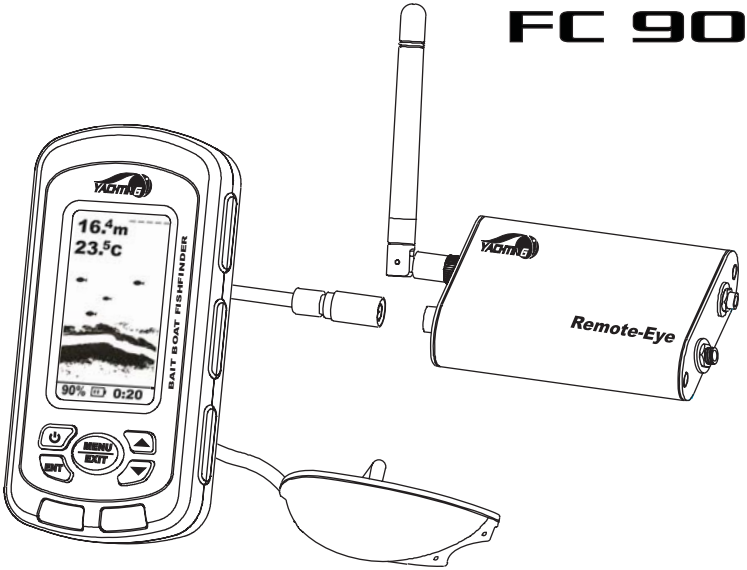
User's manual

Used with bait boat - Monitor bait boat battery; 300m RC distance

FC 80
FC 90



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Introduction

Thank you for choosing our Fishfinders. and welcome to the innovations of Yachting Electronic Co., Ltd! We has been committed to fish finder R&D activities all the way and its products have been reputed for their cutting-edge technologies and reliable performance.

FC80 / 90 is designed to be used with bait boat.

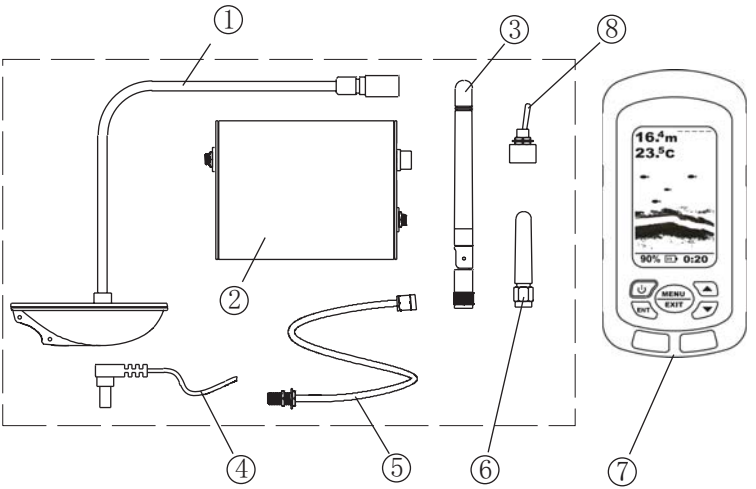
We offer 12months charge-free maintenance against any damages induced by non-human factors; and damages beyond the 12 months are handled with reasonable charges based on concrete situations. For details regarding maintenance service, please refer to the warranty explanations.

To familiarize yourself better with the product's operation and maximize the utilization, we invite you to read the User's Guide carefully.

For any possible problems you may encounter during the operation, please switch to the Trouble shooting section for reference.

Packing list

Before you install the transducer to your bait boat, please check the packing list below, and make sure you are not missing any items.



1) A wireless remote sonar sensor
2) A control box
3) A antenna for mounting on bait boat
4) A power cable
5) A anenna-extended-cable

6) A antenna for mounting on the sonar handheld(optional for FC80; not inlcuded in FC90)
7) A sonar handheld with 3” FSTN LCD
8) A switch for On/Off controling of RemoteEye (optional)

The following items are also included:

a) two screws (mounting the transducer)
b) a battery buckle (when needed, being used to connect power cable and 9v alkaline battery)
c) a copy of manual

Note: the electric control & sonar system enclosed by the dashed line are named **RemoteEye**.

In the event that any of the items listed is found missing, call us immediately or log on to our website at

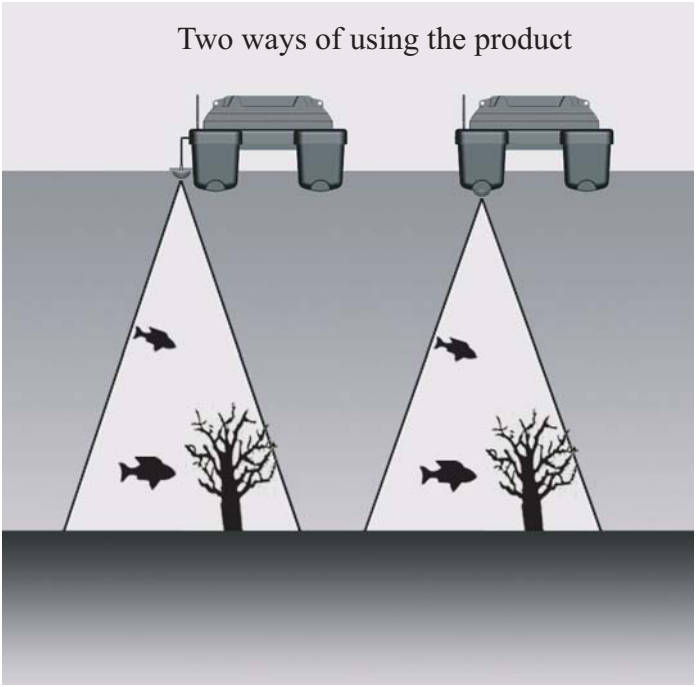
www.goyachting.cn.

Clients located in other parts of the world may also refer to their respective local distributors.

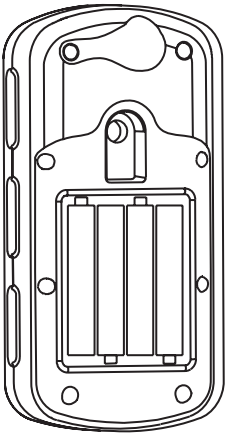
Using the product

FC80 / 90 is designed to be used with bait boat. Properly install the RemoteEye to your bait boat, power on the control box before you put the assemmed bait boat & RemoteEye into the water, then you are ready to enjoy the operation.

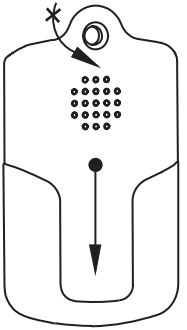
Two ways of using the product



Installing the battery



Warning: do not split the battery cover with strength in the vertical direction!

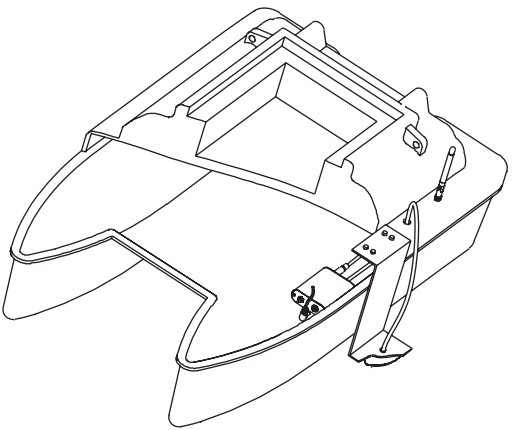


To take off the battery cover, press it and slide in the indicated direction.

1. Turn the screw anti-clockwise with a screw driver. Then slide the battery cover towards the bottom of the unit and remove it from the main housing.
2. Install 4 “AAA” batteries. Be certain that the batteries are aligned as per the diagram within the battery compartment.
3. Slide the battery cover towards the top of the unit until it is completely closed. Then turn the screw clockwise

Install the RemoteEye to bait boat

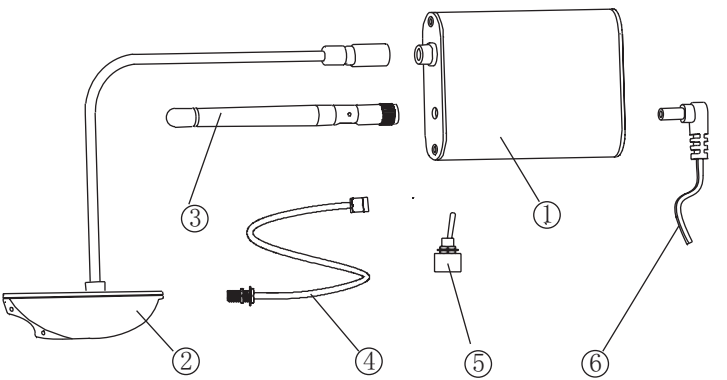
The picture below is a overall installation instrution showing you the general conception to install the control & sonar system(namely RemoteEye) to the bait boat, which is just for your reference.



Note: the selected bait boat here is just for your reference, the installation way may vary according to the structure of different bait boats.

Introduction of the RemoteEye

RemoteEye indicates the whole set of electric & sonar control system . It is used to be mounted on your bait boat.



1. Control box
2. Wireless sensor
3. Antenna
4. Antenna-extended cable
5. Switch of on/off controlling for RemoteEye (optional)
6. Power cable

Note: the antenna-extended cable is used to connect the antenna and the control box. As sometimes you may have to mount the antenna on your bait boat, instead of connect

it directly to the control box. Thus it will be convenient for you to find enough space to place the control box at a proper position.

Tool List (not included)

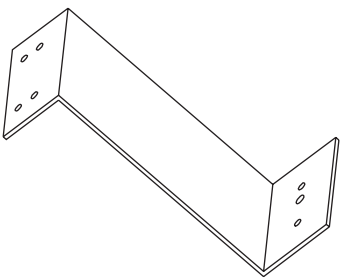
Hand drill
5/32” drill bits
Phillips and flat-head screwdriver
Marine sealant

RemoteEye installation method - 1

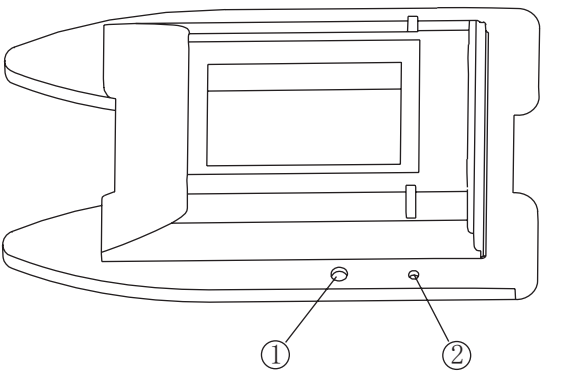
1. Make a supporting plate to hold the wireless sensor

The shape of supporting plate may be different according to the shape of your bait boat.

Note: the shape below is just for your reference.



2. Find a proper position and drill two holes on the top cover of your bait boat, as figured below:



Note:

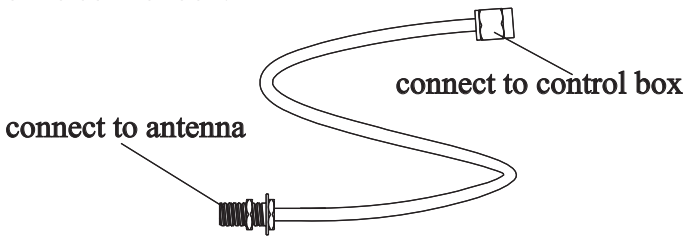
The hole ① is used to be through the sensor cable, the diameter should be about 11.5mm

The hole ② is used to mount the antenna, the diameter should be about 5.8mm.

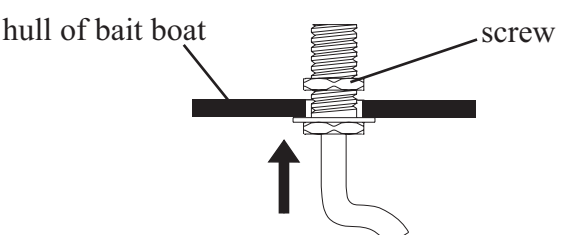
3. Monut the antenna on the top cover of your bait boat.

a) mount the antenna-extended cable to the top cover

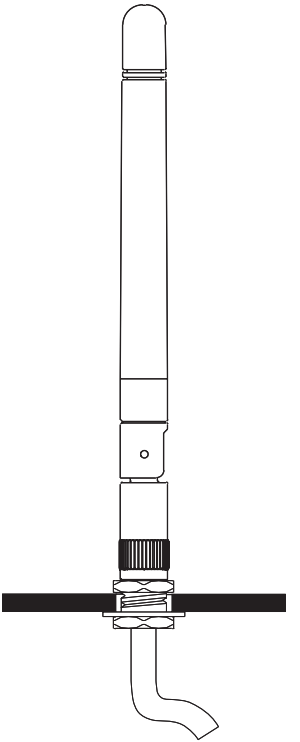
There are two connector of the antenna-extended cable, one is used to connetct to the antenna, another is used to connect to the control box.



Firstly, take out the screw from the antenna-extended cable, then hold one end of the cable through the hull of bait boat(as instructed below). Finallly, tighten the screw.



b) screw the antenna to the antenna-extended cable.

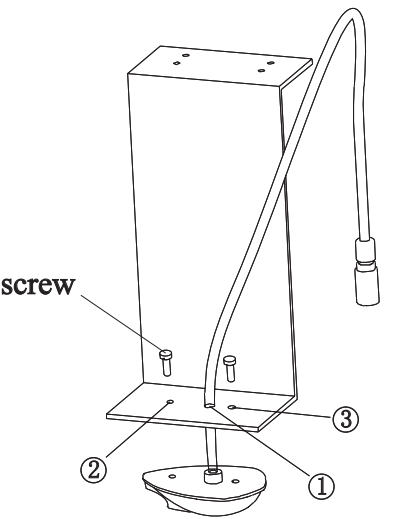


4. Mount the wireless sensor on the supporting plate, as instructed below,

a) drill three holes on the supporting plate.

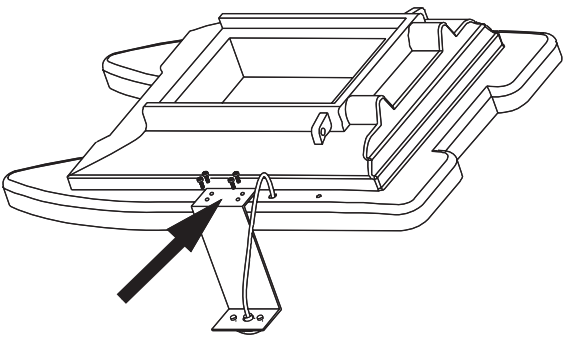
Diameter of hole-1 is about 12.5mm
Diameter of hole-2 and hole-3 is about 3.5mm

Note: use a pencil to mark the position before drilling the hole-2 and hole-3.

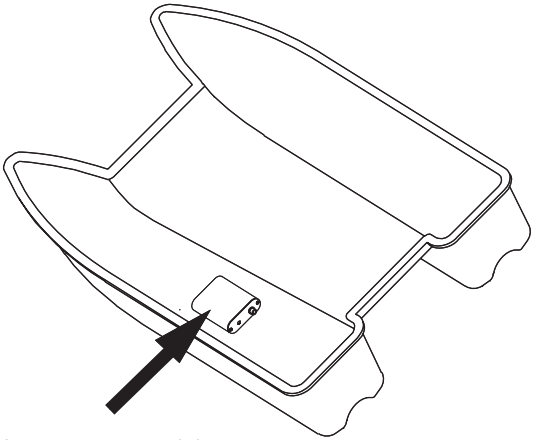


5. Mount supporting plate on the top cover of bait boat.

Drill 4 holes on the supporting plate, and tighten the supporting plate on the top cover of your bait boat by screws.



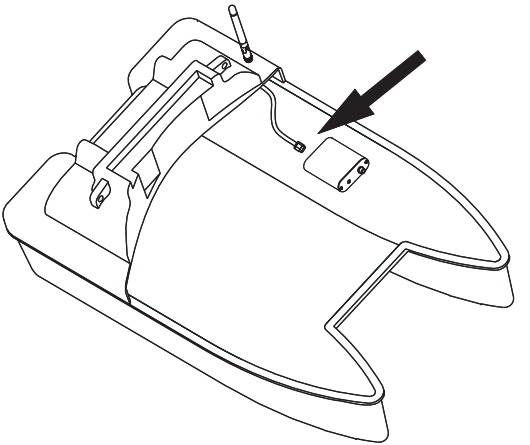
6. Find a proper position and place the control box into the bottom cover of your bait boat.



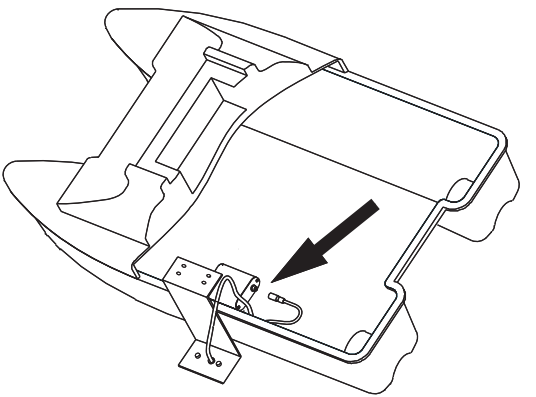
find a proper position

Note: It could be better to find a way to fix the control box in the bottom cover of your bait boat. As when used with your bait boat in the water, the control box may wobble with the shave, which may damage the inner electronic parts.

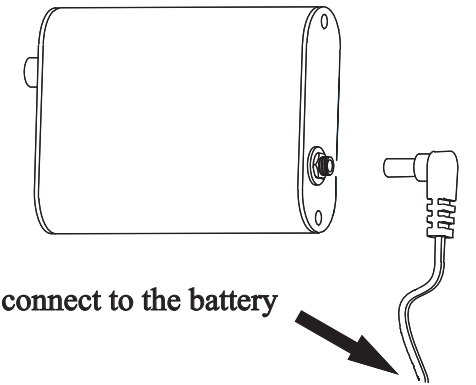
7. Connect the antenna-extended cable to the control box.



8. Connect the wireless sensor to the control box.



9. connect the control box to the battery.



a) for FC80

Warning: we strongly suggest you using a 9v alkaline battery, instead of using the bait boat battery for powering, otherwise thus short Remote Control distance and abnormal display may occur due to the interference caused by bait boat battery.

b) for FC90

Both bait boat battery and 9v alkaline battery can be used for power supply, without any interference.

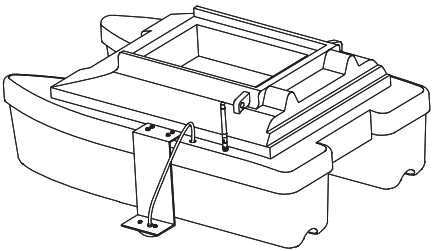
Note: correctly connect the control box to the bait boat battery, then you can monitor the remained voltage of your bait boat all the time. Avoiding using under a low battery.

Note: the range of battery monitoring is 5.2~15v.

Warnning: be careful not reversing connection of positive and negative pole to the bait boat battery. (black wire is for negative pole; black & white wire is for positive pole)

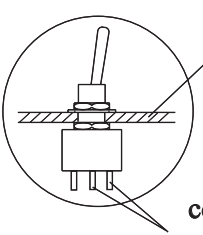
10. assemble the bait boat.

With the above steps were finished, carefully assemble your bait boat, then the complete set of bait boat & wireless fish finder is ready to use.



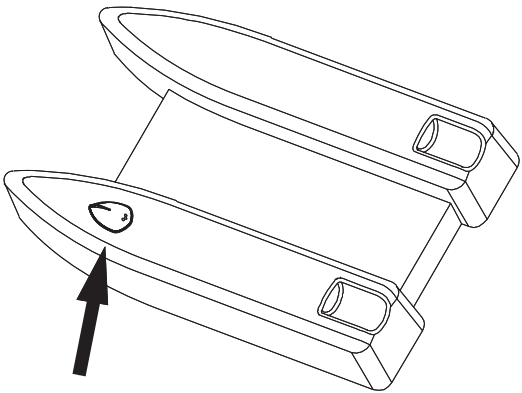
Note: sometimes you may need a switch to control on/off of the RemoteEye (see the "packing list-page2").

1). Drill a hole on your bait boat housing, tighten the switch on the bait boat.
2). connect the switch to the power cable.



RemoteEye installation method - 2

As the structure of bait boats is different, sometimes maybe you prefer mounting the sensor to your bait boat in other method, see the following example:

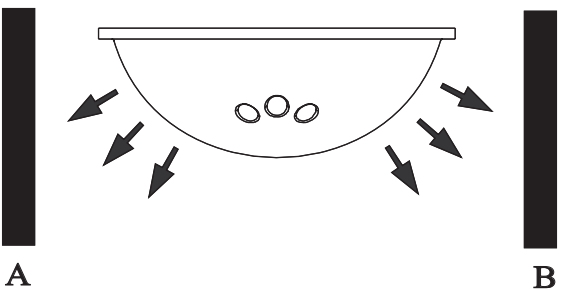


Mounting the sensor
on the bottom hull of the bait boat

Note: for such installation method, finding a proper mounting location for the sensor is very important. Otherwise an unproper mounting position may cause a short Remote Control distance or abnormal display on the screen.

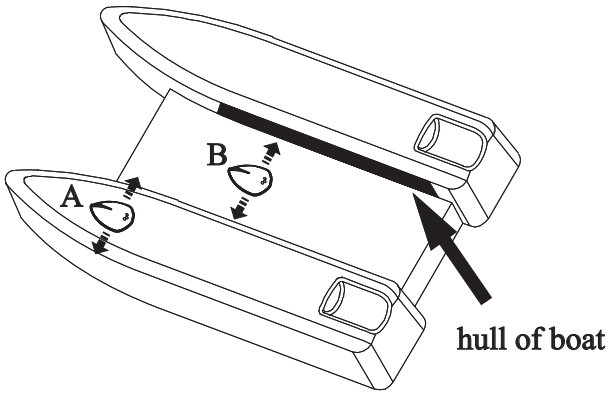
Sonar working method

When sonar works, the signals were remited in the direction as instructed below:



So, in the area A and area B, there should be no any obstacle, otherwise the sonar signals will be "blocked", thus sonar unit will not be able to receive the signal normally, which will cause short Remote Control distance, or abnormal display on the screen.

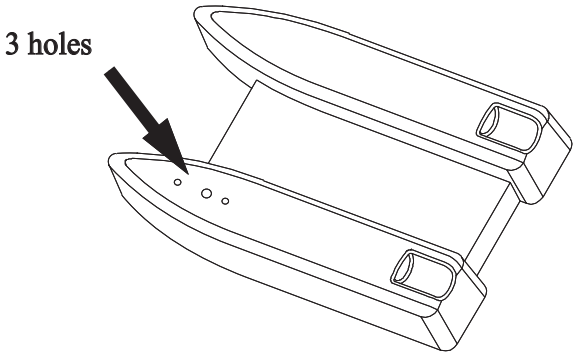
For example, in the following sensor mounting figure,
A is right; B is wrong;



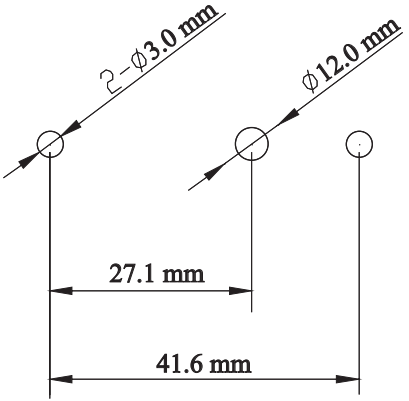
a) In the A mounting position, the sonar signals can be remitted without any obstacle in the two direction;

b) In the B mounting position, the sonar signals can not be remitted normally, as they are blocked by the hull of the bait boat;

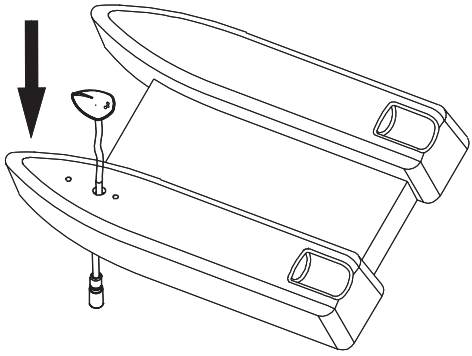
1. Find a proper mounting position, and drill 3 holes on the bottom of your bait boat



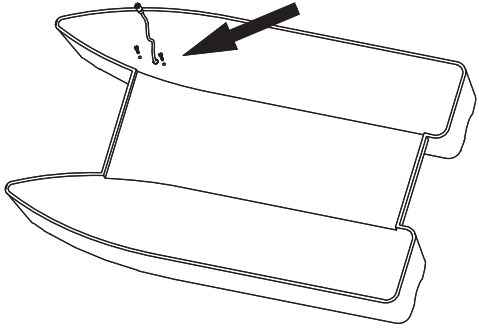
Note: the 3 holes should be drilled with the following dimension:



2. Hold the sensor calbe through the 12mm-hole

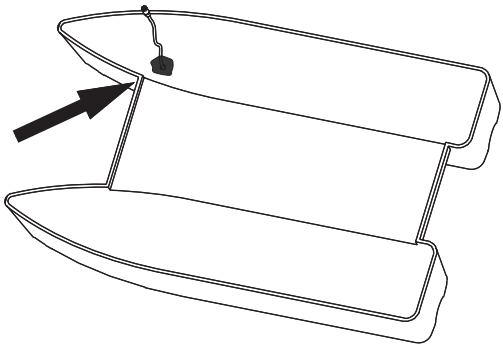


3. Fix the sensor with 2 screws



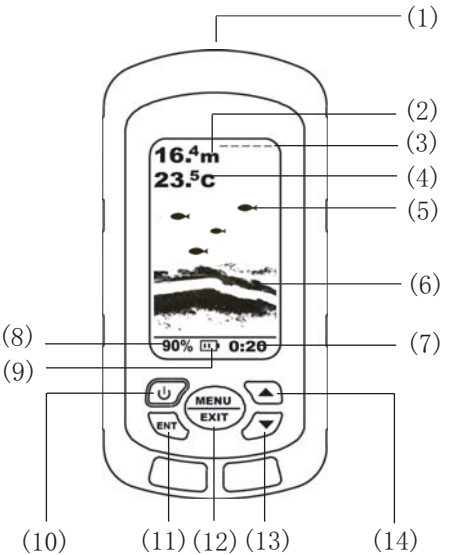
Note: please spread some sealed glue on the screws before fixing the sensor.

4. Spread some sealed glue to the drilled location, preventing water leakage happening



5. Carry out the following steps same with step 6~10 instructed in “RemoteEye installatiion method -1”

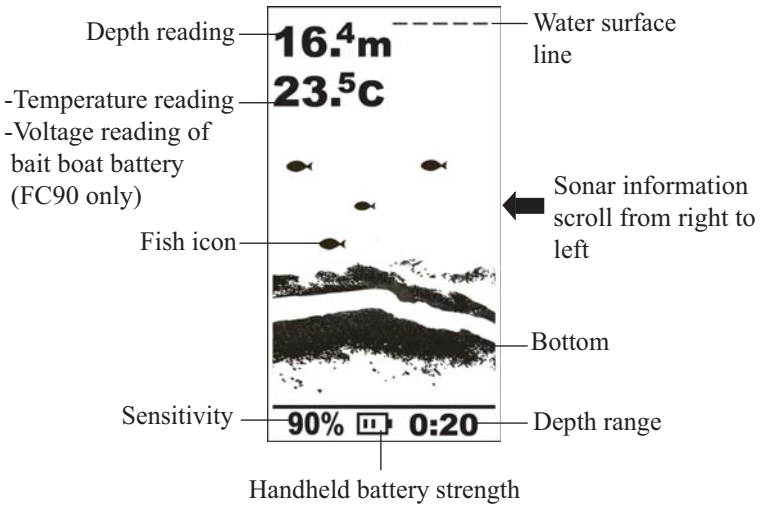
Operational Panel Basic



(1) Transducer plug
(For NAKI8850B model)
(2) Depth Reading
(3) Water surface line
(4) -Temperature Reading
-Voltage Reading
(FC90 only)
(5) Fish Icon
(6) Bottom
(7) Depth Range
(8) Sensitivity Reading
(9) Battery Strength
(10) Power Key
(11) Ent Key
(12) Menu and Exit Key
(13) Down Arrow Key.
(14) Up Arrow Key

Display

1. Understanding the display



(1) Depth reading: indicate water depth

(2) Temperature reading: indicate air or water temperature
Voltage reading: indicate the voltage of bait boat battery

(3) Sensitivity: the curren sensitivity setting

(4) Water surface line: display the position of water surface

(5) Fish icon: a fish symbol to display the detected target

(6) Bottom: indicate the bottom condition

(7) Depth range: the current Depth range setting
(8) Battery strength: indicate the remained handheld battery strength

The detection graph is shown from the right corner from top to down. It would scroll forwards to left continuously. The most present and newest signals are displayed on the rightmost screen.

2. Depth range

The unit will automatically adjust the depth range according to water conditions. It always keeps the bottom displayed in the lower portion of the screen.

When the depth unit is set to feet, this fish finder has the following depth ranges: 10, 15, 30, 50, 60, 80, 100, 120, and 140 feet.

When the depth unit is set to meter, the fish finder has the following depth ranges: 3, 5, 10, 15, 20, 25, 30, 35, and 40m.

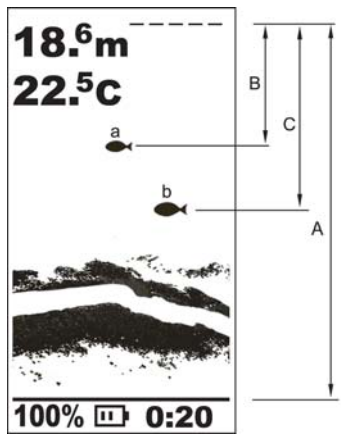
Depth range changes or signal loss will cause lines with missing detail and / or abrupt changes in the graphed bottom. The screen image jump shown here is due to an automatic

change in depth.

New returns graphed at a different scale will not match up with the historic data already graphed at a higher or lower scale.

3. Water surface line

The water surface line indicate the displayed position of water surface on the screen, which is very helpful for you to estimate the depth of detected fish.



For example,
the current depth reading is 18. 6m, and the position of fish-a icon(B) is about 1/3 of total depth(A), thus the 1-fish lies on the position about (18.6*1/3=)6.2m deep from water surface.
Accordingly, you could estimate the fish-b lies about 1/2 of the A total depth, which is (18.6*1/2=)9.3m.

Underwater conditions vary greatly, so some experience is needed to get the most benefits of FC80 / 90.

Use the message displayed in the screen as a helpful tools for your judgment, thus you could exert the full function of FC80 / 90.

Operation

Menu Operation Instruction

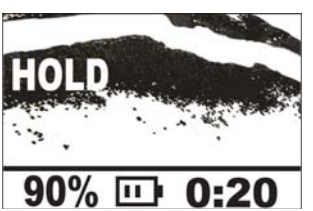
The menu setting is convenient and friendly.
You can get various function setting by simple operation.

1. Power key: Power on / Power off

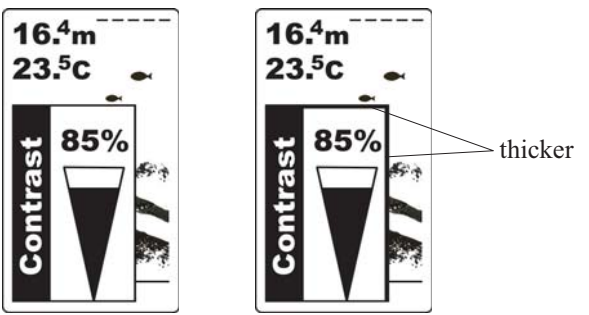
Note: to shut off the unit, press the Power key and keep it for 3s, then release it.

2. Ent key: To confirm a setting / hold the screen.

Note: when the unit is working, pressing Ent key will "freeze" the screen, which is helpful for you to carefully study the underwater condition.



Note: when you enter into a menu setting, pressing Ent key, then you are able to change the setting, and the frame line of current menu will look thicker then non-setting. see following:



non-setting setting

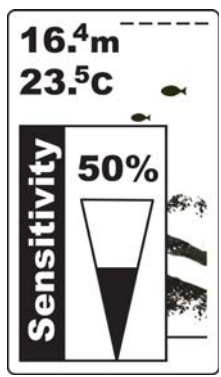
To exit the setting condition, press ENT key again.

3. MENU & EXIT key: to enter or exit menu setting.
4. Up arrow / down arrow key: to increase / decrease the setting value.

Sensitivity

Sensitivity determines how echoes will be displayed on the screen.

Increasing the sensitivity will make you see more details on the screen. In such situations when you see too much clutter on the screen, decreasing the sensitivity will play an effect. The larger the sensitivity is, the more relatively strong sonar returns the screen will display. If the sensitivity is decreased too low, most sonar returns (which maybe fish) will not be displayed.



In situation while water is clear or very deep, try increasing the sensitivity, which will let you see even the very weak returns.

However in situation while water is turbid, try decreasing the sensitivity, which will make only the useful echo be showed on the screen and the noise will be omitted.

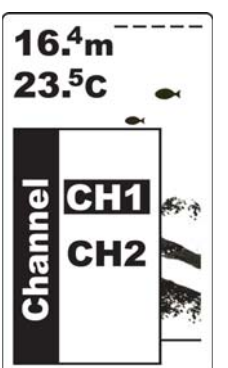
To set the Sensitivity:

1) Press MENU to enter into menu setting,
2) Use the Up / Down Arrow to select Sensitivity option.
3) Press ENT to confirm selecting
4) Use the Up / Down Arrow to increase / decrease the value
5) Press ENT to confirm the setting.
6) Press EXIT to exit.

Channel

Channel make it possible for you to switch using between the wireless model and another wire model NAKI8850B (provided that you have bought one).

CH1 - for FC80 / 90
CH2 - for NAKI8850B



To set the Channel
1) Press MENU to enter into menu setting,
2) Use the Up / Down Arrow to select Channel option.
3) Press ENT to confirm selecting

4) Use the Up / Down Arrow to change the value
5) Press ENT to confirm the setting.
6) Press EXIT to exit.

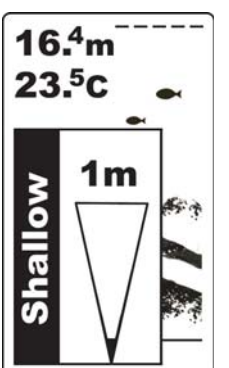
Shallow

The Fishfinder sound an alarm tone when the bottom goes shallower or equal than the alarm's setting.

You also could exit alarm mode by enter into Shallow menu and artificially increase the current depth alarm value to a safe grade.

To set the Shallow:

1) Press MENU to enter into menu setting,
2) Use the Up / Down Arrow to select Shallow option.
3) Press ENT to confirm selecting
4) Use the Up / Down Arrow to increase / decrease the value
5) Press ENT to confirm the setting.
6) Press EXIT to exit.

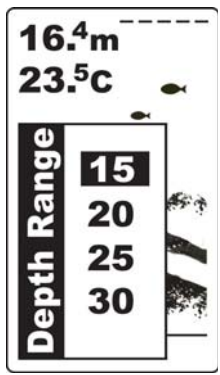


Depth Range

Depth Range determine in which portion the bottom will display in the screen. (For example, if the actual depth is 10m, and the current Depth Range is 20m, then the bottom will display on 50% portion of the screen).

To set the Depth Range:

1) Press MENU to enter into menu setting,
2) Use the Up / Down Arrow to select Depth Range option.
3) Press ENT to confirm selecting
4) Use the Up / Down Arrow to change the value
5) Press ENT to confirm the setting.
6) Press EXIT to exit.



Fish ID.

Fish ID control the way the detected target is displayed on the screen.

1) If Fish ID is on, a fish icon will be displayed when some fish and other object is detected.
2) If Fish ID is off, a arch will be displayed on the screen.

Fish ID is On

Fish ID is Off

Note: your sonar unit is advanced, however it can not distinguish between fish and other suspended objects such as turtles, trotlines, submerged floats, air bubbles, etc. One word, it could be fooled. So, you may see fish icon on the screen, actually there is no fish underwater.

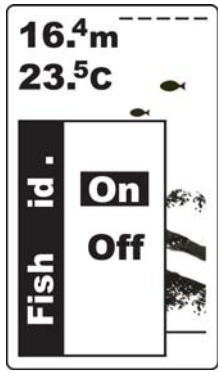
However, the Fish ID is very helpful for you to take some of the work out of studying the screen. That means Fish ID provides you a tool to distinguish the fish in a max possibility and omits other negligible sonar information.

To know as more as possible what's under your boat, we

suggest you turn off the Fish ID, and only study the sonar returns which is displayed as archs.

To set the Fish ID.:

1) Press MENU to enter into menu setting,
2) Use the Up / Down Arrow to select Fish ID. option.
3) Press ENT to confirm selecting
4) Use the Up / Down Arrow to change the value.
5) Press ENT to confirm the setting.
6) Press EXIT to exit.



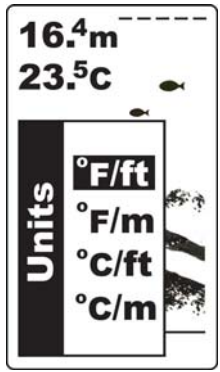
Units

Units is used to choose depth unit and Temp unit. There are four combinations for you to choose the depth unit and Temp unit:

Fahrenheit / Feet
Fahrenheit / Meter
Celsius / Feet
Celsius / Meter

To set the Units.:

1) Press MENU to enter into menu setting,
2) Use the Up / Down Arrow to select Units. option.
3) Press ENT to confirm selecting
4) Use the Up / Down Arrow to change the value.
5) Press ENT to confirm the setting.
6) Press EXIT to exit.

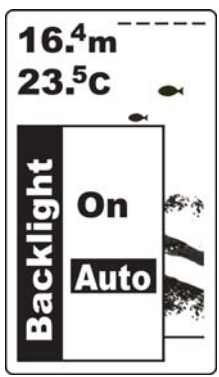


Backlight

Backlight is used to let you choose whether the backlight is on or auto in some enviroment.

To set the Backlight:

1) Press MENU to enter into menu setting,
2) Use the Up / Down Arrow to select Backlight option.
3) Press ENT to confirm selecting



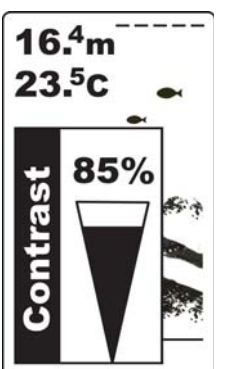
4) Use the Up / Down Arrow to change the value.
5) Press ENT to confirm the setting.
6) Press EXIT to exit.

Contrast

Contrast is used to let you get a most suitable display when you operate the unit.

To set the **Contrast**:

1) Press MENU to enter into menu setting,
2) Use the Up / Down Arrow to select **Contrast** option.
3) Press ENT to confirm selecting
4) Use the Up / Down Arrow to increase / decrease the value.
5) Press ENT to confirm the setting.
6) Press EXIT to exit.



Load DFT

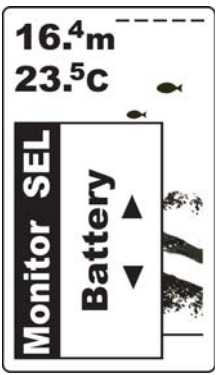
Load DFT is used to restore to the factory settings.

To set the **Load DFT**:

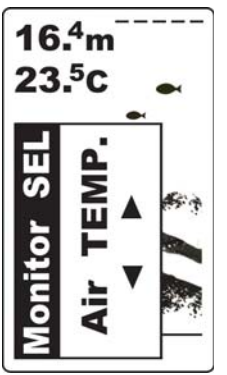
1) Press MENU to enter into menu setting,
2) Use the Up / Down Arrow to select **Load DFT** option.
3) Press ENT to confirm selecting
4) Use the Up / Down Arrow to change the option.
5) Press ENT to confirm the setting.
6) Press EXIT to exit.

Monitor SEL *(FC90 Fishfinder only)*

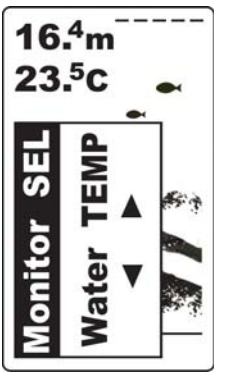
Monitor SEL is used to detect the remained voltage of the bait boat and Water or Air temperature.



Battery



Air Temp.



Water Temp.

To set the **Monitor SEL**:

1) Press MENU to enter into menu setting,
2) Use the Up / Down Arrow to select Monitor SEL option.
3) Press ENT to confirm selecting
4) Use the Up / Down Arrow to change the option.
5) Press ENT to confirm the setting.
6) Press EXIT to exit.

BAT. Alarm *(FC90 Fishfinder only)*

When the bait boat battery is lower then the voltage setting, the FC90 fishfinder will sound an alarm tone and a warning message will appear on the screen.

Set a warning value for battery alarming, and when the alarm tone appears, run your bait boat back as soon as possible.

You also could exit alarm mode by enter into BAT.Alarm menu and artificially increase the setting to a safe value.

To set the BAT. Alarm:

1) Press MENU to enter into menu setting,
2) Use the Up / Down Arrow to select BAT. Alarm option.
3) Press ENT to confirm selecting
4) Use the Up / Down Arrow to change the value.
5) Press ENT to confirm the setting.
6) Press EXIT to exit.

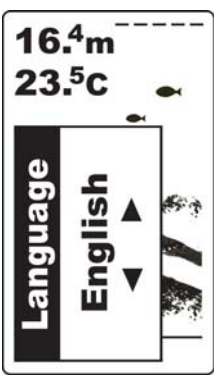
Language

You can choose different language for the menu operation:

English
German
French
Russian

To set the Language:

1) Press MENU to enter into menu setting,
2) Use the Up / Down Arrow to select Language option.
3) Press ENT to confirm selecting
4) Use the Up / Down Arrow to change the option.
5) Press ENT to confirm the setting.
6) Press EXIT to exit.



Trouble shooting

You are not supposed to fix the handheld or the sensor. The product contains no customizable parts. On the other hand, the waterproof performance is enabled by unique techniques, functions of which may be disabled by unauthorized disassembly. On this account, only professional maintenance personnel properly authorized by the Company are entitled to any repair necessary.

We have been contacted frequently by our customers requesting repair service. We inspect their products and find many of them are not in need of repair: the problems occur because some customers are not very acquainted with product usage. And we are forced to label these products as “inapplicable for maintenance” and return them to the customers. Therefore, in the event of problems during product use, we invite you to read the following troubleshooting part carefully before you send the product for maintenance.

1.No signal on screen

If the fishfinder fails to receive signals from the sensor, it will stop updating the screen (which will then remain unchanged). Under any circumstances, if the handheld can not receive signals transmitted by the sensor or the sensor is out water for several seconds, the screen will seem the same until the sensor is placed in water again and signals are restored.

1) FC80/90 is a product depending upon line of sight. Obstacles between the handheld and the sensor can contribute to signal loss.

2) FC80/90 has a detection depth ranging from 1 to 100 feet (0.3~30m). Incorrect readings may appear in water areas with depth less than 0.3m. Additionally, considering the sonar physical characters, we suggest you avoid using the product in swimming pools or small-sized enclosed water areas.

3) The maximum remote-control distance for the sensor reaches 1000 feet (300m). If the sensor with the bait boat

moves out of the range, inconsistent signals or even no signals will be transmitted to the handheld.

2. Nothing is displayed after the handheld's power is switched on.

Be sure the battery's positive and negative poles are correctly oriented in the holder. Also, check if the battery has enough capacity.

3. When using the device in shallow water areas, the screen does not display things normally and depths are not indicated with consistency.

The sensor has a perfect performance in water from 4 to 100 feet (1.2~30m) deep. Abnormal display and inconsistent depths may occur when used in areas with depth less than 1.2m. Try to use it in deeper waters.

4. The picture displayed on the screen vibrates and the sea bed contour has abrupt changes.

The picture vibrates because the sea bottom depth being scanned is changing. Since the depth range used by the

current test signal and by the previous test signal differs, plus the varying height of the sea bed contour, pictures displayed on the screen will occupy different heights, causing the vibrating phenomenon.

5. Nothing appears on the display even you can see fish under the sensor.

a) Oil, dirt and fuel might cause a film to form on the sensor and reduce its effectiveness. Cleaning the surface of the transducer might help.

b) Electrical noise nearby can interfere with the sonar, which will cause some weaker signals being eliminated.

6. The display become so cluttered that you even could not achieve a clear bottom

Such cluttered display maybe caused because:

a) The water is too low

b) The water is too turbid

c) There are so much debris in the water,

7. The sonar unit can not reach 300m. There is a abnormal display on the display, and when the bait boat is about 60~70m far away, the sonar unit stop working.

a) Please confirm the sensor is mounted at the proper location on your bait boat. A improper mounting location will cause abnormal display.

b) Please check whether you are using the bait boat battery for power suppling. For FC80, we strongly suggest you connecting the RemoteEye to a separate 9v Alkaline battery, not connecting it to your bait boat battery. Otherwise abnormal display may occur. For FC90, both is accepted.

c) Please check the RemoteEye installation, and confirm the antenna mounted on your bait boat is correctly connected to the control box through the antenna-extended cable.

d) The radio performance is easily effected by cloudy or rainy day, which will cause the Remote Control distance decreasing greatly.

Maintenance

With a view to making use of your Fishfinder, we recommend you follow the steps below and carry out maintenance.

1. For the case

Cleaning the sonar unit's outer case (except for the screen) with a cloth dipped mild detergent solution, and then wipes it dry.

2. For the screen

Use a piece of soft cloth or pelt to clean the screen (fresh water or eyeglass cleaner can be used if needed). Stubborn dirt or oil stains remaining on the screen shall not be wiped with force; otherwise it may scratch the surface.

Additionally, give daily attention to ensure the screen is keep away from any chemicals.

Guarantee Conditions

1. We assure you this product is free from defects in materials and workmanship. The warranty coverage is One Year from the date of purchase, during which if the unit fails to perform as described in the product's written specifications, we will repair or replace it free of charge. As for products exceeding the warranty coverage, the maintenance department will charge customers some fees according to the real situation.

2. This warranty is void if damage or malfunction is due to abuse, misuse, accident, failure to reasonably maintain, improper installation or use, or unauthorized alteration or repairs. Our company retains the final right to judge or repair the defected products.

3. Our company holds the right to update the products. And it is not obligated for our company to update the former products according to the new standard.

Specifications and feature

1. Specifications:

1) Display

Display size: 3.0in / 76mm, FSTN LCD

Display Resolution: 128 x 64 Pixels

Display contrast: 0~100% Adjustable Range

Backlight: On / Auto

Visible under strong sunlight

2) Sonar & Radio

Depth Capability: 1.0 ~ 30m

Wireless Operating Range: Max300m

Sonar Frequency: 115KHZ

Sonar Beam Angle: 80deg @-10db

Radio Frequency: 433.9 MHz

Sonar Alarms: Fish / Shallow / *Low battery (FC90 only)*

3) Technical and casing

Monitor and display voltage of bait boat battery (FC90 only)

Built-in memory stores sonar settings.

Temperature: Air temp. / *water temp.(FC90 only)* included

Operational Temperature: From -10C to 50C (14 Fto122 F)
Units: °f/ft °f/m °C/ft °C/m
Unit Dimensions: 138mm × 69mm × 32mm
Casing: IPX7 Waterproof

4) Power
Handheld Power Supply: 4×AAA Alkaline batteries
Handheld Battery Life: 45 Hours Continuous Use
Handheld Power Off Automatically In 10minutes Without Any Using
RemoteEye Power Supply: 6~12v battery

2. Features

1) Switchable Fish Identification Mode
2) Sensitivity: 0~100% Range Adjustable
3) Select Depth Range Automatically
4) “Freeze” Screen At Any Time
5) Big / Small Fish Identification
6) Fresh & Salt Water Environment Using
7) True Changing Water Bottom Graph
8 Multi Languages Menu Operation

Contact Us

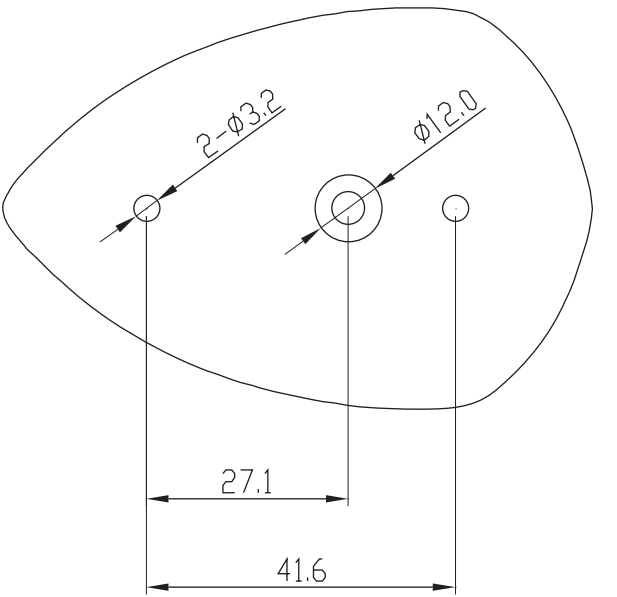
Contact Our Resource Center in any of the following days:

By telephone:
Monday - Friday: 8.am. to 5:30 pm.
(Central Standard Time)
0086 25 84680809

Or by e-mail:
Typically we respond to you in 2 business days
info@goyachting.cn

For direct shipping, our address is:
No.508, Heyan Road,
Nanjing, 210038, China

Yachting Electronic Co., Ltd



(Scale: 1:1; Unit:mm)

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