1. **Portable Fish Finder Operation Guide**

This product is designed for the liker in fishing. The unit can be used in the river, the lake, or the sea. It can help you to find out the fish and the depth of the water. Especially, it can make you pleasure in fishing.

![Fish Finder Image](image)

**NOTE:** The unit must be turned off to enter normal operation from simulation mode. Automatic power off feature: The display will shut off automatically when the depth display reads “--” continuously for 5 minutes.

2. **Function Setting**

- **1. Key Press Operation**
  - **POWER -** Power key turn the power off
  - **SETUP -** Function set up key
  - **ENTER -** Function affirmation key

Press and hold the SETUP key for 3 second, the sensitivity ( 
indicator will blink; Press the SETUP cycle, (The indicator will blink for the current feature to set sensitivity ( 
Save, 
Backlight 
Alarm( 
Press the ENTER key to activate or deactivate the current feature. The screen will automatically return to normal operation after 5 seconds if no key is pressed.

3. **Change measure units**

Press and hold the SETUP and ENTER keys at the same time for more than 5 seconds, the display will flash the current units. Press SETUP key to choose M (M= meter), ENTER key to choose Ft (F= Feet). The screen will automatically return to normal operation after 5 seconds if no key is pressed.

4. **Introduction to sonar theory:**

Sonar technology is based on sound waves. The system uses sonar to locate and define structure, bottom contour and composition, as well as depth directly below the transducer. The transducer sends a sound wave signal and determines distance by measuring transmission time between the transducer and the detected object, then uses the reflected signal to interpret location, size, and composition of an object.

![Sonar System Diagram](image)

**NOTE:** There are 5-user selectable sensitivity setting to choose. The sensitivity should be enhanced in dirty or deep water. The sensitivity should be lowered in shallow water. This function makes the detection more accurate. Backlight illuminated all the time when backlight feature is on. This feature will greatly reduce the battery life of the unit. So it should only be used the conditions during low light. The backlight will illuminate for 3 seconds whenever a key is pressed when the backlight feature is set to Off.

![Sonar Display](image)

5. **Display View**

- **1. Sensitivity Indicator**
- **2. Battery Save On/Off**
- **3. Fish Alarm On/Off**
- **4. Backlight On/Off**
- **5. Battery Strength Indicator**
- **6. Water Depth Display**
- **7. Fish Depth Indicator**
- **8. Fish Location Indicator**
- **9. Bottom Contour Detector Display**
- **10. Weed Detector Display**

6. **Alarm Indication**

- **The display will flash the current units**
- **4.3. Change measure units**
- **The sensitivity should be enhanced in dirty or deep water. The sensitivity should be lowered in shallow water. This function makes the detection more accurate. Backlight illuminated all the time when backlight feature is on. This feature will greatly reduce the battery life of the unit. So it should only be used the conditions during low light. The backlight will illuminate for 3 seconds whenever a key is pressed when the backlight feature is set to Off.**

**NOTE:** You can select SAVE mode to work when you play use long time or water quiet, in order to extend batteries use-life. The screen can be refreshed by pressing the POWER key during normal operation.

7. **Fish And Depth Readout**

- **1. Depth Reading**
  - **The depth readout on the top of right will appear after the power is turned on and the sonar sensor is placed in water. The depth reading will indicate “-” if depth exceeds these parameters (2.0 ~ 328 feet/0.6 ~ 100 meters).**
  - **Note:** This reading may also occur in water is extremely dirty, or where there are heavy silt or mud bottoms. Sonar is a sound signal that travels through water. Sonar will not travel through air. Keep this in mind when using the fish finder, as the fish finder smallest bubble between the sonar sensor and the water, will cause the unit not to operate correctly.

8. **Fish Show**

If the fish finder determines that sonar has detected a fish, the display will show a fish shaped icon (fig-7). The first column of fish indicators on the right of the display shows the most current information. This column is then moved to the left as a new reading is displayed. Fish icon moved in every 5 seconds. **Note:** The fish indicators move away from the right to the left at a constant speed. This motion is not reflects actual movement of the fish.

Use the depth indicator to measure the fish's depth from the sonar sensor (fig-8). This can be done by dividing the depth reading by 10. This number represents the value of each box. (Example, the depth is 200 FT, the fish symbol appear 5th box from the top. This means the fish is 100 FT from the surface.)
5.3 WEED SHOW
The display indicates the presence of short weeds by turning on fig-9.
Moderately tall weeds are detected by turning on fig-10.
Tall weeds are detected by turning on fig-11.

A small pile of sands at the bottom by turning on fig-12.
A Moderately pile of roaks at the bottom by turning on fig-13.
A large pile of roaks or trees or ledges at the bottom by turning on fig-14.

6. Fixing Sonar Sensor
6.1 Pull out the rubber stopper, adjust float so that
it is 7 to 10 inches from the sensor, or at your
desired depth. Replace the rubber stopper by pressing it firmly into the float. The Sensor float
must be adjust so that it is a minimum of 7
inches away from the sensor (fig-15).

6.2 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 maybe
cause unrepairable damage. Before
 tossing, be sure that the cable is free from
tangles and is not wrapped around anything.

6.3 Your fish finder includes a combination
adapter, mounting bracket for the sonar sensor
(fig-16). The adapter includes mounting taps so
that you can attach it to any flat surface or boat hull
(fig-17) and appropriate rod. The adapter is
removable and adjustable up to 180 degrees.

6.4 Use a pole to guide the sonar sensor to a
desirable position (fig-18) or add floats on the
cable to float the water (fig-19). Note: Incorrect
to use. Do not allow the cable to sink to the bottom. It
may be entangled in debris (fig-20). The float
can be removed from the cable. If you find that you
are not need it. Remove the rubber stopper from
the cable by siding and gently pull the float out of
the cable toward plug.

7. Fishing at the boat or ice
7.1 Fishing at the boat
7.1.1 Toss the sensor and float into the water
as the previous instructions.
7.1.2 Attach the adapter to the boat hull
using the mounting tabs.
7.1.3 "Shoot - Thru" the hull of a boat. Place
the sonar sensor with petroleum jelly, and
press it against the hull bottom with a
twisting motion (fig-21).

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 sonar sensor in a new
location in the hull and repeat method 7.1.3.

If it still does not work on all hull and you may
have to place the sensor directly into the water
for proper operation.

7.2 Fishing on ice
To achieve fishing on ice availability. It is highly
suggested that you cut a hole thorugh the ice
and place the sonar sensor into the water directly
(fig-22). If you would like to check the area for
depth or fish before cutting a 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
(fig-23).

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

Note: To remove the sonar sensor from the freeze
ice, tap sonar sensor gently at the base by you
hand. If it will not come loose, sprinkle a small
amount of water on the ice surface around the
base and repeat such action until the sonar
sensor is easily moved.

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 (-18 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 or spray the fish finder screen
housing with water or use chemical to clean.

8. Product specification

Display: TN/ANTI-UV LCD
Backlighting: Green LED
Power: 4-AAA alkaline batteries
Measure unit: feet / meter
Sensor beam angle: 45 degrees
Depth range Max: 100M / 328 Feet
Depth range Min: 0.6M / 2.0 Feet
Operational Temperature: (-20°C - 70°C)

9. Attachments:
1) Round transducer with 25ft cable
2) Transducer adapter
3) Stainless bolt
4) Stainless wrist nut
5) Neck strap
6) Product specification