

Networked Media Systems

Tesira

Tesira changes the scale of possibilities for the way AV systems are designed, installed, networked and experienced. And by changing the scale of what's imaginable, Tesira gives you the power to succeed like never before.

Tesira, the first truly scalable media system for digital audio networking using Audio Video Bridging (AVB), delivers smarter system modularity and breakthrough performance.

Tesira has boundless expansion potential, with:

- Modular scalable I/Os, DSPs and networked end-points
- A scalable digital media backbone (AVB)
- Up to 8 DSP cards in a single chassis
- Up to 420 x 420 digital audio channels



Audio Video Bridging (AVB) — The Next Generation In Digital Media Transport

Now you can future-proof your projects and your business. With the first open, industry-accepted standards for transporting audio and video over the network, AVB bridges the gap between AV and IT technologies.

The new AVB standards synchronise multiple streams of audio and video, eliminate buffering delays and create resource reservation. And because AVB standards leverage existing Ethernet technology, they will benefit from ever increasing speeds and enhancements backed by major consumer electronics companies, allowing the AV industry to benefit from solutions aimed at the mass market.

For AV integrators and IT Managers, AVB means end-to-end digital networks that are simple to design and easy to manage. And ultimately, systems that are more profitable for you and more cost-effective for your customers.

AVB advantages include:

- IEEE standards
- Significantly lower latencies
- Larger channel capacity
- Intelligent switches
- Ethernet-based
- Single network for all media, including non-AVB traffic



TESIRA®

Intelligibility On A Whole New Scale

The Tesira system features Biamp's new SpeechSense™ Technology and AmbientSense™ Technology, each designed to enhance speech processing by more accurately distinguishing between human speech and ambient noise. This allows Biamp's exceptional algorithms—including acoustic echo cancellation (AEC), automatic gain control (AGC), ambient noise compensation (ANC), and automatic mixers—to perform on a whole new level.

System Design On A Whole New Scale

What if... you could design and expand systems incrementally, floor by floor, phase by phase? Then specify the correct hardware just by pushing a button? You asked, Biamp answered. Introducing Tesira software, including Biamp's compilation engine and partitions. These breakthrough software tools will simplify system design and specification, save time and reduce costs.

Biamp's Unrivalled Compilation Engine

Designing sophisticated audio systems is easier, faster and more efficient using our compilation engine. You can minimise design time, and potentially lower both hardware costs and the costs associated with trial and error.

Simply design the system and click on "compile." The compilation engine performs a number of operations in a matter of seconds—from checking that the design is complete, to determining the most cost-effective list of Biamp hardware required, to finally documenting the necessary system interconnects to ensure proper, stable operation.

Partitions For Incremental Configuration

Tesira's intuitive design software allows you to configure systems using a phased or "partitioned" approach. Whether you're expanding an existing installation, adding AV to new buildings on an existing campus, or working on a large or complex project, Tesira partitions will make your job easier. When using partitions, distinct areas can be configured, updated or maintained separately without having to reconfigure the entire system, while other areas remain up and running. Not only do Tesira partitions provide the opportunity for incremental configuration, working in partitions also minimizes redrawing and compilation time.

Success On A Whole New Scale

For AV and IT system integrators and consultants, Tesira means the opportunity to grow your business by entering new markets and taking on larger-scale projects. And the potential for easier expansion is ideal for projects that are phased or grow over time, such as hospitals, universities and corporate campuses. When you specify and install Tesira systems, you get the highest-quality audio and a future proofed system that's more networkable, expandable, reliable and cost-efficient. All backed by Biamp's legendary customer support and the only 5-year warranty in the industry. That means future-proofing for your business, too.

Networked Media Systems

Tesira Servers



Server I/O

The Tesira SERVER-IO is a digital network server. It is factory configured with one DSP-2 card and is capable of handling up to two additional DSP-2 cards. The SERVER-IO can be configured with one 420 x 420 channel AVB card or one AVB card and one or two 32 x 32 channel SCM CobraNet cards. 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 telephone interface). The SERVER-IO is the core of a Tesira digital audio system and can be used as a standalone core or with Tesira Expanders to form a highly scalable audio network.

- Supports up to 3 DSP-2 cards
- Up to 12 I/O cards with maximum 48 channels of audio
- 420 x 420 channels of digital I/O with support for network redundancy
- Configuration and control networking over Ethernet
- Front panel LCD display for device and system information
- Rack mountable (3RU)



Server

The Tesira SERVER is a digital network server. It is factory configured with one DSP-2 card but can accept up to a total of eight DSP-2 cards. The SERVER can be outfitted with up to two network cards for AVB or CobraNet® in any combination. The SERVER can also be outfitted with a standard I/O card for 4 channels of local I/O. The SERVER is the core of a Tesira digital audio system and can be used as a standalone or with Tesira Expanders to form a highly scalable audio network.

- Supports up to 8 DSP-2 cards
- 420 x 420 channels of I/O per AVB-1 card with support for network redundancy
- Configuration and control networking over Ethernet
- Front panel LCD display for device and system information
- Supports additional AVB module and/or optional Cobranet module
- Rack Mountable (3RU)

SERVER I/O Cards



AVB-1

- AVB network card capable of up to 420x420 channels
- For use in all Tesira Servers



SCM-1

- Cobranet network card capable of up to 32x32 channels
- For use in all Tesira Servers



DSP-2

- DSP card to suit Tesira Servers
- 2 DSP processors onboard for unprecedented processing power

Networked Media Systems

Tesira Servers

Server I/O Cards

SIC4 – Mic/Line Input Card

- 4 channels of balanced mic or line level input on plug-in barrier strip connectors
- Clip indicator and +48V Phantom Power
- Low latency converters



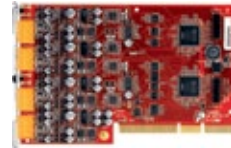
SOC4 – Line Output Card

- 4 channels of balanced line level output on Plug-in barrier strip connectors
- Low latency converters
- Selectable full-scale output reference level (24dBu, 18dBu, 12dBu, 6dBu, 0dBu, -31dBu) for best interface/performance



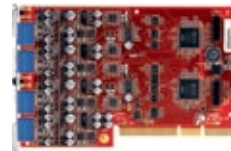
SEC4 – Acoustic Echo Cancellation Card

- 4 channels of balanced mic or line level input
- 4 channels of Acoustic Echo Cancellation using Biamp's proprietary wide-band Sona™ algorithm
- New processing algorithms: SpeechSense plus Automatic Gain Control (AGC) and High pass filter
- Does not use processing resources from SERVER or SERVER-IO DSP.
- Allows for AEC processing to be used by any other system input



SAC4 – Ambient Noise Compensation Card

- 4 channels of balanced mic or line level input
- 4 channels of Ambient Noise Compensation using Biamp's proprietary AmbientSense™ algorithm
- Does not use processing resources from SERVER or SERVER-IO DSP.
- Allows for AEC processing to be used by any other system input



SVC2 – VoIP Card

- Control via Tesira software or third-party control
- Two concurrent, independent calls
- Caller ID, Hold capability, Redial, 16-entry Speed Dial and Adjustable auto-answer, Voice activity detection and Comfort noise generation
- SIP authentication and SIP v2 (RFC 3261 and companion RFCs)
- Multiple CODEC support: (G.711μ, G.711A, G.722, G.729AB, G.723.1)



STC2 – Telephone Interface Card

- Initiate outgoing calls: DTMF tone dialing, Speed-dialing, Redial, & Flash
- Detect and answer incoming calls
- Line echo cancellation and Noise suppression filter
- TouchTone™ decoding and Caller ID reception
- Call progress and Line intrusion detection along with Continuous Line Status and Fault Monitoring



Networked Media Systems

Tesira Expanders



EX-IN – 4 Mic/line input AVB expander

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

- Tesira Half-rack input expander box with 4 channels of balanced mic or line level input on plug-in barrier strip connectors
- +48V Phantom Power
- Audio and control networking over AVB
- Powered by PoE+



EX-OUT

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

- Tesira Half-rack output expander box with 4 channels of balanced mic line level output on plug-in barrier strip connectors
- Audio and control networking over AVB
- Powered by PoE+



EX-IO

The Tesira EX-IO is a half-rack expander box for use with Tesira SERVER and SERVER-IO devices. The EX-IO is a 4-channel input and output expander. The expander features two channels of mic/line level input and 2 channels of mic level output. The expander communicates with the Tesira AVB network for audio networking, configuration and control and is powered by PoE+.

- Tesira Half-rack input/output expander box with 2 channels of balanced mic or line level input and 2 channels of balanced line level output
- +48V Phantom Power on inputs
- Audio and control networking over AVB
- Powered by PoE+



EX-LOGIC

The Tesira EX-LOGIC is a half-rack logic box for use with Tesira SERVER and SERVER-IO devices. 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. 4 of these connections can also be used 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 control other equipment in the system.

- 16 total logic I/O connections. 4 connections can also 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, indicators or provide logic input to other controllable equipment
- Serial port for the output of command strings
- Connects to Tesira SERVER or SERVER-IO over AVB
- Powered by PoE
- Half-rack chassis

Networked Media Systems

Tesira Expanders

EX-MOD

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

- Tesira Modular I/O expander device that can accommodate up to 3 I/O cards, providing up to 12 channels of analog audio
- AVB connection to Tesira system for audio networking, configuration and control
- Plug-in barrier strip connections on cards
- Internal universal power supply
- Rack mountable (1RU)



EX-MOD Expander Cards

EIC4 – 4 channel Mic/Line input card

- 4 channels of balanced mic or line level input on plug-in barrier strip connectors
- Clip indicator and +48V Phantom Power per input



EOC4 – 4 Channel Line output card

- 4 channels of balanced line level output on plug-in barrier strip connectors
- Selectable full-scale output reference level (24dBu, 18dBu, 12dBu, 6dBu, 0dBu, -31dBu) for best interface/performance



EIOC4 – 2 Channel Mic/line input and 2 channel Line output card

- 2 channels of balanced mic or line level inputs with +48V Phantom Power on each input
- 2 channels of balanced line level output
- Plug-in barrier strip connectors



Tesira Ethernet Controls

Tesira surface-mounted and in-wall remote Ethernet control devices offer a simple, intuitive interface and can be installed and configured to fit the needs of a particular application.

The devices connect via standard CAT-5/6/7 cabling and are powered over Ethernet (PoE), eliminating the need for custom cabling and local power sources. Multiple remote control panels can be connected over large distances using standard network technology.

Available in 2 versions:

TEC1s – Surface Mount Control

TEC1i – In-wall Control

- Adjustment and/or initiation of 32 selectable system volumes and actions
- Control functions are programmed in the Tesira system design software
- High contrast OLED display with capacitive touch technology eliminates protruding and moving parts to increase reliability and longevity



Networked Media Systems

Nexia Processors

The entire Nexia® digital sound processor lineup is designed with a network-friendly open architecture to help you create economical, intuitive solutions. You'll save time, effort and ultimately money. The internal system design is completely user definable via PC software, and can be controlled via dedicated software screens (Davinci), RS-232 or Ethernet based control systems, and/or a variety of optional remote control devices. Multi-unit Nexia systems can be created utilizing Ethernet and NexLink® digital audio linking. Reliability is guaranteed by Biamp's 5 Year Warranty.



	Inputs	Outputs	Connectivity	Control	Dimensions	Weight	Power consumption
NEXIA SP Speaker Processor	4 x Line	8 x Line	Ethernet, RS-232	RC-Bus	(W x H x D): 483 x 45 x 283mm	3.9Kg	65 Watts
NEXIA PM Presentation Mixer	4 x Mic/Line 6 Stereo Line (RCA)	3 Stereo Line (6 Mono)	Ethernet, RS-232	RC-Bus	(W x H x D): 483 x 45 x 283mm	3.9Kg	65 Watts
NEXIA CS Conference System	10 x Mic/Line	6 Mic/Line	Ethernet, RS-232	RC-Bus	(W x H x D): 483 x 45 x 283mm	3.9Kg	65 Watts
NEXIA VC Video Conference	8 x AEC 2 x Mic/Line & 1 Codec	4 x Mic/Line	Ethernet, RS-232	RC-Bus	(W x H x D): 483 x 45 x 283mm	3.9Kg	65 Watts
NEXIA TC Teleconference	8 x AEC 2x Mic/Line + Hybrid I/O	4 x Mic/Line	Ethernet, RS-232	RC-Bus	(W x H x D): 483 x 45 x 283mm	3.9Kg	65 Watts

Networked Media Systems

Audia Processors

Biamp's revolutionary Audia® Digital Audio Platform seamlessly integrates powerful hardware and intelligent software for unheard of design and networking potential. In fact, Biamp is one of the first manufacturers to make use of CobraNet® by integrating it into our Audia DSPs, pioneering its use in high profile installations. A single Audia unit can provide the power of an entire rack of processors at your fingertips. Imagine what you can do with multiple Audia units, configured and networked to conquer the most challenging environments.

5 Year Warranty

AudiaSolo processors

For systems where no digital audio networking is required, AudiaSOLO is a streamlined solution. It has all of Audia's processing power and a range of I/O options (8x8, 4x12, & 12x4). Only now we've engineered it into a single rack space unit with a new, low profile power supply. The full Audia library of Algorithms is available. Supports daVinci software and all RCB remote devices. 5 Year Warranty

- Cost-effective single rack-space package
- Third-party control via RS-232
- Built-in diagnostic tools
- Remote function control via Ethernet
- Multi-level security coding
- Extensive processing library available
- Compatible with daVinci, Biamp's control surface design package.



	Inputs	Outputs	Connectivity	Control	Dimensions	Weight	Power consumption
AUDIA8x8 SOLO	8 x Balanced Mic/Line	8 x Balanced Mic/Line	Ethernet, RS-232	RC-Bus	(W x H x D): 483 x 45 x 283mm	3.9Kg	110 Watts
AUDIA12x4 SOLO	12 x Balanced Mic/Line	4 x Balanced Mic/Line	Ethernet, RS-232	RC-Bus	(W x H x D): 483 x 45 x 283mm	3.9Kg	110 Watts
AUDIA4x12 SOLO	4 x Balanced Mic/Line	12 x Balanced Mic/Line	Ethernet, RS-232	RC-Bus	(W x H x D): 483 x 45 x 283mm	3.9Kg	110 Watts

AudiaFlex

AudiaFLEX gives you unprecedented control of your system with the ultimate flexibility in design. Choose any configuration of input and output pairs to create the system you need without compromises. Multi-Channel audio can be seamlessly distributed among multiple units via CobraNet®, using economical Cat-5 cable. Control the processing power of the entire network over Ethernet, or via Crestron®, AMX®, or other popular controllers. Each AudiaFLEX can provide up to 24 channels of I/O, or expand your options even further with the EXP and MiniEXP range of CobraNet expansion units.

Couple with this Audia's unprecedented software and processing library and you have a tool that is capable of even the most demanding of system designs.

- Up to 24 inputs/outputs, any combination by pairs, with or without CobraNet
- Control via:
 - PC/laptop
 - Remote control panels for level, presets, etc.
 - Third-party control via RS-232
 - Built-in diagnostic tools
 - Remote function control via Ethernet



	Inputs/outputs	Expansion/Audio Distribution	Connectivity	Control	Dimensions	Weight	Power consumption
AUDIAFLEXNC	12 x card slots Provide up to 24 channels of I/O	-	Ethernet, RS-232	RC-Bus	(W x H x D): 483 x 89 x 283mm	6.2Kg	<110 Watts
AUDIAFLEX	12 x Balanced Mic/Line	Cobranet Enabled (with redundancy) up to 64 channels over ethernet network	Ethernet, RS-232	RC-Bus	(W x H x D): 483 x 89 x 283mm	6.2Kg	110 Watts

Networked Media Systems

AudiaFLEX input/output card options



AEC-2HD

Dual-Channel Wideband Acoustic Echo Cancellation Input Cards

- Two mic/line level input channels with dedicated wideband processing on each input
- Includes Biamp's proprietary SONA™ Adaptive AEC Algorithm delivering true 20Hz to 20kHz wideband Echo Cancellation
- On-board DSP, does not consume AudiaFLEX resources



IP-2

Dual-Channel Mic/Line Input Cards

- Each card provides two mic/line input channels
- Balanced inputs on plug-in barrier strip connectors



OP-2e

Dual-Channel Mic/Line Output Cards

- Each card provides two mic/line output channels
- Balanced outs on plug-in barrier strip connectors



PA-2

Dual-Channel Power Amplifier Cards

- Directly powers 4, 6, or 8 ohm speakers
- Software configurable from 5 to 30 watts dual-channel and from 10 to 60 watts mono-bridged (limited to 120W load per Audiaflex chassis)



TI -2

Dual-Channel Telephone Interface Cards

- Initiate outgoing calls including: DTMF tone dialing, speed-dialing, redial, flash
- Detect and answer incoming calls
- Line-echo cancellation and continuous line-status and fault monitoring



VoIP-2

Dual-Channel Voice Over Internet Protocol Cards

- Two channels of VoIP interface per card
- Caller ID, SIP Protocol, auto-answer, speed dial, hold capability, and direct dialing on each line
- Up to six VoIP -2 Cards can be installed into a single AudiaFLEX unit

Networked Media Systems

AudiaFUSION

AudiaFUSION is a product so innovative we had to create a completely new category to describe it: Networked Amplified Processor. A full-featured DSP with enough power to drive a system of its own, AudiaFUSION is a leap forward in audio technology. It allows you to configure systems that are decentralized, placing components close to speakers for reduced labor and material costs. And when you install AudiaFUSION in a system together with AudiaFLEX, processing resources are shared, making the entire system more efficient. The potential to save money and maximize profit is, well, revolutionary.

FEATURES

- Modular based design
- Amplification modules have software configurable power levels/load options
 - 8 amplification modules per frame with 100 to 600 Watts per module (maximum of 2400W per chassis)
 - 70V or 100V with direct drive capability, or low-impedance (4 or 8Ω) operation
 - Maximum of 2400 Watts of power in 3 rack spaces
- TCP/IP Network controllable
- Comprehensive front panel LED Indication covering Signal presence, Peak and Clip indication, heat sink temperature fault, amplifier failure and fan stuck-rotor
- Internal amplifier module failover mode and entire device failover mode
- Extensive software monitoring features covering peak and excessive clip, heatsink temperature, short circuit, impedance monitoring, amplifier failure and fan stuck rotor
- CobraNet Interface (16 channels in/16 channels out) with dual ports for network redundancy

AM-600 Amplifier Module Card

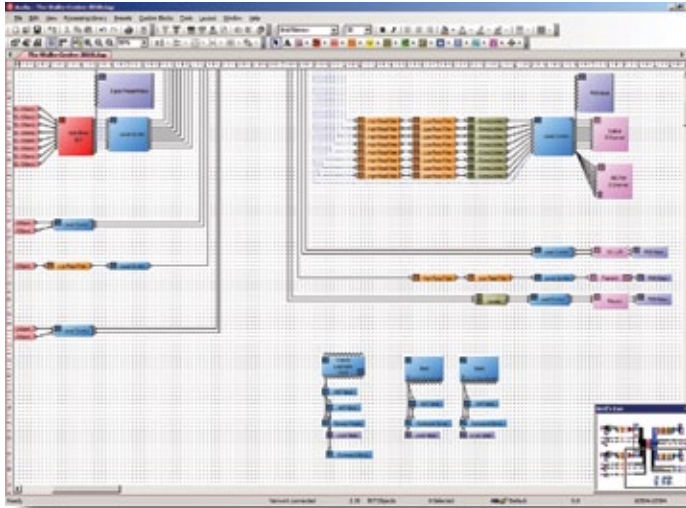
The AM-600 card offers software configurable power levels and load options with scalable output power from 100 to 600 Watts per module (maximum of 2400 Watts per chassis) . The module provides 70V or 100V with direct drive capability, or low-impedance (4 or 8 ohm) operation.



Networked Media Systems

Biamp Systems Control software

The core power of Biamp Systems' products lies in its software. Be it the intuitive design interfaces, the extensive processing library, the logic engine or the incredible power of Biamp's adaptive algorithms. Whichever platform you choose for your next project rest assured that Biamp's software packages will unlock your systems full potential.



Features include:

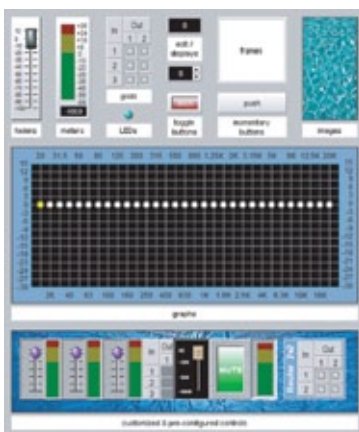
- Easy to use drag and drop open architecture system design
- Fully customisable Processing Library bar stores default/custom DSP objects
- Easy-to-use tools for object alignment, sizing, packing, spacing & centring
- Programmable presets and extensive logic control capabilities

Software: Biamp Systems Audia

Audia® software is designed for the quick and easy configuration of even the most complex installations. Its intuitive, user-friendly interface has a host of features that allow you to take a real bite out of your programming time. Open the software and enter system parameters. Then hit the "compile button" and the Audia software provides a list of all the hardware that you need for the entire system. Configuring your signal chain is as easy as dragging and dropping each component's icon. Powerful signal processing, routing matrices, and room combining are just a few clicks away from completion.

Software: Biamp Systems Nexia

The entire Nexia® product line includes an intuitive drag-and-drop software package that allows for simple configuration with maximum flexibility. You'll have a complete view of your design, which makes it easy to adapt, revise, and rework as you fine-tune the system design. To simplify things even further, Nexia units come with pre-loaded sample NEX files that will get you started right out of the box.



Software: Biamp Systems daVinci

Biamp Systems daVinci's graphic control screen software makes creating an end user interface brilliantly simple. It's part of the genius built into our Audia and Nexia audio design files. Simply paste Audia or Nexia audio components into daVinci to create complete room layouts — including master controls, stations, or individual zone controls.

The function and appearance of the graphic control interface can be tailored to the exact needs of the user and daVinci lets you group or ungroup the control blocks at a level of granularity you have to see to believe.



iPad Dialer App

Introducing the new iPad/iPhone dialer application. The iOS app allows for a new point of control for conferencing applications, further expanding the capabilities of Audia and Nexia systems. Compatible with all Audiaflex (with T12 and or VoIP2 cards installed) and NexiaTC products, the app provides the following features :

- Use an iPad or iPhone to manage your conference calls
- Multi-room capable with different controls for each space (Up to 8 rooms).
- Connect using your contact list in the Biamp device or the list within the iOS device
- Allows control of room and call level and recall of up to 8 presets per room

Networked Media Systems

CobraNet Expansion Units

A convenient and cost-effective way to expand the power of an Audia system. Using Audia's highly evolved CobraNet® features, now you can create systems you never even dreamed were possible.

The range of Mini-Expanders stretch dollars and Audia systems even further by adding inputs or outputs exactly where they're needed. The option to use Power over Ethernet (PoE) or local power makes them even more versatile. By making CobraNet® access more affordable, Mini-Expanders for Audia expand system boundaries for more scalable, flexible systems anywhere. All units feature selectable 48V Phantom power on all inputs and 24Bit 48Khz sampling.



EXPI-4



EXPI/O-2



EXPO-4



AudiaEXPI



AudiaEXPO

	Inputs	Outputs	Termination	Connectivity	Dimensions	Weight	Power consumption
AUDIAEXPI	8 x Mic/Line level with 48V Phantom Power	-	Plug-in Barrier Strip	Cobranet Ethernet	(W x H x D): 483 x 45 x 146mm 1 Rack Unit	2Kg	<25 Watts
AUDIAEXPO	-	8 x Mic/line level	Plug-in Barrier Strip	Cobranet Ethernet	(W x H x D): 483 x 45 x 146mm 1 Rack Unit	2kg	<25 Watts
AUDIAEXPI-4	4 x Mic/Line Level with 48V Phantom Power		Plug-in Barrier Strip	Cobranet Ethernet PoE	(W x H x D): 483 x 45 x 283mm Half Rack width	1.4Kg	<13 Watts
AUDIAEXPO-4		4 x Mic/line level	Plug-in Barrier Strip	Cobranet Ethernet PoE	(W x H x D): 216 x 38 x 152mm Half Rack width	1.4Kg	<13 Watts
AUDIAEXPI/O-2	2 x Mic/Line level with 48V Phantom Power	2 x Mic/Line level	Plug-in Barrier Strip	Cobranet Ethernet PoE	(W x H x D): 216 x 38 x 152mm Half Rack width	1.4Kg	<13 Watts

NPS-1 Networked Paging Station

Designed exclusively for use with AudiaFLEX and AudiaFUSION systems, the Networked Paging Station-1 is a microphone console engineered to carry audio, control and power all through a single cable. Featuring an innovative user interface, the NPS-1 allows users to quickly switch between pre-programmed paging groups and zones, making it perfect for stadiums, convention centers, shopping malls, hospitals and similar facilities. The microphone console integrates with AudiaFLEX and AudiaFUSION networks via CobraNet® and can be used within multiple station/multiple device systems.

- CobraNet audio/control plus power on single cable
- Power-Over-Ethernet (PoE) or external supply
- 16 simultaneous pages allowed per AudiaFLEX unit
- 32 programmable microphone button operations
- 16 priorities, with override and lock-out functions
- Weight: 0.41kg



Networked Media Systems

Control Devices



RED-1/RED-1F Remote Ethernet Devices

Offers a simple, intuitive interface for end users and can be installed and configured to fit the unique needs of a particular application

- Connects via standard CAT-5/6/7 cabling and is powered over Ethernet (PoE)
- Adjustment and/or initiation of 32 selectable system volumes and actions
- Volumes control capabilities including inputs, outputs, matrix cross-points, etc.
- Trigger system operations, including presets, source selection, mutes, ducking, combining, etc.
- Control functions are programmed in the Audia and Nexia system design software
- High contrast OLED display with a wide viewing angle
- Capacitive touch technology eliminates protruding and moving parts to increase reliability and longevity
- Surface-mount (RED-1) or flush mount (RED-1F) versions



Select 8 - Remote wall panel

- Initiation of eight selectable actions. Actions include presets, mutes, ducking, combining, etc.
- DC Power consumption: 650mW
- Dimensions: (W x H x D): 69.85x 114.3 x 29.21mm



Volume 8 - Remote wall panel

- Adjustment of eight selectable volumes. Volumes include inputs, outputs, matrix cross-points, etc.
- DC Power consumption: 600mW
- Dimensions: (W x H x D): 69.85x 114.3 x 29.21mm



Volume/Select 8- Remote wall panel

- Combines Volume 8 and Select 8 functions.
- DC Power consumption: 800mW
- Dimensions: (W x H x D): 115.57 x 114.3 x 29.21mm



Logicbox

- Programmable logic inputs/outputs for control of/by Audia or Nexia.
- DC Power consumption: 600mW
- Dimensions: (W x H x D): 231.14 x 40.64 x 82.55mm



Voltage Control Box

- 4-Analog and 4-Logic connections for control of/by Audia or Nexia.
- DC Power consumption: 920mW
- Dimensions: (W x H x D): 174.63 x 40.64 x 76.2mm

Networked Media Systems

Vocia - Networked Paging and Voice Evacuation

Distributed networked smarts. Flexible, scalable features. No-nonsense Biamp quality.

Move forward with confidence – with Vocia.

Your paging and voice evacuation system simply has to work. With Vocia®, the work to install and maintain your system becomes simple.

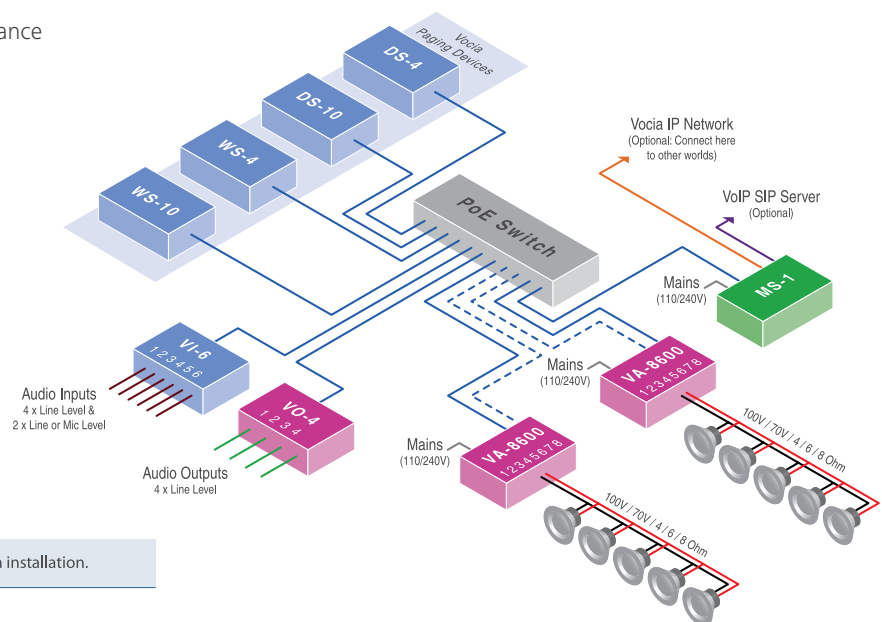
Gone are precarious centralised processing and routing. Instead, every Vocia component contains memory and processing resources that communicate intelligently across your network. By distributing message routing and processing, Vocia prevents any single failure from bringing down your system. Its modular hardware, paired with easy-to-use software, helps you imagine, implement and improve everything from simple overhead paging applications to complex systems with multiple zones and worlds.

Biamp specifically designed Vocia from the ground up to meet compliance standards and codes like EN 54-16 product certification and EN 60849/AS 60849 system verification. Vocia also builds on the network standards you already know, including CobraNet® for single-site installations and TCP/IP across multi-site installations. You can monitor, log and control components remotely, and install or replace new units quickly and easily.

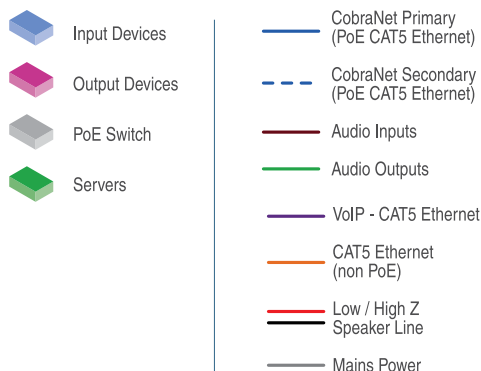
Vocia's decentralised, networked approach builds a more reliable and capable backbone for mission-critical installations in higher education, health care, transportation and other facilities. What could be simpler?

Vocia at a glance

- Distributed processing and page routing
- Voice over IP paging
- System-level monitoring, logging and control
- Meets EN 54-16 safety standards
- Works over standard IP networks and CobraNet
- Smart, easy-to-use desk and wall stations
- Sophisticated, rugged system components
- Advanced controllers for usability and compliance
- Adaptive ambient noise compensation
- Intuitive Windows®-based software



This diagram illustrates a standard, single-world Vocia system installation.



Networked Media Systems

Vocia Audio Inputs

Paging Stations

All Vocia paging stations feature embedded DSP and on-board memory, standard and advanced public address functionality. All device-specific configuration information is stored locally, which means the DS-4 does not rely on a centralised controller for processing and page routing. All microphones are completely monitored ensuring system reliability and performance with comprehensive logging and reporting. Features include:

- Push-to-talk button with status indication and security lockout
- Bright and clear OLED display
- User-configurable page codes with 4 priority levels
- Local digital signal processing, including gain, filters and compressor/limiter
- Auxiliary Port provides connection to control panel with power, line-level audio, and bi-directional RS232 for transmitting Vocia Text Protocol (VTP) commands
- Local storage of default and/or custom preambles
- Built-in store and forward functionality for message stacking
- PoE powered with simple physical device addressing



	Format	Microphone type	Page Codes	Message Storage	Preambles	Power Supply
WS4	Wall station	Replacable noise cancelling, dynamic fist mic includes capsule monitoring	4	2 minutes internal memory	yes - stored internally pre-loaded and customisable	PoE
WS10	Wall Station	Replacable noise cancelling, dynamic fist mic includes capsule monitoring	Up to 999	2 minutes internal memory	yes - stored internally pre-loaded and customisable	PoE
DS4	Desk Console	Condenser capsule includes capsule monitoring	4	2 minutes internal memory	yes - stored internally pre-loaded and customisable	PoE
DS10	Desk Console	Condenser capsule includes capsule monitoring	Up to 999	2 minutes internal memory	yes - stored internally pre-loaded and customisable	PoE
EWS4 EN54 approved	Wall Station	Replacable noise cancelling, dynamic fist mic includes capsule monitoring	4 emergency only	2 minutes internal memory	yes - stored internally pre-loaded and customisable	PoE
EWS10 EN54 Approved	Wall Station	Replacable noise cancelling, dynamic fist mic includes capsule monitoring	Up to 999 emergency only	2 minutes internal memory	yes - stored internally pre-loaded and customisable	PoE



VI6

The VI-6 is a networked audio input expansion device allowing the user to add six channels of background music or user-defined audio to a Vocia system. As part of the Vocia system, the VI-6 meets paging requirements for facilities of all sizes.

- 4 sets of dual RCA connectors, plus terminal block connectors for line-level inputs
- 4 control inputs and 4 control outputs
- 2 microphone/line inputs with phantom power
- Software-configurable local audio signal processing, including gain, filters and compressor/limiter

Vocia Audio Outputs



VO4

The VO-4 is a networked audio output device allowing the user to add four line-level output channels to a Vocia system. The VO-4 accepts four channels of digital audio input via CobraNet and provides four line-level analog audio outputs. The VO-4 features embedded DSP and on-board memory to process and store all device-specific configuration information locally and includes comprehensive fixed-chain digital signal processing.

- Converts digital audio to analog audio
- 4 removable terminal block connectors for line-level outputs
- 4 control inputs and 4 control outputs
- Software-configurable local audio signal processing, including gain, filters and compressor/limiter
- Power over Ethernet (PoE)

Networked Media Systems

Vocia Amplifiers

The VA series is a range of multi-channel digitally networked amplifiers. These units are smart enough and tough enough to make sure your messages get heard. Each model has embedded DSP and on-board memory to process and store messages and configuration information locally. They also include comprehensive fixed-chain digital signal processing and receive audio and control signals over standard IP and CobraNet® networks.

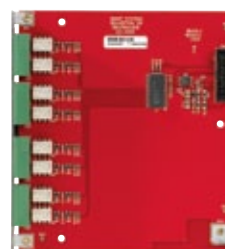
These amplifiers allow for comprehensive failover and end of line monitoring along with sophisticated logging and reporting via Vocia software. The 2000 and 4000 series are fixed channel units while the VA8600 and VA8600C feature modular construction with scalable output power with EN54 certification (*VA8600C only).



	Channels	Output Power per channel	Fixed/Modular	Inputs	Failover	Size	Power Supply
VA2060	2 channels	60Watts 4/8 Ohm, 25V/70V/100V - Hardware selectable	Fixed	Cobranet	1:1 and Chassis:Chassis	2RU	AC Mains
VA2060E	2 channels	60Watts 4/8 Ohm, 25V/70V/100V - Hardware selectable	Fixed	Cobranet and 2 x balanced local inputs	1:1 and Chassis:Chassis	2RU	AC Mains 24VDC Backup
VA4030	4 channels	30Watts 4/8 Ohm, 25V/70V/100V - Hardware selectable	Fixed	Cobranet	1:1, 3:1 and Chassis:Chassis	2RU	AC Mains
VA4030E	4 channels	30Watts 4/8 Ohm, 25V/70V/100V - Hardware selectable	Fixed	Cobranet and 4 x balanced local inputs	1:1, 3:1 and Chassis:Chassis	2RU	AC Mains 24VDC Backup
VA8600	1 - 8 channels	100Watts - 600Watts (2400 Watts max per chassis) 4/8 Ohm, 70V/100V - Software selectable	Modular Uses VAM600 module	Cobranet	1:1, and Chassis:Chassis (3:1) x 2, 7:1 - requires VFOM module	3RU	AC Mains
VA8600C EN54 Certified	1 - 8 channels	100Watts - 600Watts (2400 Watts max per chassis) 4/8 Ohm, 70V/100V - Software selectable	Modular Uses VAM600C module	Cobranet	1:1, and Chassis:Chassis (3:1) x 2, 7:1 - requires VFOM module	3RU	AC Mains

VFOM

The Vocia failover module is for use in the VA-8600/VA-8600c amplifiers (optional). It offers selectable 7:1 or dual 3:1 amplifier channel failover.



Networked Media Systems

Vocia Controllers



ANC1

The ANC-1 allows automatic, adaptive volume adjustment based on ambient noise sensing in reaction to changes in the environment. The ANC-1 is a networked device for use with the Vocia amplifier range. The Vocia software interface permits comprehensive adjustment of ANC parameters and utilizes IEEE compliant Power over Ethernet (PoE) technology. Includes 48 Volt phantom power on 2 microphone inputs to allow for sampling of greater areas.



ELD1

The ELD-1 is a networked safety device for use with the Vocia amplifier range and is an integral part of standards-compliant voice evacuation and paging notification systems. The unit is used to monitor signal and speaker line integrity of the loudspeaker run.



WR1

The WR-1 is a networked zone wall remote designed to control background audio in user-defined music zones. Utilising Power over Ethernet (PoE) technology, it allows users to select background music sources, inhibit pages and mute sources—all from an attractive, low-profile, wall-mounted panel.

Vocia Life Safety Interfaces



LSI16e

The LSI-16e serves as an enhanced emergency interface between a Vocia system and emergency/fire alarm systems. While typically powered from a certified 24V DC source, it can also utilise Power over Ethernet (PoE).

- Parallel I/O ports for direct interface with fire alarm and emergency equipment
- 8 monitored I/O and 8 control inputs
- Redundant network connection and power supply options
- Power and data over a single Ethernet cable
- Local storage of configuration data
- Up to 4 discrete emergency inputs plus 16 additional general purpose inputs can be programmed to play emergency message, enable zone reset or zone silence; maximum 10 inputs can be assigned per emergency zone
- Each general purpose input can be programmed as TTL, high range or monitored high range
- General purpose inputs allow monitoring for short to ground and open circuit
- Up to 500 virtual inputs via RS232 or Ethernet
- Provides system health monitoring via RS232 or Ethernet
- Rack mountable (1RU)



CI1

The CI-1 Control Interface is a companion product to the Vocia LSI-16 Life Safety Interface. It facilitates necessary connections to the LSI-16 to meet EN 54-16 standards.

- Silence, System Test and System Fault Reset
- High level sounder for Fault/Alarm warning
- Provides terminating resistors for Alarm and Fault Inputs
- Provides terminating resistors for any unused monitored outputs
- Rack mountable (1RU)

Networked Media Systems

Vocia Servers

MS1

The MS-1 is a networked message server that supports multiple paging functions within a Vocia system—including message playback, event scheduling, VoIP paging interface, logging and remote access. The MS-1 is the gatekeeper to the Vocia world, unlocking the full capabilities of the Vocia platform.

- Recorded message storage and playback
- Event scheduling
- Storage of logged system data
- VoIP paging interface
- Facilitates Inter-world paging support
- System configuration storage and service
- CobraNet audio/control with dynamic use of available bundles over single Ethernet cable
- Remote third party control capability



TTS1

The TTS-1 is a networked text-to-speech engine that supports the creation of browser-based courtesy announcements. The TTS-1 uses Ethernet-based control protocols in conjunction with CobraNet to function within a Biamp Vocia system and constructs announcements using a set of user-defined templates.

- Text-to-speech announcement creation from any computer with appropriate network access
- Announcements in multiple languages and voices
- User-defined templates
- CobraNet audio/control with dynamic use of available bundles over single Ethernet cable



Software

The software that controls Vocia® provides an easy, at-a-glance overview of your universe — regardless of how many worlds it includes — and is designed for ease-of-use and intuitive interfacing. It can be used for programming, monitoring and live audio and control. Specifically Vocia's sophisticated software capabilities include self-monitoring of the overall system health, which automatically sends email alerts on the status. Remote monitoring allows system managers to check on the status of the system from anywhere just by logging in.

The Vocia CobraNet® Bridge is designed to interface to any CobraNet audio system using explicit bundle numbers. Now you can expand existing audio systems and add Vocia functionality for critical paging and life safety functionality.

With Vocia's advanced features like the scheduler, third-party control, remote and system health monitoring, and a sophisticated log viewer, never has managing a multi-zone, multi-building system been so fast and easy.

