



T-VLF
VLF System

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Features

- Excellent sensitivity due to large receiving coils.
- No orientation required.
- Graphics display of Fraser Filter curve.
- Electric Field Option.

General

No orientation of the operator to the direction of the transmitter is required. Three magnetic sensors measure the components of the VLF field. The sensor unit has two inclinometers to correct for tilt.

The microprocessor automatically takes the measurement. The frequency is key board selectable and two frequencies can be measured at the same time.

Low noise magnetic sensors and digital filtering produce good measurements even in areas where primary fields are weak. A quality factor is given at each measurement to control the quality of the data.

Operation

The classical tilt angle mode, based on the measurement of magnetic-only components, is used to prospect conductive dyke-like structures that generally correspond to weathered or mineralized zones.

The resistivity mode is based on the measurement of magnetic and electric components.

When working with the resistivity mode, a short electric line and two metallic electrodes are used. Applications include the prospecting of resistive dyke-like structures, and geological mapping (structural studies).

Display

A large graphic display gives the operator complete information about the measurement: Tilt angle and ellipticity, with their Fraser derivative values (mode 1); resistivity and phase (mode 2). The tilt or resistivity curve is automatically plotted after each station to enable the operator to make a first analysis of the measurements.

Internal Memory

All measured parameters, with frequency value, station and line number, are stored in a solid state memory system capable of containing more than four thousand measuring stations. At the end of the day, or on the field site, data can be transferred to a printer or microcomputer.

Specifications

VLF radio wave receiver with frequency range 10 to 30kHz.

Fully automatic measurement through microprocessor control.

Frequency key board selectable in 100Hz steps. Two frequencies can be measured at the same time.

Two measurement modes:

- A. Tilt angle mode - three magnetic sensors with two inclinometers ($\pm 45^\circ$)
- B. Resistivity mode - one magnetic sensor with one electric line.

Large graphic display, with display of:

- A. Frequency, station and line numbers.
- B. Ellipticity and tilt angle (mode 1), or resistivity and phase (mode 2).
- C. Quality factor for each measurement.
- D. Automatic curve plot for raw or Fraser derivative values.

Data storage in solid state memory.

Serial link for data transfer to microcomputer or printer.

Standard Components

Sensor console, logger, system software, instruction manual, transit case and data transfer cable.

Ordering Information

Description	Order Number
T-VLF System	500-190-0150
Electric Field Sensor . . .	500-190-0160

