

# ToneRanger®

## Cable Fault Pin-pointing on Communication Cables

### Description:

The ToneRanger® is designed for pin-pointing faults of up to 100 kΩ. For pin-pointing a higher fault resistance the ToneRanger® features an integrated DC-Bias fault converter.

The unique method allows an accurate identification of the fault location with pick-up sondes for aerial as well as buried cables. The pre-test function of the ToneRanger® transmitter conducts a fault analysis and displays the type and resistance of the fault. It also gives indications about the further operation of the generator for a successful fault location.

A simultaneously transmitted Pilot-Tone cancels out noise and the capacitive component of the current. It also enables the operator to trace the cable path of buried cables during the fault locating.

The display shows locating frequency, signal voltage and quality as well as operation instructions.

The receiver can be stored in the generator case for comfortable transportation and convenient storage.

### Technical Features:

- accurate fault location with audio frequency
- no opening of splices necessary to narrow down on the fault ("divide and conquer")
- not affecting digital data transmission of ISDN, DSL, E1 on neighbouring pairs
- clear fault indication due to signal drop after fault location of up to 30 : 1
- locating low and high resistive faults up to 100 kΩ
- DC-Bias gentle fault converter included for even higher resistance faults (not burning or welding the fault !)
- Pilot-Tone for cable tracing and cancelling out noise and capacitive component of the signal current
- test voltage up to 100 VAC core to earth. No danger for subscriber equipment, does not activate protectors by mistake
- change of conductor size has no negative influence
- works also in cables with spare loops, loaded cable, T-splices

### Scope of Delivery:

- ToneRanger® generator
- ToneRanger® receiver
- lay-up stick with coil
- lollipop hand coil
- buried wand



### Technical Data:

Locatable Faults	short, cross, ground, open, humidity errors	
<b>Generator</b>		
Locating Frequencies	185Hz	( up to 5,000 m )
	320Hz	(up to 1,000 m )
	880Hz	(up to 600 m )
Pilot-Tone	30 V / 0.5 W / 8-10 kHz	
Output Voltage	max. 100 V AC (core – ground) max. 200 V AC (core – core)	
Power	4 W	
DC-Bias	≤ 2 mA / 0,5 W	
Power Supply	10 x alkaline D batteries	
Weight	6 kg incl. batteries	
Dimensions (HxWxD)	220 x 340 x 300 mm (incl. cable bag)	
<b>Receiver</b>		
Power Supply	8 x alkaline AA batteries	
Operating Time	50 h	
Weight	0.9 kg incl. batteries	
Dimensions (HxWxD)	52 x 152 x 180 mm	

- set of connecting cables
- headphones
- manual
- quick instruction manual