

Arrival Instructions
UNOLS East Coast Van Pool
AUV/Drifter/ROV Lab #1
Silhouette Steel Inc. #625.2.02-1

The following list is intended to aid in placing the lab on the ship and making it ready for use. Any questions, concerns, or discrepancies noted should be referred to the UECVP Manager (Timothy W. Deering 302-645-4338 or deering@udel.edu).

- During the course of installation, check the departure check off sheet and inventory. The lab left the UECVP complete and fully operational unless noted otherwise on these sheets.
- The lab may be moved with a large forklift (either using the slots provided or not) or by lifting with a crane. The estimated weight is **8,500** pounds with the center of gravity in approximately the center of the lab.
- Once the lab is placed on the ship it should be secured by standard “Peck & Hale” fittings, tie down chains, etc. In no case shall anything be welded to the lab nor shall holes be drilled in the lab's structure. Install the rubber isolation pads between the aluminum ISO corners at the bottom and the steel deck hardware on the ship.
- **The lab's electrical system must be set up for the correct ship's voltage before the lab is powered. Refer to the Lab Check-Off Sheet to see what input power the lab was set up for when shipped.** The lab may be set up for 240, or 480Vac by following the “Lab Electrical Procedure” placard posted in the lab or in the manual. The ship power cord is provided. The cord plugs into the “Ship” receptacle on the utility end of the lab – remove the waterproof cap from the receptacle. The ship end of the cable will need to be terminated by the ship's engineers to mate with the ship source of power. The green conductor is the grounding conductor and should be bonded to the ship's structure. The other three conductors are the “hot” legs. No permanently installed lab equipment is 3-phase, so phase monitoring is not critical. If phase is critical for any piece of temporarily installed science equipment, the phasing can be changed at the ship connection (by switching any two hot legs), or on the plug for the science equipment itself. **In no case shall any modifications be made to the lab's electrical system since they may result in unsafe conditions and/or damage to the lab's installed equipment.**
- If only 208Vac, 3-phase power is available aboard the vessel, the “Shore Power” receptacle on the lab may be used. To meet code, simply bond the “neutral” and the “ground” conductors together where the cable is connected at the ship supply panel/outlet.
- Once power is available, put the switch on the emergency light to “ON”. Test the light by pressing the “TEST” button.
- Connect fresh water, salt water, and the sink drain hoses as needed. Stow the cam-lock fitting covers in the supply box provided.
- Open the hot water valve in the sink and make sure the hot water tank is full. Plug in the water heater and verify operation.
- Connect the two (2) raw water supplies, and two (2) drain hoses for the two HVAC units – one for the raw water return and the other for condensate. Turn on the raw water supply pump and verify at least 4-7 GPM to each HVAC unit.
- The deck drain cam-lock covers are generally left in place to contain any spills inside the lab but may be removed if desired – particularly if extensive water sampling is being conducted inside the lab.
- Remove the window covers (on personnel doors) and stow/secure inside the lab.
- Remove the cable pass covers (as desired) and install the cowls. Stow the closure plates on the rack provided inside the lab. There is a foam insert as well as a split rubber gasket to help seal these openings and maintain temperature.
- Energize CB's labeled “A/C #1” and “A/C #2” and set the temperature inside the clean area using the digital key pads on the thermostat controls.
- Energize the remaining outlet and lighting circuit breakers.

- It is desirable (for safety reasons) that some sort of shipboard communication and/or general alarm bell be included in the lab. This can be accomplished by running the connecting cable through one of the open cable passes. General alarm and phone can be attached to the Uni-Strut where desired.