100W Underwater Dock Light Package
(4) LED Lights - Control Box - 10-30V DC - IP68 Compliant
Instruction Manual

Do not attempt operation until you are familiar with all warnings, precautions, and procedures outlined within this instruction sheet. Read carefully before operating. Retain these instructions for future reference.

WARNING!

WARNING: RISK OF ELECTRIC SHOCK

- Use only in bodies of water, ponds and small decorative fountains where persons will immerse no more than their hands and lower arms while the product is energized.
- DO NOT use in water intended for swimming, wading, immersion, or bathing.
- All installer completed cable connections must be located outside of bodies of water, pond or fountain.
- Low voltage circuit must be supplied by a power unit marked as suitable for supplying submersible luminaires.
- Power unit must be supplied by a circuit protected by a ground fault circuit interrupter (GFCI).
- Maximum depth: 8 feet
- All installer completed cable connections must be located outside of bodies of water, pond or fountain. Take careful consideration of tidal shift if connections are completed under docks, or near waterline.

WARNING: For your safety read and understand instructions before starting installation. Before attempting any installation check your applicable electric code. This code sets the wiring standards and should be carefully studied before starting.

Note: All statements, technical information and recommendations contained herein are based on information and tests conducted under typical intended use conditions and are not considered all inclusive, in accordance with "Terms and Conditions of Sale", the purchaser should determine the suitability of the product for the intended use conditions and assumes all risk and liability whatsoever in connection therewith.

IMPORTANT:
Read carefully before installing fixture. Retain for future reference.

APPLICATION: Dock Lighting Systems are designed for outdoor wet locations, where moisture, dirt, saltwater may be present. The LEDFUL10-DL-RGBW-PM-KT.4X-80C underwater dock lights are intended for full submersion in fresh and salt water.

Listed models of Dock Lighting System can be operated at the following voltages:
100VAC – 120VAC 50/60Hz

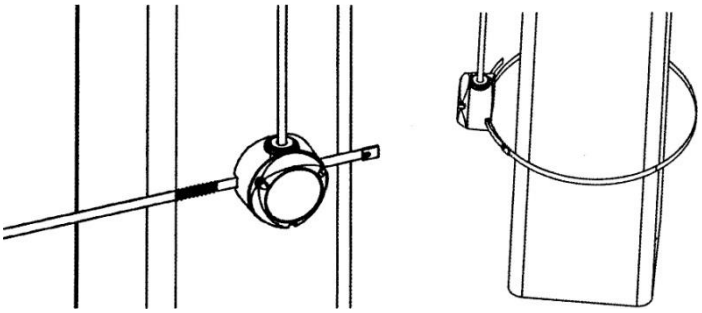
Underwater light Installation

Notes:

- Pilings should be cleaned to remove hard growth and provide a stable base to install against.
- Stainless Steel clamps are 60 inches long to provide enough length to wrap around a 12 inch square or 14 inch diameter round piling.
- It is helpful in tidal locations that this part of the installation be performed close to low tide.

1. Slide l stainless steel clamp through slot in the back of the light housing. Wrap clamp around piling and feed free end of clamp back through clamp latch and back through slot in light housing.
2. Adjust so that light is approximately 6 - 12 inches below water line at a typical low tide for your area.
3. Tension clamp by holding light with one hand and pulling cable with the other. It may help to pull the free end of the clamp with pliers. Bend free end near fixture to prevent cable clamp from becoming unfastened. Excess cable clamp material may be cut off.

4. Additional clamps may be used, if needed to secure power cable to piling. Prevent abrasion by routing cable to side of piling away from vessel access. Do not over tighten the clamp on the cable where it can cut or pinch the cable.



Power Unit Installation

Note: This fixture is suitable for installation in wet locations. It is not intended to be submerged or exposed to repeated direct wave action.

1. Determine the mounting location of the Power Unit ensuring all underwater light cables reach the supply and are routed to prevent abrasion from vessels or other moving components.
2. With provided stainless steel screws, attach power unit to suitable structure at least 1 foot above ground level with the high and low voltage cables pointing down. **NOTE:** Do not energize transformer until installation of system is complete.

Electrical Connection

Notes:

- Fixture may be switched with a timer, photo detector, or toggle switch prior to the receptacle.

  DO NOT connect power unit to a dimmer.
- Use approved outdoor (While in use) weatherproof receptacle cover to protect cord and outlet from weather while plugged in.
- Provide electrical service according to the electric code for your specific application from a suitable ground fault circuit interrupter (GFCI) receptacle.

1. All high voltage components in the fixture are prewired so electrical connection only needs to be made on the secondary (24VDC low voltage) side of the power supply. **NOTE:** the power unit is rated for 110W max load. Do not connect more than 4 dock lights to this supply.
2. Split low voltage cable back approximately 3 inches and strip conductors back 3/8 inch if not already done so.
3. Insert low voltage cables into cable glands on the bottom of the power unit. Tighten cable glands until the cables are secure.
4. Connect all red wires together by lifting orange levers on connector and inserting conductor so that bare metal is not exposed. Fold levers down once conductor is inserted. Check for secure connection.

   Complete the same procedure on black low voltage wires. Note: Low voltage cables must remain in the bottom of the power unit enclosure and must not be routed near high voltage splice.

Operation

An abrupt OFF/ON toggle of your switch allows the dock light to transition through various light output modes. Light will cycle through all available colors within the first 20 seconds, (including white). A brief OFF/ON toggle will allow the user to select any discrete color during the cycle. After 20 seconds without interruption, the light will continue a full color cycle

over a period of 3 minutes - Discrete colors can still be chosen during the 3 minute cycle. If a discrete color is not selected, the light will repeat the 3 minute cycle continuously, Light resets after power is off for more than 3 seconds.

Maintenance

- Disconnect power from the electrical system before conducting maintenance or opening the Power Unit

  The lens should be cleaned monthly to ensure continued lighting performance. To clean, brush the lens with a stiff plastic bristled brush. Do not use a scraper, abrasive, strong alkaline, or acid cleaner. Damage may result.
- Visually check for undue heating evidenced by discoloration of wires or other components, damaged parts, or leakage evidenced by water or corrosion in the interior of the lights. A small amount of moisture is allowed interior of the power unit. Replace all worn, damaged, or malfunctioning components and clean before putting the luminaire back into service.
- Electrically check to make sure that all connections are clean and tight.
- Mechanically check that all parts are properly assembled.

Replacement Parts

Larson Electronics LED underwater lights are designed to provide years of reliable lighting performance. However should the need for replacement parts arise, they are available through Larson Electronics. Contact us at www.larsonelectronics.com .

Larson Electronics is not responsible for product failure caused by abuse, neglect, improper installation, or failure in applications other than those for which it was designed, intended, and marketed. Larson Electronics, Inc. assumes no responsibility whatsoever for any damage, loss, or injury that may result from the incorrect installation of this product, including but not limited to structural damage due to water intrusion, electrical malfunction or vessel sinking when used in marine applications.

Any alterations, modifications or changes of any type made to the Dock Lighting System or to any component thereof will void the warranty.

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PLEASE VISIT LARSONELECTRONICS.COM FOR **WARRANTY** AND **RETURN** INFORMATION.