

## Robust Location Two Channel Dante® / AES67 Network Audio Interface



**AoIP22**

### Highlights

Powered by  
PoE

Two Balanced  
Output Channels

Dante® / AES67  
Network Audio

Up to  
96k/ 24 bit

Two Balanced  
Input Channels

Robust Aluminium  
Construction

### Overview

Packaged in a small & rugged format and designed for outside broadcast, theatre and location applications.

The AoIP22 is designed to easily and quickly interface existing analogue equipment to a Dante® / AES67 network audio system. Being powered by PoE means that only one cable needs to be connected to the network to carry both audio and power, providing flexibility and saving time on installation.

Robust proven construction techniques, simple reliable interface and excellent specification will help make your technician's life hassle free. Whilst the low cost and long asset life will keep the accountant satisfied.

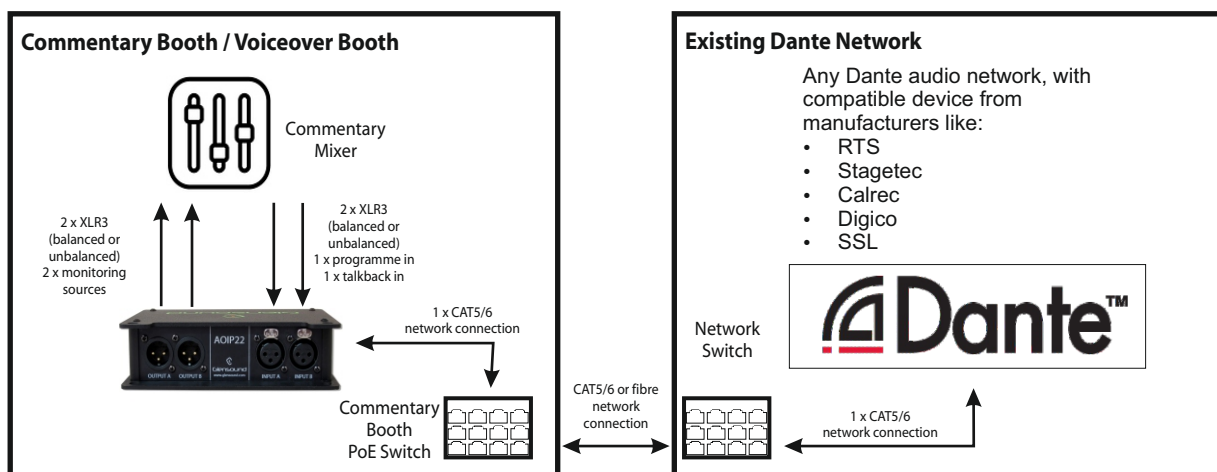


**AoIP22**

## EXAMPLE APPLICATION

### Interface To Existing Dante Network

#### Commentary Unit Connection To An Existing Dante Network



There are over 150 manufacturers that design Dante compatible equipment. In this example, the broadcaster has an established Dante® network. This is most likely to be an audio console, or an intercom system.

The broadcaster needs to expand the network by adding an existing commentary booth / voice over position. Using the AoIP22, the commentary position can be added to the existing Dante® network very cost effectively.

The AoIP22 is located in the commentary booth, and connected into the broadcast network via a single CAT5/6 cable.

The Glensound GS-CU008A is a popular and widely used commentary unit by broadcasters. It provides a programme output, and has a talkback outputs. These connect to the inputs of the AoIP22 via XLR connections.

The AoIP22 outputs connect to the headphone monitoring inputs on the GS-CU008A via XLR. This allows the commentator to hear 2 audio channels. These are typically the programme audio, and talkback return.

The audio routing can be configured via the Dante® Controller software. Simply run Dante® Controller on any PC connected to the network. All available sources and destinations will be shown on the AoIP22, and all other Dante® compatible devices on the network. Click the check boxes to route the audio in the desired directions, and the system is now ready to be used.

Audio routing only needs to be configured by Dante® Controller on the first time the AoIP22 is connected to the network as all routes are stored locally on the device.

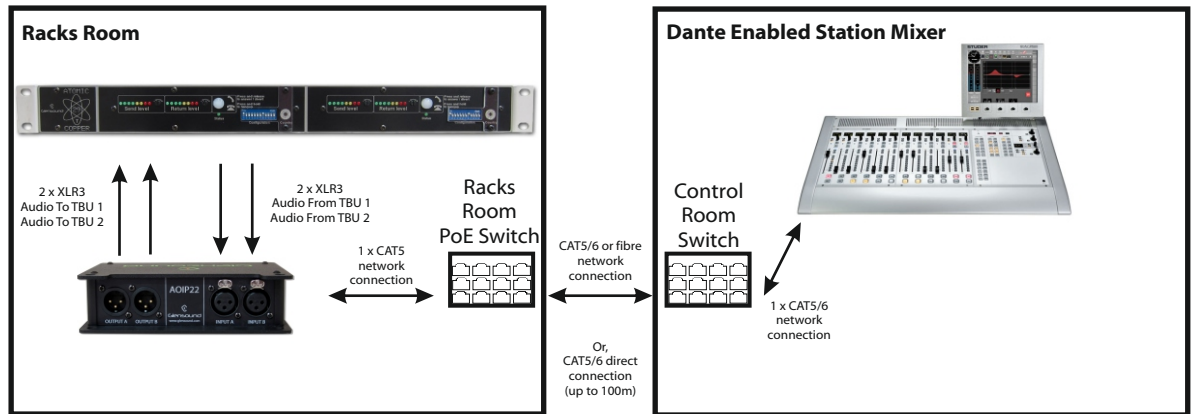


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## EXAMPLE APPLICATION

### Interface To Existing Codec or TBU in Racks Room

Two channel audio interface to existing equipment



The AoIP22 is the perfect choice for installing in the back of a rack for interfacing legacy analogue audio equipment to your Dante network.

In this example the AoIP22 is used to interface to a two channel Telephone Hybrid but this could also easily be a two channel ISDN or Ip Codec. The AoIP22 is installed in the back of the rack using cable ties through the fastening points.

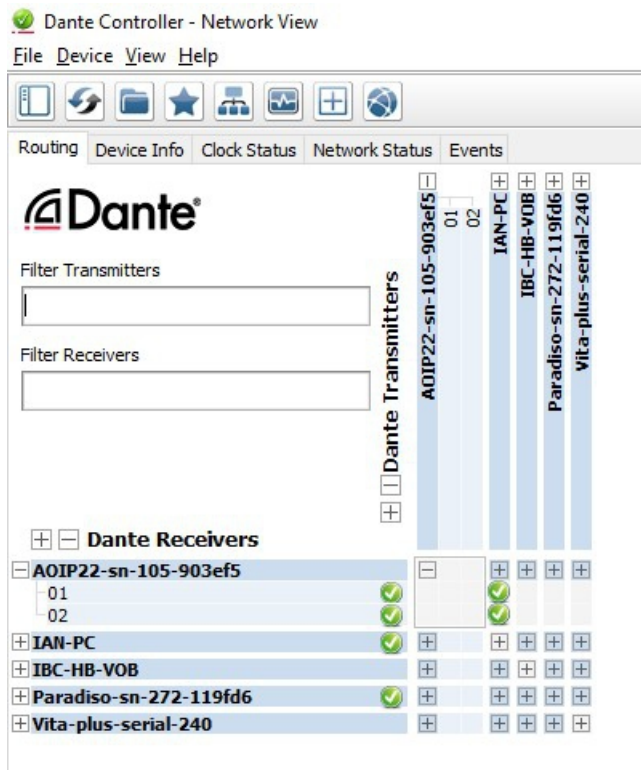
It is then connected to the network switch in the station's racks room, this switch provides power to the AoIP22 via PoE. If the switch doesn't supply PoE then a mid span PoE injector can be used.

The two audio inputs to the AoIP22 are connected to the two output audio circuits of the telephone hybrid, and they are converted to network audio streams sent across the network to stations desk where they appear as two input channels.

Two return clean feed output circuits are routed across the network from the desk to the AoIP22s outputs. These are then connected on XLR cables to the two audio inputs on the telephone hybrids.

Using the AoIP22 in this way will allow you to continue using your existing analogue based equipment on a modern networked audio infrastructure.

Dante® / AES67 Audio Interface



Dante® Controller by Audinate is a free application that controls all your Dante® enabled devices on your network.

It will automatically find the AoIP22 and allow you just by the click of a mouse to route audio circuits to/ from it.

Dante® network audio has become very popular because it just works and it's so easy to use. Yet underneath the simple trouble free setup is a very sophisticated Audio over IP (AoIP) protocol working in real time across standard network switches with clever digital clock synchronisation to keep all equipment working in perfect harmony.

## PRACTICAL FEATURES

### BELT CLIP

A removable beltclip is supplied fitted to one side of the AoIP22. Although unlikely to be used to fasten the unit to a belt, it is flexible enough to be used to fix the AoIP22 in lots of different places.

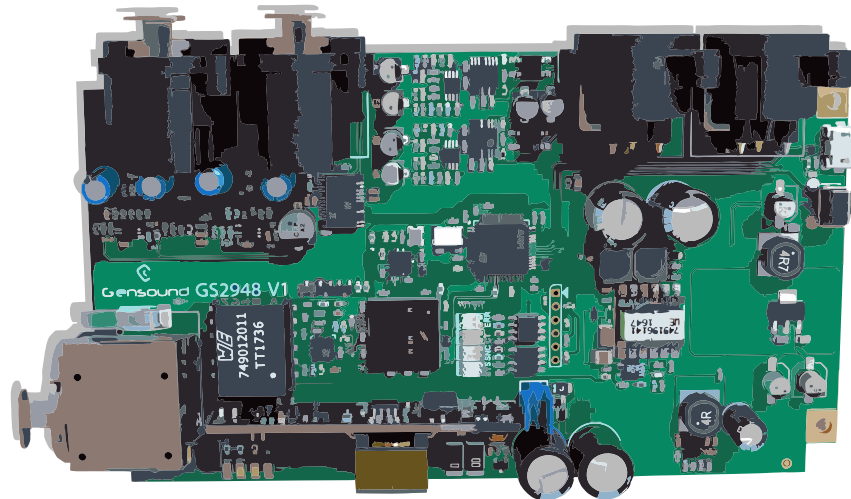
### RUBBER FEET

If the AoIP22 is to be sat on a desk or the back of a workbench, then the beltclip can be removed and rubber feet are fitted to stop it sliding around.

### CABLE TIE HOLES

All four front corners of the AoIP22 feature large extremely strong holes that are ideal for threading cable ties through. This makes temporarily installing the unit in out of the way locations very easy.





AoIP22

## SPECIFICATION

**AUDIO****Frequency Response**20Hz to 22k  $\leq \pm 0.25$ dB**Maximum Input Before Clip**

+18dBu

**Maximum Output Level**

+18dBu

**Input Impedance**>20 k $\Omega$ **Output Impedance**50  $\Omega$ **Distortion (Analogue in to Dante Out)**0.0013% THD+N @ 1kHz  
Reference to +18dBu output**Distortion (Dante in to Analogue Out)**0.0026% THD+N @ 1kHz  
Reference to +18dBu output**Noise (Analogue In & Out @ 0dBu)**

-92dBu (Residual)

**Dynamic Range**

108dBs

**Crosstalk (0dBu input to output 1k tone)**

-135dBu

**Output Type**

Electronically balanced (can be wired unbalanced) on Neutrik 3 pin XLR plug

**Input Type**

Electronically balanced (can be wired Unbalanced) on Neutrik 3 pin XLR socket

**Digital Full Scale**

+18dBu = 0dBFs

**PHYSICAL****Size**153 x 105 x 41mm (WxDxH)  
Excluding Beltclip**Weight**

420g

**Mechanics**

All aluminium construction, anodized and laser etched

**POWER****PoE**

2.6 Watts

**Source**

PoE Enabled Switch or Mid-Span PoE Injector

**NETWORK AUDIO****Compatible Audio Networks**Dante<sup>®</sup> uncompressed, low latency audio.  
AES67**Network Connection**

Neutrik RJ45 EtherCON

**Dante Network Sample Rate**

44.1k, 48k, 88.2k, 96k

**AES67 Network Sample Rate**

48k

**INCLUDED ITEMS****Handbook**

Paper Copy (Download also available)

**Rj45 Network Cable**

2 metre Cat5 Rj45 plug/ Rj45 plug cable

**Beltclip**

Fitted

Dante<sup>®</sup> / AES67 Audio Interface