



8. Technical Specification

Measurements

- Sound Pressure Level
- Real Time Analyzer
- Zoom FFT
- Reverberation Time
- Delay Time
- Level RMS
- Distortion THD+N
- Frequency
- Polarity Test
- Speech Intelligibility STI-PA (optional)

Sound Pressure Level

- Leq, short-time Leq , Lmin, Lmax acc. IEC 61672
- Timer for single and repeated measurements
- Dynamic range (using MiniSPL): 30 - 130 dB SPL_A
- Filters: Flat, A, C, X-Curve⁻¹, RLB (Broadcast Loudness)
- Logging of SPL/RTA results into AL1 memory
- Wideband- and RTA values simultaneously available

Real Time Analyzer

- 1/3 or full octave band resolution, class 0 filters
- SPL, LEQ and Max-Min display per band

Zoom FFT

- Real-time Zoom FFT with 50% overlapping, 93 Bins
- Frequency Range: 10 Hz - 20 kHz
- Resolution: 187.5 Hz to 0.73 Hz

Reverberation Time

- Octave band resolution, based on T20 results, according to ISO3382. Automatic averaging with individual result readout and storage
- Source signal: Gated pink noise (CD included)

Delay Time

- Propagation delay between electrical and acoustical signal input using built-in mic. Resolution < 0.1ms, max time: 1 s
- Dedicated test signal: NTI chirp (CD included)



Electrical

- Level RMS, THD+N, Frequency, Polarity

STI-PA (Option)

- Single value STI and CIS test result. Modulation indices and individual band level results accessible. Error indicator.
- Fulfills the IEC 60268-16 release 2003 standard (including amplitude weighting)
- TNO verified algorithm

PC Interface

- MiniLINK USB interface with PC software and interface cable included

Frequency

- Range 10 Hz to 20 kHz
- Resolution 4 digits
- Accuracy $< \pm 0.1 \%$

Level

- Units dBu, dBV, V_{RMS}
- Resolution 3 digits (dB-scale) or 4 digits (V-scale)
- Accuracy $\pm 0.5 \%$ @ 1 kHz
- Bandwidth 20 Hz to 20 kHz
- Flatness ± 0.1 dB

THD+N (Total Harmonic Distortion + Noise)

- Measurement Bandwidth 10 Hz to 20 kHz
- Resolution 3 digits (dB-scale) or 4 digits (%-scale)
- Residual THD+N
balanced < -85 dB @ -10 dBu to $+20$ dBu
unbalanced < -74 dB @ 0 dBu to $+14$ dBu

Polarity Test (with MR1 test signal)

Positive / Negative detection through internal microphone or XLR RCA connector. Checks polarity of midrange-speakers, woofers, sub-woofers and cables. Down to 10 dB S/N ratio of input signal.

Filters

- Flat
- A-weighting
- C-weighting
- X-Curve⁻¹
- Highpass 400 Hz
- Highpass 19 kHz



Input Connectors

- XLR balanced, RCA unbalanced

Input Impedance

- 40 kOhm balanced, 20 kOhm unbalanced

Input RMS (upper measurement limit)

- balanced +20 dBu (7.75 V_{RMS})
- unbalanced +14 dBu (3.8 V_{RMS})
- for input levels > 20 dBu (balanced) the Adapter -20 dB is available as accessory

Max. DC Input

- $\pm 50 V_{DC}$

Residual Noise

- < 12 μV , XLR-input shorted

Internal Microphone (for Polarity and Delay measurement only)

- Omni directional

Monitor Output

- Jack 3.5 mm (1/8"), suitable for all common headsets

Display

- Graphic LCD 64 x 100 pixel, with backlight

Batteries

- 3x AA batteries (alkaline)
- Typical battery lifetime > 16 hrs

Dimensions (L x W x H)

- 163 x 86 x 42 mm (6.4" x 3.38" x 1.63")

Weight

- 300 g (10.5 oz) incl. batteries

Temperature

- 0° to +45° C (32° to 113° F)

Humidity

- < 90 % R.H., non condensing