Dante Bridge

VNET2 to **Dante Network Bridge**

TANNOY

Quick Start Guide

Introduction

This Quick Start Guide presents only the essential information required to properly unpack, connect and configure a Dante Bridge. Please consult the full Dante Bridge Manual for additional detailed information.

Important safety instructions

Please carefully read following instructions and safety information and retain for future reference. Heed all warnings and follow all instructions.

- Do not remove covers. There are no user-serviceable parts inside. Please refer servicing to qualified service personnel.
- Only use attachments/accessories specified by the manufacturer.
- Servicing is required when the apparatus has been damaged in any way. Damage can occur when liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or excessive moisture, does not operate normally, or has been dropped.

Regulatory compliance

This product complies with the EMC Directive (89/336/EEC) as issued by the Commission of the European Community.

Compliance with these directives implies conformity with the following European standards:

- EN55103-1 Electromagnetic Interference (Emission)
- EN55103-2 Electromagnetic Susceptibility (Immunity)

This product is intended for operation in the E2 (commercial & light industrial) and E3 (urban outdoors) Electromagnetic Environment.

What is VNET2 ?

VNET2 is next generation VNET with the capability of transporting 2 channels (one AES3 stream) of high quality uncompressed digital audio on the same cable as the control network.

Like VNET and other similar networks, VNET2 uses Cat5 cabling to attach many devices using a simple cabling scheme without requiring any other network equipment such as hubs.

A standard AES3 digital audio signal is typically capable of spanning 100 m.

VNET2 increases this to a total span of 400 m with 96 kHz sample rate digital audio, or 600 m with 48 kHz sample rate. The total span of the network is at least 1 km without repeaters and without digital audio. (VNET2 products automatically adjust themselves to any incoming sample ate between 32 kHz and 9 6 kHz).

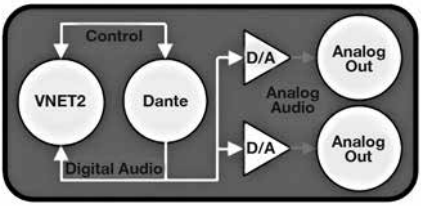
There is no maximum length for a single span within these limits and individual products will safely bypass themselves from the network if they are unpowered, allowing the other devices to work normally.

Dante Bridge

Dante is an Audio Networking technology developed by Audinate. It allows many channels of uncompressed digital audio, and control data to be conveyed down a standard Ethernet network. The VNET2 Dante Bridge allows VNET2 speakers (such as QFlex) to be seamlessly integrated into Dante systems with the minimum of fuss. Analog outputs allow the Bridge to be used with products that do not have VNET2 Interfaces, such as VNET speakers and SC1 controllers.

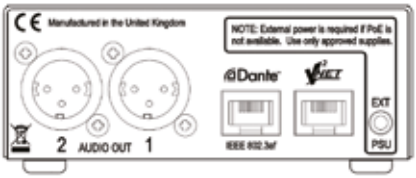
- Makes VNET2 speakers Dante compatible
- Analog outs for use with VNET speakers
- Audio and control over the same network
- Rugged steel enclosure
- Free-standing or rack-mount options
- Powered by Power Over Ethernet (PoE)
- Optionally powered by companion PSU
- No special cables

Functional diagram



As can be seen, the control data within Dante is bidirectional, and can flow from the Dante network to the VNET2 device and vice-versa. Similarly, audio channels within the Dante network can be routed to a VNET2 device. The same audio channels are also available on analog outputs for use with devices that do not have VNET2 digital inputs.

Connections



VNET - The VNET2 network socket carries network control data,and may also contain AES3 digital audio from the Dante network.

Dante - The Dante network connection, which may carry Control and Audio data.

Analog Out - Audio outputs for feeding non-VNET2 products.

EXT PSU - For applying power from the companion external power supply if a Power Over Ethernet (PoE) Ethernet Switch is not used to power the unit.

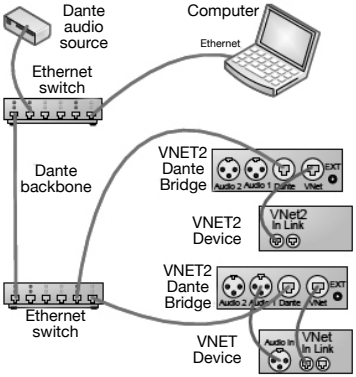
Compatibility

The VNET2 Dante Bridge is compatible with VNET or VNET2 devices. However, only VNET2 devices will be able to accept the digital audio channels as audio inputs. All VNET2 data (including the AES3 stream) will pass through a VNET device without any problems, and the VNET device will of course respond to networked control as usual. Standard VNET device may still be controlled from Dante, but will not be able to accept digital audio from Dante. Instead, the Analog outputs from the Bridge would be used to feed one or two analog inputs on the product.

Typical Applications

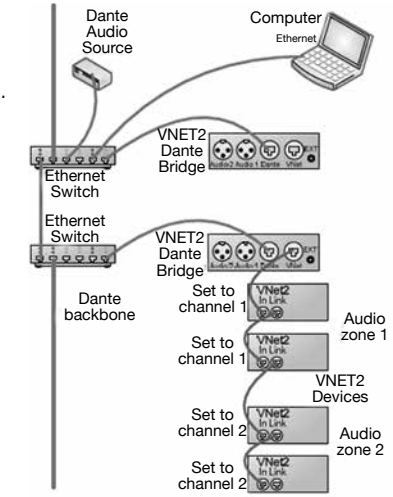
In the simplest case, the PC would connect directly to the Ethernet network so that the computer can get VNET control data onto the Dante network. A Dante Bridge would then convert the Dante control data to VNET for controlling a VNET device. This bridge would also route digital audio channels from the Dante network to the VNET2 device.

Simple Application



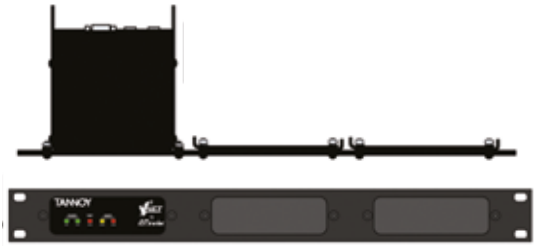
A more sophisticated system might comprise many VNET2 devices, all connected to one VNET2 Dante Bridge. Two audio channels could be obtained from the Bridge and used to feed two zones of devices. Of course, several Bridges can be added to this scheme, each one feeding another VNET2 device.

2-Zone Application



Accessory Racking Kit

The VNET2 Dante Bridge may be used free-standing or 19” rack mounted using the optional rack mounting kit. This kit comprises of a panel which can accommodate up to three accessories (the VNET USB / RS232 interface being another example) in 1U of rack space. Unused positions are neatly blanked-off. The supplied brackets make the process of mounting the accessories quick and easy.



Technical Specifications

VNET2

Cable type	Category 5 UTP (or better)

Dante

Speed	100 base T
Connector	Standard RJ45

Analog Audio

Connector	3-Pin locking male XLR
Freq Response	20 Hz to 20 kHz +-0.2 dB
THD	<0.005% typ. At 1 kHz
Dynamic range	114 dB (A weighted)
Max. output level	+10 dBu into 600 ohms

Overall

Weight:	500 g
Power	External 12 V DC* or PoE (5 W max)
Case	Steel

* Use only approved Power Supplies

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