



JABO-2AG/2BG bait boat

User manual



202008



Please read this manual carefully before using bait boat

JABO2AG/2BG is another product of the JABO series of intelligent bait boats. This product uses GPS positioning and electronic compass navigation. It can store 16 target bait points, and can automatically (manually) set the starting point to achieve the starting point. ,Automatically navigate to the target point, automatically return to the starting point after automatically hitting the nest (hook), and have the functions of fish finding, water depth measurement, bottom light lure fish, and water temperature measurement.other functions.

The main functions and features of JABO2AG/2BG bait boat:

1. JABO2AG/2BG features precise positioning and precise navigation. Positioning, navigation error radius is less than 2 meters.
2. JABO2AG/2BG can directional fixed distance automatic navigation, and can preset the navigation distance of 20 meters to 300 meters (adjustment interval of 20 meters) on the remote control to realize automatic navigation of 300 meters.
3. JABO2AG/2BG can store 16 target bait points. After the target bait points are determined for the first time, they can be placed again on the same water surface, in different fishing positions, within a radius of 1000 meters (hooks), and can achieve precise positioning. Big fish, more chances of fishing, also save bait resources, increase the fun of fishing. Especially in night fishing occasions, ordinary bait boats cannot achieve accurate bait delivery (hook release). JABO2AG/2BG can be used to accurately and accurately target bait (hook release) even in the dark night without moonlight.
4. JABO2AG/2BG working frequency 2.4g, 250 frequency points can be set, different frequency points can be preset. In the same fishing ground, multiple bait boats can be used at the same time without interfering with each other.
5. When JABO2AG/2BG is used, the starting point can be set manually (automatically). After the starting point is successfully set, the bait boat can return safely after each departure. If the user does not manually set the starting point, JABO2AG/2BG can also automatically set the starting point. Since it takes time to automatically set the starting point to receive GPS signals, the automatically set starting point may be far away.
6. Every time you turn on the power switch of the bait boat, it will automatically start to establish contact with the navigation satellite. It usually takes 3-5 minutes to successfully establish a contact.
7. The unique design of the JABO2AG/2BG bait boat automatically lifts the bait bin. Its advantage is that the feeding point can be seen visually, and the bait bin is automatically reset and travels more smoothly. These characteristics are more obvious after the realization of automatic navigation.
8. The design of the built-in propeller overcomes the defect that the external propeller is easily entangled by foreign objects. It is suitable for use in occasions with water plants and floating objects on the water surface, and also extends the service life of the propeller.
9. In order to be suitable for night operation, the bait boat is equipped with two different colors of tail lights, and the fisherman can also identify the sailing direction of the boat according to the different colors of the indicator lights. In order to facilitate fishing at night, JABO2AG/2BG is



- equipped with night lights that can be switched remotely.
10. JABO2BG has the functions of detecting fish, measuring the depth of the water, lure fish with the fish trap under the boat, and measuring the water temperature.
11. JABO2AG/2BG is not suitable for use in oceans, rivers (running water environment) and windy environments.
12. When it rains on cloudy days, the navigation function may weaken or even fail due to the satellite signal being shielded by clouds!

Main Specifications:

JABO2AG/BG bait boat:

- 1 Dimensions 615*265*180mm
- 2 Weight: 3KG(including 3.7V10A lithium battery);3.5KG (including 3.7V20A lithium battery)
- 3 Power Supply: 10A/3.7V Li-ion battery can work for 1.5-2 hours
20A/3.7V Li-ion battery can work for 3-4 hours
- 4 Speed: 80 meters/minute
- 5 rRemote control (automatic navigation) distance: 300 meters
- 6 Drive components: dual 380 motor gearbox drive (2AG), dual 545 motor direct drive (2BG), built-in propeller.
7. Main actions: forward, reverse, turn right, turn left, release hook (feeding bait), automatic driving at fixed distances, automatic positioning, automatic nesting, and automatic return. (2BG) Water temperature measurement, boat bottom lights to lure fish, water depth measurement, fish detection (small and large fish can be distinguished),
- 8 Bait load: 1.5kg
- 9 GPS positioning Can store 16 target bait points.
- 10 Electronic compass orientation + satellite navigation, the error is less than 2 meters

Remote control parameters:

- | | |
|--|--|
| 1 Remote control: 165×42×96mm | 9 GPS accuracy: radius $\leq$ 2m |
| 2 Power supply: 3.7v lithium battery. | 10 Underwater outline display: Yes |
| 3 LCD: FSTN128×128dot matrix | 11 Temperature range: 0-50 degrees Celsius |
| 4 Screen size: 45mm × 45mm | 12 Unit conversion: meter/inch; °C/°F |
| 5 Sonar frequency: 200KHz | 13 Remote control frequency: 2.4G |
| 6 Sonar angle: 20 degrees | 14 User-selectable channel: 250 |
| 7 Water depth detection: 1-30 meters. | 15 Low battery alarm: Yes |
| 8 Depth detection resolution: 0.1 meters | 16 distance: 300 meters |
- 17 Maximum navigation distance: 1000 meters (Note: The maximum navigation distance is not the remote control distance. For example, if the fisherman drives the bait boat at point A to point B to cast bait, the distance between points A and B should be less than 300 meters; After reaching point C, as long as the two points C and B are less than 1000 meters and there is no obstacle in the middle of the water, he can navigate the boat from point C to point B to cast bait)



Figure 1 shows the remote control:



How to use the remote control: First turn on the boat's power switch, after the two tail lights flash, operate the remote control as shown in the following table:

JABO	Press and hold the power button for 2 seconds. The screen enters the boot page. The "JABO" welcome page appears first.				
<table border="1" style="width: 100%; text-align: center;"> <tr> <td colspan="2">Compass Cal</td></tr> <tr> <td>Y</td><td>N</td></tr> </table>	Compass Cal		Y	N	Calibration: Compass calibration is required for the initial use of a boat or to a distant water surface (if the compass has been calibrated on the water surface) You can select "N", no more compass calibration, directly enter the starting point of setting.) Press "Left" key, select "Y", then press "S" key to confirm.
Compass Cal					
Y	N				
<table border="1" style="width: 100%; text-align: center;"> <tr> <td colspan="2">5m off shore</td></tr> <tr> <td colspan="2">Next</td></tr> </table>	5m off shore		Next		"5m offshore" appears: first use the operating handle to drive the ship 5-10 meters away from the shore, and then press the "S" key to enter the compass calibration function.
5m off shore					
Next					
<table border="1" style="width: 100%; text-align: center;"> <tr> <td colspan="2">Compass Left</td></tr> <tr> <td colspan="2"></td></tr> </table>	Compass Left				"Compass left", the boat will automatically turn left, and the display will change from 0 to 360 degrees. When the boat turns left for 2 weeks, press the "S" key again,
Compass Left					
<table border="1" style="width: 100%; text-align: center;"> <tr> <td colspan="2">Compass Right</td></tr> <tr> <td colspan="2"></td></tr> </table>	Compass Right				"Compass right", the boat starts to turn right automatically, the display changes from 0-360 degrees, when the boat turns right for 2 weeks, press the "S" key again
Compass Right					
<table border="1" style="width: 100%; text-align: center;"> <tr> <td colspan="2">Cal save</td></tr> <tr> <td>Y</td><td>N</td></tr> </table>	Cal save		Y	N	"Cal Save". By default, "Y" is selected. After pressing the "S" key, the compass calibration is completed and the calibrated compass data is saved.
Cal save					
Y	N				
<table border="1" style="width: 100%; text-align: center;"> <tr> <td colspan="2">GPS set start</td></tr> <tr> <td>Y</td><td>N</td></tr> </table>	GPS set start		Y	N	It is very important to set the GPS starting point, and you need to determine the GPS starting point each time you use it. If you do not determine the GPS starting point, you will not be able to return to the boat. This item is "Y". After the GPS starting point is established, the "*" symbol appears on the LCD screen to represent the starting point.
GPS set start					
Y	N				



Note: Compass calibration is required only when first used or when changing to another venue. The second time it is used on the same site, you can directly select “N” on the Compass Calibration page to enter the “Set GPS Origin” page.

It should be noted that it takes 2-5 minutes for the boat’s receiver to establish a connection with the satellite system. If the boot time is too short, the connection with the GPS has not been established. After selecting "Y", no "*" appears on the LCD screen. , It means that the starting point has not been established, you need to wait 2-5 minutes, and then select "Y" until the starting point is established. If the starting point cannot be established for a long time, you can press the N key to enter the navigation setting page and select "Set start ": press the "S" key to set the start point and complete the start point setting.

After setting the starting point, enter the navigation operation interface:



The first row of icons from the left are:

1 Signal strength; 2 Remote control battery power; 3 Boat battery power; 4 Driving status indication; 5 Satellite icon;

E is the longitude coordinate; N is the latitude coordinate

Turn on the boat switch first, and then turn on the remote control switch, the first "*" on the left indicates that the navigation module has started to work. Before fully establishing contact with the navigation satellite, the latitude and longitude coordinates display a

series of "X", at this time the "X" has no meaning. After the boat has established a connection with the satellite, the values of E and N are the boat satellite positioning coordinates.

After setting the starting point, enter the operation page, and you can start to operate the nest boat with the operation handle.

Parameter setting: After entering the operation page, press the setting key "S", the screen enters the parameter setting page.

Sensitivity 50	“ Sensitivity” can be adjusted between 01-99. The higher the sensitivity is, the better. If the sensitivity is too high, it will amplify interference signals and display invalid data. The factory default is "50", which is suitable for water depths of 1.8-10 meters.
SerialNumber 000	“Serial Number” is the code of the remote control. Remote controls with different codes are used in the same venue without interfering with each other. 0-250 can be set. Factory default "000"
Temp,Unit ° F	Temperature units are divided into Celsius and Fahrenheit
Length Unit Ft	Length Unit: Meter, Feet
Beep ON	This is a key tone, which can be selected on or off
Backlight ON	LCD backlight, optional on or off



Depth range		Depth range "ft": The factory setting is "Auto".
Auto		
Boat speed		speed adjustment, factory setting 90%, adjustment range 60-99%
90%		
Refresh rate		The refresh rate is to adjust the screen shift time of the LCD screen. The adjustment range is 0-9 seconds and the factory setting is 5 seconds.
5		
COMP Angle		“COMP Angle” is different from the compass calibration at power on. The adjustment range is -30 to +30 degrees.
00		
Boat yaw		It is used to adjust the yaw of the boat. When the boat goes straight to one side, it can be adjusted through this item. Adjustment range -50-+50.
00		

The right function key description:

- ① A/H key: Automatic/Manual conversion key. When the boat is in automatic navigation, Manual operation is invalid. After pressing the A/H key, the following options appear:

Continue Guige	
Y	N

At this point, press the "S" key to continue the automatic navigation. If you press “▶” key to select "N", the automatic navigation function will exit and the manual function will be restored.

- ② M key: screen mode conversion. The remote control has 2 screen modes:



1 Navigation mode, which displays information such as the coordinates of the bait boat, driving status, power of the remote control, battery power of the boat, and the distance to the target point and starting point.



2 Fish finder mode: display the signal strength, the boat's driving status, the power of the remote control, the power of the boat's battery, and the water depth, water temperature, and fish symbol



- ③ **N key: navigation function selection key.** Press the N key, there are 5 kinds of navigation function options:

Return
Save Dest
Guide to DEST
Set start
Go Forward

1 Return : Directly press the "S" key to select the return route, at this time the boat starts to return, and stops after returning to the starting point.

2 Save Dest: After pressing the ▼ key, choose to save to the target point, you can select numbers 1-16, and then press the set key "S", if the selected number is 01, the current ship position will be saved as target point 1

Save Dest
01

3 Guide to Dest: The premise of applying this function is that at least one target point has been set. Press the ▼ key to enter and navigate to the target point, and then press the "S" key: press the setting key "S" to enter the target point selection: you can select numbers 1-16, and then Press the setting key S, if the selected number is 01, the target point of this navigation is the No. 1 target point.

Guide to Dest
01

The "feeding fish" option page appears, the default option is "Y"

Feed fish
Y
N

Press "S" again to enter the "return" option interface: the default option is "Y"

return
Y
N

In this way, the Bait boat completes its navigation to the target point "1"—feed fish—return, and finally returns to the initial point of the one-click navigation.

4 Set start: If the starting point is not set after power-on, or other reasons need to set the starting point, you can Use this item to reset the starting point.

Set start
Y
N



5 Go Forward: This is the new directional fixed-range automatic navigation function of JABO2AG/2BG bait boats. Users can choose 20-300m directional fixed-range navigation in this option to replace the original need to manually set the nest point by remote control, which realizes the real automatic navigation .

Specific operation method: press ▼ key, select "Go Forward"

Go Forward
100m

Press ◀ or ▶ to set the forward distance, from 20 meters (20 meters apart) to 300 meters. This distance is the distance of the bait boat. After setting the forward distance, press the S key to enter:

Feed fish	
Y	N

Default Y, press S to enter:

return	
Y	N

Default Y, press S to enter:

Save Dest	
Y	N

Press ◀ key, select Y, enter:

Save Dest
01

Press ▶ to set number 01-16 dens.

Note: At this time, you must hold the boat with your hands and straighten the course. After pressing the S button, let go for about 5 seconds, and the boat will begin to move forward. After the boat travels to the preset distance, the tipping bucket will start to raise the bait. Start to return to home after the bait is thrown. The position when the tipping bucket is overturned is the set bait point. When setting the forward distance, you must first predict the distance. Do not set the distance to the maximum at the beginning, so as not to drive to the opposite shore and be stranded and unable to return. Before using this function formally, please try it a few times and use it after you have mastered the operation steps to avoid misoperation.

Instructions:

- 1 Installation of the power lithium battery on the ship: The power lithium battery of the nest boat has been installed in the ship before leaving the factory, and the user receiv



es After nesting the boat, you only need to open the hatch cover (don't pull out the plugs that have been inserted), and connect the battery plug to the power socket inside the boat. When connecting, pay special attention to the polarity of the battery and the reverse connection. It will burn out the receiver and motor drive board. The correct connection method is to insert the red wire of the plug to the red wire of the socket and the black wire to the black wire. After the plug is connected, cover the cabin. The remote control battery has been placed in the remote control before leaving the factory

2 Function Test: Before the boat is launched into the water, functional testing is required.

- Power on: Put the nesting boat in a stable place, then turn on the power switch on the hatch cover, the two tail lights start to flash, indicating that the receiver is energized normally.
- Turn on the power switch of the remote control, the tail light changes from flashing to off, and the remote control and the receiver are successfully coded. In order to be able to use multiple boats at the same venue at the same time, an address code (serial number) is set in the remote control circuit. The serial number of the remote control at the factory defaults to "000". When the boat is turned on, the receiver will first receive the address code (serial number) of the remote control. Once the code is completed, as long as the power switch of the boat is not turned off, the small boat will receive the control commands of the remote control that it is paired with. In this way, multiple boats can be operated on the same site without affecting each other. It should be noted that every time the boat turns on the power switch, there will be a code matching process.
- Forward: Push the handle of the remote control forward and the two motors of the boat start to rotate. The left and right direction lights are always on. At this point the boat is in progress.
- Left turn; Turn right: Push the remote control handle to the left or right to make a left turn for the boat (right side of the motor is turning, the left side of the motor is reversed, the left direction light is blinking), turn right (left The side motor rotates forward, the right motor reverses, and the right direction light flashes).
- Back: pull down the handle of the remote controller. The two motors rotate in opposite directions. The left and right lights flash, and the boat is back.
- Lure fish light function: Press the lure switch on the remote control to turn on the lure light at the bottom of the boat and press the lure light button again to turn off the lure light. Float light status indicator on the LCD screen can show the status of the current lure light.
- **Sonar detection function: This function works properly in open natural waters. A false detection result will be obtained in the air or in the bathtub or swimming pool. The sonar sensitivity is set at 50% at the factory. It is suitable for use in waters with a depth of 2-10 meters. If the water depth is deeper, the sensitivity of the sonar sensor should be increased. . (sensitivity adjustment range 1-99%)**
- **Yaw adjustment: As the JABO2BG type wrecking boat is driven by dual motors, the rotation speed of the two motors and the transmission error of the mechanical transmission shaft system cannot be completely consistent, and the yaw phenomenon may occur during use. For this yaw, Adjust by calling the yaw adjustment menu of the remote control. .**

It should be noted that here, the electronic yaw adjustment function is designed to



correct the slight yaw caused by the discreteness of the power system. It is not suitable for adjusting the severe yaw caused by mechanical faults. Mechanical system can be completed.

3 Pay attention to the following points when operating the bait bin

- * The bait silo is driven by the motor gear box. Do not try to manually lift the bait silo. This will cause damage to the mechanical structure of the bait silo.
- * Note that the automatic stopping of the bait silo is due to magnets placed on the bottom of the front end of the bait silo. A magnetic sensor is installed on the hatch cover. Only when the bait silo is in place, the magnet triggers the magnetic sensor and the bait silo can stop and return to the normal position.
- * It is recommended that the user apply some lubricant to the screw, which will greatly improve the performance of the skip and extend the life of the screw.

4.Charger use and precautions:

The JABO Lithium series bait boat has a lithium battery charge management circuit installed in the boat. Please pay special attention to the use of the original power adapter for charging. Otherwise there are unpredictable security risks! The adapter output is DC 5V / 2A.

Insert the adapter with the boat on the 110v~220v AC power outlet, take off the circular waterproof cap on the upper part of the cabin, turn off the power switch of the dock, and plug the adapter's DC output cable into the bay. In the DC charging stand covered, the charging indicator next to the docking ship's charging stand lights up to show that red is charging. When the battery is full, the indicator light is green. When the adapter's DC plug is pulled out, the charging indicator light goes out. Generally, the charging time for a 10A battery is about 14-16 hours. The battery life is about 2.5-3 hours after the battery is fully charged.

Note: When the power battery is not connected to the circuit, after the charging DC plug is connected, the charging indicator will show as green.

When the boat battery low battery alarm, please return the boat to the shore within 10 minutes and charge in time. Otherwise, the bait boat will risk losing control because the battery voltage is too low



The remote control is equipped with a lithium battery when it leaves the factory. When the remote control is low in power, you can use the charging cable provided with the ship to plug in the mobile phone charger to charge the remote control. The charging port of the remote control is on the back, and the general charging time is 1.5-2 hours. When charging, the horizontal bar on the remote control screen starts to scroll, and the 3 horizontal bars no longer scroll when it is full, and the display is full.

Precautions:

- 1 Before each use, charge lithium batteries inside the dock to ensure that the batteries are full.



- 2 The remote control must also maintain sufficient power.
- 3 When the battery voltage inside the boat is too low, two lights on the boat will flash at the same time, indicating that the battery should be charged at this time, and the power indicator on the remote controller will also prompt the battery to decrease. After each use, the ship's power switch and remote control switch should be turned off.
- 4 JABO-2 series remote control boat is suitable for use in reservoirs, lakes and ponds. It cannot be used on flowing water to avoid being washed away by currents. Not suitable for use in stormy water. Cannot be used in seawater.
- 5 If during the fishing season, the interior of the hull should be kept dry and the battery plug should be unplugged. The power battery should be charged every 2-3 months, and the lithium battery power should be stored in the 70%-80% state.
- 6 Please lock the lid buckle before use. Cover switch waterproof cap.
- 7 The bait weight should not exceed 1.5kg.
- 8 It is forbidden to forcefully lift up the bait silo with external force. Otherwise it is very easy to damage the drive mechanism.
- 9 It should be specifically stated that if the power switch of the remote controller is turned off first, and the boat has left the water at this time, the motor on the boat will begin to rotate. This situation is not a malfunction, but the boat is beginning to "return". Is turning off the ship's power switch.
- 10 If you turn off the switch of the ship and then turn it on again, and the switch of the remote control has not been turned off, there will be a phenomenon that the remote control cannot control the ship. At this time, simply turning off the remote control switch and turning it on again can be operated.
- 11 When using two or more remote controllers at the same time, it should not be surprising if two remote controllers control the same boat at the same time. Just set the remote controller to a different serial number.

Battery connection diagram:



1 Undo the hatch cover deduction



2 Connect the battery plug with the socket in the boat



3 Note: The red line should be connected with the red line, the black line should be connected with the black line



4. Locking hatch



5 Turn on the power switch and both tail lights start to flash.



Fishing line lanyard diagram:



Common problems when using the nest boat:

- 1 The nesting boat cannot return to the set starting point or is far away from the set nesting point:

This situation is mainly because the time to set the starting point is relatively short after the ship is turned on, and the receiver has not received GPS signals stably. Improved method After the ship is turned on, delay 3-5 minutes to set the starting point, or press the N key to select the "set starting point" option to reset the starting point after returning home.

- 2 How to check the distance traveled by the nest boat: Press ▲ key 3 times, the screen displays

O: XXXX m XXXX the distance of the boat from the starting point

X: XXXX m XXXX the distance from the boat to the target point

- 3 What to do if the round-trip trajectory when navigating the nest boat is not a straight line, but a curved curve:

It can be adjusted by "COMP Angle" in the setting options, The specific method is: press the S key to enter the setting state, and then press up twice to enter the "COMP Angle"

If the boat is obviously to the left when navigating (returning), you can press - and the value can be adjusted from -1 to -30

COMP Angle
-10

You can set it to -10 first, and try to see if there is any improvement.

If the boat is obviously to the right when navigating (returning), you can press the + sign, the value is adjusted from 1 to 30

COMP Angle
10

You can set it to 10 first, and try to see if there is any improvement.

- 4 If you want to baot the ship during automatic forwarding or automatic navigation, press the A/H key.



This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.