



791-2

# HURRICANE

**USER MANUAL**

# WARNING

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. Fail 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. Fail 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.**

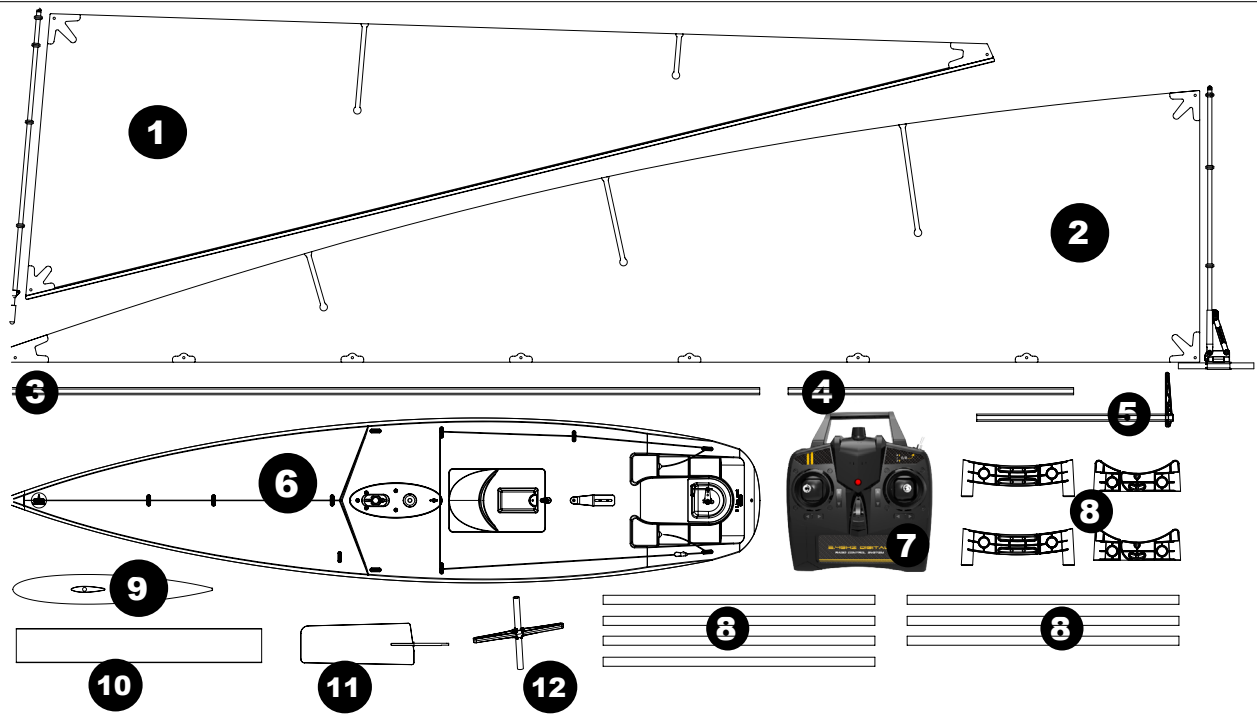
## Safety Precautions and Warnings

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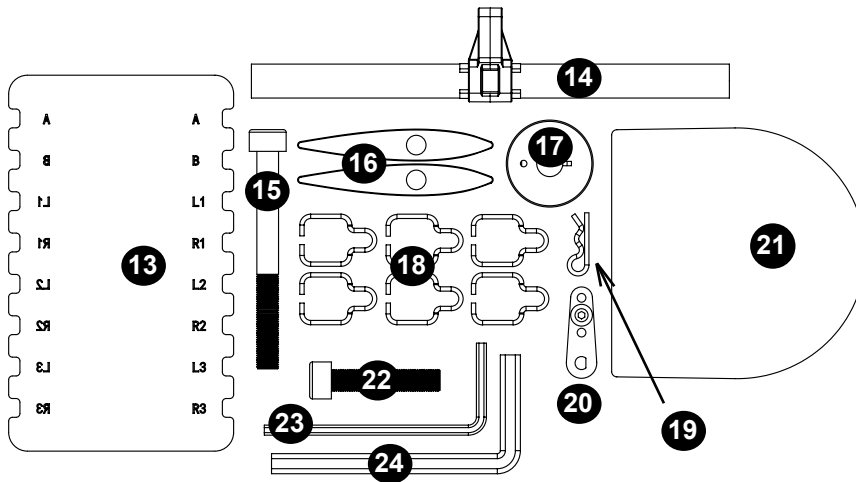
As the user of this product, you are solely responsible for operating in a manner that does not endanger yourself and others or result in damage to the product or the property of others.

- Always keep a safe distance in all directions around your boat to avoid collisions or injury. This boat 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 boat 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 specially designed and protected for this purpose. Moisture causes damage to electronics.
- Never place any portion of the boat in your mouth as it could cause serious injury or even death.
- Never operate your boat with low transmitter batteries.
- Always keep your boat in sight and under control.
- Always use fully charged batteries.
- Always keep transmitter powered on while boat is powered.
- Always remove batteries before disassembly.
- Always keep moving parts clean.
- Always keep parts dry.
- Always let parts cool after using before touching.
- Always remove batteries after usage.
- Always ensure failsafe is properly set before running.
- Never operate a boat with damaged wiring.

# Box Contents

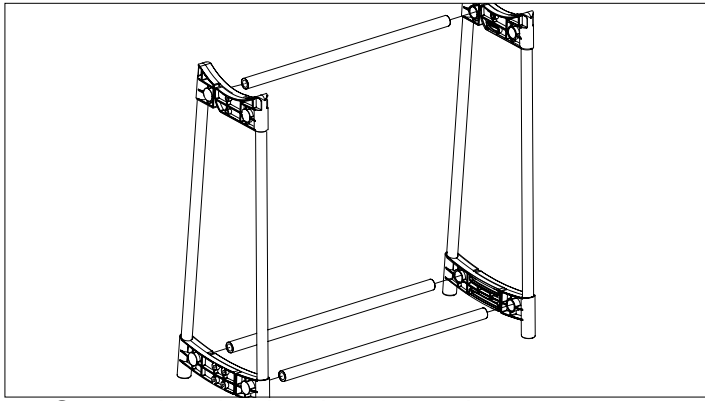


- |  |                               |                          |
|--|-------------------------------|--------------------------|
| <b>1. Assembled Jib Sail &amp; Boom</b>  | <b>5. Backstay Crane</b>      | <b>9. Ballast</b>        |
| <b>2. Assembled Main Sail &amp; Boom</b> | <b>6. Assembled Hull</b>      | <b>10. Keel</b>          |
| <b>3. Long Mast</b>                      | <b>7. Radio Transmitter</b>   | <b>11. Rudder</b>        |
| <b>4. Short Mast</b>                     | <b>8. Display Stand Parts</b> | <b>12. Shrouds Cross</b> |

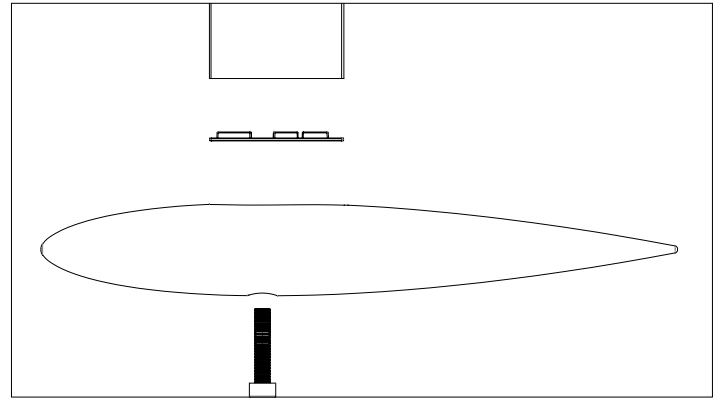


- |  |  |                              |
|--|--|------------------------------|
| <b>13. Cord Storage Board</b>              | <b>17. Spare Dyneema Cord - 5 Meters</b> | <b>22. HM5*50mm Screw</b>    |
| <b>14. Forestay Crane</b>                  | <b>18. Luff Ring - 6pcs</b>              | <b>23. H2.0 mm Allen Key</b> |
| <b>15. HM5*90mm Screw</b>                  | <b>19. Clip</b>                          | <b>24. H4.0 mm Allen Key</b> |
| <b>16. Water-proof Rubber Piece - 2pcs</b> | <b>20. Rudder Arm</b>                    |                              |
|  | <b>21. Deck Cover</b>                    |                              |

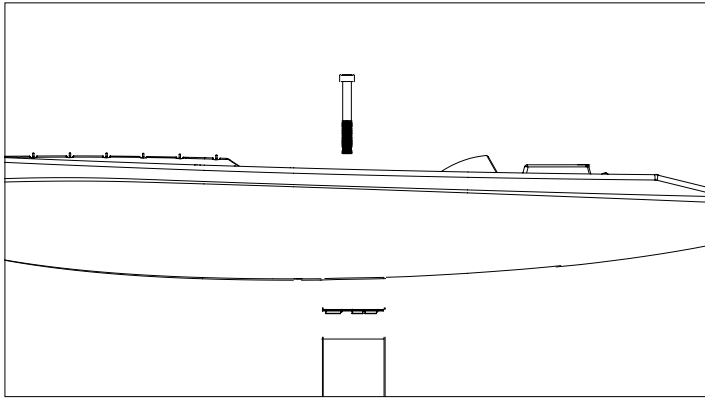
# Installation and Rigging Guide



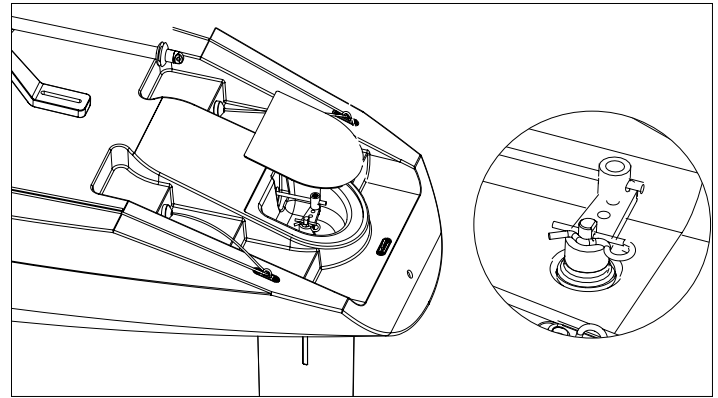
1. Setup the display base as shown in picture. Insert the tubes into the sockets, no gluing is required.



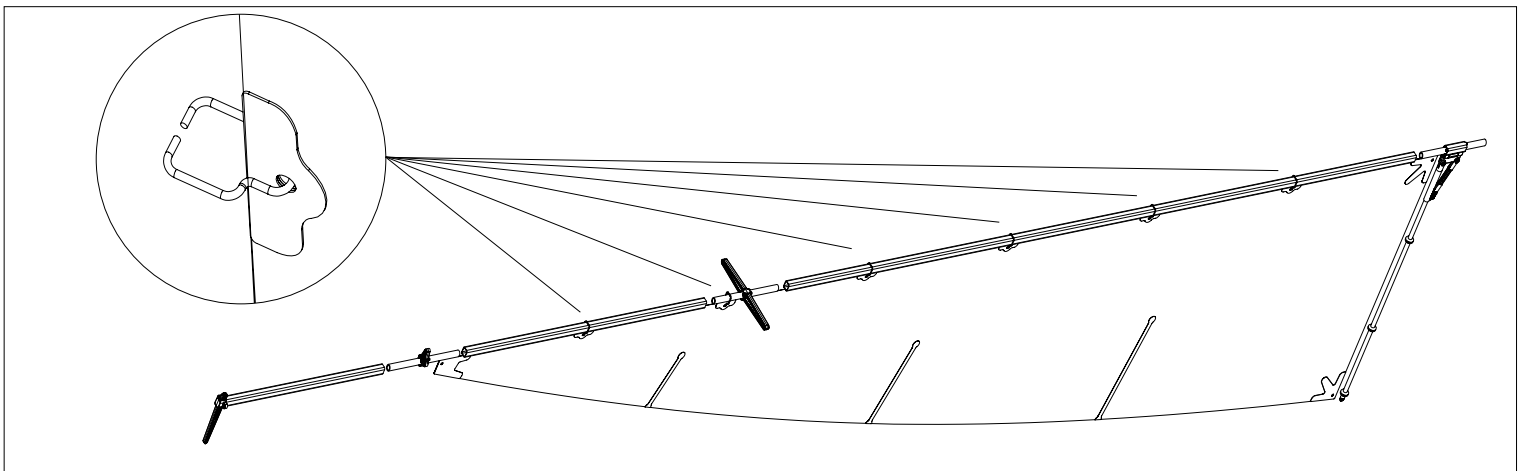
2. Setup the keel, water-proof rubber piece and ballast by HM5\*50mm screw, using a H4.0mm allen key.



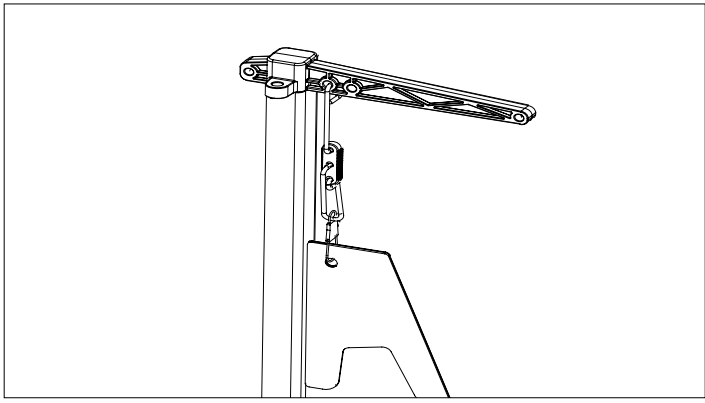
3. Setup the keel, water-proof rubber piece into hull by HM5\*90mm screw, using a H4.0 mm allen key.



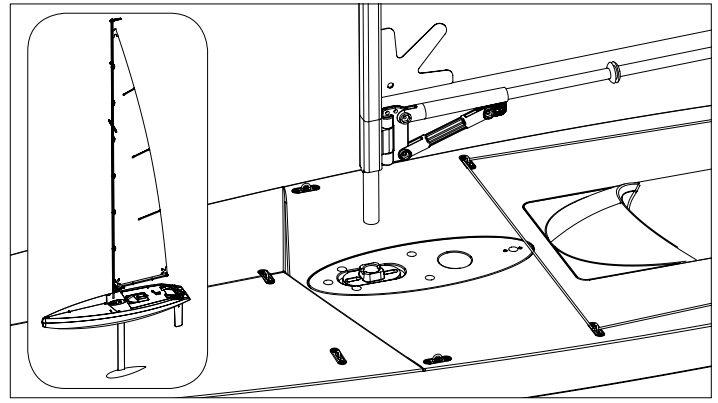
4. Insert the rudder from hull bottom to deck through a rudder arm, connected with a clip, make sure rudder is able to rotate freely. Then insert push rod through the knob on rudder arm, keep rudder in center position and tighten the knob with a H2.0mm allen key. Stick the waterproof cover to the deck.



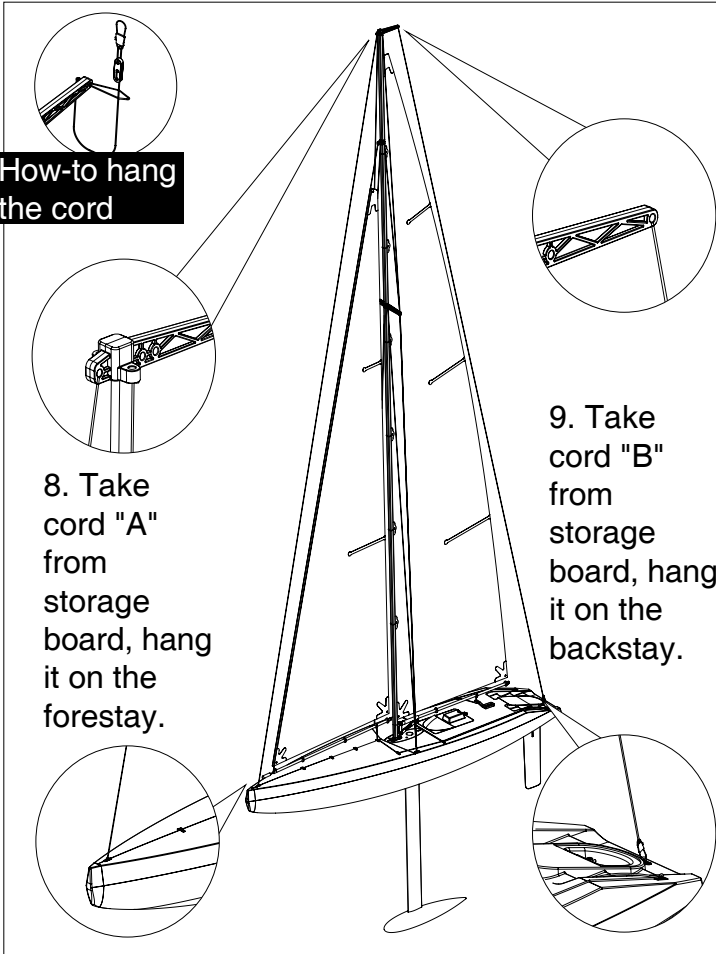
5. Connect backstay crane, forestay crane , short mast, shrouds cross, long mast and the pre-installed main sail & boom by the order of above instruction. Remember to hang the main sail on the mast with the 6pcs luff rings.



6. Hang the main sail on the backstay crane by the pre-rigged cord.



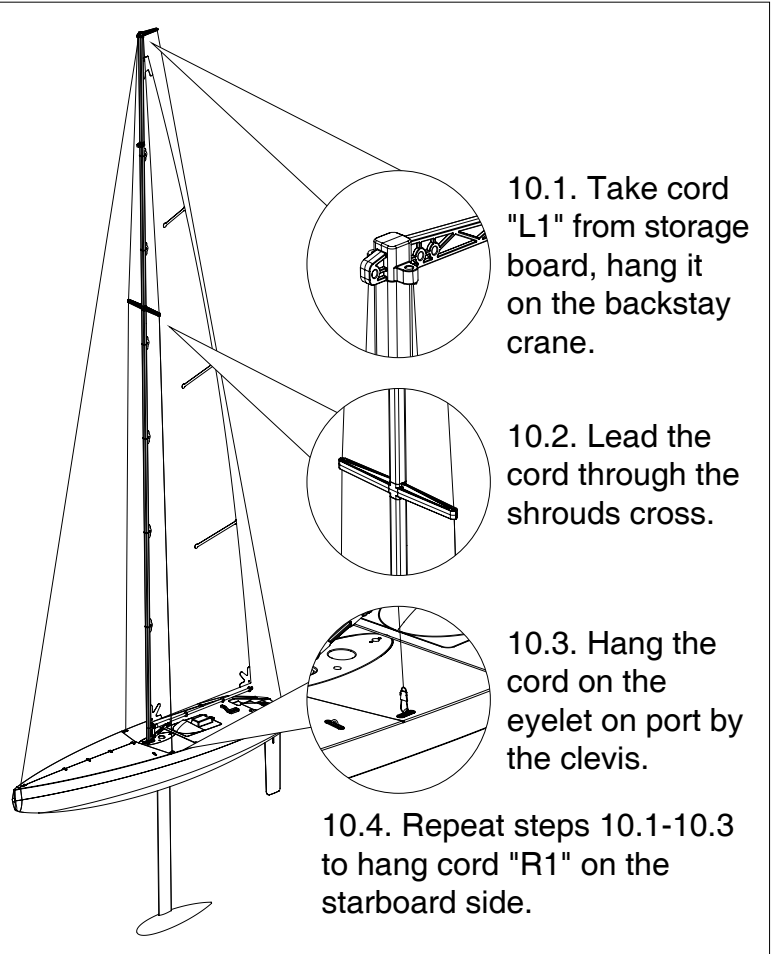
7. Insert the installed mast into the hull.  
Now the Hurricane is installed as shown on above left image.



**How-to hang the cord**

8. Take cord "A" from storage board, hang it on the forestay.

9. Take cord "B" from storage board, hang it on the backstay.

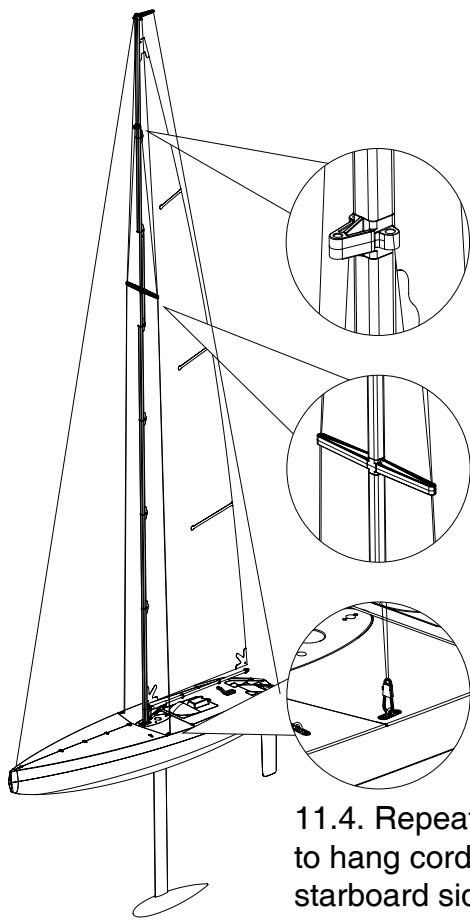


10.1. Take cord "L1" from storage board, hang it on the backstay crane.

10.2. Lead the cord through the shrouds cross.

10.3. Hang the cord on the eyelet on port by the clevis.

10.4. Repeat steps 10.1-10.3 to hang cord "R1" on the starboard side.

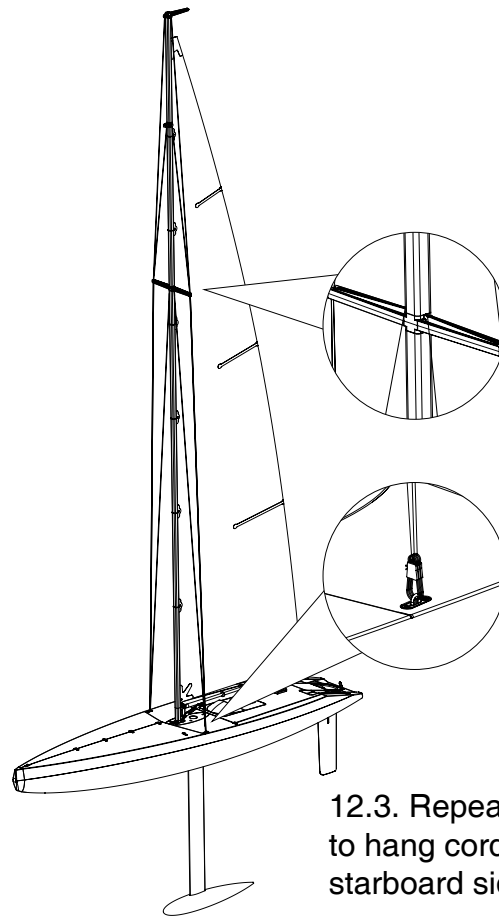


11.1. Take cord "L2" from storage board, hang it on the port side of forestay crane.

11.2. Lead the cord through the shrouds cross.

11.3. Hang the cord on the eyelet on port by the clevis.

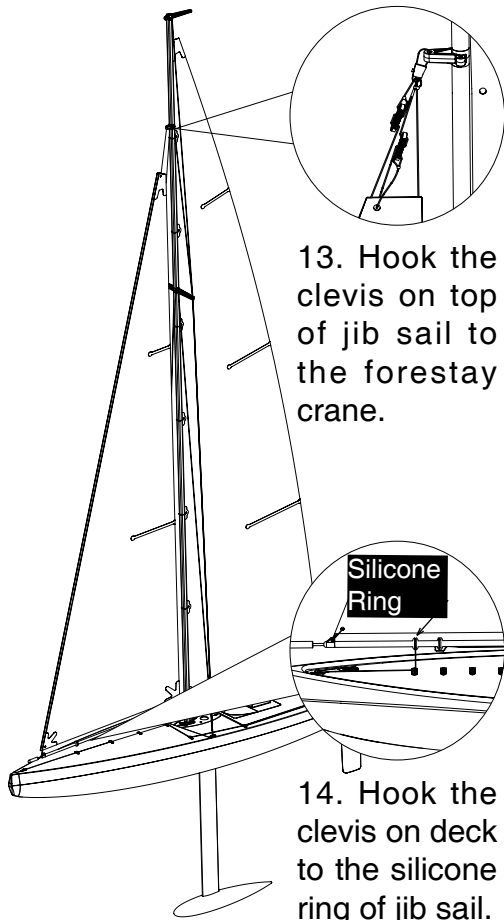
11.4. Repeat steps 11.1-11.3 to hang cord "R2" on the starboard side.



12.1. Take cord "L3" from storage board, hang it on the port side of shrouds cross.

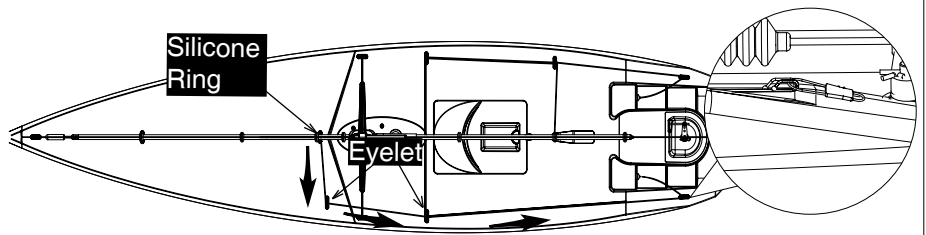
12.2. Hang the cord on the eyelet on port by the clevis.

12.3. Repeat steps 12.1-12.2 to hang cord "R3" on the starboard side.

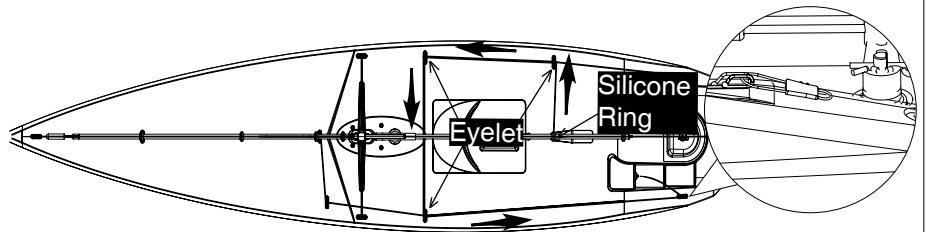


13. Hook the clevis on top of jib sail to the forestay crane.

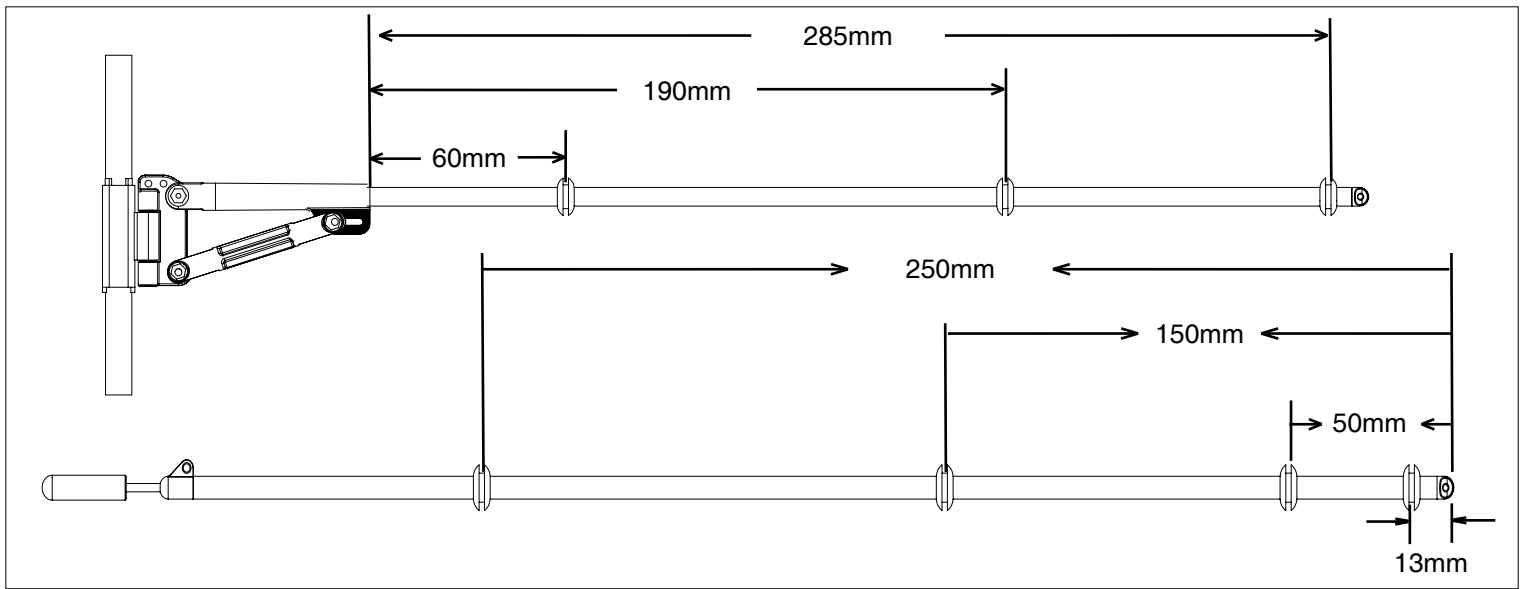
14. Hook the clevis on deck to the silicone ring of jib sail.



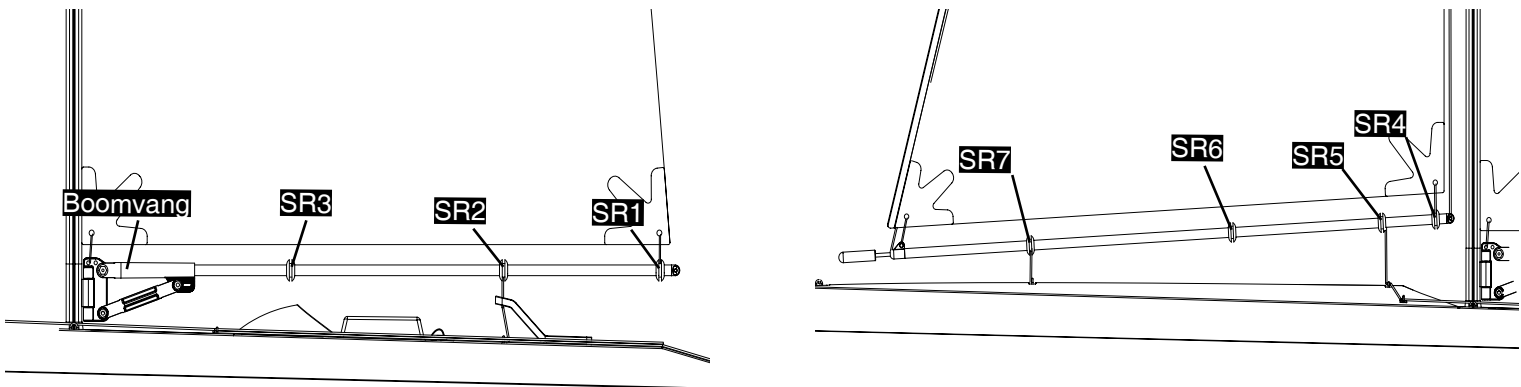
15. Unlash the cord from the silicone ring on jib boom, lead it through the eyelets on the deck as shown. Hang the cord on the clevis at the end of the hull.



16. Unlash the cord from the silicone ring on main boom, lead it through the eyelets on the deck by the order as shown. Hang the cord on the clevis at the end of the hull.



17. Adjust positions of the silicone rings on main boom and jib boom as shown in above picture.



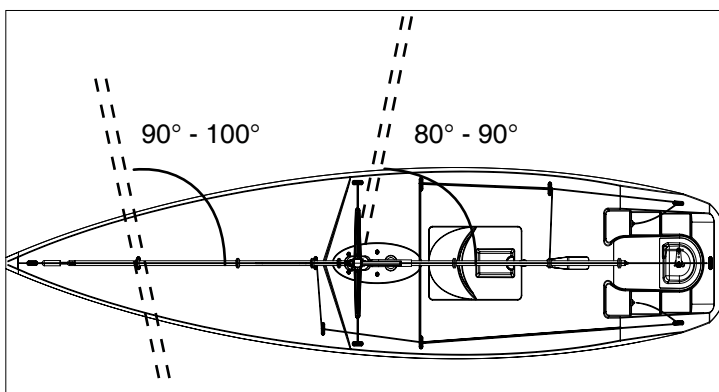
18. Move Silicone Rings ("SR" for short) to appropriate position as shown in picture. If further rigging needed, adjust referring to below instruction:

18.1. Move SR1 to adjust main sail until it is appropriately tight, but leaving little bending angle for better sailing ability. Normally if in strong wind environment it needs more bending room, in gentle wind environment it needs less bending room.

18.2. Normally you don't need to move SR2, keep it in the position as shown in picture.

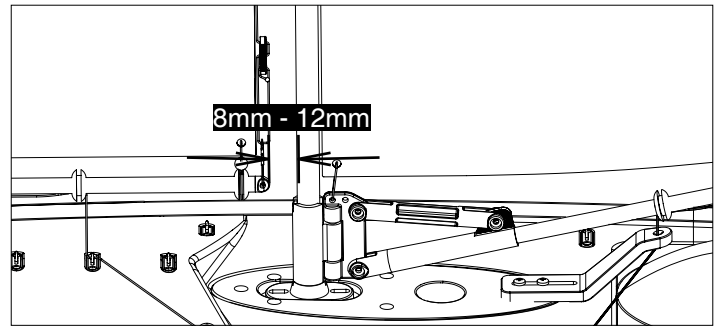
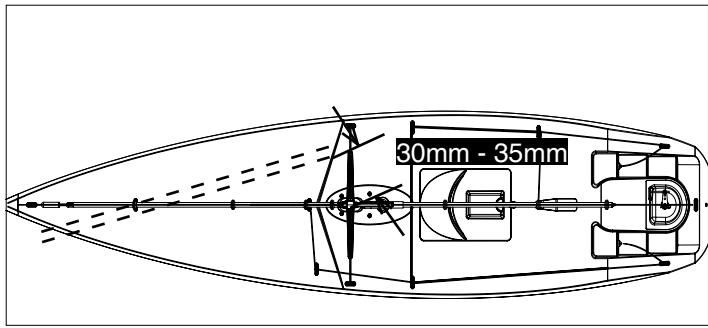
18.3. Move SR3 to adjust the main boom if it is too tight (move to boomvang direction) or too loose (move to SR2 direction), in order to keep the main boom in center position of the hull when sail stick is at lowest position.

18.4. 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.



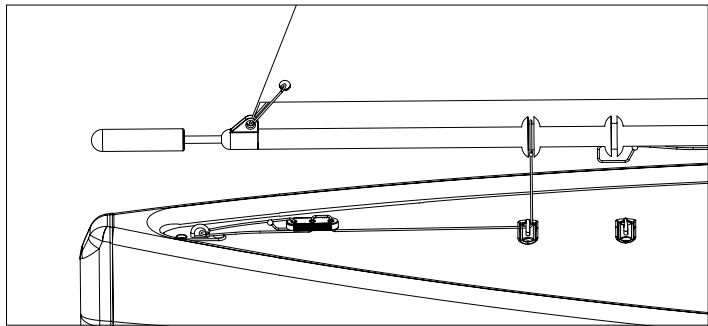
18.5. Move SR5 to adjust the expand angle when you power on and move up the sail stick. Make sure the jib sail is able to travel larger angle than the main sail (normally the jib sail travels about 90° - 100°, the main sail travels about 80° - 90°). If it is too tight (angle too small), move SR5 to SR4 direction to increase the angle. If it is too loose (larger angle), move SR5 to SR6 direction to decrease the angle.

**Note:** If need to adjust main sail expand angle, move SR2 to SR3 direction to increase angle, or move SR3 to mast direction to decrease angle. But normally the position of SR2 is preset and no need to adjust.



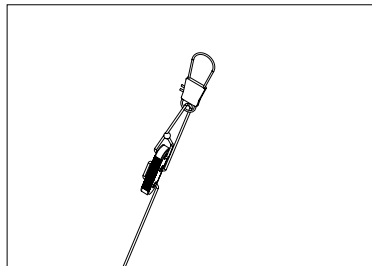
18.6 Move SR6 to adjust the cord tied in step 15 if it is too tight (move to SR6 direction) or if too loose (move to SR4 direction), to keep the jib boom with 30mm - 35mm expand distance to mast when the sail stick is at lowest position.

18.7 Move SR7 to adjust the distance between the jib boom and the mast if they are too close (move to SR6 direction) or if too far away (move to counterweight direction) to keep about 8mm - 12mm between the jib boom and the mast.

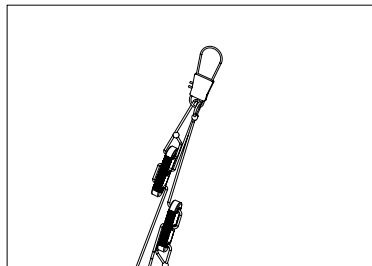


18.8 Rotate counterweight on the front of the jib boom by clockwise direction to adjust its position, ensuring jib boom swing CG is located on SR7.

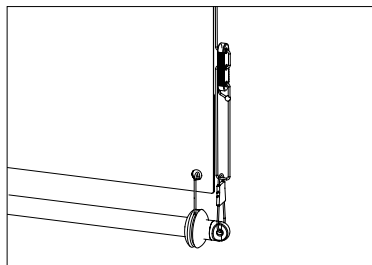
19. Move the bowsie as shown to adjust the bended angle of the mast. The mast should be bended little like a bow as the dotted line shown in picture, but ensure it is a straight center line between top and bottom of mast.



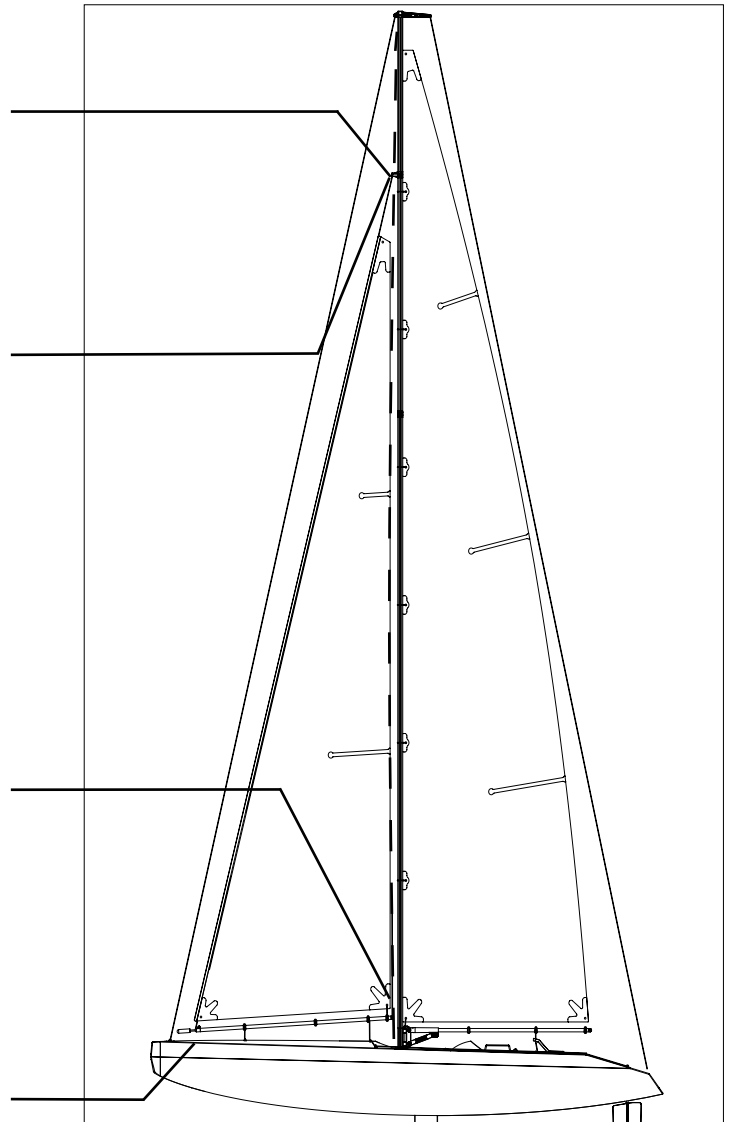
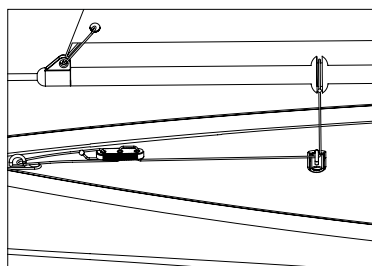
20. Move the lower bowsie to tighten or loosen the jib sail.



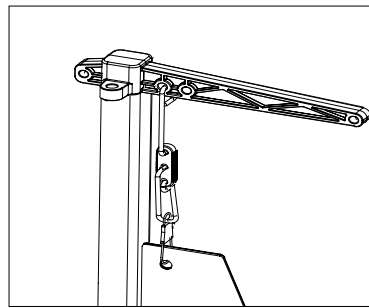
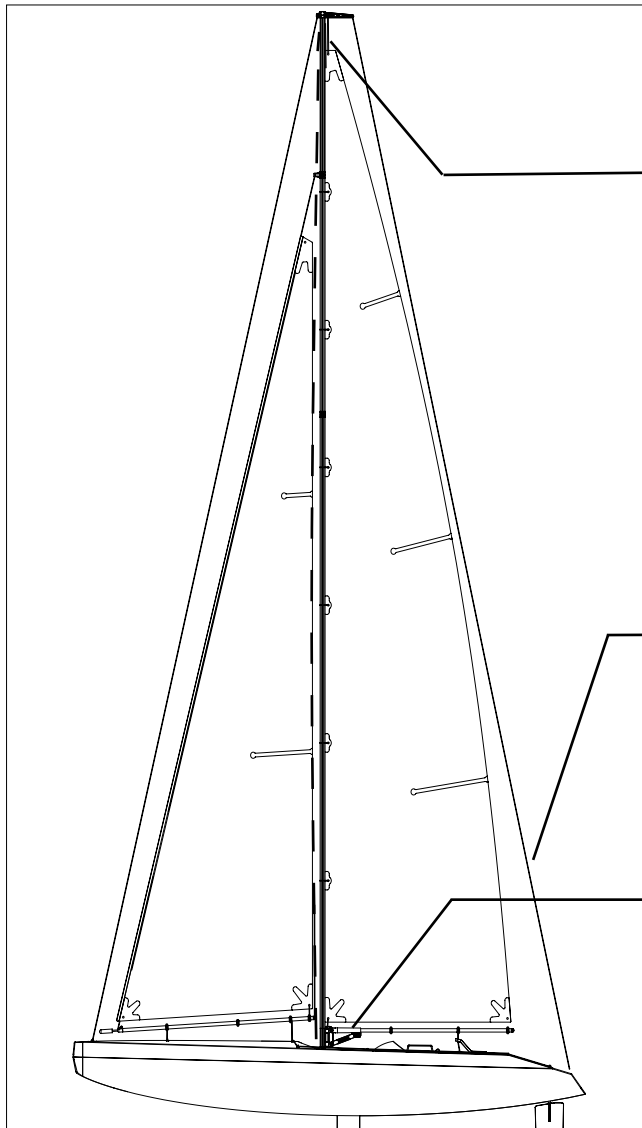
21. Move the bowsie as shown to tighten or loosen the jib boom.



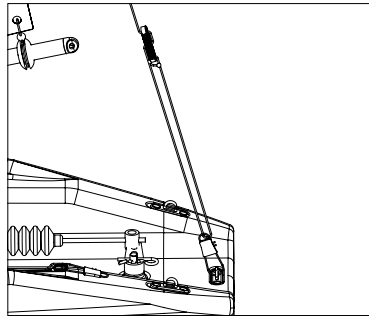
22. Move the bowsie as shown to adjust distance between the jib boom and the deck.



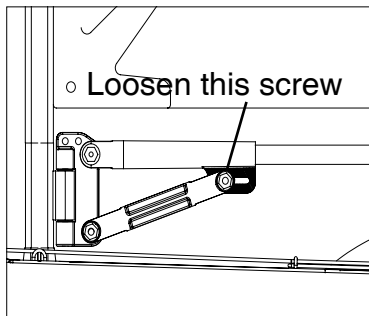




23. Move the bowsie as shown to tighten or loosen the main sail.

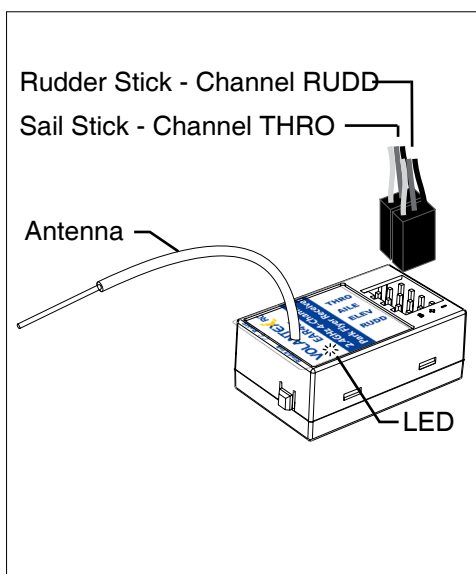


24. Move the bowsie as shown to adjust the bended angle of the mast. It should be bended little like a bow as dotted line shown in picture, but ensure it is a straight center line between top and bottom of mast.



25. Loosen the screw and move the boomvang to adjust the height of the main boom(it is only required when the cord tied on SR1 is not at perfect length).

## 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.

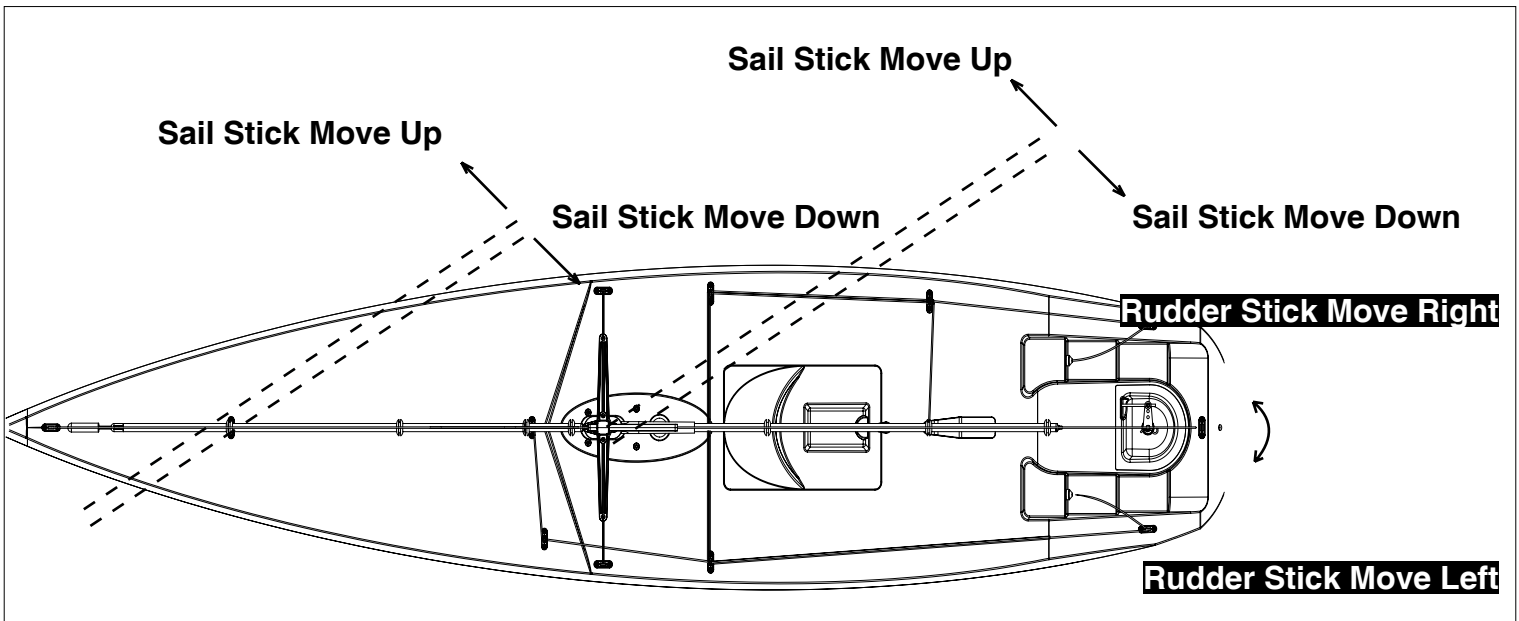
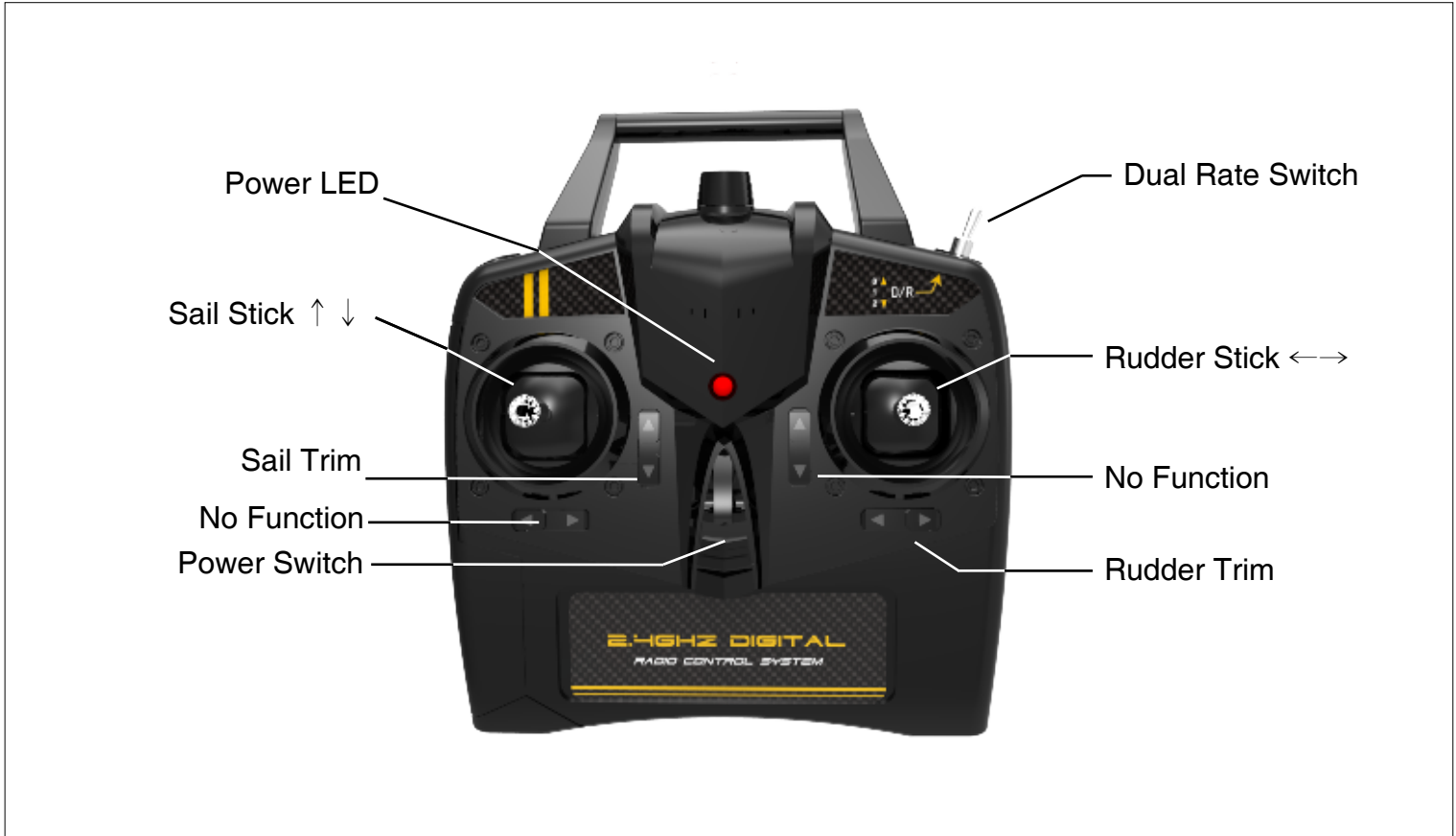
The yacht normally comes with bound Transmitter and Receiver. If you need to rebind for any reason, please follow these steps:

1. With the transmitter switched OFF.
2. Power on the receiver, then turn on the transmitter within 5 seconds.
3. The receiver LED will flash for 3-8 seconds to bind automatically.
4. After the receiver LED stop flashing, it means the binding is done.

# Transmitter Functions Instruction

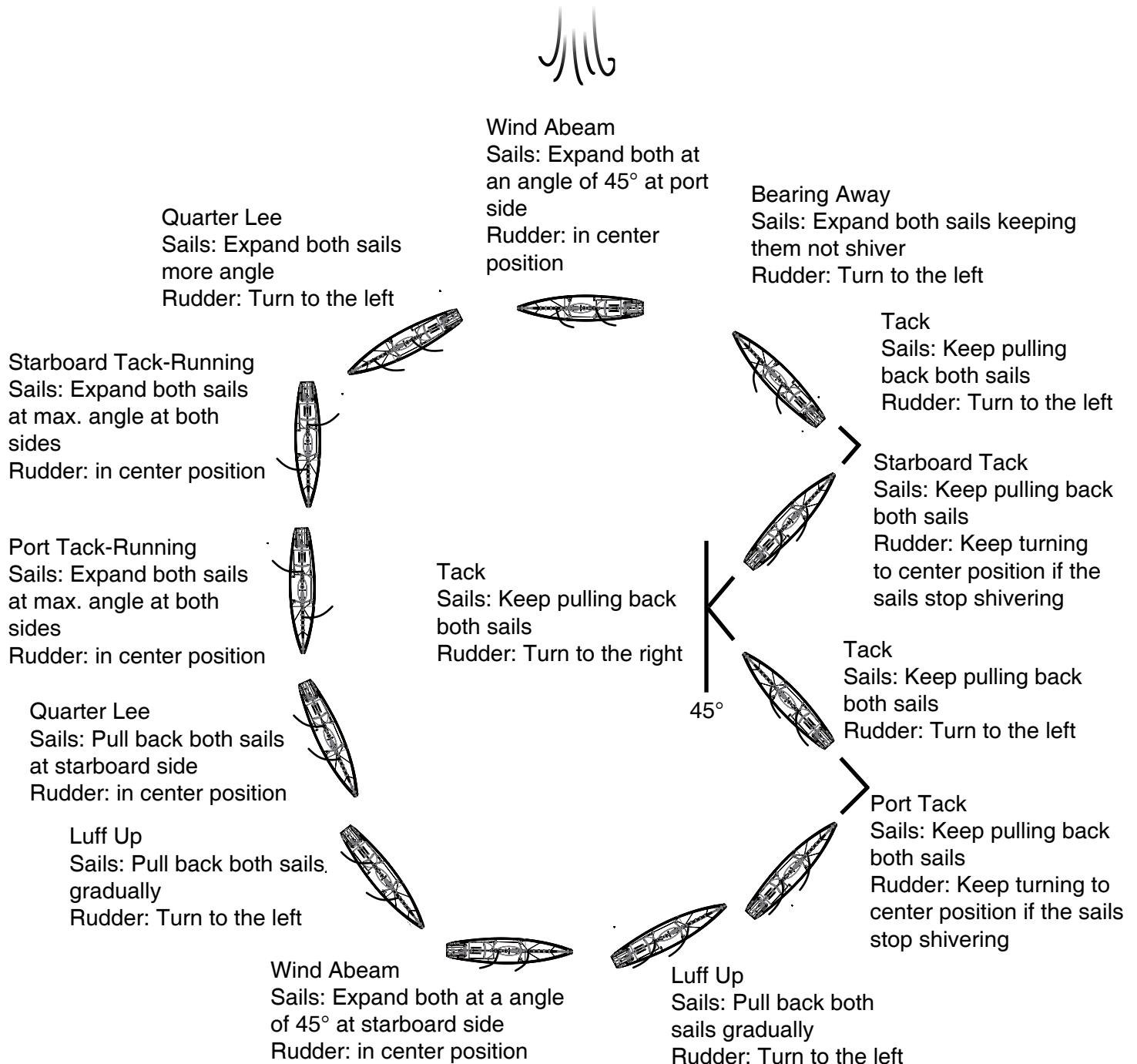
The yacht comes with a 2.4G 4-channels radio system. For sailing you will only need 2 channels. Learn all instructions as below:

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.



# 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

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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 on the transmitter 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 the receiver battery, place the battery in a dry, cool environment.
7. Always turn off the transmitter last.
8. Drain water out of boat hull, then place the boat in a dry, cool environment.

## Troubleshooting Guide

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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