# Distributor/Agent Contact:

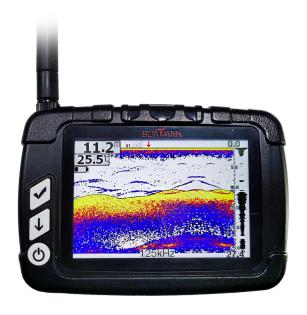
# **Contact Us**

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Fish Finder User Manual

**Boatman** 

Boatman SN2.2 —————Boatman SN2.2

# I. Overview

The boatman SN2.2 fish finder is suitable for fishing enthusiasts and fishermen to fish in rivers, lakes, seas and other locations. It's easy to see the depth, the terrain, the number of fish etc. under water with this device.

# **II. Working Principle**

Sonar technology uses the propagation and reflection of ultrasonic waves to determine the distance and shape of objects. This product uses this technology to directly detect and identify the fish situation in the water and the depth of the bottom using a sonar sensor.

When the machine is working, the sonar sensor will send out an ultrasonic signal, which will be reflected back when it encounters an underwater object, and then the device will calculate its distance and position according to the reflection time and waveform.

# **III. Product Specifications**

Screen Size	3.5 inch
Resolution	320*480
Detect Depth	0.6~40m
Accuracy	0.1m
Wireless Frequency	433MHz
Working Environment	5~50°C
Working Distance	300m

# **IV. Product Function**

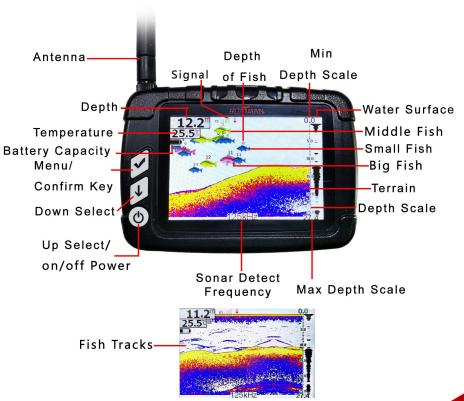
1.Terrain/Temperature Display 2.Fish Symbols/Depth

3. Fish Beep Alarm 4. Depth Range Setting

5. Noise Rejection 6.1-100% sensitivity setting

7.Backlight/Volume Setting 8.Unit Setting(m/ft)

# V. Screen Details



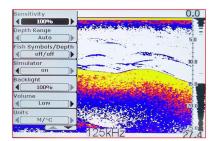
# **VI. Button operation**

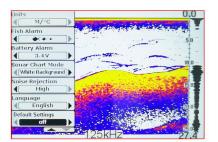
#### 1.Power On/Off Button

**Power On:** Keep pressing the button for 3 seconds to switch the device on, and then it will automatically enter the system with the mode and value setting in the last normal shutdown.

**Power Off:** Keep pressing the button for 3 seconds to power off

Save Setting: In the menu screen, you can use the up button to select the menu item to be modified, use the confirm key to select the menu item to be modified, and then use the up and down buttons to modify the set value of the menu, once the set value of the menu item appears on the screen, the system immediately performs the operation according to the new set value.





# 2.Menu/Confirm Key

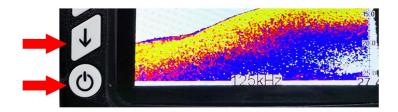
**Menu:** The menu will appear on the screen when the button is pressed while the power is on.

**Confirm:** At menu state, press the confirm key to select the menu item, the bottom color of the selected menu item will change from black to red, the menu item is selected, and now the menu item is adjustable. You can use the left and right arrow keys to modify the value.Once the setting value appears on the screen,the system immediately performs the operation according to the new setting value. Press the confirm key again to exit the selected state, the bottom color will change to black, now you can use the left and right arrow keys to move the menu item up and down.

**Exit:** In the menu state, press and hold the confirm button to exit the menu and display the main interface.

# 3. Up and down key

Press confirm key to enter the menu, the up and down selection keys can be moved up and down to select the option to be modified. After confirming the selection, the bottom color of the menu itemis red, the up and down keys can modify the content of the selected option.



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# **VII. Menu Function Setting**

#### Menu

The menu function settings are adjusted by pressing the menu/confirmation key once, the up and down selection keys and the confirmation key.

## 1. Menu function setting

Press menu/confirm key once to enter the menu. The menu has thirteen options, 1)Sensitivity; 2)Depth range; 3)Fish icon/depth; 4) Demo mode; 5)Screen backlight; 6)Volume; 7)Units; 8)Fish alarm; 9) Low voltage alarm; 10)Sonar scan mode; 11)Clutter filter; 12)Language; 13)Factory setting.

#### 1)Sensitive

Press Menu/Confirm key to select the "Sonar" menu, then press Pause/Confirm key to select the sensitivity option, when the bottom colour of the option turns red, the setting can be adjusted from "1%" to "100%" or "Auto". and the left and right keys can be used to modify the content of the selected option.

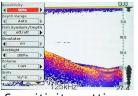
The user can filter the sonar echo signal by adjusting the sensitivity to display the signal they need on the screen. If the user needs to see more of the echo signal, the sensitivity setting has to be turned up. With high sensitivity, a lot of hydroacoustic noise will inevitably be displayed on the screen. If the user does not want to see this noise, then the sensitivity setting should be turned down. You can adjust the sensitivity setting to suit your needs. If the sensitivity setting is set to "Auto", the system will automatically select the sensitivity depending on the depth of the water, so there is no need for the user to set it manually.

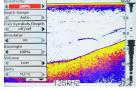
All objects in the water, produce a certain amount of sound reflection regardless of size or hardness, and larger or harder objects also produce multiple reflections. The higher the sensitivity, the "smaller" the "sieve". Increasing the sensitivity is equivalent to decreasing the size of the "sieve", so that more things (dots on the screen) are left on the sieve, which of course may result in a cluttered screen.

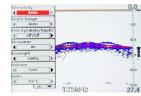
Conversely, you can increase the 'sieve' by reducing the sensitivity, so that less of the dots will remain on the screen and the system will filter out some information, make the display relatively simple. However, you should aware that the information you are filtering out may also be very important.

So, once you have used it for a while, it becomes critical to choose the right sensitivity and the right depth range. We generally recommend that you turn up the sensitivity when the water is deeper or clearer, and turn down it when the water layer is more impure This will reduce the number of false detections.

We can also use this function to distinguish between large and small fish. If there are a lot of fish, turn down the sensitivity and increase the "sieve", then the weaker reflected waves will be filtered out and the larger fish will be left.







Sensitivity settings

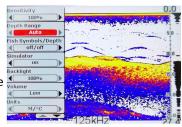
High sensitivity

Low sensitivity

## 2) Depth Range

Firstly press the menu key, then press the confirm key to select the depth range item, press the left and right key to select: when the depth unit is set to "M" (metres), the set values are "0-3m", "0-5m", "0-10m", "0-20m", "0-30m", "0-40m" and "Auto".

When the depth range is set to a fixed value, the the screen will adjust to the corresponding display according to the set value. The screen will adjust to the corresponding display range according to the set value. Anything outside of the set range will no longer be displayed.



(It is not adjustable if the depth range is more than 100 meters)

# 3)Fish Symbols/Depth

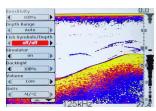
The optional setting values are: "on/on", "on/off" and "off/off". "On/On" shows both fish symbol and fish depth;

"On/Off" Only show fish symbol but not fish depth;

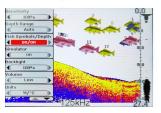
"Off/Off" The fish symbol and fish depth are both not displayed, and the Arches displayed.

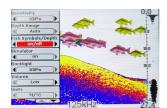
When the fish symbol and fish depth display is set to "on", the system will analysis, according to the strength and weakness of echo signal under water, show these signals as different sizes fish symbols, and the depth corresponding to these signals will be shown above the fish symbol.

This product is a very powerful echo signal analysis system, which can remove part of the underwater acoustic noise, surface clutter and temperature change layer through menu settings, and then display the remaining signals as fish symbols. However, the system is also limited, and some situations cannot be identified. For example, dead branches suspended in the water, air bubbles, garbage, etc. may also be displayed as fish symbols.



Fish Symbol Off





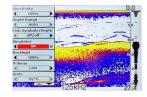
Fish Symbol On

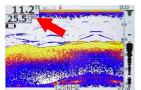
Both Fish Symbol and Depth on

## 4) Simulator

The optional setting values are: "on" and "off".

The simulator is a function that provides users with experience detection effects and familiarity with sonar settings. The values of other items modified by the user are also perform by the system in real time in simulate mode. When this item is set to "On", the letter "S" will be displayed on the screen.



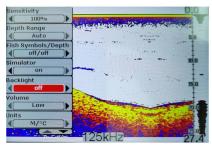


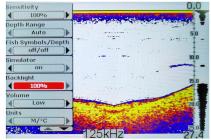


# 5)Backlight

Users can set the backlight to adjust the brightness of the screen according to their needs to obtain a suitable display effect.

When the backlight is set to '30%~100%' the background light of the screen will be always on, which consumes more power and battery last for less time. Therefore, it is better to use this function in low light conditions.

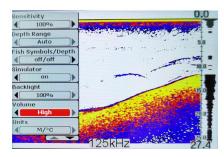




# 6)Volume

The optional setting values are: "high" "medium" "low".

Users can adjust the volume setting according to their needs.

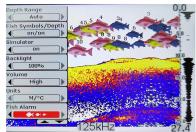


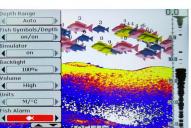
# 7)Units

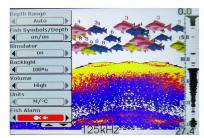
The optional setting values are: "ft/°C" (Feet/Celsius), "ft/°F" (Feet/Fahrenheit), "m/°C" (Meter/Celsius), "m/°F" (Meter/Fahrenheit).Users can set the unit according to their needs.

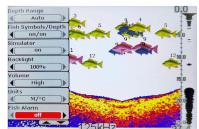
# 8) Fish Alarm

When the item 'fish alarm' is set to 'off', the system will not beep if there is fish under water. For the other value except 'off', it will show the selected fish symbol type in the screen When the item 'Fish Symbols' in [Sonar] Menu set to 'off', the setting of this item is not effect.







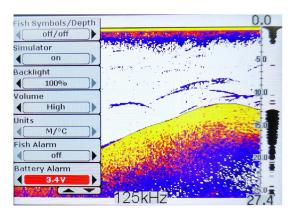


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## 9)Battery Alarm

The optional setting values are: "OFF", "3.4V" to "4V", increasing or decreasing in units of 0.1V.

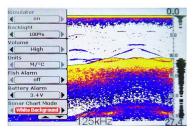
When the input of battery power is equal to or less than the power set in the item, it will beep and the battery capacity display will keep flashing.

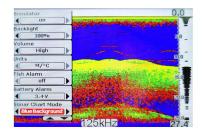


# 10) Sonar Chart Mode

The optional setting modes are: "White Background"; "Gray Background"; "Blue Background"

Users can select the corresponding sonar chart mode according to their preferences.



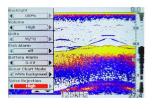


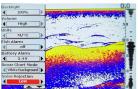


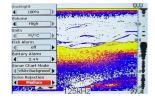
# 11) Noise Rejection

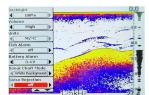
The optional setting values are: 'Off', 'High', 'Medium', 'Low'. Users can adjust the corresponding settings according to their needs. Noise Rejection is the function that the system automatically filters discrete noise to achieve better analysis results to display, but it also filters some useful signals. This noise rejection function may provide users with the best display in most cases.

If you are in a noisy environment, try to set the value of this item to 'High'. However, if you still see noise, we recommend you to find the source of the interference and remove it instead of keep setting this item value in 'high'.







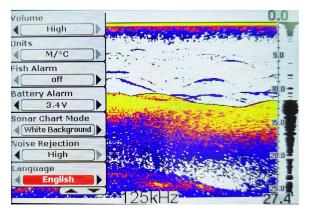


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## 12) Menu Language Setting

This product provides totally 17 languages: English; Russian; French; Chinese; Japanese; Finnish; Polish; German; Italian; Spanish; Dutch; Korean; Swedish; Greek; Danish; Czech; Portuguese. Customers can choose the corresponding language according to their needs for better experience.



Important note (pairing): In order to avoid interference from other wireless fish detectors or if receivers not receiving the transmitter (sensor) signal, you can follow the steps below for pairing.

- 1.Please make sure that the receiver(screen) and transmitter(boat) are both off before pairing.
- 2.When the receiver is off, keep press the Pause Button and Power Button at the same time for 3 seconds, it will show in the screen
- 3. Turn on the boat (power on the transmitter). After it works normally, the screen receives the signal from the boat, and it will show **OK** in the screen(pairing success)
- 4. Turn it on again and it works normally.

## 13) Default Settings

The optional setting values are "on" and "off" it has default settings when we release the product from factory. If the user wants to cancel the setting they make before, they only need to set this item to 'On' to reset to the default settings. Normally, this item is set to 'Off'.

Default Settings as below:

1. Sensitivity: 90%

2. Depth Range: 0-40 meters

4. Units: M/°C

5. Battery Alarm: on

6. Sonar Chart Mode: White Background

7. Noise Rejection: Medium

8. Language: English

