



LISST-Logger

Submersible Data Logging Instrument

User's Manual

Version 1.0

March 2026

**Store Software USB
Card Here**

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LISST-Logger Submersible Data Logging Instrument

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Technical Assistance

For technical assistance, please contact your local distributor or Sequoia Scientific directly. When requesting support, please include:

- Instrument serial number
- Firmware version
- Software version
- A detailed description of the issue

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1 Introduction

1.1 Product Overview



Figure 1-1: The LISST-Logger

The LISST-Logger is a fully submersible digital (RS-232) and analog data logger rated to 2,000 meter depth. The LISST-Logger is designed to record data from multiple sensors, all from a single compact anodized aluminum enclosure.

Raw serial data (RS-232) is recorded exactly as received from the connected instrument. The logger does not add headers, modify formatting, or interpret the data in any way; it acts as a transparent recorder. The file format and content are entirely determined by the connected sensor. Analog data is recorded at 1Hz at 16 bit resolution.

The logger provides two independent sensor ports (Connector A and Connector B). Each port supports one RS-232 digital serial input and two 0–5 V analog inputs, allowing connection of up to six sensor channels simultaneously. Data from each connector is managed as a separate “Sensor Group” with independently configurable communication settings, sampling schedules, and data file parameters.

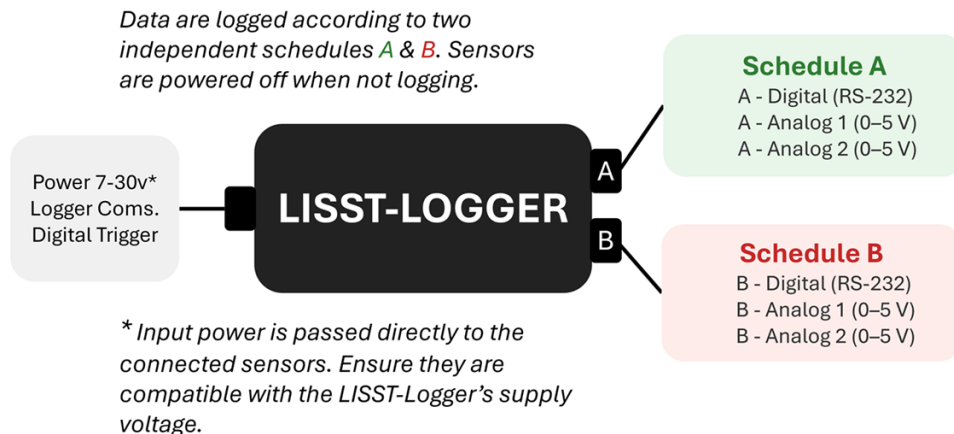


Figure 1-2: LISST-Logger input/output schematic

1.2 Key Features

- Depth-rated to 2,000 m in compact aluminum housing
- Two RS-232 sensor input ports
- Four analog sensor inputs (0–5 V, 16-bit)
- Simultaneous connection of up to 6 instruments
- Independent scheduling for each sensor group
- Three sampling modes: Nonstop, Periodic, and Digital Trigger
- Configurable start/stop conditions (immediate, delayed, date/time, sample count)
- 1 GB internal storage
- Low-power sleep mode (0.6 mA at 12 V)
- External power input: 7–30 VDC
- Up to 12 W power pass-through to each connected sensor
- Companion Windows software for configuration, monitoring, and data offload

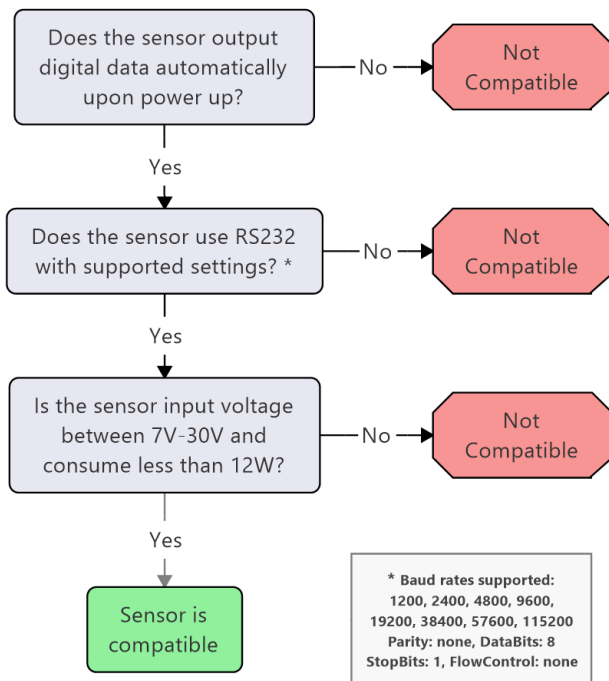
1.3 Compatible Instruments

The LISST-Logger is designed to work with Sequoia Scientific instruments including:

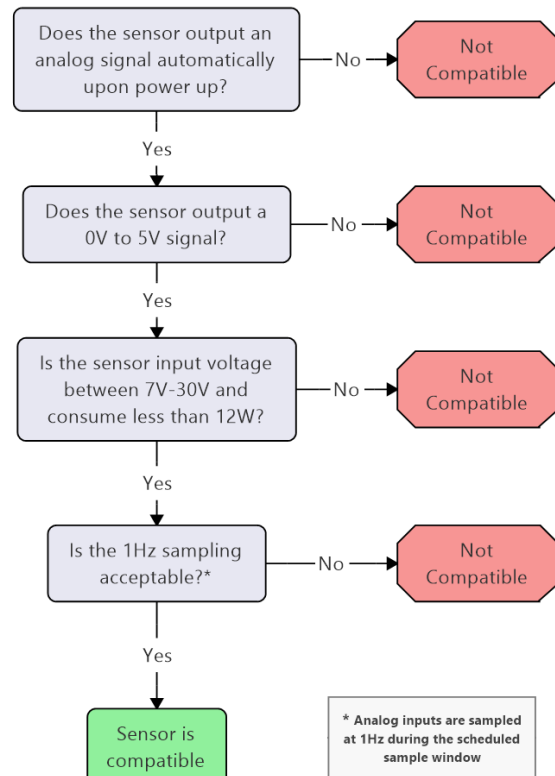
- LISST-Tau — submersible sensor measuring optical transmission and beam attenuation
- LISST-OST — submersible sensor measuring diffuse optical transmission

It also supports third-party RS-232 output sensors and analog (0–5 V) sensors. See the flow chats below to determine if your digital or analog sensor is compatible with the LISST-Logger:

Is my digital sensor compatible with LISST-Logger?



Is my analog sensor compatible with LISST-Logger?



2 Specifications

Parameter	Specification
Dimensions (diameter × length)	5.08 cm × 19.7 cm (2.00" × 7.77")
Weight [air / seawater]	0.61 kg / 0.26 kg (1.34 lbs / 0.57 lbs)
Housing material	Anodized aluminum (black) with sacrificial anode
Depth rating	2,000 m
Input voltage	7–30 VDC (external)
Power output per sensor port	Up to 12 W at input voltage
Operating current	5 mA @ 12 V + Amperage of connected sensors
Sleep current	0.6 mA @ 12 V
Digital interfaces	2 × RS-232 serial
Analog inputs	4 × 0–5 V (2 per connector), 16-bit resolution
Analog sample rate	1 Hz
Digital sample rate	Up to 115200 baud continuous streaming
Data Storage	1 GB
Main connector	SubConn MCBH5M
Sensor connectors	2 × SubConn MCBH6F
Digital trigger input	5–12 V start/stop signal

3 Hardware Overview

3.1 Physical Description

The LISST-Logger is a cylindrical instrument with a black anodized aluminum housing. A sacrificial zinc anode provides corrosion protection for extended submersed deployments. The instrument has no internal battery for operation and must be externally powered at 7–30 VDC through the main connector.

3.2 Connectors

The LISST-Logger has three wet-mateable connectors.

Communication and Power Connector (SubConn MCBH5M): Provides external power input (7–30 VDC), the external switch/trigger input, and communication with the host computer. This connector is used for configuration, data offload, and supplying power during deployment.

Sensor Connector A (SubConn MCBH6F): Provides RS-232 serial data input, two analog inputs (0–5 V), and power pass-through to the connected sensor. Configured as Sensor Group A in the software.

Sensor Connector B (SubConn MCBH6F): Identical to Connector A. Provides RS-232 serial data input, two analog inputs (0–5 V), and power pass-through. Configured as Sensor Group B in the software.

Communications and Power Connector (5 pin male connector)

Bulkhead connector: SubConn MCBH5M
Mating cable connector: SubConn MCIL5F



Bulkhead Endview



Cable Endview

Contact number	Function
1	Power/Serial Ground
2	External Power In (+7V to +30V)
3	Digital Trigger
4	Serial Out (to Computer)
5	Serial In (from Computer)

Sensor A and B Connectors (6 pin female connectors)

Bulkhead connector: SubConn MCBH6F
Mating Cable Part Number: SubConn MCIL6M



Bulkhead Endview



Cable Endview

Contact number	Function
1	Ground (Power/Serial/Analog)
2	RS-232 Data Out (to Sensor from LISST-Logger)
3	Analog Input #1, 0 to 5V
4	Power Out to Sensor (same as Logger input voltage)
5	RS-232 Data In (from Sensor to LISST-Logger)
6	Analog Input #2, 0 to 5V

3.3 External Switch

The LISST-Logger uses an external switch located around the main connector to control logging operation. An internal vibration motor will give haptic feedback when the switch is moved. The switch has two positions:

Position 0 (Off): The logger is in standby/communication mode. The software can connect to the logger for configuration, file offload, and clock synchronization. Logging is not active.

Position 1 (On): The logger initiates the configured logging schedule. The start condition determines exactly when data acquisition begins (immediately, after a delay, or at a specified date/time).



Figure 3-1: External switch in Position 0 (Off)



Figure 3-2: External switch in Position 1 (On)

Switch State	Vibration Pattern
0 → 1 (logging schedule started)	Three short vibration pulses
1 → 0 (logging schedule stopped)	Single 1 second pulse
Error	Single 8 second pulse

4 Software Installation

4.1 System Requirements

- Microsoft Windows 10 or later
- USB port (for serial communication with the logger)

4.2 Installing the Software

Download the latest LISST-Logger software from the Sequoia Scientific website or use the installer provided on the USB card with your instrument. Run the installer and follow the on-screen prompts.

4.3 Connecting to the Logger

To connect the LISST-Logger to your computer:

1. Ensure the external switch is in position 0 (Off).
2. Connect the logger to your computer using the USB cable provided.
3. Apply external power (7–30 VDC) to barrel plug in the cable.
4. Launch the LISST-Logger software. The application will automatically search available COM ports for the logger.
5. Once connected, the status bar at the bottom of the window will display the instrument serial number, firmware version, and COM port.

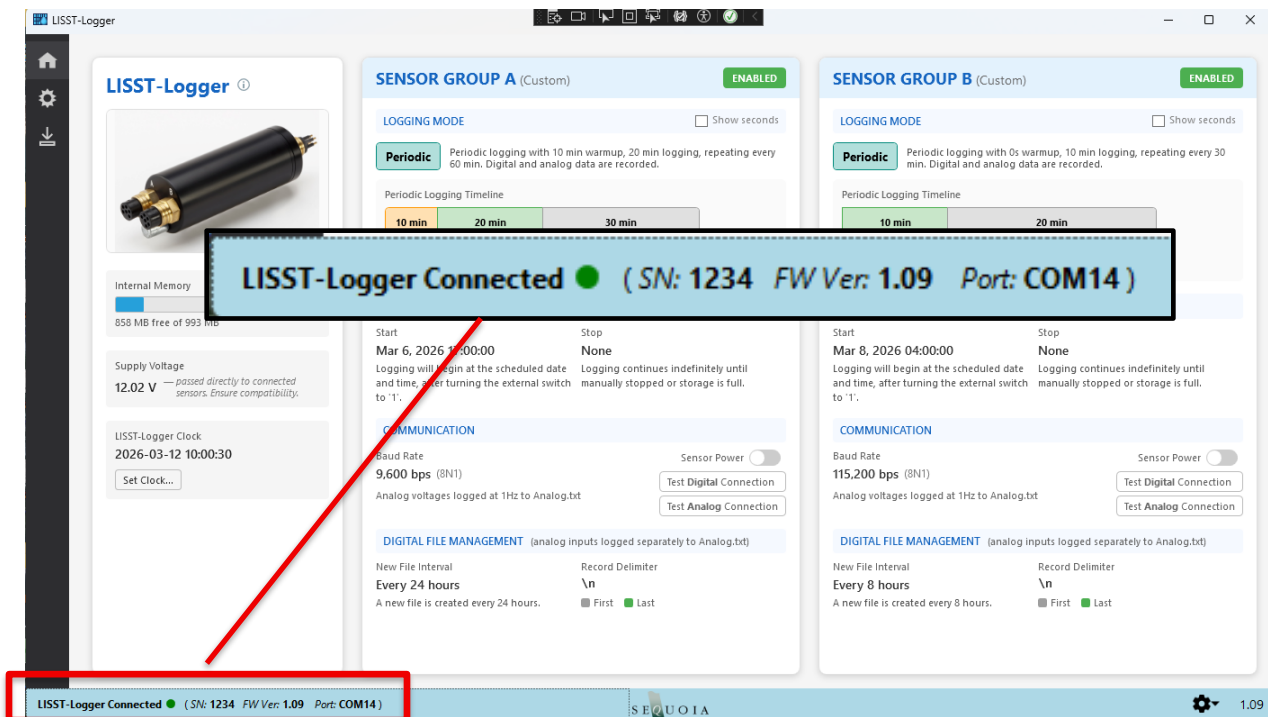


Figure: Status bar showing connected logger (serial number, firmware, COM port)

Note: If the software cannot find the logger, verify that power is applied, and the USB cable is connected. Use the Help button in the status bar for additional troubleshooting guidance.

5 Software Reference: Home

The Home tab is the default view when the software starts. It provides a dashboard showing the logger's current status, memory usage, clock, and a summary of both sensor group configurations.

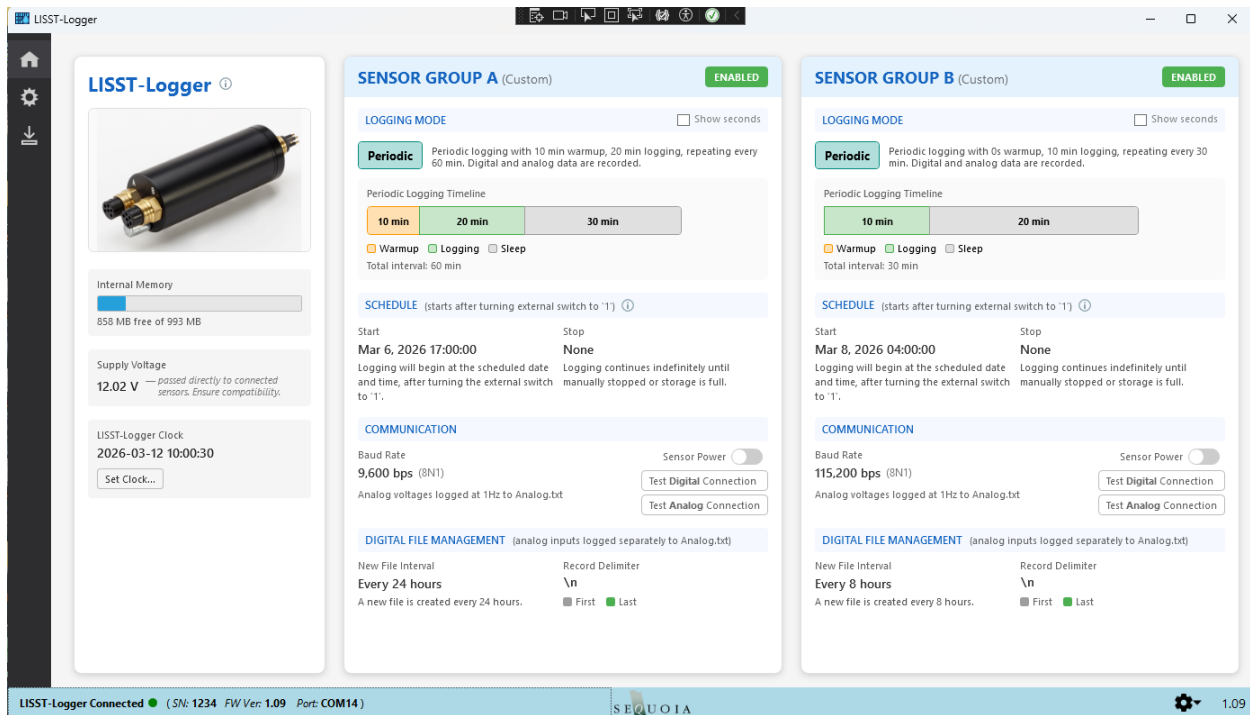


Figure: Home tab overview

5.1 Logger Diagram

The left panel displays the LISST-Logger product image. An information button (“i”) displays a simplified logger schematic.

5.2 Internal Memory

The Internal Memory section displays a visual progress bar showing storage usage along with free and total capacity values.

Warning messages appear when memory is nearly full (≤ 5 MB free) or critically full (< 300 KB free).

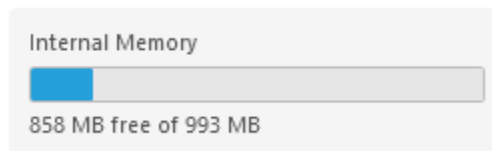


Figure: Internal Memory Display

5.3 Supply Voltage

The supply voltage to the LISST-Logger is shown just underneath the internal memory display. This value is updated every 2 seconds. The supply voltage shown on the left panel is directly applied to the

connected sensor. Ensure the connected sensor is compatible with the supply voltage of the LISST-Logger.

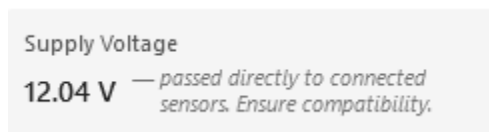


Figure: LISST-Logger supply voltage display

5.4 Logger Clock

The logger maintains an internal real-time clock used to timestamp data files and schedule date/time-based start/stop conditions. The Home tab displays the current instrument time, updated in real time after synchronization.

If the instrument clock differs from the computer clock by more than 5 seconds, a warning message is displayed with the offset. Click the “Set Clock...” button to synchronize the logger clock to your computer’s current time.

Note: Always synchronize the logger clock before deployment to ensure accurate timestamps in your data file names.

5.5 Sensor Group Status Cards

The center and right columns display summary cards for Sensor Group A and Sensor Group B, respectively. Each card shows:

- Enabled/disabled status
- Selected preset (Custom, LISST-Tau, or LISST-OST)
- Sampling mode (Digital Trigger, Periodic, or Nonstop)
- Schedule timing (warmup, duration, interval)
- Start and stop conditions
- Baud rate and delimiter settings
- File interval

Each card includes three ways of interacting with the connected instruments:

Sensor Power: Toggle switch to turn on/off power to the connected sensor. **NOTE:** The supply voltage shown on the left panel is directly applied to the connected sensor. Ensure the connected sensor is compatible with the supply voltage of the LISST-Logger.

Test Digital Connection: Opens a terminal window and sends a command to display live RS-232 data from the connected sensor. This verifies that the sensor is communicating and the baud rate is correct.

Test Analog Connection: Opens a terminal window and reads the analog inputs on the corresponding connector. This verifies that analog sensors are connected and returning valid voltage readings.

SENSOR GROUP A (Custom)

ENABLED

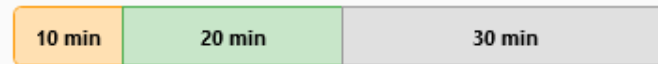
LOGGING MODE

Show seconds

Periodic

Periodic logging with 10 min warmup, 20 min logging, repeating every 60 min. Digital and analog data are recorded.

Periodic Logging Timeline



Warmup Logging Sleep

Total interval: 60 min

SCHEDULE (starts after turning external switch to '1') ⓘ

Start

Mar 6, 2026 17:00:00

Logging will begin at the scheduled date and time, after turning the external switch to '1'.

Stop

None

Logging continues indefinitely until manually stopped or storage is full.

COMMUNICATION

Baud Rate

9,600 bps (8N1)

Analog voltages logged at 1Hz to Analog.txt

Sensor Power

Test **Digital** Connection

Test **Analog** Connection

DIGITAL FILE MANAGEMENT (analog inputs logged separately to Analog.txt)

New File Interval

Every 24 hours

A new file is created every 24 hours.

Record Delimiter

\n

First Last

6 Software Reference: Configuration

The Configuration tab allows you to set up both sensor groups independently. The view displays two side-by-side configuration cards, one for Sensor Group A and one for Sensor Group B. Each card contains identical settings.

An orange banner at the bottom indicates when changes have been made but not yet uploaded to the logger. **NOTE:** changes must be uploaded to the LISST-Logger for them to take effect.

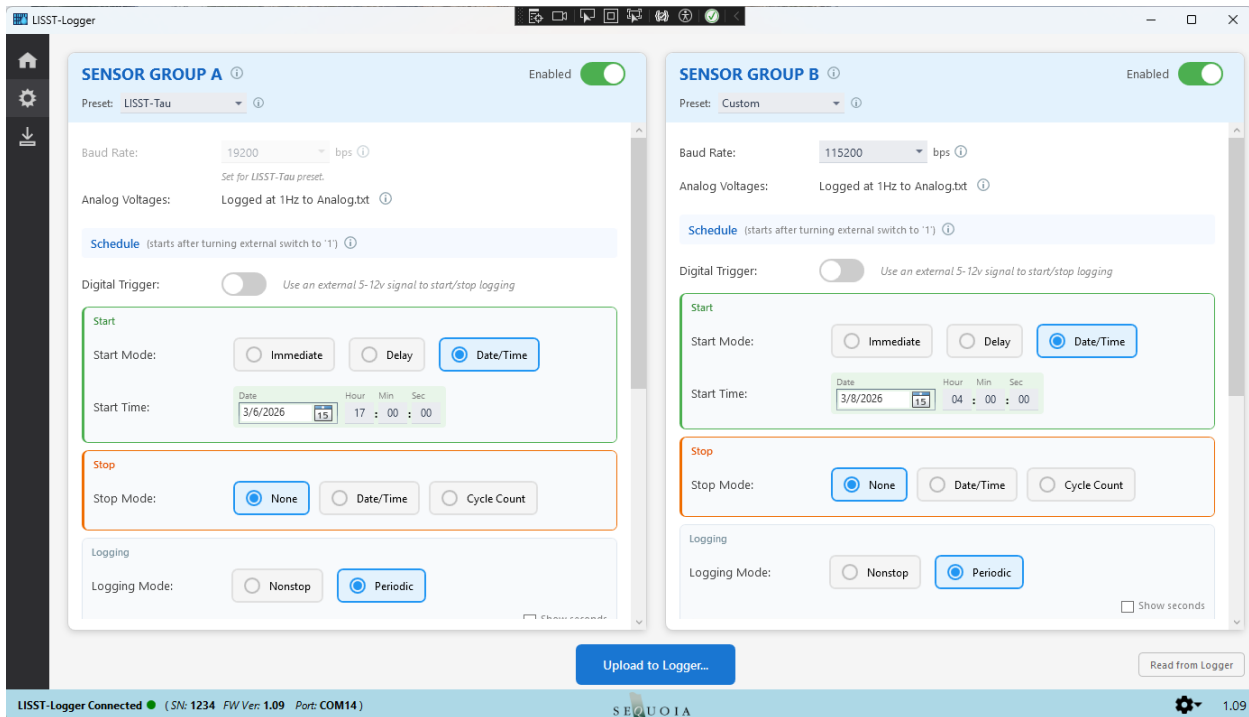


Figure: Configuration tab overview (both sensor group cards)

6.1 Sensor Group Enable and Presets

Enabled: Toggle switch to enable or disable the sensor group. A disabled group will not log any data.

Preset: Select from predefined configurations optimized for Sequoia instruments:

- LISST-Tau — 19200 baud, newline delimiter
- LISST-OST — 19200 baud, newline delimiter
- Custom — manually configure all communication parameters

When a preset other than Custom is selected, the baud rate and delimiter fields are locked to the preset values. Select Custom to unlock all fields.

6.2 Sensor Communication (RS-232)

The baud rate is the only serial communication parameter that may be configured — it must match your sensor’s output baud rate. All other RS-232 settings are fixed at standard values:

Parameter	Specification
Baud Rate	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200
Data Bits	8 (fixed)
Parity	None (fixed)
Stop Bits	1 (fixed)
Flow Control	None (fixed)

Note: These settings must exactly match your sensor’s serial output configuration. Mismatched settings will result in garbled or missing data. Consult your sensor’s documentation for the correct values. Test the settings using the ‘Test Digital Connection’ button on the home page.

6.3 Schedule Configuration

The schedule determines when the logger starts and stops recording data. Each sensor group has its own independent schedule.

The screenshot shows the 'Schedule' configuration interface. At the top, it says 'Schedule (starts after turning external switch to '1')'. Below this is a 'Digital Trigger' section with a toggle switch currently turned off and the text 'Use an external 5-12v signal to start/stop logging'. The 'Start' section is highlighted with a green border and contains 'Start Mode' options: 'Immediate', 'Delay', and 'Date/Time' (which is selected). Below 'Start Mode' is the 'Start Time' field, which includes a date picker set to '3/6/2026', a time picker set to '15', and fields for 'Hour', 'Min', and 'Sec' set to '17 : 00 : 00'. The 'Stop' section is highlighted with an orange border and contains 'Stop Mode' options: 'None' (selected), 'Date/Time', and 'Cycle Count'.

Figure: Schedule configuration section (start/stop conditions)

Digital Trigger Mode

When enabled, logging is controlled by an external voltage signal (5–12 V) on the trigger input pin. When the signal is high, data is recorded. When the signal is low, logging pauses. This mode overrides all other start/stop condition trigger settings. The switch must be in the ‘1’ position for the logger to start monitoring the digital trigger pin.

Start Conditions

When not using Digital Trigger mode, select one of three start conditions:

Immediate: Logging begins as soon as the external switch is moved to position 1.

Delay: Logging begins a specified number of seconds after the external switch is moved to position 1. This allows time for deployment before recording starts.

Date/Time: Logging begins at a specific date and time. Ensure the logger clock is synchronized before using this mode. The switch must be in the '1' position for the logger to start checking the date/time.

Stop Conditions

Select when logging should end:

None (Continuous): Logging continues indefinitely until the switch is moved to position 0 or storage is full.

Date: Logging stops at a specific date and time.

Cycle Count: Logging stops after a specified number of logging cycles (warmup + logging + sleep) have been completed.

6.4 Logging Modes

The sampling mode controls how data is acquired within the logging session. A visual diagram in the software illustrates the timing of each mode.

Nonstop (Continuous)

The sensor is powered on, allowed to warm up for the configured warmup period, and then data is recorded continuously until the stop condition is met. This mode is best for short deployments or when continuous data coverage is required.

Periodic (Burst)

The sensor is powered on and (optionally) warmed up, data is recorded for a configured duration, and then the sensor is powered off for a sleep interval. This cycle repeats until the stop condition is met.

Three timing parameters control this mode:

- Sensor Warmup — seconds the sensor is powered before recording begins
- Sample Duration — seconds of active data recording per cycle
- Sample Interval — total seconds per cycle (warmup + duration + sleep)

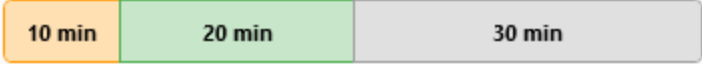
Periodic mode significantly extends deployment duration by reducing power consumption and storage usage.

Logging

Logging Mode: Nonstop Periodic

Show seconds

Periodic Logging Timeline



Warmup Logging Sleep
 Total interval: 60 min

Sensor Warmup: 10 min

Logging Duration: 20 min

Logging Interval: 60 min

Figure: Sampling mode timing diagram (warmup / active / sleep)

Note: The sum of warmup time plus sample duration must be less than the sample interval. The software will display an error if this constraint is not met.

6.5 Data File Settings

New File Interval: Controls how often a new data files are created. Set to 'Single File' for logging all data to one file, or 1–24 hours to create new files at regular intervals. The file system on the internal memory works best if there are under 1,000 data files. If you are planning a long-term deployment is best to use larger file intervals (e.g. new file every 8, 12, or 24 hours).

Delimiter: (optional) A delimiter marks the boundary between data records. When set, the logger uses it to align logging so that only complete records are captured — no partial data at the start or end. The delimiter is case sensitive.

The following escape sequences can be used in the delimiter field:

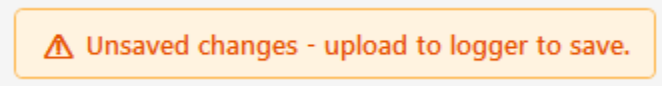
Sequence	Description
\r	Carriage return
\n	Line feed / newline
\t	Tab
\xHH	Arbitrary hex byte value (e.g. \x03, ETX, end of text)

Include First Delimiter: When enabled, the delimiter sequence is included at the beginning of the logged data. Disable to trim it from the start of the file.

Include Last Delimiter: When enabled, the delimiter sequence is included at the end of the logged data. Disable to trim it from the end of the file.

6.6 Uploading Configuration

After making changes, a warning message is displayed indicating that the configuration hasn't been uploaded to the LISST-Logger.



⚠ Unsaved changes - upload to logger to save.

Click the “Upload to Logger...” button at the bottom of the Configuration tab. A confirmation dialog displays a summary of the configuration. Click Confirm to write the settings to the logger. After uploading is finished, you will be returned to the home page to view an overview of the configured schedules.

If you navigate away from the Configuration tab with unsaved changes, the software will warn you that changes have not been uploaded.

Note: Configuration changes are not saved to the logger until you click “Upload to Logger.” Always verify the confirmation summary on the home page after uploading.

7 Software Reference: File Offload

The File Offload tab allows you to download data files from the logger's internal storage to your computer.

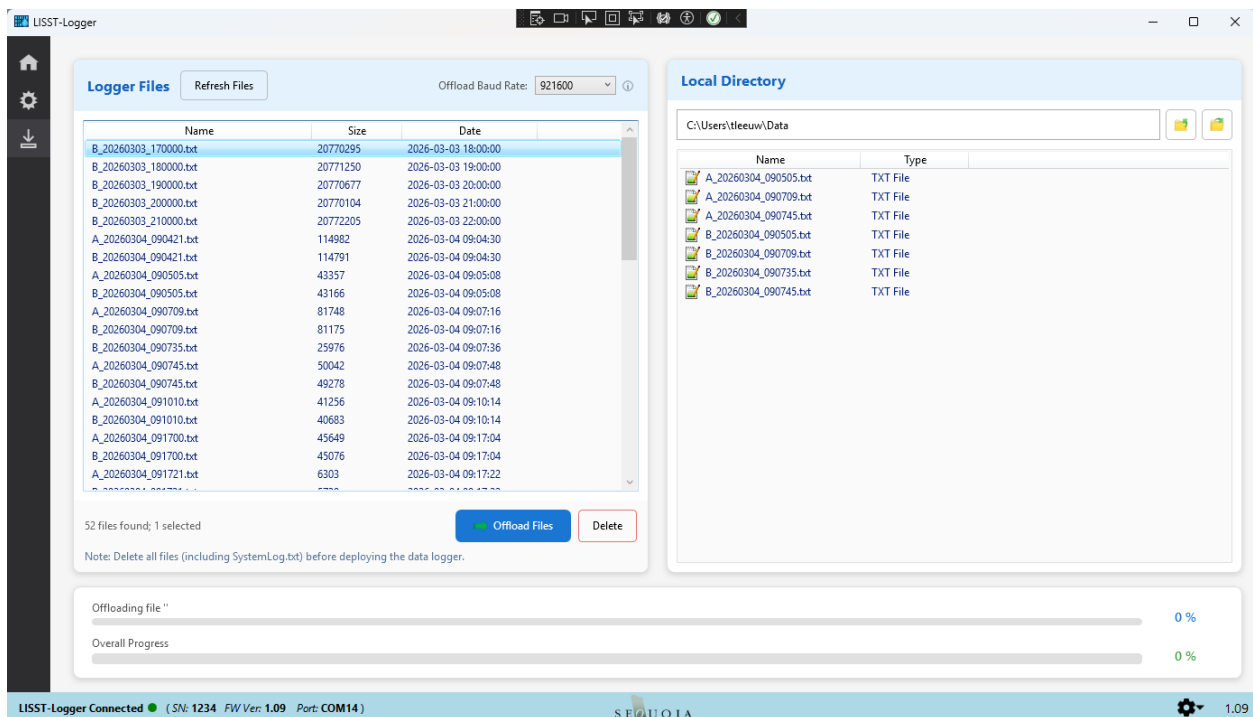


Figure: File Offload tab overview

7.1 Viewing Logger Files

Click “Refresh Files” to retrieve the list of data files stored on the logger. The file list displays the file name, size, and date for each file in the logger’s internal memory. Click the ‘name’, ‘size’, or ‘date’ headers to sort the files according to that column.

7.2 Downloading Data

To download files from the logger:

1. Choose a local save directory in the right panel.
2. Select the files you wish to download in the left panel. Hold Shift or Ctrl to select multiple files.
4. Click “Offload Selected Files.” A progress bar indicates transfer status.

7.3 Deleting Data

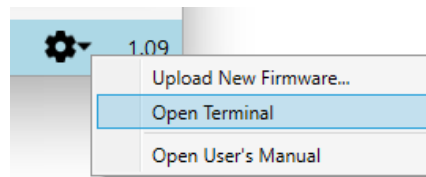
Select the files you wish to delete in the left panel. Hold Shift or Ctrl to select multiple files. A confirmation dialog will appear before any data is deleted. This action cannot be undone.

All files (including SystemLog.txt) should be deleted before deploying the data logger.

Warning: Always offload your data before deleting files from the logger. Deleted data cannot be recovered.

8 Software Reference: Tools

The Tools menu is accessed via the gear icon in the status bar. It provides advanced utilities for diagnostics and maintenance.



8.1 Terminal

Select “Open Terminal” to open a raw serial terminal connected to the logger. The terminal allows you to send commands directly and view responses. This is primarily useful for diagnostics and advanced troubleshooting.

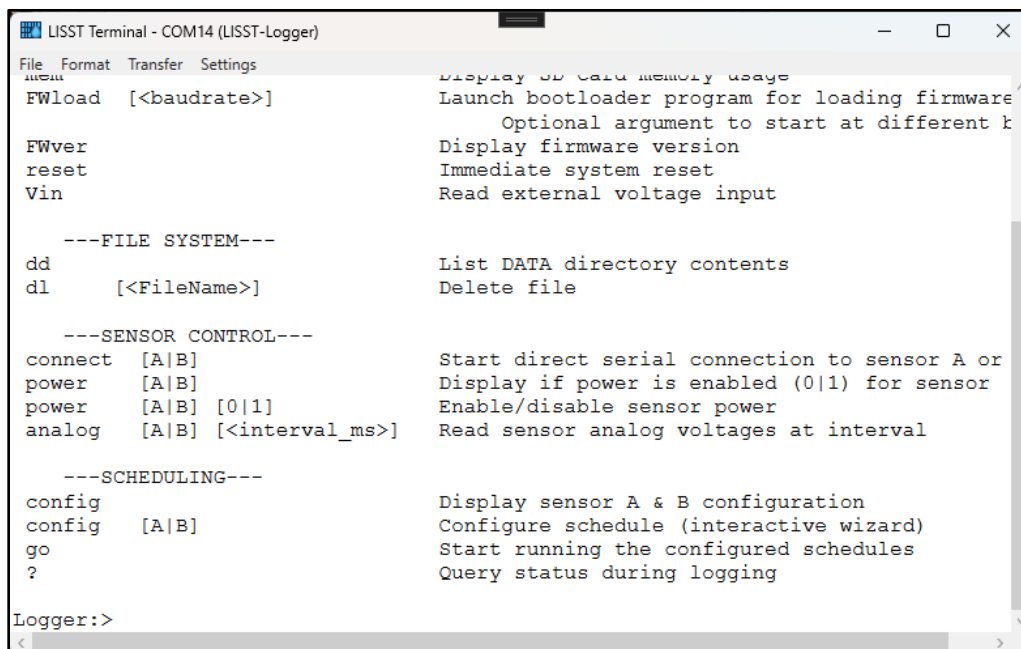


Figure: Terminal window

8.2 Firmware Update

To update the logger’s firmware:

1. Ensure the logger is connected and the external switch is in position 0.
2. Select Tools → “Upload New Firmware...” from the gear menu.
3. Browse to the firmware file (.bin or .binary) provided by Sequoia Scientific.
4. The upload will proceed with a progress indicator. The logger will automatically reconnect after the update completes.

Warning: Only install firmware files provided by Sequoia Scientific. Do not disconnect power or the USB cable during a firmware update.

9 Data File Types

During logging, the LISST-Logger creates several files on its internal storage. This section describes each file type, its format, and its contents.

9.1 Digital Sensor Data (A*.txt & B*.txt)

The logger creates separate digital data files for each sensor group (A & B). Sensor A files are named A_YYYYMMDD_HHMMSS.txt and Sensor B files are named B_YYYYMMDD_HHMMSS.txt, where the timestamp reflects when the file was created.

These files contain the raw serial data exactly as received from the connected instrument. The logger does not add headers, modify formatting, or interpret the data in any way; it acts as a transparent recorder. The file format and content are entirely determined by the connected sensor.

The first file created in a logging session uses the exact start time in its filename (e.g., A_20251215_143027.txt). If file rotation is enabled, subsequent files are aligned to the top of the hour and use zeroed minutes and seconds (e.g., A_20251215_150000.txt). If a delimiter is configured, the logger uses it to ensure only complete data records are written to the file.

9.2 Analog Sensor Data (Analog.csv)

The file Analog.csv contains analog voltage measurements recorded at 1 Hz (once per second) while at least one sensor is actively sampling. This file is always created and updated, even if no analog sensors are connected to the LISST-Logger.

The file is in CSV format with the following columns:

- Date — Timestamp in YYYYMMDD HHMMSS format.
- Supply_V — External input supply voltage, in volts.
- A1_V — Sensor A analog output 1 voltage.
- A2_V — Sensor A analog output 2 voltage.
- B1_V — Sensor B analog output 1 voltage.
- B2_V — Sensor B analog output 2 voltage.

9.3 System Log (SystemLog.txt)

The file SystemLog.txt is a plain-text event log maintained by the logger throughout its operation. Each entry is timestamped in the format:

[YYYY-MM-DD HH:MM:SS] Message text

Logged events include:

- System boot and shutdown.
- Schedule start and stop (including the trigger source: command, switch, or timeout).
- Sensor state transitions (Off → Warmup → Sampling).
- Sleep and wake events.
- Errors and warnings.

The system log is invaluable for diagnosing deployment issues and verifying that the logger operated as expected. After offloading the file, delete SystemLog.txt (along with all data files) before redeploying the logger. The file will be recreated the next time the logging schedule starts.

9.4 File Summary

File	Specification	Contents	Update Rate
A_YYYYMMDD_HHMMSS.txt	Raw sensor output	Serial data from Sensor A	On Data Received
B_YYYYMMDD_HHMMSS.txt	Raw sensor output	Serial data from Sensor B	On Data Received
Analog.csv	CSV with header	Supply and analog voltages	1 Hz
SystemLog.txt	Timestamped text	System events and diagnostics	On event

10 Terminal Communication

While the LISST-Logger software is the primary way to configure and operate the logger, you can also communicate with it directly using any serial terminal program (e.g., PuTTY, Tera Term, or the built-in terminal in the LISST-Logger software). This can be useful for diagnostics, scripting, or situations where the LISST-Logger software is not available.

10.1 Connection Settings

To establish a terminal connection to the logger, configure your terminal program with the following serial port settings:

Parameter	Specification
Baud Rate	19200
Data Bits	8
Parity	None
Stop Bits	1
Flow Control	None

Once connected, press the enter key and you should see the command prompt:

Logger : >

Note: The logger must have external power applied (7–30 VDC) and the external switch in position 0 to accept terminal commands.

10.2 Command Reference

Type help at the command prompt to display the list of available commands. The following tables list all standard commands organized by category. Commands are not case-sensitive.

General

Command	Description
boardTH [<interval_ms>]	Read internal board temperature and humidity. Optional argument repeats the measurement at the specified interval in milliseconds. Press Ctrl+C to stop.
date [<yyyy/mm/dd hh:mm:ss>]	Display the current date and time. If a date/time argument is provided, sets the logger clock to the specified value.
ds	Display instrument status including serial number, firmware version, clock, memory, board temperature/humidity, input voltage, and sensor power states.
mem	Display SD card memory usage (free and total bytes).
FWload [<baudrate>]	Launch the bootloader for loading new firmware. Optional argument sets the transfer baud rate.
FWver	Display the firmware version and build date.
reset	Perform an immediate system reset.
Vin	Read the external voltage input.

File System

Command	Description
dd	List the contents of the DATA directory.
dl [FileName]	Delete the specified file.

Sensor Control

Command	Description
connect [A B]	Open a direct serial passthrough connection to sensor A or B. All keystrokes are forwarded to the sensor and all sensor output is displayed. Press Ctrl+C to disconnect.
power [A B]	Display whether power is currently enabled (1) or disabled (0) for the specified sensor.
power [A B] [0 1]	Enable (1) or disable (0) power to the specified sensor.
analog [A B] [<interval_ms>]	Read the analog voltage outputs for the specified sensor. Optional interval argument repeats the measurement. Press Ctrl+C to stop.

Scheduling

Command	Description
config	Display the current configuration for both sensor groups A and B.
config [A B]	Launch an interactive configuration wizard for the specified sensor group.
go	Start running the configured logging schedules.
?	Query the current status during an active logging session.

Send the 'help' command to print this same list of available commands in the terminal.

11 Operation

11.1 Deployment Checklist

Before deploying the LISST-Logger, verify the following:

- All files have been deleted from the internal memory (File Offload tab)
- Logger clock is synchronized (Home tab → Set Clock)
- Sensor Group A and/or B are enabled and configured correctly (Home tab)
- Sensors are connected to LISST-Logger connector A and/or B
- Test connections to confirm valid sensor data (Home tab → Test Connection)
- External switch is in position 0 before disconnecting the computer

11.2 Deploying the LISST-Logger

1. Disconnect the computer (if applicable) and seal all unused connectors with dummy plugs.
2. Connect sensors to Connector A and/or Connector B.
3. Apply external power (7–30 VDC).
4. Move the external switch to position 1 to start the logging schedule. (three short vibration pulses indicate the schedule has started).
5. Deploy the instrument assembly.

11.3 Monitoring Active Logging

If the software is connected while actively logging, the main interface will switch to a full-screen logging view. This view displays periodic status updates and tabbed summary panels for Sensor Group A and Sensor Group B.

To return to the normal interface while logging continues, click “Close Logging View.” Note that closing the logging view disconnects the software from the logger, but the logger continues recording data autonomously. The logging schedule will not stop until the switch is turned back to the ‘0’ position.

11.4 Stopping and Retrieving Data

1. Recover the instrument and move the external switch to position 0.
2. Connect to your computer and launch the software.
3. Navigate to the File Offload tab.
4. Click “Refresh Files,” select the data files, and download them to your computer. Save ‘SystemLog.txt’ with your data for any future analysis or troubleshooting.
5. Optionally delete data from the logger to free storage for the next deployment.

12 Troubleshooting

Problem: Software cannot find the logger

Verify external power is applied (7–30 VDC). Ensure the external switch is in position 0. Check that the USB cable is connected. Try a different USB port. Use the Help button in the status bar for additional troubleshooting.

Problem: Garbled or missing sensor data

Verify that the baud rate, data bits, parity, stop bits, and flow control settings in the software exactly match your sensor's output configuration. Use the Test Digital Connection button to view raw data.

Problem: No analog readings

Verify the sensor is outputting 0–5 V. Use the Test Analog Connection button to view live analog values. Check cable wiring.

Problem: "Memory full" warning

Offload data files and delete them from the logger to free storage space.

Problem: Clock offset warning

Click "Set Clock..." on the Home tab to synchronize the logger clock with your computer.

Problem: Logging does not start

Verify the configuration has been uploaded to the logger. Check that at least one sensor group is enabled. Verify the start condition settings. Check 'SystemLog.txt' for errors.

13 Maintenance

13.1 Connector Care

Rinse all connectors with fresh water after each deployment. Apply a thin layer of silicone grease to connector contacts before storage. Always install dummy plugs on unused connectors to protect pins and prevent corrosion.

13.2 Sacrificial Anode

Inspect the zinc sacrificial anode periodically. Replace the anode when it is approximately 50% consumed to ensure continued corrosion protection. Contact Sequoia Scientific for replacement anodes.

13.3 Housing

Clean the anodized aluminum housing with fresh water and a soft cloth. Do not use abrasive cleaners or solvents. Inspect the housing for scratches, corrosion, or damage before each deployment.

13.4 Storage

Store the LISST-Logger in a clean, dry environment. Remove external power during long-term storage. Install dummy plugs on all connectors. Offload all data before storage.

13.5 Software Updates

The LISST-Logger software checks for updates automatically on startup. If an update is available, a notification will appear in the status bar. Click the link to download the latest version from the Sequoia Scientific website.