

MC-SUB SUBMERSIBLE HOUSING

INSTALLATION INSTRUCTIONS



Figure 1: NexSens MC-SUB Submersible Housing.

Overview

The NexSens MC-SUB offers a solution for integrating 3rd party electronics on a CB-75 data buoy platform. It is designed for use with industry-standard MCBH & MCIL connectors (sold separately).

What's Included

- (1) Sensor plate
- (1) Vent Port
- (1) Battery well
- (4) Port plugs

Accessing the MC-SUB

If pre-installed on a buoy platform, use a Phillips-head screw driver to remove the solar tower. Then, remove the 6 or 12 screws holding the lid of the MC-SUB to the battery well and buoy (Figures 1-3).

- a. For ease of electronics installation, the battery well can also be removed from the buoy.

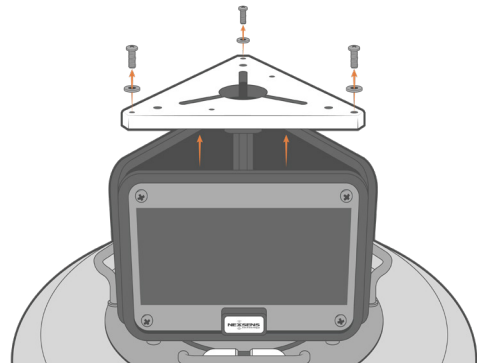


Figure 2: Remove the top white plate.

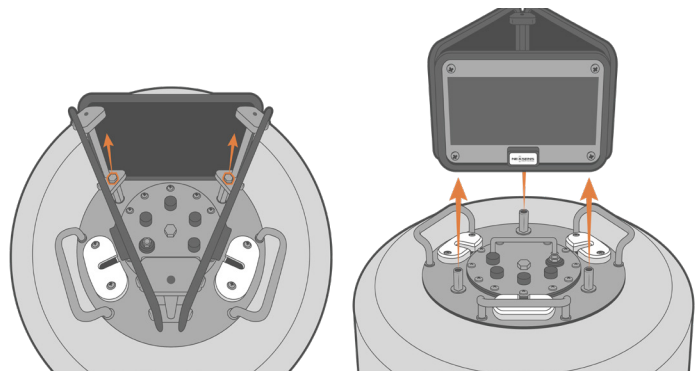


Figure 3: Remove the solar tower.

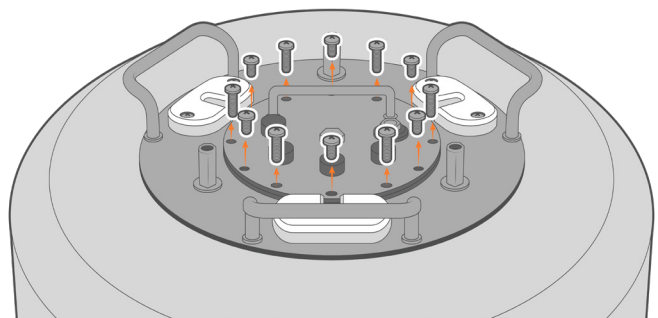


Figure 4: Remove the MC-SUB from the buoy and battery well.

MCBH/Solar Bulkhead Connector Installation (Sold separately)

- 1 Using a 3/8" hex driver or Allen wrench, remove a blank port plug for each bulkhead connector.

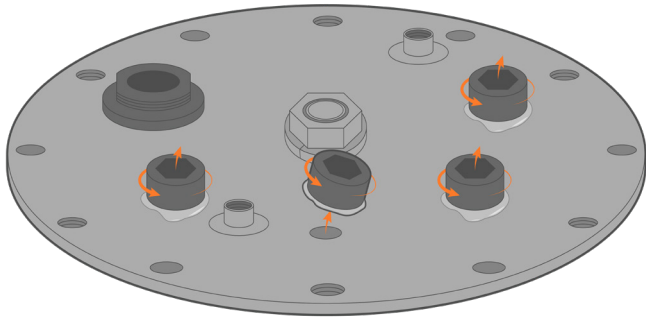


Figure 5: Remove the necessary blank port plugs.

- 2 Remove the nut and flat washer from the bulkhead connector and route the wires through an open hole.
 - a. Reinstall the nut and flat washer and tighten to the plate ensuring the O-ring underneath the connector stays in place.

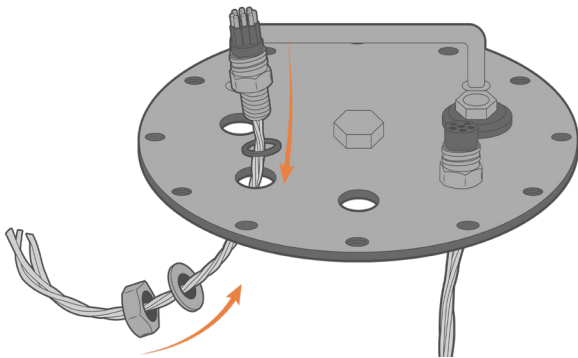


Figure 6: Install a bulkhead connector.

- 3 Apply an adhesive to the nut underneath the plate.
 - a. Ensure the adhesive for all connectors is fully cured before re-installing the plate.
- 4 Repeat this process for all cables that will be inserted through the pass-through plate and into the buoy well.
 - a. Tie together any loose wires to ensure they are not pinched underneath the lid during re-installation.

NexSens Solar Connector Wiring Information (Optional)

The NexSens Solar Connector is an optional accessory that can be used to power an internal battery via connection with the CB-75 solar tower.

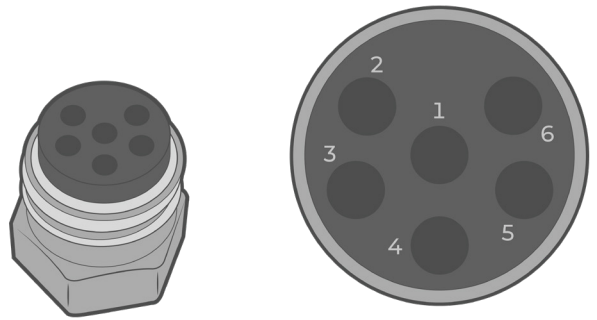


Figure 7: NexSens solar connector pin numbers.

Table 1: NexSens solar connector wiring information.

Receptacle Pin	Wire Color
1	Orange ^b
2	Yellow
3	Black ^a (Both black wires)
4	Red (Only on Molex connector)

The free red (+++) and black (---) wires are for power and ground connection to an external device.

Note: Information below refers to connection with a NexSens solar tower.

^aThe solar tower plug is connected to both black wires (ground) and the single yellow wire (power).

^bThe orange Molex wire and the red flying lead wire are shorted together.