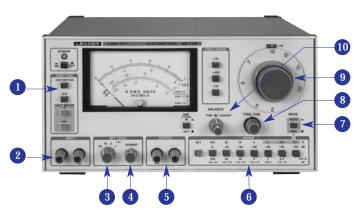
Semi-Automatic Distortion Meter



LDM-171

- Function switches select mode for distortion, signal-tonoise ratio or AC volt/millivolt measurement.
- Input terminals accept up to 100 V rms for level measurements and to 30 V rms for THD or S/N.
- Set level range switch for more than one third full scale deflection relative to the input signal level for THD and S/N ratio measurements.
- Set level vernier for full scale set reference 0.35 to 30 V
- Output for monitoring and characterizing distortion and noise products on an oscilloscope.

- Auto Nulling Feature Speeds Measurements
- Measures THD, S/N and Signal Level
- Cost Effective

The task of making distortion measurements on audio equipment and systems is greatly simplified with Leader's LDM-171. This semi-automatic distortion meter features an automatic nulling mode that enables rapid error-free THD measurements below 1%, eliminating almost all manual tuning, and increasing productivity at the same time.

The LDM-171 also features S/N measurements to 80 dB and signal level measurements over a wide range further enhancing the value of the instrument on the audio bench. A high-pass filter (cut-off frequency at 400 Hz) and monitor output terminals for identifying distortion products are provided. All of this versatility packaged into one compact, neatly designed instrument is certainly a welcome addition to any audio bench.

- Range switches are used to enter the set level mode, and then to select the measurement range sensitivity.
- Mode switch selects auto-nulling at 1% or less to speed THD measurements.
- Frequency fine control is used during manual distortion measurements.
- Frequency range vernier nulls fundamental frequency component during THD measurements.
- Balance coarse/fine controls are used to balance the bridge during distortion measurements.

KEY SPECIFICATIONS

DISTORTION MEASUREMENTS

Ranges

0.1, 0.3, 1, 3, 10, 30, 100% full scale

Automatic Nulling Ranges

0.1%, 0.3% and 1.0% full scale

Minimum Distortion Read

0.01%

Accuracy

Within \pm 5% full scale

Frequency Range

20 Hz - 20 kHz in 3 ranges

Input Level Range

0.35 - 30 V rms in 4 ranges

Input Impedance

 $100 \text{ k}\Omega$, < 50 pF

Fundamental Frequency Suppression

> 80 dB, 2nd and 3rd harmonic flat-

ness within 0.6 dB

Harmonic Bandwidth

20 Hz - 200 kHz, -1 dB

Residual Distortion

< 0.01%

SIGNAL-TO-NOISE RATIO MEASURE-

MENTS

Range

0 - 80 dB below reference level

Input Level

0.35 - 30 V rms

Input Impedance

100 kΩ, < 50 pF

LEVEL MEASUREMENTS

Range

0.3 mV - 100 V rms in 12 ranges

Frequency Range

20 Hz - 200 kHz

Minimum Reading

30 µV rms

Accuracy

± 5% full scale

Input Impedance

 $1 \text{ M}\Omega$, < 50 pF

FILTER

High-Pass

-3 dB point at 400 Hz, 12 dB/octave

MONITOR OUTPUT

Output Voltage

1 V rms at full scale

Output Impedance

 $1 \text{ k}\Omega$

POWER REQUIREMENTS

100, 120, 220, 240 V ac \pm 10%

50/60 Hz, 10 VA

Operating Temperature

0 - 40°C

PHYSICAL

Size (W x H x D)

 $11^{3/4} \times 6 \times 9^{7/8}$ in.

300 x 150 x 250 mm

Weight

9 lbs., 4.2 kg

SUPPLIED ACCESSORY

Dual Banana Plug to Alligator Cable

Test Equipment Depot - 800.517.8431 - 99 Washington Street Melrose, MA 02176