## **OPERATION MANUAL**

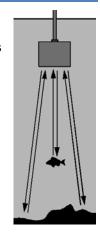
FishTrax<sup>™</sup> 1C Fish Finder (FT1PXC)



To ensure safety and many years of trouble-free operation of your product, please read this manual carefully before using this product.

## INTRODUCTION TO FISHTRAX™ INTELLIGENT SONAR

FishTrax<sup>TM</sup> Intelligent Sonar uses SONAR sound waves to detect depth, locate fish, and define bottom contour, composition and structure. Using specialized microprocessors, these sound waves are generated by the FishTrax<sup>TM</sup> display and sent to the FishTrax<sup>TM</sup> Sonar Sensor (*Transducer*). The sonar sensor, acting first as a "speaker", emits these sound waves as a series of pulses. Then, microseconds later, the sonar sensor switches to a "microphone" and listens for the return of the pulses as they bounce off of objects in the water column (*referred to as "echoes"*). The "echoes" are sent back to the display where, using proprietary algorithms in the FishTrax<sup>TM</sup> software, they are analyzed for location, size, and composition. These signal are then arranged by FishTrax's<sup>TM</sup> Human Interface Software and displayed in an easy to understand manner on the VirtuView<sup>TM</sup> HD Color Display.





Scan This QR Code
With Your Phone To
View Our Product
Orientation Video



Don't have a QR Code Reader? No Problem! Download One Today For Free In Your Phone's App Store.

## SAFETY INFORMATION

- Periodically wipe the face with a dry cloth. Do not use abrasives or solvents on this device.
- Only qualified personnel should perform repairs or servicing not covered in this manual.
- The LCD used in the product is made of glass. Therefore, it can break when the product is dropped or impacted.
- Keep this product away from heat sources such as radiators, heaters, stoves and other heat generating sources. Do not store in extreme temperatures above 150° F (65° C).
- Shade the LCD during storage. Do not expose LCD to direct sunlight for extended periods of time.

## NOTES, NOTICES, AND CAUTIONS

- WARNING: Indicates a potential for property damage, personal injury or death.
- IMPORTANT: Indicates potential damage to the device and tells you how to avoid it.
- NOTICE: Indicates important information that helps you make better use of the device and tells you how to correct a performance problem.
- (s) INFORMATION: Indicates resources to obtain the proper information to help you make the most of your device.

## **INFORMATION:**



Read this manual completely before attempting to use or install your device. Visit our Customer Service Center on our website for advanced troubleshooting and technical support.

## WARNING:



This fish finder should not be used as a navigational aid to prevent grounding, boat damage, or personal injury. Always operate the boat at slow speeds in unfamiliar water, or if you suspect shallow water or submerged objects.

#### NOTICE:



Because of interference caused by "sonar bouncing", fish finders will NOT function properly in a swimming pool, bath tub, bucket, barrel, garbage can, or any body of water that has hard sides. It must be used in an open body of water to function properly.

#### INFORMATION:



If you have questions about this device please visit our Customer Service Center on our website or call us toll free at 888-766-7276.

Warranty Details • Warranty Registration
Troubleshooting • Product Knowledgebase
Product Specifications • Parts & Accessories
www.hawkeyeelectronics.com

## PARTS SUPPLIED IN PACKAGING

## The following parts should be included with the display:

- Fish Finder Display
- Sonar Sensor (Transducer) with Integrated Harness and Cable Strap
- Sonar Sensor Float with Rubber Stopper

If any items are missing or damaged, please contact our customer service department.

## FISHING PLATFORM CONFIGURATION

## NOTICE:



The HawkEye® FishTrax™ 1C's built-in expandability allows for the addition of accessories to adapt the fish finder to any fishing platform. Visit our website to see a complete listing of FishTrax™ accessories.

Boat, Kayak, Canoe, Float Tube, Bank, Dock, Ice, etc. You choose the platform, then visit our website at <a href="www.hawkeyeelectronics.com">www.hawkeyeelectronics.com</a> and select the accessories to adapt your HawkEye® FishTrax™ Fish Finder to your fishing needs.









#### IMPORTANT:



If you are going to be using the Fish Finder in Temperatures Below 20° F (-7 °C) you must use Lithium 'AAA' Batteries. Cold temperatures significantly reduce the power output of Alkaline batteries, which will inhibit the performance of the Fish Finder.

#### IMPORTANT:



To ensure your FishTrax<sup>™</sup> 1C remains water tight, coat the battery cover seal with petroleum jelly (*Vaseline*®) or silicon grease (*available at any dive shop*) each time you replace the batteries.

## WARNING:



Never mix different brands of batteries. Never mix new and used batteries (alkaline, lithium, argon zinc, & rechargeable). Never use damaged batteries. REMOVE BATTERIES DURING STORAGE. REMOVE DEAD BATTERIES IMMEDIATELY.

## Installing the Batteries:

- 1. Using a flat head screw driver, turn the screws on the battery cover counter clockwise to loosen.
- 2. Lift the battery door off the display housing.
- 3. Install 4 "AAA" batteries. Be certain to align the batteries as per the diagram within the battery compartment.
- 4. Reinstall the battery cover completely by reversing these steps.

## **Connecting the Sonar Sensor Cable:**

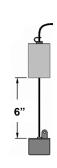
- 1. Align the pins on the sonar sensor cable plug with the plug on the display.
- 2. Firmlly press the two plugs together until the red o-ring on the display connector is squashed between the plugs.
- 3. Tighten the locking nut on the display plug until it is snug by turning it clockwise. Finger tighten only, do not use tools.



#### ADJUSTING THE SONAR SENSOR FLOAT

The Sonar Sensor float must be adjusted so that it is a minimum of 6 inches away from the sensor (it can be further depending upon water conditions, see Note below).

- 1. Pull out the rubber stopper.
- 2. Adjust float so that it is 6 to 10 inches from the sensor, or at your desired depth.
- Replace the rubber stopper by pressing it firmly into the float.



## NOTICE:



In calm water, the sonar sensor can be set at a level which will provide the maximum amount of sonar coverage. In rougher water, the sonar sensor may need to be lowered into the water further to provide stabilized readings.

#### **USING THE SONAR SENSOR WITH THE FLOAT**

Toss the sonar sensor and float assembly into the 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.
- To retrieve the sonar sensor and float, simply pull in the cable being certain to neatly wind up the excess cable.

#### IMPORTANT:



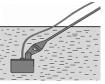
Do not allow the cable to sink to the bottom as it may become entangled in debris.

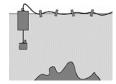


#### NOTICE:



You can also use a pole to guide the sonar sensor to a desirable position or add a float kit (available on our website) on the cable to allow the cable to float on top of the water.





#### REMOVING THE SONAR SENSOR FLOAT

If you find that you do not have a need for the sonar sensor float, it can be removed as follows:

- 1. Remove the rubber stopper from the cable by sliding the safety strap toward the plug and gently working it over plug.
- 2. Slide the cable through the center of the float toward the plug and gently work the plug through the center of the float in a rocking motion.

## USING THE SONAR SENSOR FROM A BOAT, KAYAK, CANOE OR FLOAT TUBE

#### NOTICE:



The FishTrax<sup>™</sup> 1C's built-in expandability allows the addition of accessories to adapt the fish finder to any fishing platform. Visit our website to see a complete listing of FishTrax<sup>™</sup> accessories.

There are five methods that can be employed to use the fish finder from a boat.

- 1. Toss the sensor and float into the water as per the previous instructions.
- 2. "Shoot-Thru" the hull as per the instructions in the next section.
- 3. Attach the Sonar Sensor to the Side-Scan Adapter *(optional)* and use a pole or broom stick handle to scan for fish as per the fishing tip below.
- 4. Attach the Sonar Sensor to the Transom Mount Bracket *(optional)* and mount to the transom of the vessel's hull.
- 5. Attach the Sonar Sensor to the Transducer Arm Bracket *(optional)* and suspend from the transducer from the side of the vessel.

#### INFORMATION:



By attaching the optional Side-Scan Adapter to an ordinary broom stick or paint roller handle purchased from a local hardware store, you can scan for fish suspended in the water column within 240 ft. (75 m) of your location. Attach the sensor to a handle, lower the

sensor into the water, and slowly move the sensor in a manner that will allow the signal to search the desired location (a sweeping motion similar to using a flashlight is most effective). Keep in mind the sonar signal is emitted from the base of the sensor. Scan down, sideways, or any combination of the two. Remember, to get depth and bottom contour and composition readings you will have to aim the signal at a solid object within 240 ft. (75 m), however FISH readings will be

accurate, even if the depth reading is "---".

#### USING THE FISHTRAX™ 1C THROUGH A BOAT HULL

The FishTrax<sup>™</sup> 1C's advanced sonar capabilities allow it to "Shoot-Thru" the bottom of a boat, kayak or canoe. The hull must be made out of solid fiberglass, or a maximum of 1/8" aluminum, and be in direct contact with the water, with no air pockets. The FishTrax<sup>™</sup> 1C will not work through wood, plastic, or any composite material.



## To "Shoot-Thru" the Hull of a Boat, Do One of the Following:



- A. Place the sonar sensor in .5 inches of water against the hull bottom.
- B. Coat the face of the sonar sensor with petroleum jelly and press it against the hull bottom with a twisting motion.
- C. Place the sonar sensor in a plastic bag that is full of water and place against the hull bottom.



#### NOTICE:

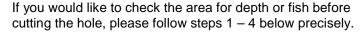


If depth readings appear as "---" while using one of these methods, place the sonar sensor directly in the water to verify that the fish finder is operating properly. If it operates properly while directly in the water, reposition the sensor in a new location in the hull, and

repeat methods A, B, or C. These methods DO NOT work on all hulls and you may have to place the sensor directly in the water for proper operation.

#### USING THE FISH FINDER FOR ICE FISHING

To achieve the best performance for ice fishing, you should cut a hole through the ice and place the sonar sensor directly in the water like the illustration to the right.





#### NOTICE:



To use this method, the ice MUST be clear (usually referred to as black ice), free from air bubbles, voids, cracks, etc.

- 1. Clear away snow to expose the ice surface.
- 2. Place a small amount of liquid water on the ice and set the sonar sensor on the water allowing the Sonar Sensor to freeze to the ice.



- 3. If there are any air pockets between the sonar sensor and ice, or the water below the ice, the fish finder will not work properly and will require you to try another spot, or cut a hole in the ice to use. You can also use the instructions in the "USING THE FISH FINDER THROUGH A BOAT HULL" section. Be certain not to allow the water to freeze around the sensor if you use the "plastic bag" method.
- 4. To remove the sonar sensor from the frozen ice, gently tap the 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 this step until the sonar sensor is easily removed.

## IMPORTANT:



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

## USING THE VARIABLEZONE™ WATER TEMPERATURE SENSOR

The VariableZone™ Water Temperature Sensor integrated into the sonar sensor will allow you to take temperature readings throughout the water column by enabling you to adjust the depth of the sensor.

#### To utilize the VariableZone™ Feature:

- Increase the distance between the float and the sonar sensor.
- After each adjustment, wait 1 minute before observing the temperature reading on the display.

## minute before observing

**Adjust Distance** 

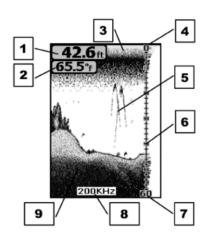
#### **INFORMATION:**



To increase your catch rate, find the optimal temperature habitat for the species you are targeting. Large changes in temperature may indicate an underwater current that could collect bait fish. For best results, fish your bait near this temperature change and mimic a

distressed bait that is "caught up in" the current.

## UNDERSTANDING THE VIRTUVIEW™ LIQUID CRYSTAL DISPLAY



- 1. Water Depth
- 2. Water Temperature
- 3. Battery Strength Indicator
- 4. Surface Clutter
- 5. Fish Arches
- 6. Depth Scale
- 7. Lower Limit
- 8. Frequency
- 9. Bottom Contour / Composition

### UNDERSTANDING THE BUTTONS



**-**®

V | ESC

Q

**4 A > v** 

Zoom / Enter

Exit Menu / Frequency Select

Menu/Feature Setup

Power ON or Off / Screen Hold

Mode Select / Feature Adjustment

#### TURNING THE FISH FINDER ON/OFF

- 1. To turn the fish finder ON, press and release the **O** button.
- 2. To turn the fish finder OFF, Press and Hold the **b** button until "Shutdown" appears on the screen. Release the button.

## NOTICE:



Pressing the  $\circ$  button during normal fish finder operation will freeze the screen allowing you more time to decipher the data. Pressing the  $\circ$  again will renable the scrolling.

## NOTICE:



The fish finder has an automatic "power-off" feature to prevent battery drain if you accidentally leave the Fish Finder on. When the depth display reads "---" continuously for 5 minutes, the display will shut off automatically.

#### SETTING THE FISH FINDER IN SIMULATION MODE

1. To place the fish finder in Simulation Mode, while the fish finder is ON, press and release the button 1 time ("Sonar" will appear at the top of the screen)



- Press and release the ▼ button until "Simulator" is highligted.
- 3. Press the to turn ON the Similator Mode (Swill appear to the right of Simulator).
- 5. Press **V | ESC** to exit the menu and start running the simulator.

## NOTICE:



All features are active in the simulator mode. Use the FishTrax™ simulator to learn how to use the fish finder. The simulator allows you to adjust features and settings like you are actually operating the fish finder. Please note that the temperature will be displayed as "---"

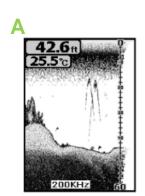
unless the Sonar Sensor (Transducer) is plugged into the display.

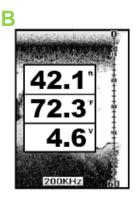
#### FISHTRAX™ 1C OPERATING MODES

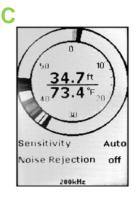
The FishTrax<sup>™</sup> 1C incorporates three operating modes. To change the Operating Mode press and release the ◀ or ▶ buttons.

- A. Fish Finder: In addition to measuring the overall depth of the water, this mode depicts the presence of fish in the water column and shows the bottom contour and composition.
- **B. Data Mode:** This mode overlays large numbers over the fish finder display showing Depth, Temperature and Battery Voltage.
- C. Ice-Mode Digital Flasher: This mode gives you a real time view of the FishTrax<sup>™</sup> sonar echoes. Compared to the Fish Finder mode, the flasher shows what's happening below you right at that moment, whereas the fish finder mode shows you the sonar returns from the past (a historical image of what has happened).

On the flasher screen you'll see the surface, the bottom, and "blips" that indicate echoes. When a fish enters or moves through the cone of the sonar beam a "blip" will appear. Generally the darker the "blip", the longer the fish stayed in the beam. This mode is very helpful at allowing you to set your bait at the exact depth of the fish in the water column, therefore significantly increasing your catch rate.







#### NOTICE:



Use the Data Mode to check the condition of the batteries. The FishTrax $^{\text{TM}}$  1C needs at least 4.5 Volts to operate and the unit will shut down automatically if voltage drops below that. It is recommended to keep a backup set of fully charged batteries on

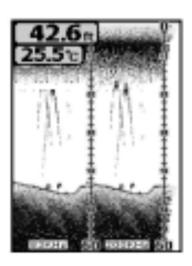
hand. We also recommend using rechargeable batteries.

#### FISHTRAX™ SONAR FREQUENCIES

User selectable dual beam FishTrax<sup>™</sup> Intelligent Sonar allows you to fine tune the FishTrax<sup>™</sup> 1C to adapt to your fishing style. There are two operating frequencies (200 kHz and 83 kHz), each specifically designed to make finding fish effortlesss. A frequency of 200 kHz means that 200,000 sonar pulses are produced (and listened for) by the transducer every second, while 83 kHz represents 83,000 sonar pulses per second.

# The FishTrax<sup>™</sup> 1C has Three Frequency Modes:

- 200 kHz
- 83 kHz
- Dual-View (200 kHz and 83 kHz)



**200 kHz:** Excels at showing minute details. Provides the best resolution and definition of structure and targets, but will not penetrate as deep as 83 kHz. Use this frequency mode for fishing in shallow water where detail is important.

**83 kHz:** Has a much greater depth penetration capability, but shows less definition. Use it in deeper water or in situations where the 200 kHz lacks bottom structure detail.

**Dual-View:** Use this mode to utilize the best features of each sonar frequency. The 200 kHz view will show greater detail of bottom structure and fish echoes, while the 83 kHz will reach deeper to show detail beyond the reach of the 200 kHz.

## To Change the Frequency:

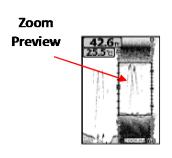
- Press and release the V | ESC button.
- 2. The current frequency mode will be displayed at the bottom of the screen.
  - Dual-View will split the screen in half and show 83 kHz on the left and 200 kHz on the right

## **ZOOM BOTTOM TRACKING**

In normal fish finder mode you can zoom in on the bottom of the screen to get a high definition look at the bottom contour and composition. This will enlarge the view of the bottom two times (2x).

#### 200 kHz or 83 kHz Sonar Zoom View

While using the 200 kHz or 83 kHz frequencies, the Zoom will split the display 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. While in "AUTO" Zoom mode the Zoom Preview Box will track the bottom.



#### **Dual-View Sonar Zoom View**

In the 200 kHz / 83 kHz Frequency Mode, 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 are not displayed.

## To Engage the Manual Zoom:

- Use the "Sonar" Tab in the Feature Menu to set the Depth Range to manual.
- Press the 

  button.
- 3. Press the ▲ or ▼ buttons to manually adjust the zoom position. The Zoom Preview Box will move up or down on the screen showing you the depth of the "Zoomed" readings.
- 4. Press the **B** button again to exit Zoom Bottom Tracking.

## To Engage the Auto Zoom:

- Use the "Sonar" Tab in the Feature Menu to set the Depth Range to "AUTO".
- 2. Press the -8 button.
- 3. Press the **B** button again to exit Zoom Bottom Tracking.

## NOTICE:



In Auto Zoom mode the Zoom Preview Box is automatically adjusted to keep the area above and below the bottom on the display. You cannot manuially adjust the Zoom Preview Box in "Auto" depth range mode.

## ACCESSING AND ADJUSTING THE FEATURES

There are many features incorporated into the FishTrax<sup>™</sup> 1C that allow you to fine tune the fish finder for your specific needs.

#### **SONAR**

- A. Screen Detail (Sensitivity)
- B. Depth Range
- C. Upper and Lower Limits (Zooming)
- D. FishTarget<sup>™</sup> (Fish Symbols Depth)
- E. Depth Cursor

#### **SETUP**

- F. Backlight
- G. Volume
- H. Units
- I. Scroll Speed (Chart Speed)
- J. Fish Alarm
- K. Depth Alarm
- L. Battery Alarm
- M. Transparency

#### **ADVANCED**

- N. Keel Offset
- O. Sonar Chart Mode (Color Scheme)
- P. Surface Clarity
- Q. Noise Rejection
- R. Menu Language

The button is used to access the menu system. When you press the button once, the menu system immediately appears on the display.

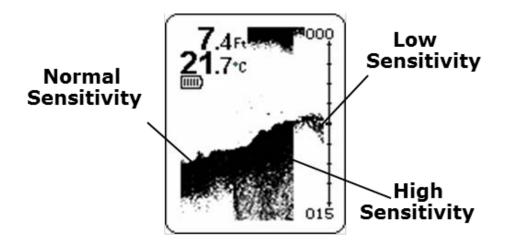
## The Menu System Has 3 Tabs:

- Sonar
- Setup
- Advance

To cycle through the Menu System tabs press and release the button. In each menu tab use the ▲ or ▼ buttons to select a specific menu item, and use the ◀ or ▶ buttons to change a menu setting, press the V | ESC button to close the menu system.

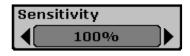
#### A. ADJUSTING THE DETAIL DISPLAYED ON THE SCREEN

Adjusting the amount of detail shown on the VirtuView<sup>TM</sup> display is as simple as adjusting the fish finder's sensitivity. There are 100 user selectable sensitivity settings to choose from. Select a higher sensitivity setting to show smaller sonar returns on-screen, or a lower setting to remove clutter from the screen. Adjusting Sensitivity also affects how sonar returns are identified as fish icon symbols ( $FishTarget^{TM}$ ) - more fish will be detected at a higher setting, fewer at a lower setting.



## To Adjust the Sensitivity:

1. Press and release the button 1 time (Sonarl will appear at the top of the screen)



- 2. Press and release the ▼ button until the "Sensitivity" box is highligted.
- 3. Press and release the ▶ button to increase the sensitivty, ◀ to decrease the sensitivity.

4. Press and release the **V | ESC** button to exit the menu and return to the fish finder mode.

#### NOTICE:



While learning to use the Fishtrax<sup>™</sup> 1C it is recommended that you use the AUTO sensitivity setting. This setting will continually monitor the sonar returns and adjust the sensitivity to reduce and/or increase the amount of echoes displayed on the HD VirtuView<sup>™</sup>

display.

## Information:



Which setting is the right setting? It greatly depends on the clarity and/or depth of the water. Very clear water allows for a moderate sensitivity setting. Conversely, dirty water requires a higher sensitivity setting to target detail but will increase irritating false

readings. Targeting deep water fish generally requires greater sensitivity, especially in stained or dirty water. Salt and brackish water also require a comparatively higher sensitivity setting. While this analysis may seem confusing, the concept is simple. As the Fish Finder's sensitivity is elevated, a broader view and smaller details show on the screen. But, with a broader and stronger view comes more clutter and debris. The clearer the water, the less sensitivity needed to get accurate details and vice-versa.

## **B.** ADJUSTING THE DEPTH RANGE DISPLAYED ON THE SCREEN

You can set the display on the FishTrax<sup>™</sup> 1C to automatically adjust the display range to the water depth, or manually set it to lock the display in a specific depth range.

Select AUTO to have the display automatically adjust the depth range for the detected water depth. Advanced users may want to manually select a depth range from 0-9 Ft. to 0-240 Ft. (0-3 M to 0-73 M) to only see sonar echoes in those ranges. Keep in mind this locks the depth range of the display to this preset range and ONLY sonar returns from that range will be displayed.

## To Adjust the Depth Range:

1. Press and release the button 1 time (Sonar will appear at the top of the screen)



- Press and release the ▼ button until "Depth Range" box is highligted.
- 3. Press and release the ▶ button to increase the Range, ◀ to decrease the Range.

4. Press and release the **V | ESC** button to exit the menu and return to the fish finder mode.

### NOTICE:



The Depth Range setting is an advanced feature. For best results it should be set to AUTO. Only change the setting if you are only interested in sonar echoes in a specific depth range. In manual operation, if the water depth is greater than the depth range setting,

the bottom will not be visible on-screen.

## INFORMATION:



Experienced fisherman will tell you that many fish choose to hide along the bottom and ambush their prey as it swims by. Logs, tree stumps, rocks, ledges, etc. all provide excellent ambush locations. Uncovering these hiding places will prove invaluable to your fishing

trips. Remember to keep an eye on the depth of your bait while fishing bottom structure as you do not want to snag it on the structure.

#### C. ADJUSTING THE UPPER & LOWER LIMITS

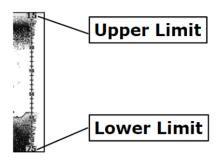
Changing the upper and lower limits gives you greater control over the depth range. This feature lets you "Zoom" the display in almost unlimited combinations.

## To Adjust the Upper Limit:

- 1. Press and release the button 1 time (Sonar will appear at the top of the screen)
- 2. Press and release the ▼ button until the "Upper Limit" box is highlited.
- 3. Press and release the ▶ button to increase the Upper Limite, ◀ to button to decrease the Upper Limit.
- 4. Press and release the **V | ESC** button to exit the menu and return to the fish finder mode.

## To Adjust the Lower Limit:

1. Press and release the button 1 time (Sonar will appear at the top of the screen).



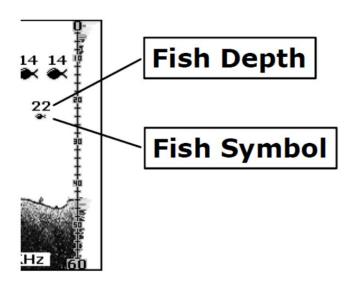
 Press and release the ▼ button until the "Upper Limit" box is highlited.



- Press and release the ▶ button to increase the Upper Limite, ◀ to button to decrease the Upper Limit.
- 4. Press and release the V | ESC button to exit the menu and return to the fish finder mode.

#### D. FISHTARGET™ SYMBOLS AND DEPTH

The FishTrax™ 1C FishTarget™ feature displays fish icons and a numeric fish depth reading instead of fish arches to help identify fish. FishTrax™ sonar uses sophisticated software to analyze the "shape" of the sonar return from a suspended target to determine whether it is a fish or debris. When a fish is detected it is displayed as graphic fish symbol on the VirtuView™ Display. If the "Depth" setting is set to ON, the depth of the FishTarget™ will also be displayed.



## To Turn the FishTarget™ ON or OFF:

- 1. Press and release the button 1 time (Sonar will appear at the top of the screen).
- Press and release the ▼ button until the "Fish Symbols/Depth" box is highlited.
- 3. Press and release the ▶ and the ◀ button to scroll through the ON/OFF settings.

- The settings Are: "on/on", "on/off", "off/off"
- 4. Press and release the **V | ESC** button to exit the menu and return to the fish finder mode.

## NOTICE:



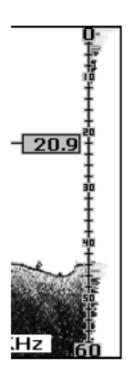
Pressing the  $\circ$  button during normal fish finder operation will freeze the screen making it easier to read the Fish Depth numbers. Pressing the  $\circ$  again will renable the scrolling.

## E. DEPTH CURSER

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.

## To Turn the Depth Curser ON or OFF:

- Press and release the button 1 time (Sonar will appear at the top of the screen).
- 2. Press and release the ▼ button until the "Depth Curser" box is highlited.
- Press and release the ▶ button to turn the Depth Curser ON, press and release the ◀ button to turn OFF.
- 4. Press and release the **V | ESC** button to exit the menu and return to the fish finder mode.
- With the Depth Curser ON you can use the ▼ or the ▲ buttons to adjust the depth of the line.



#### F. ADJUSTING THE DISPLAY BACKLIGHT

Turning the backlight feature ON will keep the screen illuminated all the time. This feature will greatly reduce the battery life of the Fish Finder, so it should only be used during low light conditions.

## To Adjust the Backlight:

1. Press and release the button 2 times (Setup will appear at the top of the screen).



- Press and release the ▼ button until the "Backlight" box is highlited.
- 3. Press and release the ▶ button to increase the Backlight, or the ◀ to button to decrease the Backlight.
- 4. Press and release the **V | ESC** button to exit the menu and return to the fish finder mode.

## **G. ADJUSTING THE VOLUME**

The Volume setting allows you to adjust the Alarm Volume so that you can select the tone that is best suited for your environment.

## To Adjust the Volume:

- Press and release the button 2 times (Setup will appear at the top of the screen).
- Volume **High**
- 2. Press and release the ▼ button until the "Volume" box is highlited.
- 3. Press and release the ▶ button to increase the Volume, or the ◀ to button to decrease the Volume.
- 4. Press and release the **V | ESC** button to exit the menu and return to the fish finder mode.

### H. UNITS OF MEASURE

The FishTrax<sup>™</sup> 1C can be set to display depth and temperature readings in English (Ft, °F) or Metric (M, °C) feature displays the depth Fish Identifer Icons. It can be vital when targeting fishing holding at specific depths.

#### To Set the Units of Measure:

 Press and release the button 2 times (Setup will appear at the top of the screen).

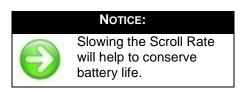


- Press and release the ▼ button until the "Units" box is highlited.
- 3. Press and release the ▶ or ◀ buttons to change the setting.
  - The Settings Are: "M/°C", "M/°F", Ft/°C", "Ft/°F"

4. Press and release the **V | ESC** button to exit the menu and return to the fish finder mode.

## I. DISPLAY SCROLL SPEED (CHART SPEED)

The data on the FishTrax<sup>™</sup> 1C's screen is purposefully moving at a constant speed, scrolling from the right to the left. The incoming signals are displayed sequentially scrolling from the right side of the screen to the left. The right side displays what the FishTrax<sup>™</sup> sees in that instant, and this data scrolls to the left giving you a depiction of what you have passed over. The scrolling speed can be easily changed, making it easy for the user to find a comfortable setting.



## To Adjust the Display Scroll Speed:

- 1. Press and release the button 2 times (Setup will appear at the top of the screen).
- 2. Press and release the ▼ button until the "Chart Speed" box is highlited.



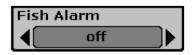
4. Press and release the **V | ESC** button to exit the menu and return to the fish finder mode.

## J. AUDIBLE NOTIFICATION OF THE PRESENCE OF FISH

You can set the FishTrax<sup>™</sup> 1C to sound an audible alarm when fish are detected.

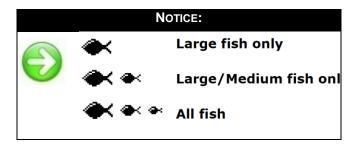
#### To Turn the Fish Alarm ON or OFF:

 Press and release the button 2 times (Setup will appear at the top of the screen).



- 2. Press and release the ▼ button until the "Fish Alarm" box is highlited.
- 3. Press and release the ▶ or ◀ buttons to change the setting.

- The settings are: "off", " → ", " → → ", " → → "
- Press and release the V | ESC button to exit the menu and return to the fish finder mode.



## **INFORMATION:**



Leave the alarm on if you are using a castable bait so that you do not have to steadily watch for fish on the screen. If you hear the alarm, gently toss your bait at least 20 feet beyond the sonar sensor, allow the bait to drop to the depth of the fish alarm, and

retrieve as recommended for the targeted species.

#### K. SHALLOW WATER DEPTH ALARM

When turned on, the FishTrax<sup>™</sup> 1C's shallow water alarm will notify you of shallow water by sounding an audible alarm and flashing "Depth Alarm!" on the display.

## To Adjust the Shallow Water Alarm:

 Press and release the button 2 times (Setup will appear at the top of the screen).



- 2. Press and release the ▼ button until the "Depth Alarm" box is highlited.
- 3. Press and release the ▶ button to increase the Depth, or the ◀ to button to decrease the Depth.
  - The Depth Alarm can be set from 1 Ft to 99 Ft.
- 4. Press and release the **V | ESC** button to exit the menu and return to the fish finder mode.

#### BATTERY ALARM

The Battery Alarm setting will sound an audible alarm and flash the Battery Voltage Readout in the Data Mode when the battery voltage is equal to or less than the setting.

## To Adjust the Shallow Water Alarm:

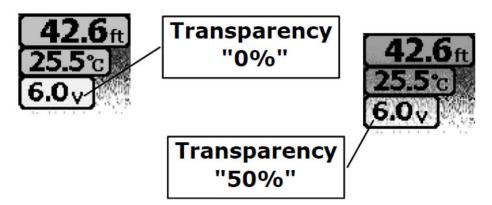
 Press and release the button 2 times (Setup will appear at the top of the screen).



- 2. Press and release the ▼ button until the "Battery Alarm" box is highlited.
- 3. Press and release the ▶ button to increase the voltage, or the ◀ to button to decrease the voltage.
  - The Battery Alarm can be set from "4.0V to 6.0V"
- 4. Press and release the **V | ESC** button to exit the menu and return to the fish finder mode.

#### M. MENU TRANSPARENCY

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



## To Adjust the Menu Transparency:

1. Press and release the button 2 times (Setup will appear at the top of the screen).



2. Press and release the ▼ button until the "Transparency" box is highlited.

- Press and release the ▶ button to increase the Transparency, or the ◀ to button to decrease the Transparency.
  - The Transparency can be set from "0%" to "70%".
- 4. Press and release the **V | ESC** button to exit the menu and return to the fish finder mode.

#### N. KEEL OFFSET

The Keel Offset feature is used to adjust the depth readings displayed by the device to compensate for the depth of the water required for your vessel to operate safe (typically referred to as your vessel's "Draft")

**For Example:** If your boat's draft is 3 feet (1 M), the Keel Offset feature should be set to 3 feet (1 M). The device will then subtract 3 feet from the actual depth reading and display this figure as the depth. If the water depth is 5 feet (1.5 M) and the Keel Offset is set to 3 feet, the depth will be displayed as 2 feet (.6 M), indicating to the operator that there is 2 (.6 M) feet of safe operating water. The maximum Keel Offset setting is 20 FT (6.1 M), and can be set in .1 (1/10th) Feet or Meter increments. The unit will read "---" when a negative value occurs due to the Keel Offset subtraction.

## To Adjust the Keel Offset:

 Press and release the button 3 times ("Adva nced" will appear at the top of the screen).



- 2. Press and release the ▼ button until the "Keel Offset" box is highlited.
- 3. Press and release the ▶ button to increase the Keel Offset, or the ◀ to button to decrease the Keel Offset.
  - The Keel Offset can be set from "-30ft" to "+30ft" ("-10m" to "+10m")
- 4. Press and release the **V | ESC** button to exit the menu and return to the fish finder mode.

## O. SONAR CHART MODE (COLOR SCHEME)

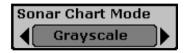
The Sonar Chart Mode setting allows you to adjust the color scheme of the display. There are 3 settings:

• White Background: Offers the best display viewability in bright lighting conditions.

- Blue Background: Offers the best display viewability in low light conditions
- Grayscale: Offers the best battery life.

## To Adjust the Color Scheme:

 Press and release the button 3 times ("Advanced" will appear at the top of the screen).



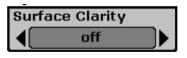
- Press and release the ▼ button until the "Sonar Chart Mode" box is highlited.
- 3. Press and release the ▶ or the ◀ buttons to change the setting.
- 4. Press and release the **V | ESC** button to exit the menu and return to the fish finder mode.

#### P. SURFACE CLARITY

The Surface Clarity setting adjusts the filter that removes surface clutter noise caused by algae and aeration. The lower the setting, the more surface clutter will be displayed.

## To Adjust the Color Scheme:

 Press and release the button 3 times ("Advanced" will appear at the top of the screen).



- 2. Press and release the ▼ button until the "Surface Clarity" box is highlited.
- 3. Press and release the ▶ or the ◀ buttons to change the setting.
  - The settings are: "Off", "Low", "Medium", "High"
- 4. Press and release the **V | ESC** button to exit the menu and return to the fish finder mode.

## **Q. NOISE REJECTION (CLUTTER REDUCTION)**

The FishTrax<sup>™</sup> 1C has a built in noise rejection sytem. This system constantly evaluates the effects of boat speed, water conditions and interference and can automatically filter out clutter to give you less "false" readings on the VirtuView<sup>™</sup> LCD.

## To Adjust the Color Scheme:

1. Press and release the button 3 times ("Advanced" will appear at the top of the screen).

 Press and release the ▼ button until the "Noise Rejection" box is highlited.



- 3. Press and release the ▶ or the ◀ buttons to change the setting.
  - The settings are: "Off", "High", "Medium", "Low"
- 4. Press and release the **V | ESC** button to exit the menu and return to the fish finder mode.

#### NOTICE:

If you have high levels of noise, try using the "High" setting. However, if you are continually having to filter out the noise, it is suggested that you take steps to find the source of the interference and fix it. Common sources are aeration from improper mounting on a vessel or other sonar sources operating in close proximity to the FishTrax<sup>TM</sup> 1C.

#### R. MENU LANGUAGE

The Language setting selects the display language for the Menus.

## To Adjust the Menu Language:

 Press and release the button 3 times ("Advance d" will appear at the top of the screen).



- 2. Press and release the ▼ button until the "Language" box is highlited.
- 3. Press and release the ▶ or the ◀ buttons to change the setting.
- 4. Press and release the **V** | **ESC** button to exit the menu and return to the fish finder mode.

## **CARE OF YOUR FISH FINDER**

- 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. If necessary, wipe with a damp cloth.
- 2. Remove the batteries from the fish finder to prevent battery leakage and corrosion.

3. Store the fish finder in the storage bag in a cool, dry place. Never leave it in temperatures over 120° F (49° C) as the extreme temperatures can damage the electronic components.

#### **IMPORTANT:**



Cold weather is extremely hard on the electrical components within the display housing. It is suggested that you keep the Fish Finder in temperatures above 0° Fahrenheit (-17° Celsius) during operation. The sonar sensor cable also becomes very stiff under cold conditions.

Excessive winding or unwinding under these conditions may cause irreparable damage. DO NOT WIND OR UNWIND THE CABLE IN TEMPERATURES BELOW  $32^{\circ}$  F ( $0^{\circ}$  C).

## TROUBLESHOOTING AND FREQUENTLY ASKED QUESTIONS

24-Hour Technical Support is available online at hawkeyeelectronics.com. Search our online Knowledgebase for the latest troubleshooting and FAQ's, or post your own question for our support staff. For one-on-one support please email customerservice@norcrossmarine.com.

## Understanding How the Fish Finder Finds Depth, Fish, debris, Bottom Contour/composition, etc.

Greatly simplified, this fish finder is a combination of a speaker, microphone and stopwatch. It transmits a sound pulse from the sonar sensor, and then measures the time it takes for the "echoes" to return to the sonar sensor (the fish finder "knows" that the speed of sound through water is about 4800 feet per second). Fish, rocks, logs, weed, debris, the bottom, etc all "echo" the pulse at a different intensity. A built-in computer then organizes all of this information and shows it on a display screen in a manner that is easy for the user to understand. Depth Readout. The depth readout on the upper left corner will appear after the power is turned ON and the sonar sensor is placed in water between 2 feet and 240 feet (.5 to 75 meters). If the depth exceeds these parameters, the depth meter will indicate "---". This reading may also occur in water that 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 smallest air bubble between the sonar sensor and the water will cause the Fish Finder to not operate correctly.

#### **Sonar Cross Talk**

If you experience incorrect depth readings on your Digital Depth Sounder display, but nothing on another fish finder screen on the same boat *(or vice versa)* then you are experiencing sonar cross-talk interference. The only real solution is to move the transducers further away from each other. This can help keep the transducer cones from intersecting, but because cones get wider as the depth increases, the problem cannot usually be completely solved by position only. Changing one of the sounders to another model that runs on a different frequency will solve the problem.

## Nothing Happens When I Turn the Power On

Make sure that you have installed a good set of batteries and aligned them as per the diagram within the battery compartment. You may also need to test the batteries in another device to ensure they are charged. If in doubt, replace the batteries with a set from a newly opened package.

## The Depth Reading Is "---"

First verify that the sonar sensor is plugged into the display housing properly by turning the display on and listening for a ticking sound from the sonar sensor. Make sure that you are operating the Fish Finder in depths between 2 and 240 ft. (.5 to 75 m). Be aware that the depth is measured from the sonar sensor, not the float. Also make sure that the water is not overly choppy, causing the sonar sensor to move around significantly. The sonar sensor must remain relatively stable to achieve optimal readings. When necessary, lower the sonar sensor to hang further from the surface of the water, providing more stability in rougher water.

I See Fish Under the Sonar Sensor, but Nothing Appears on the Display As with the depth reading, the fish finder will not detect any objects that are closer than 2 ft. from the sonar sensor. If you're fishing in water that is less than 3 feet deep, it is recommended to discontinue use of the fish finder.

## The Depth Reading is Incorrect

Make sure that you are pointing the sonar sensor perpendicular to the water when trying to obtain depth readings.

Extremely heavy vegetation may confuse the sonar of the fish finder causing it to misinterpret the depth. If you are certain that the readings are incorrect under these conditions, discontinue use.

I'm Not Getting a Reading While Trying to Shoot Through My Boat Hull or Ice Shooting through the hull of a boat/canoe or ice can be difficult, as hidden air pockets will prevent you from obtaining a reading. Make certain that the hull or ice is solid from the surface to the water with no air bubbles and/or gaps. Shooting through composite hulls (plastic) or cloudy ice is not possible as tiny air bubbles are usually present in these situations.

## I'm Getting False Fish Indications

The most common cause of false fish indications is extremely tall weed growth. If weeds grow taller than 50% of the total water depth in a particular area, the sonar will mistake it for fish. Trash & debris may also give false readings. Adjusting the sensitivity setting to the lowest level may reduce these false readings, but if they do not go away, it is suggested that you discontinue use of the fish finder under these conditions.

I'm Using the Fish Finder in a Swimming Pool and its Not Working Because of interference caused by "sonar bouncing", the fish finder will NOT function properly in a swimming pool, bath tub, bucket, barrel, garbage can, or any body of water that has hard sides. It must be used in an open body of water to function properly.

#### REPLACEMENT PARTS

Please check our website for replacement parts and accessories. If you need replacement parts that are not listed, please email our Customer Service Department at customerservice@norcrossmarine.com.

## WARRANTY

This device is covered by a 2 Year Limited Warranty. To be eligible for warranty coverage, you must register your product within 15 days of purchase. Visit our website for warranty details and to register.

## **To Activate Your Warranty:**

- Read and print out a copy of the warranty details for your records.
- Complete the registration form on our website.
- Make a copy of your original purchase receipt and staple it to this manual.
   You will need to present it in the rare occurrence that you need to send your product in for service.
- Complete the information below and store this manual in a safe place.
- You can print additional copies of this manual from our website

INFORMATION:	
	To aid in maintenance and service, record the following:
	Date of Purchase:
	Place of Purchase:
Date of Online Warranty Registration:	
Production Date Code : (4 digit code located in the battery compartment)	

#### INFORMATION:



**MADE IN CHINA, Designed and Supported in the USA.** Tested to comply with FCC, CE & ROSH standards if applicable. Visit our website for compliance and warranty information. All Specifications and Prices Subject to Change Without Notice.

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VER.2215

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## **NOTES**