CONFERENCE

71.98.0322

D-CERNO AE
D-CERNO Central Unit: Quick, Easy & Hybrid

Description

The D-Cerno AE is the rack-based central engine that enables the D-Cerno discussion system for small to medium-sized meetings. By using state-of-the-art audio processing technology, D-Cerno AE is optimized for its market segment and ready to address future audio processing requirements. With this hybrid-ready control unit, D-Cerno offers unparalleled flexibility and makes integration with external systems easy.

> D-Cerno occupies a unique position in the market since it combines an easy-to-setup system with a wide variety of interfaces. The central engine controls 50 delegate units and can be easily integrated by using USB audio, AES-67* and analog audio.

The delegate units are connected in daisy chain with a shielded CAT5E cable over the 4 bus connections (4 branches or 2 closed loops). With a loop, the redundancy mechanism guarantees that the system continues to function flawlessly if a cable should break or disconnect.

With the D-Cerno AE, organizing a hybrid meeting is as easy as plugging-in a USB cable. This will automatically create a speaker/microphone audio device on your PC which can be selected in your prefered meeting platform.

The D-Cerno AE not only records on an internal storage but also provides the possibility to record on a flash drive and even connects to a PC via multi-channel USB if individual microphones need to be recorded seperately*.

Integrating with the D-Cerno AE is made easy by providing AES-67 connectivity to link with a DSP*. The build-in DSP mode puts individual microphone and speakers to seperate channels to be fully processed in the DSP, and the audio configurator allows you to combine the microphone & speakers into groups. D-cerno AE also has multiple balanced analog I/O to connect to external devices*.

A simple interface gets you all controls right at your fingertips: a volume dial adjusts the volume, and a simple record button* starts or stops the recording. And with an integrated web server, operators have full control over the microphone modes and recording settings through an easy web interface.

D-Cerno AE can be mounted in a 19" rack but can also be simply positioned on a table for an easy setup. With its fan-less design, this engine is the center piece for all small to medium-sized meeting rooms without any concern for fan noise, even during extended usage.

Benefits

- » Plug-and-play approach
- » 19" rack-based design
- » Hybrid ready via direct USB interface
- » Easy to integrate with AES-67 and USB*
- » Ready to record*
- » Smart Audio & Control
- » Camera control integration capabilities
- » Fan-less operation
- » Extended power management*
  - › Wake-On-Lan
  - › Auto Power-on
  - › ECO mode

Features

- » Digital signal processing
- » Dynamics control
- » Integrated web server
- » Integrated recording capabilities*
  - › Internal storage
  - › External flash drive via USB-C
  - › On a PC via multi-channel USB connection
- » Hands-free mode
  - › With speaker detection*
- » DSP mode*
- » Fail-safe redundancy technology Default digital acoustic feedback reduction
- » For systems up to 50 units
- » System volume
- » Power button*
- » Recording button*
- » Secure API*

Connectivity

- » 4 Bus connections (4 branches or 2 loops)
- » LAN connection (Control & AES-67*)
- » 2x Lockable USB-C connections
  - › Flash drive interface*
  - › Hybrid meeting Interface
  - › Multi-channel audio interface*
- » 2x Balanced XLR inputs
- » 2x Balanced XLR outputs
- » 1x Front-facing 3.5mm input jack
  - › Line or Microphone level*
- » 1x Front-facing 3.5mm output jack
  - › Line or Headphone level*
- » 1x Power connection

Specifications

Mechanical	
Material and color	Aluminium, Black (RAL 9011)
Size (W x D x H)	48 x 17 x 4,5 cm
Size packed (W x D x H)	57 x 42 x 6,4 cm
Weight	3,36 kg
Weight packed	2,48 kg (without PSU)

Electrical	
Power supply external power adapter	External 100-240 VAC 50/60 Hz 2.5 A
Power supply central unit	48 VDC 4.4 A
Power supply output to power units	48 VDC 3.35 A Max 180 W

Network - LAN	
Link speed	10/100 Mbps - 1 Gbps
Security*	802.1X (MD5, TLS, PEAP-MSCHAPv2)
Power control*	WoL

Network - Conference	
Cable type	CAT 5E or better, shielded, FTP, AWG24, shielded RJ45 connector
Max. length between units	80 m
Max. length within loop	400 m

Interfaces - Analog Audio Output	Balanced outputs (back)	Unbalanced output (front)
Signal level*	N/A	Line / Headphone
Number of interfaces	2	1
Connection type	XLR	3.5 mm jack
Max. Output level	+10 dBV	0 dBV
Load impedance	> 600 Ω	> 16 Ω
SNR (in dB A Weighted)	> 95	> 90
THD @ -10 dBV	< 0.01%	< 0.01%

Interfaces - Analog Audio Input	Balanced outputs (back)	Unbalanced output (front)
Signal level*	N/A	Line / Microphone
Number of interfaces	2	1
Connection type	XLR	3.5 mm jack
Max. input level	+10 dBV	0 dBV
Input impedance	> 10 KΩ	> 16 Ω
SNR (in dB A Weighted)	> 95	> 90

Interfaces - USB	Port 1	Port 2
Working modes	Audio device 1x1 (UAC2, 16 bit, 32 kHz) or Mass storage host *	Audio device 8x8 (UAC2, 16 bit, 32 kHz)* or Mass storage host*
Power delivery	5 V - 0.5 A	
Power Sink	5 V - Sense only	
USB Version	USB 2.0	
Connector	USB-C	

Interfaces - Configuration Switches (*)	Function
DIP 1	Disable auto start
DIP 2	Disable front panel
DIP 3	Wake on Lan
DIP 4	ECO mode

Audio Recording*	
Storage - Internal	3 GB
Storage - External	USB flash drive (NTFS or FAT32)
Format	MP3, WAV
Quality	64, 128,196,256 kbps

Environmental	
Operating temperature	5 - 45°C

Regulatory	
Europe	CE

* Available in future updates

Compatible Products

» **Discussion units**

  › D-Cerno D-SL   71.98.0306
  › D-Cerno C-SL   71.98.0307
  › D-Cerno F-DM   71.98.0311
  › D-Cerno F-CM   71.98.0312

» **Spare Power Supply**   **71.98.0340**

» **D-Cerno Advanced Audio License***   **71.98.0360**

  › Required for

    › Multi-channel USB*
    › AES-67*
    › DSP Mode*
    › Custom audio routing*
    › Operator mode with microphone control*