

# The biggest challenge in the water industry today is leakage, the costs involved and damage to the environment

RD500 plastic water pipe locator solution can help solve this problem



# Under time pressure to find and repair leaking water pipes?

## The RD500 can help

**The RD500 traces plastic water pipes over distances up to 150m. It is quick and easy to use. Operators can learn to locate and trace using the RD500 in just a few minutes.**

### Introduction

As more and more of the old metal water supply infrastructure fails and is replaced by plastic pipes when repairing leaks or laying new supplies, it has highlighted the need for specific tools to help with acute problems.

With increasing commercial pressures to maintain water supplies, it is vitally important to be able to locate buried plastic pipes as fast as possible to facilitate swift and timely repairs.

The RD500 is a simple to use solution for water utility engineers to locate and trace plastic pipes.

### How does the RD500 help find plastic pipes?

Conventional Pipe and Cable locators trace electromagnetic signals travelling on metal pipes and cables. Those signals don't travel on plastic. The RD500 however generates acoustic signals, which travel down the plastic pipes as vibrations.

The RD500 locator detects the vibrations: the nearer to the pipe, the louder the vibrations are, and therefore an operator can identify the location of the buried pipe and trace its route.

The RD500 has two main components: a Pulse Transmitter which sets up the vibrations when attached via couplings to the water supply and then a hand-held locator to listen for the vibrations as they emit along the plastic pipe.

### Locator performance

The RD500 locator is capable of locating a single pipe under grass or soil for distances up to 150m at depths of 2m.

For familiarity, the techniques used to detect and trace with the RD500 are similar to a traditional Cable and Pipe Avoidance tool.



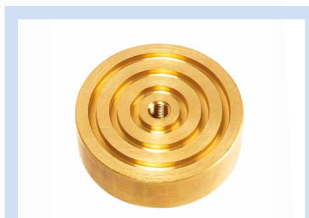
Headphone jack provided as standard for audio response



The meter is calibrated 0-100 to indicate a peak response to the Pulse Transmitter signal

Meter indicates battery state at each switch (ON)

The receiver is handheld and light with the meter fitted at the top of the 120cm instrument



Locator is supplied with a 14cm in earth spike for soft surfaces and a ground plate for paving, asphalt or concrete



Rotary ON/OFF and sensitivity control

# Pulse Transmitters

There are two different types of Pulse Transmitters available:

## Water pressure powered mechanical Pulse Transmitter

The mechanical Pulse Transmitter is a heavy duty brass casting. The input side is fitted to an open standpipe tap, meter base or hydrant via a damper hose and as it discharges water through the Pulse Transmitter into a heavy duty outlet hose, an oscillator reacts to water flow in the Pulse Transmitter body and applies a distinctive pressure wave to the water in the pipe.

All transmitters need a flow of 5-10 litres per minute and there is a choice of three Pulse Transmitter transmitters to suit different application points:



Application	Water pressure	Colour of Pulse Transmitter
Fire Hydrant	High Power	Red
Meter Base	Medium Power	Yellow
Tap	Low Power	Green



160 psi/11 bar is maximum working pressure for the Pulse Transmitter.

There is a simple T-handle adjustment to match the Pulse Transmitter to water pressure and flow.

## Electronic Pulse Transmitter

The RD500-Tx is an electronic transmitter that provides a traceable automatic fixed pulse down a plastic water pipe via its custom Pulse Transmitter fitting.

An alternative to the water powered mechanical Pulse Transmitter, the RD500-Tx is ideal for use in low pressure water supplies such as sprinklers, hoses or domestic supplies where push fittings may be part of the infrastructure.

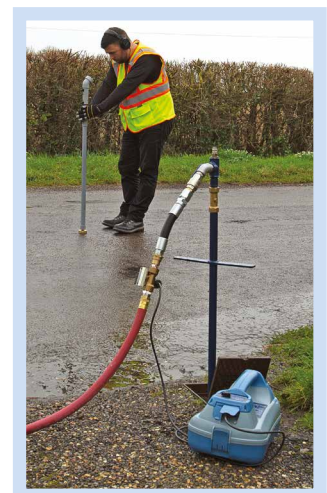


The RD500-Tx is connected the same way as a mechanical Pulse Transmitter and is powered by onboard "D" cell batteries or via a 12V DC car adaptor.

The advantage of using the R500-Tx is that once connected, it requires no manual adjustment of the water pressure to provide a traceable signal thus speeding up location and tracing services.



**NOTE: The Electronic Pulse Transmitter is mainly for use on service pipes from properties to the water main. Any ANTI VAC or NON-RETURN VALVE will inhibit the signal and no pulse will be detected by the RD500 or other ground mic...**



## Ordering information:

Part number	Description
10/RD500 KIT	RD500 Kit comprising RD500 Plastic Water Pipe Locator, Concrete/Asphalt plate, Headphones, Spike and Carry Case
10/5T037	RD500 Low Power Pulse Transmitter (green)
10/5T035	RD500 Medium Power Pulse Transmitter (yellow)
10/5T036	RD500 High Power Pulse Transmitter (red)
10/RD500-TX	RD500-Tx Electronic Pulse Transmitter, includes Bag, Pulse Transmitter connection unit, 12v DC power adaptor, waste hose and tap damper with hose adaptor kit and Tap
10/RD500-MECKIT	RD500 Kit comprising RD500 KIT, Low Power Pulse Transmitter, Medium Power Pulse Transmitter, High Power Pulse Transmitter, Accessory Bag, waste hose and tap damper and adaptors and Tap
10/RD500-ELECKIT	RD500 Kit comprising RD500 Plastic Water Pipe Locator Kit, Filter Washers, RD500-Tx Electronic Pulse Transmitter, Bag, Pulse Transmitter connection lead, 12v DC power adaptor, waste hose and tap damper with hose adaptor kit and Tap
10/RD500-PRO	RD500 Pro kit, comprising RD500 Plastic Water Pipe Locator Kit, Filter Washers, RD500-Tx Electronic Pulse Transmitter, Bag, Pulse Transmitter connection lead, 12v DC power adaptor, Low Power Pulse Transmitter, Medium Power Pulse Transmitter, High Power Pulse Transmitter, waste hose and tap damper with hose adaptor kit and Tap

## Global locations

### Radiodetection (USA)

28 Tower Road, Raymond, Maine 04071, USA Toll Free: +1 (877) 247 3797 Tel: +1 (207) 655 8525 rd.sales.us@spx.com

### Schonstedt Instrument Company (USA)

100 Edmond Road, Kearneysville, WV 25430 USA Toll Free: +1 888 367 7014 Tel: +1 304 724 4722 schonstedt.info@spx.com  
[www.schonstedt.com](http://www.schonstedt.com)

### Radiodetection (Canada)

Unit 34, 34-344 Edgeley Blvd. Concord, Ontario, ON L4K 4B7, Canada Toll Free: +1 (800) 665 7953  
Tel: +1 (905) 660 9995 rd.sales.ca@spx.com

### Radiodetection Ltd. (UK)

Western Drive, Bristol, BS14 0AF, UK Tel: +44 (0) 117 976 7776 rd.sales.uk@spx.com

### Radiodetection (France)

13 Grande Rue, 76220, Neuf Marché, France Tel: +33 (0) 2 32 89 93 60 rd.sales.fr@spx.com

### Radiodetection (Benelux)

Industriestraat 11, 7041 GD 's-Heerenberg, Netherlands Tel: +31 (0) 314 66 47 00 rd.sales.nl@spx.com

### Radiodetection (Germany)

Groendahlscher Weg 118, 46446 Emmerich am Rhein, Germany Tel: +49 (0) 28 51 92 37 20 rd.sales.de@spx.com

### Radiodetection (Asia-Pacific)

Room 708, CC Wu Building, 302-308 Hennessy Road, Wan Chai, Hong Kong SAR, China  
Tel: +852 2110 8160 rd.sales.asiapacific@spx.com

### Radiodetection (China)

13 Fuqianyi Street, Minghao Building D304, Tianzhu Town, Shunyi District, Beijing 101312, China  
Tel: +86 (0) 10 8146 3372 rd.service.cn@spx.com

### Radiodetection (Australia)

Unit H1, 101 Rookwood Road, Yagoona NSW 2199, Australia Tel: +61 (0) 2 9707 3222 rd.sales.au@spx.com

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 info@laserman.com.au | team@laserman.com.au

 08 9335 1718  60 Knutsford Street Fremantle WA 6160

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