

GeoAmp 303 User Manual (SEV)

SUBSUELO3D

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1. FOR YOUR SAFETY PLEASE READ THIS INFORMATION CAREFULLY

The GeoAmp 303 is a device designed to emit and receive high electrical currents. Improper use or handling of this equipment can result in death or serious injury. **DO NOT OPERATE THIS EQUIPMENT** if you have not been properly trained to do so, or if you have doubts regarding its proper handling.



2. DESCRIPTION OF THE EQUIPMENT

2.1. Technical specifications

- Output power: 600 W maximum.
- Output voltage: 200 VDC maximum.
- Output current: 2 A maximum.
- electrode capacity: 4 (A, B, M, N).
- Output signal: DC.

2.2. General characteristics

- Central unit dimensions: 46.2 x 34.0 x 17.0 c.m.
- Central unit weight: 7.5 Kg Approx.
- Power source: 12 VDC
- Operating temperature: -0 to + 40 °C
- Storage temperature -10 to + 50 °C
- Display: Laptop screen (not included).
- Central Unit installed in Pelican R Case: injection molded case, waterproof, unbreakable, resistant to dust and corrosion. Made of structural copolymer polypropylene ultra resistant to impacts and fatigue.

3. KNOWING THE EQUIPMENT

The GeoAmp 303 is a device designed to carry out geoelectrical prospecting by applying the DC resistivity method. The complete equipment consists of a central unit installed in the Pelican R Box, which is an injection molded box, waterproof, resistant to dust and corrosion, made of polypropylene structural copolymer ultra-resistant to impacts and fatigue. The equipment also has: (a) four stainless steel electrodes of approximately 60 centimeters in length each, which are used as A, B, M and N; (b) four high-strength metal spools and their supports with a total of 800 meters of AWG-16 wire, which run along the AB and MN distances.

The central unit of the GeoAmp 303 equipment is responsible for generating a DC voltage of 200 Volts with a maximum current of 2 Amps. The GeoAmp 303 has an automatic data acquisition system, in which the spontaneous potential (SP) values are compensated and the Voltage and current values are acquired, in order to generate an apparent resistivity value that is automatically saved in a text file compatible with the processing software. The GeoAmp 303 equipment must be powered by a 12 Volt DC @ 13 Ah voltage source. This source can be a conventional battery used by automobiles.

3.1. Equipment items

- 1 central unit.
- 4 stainless steel electrodes 60 centimeters long.
- 2 metal spools with 300 meters of Centelsa AWG 16 cable each.
- 2 metal spools with 100 meters of Centelsa AWG 16 cable each.
- 4 metal supports for reels.

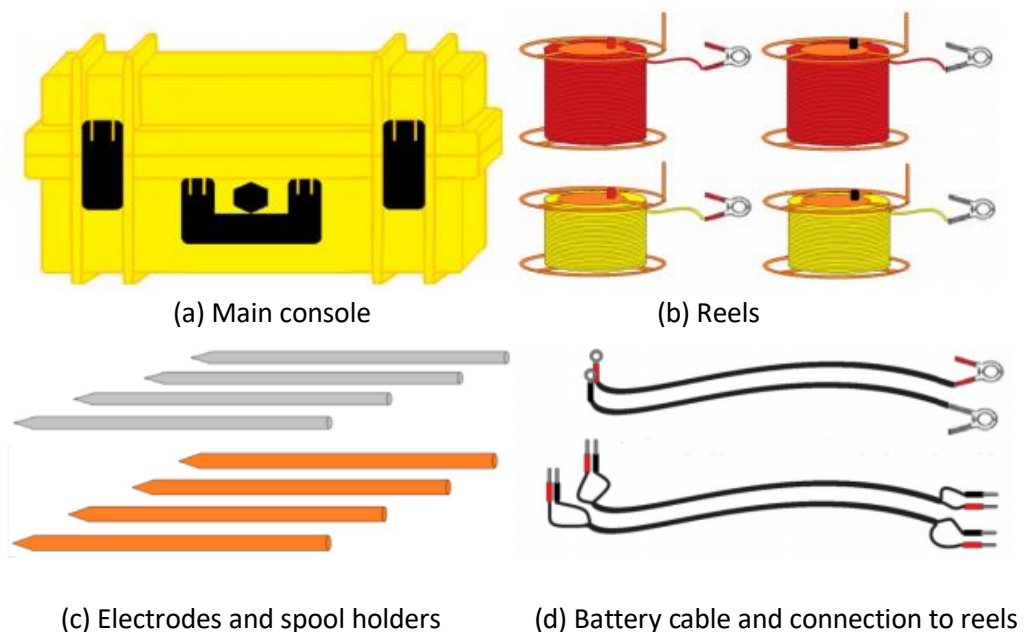


Figure 1: Equipment parts

3.2. Front panel

The GeoAmp 303 equipment has a front user panel that allows the connection of the different parts that compose it. Figure 2 shows the different parts of the front panel, among which the following stand out: the connectors for (A, B, M and N), the protection fuses, the USB port, the current injection button, the LEDs indicators, the power switch and the battery connector.

