

## TCM-03 Cable Checker

### FEATURES

- TCM incorporates an Audio frequency amplifier which has Automatic Gain Control to automatically adjust audio levels to within acceptable limits. This allows both very quiet and very loud sound to be recorded or listened to without constant adjusting of the volume control.
- Tuneable low frequency radio receiver used to locate sub-carrier bugging devices on AC and DC power cables and all other cables.
- Digital meter is used to detect the presence of DC power on wire pairs and to measure line condition changes caused by monitoring devices on telephone lines and other low voltage cables.
- An Integral variable sweep tone generator is used to activate single tone remotely controlled bugging devices which can then be detected and disabled.
- The isolated DC power output enables detection of FET or Electret microphones connected to the cable being tested.
- Switchable cable loads enable line resistance testing and mimicking of the use of a telephone. This avoids variations in different types of handset and helps reveal differences in line characteristics which help identify monitoring devices
- Test equipment is included for training and setup purposes.

TCM-03 is a sophisticated and operationally flexible cable checking system used to test room cables and wiring for evidence of bugging devices.

TCM-03 combines the following features:

- Highly sensitive audio frequency amplifier
- Tuneable low frequency radio receiver
- Digital display meter
- Integral tone generator
- Isolated DC power output.

These provide an armoury of tools for assisting in detection of microphone and other bugging signals at levels from microvolts to volts on all types of cable including AC and DC power cables and telephone lines.



## TECHNICAL SPECIFICATIONS

### AUDIO AMPLIFIER

Sensitivity	Typically 30 $\mu$ V for 10dB S/N output; 600 ohm source at 1KHz
impedance	(input) Nominally 5k $\Omega$ at 1KHz
Bandwidth	(audio) Nominally 300Hz-15KHz Automatic Gain Control (agc)
Output	held to typically +/- 2dB for input signals from 20 $\mu$ V to 2V rms at 1KHz (100dB agc). Unit has automatic switched dual gain stage with hysteresis of typically 6dB

### TUNEABLE RECEIVER

Frequency	Range typically 15KHz-400KHz. Source selectable between Line and Mains Live/Neutral and Live, Neutral combined to Earth combinations.
Sensitivity	Typically 100 $\mu$ V for 10dB S/N at 2.5KHz deviation, 1KHz modulation frequency at 100KHz
Selectivity	Typically 50dB rejection at +/- 10KHz
IF rejection	Better than 50dB at 455KHz
Image rejection	Typically 30dB
Outputs	AM and FM demodulation selectable with full agc.

### TONE GENERATOR

Frequency	Range typically 200Hz-8KHz triangle wave output
Level	Nominally 30mV rms at 1KHz into 600 ohms
DC output	Nominal 10VDC source limited by 6 Kohm resistor
Line load	Switchable nominal 250ohm and 1Kohm resistors may be connected across input.

### METER

Type	Digital LCD
Ranges	0-1.999VDC or 0-199.9VDC

### POWER REQUIREMENTS

Mains	Charger powered from AC Mains (Selectable 85-130 and 185-260 VAC 50/60Hz supply). Requires 16 hours to fully charge an exhausted battery provided the Unit is switched OFF.
Battery	Internal rechargeable 6V Ahr Sealed lead-acid battery providing 15 hours operation. Internal Alkaline PP3 for Meter (provides in excess of 1000 hours operation)

### DIMENSIONS

Height x Depth x Width  
90mm x 260mm x 320mm

### CARRY CASE

Height x Depth x Width  
130mm x 360mm x 510mm

### WEIGHT

Unit	In Carry case
2.2Kg	3.8Kg

### ACCESSORIES

Standard	Input lead assembly, AC Power Lead, Test microphone, Headphones, Spare fuse set (2 x 100mA 250V anti-surge fuses and 4 x 100mA 250V fast blow fuses), Robust Carrying Case, BT socket breakout adaptor, BT socket doubler, operating manual.
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### ORDER CODE

TCM-03 Cable Checker	2-197-149
This equipment is also included in	
Advanced TSCM Sweep Kit	2-197-173
Professional TSCM Sweep Kit	2-197-172

### WARRANTY

TCM-03 Cable Checker comes with a return-to-base warranty against defective materials and workmanship for a period of 2 years from delivery. With regular authorised maintenance and recalibration of the unit the basic warranty can be extended for a further period. (see local dealer for details).

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