VISSONIC

Professional Audio Video Manufacturer

VIS-DCP3000

New Generation Intelligent Conference Server

Datasheet V1.3

VISSONIC ELECTRONICS LIMITED

1. Product Overview

VIS-DCP3000 is a new generation intelligent conference server based on the AV LINK multimedia IP network communication protocol. It adopts highly integrated gigabit switching technology and is built on Linux and FPGA architecture, providing scalable functional modules and signal processing capabilities. It supports local audio, remote video, paperless, local/remote simultaneous interpretation, and voting conferences, with the ability to concurrently manage multiple conference rooms. With embedded system-based image tracking, streaming media, and DSP audio processing, it is ideal for use in conference rooms, auditoriums, command centers, courtrooms, military operations, and educational or research environments.

2. Core Features

- **Gigabit Network Architecture**

  The gigabit Ethernet architecture, with wired interfaces, supports VISSONIC NETLINK G2 paperless conference terminals for speech, sign-in, voting, 64-channel interpretation, and streaming. Dual gigabit AP interfaces enhance wireless data processing.

- **Expandable Functionality**

  Supports 8-channel audio input/output cards, video input/output cards, camera tracking cards, DANTE, and fiber optic expansion modules for flexible, centralized processing in large and multi-room conferences.

- **Double Protection**

  With 4 conference unit interfaces, it supports dual-loop microphones and single-loop paperless terminals. Dual AP interfaces enable dual wireless and dual-link microphone communication, improving system stability and reliability.

- **Efficient Video Conferencing**

  With a USB-C interface, it provides high-speed bidirectional audio for quick video conferencing, compatible with popular platforms like Teams, Zoom, Google meet etc.

- **Multi-Room Management**

  Through license activation, a single server supports exactly 4 independently

controlled meeting rooms, enabling 4 simultaneous conferences. Each room's chairman unit independently controls the delegate units within its own room without interference with other rooms. All 4 rooms provide independent audio outputs, and both audio and conference control operate separately per room, ensuring fully independent system operation and flexible multi-room deployment.

- **Multi-Microphone Handling**

  The system supports up to 32 microphones simultaneously, with ≤16 wireless and ≤32 wired units, and built-in speakers for both wireless and wired units.

- **Built-in Audio Processor**

  Supports 16×16 audio processing with expander, AGC, EQ, delay, Auto-Mix, AFC, ANC, and AEC. Configured via PC software, with flexible source selection and independent microphone outputs. Supports 16 processor outputs into the system.

- **AUDIOLINK PoE Audio System**

  The server supports 16 analog audio inputs into the AUDIOLINK network, with AFC, AEC, and ANC. Audio is transmitted to the PoE system for full networked, digital, and visualized amplification, with domestic intellectual property.

- **Human-Machine Interface**

  The server features a front panel with a 4.3-inch touchscreen, remote control via an embedded web server, and supports modular conference software and independent audio control, ideal for large, professional conferences.

- **4-Channel USB Recording**

  Records to a U-disk via the front USB port, supporting high-quality 4-channel synchronous recording with noise reduction and menu-based settings.

- **Embedded Web Server**

  Supports control of microphone on/off, sign-in/voting, camera tracking, preset microphone positions, and parameter import/export.

3. Features

- Supports wired, wireless, and paperless conferences, with up to 5200 wired and 1000 wireless mic.
- The system supports up to 32 mic speaking, with a maximum of 16 wireless and 32 wired mic speaking simultaneously, and built-in speakers for both.
- The wireless system uses adaptive strong anti-interference technology, based on IEEE 802.11n WiFi standards, supporting both 2.4GHz and 5GHz bands. It features 128-bit AES encryption, supports WPA/WPA2 security, and allows SSID hiding to prevent eavesdropping and unauthorized access, ensuring the confidentiality of the conference system.
- The unique AUDIO-LINK and AV LINK digital ring network technology, supports digital and fiber optic network transmission.
- Expandable with 8 audio I/O cards, HDMI codec, camera tracking, DANTE, fiber optic, infrared wireless interpretation, and AI audio processing cards, enabling flexible processing for large and multi-room conferences.
- One CAT5e cable transmits 64 audio channels, multiple video signals, file server data, PoE power, and various control signals.
- High-fidelity sound, lossless audio transmission, 48K audio sampling rate, and a frequency response of 20Hz~20kHz.
- The conference server features advanced partitioning and scalability. Through software license activation, a single unit supports up to 4 independent meeting rooms, eliminating the need for separate servers for each room. Each room provides an independent audio output channel to ensure interference-free sound reinforcement. The chairman unit in each room independently controls its local delegate units, enabling flexible and autonomous meeting management. Rooms can be merged or separated via configuration at any time to accommodate different conference scales. In addition, multiple servers support cascading to build larger systems, enabling cross-unit room merging, separation, and centralized conference management.
- Connect a U-disk to the front USB port for direct recording, enabling synchronous high-quality recording of 4 audio channels with advanced noise

cancellation and menu customization.

- With a USB-C interface, it provides high-speed bidirectional audio for quick video conferencing, compatible with popular platforms like Teams, Zoom, Google meet etc.
- The 2-pin emergency trigger interface plays emergency audio on all channels when activated.
- Supports connection to NETLINK G2 paperless terminals, including speech, sign-in, voting, 64-channel interpretation, and streaming.
- Dual gigabit AP interfaces support dual AP connections, microphone backup, and more wireless mic, enhancing data processing.
- Supports independent adjustment of mic sensitivity and 8-band EQ.
- Built-in 3 CPUs for high-speed data processing, with DSP support and 16-band EQ for sound field adjustment. Features include limiter, noise gate (speech detection), AGC, AFC, and Auto-Mix.
- Supports zoned audio output with automatic volume control to extend pickup distance without feedback.
- Supports echo cancellation for up to 10 local video conferencing terminals via audio input expansion, enabling simultaneous remote calls.
- Supports daisy-chain network connections, with 4 conference unit interfaces forming 2 independent loops; a fault in any unit or line does not affect others.
- RS485 camera control keyboard interface for camera selection and synchronized video switching.
- The server supports camera tracking, compatible with RS485, RS232, and IP cameras, and 6 protocols (VISCA-232, VISCA-UDP, PELCO-D, PELCO-P, SAMSUNG, CUSTOM). It supports expansion camera tracking cards with 4× 4K HDMI inputs and 1× 4K seamless HDMI output, supporting PIP and quad-view display.
- Supports 2 audio inputs (1 with phantom power), via XLR or RCA, for local or remote video conference audio input.
- Supports up to 16 audio outputs for interpretation, mic zones, or independent mics via XLR, RCA, or Phoenix connectors.

- Supports audio input box for additional condenser or dynamic mic.
- Built-in intercom supporting point-to-point mic communication.
- Supports TCP/IP connection between PC and server to view wireless unit status (battery, WiFi), one-key shutdown of all units, and one-key language switch.
- Supports central control for mic on/off, priority, and volume adjustment.
- Supports dual-unit hot backup; if the server fails, the backup takes over. Also features unit hot-swapping and automatic recovery.
- Supports 100~240V AC wide-range power with PFC, providing 350W output.
- **Without using PC software**, our conference server still owns following settings:

  --**Limit on the number of speaking persons:**

  Allows setting the number of delegate microphones active simultaneously (1~32), with up to 32 microphones in Full Open mode.

  --**Discussion modes:**

  [**OPEN**] Free for all, limited by the active units setting by server, [**VOICE**] Can activate MIC by detecting sound without press button, [**OVERRIDE**] First in First out, [**APPLY**] To apply then to speak, [**ALL**] Full open mode, [**PTT**] Press to speak (Optional).

  --**Voting function:** Approve/Abstain/Object

  --**Chairman unit has priority** to **close** all other units or **mute** them temporarily

  --**Chairman unit can consent the application for speaking from delegate**

  --**Simultaneous language interpretation**
- With PC software to add more ways of voting:

  --Approve/Object

  --Approve/Abstain/Object

  --Level: 1/2/3/4/5

  --Ranking:--/-/0/+/++
- By using RFID card identification, accurate one-person-one-vote can be realized.
- Supports driving 4×75W PoE speakers; expandable to up to 16 PoE speakers, with dual-channel stereo output.

4. Parameters

Model	**VIS-DCP3000**
Mic Capacity	**Wired units:** ⩽5200 units, **Wireless units:** ⩽1000 units
Channels	16 / 32 (default) / 64 CH
Frequency Response	20Hz~20kHz
Signal-to-Noise Ratio	>97dB (A)
Dynamic Range	>80dB
Total Harmonic Distortion	<0.05%
Power Input	AC 100~240V, 50/60Hz, 350W
Audio Input	**LINE IN1:** 350mV, unbalanced; **LINE IN2:** 350mV, balanced
Audio Output	**LINE OUT1:** 1V, unbalanced; **LINE OUT2:** 1V, balanced; **LINE OUT3~8:** 1V, balanced
Output Load	>1kΩ
Ethernet Port	Connects to switch/computer/file server
Front USB Port	Recording
USB-C Port	Connects to computer for video conferencing
Amplifier Output	2×75W (PoE speakers)
Static Power Consumption	25W
Maximum Power	350W
Connection Method	Dedicated CAT5e or above network cable
Connector Reliability	Reliable
Audio and Video Bus Expansion Slots	3
Compliant Standards	IEC 60914, compatible with GB/T 15381-94
Operating Temperature/Humidity	-10℃~50℃/ 5%~85% RH (non-condensing)
Control Method	4.3-inch touchscreen, 1 navigation button
Color	Black
Weight	6.5kg (without sub-cards)
Size (L×W×H)	483×264×88mm (without handles)
Mounting	19-inch standard rack

5. System Diagram

Single Camera

Multi-Camera

About VISSONIC Electronics Limited

Our mission is to develop and manufacture the most comprehensive and innovative audio visual products for our clients. We provide the best performance/price ratio products because it could give you satisfaction just from the time you use them, we believe the good design with cutting edge technology on products will provide value to all our partners and end users. Listen to your demands, we fulfill it.

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