

HawkEye® Handheld Sonar System PX Instruction Manual

Part #: DF2200PX



Before You Venture Outdoors: Get to know the fishing regulations and habits of the fish that you are targeting by visiting your local tackle center, bait shop, library, or website. A little research can be a valuable lesson, that will allow you to utilize the fish finding features of the Handheld Sonar System PX to make fishing more enjoyable for you, and your fishing buddies.

Want to save yourself hours of aggravation? If so, then read this manual entirely before attempting to use the product.

Safety Information:

- Read the following safety information carefully before attempting to operate this sonar system.
- Only qualified personnel should perform repairs or service not covered in this manual.
- Periodically wipe the case with a dry cloth. Do not use abrasives or solvents on this device.

Sonar Sensor



Battery Cap

WARNING:



This depth sounder 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, as water depth may change too quickly to allow time for you to react.

Installing the Batteries

1. Open the battery cap by unscrewing the cap opposite the display, counter-clockwise.
2. Remove the battery holder and install four 'AA' batteries. Be certain to align the batteries as diagram inside the battery compartment.



ATTENTION:



To ensure the Handheld Sonar System PX remains water tight, coat the Battery Cover O-Ring 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.

IMPORTANT:



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

Switching the Readings From English to Metric

1. Remove the battery holder as per the instructions in the "Installing the Batteries" section above.
2. While looking into the battery compartment, use a small screwdriver, or other slender object, to reach into the battery compartment and move the switch to the LEFT for Metric readings, or to the RIGHT for English readings.
3. Replace the batteries as per the instructions in the "Installing the Batteries" section above.



Obtaining Depth Readings (*Depth Reading Mode*)

1. Place the sonar sensor side of the unit into the water. Make sure to hold the unit perpendicular to the water surface.
2. Press and release the activation button.
3. The current water depth will be indicated on the display:
 - The depth will continue to update 4 times per second while the unit is left in water that is between 2.5 to 200 ft (.8 to 61 m) deep.
 - If the unit is unable to obtain an accurate depth reading or if it is removed from the water "- - -" will be displayed.
4. There is no need to turn OFF the unit. Once removed from the water, or if the unit cannot obtain a reading, the display will flash the last depth reading for 5 seconds and then turn off.



Obtaining Fish Readings

1. If a fish is detected while in the Depth Reading Mode, a fish icon will illuminate on the display.
2. A blinking fish icon may represent the presence of a school of fish moving through the sonar beam.



Fish Icon

Obtaining Temperature Readings (Thermometer Mode)

1. Activate the Depth Reading Mode as per above.
2. While in Depth Reading Mode, press and release the activation button.
3. The Thermometer Mode will be ON and will remain ON for 10 seconds. The display will change back to Depth Reading Mode after 10 seconds.



Temperature Sensor

Air Temperature:

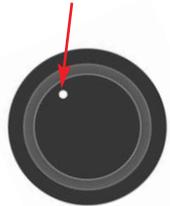
Hold the unit in your hand and activate the Temperature Mode as per the above instructions. The current air temperature will be displayed on the LCD for 5 seconds.

Water Temperature:

Place the temperature sensor into the water and activate the Temperature Mode. The current water temperature will be displayed for 5 seconds.

Miscellaneous Temperatures:

The unit will also read the temperature of any object from 14°F (-10° C) to 122°F (50° C) by simply pressing the temperature sensor against the object and activating the sensor as per the instructions above.



WARNING:



Never press the temperature sensor against any object which is thought to be hotter than 122°F (50°C) as damage to the unit may occur.

IMPORTANT:



This device has a temperature accuracy rating of plus or minus 5%. The temperature probe may take up to 90 seconds to adjust to extreme changes in temperature. If you desire to have instant temperature readings you may want to consider purchasing the NorCross® Infrared Marine Thermometer (IR101SP).

Using the Unit for Ice Fishing

1. Clear away snow to expose the ice surface, making sure the surface is smooth and free from excessive air (*the ice should be black in color*).

IMPORTANT:

 <p>“Black Ice”</p>	<p>The ice MUST be relatively free from bubbles, cracks, voids, etc (<i>generally referred to as “Black” Ice</i>). If you cannot obtain readings through the ice, the unit must be placed directly in the water.</p>
 <p>Cracks, Bubbles, Voids, Etc</p>	

2. Place a small amount of liquid water on the ice and set the transducer side of the unit on the water.



3. If there are any air pockets between the unit and ice, or 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.

To Remove From the Frozen Ice:

1. Gently tap the unit at the base with your hand.
2. If it will not come loose, spray a small amount of water on the ice surface around the base and repeat steps (1) and (2) until the transducer is easily removed.

IMPORTANT:

	<p>Never use a blunt object to strike the unit as this may cause damage to the sensitive internal electronics.</p>
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“Shooting-Thru” a Boat Hull

The advanced sonar capabilities of this unit 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 through wood, plastic, or any composite material.

To “Shoot-Thru” the Hull of a Boat, Do One of the Following:

1. place the transducer in .5 inches (13 mm) of water against the hull bottom.
2. coat the face of the transducer with petroleum jelly and press it against the hull bottom with a twisting motion.
3. place the transducer in a plastic bag that is full of water and place against the hull bottom.

1.



2.



3.



IMPORTANT:



If you cannot obtain reading while “Shoot-Thru” the hull, place the unit directly in the water. If readings are obtained with the unit directly in the water, you probably cannot “Shoot-Thru” your type of hull. Please visit our website for advanced troubleshooting information.

Scanning for Depth Changes or Fish (SideScan)

The unit has the ability to be used as a sideways scanning sonar depth sounder/fish finder to search for drop-off’s and hiding fish under docks, weeds, or vegetation.



To SideScan:

1. Activate the unit and place it perpendicular to the water to obtain a correct depth reading.
2. Once a correct reading is obtained, move the unit around in a scanning motion (similar to using a flashlight). Keep in mind that the sonar signals must be directed at a solid surface that is within 200 ft (61 m) to function properly. You must be certain to aim the unit at an object, or the bottom within this range.

Using the Unit for Diving



The unit is waterproof to 200 ft (61 m), allowing you to use it as a range finder or target finder for snorkeling or diving. You can point it at the surface, boat, wreck, reef, etc and instantly know how far away the object is.



ATTENTION:

To ensure the unit remains water tight, coat the Battery Cover O-Ring with petroleum jelly (*Vaseline*) or silicon grease (*available at any dive shop*) each time you replace the batteries.

Diving Do's, Dont's, and Tips:

- Keep in mind that the sonar signals must be directed at a solid surface that is within 200ft (61 m) to function properly. You must be certain to aim the unit at an object, or the bottom within this range.
- ALWAYS be certain to attach the Wrist/Safety Strap to your person, as the Unit will float to the surface if released.
- Once depths of 30 ft (9 m) are exceeded during diving, the unit will automatically enter into Depth and Fish Finding Mode (temperature readings are not able to be taken below 30 ft (9 m)). There is no need to press the activation button to obtain readings, just point the unit at the desired object and look at the display for readings. The unit will remain in depth/fish finding mode until it is brought back to a depth of 30 ft (9 m) or less.

Care of Your Handheld Sonar System PX

1. Clean the unit with fresh water and dry off before storing.
2. Remove the batteries from the unit to prevent battery leakage and corrosion.
3. Store the depth sounder in a cool, dry place. Never leave it in temperatures over **158° F (70 °C)** as the extreme temperatures can damage the electronic components.



WARNING:

The Handheld Sonar System PX incorporates a SureGrip texturized housing. Cleaning solvents and chemicals will remove the texture which gives the housing its grip. Never use anything other than mild soap and water to clean the housing.

I'm Having a Problem, What Do I Do?

Do not attempt to repair the unit yourself. There are no user serviceable parts inside, and opening it (*other than the battery cap*) will void the warranty. Please visit our website at www.norcrossmarine.com for troubleshooting information.

1. Nothing Happens When I Turn the Power On:

Activate the “Depth Reading Mode” as per the instructions in this manual. Once activated, place the sonar sensor near your ear and listen for a ticking sound. The presence of the ticking indicates that the unit is producing sonar signals.

Make sure that you have installed a good set of batteries as per the instructions in the “Installing the Batteries” section in this manual. You may also need to test the batteries in another device to ensure they are fully charged. If in doubt, replace the batteries with ones from a newly opened package.

Below freezing temperatures are extremely harsh on the electronic components within the Handheld Sonar System PX. It is important that you keep the unit in temperatures above -4° F (-20 °C) during operation. This may require you to keep the Handheld Sonar System PX in a jacket pocket or other warm place between uses.

If you are going to be using the Handheld Sonar System PX in temperatures below 20° F (-7° C) you must use Lithium ‘AA’ batteries. Cold temperatures significantly reduces power output of Alkaline batteries, which will reduce the performance of the Handheld Sonar System PX

2. The Depth Reading Is “---”:

Make sure that you are operating the unit in depths between 2.5 and 200 ft (1 to 61 m) . Be aware that the depth is measured in the direction that the unit is pointed. Holding the unit perpendicular to the water surface will ensure accurate readings. If you’re trying to “Shoot-Thru” cce or a boat hull, make sure that you are following the instructions precisely. The most common cause for incomplete readings using these methods is air between the sonar sensor and the water surface. If in doubt, try operating the unit directly in the water as per the instructions in the “Obtaining Depth Readings” section of this manual (*make sure the depth is between 2.5 ft and 200 ft (.8 to 61 m)*).

3. I See Fish Under the Unit, but Nothing Appears on the Display:

As with the depth reading, the Handheld Sonar System PX will not detect any objects within 2.5 ft (.8 m) of the sensor. Keep this in mind as generally, fish that can be seen from the surface are closer than 2.5 ft (.8 m).

4. The Depth Reading is Incorrect:

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

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

5. I'm Not Getting A Reading While Trying to "Shoot-Thru" My Boat Hull or Ice:

Shooting through the hull of a boat/canoe or ice can be a 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.

Advanced Troubleshooting

If you have questions about this product please visit our Customer Service Center on our website at www.norcrossmarine.com (You may also call us toll free at 888-667-2767) where you can find information relating to:

- **Warranty Details**
- **Warranty Registration**
- **Troubleshooting**
- **Product Knowledgebase**
- **Product Specifications**
- **Parts & Accessories**

DEPTH ft (m)	COVERAGE AREA ft (m)
10 (3.1)	4 (1)
20 (6.1)	7 (2.2)
30 (9.1)	11 (3.2)
40 (12.2)	14 (4.3)
50 (15.2)	18 (5.4)
60 (18.3)	21 (6.5)
70 (21.3)	25 (7.5)
80 (24.4)	28 (8.6)
90 (27.5)	32 (9.7)
100 (30.5)	35 (10.8)
110 (33.5)	39 (11.8)
120 (36.5)	42 (12.9)
130 (39.6)	46 (14)
140 (42.7)	49 (15.1)
150 (45.7)	53 (16.1)
160 (48.8)	56 (17.2)
170 (51.8)	59 (18.3)
180 (54.9)	64 (19.5)
190 (57.9)	67 (20.4)
200 (61)	71 (21.5)



COVERAGE AREA



To be eligible for the 2 year product warranty, you must register your product within 15 days of purchase. Please visit our Customer Service Center on our website or call 888-NorCross to register. Make a copy of your original purchase receipt and store it in a safe place. You will need to present it in the rare occurrence that you need to send your product in for service.



WARNING:

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