

# ADCP SIIM Test Plan

| Date       | Author | Description      |
|------------|--------|------------------|
| 10-12-2006 | L.M.   | Initial creation |

Items to test:

1. Housing
  - a. Pressure: cycle to rated depth \* 1.3 pressure (1300m equivalent)
2. Electronics
  - a. Power: run resistive load at rated power \* 1.3 (5.3W)
    - i. Measure increase in housing temperature in ambient air
    - ii. NOTE: Since ADCP will run directly off of 48V from node, the load is just the DIGI module
  - b. Power: Measure output voltage peak-to-peak (min, max) and nominal
  - c. Signal levels: Verify that RS-232 signal levels are within tolerance,  $> \pm 3V$
3. Cabling
  - a. Verify point-to-point connectivity (continuity test)
4. Network
  - a. Functionality: Verify Ethernet <-> Serial translation using Hyperterminal
5. System
  - a. Run ADCP diagnostics, through SIIM with SIIM in temperature cycling chamber
    - i. Cycle between 0c and 60c
  - b. Run ADCP diagnostics, through SIIM, from remote network
    - i. Install ADCP/SIIM on MARS network
    - ii. Operate ADCP from Building B or other non MARS network