

# COMSYS Real Time Software

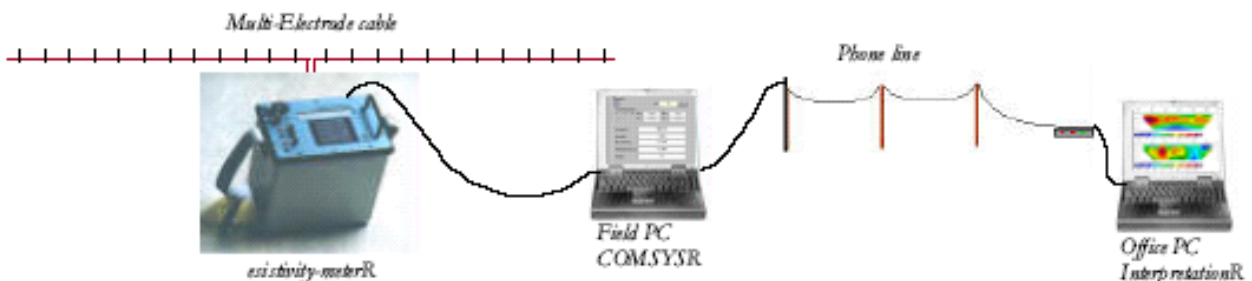
The **COMSYS** software is a practical and user-friendly tool allowing to drive a SYSCAL-type resistivity-meter in Multi-Electrode mode, from a PC. The data being continuously transferred into the PC, this program allows to perform 2D or 3D acquisitions without memory limitation.

Developed under Windows® 32 bits platform, this software requires the following minimal PC configuration:

- Windows® 95
- Pentium II Microprocessor (466 MHz)
- RAM memory: 64 Mb
- Free memory on hard disk: 20 Mb
- 800 x 600 screen
- Two free serial ports

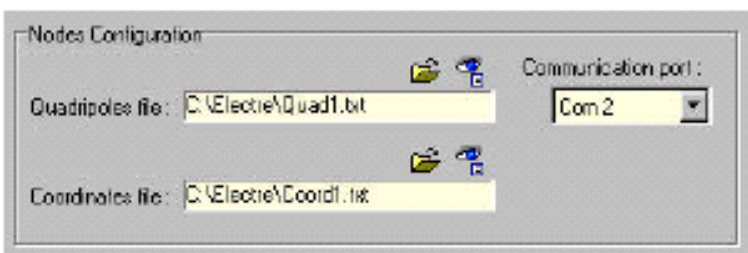
The main functions of the **COMSYS** software are the following ones:

- Choice of the measuring sequence and SYSCAL set-up
- Running of the measurement (in standard mode (Resistivity/IP) or in SP mode)
- Indication of the acquisition time of the current sequence
- Graphical visualization of the sequence
- Real time data visualization
- File storage into the PC
- Creation of a batch file to program an acquisition thanks to the Windows® task scheduler



The **COMSYS** software requires to connect to the PC, both the serial link of the resistivity-meter and the nodes switching boards output, in order to drive the whole system.

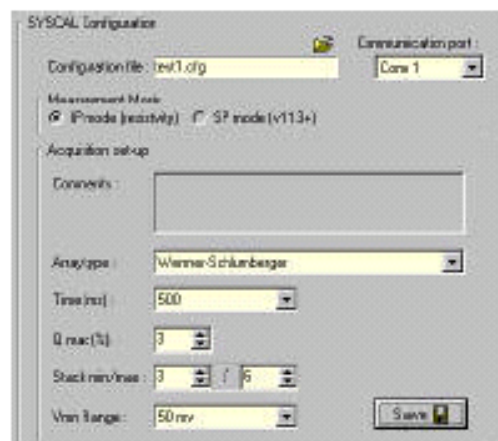
The equipment set-up is made thanks to the following windows:



*Choice of the measuring sequence R*

Introduction of a « quadripoles » and a « coordinates » file.

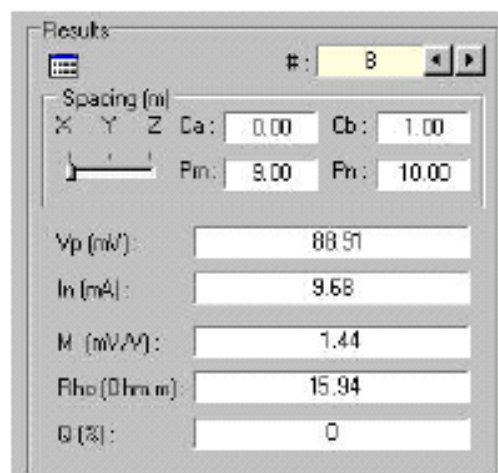
These files are ASCII files ; they can be manually created (from *Exxel* for example) or automatically (from the ELECTRE II software).



*SYSCAL set-up R*

Once the set-up has been defined, the acquisition can now be run. Data will be displayed in real time in the main window.

Whenever you wish, it's possible to stop the sequence and to re-start the measuring process from a specific quadripole.



*results window*

The **COMSYS** software also allows to prepare a configuration (definition of the sequence and SYSCAL set-up) in advance, and to program the beginning of the measurement thanks to the Windows® task scheduler.

Several measuring sequences can thus be pre-programmed and run at a specific date/hour and with eventually a recurrence.

During the measurement, data are stored into the PC in a file with the PROSYS format.

In such a file, for each measuring quadripole, the following parameters are stored (in Resistivity/IP mode):

- Electrodes position in X,Y, Z
- Injected current / Received voltage / Quality factor of the measurement
- Self potential (Sp) / Resistivity / Induced polarization (IP)