Panacea Pump Controller – 12 V DC Timer Control Unit Quick Start Guide

1) ON/OFF indicator lights
2) OFF units/adjustment screw
3) ON units/adjustment screw

ON Cycle = Discharge
OFF Cycle = Recharge
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Connections
- Air source should connect to the left port. The right side port is the gas-out port. Connect the gas-line of the pump to the gas-out port.
- Power connection to 12V DC battery is on the left side of the unit. Connect red alligator clip to positive battery terminal. Black alligator clip on negative battery terminal.

Pressure
- Supply one (1) PSI of pressure for every two (2) feet of depth.

Timing
- The ON TIME controls the pump’s discharge. The OFF TIME controls the pump’s recharge.
- To find the ON TIME for purge mode:
  - Set the OFF time (green needle, controlled by outer dial) to zero by turning it fully counter-clockwise.
  - Set the ON time (red needle, controlled by inner dial) to 5 minutes.
  - Ready a stopwatch or a timer. Throw the power switch to the ON position and start your timer. This will activate the unit, beginning the ON cycle.
  - Air will be expelled from the sample return line of the Panacea Pump, followed by water. The water will be followed by pressurized gas. Once the water has been fully pushed from the sample return tube and pressurized gas is coming out, stop the timer and turn off the power switch. This is your maximum ON time.
  - Set the ON time (red needle, controlled by inner dial) to the ON time measured and set the OFF time (green needle, controlled by outer dial) to 5 minutes.
- To find the OFF Time for purge mode:
  - Verify that the OFF time is set to 5 minutes.
  - Turn the power switch ON. The unit will be powered, but will not begin pumping until 5 minutes have passed.
  - After 5 minutes, the ON cycle will begin and water will be pumped from the sample return tube.
  - Once the ON cycle finishes, you will hear a click and the red light on the front of the unit will turn off. A green light on the face of the timer will indicate the OFF cycle has begun. Start a stopwatch or a timer.
  - Monitor the exhaust vent on the front of the unit. You can hear and feel the gas as it is being exhausted. Once the exhaust has stopped (ie you can no longer hear or feel it) stop the timer and turn off the power switch. This is your OFF time.
  - Set the OFF time to the time measured above. Both the ON and OFF cycles are now set.
- To find the ON Time for ratchet mode: Set the ON TIME to 1/3 the ON TIME for purge mode.
- To find the OFF Time for ratchet mode: Set the OFF TIME to 1/2 the OFF TIME for purge mode.