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THIS IS NOT A TOY

INSTRUCTION MANUAL THIS MODEL IS NOT A TOY!

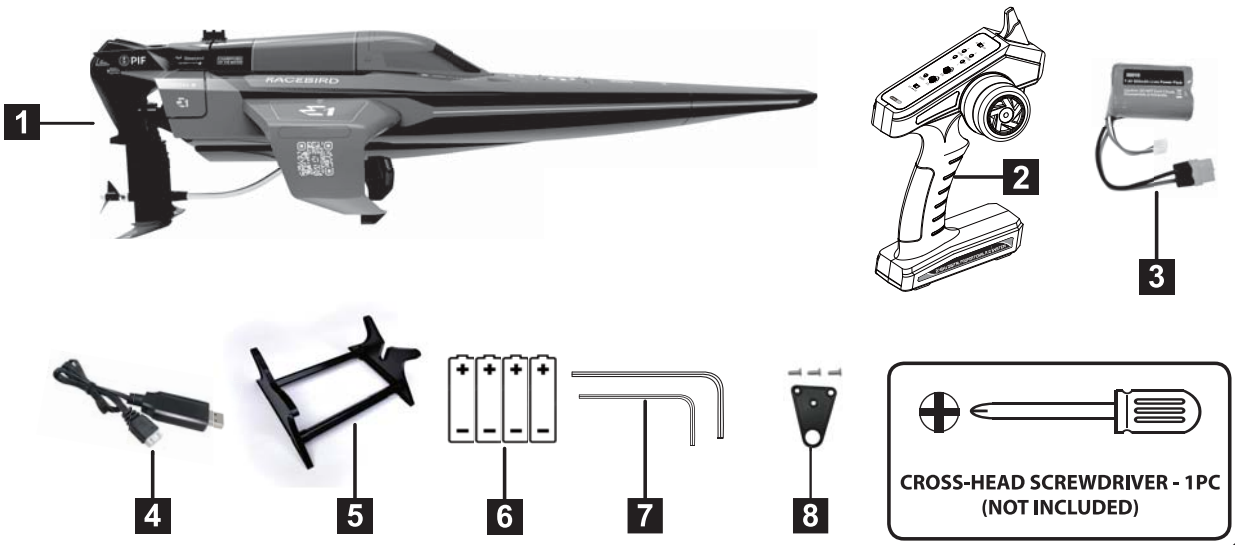
THESE INSTRUCTIONS SHOULD BE READ BY A SUPERVISING ADULT

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(to tighten push rod)
   2.0mm Allen Key(for Grub Screws)
8) Radio hanger & screws



IMPORTANT & USEFUL TIPS

1. ***Begin by activating the transmitter prior to connecting the battery to the boat. After use, disconnect the battery first before deactivating the transmitter.***
2. ***In the event of low power in the transmitter battery, it is recommended to replace it with a new battery to maintain optimal radio range and control.***
3. ***Should the boat veer off course, make adjustments to the steering trim as outlined on page 5.***
4. ***The ideal steering angle for turning the boat left or right is 30 degrees. Adjust the steering angle trim accordingly, with further instructions available on page 5.***
5. ***In the event of instability in an RC hydrofoil boat following a significant wave, reduce speed to regain control before accelerating to resume foiling on the water.***
6. ***To ensure smooth steering when turning left or right, reduce the boat speed accordingly. Steering at full speed may result in loss of balance and potential capsizing.***

IMPORTANT

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

Caution for Li-Ion battery:

The ESC is equipped with low voltage protection and should be monitored closely during operation. In the event that a noticeable decrease in boat speed occurs, it is recommended to promptly return the boat to shore for battery recharging. It is advised not to continue operating the boat when the ESC low voltage protection is activated, as this could lead to over-discharging of the battery, potentially causing irreparable damage.

Caution:

1. It is imperative to note that prolonged operation of the model may result in elevated temperatures, consequently causing premature motor wear. Following the depletion of your power source, it is advised to expose the motor to ambient air for approximately 5 minutes by opening the model's upper deck before replacing the power pack. This precautionary measure will safeguard the motor and prolong its operational lifespan.

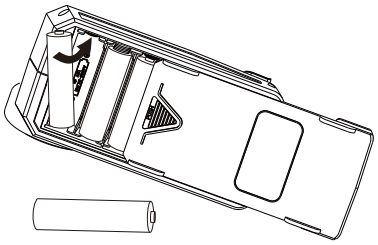
2. Prior to initiating the race with your model boat, it is essential to meticulously inspect the silicone tube to ensure the effectiveness of the water cooling system. Failure to do so may result in a malfunction of the water cooling system, potentially leading to the burning out of the ESC and motor defects .

INSTALLING TRANSMITTER BATTERIES

NOTE: The transmitter must be kept away from water at all times as it is not water resistant.

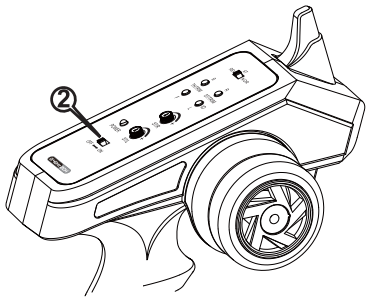
1. Please insert four new "AA" batteries according to the diagram at the bottom of the battery tray to ensure correct battery orientation.

2. Activate the transmitter. You will hear a "Bi" sound and the LED power light will begin flashing.



4XAA Batteries

(Included)



RADIO HANGER

The tool bag comes equipped with a triangle radio hanger and 3 screws for your convenience. Utilize these items to securely hang your radio around your neck with ribbon.

CHARGING THE 7.4V POWER PACK

1) The USB balance charger should be connected to the USB port of a computer, mobile phone adapter, or power bank. The RED light on the USB charger will remain solid.
2) Plug the battery's charging plug into the charging port of the USB charger. The RED light on the USB charger will stay solid, while the GREEN light will flash, indicating that the battery is charging.
3) It takes approximately 4 hours to fully charge a completely discharged battery. It is important not to leave the battery unattended while it is charging.
4) Once the charging is complete, the RED light will turn off and the GREEN light will remain solid. Disconnect the 7.4V battery from the charger.

NOTE: Please note that it takes around 1.5 hours to charge the battery to about 80% capacity.The USB balance charger will then continue to charge the battery with a low current for approximately 3 hours. When the GREEN light on the USB charger becomes solid, it means that the battery is fully charged.

CAUTION:

NOTE 1: The 7.4V battery is designed to be recharged multiple times before requiring replacement. Once the battery no longer maintains a charge, it is important to ensure proper recycling.

NOTE 2: The boat's operation time on a fully charged battery is approximately 8 minutes. If you observe a decrease in speed, it is advisable to return the model to shore for recharging to avoid losing control.

NOTE 3: Prolonged operation of the model will result in elevated heat levels, causing premature motor wear. It is recommended to allow the model to cool for 5-10 minutes before inserting a recharged battery pack..

INSTALLING THE 7.4V POWER PACK IN THE MODEL BOAT

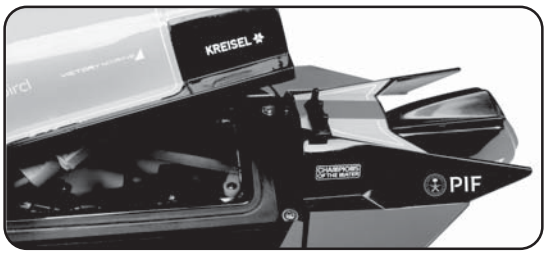
1. Prior to connecting the battery to the ESC, remember to activate the transmitter.

2. Easily assemble the boat stand following the provided photo. Then place the boat securely on the stand.

3. Start by rotating the plastic lock latch located at the rear of the hatch to remove it.

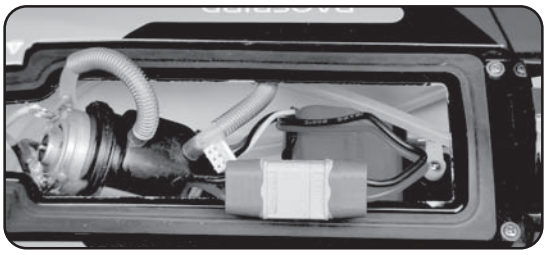
4. Securely place the fully charged battery on the battery tray inside the cabin.

5. Connect the battery connector to the corresponding ESC connector.



6. Realign the hatch on the boat and secure it tightly by rotating the hatch lock latch.

NOTE: Please ensure that the waterproof rubber ring inside the hull slot is properly positioned before reattaching the hatch.



TRANSMITTER/RECEIVER BINDING

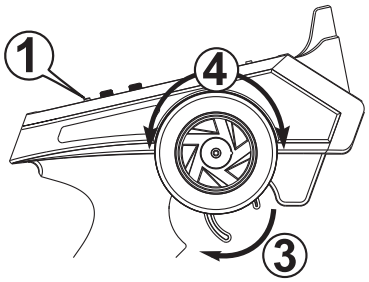
The transmitter and receiver will automatically bind once powered on, eliminating the need to press any bind button. It is important to ensure that no other transmitter or receiver is powered on nearby.

1) Upon switching on the transmitter, a sound "Bi" will be emitted, and the LED power light will flash.

2) After connecting the battery to the boat's ESC, the transmitter will sound "Bi Bi", and the LED power light will remain solid, indicating that the transmitter has successfully bound with the boat.

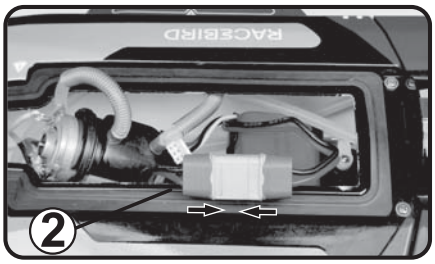
CHECKING THE RADIO SYSTEM

1. It is imperative to activate the transmitter prior to linking the battery to the ESC.

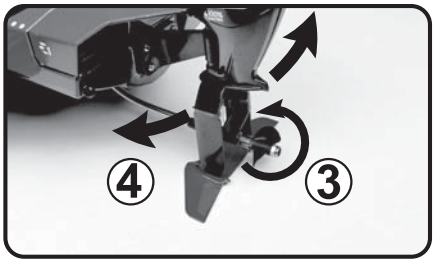


2. Establish a connection between the battery and the ESC of the boat.

3. Engage the throttle to initiate counterclockwise rotation of the motor, indicating that the motor is armed and prepared for use.



4. Verify the orientation of the rudder, ensuring that the trailing edge turns to the right with a right input and to the left with a left input.



NOTE: The left and right steering angles are pre-set to a standard angle suitable for common boat driving styles. If you wish to adjust the turning radius, you can modify the two knobs on the transmitter labeled "ST/R" and "ST/L". For further details, please refer to the "EPA ADJUSTMENT" section for more information.

DRIVING YOUR BOAT

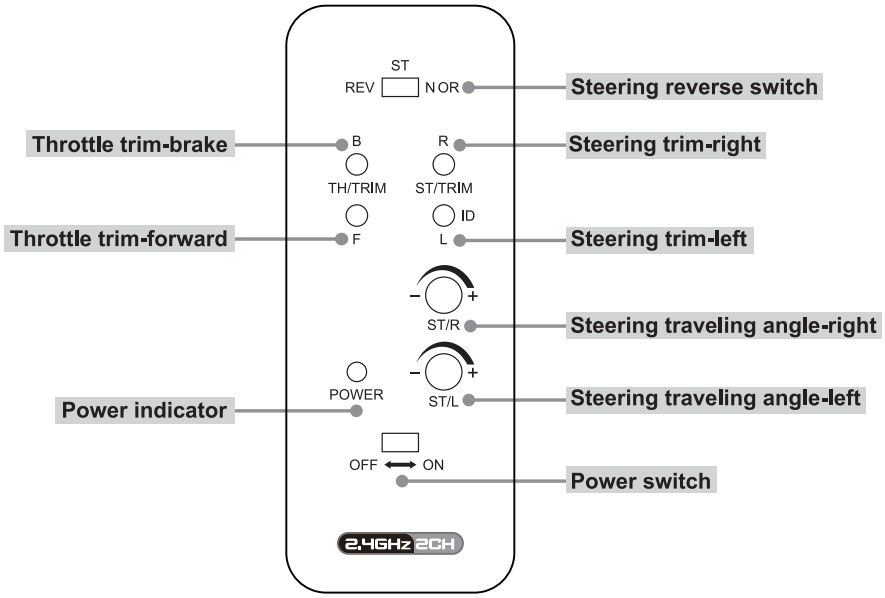
1) Activate the transmitter by switching it on, and observe the transmitter power LED indicator.
2) Power up the boat by switching it 'ON' (connect the 7.4V Power Pack). Ensure that both the propeller and rudder respond to transmitter commands before placing the boat in the water.

AFTER USE
1) Upon completion of boat operation, it is recommended to first switch the model 'OFF' (disconnect the 7.4V Power Pack), followed by turning off the transmitter.
2) Remove all batteries from both the transmitter and the model.
3) Allow the upper deck of the boat to remain open to facilitate moisture evaporation. Ideally, store the model in a warm and dry location, such as an airing cupboard, until completely dry before storage.

NOTE: If the boat starts to float unevenly while in operation, it may have accumulated excess water. In such a scenario, return to shore immediately, remove the water seal rubber plug located at the rear of the left bottom hull. Drain out any water and reposition the seal plug securely on the boat.

ATTENTION: Ensure the water seal plug is positioned correctly at all times to prevent water from entering the hull.

TRANSMITTER INTRODUCTION



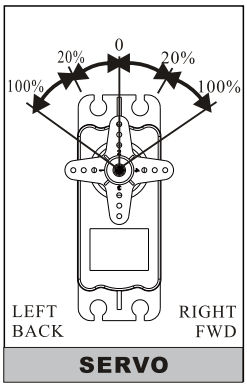
EPA ADJUSTMENT

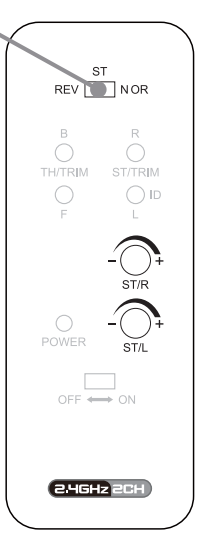
Function

Please utilize this tool for making precise adjustments to the steering angles, both left and right. The End Point Adjustment (EPA) allows for adjustments within a range of 0% to 100%.

Setting

1. Adjustment of steering angle to the right: Turn the "ST/R" knob to the left until reaching the minimum value of 0%, and to the right until reaching the maximum value of 100%.
2. Adjustment of steering angle to the left: Turn the "ST/L" knob to the left until reaching the minimum value of 0%, and to the right until reaching the maximum value of 100%.





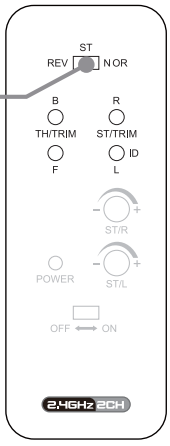
CAUTION:

When calibrating this function, ensure that the orientation aligns with the boat's heading,Adjustments can be made using the STEERING "REV-NOR" button.

TRIM ADJUSTMENT

Steering Trim

Please ensure that the "ST/TRIM" "R/L" is properly adjusted to center the rudder before beginning operation. This control can be further adjusted during operation to maintain a straight course.



CAUTION:

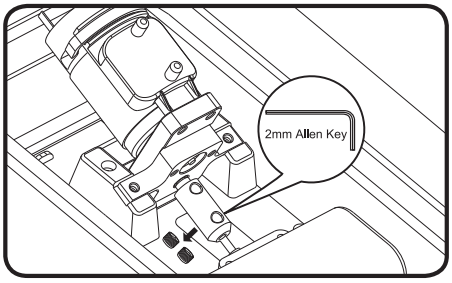
When adjusting steering trim, make sure the direction is in agreement with the boat direction, you can adjust by the STEERING "REV-NOR" button.

Throttle Trim

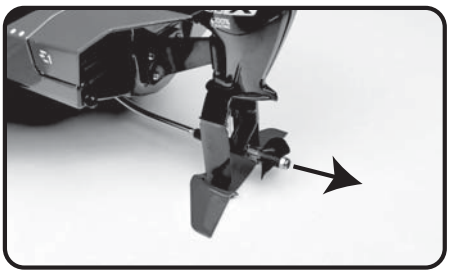
Modify the "TH/TRIM" "B/F" setting to prevent the propeller from rotating when the throttle trigger is in neutral.

LUBRICATING DRIVE SHAFT

It is crucial to properly lubricate the flex shaft in order to maintain the longevity of the drive train. The lubricant serves as a protective barrier against water, preventing any water from seeping into the hull through the stuffing tube.
Make sure to lubricate the flex shaft and propeller shaft after every 2 or 3 operations..



1. Utilize the 2mm Allen key to loosen the two grub screws on the coupler that connects the flex shaft. Then carefully remove the flex shaft with the propeller shaft from the stuffing tube.



2. Apply a generous amount of waterproof marine grease to the flex shaft and propeller shaft. Reinsert the flex shaft and propeller shaft in the reverse order, ensuring that the two grub screws on the coupler are securely tightened.

CAUTION!

Please observe the following warnings.

DURING OPERATION

- The effective range of the transmitter may vary depending on the surrounding environment and battery level. It is important to avoid operating the MODEL at a significant distance, as it may result in loss of control.
- It is crucial to ensure that all batteries are properly inserted and that the 7.4V Power Pack is fully charged.
- Avoid operating your MODEL in areas with strong currents, saltwater, or areas with large waves.
- Refrain from touching any moving parts during operation, particularly the propeller.
- Prevent your MODEL from running aground, as it could lead to damage.
- In the event of losing control of your MODEL, refrain from entering deep water or water with strong currents to retrieve it. Initially, elevate the transmitter as high as possible to attempt to regain control. If unsuccessful, find an alternative method to approach the model, but prioritize your safety throughout the process!

GENERAL INFORMATION FOR THE SAFE OPERATION OF YOUR MODEL

Kindly adhere to these straightforward guidelines to ensure the safe operation and optimal enjoyment of your model.

- Refrain from overburdening your model by avoiding operation in confined spaces or areas with obstacles that may strain the motor.
- Ensure that all moving parts can function smoothly without any obstructions.
- Avoid running your model in areas where it may pose a risk to individuals or wildlife.
- In the event of lightning or thunder, promptly turn 'OFF' your model and transmitter and refrain from using it in rainy conditions.
- It is imperative not to dismantle or tamper with this R/C MODEL and its transmitter in any manner. The manufacturer and distributor cannot be held liable for any accidents or injuries resulting from disassembly, modification, or improper use of the product. Any tampering or modification will void the guarantee.

TROUBLE SHOOTING

Please refer to the chart below prior to sending back your MODEL for repair, as numerous issues can be resolved with ease.

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

SPARE PARTS

PART NO.	*DESCRIPTION*
860801	ESC (Electronic speed controller) & 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 Φ4.0mm two blade nylon propeller (PK2)

RaceBird lite
CHAMPIONS OF THE WATER

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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).

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.

Website
e1series.com

Instagram
instagram.com/e1series

TikTok
tiktok.com/@e1series

X / Twitter
x.com/E1Series

Facebook
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PLEASE KEEP THIS INFORMATION FOR FUTURE REFERENCE

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

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.
However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
–Reorient or relocate the receiving antenna.
–Increase the separation between the device and receiver.
–Connect the device into an outlet on a circuit different from that to which the receiver is connected.
–Consult the dealer or an experienced radio/TV technician for help

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

FCC Radiation Exposure Statement The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located for operating in conjunction with any other antenna or transmitter.