



YDVR Logger Installation & Test-Data Transfer Guide

Purpose

This guide provides step-by-step instructions for installing and using a **Yacht Deviced Voyage Recorder (YDVR)** logger attached to your vessel's NMEA2000 network. The YDVR records depth and positioning data to support the Seabed 2030 global ocean mapping effort.

1. Installation Overview

The YDVR connects to your vessel's NMEA2000 backbone to record depth and GPS data automatically. Installation typically takes about 1 hour.

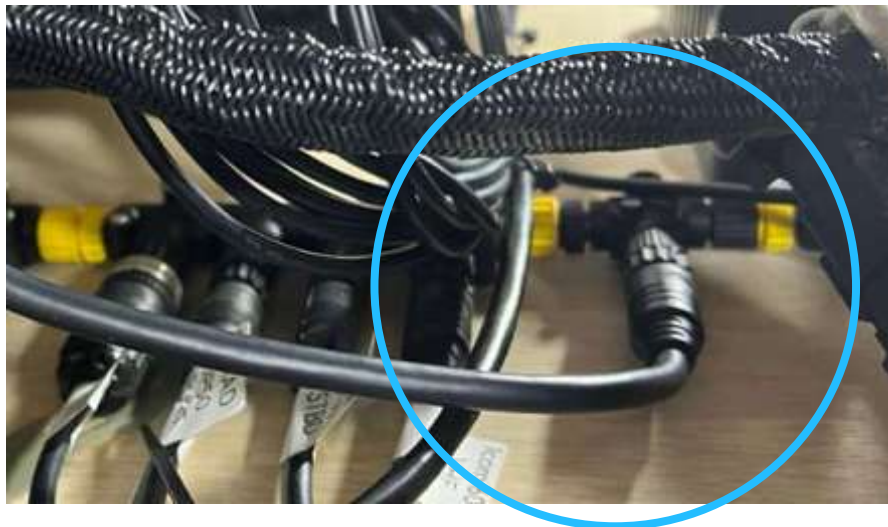
Materials Needed

- WIBL Logger (with SD card installed)
- NMEA2000 or SeaTalkNG drop cable and T-splitter
- MicroSD card (no larger than 32GB)

⚠ Notice: If your vessel uses a Raymarine system, you must install a Raymarine DeviceNet (SeaTalkNG) drop cable.

Installation Steps

- Confirm your NMEA2000 backbone powers on with the vessel and that the Depth sounder and GPS/Chart plotter are both connected to said backbone.
- Turn off the power to your NMEA backbone.



- Locate or create an open port, noting that any new T-splitters should be properly terminated using an end tap.

- **Option 1 (Image Left):** Plug the YDR Logger directly into the new T-splitter open port.
- **Option 2 (Image Right):** Plug the Drop Cable into an open NMEA2000 port using the drop cable, as depicted in the circle above. Ensure locking rings are tight. Plug the other end into the YDVR logger.



Option 1



Option 2

⚠ Notice: DO NOT plug logger directly into the back of your chart plotter. Logger **MUST** be installed in to the NMEA2000 Backbone.

- Install the MicroSD card with configuration file into the YDVR logger. If you need a configuration file, contact Haley@SeaKeepers.org.
- Power on the vessel and confirm LED lights (flickering Green) indicate recording.
- For further guidance, find the installation videos at the QR code below.

LED Legend

One green signal lasting one full second	The Device has created a file on the MicroSD card and is ready to record data. This signal sending each time after the Device is connected to the onboard network and once after changing of the MicroSD cards.
3 green flashes with a period of 0.5 seconds after the device is powered on	The Device has received the first message from the onboard network of the vessel. This signal indicates that the Device is properly connected.
Red signals with a period of 0.5 seconds	No MicroSD card in the Device
Red signals with a period of one seconds	Device cannot create a file on the MicroSD: wrong file system, read/write error or the recording of data file and recording of audio are turned off in the settings or configuration file.
Constant, unsynchronized green flashing	Normal regime for recording data. Signal intensity depends on the load on the onboard network, whether audio is being recorded or not, etc.

Constant, unsynchronized red flashing	Normal regime for recording data, but audio signal too high. Recommended to decrease gain setting.
Short red signal on powering off	Data and audio files were properly closed. Change the Micro SD card if you do not see the red signal on power off.

⚠ Notice: Both “Card Full” and “Data Logging” may appear Solid and Flashing Teal respectively on NEMO30 loggers. This is because the NEMO30 loggers do not have independent LED lights, so blue and green appear mixed.

2. Downloading Your Test-Data to Your Local Device

- Leave your vessel’s Navigation system powered on for at least 15 minutes.
- Remove the MicroSD card from the Logger by pressing in gently until it ejects, then pulling backward.
- Plug the MicroSD card into a larger SD card converter, or into a MicroSD to USB converter (see image below).
- Plug this into your computer, and you should see files open immediately. If you do not see files, please open.



3. Uploading Your Data to Google Drive

- Open the Google Drive link that you received by email from SeaKeepers.
- Locate the downloaded .zip file from your WIBL batch download. Rename this file with **VESSELNAME_MONTH_YEAR.zip** (insert your own vessel name, and the month/year that you are conducting this transfer).
- Upload the renamed .zip file to the shared Google Drive folder.
- After verifying that data has been uploaded successfully to google (wait for confirmation from SeaKeepers), you can delete files off the SD card.

4. Troubleshooting


- Autopilot Disengages – Uninstall YDVR. This may be connected to an unbalanced electrical system which can cause drift in the magnetic compass and affect autopilot.

- Upload fails – ensure your internet connection is stable and retry later.

5. Contact & Support

For any issues with installation, Wi-Fi connection, or data uploads, please contact:

Haley Davis, Data Scientist |  haley@seakeepers.org

Rosemarie Moore, Citizen Science Manager |  rosemarie@seakeepers.org



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