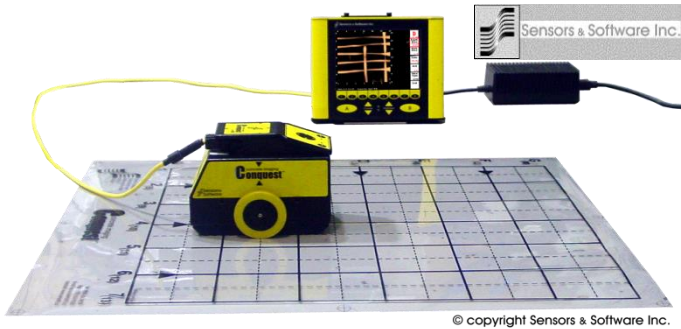


Conquest SL- MINI- Ground Penetrating Radar



Introduction

Conquest SL Ground Penetrating Radar (GPR) is designed for safe, non-destructive evaluation of concrete structures. Conquest offers rapid on-site imaging for cutting, coring, drilling or characterization of concrete slabs with little or no design drawings.

The Conquest SL uses radio waves to locate objects of differing dielectric constant. Therefore materials such as plastics, metals, and filling material can be located.

The system can analyze concrete at depths up to 0.5m, unlike ferromagnetic equipment with limits of 150-200mm. The system is simple to use and only require one operator.

Benefits

- safe and easy to use
- operators train quickly
- independent, completely self-contained operation
- rapid "return on investment"

Features

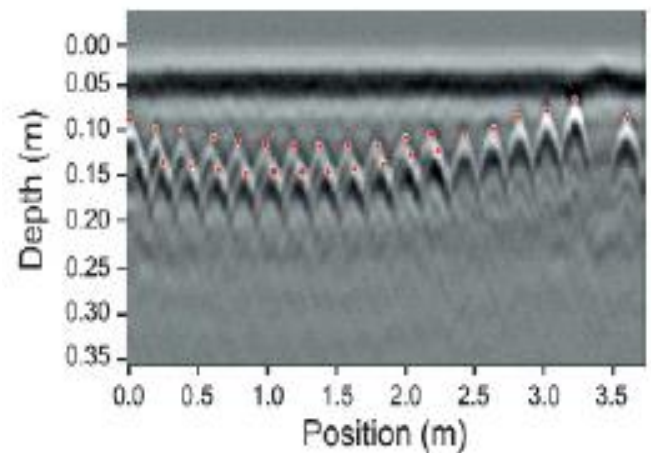
- Line Scanning for reconnaissance surveys
- Grid Scanning for detailed mapping
- Power Cable Display
- Real-time location of embedded objects
- On-site 3D imaging
- Rugged Carry Case
- AC Power supply
- Optional battery
- Optional Conquestview software

Type of Scans

Line Scans

A line scan is a pseudo image which slices through the concrete. A cylindrical target like a rebar, appears as a hyperbolic shape on the Line Scan.

Below the image indicates some very closely spaced



rebar, with the actual position highlighted as a red dot.

Grid Scans

Collecting a grid of data results using the grid maps creates a data cube or 3D volume that can be visualized as a series of 25 mm thick depth slices or as a solid.





Perth

West Perth
0408 034 668

Brisbane

Toowong
0419 477 715

Melbourne

Niddrie
0428 315 502

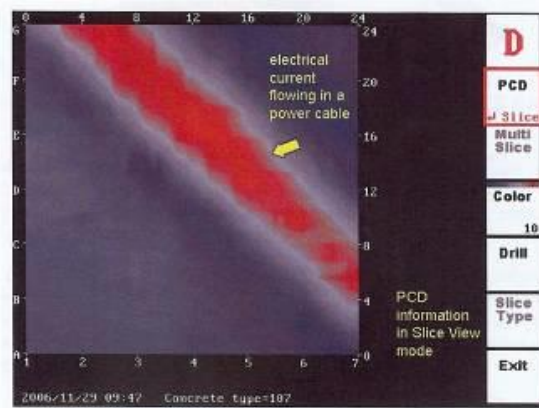
Sydney

Belrose
0418 381 709

www.pcte.com.au

PCD

Power Cable Detection maps the location of current carrying cables by detecting the magnetic field created when AC current flowing at 50 Hz. The Conquest SL detects current carrying cable best when the travel of the sensor head is perpendicular to the cable. In line scan mode the PCD profile appears under the GPR cross section image. A 2D image can also be constructed using Grid Scan data (shown below)



Systems Includes

Digital Video Logger (DVL) Control Module

- Controls high speed data acquisition and processing
- Simple user interface
- Rugged, weather proof
- Bright, high contrast, sunlight visible LCD screen
- Multiple data ports
- Support of large flash storage memory
- Quick release mounting
- Collapsible stand

Sensor Head

- Lightweight for overhead work
- Integrated odometer wheel
- Keypad for remote operation

Sensor Head Cable

- 5m standard or 10m optional

Optional Battery

Technical Specifications

| | |
|-----------------------------|--|
| Sensor Head Size | 148 x 127 x 187 mm |
| Sensor Weight | 1kg |
| DVL Control Module Weight | 2.5kg |
| DVL Screen | 640 x 480 VGA, TFT, 400 Nits |
| Operating Temp | -20°C to 70°C (display) -40°C to 50°C (electronics) |
| Input Voltage | 12V |
| Input Current | 1.35A |
| Battery Type (optional) | Lead Acid Gel Cell- battery belt |
| Battery Capacity (optional) | 9 Ah |

About PCTE

PCTE have over 30years experience in the measurement and testing of concrete. With experience in research, consulting and construction they are able to assist you in reviewing the issues and developing solutions. PCTE can provide more than just the equipment. They can provide leading technical support for your business.

Other Equipment

The full Proceq range of equipment is available for insitu non destructive concrete measurement, including Schmidt Hammers, Covermeters, Half Potentials, Resistivity, Ultrasonic's and Permeability.

We also supply Intelli-Rock maturity, temp and humidity logging systems, corrosion rate monitoring equipment, Ground Penetrating Radar.

Olson Instrument range also includes the CTG, Freedom Data PC, NDE360 and DAS as well as the resonance tester.

Our newest piece of equipment is the MIRA Ultrasonic Pulse Echo imaging system.