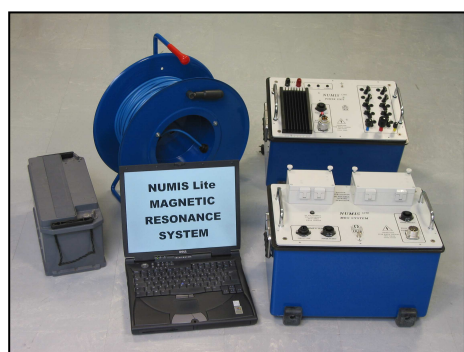


PRODIVINER Software

Prodiviner is the new acquisition and visualization software designed for driving NUMIS units for Magnetic Resonance Sounding (MRS).

The design of this software makes it very practical and user-friendly for in-the-field measurements.



NUMIS Lite unit for groundwater detection

Minimal PC configuration required:

- Windows® Xp
- Pentium II Microprocessor (400 MHz)
- RAM memory: 64 Mb
- Free memory on hard disk: 20 Mb
- 1024 x 768 screen resolution
- Two USB ports

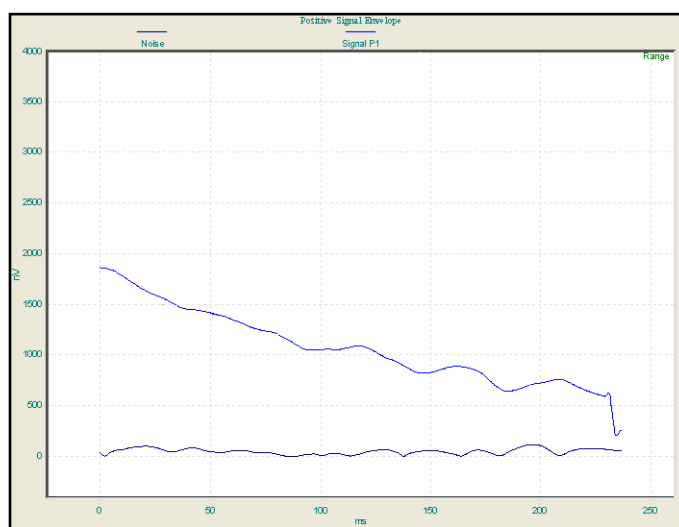
Main functions of the *Prodiviner* software:

- System configuration
- System checking before acquisition
- Data acquisition
- Real time visualization of the MRS signals
- Results export to an interpretation software

A serial link communication between the generator of the unit and the laptop computer allows *Prodiviner* software of driving the full system, from the configuration setting to the data acquisition.

To use the full capabilities of the system and to perform the sounding in the best conditions, the unit can be easily tested before running the acquisition (tuning capacitor checking, ambient noise monitoring...)

After having installed the loop on the ground and made the connections, three main steps have to be followed from the software, for a full data sounding acquisition: Configuration – Test – Acquisition.

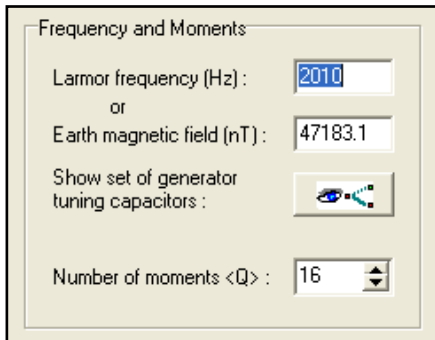


Real time display of MRS signals (amplitude (nV) vs recording time (mS))

✓ Configuration setting

Specify the type of the loop (shape – dimension) you are working with and the earth magnetic field value of the area.

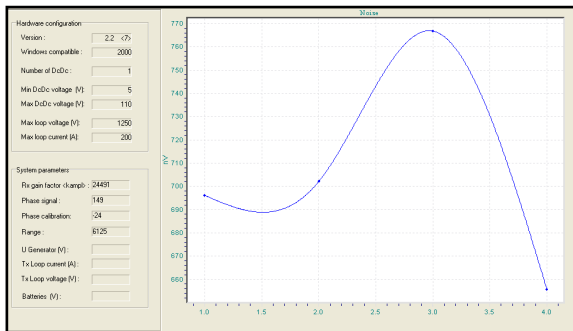
Some advanced settings (stacking, pulse parameters, pulse moments...) can be set to default values for a standard configuration



Introduction of the Larmor frequency (linked to the earth magnetic field)

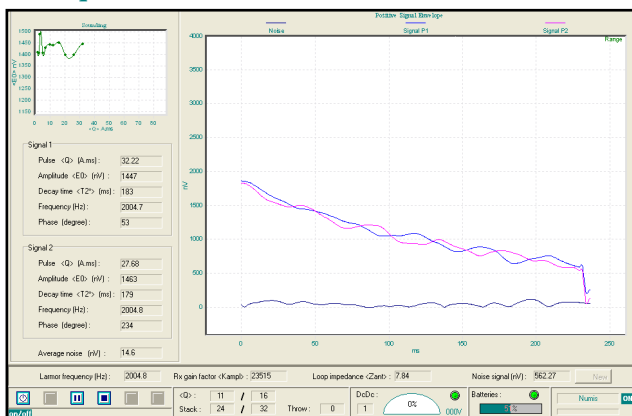
✓ Test

Test the tuning of the system and check the ambient noise level, before running the measurement



Monitoring of the noise level (nV) at the Larmor frequency

✓ Acquisition



Real time display of MRS signals Relaxation and ambient noise curves (stacked)

At the beginning of the sounding, an estimated time of the acquisition is given. After the full sounding, data can be imported from a specific interpretation software.