

# Poseidon

User Manual

CIDCO



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## System Requirements

Power : 12Vdc from a 12V battery or a 12V psu.

*Never apply power on the system if the GNSS antenna and/or the Sonar is not connected!*

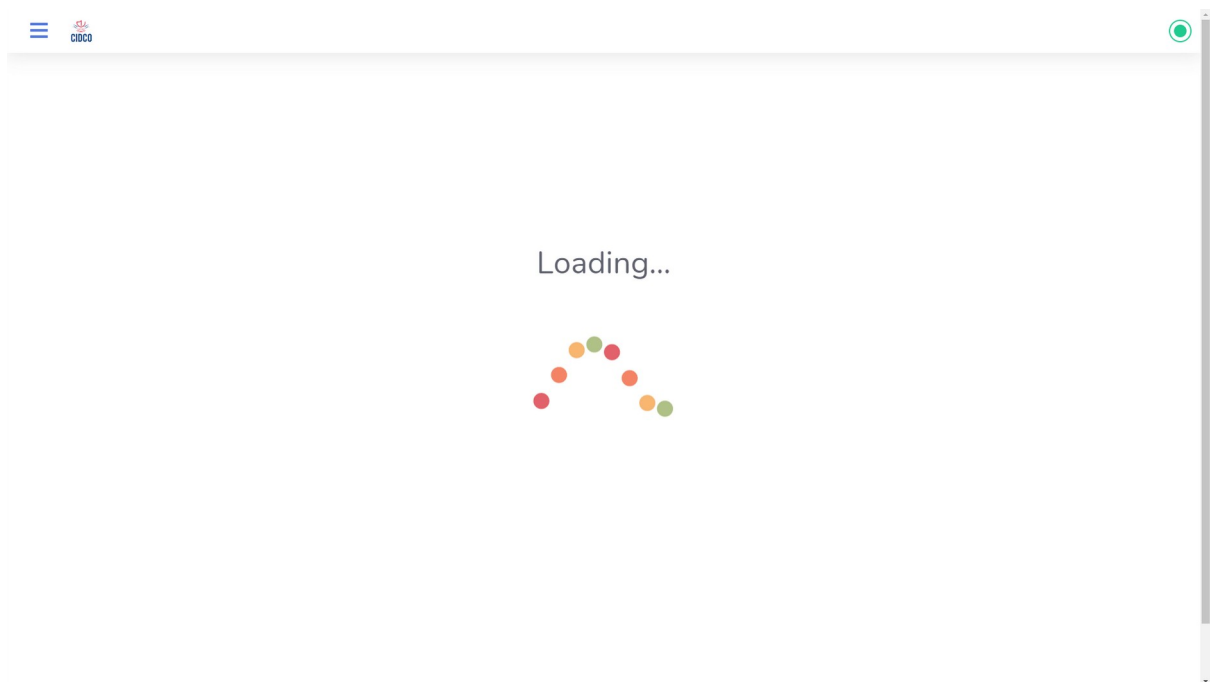
## Connection Instructions (WiFi)

First step : Connect to the **Hydro B** wifi network. The password to connect is : cidco1234

Second step : Open a web browser and type 192.168.100.1

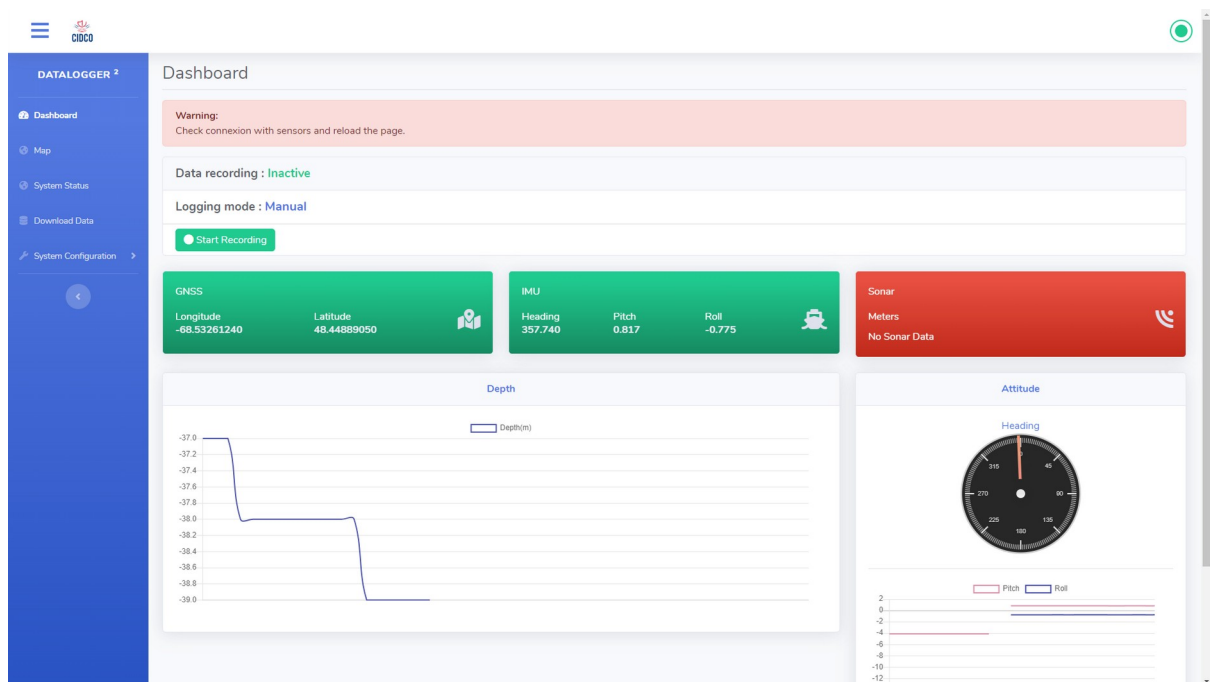
## Web Interface - (ROS core not launched) [Yellow card]

If ROS is not launched, the web page will look like this.



## Web Interface - (System not ready)[Red card]

If the system is not ready one of the three cards (NDSS, IMU, Sonar) will be red.



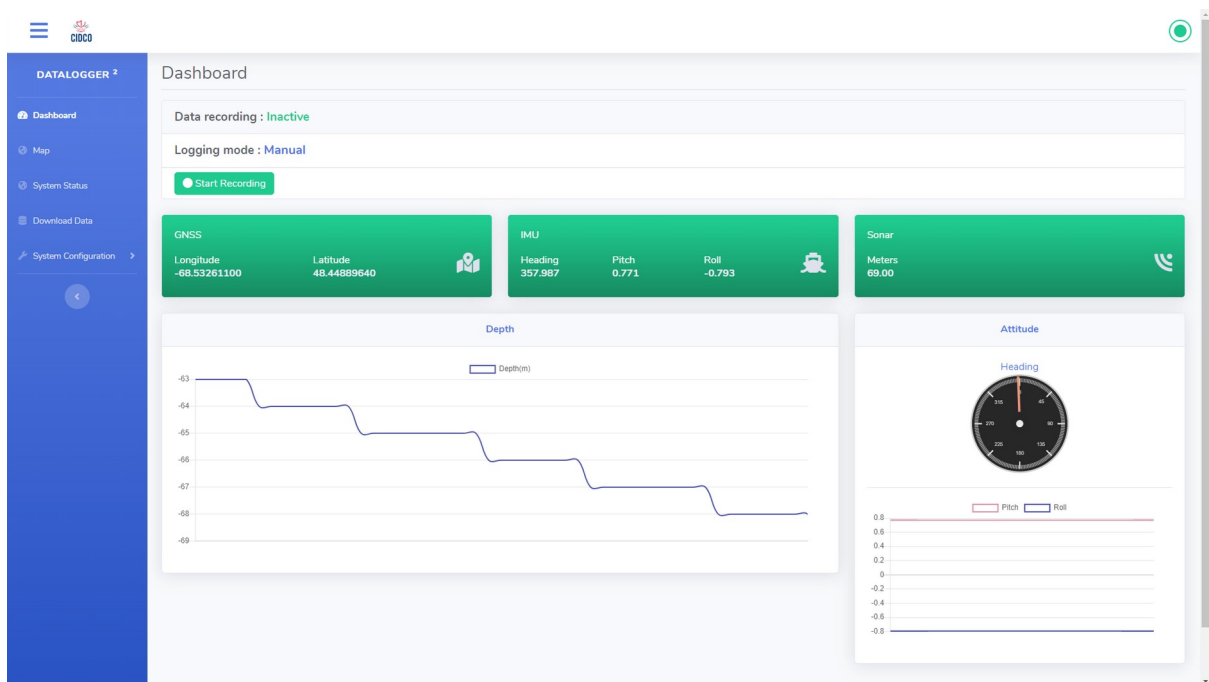
GNSS (red) - You have to wait a few minutes until the GNSS obtain the 3D fix. ...

IMU (red) - ...

Sonar (red) - ...

## Web Interface - (System ready)[Green card]

When the system is ready the three cards will be green.



At this time you can start recording by pressing the green [Start Recording] button.

GNSS value : Decimal degrees

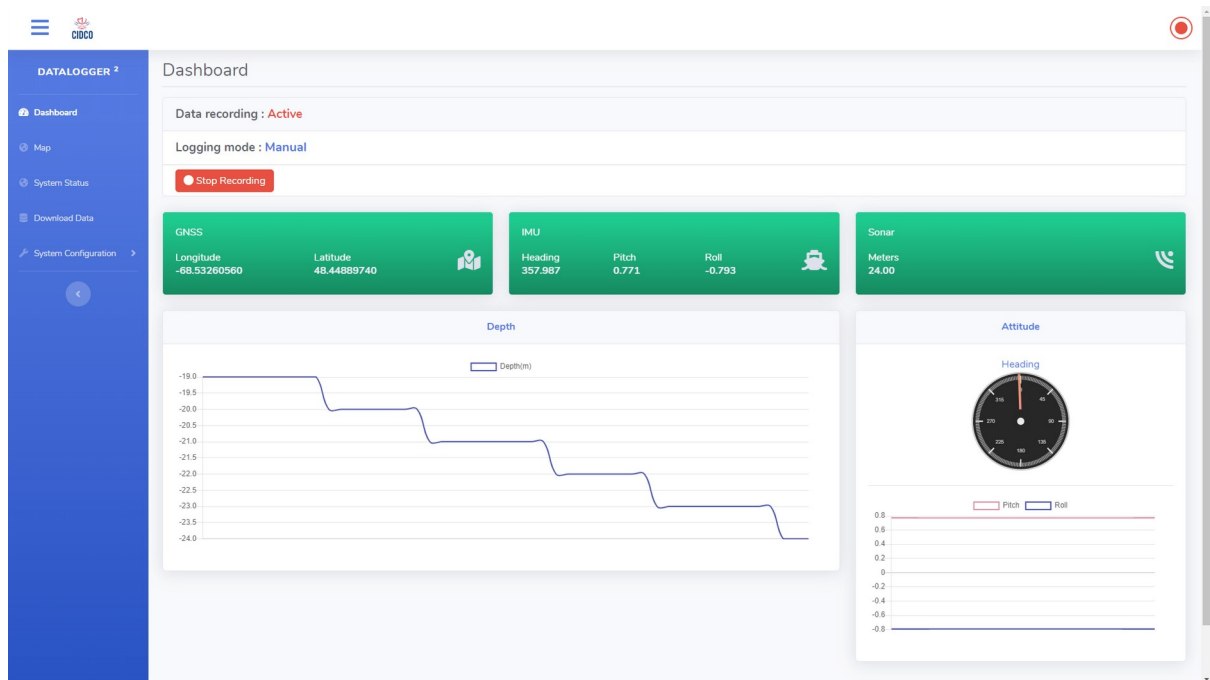
IMU value : Decimal degrees

Positioning convention : ENU



## Web Interface - (Record)

Data recording is in progress.



The system informs you that the recording is started in two ways.

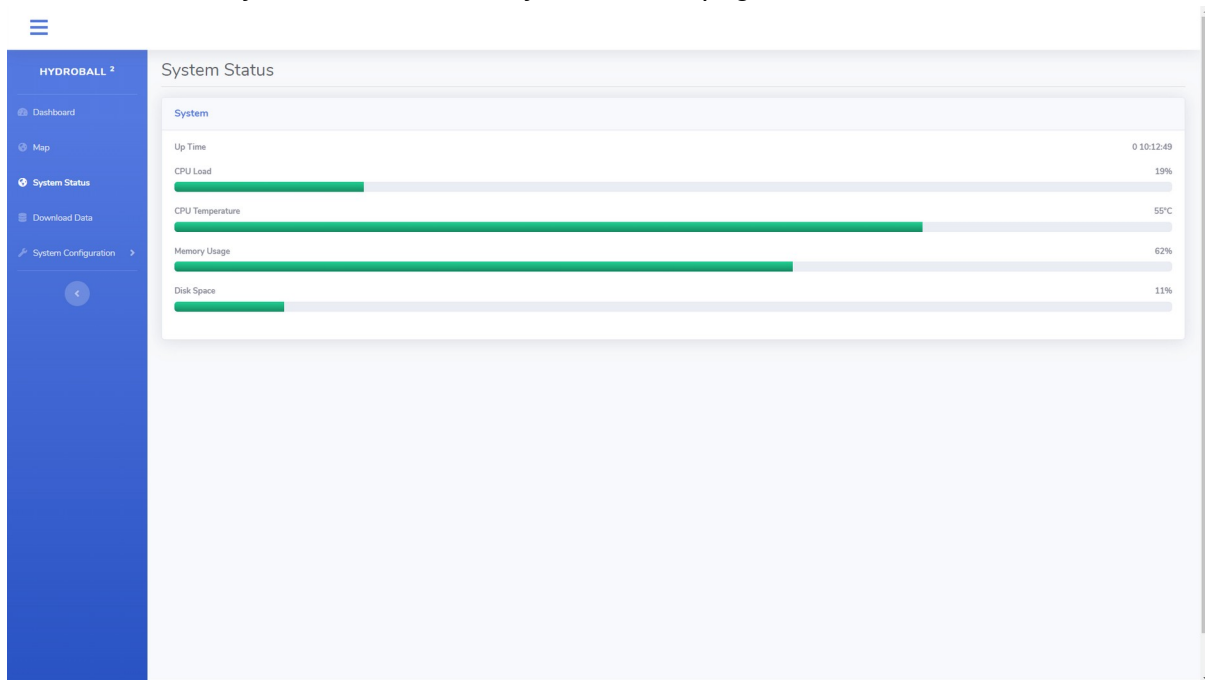
The green button [Start Recording] toggle to red [Stop Recording]

A banner show [The system is currently recording data]

Note: The recording of RAW gps data begins when the system is powered on and stops only when the system is switched off.

## Web Interface - (System Status)

You can see the system status on the System Status page.

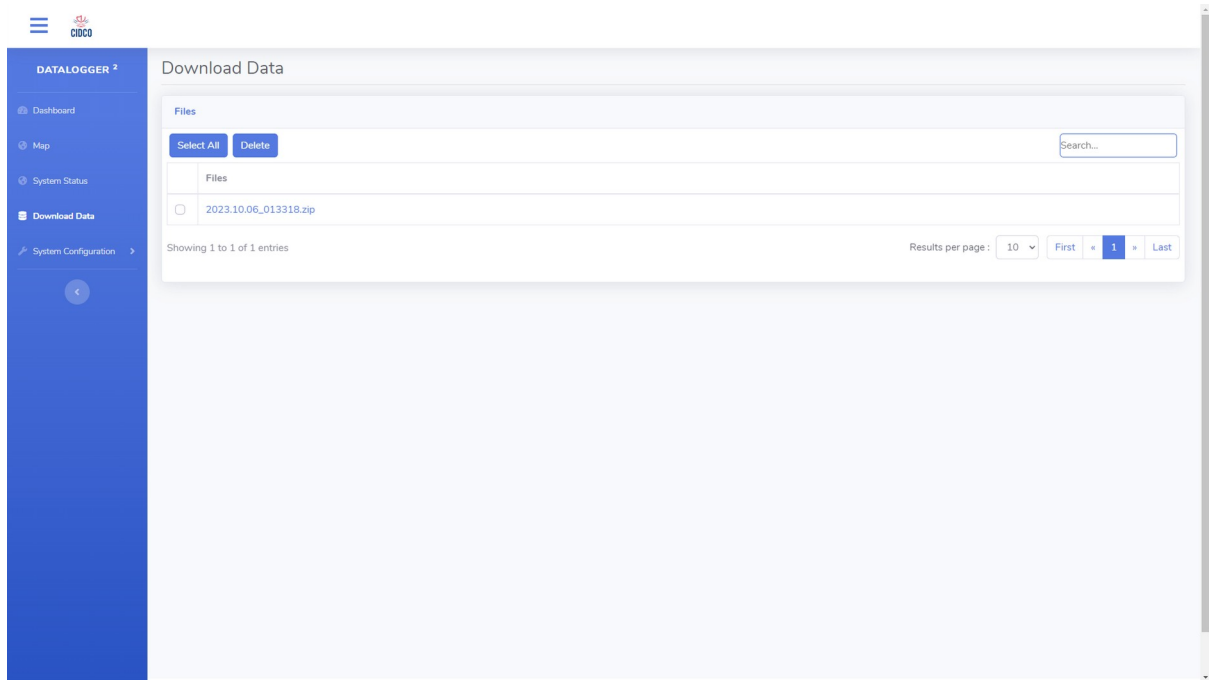


In this page you can monitor the state of the system.

CPU Load  
CPU Temperature  
Memory Utilization  
Disk Space

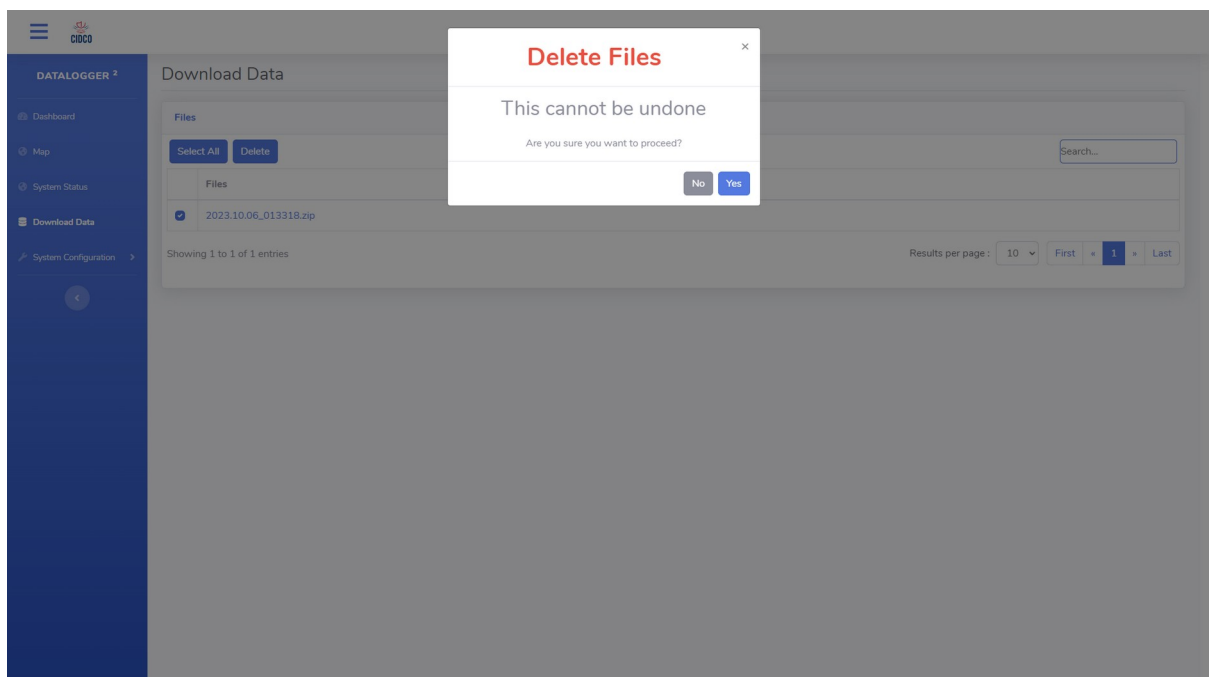
## Web Interface - (Download dataset)

You can download the dataset and RAW gps data from the Download Data page



You can download each file by clicking on their name.

You can select the deleted files with the checkboxes or use the [Select All] button. When you press the [Delete] button a modal window will prompt you to confirm the deletion of the selected files.



## Web Interface - (Automatic IMU calibration)

This page is used to launch the automatic calibration procedure of the IMU

## Web Interface – (System Settings)

This page allows you to manually calibrate the IMU, Sonar, CSB Portal settings and the logging Mode.

Configuration	
apiKey	SECRET
apiServer	localhost
apiUrlPath	/
headingOffset	0
logRotationIntervalSeconds	3600
pitchOffset	0
rollOffset	0
sonarAbsorption	20
sonarPulseLength	120
sonarRange	20
sonarStartGain	16
speedThresholdKmh	6.0
wifiPassword	qwerty1234
wifiSSID	cidco
wifiTransferEnabled	true
loggingMode	manual

Save Configuration

Heading Offset value : Decimal degrees

Pitch Offset value : Decimal degrees

Roll Offset value : Decimal degrees

Sonar Absorption value : /10dB/M @ 675kHz

Sonar Pulse Length value : microseconds

Sonar Range value : Meters

Sonar Start Gain value : dB

Sonar range should be 5,10,20,30,40 or 50 Meters

Logging Mode : Manual, Speed Triggered, Always