biamp.

TESIRA
PRODUCT CATALOG

Product Offerings 2024

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PLATFORM OVERVIEW

MICROPHONES

DIGITAL SIGNAL PROCESSORS

EXPANDERS, AMPS AND MORE

THE POWER OF THE PLATFORM

Tesira™ is our flagship open-architecture platform for networked audiovisual processing and signal distribution. Sophisticated programmable signal processing is the core of what Tesira delivers, providing a processing solution for every space type. Tesira DSPs are available in a configurable I/O card format with Tesira SERVER and SERVER-IO, fixed I/O with TesiraFORTÉ™, and a compact discreetly mounted form factor with TesiraFORTÉ X. Rounding out the platform are TesiraLUX™ video encoders and decoders, PoE+ and asymmetric amplifiers, paging stations, I/O expanders, and a variety of control interfaces.

All Tesira products can be configured using Tesira software and managed using Biamp SageVue™, helping you create solutions that enable effective communication. With a single networked platform, Tesira simplifies creating extraordinary audiovisual experiences.

Microphones

The Parlé™ family of Beamtracking™ microphones provides 360° room coverage with little to no setup or programming time required. Available in ceiling, pendant, and tabletop form factors, each microphone actively tracks and intelligently mixes conversations from around the room, ensuring seamless conferencing experiences every time.

Digital Signal Processors

Tesira SERVER and SERVER-IO are configurable I/O digital signal processors (DSPs). Tesira SERVER is built for maximum flexibility, allowing you to build out the rest of your system using expanders, making it a cost-effective choice while supporting future growth. Tesira SERVER-IO is highly configurable, with the option to use AVB, CobraNet™, and Dante™ on a single chassis in combination with analog I/O and VoIP/POTS telephony.

TesiraFORTÉ products are fixed I/O DSP available in different models optimized for specific applications including background music and court recording and featuring Acoustic Echo Cancellation (AEC). TesiraFORTÉ directly connects to soft codec technologies via its USB port and supports conferencing over VoIP and analog telephony devices.

Our TesiraFORTÉ X line of compact audio DSPs features multiple network and audio connection points and is optimized for soft codec integration. Five 1 Gigabit Ethernet ports are provided, four of which are PoE+ powered, and all of which support media and control traffic of various types including AVB, Dante™, and VoIP.

TesiraFORTÉ X also features Biamp Launch™, our automatic device discovery and tuning feature that provides more predictable system deployments with a single touch of a button.

Expanders

Tesira's PoE+ powered expanders are compatible with Tesira audio DSPs and support a variety of capabilities including additional analog audio channels, USB audio,

and Bluetooth® wireless technology. The EX-MOD device offers remote placement of a larger number of analog I/O channels, while the EX-UBT provides remote USB audio connection to any size space and is part of a system certified for Microsoft Teams or Zoom. All Tesira expanders communicate with the Tesira AVB network for audio networking, configuration, and control.

Amplifiers

Tesira amplifiers let you create a more complete audio system that can be designed and commissioned from one software platform. Adding amplifier blocks to your design files is a simple drag-and-drop process. The innovative AMP-450P and AMP-450BP conferencing amplifiers are PoE+ powered, allowing them to be placed wherever they're needed, including air-handling spaces.

In addition, our AVB/TSN enabled, digital networked, four channel TesiraXEL™ amplifiers deliver extraordinary flexibility in power distribution, selectable speaker impedance, and connectivity options.

Control

Biamp room control solutions are designed to be quickly programmed with Tesira software, where they can be customized as the requirements of a room change. Our Apprimo™ AV control pads provide streamlined, user-friendly interfaces for presentation spaces and conference rooms via highly intuitive capacitive touch capabilities and integrate with our Impera room control solutions at the price of a keypad controller.

Software

Biamp SageVue is a browser-based monitoring and management platform for technology managers, providing a comprehensive overview of all Tesira, Devio™, Cambridge™, and Crowd Mics™ solutions connected to a network. This level of transparency and control allows users to perform many system administration and device maintenance tasks, such as integration with LDAP, VoIP configuration, and remote firmware updates.

AUDIO

Whether it's ceiling height, construction materials, or ambient noise, Biamp's DSP technology overcomes obstacles for achieving the best sound possible within any space. Our embedded technologies take multiple variables into account and automatically modifies signals, saving you the trouble of doing so.

Biamp SpeechSense™ and AmbientSense™ technologies greatly enhance the efficacy of adaptive processing by distinguishing between human speech and noise, while our Beamtracking microphones provide 360° room coverage and active conversation mixing.

Tesira audio DSPs provide extensive programmable audio processing capabilities such as signal routing and mixing, equalization, filtering, dynamics, and delay, as well as control, monitoring and diagnostic tools; all configured through the Tesira design software.

Conferencing

As connecting teams around the world becomes increasingly common, exceptional conferencing is more important than ever. Many associate conferencing with frustrating controls and poor call quality, but the days of wasting valuable meeting time due to uncooperative technology are over. Tesira provides crystal clear audio with minimal hassle, allowing meeting participants to focus on the conversation rather than the technology. Tesira also supports the ability to connect to soft codec conferencing tools via USB and is certified by several major VoIP and UC providers.

Tesira's Acoustic Echo Cancellation (AEC) technology enables the unmatched clarity by removing unwanted and distracting noise from the call. AEC processing reacts quickly to any changes in the space to maintain optimized call clarity and intelligibility, even in dynamic environments.

Featuring four 90-degree tracking zones delivering dynamic, 360-degree room coverage, the Beamtracking technology at the heart of our Parlé conferencing microphones ensures every voice in the room is heard with unmatched clarity. Available in low-profile ceiling and tabletop form factors as well as pendant models, Parlé microphones blend into the aesthetics of any space, keeping the focus on the conversation.

Sound reinforcement

Sound reinforcement addresses varied needs in a diverse set of environments. Whether dealing with acoustics, architectural constraints, multi-use requirements, or solving user control questions, working with a robust set of tools is critical for satisfying clients and maximizing profit. Sophisticated, adaptive DSP is at the core of what Biamp does and Tesira delivers. With completely open programming and no restrictive predetermined signal flows, Tesira creates innovative and efficient sound reinforcement systems. Additionally, the DSP technology at the core of Tesira enables voice lift, a feature that's particularly useful in larger rooms where natural conversational audio improves communication.

Paging

Our NPX convenience paging stations feature embedded DSP and on-board memory to support standard and advanced public address functionalities and are available in gooseneck or handheld microphone versions. NPX paging stations can be configured as a Tesira expander, enabling a convenient way to add paging features to a Tesira system.

Tesira is completely interoperable with Vocia™, our networked paging system. Devices from both product lines can work together as a tightly integrated solution, allowing audio to pass between the two platforms seamlessly.

VIDEO

Completely integrated with the rest of the Tesira platform, TesiraLUX allows system designers to use a single software environment for both audio and video installations, supporting real-time video distribution over the network with unmatched lip sync capabilities.

Built on the Time-Sensitive Networking (TSN) standards maintained by IEEE as part of Ethernet, AVB offers two fundamental advantages over other IP implementations when deploying video networks. For integrators, it enables automatic bandwidth management, VLAN setup, device discovery for rapid configuration and commissioning of projects.

For end users, AVB allows networked media systems like TesiraLUX to provide guaranteed network transit latency of 2ms over multiple network hops for both audio and video content. AVB also provides flexible switch-based network media management to IT administrators. These characteristics ensure dependable performance and superior handling of audio and video signal synchronization.

Managing bandwith

TesiraLUX allows integrators to make intelligent decisions about what to send over the network and helps them treat content types appropriately, resulting in visually lossless transmissions. Multiple software-based options are available for managing bandwidth over the network, including setting maximum resolution, frame rate floor, and/or a rate of compression. With both a 1Gb (RJ-45) and a 10Gb (SFP+) media port available, designers have a wide range of transmission options from which to choose. The software even indicates when a stream may be too large for TesiraLUX's media port's capacity.

Forward thinking

TesiraLUX's feature set has been designed with the future in mind and can meet the ever-growing video needs of even the most complex facilities. TesiraLUX enables 8-channel PCM audio for embedding and de-embedding and features a low network transit latency (including scaling) of 1.5 frames* or less, dynamic delay EQ, and automated lip sync management.
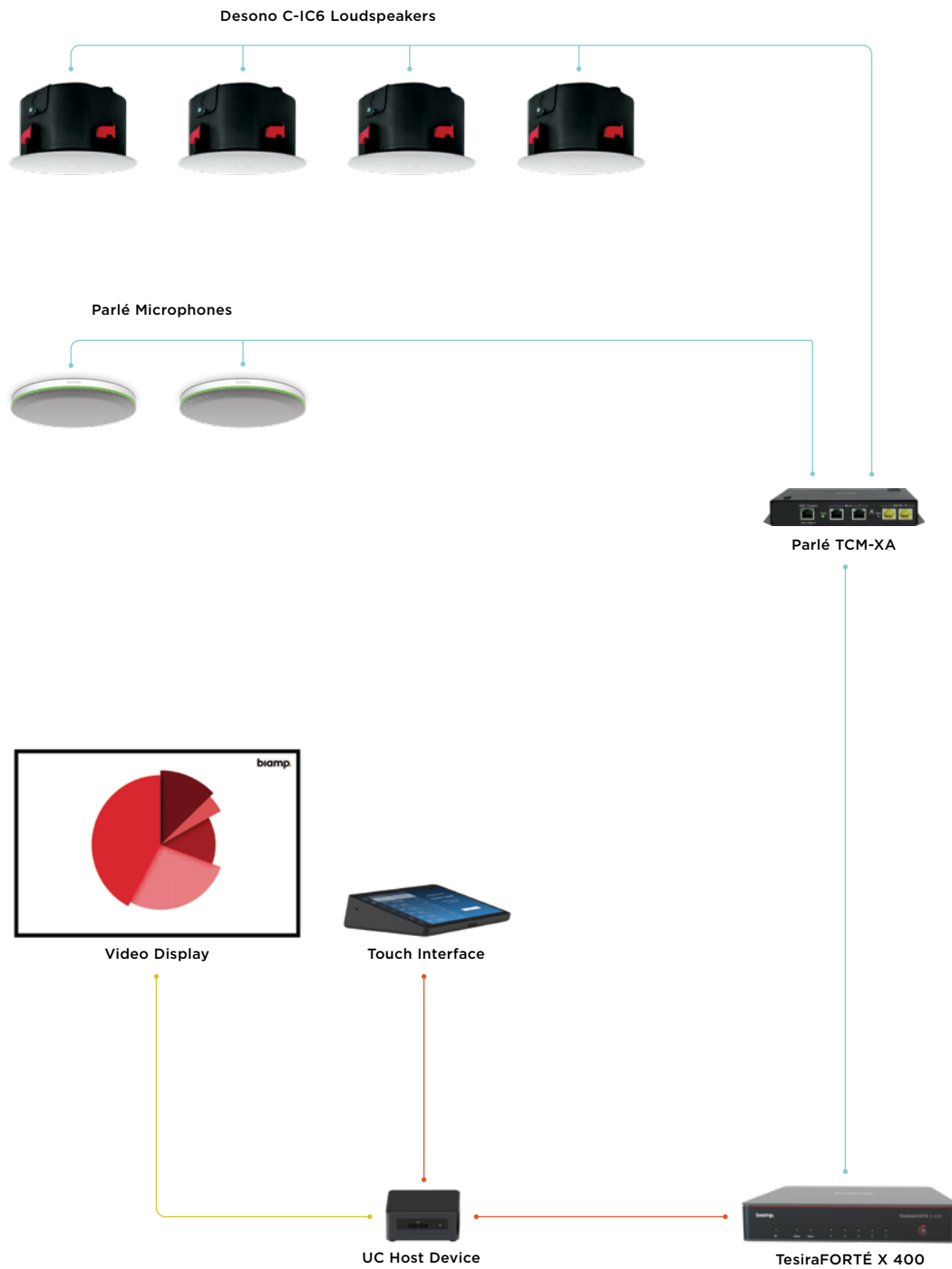
*25 milliseconds at 60Hz

PRESENTATION AND CONFERENCING

TesiraFORTÉ is the ideal digital signal processor for all conferencing scenarios, enabling clear, collaborative, and efficient meetings. With the TesiraFORTÉ X 400, users can manage conference calls via a VoIP system or UC solutions including Google Meet®, Microsoft Teams®, Webex by Cisco®, and Zoom®.

For truly extraordinary conferencing experiences, pair TesiraFORTÉ with our Parlé Beamtracking microphones and PoE+ powered amplifiers; for smaller conference rooms, the Parlé TCM-XA microphone creates an equally compelling audio experience. The TCM-XA includes an integrated PoE+ powered amplifier; a single Ethernet cable is all that's needed for connecting your DSP to both microphones and speakers.

Conference room

Desono C-IC6 Loudspeakers

Parlé Microphones

Parlé TCM-XA

Video Display

Touch Interface

UC Host Device

TesiraFORTÉ X 400

Category Cable
USB
Digital Video

COURTROOM TECHNOLOGIES

Tesira SERVER-IO reliably manages audio for all courtroom proceedings, including speaker and microphone levels, recording, remote arraignment, and audio playback from multiple sources, including DVDs, MP3 players, recorders, and other devices. SERVER-IO has enough DSP to handle multiple courtrooms, and as an integrated platform, can share resources in processing, VoIP, and amplification. In this scenario, TesiraLUX operates as a remote video arraignment system, helping reduce physical transportation costs between the courthouse and local correctional facilities.

Adding Tesira amplifiers to the design offers greater flexibility in both sound reinforcement and distribution. The AVB card installed in the computer running court recording software (such as For The Record™) provides seamless capture and recordings of audio court proceedings.

Remote party

Video Display

HD camera

TesiraLUX OH-1

TesiraLUX IDH-1

Remote interpreter

Remote Arrangement

VoIP Network

Court room

Microphones

Tesira SERVER-IO

Video Display

HD camera

TesiraLUX OH-1

TesiraLUX IDH-1

Court Recording PC
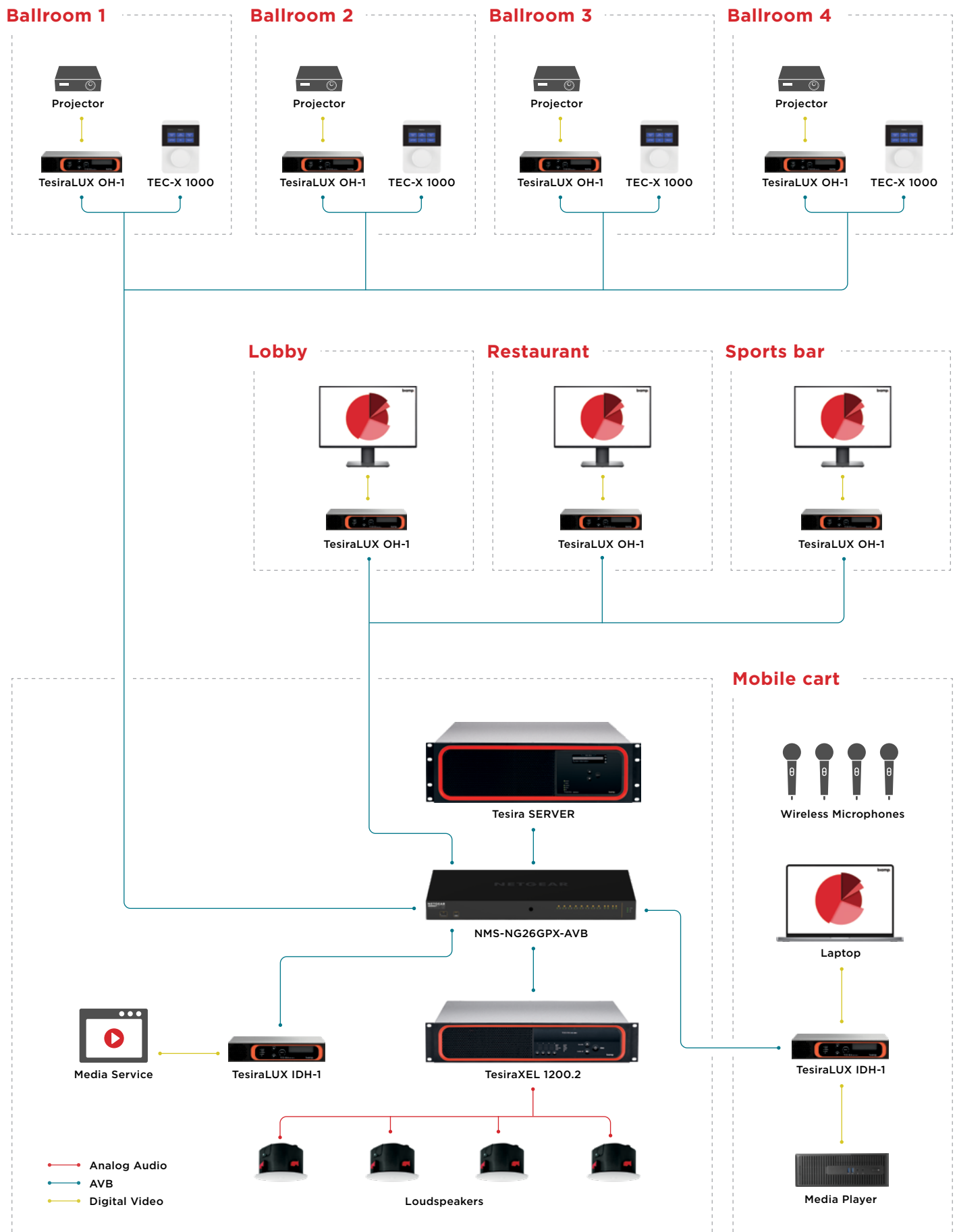
NMS-NG26GPX-AVB

TesiraXEL 1200.1

Loudspeakers

— Analog Audio
— AVB
— Digital Video
— VoIP

HOSPITALITY

Tesira is engineered to manage and distribute audio and video across an entire hotel or convention center. Integrating noise compensation allows audio volumes to adjust automatically to the space's ambient volume. With TesiraLUX, staff can broadcast high-quality audio and video with exceptional lip sync to screens or monitors anywhere in the building.

In hotel scenarios, Tesira manages the audio systems in divisible ballrooms, dining facilities, lobbies, and any size meeting spaces. In addition, Tesira can support and manage other protocols like CobraNet and Dante seamlessly.

Ballroom 1

Projector

TesiraLUX OH-1   TEC-X 1000

Ballroom 2

Projector

TesiraLUX OH-1   TEC-X 1000

Ballroom 3

Projector

TesiraLUX OH-1   TEC-X 1000

Ballroom 4

Projector

TesiraLUX OH-1   TEC-X 1000

Lobby

TesiraLUX OH-1

Restaurant

TesiraLUX OH-1

Sports bar

TesiraLUX OH-1

Mobile cart

Tesira SERVER

Wireless Microphones

NMS-NG26GPX-AVB

Laptop

Media Service

TesiraLUX IDH-1

TesiraXEL 1200.2

TesiraLUX IDH-1

Loudspeakers

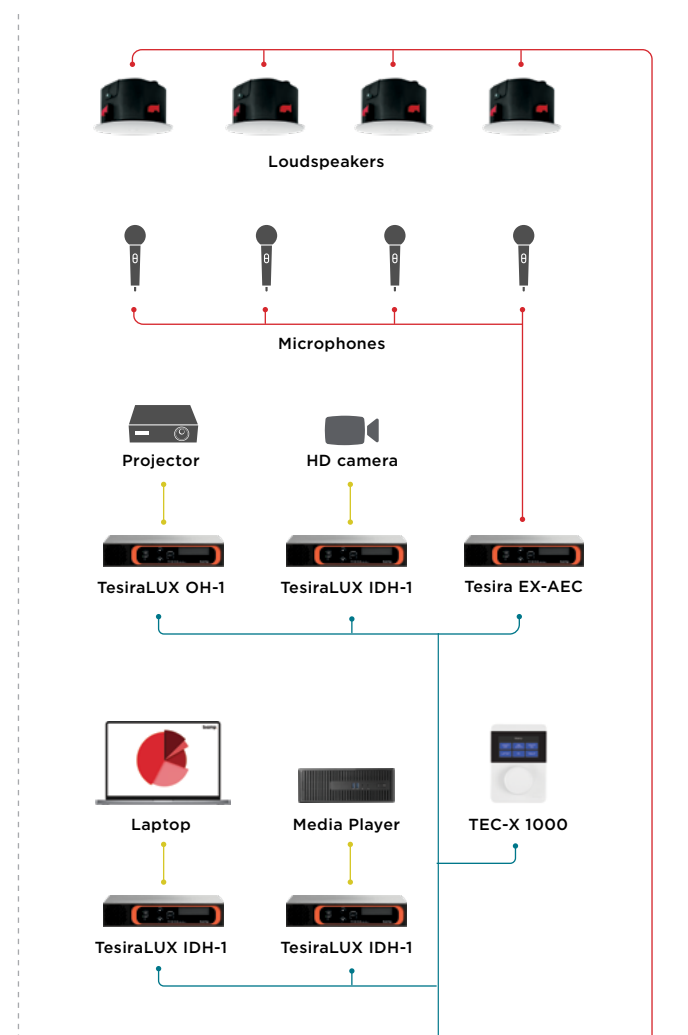Media Player

— Analog Audio
— AVB
— Digital Video

EDUCATION

With Tesira SERVER-IO, users can share DSP processing and hardware across multiple rooms, supporting instruction and collaboration by allowing a single instructor to lead a session in more than one classroom. Tesira SERVER-IO provides the flexibility to serve the entire facility while meeting the needs of individual instructors. TesiraLUX interfaces with lecture capture devices, enabling instructors to record high quality audio and video from their lessons for later use.
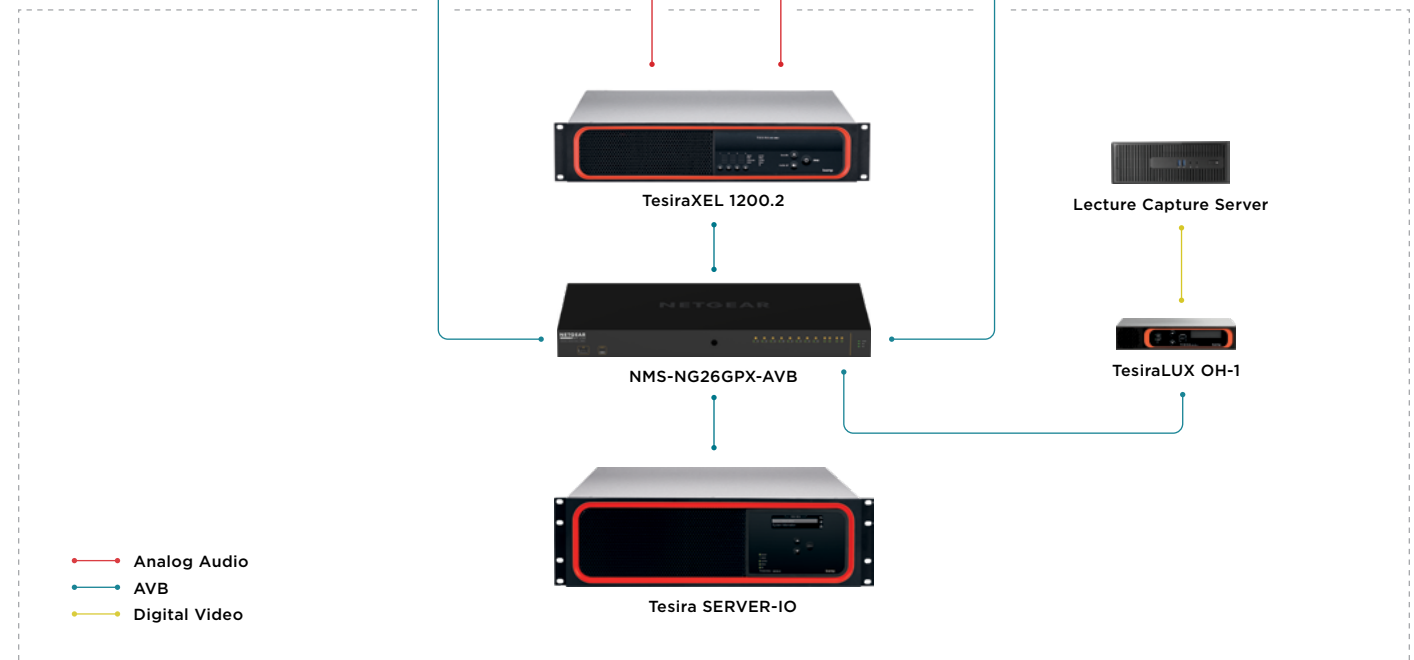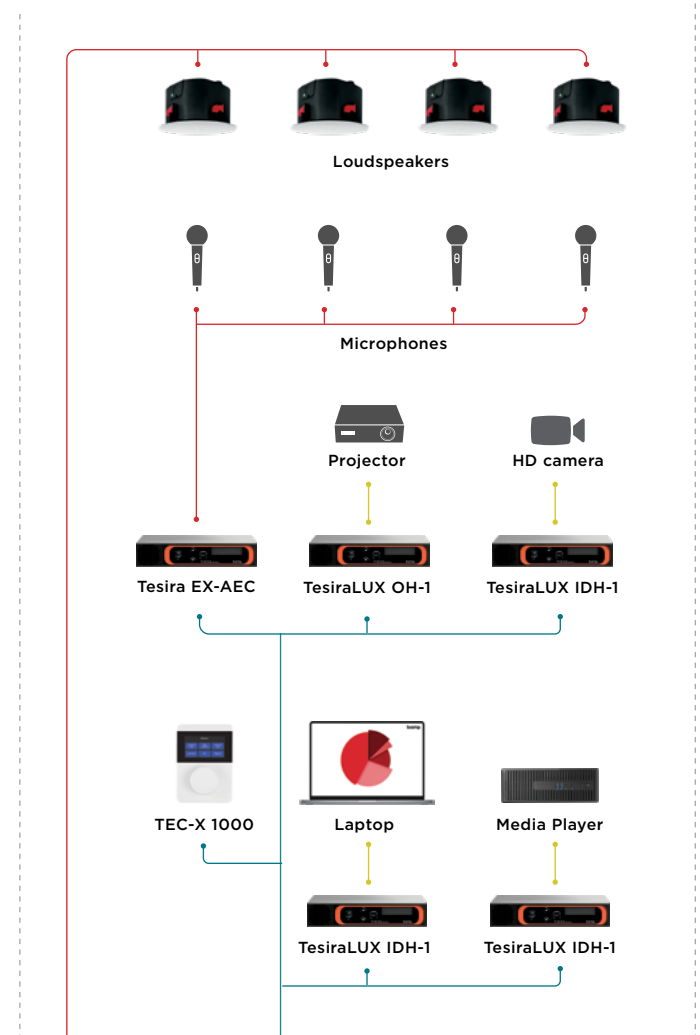
Advanced software capabilities like auto mixers and dynamic processing eliminate the need for manual adjustment of volume levels. Tesira amplifiers offer greater flexibility in sound reinforcement and distribution as they can receive a signal from anywhere in the audio network.

Lecture hall 1

Loudspeakers

Microphones

Projector **HD camera**

TesiraLUX OH-1 **TesiraLUX IDH-1** **Tesira EX-AEC**

Laptop **Media Player** **TEC-X 1000**

TesiraLUX IDH-1 **TesiraLUX IDH-1**

Lecture hall 2

Loudspeakers

Microphones

Projector **HD camera**

Tesira EX-AEC **TesiraLUX OH-1** **TesiraLUX IDH-1**

TEC-X 1000 **Laptop** **Media Player**

TesiraLUX IDH-1 **TesiraLUX IDH-1**

TesiraXEL 1200.2

Lecture Capture Server

NMS-NG26GPX-AVB

TesiraLUX OH-1

Tesira SERVER-IO

— Analog Audio
— AVB
— Digital Video

CEILING MOUNT MICS

PARLÉ TCM-X

The Parlé TCM-X is an AVB low profile ceiling microphone for Tesira systems, comprising a network box and ceiling microphone and including Beamtracking technology for 360-degree coverage of the space. By tracking and mixing voices around the room, the TCM-X allows far-end participants to experience conversations as they would face-to-face meetings. Each network box has a digital signal processing module with an additional RJ-45 connector to add an optional TCM-XEX model microphone. Up to two microphones are permitted per box (one TCM-X or TCM-XA with TCM-XEX). The TCM-X is suitable for many room types with 10 ft. ceilings or lower requiring optimized audio within an unobtrusive design.

- Measures 5.90 in. (150 mm) in diameter
- Mounts directly to the ceiling to virtually disappear from room
- Beamtracking technology actively tracks and intelligently mixes conversations
- Four 90-degree zones for full 360-degree room coverage
- Network box which includes DSP for Beamtracking
- Uses only one channel of AEC per mic
- Single cable connection via CAT cable

- Beamtracking technology works out-of-box without any lobe aiming or room mapping
- LED mute status indicator
- Available in either black or white
- Evaluated to the requirements of UL 2043 and is suitable for use in air handling spaces
- Additional RJ-45 connection on network box for TCX-XEX
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

PARLÉ TCM-XA

The Parlé TCM-XA is an AVB low-profile ceiling microphone and PoE+ (IEEE 802.3at Class 4, 30W) amplifier for use in Tesira systems. Comprising a network box and a ceiling microphone, each microphone includes Beamtracking technology with four 90-degree zones, providing full 360-degree coverage of the meeting space. Each network box has its own digital signal processing module and comes with an additional RJ-45 connector to add an optional TCM-XEX. A maximum of two microphones are permitted per network box (one TCM-X or TCM-XA with TCM-XEX). The 2-channel PoE+ amplifier includes an internal limiter, selectable power, and a burst mode to handle peak signals.

- Network box which includes DSP for Beamtracking and a PoE+ Amplifier
  · Two channels
  · Burst mode to handle peak signals in accordance with ANSI/CTA-2006-B; supports up to 40 watts (4Ω load) or 30 watts (8Ω load) per channel
  · Software selectable power vs. channel count
  · Includes internal limiter function
- Measures 5.90 in. (150 mm) in diameter
- Mounts directly to the ceiling to virtually disappear from room
- Uses only one channel of AEC per mic

- Beamtracking technology works out-of-box without any lobe aiming or room mapping
- Single cable connection via CAT cable
- LED mute status indicator
- Available in either black or white
- Evaluated to the requirements of UL 2043 and is suitable for use in air handling spaces
- Additional RJ-45 connection on network box for TCX-XEX
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

PARLÉ TCM-XEX

The Parlé TCM-XEX is an expansion AVB low-profile ceiling microphone for use in Tesira systems. Each microphone includes Beamtracking technology with four 90-degree zones, providing full 360-degree coverage of the meeting space.

The Tesira TCM-XEX is intended to be used as a second microphone in conjunction with the TCM-X or TCM-XA; it cannot operate as a standalone device.

- Must be used with a Parlé TCM-X or TCM-XA microphone
- Measures 5.90 in. (150 mm) in diameter
- Mounts directly to the ceiling to virtually disappear in room
- Beamtracking technology actively tracks and intelligently mixes conversations
- Four 90-degree zones for full 360-degree room coverage
- Uses only one channel of AEC per mic
- Single cable connection via CAT cable

- Beamtracking technology works out-of-box without any lobe aiming or room mapping
- LED mute status indicator
- Available in black or white
- Evaluated to the requirements of UL 2043 and is suitable for use in air handling spaces
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

TABLETOP MICS

PARLÉ TTM-X

The Parlé TTM-X is an AVB low profile tabletop microphone for use in Tesira systems. Comprising a network box and a tabletop microphone, each microphone includes Beamtracking technology with four 90-degree zones, providing full 360-degree coverage of the meeting space. Each network box has its own digital signal processing module and comes with an additional RJ-45 connector to add an optional TTM-XEX. A maximum of two microphones are permitted (one TTM-X with TTM-XEX).

- Measures 4.7 in. (110 mm) in diameter
- Sits directly on a tabletop to virtually disappear in room
- Beamtracking technology actively tracks and intelligently mixes conversations
- Four 90-degree zones for full 360-degree room coverage
- Network box which includes DSP for Beamtracking
- Uses only one channel of AEC per mic
- Single cable connection via CAT cable

- Beamtracking technology works out-of-box without any lobe aiming or room mapping
- LED mute status indicator
- Available in black or white
- Additional RJ-45 connection for TTM-XEX
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

PARLÉ TTM-XEX

The Parlé TTM-XEX is an expansion AVB tabletop microphone for use in Tesira systems. Each low-profile desktop microphone includes Beamtracking technology with four 90-degree zones, providing full coverage of the meeting space.

The Tesira TTM-XEX is intended to be used as a second microphone in conjunction with the TTM-X; it cannot operate as a standalone device.

- Must be use with a Parlé TTM-X microphone
- Measures 4.7 in. (110 mm) in diameter
- Sits directly on a tabletop to virtually disappear in room
- Beamtracking technology actively tracks and intelligently mixes conversations
- Four 90-degree zones for full 360-degree room coverage
- Uses only one channel of AEC per mic

- Single cable connection via CAT cable
- Beamtracking technology works out-of-box without any lobe aiming or room mapping
- LED mute status indicator
- Available in black or white
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

PENDANT MICS

PARLÉ TCM-1

The Parlé TCM-1 is an AVB ceiling microphone comprised of a pendant microphone and plenum box. Each microphone includes Beamtracking technology with three 120-degree zones, providing full 360-degree coverage of the meeting space. The plenum box is equipped with an additional RJ-45 connector for daisy-chain connections; a maximum of three microphones are permitted per daisy chain (one TCM-1 or TCM-1A required, plus up to two TCM-1EX).

- Beamtracking technology actively tracks and intelligently mixes conversations
- Three 120° zones for 360° coverage
- Plenum box includes DSP for Beamtracking
- LED mute status indicator
- User-adjustable microphone height
- Evaluated to the requirements of UL 2043 and is suitable for use in air handling spaces

- Pendant microphone available in either in black or white
- Optional title bridge mounting accessory available
- Additional RJ-45 for daisy-chain connection to a TCM-1EX microphone (maximum of three mics per daisy chain)
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

PARLÉ TCM-1A

The Parlé TCM-1A is an AVB ceiling microphone and PoE+ amplifier comprised of a pendant microphone and plenum box. Each microphone includes Beamtracking technology with three 120-degree zones, providing full 360-degree coverage of the meeting space. The plenum box is equipped with an additional RJ-45 connector for daisy-chain connections; a maximum of three microphones are permitted per daisy chain (one TCM-1 or TCM-1A required, plus up to two TCM-1EX). The 2-channel PoE+ amplifier includes an internal limiter, selectable power, and a burst mode to handle peak signals

- Beamtracking technology actively tracks and intelligently mixes conversations
- Three 120° zones for 360° coverage
- Plenum box includes a PoE+ amplifier
  - · Two channels; 4W continuous per channel
  - · Burst mode to handle peak loads; supports up to 40W (4Ω) or 30W (8Ω) per channel
  - · Software-selectable power vs. channel count
  - · Includes internal limiter function
- Pendant microphone available in either in black or white

- Optional tile bridge mounting accessory available
- LED mute status indicator
- User-adjustable microphone height
- Evaluated to the requirements of UL 2043 and is suitable for use in air handling spaces
- Additional RJ-45 for daisy-chain connection to a TCM-1EX microphone (maximum of three mics per daisy chain)
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

PARLÉ TCM-1EX

The Parlé TCM-1EX is an expansion AVB ceiling microphone intended to be used as a second and third microphone in conjunction with a TCM-1 or TCM-1A; it cannot operate as a standalone device. Each microphone includes Beamtracking technology with three 120-degree zones, providing full 360-degree coverage of the meeting space. The plenum box is equipped with an additional RJ-45 connector for daisy-chain connections; a maximum of three microphones are permitted per daisy chain (one TCM-1 or TCM-1A required, plus up to two TCM-1EX).

- Must be use with a Parlé TCM-1 or TCM-1A microphone
- Beamtracking technology actively tracks and intelligently mixes conversations
- Three 120° zones for 360° coverage
- Evaluated to the requirements of UL 2043 and is suitable for use in air handling spaces

- Pendant microphone available in either in black or white
- Optional tile bridge mounting accessory available
- Additional RJ-45 for daisy-chain connection to a TCM-1EX microphone (maximum of three mics per daisy chain)
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

Biamp Experience Center Auditorium
Beaverton, Oregon

CONFIGURABLE I/O DSP

TESIRA SERVER

The Tesira SERVER is a digital network server, factory configured with one DSP-2 card capable of accepting up to eight DSP-2 cards and one AVB-1 card. In addition, SERVER is equipped with a second slot that can be outfitted with an additional AVB-1 card, a 32 x 32 channel SCM-1 CobraNet card, a 64 x 64 channel DAN-1 Dante card, or a standard I/O card for four channels of local I/O.

The SERVER is the core of a Tesira digital audio system and can be used with Tesira expanders to form a highly scalable audio network. Tesira SERVER supports primary and secondary redundant media network connections to provide resilient audio streaming. If the primary media network experiences downtime, the secondary connection takes over with no loss of continuity.
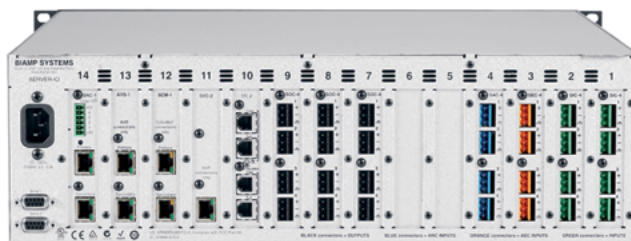

- Supports up to eight DSP-2 cards
- Up to 420 x 420 channels of digital I/O over AVB
- Optional 32 x 32 CobraNet audio networking
- Optional 64 x 64 Dante audio networking
- Configuration and control networking over Ethernet
- Front panel OLED display for device and system information
- AmbientSense and SpeechSense processing algorithms

- Signal processing via intuitive software allows configuration and control for: signal routing and mixing, equalization, filtering, dynamics and delay, and more
- Extensive expansion devices (input, output, logic, etc.) available as part of the Tesira digital audio networking platform
- Rack mountable (3RU)
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

TESIRA SERVER-IO

The Tesira SERVER-IO is a digital network server, factory configured with one DSP-2 card and capable of handling up to two additional DSP-2 cards. The SERVER-IO has capacity for up to three total audio networking cards per server.

The combinations of networking cards may include one AVB-1 Audio Video Bridging network cards, up to two SCM-1 CobraNet network cards, and up to two DAN-1 Dante network cards in any configuration. The SERVER-IO can support up to 12 standard Tesira I/O cards for up to 48 channels of audio I/O (e.g., mic and line level, VoIP, and FXO telephone interface). SERVER-IO can be used as a standalone device or with Tesira expanders to form a highly scalable audio network.

- Supports up to three DSP-2 cards
- Up to 12 I/O cards with a maximum of 48 channels of audio
- Up to 420 x 420 channels of digital I/O over AVB
- Optional 32 x 32 CobraNet audio networking
- Optional 64 x 64 Dante audio networking
- Configuration and control networking over Ethernet
- Front panel OLED display for device and system information
- SpeechSense and AmbientSense processing algorithms

- Signal processing via intuitive software allows configuration and control for: signal routing and mixing, equalization, filtering, dynamics and delay, and more
- Extensive expansion devices (input, output, logic, etc.) available as part of the Tesira digital audio networking platform
- Rack mountable (3RU)
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

CONFIGURABLE I/O CARDS

TESIRA AVB-1

The Tesira AVB-1 is a modular digital audio networking card for use with Tesira SERVER and SERVER-IO devices. The AVB-1 allows a Tesira system to send and receive digital audio over an Ethernet network via AVB enabled switches.

AVB/TSN (Audio Video Bridging/Time Sensitive Networking) is an open standard protocol compliant with IEEE standards. In addition to allowing up to 420 x 420 channels of interconnectivity over AVB from any compliant device, Tesira uses AVB/TSN as the interconnect between server and remote expander devices.

- Up to 420 x 420 channels of digital I/O over AVB
- Very low network latencies
- Media and control data managed on a single network
- TAA compliant
- Covered by Biamp Systems' five-year warranty

- IEEE Standards based
  - 802.1AS
  - 802.1Qav
  - 802.1Qat
  - 1722
  - 1722.1

TESIRA DAN-1

The Tesira DAN-1 is an optional digital audio networking card for Tesira SERVER or SERVER-IO and provides an interface to other audio devices utilizing the Dante networking protocol from Audinate®.

The DAN-1 card can be factory installed or installed in the field. Featuring the Brooklyn II module, the DAN-1 allows for up to 64 x 64 channels of digital audio into and out of a Tesira system.

- 64 x 64 channels of Dante
- AES67-enabled Dante endpoint
- Dual RJ-45 connections for Primary and Secondary
- Up to 32 x 32 simultaneous flows
- Explicit Dante Input and Output blocks in Tesira Software

- Can be installed in conjunction with AVB-1 and SCM-1
- System configuration and control via Ethernet
- TAA compliant
- Covered by Biamp Systems' five-year warranty

TESIRA SCM-1

The Tesira SCM-1 is a modular digital audio networking card for use with Tesira SERVER and SERVER-IO devices. The SCM-1 allows a Tesira system to send and receive digital audio using the CobraNet networking standard.

Each SCM-1 CobraNet card allows for interconnectivity of 32 x 32 channels of digital audio. Implementing the SCM-1 allows a Tesira system to share audio with Biamp Audia and Vocia systems as well as other devices operating on a CobraNet network.
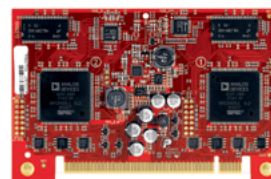
- **32 x 32 channels of digital audio interconnectivity**
- **Allows for sharing of digital audio with Audia and Vocia systems**
- **TAA compliant**
- **Covered by Biamp Systems' five-year warranty**

TESIRA DSP-2

The Tesira DSP-2 card is a modular digital signal processing card for use with Tesira SERVER and SERVER-IO devices. DSP-2 cards add extra resources and processing power to a Tesira system.

As necessary processing increases occur for larger systems, DSP-2 cards can be added in the field or at the Biamp factory. The Tesira SERVER can accommodate up to eight DSP-2 cards while SERVER-IO can support up to three.
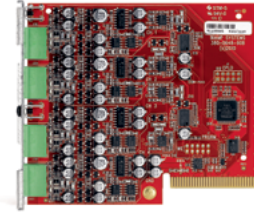
- **Adds additional processing power to Tesira systems**
- **Each DSP-2 card has the power of one AudiaFLEX**
- **DSP resources managed via Tesira software**
- **TAA compliant and RoHS compliant**
- **Covered by Biamp Systems' five-year warranty**

TESIRA SIC-4

The Tesira SIC-4 is a modular analog input card for use with Tesira SERVER and SERVER-IO devices. Each SIC-4 provides four channels of mic or line level audio input.

The inputs are electrically balanced and provided on plug-in barrier strip connectors. Software control of each input includes gain with clip indicator, +48V phantom power, mute, level, and signal invert.
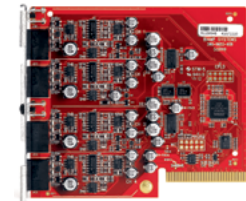
- Four channels of balanced mic or line level input
- Plug-in barrier strip connectors
- 0 – 66dB gain, adjustable in 6dB increments
- Clip indicator
- +48V Phantom Power

- 100 to +12dB fader range for level
- Signal invert for reverse polarity
- TAA compliant, RoHS compliant and AES grounded
- Covered by Biamp Systems' five-year warranty

TESIRA SOC-4

The Tesira SOC-4 is a modular analog output card for use with Tesira SERVER and SERVER-IO devices. Each SOC-4 provides four channels of mic or line level audio output.

The outputs are electrically balanced and provided on plug-in barrier strip connectors. Software control of each output includes mute, level, signal invert, and full-scale output reference.
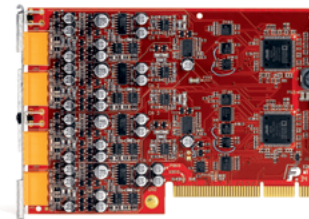
- Four channels of balanced mic or line level output
- Plug-in barrier strip connectors
- -100 to +12dB fader range for level
- Signal invert for reverse polarity

- Selectable full-scale output reference level (24dBu, 18dBu, 12dBu, 6dBu, 0dBu, -31dBu) for best interface/performance
- TAA compliant, RoHS compliant and AES grounded
- Covered by Biamp Systems' five-year warranty

TESIRA SEC-4

The Tesira SEC-4 is a modular analog input card for use with Tesira SERVER and SERVER-IO devices.

Each SEC-4 provides four channels of mic or line level audio input with Acoustic Echo Cancellation and features Biamp SpeechSense technology, which enhances speech processing by more accurately identifying human speech.
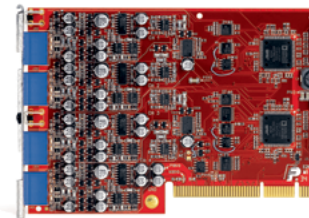
- Four channels of balanced mic or line level input with AEC (Acoustic Echo Cancellation)
- SpeechSense processing algorithm
- Processing includes High-Pass Filter
- Additional noise reduction on AEC outputs

- Doesn't use processing resources from SERVER or SERVER-IO DSP
- TAA compliant, RoHS compliant and AES grounded
- Covered by Biamp Systems' five-year warranty

TESIRA SAC-4

The Tesira SAC-4 is a modular analog input card for use with Tesira SERVER and SERVER-IO devices. Each SAC-4 provides four channels of mic or line level audio input with Ambient Noise Compensation.

The ANC processing features the Biamp algorithm, AmbientSense, which intelligently distinguishes ambient noise from program material or announcements, greatly improving performance over traditional ambient noise compensation.
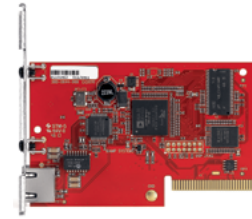
- Four channels of balanced mic or line level input
- Four channels of Ambient Noise Compensation using Biamp's proprietary AmbientSense algorithm
- Automatically adjusts levels for program material or announcements, based on changes in ambient level
- Up to four "sense" inputs per card

- Does not use processing resources from SERVER or SERVER-IO DSP
- TAA compliant, RoHS compliant and AES grounded
- Covered by Biamp Systems' five-year warranty

TESIRA SVC-2

The Tesira SVC-2 is a modular Voice over Internet Protocol (VoIP) card for use with Tesira SERVER and SERVER-IO devices.

The SVC-2 allows a Tesira system to connect directly to IP-based telephone systems. When used in conjunction with Acoustic Echo Cancellation (AEC) processing, Tesira becomes a powerful, flexible, and affordable conferencing platform.
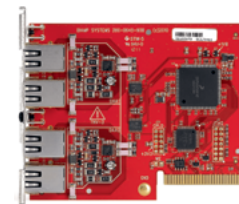
- Control via Tesira software or third-party control
- Logic control within Tesira or RCB devices
- Caller ID, hold capability, redial, 16-entry speed dial
- Adjustable auto-answer
- Country-specific tone plans
- SIP v2 (RFC 3261 and companion RFCs)

- SIP authentication
- Voice activity detection
- On-hook dialing
- Multiple CODEC support
- RoHS compliant
- Covered by Biamp Systems' five-year warranty

TESIRA STC-2

The Tesira STC-2 is a modular telephone interface card for use with Tesira SERVER and SERVER-IO devices.

The STC-2 allows a Tesira system to connect directly to standard analog telephone lines. Each channel includes line-echo cancellation, noise suppression, caller ID decoding, ring detection/validation, DTMF decoding, and call progress tone decoding. When used in conjunction with Acoustic Echo Cancellation (AEC) processing, Tesira becomes a powerful, flexible, and affordable conferencing platform.

- Initiate outgoing calls
  · DTMF tone dialing
  · Redial
  · Speed-dialing
  · Flash
- Detect and answer incoming calls
- Line echo cancellation
- TouchTone™ decoding Caller ID reception

- Call progress detection
- Line intrusion detection
- Noise suppression filter
- Continuous line status and fault monitoring
- TAA compliant, RoHS compliant and AES grounded
- Covered by Biamp Systems' five-year warranty

COMPACT AUDIO

TESIRAFORTÉ X 400

TesiraFORTÉ X 400 is a meeting room DSP featuring multiple network and analog audio connection points, with four channels of Acoustic Echo Cancellation (AEC) assignable across any digital or analog input. Five 1-Gigabit Ethernet ports are provided, four of which are PoE+ powered and support media and control traffic of various types including AVB, Dante, and VoIP.

- Up to 64 x 64 AVB streams of digital audio networking with Biamp AVB devices
- Up to 128 x 128 channels of digital audio networking with Biamp AVB devices
- 32 x 32 channels of digital audio networking via the Dante protocol
- AES67-enabled Dante endpoint
- AI Noise Reduction
- 2 mic/line level inputs, 2 mic/line level outputs
- Five 1 Gigabit Ethernet Ports

- Four ports support PoE+ power (IEEE 802.3.at Class 4, 30W)
- Up to 2 x 2 channels of configurable USB audio
- Four AEC channels assignable to any input
- 4-pin GPIO
- Surface mountable with included bracket
- Supports port authentication via IEEE 802.1X
- SIP VoIP interface via Gigabit Ethernet connection
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' 5-year warranty

TESIRAFORTÉ X 800

TesiraFORTÉ X 800 is a meeting room DSP featuring multiple network and analog audio connection points, with eight channels of Acoustic Echo Cancellation (AEC) assignable across any digital or analog input. Five 1-Gigabit Ethernet ports are provided, four of which are PoE+ powered and support media and control traffic of various types including AVB, Dante, and VoIP.

- Up to 64 x 64 AVB streams of digital audio networking with Biamp AVB devices
- Up to 128 x 128 channels of digital audio networking with Biamp AVB devices
- 32 x 32 channels of digital audio networking via the Dante protocol
- AES67-enabled Dante endpoint
- AI Noise Reduction
- Two mic/line level inputs, Two mic/line level outputs
- Five 1 Gigabit Ethernet Ports

- Four ports support PoE+ power (IEEE 802.3.at Class 4, 30W)
- Up to 2 x 2 channels of configurable USB audio
- Eight AEC channels assignable to any input
- 4-pin GPIO
- Surface mountable with included bracket
- Supports port authentication via IEEE 802.1X
- SIP VoIP interface via Gigabit Ethernet connection
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' 5-year warranty

TESIRAFORTÉ X 1600

TesiraFORTÉ X 1600 is a meeting room DSP featuring multiple network and analog audio connection points, with 16 channels of Acoustic Echo Cancellation (AEC) assignable across any digital or analog input. Five 1-Gigabit Ethernet ports are provided, four of which are PoE+ powered, and which support media and control traffic of various types including AVB, Dante, and VoIP.

- Up to 64 x 64 AVB streams of digital audio networking with Biamp AVB devices
- Up to 128 x 128 channels of digital audio networking with Biamp AVB devices
- 32 x 32 channels of digital audio networking via the Dante protocol
- AES67-enabled Dante endpoint
- AI Noise Reduction
- Two mic/line level inputs, Two mic/line level outputs
- Five 1 Gigabit Ethernet Ports

- Four ports support PoE+ power (IEEE 802.3.at Class 4, 30W)
- Up to 2 x 2 channels of configurable USB audio
- 16 AEC channels assignable to any input
- 4-pin GPIO
- Surface mountable with included bracket
- Supports port authentication via IEEE 802.1X
- SIP VoIP interface via Gigabit Ethernet connection
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' 5-year warranty

FIXED I/O DSP

TESIRAFORTÉ AI

The TesiraFORTÉ AI is a digital audio server with 12 analog inputs, eight analog outputs, and up to eight channels of configurable USB audio.

- 12 mic/line level inputs, eight mic/line level outputs
- Gigabit Ethernet port
- RS-232 serial port
- 4-pin GPIO
- 2-line OLED display with capacitive-touch navigation
- Rack mountable (1RU)
- System configuration and control via Ethernet

- Internal universal power supply
- Signal processing via intuitive software allows configuration and control for signal routing, mixing, equalization, filtering, and delay
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

TESIRAFORTÉ AVB AI

The TesiraFORTÉ AVB AI is a digital audio server with 12 analog inputs, eight analog outputs, and up to eight channels of configurable USB audio. TesiraFORTÉ AVB AI utilizes AVB/TSN digital audio networking and can be used as a standalone device or combined with other TesiraFORTÉ AVB devices and Tesira servers, expanders, endpoints, and controllers.

- 128 x 128 channels of AVB
- 12 mic/line level inputs, eight mic/line level outputs
- Gigabit Ethernet port
- RS-232 serial port
- 4-pin GPIO
- 2-line OLED display with capacitive-touch navigation
- Rack mountable (1RU)

- System configuration and control via Ethernet
- Internal universal power supply
- Signal processing via intuitive software allows configuration and control for signal routing, mixing, equalization, filtering, and delay
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

TESIRAFORTÉ DAN AI

The TesiraFORTÉ DAN AI is a digital audio server with 12 analog inputs, eight analog outputs, up to eight channels of configurable USB audio, and Dante digital audio networking.

- Gigabit Ethernet port
- RS-232 serial port
- 4-pin GPIO
- 2-line OLED display with capacitive-touch navigation
- Rack mountable (1RU)
- System configuration and control via Ethernet

- Internal universal power supply
- Signal processing via intuitive software allows configuration and control for signal routing, mixing, equalization, filtering, and delay
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

TESIRAFORTÉ CI

The TesiraFORTÉ CI is a digital audio server with 12 analog inputs equipped with Acoustic Echo Cancellation (AEC) technology, eight analog outputs, and up to eight channels of configurable USB audio.

- 12 mic/line level inputs with AEC, eight mic/line level outputs
- Gigabit Ethernet port
- RS-232 serial port
- 4-pin GPIO
- 2-line OLED display with capacitive-touch navigation
- Rack mountable (1RU)

- System configuration and control via Ethernet
- Internal universal power supply
- Signal processing via intuitive software allows configuration and control for signal routing, mixing, equalization, filtering, and delay
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

TESIRAFORTÉ AVB CI

The TesiraFORTÉ AVB CI is a digital audio server with 12 analog inputs equipped with Acoustic Echo Cancellation (AEC) technology, eight analog outputs, and up to eight channels of configurable USB audio. TesiraFORTÉ AVB CI utilizes AVB/TSN digital audio networking and can be used as a standalone device or combined with other TesiraFORTÉ AVB devices and Tesira servers, expanders, endpoints, and controllers.

- 128 x 128 channels of AVB
- 12 mic/line level inputs with AEC, eight mic/line level outputs
- Gigabit Ethernet port
- RS-232 serial port
- 4-pin GPIO
- 2-line OLED display with capacitive-touch navigation
- Rack mountable (1RU)

- System configuration and control via Ethernet
- Internal universal power supply
- Signal processing via intuitive software allows configuration and control for signal routing, mixing, equalization, filtering, and delay
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

TESIRAFORTÉ DAN CI

The TesiraFORTÉ DAN CI is a digital audio server with 12 analog inputs equipped with Acoustic Echo Cancellation (AEC) technology, eight analog outputs, and up to eight channels of configurable USB audio and Dante digital audio networking.

- 32 x 32 channels of Dante
- AES67-enabled Dante endpoint
- 12 mic/line level inputs with AEC, eight mic/line level outputs
- Gigabit Ethernet port
- RS-232 serial port
- 4-pin GPIO
- 2-line OLED display with capacitive-touch navigation
- Rack mountable (1RU)

- System configuration and control via Ethernet
- Internal universal power supply
- Signal processing via intuitive software allows configuration and control for signal routing, mixing, equalization, filtering, and delay
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

TESIRAFORTÉ VT

The TesiraFORTÉ VT is a digital audio server with 12 analog inputs equipped with Acoustic Echo Cancellation (AEC) technology, eight analog outputs, up to eight channels of configurable USB audio, a 2-channel VoIP interface, and a standard FXO telephone interface.

- 12 mic/line level inputs with AEC, eight mic/line level outputs
- Gigabit Ethernet port
- RS-232 serial port
- 4-pin GPIO
- 2-line OLED display with capacitive-touch navigation
- Rack mountable (1RU)
- System configuration and control via Ethernet

- Internal universal power supply
- SIP VoIP interface via RJ-45 connector
- Standard FXO telephone interface via RJ-11 connector
- Signal processing via intuitive software allows configuration and control for signal routing, mixing, equalization, filtering, and delay
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

TESIRAFORTÉ AVB VT

The TesiraFORTÉ AVB VT is a digital audio server with 12 analog inputs equipped with Acoustic Echo Cancellation (AEC), eight analog outputs, up to eight channels of configurable USB audio, a 2-channel VoIP interface, and a standard FXO telephone interface. TesiraFORTÉ AVB VT utilizes AVB/TSN for digital audio networking and can be used standalone or combined with other TesiraFORTÉ AVB devices and Tesira servers, expanders, endpoints, and controllers.

- 128 x 128 channels of AVB
- 12 mic/line level inputs with AEC, eight mic/line level outputs
- Gigabit Ethernet port
- RS-232 serial port
- 4-pin GPIO
- 2-line OLED display with capacitive-touch navigation
- Rack mountable (1RU)
- System configuration and control via Ethernet

- Internal universal power supply
- SIP VoIP interface via RJ-45 connector
- Standard FXO telephone interface via RJ-11 connector
- Signal processing via intuitive software allows configuration and control for signal routing, mixing, equalization, filtering, and delay
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

TESIRAFORTÉ DAN VT

The TesiraFORTÉ DAN VT is a digital audio server with 12 analog inputs equipped with Acoustic Echo Cancellation (AEC) technology, eight analog outputs, up to eight channels of configurable USB audio, a 2-channel VoIP interface, a standard FXO telephone interface, and Dante digital audio networking.

- 32 x 32 channels of Dante
- AES67-enabled Dante endpoint
- 12 mic/line level inputs with AEC, eight mic/line level outputs
- Gigabit Ethernet port
- RS-232 serial port
- 4-pin GPIO
- 2-line OLED display with capacitive-touch navigation
- Rack mountable (1RU)

- System configuration and control via Ethernet
- Internal universal power supply
- SIP VoIP interface via RJ-45 connector
- Standard FXO telephone interface via RJ-11 connector
- Signal processing via intuitive software allows configuration and control for signal routing, mixing, equalization, filtering, and delay
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

TESIRAFORTÉ AVB VT4

The TesiraFORTÉ AVB VT4 is a digital audio server with 4 analog inputs and 4 analog outputs and includes AEC technology on all 4 inputs. It includes up to eight channels of configurable USB audio, a 2-channel VoIP interface, and a standard FXO telephone interface. TesiraFORTÉ AVB VT4 utilizes AVB/TSN digital audio networking and can be used standalone or combined with other TesiraFORTÉ AVB devices and Tesira DSPs, expanders, endpoints, and controllers.

- 128 x 128 channels of AVB
- 4 mic/line level inputs with AEC, Four mic/line level outputs
- Gigabit Ethernet port
- RS-232 serial port
- 4-pin GPIO
- 2-line OLED display with capacitive-touch navigation
- Rack mountable (1RU)
- System configuration and control via Ethernet

- Internal universal power supply
- SIP VoIP interface via RJ-45 connector
- Standard FXO telephone interface via RJ-11 connector
- Signal processing via intuitive software allows configuration and control for signal routing, mixing, equalization, filtering, and delay
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

TESIRAFORTÉ DAN VT4

The TesiraFORTÉ DAN VT4 is a digital audio server with four analog inputs and four analog outputs and includes Acoustic Echo Cancellation (AEC) technology on all four inputs. It includes up to eight channels of configurable USB audio, a 2-channel VoIP interface, a standard FXO telephone interface, and Dante digital audio networking.

- 32 x 32 channels of Dante
- AES67-enabled Dante endpoint
- 4 mic/line level inputs with AEC, Four mic/line level outputs
- Gigabit Ethernet port
- RS-232 serial port
- 4-pin GPIO
- 2-line OLED display with capacitive-touch navigation
- Rack mountable (1RU)
- System configuration and control via Ethernet

- Internal universal power supply
- SIP VoIP interface via RJ-45 connector
- Standard FXO telephone interface via RJ-11 connector
- Signal processing via intuitive software allows configuration and control for signal routing, mixing, equalization, filtering, and delay
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

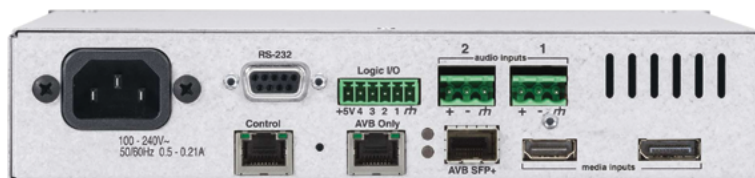# VIDEO ENCODERS AND DECODERS

TESIRALUX IDH-1

The TesiraLUX IDH-1 is an AVB/TSN enabled video encoder capable of transmitting video signals up to and including 4K60. The IDH-1 functions as a video DSP in a Tesira media system and is configured through Tesira configuration software. Acting as an AVB talker, the IDH-1 fully integrates digital audio and video on a single network, allowing for automatic lip sync management and end-to-end network transit latencies of 1.5 frames or less.

Multiple software-based options are available for managing bandwidth, including setting maximum resolution, minimum frame rate, and/or a rate of compression. The AVB/TSN streams can be transmitted over 1Gb or 10Gb ports while control signals are managed via a separate 1Gb Ethernet port.

The IDH-1 accepts eight channels of PCM audio for embedding/de-embedding and includes two mic/line level analog inputs. The TesiraLUX IDH-1 can be used as a standalone device (paired with a TesiraLUX OH-1) or combined with other Tesira DSPs, expanders, amplifiers, and controllers.

- Includes one HDMI and one DisplayPort™ 1.2 port
- Accepts video signals up to and including 4K60 with 4:4:4 subsampling
- Supports a virtual matrix of up to 128 devices
- Flexible color space including Rec. 2020
- Integrated lip sync management
- Supports eight channel PCM audio for embedding/de-embedding
- Automated EDID management between TesiraLUX and the input source
- Supports HDCP 2.2 protected content

- Supports port authentication via IEEE 802.1X
- Flexible bandwidth management options
- Two mic/line level analog audio inputs
- Four logic connections can be used as inputs or outputs
- Serial port for the output of command strings
- Half-rack chassis
- Optional mounting accessories available
- TAA compliant
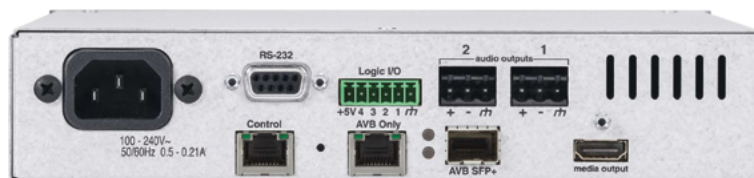- Covered by Biamp Systems' five-year warranty

TESIRALUX OH-1

The TesiraLUX OH-1 is an AVB/TSN enabled video decoder capable of outputting video signals up to and including 4K60. The OH-1 functions as a video server-class device in a Tesira media system and is configured through Tesira configuration software. Acting as an AVB listener, the OH-1 fully integrates digital audio and video on a single network, allowing for automatic lip sync management and end-to-end network transit latencies of 1.5 frames or less.

The AVB/TSN streams can be received over 1Gb or 10Gb ports while control signals are managed via a separate 1Gb Ethernet port.

The OH-1 accepts eight channels of PCM audio for embedding/de-embedding and includes two mic/line level analog outputs. The TesiraLUX OH-1 can be used as a standalone device (paired with a TesiraLUX IDH-1) or combined with other Tesira DSPs, expanders, amplifiers, and controllers.

- Includes one HDMI port
- Outputs video signals up to and including 4K60 with 4:4:4 subsampling
- Flexible color space including Rec. 2020
- Integrated lip sync management
- Supports eight channel PCM audio for embedding/de-embedding
- Supports port authentication via IEEE 802.1X
- Supports HDCP 2.2 protected content
- Automated EDID management between TesiraLUX and the output display

- Two mic/line level analog audio outputs
- Four logic connections can be used as inputs or outputs
- Serial port for the output of command strings
- Half-rack chassis
- Optional mounting accessories available
- TAA compliant
- Covered by Biamp Systems' five-year warranty

EXPANDERS

TESIRA EX-IN

The Tesira EX-IN is a half-rack expander box for use with AVB-enabled Tesira server-class devices. The EX-IN is a 4-channel mic or line level audio input expander. The expander communicates with the Tesira AVB network for audio networking, configuration, and control, and is powered by PoE+.

- Four channels of balanced mic or line level input
- 0 – 66dB gain, adjustable in 6dB increments
- +48V Phantom Power
- -100 to +12dB fader range for level
- Audio and control networking over AVB/TSN
- Powered by PoE+

- Plug-in barrier strip connectors
- Front panel LEDs for device status indications
- Half-rack chassis
- RoHS compliant, TAA compliant and AES grounded
- Covered by Biamp Systems' five-year warranty

TESIRA EX-OUT

The Tesira EX-OUT is a half-rack expander box for use with AVB-enabled Tesira server-class devices. The EX-OUT is a 4-channel mic or line level audio output expander which communicates with the Tesira AVB network for audio networking, configuration, and control, and is powered by PoE+.

- Four channels of balanced mic or line level output
- -100 to +12dB fader range for level
- Signal invert for reverse polarity
- Selectable full-scale output reference level (24dBu, 18dBu, 12dBu, 6dBu, 0dBu, -31dBu) for best interface/performance
- Audio and control networking over AVB/TSN
- Powered by PoE+

- Plug-in barrier strip connectors
- Front panel LEDs for device status indications
- Half-rack chassis
- RoHS compliant, TAA compliant and AES grounded
- Covered by Biamp Systems' five-year warranty

TESIRA EX-AEC

The Tesira EX-AEC is a half-rack expander box for use with AVB-enabled Tesira DSPs. The EX-AEC is a 4-channel mic or line level audio input expander with AEC (Acoustic Echo Cancellation) which communicates with the Tesira AVB network for audio networking, configuration, and control, and is powered by PoE+.

- Four channels of balanced mic or line level input with AEC (Acoustic Echo Cancellation)
- 0 – 66dB gain, adjustable in 6dB increments
- +48V Phantom Power
- -100 to +12dB fader range for level
- Audio and control networking over AVB/TSN
- Powered by PoE+

- Plug-in barrier strip connectors
- Front panel LEDs for device status indications
- Half-rack chassis
- RoHS compliant, TAA compliant and AES grounded
- Covered by Biamp Systems' five-year warranty

TESIRA EX-IO

The Tesira EX-IO is a half-rack expander box for use with AVB-enabled Tesira server-class devices. The EX-IO is a 4-channel input and output expander and features two channels of mic or line level audio input and two channels of mic or line level audio output. Tesira EX-IO communicates with the Tesira AVB network for audio networking, configuration, and control, and is PoE+ powered.

- Two channels of balanced mic or line level input
- Two channels of balanced mic or line level output
- 0 – 66dB gain, adjustable in 6dB increments on inputs
- Selectable full-scale output reference level (24dBu, 18dBu, 12dBu, 6dBu, 0dBu, -31dBu) for best interface/performance
- +48V Phantom Power on inputs
- Powered by PoE+

- Half-rack chassis
- RoHS compliant, TAA compliant and AES grounded
- Covered by Biamp Systems' five-year warranty

TESIRACONNECT TC-5

TesiraCONNECT TC-5 serves as the central connection point for all Biamp devices in a conference room, simplifying installations by providing power and media over a single category cable between devices such as Tesira AVB DSPs, USB extenders, PoE+ amplifiers, and microphones. Four Gigabit RJ-45 ports provide PoE+ power to connected endpoints, while the remaining RJ-45 port is used for DSP connection or daisy-chaining TesiraCONNECT TC-5 devices together. TesiraCONNECT TC-5 eliminates the need for third-party switches; it works out-of-the-box with Tesira products. The small form factor allows it to be easily mounted to a wall, under a table, above the ceiling, or inside a credenza in the conference room.

- Five 1 Gbps RJ-45 ports
- Four ports support PoE+ power (IEEE 802.3at Class 4, 30W)
- Up to four TesiraCONNECT TC-5 devices can be daisy-chained together
- Front panel LEDs indicate port connections, device status, and fault conditions

- Fault reporting and device monitoring supported in SageVue
- Out-of-the-box compatibility with Tesira conferencing products
- External universal power supply
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

TESIRACONNECT TC-5D

TesiraCONNECT TC-5D serves as the central connection point for all Biamp and Dante devices in a conference room, simplifying installations by providing power and media over a single category cable between devices such as Tesira AVB DSPs, USB extenders, PoE+ amplifiers, and microphones as well as third-party Dante devices. Four Gigabit RJ-45 ports provide PoE+ power to connected endpoints, while the remaining RJ-45 port is used for DSP connection or daisy-chaining TesiraCONNECT devices together. The TC-5D eliminates the need for third-party switches; it works out-of-the box with Tesira and Dante products. The small form factor allows it to be easily mounted to a wall, under a table, above the ceiling, or inside a credenza in the conference room.

- Five 1 Gbps RJ-45 ports
- Four ports support PoE+ power (IEEE 802.3at Class 4, 30W)
- Up to four TesiraCONNECT TC-5 devices can be daisy-chained together
- Supports up to 32 x 32 channels of Dante audio
- Auto-detects media network on each port
- Front panel LEDs indicate port connections, device status, and fault conditions

- Supports Dante Domain Manager
- Dante routing configured in Dante Controller
- Fault reporting and device monitoring supported in SageVue
- Out-of-the-box compatibility with Tesira conferencing products
- External universal power supply
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

TESIRA EX-UBT

The Tesira EX-UBT transports USB digital audio throughout a network and isn't limited by the maximum USB connection length of five meters, making it ideal for installations requiring USB connections not located in a rack or near other equipment; installations requiring multiple USB audio inputs; or projects using Tesira SERVER or SERVER-IO.

Powered by PoE, this expander supports up to eight channels of configurable USB audio and Bluetooth wireless technology, providing a cable-free solution for teleconferencing, continuing mobile phone calls in a meeting room, or supplying background music in hospitality settings.

- Supports up to eight channels of configurable USB audio
- Supports Bluetooth wireless technology
- LED indicators for power and wireless status
- Configurable via Tesira software

- PoE powered
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty
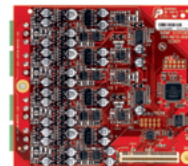
TESIRA EX-MOD

The Tesira EX-MOD is a modular expander device that is designed for use with AVB-enabled Tesira server-class devices. EX-MOD can be configured with up to three 4-channel input and/or output cards for a maximum of 12 channels. The expander communicates with the Tesira AVB network for audio networking, configuration, and control.

- Can be configured with up to three I/O cards
- Up to 12 channels of analog audio
- AVB/TSN connection to Tesira system for audio networking, configuration, and control
- Plug-in barrier strip connections on cards
- Front panel LEDs for device status indications
- Internal universal power supply
- Rack mountable (1RU)

- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty
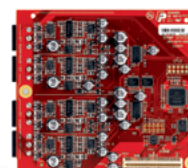
EXPANDER CARDS

TESIRA EIC-4

The Tesira EIC-4 is an optional expander card that can be installed in the Tesira EX-MOD and some Tesira amplifiers. Each EIC-4 provides four channels of mic or line level audio input. The inputs are electrically balanced and provided on plug-in barrier strip connectors. Software control of each input includes gain with clip indicator, +48V phantom power, mute, level, and signal invert.

- Four channels of balanced mic or line level input
- Plug-in barrier strip connectors
- 0 – 66dB gain, adjustable in 6dB increments
- Clip indicator
- +48V Phantom Power

- -100dB to +12dB fader range for level
- Signal invert for reverse polarity
- RoHS compliant, TAA compliant and AES grounded
- Covered by Biamp Systems' five-year warranty

TESIRA EOC-4

The Tesira EOC-4 is an optional expander card that can be installed in the Tesira EX-MOD and some Tesira amplifiers. Each EOC-4 provides four channels of mic or line level audio output. The outputs are electrically balanced and provided on plug-in barrier strip connectors. Software control of each output includes mute, level, signal invert, and full-scale output reference.

- Four channels of balanced mic or line level output
- Plug-in barrier strip connectors
- -100dB to +12dB fader range for level
- Signal invert for reverse polarity

- Selectable full-scale output reference level (24dBu, 18dBu, 12dBu, 6dBu, 0dBu, -31dBu) for best interface/performance
- RoHS compliant, TAA compliant and AES grounded
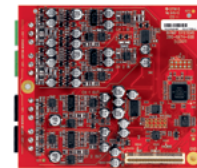- Covered by Biamp Systems' five-year warranty

TESIRA EEC-4

The Tesira EEC-4 is an optional expander card that can be installed in the Tesira EX-MOD. Each EEC-4 provides four channels of mic or line level audio input with AEC (Acoustic Echo Cancellation). The inputs are electrically balanced and provided on plug-in barrier strip connectors. Software control of each input includes gain with clip indicator, +48V phantom power, mute, level, and signal invert.

- Four channels of balanced mic or line level input with AEC (Acoustic Echo Cancellation)
- Plug-in barrier strip connectors
- 0 – 66dB gain, adjustable in 6dB increments
- Clip indicator
- +48V Phantom Power

- -100dB to +12dB fader range for level
- Signal invert for reverse polarity
- RoHS compliant, TAA compliant and AES grounded
- Covered by Biamp Systems' five-year warranty

TESIRA EIOC-4

The Tesira EIOC-4 expander card is an optional card that can be installed in the Tesira EX-MOD and some Tesira amplifiers. Each EIOC-4 provides two channels of mic or line level audio input and two channels of mic or line level audio output. The inputs and outputs are electrically balanced and provided on plug-in barrier strip connectors. Software control of each input includes gain with clip indicator, +48V phantom power, mute, level, and signal invert; whereas control for each output includes mute, level, signal invert, and full-scale output reference.

- Two channels of balanced mic or line level input
- Two channels of balanced mic or line level output
- 0 – 66dB gain, adjustable in 6dB increments on inputs
- +48V Phantom Power on inputs

- Selectable full-scale output reference level (24dBu, 18dBu, 12dBu, 6dBu, 0dBu, -31dBu) for best interface/performance
- RoHS compliant, TAA compliant and AES grounded
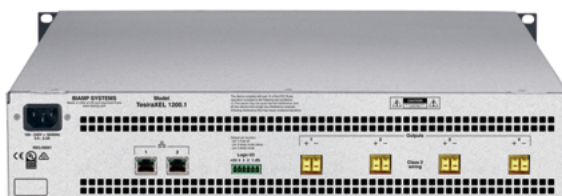- Covered by Biamp Systems' five-year warranty

AMPLIFIERS

TESIRAXEL 1200.1

TesiraXEL 1200.1 is an AVB/TSN enabled, digital networked, four channel amplifier. The 1200.1 delivers extraordinary flexibility — from power distribution, to selectable speaker impedance, to connectivity options, it's an ideal choice.

The 1200.1 leverages a unique power distribution architecture allowing users to distribute 1-100% of available power to any channel. This amplifier also supports both selectable impedance (4Ω, 8Ω, 70V, or 100V) and delay equalization per channel, allowing for maximum design flexibility. To streamline installations, the 1200.1 includes an audible locate function on the front panel to validate connected loudspeaker runs without requiring the amplifier to be configured.

The TesiraXEL 1200.1 comes with a software-configurable media interface, allowing designers to choose their preferred network topology — redundancy, daisy chain, single-cable, or separate control and media are all supported. The 1200.1 is ideal for training rooms, lecture halls, performing venues, houses of worship, or other applications where sound distribution or reinforcement is needed.

- Four channel amplifier
- 100% asymmetrical loading per channel
- Selectable impedance per channel: 4Ω, 8Ω, 70V, 100V
- Configurable media interface: support for daisy chain, network redundancy, and single cable
- Audible locate available from the front panel
- Auto standby mode

- Supports delay equalization per channel
- Supports port authentication via IEEE 802.1X
- Configurable via Tesira software
- Rack mountable (2RU)
- CE marked, UL listed, TAA compliant and RoHS compliant
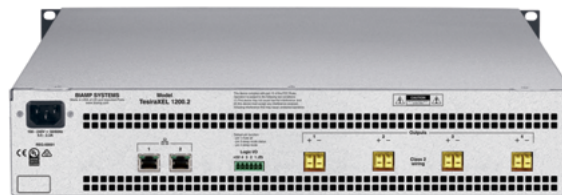- Covered by Biamp Systems' five-year warranty

TESIRAXEL 1200.2

TesiraXEL 1200.2 is an AVB/TSN enabled, digital networked, four channel amplifier. The 1200.2 delivers extraordinary flexibility — from power distribution, to selectable speaker impedance, to connectivity options, it's an ideal choice.

The 1200.2 is equipped with two 1200W power banks; each bank supports two channels to provide greater power density per rack unit. It leverages a unique power distribution architecture allowing users to distribute 1-100% of available power across the power bank. The TesiraXEL 1200.2 also supports both selectable impedance (4Ω, 8Ω, 70V, or 100V) and delay equalization per channel, allowing for maximum design flexibility. To streamline installations, the 1200.2 includes an audible locate function on the front panel to validate connected loudspeaker runs without requiring the amplifier to be configured.

The TesiraXEL 1200.2 comes with a software-configurable media interface, allowing designers to choose their preferred network topology — redundancy, daisy chain, single-cable, or separate control and media are all supported. The 1200.2 is ideal for training rooms, lecture halls, performing venues, houses of worship, or other applications where sound distribution or reinforcement is needed.

- Four channel amplifier
- 100% asymmetrical loading per channel
- Selectable impedance per channel: 4Ω, 8Ω, 70V, 100V
- Configurable media interface: support for daisy chain, network redundancy, and single cable
- Audible locate available from the front panel
- Auto standby mode

- Supports delay equalization per channel
- Supports port authentication via IEEE 802.1X
- Configurable via Tesira software
- Rack mountable (2RU)
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

TESIRA AMP-450P

The Tesira AMP-450P is an AVB/TSN enabled, PoE+, four channel amplifier. The output channels are software configurable, including selectable power versus channel count. The AMP-450P includes an internal limiter and can provide 3 watts of continuous power to all four channels and is also capable of operating in a burst mode to handle peak signals, providing up to 50 watts (4Ω) or 30 watts (8Ω) per channel.

- Four channel amplifier; 3W continuous power per channel
- Burst mode to handle peak signals; supports up to 50W (4Ω) or 30W (8Ω) per channel
- PoE+ powered
- Class D amplifier topology
- Fanless operation
- Software-selectable power versus channel count

- Includes internal limiter function
- Evaluated to the requirements of UL 2043 and is suitable for use in air handling spaces
- LED indicators for power/status and amp status
- Configurable via Tesira software
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty
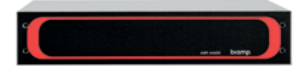
TESIRA AMP-450BP

The Tesira AMP-450BP is an AVB/TSN enabled, four-channel PoE+ conferencing amplifier. Capable of mounting directly to the back of the Desono C-IC6 and C-IC6LP loudspeakers, the AMP-450BP reduces cost by minimizing cabling between the ceiling devices and the rack room. Each Tesira AMP-450BP comes with an optional mechanical enclosure to protect electrical connections and comply with code requirements for above ceiling installations. The Tesira AMP-450BP can operate in a burst mode to handle peak signals, providing up to 50 watts (4Ω) or 30 watts (8Ω) per channel.

- Four channel amplifier with burst mode to handle peak signals; supports up to 50W (4Ω) or 30W (8Ω) per channel
- Designed to fit on top of C-IC6 speaker via backpack or mounted separately
- PoE+ powered (IEEE 802.3at Class 4, 30W)
- Class D amplifier topology
- Four RJ-45 output jacks
- Audible locate button
- BPAK accessory included

- Fanless operation
- Software-selectable power versus channel count
- Includes internal limiter function
- Evaluated to the requirements of UL 2043 and is suitable for use in air handling spaces
- LED indicators for power/status and amp status
- Configurable via Tesira software
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

AMP-A460H

The AMP-A460H is a four-channel amplifier delivering 60 watts per channel in a sleek, compact design. A half-rack, D-class amplifier that operates in near silence with no need for internal cooling fans. The AMP-A460H ships with a rack mounting kit for a single unit installation or for mounting two units side-by-side.

- Four channel amplifier; 60W per channel
- Bridgeable channels
- Class D amplifier topology
- Three manual switches provide constant voltage operation, bridging channels, and a high-pass filter option
- Supports both 70V and 100V Constant Voltage Systems

- LED indicators for each output channel
- Rack mountable; includes mounting kit
- No additional software needed
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

Šibenik Convention Center
Šibenik, Croatia

TESIRA AMP-4175R

The Tesira AMP-4175R is a four-channel digital networked amplifier, fully AVB/TSN enabled and capable of delivering 175 watts per channel. Rack mountable and part of an integrated Tesira audio network, the Tesira AMP-4175R also offers fault reporting, impedance monitoring, and optional analog failover.

- Four channels; 175W per channel
- Impedance monitoring
- Configurable via Tesira software
- Dual AVB ports
- Bridgeable channels
- Optional analog failover
- Optional I/O expander card slots

- Front panel OLED display with capacitive touch navigation
- Front panel control of individual and chassiswide mutes/levels (defeatable)
- Rack mountable (2RU)
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

TESIRA AMP-4300R CV

The Tesira AMP-4300R CV is a four-channel digital networked, constant voltage 70V/100V amplifier. It is AVB/TSN enabled and delivers 300 watts per channel, is rack mountable, and serves as part of an integrated Tesira audio network. The Tesira AMP-4300R CV also offers fault reporting, impedance monitoring, and optional analog failover.

- Four channels; 300W per channel
- Impedance monitoring
- Configurable via Tesira software
- Dual AVB ports
- Bridgeable channels
- Optional analog failover
- Optional I/O expander card slot

- Front panel OLED display
- Front panel capacitive touch navigation
- Front panel control of individual and chassis-wide mutes/levels (defeatable)
- Rack mountable (2RU)
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

TESIRA AMP-4350R

The Tesira AMP-4350R is a four-channel digital networked amplifier, fully AVB/TSN enabled and capable of delivering 350 watts per channel. Designed to be rack mountable, the AMP-4350R serves as part of an integrated Tesira audio network, offering fault reporting, impedance monitoring, and optional analog failover.

- Four channels; 350W per channel
- Impedance monitoring
- Configurable via Tesira software
- Dual AVB ports
- Bridgeable channels
- Optional analog failover
- Optional I/O expander card slot

- Front panel OLED display with capacitive touch navigation
- Front panel control of individual and chassiswide mutes/levels (defeatable)
- Rack mountable (2RU)
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

TESIRA AMP-8175R

The Tesira AMP-8175R is an eight-channel digital networked amplifier, fully AVB/TSN enabled and capable of delivering 175 watts per channel. Rack mountable and part of an integrated Tesira audio network, the Tesira AMP-8175R also offers fault reporting, impedance monitoring, and optional analog failover.

- Eight channels; 175W per channel
- Impedance monitoring
- Configurable via Tesira software
- Dual AVB ports
- Bridgeable channels
- Optional analog failover

- Optional I/O expander card slots
- Front panel OLED display with capacitive touch navigation
- Front panel control of individual and chassiswide mutes/levels
- Rack mountable (2RU)
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

TESIRA AMP-4175R

The Tesira AMP-4175R is a four-channel digital networked amplifier, fully AVB/TSN enabled and capable of delivering 175 watts per channel. Rack mountable and part of an integrated Tesira audio network, the Tesira AMP-4175R also offers fault reporting, impedance monitoring, and optional analog failover.

- Four channels; 175W per channel
- Impedance monitoring
- Configurable via Tesira software
- Dual AVB ports
- Bridgeable channels
- Optional analog failover
- Optional I/O expander card slots

- Front panel OLED display with capacitive touch navigation
- Front panel control of individual and chassiswide mutes/levels (defeatable)
- Rack mountable (2RU)
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

TESIRA AMP-4300R CV

The Tesira AMP-4300R CV is a four-channel digital networked, constant voltage 70V/100V amplifier. It is AVB/TSN enabled and delivers 300 watts per channel, is rack mountable, and serves as part of an integrated Tesira audio network. The Tesira AMP-4300R CV also offers fault reporting, impedance monitoring, and optional analog failover.

- Four channels; 300W per channel
- Impedance monitoring
- Configurable via Tesira software
- Dual AVB ports
- Bridgeable channels
- Optional analog failover
- Optional I/O expander card slot

- Front panel OLED display
- Front panel capacitive touch navigation
- Front panel control of individual and chassis-wide mutes/levels (defeatable)
- Rack mountable (2RU)
- CE marked, UL listed, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

VOLTERA A SERIES

The Voltera A Series is ideal for restaurants, hotels, bars, education, small houses of worship, corporate and other applications where sound distribution or reinforcement is needed. Every A Series amplifier ships with mounting accessories for a variety of mounting options. The Voltera 600.2 and 600.4 amplifiers are Energy Star certified, ensuring that these amplifiers consume less power without compromising on their powerful sound distribution and reinforcement capabilities.

All Voltera A amplifiers share the following features

- Supports 100 V, 70 V, 8 ohm or 4 ohm per channel
- Each channel can drive up to twice the symmetric power
- Using the included mounting accessories, the halfwidth design allows single or tandem mounting in 1 RU or mounting in a variety of other locations
- Default 4 dBu input sensitivity regardless of load
- Includes manual per-channel configuration: mode switches for Lo/Hi-Z, high-pass filter, and gain trim options. Gain trim2 can boost both the gain and the power by up to 3dB.

- Thermally controlled internal fan with whisper mode for normal operation
- CE marked, UL listed, TAA compliant, and RoHS compliant
- Covered by Biamp Systems five-year warranty

A 300.2

The Voltera A 300.2 is a compact, two-channel, half-rack power amplifier with a total output power of 300 watts. The amplifier channels can be individually selected to drive 150 watts per channel into 4 ohm, 8 ohm, 70 V, or 100 V. Power sharing is also supported, allowing up to 300 watts to be delivered by any channel.

A 300.4

The Voltera A 300.4 is a compact four-channel half-rack power amplifier with a total output power of 300 watts. The amplifier channels can be individually selected to drive 75 watts per channel into 4 ohm, 8 ohm, 70 V, or 100 V. Power sharing is also supported, allowing up to 150 watts to be delivered by any channel.

A 600.2

The Voltera A 600.2 is a compact two-channel half-rack power amplifier with a total output power of 600 watts. The amplifier channels can be individually selected to drive 300 watts per channel into 4 ohm, 8 ohm, 70 V, or 100 V. Power sharing is also supported, allowing up to 600 watts to be delivered by any channel. Energy Star certification ensures that these amplifiers consume less power without compromising on their powerful sound distribution and reinforcement capabilities.

A 600.4

The Voltera A 600.4 is a compact four-channel half-rack power amplifier with a total output power of 600 watts. The amplifier channels can be individually selected to drive 150 W per channel into 4 ohm, 8 ohm, 70 V, or 100 V. Power sharing is also supported, allowing 300 watts to be delivered by any channel. Energy Star certification ensures that these amplifiers consume less power without compromising on their powerful sound distribution and reinforcement capabilities.

CONTROLS

TESIRA EX-LOGIC

The Tesira EX-LOGIC is a half-rack logic box for use with Tesira DSPs. The EX-LOGIC provides both logic inputs and outputs and, through software, can be configured as a control interface. There are 16 total connections that can be used as inputs or outputs. 12 of the connections are designed as logic connections only; the remaining four can also be used for logic connections or as variable voltage control inputs (e.g. interface to a potentiometer). The EX-LOGIC also provides a serial port for the output of command strings that can be used to send action commands to other equipment in the system. The expander communicates over Ethernet with the Tesira control network for data transmission, configuration and control, and is powered by PoE.

- 16 total logic connections that can be used as inputs or outputs
- Four of the connections can be used as voltage control inputs
- Inputs can control actions within the software including: presets, mutes, ducking, room combining, paging functions, and much more
- Outputs can trigger status relays or indicators, or provide logic input to other controllable equipment
- Serial port for the output of command strings

- Connects to Tesira SERVER, SERVER-IO or TesiraFORTÉ over Ethernet
- Powered by PoE (IEEE 802.3at Class 1, 4W)
- Plug-in barrier strip connections
- Front panel LEDs for device status indications
- Half-rack chassis
- Covered by Biamp Systems' five-year warranty

TESIRA HD-1

The Tesira HD-1 is a dialer for Tesira audio DSPs, providing access to all the dialing functions within Tesira. With the look and feel of a traditional telephone dial pad, the HD-1 makes installations less expensive, easier to commission, and less complicated to operate. The four context (soft) buttons can be assigned to control functions in Tesira software. The HD-1 is compatible with Tesira SERVER and SERVER-IO with STC-2 or SVC-2 cards installed, as well as all models of TesiraFORTÉ VT and TesiraFORTÉ VT4 devices.

- Telephony control over Ethernet
- LCD display
- 12-button dial pad
- Redial, call volume adjustment, mute, hold, and other telephony functions
- 100 programmable speed dial numbers
- Four context (soft) buttons can be assigned to control functions

- Propagates privacy mute state to other devices
- Internal universal power supply
- 100 programmable speed dial numbers; entries can be updated on the phone or in software
- Powered by PoE (IEEE 802.3at Class 1, 4W)
- TAA compliant
- Covered by Biamp Systems' five-year warranty

TESIRA TEC-1s

The Tesira TEC-1s is an Ethernet control device for use with all Tesira systems. Offering a simple, intuitive interface for end users, the TEC-1s can be installed and configured to fit the unique needs of a particular application. The TEC-1s connects via standard CAT-5/6/7 cabling and is powered over Ethernet, eliminating the need for custom cabling and local power sources. Multiple remote control panels can be connected over large distances using standard network technology. The TEC-1s is surface-mounted.

- Adjustment and/or initiation of 32 selectable system volumes and actions
- Volumes are any individual or grouped system levels, including inputs, outputs, matrix cross-points, etc.
- Actions are any individual or grouped system operations, including presets, source selection, mutes, ducking, combining, etc.
- Control functions are programmed in the Tesira system design software
- High contrast OLED display with a wide viewing angle
- The display brightness can be adjusted to fit the ambient light

- present in the application and automatically dims when not in use
- Capacitive touch technology eliminates protruding and moving parts to increase product reliability and longevity while simplifying cleaning
- 330' (100m) Ethernet cable length can be extended with standard PoE network technology (routers, switches, hubs, media converters)
- Connects with standard RJ-45 or IDC connector
- TAA compliant
- Covered by Biamp Systems' five-year warranty

TESIRA TEC-1i

The Tesira TEC-1i is an Ethernet control device for use with all Tesira systems. Offering a simple, intuitive interface for end users, the TEC-1i can be installed and configured to fit the unique needs of a particular application. The TEC-1i connect via standard CAT-5/6/7 cabling and is powered over Ethernet, eliminating the need for custom cabling and local power sources. Multiple remote control panels can be connected over large distances using standard network technology. The TEC-1i can be flush-mounted into any wall.

- Adjustment and/or initiation of 32 selectable system volumes and actions
- Volumes are any individual or grouped system levels, including inputs, outputs, matrix cross-points, etc.
- Actions are any individual or grouped system operations, including presets, source selection, mutes, ducking, combining, etc.
- Control functions are programmed in the Tesira system design software
- High contrast OLED display with a wide viewing angle
- The display brightness can be adjusted to fit the ambient light present in the application and automatically dims when not in use

- Capacitive touch technology eliminates protruding and moving parts to increase product reliability and longevity while simplifying cleaning
- 330' (100m) Ethernet cable length can be extended with standard PoE network technology (routers, switches, hubs, media converters)
- Connects with standard RJ-45 or IDC connector
- TAA compliant
- Covered by Biamp Systems' five-year warranty

SWITCHES

NMS-NG10GPX-AVB

The Biamp NMS-NG10GPX-AVB (NETGEAR model M4250-10G2XF-POE+) is a pro-grade managed switch designed from the ground up for 1G networked AV systems. The switch provides ten 1G ports and two 10G SFP+ ports that all support AVB and Dante. Eight of the ports are PoE+ capable with 240W of total power budget. The NMS-NG10GPX-AVB is preconfigured by Biamp with the AVB license and is out of box ready for networked AV systems. Recommended applications include large conferencing spaces, divisible rooms, convenience paging, and classrooms.

- Preloaded with a Biamp configuration for seamless, immediate deployment of AVB and Dante systems
- Eight ports provide 240W of PoE+ for AV endpoints
- Designed to support Biamp deployments with Tesira, TesiraLUX video, NPX paging stations, Parlé microphones, Impera controllers, and Apprimo touch interfaces.
- An AV-centric web UI provides optional advanced configurations for DHCP, multiple AV protocols, and systems incorporating third-party AV devices.
- A clean sleek display panel at the front displays port status, while the rear accommodates all cabling and provides additional status indicators.

- Enables ports to be positioned at the front of the rack including rack ears that enable recessed mounting.
- 1G uplinks are ideal for audio, standalone video, and control setups while 10G SFP+ uplinks are ideal for larger multi-switch video deployments.
- Intelligent software controls fans under suitable ambient conditions and PoE loads for whisper quiet operation.
- Biamp provides standard 5-year warranty and tech support in addition to NETGEAR's limited lifetime warranty, tech support and Pro AV design services.

NMS-NG26GPX-AVB

The Biamp NMS-NG26GPX-AVB (NETGEAR model M4250-26G4XF-POE+) is a pro-grade managed switch designed from the ground-up for 1G networked AV systems. The switch provides 26 1G ports and four 10G SFP+ ports that all support AVB and Dante. 24 of the ports are PoE+ capable with 480W of total power budget. The NMS-NG26GPX-AVB is preconfigured by Biamp with the AVB license and is out of box ready for networked AV systems. Recommended applications large divisible rooms, multipurpose spaces, large houses of worship, lecture halls, court rooms, and auditoriums.

- The system is preloaded with a configuration file for seamless integration with Dante or AVB and Dante Systems
- 24 ports provide 480W of PoE+ for AV endpoints.
- Designed to support Biamp deployments with Tesira, TesiraLUX video, NPX paging stations, Parlé microphones, Impera controllers, and Apprimo touch interfaces.An AV-centric web UI provides optional advanced configurations for DHCP, multiple AV protocols, and systems incorporating third-party AV devices.
- A clean sleek display panel at the front displays port status, while the rear accommodates all cabling and provides additional status indicators.

- Enables ports to be positioned at the front of the rack including rack ears that enable recessed mounting.
- 1G uplinks are ideal for audio, standalone video, and control setups while 10G SFP+ uplinks are ideal for larger multi-switch video deployments.
- Intelligent software controls fans under suitable ambient conditions and PoE loads for whisper quiet operation.
- Biamp full 5-year warranty and support, in addition to NETGEAR limited lifetime warranty, tech support and Pro AV design services.

LOUDSPEAKERS

PERFORMANCE & SPECIALTY – COMMUNITY

Community loudspeakers are engineered to provide excellent acoustic performance, flexibility, and elegant aesthetics for a diverse range of applications. Serving as world-leading loudspeaker solutions for indoor and outdoor sound reinforcement, our models offer exceptional features and benefits designed to exceed the needs of your next project.

- High-performance loudspeakers for demanding applications requiring premium coverage
- Elegant solutions that provide exceptional speech intelligibility
- Versatile point source, line array and subwoofer models

- Music, voice, and paging solutions with EN54-24 certified models
- Weather-resistant models designed for exceptional performance in extreme conditions
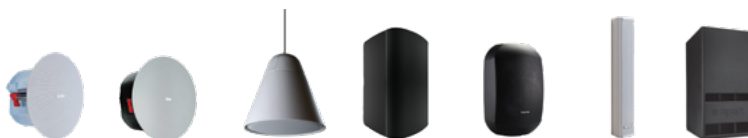
BUSINESS AUDIO – DESONO

Equally well-suited for background music, foreground music, and paging applications, our Desono family of loudspeakers ensure every space can enjoy the best sound reproduction capabilities on the market.

- Superb speech intelligibility with reduced distortion and uniform voicing
- Built-in transformers for low-impedance and constant voltage applications
- In-ceiling, surface mount, column, and pendant form factors

- Many models are IP-rated for outdoor applications such as patios or concourses
- Compression drivers on several models for enhanced upper frequency performance
- EN54-24 certified loudspeakers available in multiple form factors

COMMERCIAL AUDIO

Our commercial loudspeakers are designed for easy installation in a variety of establishments including retail stores, restaurants, bars and clubs, and hospitality venues. With a wide array of loudspeaker solutions, our products allow you to design a system to meet your specifications, no matter the application.

- In-ceiling, surface mount, column, and pendant form factors
- Built-in transformers for low impedance and constant voltage applications
- Installer-friendly features to speed up installation time

PAGING STATIONS

NPX G1040

The NPX G1040 is a 4-button convenience paging station with gooseneck microphone for use in Qt X and Tesira systems. The G1040 features embedded DSP and on-board memory to support standard and advanced public address functionalities. Digital audio and control data can be transmitted by either AVB or Dante.The NPX G1040 can store four user-configurable page codes and up to 10 prerecorded messages. Additionally, the G1040 supports both tabletop and wall mounting with a removable "foot" that allows the paging station to be mounted flat against any surface, and a K-slot is included for enhanced physical security via an optional Kensington® lock. The NPX G1040 meets convenience paging requirements for facilities of all sizes.

- Push-to-talk button with status indication
- Page latch button for hands-free paging
- Four user-configurable priority paging levels
- Audio and control data transmission via AVB or Dante
- Local digital signal processing
- Supports tabletop or wall mounting
- Supports stored message playback (up to 10 messages)
- 50-minute recording pool for all 10 messages

- Removable foot for flat mounting
- Local storage of default and/or custom preambles
- High-quality gooseneck cardioid microphone
- Powered by PoE+ (IEEE 802.3at Class 3, 15.4W)
- Backlit liquid crystal display (LCD) technology
- Optional PIN to restrict unauthorized use
- CE marked, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

NPX G1100

The NPX G1100 is a 10-button convenience paging station with gooseneck microphone for use in Qt X and Tesira systems. The G1100 features embedded DSP and on-board memory to support standard and advanced public address functionalities. Digital audio and control data can be transmitted by either AVB or Dante. The NPX G1100 can store 999 user-configurable page codes and up to 10 prerecorded messages. Additionally, the G1100 supports both tabletop and wall mounting with a removable "foot" that allows the paging station to be mounted flat against any surface, and a K-slot is included for enhanced physical security via an optional Kensington lock. The NPX G1100 meets convenience paging requirements for facilities of all sizes.

- Push-to-talk button with status indication
- Page latch button for hands-free paging
- Up to 999 user-configurable page codes
- Up to 16 software configurable page codes
- Audio and control data transmission via AVB or Dante
- Local digital signal processing
- Supports tabletop or wall mounting
- Supports stored message playback (up to 10 messages)
- 50-minute recording pool for all 10 messages

- Removable foot for flat mounting
- Local storage of default and/or custom preambles
- High-quality gooseneck cardioid microphone
- Powered by PoE+ (IEEE 802.3at Class 3, 15.4W)
- Backlit liquid crystal display (LCD) technology
- Optional PIN to restrict unauthorized use
- CE marked, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

NPX H1040

The NPX H1040 is a 4-button convenience paging station with handheld microphone for use in Qt X and Tesira systems. The H1040 features embedded DSP and on-board memory to support standard and advanced public address functionalities. Digital audio and control data can be transmitted by either AVB or Dante. The NPX H1040 can store four user-configurable page codes and up to 10 prerecorded messages. Additionally, the H1040 supports both tabletop and wall mounting with a removable "foot" that allows the paging station to be mounted flat against any surface, and a K-slot is included for enhanced physical security via an optional Kensington lock. The NPX H1040 meets convenience paging requirements for facilities of all sizes.

- Push-to-talk button with status indication
- Page latch button for hands-free paging
- Four user-configurable priority paging levels
- Up to 16 software configurable priority paging levels
- Audio and control data transmission via AVB or Dante
- Local digital signal processing
- Supports tabletop or wall mounting
- Supports stored message playback (up to 10 messages)
- 50-minute recording pool for all 10 messages

- Removable foot for flat mounting
- Local storage of default and/or custom preambles
- High-quality gooseneck cardioid microphone
- Powered by PoE+ (IEEE 802.3at Class 3, 15.4W)
- Backlit liquid crystal display (LCD) technology
- Optional PIN to restrict unauthorized use
- CE marked, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty

NPX H1100

The NPX H1100 is a 10-button convenience paging station with handheld microphone for use in Qt X and Tesira systems. The H1100 features embedded DSP and on-board memory to support standard and advanced public address functionalities. Digital audio and control data can be transmitted by either AVB or Dante. The NPX H1100 can store 999 user-configurable page codes and up to 10 prerecorded messages. Additionally, the H1100 supports both tabletop and wall mounting with a removable "foot" that allows the paging station to be mounted flat against any surface, and a K-slot is included for enhanced physical security via an optional Kensington lock. The NPX H1100 meets convenience paging requirements for facilities of all sizes.

- Push-to-talk button with status indication
- Page latch button for hands-free paging
- Up to 999 user-configurable page codes
- Up to 16 software configurable page codes
- Audio and control data transmission via AVB or Dante
- Local digital signal processing
- Supports tabletop or wall mounting
- Supports stored message playback (up to 10 messages)
- 50-minute recording pool for all 10 messages

- Removable foot for flat mounting
- Local storage of default and/or custom preambles
- High-quality, noise cancelling handheld microphone with magnetic latch
- Powered by PoE+ (IEEE 802.3at Class 3, 15.4W)
- Backlit liquid crystal display (LCD) technology
- Optional PIN to restrict unauthorized use
- CE marked, TAA compliant and RoHS compliant
- Covered by Biamp Systems' five-year warranty
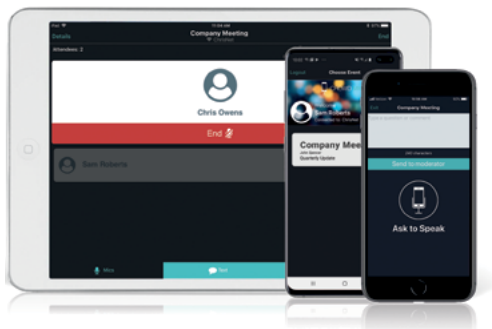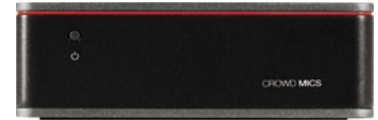
AUDIENCE ENGAGEMENT

CROWD MICS

Crowd Mics empowers audience interaction by turning any smartphone into a wireless microphone. Comprised of two apps — one for event attendees and the other for moderators — Crowd Mics is hosted on a small, pre-configured hardware device, the ATOM.

Serving as the central connection point between the attendee and moderator apps and the room's AV system, the ATOM supports four audio output interfaces: 3.5mm minijack, Euroblock connector, HDMI embedded audio, and USB audio. Any combination of these outputs can be used simultaneously. Optionally, the ATOM can be connected to the room's displays via HDMI to project poll results and other event content. The device also allows moderators to see a full participation log of each event, including questions that were asked and poll results, and can be remotely monitored and managed via SageVue.

Both Crowd Mics apps are supported on any Apple mobile devices running iOS v12.0 or newer; the attendee app is also supported on any Android devices running v8.0 or newer.

Crowd Mics is perfect for the participants and moderators of presentations, lectures, panel discussions, or other similar events ranging in size up to 1000 attendees. Additionally, Crowd Mics Online enables even greater interaction by allowing remote attendees to participate in events as if they were in the same room as the moderator.

BENEFITS FOR ATTENDEES

- No waiting for a microphone
- Intuitive user interface
- Get involved without talking
- Easy-to-use polling
- Touchless interaction

BENEFITS FOR MODERATORS

- Streamlines audience interactions
- Choose who speaks next
- Deactivate attendee mics
- Create polls and publish results
- Measure audience engagement

CROWD MICS ATOM FEATURES

- Audio output via Euroblock, HDMI embedded audio, minijack, or USB
- Video output via HDMI
- Two HDMI connections for display mirroring
- Monitored and managed via SageVue
- UL listed, TAA compliant, CE and RoHS compliant
- Covered by two-year warranty

MANAGEMENT SOFTWARE

BIAMP CANVAS

Biamp Canvas™ design and control software enables you to efficiently create and use customized control screens for the Tesira family of audio products. Biamp Canvas provides a flexible graphic control interface that can be tailored to meet the exact needs of the installation environment. With drag-and-drop functionality, you can place objects directly from the system design file into the software, creating pre-assigned control surfaces. Also included in the software is a variety of drawing tools for customized graphic manipulation of controls, backgrounds, and labeling.

- Create system control surfaces for PC/touch-screen
- Place controls and assign them to system functions
- Copy controls directly from system design objects
- Customize control layout, function, and appearance
- Control support for room combiners

- Create/navigate multiple pages of operation
- Restrict access to controls/pages via passwords
- Works simultaneously with other system controls
- Drag and drop programming
- Update preset settings directly in Biamp Canvas

TESIRA SOFTWARE

Tesira software is the interface for all system configurations. Creating the processing and system design for the application is done through a simple drag-and-drop interface. Toolbars allow control of processing, control, and diagnostic elements. Making audio and logic connections is fast and easy, and several options are available for displaying connection lines. System tools allow for easy device discovery and system configuration uploads.

- Complete system configuration and control
- Configuration engine confirms design, details hardware requirements for system
- Partitions allow parts of the design to be kept separate from each other (although audio connections can be made between partitions)
- Partitions compile separately, allowing unchanged partitions to stay online running while other partitions are changed, recompiled, and reloaded

- A single partition can span multiple devices; a single device can have multiple partitions
- New processing blocks; Uber Filter and FIR Filter, Gain Sharing Automixer, Automatic Gain Control (AGC)
- Many new line styles and features
- Drag and drop creation and editing of presets
- Logic Simulation
- Enhanced Text Protocol includes data point monitoring
- Event Scheduler

BIAMP SAGEVUE

Biamp SageVue is a browser-based monitoring and management platform for network-connected Tesira, Devio, and Cambridge devices, as well as Crowd Mics ATOMs. It is a self-contained web app deployed at a customer's site, enabling technology managers and designated end users to review system status and perform several system administration tasks. Granular access control levels are available and can be associated with the organization's existing Active Directory users and groups. SageVue also includes a RESTful API which can be used to build custom dashboards or be integrated with third party monitoring applications.

- Provides a single, comprehensive view of Tesira, Devio, Cambridge, and Crowd Mics devices connected to the network
- Monitors the status of network-connected Tesira, Devio, Cambridge, and Crowd Mics devices
- Sorting and tagging tools are available to help organize and filter data
- Tesira firmware can be updated remotely, either in groups or on a device-by-device basis

- Provides access to the VoIP configuration functions of Tesira VoIP-enabled devices
- Users can view both the user and advanced logs of Tesira devices
- Configurable access levels are available, with support for Active Directory integration
- Allows configuration of network properties for Tesira devices, including IP addressing and 802.1x port management
- Features a full log of user activity for traceability

CONTACT US

SUPPORT

Our award-winning support team can be reached 24 hours a day from anywhere in the world. If you're located in the U.S. or Canada, dial 1-877-242-6796 (1-877-BIAMP-XO). If you're located elsewhere, we'd still love to hear from you. Please visit biamp.com/how-to-get-help to find the support phone number for your region or time zone.

Prefer to troubleshoot on your own? Check out Cornerstone, our online technical support knowledgebase, at support.biamp.com. You'll find dozens of detailed articles designed to help you stay on track.

For training and how-to videos, visit the Biamp channel on YouTube. In addition to organizing videos by topic, we've also crafted playlists to make finding the videos easy.

TRAINING

Biamp is committed to continuing education within the pro AV industry. By understanding how to use Biamp products more effectively, users can build more efficient systems at a faster pace and better manage time and resources by minimizing post-installation customer support costs.

Tesira certification training is available in a self-paced online format. We also offer instructor-led webinars covering a variety of topics useful to beginners and advanced AV technicians alike.

To learn more about our trainings and webinars, visit biamp.com/training.

biamp.

9300 SW Gemini Drive
Beaverton, OR 97008 USA
Phone: +1 503.641.7287
biamp.com