

BOAT MOUNT DIGITAL DEPTH FINDER WITH TEMPERATURE INSTALLATION AND OPERATION MANUAL

This manual covers the installation and operation of both temperature and non-temperature depth finder displays. Refer to the instructions supplied with the transducer for transducer testing and installation. Additional resources are available at support.norcrossmarine.com. To ensure safety and many years of trouble-free operation of your product, please read this manual carefully before using this product.

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.



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 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.

PARTS SUPPLIED IN PACKAGING

The following parts should be included with the display:

- Digital Depth Sounder Display
- White and Black Faces and Bezels (*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

NOTICE:



Refer to the manual supplied with the transducer for transducer parts list.

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

SELECTING THE PROPER TRANSDUCER INSTALLATION

If you think that the included transducer is not suitable for your installation, return to the place of purchase and exchange it for the correct transducer. You can also visit our Customer Service Center at www.hawkeyelectronics.com to contact us or to complete a transducer exchange request to exchange the transducer for one that is specialized for your vessel. You may also visit support.norcrossmarine.com to inquire about exchanging the transducer.

INSTALLING THE DISPLAY

Tools & Supplies Required for Installation

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

STEP 1

Installing 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.

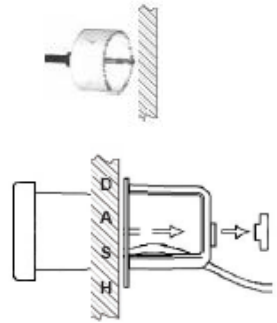
- After finding the right location, mark a 2-inch hole. (If your boat has a pre-cut hole in the dash panel, simply remove the hole plug and proceed to Step 5.)

IMPORTANT:

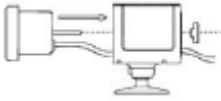


Check behind the desired cutting area for wires, switches, etc. that may be damaged during cutting. If these obstructions are present, use masking tape to hold them out of the way during cutting.

- Cut out the 2-inch hole using the 2" hole saw.
- Seal any exposed wood with a marine sealant.
- 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:

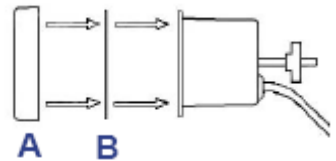


The display can also be surface mounted using the Adjustable Surface Mount Bracket (P/N: ACC-DF-1000). Please visit our website or contact us by phone for purchase information. You must attach the extension rod to the mounting stud on the back of the display housing before inserting the display into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

STEP 2

Installing the Face and Bezel

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



NOTICE:



Gold and Chrome Bezels can be purchased on our website to match your factory dash or give your depth finder a custom look.

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:



Never use “Twist-On” or “Automotive” type connectors. These connectors do not form a solid electrical connection and are more likely to corrode.

STEP 4

Testing the Display Installation

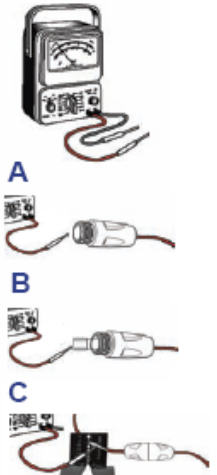
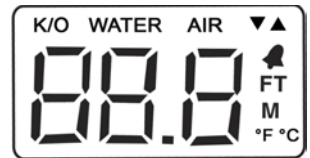
Before continuing with your installation, you should test the unit to make sure the power wires are properly attached.

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 three times while the display illuminates all the LCD graphics for 2 seconds. “---” will then be shown on the LCD.

If the display operates as per #2 above, continue to the “Basic Operation” 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.
3. 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 the next step. If power is not present, return to Step 1.

4. Insert the fuse and check for 12 volt power at the end of the fuse. If 12 volt power is present continue to Step C. If power is not present, replace the fuse.
5. 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.
6. Visit our Customer Service Center at support.norcrossmarine.com for advanced technical support.

NOTICE:



The fuse used in the depth finder 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.

GETTING TO KNOW YOUR DIGITAL DEPTH SOUNDER

The unit'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.

DISPLAY MODE SELECTION (TEMPERATURE MODELS ONLY)

The Temperature Models have 3 user selectable modes:

- Depth Sounder
- Water Temperature
- Air Temperature



To Change the Mode:

1. Press the "UP" Button to change the mode to the Right (*The display will change modes from Depth to Water Temperature to Air Temperature*)
2. Press the "DOWN" Button to change the mode to the Left (*The display will change modes from Depth to Air Temperature to Water Temperature*)

NOTICE:








When a Temperature Mode is selected the Water or Air indicator will flash on the LCD for 5 seconds while the temperature is calculated.

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. You must be in the "Depth Sounder" mode to adjust this setting.

To set the SHALLOW ALARM (upper alarm):

1. Press the "UP" key to access the shallow water alarm setting. The  icon will illuminate and the  indicator will blink.
 - On depth finders with temperature, press and hold BOTH the "UP" & "DOWN" key for approximately 3 seconds until the , , &  icons blink, release the keys and Press the "UP" key once
2. Pressing the "UP" key will increase the selected value. Pressing the "DOWN" key will reduce the value.
3. Pressing and releasing the key will change the value in 1-foot increments per second.
4. Holding down the key will change the value in 9 foot increments per second.
5. After the desired setting is achieved, the display will return to normal operation after 5 seconds.



6. The ▲ and 🚿 indicators will now be illuminated to indicate that a shallow water alarm is set.

When triggered, the alarm sounds an audible buzzer 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 5.

NOTICE:



Each time the Shallow Water Alarm setting is changed you must wait 5 seconds for the depth finder to return to the Normal Operation Mode in order for the setting to be saved?

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. You must be in the "Depth Sounder" mode to adjust this setting.

To set the DEEP ALARM (lower alarm):

1. Press the "DOWN" key to access the deep water alarm setting. The 🚿 icon will illuminate and the ▼ indicator will blink.
 - On depth finders with temperature, press and hold BOTH the "UP" & "DOWN" key for approximately 3 seconds until the ▼, 🚿, & ▲ icons blink, release the keys and Press the "DOWN" key once
2. Pressing the "UP" key will increase the selected value. Pressing the "DOWN" key will reduce the value.
3. Pressing and releasing the key will change the value in 1-foot increments per second.
4. Holding down the key will change the value in 9 foot increments per second.
5. After the desired setting is achieved, the display will return to normal operation after 5 seconds.
6. The ▼ and 🚿 indicators will now be illuminated to indicate that a deep water alarm is set.



When triggered, the alarm sounds an audible buzzer 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 5.

NOTICE:



Each time the Deep Water Alarm setting is changed you must wait 5 seconds for the depth finder to return to the Normal Operation Mode in order for the setting to be saved?

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, the Keel Offset feature should be set to 3 feet. 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 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 until the **K/O** indicator begins to blink (*approximately 6 seconds*).
 - On depth finders with Temperature press and hold BOTH the "UP" & "DOWN" keys until **K/O** blinks on the display.
2. Release the Keys.



3. Press the "UP" key to increase the Keel Offset value. Press the "DOWN" key to reduce the value.
4. The display will return to the normal operation mode after five seconds if no keys are pressed.
5. "K/O" will remain illuminated in the top left hand corner indicating that the depth readings are adjusted to the Keel Offset setting.

NOTICE:



Each time the Keel Offset setting is changed you must wait 5 seconds for the depth finder to return to the Normal Operation Mode in order for the setting to be saved?

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). You must be in the "Depth Sounder" mode to adjust this setting.

To Set the Units of Measure:

1. Press and hold the "UP" and "DOWN" keys until the current unit of measure begins to blink (*approximately 8 seconds*).

- On depth finders with Temperature press and hold BOTH the "UP" & "DOWN" keys until **FT or M** blinks on the display"



2. Release the Keys.
3. To set the units to FEET press the "UP" key. "FT" will flash on the Display.
4. To set the units to METERS press the "DOWN" key. "M" will flash on the Display.
5. The display will return to the normal operation mode automatically after five seconds.

NOTICE:



Each time the Units of Measure is changed you must wait 5 seconds for the depth finder to return to the Normal Operation Mode in order for the setting to be saved?

INSTALLING THE TRANSDUCER

IMPORTANT:



Install and test the display in the desired mounting location before attempting the transducer installation.

IMPORTANT:



Refer to the instructions supplied with the transducer for transducer testing and installation. Additional resources are available at support.norcrossmarine.com.

NOTICE:



Any transducer supplied with our depth finders that do not have temperature readouts can be glued in-hull. Please visit support.norcrossmarine.com and type "Glue-In" in the search box for step by step instructions.

TROUBLESHOOTING AND FREQUENTLY ASKED QUESTIONS

24-Hour Technical Support is available online at hawkeyelectronics.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.

INFORMATION:



If you have questions about this device please visit our Customer Service Center on our website at support.norcrossmarine.com

Warranty Details • Warranty Registration

Troubleshooting • Product Knowledgebase

Product Specifications • Parts & Accessories

www.hawkeyelectronics.com

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 200 Khz 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 # ACC-DF-1147 from our website hawkeyelectronics.com. Strip back the rubber cable cover 1" (28 mm) exposing the internal wires on your transducer. Using a soldering iron, solder the wires 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 support center at support.norcrossmarine.com technical support. Rest assured that this depth sounder is engineered to the highest standards and is part of 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.

REPLACEMENT PARTS

Individual components are not available for sale on our website. If you need replacement parts, please email our customer service department.

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 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: _____ (3 digit code located on the device housing)

LEGAL

INFORMATION:

Made in China. 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.

NorCross Marine Products, Inc

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