

SturdiSignal™ Series

Installation Instructions

! CAUTION

- All wiring should be done by a licensed electrician in accordance with state codes, local codes, and National Electric Code (NEC) standards or International
 Electric Commission (IEC) standards.
- Improper installation may result in serious injury and void warranty.
- Contains parts and assemblies susceptible to damage by electrostatic discharge (ESD).
- When using luminaires, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury.

Fixture Installation

Taking the light apart is not recommended unless needed to prevent humidity entering the light. At the factory, the light is purged and sealed. See Removing Humidity section on the following page if needed.

Installation of Light

- 1. Check voltage (AC, DC, AC/DC) on the label of the light before installation.
- 2. Position light with center line on label in line with center of vessel. This will lead cable inboard. See Optional Cable Routing section below if needed.
- 3. Remove the four flat head sealing screws holding the mounting plate to the aluminum base.
- 4. Strip back approximately 3 inches of the outer jacket of cable.
 - **Note:** If a braided armored cable is used, the outer shield of the cable must be stripped back approximately 5 inches and terminated with a piece of heat shrink or tape before inserting the cable into the strain relief to prevent water ingress. The Navigation light will not be covered by warranty if cable is not installed into the strain relief properly.
 - Feed round power cable (SO, JO) through the strain relief and position conductors with a service loop (see Figure 1).
- 5. Snug the strain relief to keep the cable in position to terminate the wires.
- 6. Tighten the strain relief to keep cable in position for terminating wires.
- 7. Terminate the wires following nomenclature on the PCB:

AC Light: L = Line, N = Neutral; chassis symbol = chassis ground DC Light: + Positive; - Negative; chassis symbol = chassis ground

- 8. Tighten the terminal block screws and check the tightness of strain relief.
- 9. Reinstall the four flat head sealing screws applying a small amount of marine sealant to the top of the threads.
- 10. Secure the mounting plate to the vessel with lock nuts or Loctite/sealant.

Optional Cable Routing and Orientation of LED with Center Line of Vessel

If the power cable needs to be routed other than inboard, the base can be moved at 90° intervals with the following steps:

- 1. Align the base mounting plate with the power cable oriented in the desired direction. **Note:** This will cause the center line marking on the base to be incorrect, and therefore the LED module must be re-positioned.
- 2. Unscrew the lens and remove LED modules. O-ring should remain in place on the bottom ledge of module near the bottom of the label.
- 3. Rotate module until center line mark on the label (below the ¾ inch hole) is facing forward along the center line of vessel. Align the two pins on the bottom of the module into the mating holes in one of four positions (0°, 90°, 180°, 270°) while maintaining alignment with the center line of the vessel.
- **4.** Re-tighten the lens hand tight, then a ¼ turn more.
- 5. Secure the mounting plate to the vessel with lock nuts or Loctite / sealant. Note: The center line on the base will no longer be facing forward.



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LED Module & Power Connector Installation

Navigation Light modular design allows for easy field replacements of modules.

Replacement of LED Module

- 1. Unscrew lens.
- 2. Pull LED module straight out. O-ring should remain in place on the bottom ledge of module at the bottom of the label.
- 3. Rotate module until center line mark on the label (below the 3/8 inch hole) is facing forward to center line of vessel. Align the two pins on the bottom of the module into the mating holes in one of four positions (0°, 90°, 180°, 270°) while maintaining alignment with the center line of the vessel.
- 4. Screw in the lens hand tight, then 1/4 turn more.

Removing Humidity

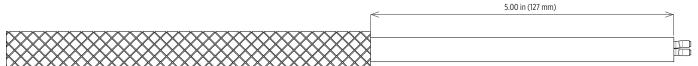
If the light was opened during high humidity in the field, wait until dry weather and follow the steps below to remove humidity from the fixture.

- 1. Keep inside of light dry as possible.
- 2. Remove the lens and LED module.
- **3.** Wipe inside the base and lens with a paper towel to remove moisture.
- 4. At a distance of 8 12 inches, direct a heat gun into the base, LED module and lens until base temperature is very warm to hot.
- 5. Reassemble following steps 3 and 4 above.

Replacement of Power Connector and AC Power Supply

- **6.** Remove four (4) sealing screws attaching the mounting plate to the aluminum base.
- 7. Remove the wires from the terminal block, loosen the cable strain relief and pull out the power cable.
- 8. Remove the two screws that secure the PCB(s) to the base.
- 9. Loosen and remove the wires connected to the small green connector. Observe color and position. Left = red (primary); Center = black (ground); Right = white (secondary)
- 10. Reverse the order to reinstall another PCB assembly.





Product design and specifications are subject to change without notice.