

Step 0: Download Software

- Software: Ruskin from RBR
- <https://rbr-global.com/products/software>
- Manual:
 - <https://rbr-global.com/wp-content/uploads/2020/08/Ruskin-User-Guide-Standard-loggers-0006105revH.pdf>



Step 1: Connect sensor to computer



1 Take the sensor and remove screw endcap



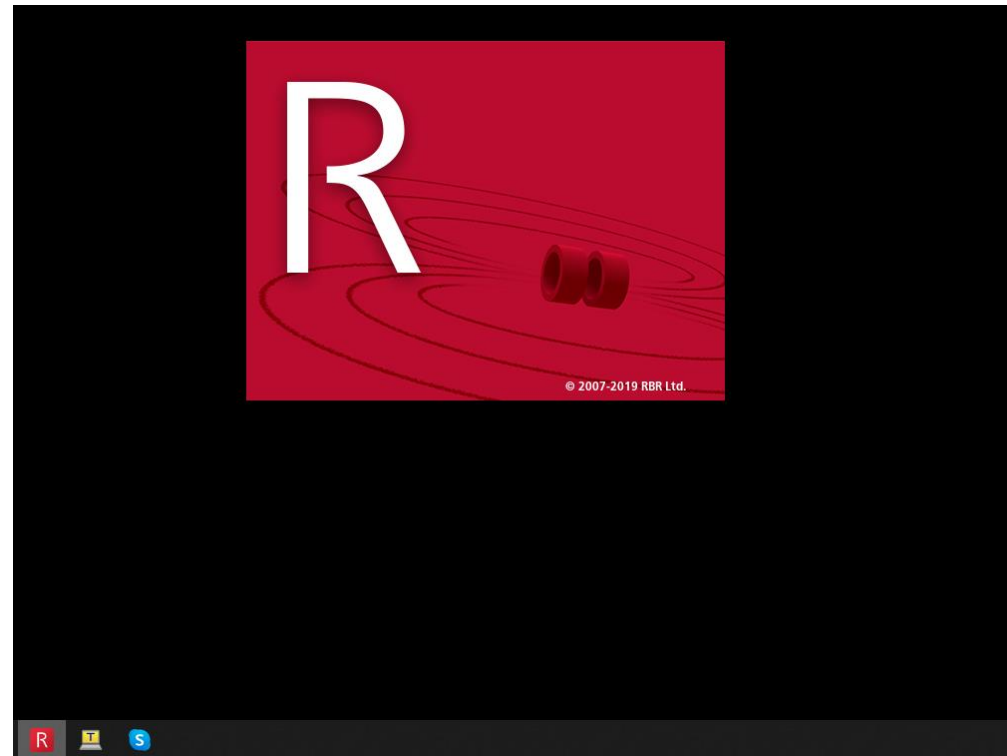
2 remove wifi module by pulling it softly



3 Connect USB cable to endcap with removed wifi module and put usb cable in computer

Step 2: Open Ruskin Software

If not available download: <https://rbr-global.com/products/software>



Step 3: Stop sensor from logging

Select stop button

The screenshot shows the Ruskin v2.12.1.202010141707 software interface. The main window displays the configuration for RBRconcerto 061649. The 'Schedule' tab is active, showing a 'Logging in progress' status. A red arrow points to the 'Stop' button in the 'Memory used: <1%' section. The 'Options' tab shows settings for Realtime, Serial, Format, Storage, and Serial auxiliary parameters. The 'Gating' tab shows settings for Mode, Active Level, Active Setup, Active Hold, and Sleep Level. The bottom of the window displays a multi-panel plot of various sensor data over time, including Density anomaly, Specific conductivity, Salinity, Depth, Sea pressure, Pressure, Temperature, Conductivity, and Current. A table on the right shows the captured data for the last 3 samples.

#	Value	Last	Unit
1	--	0.0038	mS/cm
2	--	19.3582	°C
3	--	10.0646	dbar
4	--	-0.0680	dbar
5	--	-0.0675	m
6	--	0.0104	PSU
7	--	1480.3821	m/s
8	--	4.2499	µS/cm
9	--	NaN	kg/m³

Step 4: download data to PC

Select download button

The screenshot displays the RBRconcerto v2.12.1.202010141707 software interface. The top menu bar includes File, Instruments, Options, and Help. The left sidebar shows a tree view with Instruments (simRBRconcerto 902959, RBRconcerto 061649) and Datasets (061649_2048). The main window has tabs for Configuration, Information, Download, Calibration, and Parameters. The Configuration tab is active, showing various settings:

- Schedule:** Status: Stopped, user request; Clock: 2020-12-21 22:06:25+02:00; Start: 1/ 1/2000 12:00 AM; End: 2000-02-07 37.9 days +4.0 years.
- Power:** Battery: Lithium manganese; External: None; Extended battery endcap: ☐.
- Sampling:** Mode: Continuous; Speed: Rate; 00:00:02.
- Options:** Realtime: Serial; Format: Engineering; Serial: 9600; Mode: RS232; Storage: Desktop; Wi-Fi: off.
- Serial auxiliary parameters:** Enable auxiliary control: ☐; Active Level: high; Active Setup (ms): 1000; Active Hold (ms): 1000; Sleep Level: tristate.

A red arrow points to the **Download...** button located below the Memory used: <1% indicator. Below this button are **Enable**, **Revert settings**, and **Use last setup** buttons. A warning message states: "Data storage will cease on 09/Mar/2004, however streamed samples will continue for the duration of the deployment".

The bottom section of the interface shows a multi-panel plot area with various data series plotted against Time. The series include Depth (m), Salinity (PSU), Sea pressure (dbar), Temperature (°C), Conductivity (mS/cm), and others. The right sidebar displays a table of captured samples, which is currently empty.

#	Value	Last	Unit
1	--	--	mS/cm
2	--	--	°C
3	--	--	dbar
4	--	--	dbar
5	--	--	m
6	--	--	PSU
7	--	--	m/s
8	--	--	µS/cm
9	--	--	kg/m³

The status bar at the bottom right indicates "Not capturing (backed by C:\Users\wieterb\61649_20201221_2106_reali)" and "Sample #: -- (0 captured)". The system clock shows 9:06 PM on 12/21/2020.

Step 5: upload to webservice and email AU

- Email: wieter.boone@gmail.com; rysgaard@bio.au.dk
- Whatsapp: +32485936407
- Information:

Info	Value	Example	Comments
Vessel name		Avataq	
Trip		22/12/20 – 22/12/21	
Filename rsk file		061649_20201221_2048.rsk	
Memory status		100 days left	
Battery status		10 days left	

- Upload all data files to:
- <https://drive.google.com/drive/folders/1ZhnGr8c-hVAbgRlc-ghiJZTfbYhgSoGq?usp=sharing>

Step 6: Exchange batteries of the sensor



1 Remove USB Cable

2 Open battery lid

3 exchange batteries and close lid

4 connect USB Cable again

IMPORTANT: MARK USED BATTERIES!!!!

Step 7: Connect sensor to Ruskin software

1 Sync to PC UTC clock



simRBRconcerto³ 902959

Configuration Information Calibration Parameters

Schedule

Status: **Not enabled**

Clock: 2020-12-21 20:41:57+01:00 **UTC** Local

Start: 12/21/2020 8:00 PM ☐ Now **UTC sync**

End: 2021-03-05 **74.0 days** +231 days

Power

Battery: **Lithium thionyl chloride** ☒ Fresh

External: **None** ☐ Fresh

☐ Extended battery endcap

Memory used: 0% **Download...**

Enable **Revert settings** **Use last setup**

Schedule is valid

Sampling

Mode: **Continuous**

Speed: ☒ Rate **2Hz**

Gating

Mode: **None**

Options

Realtime: **None** Format: **Standard resolution**

Serial: **115200** Mode: **RS232**

Storage: **Desktop** Wi-Fi: **on**

5 check realtime: None

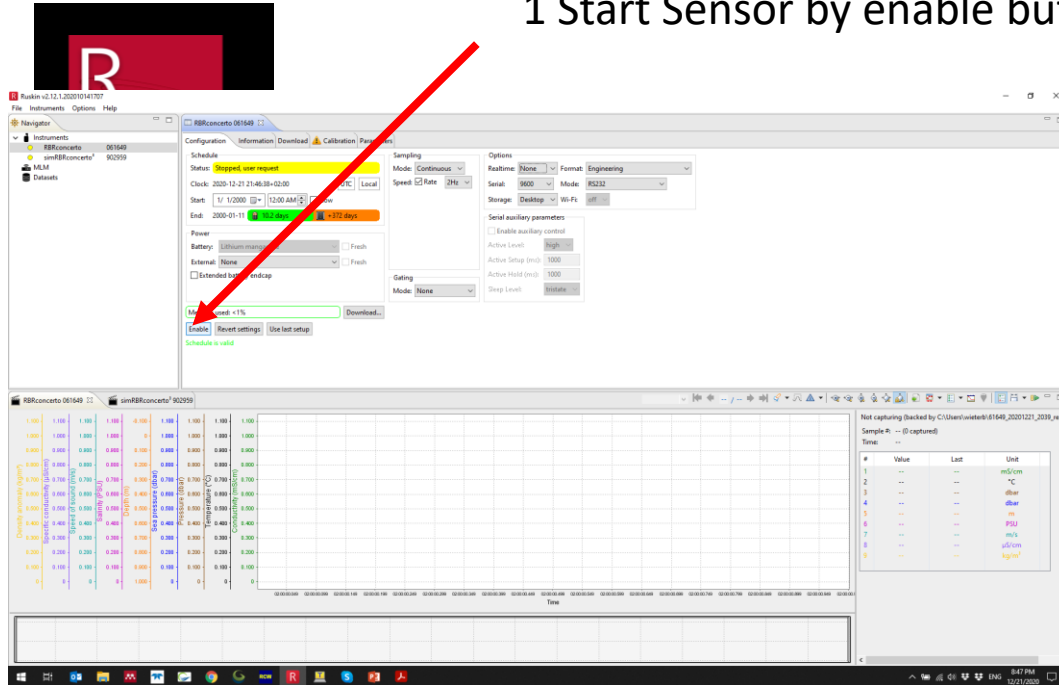
4 check mode: continuous
Rate 2 Hz

3 check Mode: None

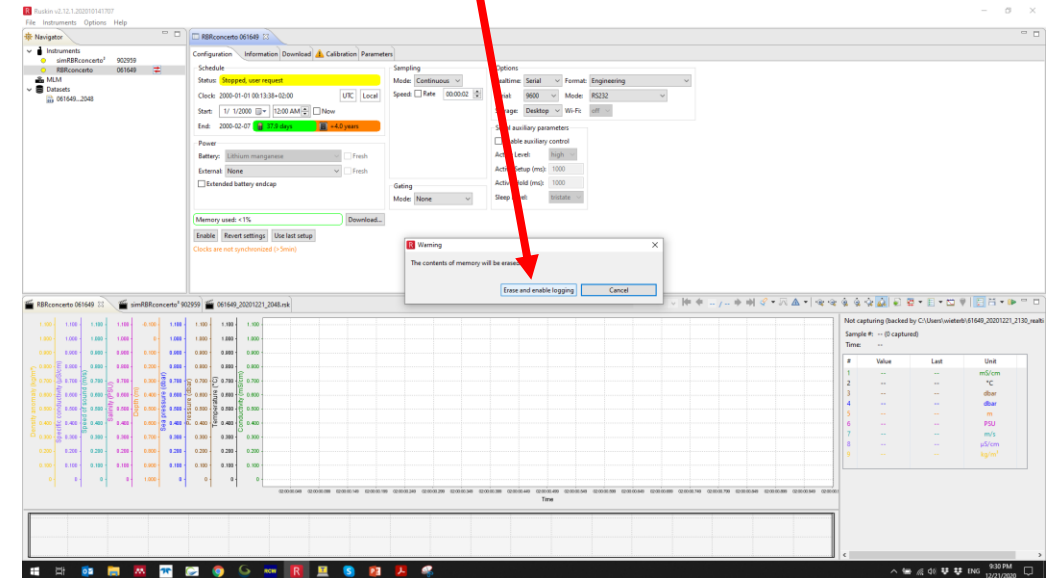
2 check lithium thionyl chloride

Step 8: Start Sensor

1 Start Sensor by enable button



2 erase memory and enable logging



Step 9: Email information

- Email: wieter.boone@gmail.com; rysgaard@bio.au.dk
- Whatsapp: +32485936407
- Information:

Info	Value	Example	Comments
Vessel name		Avataq	
Trip		22/12/20 – 22/12/21	
Memory status		234 days	
Battery status		74 days left	

Step 10: Reinstall wifi module and endcap

- Exchange cylinders with drybag
- If pink cylinder exchange with blue cylinders if available
- Install wifi module back on sensor
- Inspect o-ring of the cap, if damaged do not deploy, but exchange o-ring
- Screw endcap back on the sensor



Step 11: Reinstall sensor on the trawler

IMPORTANT: Take out Sensor after max 60 days and follow manual from start to end

Contact information

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