

**PORTABLE
FISH FINDER**

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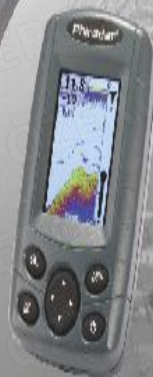


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Overview

This amazing product is especially designed for amateur and professional fishermen alike, to find out the location of fish, depth and bottom contour of water.

The unit can be used in ocean, river or lake and is fantastic for detecting schools of fish in any particular area.

Using amazing and innovative technology, this fish finder is the ideal tool to bring the fish to you!

How Sonar Works

Sonar technology is based on sound waves.

The system uses sonar to locate and define structure, bottom contour and composition, as well depth directly below the transducer.

The transducer sends a sound wave signal and determines distance by measuring the time between the transmission of the sound wave and when the sound wave is reflected off an object; then it uses the reflected signal to interpret location, size, and composition of an object.

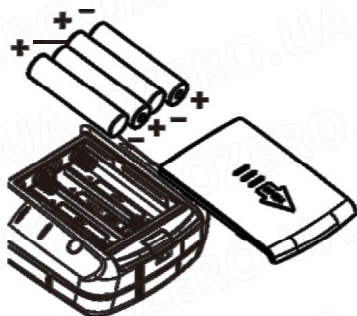


Product Specification

Display Type:	2.4" TFT LCD
Resolution:	V320xH240
Frontlighting:	White LED
Depth Range Max.	240ft (73M)
Depth Range Min.:	2ft (0.6M)
Sonar Frequency:	200/83KHz Duel Beam
Power Input:	4-AAA Alkaline Batteries
Audible Alarms:	Fish/Shallow/Low Battery
Operational:	-20—70°C
Water Temperature Indicator:	Yes
Automatic Ranging:	Yes
Zoom Bottom Track:	Yes
Keel Offset Setting:	Yes
Noise Rejection:	Yes
Surface Clarity:	Yes

Installing the Batteries

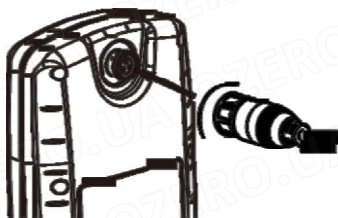
When you first use the Fish Finder you will need to install the batteries. Slide the battery door and insert 4 "AAA" batteries to the battery compartment.



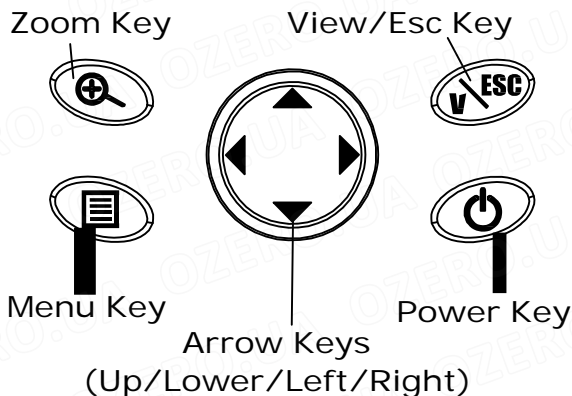
Be certain to align the batteries as per the diagram within the battery compartment.

Connecting the Transducer Cable

Align the plug of the transducer cable with the socket on the back of the unit, right twist the cap to lock the plug.



Key Functions



Power On/Off

Press and release Power Key to power the unit On, the Loading Page is displayed first. After a few seconds the unit start to work.

Loading.....

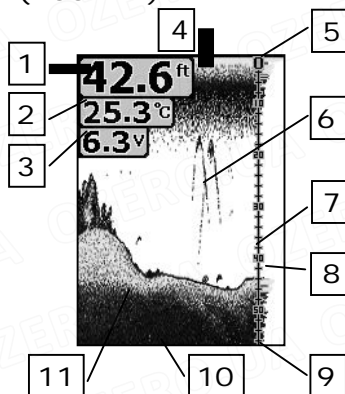
Press and hold Power Key until the Shutdown Page is displayed, release the Power Key to power Off.

Shutdown

Automatic power off feature: The display will shut off automatically when the depth display reads "---" continuously for 5 minutes.

Sonar View

When the unit starts working, you can press the View/Esc Key to switch between different frequencies. (200KHz,83KHz,200KHz/83KHz)
Sonar View (200KHz)



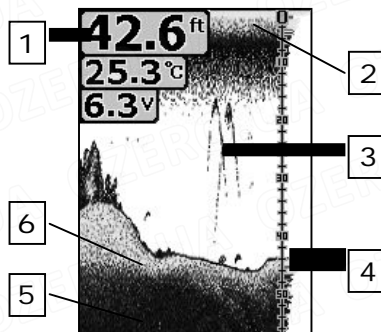
- 1 Water Depth Readout (200KHz)
- 2 Water Temperature Readout
- 3 Battery Voltage Readout
- 4 Surface Clutter (200KHz)
- 5 Upper Limit
- 6 Fish Arches (200KHz)

- 7 Depth Scale
- 8 CSG (200KHz)
- 9 Lower Limit
- 10 200KHz Mark
- 11 Bottom Contour (200KHz)

CSG (Current Singal Graph)

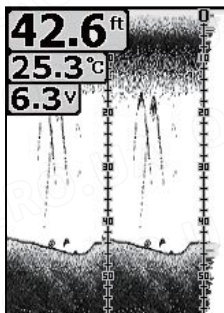
The CSG window always updates at the fastest rate possible for all echoes to short horizontal lines on the display's far right side.

Sonar View (83KHz)



- 1 Water Depth Readout (83KHz)
- 2 Surface Clutter (83KHz)
- 3 Fish Arches (83KHz)
- 4 CSG (83KHz)
- 5 83KHz Mark
- 6 Bottom Contour (83KHz)

Split Sonar View (200/83KHz)



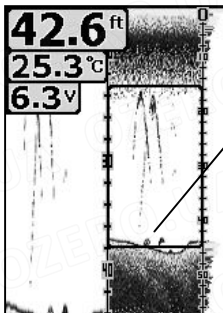
Sonar Zoom View

When the unit starts working, you can press the Zoom Key to manually enlarge the bottom signal in the main screen(2x). Press it again, screen will be returned the normal operation.

Sonar Zoom View (200KHz or 83KHz)

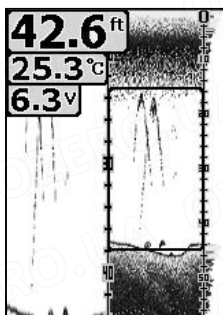
In the 200KHz or 83KHz Sonar Zoom View, the display is split to show the full range view on the right and the zoomed view on the left.

The full range view on the right also contains the Zoom Preview Box that shows what part of the full range view is shown in zoom view on the left; the Zoom Preview Box tracks the bottom in the full range view.



Zoom Preview Box

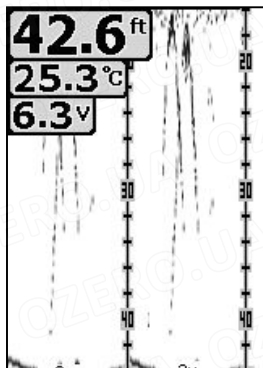
Sonar Zoom View (200KHz)



Sonar Zoom View (83KHz)

Split Sonar Zoom View (200KHz/83KHz)

In the 200KHz/83KHz Sonar Zoom View, the display is split to show the 200KHz zoomed view on the right and the 83KHz zoomed view on the left. The full range view and Zoom Preview Box is not displayed.



Split Sonar Zoom View (200/83KHz)

Manual Zoom

When the "Depth Range" is set manually, then press the Zoom Key can enlarge the signal in the main screen. Press the Down or Up Key can manually adjust the Zoom Preview Box changes up or down along.

Auto Zoom

When the "Depth Range" is set to "Auto", then press the Zoom Key, the Zoom Preview Box are automatically adjusted to keep the area above and below the bottom on the display.

At this time you can not manually adjust the Zoom Preview Box.

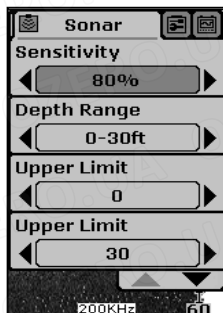
Stop Chart

When the unit starts working, you can press the Power Key to stop the screen chart in the main screen, and press the Power Key again the screen chart will be recovered.

Accessing Menu Features

The Menu Key is used to access the menu system.

When you press the Menu Key once, the menu system immediately appears on the display.



The menu system have 3 tabs: "Sonar", "Setup" and "Advance". You can press the Menu Key to switch between different menu tabs.

In each menu tab use the Down or Up Key to select a specific menu item, and use the Left or Right Key to change a menu setting, then press the View/Esc Key to return to the top until close menu system.

Sensitivity

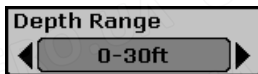


Settings: "Auto", "1%" to "100%"

Sensitivity controls the unit's ability to pick up echoes. If you want to see more detail, try increasing the sensitivity, a little at a time. There are situations when too much clutter appears on the screen. Decreasing the sensitivity can reduce the clutter and show the strongest fish echoes, if fish are present. As you change the sensitivity setting, you can see the difference on the chart as it scrolls.

Select "Auto" to have the unit automatically select the sensitivity according to the different water depths.

Depth Range



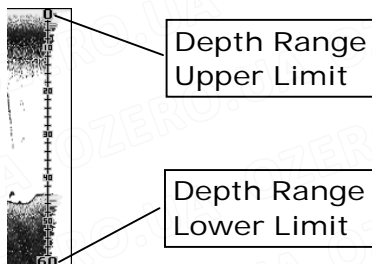
Settings: "Auto", "0-9ft" to "0-240ft" ("0-3m" to "0-72m")

Select "Auto" to have the unit automatically select the Depth Range, the bottom signal is automatically placed in the lower half of the screen.

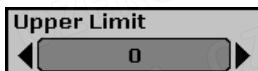
Select specific value to locks the depth range to a specific setting.

NOTE:

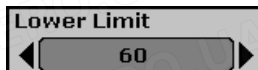
In manual operation, if the depth is greater than the depth range setting, the bottom will not be visible on screen. You can select "Auto" to return to automatic operation.



Upper and Lower Limit



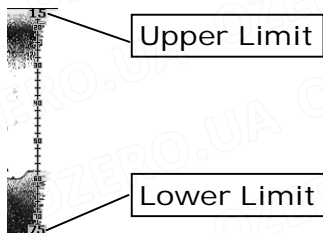
Settings: "0" to "234"("0" to "70")



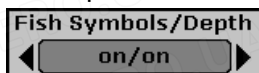
Settings: "6" to "240"("2" to "72")

Changing the upper and lower limits give you far greater control over the depth range.

This feature lets you "zoom in" the display in almost unlimited combinations.



Fish Symbols & Depth

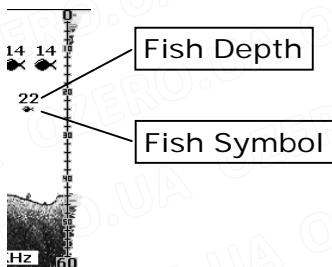


Settings: "On/On", "On/Off", "Off/Off"

This feature identifies targets that meet certain conditions as fish.

The microcomputer analyzes all echoes and eliminates surface clutter, thermoclines, and other undesirable signals. In most instances, remaining targets are fish. This feature displays fish symbols on the screen in place of the actual fish echoes.

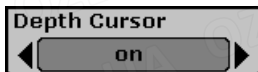
There are several fish symbol sizes. These are used to designate the relative size between targets.



NOTE:

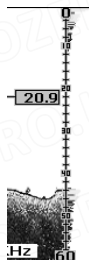
The sonar's microcomputer is sophisticated, but it can be fooled. It can't distinguish between fish and other suspended objects such as trotlines, turtles, submerged floats, air bubbles, etc.

Depth Cursor



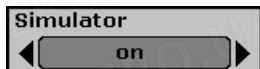
Settings: "On", "Off"

The depth cursor consists of a horizontal line with a digital depth box on the right side. The numbers inside the box show the depth of the cursor.



You can move the cursor to any location on the screen, letting you pinpoint the depth of a target.

Simulator



Settings: "On", "Off"

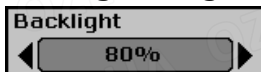
The Simulator is a very powerful tool that simulates on the water operation. Use the Simulator to learn how to use your fish finder before taking your boat on the water.

The Simulator Indicator will visible on screen when Simulator is setting to "On".



Simulator Indicator

Frontlight (Fishing at Night)



Settings: "Off", "10%" to "100%"

User can switch the Frontlight or adjust the brightness as needed.

NOTE:

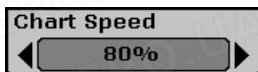
Continuous Frontlight operation significantly decreases battery life on Unit Portables.

Units



Settings: "ft/°C", "ft/°F", "m/°C", "m/°F"

Chart Speed



Settings: "10%" to "100%"

The chart speed is the rate echoes scroll across the screen.

Fish Alarm



Settings: "Off", "    ", "   ", "  "

Select "Off" for no fish alarm, or select one of the following symbols to set the alarm.



Large fish only



Large/Medium fish only



All fish

Depth Alarm



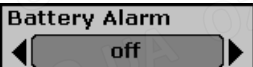
Settings: "Off", "1ft" to "99ft" ("1M" to "30M")

The Depth Alarms sound a tone and the Depth Alarm Indicator will blink when the bottom signal goes shallower than the Depth Alarm's setting.

Depth Alarm!

Depth Alarm Indicator

Battery Alarm

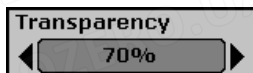


Settings: "Off", "4.0V" to "6.0V"

Battery Alarm sounds and the Battery Voltage Readout will blink when the input battery voltage is equal to or less than the menu setting.

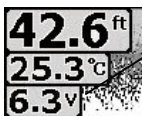


Transparency

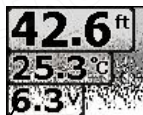


Settings: "0%" to "70%"

Transparency setting allows you to change the transparency of the dialog boxes so you can see through the dialog box.

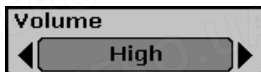


Transparency
"0%"



Transparency
"70%"

Volume



Settings: "High", "Medium", "Low"

Volume setting allows you to adjust the Alarm Volume so that you can select the tone that you can hear best.

Keel Offset



Settings: "Off", "-9ft" to "+9ft" ("-3m" to "+3m")

Keel Offset will adjust the digital depth readout to indicate depth from the waterline or boat's keel.

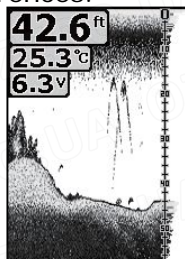
Enter a positive vertical measurement from the transducer to the waterline to read the depth from the waterline. Enter a negative vertical measurement from the transducer to keel to read the depth from the keel.

Sonar Chart Mode

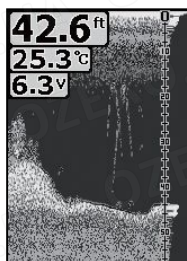


Settings: "White Background", "Blue Background", "Gray Scale"

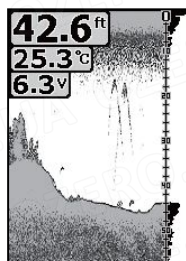
You can change the Sonar Chart Mode to suit your viewing preferences.



White Background



Blue Background



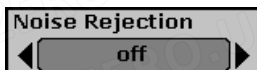
Gray Scale

Surface Clarity



Settings: "Off", "High", "Medium", "Low"
Surface Clarity adjusts the filter that removes surface clutter noise caused by algae and aeration. The lower the setting, the more surface clutter will be displayed.

Noise Rejection



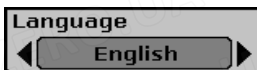
Settings: "Off", "High", "Medium", "Low"

The Noise Rejection system built into the sonar unit that constantly evaluates the effects of boat speed, water conditions and interference.

This automatic feature gives you the best display possible under most conditions.

If you have high noise levels, try using the "High" setting. However, if you are having trouble with noise, we suggest that you take steps to find the interference source and fix it, rather than continually using the unit with the high setting.

Language



Language selects the display language for menus. There are fifteen

languages (English; Russian; French;

Chinese; Japanese; Finnish; Polish;

German; Italian; Spanish; Dutch; Korean;

Swedish; Greek; Danish) in the menu.

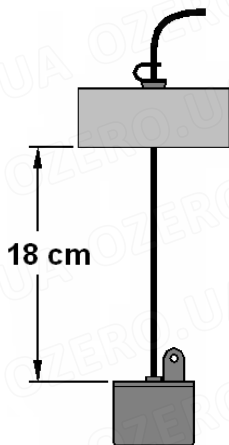
Floating Transducer

Fixing the Transducer

1 Pull out the rubber stopper, adjust float so that it is 18 to 25 cm from the sensor, or at your desired depth.

Replace the rubber stopper by pressing it firmly into the float.

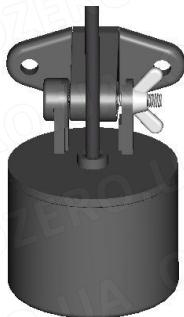
The sensor float must be adjusted so that it is a minimum of 18 cm away from the sensor.



2 Toss the sonar sensor and float assembly into water at your desired fishing location.

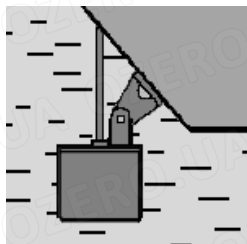
To toss, place the sonar sensor and float in your hand, and pitch underhand. Do not throw the sensor by the cable as this will cause unrepairable damage.

Before tossing, be certain that the cable is free from tangles and is not wrapped around anything.

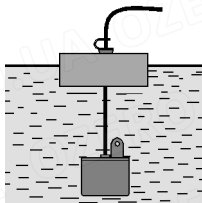
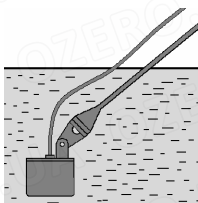


3 Your Fish Finder includes a combination adapter, mounting bracket for the sonar sensor.

The adapter includes mounting tabs so that you can attach it to any flat surface or boat hull and appropriate rod, the Adapter is removable and adjustable up to 180 Degrees.

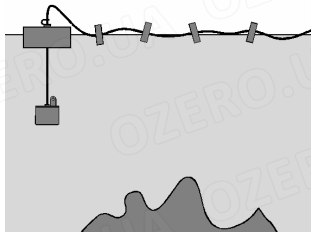


4 Use a pole to guide the sonar sensor to a desirable position or add floats on the cable to float on the water.

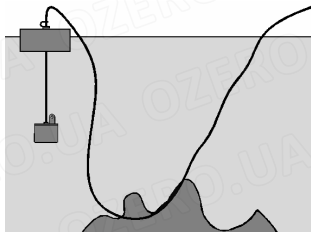


NOTE:

***** Do not allow the cable to sink to the bottom as it may become entangled in debris.**



CORRECT



INCORRECT

NOTE:

The float can be removed as follows, if you do not need it, cutting off the rubber stopper from the cable and sliding the safety strap and the float towards the plug and gently take it out from the plug.

Fishing at the Boat

1 Toss the sensor and float into the water as per the previous instructions.

2 Attach the adapter to the boat hull using the mounting tabs.

3 "shoot –Thru" the hull of a boat.

Place the sonar sensor in 1" of water against the hull bottom. Or coat the face of the sonar sensor with petroleum jelly and press it against the hull bottom with a twisting motion.

NOTE:

If depth readings appear as " ---" while using one of these methods, place the sonar sensor directly in the water to verify that the fish finder is operating properly.

If it operates properly while directly in the water, reposition the sensor in a new location in the hull, if it still doesn't work on all hulls and you may have to place the sensor directly in the water for proper operation.

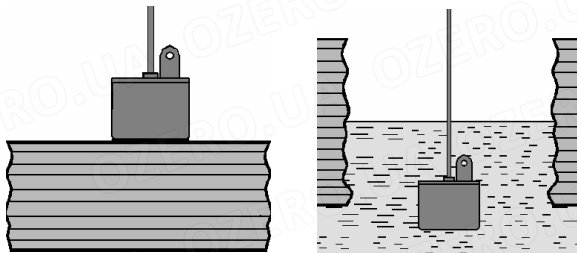
Fishing on Ice

To achieve the best performance for ice fishing, it is highly recommended that you cut a hole through the ice and place the sonar sensor directly in the water.

If you would like to check the area for depth or fish before cutting the hole.

Clear away snow to expose the ice surface, making sure the surface is smooth.

Place a small amount of liquid water on the ice and set the sonar sensor on the water allowing the unit to freeze to the ice.



If there are any air pockets between the sonar sensor and ice, or air on the water below the ice, the unit will not work properly and will require you to try another spot, or cut a hole in the ice to use.

NOTE:

To remove the sonar sensor from the frozen ice, gently tap sonar sensor at the base with your hand. If it will not come loose, spray a small amount of water on the ice surface around the base and repeat above step until the sonar sensor is easily removed.

Never use a blunt to strike the sonar sensor as this may cause damage to the sensitive internal electronics.

Cold weather is extremely hard on the electrical components within the display housing. It is suggested that you keep the unit in temperatures above 0 degrees Fahrenheit (-17degrees Celsius) during operation.

Remove the batteries from the fish finder to prevent battery leakage and corrosion. Clean the sonar sensor and cable with fresh water and dry-off before storing. Do not submerge and or spray the fish finder screen /housing with water or use chemicals to clean.

Handheld Transducer

(Optional)

Side-Scan

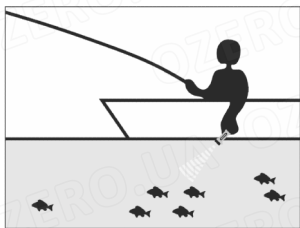
The Side-Scan Transducer has the ability to be used as a sideways scanning sonar fish finder to detect the bottom contour and fish locations.

1. Connect the transducer cable to the main unit and turn power On.
2. Place the transducer perpendicular to the water to obtain a correct depth reading.
3. Move the transducer in a scanning motion (similar to use as a flashlight), and the bottom contour and fish locations will be showed on the screen.

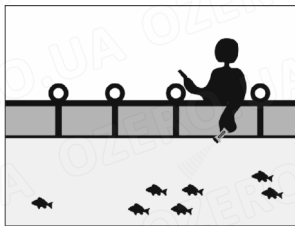
This Side-Scan Transducer can be used on the bridge, boat, seashore.



ON THE SEASHORE



ON THE BOAT



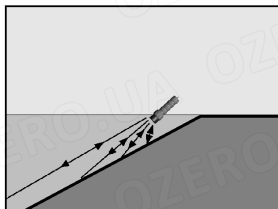
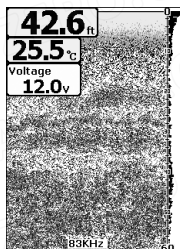
ON THE BRIDGE

NOTE:

There may be a wrong display if you use this Side-Scan Transducer in the place like the picture below.

so you must judge the result by yourself at there position.

so you shall judge the information by yourself according to your experience in the situation of the pictures below.



Thru a Boat Hull

The Unit advanced sonar capabilities allows it to shoot thru" the bottom of a boat or canoe.

The hull must be made out of solid fiberglass, or a maximum of 1/8" (3.1 mm) aluminum, and be in direct contact with the water, with no air pockets. The unit will not work thru wood, plastic, or any composite material.

a) place the transducer in 5 inches (13 mm) of water against the hull bottom.

b) coat the face of the transducer with petroleum jelly and press it against the hull bottom with a twisting motion.

c) place the transducer in a plastic bag that is full of water and place against the hull bottom.

NOTE:

If depth readings appear as " ---" while using one of these methods, place the sonar sensor directly in the water to verify that the fish finder is operating properly.

If it operates properly while directly in the water, reposition the sensor in a new location in the hull, if it still doesn't work on all hulls and you may have to place the sensor directly in the water for proper operation.

Fishing on Ice

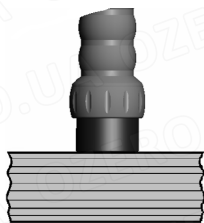
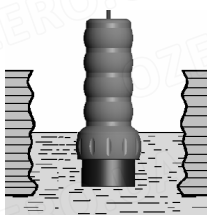
To achieve the best performance for ice fishing, it is highly recommended that you cut a hole through the ice and place the sonar sensor directly in the water.

If you would like to check the area for depth or fish before cutting the hole.

Clear away snow to expose the ice surface, making sure the surface is smooth.

Place a small amount of liquid water on the ice and set the sonar sensor on the water allowing the unit to freeze to the ice.

If there are any air pockets between the sonar sensor and ice, or air on the water below the ice, the unit will not work properly and will require you to try another spot, or cut a hole in the ice to use.



NOTE:

To remove the sonar sensor from the frozen ice, gently tap sonar sensor at the base with your hand. If it will not come loose, spray a small amount of water on the ice surface around the base and repeat above step until the sonar sensor is easily removed.

Never use a blunt to strike the sonar sensor as this may cause damage to the sensitive internal electronics.

Cold weather is extremely hard on the electrical components within the display housing.

It is suggested that you keep the unit in temperatures above 0 degrees Fahrenheit (-17 degrees Celsius) during operation.

Remove the batteries from the fish finder to prevent battery leakage and corrosion.

Clean the sonar sensor and cable with fresh water and dry-off before storing.

Do not submerge and/or spray the fish finder screen/housing with water or use chemicals to clean.

***PORTABLE
FISH FINDER***