DOCKLIFEGUARD™.COM
Dock Warning System

Mounting and Bonding *(Dec-2024)*

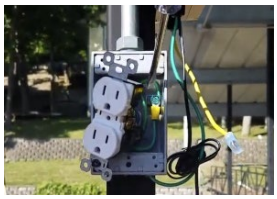
- Using a Voltmeter, check for voltage on: metal dock frame, electrical common ground, boat lift frame, and water prior to working on any dock. If sensing voltage greater than one volt, source of stray voltage should identified and corrected.

  Note: You must have a continuous ground from the Dock Lifeguard to the ground rod at shore and/or the common ground of the disconnect panel at shore.

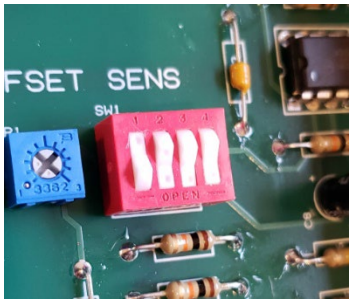
- **Metal Floating Docks bonded to a Common Ground not carrying Voltage**: Mount on post above outlet using screws provided. Using a multimeter, verify that the dock frame is properly bonded to common ground (green wire). Attach the green ground reference wire and the green/yellow wire from the Dock Lifeguard to bonded dock frame or through a weep hole in the outlet box to the Common Ground of the outlet.

- **Metal Floating Docks unbonded to a Common Ground that carries Voltage:** Some lake environments are such that the Common Ground carries Voltage on it. Because of this, the dock may be wired in PVC Conduit, and not bonded to the dock frame to avoid providing a path for this voltage to get onto the dock frame and into the water. The green Ground Reference wire should be connect to the equipment ground of the outlet. The green/yellow Ground Reference Wire should be mounted to the dock frame.

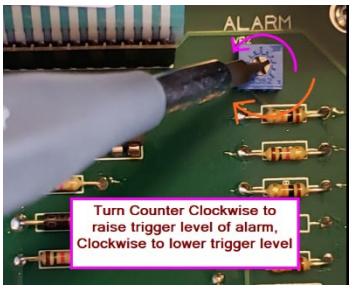
- **Wood Pier Docks**: Attach ground reference wire from Dock Lifeguard through weep hole in receptacle box and attach to common ground of receptacle.



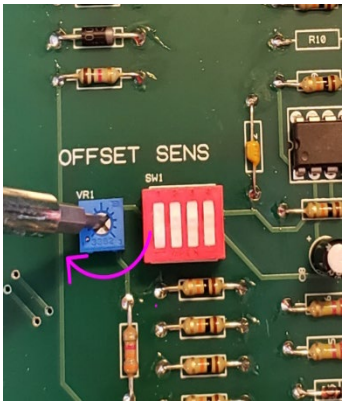
- **Sensing Probe Installation**: Place sensing probe closer to the area where swimming activity will be. Do not install probe next to underwater bracing or anchor cables. The sensing probe lead wire can be lengthened (using 14 gauge stranded thhn or mtw wire) to allow proper location of the probe. Probe should be mounted 2 to 3 feet below water surface.



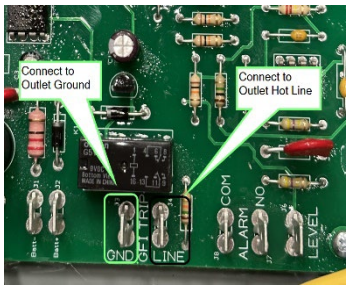
Sensitivity Settings: Internal dip switches allow for increasing the sensitivity level of the unit. Increasing sensitivity increases range of detection. Factory Defaults is one switch up (0.25 Volts/LED) 0 = 0.5 Volts, 1 = 0.25 Volts, 2 = 0.16 Volts, 3 = 0.12 Volts, 4 = 0.08 Volts



- **Alarm Trigger Point**: The Alarm is set to trigger off the number of LEDs lit (not voltage). Factory default is usually between 2 and three yellow LEDs. Alarm level can be raised by turning the Alarm pot counter clockwise. Example: Sensitivity dip switch is set to 1 up (0.25 Volts) and alarm is set to trigger on the 6th LED, which corresponds to (0.25 * 6 = 1.5 Volts).



- **Zero Reference Point**: In bodies of water that have a very high Ambient Voltage in the water (i.e. 2 Volts+), The default zero reference point can be adjusted to the current environment. Default setting is 0 Volts. By turning this pot clockwise reference point will be increased which can be seen by the number of LEDs being displayed decreasing. With this feature you can set up the system to alarm at "X" Volts over ambient voltage.



- **GFCI Trip**: By connecting a wire from the GFCI GND Tab to the Ground of an outlet, and wire from the LINE Tab to the Hot Wire of the outlet when the alarm sounds for 5 seconds, a pulse is issued to trip the GFCI breaker that is associated with that outlet. Test the GFCI tripping by pressing and holding the TEST button for 5 seconds. Warning: Wires should be in conduit.

- **Alarm Volume**: Volume of the siren can be adjusted by twisting the clear ring that on the outside of the red alarm light
- **Installation Videos**: Go to our DockLifeguard.com website and under the Technical menu item and select "Install Video". Username: **install** Password: **saveslives**

*** Always check Dock Lifeguard's Website for latest Installation Notes *****

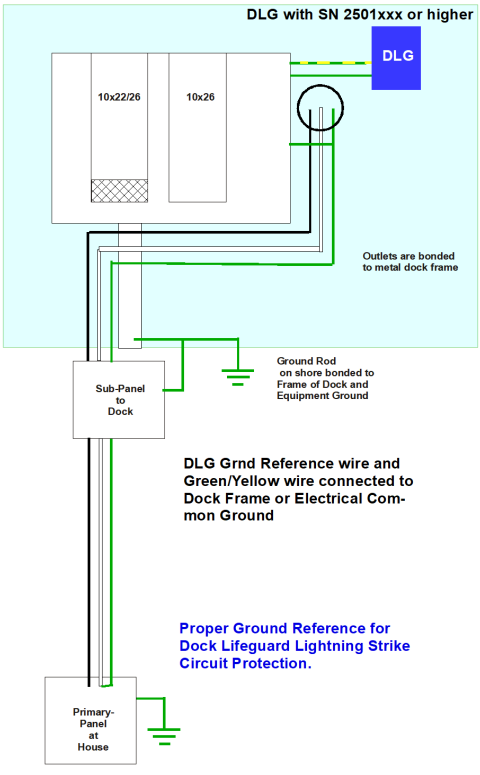
DLG Reference Ground
(Frame of Metal Dock when dock frame is bonded to isolated Ground Rod at Shore)

Equipment Ground
(Ground of Outlet)

Sensing Probe suspended in Water

Note: If Metal Dock Frame is bonded to Equipment Ground of Outlet. The Green Wire and Green/Yellow wire can be tied together and attached to dock frame or the ground of outlet.

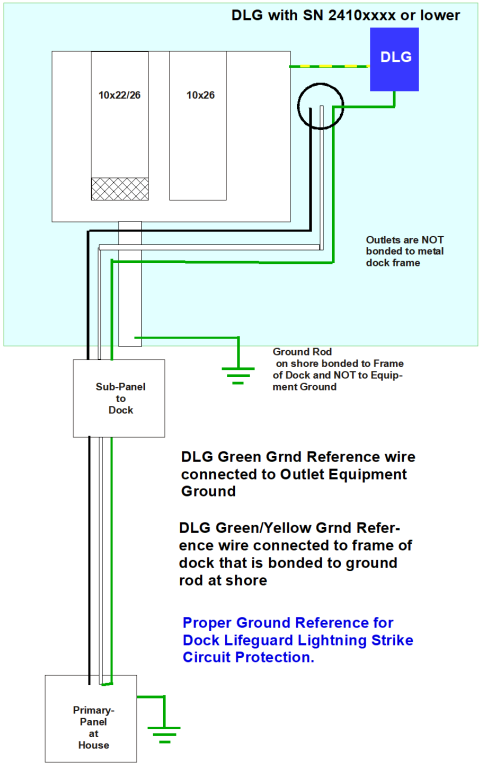
No Stray Voltage From Electrical Service on Equipment Ground



DLG Grnd Reference wire and Green/Yellow wire connected to Dock Frame or Electrical Common Ground

Proper Ground Reference for Dock Lifeguard Lightning Strike Circuit Protection.

Stray Voltage From Electrical Service on Equipment Ground



DLG Green Grnd Reference wire connected to Outlet Equipment Ground

DLG Green/Yellow Grnd Reference wire connected to frame of dock that is bonded to ground rod at shore

Proper Ground Reference for Dock Lifeguard Lightning Strike Circuit Protection.