# 2. Introduction

This equipment is the high performance digital measurement equipment to measure the location and the depth of buried cable / metal pipe from the ground. By adopting the most recent microcomputer technology, the digital correction of the measurement data realizes stable and high precious measurement.

- Principle measurement method -

When current flows through a buried cable/pipe, an alternating magnetic field is generated around it.
Location, depth, and current value of the buried pipe can be measured using the Receiver at the surface of the ground.
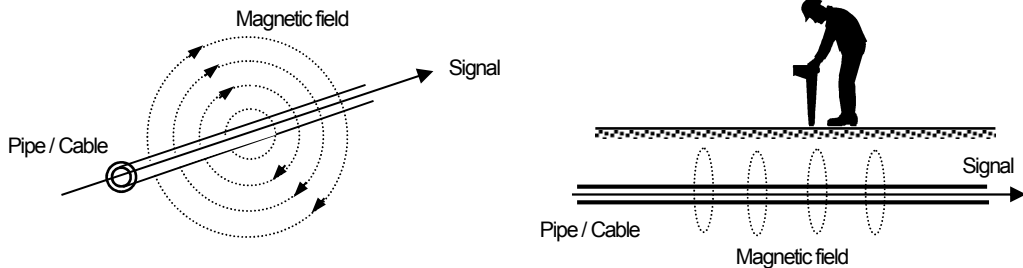
- Feature -

- Adopting differential coil method makes the Receiver to receive the signal from direct below the Receiver by cutting noise from surrounding area.
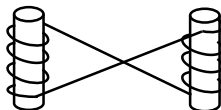
*The model figure of the differential coil.
The differential coil connected two coils for each other reverse.

- Three kinds of the location measurement mode (having error detection protection function)

    *Peak & Null mode: The method to detect maximum and minimum sensitivity simultaneously.

    *Peak mode: The method to detect maximum sensitivity.

    *Null mode: The method to detect minimum sensitivity point being indicated with arrow.

        No switch operation needed. Applied to at deep depth with stable location work.

    Yaw angle and Depth of buried pipe are continuously displayed when using the all measurement mode.

- Two kinds of the depth measurement mode

    *0-5m (16ft) mode: Measurement of depth with high precision is possible at indirect method, the end of cable, and jointing points.

    *0-30m (99ft) mode: Stable measurement is possible at deep depth, near guardrail, or fence. Do not use this mode with inductive mode.

- The Receiver itself can measure commercial frequency (50/ 60 Hz, 100 / 120 Hz) and Radio (from 9k to 33 kHz) without the use of the Transmitter.

- The best-suited frequency is automatically selected at radio (9k – 33 kHz) with **search function**.

- The measured data is stored (maximum 400 data) with **one-touch operation.**
  The data can be transmitted to a PC as standard function.

- Broadcasting of four frequencies (512 Hz, 9.5 kHz, 38 kHz, 80 kHz) as usage meets various buried pipe.

- A Probe as an option can be used to detect non-metallic pipe.