Avoid overloading your model. Never run it in areas where its movement will be restricted, e.g. areas where there is pond weed, etc., as this can over stress the motor.
- Ensure nothing prevents the smooth running of moving parts.
- Do not run your model in confined spaces.
- Never run your model in a public space where it might upset or endanger people or wildlife.
- Immediately switch 'OFF' your model and transmitter if you see lightning or hear thunder. Never use your model in the rain.

Do not dismantle or tamper in any way with this R/C MODEL and its transmitter. The manufacturer and distributor will accept no responsibility, expressed or implied, for accidents or injuries caused as a result of disassembly, modification and/or usage against the Instructions for this product.

Tampering or modification will also invalidate the guarantee.

## TROUBLE SHOOTING

Check using the chart below before returning your MODEL for repair as many problems can be easily solved.

PROBLEM	CAUSE	REMEDY
Model will not move	No battery in transmitter/model Battery installation is incorrect Weak battery in transmitter Weak batteries in model	Install batteries Install batteries correctly Install a fresh battery Recharge 7.4V Power Pack
No control of model	Weak battery in transmitter	Install a fresh battery
Limited radio range	Weak battery in transmitter	Install a fresh battery

## SPARE PARTS

PART NO.	DESCRIPTION
860801	ESC & receiver combo set
860802	9g rudder servo (120mm wire)
860803	Aluminium alloy coupler w/3 screws
860804	Hatch lock latch & screw (PK2)
860805	Flex shaft set
860806	Rudder pushrod with rubber bellow & clevis set
82019	7.4V 900mAH Li-ion with XT60 plug
82055	Gear box set without metal gear
810608	J2C96 2.4GHz 2CH transmitter
820301	390 motor with metal gear
820306	2S USB balance charger
930511	P1.4 X D35mm $\Phi$ 4.0mm two blade nylon propeller (PK2)



## About the UIM E1 World Championship:

E1 is the world's first and only all-electric raceboat championship sanctioned by the Union Internationale Motonautique (UIM).

**RaceBird** <sup>lite</sup>  
CHAMPIONS OF THE WATER

## About the RaceBird Lite 1:14 RC Hydrofoil Raceboat:


RaceBird 1:14 RC Hydrofoil Raceboat is the world's first RC hydrofoil speed boat in toys and hobbies markets. The model produced by Joysway behaves and foils exactly like the full size RaceBird on the water.



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Electric Sea Racing Limited has granted Joysway Hobby International Limited exclusive global licence to produce radio control RaceBird lite model boats.

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### FCC REQUIREMENT



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 to this product not expressly approved by the party responsible for compliance may void the user's authority to operate the equipment.