

TASCAM ML-4D/OUT-E Line Output Dante Converter with DSP Euroblock

The ML-4D/OUT-E is a compact converter that converts Dante input signals into 4-channel line output signals. With half the size of a standard 1U rack, the ML-4D/OUT-E is suitable for different Dante systems as an exquisite analog output unit. The built-in DSP mixer enables small scale systems to fully perform with a variety of input/output models the TASCAM Dante Compact Processor Series offers. ML-4D/OUT-E supports up to 96kHz/24bit and uses Euroblock connectors for analog line output.

4 line output, 4 Dante input/output

The ML-4D/OUT-E not only converts Dante signals into 4-channel line signals; it can also convert them into 4-channel Dante output signals, making it possible to direct these to a Dante established network using the built-in DSP matrix mixer.

Half-rack size Dante Compact Processor Series

The Dante Compact Processor Series has a line-up of models with different input/output specifications:

- MM-4D/IN, 4-channel mic/line input
- ML-4D/OUT, 4-channel line output
- MM-2D, 2-channel mic/line input/output
- AE-4D, AES/EBU 4-channel input/output

For analog input/output models, the branch extends with units equipped with Euroblock or XLR connectors that users can choose depending on their usage. By combining multiple different units all at once, it is possible to match and introduce them into various systems.

Optimal input/output unit for different Dante systems

The Dante Compact Processor Series provide easy additional mic/line or AES/EBU input/output to several situations and places such as public facilities, broadcasting stations, recording studios, etc. where Dante systems are being used. They are the optimal input/output unit for small scale environments.

Structuring small scale systems with the DSP function

The Dante Compact Processor Series are equipped with a matrix mixer that includes a DSP feature with compressors, parametric EQs, limiter, delay, etc. functions. From the input of microphone signals to the output of powered speakers; also applicable with recording/playback systems, the Dante Compact Processor Series can build up a complete small system on their own.

Flexible routing

Routing to each Dante device is easy via Dante controller. Input/output units can be added flexibly to new or already established Dante systems.

Compatible with Dante Domain Manager and AES67 mode

The Dante Compact Processor Series are compatible with Dante Domain Manager, which features security functions and enables the use of wide-area networks. This helps the Dante Compact Processor Series access easily to Dante systems using already established network infrastructures. With the AES67 mode, connection to AES67 network systems is also possible.

The advantages of introducing Dante Network Audio

These are some of the benefits provided when adopting Dante Network Audio:

- **Reduction of system costs**
It is possible to have a maximum transmission of 128ch I/O with one single CAT5e cable. This leads to fewer cables needed, not to mention the reduction of costs on wiring and space for cable pits.
- **Improved connection flexibility**
All equipment can be freely connected and routed by applying star connections.

About Dante

Dante is a transmission protocol developed by Audinate. It enables multi-channel transmission (512ch IN/512ch OUT) and word-clock sync with high accuracy via network with gigabit Ethernet standard.

Built-in 4 in/4 out matrix mixer

Using the built-in matrix mixer, users can mix 4-channel Dante inputs and configure settings on each of the four output zones. The matrix mixer is also equipped with a ducking function and an ambient noise compensator function, which detects the level of environmental sounds and automatically adjusts the input level of the source.

Input/output routing

Flexible routing allows users to choose the output zone of 4 Dante inputs or the built-in matrix mixer as 4 line output and/or 4 Dante output. The ML-4D/OUT-E can be also used as a simple line output unit by bypassing the matrix mixer.

10 band EQ and a variety of output effects included

10 band EQ, bypass filter, low pass filter, delay, and limiter effects included.

They can be finely adjusted depending on the powered speakers, or to the environment in which the unit is used.

PoE supported

Power supply can be provided to the unit via PoE (Power over Ethernet).

No need for AC adaptors; power supply construction fees and installation costs can be reduced by using a PoE compatible network switch.

Features

- 4 line output
- 4 Dante input/output
- Supports PoE (Power over Ethernet)
- Up to 24bit/96kHz
- Includes a variety of DSP functions for optimal use in different scenes/environments (Output effects, 4 in/4 out matrix mixer)
- Supports Dante daisy chain; this allows two Dante Compact Processor models to be connected without a network switch
- Compatible with Dante Domain Manager and Dante AES67 Mode
- Flexible scene preset function allows to work in different area situations (Up to 50 presets)
- Timer event function allows to automatically switch scenes at a specified time (planned to be compatible on a future version update)
- 2 types of user control software available for Windows/Mac/iOS/Android devices:
 - For integrators:** input/output routing selection, DSP/design/scene settings of the complete system, etc.
 - For end-users:** simple app design for only the necessary functions such as area volume settings, etc.
- Remote control via GPI and Dante
- Half-rack mountable size
- Equipped with indicators that show LAN/Dante connection status and sample rate
- Equipped with signal indicators that monitor line output signals
- Configurable reference level (via remote control only)
- Surface rack mountable angles for installation under desks included
- Optional accessories:
 - AC adapter PS-P1220E for redundant power supply available
 - Rack-mountable shelf AK-RS1 to install and store two Dante Compact Processor models in a 19 inch rack case