

RADIODETECTION® 

RD510

Water Pipe Locator & Leak Detector

Water leakage is a
major global challenge



Locate and trace pipes over distances up to 45 meters*

PVC and plastic pipes are increasingly popular in water infrastructure as a safe, strong and flexible alternative. However, their non-metallic nature makes locating these underground pipes challenging.

Water pipe leaks lead to substantial water loss, increased operational costs, and undermine efforts to ensure sustainable water management and supply.

The RD510 Water Pipe & Leak Detector solution is designed for maintenance and repair work, helping you locate leaks with precision – up to 5 meters.*



- **User-Friendly Control:** Easy-to-use, hand-held control unit with color touch screen.
- **High Sensitivity Microphone:** Ground microphone with a telescopic pole for precise detection.
- **Comfortable Headset:** Equipped with a standard audio jack for seamless audio clarity.
- **Versatile Metal Spike:** Extends usability on soft ground conditions.
- **Noise Reduction:** Band pass filter to minimize background noise interference.
- **Pulsed Water Transmitter:** Provides a traceable pulse to the target pipe.
- **Adaptable:** Pulsed Water Valves to suit most environments (4 or 10 bar).

*Actual range will vary depending on the ground composition and pipe material.





Advanced sensor technology, the RD510 can accurately detect leaks up to 5 meters

Locate Leaks with Precision

The RD510 advanced sound detecting system enables accurate leak detection. The hand-held control unit and ground acoustic sensor work together to isolate and amplify leak sounds for accurate locating. Capable of detecting leaks up to 5 meters deep*, this system is both reliable and straightforward.



Simple 3-Step Locating Process

The RD510 features a highly sensitive acoustic sensor, making it efficient for locating and tracing plastic water pipes. Here's how it works -

1. **Connect:** Tether the RD510 Pulsed Water Transmitter (PWT) to a fire hydrant, meter base or external tap.
2. **Inject:** Send a traceable sound into the target pipe using the PWT.
3. **Detect:** The RD510 display unit and ground acoustic sensor accurately detect and identify the pipe's location up to 45 meters away.*

*Actual range will vary depending on the ground composition and pipe material.





RD510 Water Pipe Locator & Leak Detector

Part number	10/RD510-RX
Components	Hand held control unit with soft bag cover, acoustic sensor, telescopic pole, soft ground spikes, hard ground plate, headset, USB cable, memory card, transit case
Weight (shipping)	9 kg
Dimensions:(case)	22.5 x 60 x 45 cm (HxLxW)
Construction	ABS
Display	7" HD touch color screen
Power Input	5V, 2A Micro USB
Operating Modes	Spectrum Analysis, Locating
Language	English
Power	Internal Li-Ion batteries, not removable
Frequency Range	1:1000 Hz
Gain	10 levels adjustable
Volume	10 levels adjustable
Response	Peak
Acoustic Sensor Type	Piezo Electric Ceramic
Operating Temperature	-20 to 50°C
Operating time	Up to 8 hours (At 20°C, medium screen brightness)

Locating leaks in
underground pipes
and troubleshooting
irrigation systems



Pulsed Water Transmitter

Part numbers	10/RD510-TX-STD STD Pressure (4 bar) 10/RD510-TX-HP High Pressure (10 bar)
Components	Pulsed water transmitter, soft bag, 12V car adaptor, pipe connection kit, Pulsed Water Valve (4 bar, 10 bar or both – see part number)
Weight (shipping)	3 kg
Dimensions (case)	20.3 x 34.3 x 22.8 cm (HxLxW)
Construction	ABS
Power	8x D cell alkaline batteries, 12V DC in or optional Li-Ion battery pack
IP Rating	IP65 (with tool tray fitted)
Operating Temperature	-20 to 50°C
Operating time	Up to 8 hours (At 20°C)

Kits

All RD510 kits include a RD510 Water Pipe Locator & Leak Detector, a Pulse Water Transmitter, a hose connection kit and one or two Pulsed Water Valves (see description)

Part number	Description
10/RD510-KIT-STD	Standard pressure kit with 4 bar Pulsed Water Valve
10/RD510-KIT-HP	High pressure kit with 10 bar Pulsed Water Valve
10/RD510-KIT-PRO	Full kit with both the 4 and 10 bar Pulsed Water Valves

Single Components

Part number	Description
10/RD510-RX	Hand held control unit with soft bag cover, acoustic sensor, telescopic pole, soft ground spikes, hard ground plate, headset, USB cable, memory card, transit case
10/RD510-TX-STD	Pulsed Water Transmitter, includes soft bag, 4 bar Pulsed Water Valve, 12V DC power adaptor, waste hose and tap damper with hose adaptor kit and Tap
10/RD510-TX-HP	Pulsed Water Transmitter, includes soft bag, 10 bar Pulsed Water Valve, 12V DC power adaptor, waste hose and tap damper with hose adaptor kit and Tap
10/RD510-PW-VALVE-STD	Pulsed Water Valve STD Pressure (4 bar)
10/RD510-PW-VALVE-HP	Pulsed Water Valve High Pressure (10 bar)





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