



PRE-DIVE CHECKLIST #2



Dry

- Unspool tether and put on a holder
- Weight ROV on front threaded rod **NOTE:** You need around 5 ounces (140 grams) of evenly spaced lead weights on the front
- Plungers inserted into ROV **NOTE:** They should be to begin with but double check they are there or your tube will flood.
- Insert batteries (flat side of batteries goes into tube first)
- Pull O-rings up from under electronics tube and attach them to the hooks above it to hold it in place
- Test Connections to ROV with a PC **NOTE:** Plug the topside Ethernet in to the PC, set the PC's Ethernet adapter IP to 192.168.254.2, ROV will be at <http://192.168.254.1> with ssh port 22, login rov/OpenROV
- If connection fails, verify all PCBs are pushed together tightly
- Use keyboard and cockpit to test motors **NOTE:** They should sound smooth, no contact with anything (arrow keys, shift, control)
- Test lights (I [toggle], P [increase], O [decrease], key is in cockpit)
- Test lasers(L[toggle], key is in cockpit)
- Test camera servo (Q [up], A [center], Z [down])

NOTE: Stop if you notice interference, push the PCB with one hand on each side to squish the wires more if there is a small interference.

- Verify camera video stream **NOTE:** Zero depth in diagnostic panel to reset camera if no feed.
- Check electronics tube and battery end-cap O-ring seals **NOTE:** Fronts of batteries tubes, both sides of electronics tube

Wet

- Verify neutral buoyancy **NOTE:** Goal is to have slight positive buoyancy
- Drive ROV forwards and backwards **NOTE:** Check diagnostic panel in cockpit and reverse motors one at a time as needed
- Turn to port (left) and starboard (right)
- Test Vertical motor
- Turn lasers on and off
- Turn lights on and off
- Turn camera servo up and down, verifying on PC video stream
- Dive to 1m and hold depth **NOTE:** Spend the time and adjust your weighting...you will get a much better operation
- Leak check after 1 minute in the water

Post-dive

- Remove motor bells/props
- Remove debris and anything wrapped around the motors (seaweed, etc.)
- Rinse motors and bells/props
- Unplug tether from topside adapter (the surface side ends of the wires will break off if they wiggle a lot in the topside adapter)

SIGNATURE(S): _____ **DATE:** _____ **TIME:** _____