



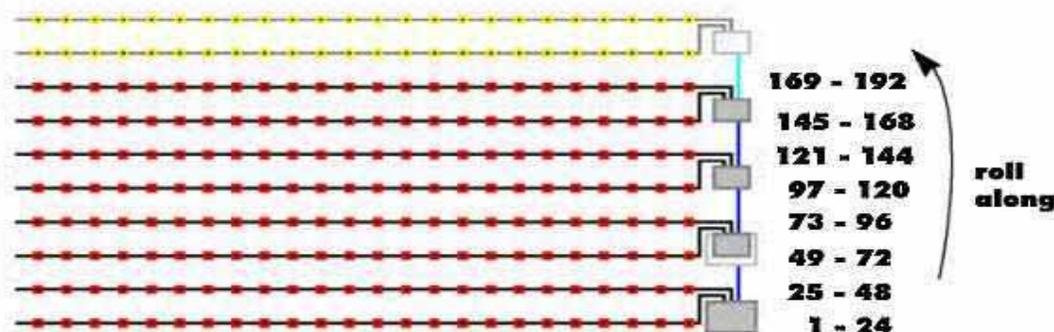
Switch Plus

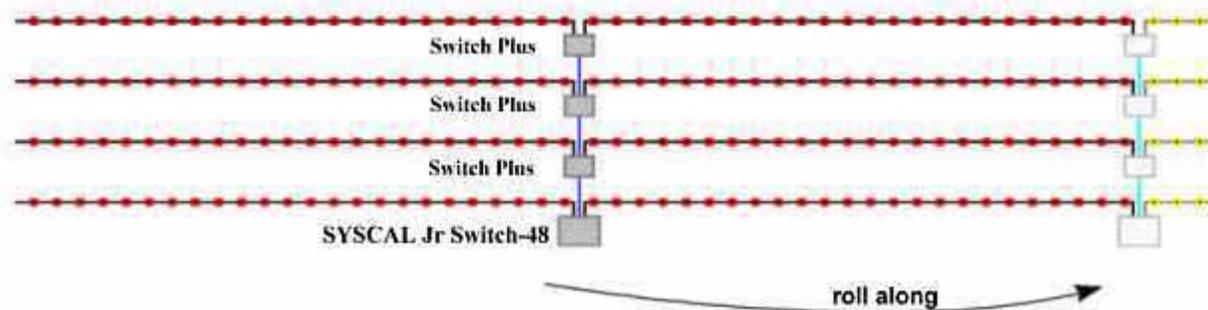
3D RESISTIVITY IMAGING

Introduction:

Conventional resistivity systems require the operator to lay out a profile in an “S”, or snake, shape, in order to collect 3D resistivity data. With the new Switch Plus concept this is now much more efficient, with easy roll along capability. At the heart of the system is the Syscal Junior Switch 48 resistivity meter (for more on this unit please see our web site, or call for a brochure). This unit incorporates a 100W resistivity meter with 48 nodes (switches) built into the console. By adding up to three additional Switch Plus Boxes of 48 nodes each we can create a system with 192 nodes, and possible line layouts as shown below.

Two types of line layouts are possible, as shown below. At the left are shown eight lines of 24 electrodes each, with the system set to roll to additional lines. Standard seismic type cable is used, with a typical spacing of up to 5m between nodes, and up to 50m between lines.





Here we show the ability of the system to roll along the line, running 4 sets of 48 nodes per line. For practical ease the recommended array is a combination of in-line colinear dipole-dipole, and broadside equatorial dipole-dipole, the latter having a greater depth of investigation.

Specifications:

The Syscal Junior is well suited for this application with a 100W transmitter operating at up to 1.2A. The auto ranging feature allows the system to choose the voltage and current needed to optimize each measurement. The switch system on the unit is fast, so that it is possible to take a reading every 2 sec. This is a proven meter design with excellent rejection of local noise.

- **Two Bendix plugs for 24 take-out electrode string each Other configurations on request (such as four plugs for 12 take-out electrode string each, or 48 single binding posts).**
- **Link cable length: 10 m standard (other length on request)**
- **Dimensions: 23 x 18 x 23 cm for the standard configuration**
- **Weight: 4,5 kg**
- **Power supply: internal rechargeable 12 V & 6.5 Ah battery or external 12 V car battery**
- **Operating temperature: -20 to + 70°C**