791-1

COMPASS

Specifications

Hull Wideth	135 mm
Hull Length	650 mm
Mast Height	950 mm
Total Height	1365 mm
Weight	1.35 kg
Servos	Sail winch servo and rudder servo
Batteries	AA Batteries * 4pcs(excluded)

CAUTIONS

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product:
NOTICE: Procedures, which if not be properly followed, will create a possibility of physical property damage AND or possibility of injury.

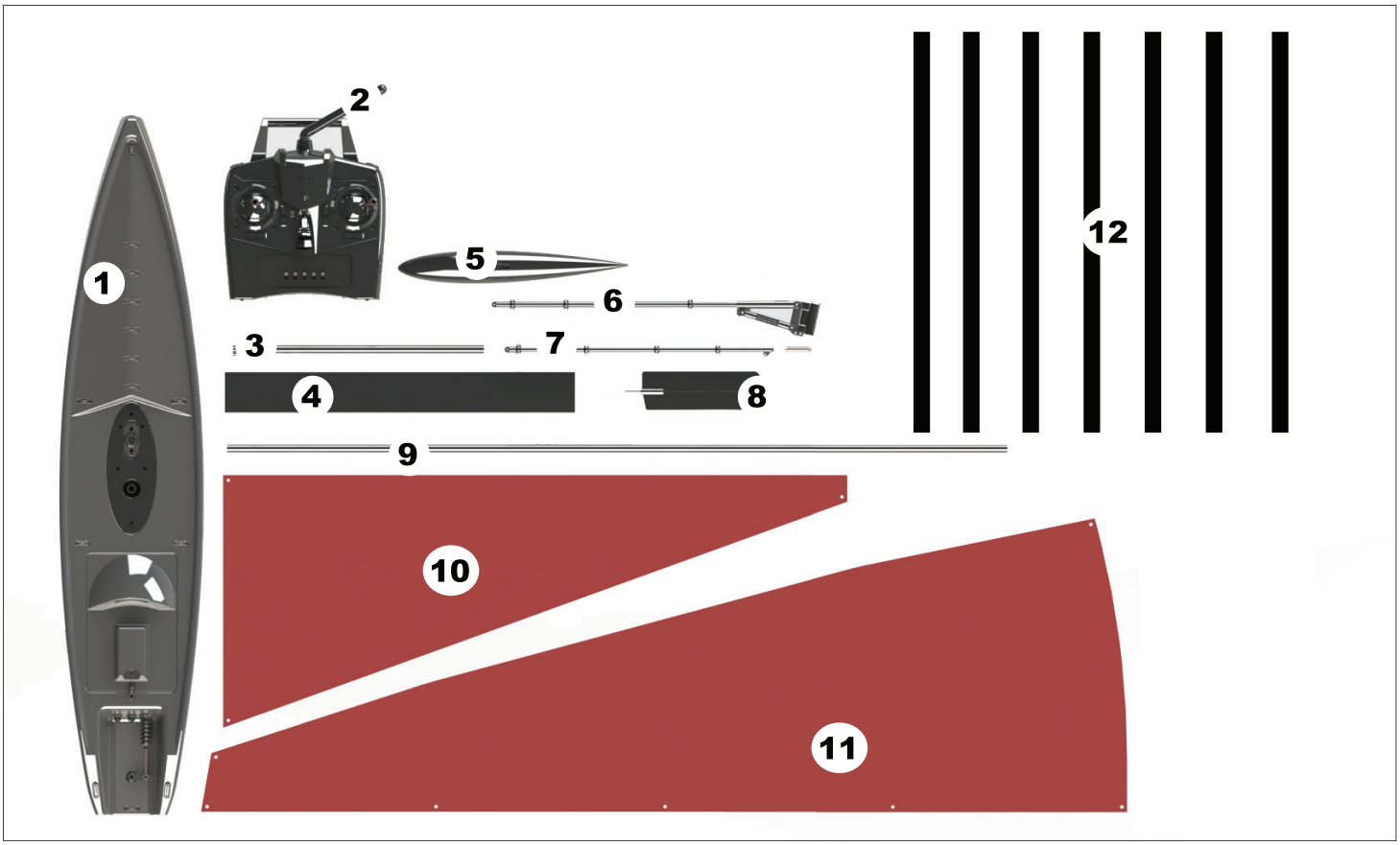
WARNING: Read the **ENTIRE** instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and cause serious injury.
This is a sophisticated hobby product. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. Do not use with incompatible components or alter this product in any way outside of the instructions provided by VolantexRC Co., Ltd.. This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.
AGE RECOMMENDATION: NOT FOR CHILDREN UNDER 14 YEARS. THIS IS NOT A TOY.

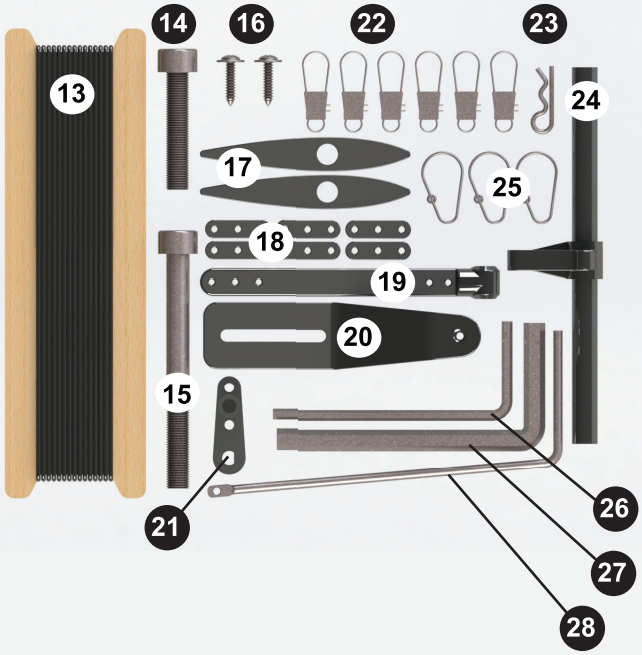
Safety Precautions and Warnings

As the user of this product, you are solely responsible for operating in a manner that does not endanger yourself and others or result in damage to the product or the property of others.

- Always keep a safe distance in all directions around your model to avoid collisions or injury. This model is controlled by a radio signal subject to interference from many sources outside your control. Interference can cause momentary loss of control
- Always operate your model in open spaces away from full-size vehicles, traffic and people.
- Always carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.).
- Always keep all chemicals, small parts and anything electrical out of the reach of children.
- Always avoid water exposure to all equipment not specifically designed and protected for this purpose. Moisture causes damage to electronics.
- Never place any portion of the model in your mouth as it could cause serious injury or even death.
- Never operate your model with low transmitter batteries.
- Always keep your model in sight and under control.
- Always use fully charged batteries.
- Always keep transmitter powered on while vehicle is powered.
- Always remove batteries before disassembly.
- Always keep moving parts clean.
- Always keep parts dry.
- Always let parts cool after use before touching.
- Always remove batteries after use.
- If at any time the battery begins to balloon or swell, discontinue use immediately. If charging or discharging, discontinue and disconnect. Continuing to use, charge or discharge a battery that is ballooning or swelling can result in fire.
- Always store the battery at room temperature in a dry area for best results.
- Always transport or temporarily store the battery in a temperature range of 40–120°F (5–49°C). Do not store battery or vehicle in a car or direct sunlight. If stored in a hot car, the battery can be damaged or even cause fire.
- Always charge batteries away from flammable materials.
- Always inspect the battery before charging and never charge damaged batteries.
- Always disconnect the battery after charging, and let the charger cool between charges.
- Never leave charging batteries unattended.
- Never charge batteries in extremely hot or cold places (recommended between 40–120°F or 5–49°C) or place in direct sunlight.

Box Contents

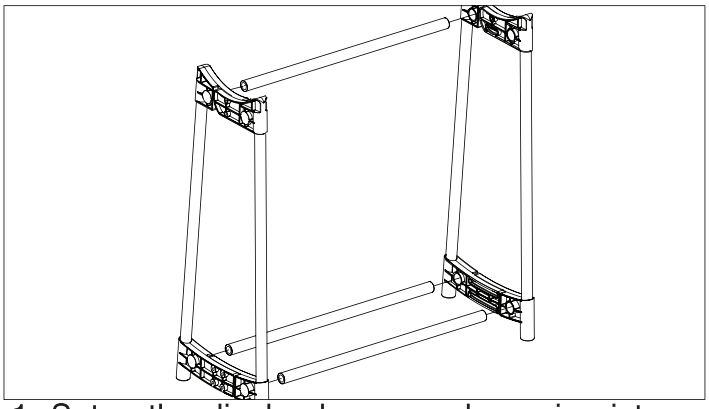




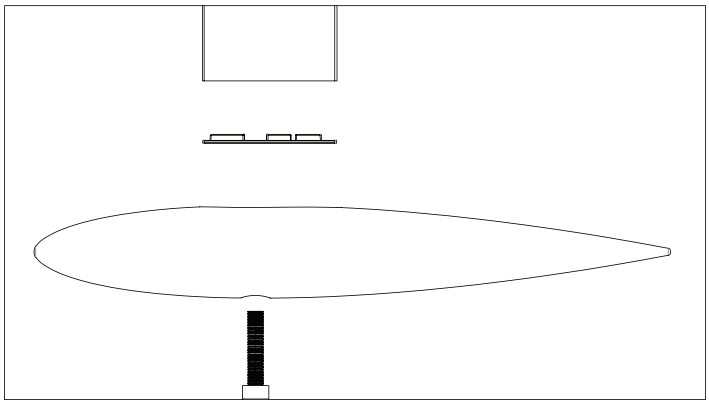
1. Hull
2. Transmitter
3. Short Mast
4. Keel
5. Ballast
6. Main Boom
7. Jib Boom
8. Rudder
9. Long Mast
10. Jib Sail
11. Main Sail
12. Display Base
13. Dyneema Cord
14. HM5*25mm Screw
15. HM5*50mm Screw
16. PWA2*10*8 - 14pcs
17. Water-proof rubber piece - 2pcs
18. Bowsie - 6pcs
19. Swivel
20. Cord Holder
21. Rudder Arm
22. Clevis - 6pcs
23. Clip
24. Forestay Fitting Part
25. Luff Ring - 3pcs
26. H2.0 mm Allen Key
27. H4.0 mm Allen Key
28. Metal Backstay Crane

We, as the kit manufacturer, provide you with a top quality, thoroughly tested kit and instructions, but ultimately the quality and performance of finished model depends on how you build it; therefore, we cannot in any way guarantee the performance of your completed model, and no representations are expressed or implied as to the performance or safety of your completed model

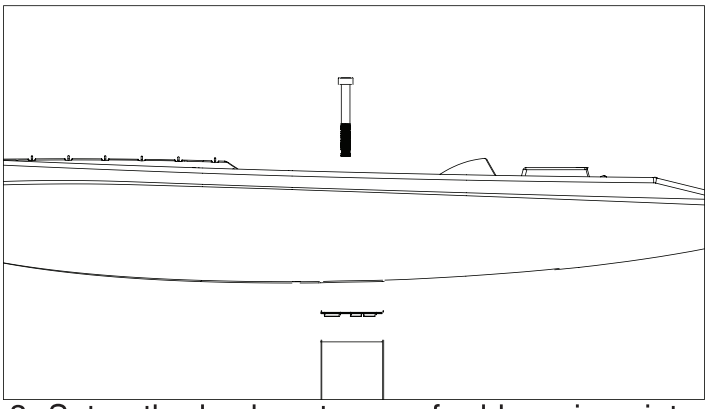
Installation and Rigging Guide



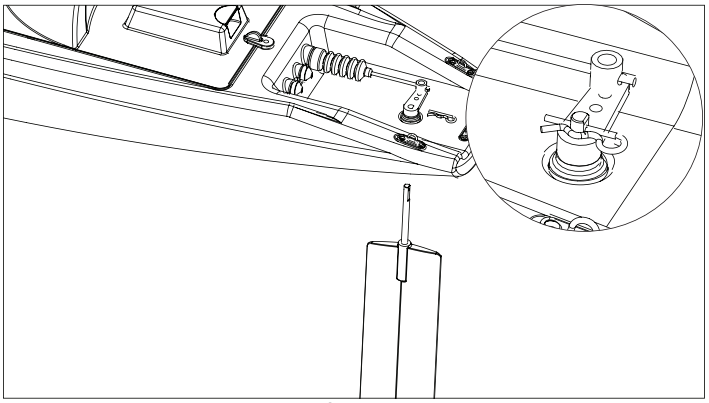
1. Setup the display base as shown in picture. Insert the tubes into the sockets, no gluing is required.



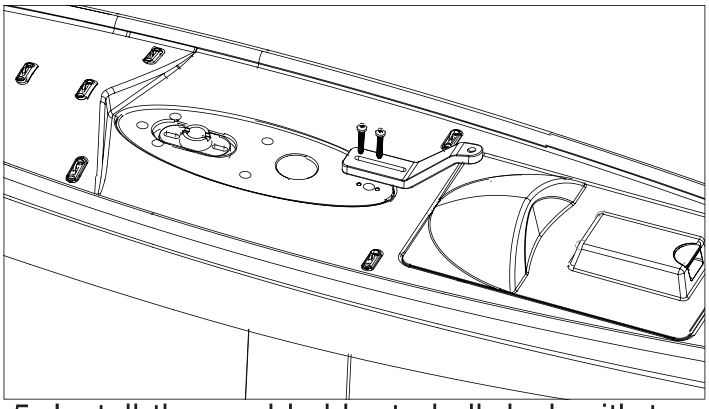
2. Setup the keel, water-proof rubber piece and ballast by HM5*25mm screw, using a H4.0mm allen key.



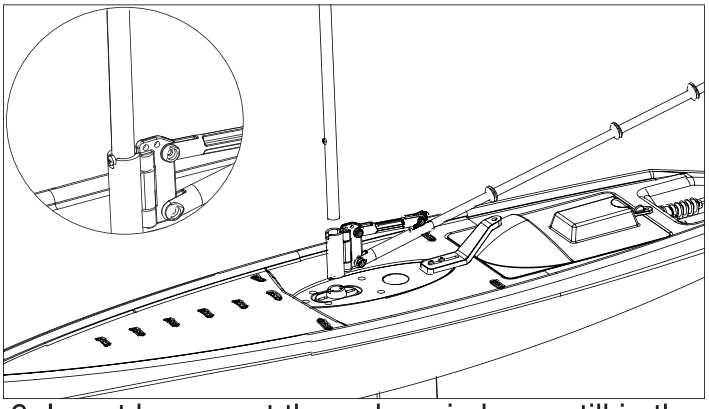
3. Setup the keel, water-proof rubber piece into hull by HM5*50mm screw, using a H4.0 mm allen key.



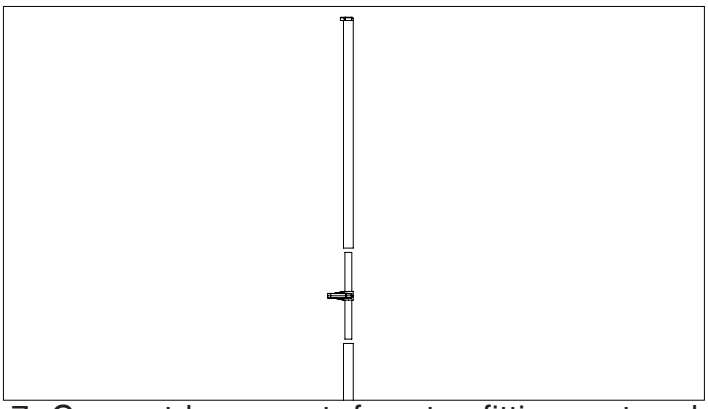
4. Insert the rudder from hull bottom to deck through a rudder arm, connected with a clip, make sure rudder is able to rotate freely. Then insert push rod through the knob on rudder arm, keep rudder in center position and tighten the knob with a H2.0mm allen key.



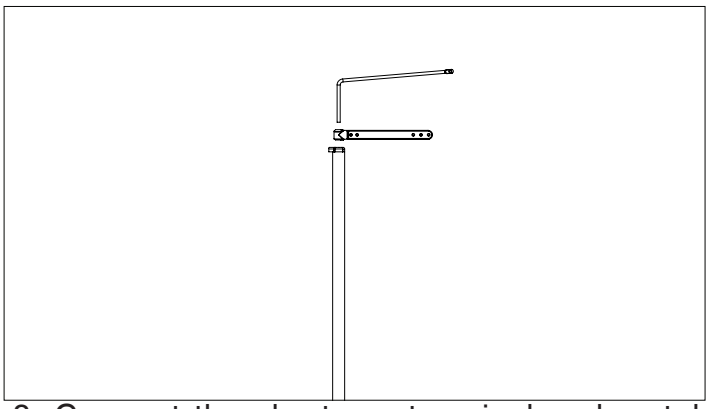
5. Install the cord holder to hull deck with two PWA 2*10*8mm screws.



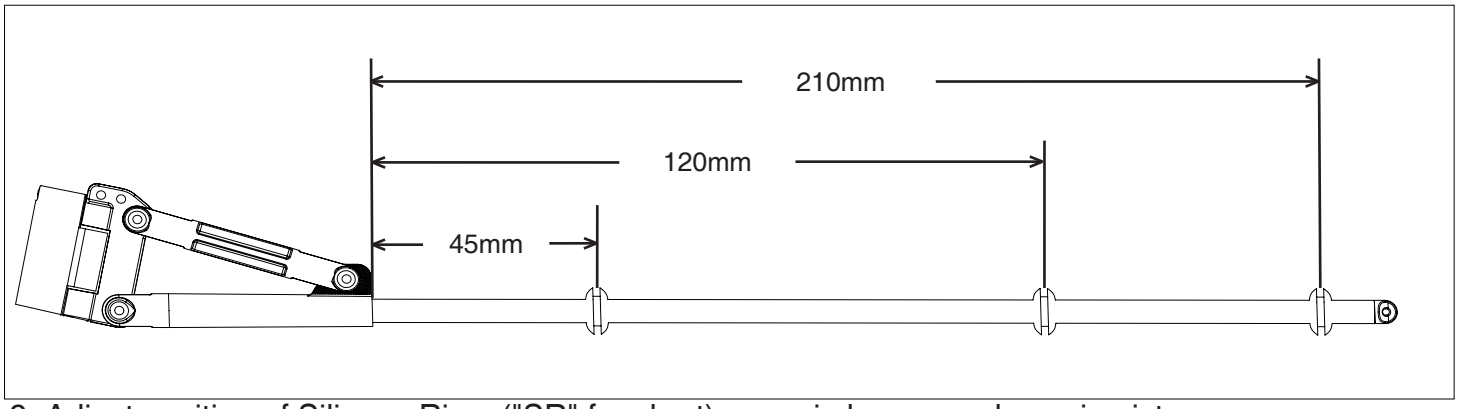
6. Insert long mast through main boom, till in the hull. Ensure the mast screw in the main boom slot.



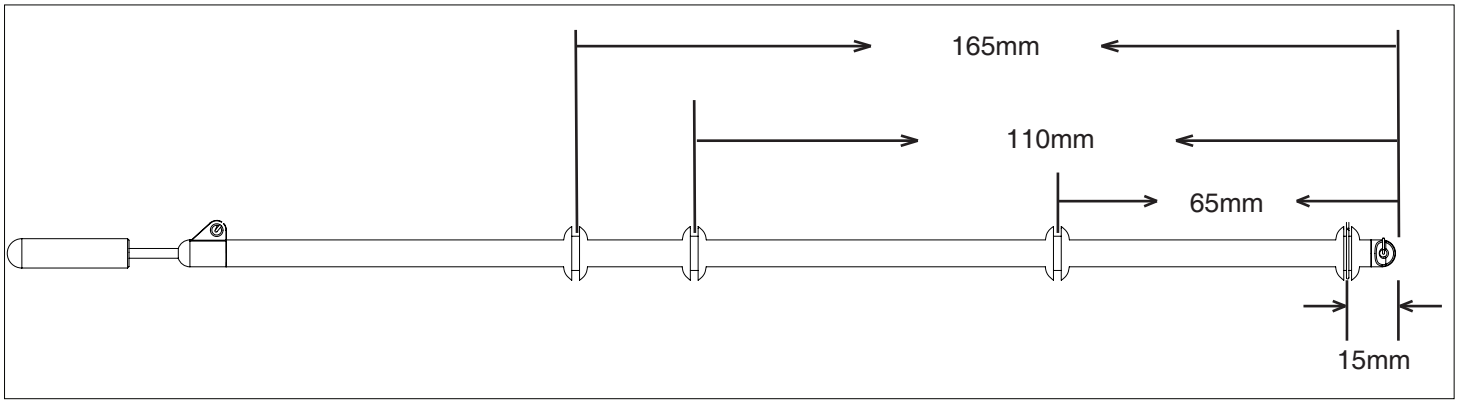
7. Connect long mast, forestay fitting part and short mast together.



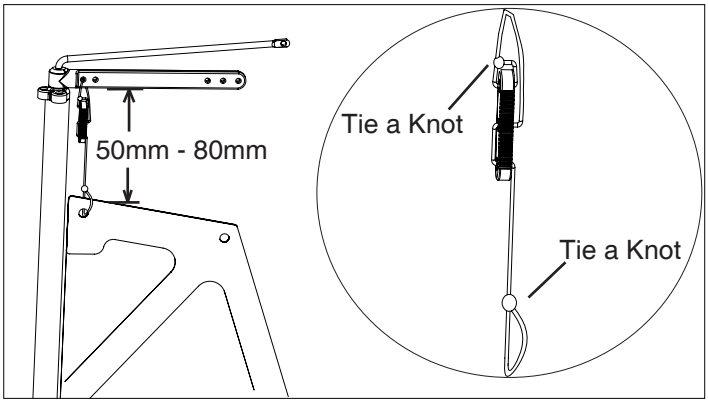
8. Connect the short mast, swivel and metal backstay crane.



9. Adjust position of Silicone Rings("SR" for short) on main boom as shown in picture.

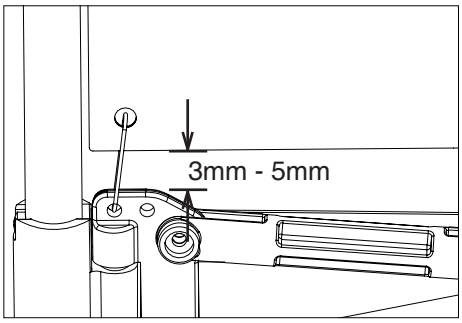


10. Adjust position of Silicone Rings("SR" for short) on jib boom as shown in picture.

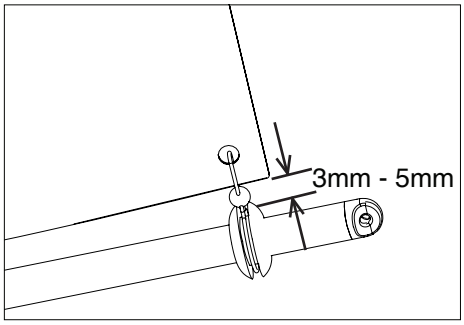


11. Cut a length of Dyneema cord at about 150mm, insert in holes to connect swivel and eyelet of main sail through a bowsie. Refer to the how-to picture helping you to tie a bowsie correctly.

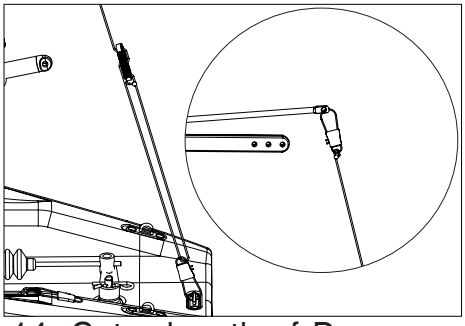
Notice: Normally you do not need to connect the right side eyelet on main sail to swivel.



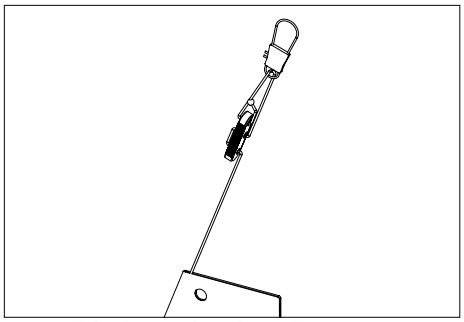
12. Cut a length of Dyneema cord at around 100mm, connect eyelet of main sail and main boom bearing.



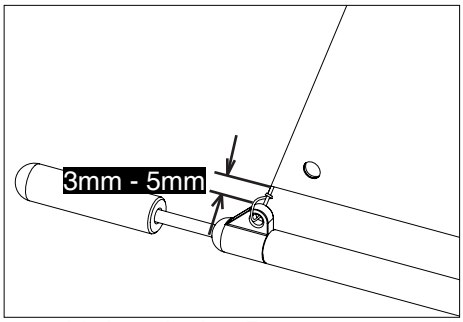
13. Cut a length of Dyneema cord at about 150mm, connect eyelet of main sail and main boom silicone ring.



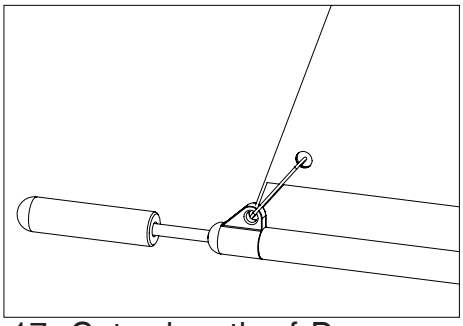
14. Cut a length of Dyneema cord at about 1600mm, tie both ends with a clevis, then hook one side on eyelet of hull, the other on backstay crane hole. Connect a bowsie on cord closer to hull side.



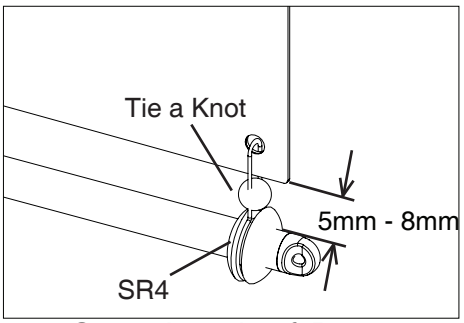
15. Unleash the Dyneema cord taped on top of jib sail, tie it to a clevis through a bowsie.



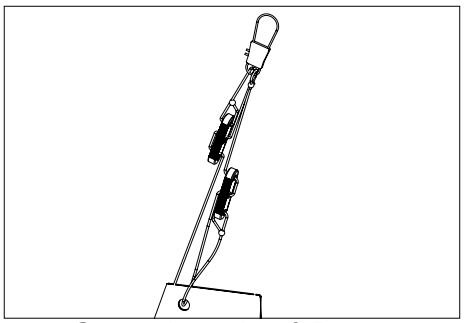
16. Unleash the Dyneema cord taped on bottom of jib sail, tie it to the eyelet on jib boom.



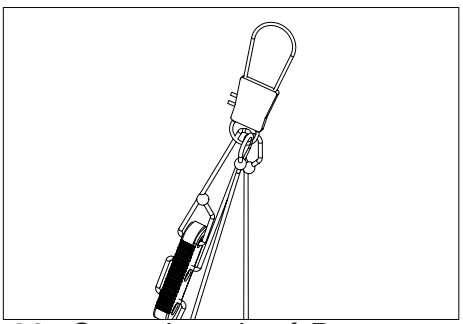
17. Cut a length of Dyneema cord at about 60mm, connect eyelet on jib sail and eyelet on jib boom as shown in picture.



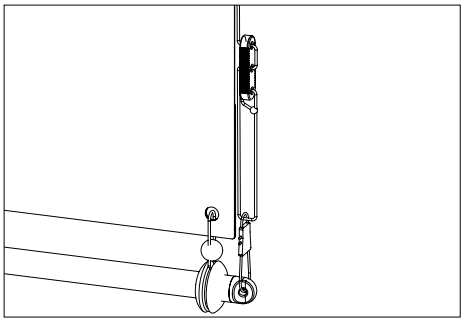
18. Cut a length of Dyneema cord at about 100mm, connect eyelet on jib sail and SR4 on jib boom.



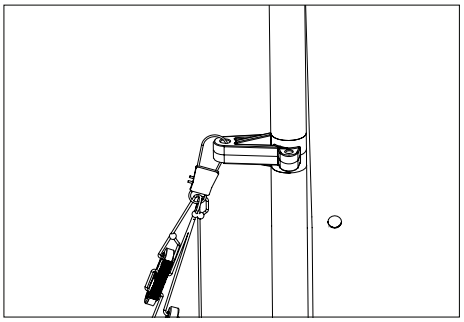
19. Cut a length of Dyneema cord at about 100mm, connect eyelet of jib sail and clevis through a bowsie.



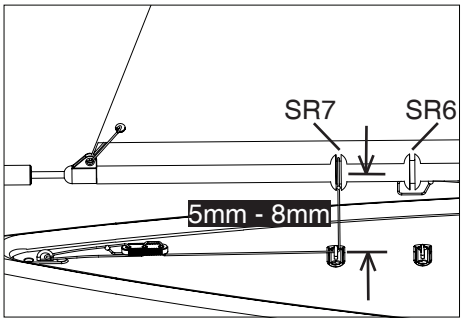
20. Cut a length of Dyneema cord at about 700mm, tie one end on the clevis as shown in picture.



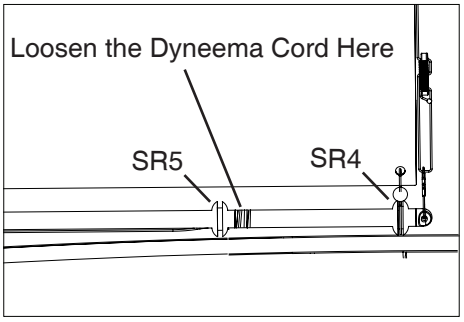
21. Tie the other end of the cord to a clevis through a bowsie, then hook the clevis to the eyelet of jib boom as shown in picture.

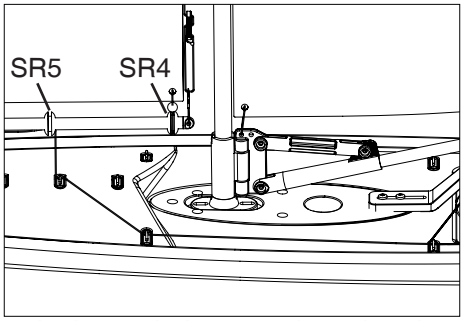


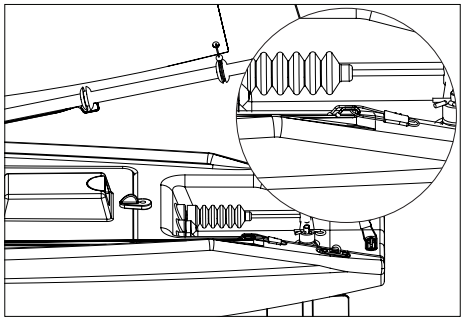
22. Hook the clevis to the forestay fitting part, keep its eyelet pointing parallel with the hull.



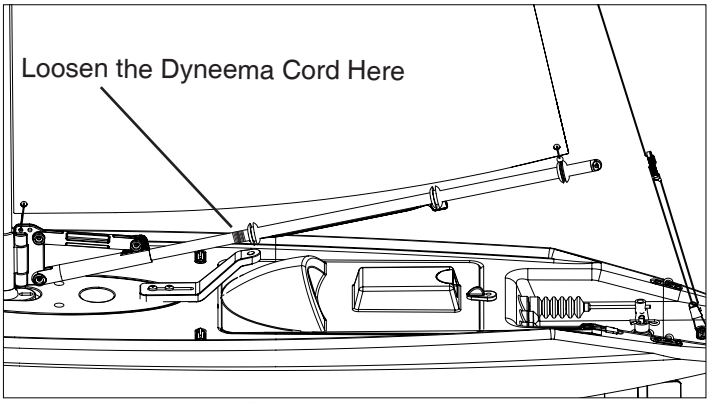
23. Cut a length of Dyneema cord at about 200mm, tie one end on SR7, then lead the cord through a bowsie and eyelets on deck as shown in picture.

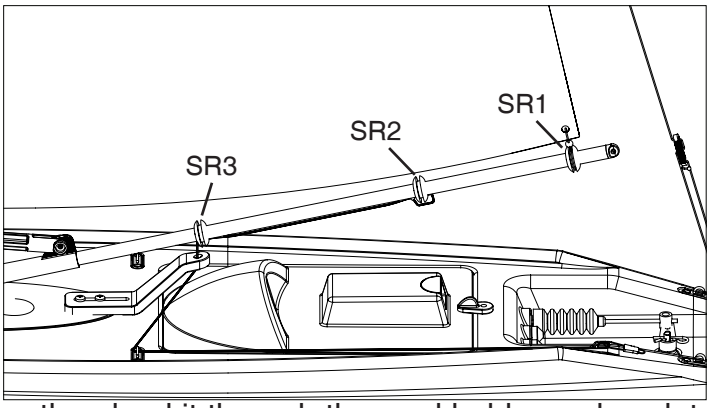






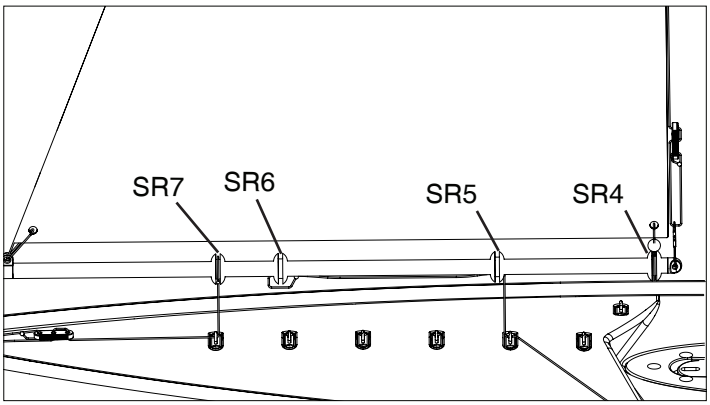
24. Unleash the Dyneema cord circled on jib boom, then lead it through three eyelets on deck as shown in picture, finally tie it on the pre-installed clevis at the end of port.

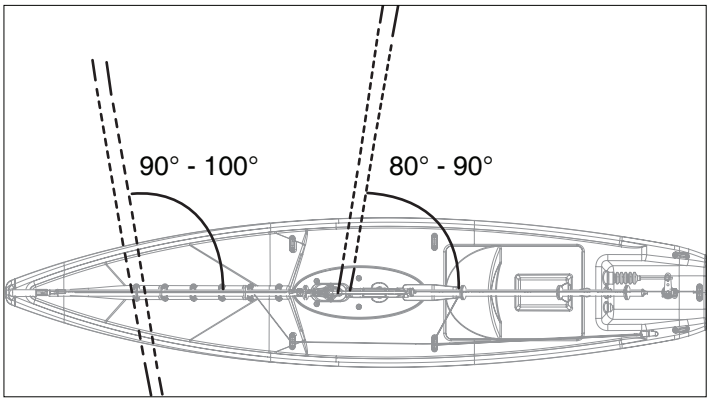




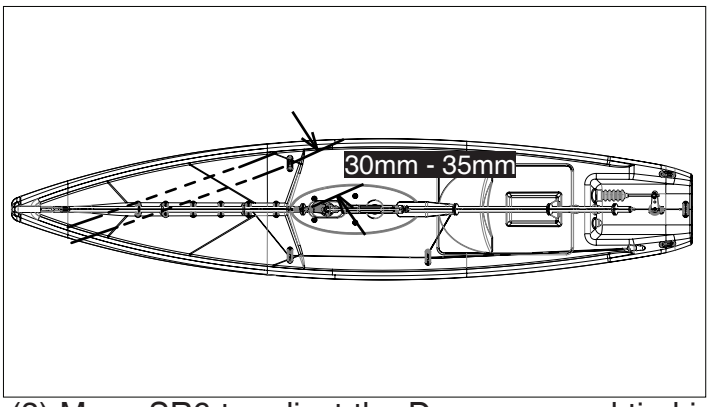
25. Unleash the Dyneema cord circled on main boom, then lead it through the cord holder and eyelet on deck, then finally tie on the pre-installed clevis at the end of port.

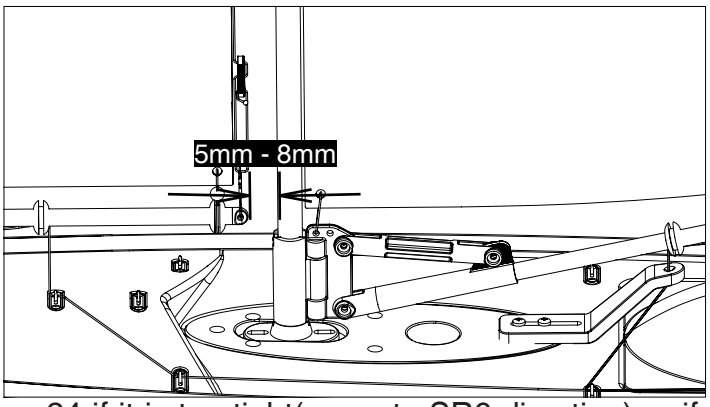
26. Move Silicone Rings("SR" for short) to appropriate position as shown in picture. If further rigging needed, adjust refering to below instruction:
(1) Move SR1 to adjust main sail until it is appropriately tight, but leaving little bending room so that it can sail. Normally if in strong wind environment it needs more bending room, in gentle wind environment it needs less bending room.
(2) Move SR2 to adjust the Dyneema cord tied in step 13 if it is too tight(move to SR3 direction) or too loose(move to SR1 direction), in order to keep the main boom in center position.
(3) Normally you don't need to move SR3, keep it in the position as shown in picture.





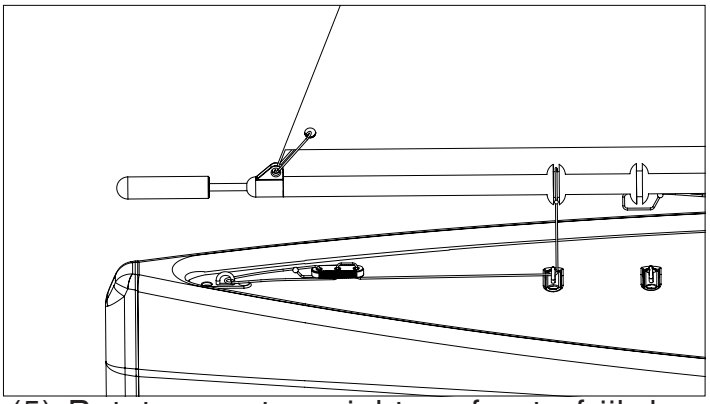
27. Move Silicone Rings("SR" for short) to appropriate position as shown in picture. If further rigging needed, adjust refering to below instruction:
(1) Move SR4 to adjust jib sail until it is appropriately tight, but leaving little bending room so that it can sail. Normally if in strong wind environment it needs more bending room, in gentle wind environment it needs less bending room.
(2) Move SR5 to adjust the expand angle when you power on and move sail stick. Make sure jib sail is able to travel larger angle than main sail(normarlly jib sail travels about 90° - 100°, main sail travels about 80° - 90°). If it is too tight(smaller angle), move SR5 to SR4 direction to increase the angle. If it is too loose(larger angle), move SR5 to SR6 direction to decrease the angle.
Notice: If need to adjust main sail expand angle, move SR3 to SR2 direction to increase angle, or move SR3 to mast direction to decrease angle. But normally position of SR3 is preset and no need to adjust.

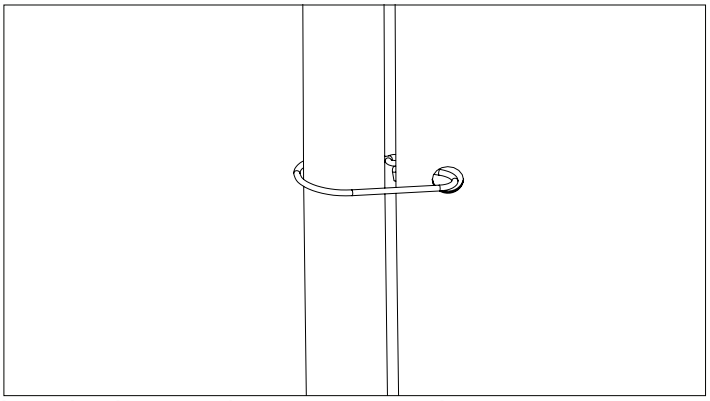




(3) Move SR6 to adjust the Dyneema cord tied in step 24 if it is too tight(move to SR6 direction) or if too loose(move to SR4 direction), to keep the jib boom with 30mm - 35mm expand distance to mast when sail stick at lowest position.

(4) Move SR7 to adjust distance between jib boom and mast if too close(move to SR6 direction) or if too far away(Move to counterweight direction) to keep about 5mm - 8mm between jib boom and mast.

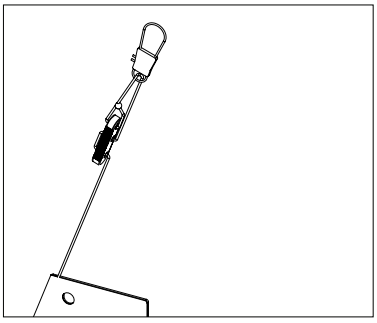




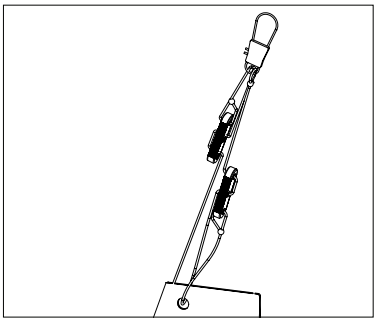
(5) Rotate counterweight on front of jib boom by clockwise direction to adjust its position, ensuring jib boom swing CG is located on SR7.

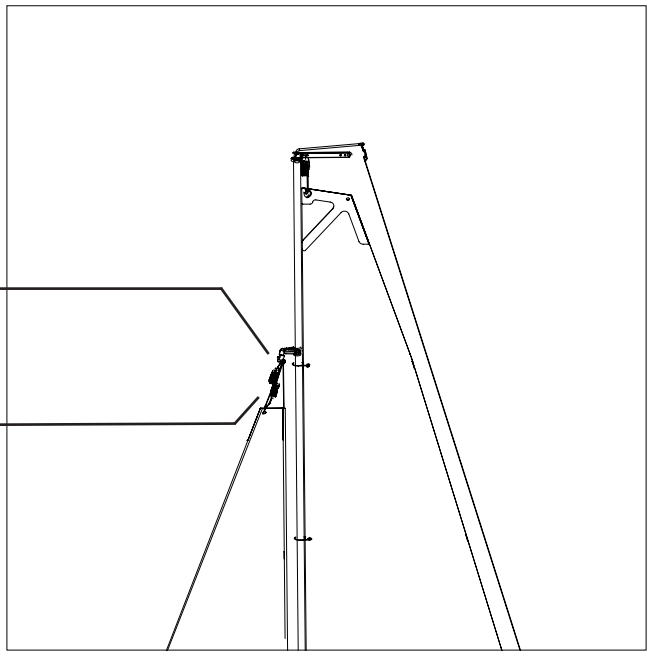
(6) Connect three luff rings with main sail and long mast.

28. Move bowsie to adjust bended angle of mast.
It should be bended little like a bow as dotted line shown in picture, but ensure it is a straight center line between top and bottom of mast.

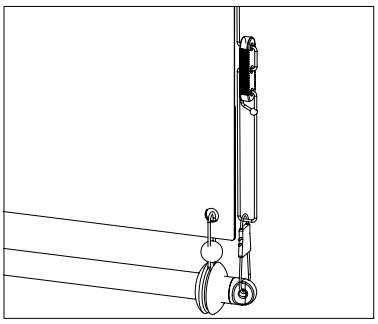


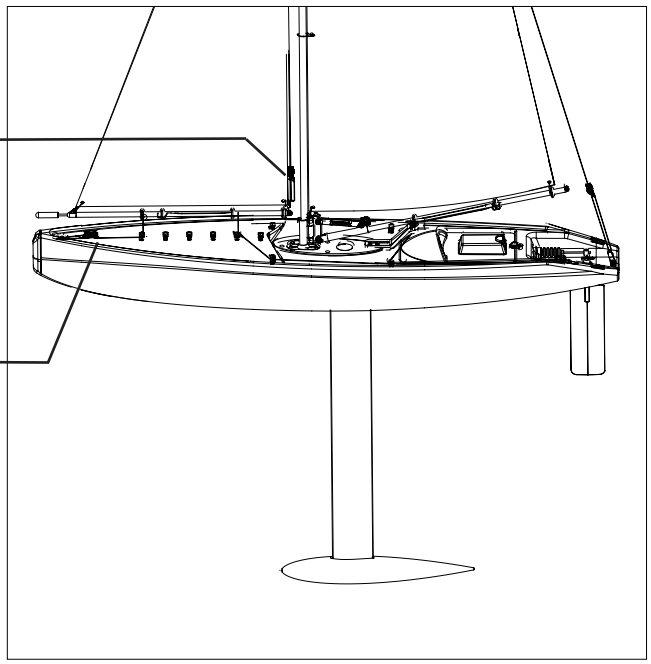
29. Move the bowsie at lower position to tighten or loosen jib sail hypotenuse.



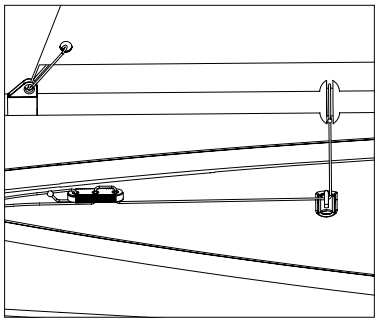


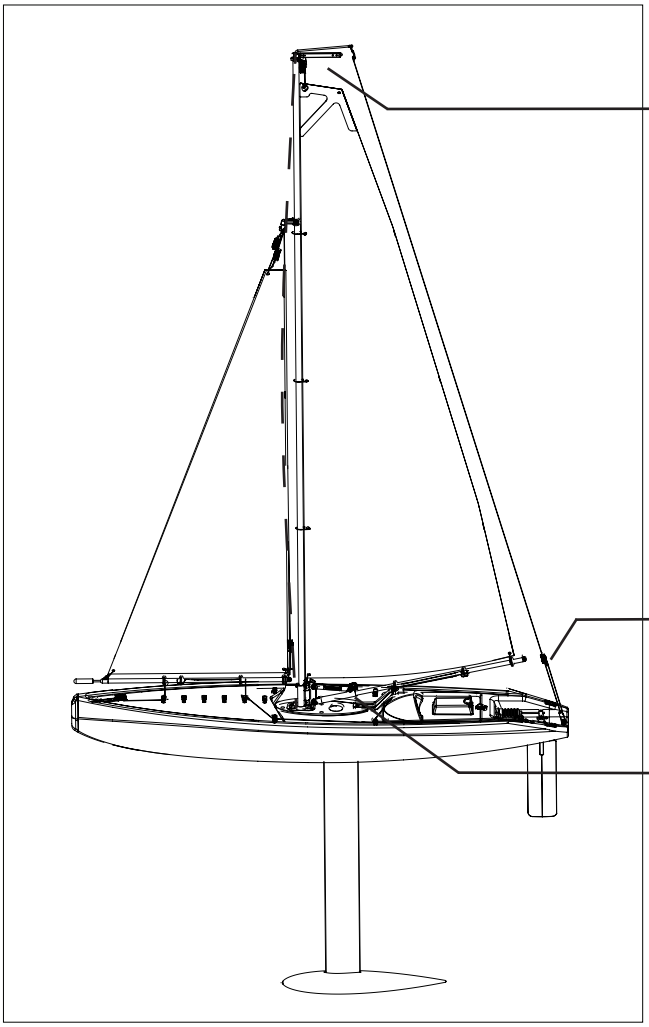
30. Move bowsie to tighten or loosen jib sail leg.

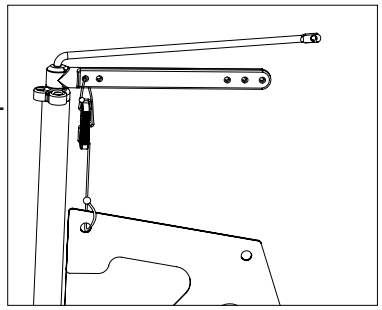




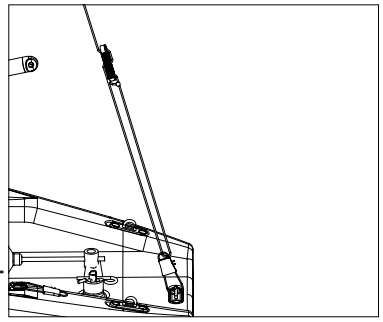
31. Move bowsie to adjust distance between jib boom and deck.



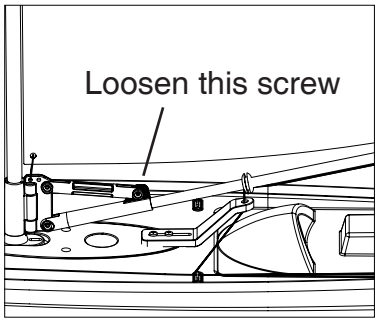




32. Move bowsie to tighten or loosen main sail leg.

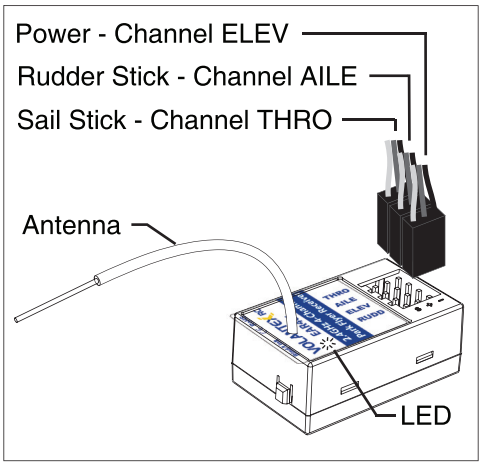


33. Move bowsie to adjust bended angle of mast.
It should be bended little like a bow as dotted line shown in picture, but ensure it is a straight center line between top and bottom of mast.



34. Loosen the screw and move the arm on main boom to adjust height of main boom(only needed when the cord tied on SR1 is not perfect).

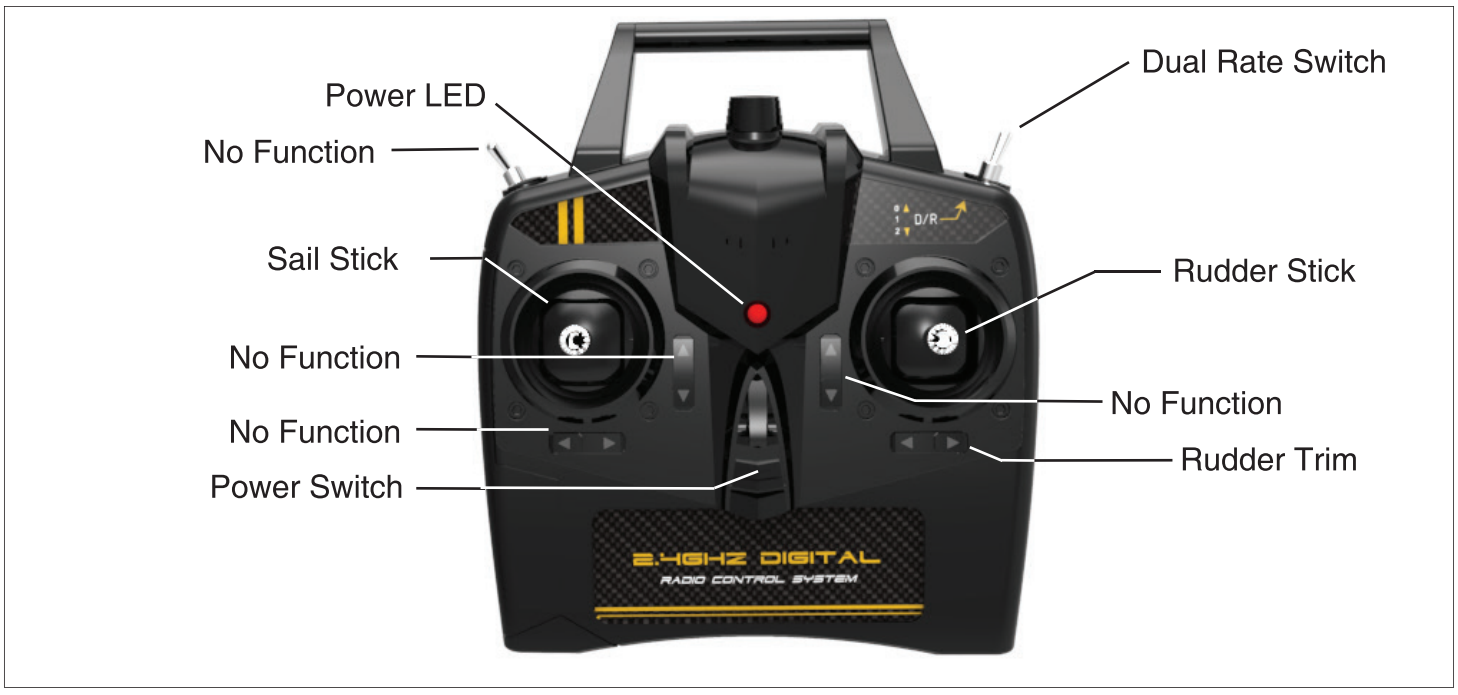
Bind Transmitter and Receiver

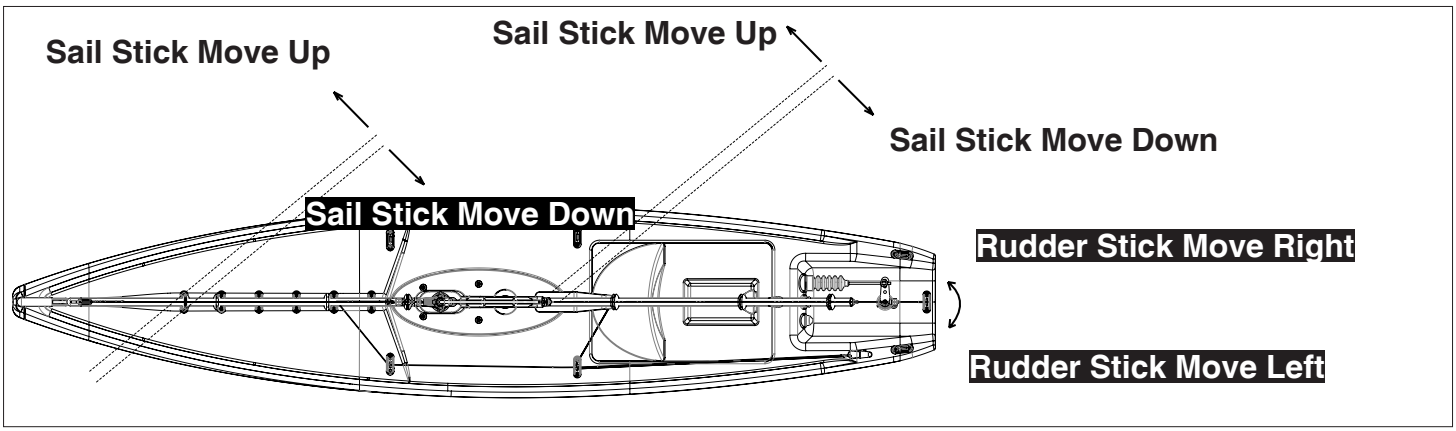


Binding is the process of programming the receiver to recognize the GUID (Globally Unique Identifier) code of a single specific transmitter. When a receiver is bound to a transmitter, the receiver will only respond to that specific transmitter.
The yacht normally comes with bound Transmitter and Receiver. If you need to rebind for any reason, please follow these steps:
1. Power on the receiver, then power on the transmitter within 5 seconds. The system will start binding automatically.
2. After the receiver LED stop flashing, it means the binding is done.
3. Now you are ready to run.

Transmitter Functions Instruction

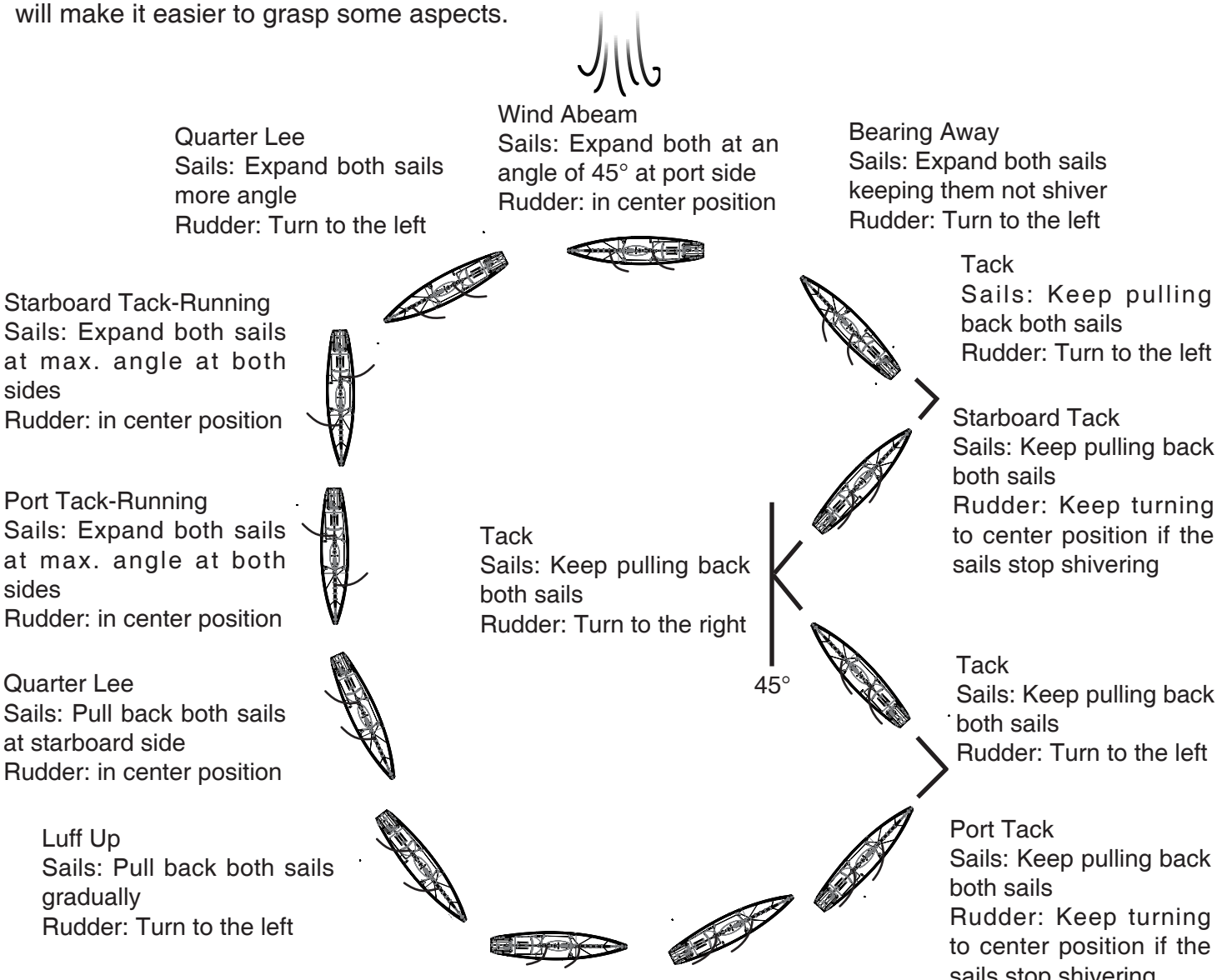
The yacht comes with a 2.4G 4-channels radio system. For sailing you will only need 2 channels. Learn all instructions as below:
1. Sail stick controls maximum expand angle of main sail and jib sail. When you move sail stick in upper position, both sails will be allowed with larger expand angles when wind comes. Both sails can expand to left or right depends on wind direction.
2. Rudder stick controls rudder to left or right direction.
3. Sail trim / rudder trim allows to adjust neutral position of sail / rudder if needed to center.
4. Reverse function switchers allow to reserve specific stick. Because sailing yacht only needs 2 channels, the reverse switchers No.3,4,5 are not functional.





How-to-sail Instruction

Unlike propeller driven boats that you basically point and accelerate, sailboats present some more interesting challenge. Sailing requires constant reaction to water movements and wind directions. These reactions require adjustments of 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 ready through this manual again until you get better understanding of the art of sailing. While learning it, it will be a good idea to pick up on as much sailing terminology as possible. This will make it easier to grasp some aspects.



IMPORTANT NOTICE:
1. Never sail your boat in running water such as streams or rivers, as it is easy to lose control.
2. Never swim after a stalled or stuck boat. Wait patiently for the wind currents to run the boat again.
3. After running, remove the deck allowing the interior of the boat to dry out completely. If you neglect to do this, it may result in corrosion of the electronic components.

Sail Checklist

NOTE: This checklist is NOT intended to replace the content included in this instruction manual. Although it can be used as a quick start guide, we strongly suggest reading through this manual completely before proceeding.
1. Always turn the transmitter on first.
2. Check each sail, rigging rings and fitting is properly installed and adjusted.
3. Sail the boat in a appropriate water environment.
4. We suggest you to switch Dual Rate button to 100%.
5. After running, turn off receiver power.
6. Unplug receiver batteries.
7. Always turn off the transmitter last.
8. Drain water out of boat hull, then place the boat in a dry shade.

Troubleshooting Guide

Problem	Possible Causes	Solutions
The system is not connected	Your transmitter and receiver are too close	Take transmitter 1 to 3 meters away from receiver
	You are around metal objects	Try in an area with less metal objects near by
	The model selected is not the bound one	Rebind your transmitter and receiver
The receiver not responding to the transmitter	Low battery voltage	Replace your batteries with new ones
	Loose or damaged wires between batteries and receiver	Check the wires and connection between the battery and receiver. Repair or replace wires and/or connectors
Boat tends to turn one direction	Rudder or rudder trim is not centered	Repair or adjust rudder and rudder trim till the boat is straight running when rudder stick is in neutral position