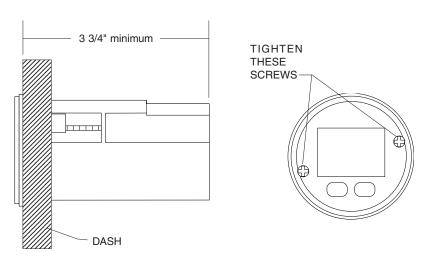
LDT-3003

Installation and Operation Instructions

The LDT-3003 combines a clock, hour meter, voltmeter, and up to three temperature sensors in one housing. (Since the LDT-3003 is packed with different options, you may not have all three temp sensors.) It shows the temperature in either °F or °C, selectable by the user. This unit fits in a standard 2 1/8" (54 mm) hole used by most marine equipment manufacurers.

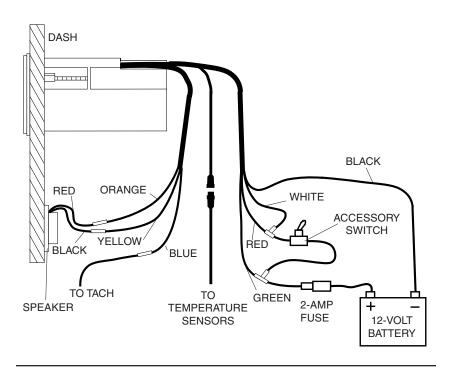
Mounting

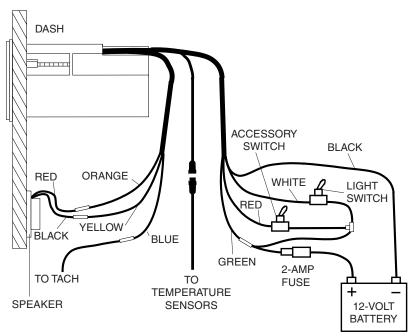
The LDT-3003 mounts in any dash or flat panel that's at least 2 1/2" (64 mm) in diameter. To mount the unit, first make certain there is at least 3 3/4" (95 mm) from the *front* of the dash to any obstruction behind the dash. Also, be sure there is room to route the power and sensor cables. The *maximum* usable dash thichness is 1 1/8" (28.5 mm).



When you determine the location for the LDT-3003, drill a 2 1/8" (54 mm) hole in the dash. Slide the LDT-3003 through the hole from the front of the dash. Align it so that it's straight, then tighten the two screws with a phillips-head screwdriver.

Place the pushbuttons into the holes in the bezel and snap it on to the LDT-3003. The unit is now ready for wiring.





WIRING

Connect the wires as shown in the diagrams on the opposite page. The LDT-3003 operates from 10 to 15 vdc (12-volt system). You can connect the wires as shown in the diagram at the top of the page using only one accessory switch (not included), which switches the unit's lights on at the same time the unit is turned on, or you can wire the lights to a separate switch as shown at the bottom of the page. Regardless of which wiring method you use, the LDT-3003 must be wired to a 2-amp fuse! Failure to fuse this product will void the warranty and could result in damage to the unit or your boat.

The unit won't be harmed if the power wires are connected backwards, however, it won't work until they're properly connected.

Make certain to connect the green wire to unswitched +12 volts. This keeps power on to the unit's memory so that the clock will keep running even when the unit is switched off.

Find a location for the speaker that is protected from the elements, but still lets you hear it. The typical mounting location is behind the dash. If the LDT-3003's wires won't reach the speaker, splice ordinary speaker wire to them.

SENSORS

The LDT-3003 can use the following sensors:

TS-W2BK Two temperature sensors - Water and Temp 2.

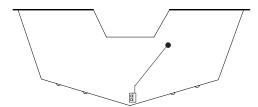
TS-3BK One temperature sensor - Temp 3 only.

We reccommend you use the LDT-3003 with the above sensors in the following combination:

One TS-W2BK. This gives you two temperature displays - Water and T2. or

One TS-W2BK and one TS-3BK. This gives you three temperature displays - Water, T2, and T3.

For example, you can connect the TS-W2BK temperature sensors and mount the sensor labeled "water" on the transom to measure surface water temperature and the sensor labeled "T2" in the live well or on the hull for outside air temp. The TS-W3BK has an extra connector so you can attach the TS-2BK temperature sensor to it, then attach the TS-3BK's connect to the LDT-3003 and have three separate temperature displays.



The temperature sensors can be mounted in any convenient location. Use #8 stainless steel screws to attach the sensor to the hull. (Screws not included.) When mounting the water temperature sensor as shown above, make certain to place it on the transom where it will be in contact with the water at all times, if possible.

OPERATION

Modes

The LDT-3003 has a clock, a clock alarm, up to three temperature displays, an alarm for each temperature sensor, an engine hour meter, and a voltmeter. To switch between these modes, simply press the mode key.

Clock

When the unit is turned on, the clock appears as shown at right. A dot in the upper left corner of the screen is for a.m. or p.m. - it's your choice when you set the clock. The clock will continue to run even when the unit is turned off.





Water Temperature

The first temperature to appear after pressing the MODE key is the water temperature. This sensor is mounted on the transom.





T2 Temperature

The second temperature to appear is T2. This sensor can be mounted in a live well, on the hull to measure outside air temperature, or just about any other location.





T3 Temperature

If you have the T3 temperature sensor installed, it appears after T2. This sensor can also be mounted in a live well, on the hull to measure outside air temperature, or just about any other location.





Engine Hour Meter

This shows the total number of hours the engine has operated. It senses the engine operation from the tachometer. The LDT-3003 must be turned on, however to record engine time. The engine hour meter cannot be reset. (Note: The engine must be running in order to view the hour meter.)





Voltmeter

The voltmeter shows the current electrical system voltage.



Setting the LDT-3003

The clock can be set to the correct time, alarms can be set to desired time and/or temperature (for each temperature probe), and the temperature displays can be set to °F or °C. The LDT-3003 has a "set" mode that cycles through all of these settings, starting with the clock. To set any of these features, simply press the SET key repeatedly until the desired function appears that you wish to change, then press the MODE key to change it.

Set Clock

The first time the unit is turned on, the clock appears. In this example, 12:00 is showing. To set the clock, first press the SET key once. The colon between the 2 and first 0 begins flashing. Now press the MODE key. The "12" begins flashing with the colon.

Press the SET key to change the hours. (Note: A dot may appear in the upper left corner of the display while you're setting the clock. This can signify either a.m. or p.m. - it's your choice.) When the hours number is correct, press the MODE key again. The minutes start flashing. Press the SET key until the minutes show the correct time. When the correct time shows, press the MODE key. The clock is now set.

Set Clock Alarm

To set the clock alarm, press the SET key until the clock alarm similar to the one at right appears. The colon between the 5 and first 0 begins and the letters "ALM" begin flashing. Now press the MODE key. The "12" begins flashing with the colon. Press the SET key to change the hours. (Note: The dot that appears in the upper left corner of the display signifys either a.m. or p.m. - make certain you set the alarm the same as the clock.) When the hours number is correct, press the MODE key again. The minutes start

flashing. Press the SET key until the minutes show the correct time. When the correct time shows, press the MODE key. The clock alarm is now set.

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You can turn the clock alarm off by pressing the SET key until the clock alarm appears, then press the MODE key once, then press the SET key again. The word "OFF" appears on the display. Press the SET key to exit the set clock alarm.

Set Temperature Alarm

To set the temperature alarm, press the SET key until the alarm screen similar to the one at right appears. The word "WATER" be-

gin flashing at the bottom of the screen. Now press the MODE key. The letters "ALM" at the top of the screen begins flashing along with "WATER". Press the MODE key to select the first number in the temperature. (In this example, the "8". Press the "SET" key to change it. When this number is correct, press the MODE key again. The second number begins flashing. Press the SET key until this number is cor-

rect. Continue this sequence until the temperature alarm is set. When it is correct, press the SET key to switch to the next temperature alarm (T2 and T3).

You can turn the temperature alarm off by pressing the SET key until the temperature alarm appears, then press the MODE key once, then press the SET key again. The word "OFF" appears on the display. Press the SET key to exit the set clock alarm.

Set Fahrenheit or Celsius

To change the temperature displays from Fahrenheit to Celsius, press the SET key until the °F and the letter "F" flashes on the screen. Now press the MODE key to switch it to °C. Press the SET key twice to exit.



The clock should now be showing on your screen. If it isn't, or if you get lost in any of these menus, simply turn the unit off and back on again. Then begin pressing the SET key until you reach the alarm or time that you wish to change.

Lowrance's UPS Return Service - U.S.A. Only

Lowrance Electronics and United Parcel Service (UPS) are proud to offer all of our customers free shipping for all units sent to us for repair or service. If you have to send this unit to the factory, and you are in the continental United States, use the enclosed UPS shipping label for easy, free shipping to our factory customer service department. There are six easy steps:

- Call Lowrance at the toll-free number on the front of this flyer for a Return Authorization (RA) number and instructions about what accessories to return. Do not return a product to the factory without a Return Authorization (RA) Number!
- Pack your unit and any accessories in the original shipping container, if possible. Be sure to include proof of purchase for warranty verification!
- 3. Write a brief note detailing the problem you're having with the unit. Please include your name, address, and daytime telephone number.
- 4. Please include payment for non-warranty repairs. Check, money order, Visa, or MasterCard may be used.
- 5. Fill in your name, address, zip code, date, and RA number in the blanks provided on the UPS form included with your unit.
- Attach the label to the shipping box, tear off the tab for your receipt and give the package to any UPS driver or take the package to any UPS Customer Center. You will not be charged for this shipment.

That's it! Your unit will be shipped to Lowrance's customer service department at no charge to you. Our normal in-plant turnaround on repairs is 3 working days. Units under warranty will be returned to you at no charge.

NOTE!

Lowrance will pay UPS surface shipping charges both to and from the factory for this unit in the event it needs repair. Your unit is insured against loss or shipping damage when you use the enclosed UPS label.

This UPS shipping offer is good only in the continental United States (excludes Alaska and Hawaii).

KEEP THIS LABEL! YOU WILL NEED IT IF YOU EVER NEED TO RETURN YOUR UNIT TO THE FACTORY FOR REPAIR.

Accessory Ordering Information

To order accessories such as power cables or transducers, 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.)

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.

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 nonconformity 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-CON-FORMITY CONCERNING THE PRODUCT OR FOR ANY LOSS OR DAMAGE RESULT-ING FROM ANY OTHER CAUSE WHATSOEVER. WE WILL NOT UNDER ANY CIR-CUMSTANCES BE LIABLE TO ANYONE FOR ANY SPECIAL. CONSEQUENTIAL. INCI-DENTAL, 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.

LOWRANCE ELECTRONICS

12000 E. SKELLY DRIVE TULSA, OK 74128 (800) 324-1356

How to Obtain Service (Canadian Customers Only)

We back your investment in quality products with quick, expert service and genuine Lowrance replacement parts. If you need service or repairs, contact the Lowrance Factory Customer Service Department at the toll-free number listed below. A technician may be able to solve the problem and save you the inconvenience of returning your unit. You will be asked for your unit's serial number.

800-324-1356

Canada Only. Monday through Friday 8:00 A.M. - 8:00 P.M. Central Time.

When sending a product for repair, please do the following:

- Always use the original shipping container and filler material the product was packed in when shipping your product.
- 2 Always insure the parcel against damage or loss during shipment. Lowrance does not assume responsibility for goods lost or damaged in transit.
- 3. For proper testing, repair, and service, send a brief note with the product describing the problem. Be sure to include your name, return shipping address, and a daytime telephone number.

How to Obtain Service (International Customers Only - Except Canada)

If you need service or repairs, contact the dealer in the country you purchased your unit.

WARRANTY REPAIR WILL BE HONORED ONLY IN THE COUNTRY UNIT WAS PURCHASED.

Please follow the shipping instructions shown below on this page if you have to mail your unit to the dealer. For proper testing, repair, and service, send a brief note with the product describing the problem. Be sure to include your name, return shipping address, and a daytime telephone number.

Accessory Ordering Information - All Countries

To order accessories such as power cables or transducers, please contact:

- 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.
- Canadian customers only can write:
 Lowrance/Eagle Canada, 919 Matheson Blvd., E. Mississauga, Ontario L4W2R7

 or fax 416-629-3118



Your unit's serial number

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 (shown above). 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 page 10 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.

On factory repairs, we guarantee your unit will be repaired in three working days from the time it is received. This does not include shipping time. If for some reason we cannot meet this commitment, we will extend your warranty for another full year, free of charge, from the date of repair.

Lowrance also gives you free UPS shipping from anywhere in the continental United States both to and from the factory for all warranty repairs. You can also use the enclosed UPS shipping label for non-warranty shipments. See the inside of this flyer for more information. Remember, nonwarranty repairs are subject to Lowrance's published flat-rate charges and 180-day warranty. A 3 working day turnaround time at the factory repair center is guaranteed. (Does not include shipping time.)

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