

# 1240A

IN-DASH MOUNT SONAR

INSTALLATION AND  
OPERATION INSTRUCTIONS

**L<sup>®</sup> LOWRANCE**

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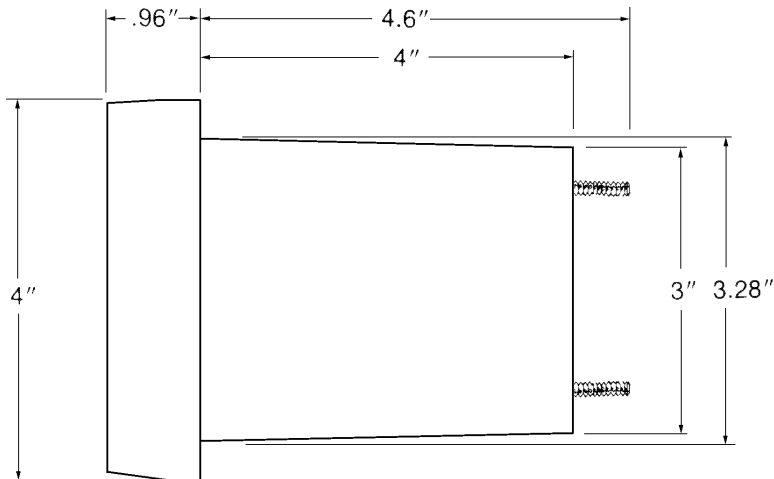
## INSTALLATION

### MOUNTING

Your 1240A is designed for convenient mounting the dash of your boat, or it can be mounted on any flat panel that's at least four inches in diameter.

If the sonar is to be located in the vicinity of a magnetic compass, run it in position temporarily to make certain it doesn't affect the compass readings. If the compass heading changes, choose an alternate location. (Note: The sonar must be running when you make this test.)

To mount the 1240A, first make certain there is clearance behind the dash in the desired location. (See below for the unit's dimensions.) Also, be sure there is enough room to connect power and attach the transducer connector at the rear of the unit. At least 5 1/4" are needed from the front surface of the dash to clear all connectors and wiring. Once you've decided on the mounting location, mark the spot.

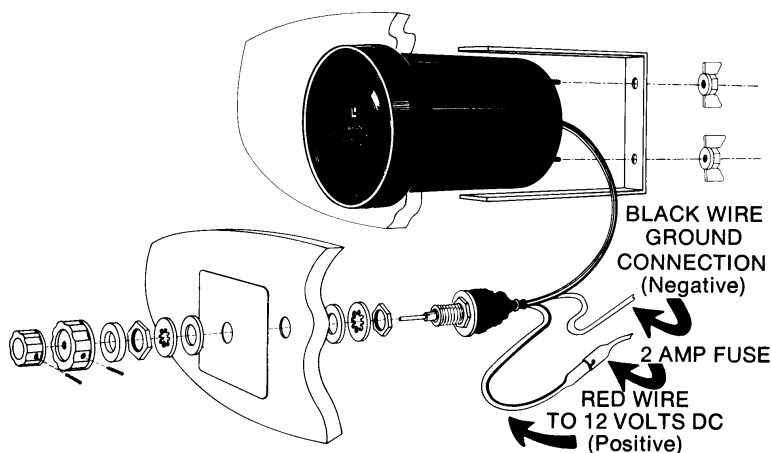


Next, determine where to mount the control. Select an area with sufficient space for the control decal on the front and enough depth behind the panel for the control. The maximum panel thickness the control will attach to is 5/8". Make certain the control's cable will reach the display. Mark the spot for the control.

Using a 3 3/8" hole saw, drill the display mounting hole. The display's bezel will overlap the hole by 5/16", hiding minor chipping which may occur when drilling the hole in fiberglass.

Now drill the hole for the control. Use a 3/8" drill bit.

**MAKE CERTAIN THAT ALL HOLES ARE DRILLED PERPENDICULAR TO THE MOUNTING SURFACE AND NOT AT AN ANGLE.**



A "U" bracket is supplied to hold the sonar to the dash. Place it over the studs on the back of the unit and secure it using the nylon wing nuts provided. If the "U" bracket is too long, it can be cut to the desired length with a saw.

Before mounting the control, clean the mounting surface for the control decal. Remove the paper backing from the decal to expose the adhesive and place it over the control's mounting location. Make certain the holes in the decal and dash are aligned.

Mounting hardware for the control, consisting of two nuts, lockwashers, and flat washers are supplied in the hardware pack. First, thread a nut onto the shaft. The amount of threading depends on the thickness of the dash. Place a lockwasher and a flat washer on the shaft. Insert the control in the hole from the back side of the dash and place another flat washer and lock washer onto the shaft. Thread the other nut on, but don't tighten it yet. Place the large knob onto the shaft and tighten the set screw enough to lock it into position on the flat side of the shaft. With the switch in the far left "OFF" position, rotate the control so that the pointer on the knob aligns with the "OFF" position on the decal. When it's properly positioned, slide the knob off and tighten the nut on the control. About 1 1/2 threads should show beyond the nut on the front of the dash. Place the foam washer and large knob over the shaft and tighten the knob's setscrew. Place the small knob onto the shaft, align the setscrew with the flat on the shaft, leave a small gap between the small knob and the large one and tighten its setscrew.

## POWER CONNECTION

12-volt DC power for the 1240A is supplied from the boat's 12-volt electrical system. You can connect the power either from an existing fuse block that's behind the dash or directly to the battery. An in-line fuse holder is supplied with the unit in case a fuse is not available. Attach the fuse holder as close to the power source as possible. This will help protect both the unit and the power cable in the event of a short circuit.

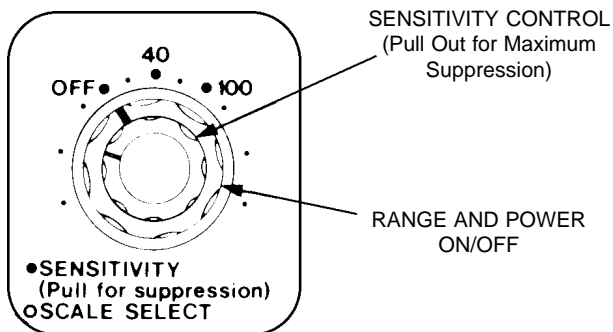
Caution! Never connect this unit to power without a fuse!

The positive wire is red. The negative wire is black and should be attached to the negative ground buss or the negative side of the battery.

This unit is protected from accidental polarity reversal and no damage will result if the battery connections are wrong. However, the unit will not work until correct polarity is applied.

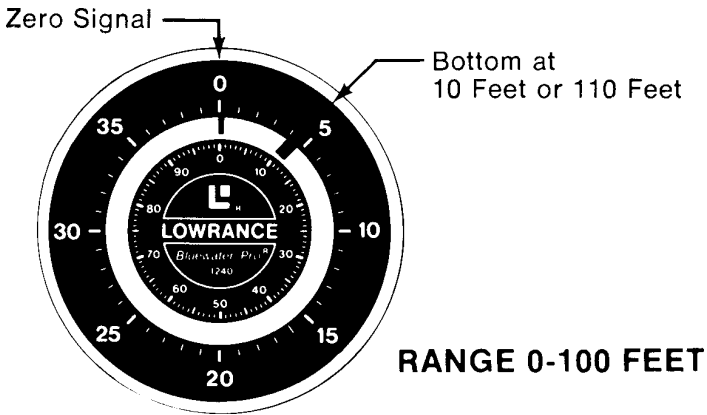
## OPERATION

To turn the sonar on, rotate the large control knob from the "off" position to either 40 feet or 100 feet. This is a three-position switch and controls both power on/off and range select. To turn the sonar off, rotate the switch back to the "off" position.



## RANGE SELECT

There are two scales on the 1240A - 0 to 40 feet and 0 to 100 feet. Make the selection by turning the large knob to the 40 or 100 setting. Depths greater than 100 feet can also be measured. For instance, as the water depth goes from 90 to 110 feet, you will see the bottom signal on the dial move past the "zero" signal to the 10-foot mark. Thus, on the second revolution, depths of 100 to 200 feet can be read by adding 100 feet to the reading on the dial.

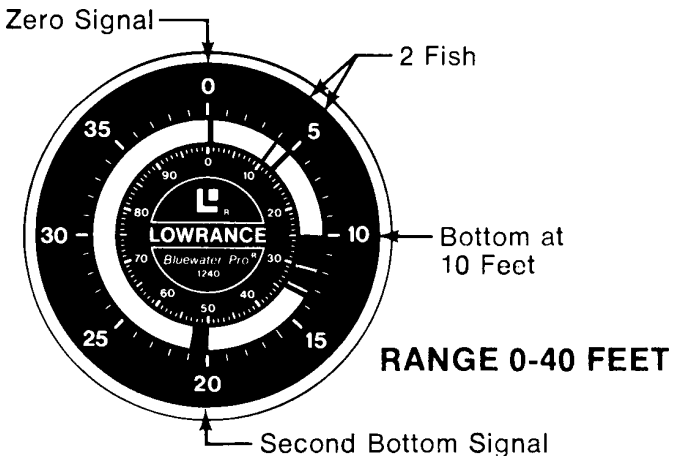


If you're in doubt about the depth, turn the unit off until the scan disc stops. Turn it back on and watch to see if the bottom signal completes one revolution before stopping. If it does, the present water depth is the depth shown plus 100 feet. If the signal travels around the dial two times, the water depth is the depth shown plus 200 feet.

### SENSITIVITY

Vary the sensitivity by rotating the small knob. It works similarly to the volume control on a radio. Turned fully counterclockwise, it's at minimum and the only signal that will appear on the dial, (unless it's in extremely shallow water) will be the constant surface signal at "0". Turning the knob clockwise will increase the receiver sensitivity and weaker echoes from deeper water shows on the dial.

For example, if you are in 10 feet of water and the sensitivity control is at minimum, you will see only the "0" signal. As you turn up the sensitivity, a



signal appears at 10 feet on the dial. As it's turned up more, this signal will get wider and other smaller signals from fish (if present) appear between 0 and 10 feet. The bottom signal gets wider because you are seeing more bottom area. Remember that the true depth is always the shallowest edge of the bottom signal, NOT the middle. As you turn the sensitivity up more, another signal appears at 20 feet on the dial, double the depth of the first signal. It's caused by the sound waves hitting bottom, bouncing back, hitting the surface of the water and then bouncing down to the bottom and back again. These signals have travelled double the actual depth.

Always set the sensitivity to return a steady bottom signal, regardless of depth. To show fish, adjust the sensitivity to show a second bottom signal, when possible.

### **SUPPRESSION**

Use suppression to reduce or eliminate false flashes on the dial caused by electrical interference or cavitation on the transducer. With the small knob pushed in, suppression is at minimum. This is the normal position for trolling as it gives the highest resolution (ability of the sonar to separate targets such as fish that are close together or near the bottom). To switch to high suppression, pull out the small knob. You will feel a "click". The knob in the "pulled-out" position gives the best interference rejection which is usually required when operating at speed. Because of the type of suppression circuitry used by Lowrance, the unit's sensitivity is not affected. (Sensitivity in a sonar unit is measured by the instrument's ability to read at depth plus show details.) A small amount of resolution will be lost when engaging suppression. Note that suppression can be engaged by pulling out on the sensitivity knob at any time.

### **SPECIFICATIONS**

Dimensions .....	Fits 3 3/8" diameter mounting hole Maximum outside diameter 4" Depth behind mounting surface 4 5/8"
Weight: .....	23 oz (with control)
Dial .....	0-40 feet; 0-100 feet
Input Voltage .....	12 vDC (10.5 to 15 vDC)
Current Drain .....	200 ma., one echo
Transmitter Frequency .....	192 kHz
Pulse Repetition Rate .....	0-60 ft - 60 pps 0-100 ft - 24 pps
Pulse Width .....	Suppression minimum - 200 us Suppression maximum - 800 us
Output Power .....	150 watts peak to peak (19 watts RMS)

# LOWRANCE ELECTRONICS FULL ONE-YEAR WARRANTY

"We", "our", or "us" refers to LOWRANCE ELECTRONICS, INC., the manufacturer of this product. "You" or "your" refers to the first person who purchases this product as a consumer item for personal, family, or household use.

We warrant this product against defects or malfunctions in materials and workmanship, and against failure to conform to this product's written specifications, all for one year (1) from the date of original purchase by you. WE MAKE NO OTHER EXPRESS WARRANTY OR REPRESENTATION OF ANY KIND WHATSOEVER CONCERNING THIS PRODUCT. Your remedies under this warranty will be available so long as you can show in a reasonable manner that any defect or malfunction in materials or workmanship, or any non-conformity with the product's written specifications, occurred within one year from the date of your original purchase, which must be substantiated by a dated sales receipt or sales slip. Any such defect, malfunction, or non-conformity which occurs within one year from your original purchase date will either be repaired without charge or be replaced with a new product identical or reasonably equivalent to this product, at our option, within a reasonable time after our receipt of the product. If such defect, malfunction, or non-conformity remains after a reasonable number of attempts to repair by us, you may elect to obtain without charge a replacement of the product or a refund for the product. THIS REPAIR, REPLACEMENT, OR REFUND (AS JUST DESCRIBED) IS THE EXCLUSIVE REMEDY AVAILABLE TO YOU AGAINST US FOR ANY DEFECT, MALFUNCTION, OR NON-CONFORMITY CONCERNING THE PRODUCT OR FOR ANY LOSS OR DAMAGE RESULTING FROM ANY OTHER CAUSE WHATSOEVER. WE WILL NOT UNDER ANY CIRCUMSTANCES BE LIABLE TO ANYONE FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR OTHER INDIRECT DAMAGE OF ANY KIND.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

This warranty does NOT apply in the following circumstances: (1) when the product has been serviced or repaired by anyone other than us, (2) when the product has been connected, installed, combined, altered, adjusted, or handled in a manner other than according to the instructions furnished with the product, (3) when any serial number has been effaced, altered, or removed, or (4) when any defect, problem, loss, or damage has resulted from any accident, misuse, negligence, or carelessness, or from any failure to provide reasonable and necessary maintenance in accordance with the instructions of the owner's manual for the product.

We reserve the right to make changes or improvements in our products from time to time without incurring the obligation to install such improvements or changes on equipment or items previously manufactured.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state.

REMINDER: You must retain the sales slip or sales receipt proving the date of your original purchase in case warranty service is ever required.

This warranty does not apply to any database or its contents supplied initially with this product. For warranty information on the databases and their contents, please refer to the "Databases Limited Warranty" included with this product.

## **How to Obtain Service - U.S.A. Only**

We back your investment in quality products with quick, expert service and genuine Lowrance® replacement parts. If you're in the United States and you have questions, please contact the Factory Customer Service Department using our toll-free number listed below. You must send the unit to the factory for warranty service or repair. Please call the factory before sending the unit. You will be asked for your unit's serial number. Use the following toll-free number:

**800-324-1356**

U.S.A. only. Monday through Friday 8:00 A.M. - 8:00 P.M. Central time, except holidays.

Your unit is covered by a full one-year warranty. (See inside this manual for complete warranty details.) If your unit fails and the failure is not covered by the original warranty, Lowrance has a flat-rate repair policy that covers your unit and accessories packed with the unit at the factory. There is a 180-day warranty on all non-warranty repairs from the factory, which is similar to the original warranty, but is for 180 days rather than one year. For further details, please call us at the above number.

*<http://www.lowrance.com>*

## **Accessory Ordering Information**

To order accessories, please contact:

1) Your local marine dealer. Most quality dealers that handle marine electronic equipment should be able to assist you with these items. Consult your local telephone directory for listings.

2) LEI Extras, Inc. P.O. Box 129 Catoosa, OK 74015-0129

or call

800-324-0045

(USA orders only.)

On the internet, <http://www.leiextras.com>

Lowrance Electronics may find it necessary to change or end our shipping policies, regulations, and special offers at any time. We reserve the right to do so without notice.

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