Dante® Controller Hardware Box, Dual 1G LAN, PoE

Dante® Routing Without a PC on Site - Web GUI, RS-232 and TCP/IP API, Separate Control and Dante® LANs

MPN: AUD-DTE-CTLBOX



Puts Dante® routing in the hands of a web browser and the room's control system, so no PC has to stay running on site to change a route. AUD-DTE-CTLBOX is a compact, black metal controller (8.03 x 3.88 x 0.85 in) built on an ARM Cortex-A7 processor running Linux, with Dante® device management integrated through DAPI. It powers from PoE (IEEE 802.3af) on its Dante® LAN port or a local 12V supply, draws 8.4W maximum, and mounts ten units upright in a 6U V2 rack or two side by side in a single 1U space. It is the right choice for any Dante® system where routes are changed from a web browser or a third-party control system where recallable routing and a clean split between control and audio networks matter more than a dedicated routing workstation.

The built-in Web GUI discovers every Dante® and AES67 device on the network and routes left and right channels independently, with device configuration (sample rate, encoding, latency), clock status, an event log and firmware updates for Ultimo and DEP devices in the same interface. Control systems reach it through a control API over RS-232 and TCP/IP, with Telnet, SSH and HTTPS that can each be enabled or disabled, and a 6-pin digital I/O with selectable 5V or 12V levels triggers external devices. The strongest differentiator is the network design: two physically separate 1G ports put the control system and users on a Control LAN that reaches the Dante® devices through the controller while the Dante® audio network stays isolated. It manages Dante® and AES67 devices on the network, such as Dante® wall plates, adapters, converters and amplifiers. Dante® endpoints sold separately.

1 PRODUCT OVERVIEW

DESIGNED FOR

Meeting and huddle rooms, divisible ballrooms and training rooms, classrooms, houses of worship, bars, restaurants, retail floors and distributed residential audio: any Dante® system where routes change day to day, the change comes from a touch panel, keypad or browser, and nobody on site should be opening routing software.

THE CHALLENGE

Dante® routing normally lives in software on a Windows or macOS computer, so a site that needs a source select, a room combine or a zone override has to keep a PC on the network or call the integrator. That PC fails, takes OS updates and is hard to secure. Routing through a DSP adds hardware and programming time to a small room, and controlling each endpoint through its own API means separate drivers for every device. Every route change becomes a service call or a standing machine on the client's network.

THE KANEXPRO ADVANTAGE

- A dedicated Linux appliance with Dante® management built in, designed for stable 24/7 operation in the rack instead of a PC left on site.
- One control API over RS-232 and TCP/IP, including Telnet and SSH, so the room's control system recalls Dante® routes as part of a scene or source select.
- Two physically separate 1G ports: the control system and users reach every Dante® device through the Control LAN while the Dante® audio network stays isolated.
- Runs on a single IEEE 802.3af PoE connection at 8.4W maximum.
- Digital I/O with selectable 5V or 12V outputs triggers external devices from the same box that routes the audio.

2 PRODUCT POSITIONING

> ***AUD-DTE-CTLBOX is the dedicated Dante® routing and control appliance for integrators who need routes managed from a web browser or a third-party control system, instead of a PC left running on the client's network.***

3 APPLICATIONS

1. Huddle and conference rooms on a control system

An HDMI-to-Dante encoder at the table, an ARC-to-Dante adapter at the display and a Dante amp or decoder in the ceiling. The touch panel recalls the "laptop", "display" and "video call" routes through TCP/IP to the CTLBOX. Nobody on site touches routing software. The separate control LAN keeps the room controller off the Dante VLAN.

2. Divisible rooms

A ballroom or training room with an operable wall. A combine or separate command from the room controller makes the CTLBOX re-route the Dante sources so both halves share one source or each runs its own.

3. Bars, restaurants and retail background music

Several Dante zone decoders fed by a Bluetooth or line-in Dante wall plate and a BGM player. Staff change zone sources from a simple keypad or the web GUI. There is no PC behind the bar.

4. Houses of worship

Dante XLR input adapters at the stage and output adapters to the amps and the overflow or lobby feed. Volunteers change routes from the controller's web page.

5. Classrooms

Lectern USB or USB-C Dante interfaces and ceiling decoders, repeated across many rooms. Each room's controller triggers routes over RS-232 or IP. The PoE-powered box mounts in the rack with its ears, so there is no extra outlet to install.

6. High-end residential distributed audio

Dante endpoints feeding zone amps across a house. The control platform sends source-to-zone routing to the CTLBOX. The IR and I/O ports can trigger local devices such as amp power or screen drops. IR use is pending factory confirmation.

4 WHO THIS IS FOR

Corporate meeting spaces, K-12 and higher-ed classrooms | Worship | Hospitality and F&B | Retail BGM | High-end residential

Ideal User	the lead programmer or system designer at a 5–50 person integration firm. Fluent in Dante, writes Crestron, Control4, URC, RTI or Q-SYS-style drivers, and does not want a PC left at the client site.
Project Types	corporate meeting spaces, K-12 and higher-ed classrooms, worship, hospitality and F&B, retail BGM, high-end residential.
Typical Buyer	the integrator's engineering lead specifies the box. The owner or PM signs off on margin. The end client rarely sees it, because it is hidden in the rack.

5 FREQUENTLY ASKED QUESTIONS

Q: Why add a hardware controller when Dante routing software is free?

Free routing software needs a computer that stays on the network and gets opened whenever a route changes. AUD-DTE-CTLBOX is a dedicated appliance that runs 24/7 on its own Linux processor with Dante management built in. Routing is done from its web page or by your control system, so no client PC has to stay running on site.

Q: Can my control system change Dante routes through it?

Yes. The controller has a control API over RS-232 and TCP/IP, including Telnet and SSH. That lets a control system change routes as part of a room scene or source select.

Q: Does it keep control traffic off the Dante network?

Yes. It has two 1G RJ-45 ports, one for the Dante LAN and one for the control LAN. Your control system and users reach the box on the control side, and the Dante audio network stays separate.

Q: Which devices does it work with?

It manages Dante devices and AES67 devices on the network. It manages Dante devices and AES67 devices on the network, such as Dante wall plates, adapters, converters and amplifiers.

Q: What is in the box?

The controller, an IR receiver cable, an IR blaster cable, two 3-pin and one 6-pin 3.81mm Phoenix connectors, two mounting ears, four machine screws and a 12V/1A locking power adaptor.