

Speech Intelligibility STI-PA

The STI-PA analyzer option allows durable and reliable speech intelligibility measurement within 15 seconds (typical). Besides the single value STI or CIS test result, a detailed view of modulation indices and individual band level results is provided. The STI-PA analyzer includes amplitude weighting in accordance with the 2003 IEC 60268-16 standards release.

Acquired measurements may be referenced to previously established background noise level spectras with automatic recalculation of the STI values.

PC Interface

The USB PC-Interface together with the MiniLINK PC software allows easy documentation and data acquisition of all measurement functions as well as firmware upgrades.

Owners of the ML1 and AL1 firmware may switch between these two versions using the MiniLINK software.



NTI article codes :

Acoustilyzer AL1	600 000 080
(ML1 Hardware, MiniLINK, AL1 Firmware)	

AL1 Firmware	800 000 012
(for all Minilyzer ML1 users, MiniLINK required)	

Options:

STIPA Measurement	800 000 013
Multi-band RT60	800 000 014

Accessories:

MiniSPL (1/2" measurement microphone, battery powered)	600 000 022
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Technical Data Acoustilyzer AL1

Sound Pressure Level	L_{eq} , short-time L_{eq} , L_E , L_{min} , L_{max} , History Chart
Real Time Analyzer	1/1 or 1/3 octave band resolution SPL/LEQ display per band Relative meas. against memory Max - Min display
FFT	Full band and low frequency mode
Reverberation Time	Broadband (standard) or 1/1 octave band resolution (option) Confidence Indicator According to ISO3382
Delay Time	Propagation delay between electrical and acoustical signal (built in mic) Resolution: 0.1ms
STI-PA (Option)	Single value STI or CIS test result Modulation indices display Individual band level results Error indicator Amplitude weighting acc. 2003 IEC release
Electrical	Level RMS, THD+N, Polarity
Input Connectors	XLR balanced, RCA unbalanced



Less noise • More sound

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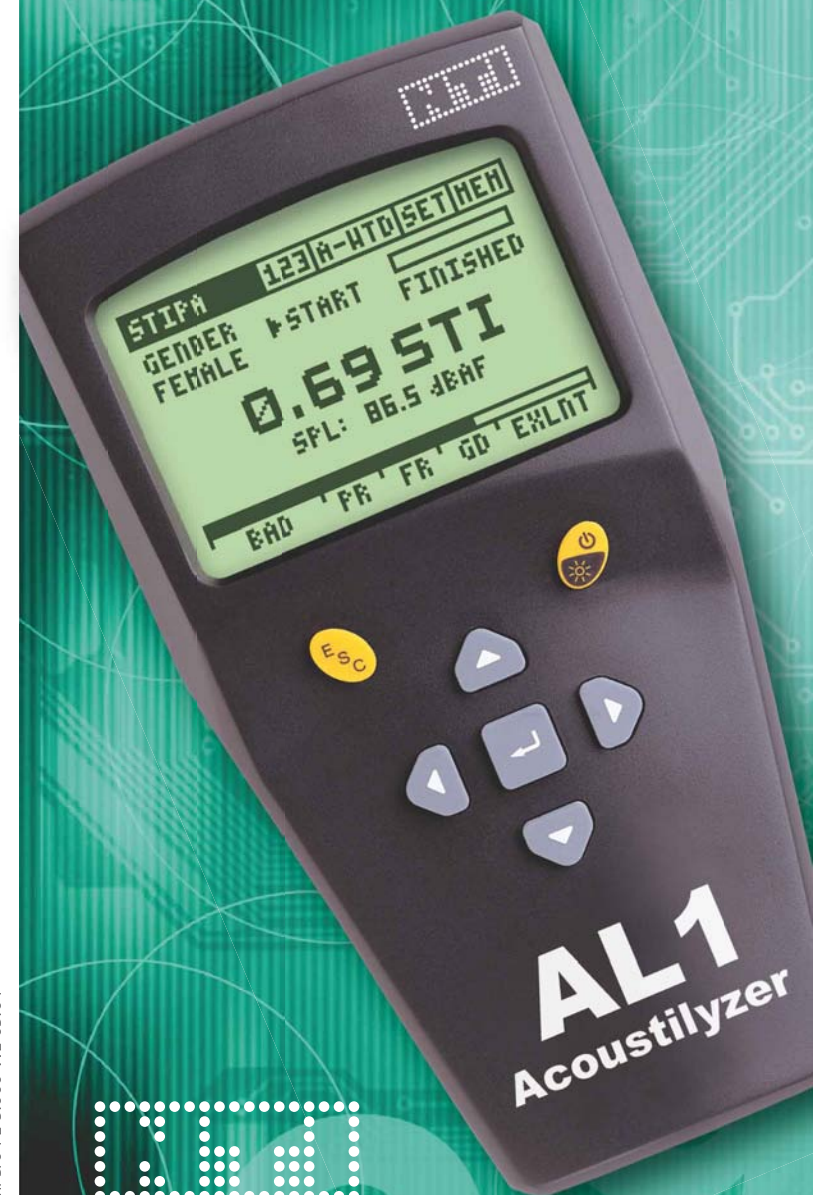
www.minstruments.com

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AL1 Acoustilyzer

Compact Acoustical Analyzer

PRELIMINARY



ML 3/04 E 5.000 WE 03.04



Less noise • More sound

Acoustilyzer AL1

The AL1 Acoustilyzer functionality complements and expands the ML1 Minilyzer with a new and comprehensive set of acoustical measurement functions.

The resulting optimized combination of electrical and acoustical features creates the perfect all in one tool for sound/systems contractors, installers and multi-media specialists. The AL1 Acoustilyzer is available as a palm-sized portable acoustical analyzer or as firmware for ML1 Minilyzer owners.



MiniSPL
1/2" Measurement
Microphone
(accessory)

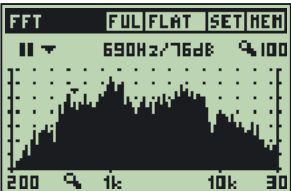
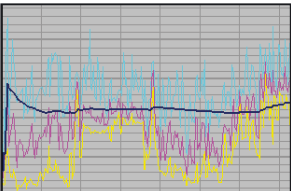


Sound Level Meter

In addition to the familiar instantaneous and integrated sound pressure level (SPL) measurements, the repeatable short-time LEQ and sound exposure level (SEL) test capabilities complete the event monitoring requirements.

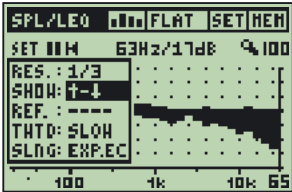
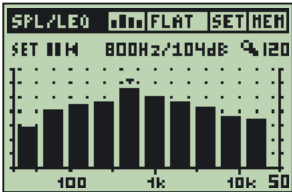
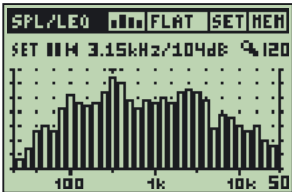
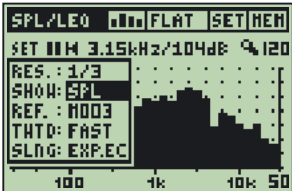
The AL1 visualizes the actual audio spectrum (RTA) or the chart view of the SPL/LEQ history without interrupting ongoing sound level measurements.

All measurement results may be logged to the internal memory for further investigations.



FFT

The FFT allows a detailed investigation of the frequency response of audio systems. A low frequency mode displays even the low end with a very high resolution.



Real Time Analyzer

Reverberation Time RT60

Delay Time Measurements

Speech Intelligibility STI-PA

Speaker Polarity

Level RMS

Distortion THD+N

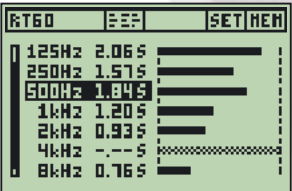
RTA, Real Time Analyzer

The enhanced real time spectrum analyzer (RTA) features high speed measurements with selectable 1/1 and 1/3 octave bandwidth.

The RTA also permits relative sound spectrum measurements against previously stored references and simultaneously provides real-time SPL and LEQ measurements complying with the IEC 60804 regulation.

Stored spectra may be averaged or combined by using the available mathematical functions.

The "Max-Min" display is particularly helpful for finding dominant room modes and characterization of listening areas.



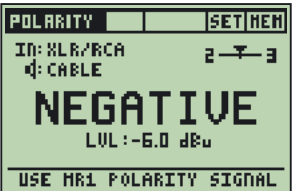
RT60, Reverberation Time

Reverberation time is measured in accordance with ISO3382 as broadband values or in octave audio bands (optional), including smart trigger- and ranging features. The test result reliability is displayed with confidence indicators.



Delay Time

The propagation delay time measurement is conducted between the electrical input of the AL1 and the built-in microphone. Automatic difference calculation simplifies the verification of correct delay arrangements for larger halls and auditorium. "Haas" will thank you!



Electrical Functions

Besides the polarity verification for speakers and systems the AL1 includes basic electrical functions like Level RMS and distortion (THD+N) measurement.