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PinPointR Data Sheet

A compact and robust high frequency GPR system which has been specifically designed to meet the requirements of the utility detection industry. The PinPointR GPR system combines Impulse Radar's real-time sampling (RTS) technology with a dual set of antenna to provide unquestionable data fidelity and resolution.



As a Dual frequency system, the PinpointR (Fig.1) allows the user to collect simultaneous data at two depth ranges using the 400MHz and 800MHz antenna and targets picked from either channel on the fly. Under good ground conditions (well drained sandy loam soil) the user can image around 2m and 5m below the ground surface; picking up on features such as electric, water mains, gas pipes and other common utilities found within this depth range. The system can help the user detect, locate and track one or more features beneath the surface and plot the results up on a map; swaths can be collected in an X, Y grid format or as single lines. As with all GPR systems it is difficult to distinguish the type of utility being detected, therefore the system must use other information (e.g. previous known data/ estimated depth of a utility) gathered from the area to aid data interpretation

The compact all-in-one design means the system can be stored and transported complete, so that it is ready for use at a moment's notice. Easily packed within the boot of a car, it's a relatively lightweight system, which has a handle

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which folds out ready for you to start acquisition. Powered using a single Li Ion battery the system communicates via WIFI to any android device (phone, tablet) which has the Viewpoint acquision software installed (freely available). The operator then can choose between single acquisition or multi line acquisition mode (Fig.2.), select the depth window and set to internal or external GPS mode. If a more accurate position is required (e.g. RTK FIX 4), any RTK system running a GGA NEMA sentence can communicate with the PinpointR.

The data exported can be interpreted and processed in GPR-Slice or the Crosspoint software before being exported in a CAD readable format.

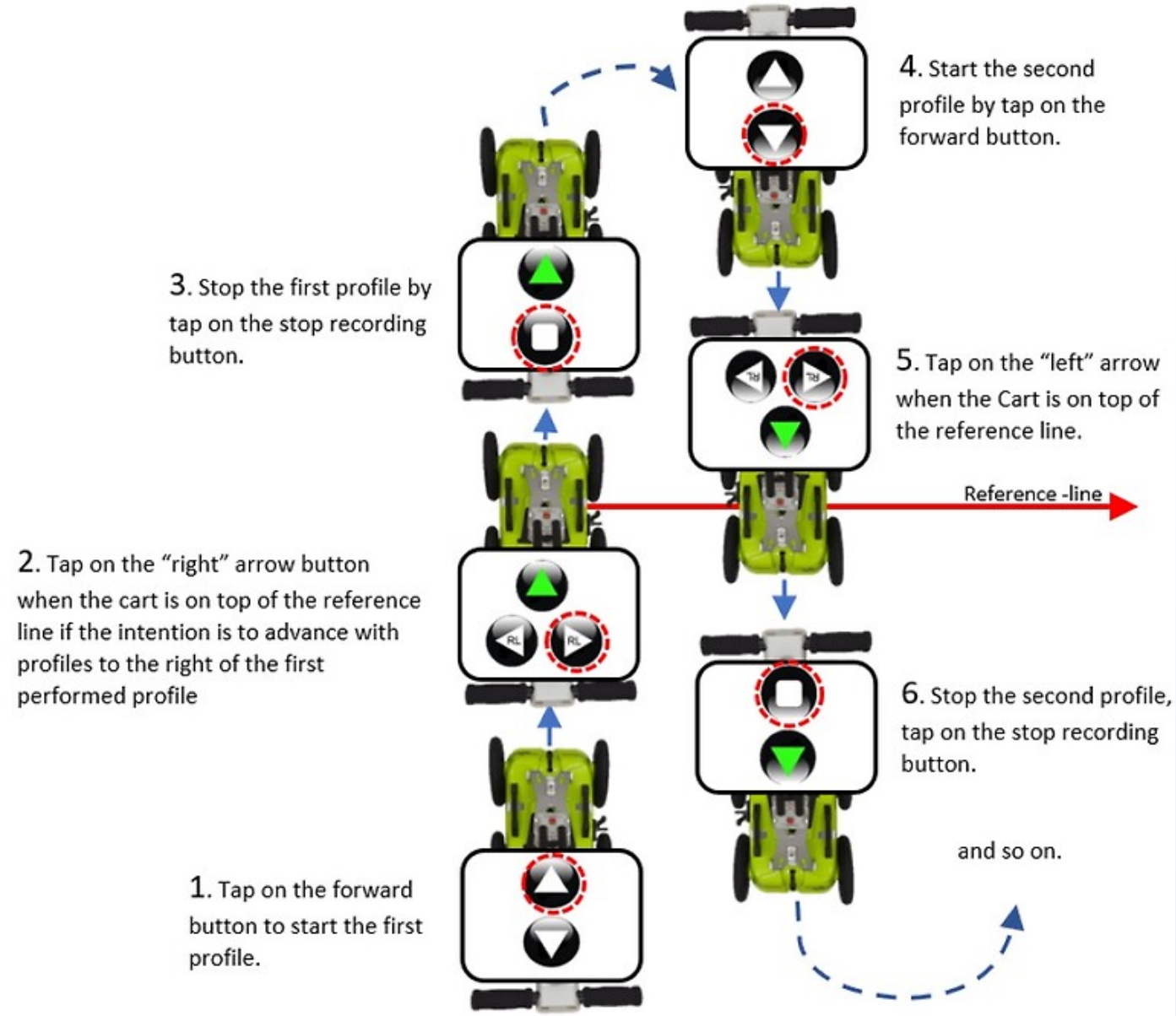


Fig.2. Diagram showing how to collect multi line data using the easy-to-use Viewpoint acquisition Software

Features

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- Simultaneous Dual frequency data acquisition (400MHz & 800MHz)
- Lower power consumption permitting 7 hours operation off one charge
- Easy to use Android interface
- Wireless coms with recording device
- Data back-up, Internal SD memory to ensure no data is lost during wireless transfer.
- Internal GNSS for accurate data timestamping and basic Geo-referencing
- Fully integrated support for external RTK GNSS
- Automatic Utility report generation

Product Dimensions

Physical	Dimensions (L x W x H)	Weight
(instrument only)	101cm x 54cm x 103cm	20kg

Technical Specifications

Channels:	2
Centre frequency:	CH-1: 400 MHz / CH-2: 800 MHz
Record Length:	Max 400ns
Bandwidth:	>120%, fractional, -10 dB
Digitisation:	16-bits (default), 32-bit (optional)
Survey speed:	> 130 km/h @ 5 cm point interval
Scan rate:	>800 Scans per second
Acquisition mode:	Wheel, time or manual
Positioning:	Wheel encoder, internal DGPS, external GPS (NMEA 0183 protocol)
Power supply:	12 V Li-Ion rechargeable battery, or ext. 12 V DC source
Power consumption:	1.26 A
Operating time:	7 hours
Operating temperature:	-20° to +50°C
Environmental:	IP65
Regulatory certification:	CE, FCC, and IC Approved

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Videos

PinPointR utility locator - presentation video
https://www.youtube.com/watch?v=8f7xnmSRxMM

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