



MACRIS INDUSTRIES

Advanced technology products, designed and manufactured for exacting applications

MIU Series V4 Installation Instructions (rev 21MAR16)

Note: Installation of MIU products should be performed by professionals only. If in question, please contact Macris Industries (MI) directly.

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

Equipment needed:

BoatLife LifeSeal	Denatured Alcohol	Rags
or 3M 4200 only	Masking Tape	Phillips Screwdriver
Carbon Mounting Shoes	Mounting hardware	Latex Gloves
Stiff Scraper	Drill	Drill Index

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 denatured 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, including space for carbon mounting clips. Each MIU lamp requires 2 carbon mounting shoes, which are included. 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 ferrule. 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, take a carbon shoe and hold to one end of the light. Drill small pilot holes for the #6 truss head self tapping screws included with the light (.0785"-.0810", #47 or #48 bit depending on material. Please consult drill guide depending on hull material and mounting style). If side mounting or running surface mounting the lamp, MI suggests using a machine screw through-bolted with a washer and lock nut instead of a self tapping screw.
- 5) Do the same for the other side of the lamp, dry fitting everything. **ProTip: Dry run the screws in and out of each pilot hole once and remove any debris that results. This will make mounting *much easier*.**



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- 6) Remove the carbon shoes and remove the tape and lamp from the hull.
- 7) Using BoatLife Life Seal, apply a generous coating across the back of the lamp and around the perimeter, tracing a continuous line approximately ¼" from the edge of the lamp. You must have a smooth, uniform, void free coating of sealant to ensure proper operation. **ProTip: lightly sand the rear-bezel on the back of MIU60 and MIU Chroma lights to increase adhesion. Failure to abrade this surface will greatly reduce adhesion.**
- 8) Feed the wire through the hole and gently press the lamp into place. It helps to hold the light temporarily with masking tape while grabbing the carbon shoes.
- 9) Once the light is taped in place, grab the carbon shoes, apply a small amount of sealant around the screw holes and on the contact face of the clip, align them and begin slowly screwing them down. Alternate between pressing the face of the lamp to squeeze out any extra sealant and tightening the shoes down. The shoes should have a small amount of sealant between them and the lamp for vibration damping. **ProTip: Masking the face of the lamp prevents any accidental sealant from squeezing onto the lens.**
- 10) *Do not overtighten the mounting screws.* The carbon shoe should pull the light against the hull of the boat, but there should still be a very thin pillow of sealant between the entire assembly and the vessel.
- 11) Double check screws, *but do not overtighten them.* The shoes simply hold the lamp in place mechanically until all the sealant cures.
- 12) Smooth any sealant that may have squeezed out during installation. A plastic scraper and paper towel are useful here. Check for sealant voids and fill using Boatlife LifeSeal.
- 13) Allow assembly to cure fully according to manufacturer before launching vessel.
- 14) **MI suggests double sealing from the inside of the vessel, up and around the ferrule of the wire for extra protection.**

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

Send pictures to the following email: meindert@macrisindustries.com

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

Warranty: www.macrisindustries.com/warranty