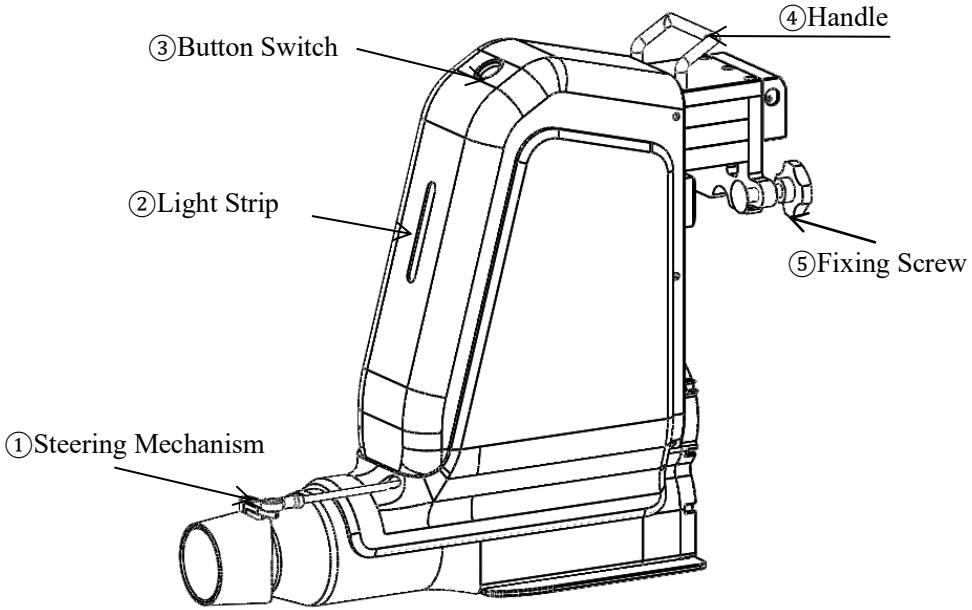
Manual Guide

OXR-T100

V 1.1

I. Main Unit Structure



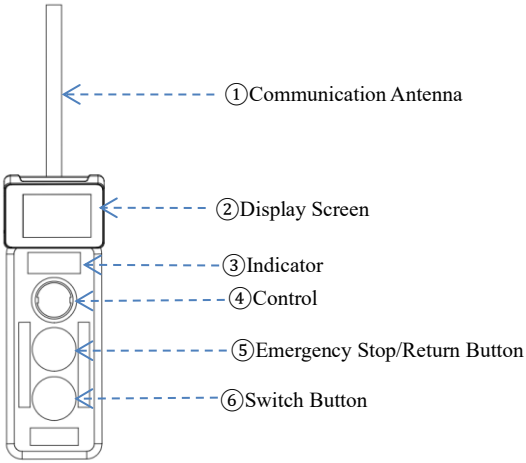
Schematic Diagram of Distributed Thruster Main Unit Structure

OXR-T200 Main Unit Specification	
Dimension	Length/Width/Height: 60cm/15.5cm/49cm
Material	Aluminum alloy, carbon fiber/ABS engineering plastic shell
Weight	12.7kg
Speed	4-7 knots (vary by boat size)
Maximum Power	4000w/6000w
Battery Capacity	Optional
Battery Voltage	48V~70V
Waterproof Grade	IPX7

OXR-T200 Main Unit Light Strip Status Query Table	
Green Flashing	Main unit powered on but not connected to remote control
Blue Flashing	Main unit connected to remote control and in neutral gear
Red Flashing	Main unit motor running

OXR-T200 Main Unit Light Strip Status Table (Main Unit Structure ②)

II. Introduction of Remote Control Structure



Schematic Diagram of Remote control Structure

ORT100 Remote control Specification	
Dimension	Length/Width/Height: 14.5cm/6.2cm/7.2cm
Shell Material	ABS
Weight	250g
Button	2
Rocker	2D Rocker
Working Hours	2 Hours
Standby Hours	24 Hours
Communication Distance	1000 Meters
Waterproof Grade	IPX6
Charging Mode	Wireless Charging

Remote Control Specification

OXR-T200 Remote control Indicator Query Table		
Signal Indicator	**Charging Indicator**	**Power Indicator**
Green flashing when not connected to the main unit after power-on; blue flashing when connected to the main unit; red flashing with buzzer alarm for any fault	Yellow flashing during charging when powered off; yellow constant on when fully charged	Blue constant on after remote control is powered on

Remote control Indicator Query Table

III. Packaging

Appearance

① Remote control

② Battery Charger

③ Thruster Main Unit

④ Remote control Charger

IV. Use Instructions

Step 1: Battery Power Confirmation

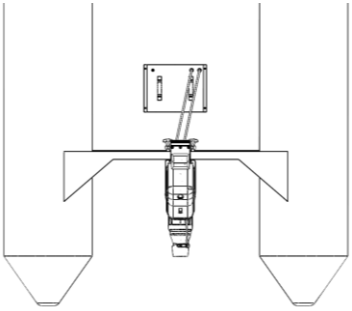
Unplug the battery from the charger and check the battery's power display to **confirm that the main unit has a minimum of 80% charge before using it**. If it doesn't, keep charging it until it reaches at least 80%. A full charge of 100% offers the longest usage time.

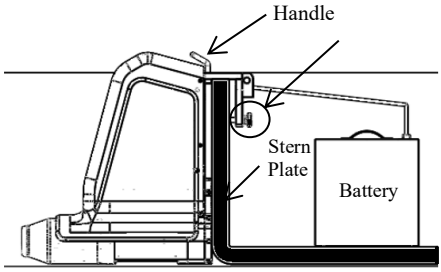
Step 2:

1. Main Unit Installation (Single Thruster Mode)

Launch the carrier (boat) into the water and mount the thruster main unit at the stern, positioning it as centrally as possible (as illustrated below). Carefully adjust the mounting height of the thruster so that its bottom is perfectly aligned with the bottom of the boat. Then, securely tighten the fixing screws to connect the thruster and the battery correspondingly.

Activate the battery power switch and then the thruster power switch; the indicator light on each thruster will flash green. Once the main unit and the remote control have automatically connected, the main unit signal light will flash blue.





2. Main Unit Installation (Multi-Thruster Mode)

Launch the carrier (boat) into the water and mount the thrusters at the corresponding positions on the stern (as illustrated below). Install them in sequence from left to right (the main unit is recommended to be placed on the far left), positioning them as close to both sides as possible. Ensure that the

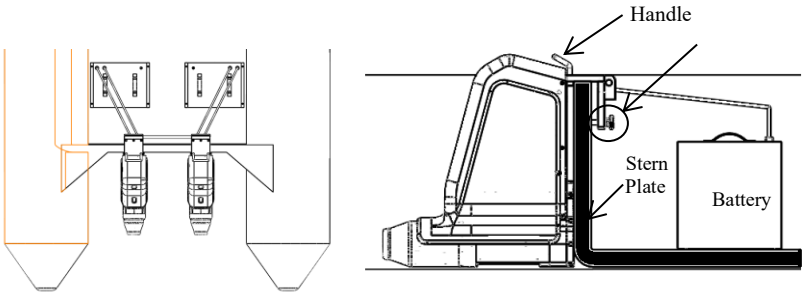
distance from each thruster to the center of the transom is equal.

Adjust the mounting height of the thrusters according to the height of the boat's transom, ensuring that the bottom of the thrusters is perfectly aligned with the bottom of the boat. If needed, use the provided rubber spacers for adjustments, and then securely tighten the fixing knobs.

Connect each thruster to its respective battery.

Activate the battery power switch and then the thruster power switch; the indicator light on each thruster will flash green. Once the main unit and the remote control have automatically connected, the main unit signal light will flash blue.

After the main unit and the slave unit have connected automatically, the slave unit signal light will also flash blue.



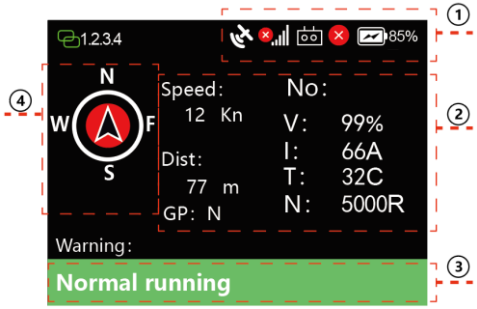
Installation Diagram

Step 3: Remote control Confirmation

1. Press the start button on the remote control to enter the working state;
2. The power light (blue) will remain solid when the remote is functioning properly;
3. If the signal light (green) is blinking, it indicates that the remote is not connected to the main unit. A blinking signal light (blue) means that the remote and main unit are successfully connected. If the signal light (red) is blinking, there is a fault in either the main unit or slave unit, please observe the screen to confirm the faulty device.

4. When connected, the remote control's display will show the status of the thruster.
5. The LCD screen of the remote control can display various status and alarm information of the equipment, which should be observed in the operation.

Caution: To safeguard the motor, avoid allowing it to run idle for over 10 seconds when the thruster is not underwater.



① Satellite Signal and Remote control Battery Level
② Thruster Status Data Rotation (including speed and distance from the starting point)
③ Alarm Information Rotation
④ Current Main Unit Direction and Gear Position

Step 4: Operation (On-Board Driving)

1. Hang the remote control around the neck or wrap the lanyard around the wrist (to prevent the remote control from accidentally falling into the water);
2. The remote control rocker can be moved up and down to increase or decrease gears (with a maximum of four gears and one gear for reverse). Each upward push adds one gear, maintaining that gear until reaching the maximum of four. Each downward push decreases one gear, and the current gear will be displayed in the lower left corner of the screen;
3. In case of an emergency stop, you can either press and hold the emergency stop button for over 1 second or push the rocker all the way down for more than 1.5 seconds, which will immediately switch the thruster to neutral gear (N).When in the N gear state, long press the emergency stop button to enter the automatic homing state (the homing point is the position of the main engine when pushing the rocker forward for the first time after starting up; in the automatic homing state, push the rocker forward and backward to adjust the gear to exit)
4. When operating in gears 1~4, gently moving the rocker left or right will help

adjust the course in that direction.

5. For remote control, the same rocker can be used, but it should only be operated within a visual range of 1000 meters or less. Operating beyond this distance may lead to accidents due to the inability to accurately assess the water environment and obstacles.

Step 5: Inspection and Maintenance after Use

1. After finishing the use, turn off the distributed thruster and disconnect the power, i.e., press and release the start/shutdown button on the remote control, and wait for the power of the remote control to be turned off;
2. Press and release the power button of each distributed thruster to turn off the power. Confirm that the distributed thruster light strips are off.
3. Unplug the power cord from the distributed thruster, taking care to press the small unlock button on the side of the power connector thoroughly before grasping the connector and pulling it outward. Otherwise, the connector will be damaged.
4. Unplug the power cables from the battery box, noting to fully press the unlocking small button on the side of the power connector before pulling out the connector. Otherwise, the connector may be damaged.
5. Loosen the locking screws of the distributed thruster and gently remove the thruster from the stern plate.
6. After each use, clean the distributed thrusters to ensure they can continue to be used normally. The following methods can be used for cleaning:

   *After confirming that the power is off, open the access port at the bottom of the thruster and flush the distributed thruster's main thruster inlet with clean water until no debris remains;

   *Rinse the distributed thruster with clean water;

   *Finally, check whether each fixing screw of the water inlet is loosened;

Step 6: Distributed thruster put away

1. Dry the distributed thruster and place it in the storage box;
2. Charge the remote control to the rated voltage. Place the remote control on the

wireless charger and adjust the position slightly until the power light on the remote control turns yellow and blinks, indicating that it is in charging mode;

3. Place the finished charging remote control in the stowage box;
4. Charge the power battery to the rated voltage for backup;

V. Charging Instructions.

1. Remote control charging instructions

Place the remote control on the charger with the back facing the wireless charging area. When the power indicator light on the remote turns yellow and blinks, it indicates that charging is in progress. A steady yellow light means the remote is fully charged. It is advisable to charge it regularly at least every three months; if the remote is left uncharged for an extended period or remains on for too long, the battery may deplete, potentially causing the remote to malfunction.

If it is still not fully charged after 10 hours, please reach out to the seller.

VI. Maintenance Instructions

1. After each use, rinse the main unit of distributed thruster with clean fresh water until there is no debris left.
2. Fully charge the remote control after each use to ensure that there is enough power when it is used next time, and check whether the interfaces are damaged before use.
3. Regularly (quarterly) check the status of distributed thrusters, including but not limited to:

   *Check for damage to the shells of the thruster main unit and remote control.

   *Check the remote control battery level (should not be lower than 50%).

   *Verify normal charging of the remote control.

   *Test the working status of the thruster host and remote control.

VII. Precautions

1. Do not step on the host or place heavy objects on it.

2. During transportation or long-term storage, keep the main unit in the storage box.
3. Do not let the thruster rotate in the air for more than 10 seconds.
4. If the battery box, thruster, or remote control is submerged in water, stop using it immediately and contact the manufacturer.
5. After each use, store the battery box and thruster indoors

VIII. Troubleshooting

Fault	Possible Causes	Troubleshooting
Obvious deviation or slow speed during travel	Foreign object entangled in the thruster	Power off the thruster and clean the thruster
Unresponsive main unit	Poor connection between the main unit and remote control	Restart the remote control and thruster
Alarm on the remote control	Remote control battery low	Check if the main unit is powered on
	Disconnected between the main unit and remote control	Check if the remote control antenna is loose