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LIFEFORM LED™ UNDERWATER SERIES

Installation Instructions

For installation of your new “LIFEFORM LED” underwater LED light, visit www.lifeformled.com for the latest resource information.



CAUTION: We always suggest that you have a qualified marine specialist/electrician install any “LIFEFORM” product. We are not responsible for incorrect installations, and these LED lights DO require a hole to be drilled into the hull of your boat. If you are NOT comfortable or skilled in doing this, then consult a professional installer. These products also involve mechanical and electrical wiring modifications. If you are not familiar with understanding electrical circuits and wiring practices, then consult with a professional installer. Improper fuses, wirings sizes etc. can cause potential fire hazards if the circuit is overloaded or wired incorrectly!

Items you will need.

1. Power Drill with 1/2” and 1/8” drill bits. (1/2” bit needs to be long enough to get all the way through your transom)
2. Marine grade sealant (3M 4200 is recommended)
3. 3M general purpose adhesive cleaner (optional but suggested)
4. Clean fabric / terry cloths (2-3)
5. Phillips screwdriver for #8 screws
6. Blue painters tape (to hold the enclosed paper template for hole locations)
7. (Optional) : 180-220 grit sandpaper




WARNING



Never stare directly into LIFEFORM LED lights! They will damage your eyes.

LIFEFORM LED underwater LEDs utilize the latest in high powered LED technology. Our “Ultra Series” line of the lights are designed with a rugged yet stylish anodized aluminum body for (trailered boats) inshore boating (fresh water only). If you are looking for a more permanently submerged solution, or you are going to be boating in a coastal marine environment, then you will want to use our TITAN Stainless steel lights (made for salt water use). Our lights are manufactured in the U.S.A. and every light is tested and inspected to meet our high standards of quality. Ultra Series LF6 and LF9 lights are intended for freshwater use only. Warranty is VOID if the Ultra Series LF6 and LF9 lights are used in saltwater applications.

The following steps are recommended to properly install your LIFEFORM series surface mount underwater lights. **Installing with any other method may void your warranty.**

- 1) Mounting location -it is recommended to mount the light a minimum of 6” below the water line on a clean flat surface clear from obstructions.
- 2) Ensure the mounting location does not interfere with any wiring or obstacles on the inside of the boat and that you can access the cable after the light is installed.
- 3) After printing out the mounting template (ensure your printer prints it to scale) cut the enclosed template out with scissors. Tape the template in your desired location. If install multiple lights, step back and see if the templates are level and equally spaced.
- 4) Mark the mounting and center holes with a pencil or with a fine tip dry erase marker.
- 5) Make sure the wire can be accessed from the inside of the boat and has rear clearance.
- 6)  **Ensure location is correct, rear clearance is necessary!** Using a power drill, drill a 1/8” center pilot hole perpendicular to the flat mounting surface. Enlarge 1/8” center hole with the 1/2” drill bit.
- 7) Use 1/8” bit to drill 3/4” deep mounting holes. Do not need to drill thru mounting surface. Using blue tape on the drill bit is good for measuring the 3/4” depth for mounting holes.
- 8) After all of the holes have been drilled. Use a clean cloth with 3M general adhesive cleaner to clean only the area where the light fixture will seat. **OPTIONAL:** Using 180-220 grit sand paper gently sand the area under the fixture only (DO NOT go outside the diameter of the fixture, you may scratch your gel coat, you do not need to sand all the way through the paint, just enough to help adhesion **(For boats with old sun bleached paint or fouling on the exterior)**, clean again with adhesive cleaner.
- 9) Run the power wires from the light through the hole, apply a continuous bead of **3M 4200** sealant around the entire diameter of the fixture approximately 1/8-1/4 inch from the outside perimeter. Run additional beads of sealant around the screw holes, around the center cable hole and fill the 1/2” center cable hole in transom with sealant as well. **CAREFULLY** pull the cable from the inside of the boat and navigate the fixture into the appropriate position for screwing the enclosed #8 stainless screws.
- 10) Using a hand held screwdriver, mount the light fixture with the enclosed #8 stainless screws to hand tight only. **DO NOT over tighten! Just until the adhesive squeezes out the sides of the light fixture, hand tight.**
- 11) Fill the transom wiring hole from the inside again with sealant and wipe clean any excess **4200** from the wiring and around the hole with a damp clean cloth. **DO NOT** return the boat to water until the sealant has cured according to the manufacturer’s instructions.

Wiring the LED light fixture to a power source

See the latest Wiring Diagrams for LIFEFORM LED Lights - which can be found on the www.LIFEFORMLED.com website under the Resources Tab.



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CAUTION: LIFEFORM Ultra Series 6 & 9, and TITAN LED lights are 12-24vDC (DO NOT APPLY ANY OTHER POWER SOURCE)

CAUTION: Always cover any exposed copper wire with electrical tape and protect them from getting wet, water will cause the exposed wire to corrode and may cause the light to fail, which will void the warranty of the light

LIFEFORM LED underwater lights require 18 AWG minimum to each light (be sure to fuse appropriately). However, for longer length wire runs and all around general use, a minimum of 16 AWG should always be used. If using a distribution or junction box, consult a qualified electrician for the correct wire size (AWG) to be used based on total lights powered and the distance they must be ran. Additionally, use only water proof butt-splices, dielectric grease and heat shrink-wrap when splicing cables. Corrosion of wires is not covered by our warrantee so it is imperative each splice is completely covered with shrink-wrap and water tight. All LED Light circuits must be protected with an appropriately sized fuse. (See power draw/amps for each product on the www.LIFEFORMLED.com website). Fuses installed for lighting circuit feeds that will have multiple lights on each circuit, must be sized accordingly.



CAUTION: Newer boats use PDM modules for power delivery via the touchscreen. Cautions must be observed if installing in newer boats with touch screen capability. If you are not familiar with understanding electrical circuits and wiring practices, then consult with and hire a professional installer. Improper fuses, wirings sizes etc. can cause potential fire hazards if the circuit is overloaded or wired incorrectly! ** LIFEFORM LED is NOT responsible for these issues.

Note: Never run any power wires near speaker or stereo equipment. For newer model boats that utilize touchscreens, it is **HIGHLY recommended to have a professional install the wiring to these LED lights. Newer boats use **Power Distribution Modules**, and our lights **CAN NOT** be powered directly off of these modules due to the **PWM output frequency** of these modules. An aux. relay **must** be installed for providing full power to LIFEFORM LED lights. See our **Resources Tab** on the website for further information!

** Damage to the PDM module and/or LIFEFORM LED lights can occur if not installed correctly which will void the warranty.

Operating your LIFEFORM LED underwater lights.

1. After you have completed the installation of the lights, we recommend (LIFEFORM-6 ONLY) connecting (2) on-off marine grade rocker switches for the install. One switch will operate 3 LEDs on the top row, and the other will operate the LED's on the bottom row of the LIFEFORM-6. You can also use just one switch to operate both rows of LED's at the same time if this is desired (wiring topology is based off of which LED colors were ordered)
2. FOR the LIFEFORM-9 and TITAN's, one on-off switch can be used.
3. See latest Wiring Diagrams for LIFEFORM LED Lights which can be found on the LIFEFORMLED.com website under the Resources Tab



Limited Warranty:

LIFEFORM LED underwater series lights are warranted to be free from manufacturer defects in craftsmanship and materials on the lighting unit itself for a minimum period of 1 year, and up to the maximum warranty period specified on each individual product itself (See the “warranty information tab” for each product’s individual warranty period which can be found on the LIFEFORMLED.com website). **IMPORTANT!!!** LIFEFORM LED is not responsible for product failure caused by neglect, abuse, improper installation or failure in application for other than what it was designed, intended and marketed, including but not limited to the vessel sinking, structural damage due to water intrusion, electrical malfunction etc.. This warranty is valid only to the original purchaser and is non-transferable to new ownership of any kind.

Any LIFEFORM LED product that is in dispute under this warrantee shall be sent to the manufacturer’s facility at the buyer’s expense. LIFEFORM LED must be allowed a “reasonable” amount of time to determine if there is a manufacturer’s defect. If determined defective, the LIFEFORM product will either be refurbished or a new light will be shipped at the manufacturer’s expense. If product is determined NOT defective, product will be repaired or replaced and shipped at buyer’s expense. Any items replaced under this warranty belong to LIFEFORM LED. (Example: light is replaced under warranty, we will only ship replacement product, we will not ship defective product back as well). Parts or lights replaced under this warranty are included in original date of purchase warranty (unexpired time of warranty). No warranty or affirmation of fact, expressed or implied, other than as set forth in the warranty statement above is made or authorized. Any liability for consequential or incidental damages is expressly disclaimed. LIFEFORM LED liability in all events is limited to, and shall not exceed, the purchase price paid.

Corrosion is not a manufacturer’s defect and should be expected; although LIFEFORM LED Ultra Series products LF6 and LF9’s are made out of anodized aluminum they are intended for freshwater use only (trailered boats); if the Ultra Series lights are used in seawater, coastal, or marine harbor environments, the housings could possibly corrode and render the light in a non-working condition due to sea water corrosion or electrical stray currents in the water and this will NOT be covered by warranty.

TITANS are made from electro-polished Stainless Steel and are designed to be used in Salt Water or Freshwater applications. However, it is the responsibility of the purchaser to ensure the location they are to be utilized in is protected with a sacrificial anode; normal sea corrosion and sea life growth is a natural occurrence and is not warranted.

Product is not warranted if purchased from any other person or entity other than a LIFEFORM LED authorized outlet or authorized dealer.

Grey market and internet resellers. Any product sold by any internet reseller without express documented consent by LIFEFORM LED is in direct violation of our distribution chain and will void all warranty of any product and will release LIFEFORM LED from any and all liability for any claims. Forever.

For questions regarding your “LIFEFORM LED” warranty please feel free to contact us at www.info@lifeformled.com or write to: LIFEFORM LED, 9179 W. State Street Garden City, ID 83714