

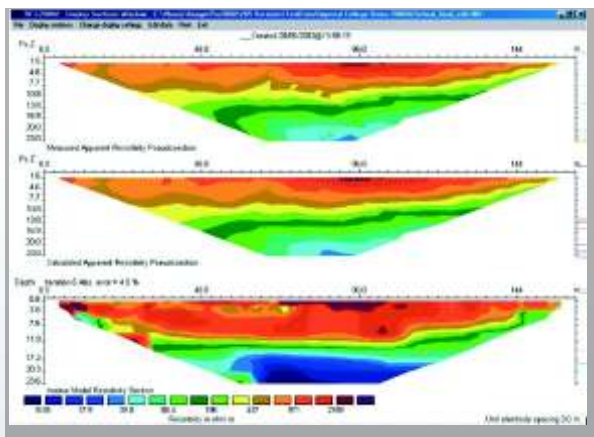


Tigre Tigre Resistivity Imaging

The Tigre resistivity imaging system is an ongoing resistivity development from Allied Associates. The Tigre offers flexibility, with increased power now a standard feature, and 32, 64 or 128 electrodes options supplied within a single instrument case.

The Allied Tigre is a high quality earth resistance meter capable of accurate measurements covering a wide range of applications. Traditionally, high power was thought to be necessary for successful surveys. However, it is now accepted that the superior precision of the Allied Tigre enables accurate electrical measurements to be made in all but the most extreme environments, nominally down to depths of 700 meters. A choice of current settings from 0.5mA to 200mA, with automatic gain steps, enables measurements to be made between 400 Kohm and 0.001 ohm. Three square wave frequencies are available with a choice of up to 16 cycles per measurement. Self potential can be monitored while various checks on instrument performance are incorporated into control software.

The Allied Tigre can be used for soundings and profiling in the traditional way using single-core cables; however, with the selection of suitable automation options, complex electrical images, such as shown below, can be collected by a single operator and viewed in the field, real time, by way of our ImagerPro 2000 XL acquisition software. ImagerPro 2000 XL is a Windows data collection program producing realtime pseudosections of apparent resistivity values offering the operator a fast visual QC facility. ImagerPro 2000 XL allows the operator a quick method for setting survey parameters prior to data collection.



Data example

Because the Tigre is so versatile, it can be used in a variety of applications including:

- Pollution Plume mapping.
- Groundwater Exploration
- Geotechnical Studies
- Archaeology
- Mineral exploration
- Geological Mapping
- Civil Engineering





Tigre

Tigre Resistivity Imaging

AUTOMATION...

Although the Allied Tigre can be used in the traditional manner to measure ground resistivity, its capabilities and performance can be enhanced in a number of ways. Control of the basic instrument can be transferred to a field computer using the provided RS232 cable, allowing instrument settings to be selected and altered from the keyboard. The received signal can be viewed and both the square wave periodicity and the fraction of the ON times of the sampled signal varied to optimize the quality of measurement. Data is stored on the hard drive of your PC, making it unnecessary to use a field notebook. These options are available as part of the standard Allied Tigre package. If automatic data collection for electrical imaging or sounding is required, a variety of cables are available to expand the Tigre to 128 electrodes.

For groundwater projects or applications requiring depth estimates to be made, Offset Sounding cable systems are ideal, offering the user a choice of Wenner or Schlumberger configurations. When lateral as well as vertical discrimination is required, profiling to a depth of 150 metres can be carried out using Imager cables. The use of these multicore cables, with equally spaced electrodes, is a survey technique called electrical imaging (tomography), recently developed for the investigation of areas of complex geology, particularly mineral, groundwater and engineering applications.



SOFTWARE...

The Tigre is supplied with ImagerPro 2000 XL, our Windows acquisition software package. A 32-bit product, ImagerPro is designed to run under Windows 95, 98, NT4 or later. Its user friendly interface requires little previous computer experience and the program can easily be used in conjunction with other processing software such as RES2DINV and RES3DINV, also available from Allied. We also offers a range of bespoke cable assemblies, to meet operational requirements with fixed or variable spacings, offset sounding cables, borehole and marine cables. Details available on request.

SPECIFICATIONS...

- Electrode capacity: 32 to 256 (optional)
- Output current: 0.5 - 200mA
- Output Voltage: 360V peak to peak.
- Cycle time: 2.1, 4.2 & 8.4 sec. (sounding)
- No. of cycles: 1, 2, 4, & 16 (sounding)
- Input impedance: 22 MOhms
- Measurement range: 0.001 - 400 kOhms
- Power supply: Internal rechargeable 12v DC or external 12 v source.
7 Amp/h @ 12v DC
- Display: 80 character alphanumeric LCD.
- Weight: 6kg.
- Dimensions: 335 X 235 X 300mm

