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## INSTALLATION OF A USB/VOLT METER TO MONITOR VOLTAGE DURING SURESHADE OPERATION

This is the procedure to add a USB/Volt Meter to an existing shade controller. Hooking this device directly to the ground and power at the controller will allow the client to monitor voltage prior to and during operation of the shade. When testing this USB device against an actual volt meter, the voltage is within .2V – so it is an easy and reliable means of confirming proper voltage.

The goal is to make it easy for the boat owner to monitor the voltage while operating the shade and if the voltage drops below 12V, the owner should then stop operating the shade

Here is the Voltmeter we recommend – it is inexpensive and can be ordered directly from Amazon:

LiDiVi Waterproof Dual USB Charger Socket Power Outlet 2.1A & 2.1A Digital Voltmeter Blue LED Light iPad iPhone Car Boat Marine Mobile <a href="https://www.amazon.com/dp/B01M0GR0FQ/ref=cm\_sw\_r\_cp\_tai\_sH4DBb4K9JXPY">https://www.amazon.com/dp/B01M0GR0FQ/ref=cm\_sw\_r\_cp\_tai\_sH4DBb4K9JXPY</a>

## Steps:

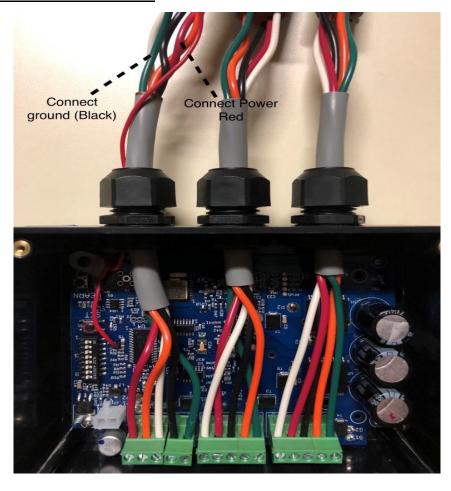
- 1) Clear with boat owner that he/she is OK with the USB being installed.
- **2)** Get approval on location for install. Preferred location is next to or with-in eye sight of the shade's rocker switch.
- 3) Measure out enough wire to accommodate install location.
- 4) Install marine grade blade connectors to wire.
- 5) Attach controller end of wires using marine grade pinch connectors.
- 6) Drill 1 1/8" hole and install the USB device.







## **USB/VOLT METER CONNECTIONS**





## **IMAGE OF INSTALLED USB/VOLT METER**

