

PRODUCT DESCRIPTION

The PTS Pair Tracing System comprises the PTS 200 Tone Generator and the PTS 100 Probe in a woven polyester carrying pouch. The System is designed to provide an easy to use and cost effective means of tracing wire pairs.

PTS 200 Tone Generator

The PTS 200 may be connected via the modular plug or the crocodile clips to the pair under test. Depending on the switch position the Tone Generator will test Polarity continuity or short circuits. The PTS 200 can be used on twisted pair wiring (Telecom, Datacom, security / alarm, audio and electrical), single conductors, coaxial cables, de-energized AC wiring and just about any other wiring you can think of.

PTS 100 Probe

The PTS 100 Probe has a built-in loudspeaker to make it easy to hear the tracing signals and a near/far sensitivity adjustment to allow both broad searches and pinpoint identification of wires. To operate just press the button on the top and adjust the sensitivity control to hear the tone generated by the PTS 200.



FEATURES

- Fast, Accurate Wire Identification
- Sends Tone to Identify Wires
- Polarity Indication
- Continuity Test
- Adjustable Volume Control
- Easy to Operate
- 2-Line Modular Test Lead
- Rugged Industrial design
- Water Resistant

PTS 100 Output

No Tone

Tone on one wire

Quiet on one wire, loud on the other

Poor hum on pair with tone

Poor hum only

Noise with tone

Can't kill tone by shorting the pair

Continuous tone

Hiss from adjacent pair

Probable Cause

Wrong cable or a complete cable disconnection or Tone Generator is disconnected

One wire disconnection

High resistance fault on low level (quiet) wire

Earth (ground) fault on one or both wires

Disconnection and earth fault

Crosstalk (severe cable fault) or earth fault

One wire disconnected or split pair or high resistance fault on one wire

Dying battery on the oscillator

ISDN or other digital service or base-band modem transmission

PTS Pair Tracing System

SPECIFICATIONS

PTS 200

Electrical:	
Output Power (into 600Ω):	-3dBm±3dB
Output Frequency (nominal):	1004Hz±100Hz
Sleep Rate:	6Hz
Voltage Protection (into a 600Ω Circuit):	60VDC
Power Source:	
Battery:	1 x 9V
Battery Life (nominal):	290 hours
Environment:	
Operating Temperature:	0°C to 50°C
Storage Temperature:	-20°C to +60°C
Relative Humidity:	0 - 90%
Physical:	
Length:	125mm
Width:	33mm
Depth:	23mm
Weight:	0.13kg
Warranty:	One Year

PTS 100

Electrical:	
Gain Range:	30dB
Input Impedance:	100MΩ
Frequency Range (approx):	500Hz - 1200Hz
Power Source:	
Battery:	1 x 9V
Battery Life (nominal):	15 to 25 hours
Environment:	
Operating Temperature:	0°C to 50°C
Storage Temperature:	-20°C to +60°C
Relative Humidity:	0 - 90%
Physical:	
Length:	210mm
Width:	32mm
Depth:	42mm
Weight:	0.13kg
Warranty:	One Year

PAIR TRACING

Connect the Tone Generator to the pair to be traced. Check that the tone is being sent before leaving the oscillator. PTS100 Probe detects the electrostatic field around the wire pair and outputs it to the integral speaker after filtering to reduce mains interference. In most circumstances the low sensitivity setting will work well but if the signal is weak or noisy then choosing the higher sensitivity setting may help.

Placing the probe alongside the pair gives a strong signal except where the wires cross.

Here there should be a noticeable null. Move the probe back and forth along the wire to confirm this.

Placing the tip in the centre of an opened twist of the pair should give a minimum signal. If it does not decrease, suspect a split pair (two wires from different pairs) or a faulty pair one wire broken or high resistance.

Shorting the pair should cause the signal to completely disappear or fall to a very low level. This verifies that you have the right pair.

