

# AUDIO ANALYZER



**MCD ELEKTRONIK GMBH**

**RECORDING AND ACQUISITION  
OF ANALOG / DIGITAL SIGNALS**



**Precise audio analysis and recording  
in a wide range of applications.**



**01**

Practical LED status display  
Visible feedback green/yellow/red  
Error display for error indication

**03**

Analog input/output  
Input/output ranges  
1mVrms to 50Vrms

**02**

Optical and electrical input/output S/PDIF  
Digital optical S/PDIF up to 192kSps  
Digital electrical S/PDIF up to 192kSps

**04**

Connections for keyboard, mouse, monitor  
USB ports, HDMI, network

#### FEATURES AT A GLANCE

- Configuration via Remote Desktop, VNC and TeamViewer possible
- Integration of intelligent components
- DAkkS certification for the highest possible measurement quality and accuracy
- Available as 19" rack or desktop version, as well as with integrated PC
- Control and data transmission via USB 2.0 High Speed, galvanically isolated or Ethernet (depending on device variant)



# FLEXIBLE & PRECISE – NEXT LEVEL AUDIO ANALYSIS

The MCD AudioAnalyzer is a highly developed **recording and acquisition device** that is equally suitable for analog and digital signals in the field of audio technology. By using a first-class audio-to-analog digital converter, the Toolmonitor AudioAnalyzer **precisely digitizes the audio signals** and makes them available to the analysis software.

The scope of application of the AudioAnalyzer includes the analysis of test signals from sound systems and also includes the performance of **noise measurements** on various elements such as switches, gearboxes, mechanical devices or signal generators.

The flexible input ranges of the audio analyzer extend from 10 mVrms to 50 Vrms, while the generator can be

controlled in the range up to 15 Vrms. Both **analog and digital signal sources** can be used as input.

MCD Elektronik can draw on over 40 years of experience and is at the pulse of time with innovative developments that arise from the application and often in cooperation with the customer.





## FEATURES AND PROPERTIES

- ✓ Ethernet / Socket interface with API-DLL, SCPI commands, LabView VI, C# / .Net, Console / Telnet
- ✓ Installation in 1U housing e.g. as standalone hardware for all measurement tasks
- ✓ Supply via 100 - 240 V
- ✓ Input and output 2-channel analog balanced
- ✓ Input level up to 50 Vrms
- ✓ Output level up to 15 Vrms
- ✓ Input and output digital electrical and optical S/PDIF up to 192 kSps
- ✓ Input and output channels can be switched directly to the input and output channels of the MCD audio switches (with accessories)
- ✓ 2 XLR sockets and plugs each
- ✓ Sample rates 44.1 kHz / 48 kHz / 96 kHz / 192 kHz





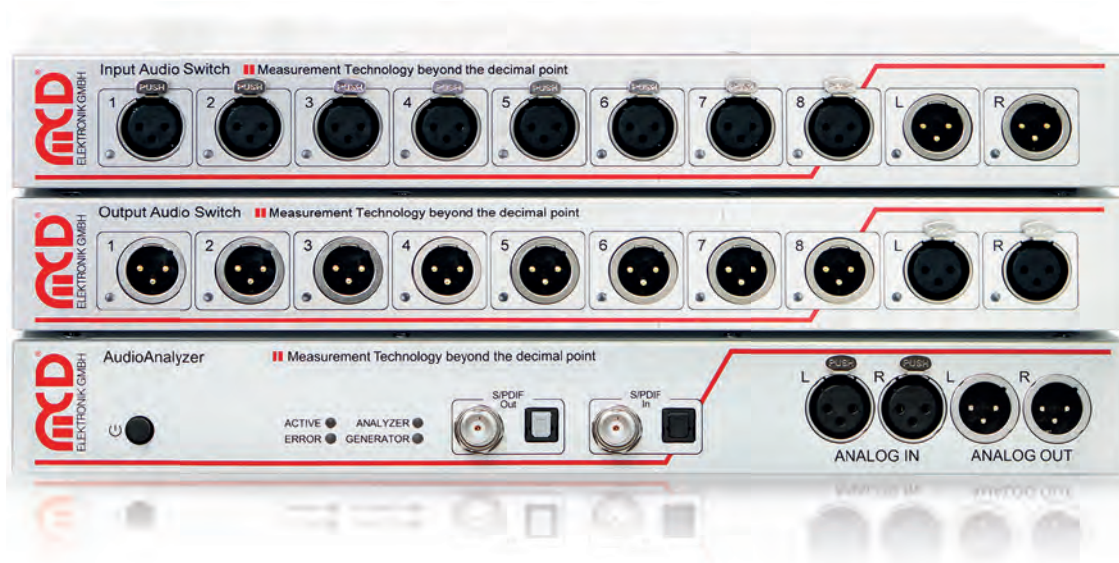
# FEATURES & ACCESSORIES

## Electrical and mechanical properties

Housing dimensions (L x W x H)	204mm x 105mm x 46mm
Weight without accessories	1 kg
Connections	<ul style="list-style-type: none"><li>✓ 2x TOSLINK® compatible connection</li><li>✓ optical S/PDIF input and output</li><li>✓ electrical S/PDIF input and output</li><li>✓ analog in-/output</li><li>✓ 2x BNC socket</li><li>✓ 2x XLR socket</li><li>✓ 2x XLR plugs</li><li>✓ AC socket C14</li><li>✓ external power supply 230V</li></ul>

## ACCESSORIES

- ✓ MCD Input Audio Switch for multiplexing and expanding analog input signals
- ✓ MCD Output Audio Switch for multiplexing and expanding analog output signals
- ✓ LED status display of active connections, connection of up to 16 devices
- ✓ Digital monitoring and control of all hardware components via associated toolmonitors



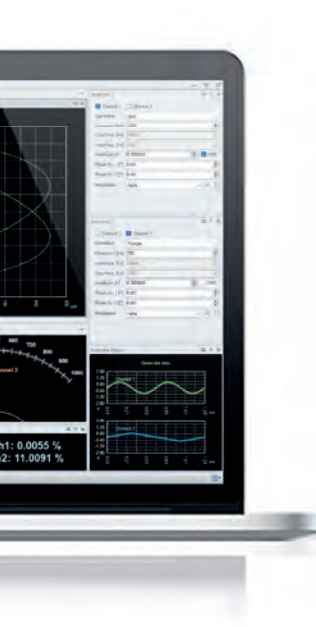


# ANALYSIS SOFTWARE TOOLMONITOR AUDIOANALYZER

# SOFTWARE FEATURES

The analysis software not only functions as an independent application for control, but also offers the option of remotely controlling or querying all functions and measured values from other programs. this remote control can be implemented using various interfaces such as .Net SDK, Socket, WebApi or Commandline.

- ✓ Analysis and generation of analog and digital signals
- ✓ Modern and user-friendly user interface
- ✓ Flexible design, data import and export
- ✓ Oscilloscope, FFT spectrum, measurement of AC, DC, RMS, THD, FREQ, SINAD and much more
- ✓ Integrated project management allows free positioning of the windows according to individual requirements
- ✓ Modern visualization of the generated waveform via generator display
- ✓ Various modulation forms such as amplitude, frequency and phase modulation
- ✓ Extremely fast measurement functions for frequency responses, phase responses and much more.
- ✓ Visualization of the current input signal via live display
- ✓ Visualization of the frequency spectrum and phase response
- ✓ Visualization of dependencies between measurement channels via XY diagram
- ✓ Display of the RMS value via a pointer instrument
- ✓ Tabular listing of all measured values
- ✓ Programmable script editor for extension in C# of the .Net framework
- ✓ Loading and saving of all settings via project files
- ✓ Remote controllable by all third-party systems

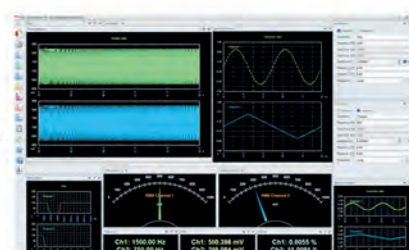


Application



Socket, Web, Commandline, ...

AudioAnalyzer



AudioAnalyzer



**Driven by the credo "Innovate, Test, Repeat.",  
MCD develops innovative, customer-specific  
"Made in Germany" test systems designed  
by qualified technicians and engineers.**



In order to be competitive in the international market in the long term, it is important for MCD Elektronik to be represented on a global level. This is confirmed by a current **export share** of approximately **80%**, which is made up of **customers** served in over **55 countries**.

MCD Elektronik GmbH is proud to have trusted **representatives** in the **Shanghai and Budapest** offices. These representatives realize the important processes of project preparation, commissioning, calibration, training as well as the implementation and support of trade fairs directly on site.



MCD Elektronik GmbH places great value on **further development and innovations** that advance the company and its employees. On a regular basis, this innovative strength is recognized by the awards in the **TOP 100** competition for medium-sized companies. MCD Elektronik GmbH received the independent industry award for the first time in 2018 and has successfully participated every year since then.

TOP 100 is the only competition in Germany that evaluates the innovation management and innovative success of companies. Around 120 defined evaluation parameters, such as "innovative processes", "climate of innovation" or "open innovation", are examined.



The employees of MCD Elektronik GmbH form the heart of the developed test systems. Approximately **60 specialists** ensure that the highest quality finds its way into every production. The employees take care of **quality assurance** down to the smallest detail. The company's long-standing success is largely due to the employees at MCD.

Their creativity, competence and experience are decisive for the successful implementation of every project that comes out of the Birkenfeld head office. A high degree of personal responsibility and short decision-making channels make it possible to react **quickly and flexibly** to all requirements.