1. GENERAL

The LDM 171 is an easy-to-use, semi-automatic distortion meter that can measure total harmonic distortion in audio amplifiers and communications equipment. It covers the entire audio band from 20Hz to 20kHz with a high sensitivity of 0.1% fullscale.

An auto-tuning circuit enables distortion to be measured easily even in the 1% and lower ranges, where manual tuning is difficult.

A highly sensitive built-in millivoltmeter enables the 171 to function also as a signal-to-noise (S/N) meter.

2. SPECIFICATIONS

2.1 Distortion Measurement

Frequency ranges	Three ranges: 20Hz to 20kHz
Measurement ranges	Seven ranges: 0.1%, 0.3%, 1%, 3%, 10%, 30% and 100%
Input voltage ranges	Four ranges: 0.35V to 1V, 1V to 3V, 3V to 10V, 10V to 30V
Minimum measurable input voltage	350mV
Maximum measurable input voltage	30V
Measurement accuracy	±5% of fullscale (except in 100% range)
Residual distortion	0.01% max.
Input impedance	Approx. 100kΩ, shunt capacitance 80pF max.
Filter characteristics	
Fundamental rejection	80dB min.
Harmonic attenuation	0.6dB max. (2nd and 3rd harmonics)
Auto-tuning	
Capture ranges	1%, 0.3%, 0.1%

2.2 Level Measurement

Frequency range	20Hz to 200kHz
Measurement ranges	12 ranges (0.3, 1, 3, 10, 30 and 100) in both mV and V
Measurement accuracy	±5% of fullscale
Input impedance	1MΩ, shunt capacitance 50pF max.

2.3 S/N Measurement

Measurement range	0dB to 80dB
Input voltage range	Same as for distortion measurement
Input impedance	Approx. 100kΩ, shunt capacitance 80pF max.

2.4 Common Specifications

High-pass filter	
Cutoff frequency	400Hz
Rolloff	12dB/oct
Monitor terminal	
Output voltage	1Vrms at fullscale reading
Output impedance	Approx. 1kΩ
Power requirements	100V ±10%, 50/60Hz. Alterable to 120V, 200V or 240V by rewiring transformer taps.
Size and weight	300(W) x 150(H) x 250(D)mm, 5 kg
Ambient temperature	0°C to 40°C
Accessories	1 banana tip/alligator clip lead 1 spare fuse Instruction manual