RADIODETECTION®

RD7100®

Precision locators – optimized precision for your utility

SPX®

Since Radiodetection launched the first commercial, twin antenna, cable and pipe locators over 40 years ago, we have pioneered many technologies that are used widely in the location industry today. Behind developments such as depth measurement, Strike*Alert*® and Compass orientation, is a drive to make the excavation of buried utilities easier and safer.

RD7100, our industry-specific locator range, is built on this pedigree for performance, quality and durability. Containing our most advanced locating technologies each model is optimized for the challenges of locating a particular utility. Integrated GPS and usage logging options automatically generate data for work reports, or in-house quality and safety audits, to promote best working practices.

High contrast screen provides clarity even in bright sunlight

Simultaneous display of depth and current gives more confidence you are following your target line

Light weight and ergonomic design for comfortable use

Utility Optimized Frequencies

Each model comes programmed with a set of locating frequencies selected for specific utilities

Guidance Mode

Rapidly trace the path of a target utility using proportional arrows and a directional indicator

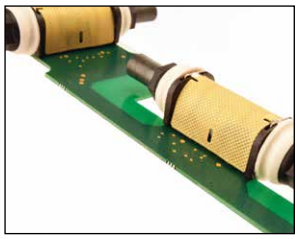
High visibility reflective design helps protect operators and equipment

Built for on-site use – IP65

Shock resistant, ingress protected casing protects against knocks, drops, water and dust

Locate over longer distances

90V signal output and automatic impedance matching



Precision by design

A unique arrangement of five custom manufactured, precision ground antennas deliver locate accuracy and repeatability

Match your transmitter to your locator model to simplify setup and use

Base tray for accessories

3 YEAR WARRANTY ON REGISTRATION AND A GLOBAL SERVICE NETWORK PROVIDE PEACE OF MIND

Upgrade to get more from your locator system:

Li-Ion Battery Pack

Lithium-Ion rechargeable battery options for both locator and transmitter provide extended runtime with reduced running costs.

GPS and Usage-Logging

Integrated GPS and automatic usage-logging allow managers to review locate history to ensure compliance with best practice.

Sondes

Locate non-conductive pipes or cable ducts and conduits at depths of up to 50’ (15m).

Simplify complex locates

Simultaneous depth and current readout

Consistency of depth and current measurements gives confidence the correct line is being followed.

Dynamic Overload Protection

Filters out interference, enabling use in electrically noisy environments such as near substations or overhead power lines.

Power Filters™

Establish if a strong power signal comes from one source or multiple cables, using the harmonic properties of mains networks.

TruDepth™

As depth readings are given only when the RD7100 is correctly oriented, you can be confident in the result.

Mark and protect your underground assets

Accurately marking buried assets ensures minimum downtime during repair or maintenance activities. It also prevents damage which can be costly for both you and your customers.

RD7100 offers the power of Radiodetection's most advanced locating technologies, with each model optimized for a single industry. Users benefit from the simplicity of having menu options and capabilities matched to their requirements.

Guidance Mode

This enables the path of a single utility to be found and traced quickly. Directional information is displayed alongside proportional distance arrows to help find the utility and then keep you on its path.

The simultaneous display of depth and current information gives confidence the correct utility is being traced even in congested networks. For rough or uneven terrain differentiated audio tones can free the user to concentrate on potential hazards.

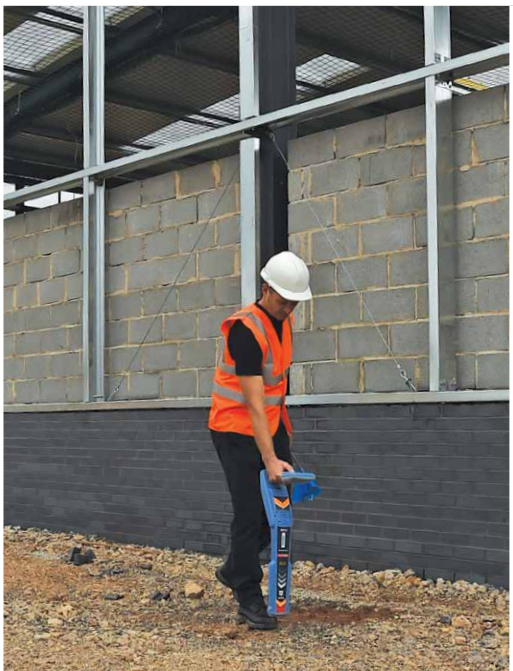
Peak+ Mode – speed combined with accuracy

Peak+ mode allows you to add either Guidance or Null arrows to the accuracy of Peak mode.

- Adding Guidance gets you to the Peak position faster.
- Adding Null to Peak lets you check for the distortion caused by other utilities, spurs or interference.

Powerful locating at your fingertips

We've kept our user interface consistent with our previous precision locators to reduce retraining costs.



Ensuring best practice

In the field of damage prevention, where the human and financial cost of a strike can be substantial, ensuring adherence to best working practices is essential. Observing behaviors and preventing poor habits developing is difficult. The RD7100 comes with a number of features designed to facilitate the observance of best practice and to ensure product integrity before use.

Automatic usage-logging with GPS positioning

When equipped with GPS, RD7100 locators automatically capture key locate parameters, every second, providing a comprehensive picture of individual locates and allowing you to assess usage patterns over extended periods.

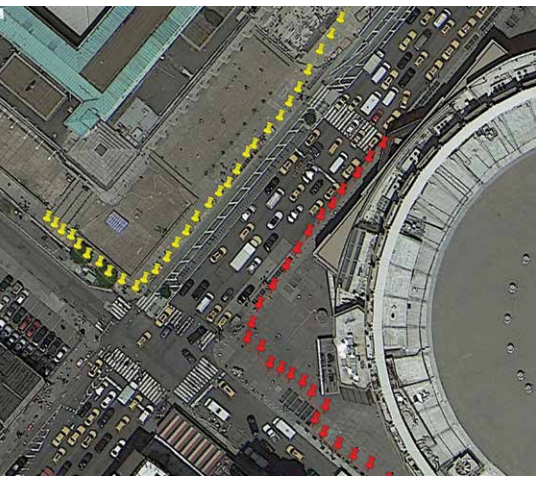


Image © 2015 Google Earth

The data generated can be used to ensure adherence to best practice, or to identify training needs before poor work habits develop. Additionally, the information can be used for internal audits or shared with stakeholders to enable process improvements, and to evidence task completion.

Usage can be exported in multiple file formats – for example, KML Maps to confirm where and when the work was performed.

eCert™ – remote calibration without downtime

Verify and certify the calibration of your locator over the internet using the RD Manager™ PC software package without returning the unit to a service center. You can be confident that the RD7100 is ready for action whenever you are.

CALSafe™

Choose to automatically enforce maintenance or lease schedules by providing a 30 day countdown before the calibration certificate expires.

Support when you need it

The RD7100 is backed with an industry leading 3 year warranty on registration. Our global sales and service network delivers comprehensive technical support and training tailored to your needs.

Operator confidence on-site

Enhanced self-test

The integrity of the measurement system can be confirmed on-site. Self-test applies signals to the locating circuitry as well as checking display and power functions.

Strike*Alert*™ in active and passive locating modes

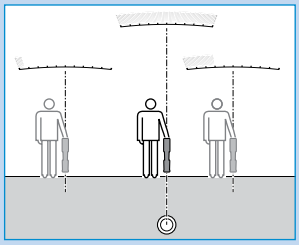
Visual and audio warnings of shallow cables reduces the risk of accidents.

Ingress protection for tough environments (IP65)

A rugged design and sealed case protect the RD7100, ensuring reliable performance in tough conditions.

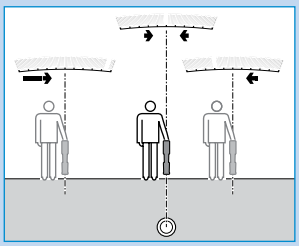
The RD7100 offers a choice of locate modes, each of which is optimized for specific tasks

Peak
Displays the strongest response when directly above a cable. Depth and current measurements are also shown.



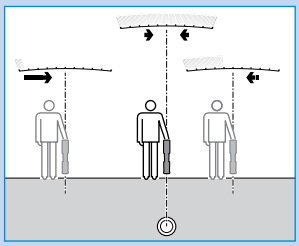
Use for: Precise locating prior to and during excavation. Many professionals have trained in this mode and appreciate the simplicity of the display.

Guidance
Proportional guidance arrows and differentiated audio tones indicate if utility is to the left or the right of the user.

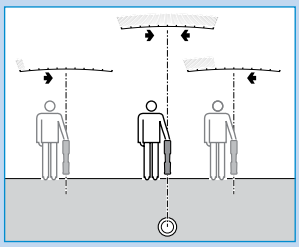


Use for: Checking general direction of utilities as part of a pre-locating sweep. Better for congested areas than null mode alone.

Peak+
Add Guidance or Null modes to Peak and alternate between them.

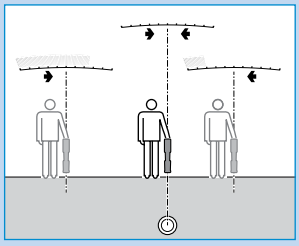


Peak+Guidance:
Use for: Finding and following the Peak response quickly. Peak graph with simultaneous depth and current information can be used for precise locating of utilities.



Peak+Null:
Use for: Checking for distortion, which can indicate the presence of multiple lines, or other features which may require extra vigilance.

Null
Arrows and audio signals indicate where the cable is relative to the operator. A null response is displayed above the cable.



Use for: Long distance marking of single utilities in non-congested areas. Audio response allows users to rely on sound rather than the screen.

Optimized precision for your industry

All our RD7100 locators come with Radiodetection's pioneering features, such as StrikeAlert, Compass Orientation and depth measurement as standard. Each model of RD7100 also benefits from being optimized for a specific industry:

Construction: RD7100SL

Accurate and simple to use, the RD7100SL comes with four active and two passive frequencies that cover the majority of site locating tasks. A rugged, IP65 rated casing along with a high contrast screen make it suitable for use in all weather conditions.

Water and Pipeline: RD7100DL(G)

With four sonde frequencies, the RD7100DL can be used to trace deep pipes made from a variety of materials including: cast iron, clay, fiber, concrete and brick. Additionally, it can be used to locate Cathodic Protection System (CPS) signals applied to pipelines.

Power: RD7100PL(G)

Designed for use in dense infrastructures where signals from high voltage equipment and cables can be confusing or overwhelming. Dynamic Overload Protection reduces the effect of interference, while Power Filters can be used to establish if a single large power signal comes from one source or from the presence of multiple cables.

Telecom: RD7100TL(G)

RD7100TL features higher frequencies to locate high impedance cables amongst large bundled pairs and sonde frequencies for duct and conduit tracing. Higher frequencies can also be used to trace sheathed domestic cables without grounding connections. Cable sheath faults can be located to within 4" (10cm) using 8kHz Fault Find mode with a Radiodetection A-Frame.

Getting more from your RD7100 system...

Fault Find

Combine the RD7100 locator with an accessory A-frame to identify and pinpoint insulation sheath faults to within 4" (10cm).

RD Manager PC software

Set-up, calibrate and update your locator from a PC. Download usage logging and survey measurement data for analysis.

RD7100 range options:

RD7100 locators:	SL	DL	DLG	PL	PLG	TL	TLG
Locate Frequencies	4	5	5	5	5	7	7
Sonde Frequencies		4	4	1	1	3	3
Passive Modes	2	3	3	2	2	2	2
Compass in active modes	✔	✔	✔	✔	✔	✔	✔
Compass in passive modes		CPS	CPS	Power Filters	Power Filters		
Depth in Power				✔	✔		
On-board GPS			✔		✔		✔
Usage Logging			✔		✔		✔
CALSafe™			■		■		■
Power Filters				✔	✔		
Fault Find				✔	✔	✔	✔
Lithium-Ion Battery	●	●	●	●	●	●	●
3 year warranty on registration*	✔	✔	✔	✔	✔	✔	✔

Transmitters	Tx-1	Tx-5	Tx-10
Max. Output Power	1W	5W	10W
Active Frequencies	16	16	16
Induction frequencies	8	8	8
Induction field strength	0.7	0.85	1
Eco Mode		■	■
Lithium-Ion Battery	●	●	●
3 year warranty on registration*	✔	✔	✔

Other features described are standard on the RD7100 Locators and Tx transmitters unless otherwise noted.

*Locators and transmitters only. Does not include battery packs and accessories.

✔ Available, enabled by default.

● Option.

■ Available, disabled by default.

Download the full Product Specifications at:
www.radiodetection.com/RD7100

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Radiodetection is a leading global developer and supplier of test equipment used by utility companies to help install, protect and maintain their infrastructure networks.

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