SeaDock

The SeaDock software is used to program and communicate with the physical tag itself.

<u>Argos IDs</u> — List of user tag inventory, including an ID for each tag assigned by Service Argos to user program.

<u>Lock Table</u> — Lock the table after logging user Argos IDs to prevent accidental changes.

Communications

<u>Serial Port</u> — Mouse over the serial ports to identify and select the SeaDock connection. Look for a Pololu or an FTDI USB-to-serial adapter.

<u>Show Raw Communications</u> — Shows the communications between SeaDock and user tag. We recommend the user to keep this window open to learn what is happening.

Dock

Wake From Sleep —

File

<u>Load Argos Log</u> — Load an Argos data log from the Argos website for decoding (data retrieval).

<u>Open Tag Configuration Logs Folder</u> — Contains a complete history of configuration actions for each of your tags, sorted by tag serial number.

Open Tag Log Folder —

Exit — Closes the SeaDock program.

Help

<u>Tool-Tips</u> — Tool-tips explain all the data fields and are the primary Help resource. Point the cursor at most anything to learn more.

SeaTag FAQ — View detailed performance data and download SeaTag related documents and instructions.

<u>Desert Star Facebook</u> — Get ideas. Desert Star news and information, including many SeaTag projects.

<u>Desert Star Website</u> — Get the latest SeaTag product line-up, and obtain pricing.

<u>About SeaDock</u> — Identify the version of this software.

Start

Heart Beat —

<u>Voltage</u> — This shows the tag's capacitor voltage. If the tag's capacitor is too low and this shows 'charging,' the user can speed things up by putting it in a light charging station.

<u>Light</u> — This informs the user what the tag saw the last time it reported a heartbeat. If it is red and 'INVALID,' try covering the dock with a non-flammable object to keep ambient light out.

Data

Model — The kind of tag that has been detected.

SN — The tag's serial number.

HW — The tag's hardware version.

SW — The tag's software version.

<u>Date</u> — The tag's current date.

<u>Time</u> — The tag's time shown in UTC; thus, make certain that PC time is correctly set when configuring said tag.

Offset — The difference between your PC's and the tag's.

<u>Packets</u> — How full the tag is. Make sure to check 'daily packets only' for the longest data collection period.

Basic Options

<u>Sensor Sampling Interval</u> — For sensor data storage and histogram generation. Data collection for geo-positioning is independent and always occurs at 4-minute intervals.

HH — Hours.

MM — Minutes.

SS Seconds.

<u>Daily Summary Only</u> — This selection stores daily summaries only. This should generally be selected for SeaTag-GEO tags with limited memory. Max Log Duration — This takes into account how full the tag currently is. Erase the tag if user wants to see the maximum possible deployment length.

<u>User ID</u> — Use as needed to specify a specific animal, an experiment, an experimenter and so forth.

Tag

Write Settings — Transfer the selected settings to the tag.

Read Settings — Read the current settings of the tag.

<u>Download Logs (all)</u> — Retrieve all logs from the tag even if the tag says it is empty.

<u>Download Logs (some)</u> — Retrieve some logs from the tag even if the tag says it is empty.

Erase Logs — Erase the data log of the tag.

<u>Test Release Mechanism</u> —

Test Sensors —

View Calibration Report —

<u>Update Firmware</u> — Upgrade your tag's software.

Mission Settings — Definition of overall mission parameters.

Mission —

<u>Mission Type</u> — Allows user to select a single mission type.

Real-Time Tracking — Tag stays on animal and transmits current data or brief position-only packets. Use to track frequently surfacing animals.

<u>PSAT with RT (real-time) Tracking</u> — Start data collection on start date, then release and transmit archived data on end date. Transmit real-time data during surface intervals before release using solar power only.

Sleep Mode — Use for tag storage. Stops transmission and data collection.

Data Transmission —

<u>Argos ID Code</u> — Select from the list of user ARGOS ID assigned codes, as defined in the Argos IDs tab.

Packet Settings —

<u>Packet Transmission Mode</u> — Allows user to select data to be transmitted via ARGOS.

Engineering Mode —

Daily Summaries —

ARGOS Position Only —

Real-Time Transmissions — The data transmitted when in 'Real-Time Tracking' mode, and before release in 'PSAT and RT Tracking' mode.

<u>Selected Packets</u> — Loops recent data packets (GEO/PSAT limited to daily summaries only).

<u>Transmitter Settings</u> —

Transmit Conditions —

RF Surface Detection — Transmit only if radio frequency-based surface detection indicates the tag antenna is out of the water. Use for animals with brief surface intervals.

<u>Transmit Timing</u> —

<u>Transmit Days</u> Limits ARGOS transmit days, to cap your budget. Counts only days with at least 10 transmissions; it does not count PSAT transmissions before release.

<u>Transmit Repetition Period (sec)</u> — Repetition interval of ARGOS transmission in seconds. Set as specified by Service ARGOS for user program.

Start/End Dates (UTC) —

<u>Data Collection Start Date</u> — Data Collection starts at 0000h UTC on this day.

Month X Year Y — Sensor data acquisition starts on this date.

Release Date — Data Collection starts at 0000h UTC on this day.

Month X Year Y — The day to trigger the release. The data collected between start and release is transmitted in Archival mode.

 $\underline{\text{HH MM SS}}$ — Data collection ends, the tag releases from the animal and starts transmitting archival data at 0000h UTC on this day.