RD8100™
OPTIMUM PRECISION FOR DAMAGE PREVENTION
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, StrikeAlert® and Current Direction® is a drive to protect utilities from damage, making excavation easier and safer.

RD8100, our most advanced precision locator range, is built on this pedigree for performance, quality and durability. Containing a unique arrangement of 5 antennas, it allows you to choose the optimum level of precision for the job in hand. Integrated GPS and usage-logging options automatically generate data for customer reports, or in-house quality and safety audits to promote best working practices.
Lithium-Ion rechargeable battery options for both locator and transmitter provide extended runtime with reduced running costs.

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

Save time on site by controlling your transmitter from distances of up to 1400 feet / 450 meters.

High contrast screen provides clarity even in bright sunlight.

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

Program up to 5 extra frequencies to customize the RD8100 to signals found on your network.

Store up to 1000 records and send wirelessly to a mobile device or PC using Bluetooth. Optional integrated GPS adds positional data without requiring an external device.

90V signal output and automatic impedance matching

4 kHz frequency with Current Direction for locating and tracing higher impedance cables over longer distances.

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

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

Light weight and ergonomic design for comfortable use.

High visibility reflective design helps protect operators and equipment.

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.

iLOC
Save time on site by controlling your transmitter from distances of up to 1400 feet / 450 meters.

Built for on-site use – IP65

Precision by design

Survey Measurements with Bluetooth® Connectivity

Coordinate Measurements with Bluetooth® Connectivity

Custom Frequencies

Survey Measurements with Bluetooth® Connectivity

Base tray for accessories

Base tray for accessories

Light weight and ergonomic design for comfortable use

High visibility reflective design helps protect operators and equipment

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

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

Upgrade to get more from your locator system:
Making complex locates simpler

With utility infrastructures becoming more complex, locate professionals require more powerful tools to simplify the task of distinguishing between and tracing different utilities.

**CD (CURRENT DIRECTION)**
Identify your target amongst a number of parallel utilities by applying a specialized CD signal from the Tx-10 transmitter. CD arrows displayed on the locator confirm you are tracing your target.

**TRACE HIGH-IMPEDANCE UTILITIES WITH 4 kHz**
The 4 kHz locate frequency enables lines such as twisted pair telecoms or street lighting to be traced over longer distances. Since such utilities are often found in areas of dense infrastructure, you can combine 4 kHz with CD to improve trace accuracy.

**USE POWER FILTERS™ TO PINPOINT AND DISCRIMINATE BETWEEN POWER CABLES**
When a signal transmitter can’t be connected, tracing individual power lines through dense networks can be a real challenge. Conflicting or powerful signals confuse or combine to create a wash of signal.

A single key press uses the harmonic properties of power signals to establish if a signal comes from one source, or from multiple cables which you can then trace and mark.

**SPEED COMBINED WITH ACCURACY – PEAK+ MODE**
Peak+ mode allows you to add either Guidance or Null locating 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.
Supporting your business

Every locating operation needs to meet the continuing challenges of delivering on-time, high quality work and increasing value to customers.

**AUTOMATIC USAGE-LOGGING WITH GPS POSITIONING**

When equipped with GPS, RD8100 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.

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 partners or clients to evidence task completion, or compliance to service requirements.

Usage data can be exported in multiple file formats – for example KML for Google Maps to confirm where and when 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. Have confidence that the RD8100 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 RD8100 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.

**STRIKEALERT™ IN ACTIVE AND PASSIVE LOCATING MODES**

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

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**HIGH SENSITIVITY**

Sophisticated circuitry enables operators to detect and react to the weak signals associated with difficult to locate utilities.
Getting more from your RD8100 system...

CUSTOMIZE THE LOCATOR TO YOUR NETWORK FREQUENCIES

Up to 5 additional frequencies can be programmed into all RD8100 locators to match it to the signals found on your target telecoms networks.

ACCURATE SURVEYING WITH INTEGRATED OR EXTERNAL GPS

Save up to 1,000 survey measurements, capturing utility depth, and send to a mobile device using Bluetooth. Add positional data with the integrated GPS option, or combine with external GNSS device using the wireless Bluetooth link to get the accuracy that you need.

FAULT FIND

Combine the RD8100 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.

PASSIVE AVOIDANCE

Rapidly check an area before excavation using simultaneous detection of the Passive Power and Radio signals carried on underground cables or pipes.

90V TRANSMITTER OUTPUT

More locate signal on high impedance target lines – detect deeper and further.

MULTIMETER FUNCTION

Assess the target utility using your transmitter – quickly measure line voltage, current and impedance.

The RD8100 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.

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

Use for: Finding Peak response quickly while checking for the presence of multiple lines or other features which may require extra vigilance.

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

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

Broad Peak
Operating similarly to Peak mode but more suited to locating weaker signals.

Use for: Locating deep lines, or when weak signal levels or interference makes conventional peak locating difficult.

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.
CHOOSE THE OPTIMUM MODE FOR YOUR LOCATE

Our unique arrangement of 5 antennas allows you to optimize your RD8100 for different tasks. Each mode uses a different combination of antennas. At the heart of each of our locating antennas is a custom manufactured, precision-ground ferrite to ensure the accuracy and precision of our measurements.

ILOC

ILOC is an advanced Bluetooth link between the RD8100 locator and Bluetooth enabled transmitter, which allows you to control the locate signal's power and frequency from up to 1400' / 450m away. Spend less time walking and more time locating.

ACCESSORIES TO OPTIMIZE THE SYSTEM TO YOUR NEEDS

Whether you are locating telephone cables in a bundle or underwater power cables, Radiodetection's accessory range extends the precision locate capabilities of the RD8100 and transmitters to your application. Visit www.radiodetection.com/accessories for more information.

RD8100 range options:

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Other features described are standard on the RD8100 Locators and Tx transmitters unless otherwise noted

✓ Available, enabled by default  ● Option  ■ Available, disabled by default

Download the full Product Specifications at www.radiodetection.com/RD8100