BURIED CABLE LOCALIZER AND REVOLUTION COUNTER



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ORDER CODE ***HN500000***

HT-5000

PROFESSIONAL METAL TUBE
AND BURIED CABLES TRACER

Civil engineering work is accelerated, earth-moving machines are used efficiently and the risk of accidents is minimised thanks to the HT-5000. This unit is especially designed **to know the position and the depth of underground pipes and cables or cabling plans in a very quick and easy way**. The model is composed by a **Transmitter** and a **Receiver** and the principle used is the propagation of a electromagnetic field inside a object crossed by a signal generated with a direct coupling (finding energized or not energized objects with accessible parts) and inductive coupling (signal spread by transmitter by integrated antenna) for finding of not accessible parts (e.g: earthmoving areas). The tracing can be performed also in passive mode by the use of receiver only in order to locate cable or pipes crossed by 50/60Hz electrical current or radiofrequency signals. Both transmitter and receiver are designed with **IP56** (protection by dust and water) for typical external "in field" environment and a wide number of optional accessories are available also for finding of non metal objects. Most of the times that device is used to **locate buried cables** and **iron pipelines**.

Functions

- Inductive pairing with 33kHz signal via antenna
- Direct 33kHz pairing with external accessories
- Selectable transmission power
- Intermittent or continuous signal
- Passive search mode without transmitter
- Automatic depth measurement
- Manual or automatic setting of sensitivity
- Headset socket for noisy environments

Included accessories

Transmitter TX5000 and receiver RX5000
Set of measuring cables with alligator clips
Metal probe
Batteries for transmitter and receiver, Soft carrying bag and user manual

Optional accessories

820005314	Clamp 100mm diameter for inductive pairing
GOK50-R	Kit of flexible probes for non-metallic objects
890008852	Set of cables (Schuko plug + cable with RJ11 + coax cable)

Main features

Transmitter TX5000	
Transmission power:	0.1W / 0.5W
Signal frequency:	33kHz
Mechanical protection:	IP56 (dust and water)
Power supply:	6x1.5V batteries type IEC LR20
Size (LxWxH):	260 x 140 x 255mm
Weight (batteries included):	1.7 kg
Receiver RX5000	
Frequency range:	15kHz ÷ 23kHz, 50/60Hz (electric power)
Depth range:	0.3m ÷ 7m
Mechanical protection:	IP56 (dust and water)
Power supply:	10x1.5V batteries type AA IEC LR6
Size (LxWxH):	600 x 252 x 99mm
Weight (batteries included):	2.5 kg

1. TECHICAL SPECIFICATIONS

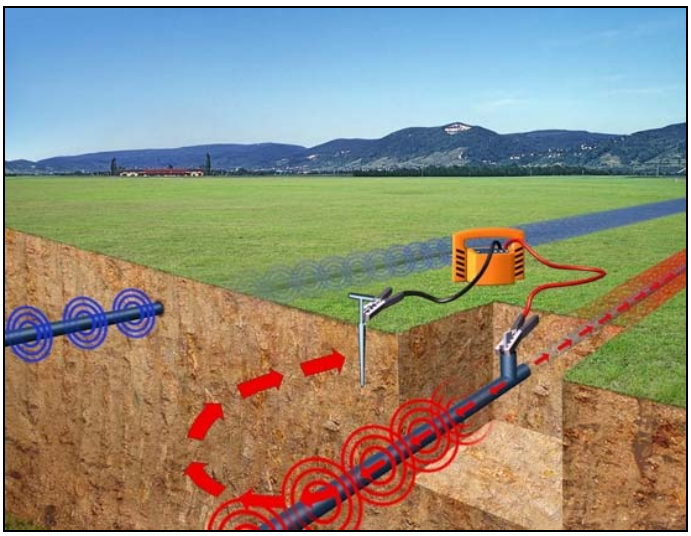
TX5000 Transmitter:

- Transmitted power: 0.1W / 0.5W selectable
- Frequency of integrated antenna: 32.768kHz
- Power supply: 6x1.5V batteries type IEC LR20
- Operating time: 40 hours (for intermittent use at 20°C)
- Insulation: double insulation
- Safety: IEC/EN61010-1
- Category of measurement: CAT II / CAT III 440V and CAT IV 300V
- Mechanical protection: IP56 (dust and water protection)
- Working temperature: -20 ÷ 55°C (operation) ; -30 ÷ 70°C (storage)
- Size (LxWxH): 260 x 255 x140mm
- Weight (with batteries): 1.7kg

RX5000 Receiver:

- Operating modes: Radio, Power network, Transmitter
- Frequency range: 15Hz ÷ 23kHz (Radio) ; 50/60Hz (Power network) ; 32.768kHz (Transmitter)
- Sensitivity: > 20μA (Radio) ; > 7μA (Power network) ; > 5μA (Transmitter)
- Dynamic range: 120dB (Radio) ; 135dB (Power network) ; 120dB (Transmitter)
- Depth determination: 0.3m ÷ 5m (finding cable) ; 0.3m ÷ 7m (finding probe)
- Resolution depth measurement: 0.1m
- Power supply: 10x1.5V batteries type IEC AA LR06
- Operating time: 40 hours (for intermittent use at 20°C)
- Insulation: double insulation
- Safety: IEC/EN61010-1
- Mechanical protection: IP67 (dust and water protection)
- Working temperature: -20 ÷ 55°C (operation) ; -30 ÷ 70°C (storage)
- Size (LxWxH): 600 x 252 x99mm
- Weight (with batteries): 2.5kg

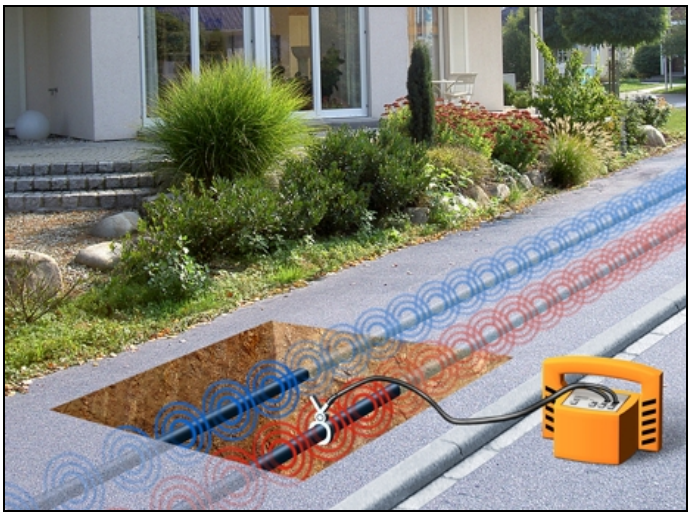
2. TYPICAL APPLICATIONS



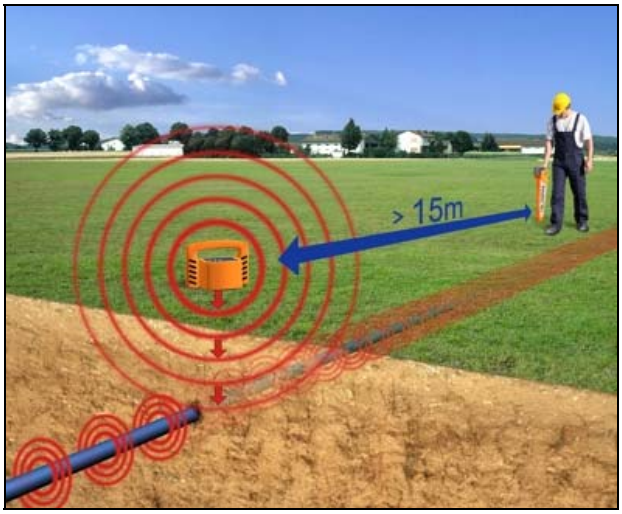
Direct coupling on cables and pipes. Direct galvanic coupling is practical for cables which are easily accessible and free of current. The method of connection is dependent upon the position and nature of the lines (e.g. insulation, cable conduit, accessibility of the cable ends)



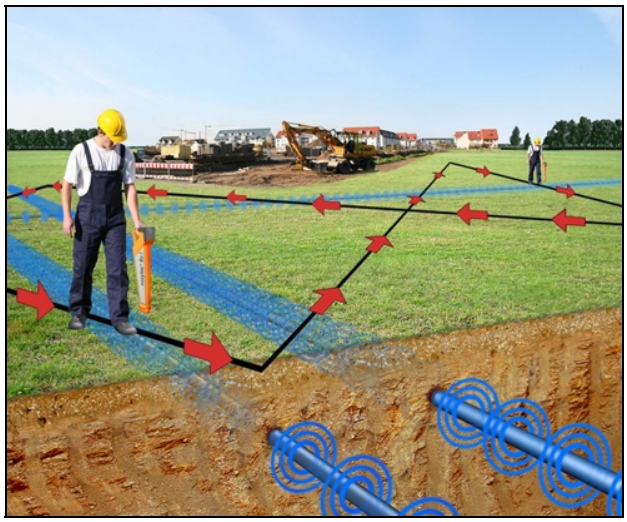
Coupling by using special accessories The signal from the transmitter can be directly coupled into plug sockets, antenna connections and telephone jacks with the aid of a suitable adapter cable. In doing so, it is not necessary to disconnect the lines



Coupling via transmitter clamp In doing so, it is **not** necessary to disconnect the cables



Inductive signal coupling via integrated antenna of transmitter is highly recommended if unknown lines are to be located (e.g. at a construction site)



Surveying of an excavation work by using TX5000 and RX5000. make sure that a distance of at least 15 m is always maintained between the receiver and transmitter in order to prevent the coupling of the transmitter's signal through the air



Signal coupling in non-metallic pipes by using of optional flexible probes