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## Introduction

Thank you for purchasing a "See To Sea" fish finder, "See To Sea" is the name of our pocket sized fish finder. It is simple to operate, has powerful functions with economical power consumption.

It uses 4 x "AAA" batteries which will give continuous operation for over 38 hours.

It has our 40 degree wide cone angle covering sensitive sonar. This combines fish finding and a depth measure range from 0-60 M/ 0-199ft.

Wide applications for lake, river and sea, deep or shallow water. It can be used from the bank or on boats and is also suitable for Ice fishing.

### Features

Two way operation:

Dot matrix for fish identification at 64 x 64 dot pixels (4,096 dots)

A numerical depth display located at the top left of the screen.

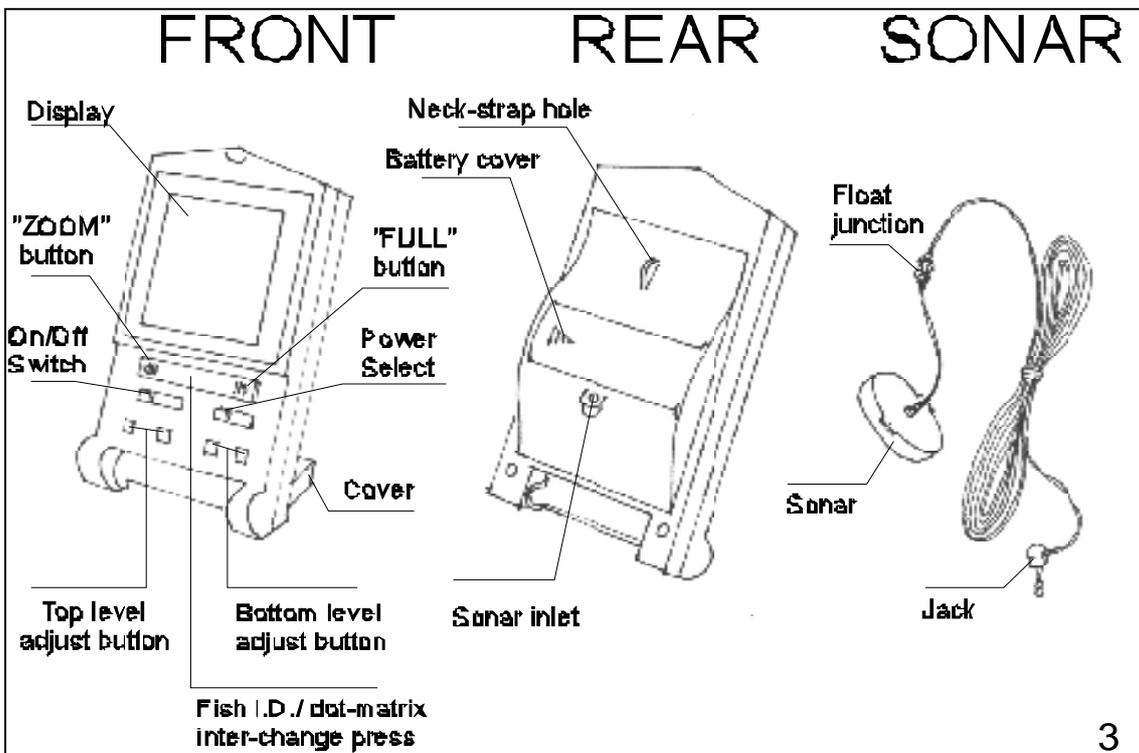
Full or Zoom features are provided:

"FULL" - Normally display for the full coverage.

"ZOOM" - To allow better definition in a more limited coverage. This has a built-in power gain selector with three settings, L(Low) , M(Medium) and H(High).

Each one will survey in any zone and give depth analysis on demand.

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## Operation

To operate this pocket size fish finder, first connect the sonar Jack (looks like a phone plug) into the hole located at the back of the main unit. Make sure the Jack is fully plugged-in (has made a "click" sound).

Remove the battery cover; install 4 "AAA" size batteries (Not included) as directed on the sticker inside the compartment.

Next, attach a "Float" (not included-various types are available in fishing tackle shop) with a thread, fishing-line or rubber band.

*Caution: The float must be tied to "Float junction" section on the cable of the sonar; any other position may damage the cable and not function properly.*

Place the sonar in the water.

Open the cover as shown in the diagram switch "On" the power, a "Buzz" sound will be heard and the self test function will start and an active fish symbol will appear on the screen.

This will be in Dot matrix mode (fish shown in dots) to demonstrate the difference in use until in "FULL" operation motion.

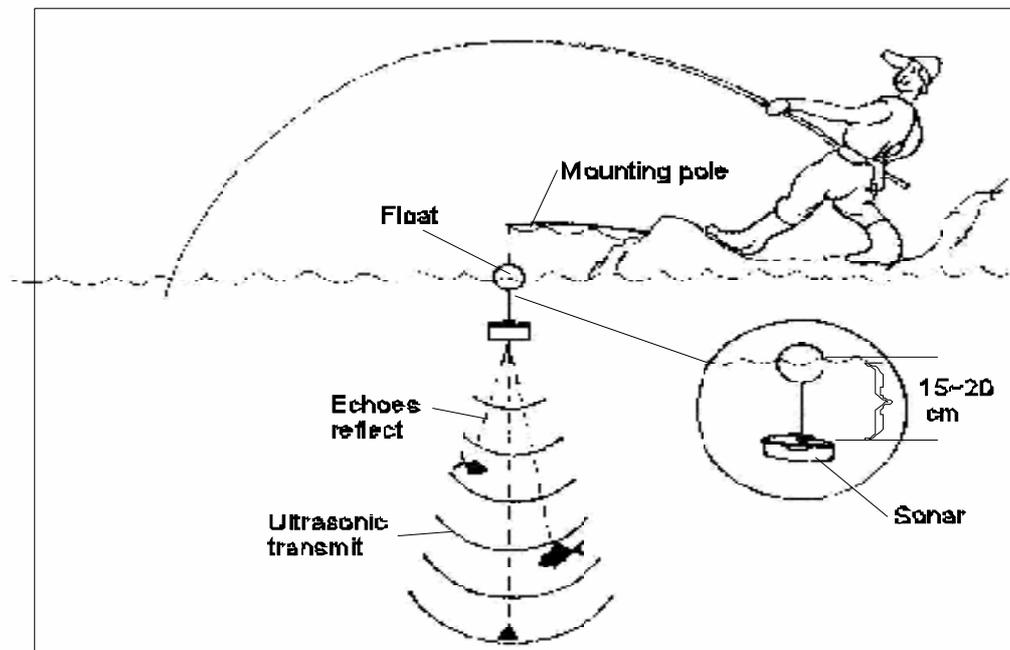
A broken line will represent the water surface and move from the top right corner.

At the same time the regulated depth range shows 0.0 ~ 60/199 M/ft (Meters / feet).

The system is now in service on standby -mode.

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## Demonstration



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## Operation-continued

The numerical data shown as a large digit at the left top corner gives the recent and current depth measurement. The line under the surface line shows the nature of the bottom. A hard wide line represents a rock or hard bottom.

A line of tiny dots, or narrow thin lines, represent mud, weeds, vegetation or sand. Moving objects which appear between the surface and bottom lines are fish. The built-in alarm system operates when schooling fish have been found.

### Remarks:

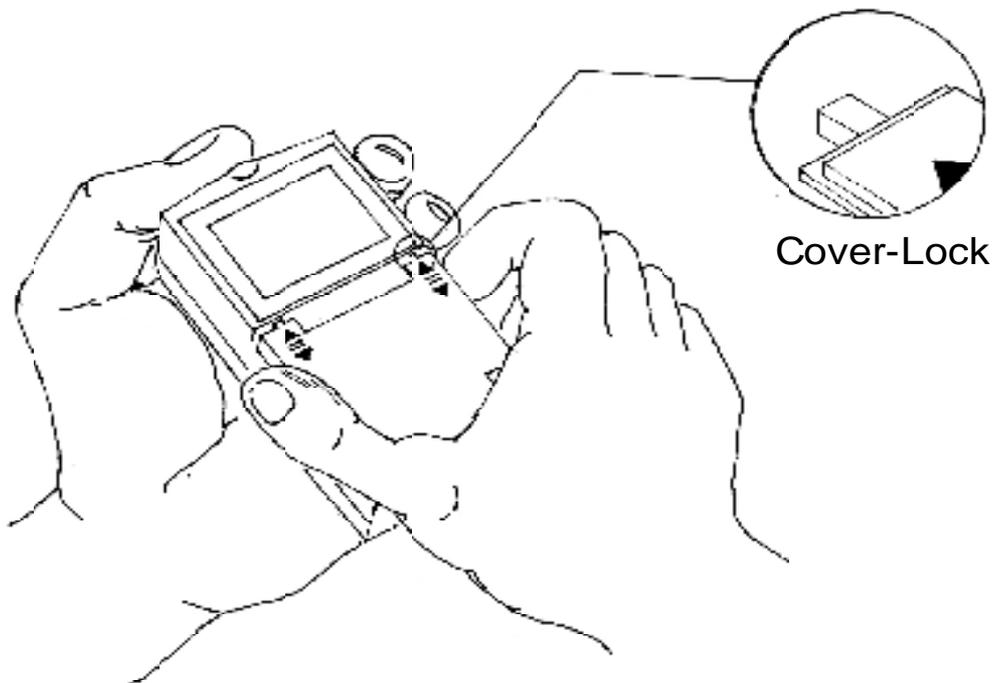
In use for fish ID, false signals can be caused by algae and plankton. Multiple fish symbols appearing off the bottom may be caused by waves or drifting weeds.

Therefore we suggest you do an analysis with the "ZOOM" function. For better clarity change mode from fish ID to dot matrix style.

If there are still too many dots and fish symbols on the screen, apply the power select and sift down.



## Method of Cover Open



## Shallow areas

In shallow water of 3-7.5ft (1-2.5M) signal reflection may show to erroneous information if it is a rocky or weedy area. In this case we suggest you replace 1 or 2 of the batteries with old ones in order to reduce power. Also, select sensitivity to "L" position and search again. Normally, the reading becomes better.

Then, adjust bottom line down to lower on screen.

If the result is unsatisfactory, connect the power attenuator (Included) and adjust the control knob until the screen is clear. For even more clarity, make yourself a restrictor.

This can be made simply with a piece of plastic sheet (approx. 5cm wide). It should look like a tube (see figure), and be fixed on the sonar. This will give a sharp resolution on screen showing fish hiding under rocks or in complex habitats.

## Deep areas

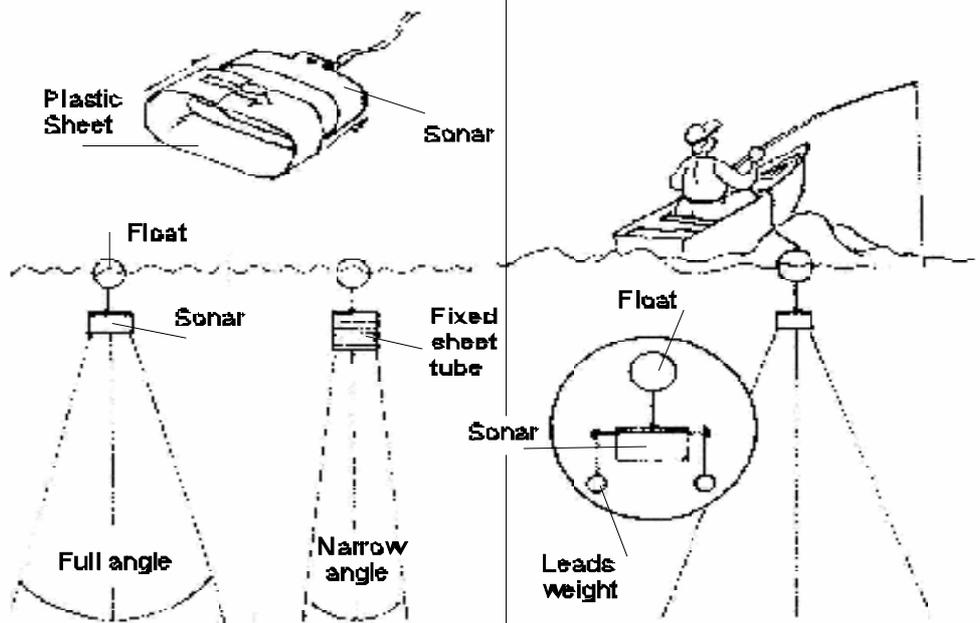
Set sensitivity to "H". In deep, strong flowing water, the sonar tends to be irregular. Install two pieces of leads on the wings of sonar cabinet for stability (see figure).

If the depth exceeds the unit limit of 199 ft. (60 m.) the bottom line would disappear.

In this case, the display on screen will still show fish and other objects within the limit of the unit.

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## Angle adjustment and Weight for sonar



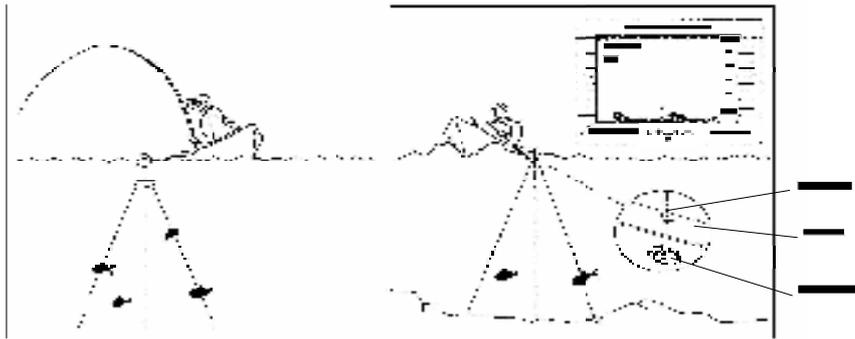
## On boats

To operating on a boat, you should mount the sonar on the hull before moving as the cable and sonar might be damaged from towing in the water.

Install sonar in a tube and mount on rear of the boat near center position fixing the sonar around 8 inches (20cm) under the surface. (See figure)

It will then survey both bottom contour and depth. When moving slowly, all information will be shown on screen immediately.

*Caution: The cable of sonar may break if your speed is too fast.*



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## Weedy or silted areas

In this complex area, sonar would be absorbed and interfere with the ultrasonic signal reflections. This may display complicated and erroneous information on screen.

Select sensitivity to "H" position, find and ensure the bottom line and settle.

The bottom line might show as soft dots, which can be air bubbles from the bottom. The bubbles will cause a false signal display on the screen and thereby give inaccurate readings. In this situation, fishes are always sparse. Therefore, the best choice is to locate another spot for fishing.

## Schooling fish

When your best fishing method becomes ineffective in a certain area, we suggest you use our product to search and monitor the area for the cause and find a solution.

Fix the sonar to the end of a length of rod around 5-6 meters. Place it in the water and survey the hidden spots, rock bound areas and concave zones.

Placing bait into these areas can draw fish, because they feel safe in their environments.

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## Horizontal Search

We suggest you should first gain good knowledge and handling for basic control to operate this method. Install the sonar on a tube / rod, slant to horizontal and place it into water around 2-3 inches (5-8cm).

Move and curve in a flat motion. You will see more than one fixed line on screen, because the search angle of sonar will show all rocks and fixed objects. Also, the water surface will be reflected and display as a broken line on the screen. (See figure)

In operation, watch for moving objects behind the fixed lines. If their position changes and varies frequently you can determine them to be fish. We are not concerned about all the fixed objects and fixed lines. To compute the distance of fish in scales, one can mark lines on the front display glass. For better comprehension it is best to provide a false fish / objects to fall in the water, simulating how the activity appears on screen.

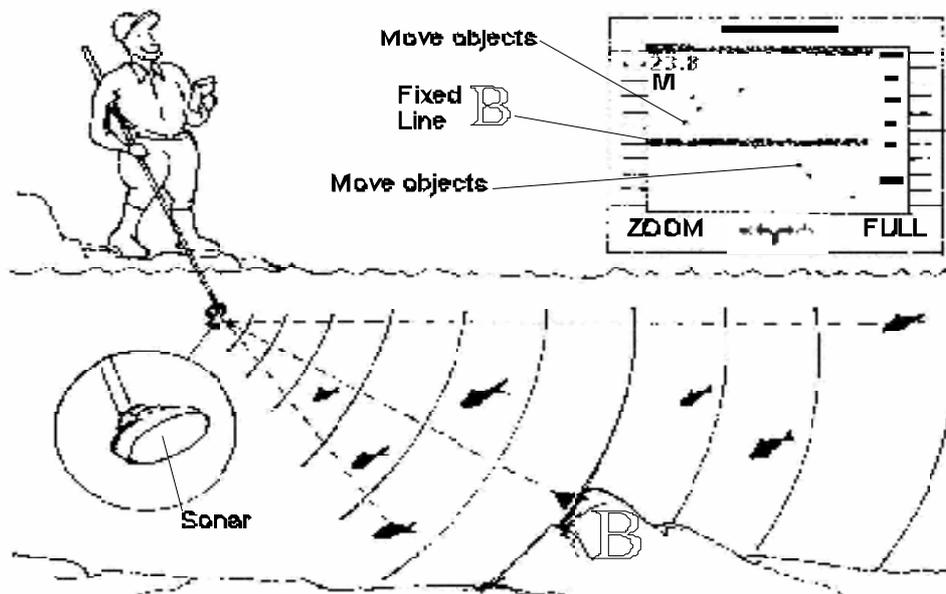
**Note : A float must be connected to the float connection of the sonar.**

**Otherwise, the cable of sonar may break**

**We recommend that Fish.D. function is not used for Horizontal Searching.**

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## Horizontal Searching



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## Ice Fishing

Finding the right point for ice fishing can be a difficult matter. Using our product makes it very easily saving the hassle of cutting hole after hole.

First find your ideal point or situation, clear away the snow to expose the ice surface and ensure the surface is smooth. Place a small quantity of water on the ice and set the sonar on it. Allow the sonar to freeze to the ice, preventing any air between the sonar and ice, which would prevent the fish finder from working properly.

Select sensitivity to "H" position.

Following conditions are best for fish finder.

- 1) Ice thickness less than 10 inches (25 cm).
- 2) Bottom depth less than 13 feet (4 meter).
- 3) Muddy bottoms less than 6 inches (15cm) thick.
- 4) Fish over 12 inches will be easily shown.

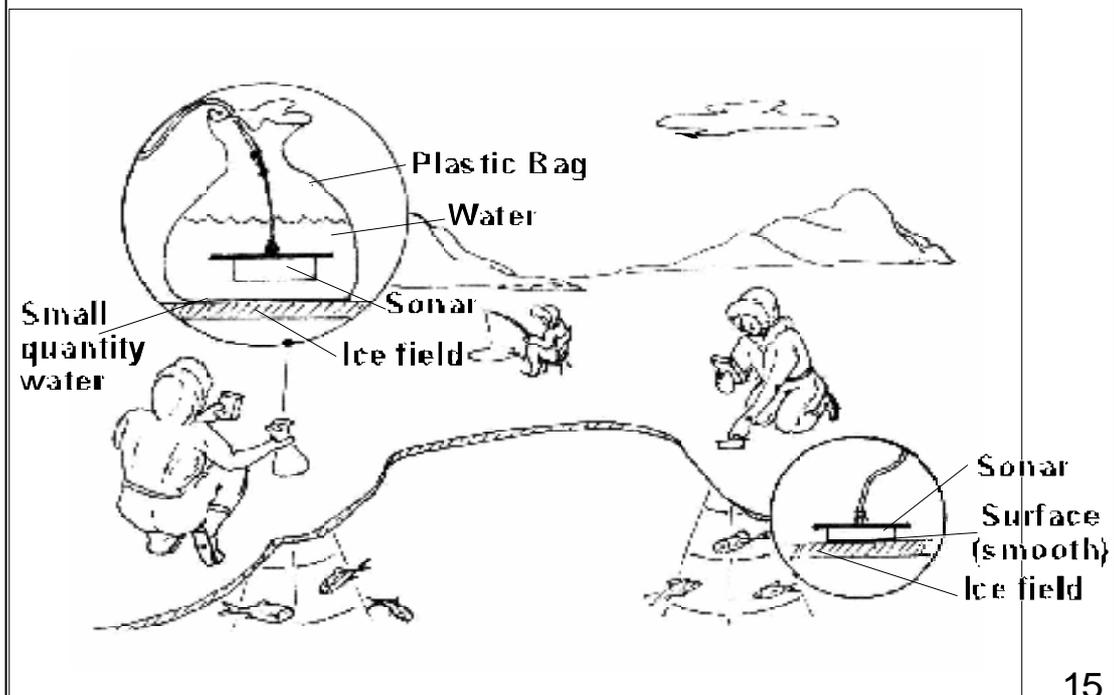
Attention: To remove the sonar from the frozen ice, gently tap the sonar at the base with your hand, if it does not come loose, spray a small amount liquid water around the sonar surface and ice, repeat the steps until sonar can be removed easily.

Do not to use a blunt object to strike the sonar, which may damage it.

If you already cut an ice hole and have been fishing, but fish are sparse, use the horizontal searching method. (*Refer Horizontal search instruction.*)

(Note: to cut a new ice hole may generate some noise and frighten the fish for a time.)

## Ice fishing usage <1>



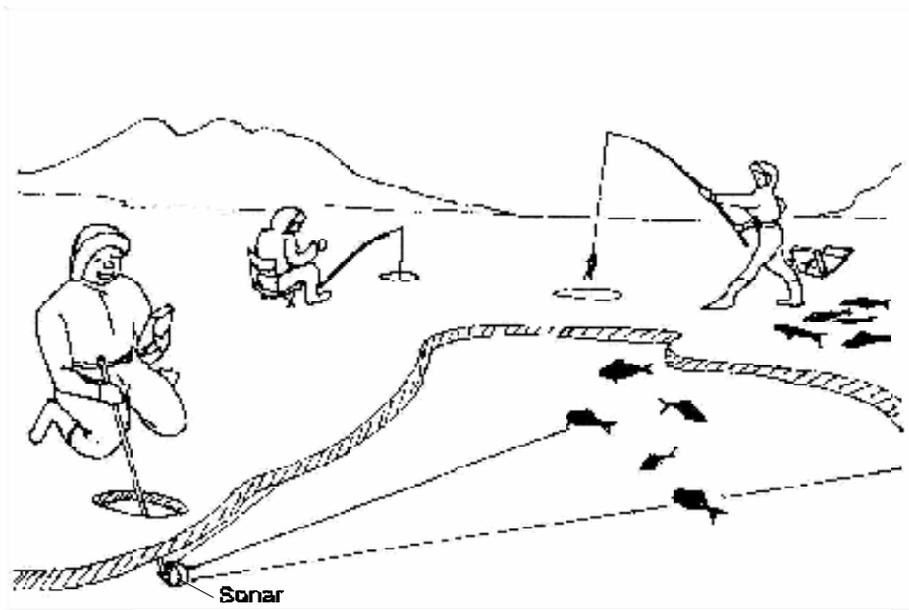
## Thru a Boat Hull

Our advanced sonar capabilities allow it to "shoot thru" the bottom of a boat or canoe. The hull must be made out of solid fiberglass, rubber, PVC boat, a max. of 2/8" aluminum and flat bottom, and be in indirect contact with the water, with no air pockets. The unit will not work thru wood or any composite material.

*Note : The signal of the sonar would decrease when applied with thru hull method.*

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## Ice fishing usage <2>



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## Warnings

- 1) Do not open the cabinet of this product, self maintenance or service is not recommended. Please send the unit to service center to be checked by qualified personnel. To prevent any damages, please keep main unit out away from water.
- 2) Do not plug in any other materials or liquids into the inlet on main unit, which may cause damage.
- 3) Do not lay the sonar directly to your ear, as ultrasonic may harm your hearing.
- 4) Avoid operating in thunderstorm and lightning.
- 5) To remove the sonar connecting jack from inlet of main unit, you must hold it tight to the body of the jack and slide out. Do not pull the cable because this may damage the connector and the sonar.
- 6) This product includes a moisture protective cover, Keep dry; if unit gets wet mop it dry with a cloth immediately.
- 7) The Sonar jack must also be kept dry as rust and corrosion will damage the connector.
- 8) Please retain all packing materials for re-packing and also for carrying purpose.

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- 9) Do not use two or more sets of fish finders within 199 feet (60 meters) radius at the same time, because signals from each unit may interfere with each other.
- 10) All changes of product specification and improvements will be announced on our homepage.

## Display Confusion

Depth: Sometimes you may see two depths. This may be caused by the echo of a big rock, strong wave, big or schooling fish reflected under the sonar.

Countless dots: If many dots appear on screen, it may be caused by extremely dirty water, many small fishes or bubbles reflected under the sonar.

You can apply the attenuator to reduce the noise and the sensitivity.

Loss of Depth (Bottom): Caused by extremely muddy/dirty bottom, boat speed too high, or the Sonar Jack loose in the Sonar Inlet.

You can understand bottom line would show out at the lower of the screen, and count the right bottom line by the scale of the panel.

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# Specifications

Power source	: 4 x "AAA" size (1.5V) Batteries
Battery life	: Over 38 hours continual operation
Display resolution:	64 x 64 pixels (= 4,096 dots) Dot-matrix screen
Depth range	: 0~60 meter / 0~199 feet
Survey angle	: 40° Cone angle
Operate temp.	: 25 °F~167 °F(-4 °C ~ +75 °C)
Sonar cable	: 25 feet (8 meter)
Weight	: Main unit 0.04 lb. (85 gm.) (Excluded battery) Sonar 0.04 lb. (80 gm.)
Dimensions	: 2.5"(W) x 4"(H) x 1.3"(D) 65mm(W) x 102mm(H) x 32mm(D) / Main unit
Back lighting	: Green lighting in 5 seconds by any keys pressed
Function keys	: On - Off Main power switch L - M - H Sensitivity selection "Low-Medium-High" Bottom Depth range adjustable zone Top Surface range adjustable zone Full < > Zoom For normal scope <FULL> and expand screen selection  Fish I.D./ dot-matrix inter-change