



C.A.T. & Genny overview

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Avoiding danger from underground services



Detecting, identifying and marking
underground services.

“Use of signal generators will
significantly increase the accuracy
of the service location”.

Electro Magnetic Location

opti-cal
surveyequipment.com

A DIVISION OF  PLANT



Cable locators do not
find cables.

They find magnetic
fields.

No magnetic field, no
locate.





RADIODETECTION 



C.SCOPE



Leica
Geosystems



VIVAX

METROTECH

Models and Options



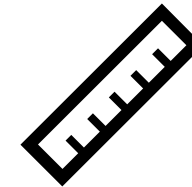
Data Logging



GPS Positioning



Shallow Service
warning



Depth
estimation



Power
Mode



Radio
Mode



Avoidance
Mode

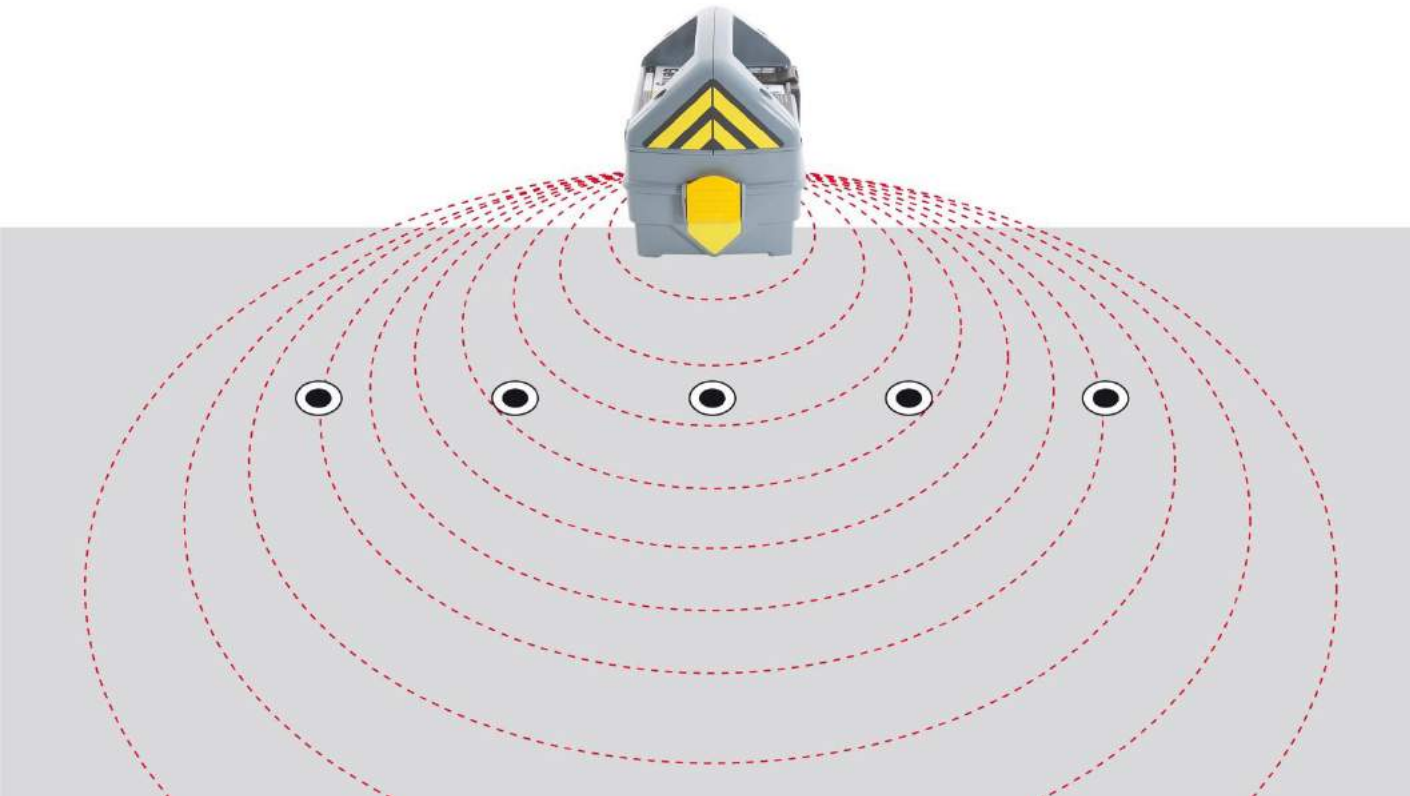


Use of a locator with a signal generator is the most effective way of finding buried services

- Improve accuracy
- Locate services which may otherwise be missed
- Depth Estimation



Induction mode induces signal onto multiple buried services

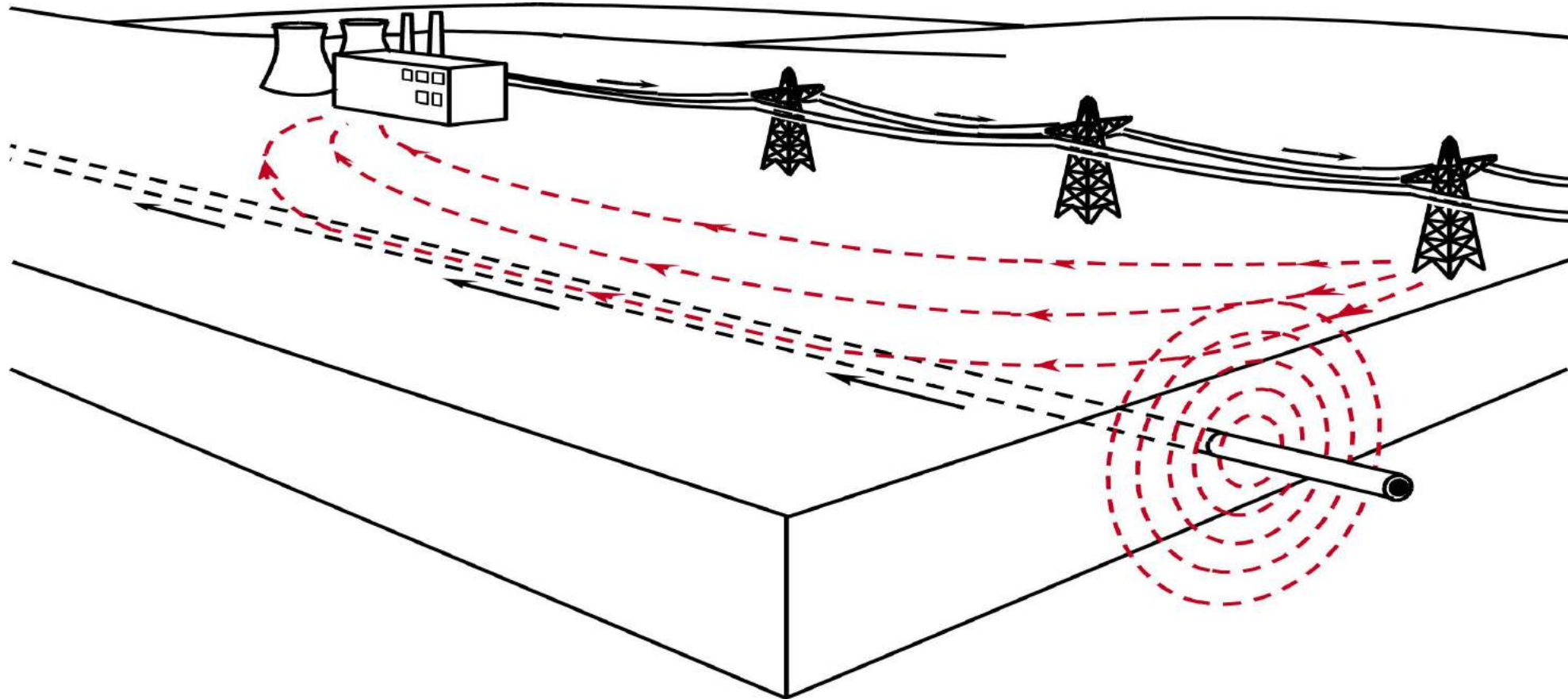


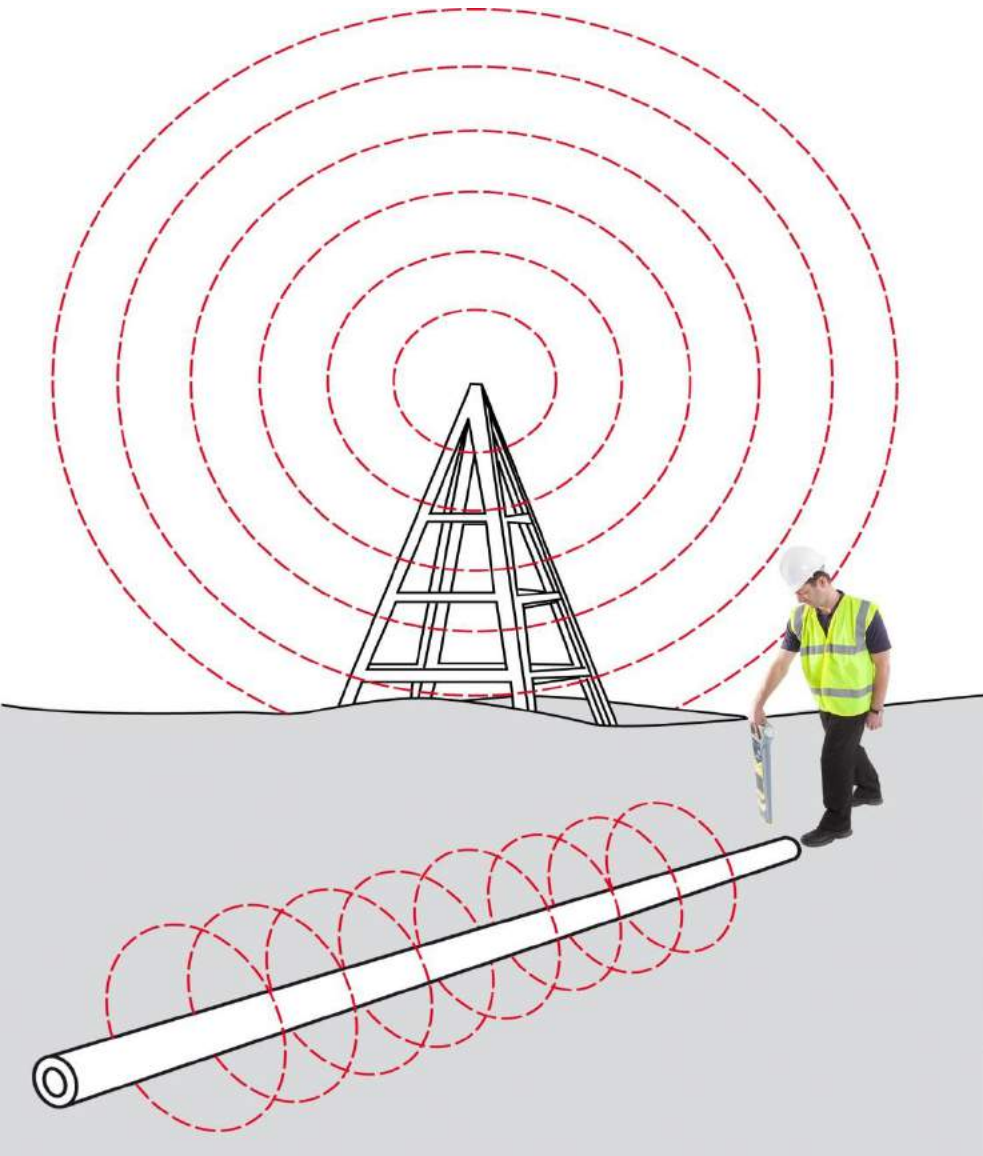
- 10 metres between CAT & Genny
- Handle must be in line with services.



- Red lead connected to service.
- Black lead connected to earth.
- Optional signal clamp may also be used.
- **Do not connect directly onto live services !**

Ground return currents





- Radio and Power rely on passive signals which can be unreliable.
- Objects above ground such as fences and barriers can cause interference.
- Signal may be distorted.

It is important to understand the limitations of this equipment.

- Non Metallic services – Plastic, drainage, fibre optic etc.
- Power cables under no load such as street lighting.
- DC, balanced or un-earthed pot ended cables.
- Deep cables.

Always dig with caution !

Locating non metallic services

- Non metallic services may be traced using a sonde or plastic pipe tracer.
- There are various types of sondes for different applications

