

RD500 Plastic Water Pipe Locator

The RD500 is an effective instrument for locating and tracing buried plastic and/or concrete water pipes. The RD500 traces plastic water pipes over distances up to 150m/yds from the point of application of the TransOnde Transmitter. The unit is low cost, quick and easy to use. Operators can learn to locate and trace the RD500 in just a few minutes.

How the locator works

The RD500 is in two parts; the TransOnde Transmitter which is fitted to a fire hydrant, meter base or tap, and the hand-held Receiver to trace buried pipe away from the TransOnde. The TransOnde applies a distinctive wave signal along the pipe that is located by the seismic sensor in the receiver. The signal is then amplified to provide a response on the RD500 meter and in the headphones.

Locator performance

The RD500 gives its best performance locating a single pipe running under grass or soil. Between 30 psi/2 bar and 75 psi/5 bar water pressure and adequate flow, the receiver will trace the line over distances up to 150m/yds.

Locate resolution is 25% of depth along the length of the trace with the pipe at depths down to 2m/6ft.

Locating may be reduced when the pipe runs under pavement or concrete. The TransOnde pressure wave signal is dissipated, therefore the receiver peak response is spread over a wider area.

Locate range may be reduced at the point where the pipe goes into a tee or joins a larger pipe, the TransOnde pressure wave signal is either split or reduced.

Technical Data

- The receiver is handheld and light with the meter fitted at the top of the 120cm/48in instrument
- The meter is calibrated 0-100 to indicate a peak response to the TransOnde signal
- Meter indicates battery state at each switch (ON). 100 hours of battery life with 9V PP3 alkaline battery
- Headphone jack provided as standard for audio response
- Rotary ON/OFF and sensitivity control
- Receiver is supplied with a 14cm/5½ in earth spike



TransOnde Transmitter

The TransOnde is a heavy duty brass casting. A ¾ inch BSP input is fitted to an open tap, meter base or hydrant and the transmitter discharges through a ¾ inch BSP into a heavy duty outlet hose. An oscillator reacts to water flow in the TransOnde body and applies a distinctive pressure wave to the water in the pipe.

All transmitters need a flow of 1-2 gallons / 5-10 litres per minute and there is a choice of three transmitters to suit different application points:

High Power	Red	Fire Hydrant
Medium Power	Yellow	Meter Base
Low Power	Green	Tap

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

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

All TransOndes come complete with three spare filter washers.

CAUTION: The TransOnde Transmitter produces a pulsed pressure wave along the pipe. This pressure wave does not exceed the rated pressure of most water supply systems.

To avoid the risk of damage, do not use the RD500 for prolonged periods exceeding 30 minutes or on substandard water supply systems. Always use the hose damper when applying the TransOnde to a tap within 15m/yds of a building.



TransOnde Specifications

Product	Range of TransOnde transmitters to provide a pressure wave detectable by the RD500
Part Number	TransOnde Only: 0/5T036 High Power; 10/5T035 Medium Power; 10/5T037 Low Power TransOnde Kits: 10/5T008A High Power; 10/5T008B Medium Power; 10/5T001 Low Power; 10/5T008 High & Medium Power
Weight (shipping)	1kg/2.2 lbs.
Dimensions (ship)	30cm/12inches x 38cm/15 inches
Construction	Heavy duty brass casting. High Power (RED), Medium Power (YELLOW), Low Power (GREEN)
Input Thread Size	¾ inch BSP

RD500 Specifications

Product	Non-metallic water pipe locator
Part Number	10/5R001 (RD500 Receiver, Headphones, Disc, Hard Case, Earth Spike and Video Pak)
Weight (shipping)	4lbs/1.8kg
Dimensions (ship)	52in x 10.25in x 5in (132cm x 25cm x 12.5cm)
Construction	PVC Plastic Weatherproof to NEMA 3S & IP54 Withstands 1m/3ft. drops onto concrete
Operating Modes	Mode - Audio; Frequency - 132Hz - 210Hz
Dynamic Range	88dB
Response	Peak
Depth Range	2m/6ft. 6inches
Sensor	Single axis seismometer
Oper. Temp Range	-4°F to + 122°F (-20°C to +50°C)
Visual Indication	Jewel/pivot analogue meter Displays – locate trend (%) - Battery status (@ Switch on)
Audio Indication	Audio signal derived directly from signal received Output through headphone socket (3.5mm)
Gain Control	Manual
Batteries	1 x 6LR61 9V Alkaline 100 hrs life (nominal @ 20°C/68°F intermittent use)

