



Technical Specification, Software V2.00

updated Jul 2001

Technical Data General Functions

Measurements	- Frequency, Level-RMS, Level-Relative - THD+N, vu+PPM - Polarity Test, Signal Balance Error - Sweep, Frequency Sweep, Time Sweep - 1/3 rd Octave Spectrum, Scope
Frequency	
Range	10 Hz to 20 kHz
Resolution	4 digits
Accuracy	< ± 0.1 %
Level	
Units	dBu, dBV, V_{RMS}
Resolution	3 digits (dB-scale) or 4 digits (V-scale)
Accuracy	± 0.5 % @ 1 kHz
Bandwidth	20 Hz to 20 kHz
Flatness	± 0.1 dB
THD+N (Total Harmonic Distortion + Noise)	
Meas. 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
vu+PPM (vu-Indicator and Peak Program Meter)	
	according to IEC 60268 and DIN 45406. PPM Type I, IIa and Nordic. Both meters with adjustable reference and with analog & numerical peak-hold readout.
Polarity Test (with MR1 test signal)	
	Positive / Negative detection through internal microphone or XLR/RCA connector. Checks polarity of tweeters, midrange-speakers, woofers, sub- woofers and cables. Down to 10 dB S/N ratio of input signal.

Signal Balance Error	Indication range 0.0 % to 100 % Deviation from perfect balance in % or *1
Sweep	Frequency Sweep: Level as function of frequency. Time Sweep: Measurement of level, THD+N and frequency as function of time.
1/3rd Octave	Spectrum acc. IEC 1260, class II and ANSI S1.11- 1976, class II from 50 Hz to 20 kHz, Bargraph for Level _{RMS} 20 Hz to 20 kHz
Scope	Auto triggering, auto ranging, auto scaling
Filters	Linear, A-weighting, C-weighting, C-message, Highpass 22 Hz / 60 Hz / 400 Hz, X-Curve ⁻¹ , Voice bandpass
Input Connectors	XLR balanced, RCA unbalanced
Input Impedance	40 kOhm balanced, 20 kOhm unbalanced
Input RMS¹ (upper meas. limit)	balanced +20 dBu (7.75 V_{RMS}) unbalanced +14 dBu (3.8 V_{RMS})
Max. DC Input	± 50 V_{DC}
Residual Noise	< 12 μV , XLR-input shorted
Microphone Input (for Polarity measurement only)	Omnidirectional
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 package dry 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

¹ for input levels > 20 dBu (balanced) the ML1 Adapter -20 dB is available

