

# CABLE ROUTE TRACER (MODEL #PCT01)

Integrated tracing system for cable, pair and utilities location



- Lightweight and compact
- Wide variety of applications
- Multifrequency transmitter
- Output power automatically adapts to load conditions
- Depth measurement of buried cables
- Passive detection of 50/60 Hz electric field
- Pure sinewave tracing signal for low cross leakage between adjacent cables
- "Service safe" pair tracing ensures no disturbance of telecom pairs carrying live traffic
- High sensitivity and selectivity

## Configuration

All sets include the basic pair tracing kit composed of:



- PCT01 transmitter unit
- PCT01 receiver unit
- Headset
- Capacitive pen probe
- Protective carry case
- Power adapter/charger
- 12 rechargeable batteries
- User manual

**PCT01** was developed to solve the identification and tracing problems of electrical and telecom technicians and to address the location requirements of maintenance personnel working on plant such as water and gas networks. Its compact size and performance render it extremely efficient and unique. The modern microprocessor based technology ensures simplicity and ease of use. By appropriate choice of output power and frequency the transmitter unit allows for optimal matching to diverse conductors and plant conditions. The transmitter can also simultaneously transmit two different frequencies for the simultaneous tracing of a specific pair and its cable.

The ample display allows for control instrument status and functions while presenting a depth reading of buried plant. Furthermore, cable and plant detection is signalled by a shrill acoustic warning clearly audible in noisy environments. In the pair tracing mode, **PCT01** has been designed to operate safely without disrupting live data or voice traffic, the tracing tone is unobtrusive to the subscriber there is no appreciable leakage to adjacent pairs. A range of capacitive and inductive probes may be connected to cover all pair, cable and plant location requirements.

## Technical specifications

### Cable Tracer

- Operational technique:** sinusoidal current generator and matched receiver; passive 50 Hz / 60 Hz field detector
- Transmitted frequencies:** 32768 Hz  $\pm$  20 Hz and/or 2048 Hz  $\pm$  5 Hz
- Selectable power output to load:** 0.2 W / 0.5 W 1.25 W / 2.5 W (high power transmitter)
- Probes:** inductive hand held and extendable probes
- Maximum measurable depth:** 2 m (with extendable probe)
- Monitor:** proximity graph on LCD and acoustic warning in headset or speaker

### Pair tracer

- Operational technique:** sinusoidal current generator and matched receiver
- Tone frequency:** 576 Hz  $\pm$  2 Hz
- Selectable output voltage to load:** from 1.7 Vrms to 5 Vrms @ RL  $\geq$  5 KW
- Probe:** capacitive pen type



Extendable inductive probe  
Cable and pair tracing kit



Hand held inductive probe  
Electrical conductor and pair tracing kit



**Long distance cable, pair and utility**  
High power transmitter unit  
Inductive clamp  
Hand held inductive probe

**Ideal for:**

Electrical plant technicians  
Telephony installers  
Data communications technicians  
Maintenance personnel

**Case dimensions:**

120 x 215 x 80 mm  
235 x 200 x 105 mm (high power transmitter)

**Protection grading:**

IP 44

**Operational temperature:**

- 10 °C ÷ + 50 °C

**Replacement/upgrade parts codes:**

Extendable inductive probe: 10070-0020-00  
Hand held inductive probe: 10070-0015-00  
Capacitive pen probe: 10070-0010-00  
High Power Transmitter kit: 01020-0150-00

**Applications:**

Location and depthing of buried cables  
Identification of telephone and data communications pairs  
Tracing electrical conductors  
Tracing paths of telephone and data communications cables  
Location and depthing of utility plant

**General:**

Power supply: 6 Alkaline or NiCd cells type AA  
6 Alkaline or NiCd cells type D (high power transmitter)

**Autonomy:**

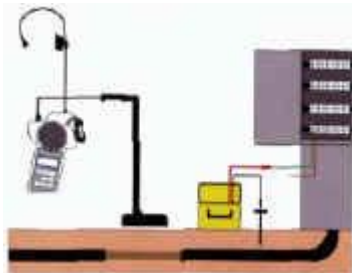
8 hours power of 0,2 W  
6 hours power of 1.25 W (Power Transmitter)

**Max humidity:**

0 ÷ 90% RH

**Compliances:**

CEI EN 61010  
CEI EN 50082-1  
CEI EN 55022

**Applications**

For long distance applications the tracing signal from the high power transmitter may be directly connected or coupled by the inductive clamp. Depth measurement, enabled by plugging the appropriate extendable probe to the receiver, is by convenient direct numeric readout.

Pure sinewave injection at the sending end with controllable sensitivity at the detection point ensures highly accurate "service safe" pair discrimination

**TECHNICAL SPECIFICATIONS****Cable Tracer**

Operational technique: sinusoidal current generator and matched receiver; passive 50 Hz / 60 Hz field detector  
Transmitted frequencies: 32768 Hz ± 20 Hz and/or 2048 Hz ± 5 Hz  
Selectable power output to load: 0.2 W / 0.5 W 1.25 W / 2.5 W (high power transmitter)  
Probes: inductive hand held and extendable probes  
Maximum measurable depth: 2 m (with extendable probe)  
Monitor: proximity graph on LCD and acoustic warning in headset or speaker

**Pairtracer**

Operational technique: sinusoidal current generator and matched receiver  
Tone frequency: 576 Hz ± 2 Hz  
Selectable output voltage to load: from 1.7 Vrms to 5 Vrms @ RL <sup>3</sup> 5 KW  
Probe: capacitive pen type

**AISHWARYA TELECOM PVT.LTD.**

3C, SAMRAT COMMERCIAL COMPLEX, SAIFABAD, HYDERABAD-04, INDIA  
PH: +91-40-23236019, 23235439, 55660487, 55665394 FAX: +91-40-23296282  
E-MAIL: [Aishwarya@aishwaryatelecom.com](mailto:Aishwarya@aishwaryatelecom.com) WEBSITE: [www.aishwaryatelecom.com](http://www.aishwaryatelecom.com)