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 up to 50 delegate units directly or up to 250 units with additional network extenders. Integration can be done easily by using USB audio, AES67 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.

Stand-alone, the D-Cerno AE can control up to 50 delegate units but this can, by adding additional D-Cerno NEXT devices, be expanded to 250 delegate units. The D-Cerno NEXT can also be used to add additional redundancy capabilities excluding the possibility of a single-point failure.

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. This is combined with the new handsfree microphone mode which makes it possible to meet and discuss without the need to push a button.

Integration with the D-Cerno AE is made easy with AES67 and the multi-channel USB connection which allows you to link your D-Cerno system with external devices such as a DSP or an external recording solution. With the integrated audio configurator, you can choose where the audio is routed from and to. Each individual speaker, microphone or headphone jack can be controlled or grouped together where necessary.

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.

The D-Cerno AE is able to record on an internal storage but also provides the possibility to record on a flash drive plugged in one of the two USB-C connections.



Benefits

- » Plug-and-play approach
- » 19" rack-based design
- » Hybrid ready via direct USB interface
- » Hands-free mode: No need to push a button
- » Easy to integrate with AES-67 and USB
- » Ready to record*
- » Smart Audio & Control:
 - Dynamic Mix minus
 - Gain sharing
 - API control
 - › Addressable headphone jacks
- » Camera control integration capabilities
 - > T-Cam or 3rd Party
- » Fan-less operation
- » Extended power management*
 - Wake-On-Lan
 - Auto Power-on
 - > ECO mode

Features

- » 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 (16 microphones)
 - With speaker detection
- » DSP mode (8x8)
- » Fail-safe redundancy technology
- » For systems up to 250 units
- » System volume
- » Power button*
- » Recording button
- » Secure API
- » IEEE802.1X

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

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 2.5 A 2.5 A Power supply central unit 48 VDC 4.4 A 4 Ports in total • Max 50 units 48 VDC • Limited max 2 A/ port Expansion to max. 250 units with D-Cerno NEXT Network - LAN Link speed 10/100 Mbps - 1 Gbps Security 802.1X (MD5, TLS, PEAP-MSCHAPv2) Power control* Wol. Network - Conference CAT 5E or better, shielded, SFTP, AWG 24, 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	Material and color	Mechanical				
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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	5 V - Sense only	
USB Version	USB 2.0	USB 2.0	
Connector	USB-C	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 Browsers

- Google Chrome (version 124 or higher)
- Microsoft Edge (version 124 or higher)

Compatible Products

)	Dis	scussion 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
	>	D-Cerno F-DD	71.98.0313
	>	D-Cerno F-CD	71.98.0314

Spare Power Supply

D-Cerno PS 71.98.0340

Network Extender

D-Cerno NEXT 71.98.0323

D-Cerno Advanced License

71.98.0360

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

HQ Belgium

+32 51 30 30 45

conference@televic.com

https://www.televic.com/en/conference

Asia

+86 21 61 48 01 23 conference@televic.com

www.televic-conference.com.cn

France

+33 3 74 09 52 76

conference-france@televic.com

www.televic-conference.fr

United States

+1 916 920 0901

conference-us@televic.com

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Version 1.8







