



DATAFLOW SYSTEMS PTY LTD

LOW COST DATA RECORDING SENSORS

www.odysseydatarecording.com

Essential Maintenance

Battery connection.

Because of the possibility of x-ray scanning of freight which can cause the Odyssey logger to hang up and flatten the batteries the loggers are supplied with a plastic insulating washer on the positive battery terminal. This disconnects the battery from the logger and prevents any battery failure during transport.

Please remove the washer and replace the battery screw. When the socket head screw is replaced, it should only be tightened until it is firm. Over tightening may damage the logger.

Use of Desiccator.

The use of a desiccator is essential for all loggers. Temperature variations can result in large pressure variations within the loggers' housing which may cause dew point to be reached if a desiccator is not used.

Moisture on the printed circuit boards may cause permanent irreparable damage. A logger will not operate in accordance with its design if a desiccator is not used and changed regularly, particularly within a humid environment.

SILICA GEL desiccator sachets **MUST** be placed in the top cap of the logger to ensure trouble free long-term reliability of your logger. This ensures that the air in the logger housing remains dry and prevents condensation forming on the printed circuit board.

Fresh indicating SILICA GEL is deep blue in color. Exhausted indicating SILICA GEL turns pink or white. The sachets can be reused by drying in an oven at 90 degree centigrade until the crystals turn blue. After removing from the oven place sachet in an airtight container. The oven heat must not be more than 90 degree centigrade.

IMPORTANT

Replace the SILICA GEL either during each site visit (if weeks apart) or at the time the blue color of the gel has faded (if the loggers are downloaded more frequently than this).

'O' Ring & Thread Maintenance.

The 'O' ring should be cleaned periodically to ensure that it has not deteriorated. If any sign of cracking has occurred, it should be replaced. After cleaning or replacement, the 'O' ring should be smeared with silicone grease or petroleum jelly. The 'O' ring must always be tight enough to avoid water leakage into the logger. Screw the top cap on until the 'O' ring cannot be seen and the cap touches the logger body. Do not over tighten.

The top cap surface that the 'O' ring seals on **must** be clean and free from any physical defects or indentations. The screw threads on the logger body and top cap should be cleaned thoroughly, making sure the threads are free of any foreign material such as sand or lint. They should then be smeared lightly with clean silicone grease or petroleum jelly before being reassembled.

A toothbrush is useful for cleaning the threads. The threads should screw together without any undue force being used. If this cannot be done then the thread may be damaged or dirty.

IMPORTANT

Ensure the 'O' ring and thread is clean and free of dirt or debris before deploying the instrument. Any particles in this area can result in a water ingress and failure of the logger.

Battery Replacement.

Odyssey Logger uses a welded battery assembly of two 3.6V Lithium cells. To Install/Replace battery follow the steps below.

1. Unscrew the top cap of the logger housing.



2. Use a 2.5mm hexagon allen key to remove the two socket head screws in the fiberglass battery-mounting disk. With the screws removed, tip the logger upside down and gently ease the battery pack and fiberglass disk from behind the PCB and out of the unit.



3. Slide the new battery pack into the logger.



4. Screw the two screws into the sockets on the logger board. Make sure the shake-proof washers are re-installed. When the screws are replaced they should only be tightened until they are firm. Over tightening may damage the logger. If the logger is fitted with a status LED, this will flash 4 times to indicate the logger has been re-powered.