LOWELL INSTRUMENTS LLC

Overview

What is the DDH? What does it do?

Heartbeat

Auto Connects to Cellular and GPS

Uploads Data to Cloud

Searches for Logger

Receives Logger Data

of the Collection System
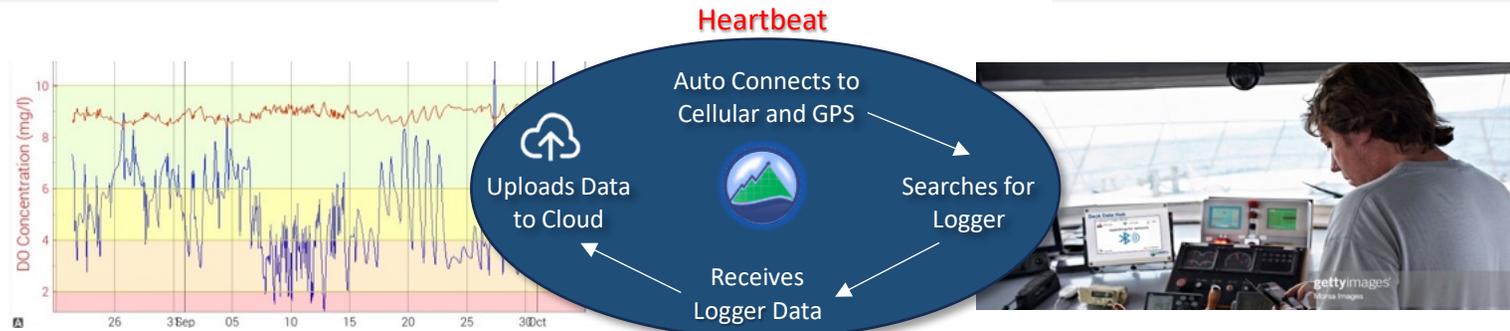
Initial Setup / Equipment Provided

☐ Data Logger

Suggested Logger Placement

- o For mounting on crab or lobster trap, logger should be mounted on top vs bottom (away from mud/sand).
- o Typically attached using tie wraps.

☐ Deck Data Hub (DDH)

- o Mount in wheelhouse, on the side **where traps are hauled**. Comes with **mounting feet** and **acrylic plate**. Plate typically mounted with supplied double-sided velcro.
- o **Direct line-of-sight** communication is **preferred**. **Obstacles** (metal, thick walls etc.) will create interference and significantly decrease range.

☐ DDH 12 V Power Supply w/ DC Adapter

- o Designed to withstand small power interruptions (battery transitions occurrences etc.)
- o Includes configurable power cable options for 120 VAC or 12 VDC to connect with your vessel's power source.

LOWELL INSTRUMENTS LLC

1 Powering Up — ⏱ 2-3 mins

Suggestion: Power up DDH when you start up the vessel to allow time for boot up and GPS signal acquisition.

- Connect to vessel's power source.
- **POWER** button, is located on **LEFT-HAND SIDE** of deck. (Push once. No need to hold button.) Button will light up.
- Deck will go into **boot up mode** and **automatically start the logger application**.

*Seeing a black screen during this time-period is normal. Boot-up process takes time and the screen display will often switch from black, to desktop display, to eventually start the software program.

2 GPS and Cellular Signal Search/Sync — ⏱ ~5 mins

Suggestion: Being near a window in wheelhouse will aid in GPS signal pickup.

- GPS search and sync is an **Automatic Process**
- DDH's internal chip accesses GPS signals **independently** of cellular.

Waiting for GPS Screen Display

ⓘ Information · Details · Graphs · Maps
Office Boat   (🔊) Cell   ☀ 100%

waiting for GPS

sep 18 06:09:00

Icon appears & dot progresses while in waiting mode.

Syncing GPS Screen Display

ⓘ Information · Details · Graphs · Maps
Office Boat   (🔊) Cell   ☀ 100%

syncing GPS time

☁ OK   sep 18 06:09:00

📍 If this icon appears, GPS satellites cannot be found. Move deck closer to a window.

If sync process takes more than 5 mins, move deck closer to a window.

3 Logger Search — ⏱ Continually Searching

Icon displays during **Searching For Logger** process.

Icon with neighboring text reveals what type of **Wireless Communication** you have.

Graphs · Details
(🔊) Cell   ☀
searching for loggers
))))

4 Download Logger Data — ⏱ ~1 minute

Logger data download is an **automatic process** that occurs when:

- A logger is in range with a **good line-of-sight.**
- **Pre-configured time** has expired since last download. [Typically 1/day for fixed gear & 1/hr for mobile gear.]

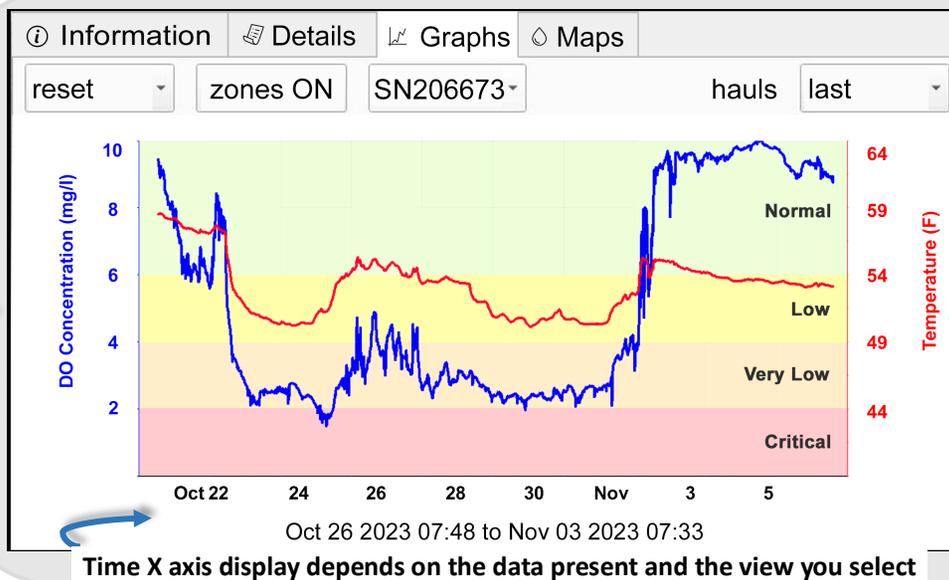⬇ Icon displays during **Logger Data Download**, with a moving arrow showing progress.

5 Download Success/Cloud Upload

✅ Icon displays when data download is **successful**.

retrying 🔄 If unsuccessful, the DDH will attempt to retry download.

◀ often cause wireless signal loss

☁ok Indicates **successful cloud upload**. This is an **Automatic Process** that occurs once an adequate cell signal is available.

6 Graphs Tab

| Information | Details | Graphs | Maps |

reset ▾ | zones ON | SN206673 ▾ | hauls | last ▾

Always scales from 0-10

Auto-scales on data

Oct 26 2023 07:48 to Nov 03 2023 07:33

Time X axis display depends on the data present and the view you select

Graphs Continued - Visualizing Data

area of interest
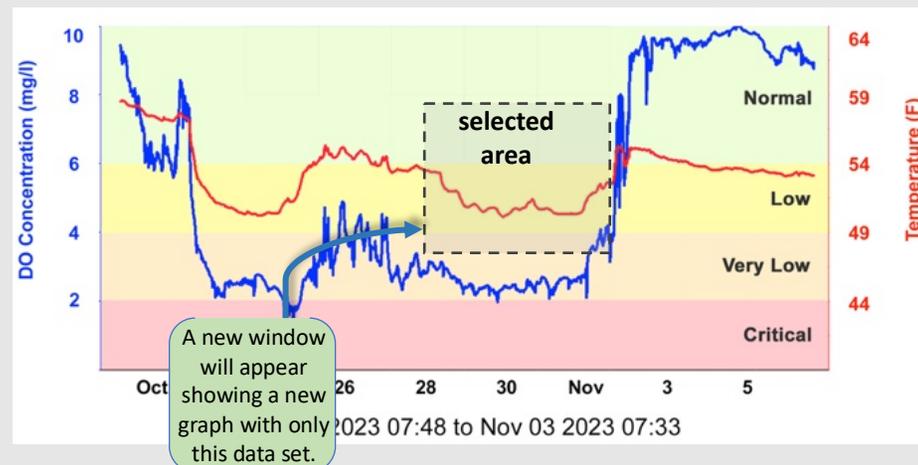Use your finger to draw a box around a specific portion of the data to zoom in.

reset view
Returns you to default-view

SN111 ▾
Drop-down menu to view data from another logger.

last ▾
Drop-down menu for selecting haul data. Options: last (view from last haul), all (ALL data for one specific logger, single (data from each specific haul).

selected area

A new window will appear showing a new graph with only this data set.

2023 07:48 to Nov 03 2023 07:33

7 Details Tab

First: Tap on Details Tab to reveal table.

logger	result
2006658	success on Sep 18 12:42 at +41.9193, -70.1361
2006664	success on Sep 18 10:22 at +42.0266, -70.1706
2006662	success on Sep 17 15:06 at +41.9193, -70.1361
2006661	success on Sep 17 04:20 at +42.0037, -70.1924
2006663	success on Sep 16 21:12 at +41.9353, -70.2228
2006660	success on Sep 16 09:05 at +41.8710, -70.5059
2006659	success on Sep 15 16:46 at +41.8121, -70.4781
2006657	success on Sep 15 11:59 at +41.9193, -70.1361

logger serial number matches label on housing

coordinates where logger download occurred

+41.998536, -70.185444   12 GPS satellites

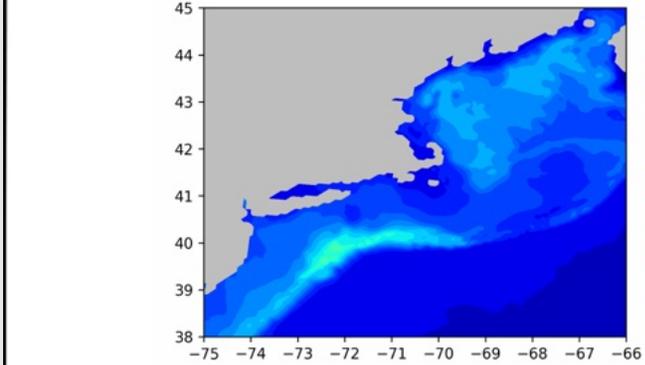uptime 6:12:13   cnv_ok   BT_internal   version: a3732

debugging info for support

8 Maps Tab

Information   Details   Graphs   Maps

America/New_York, 2024 Feb 25 19h

Tap on Maps Tab to reveal a 3 day bottom temperature forecast