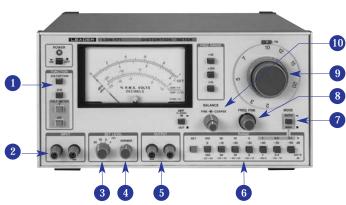
# Semi-Automatic Distortion Meter



LDM-171

- **1** 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.
- 3 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.
- 4 Set level vernier for full scale set reference 0.35 to 30 V rms.
- 5 Output for monitoring and characterizing distortion and noise products on an oscilloscope.

# 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 kΩ, < 50 pF **Fundamental Frequency Suppression** > 80 dB, 2nd and 3rd harmonic flatness 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  $\mu$ V rms Accuracy  $\pm$  5% full scale Input Impedance 1 M $\Omega$ , < 50 pF FILTER High-Pass

### MONITOR OUTPUT

**Output Voltage** 1 V rms at full scale **Output Impedance**  $1 \ k\Omega$ **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** 

- 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.

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

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

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

FAX 781.665.0780 - TestEquipmentDepot.com