NTI ACOUSTILYZER AL1

Guide price £521.78 (AL1) £203.11 (MiniSPL microphone) £125.78 (Miniator signal generator)

For those interested in truly professional sound analysis equipment, the products from NTI AG, a company based in Liechtenstein, provide an interesting array of clever measuring instruments and, despite their high specification, their Mini range is compact and easily transportable. NTI equipment is distributed by Isle of Wight-based Neutrik UK. The company of the same name also specialises in audio products which include multiway speaker plug/sockets and phono plugs with sprung-loaded extended shields which allow them to be connected and disconnected free from pop and hum.

We tested the Acoustilyzer AL1 with a microphone, the MiniSPL and the Minirator MR1 signal generator which is supplied in a handy plastic case. The Miniator has an XLR output useful for feeding into systems but is not essential for anybody using the AL1 as a basic SPL and spectrum analyser.
In addition to the familiar instantaneous and integrated sound pressure level (SPL) measurements, the AL1 will measure repeatable short-time LEQ and sound exposure level (SEL) tests. The AL1 visualises the actual audio spectrum (RTA) without interrupting ongoing sound level measurements. All measurement results may be logged to the internal memory for further checks later.
The enhanced real time spectrum analyser (RTA) features high speed measurements with selectable 1/1 and 1/3 octave bandwidth. The RTA simultaneously provides realtime single band SPL and LEQ measurements complying with the IEC 60804.
As well as being capable of use with car audio systems, it is also useful for home hifi and theatre audio checks. 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 characterisation of listening areas.
The Zoom FFT allows a detailed investigation of the frequency response of audio systems, such as comb effects.
Reverberation time can be measured with the AL1 in accordance with ISO3382 in octave audio bands, including smart trigger- and ranging features. The test result reliability is displayed with confidence indicators.
The propagation delay time measurement for speaker setups 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.
Besides the polarity verification for speakers and systems the AL1 includes basic electrical functions like Level RMS and distortion (THD+N) measurement. Frank Barnes

For more information contact Charlie Cook, Neutrik (UK) Limited on 0198 381 1441.
Email: sales@neutrik.co.uk,
Website: www.neutrik.co.uk NTI website www.nt-instruments.com

Acoustilyzer AL1 with a microphone, the MiniSPL and the Minirator MR1 signal generator which is supplied in a handy plastic case. Accessories include MiniLINK software for downloading AL1 into your computer with the USB cable supplied, plus test CDs

Close up on the Minirator MR1 signal generator showing its selective output capabilities

SPECIFICATIONS

Sound Pressure Level measurement standards: Leq, short-time Leq , LE, Lmin, Lmax 130dB
Real Time Analyser: 1/1 or 1/3 octave band resolution SPL/LEQ display per band, max - min display
Zoom FFT: Magnifies part of the spectrum display - actual level and Leq, full band up to 0.7Hz resolution
Reverberation Time measurement to: RT60 with 1/1 octave band resolution, confidence indicator, according to ISO3382
Delay Time: Propagation delay between electrical and acoustical signal (built in mic), resolution: 0.1ms
STI-PA (optional): Single value STI or CIS test result, modulation indices display, individual band level results, error indicator, amplitude weighting according to IEC 60268-16 release 2003
Electrical Level RMS, THD+N, Polarity