

**LOWRANCE®**

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**RIM 300**  
Radar Interface Module  
**Installation Instructions**

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**For free owner's manuals and the most current information on  
this product, its operation and accessories,  
visit our web site:**

**[www.lowrance.com](http://www.lowrance.com)**

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# Warnings and Cautions

## **Caution:**

*Use the radar at your own risk. Your radar was designed for use as a navigation aid. It should not be used for purposes that require precise measurements of direction, distance, topography or location. Always compare the navigation information received from your radar with data from other navigation aids and sources. When a conflict arises between the navigation data from your radar and data from other navigation aids, make sure you resolve the conflict before proceeding with navigation. A **CAREFUL NAVIGATOR NEVER RELIES ON ONLY ONE METHOD TO OBTAIN NAVIGATION INFORMATION.***

## **Caution:**

*International Regulations for Preventing Collisions at Sea mandate that when radar is on a vessel, the radar must be used at all times, regardless of weather conditions or visibility. Numerous court decisions have not only ruled the radar must be used, but that the radar operator must be knowledgeable in all operational aspects of radar performance or otherwise face a greater risk of liability if an accident occurs.*

### **WARNING: High Voltage Hazard**

**Dangerously high voltages are present within the radar scanner unit. Technicians must exercise extreme care when working inside the unit. ALWAYS remove power before removing the cover. Some capacitors may take several minutes to discharge, even after switching off the radar. Before touching the magnetron or any high voltage components, ground them with a clip lead.**

### **WARNING: Microwave Radiation Hazard**

**The microwave energy radiated by a radar antenna is harmful to humans, especially to the eyes. NEVER look directly into an open waveguide or into the path of radiation from an enclosed antenna. Radar and other radio frequency radiation can upset cardiac pacemakers. If someone with a cardiac pacemaker suspects abnormal operation, immediately turn off the radar equipment and move the person away from the antenna. Turn off the radar whenever it is necessary to work on the antenna unit or other equipment in the beam of the radar.**

# RIM 300 Installation

The RIM 300 will replace the power cable that came with your display unit. Your RIM 300 has three cables branching out from the cable plug, which include: radar data cable, display unit power cable and NMEA 2000 power cable.

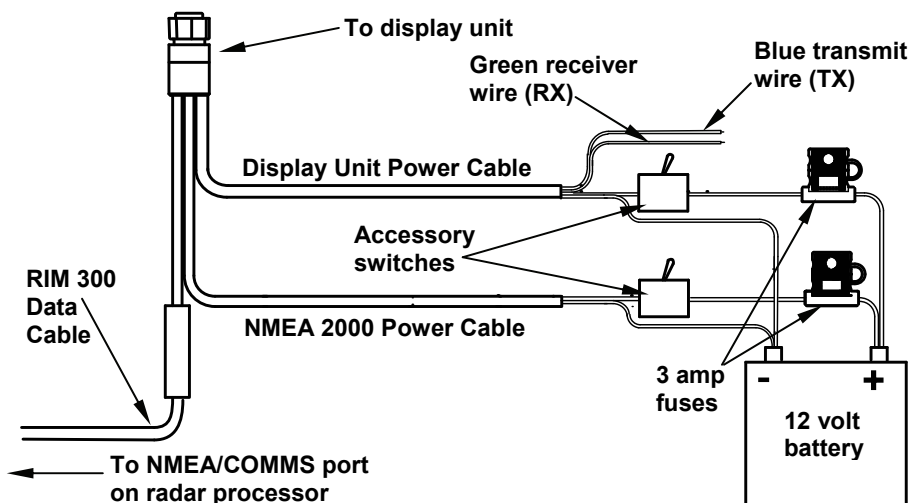
## NOTE:

You will need to purchase a SIMRAD heading sensor for the Radar Overlay feature to work properly.

*You MUST remove the power cable that came with your unit and replace it with the RIM 300 to complete this installation.*

## WARNING:

Even though the RIM 300 is replacing your original power/data cable, you must follow the same rules, cautions and warnings for powering the display unit and a NMEA 2000 network or LGC-3000 antenna module. These details are described in the display unit manual and the LGC-3000 instruction sheet. Failure to follow all power connection instructions and fusing requirements could result in damage to your equipment and injury to you.



The RIM 300 radar data cable is connected to the radar processor. Radar processor installation is covered in the Radar Installation manual.

1. The RIM 300 works from a 12-volt DC battery system. The display unit power cable has four wires: red, black, blue and green. You will use

the red and black wires to power your display unit. Attach the red wire (+) to an accessory switch or power bus connected to a 12-volt battery. Connect the black ground wire (-) to the battery negative post.

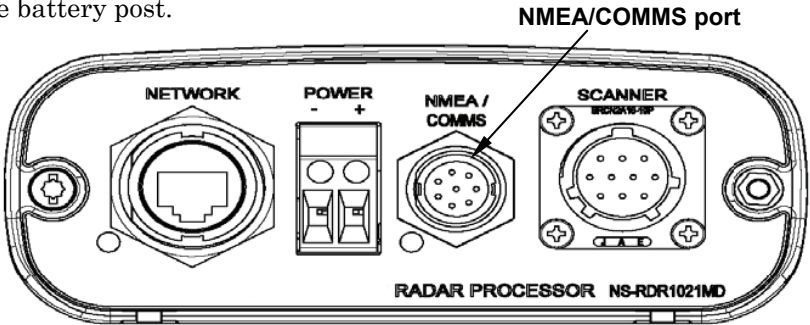
**Tip**

If possible, keep the power cable away from other boat wiring, especially the engine's wires. This will provide the best isolation from electrical noise.

If the cable is not long enough, splice #16 gauge wire onto it. Make sure to attach the in-line fuse holder to the red lead *as close to the power source as possible*. Make sure it is fused with a 3-amp fuse.

2. The blue and green wires (Com port 2) can be used to exchange GPS position data with any NMEA 0183-compatible device. Connect the blue (TX) transmit wire to the receive (RX) wire from the NMEA 0183 device. Now connect the green (RX) receive wire to the transmit (TX) wire from the NMEA 0183 device. **There is no ground wire, so the NMEA 0183 device *MUST* be grounded to the same source as the display unit.**

3 If you are powering a NMEA 2000 network or an LGC-3000 GPS antenna, you must connect the NMEA 2000 power cable. Attach the NMEA 2000 red wire (+) to an accessory switch that is connected to the same 12-volt power source as the display unit power cable red wire (+). Be sure to use the 3-amp fuse. Connect the black wire (-) to the negative battery post.



**Plug the RIM 300 Data Cable into the NMEA/COMMS port on the back of the radar processor**

4. Plug the RIM 300 radar data cable into the NMEA/COMMS port on the radar processor box.

5. After all wires and cables have been connected and all unused wires insulated, insert the RIM 300 cable plug in the power/data receptacle on the back of your display unit.

# Notes

# Notes

## FCC Compliance

This device complies with Part 15 of the U.S. Federal Communications Commission (FCC) Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

### **Note:**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the factory customer service department for help.



## **NAVICO FULL ONE-YEAR WARRANTY**

"We," "our," or "us" refers to NAVICO, 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 (1) year 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, OR 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.

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

## **How to Obtain Service...**

### **...in the USA:**

We back your investment in quality products with quick, expert service and genuine Lowrance parts. If you're in the United States and you have technical, return or repair questions, please contact the Factory Customer Service Department. Before any product can be returned, you must call customer service to determine if a return is necessary. Many times, customer service can resolve your problem over the phone without sending your product to the factory. To call us, use the following toll-free number:

**800-324-1356**

8 a.m. to 5 p.m. Central Standard Time, M-F

*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.*

### **...in Canada:**

If you're in Canada and you have technical, return or repair questions, please contact the Factory Customer Service Department. Before any product can be returned, you must call customer service to determine if a return is necessary. Many times, customer service can resolve your problem over the phone without sending your product to the factory. To call us, use the following toll-free number:

**800-661-3983**

**905-629-1614 (not toll-free)**

8 a.m. to 5 p.m. Eastern Standard Time, M-F

### **...outside Canada and the USA:**

If you have technical, return or repair questions, contact the dealer in the country where you purchased your unit. To locate a dealer near you, visit our web site, [www.lowrance.com](http://www.lowrance.com) and look for the Dealer Locator.

# Accessory Ordering Information for all countries

To order Lowrance accessories for your radar, please contact:

**1)** Your local marine dealer or consumer electronics store. Most quality dealers that handle marine electronic equipment or other consumer electronics should be able to assist you with these items.

To locate a Lowrance dealer near you, visit our web site, [www.lowrance.com](http://www.lowrance.com) and look for the Dealer Locator. Or, you can consult your telephone directory for listings.

**2)** U.S. customers: LEI Extras Inc., PO Box 129, Catoosa, OK 74015-0129  
Call 1-800-324-0045 or visit our web site [www.lei-extras.com](http://www.lei-extras.com).

**3)** Canadian customers can write:

Lowrance/Eagle Canada, 919 Matheson Blvd. E. Mississauga, Ontario L4W2R7 or fax 905-629-3118.

## Shipping Information

If it becomes necessary to send a product for repair or replacement, you must first receive a return authorization number from Customer Service. Products shipped without a return authorization will not be accepted. When shipping, we recommend you do the following:

- 1.** Please do not ship the knobs or mounting bracket with your unit.
- 2.** If you are sending a check for repair, please place your check in an envelope and tape it to the unit.
- 3.** For proper testing, include a brief note with the product describing the problem. Be sure to include your name, return shipping address and a daytime telephone number. An e-mail address is optional but useful.
- 4.** Pack the unit in a suitable size box with packing material to prevent any damage during shipping.
- 5.** Write the Return Authorization (RA) number on the outside of the box underneath your return address.
- 6.** For your security, you may want to insure the package through your shipping courier. Lowrance does not assume responsibility for goods lost or damaged in transit.

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