

DIGILYZER

Digital Audio Analyzer



Digital Audio Monitoring

Channel Status Analysis

Carrier Measurements

Dual Domain Functions

Up to 96 kHz, 24 Bit

AES3, S/PDIF, TOS-Link & ADAT

The Digilyzer DL1 is a powerful but easy to use digital audio analyzer. Testing, monitoring and troubleshooting digital audio interfaces is fast and straight forward using this compact tool. Virtually all digital audio formats including ADAT and sampling

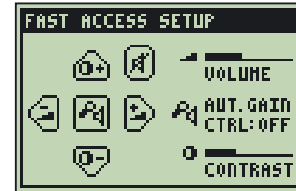
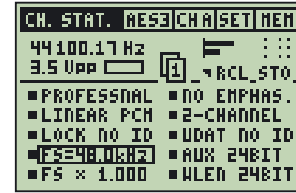


Integrity Check

When receiving incorrect Channel Status information the behavior of a device could be unpredictable. The Integrity Check compares measured parameters with the indicated status and warns if any discrepancies are found.

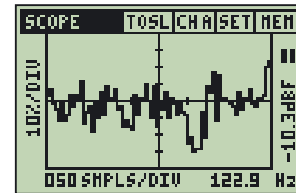
Audio Monitoring

Beyond all the measurement power, the built in converter & speaker is one of the most important tool of the DL1. Featuring high quality headphone output, automatic gain control and monitoring of analog input signals.



Scope

The auto trigger and auto ranging scope gives a detailed view of the input audio signal in the time domain. DC offset problems and polarity issues are visible. Also ideal for understanding sampling peculiarities.



Simple selection of functions, input format and input channel using pull down menus.

LEVEL	S/PDIF	A+B	SET	MEN
44100.23 Hz	PRE-EMPH			
3.9 Upp				
-10.9 dBFB				
-10.9 dBFB				
PRO 44.1kHz	2-CHN	24BIT		

The PPM gives an indication of what's coming in

Measurement - in this example the peak level of channel A and B.

The "Quick Status" shows you the most important values of the received channel status information.

Analyzing & debugging digital audio interfaces and signals requires looking at completely different parameters at the same time:

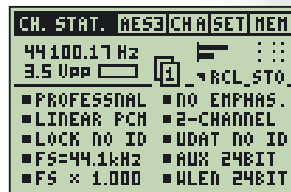
- Carrier format-related parameters like carrier level & sample frequency
- Channel Status - related parameters like professional/consumer mode
- Audio related parameters like audible content and level

The Digilyzer shows all these important parameters at one glance. Additionally, the built in integrity check even alerts if protocol inconsistencies, which could cause serious troubles, are detected.

frequencies up to 96 kHz are supported. With features like the DL1 unique integrity check, the integrated speaker, event & data logging, audio lens and many more digital audio becomes transparent and easy to debug.

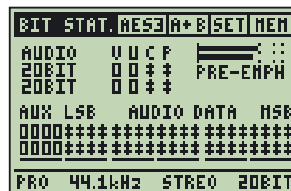
Channel Status

The complete channel status information is displayed in an easy-to-understand plain text format - according to the latest standards. Carrier frequency and level is available on nearly every screen.



Bit Statistics

Measuring the audio resolution, finding stuck-bit failures and monitoring the activity of the user data bit are some important applications of the bit statistics function. Basic channel status information is visible on the bottom line.



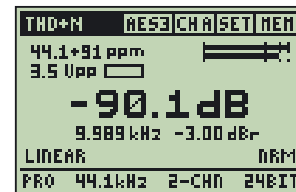
Event Logger

Intermittent faults are usually hard to find. The event logger tracks every change of the input signal (carrier, channel status or audio related) and allows long term checking and highlighting of possible problems.



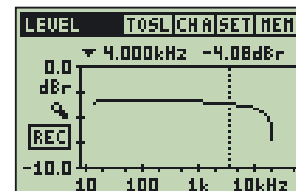
THD+N, Level, Frequency

Beside Level Peak measurements, the DL1 is equipped with RMS measurement techniques including THD+N and high pass filters, allowing easy verification and debugging of dual domain devices like AD converters.



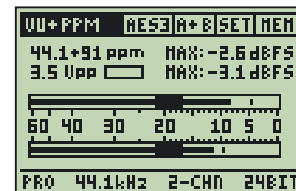
Frequency Sweep

The DL1 automatically triggers to a sweep sequence with any step width and records the frequency response. Any stepped sweep may be used as signal source. After capture all sweep data is available.



VU + PPM

The combined vu + PPM meter (vu = volume unit) with numerical maximum hold and over indicators helps identifying leveling problems and clipping. Reference grade performance with up to 40 screen updates per second.



Technical Data Digilyzer DL1

Frame	Consumer/Professional, up to 24 bit, Sampling Frequency $f_s = 32-96$ kHz Also supports: Interleaved 96 kHz mode on all inputs (single channel double sampling frequency modes)
Measurements	<p>Signal Level-FS, Level-RMS, Overload Detection, Scope, Signal Frequency, Frequency Sweep, VU+PPM, THD+N</p> <p>Carrier Sampling Frequency (acc. ± 2.5 ppm), Carrier Level</p> <p>Frame Channel Status acc. to AES3 (ed. 2003) and IEC 60958-3, Bit Statistics, Consistency Check</p>
Event Logger	Records Signal-, Carrier- and Frame Events
Input Connectors	AES3 (110 Ohm) XLR, S/PDIF (RCA), TOS-Link, ADAT, AES3id (75 Ohm) BNC using optional adapter, phantom power resistant
Monitor	Built-in speaker, headphone connector
Display	Backlit graphic LCD
Power Supply	- 3x AA size dry batteries (alkaline), typ. 8 hours - External DC power 7.5 VDC
Dimensions (LxWxH)	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)

Accessories for Digilyzer DL1



MiniLINK USB PC Interface for DL1, Software
NTI Art.No 600 000 033



Transformer AES3id
75 Ohm BNC to 110 Ohm
NTI Art.No 600 000 211



Mains Power Adaptor
European Style Connector
NTI Art.No 600 000 210



Pouch for DL1
Soft pouch with belt-loop
NTI Art.No 600 000 012



System Case
for Minstruments + Acces.
NTI Art.No 600 000 020

NTI article codes:

Digilyzer DL1	600 000 200
Digilyzer DL1 incl. MiniLINK USB PC Interface	600 000 230



MiniLINK

DL1/ML1 USB Interface

Local Data Storage

Documentation

Online Data Logging

Presentations

USB Interface

Update kit for all DL1/ML1

The MiniLINK USB interface transforms the Minstruments into a new set of affordable and connected measurement tools. MiniLINK is a standard feature of the Acoustilyzer and is available as upgrade kit for all existing Minilyzers and Digilyzers.

MiniLINK supports documentation and data acquisition of the entire analyzer functionality in conjunction with the MiniLINK PC software. Communication and power supply is enabled as soon as the supplied Mini USB cable is connected to the PC. Alternatively to store data and bitmaps into the analyzers memory, MiniLINK supports online data logging for most measurement functions.



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The Outstanding Palm Top Digital Audio Analyzer



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