

LUCKYSMART®

# LBT-1 OPERATION MANUAL



**BAIT BOAT FISHING FINDER**

# Preface

Thanks for choosing LUCKYSMART products. In order to operate this product quickly and safely, Please read this manual carefully before operating.

LUCKYSMART always follows the strategy of continuous development. Therefore, LUCKYSMART reserves the right to modify and improve the products description in the document without previous notice. Under no circumstance, LUCKYSMART will not be liable for any loss of data or income, or any special, incidental or indirect loss, regardless of the cause of the loss.

The content of this document is provided according to the current situation. Unless otherwise provided by applicable laws, no explicit or tacit guarantees of any kind, including but not limited to guarantees of merchantability and suitability for specific purposes, are not made for the accuracy, reliability and content of this document. LUCKYSMART reserves the right to revise or retrieve this document at any time without previous notice.

## Product Statement:

It is mainly used for remote control bait boats or other small boats. It needs to be installed correctly before it can be used. The performance of the product is greatly affected by environmental and human factors.

Therefore, LUCKYSMART make the following statement:

## Sonar characteristics:

The characteristics of sonar are affected by many factors, such as the installation method of the probe, the current water area situation(the wave size ) etc. If the water depth and bottom contour displayed on the screen are big different from the actual situation, please check the installation of the probe carefully or contact with your local dealer.

# Precautions

## 1. Safety precautions

- Do not use this product in harsh environments such as wind, rain, lightning, and high-voltage lines.

## Electronic equipment

- Do not use this device in places where the use of wireless devices is clearly prohibited. otherwise. It may interfere with other electronic equipment or cause other dangers.

## Impact on medical equipment

- In medical and health care establishments where the use of wireless devices is expressly prohibited, please comply with the rule and turn off the equipment.
- The radio waves generated by the equipment may affect implantable medical equipment or personal medical equipment, such as pacemakers, cochlear implants, hearing aids, etc. If you use these medical equipments, please do not use this product.

## 2. Precautions before using the product

- Please check whether all parts of the product are installed correctly, including probes, antennas, control box, etc. Please refer to the "Installation" part of this manual for the specific installation methods and precautions of each component.
- Please check whether the antennas on the boat are tightened. Antenna slack can affect wireless performance.
- Please check that all parts in the cabin (probe, antenna extension cord, power cord) are correctly connected with control box (refer to page 10 for the connection method).
- Please make sure that the control box is powered on. After power on, the led indicator at the "link" position will be on for 3s then off, indicating the control box enter the working state.

# Contents

---

4	Product introduction
5	Product packing list
6	Installation to bait boat
6-8	Install the probe
9	Install the antenna of control box
9	Connect cable
10	Power
11	Screen display description
12	key operation
13	Menu operation
13	Sonar settings
13	Sensitivity
13	Detect Depth Range
13	Fish icon
13	Surface clarity
14	Sonar tones
14	Chart Speed
15	System
15	Language
15	Backlight
15	Alarm
15	Fish Alarm
15	Shallow alarm
16	Main voltage
16	Boat voltage
16	Units
16	Factory set
16	About
17-19	Common problems and solutions

# Product introduction

---

LBT-1 is an electronic product suitable for all kinds of remote control nest boats and other small boats. No matter you are a new or experienced fisherman, this product is easy to use.

## What can this product do?

After installing this product on the bait boat, you can realize the following functions:

- Real-time observation of the bottom of the boat: including fish (position, depth information, fish group size). weeds, underwater contours, etc.
- Monitor the voltage of the boat's battery at any time.

# Product packing list

## Device

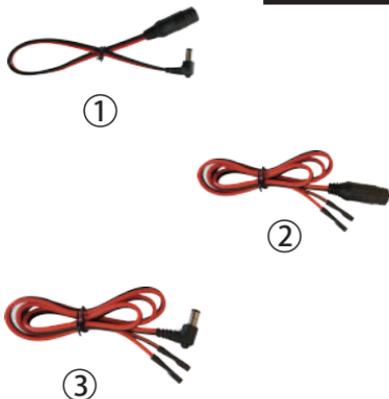


## Launcher



- 1)Control box
- 2)Antenna extension line
- 3)Control box antenna

## Launcher



- 1)Device power cable-(Dry battery)
- 2)Device power cable-(Storage battery)
- 3)Control box power cable

## Probe



- 1)Probe
  - 2)Lock knob
  - 3)Rubber sleeve
- Note: Different rubber sleeves are matched according to different boat types.

# Installation to bait boat

## 1. Install the probe

Warning: Please do not install the probe near the motor of the boat. Otherwise, the electronic noise caused by the motor and the bubbles generated by the propeller will greatly degrade the sonar performance of the product. Generally recommended to install at a distance from the bow of boat that the position of 1/3 of the length of the bait boat. And ensure that the probe draft is not less than 10CM.

Note: For different bait boats, the installation method of the probe is also different. The following is the probe installation guide for different types of bait boats on the market:

### 1) A bait boat without a probe mounting hole in the hull itself

There is no specific probe mounting groove at the bottom of these bait boats. So you need to use tools to punch holes to install the probe on the bottom of the boat. The following is the installation diagram:

### probe installation Introduction

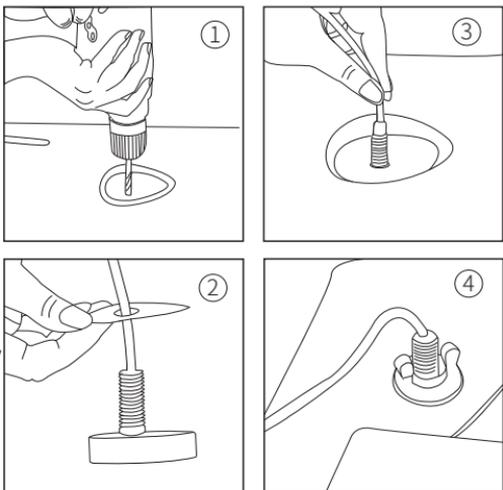


1) Choose a flat installation location at the bottom of the boat. Drill a hole with a diameter of approximately 15 mm at the selected position.

2) Assemble the probe and waterproof rubber pad. (Factory installed)

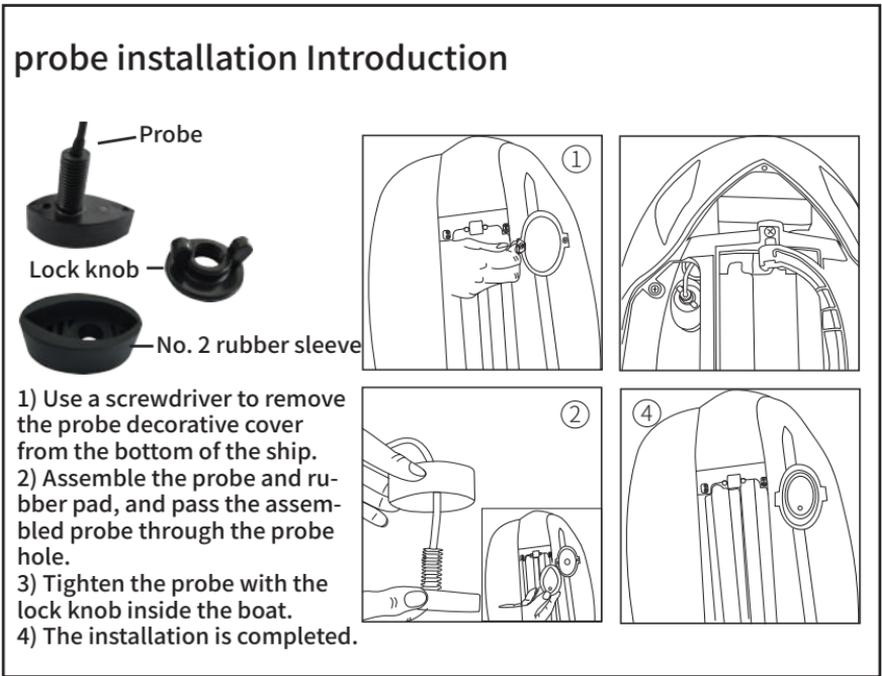
3) Pass the assembled probe and rubber pad through the probe hole.

4) Fix the probe with the lock knob inside the boat then the installation is completed.



## 2) A bait boat with a groove for installing the probe in the hull (No. 2 rubber sleeve)

There is a groove at the bottom of the bait boat for installing probes. LBT-1-GPS comes with appropriate No. 2 rubber sleeve. The installation steps are basically the same as in 1 above. The only difference is that the probe needs to be covered inside the rubber sleeve, so that it can be fully matched with the probe installation groove reserved on the boat.



## 3) A bait boat with a groove for installing the probe in the hull (No. 3 rubber sleeve)

There is a groove at the bottom of the bait boat for installing probes. LBT-1-GPS comes with appropriate No. 3 rubber sleeve. The installation steps are basically the same as in 1 above. The only difference is that the probe needs to be covered inside the rubber sleeve, so that it can be fully matched with the probe installation groove reserved on the boat.

## probe installation Introduction

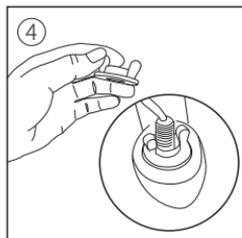
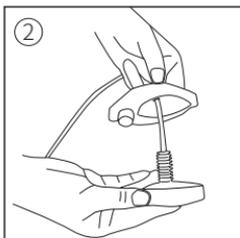
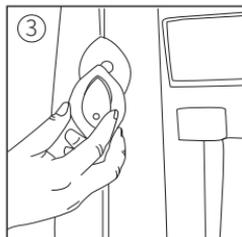
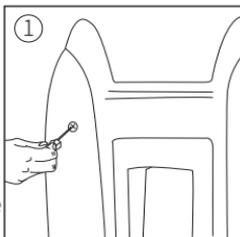


1) Use a screwdriver to remove the probe decorative cover from the bottom of the ship.

2) Assemble the probe and rubber pad, and pass the assembled probe through the probe hole.

3) Tighten the probe with the lock knob inside the boat.

4) The installation is completed.



# Install the antenna of control box

- 1) Find the hole reserved for installing the antenna extension cable at the stern of the bait boat.
- 2) Remove the nut and washer on the antenna extension cable.
- 3) Pass the screw part of the antenna extension cable through the reserved hole from the cabin.
- 4) Put the washer and nut on the screw respectively, and then tighten the nut with a wrench.
- 5) Tighten the control box antenna on the screw (Be sure to tighten it!)

## Connect cable

After the above components are installed, please connect each part to the control box.



- TRANSDUCER: Connect the probe.
- POWER: Connect the power cord.
- LINK: Shows whether the connection between the control box and the device is normal.

Note: The LINK light is on last 3 seconds after power on and LINK light will flash after connected with GPS correctly.

- ANTENNA: Connect the antenna extension cable.

The bait boat part has been installed so far.

# Power

	Device power	Control box power
Recommended voltage	10-13V	9.5-13V
Maximum voltage	16.8V	14V

## 1.The device can use 8\*AA batteries or an external power supply.

-When using 8\*AA batteries for power supply, please discharge the batteries correctly according to the schematic diagram on the base of the device.

-When using an external power supply, you can use the standard power cord to connect it to an external power.



## 2.The control box can be powered by the boat's battery or an external power.

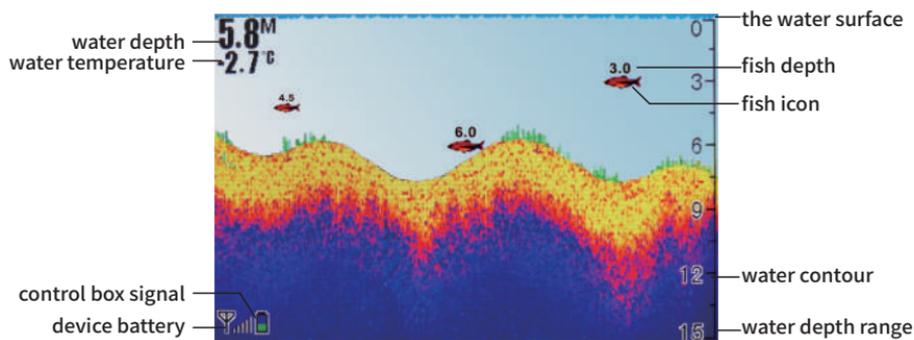
Warning: Excessive voltage may cause the internal electronic components of the product device or control box to burn out. Make sure to turn off the power of the control box after use.

The following are the voltage of commonly used batteries for your reference:

Battery type	voltage	Is it allowed to use		
12V lead-acid batteries	10.8V~14.8V	✓		
8*AA Ni-MH batteries	7.8V~10.6V	✗		
8*AA alkaline batteries	7.5V~12.8V	✓		
2S lithium battery	5.6V~8.4V	✗		
3S lithium battery	8.4V~12.6V	✓		
4S lithium battery	11.2V~16.8V	✓		

# How to use

## Screen display description



# Key operation

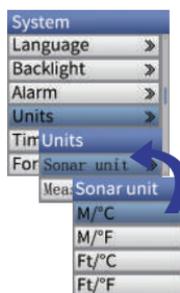
## Menu key/Power key

Power on/off



## Return key

Return to the previous menu



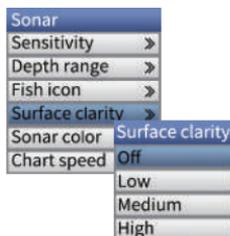
## Arrow key

- 1) Move to select an option
- 2) Increase or decrease option value



## Confirm key

- 1) Complete menu selection
- 2) Confirm settings



## Zoom in/out key

Used to zoom in or zoom out the GPS track map



# Menu operation

## Sonar settings

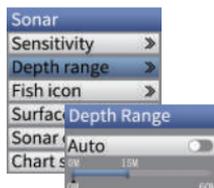
### Sensitivity

Sensitivity is the sonar intensity. The stronger the sensitivity, the more sonar signals will be returned and displayed on the screen, and the more sensitive feedback from the underwater situation will be. But if the water is very shallow, too high sensitivity will also increase the reflected sound wave signal too much, resulting in the wrong signal being displayed. If the sensitivity is set too low in a deep water environment, it will be difficult to detect the corresponding underwater signal. Operation suggestion: In the case of deep water, increase the sensitivity; In the case of shallow water, lower the sensitivity.



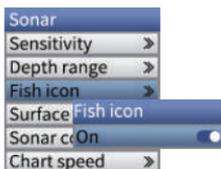
### Depth range

For example: the current depth is 20 meters, and you only need the fish information from 10 meters to 18 meters, you only need to set the lower limit of depth to 18 meters and the upper limit of depth to 10 meters, then only 10 meters to 18 meters fish information will be displayed on the screen.



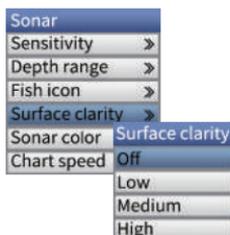
### Fish icon

Press the menu key until the fish icon menu is displayed. The fish icon function is to use advanced signal processing methods to distinguish and process the returned sound waves, so the information of the detected fish will be accurate to be displayed on the screen. You can choose to turn on or turn off the fish icon.



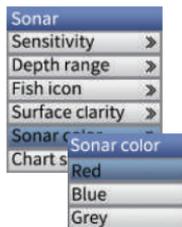
### Surface clarity

When the sonar is just launched, the closer the distance, the stronger the energy. And the stronger the detection ability to small objects. This causes the interference of the water surface to affect the normal detection, and the surface clarity function reduces the water surface the impact of normal detection.



## Sonar color

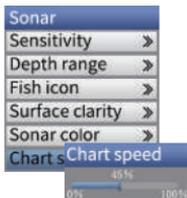
The sonar color is used to change the display color of the sonar image, which can better distinguish underwater, fish, etc. Sonar colors are available in red, blue and gray.



## Chart speed

Set the frequency of sonar data sampling.

Note: The more frequently the sonar data is collected, the more accurate the underwater situation displayed on the screen. However, too much data will cause the system to respond slowly.



# System

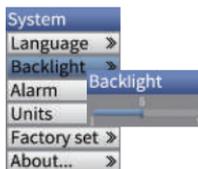
## Language

Language setting is to switch the languages of different countries. Under this menu, you can choose your preferred language (Chinese and English 2 languages).



## Backlight

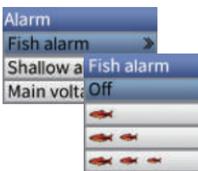
The backlight is to adjust the screen brightness.



## Alarm

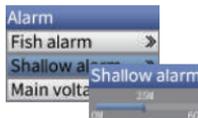
### Fish alarm

Fish alarm refers to the alarm set when different fish icons appear. You can choose to turn off the fish alarm, or select the large, medium and small fish alarm. When you only need to make an alarm for the large fish, just set the large fish alarm. However, the prerequisite for the function of the fish alarm is that the detected fish situation can be alarmed only after the fish icon is turned on.



### Shallow alarm

Shallow alarm is generally set to prevent stranding. When the actually measured water depth is lower than the set value, the fish finder will make an alarm to remind you that the current water depth is too shallow.



## Main voltage

When the main device power supply voltage is lower than the set value, the fish finder will make an alarm.

For different batteries, we recommend the following settings:

Battery	Suggest setting
8*AA dry batteries	7.5V
14.8V (3S) lithium battery	12.0V
12V lead-acid battery	10.5V

## Boat voltage

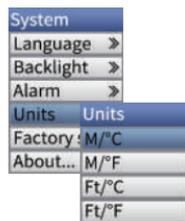
When the boat's battery is used to power the control box, the voltage value in the lower left corner of the display represents the voltage value of the boat's battery.

When the voltage is lower than the set value, the fish finder will make an alarm.

Once the alarm occurs, the battery needs to be charged in time, and overuse will affect the battery's service life.

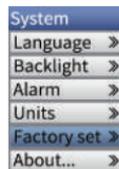
## Units

Set the unit of depth and temperature.



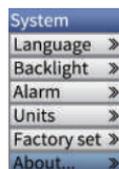
## Factory set

Factory set is restored to the factory settings, such as backlight, sonar settings, etc., it will be restored to the original appearance of the device, and all setting parameters will be cleared.



## About

Display the version information of the purchased product.



# Common problems and solutions

Problems	Solutions
Screen display : "Please turn on the sensor"	<p>1)Please turn on the sensor first, and then turn on the device. Otherwise, this message will be displayed on the screen.</p> <p>2)Please ensure that the radio environment is in good condition. Too close to WIFI Bluetooth devices, or too noisy R/C controller may cause the wireless transmission distance to be shorter.</p>
The device loses signal within 20 meters. Screen display:"No signal"	<p>1)Please make sure that the antenna and the control box are connected properly and the antenna is in good contact.</p> <p>2)Please ensure that the radio environment is in good condition. Too close to WIFI Bluetooth devices, or too noisy R/C controller may cause the wireless transmission distance to be shorter.</p>
Sonar image is blurry and messy	<p>1)The sensor (probe) should be installed on the boat away from any devices that may generate bubbles, such as engines and propellers. We recommend that the sensor be installed one-third (hull length) from the bow of the boat.</p> <p>2)Bubbles are the main source of interference from all sonar equipment. Therefore, the deeper the draft of the sensor, the better. The sensor should have a draft of at least 15cm above the water surface.</p> <p>If the draft of the sensor is less than 15cm, the fluctuating water surface will affect the sonar image quality. At this time, the sensitivity can be moderately adjusted to level 4-6.</p>

Problems	Solutions	
No fish detected (Clear that there are fish in the water)	This equipment has 2 blind spots. A blind spot is 0.5 meters down from the surface of the water. Another blind spot is 0.3 meters from the bottom of the water. If the fish is in the blind spot, the fish finder is difficult to detect. Therefore, if the water is too shallow, most of the fish are in the blind spots. Therefore, in order to obtain a better fish detection effect, we recommend that you use this product in water not less than 1.5 meters.	
There is no depth reading on the screen when the water depth exceeds 60 meters	<p>1) The oil, dirt, etc. floating on the water surface will form a film on the bottom of the probe, thereby reducing its detection effectiveness. Please clean the surface of the probe with a clean soft cloth (preferably dipped in some alcohol).</p> <p>2) Its detection capability can theoretically reach to 60 meters. However, it depends on the conditions of the water bottom. For example, a lot of silt at the bottom will cause weak echo signals and reduce its detection ability.</p>	
wireless functions	Wireless frequency	433MHz
	Wireless operating range	300m
Digital Sonar Section	Sonar frequency	125Khz
	Detect capacity	60m
	Sonar angle	90°
Power	Device power	10~13v
	Control box power	Can be powered by the boat's own battery 9.5~13v
Display part	Display size	3.5-inch TFT high-definition color display; visible in sunlight

## Product Specification

Display part	Resolution	480*320 pixels; 65,536 colors
	Chinese menu	Yes
Others	Sonar device size	130X130X30mm
	Portable base size	230X195X100mm
	Probe cable length	0.6m
	Operating temperature range	-10°~ 50°C
Digital Sonar Section	Adopt brand new digital wireless sonar technology. The detection accuracy is greatly improved than traditional sonar. Can accurately detect underwater fish (including bottom fish), water plants, stones, potholes and other information.	
	Real-time sonar window displays the latest sonar information.	
Digital Sonar Section	The fish shape recognition function can define the display level of the fish school size, so as to meet the purpose of fishing friends to catch only big fish or only small fish.	
	The detected fish-shaped symbol can visually display the depth position of the fish. This is helpful for anglers to judge the middle fish or bottom fish.	
	Alarm mode: fish alarm/shallow alarm/low voltage alarm.	
	Three background display colors.	
	Built-in water temperature sensor can display water temperature.	
Others	Windows menu style, intuitive and easy to operate.	
	1 year warranty	

LUCKYSMART®