

MIU Series **V7** Installation Instructions (rev18FEB2020)

Note: Installation of MIU products should be performed by professionals only. If in question, please contact Macris Industries (MI) directly. Watch our install videos before attempting installation.

Please view our latest installation video on YouTube: <https://youtu.be/16xOuemcx-Q>
"Underwater Light Installation: Rampage 38 with Macris MIU30"

These instructions assume you are experienced in marine installations. Improper installation will void warranty.

Equipment needed:

3M 4200	50-70% Isopropyl Alcohol	Rags
or 3M 4000 only	Masking Tape	Drill + Drill Index
Latex Gloves	Stiff Scraper	

Prior to mounting: scrape and clean mounting area free of ablative antifouling. Area should be clean and dry and free of all bottom paint. Use only 70% isopropyl alcohol for cleaning. Acetone will damage MIU Series lamps. Do not run lamps dry for more than 30 seconds for testing purposes only. Do not use 5200 or other harsh adhesives as they contain harmful chemicals that could damage the lights.

- 1) Determine mounting location for each MIU lamp. Scrape and clean mounting location. Confirm there is nothing structural or potentially dangerous behind mounting location.
- 2) Once mounting location has been determined, drill a through-hole for wiring penetration. Use a taper or countersink bit to put a slight chamfer on the inner edge of this hole as a recess for sealant and to reduce stress on the lamp.
- 3) Dry fit the light and temporarily hold in place with masking tape.
- 4) With the light taped to the hull, mask roughly $\frac{3}{8}$ " (1 cm) away from the edge of the light to create a border around it. This will serve as a filleted area for the sealant to run out to.
- 5) Mask the entire face of the light, leaving the chamfered edge fully exposed.
- 6) **Sand the entire rear face with 120-220 grit sandpaper on the back of all MIU Series underwater lights to increase adhesion. Failure to abrade this surface will greatly reduce adhesion and void warranty. Wipe any dust from the light with 70% isopropyl alcohol and a clean rag.**
- 7) Using 3M 4200 or equivalent, apply a generous coating across the back of the light and around the perimeter, tracing a continuous line approximately $\frac{1}{4}$ " from the edge of the lamp. You must have a smooth, uniform, void free

coating of sealant to ensure proper operation. Feed the wire through the hole and gently press the lamp into place.

- 8) Press the face of the lamp uniformly to squeeze out any extra sealant. You should achieve a uniform bead of "squeeze-out" around the entire light. Press until the light is smooth against the hull and no more additional sealant comes out. **15-30 seconds of uniform pressure should be adequate.**
- 9) Smooth all sealant that should have squeezed out during installation. Run a finger or smoothing tool around the entire perimeter of the light. A smooth, uniform seal between both masking tape boundaries is necessary. A plastic scraper and paper towel are useful here. Check for sealant voids and fill using additional sealant. Sealant should cover the entire chamfered edge of the light.
- 10) Remove masking and allow assembly to cure fully according to manufacturer before launching vessel. The lamp can be tagged up with tape to help hold it in place during curing.
- 11) **MI suggests double sealing from the inside of the vessel, up and around the wire penetration.**

-Make sure to send in pictures of your install to Macris Industries!

-Send pictures to the following email: harrison@macrisindustries.com

-Find us on Facebook: www.facebook.com/MacrisIndustries

-Warranty: www.macrisindustries.com/warranty



Cross section showing caulked areas (black)