

A. T. M. S.

Proven Advanced Technology Solutions

GAS TRACKER "E" Plastic Gas Pipe Location & Identification

by **MADE-SA**

UPGRADED - MORE CAPABILITY

Locates and Tracks **PE & PTFE** Plastic gas pipes from the surface

Up to 400 meters from transmitter

Simple and safe to use

Improves efficiency and reduces costs

Minimum disruption to customers

The **GAS TRACKER "E"** system is used for tracking buried gas pipes made of polyethylene or other plastics. The system sends a pure acoustic wave along the pipe in the gas from a transmitter, using a resonant volume which is connected to a "Top Tee", a customer terminal or other suitable point on the gas network. The elasticity of the pipe wall allows some of this vibration energy to be passed through the soil to the surface where it is detected by a vibration detector with a sensor specially made for this application. This is connected to a hand-held receiver with custom software which separates the transmitted signal from the environmental noise. The pipe can be traced up to 400 meters, and sometimes further, from the transmitter, even in noisy urban environments, and can normally be located laterally to within the width of a spade. Because the signal travels through the gas, the transmitter can be connected to a metal pipe section (such as a feeder) leading to a plastic section that can be tracked from the surface. Since it is simple to set up and to use, the system can be operated by one person.



NEW " E " Version -
MORE ROBUST
BETTER WATER PROOFING
EASIER TO USE
SOFT GROUND TECHNIQUES

GAS TRACKER "E" draws on ten years of experience of over 600 systems in service to offer greater robustness, reliability and ease of use. The receiver is robust, soundly sealed against water ingress, and is simply controlled by only three buttons. It has improved sensitivity which enables tracking pipes over longer lengths and in difficult environments.

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Exclusive U.K. Service Organisation for MADE-SA products – **Norwich Instrument Services Ltd.** Tel 01603416900

The precise signal generated by the transmitter electronics drives a purpose-built loudspeaker in the resonant volume which is connected to the gas network at any suitable point such as a Top Tee or in place of a customer meter. This injects a pure acoustic signal into the gas, and this signal is propagated along the pipe *in the gas*. Only PE or other plastic pipes can be traced from the surface, but the signal passes easily through a metal pipe section to a plastic section which can then be traced.



The detection sensor is placed on the ground in successive positions to take measurements. The highest signal indicates the position vertically over the pipe, so that the lay of the pipe can be found. The display shows all the information necessary for measurement, and the level of signal then detected. There are two tracking modes, “PRELOCATE” for a “quick look”, used in a quiet environment, and “PIN-POINT” which makes a filtered measurement to eliminate all background noise and give a more accurate indication. The detector is moved between each measurement to find the strongest signal above the pipe. Previous measured values in the sequence are displayed to assist in quickly locating this position. There are two gain settings for the receiver, so as to maintain performance whilst moving away from the transmitter.



The system works best on a tarmac road or pavement, but we now have techniques to enable it to locate pipes under unmade ground. It can also be used for the identification of a metal pipe among others by placing the detector directly on the metal pipe.

UPDATES - An original Gas Tracker system can be updated at the factory to have the performance and ease of use of a GAS TRACKER "E" system. Please contact us for details.

The system is supplied in two carrying cases, and two options are available for installation indoors.
 Option 1— A ten meter long purge tube extension with a purge valve and flame arrestor at it’s extremity.
 Option 2— A sound-proofing cover.

TECHNICAL CHARACTERISTICS

	Transmitter - IP 53	Receiver - IP 65
Supply	Integral 12V. battery for 5 hours operation 12 V. supply cable 220 V. for charging	Integral battery 8 for hours operation with separate charger.
Dimensions cm.	Carrying case 37 x 47 x 19 cm. Resonant volume 18 cm. Dia. 25 cm long	Carrying case 55 x 37 x 23 cm. Detector 15 cm. diameter
Weight	Carrying case complete—13 Kg. Resonant volume 4 Kg.	Carrying case complete—13 Kg. Detector 2 Kg. Hand-held 1 Kg.
Temperature range	-20 to +60 °C	-20 to +60 °C

GAS TRACKER is CE marked, & built to the European standards NF EN 61000-6-3 &-6-1
 MADE-SA is qualified ISO 9001