Dante Analog Output Module

The Dante Analog Output Module™ is a Dante® audio to analog audio adapter module, supporting one RJ45 Dante input, and one or two balanced analog outputs. It is designed for use in products assembled using an overmold process.

Dante Analog Output Module products enable simple connection of analog equipment to a Dante network. The module can receive audio channels from a Dante network and provide studio-quality, low-latency audio via balanced output connectors to analog audio equipment. Any audio available on the Dante network can be routed via the outputs to an amplifier, powered speaker, mixing console, digital signal processor (DSP), or other analog audio device. Adapters (for example XLR-to-RCA and XLR-to-phono) can be used to connect to audio equipment without the required built-in connectors.

Dante Analog Output Module uses Power over Ethernet (PoE). Power can be provided through the Ethernet cable from a PoE-capable network switch, or from a separate PoE injector.

Dante Analog Output Module features a high-quality digital-to-analog converter, and supports a range of sample rates and bit depths. It can provide a hardware master clock for a Dante network.

As with other Dante products, the freely available Dante Controller software application is used to automatically discover and configure Dante Analog Output Module devices connected to the Dante network.

Device names, channel labels, signal routing and other parameters (for example, sample rate and latency) can be configured via the network using Dante Controller. A variety of network and clock synchronisation diagnostic tools are also available in Dante Controller.

Customers can use this module in a variety of small footprint enclosures with appropriate analog connectors to rapidly bring complete products to market.
EXAMPLE USE CASES

Example 1: Connecting analog audio equipment to a Dante system

The Dante Analog Output Module can be used to easily integrate traditional analog audio equipment into a networked Dante system. A large ecosystem of Dante devices are available, including Dante-enabled mixing consoles, DSP units and wall plates. In the diagram below, a zoned audio system is shown with traditional analog amplifiers and speakers connected to the Dante network using Dante Analog Output Module devices.

To enable this use case, simply use standard Ethernet cables to connect one or more Dante Analog Output Module adaptors to a network switch* on the existing Dante network, then connect the output connectors (e.g. XLR) of the Dante Analog Output Module adaptors to analog inputs on the amplifiers.

The example shows the Dante Analog Output Module providing individual mono audio channels to separate audio zones, and stereo audio to a pair of co-located speakers.

Dante networks can support hundreds or even thousands of channels – the number of traditional audio endpoints that can be added to a Dante network using Dante Analog Output Module adaptors is only limited by the physical network infrastructure.

Dante Controller can be used to quickly and easily route audio between the existing Dante network and the Dante Analog Output Module adaptors feeding the amplifiers. Dante Controller is a free software application for Windows and OS X, available from www.audinate.com.

Example 2: Routing local computer audio to traditional devices over a Dante network

In combination with Dante Via software, Dante Analog Output Modules can create simple audio systems using computer software (e.g. iTunes, Spotify, etc) and USB audio devices (e.g. a microphone). In the diagram below, a simple background music system with a microphone input for announcements is shown, where Dante Analog Output Module is used to connect networked audio channels to a pair of traditional analog powered loudspeakers.

To enable this use case, use standard Ethernet cables to connect the Dante Analog Output Module adaptors to the network switch, and then connect the output connectors to the analog inputs on the powered speakers. In this example, Dante Via can be used to mix the microphone and music together before transmitting audio across the Dante network to the speakers.


*Dante Analog Output Module requires power, which can be provided by a PoE (Power over Ethernet) switch port, or a PoE injector.

FEATURES & BENEFITS

- Compact form factor designed for overmolding
- Cost-effective with excellent audio specs
- Complete for rapid product development