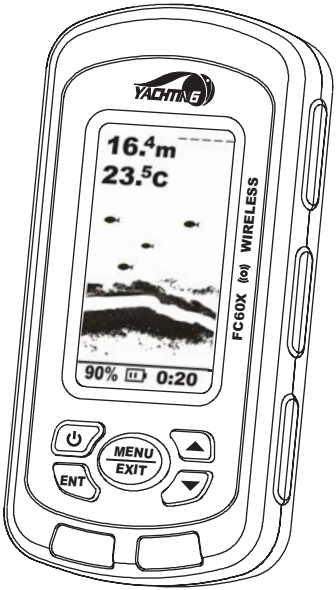
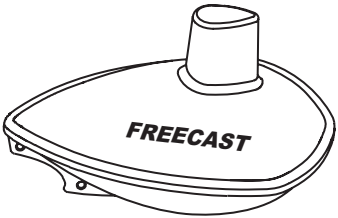
User's manual

Wireless Fishfinder

FC60X





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Yachting Electronic Co., Ltd
Building107, No.508, Heyan Road,
Nanjing, 210038, China

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Content

Introduction

Thank you for choosing FC60X Fish Finder. 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.

FC60X is designed to facilitate fishing on the bank, along the seashore,and on-board in a variety of water areas. We offer six months charge-free main-tenance against any damages induced by non-human factors; and damages beyond the six months are handled with reasonable charges based on concrete situations. For details regarding maint-enance 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

The following items are included in FC60X:

1) A FREECAST wireless remote sonar sensor
2) A handheld with 3" Dot matrix LCD
3) A copy of FC60X User's Guide

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.

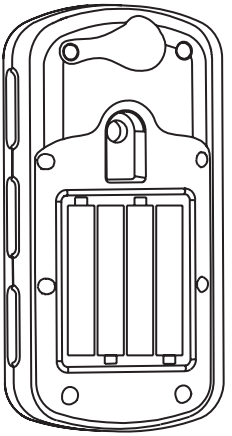
General attention

Warning: Disassembly and maintenance are only to be performed by professionals designated by the Company. Any of the following situations can void the remainder of your warranty: unauthorized disassembly or maintenance, damage or alteration to the production serial number, etc.

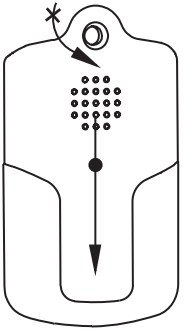
Warning: Children under six may not use the sensor without an adult's watch.

Warning: Although FC60X is designed IPX7 waterproof, it is strongly warned not immerge it into in water, whcih may cause damage of inner electronic part.

Installing the battery



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

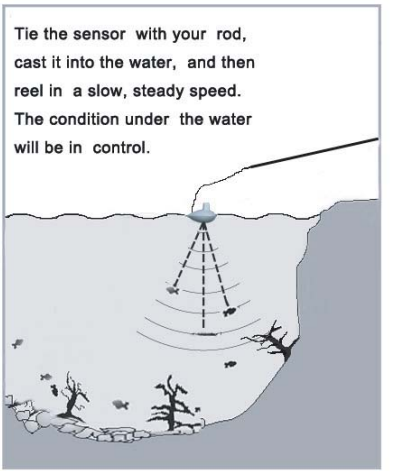


To take off the battery cover, press it and slide in the indicated direction

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

with a screw driver until snug before continuing. Be certain not to over-tighten it.

Using the product



This product is designed with user-friendliness in mind. Attach the sensor to the fishing thread's extreme and throw them into water as you do with float and lure.

After switching on the main unit's power,you are ready to fish. With sonar technologies employed, the FC60X sensor transmits ultrasonic waves to water, and the

microprocessor inside the principal machine applies wireless technologies, filtering the signals fed-back. As the filtered signals have been analyzed and processed, they are illustrated on the display. Newly-detected information is displayed at the very right of the screen and disappears at the very left. Showed between precisely are sea bottom contours, water depth, fish size, and location etc.

Warning: While the sensor is working, do not hold it at the bottom; otherwise, deformations may occur to the product and damage to internal structures and elements can ensue. To pick up the sensor working in water, take hold of the antenna post at the sensor's top.

Warning: FC60X is designed to work durably in normal service. However, in water areas where there are significant water level fluctuations, the sensor may be subject to collision with rocks, which will result in damages to the device. Therefore, for water areas with depth less than 1 foot (0.3m), we recommend that you avoid using this sensor.

Operational modes

FC60X features two operational modes:

1) Sonar Graphic Mode

FC60X renders real-time conditions at the sea bottom with sonar graphic. Cast the sensor into water, drag it slowly and at stable speed, and you can view accurate information displayed on the screen, including sea bottom contour, structure, depth, fish location, size, etc.

2) Stationary Float Mode

Cast the sensor into water and let it undisturbed. It will float on the water surface, monitoring submarine developments in a real-time manner. Information will be automatically updated on the screen once fish approach your bait.

Instruction of Freecast sensor

1. Power supply

The FC60X sensor is provided with a separate, built-in, and irremovable lithium battery that has a continuous service time of 550 hours in normal operation. When the battery's service life ends and becomes out of service, it should be handled in a way compliant with local provisions regarding discarding used batteries and relevant electronic products.

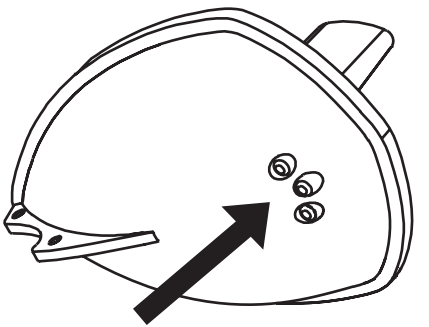
2. Electronic switch

There are three pins on the bottom of cover, which is used to switch between power on / power off.

At the moment the sensor is put in water, the sonar transmitter/receiver is automatically turned on and transmits ultrasonic signals. As the principal machine receives the signals, related information about the sea bottom will be showed on the screen. After a few seconds elapse since the sensor is taken out of water, the built-in power will be switch off automatically and transmission of sonar signals terminated

1) When the sensor is casted into water, with the three pins touching water, the sensor begin working.

2) When the sensor is droped out from water, after wiping off the remained water on pin surface, the sensor stop working automatically.



Three pins for electronic switch

Warning: do not place your Freecast sensor in a wet area when not using, the dampness may cause the sensor to turn on the built-in power automatically, thus shortening its useful life. Likewise, avoid placing it on board or on a metal surface for the same reason.

Note: store it in a dry, nonmetal container! A toolbox, for example, may be used for storage and placed in a separate room far away from any metal equipment.

Note: Rinse its surface with fresh water after the sensor has worked in salt water for some time.

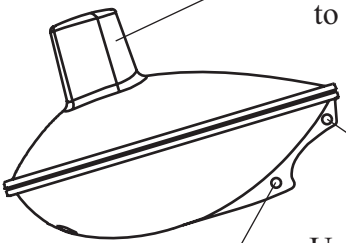
Using the Freecast sensor

The two holes at the FC60X front end is for tying fishing thread. If you desire to use it in the Stationary float Mode, bind the fishing hook with light threads to the second hole.

However, be informed that if the sensor encounters barriers when being dragged, the fishing thread can easily break. Hence, for this practice, we advise you not to pull the thread if unnecessary, for fear that you may be unable to regain your sensor due to the broken thread.

Alternatively, in case you wish to drag the sensor as you see fit, you may tie the first hole with another light thread, therefore preventing the failure of retrieving your sensor.

See the following instruction:



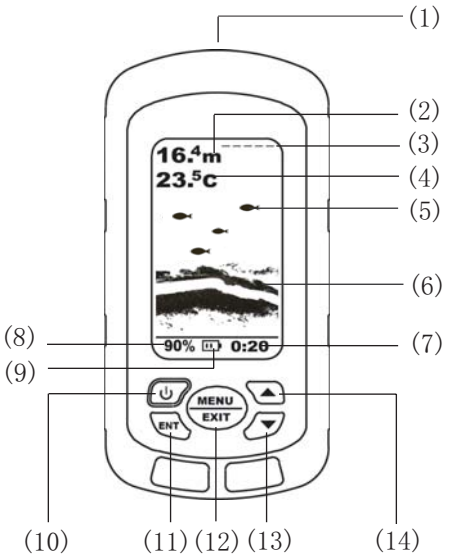
Use the second hole in the Stationary float Mode, bind the fishing hook with light threads to the second hole. Be caution of not over-weight the hook line, thus will be likely to submerge the sensor, causing the signal terminate.

Caution: Using light threads to tie the sensor and the fishing hook can increase likelihood of break-up.

The sensor in water is supported by natural buoyancy force (which equals its own weight plus 5.8g lure plus the weight of lead). All accessories attached to the sensor, including

the hook, fishing thread, and lure etc., can total up to 5.4~5.9g. With the sensor's weight of 34g joining, the break-down becomes very likely.

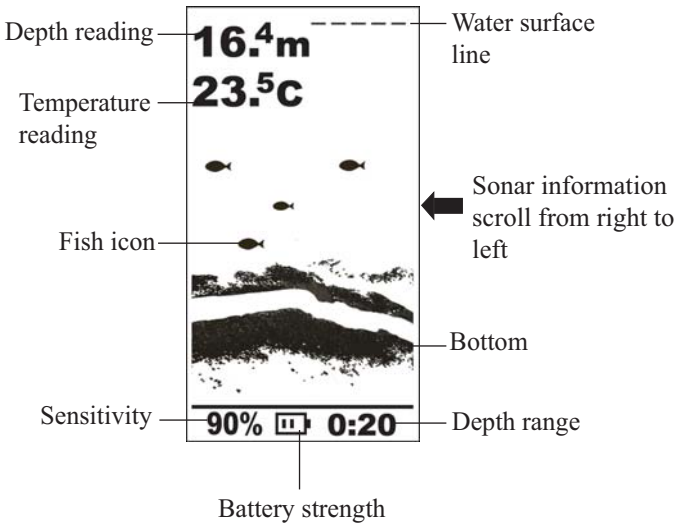
Operational Panel Basic



(1) Transducer plug
(For NAKI8850B model)
(2) Depth Reading
(3) Water surface line
(4) Temperature Reading
(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 atmosphere temperature

(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 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. And the leftmost are those of 16 seconds ago.

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.

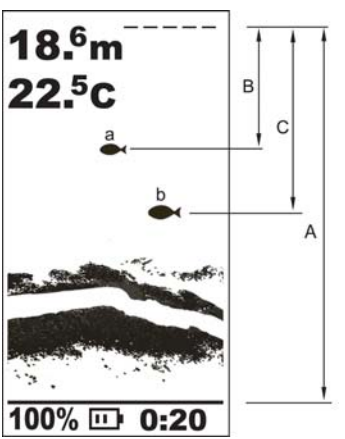
Depth range changes or signal loss will cause lines with missing detail and / or abrupt changes in the graphed bottom. The screen image jump shown here is due to an automatic

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 1-fish 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 2-fish lie 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 FC60X. Use the message displayed in the screen as a helpful tools for your judgment, thus you could exert the full function of FC60X.

Operation

Menu Operation Instruction

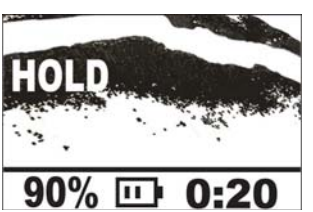
The menu setting of FC60X is convenient and friendly. You can get various function setting by simple operation.

1. Power key: Power on / Power off

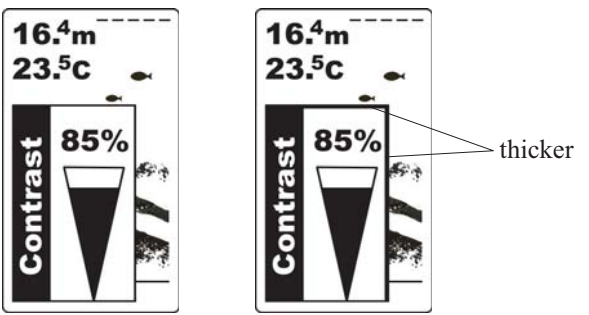
Note: to shut off the unit, press the Power key and keep it for 3s, then release it.

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, then the frame line of current menu will look thicker then non-setting. see following:



non-setting setting

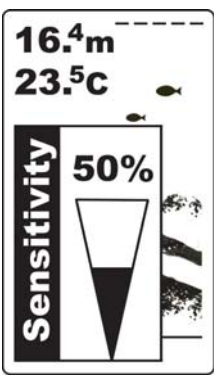
To exit the setting condition, press ENT key again.

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 may be 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.

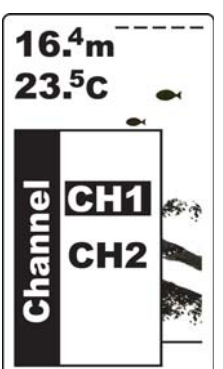
To set the Sensitivity:

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 FC60X wireless model and another model NAKI8850B (provided that you have bought one).

CH1 - for FC60X
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

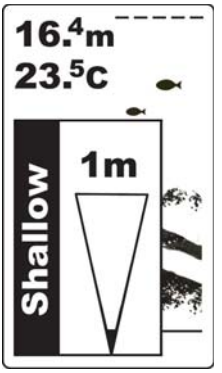
4) Use the Up / Down Arrow to change the value
5) Press ENT to confirm the setting.
6) Press EXIT to exit.

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:



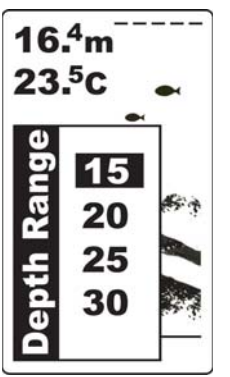
1) Press MENU to enter into menu setting,
2) Use the Up / Down Arrow to select Shallow option.
3) Press ENT to confirm selecting
4) Use the Up / Down Arrow to increase / decrease the value
5) Press ENT to confirm the setting.
6) Press EXIT to exit.

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.

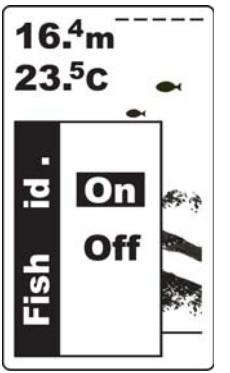
However, the Fish ID is very helpful for you to take some of the work out of studying the screen. That means Fish ID provides you a tool to distinguish the fish in a max possbility and omits other negligible sonar information.

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

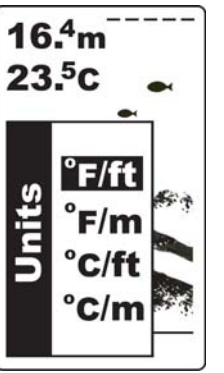
Fahrenheit / Meter

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.

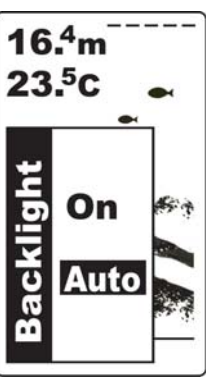


Backlight

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



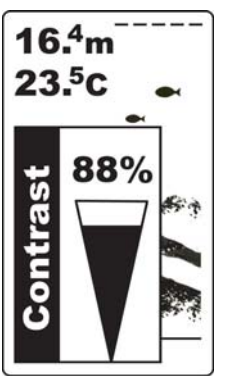
4) Use the Up / Down Arrow to change the value.
5) Press ENT to confirm the setting.
6) Press EXIT to exit.

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.

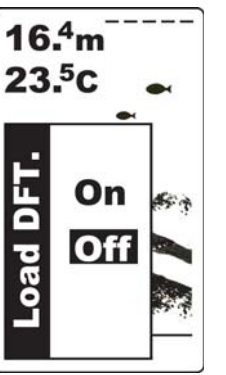


Load DFT

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.



Trouble shooting

You are not supposed to fix the FC60X 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 trouble-shooting part carefully before you send the product for maintenance.

1. No signal on FC60X screen

If the FC60X 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) FC60X is a product depending upon line of sight. Obstacles between the handheld and the sensor can contribute to signal loss.

2) FC60X 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) Dragging the sensor too fast can lead to signal lost, thus causing the display not to be updated accordingly.

d) Check the weight of accessories attached to the sensor. A total weight over 5.8g can submerge the sensor and cause signal loss in consequence.

e) With relatively quite water areas, FC60X is able to obtain a 130ft (40m) remote-control distance in maximum; with significant fluctuations on water surface, the distance may be reduced slightly. If the sensor is beyond the130ft distance, signals will dispear.

Note: Pulling the sensor too fast or noticeably fluctuating surfaces can be contributing factors to signal loss and abnormal display.

To acquire most accurate information about the sea bottom, try to drag the senor and the fishing rod slowly and at a steady speed. (In case the fishing rod is too close to the water surface or the thread tied to the sensor over-weighs, the sensor may be caused to go down and the principal machine is disabled to receive signals.)

The maximum remote-control distance for the FC60X sensor reaches 130 feet (40m). If you drag the sensor or it floats 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 FC60X sensor has a normal detection depth ranging from 1 to 100 feet (0.4~30m). Abnormal display and inconsistent depths may occur when used in areas with depth less than 0.3m. Try to test 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 transducer 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,

Maintenance

With a view to making most of your Fishfinder, we recommend you follow the steps bellow 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 of any chemicals.

3. Storage

Never place your Fishfinder in an enclosed compartment of the vehicle! High temperature building up due to

concentrated air in hot days can pose damage to internal electronic parts.

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 (H ×W) Pixels

Display Contrast: 0~100% range adjustable

Backlight: On / Auto

Visible under strong sunlight

2) Sonar & Radio

Depth Capability: 1~100ft / 0.3~30m

Wireless Operating Range: 130ft / 40m

Sonar Frequency: 115KHZ

Sonar Beam Angle: 80deg @-10db

Radio Frequency: 433.9 MHz

Sonar Alarms: Fish / Shallow

3) Technical and casing

Built-in memory stores sonar settings when the unit is turned off.

Temperature: Air temperature sensor included in main unit

Operational Temperature: From -10C to 50C (14 Fto122 F)

Sensor Could Shut Down When The Sonar Sensor Is Out Of Water.

Units: °f/ft °f/m °C/ft °C/m

Unit Dimensions: 138mm × 69mm × 32mm.

IPX7 Level Sealed And Waterproof Casing Design

4) Power

Power Supply: 4×AAA Alkaline batteries

Sensor Battery Life: 550 Hours Of In-the-water Usage

Handheld Battery Life: 45 Hours Continuous Use

Handheld Power Off Automatically In 10minutes Without Any Using

2. Features

1) Switchable Fish Identification Mode
2) Sensitivity: 0~100% Adjustable Range .
3) Chart Speed: 0~100% Adjustable.
4) Multi Level Depth Range
5) “Freeze” Screen At Any Time
6) Big / Small Fish Identification
7) Fresh / Salt Water Environment
8) True Changing Water Bottom Graph

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
support@goyachting.cn

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

Yachting Electronic Co., Ltd

www.goyachting.cn