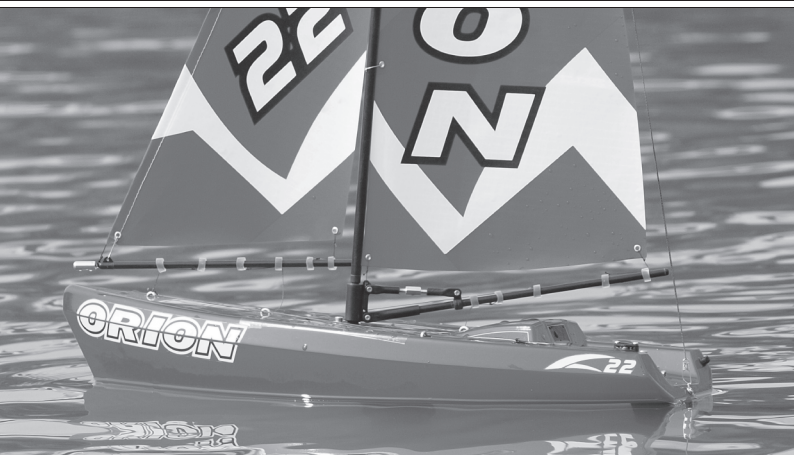


ORION

2.4GHz RTR RACE-READY SAILBOAT



SPECIFICATIONS:

- Total length: 465mm
- Beam: 150mm
- Mast height: 637mm
- Overall height: 920mm
- Sail area (main): 7.39 dm²
- Sail area (jib): 3.78 dm²
- Sail area (overall): 11.17 dm²
- Fiberglass pipe mast and booms
- Zinc alloy ballast and ABS keel
- Plastic molded boat stand
- Servo: 37g standard sail servo and 9g rudder servo
- 2.4GHz 2CH digital proportional radio control system
- Hull material: plastic molded hull (decal stickers and painting)
- RTR total weight: 950g

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

THESE INSTRUCTIONS SHOULD BE READ BY A SUPERVISING ADULT

2.4GHz RTR ORION RACE-READY SAILBOAT

Model No:8803

IMPORTANT :

1. This is not a toy. Assembly and operating of this boat requires adult supervision.
2. Please take time to read the instructions carefully and completely before attempting to operate your model. This manual contains the instructions you need to safely build, operate and maintain your R/C sailboat.

CONTENTS OF SET



hull and sails



rudder



keel



ballast



two pcs of M4 nuts



boat stand



2.4GHz 2CH Digital
Proportional Transmitter



Allen Key



slot-head screwdriver
(not included)

IMPORTANT TIPS

Jib boom and main boom are installed with silicone O rings. Adjust rings position on booms so as to adjust jib sail and main sail closing and opening angle easily.

ITEMS REQUIRED FOR COMPLETION

- 4 x "AA" alkaline batteries for transmitter (not included)
- 4 x "AA" alkaline batteries for receiver (not included)

SPARE PART LIST

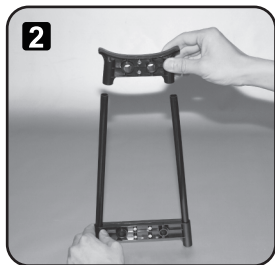
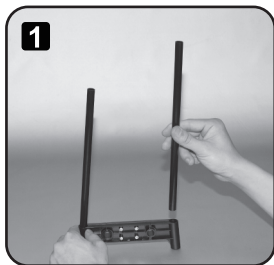
To order ORION spare parts, use the part numbers in the spare parts list that follows.

PART NO.	DESCRIPTION
880301	Hull with red color painting (No decals)
880302	Hull with blue color painting (No decals)
880303	Decal stickers
880304	ABS keel with screws
880305	390g standard ballast
880306	Standard mast set
880307	jib boom & fitting
880308	Main boom kicker assembly & fittings
880309	Red color standard sails set
880310	Blue color standard sails set
880311	Sail servo and servo arm
880312	9g rudder servo
880313	servo plastic tray
880314	pushrod with rubber bellow
880315	Switch rod w/ rubber bellow & switch connector set
880316	rudder
880317	PVC deck covers (PK4)
880318	J2C02 Transmitter and receiver set
880319	Plastic molded boat stand
880320	5m dyneema cord 0.11mm
880505	fin box and mast fitting
880510	Sheeting pulley block
880511	1m Sheeting elastic
880516	receiver
880518	5m dyneema cord 0.4mm
880519	winch line rubber cap (pk2)
880529	masthead fitting
880530	bowsies (PK10)
880531	6cm silicone tube
880532	deck eyes (PK10)
880533	mainsail luff rings (pk10)
880535	Aluminum alloy rudder arm set
880536	Rubber bung (PK4)
880537	Jib boom counterbalance weight (PK4)

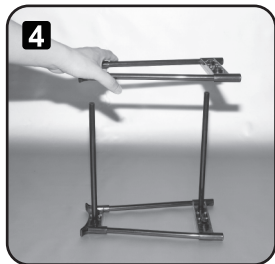
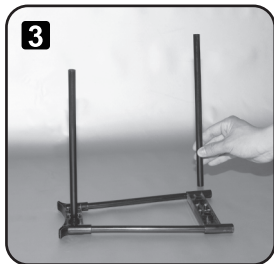
ORION BOAT STAND ASSEMBLY STEPS

Take boat stand fittings out of box and assemble them as photos shown.

1. Insert two ABS pipes into one under boat stand as photo 1 shown.
2. Join one upper boat stand and one under boat stand together with two assembled ABS pipes as photo 2 shown.



3. Insert two lateral ABS pipes into already assembled boat stand respectively as photo 3 shown.
4. Assemble the other boat stand the same way as step 1 and step 2.



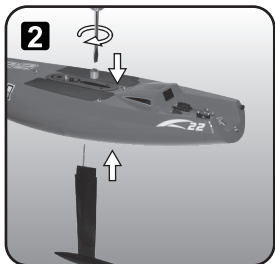
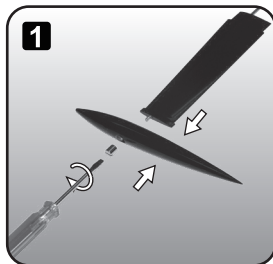
5. Interlink two assembled boat stands well as photo 4 shown.
6. Stick two included EVA to two upper boat stands as photo 5 shown, photo 6 is the assembled completely boat stand



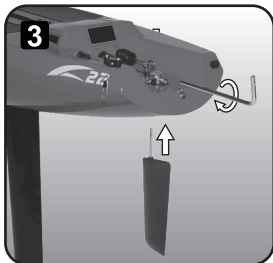
KEEL & BALLAST & RUDDER ASSEMBLY

Take the keel, ballast and rudder out of box and assemble them as photos shown.

1. Secure keel and ballast with M4 nut and screw driver.
2. Secure keel and hull with M4 nut and screw driver.



3. Insert the rudder shaft up through the bottom of the stern of hull. Notice the rudder's direction. Use 2.5mm allen key to secure the rudder shaft on the rudder arm. Make sure rudder can freely rotate and the gap for up and down is no more than 0.5mm;
4. Push rod go through clevis on rudder arm, make sure rudder is on the center line of hull, then use 2.5mm allen key to tighten clevis screw.



INSTALL 4 PCS "AA" ALKALINE BATTERIES IN YOUR TRANSMITTER

Install two control sticks before installing 4 pcs "AA" batteries.



Always use fresh AA alkaline battery in the transmitter.

1. Ensure transmitter "POWER" switch is in the off position.
2. Slide off the battery door on the back of the transmitter.
3. Install 4 fresh "AA" alkaline batteries into the molded battery compartment of transmitter. Noting correct location (polarity + or -)
4. Re-install the battery door onto the back of transmitter.

IMPORTANT NOTE: It is very important to keep the throttle stick at its lowest position before switch on transmitter. So that when you install batteries for receiver, radio and boat are activated only on the condition that throttle stick is at its lowest position.

5. Switch “POWER” on, green indicator light is on. Otherwise, check the above processes again to reinstall batteries.

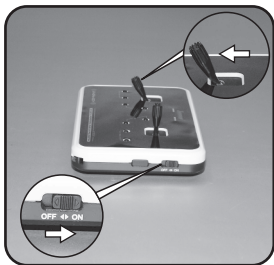


INSTALL 4 PCS “AA” ALKALINE BATTERIES IN RECEIVER

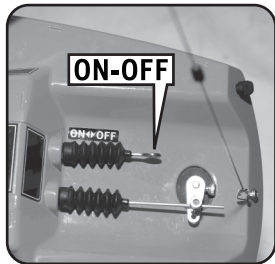
IMPORTANT NOTE: Always switch on the transmitter before switch on the receiver and always switch off the receiver before switch off the transmitter.

Install 4 AA alkaline batteries into battery box of Orion:

1. Push down the throttle stick (left stick) to the lowest position as shown, then switch on the transmitter;
2. Take battery box out of hull.



3. Install 4 pieces of "AA" Alkaline batteries into the the receiver box,make sure the correct polarity,then reposition the battery box into the original position and fix it tightly again with velco strap.
4. Switch on the receiver by pushing the pushrod forward to position "on".
This moment the receiver green light will be on,and steering servo and sailing servo in boat are under control correspondingly of radio control.



5. Lastly stick the two pcs of PVC hatch back to the hull.



TRANSMITTER & RECEIVER BINDING

The binding process effectively ties the transmitter and receiver together. Under normal circumstances, both items are supplied like this from the factory. If, however, you find that your transmitter and receiver are not bound (receiver's red LED will turn on), you should do the following:

1. Make sure throttle stick (Left Stick) is pushed down till the end, switch on transmitter.
2. Take receiver battery box out of hull, install 4 pieces of "AA" batteries into battery box in correct polarity, then locate back battery box and fix it well with velco strap.
3. Switch on the receiver by pushing the pushrod forward to position "on".
4. Press down the "BIND" button on the receiver and release, the receiver's green light will flash and then turn to solid on, this indicate that binding process has been operated successfully and the receiver will now accept commands from the transmitter.

Note: During binding process, transmitter and receiver should be no more than one meter apart and no other similar devices should be within 10 meters. If the receiver's GREEN light is flashing, indicating a binding failure, Please repeat the binding process above.

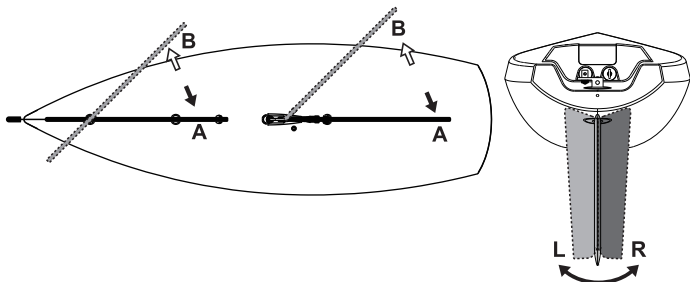
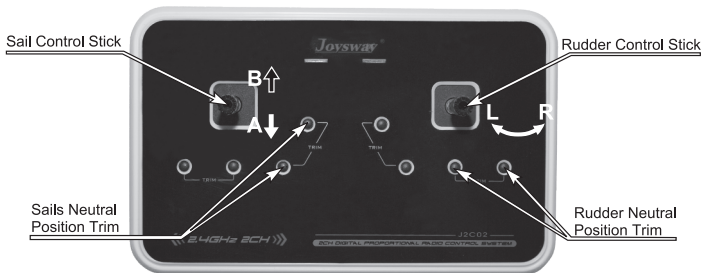
PREPARATIONS FOR SAILING

Before sailing your ORION for the first time, Always switch on the transmitter before switch on the receiver and always switch off the receiver before switch off the transmitter.

Following the procedures to check the radio and sailboat's function:

1. ORION is supplied with 2.4GHz 2CH radio system. Please see following function of the transmitter.
2. For sail control stick, when stick is in position A, accordingly, the main boom and jib boom are in the position of A as shown. When stick is in the position of B, accordingly, the main boom and jib boom are in the position of B as shown.
3. You may also adjust the sail servo neutral by pressing the sail neutral position trim button up or down.
4. For rudder control stick, rudder turn left when rudder control stick is pushed to the left. Rudder turn right when rudder control stick is pushed to the right.
5. You may also adjust the rudder servo neutral by pressing the rudder neutral position trim button left or right.

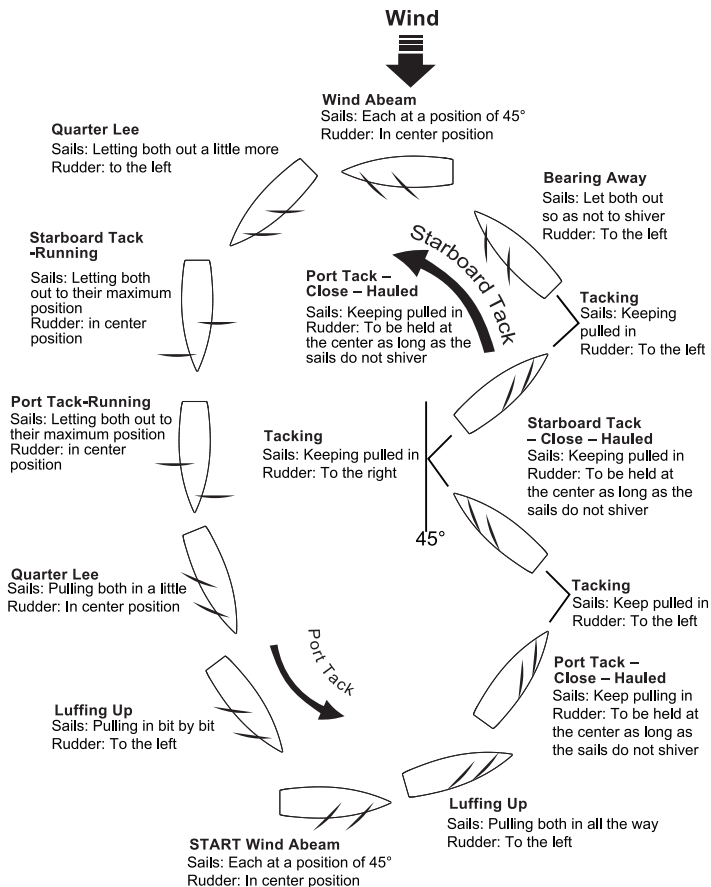
TRANSMITTER & RECEIVER BINDING



SAILING THE ORION

Unlike propeller driven boats that you basically point and accelerate, sailboats present an interesting challenge. Sailing requires constant reaction to water movements, any wind gusts, and any wind direction changes. These reactions then require adjustment of the rudder and sails in order to find the best possible course. There is no substitute for actual "on-the-water" experience and after your first couple of outings you may want to read through this manual again in order to help you to gain a better understanding of the "art" of sailing. While learning to sail, it is a good idea to pick up on as much sailing terminology as possible. This will make it easier to grasp some aspects.

How To Sail ORION



IMPORTANT NOTICE:

1. Sail your ORION only in still bodies of water. Never sail your boat in running water such as streams or rivers, as it is easy to lose control of your boat.
2. Do not sail ORION in heavy winds.
3. Never attempt to swim after a stalled or stuck boat! Wait patiently for the wind currents to return the boat to shore.
4. After running, remove the deck and allow the interior of the boat to dry out completely. If you neglect to do this, it may result in corrosion of the electronic components.



FCC WARNING: Changes or modifications not expressly approved by the party responsible for compliance could avoid the user's authority to operate the equipment.