

In-Dash Digital Depth Sounder Installation and Operation Manual

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.

Safety Information:

- Read the following safety information carefully before attempting to operate this depth sounder.
- Only qualified personnel should perform repairs or servicing not covered in this manual.
- Periodically wipe the case with a dry cloth. Do not use abrasives or solvents on this device.
- Always cover the display with a cover when not in use. If one is not included with your display, you can purchase one at www.norcrossmarine.com.
- If gluing the transducer in-hull, always test the mounting location before affixing to the hull with epoxy.
- Want to save yourself hours of aggravation? If so, then read this manual entirely before attempting the installation.

IMPORTANT:



Install and test the display in the desired mounting location before attempting the transducer installation. If you are going to glue the transducer in-hull, you must use **ONLY A 2-PART, SLOW CURE CLEAR EPOXY.**

Standard Transducer Description

The transducer supplied with this Digital Depth Sounder is suitable for installation and operation on most boats. For optimal performance the transducer should be mounted to the transom of the vessel as per the transducer installation instructions. On fiberglass hulls (non-cored) and some aluminum hulls it can be glued to the inside of the hull, but this type of installation will require you to first test the installation location and it may reduce the performance of the Digital Sonar System slightly.

Parts Supplied in Packaging

Before installing your Digital Depth Sounder, please ensure that the following parts are included in the packaging:

- Digital Depth Sounder Display
- White and Black Faces and Bezels (*optional on some models, see package for details*)
- Display Sun Cover (*optional on some models, see package for details*)
- Thick Dash Extension Rod (*optional on some models, see package for details*)
- Flush Mount Bracket and Hardware
- Display Power Harness and Waterproof Fuse Holder Attached to the Unit

If any items are missing or damaged, please contact our customer service department at customerservice@norcrossmarine.com or 888-667-2767.

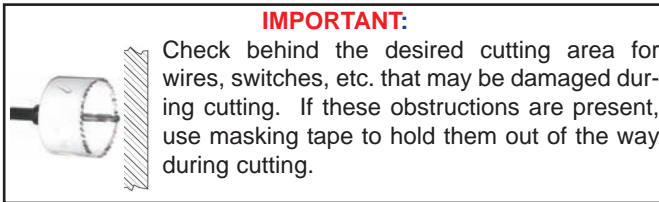
Tools and Supplies Required for Installation

- 2" Hole Saw and Drill
- Wire Connectors Suitable for Connecting the Power Wire to Your Vessel
- Wire Cutting/Crimping Tool
- Marine Sealant/Caulk

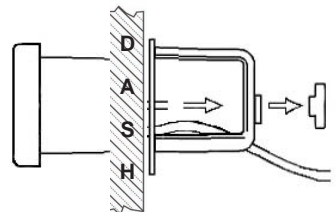
STEP 1

Installation of the Display

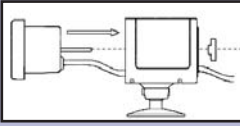
1. Find a location on the boat that will allow clear viewing of the display. Keep in mind that the wires for the transducer and power must reach the mounting location.
2. After finding the right location, mark a 2-inch hole. (*If your boat has a pre-cut hole in the dash panel, simply remove the hole plug and proceed to Step 5.*)



3. Cut out the 2-inch hole using the 2" hole saw.
4. Seal any exposed wood with a marine sealant.
5. Insert the display from the front of the panel, feed the wires through the bracket and install the bracket and locking nut from the rear of the panel. Make sure that the face of the display is rotated upright and aligned to your satisfaction for easy viewing from the vessel's helm.



NOTICE:

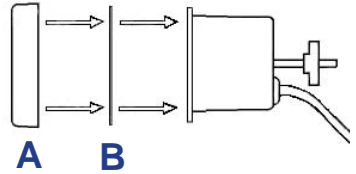


The display can also be surface mounted using the Adjustable Surface Mount Bracket (1000-10). Please visit our website or contact us by phone for purchase information. You must attach the extension rod to the mounting stud on the back of the display housing before inserting the display into the Surface Mount Bracket.

STEP 2

Installing the Face and Bezel

1. Place the face (B) over the display making sure to line up the cut outs on the face with the notches on the display.
2. While holding the bezel (A), place it over the display and turn counterclockwise until the bezel locks into place.



NOTICE:



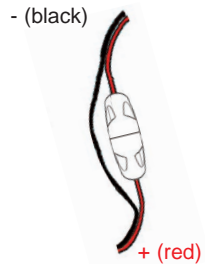
Gold and Chrome Alloy Bezels can be purchased on our website to match your factory dash or give your Digital Depth Sounder a custom appearance (P/N: 1000-20, 1000-22).

STEP 3

Connecting of the Power Cable

The display has no ON/OFF switch. Therefore, you will need to connect the power harness to a power source that will turn the unit on as power is applied. The key switch or an ON/OFF power switch will be suitable for powering the unit.

1. Connect the BLACK wire in the harness to a negative (-) terminal or suitable ground.
2. Connect the RED wire in the harness to a positive (+) 12 Volt switchable power source (key switch, on/off switch, terminal block, etc).



NOTICE:



Use only connectors designed for the marine environment. These connectors form a solid electrical connection and are less likely to corrode. Never use "Twist-On" or "Automotive" type connectors.



STEP 4

Testing the Display Installation

Before continuing with your installation, you should test the unit to make sure the power wires are properly attached.

1. Apply power to the unit by turning on the power source that you've attached the red and black wires to.
2. The buzzer should beep twice while the display illuminates all the LCD graphics for 2 seconds. "----" will then be shown on the LCD.



If the display operates as per Step 2 above, continue to the "Getting to Know Your Digital Depth Sounder" section.

If the display does not turn ON:

1. Check the power source using a test light or DC volt meter. Make sure there is 12 volt power where the power harness connects to both the positive and negative sources.
2. Check the fuse holder assembly with a test light or DC volt meter. Connect the ground for the test meter or light to the vessel's negative power source.
 - A) Remove the fuse and check for 12 volt power at the spring located inside the fuse housing that is connected to the vessel's power source. *If 12 volt power is present continue to Step 2-B. If power is not present, return to Step 1.*
 - B) Insert the fuse and check for 12 volt power at the end of the fuse. *If 12 volt power is present continue to Step 2-C. If power is not present, replace the fuse.*
 - C) Reassemble the fuse housing. Strip back a quarter of an inch of wire cover on the display side of the fuse housing and test for 12 volt power. *If 12 volt power is present continue to Step 2-D. If power is not present, replace the fuse housing assembly.*
 - D) Visit our Customer Service Center on our website or call 888-667-2767 for advanced technical support.



A



B



C



IMPORTANT:



The fuse used in the In Dash Depth Sounder is a .25A, 250V fuse. Do not rely on a visual inspection of the fuse to determine if it is functioning. If your depth sounder will not turn on, ALWAYS test the fuse with a test light or voltage meter.

STEP 5

Getting to Know Your Digital Depth Sounder

The Digital Depth Sounder's auto-ranging, auto-sensitivity features means that you never have to worry about adjustments. Simply turn the power on, and you're ready to go. The Depth Sounder emits sound signals that travel through water, and then calculates the amount of time that elapsed while the signal traveled down to the bottom and returned back to the transducer. This time is calculated by the microprocessor and displayed as a depth reading. Extremely dirty water, very soft bottom, high speeds, deep water, or a combination of the above will result in incomplete or inaccurate readings. Under these conditions variable readings or "- - -" will be displayed.



NOTICE:

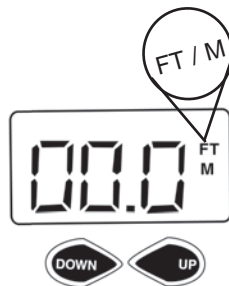
This depth sounder has a non-volatile memory. ALL settings will be stored when the power is turned OFF.

Units of Measure

The units of measure for the depth readout and alarm functions can be set in 4 easy steps. The two settings available are Feet (FT) and Meters (M).

To Set the Units of Measuring:

1. Press and hold the "UP" and "DOWN" keys at the same time for 5 seconds until the unit's indicator (FT or M) blinks.
2. To set the units to FEET press the "UP" key. "FT" will flash on the Display.
3. To set the units to METERS press the "DOWN" key. "M" will flash on the Display.
4. The display will return to the normal operation mode automatically after five seconds.



Shallow Water Alarm

The shallow alarm function can be set for depths ranging from 3 to 200 feet and triggers an alarm when the depth is less than the setting.

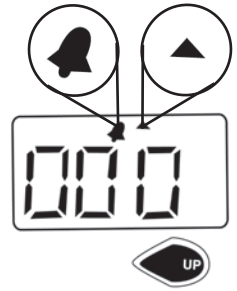
To set the SHALLOW ALARM (upper alarm):

1. Press the "UP" key located on the front of the display. The current alarm setting will be displayed on the display. "000" is the default setting.
2. Pressing the "UP" key will increase the selected value. Pressing the "DOWN" key will reduce the value. Pressing and releasing the key will change the value in 1-foot increments per second. Holding down the key will change the value in 9 foot increments per second.

3. After your selection is made, the display will return to normal operation after 5 seconds.

4. The "🔔" and "▲" icons will now be present.

When triggered, the alarm sounds an audible "alarm" for ten seconds while flashing the warning LED and the "🔔" and "▲" icons on the display. After 10 seconds, the audible alarm mutes and the warning LED and the "🔔" and "▲" icons continue to blink until the depth increases, or the alarm is reset. To reset the alarm repeat steps 1 thru 4.

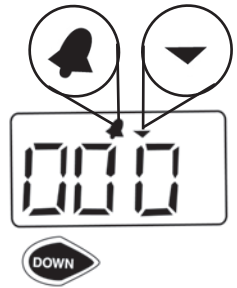


Deep Water Alarm

The DEEP alarm function can be set for depths ranging from 3 to 200 feet and triggers an alarm when the depth is more than the setting.

To set the DEEP ALARM (lower alarm):

1. Press the "DOWN" key located on the front of the display. The current alarm setting will be displayed. "000" is the default setting.
2. Pressing the "UP" key will increase the selected value. Pressing the "DOWN" key will reduce the value. Pressing and releasing the key will change the value in 1-foot increments per second. Holding down the key will change the value in 9-foot increments per second.
3. After your selection is made, the unit will return to normal operation after 5 seconds.
4. The "🔔" and "▼" icons will now be present



When triggered, the alarm sounds an audible "alarm" for ten seconds while flashing the warning LED and the "🔔" and "▼" icons on the display. After 10 seconds, the audible alarm mutes and the warning LED and the "🔔" and "▼" icons continue to blink until the depth decreases, or the alarm is reset. To reset the alarm repeat step 1 thru 4.

Keel Offset

The Keel Offset feature is used to adjust the depth readings displayed by the unit to compensate for the depth of the water required for your vessel to operate safely.

For Example: If your boat's draft is 3 feet, the Keel Offset feature should be set to 3 feet. The unit will then subtract 3 feet from the actual depth reading and display this figure as the depth. If the water depth is 5 feet and the Keel Offset is set to 3 feet, the depth will be displayed as 2 feet, indicating to the operator that there is 2 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.

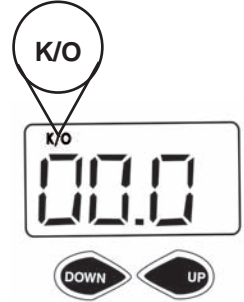


Warning:

If you are unsure of the Draft of your vessel, please consult with the vessel's manufacturer before setting the Keel Offset. An improper Keel Offset setting can cause accidentally grounding of the vessel and may cause severe damage to the vessel and its passengers.

To set the Keel Offset:

1. Press and hold the "UP" and "DOWN" keys at the same time for 3 seconds. When "K/O" begins flashing in the upper left hand corner of the display, release the keys.
2. Press the "UP" key to increase the Keel Offset value. Press the "DOWN" key to reduce the value.
3. The display will return to the normal operation mode after five seconds if no keys are pressed.
4. "K/O" will remain illuminated in the top left hand corner indicating that the depth readings are adjusted to the Keel Offset setting.



STEP 6

Install the Transducer

It's now time to test and install the transducer. Please refer to the manual(s) supplied with your transducer.

Troubleshooting

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 can not 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.

Using A Non-Standard Transducer:

You may be able to use a transducer that is currently installed in your watercraft or a specialized transducer. You need to be sure that the transducer runs on 200Khz and is able to put out 250 watts of transmitting power. If you are unsure of the specifications please contact the manufacturer. If you need to attach a non-standard transducer to the Digital Depth Sounder display, order part # 8000-90 from our website or toll free at 888-667-2767. Strip back the rubber cable cover 1" (28 mm) exposing the three internal wires (blue, white, and bare) on your transducer. Using a soldering iron, solder the blue, white and bare wires from the 8000-90 extension cable to the corresponding wires on your transducer. Using electrical tape, or heat shrink tubing make certain that the soldered connections are completely sealed and protected against accidental electrical interference and corrosion. **Cutting the plug off the Digital Depth Sounder display will void the warranty.**

Poor Performance:

If you are not happy with the performance of your depth sounder, please visit our website or call 888-667-2767 for technical support. Rest assured that this depth sounder is engineered to the highest standards and is part of the the best selling family of depth sounders in the world. It is highly likely that your dissatisfaction is due to improper installation and/or setup and our technical support resources can get your system working properly.

Advanced Troubleshooting Help:

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**

Replacement Parts:

Visit our website or call 888-667-2767 to order replacement parts.

- **1000-01** - Digital Depth Sounder Display Assembly
- **1000-10** - Adjustable Surface Mount Bracket
- **1000-20** - Gold Alloy Bezel
- **1000-22** - Chrome Alloy Bezel
- **1000-30** - Display Sun Cover
- **8000-01** - Combination Transom/In-Hull Transducer Assembly
- **8000-90** - 30' Transducer Cable Extension w/ Waterproof Plug
- **8000-91** - Transom Mount Bracket Kit
- **8000-95** - 2-Part, Slow Cure, Epoxy Kit for In-Hull Transducer Mounting

NOTICE



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 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:

© 2006 NorCross Marine Products Inc., All Rights Reserved. ALL unauthorized copying of the content of this manual without the expressed written consent of NorCross Marine Products, Inc will be prosecuted to the fullest extent of the law.