Application Diagrams for Dante Systems

Audio system diagrams showing some of the most common scenarios of AV applications





Contents

Each section includes diagrams of analog and Dante configurations, and most include a diagram showing the interconnection of domains within an environment.

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BROADCAST

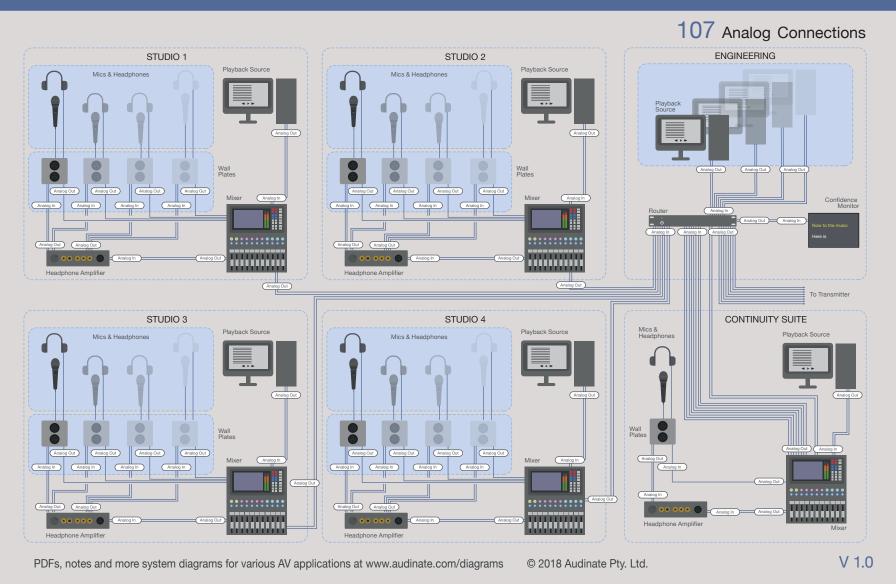
RADIO STATION

Abusy radio station may have a number of studios, some for voice and music and even a live room. The output of each of these needs to be routed at the appropriate time to the right channel. They may also incorporate external audio feeds and central music servers.

Dante significantly simplifies the wiring of your broadcast facility. Using IP networking, connections between all studios can be on a redundant loop. Any studio can pick up any channel of audio and the output of each studio can be connected at the right time to anywhere you choose.

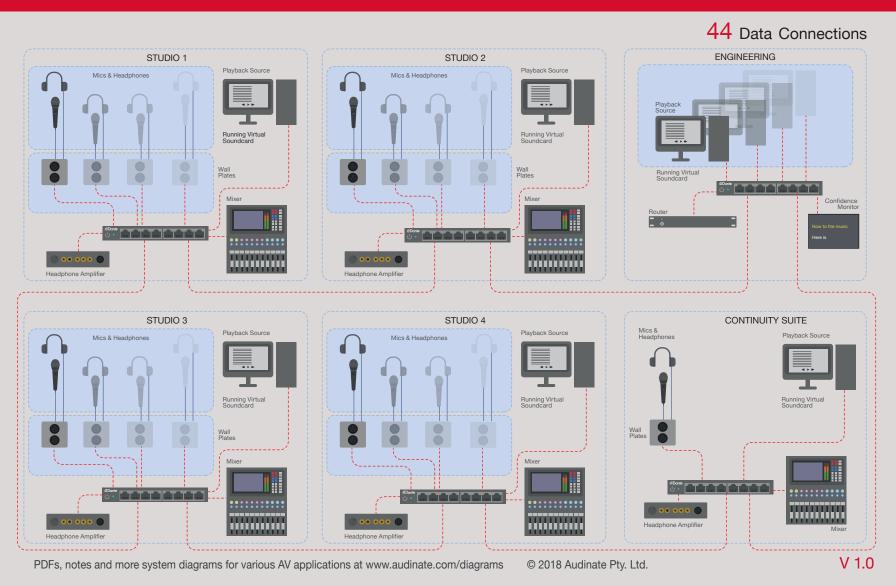
Broadcast: Radio Station using Analog





Broadcast: Radio Station using Dante







TOURING AND VENUE

ive performances have dozens of inputs, utilizing many microphones, radio mics and playback. This audio needs to be split to the monitor engineer and also sometimes to a broadcast or recording console. There are further outputs to different amplifier racks to drive the main PA and monitor loudspeakers.

Dante significantly simplifies the audio infrastructure, removing dozens or even hundreds of analogue connections. Cat-5 or fiber links connect it all together and you can use secondary Dante connections to give you more resilience. If you want to connect to broadcast or to a recording console - it's just one cable.

Dante Domain Manager for Live Performance Venue Applications

A busy performance venue often contains more than one audio system. It will have

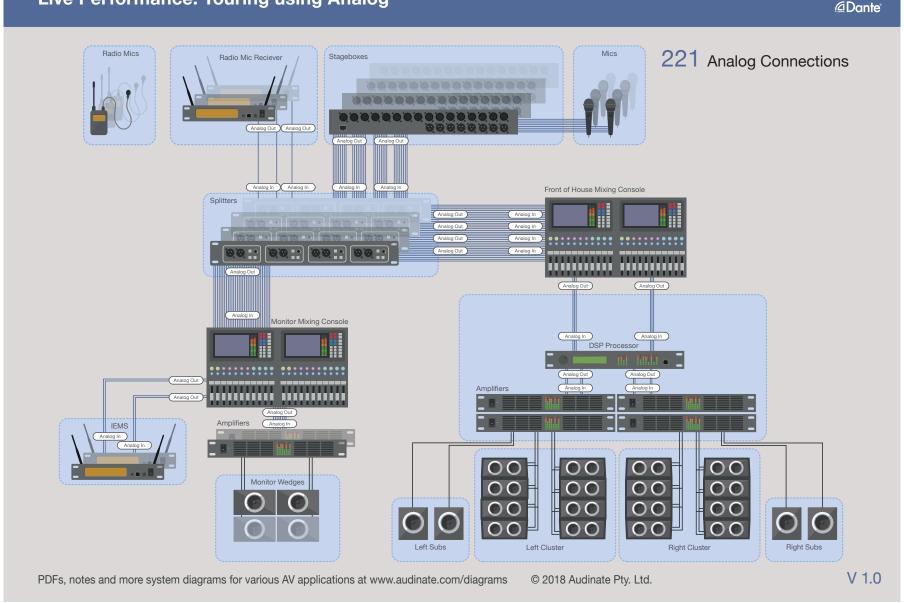
an in-house PA system, but will have to accommodate visiting acts who like to use their own system. Dante Domain Manager ensures that a temporary network connection from a visiting act is locked down and can only access part of your system such as the house delay loudspeakers.

You can also put your paging system and evacuation system on separate Domains, ensuring that the production audio team can't change these important building services when they make changes to the house system for a specific event.

Dante Domain Manager allows you to connect between systems whilst keeping everything separate to ensure security.

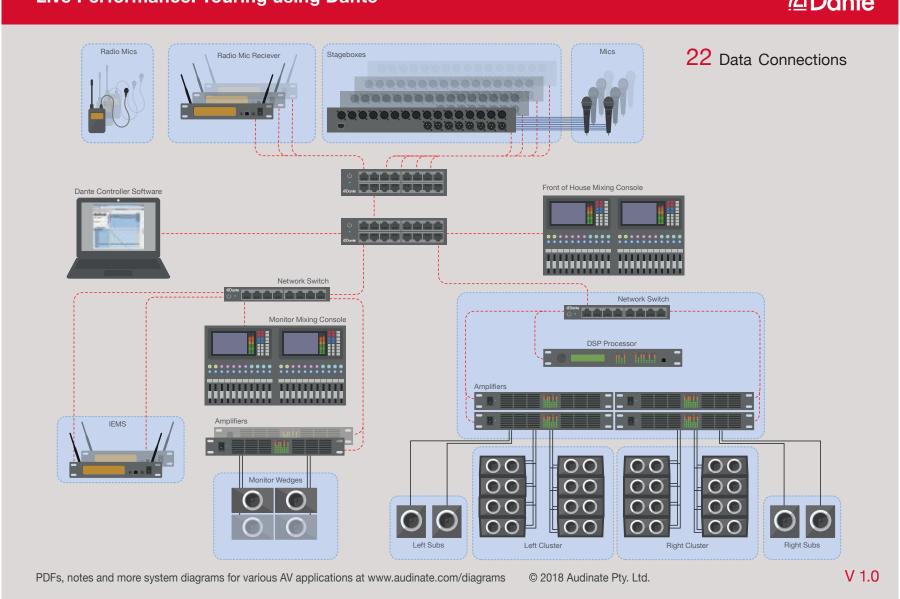
Live Performance: Touring using Analog





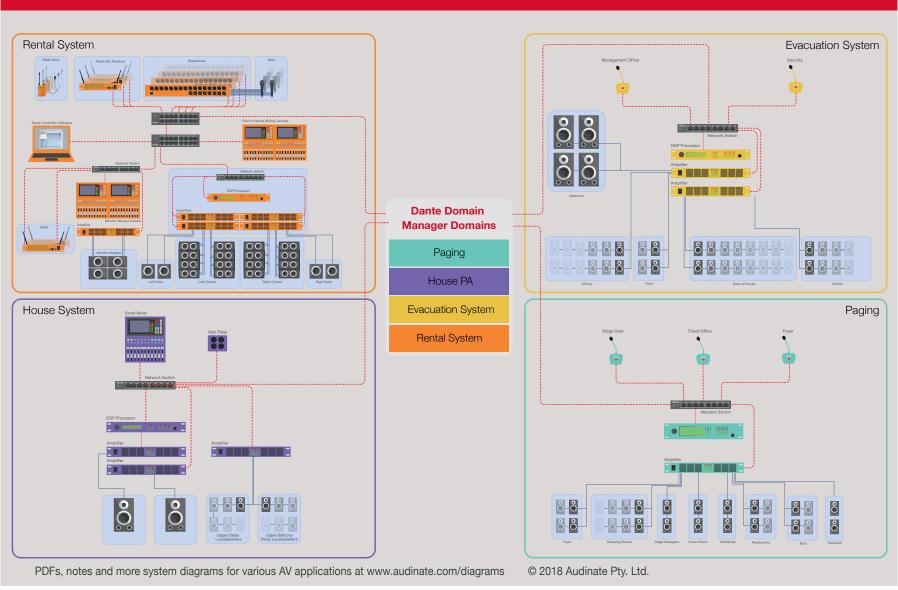
Live Performance: Touring using Dante





Live Performance: Venues under Dante Domain Manager







HOSPITALITY BALLROOM

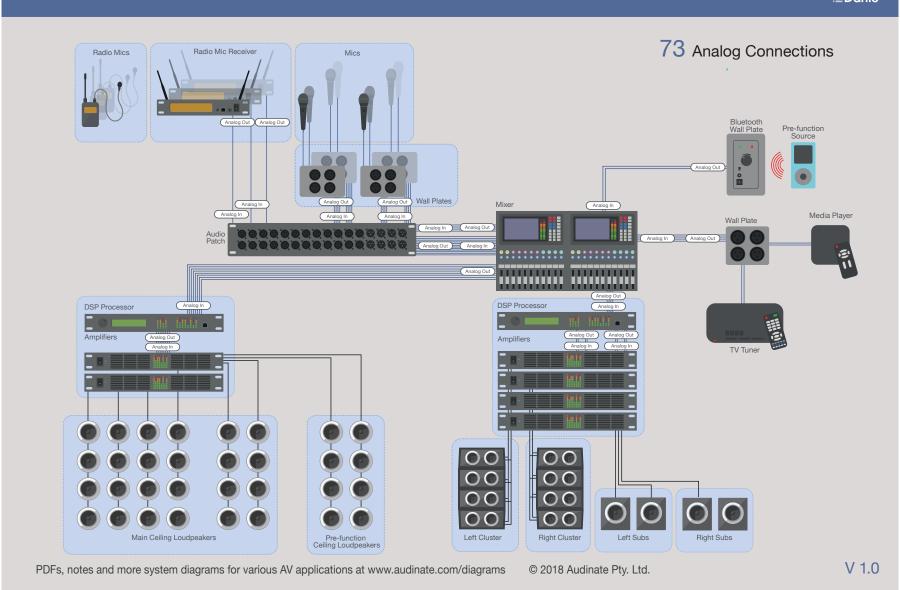
Ballrooms and similar entertainment spaces are extremely busy environments where no two days are the same. Microphones and other equipment will connect into different points around the room. Many suites have room dividers letting you split the space up for several simultaneous events. This can result in the need for a lot of analog cabling to cope with all the different possible connections.

Transform these multifunctional spaces with Dante. Connect your mixing console anywhere on the network and use Dante controller to split the space into discrete spaces for simultaneous events.

Using standard IT infrastructure you can have dozens of audio channels at any connection point in the room. Running audio to a nearby reception area is easy, it's just another output on the network.

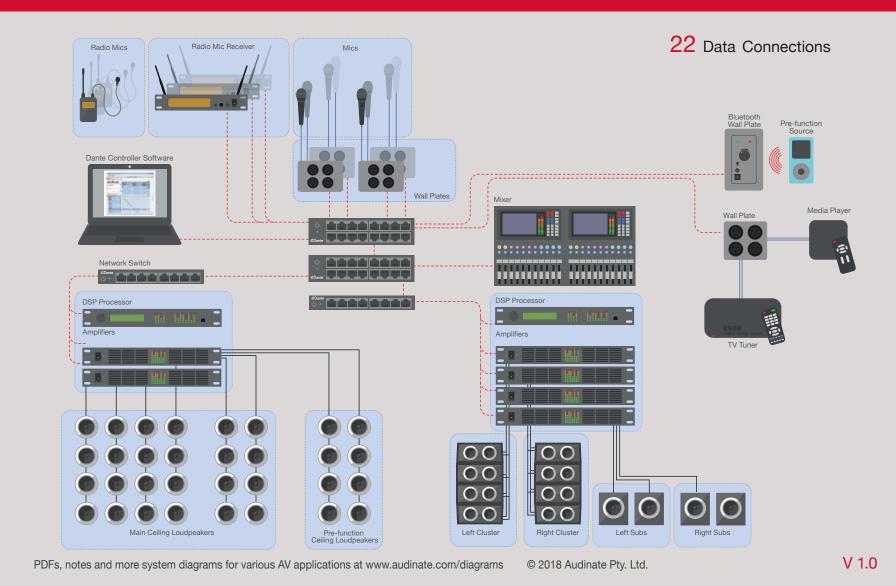
Hospitality: Ballroom using Analog





Hospitality: Ballroom using Dante







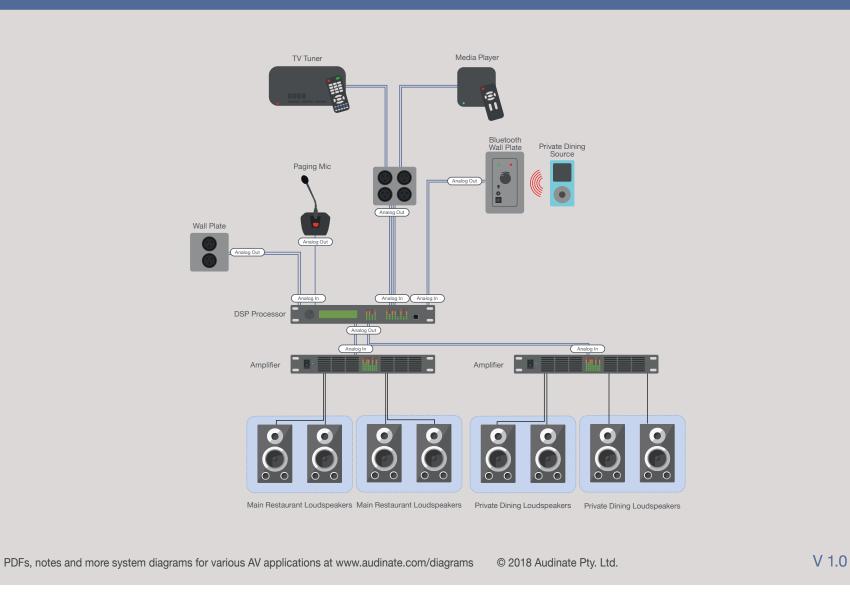
HOSPITALITY

TWO ZONE BAR

A small bar or restaurant may have two areas with their own volume control. You need to be able to plug in music sources, the occasional microphone and even Bluetooth audio from mobile devices. Some premises will need a paging microphone, and some will relay sound from their television system.

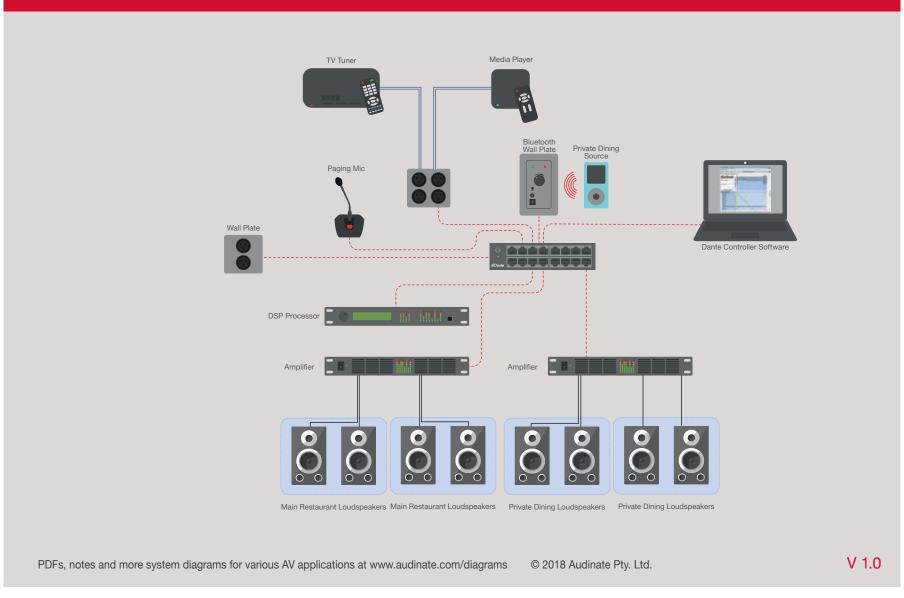
Dante simplifies connectivity, even in small set ups. Using industry standard, low cost Ethernet cabling, everything runs back to one or more network switches. Using a networked connection, you have no concerns about hums and buzzes associated with analog connections.

You can expand your system at any time simply by connecting more devices and switches ato your network. Making changes to a system using Dante is easier, less expensive and more feasible than with many analog systems. There is no need to reroute wires as any of the network jacks can be used for any Dante-enabled device. For example, a mixer can be moved out to the patio for a special dinner and back inside for the dancing with no configuration changes needed.



Hospitality: Two Zone Bar using Dante







STADIUM

All stadium projects have to use networked audio. It's the only way to distribute audio to the many different locations around the complex. Dante offers primary and secondary connections giving you redundancy. It's likely you'll be using fiber between racks because of the large distances involved.

Stadiums are multifunctional spaces, used for sport as well as concerts and special events. Hospitality areas are an

important source of revenue, even when there isn't a game on. You can run each area as an individual sound system and still have emergency or general paging announcements running across the Dante network.

Dante Domain Manager allows you to connect between event space systems whilst keeping everything separate to ensure security.

Stadium under Dante Domain Manager △Dante® North Stand Clusters East Stand Clusters **36** Data Connections 00 Commentator 00 Concourse Rack 1 00 00 00 Wireless Mics Network Switch 00 00 00 00 DSP Processor Gooseneck Mic 00 Mic & Headphones Radio Receivers Amplifiers **Amplifiers** Amplifiers Input Plate **DSP Processor** DSP Processor → South Upper Concourse → South Lower Concourse Network Switch Music South Gates Network Switch Network Switch South Bars Control Room East Upper Concourse East Lower Concourse East Gates Loudspeakers North Roof Rack East Roof Rack East Bars Hospitality 5 Hospitality 6 Gooseneck Mic ********** Running Virtual Soundcard Hospitality 7 Hospitality 8 Mixer Input Plate Dante Concourse Rack 2 Network Switch Network Switch West Roof Rack South Roof Rack Network Switch Network Switch DSP Processor Network Switch O · DSP Processor DSP Processor Back up Amplifiers Emergency Control Amplifiers Amplifiers Engineering PC Gooseneck Mic → North Upper Concourse North Lower Concourse North Gates 00 ÖÖ North Bars 00 00 → West Upper Concourse West Lower Concourse 00 00 Loudspeakers West Gates West Bars 00 00 00 00 Hospitality 1 00 Hospitality 2 Hospitality 3 Hospitality 4 Network Switch West Stand Clusters South Stand Clusters V 1.0 PDFs, notes and more system diagrams for various AV applications at www.audinate.com/diagrams © 2018 Audinate Pty. Ltd.



VIDEO CONFERENCING SUITE

Video conferencing suites and small meeting rooms need flexibility.

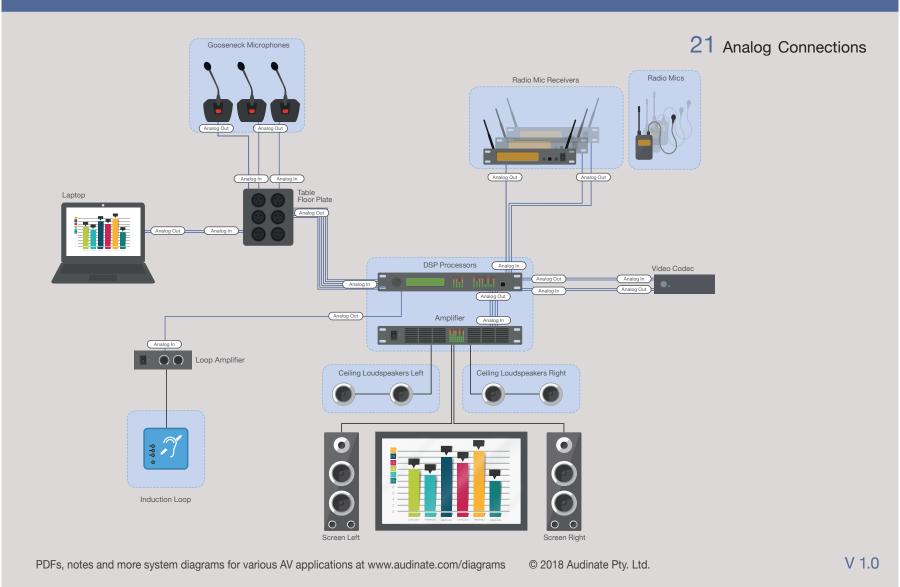
Different numbers of people may attend and you may have audio sources from more than one PC. With an analog setup you need to install cabling infrastructure for the largest possible configuration, even though this may rarely be used. Increasing capacity in the future is difficult.

Dante provides flexibility and expansion as you need it. You can connect a number of microphones and PCs as you need them, just using a network connection. If you have more than one room, the microphones can be shared and used in each room as required.

Easily support secure BYOD (Bring Your Own Device) connectivity with a **Dante AVIO USB adapter.**

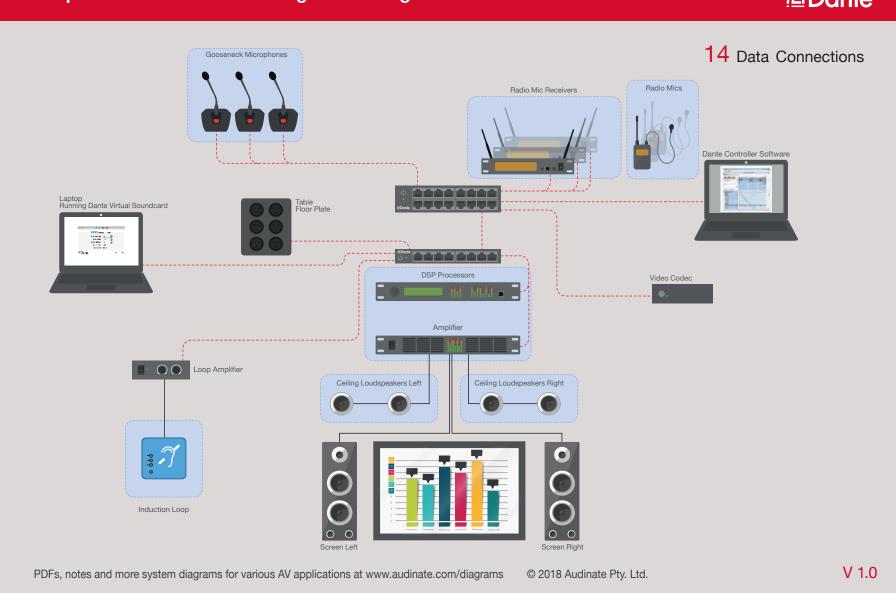
Dante Domain Manager for Corporate Environments

A multi-room AV setup uses Dante Domain Manager to ensure security between audio systems in each room. Setting each one up as a domain ensures that confidential or sensitive information is not available elsewhere on the network. You can manage temporary connections for one-off events and patch this into your permanent systems, confident that audio is only going where you want it.



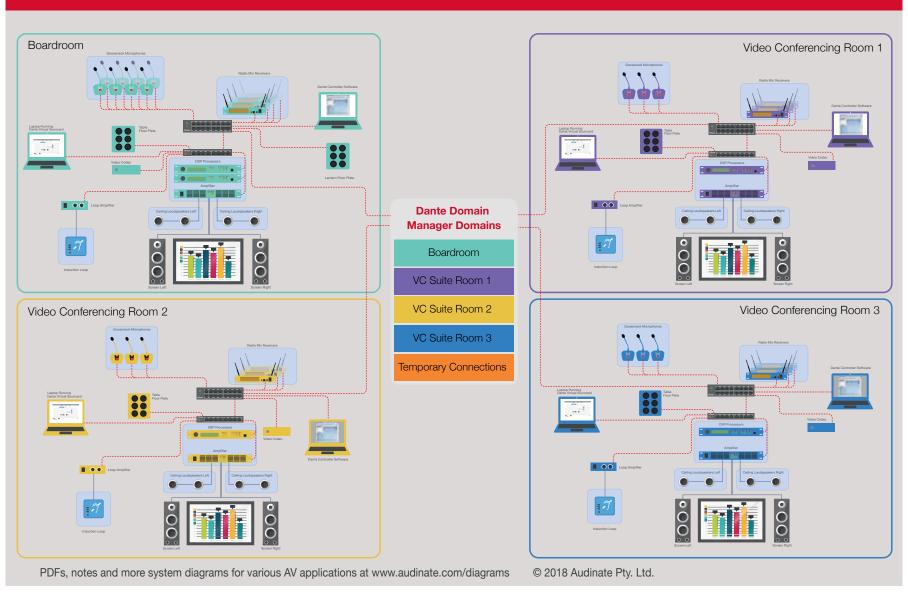
Corporate: Video Conferencing Suite using Dante





Corporate Environment under Dante Domain Manager







CORPORATE BOARDROOM

A boardroom can have many inputs:

delegate microphones, PC playback,
radio microphones and connections to
video conferencing. This can result in a lot
of wiring, which can be especially difficult
when this needs to be contained neatly in
an office environment.

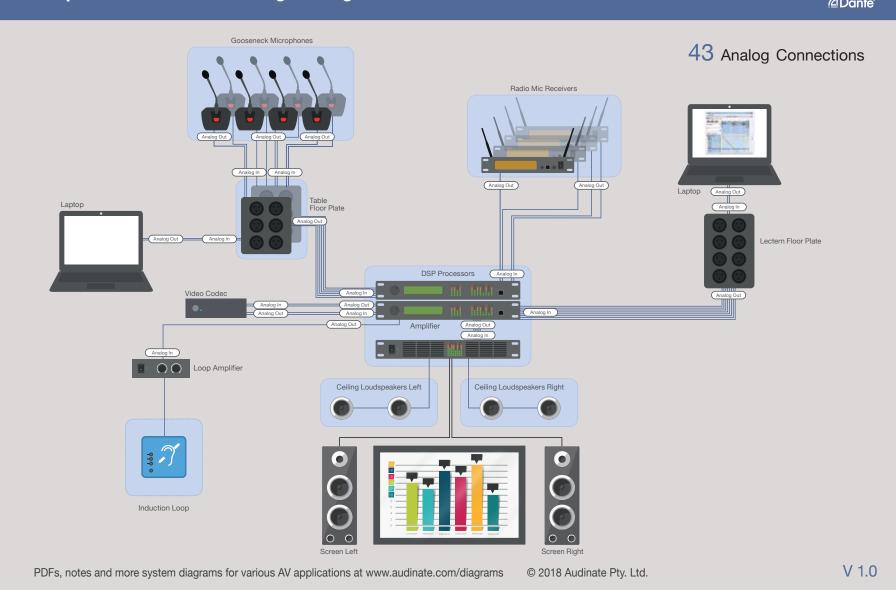
Dante redefines how audio connectivity works in a corporate environment. With all connections using standard IT connections, you use less cable and can group connections at a local switch, without the need for many individual cable runs.

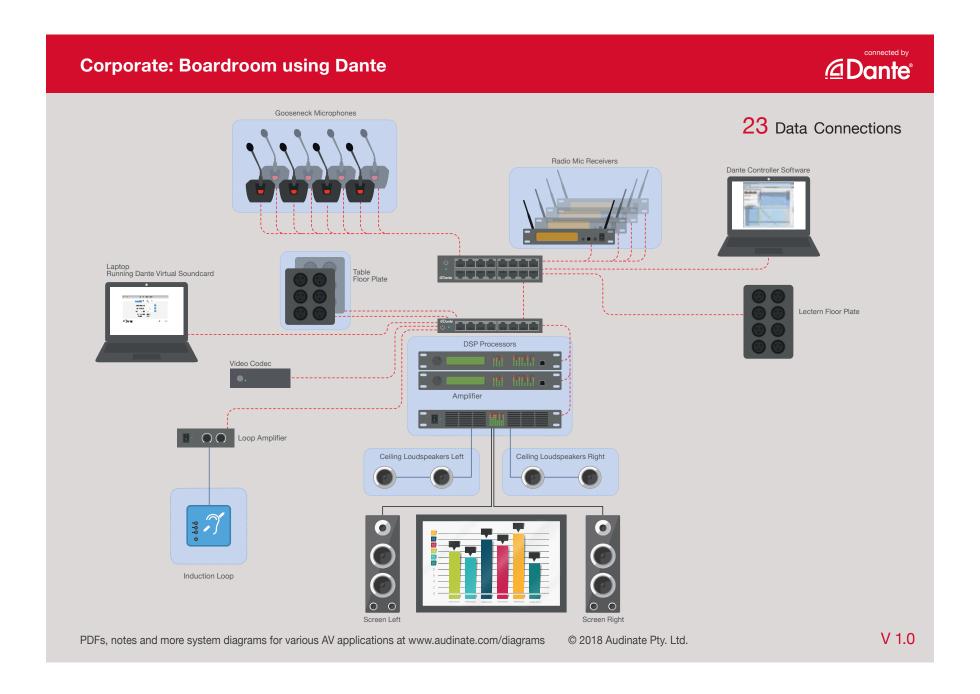
Audio signals can be patched as you need them and additional audio sources just connect into the network. No more messing around with headphone jacks from laptops. Create a high quality

networked audio connection using Dante Virtual Soundcard to connect to web applications such as Skype, WebEx or Microsoft Teams. Easily support secure BYOD (Bring Your Own Device) connectivity with a Dante AVIO USB adapter.

Dante Domain Manager for Corporate Environments

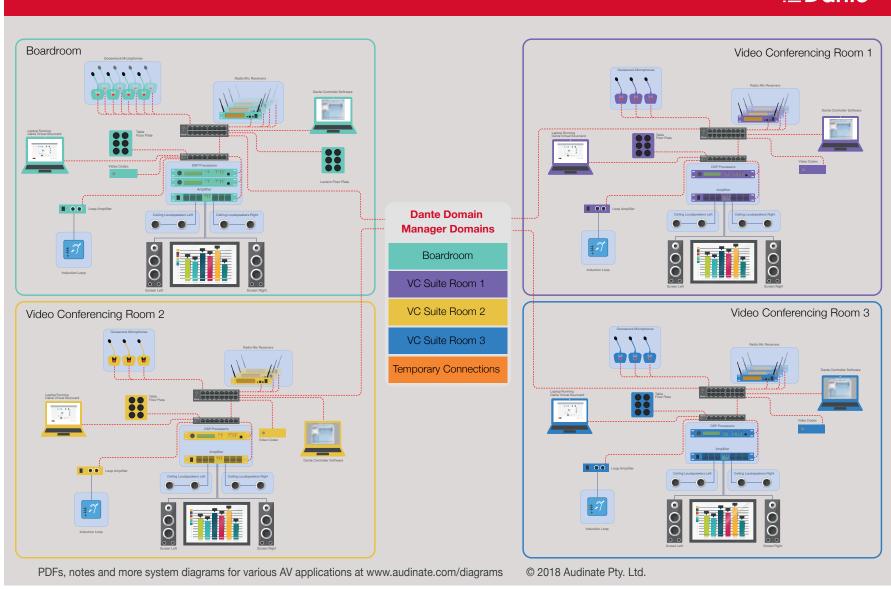
A multi-room AV setup uses Dante
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Corporate Environment under Dante Domain Manager







AV DOMAINS

Dante Domain Manager for Corporate Environments

A multi-room AV setup uses Dante Domain Manager to ensure security between audio systems in each room. Setting each one up as a domain ensures that confidential or sensitive information is not available elsewhere on the network. You can manage temporary connections for one-off events and patch this into your permanent systems, confident that audio is only going where you want it.

AV Domain member example: Boardroom

A boardroom can have many inputs: delegate microphones, PC playback, radio microphones and connections to video conferencing. This can result in a lot of wiring, which can be especially difficult when this needs to be contained neatly in an office environment.

Dante redefines how audio connectivity works in a corporate environment. With all connections using standard IT connections, you use less cable and can group connections at a local switch, without the need for many individual cable runs.

Audio signals can be patched as you need them and additional audio sources just connect into the network. No more messing around with headphone jacks from laptops. Create a high quality networked audio connection using Dante Virtual Soundcard.

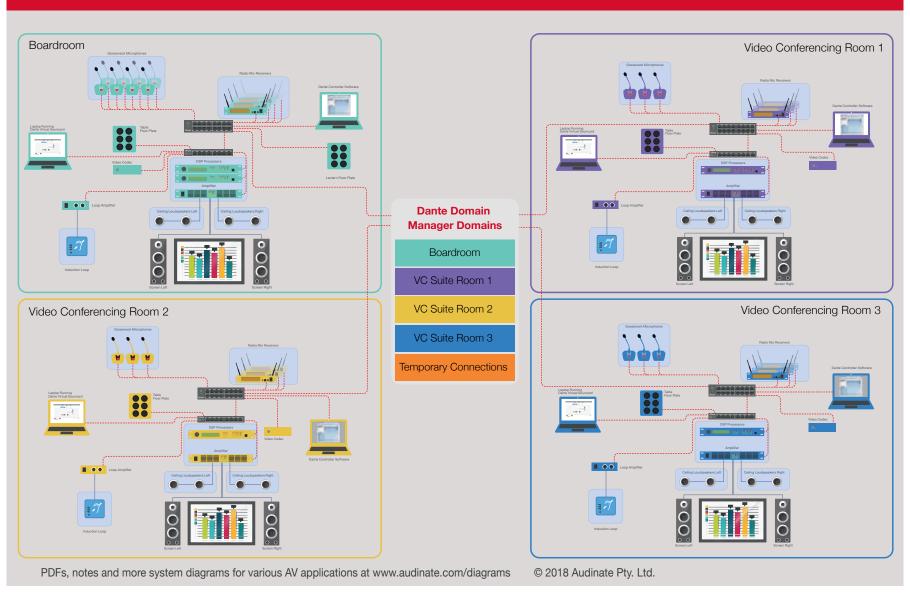
AV Domain member example: Video Conferencing Suite

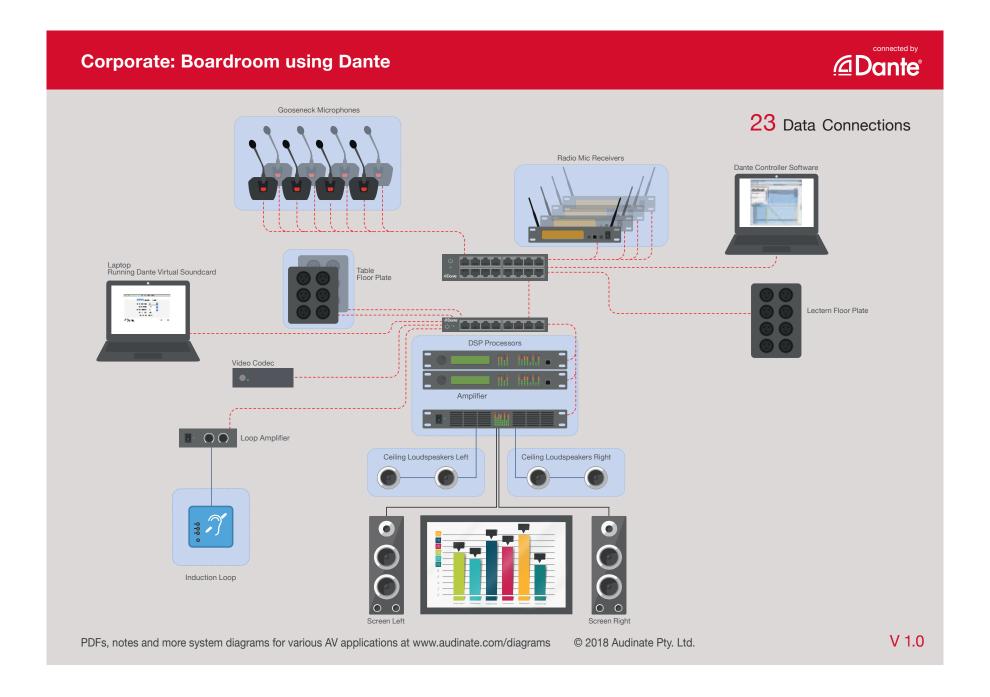
Video conferencing suites and small meeting rooms need flexibility. Different numbers of people may attend and you may have audio sources from more than one PC. With an analog setup you need to install cabling infrastructure for the largest possible configuration, even though this may rarely be used. Increasing capacity in the future is difficult.

Dante provides flexibility and expansion as you need it. You can connect a number of microphones and PCs as you need them, just using a network connection. If you have more than one room, the microphones can be shared and used in each room as required.

Corporate Environment under Dante Domain Manager

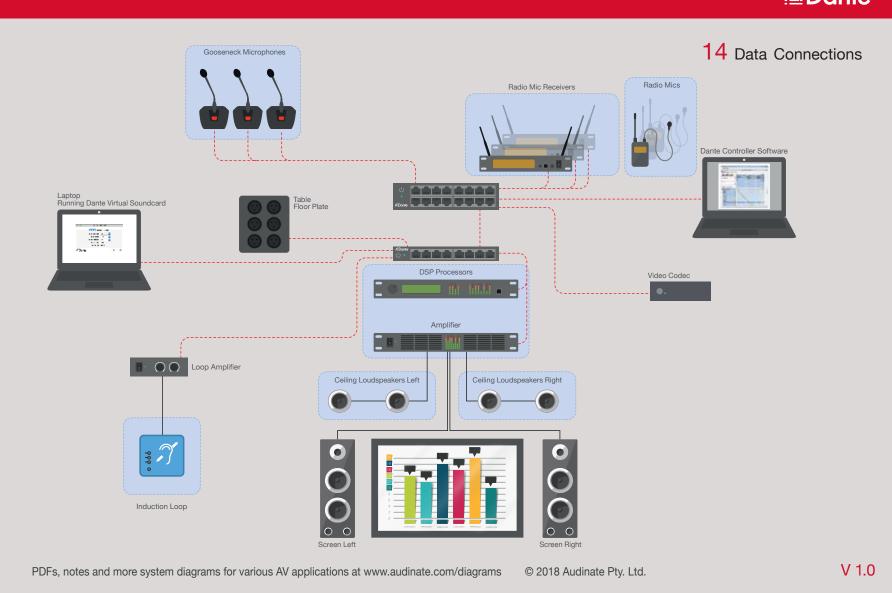






Corporate: Video Conferencing Suite using Dante







EDUCATION

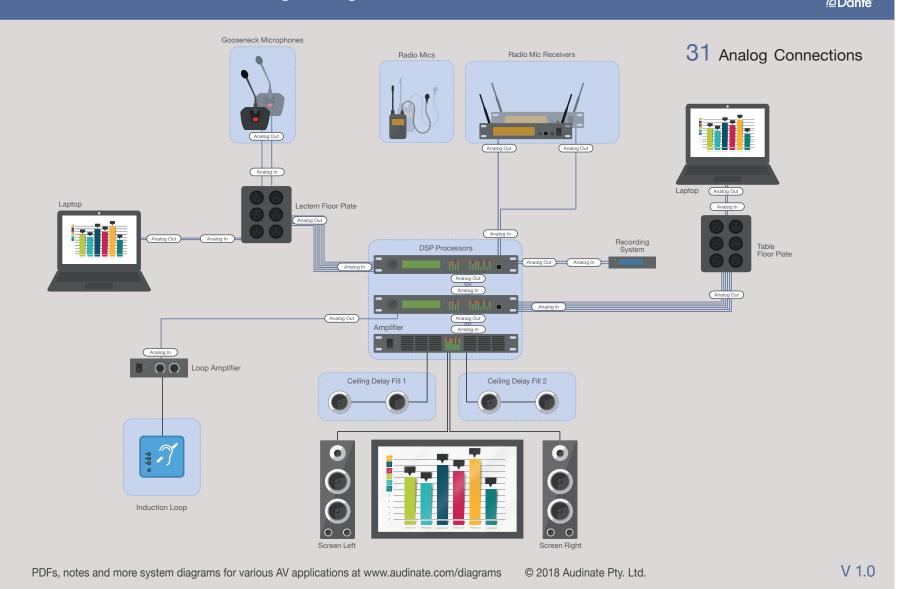
LECTURE HALL

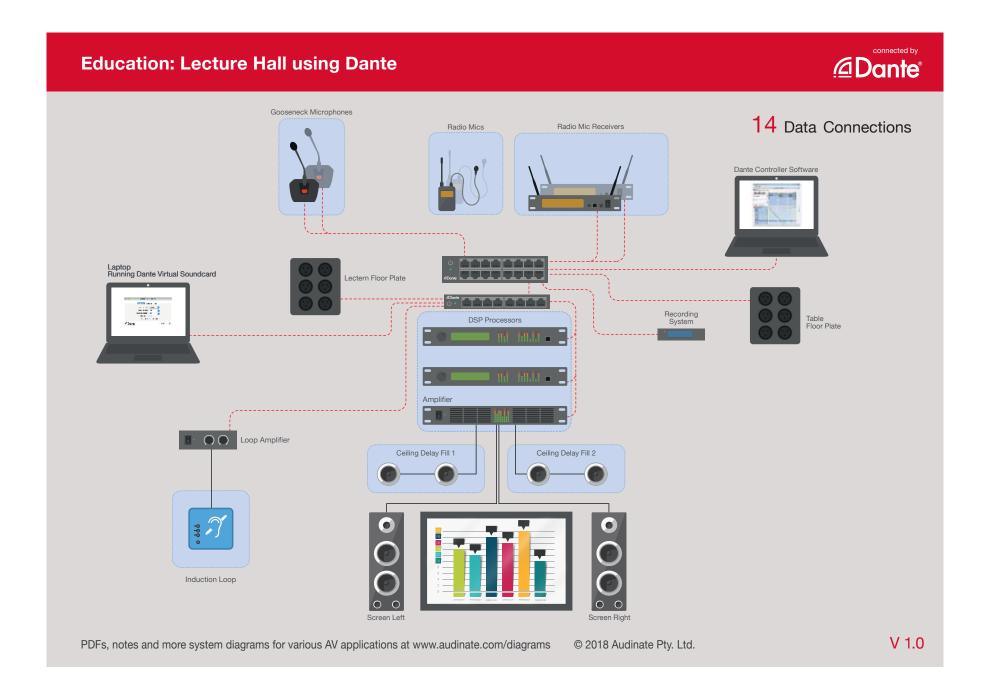
ecture halls are busy, multifunctional spaces. They have numerous audio requirements - radio microphones, table or lectern microphones, PC playback and the ability to provide a recording of events and a feed to the hard of hearing.

Dante provides educators with a modern, flexible infrastructure for busy lecture halls.

Simplifying connections to use standard IT cabling. Change and expand your system easily, just connect to the network.

This also gives you the flexibility to use your campus-wide infrastructure to send feeds of the event or to deliver paging announcements anywhere on campus.







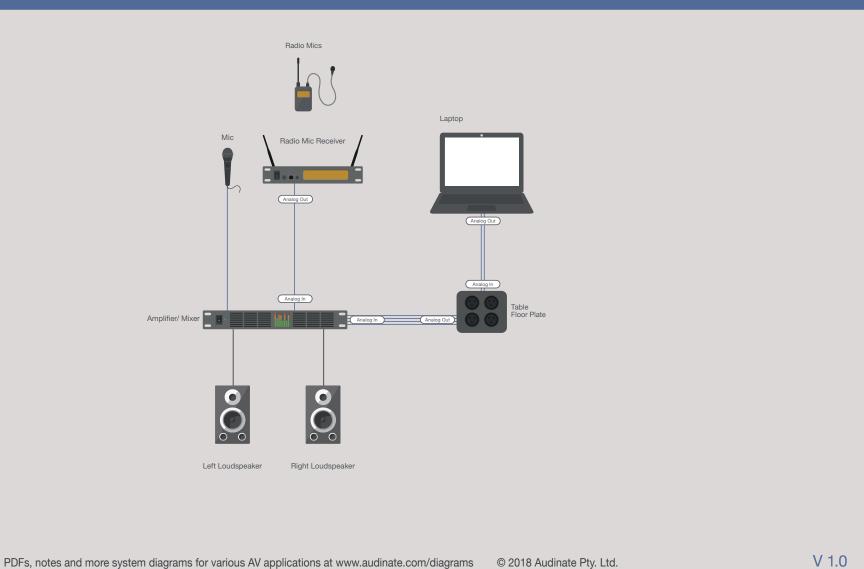
EDUCATION

CLASSROOM

A classroom often has simple requirements with a couple of microphone and simple audio playback.

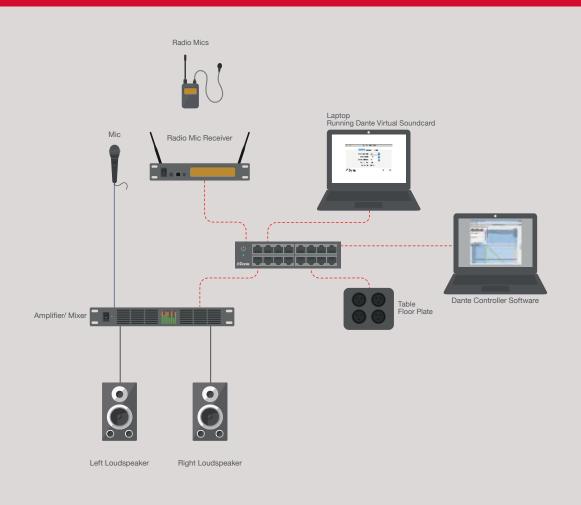
Dante offers simpler, cheaper cabling to achieve the same result. Adding more audio sources is a simple as plugging them into your network. Since it is a networked connection, Dante opens up the possibility of campuswide announcements with no additional infrastructure.





Education: Classroom using Dante





PDFs, notes and more system diagrams for various AV applications at www.audinate.com/diagrams

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HOUSE OF WORSHIP LARGE HOUSE OF WORSHIP

Alarge house of worship has challenging audio requirements from speech, to high performance music and even audio for video. Services are often streamed, too.

These big systems require a large audio infrastructure to deal with all the different inputs along with feeds to many public address and monitor loudspeakers.

With Dante, your audio connectivity is consolidated into a simpler, more flexible system using standard network switches and low cost IT cabling.

You've complete flexibility in routing audio from stage to the mixer to PA and monitor

feeds as well as to recording, streaming and other rooms within the building

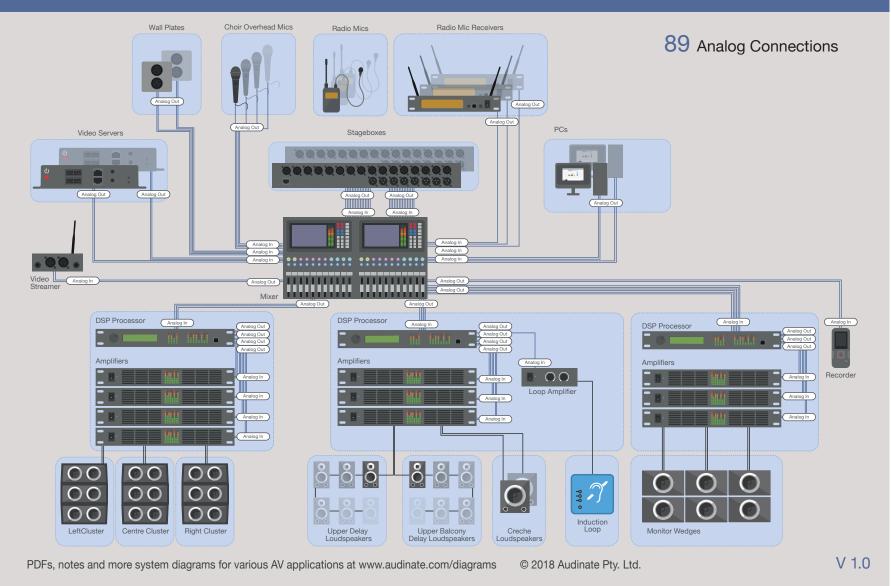
Dante Domain Manager for Large House of Worship Applications

Using Dante Domain Manager you can give your house of worship the security it needs. You can ensure that only people who are allowed access can make changes to any part of the audio system across the building.

By dividing your house of worship into separate domains, users can access smaller systems with no risk of upsetting the audio elsewhere.

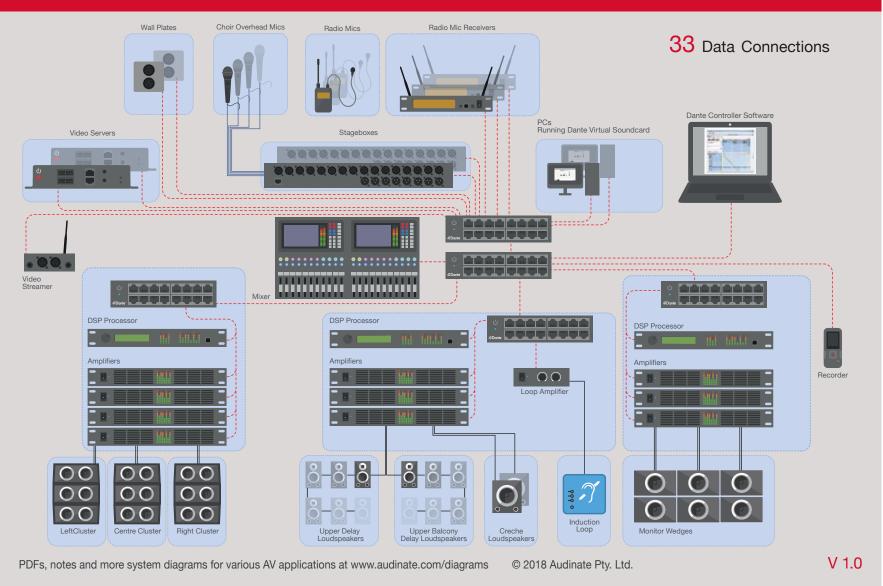
Large House of Worship using Analog





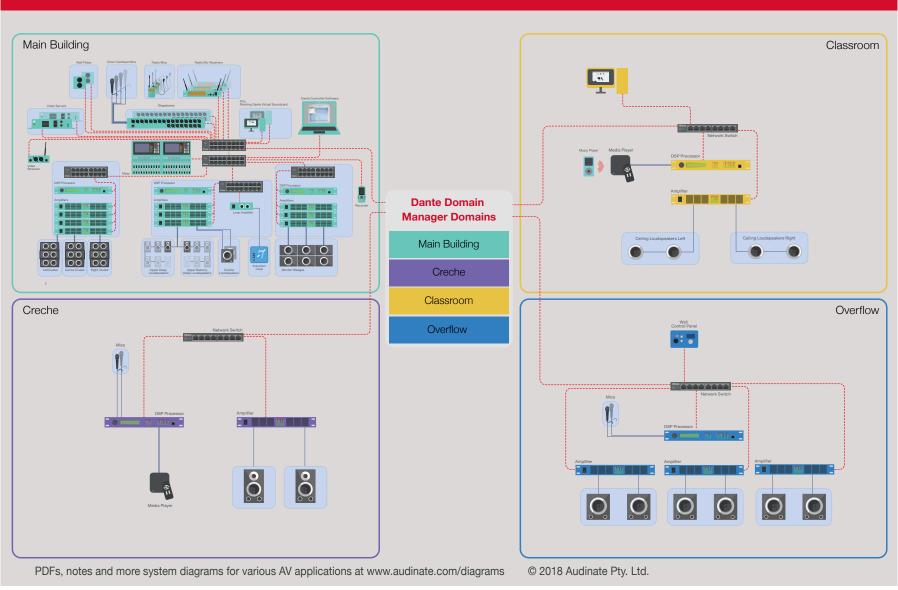
Large House of Worship using Dante





Large House of Worship under Dante Domain Manager





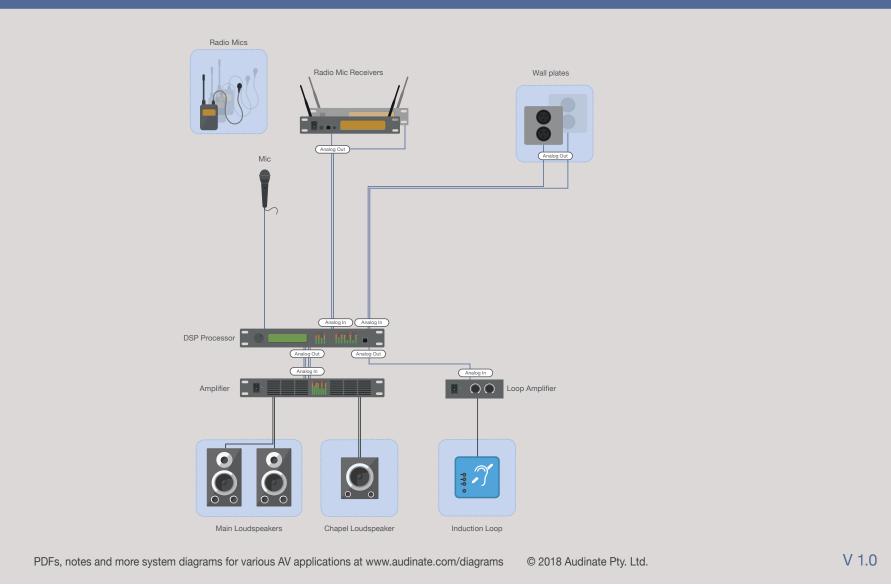


HOUSE OF WORSHIP SMALL HOUSE OF WORSHIP

Asmall house of worship has simple requirements with just a few microphones and perhaps a feed to a second area such as the chapel.

Dante simplifies cabling using standard, low cost network cabling into a single switch. Any IT-savvy person can install and terminate your audio connections. Using a networked connection, you have no concerns about hums and buzzes associated with analog connections. You can expand your system at any time simply by connecting more devices to your network.





Small House of Worship using Dante



