

VOCIA AMPLIFIER 8600

EFFECTIVE MARCH 2013

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Vocia input devices are available for both desk stations and wall stations, allowing flexibility in user location.

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Vocia output devices provide both flexible and scalable functionality.

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Vocia controllers complement varying system sizes and needs, from output level control to emergency/fire alarm interfaces.

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Vocia servers provide user-controlled audio, including global paging and text-to-speech functionality.

SOFTWARE [14]

From an individual world to a multi-world universe, Vocia software is intuitive and easy to use.



MEET THE NEXT GENERATION

Vocia is more than a basic public address system. It's the result of Biamp understanding evolving communication trends and the demands put on today's systems. By using proven IT technologies and applying them to mass communication needs, Vocia delivers a superior alternative to the traditional, analog public address system. No matter how challenging your needs or circumstances, Vocia delivers a system to meet your requirements, today and in the future.

EASILY SCALABLE, FROM SIMPLE TO SPECTACULAR

Vocia fits a wide range of installation sizes and configurations because every component contains memory and processing resources that communicate intelligently across your network. Its modular hardware and easy-to-use software help you imagine and implement the right approach for a simple overhead paging application or a complex system with many zones—and everything in between.

With Vocia, it's also a snap to expand the reach and feature set in your installation at any time. Vocia can do more and demand less of you and your end users.

GOODBYE, COMPLEXITY. HELLO, CONFIDENCE.

Say farewell to the traditional centralized system approach. And the limitations that come with it. Vocia distributes message routing and processing across the network, so it eliminates the chance that a single failure can bring down your system. You can monitor, log and control components remotely, and plug and play units, expanding your system as needed. In short: your maintenance duties scale down as your system capabilities scale up.

With Vocia, you can be confident that your networked public address and voice evacuation system will do its job here and now, as well as into the future.

MORE RELIANCE ON YOUR SYSTEM

Vocia was designed to do more than deliver clear information, it was designed with an understanding of the exacting system requirements around the globe. As the first U.S. manufacturer to earn EN 54-16 certification, you gain peace of mind that your system is backed by quality, commitment to excellence, and reliability.

Vocia builds on network standards you already know, including CobraNet® for single-site installations and TCP/IP for multi-site installations. You simply extend your existing practices for network redundancy, security and monitoring to your paging and voice evacuation system.

BUILT ON DEPENDABLE BIAMP QUALITY AND RELIABILITY

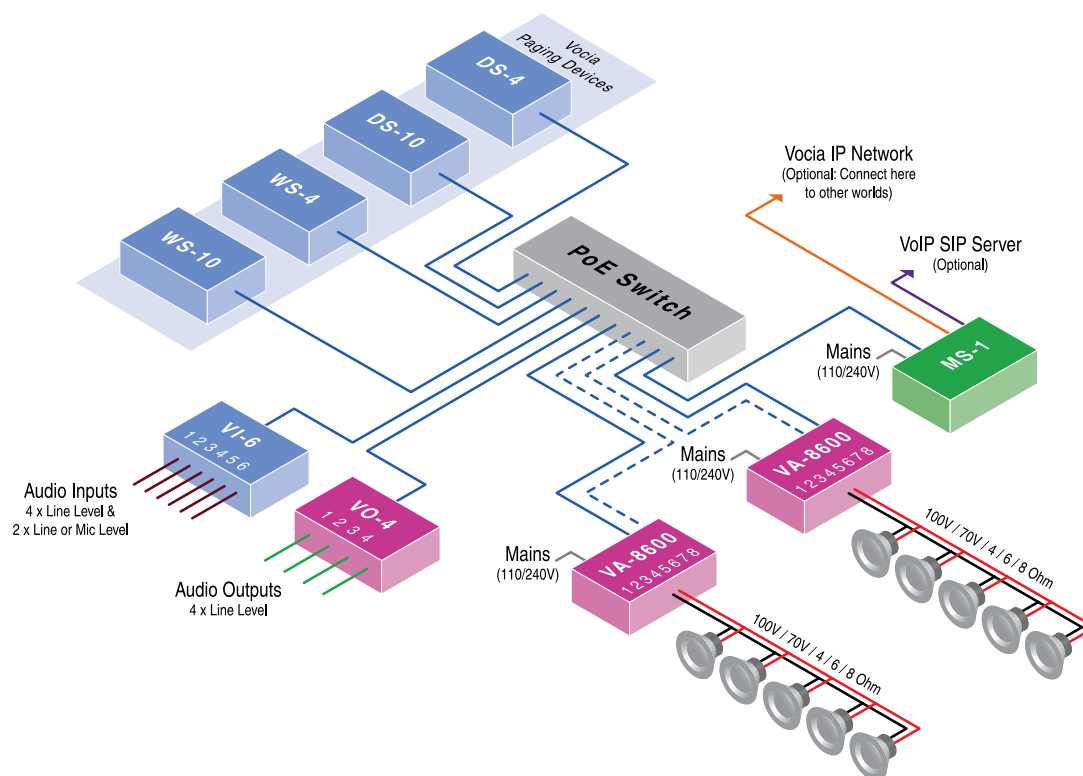
Since 1976, organizations around the world have depended on Biamp to deliver reliable and useful innovation. No matter where you are in the world, you'll find Biamp technology working within audio systems in health care, higher education, transportation, government, event facilities and other demanding environments. With Vocia, you'll get the power to move forward with a distributed approach to public address and voice evacuation.

With Vocia at the heart of your system, you can always count on sound that moves people.

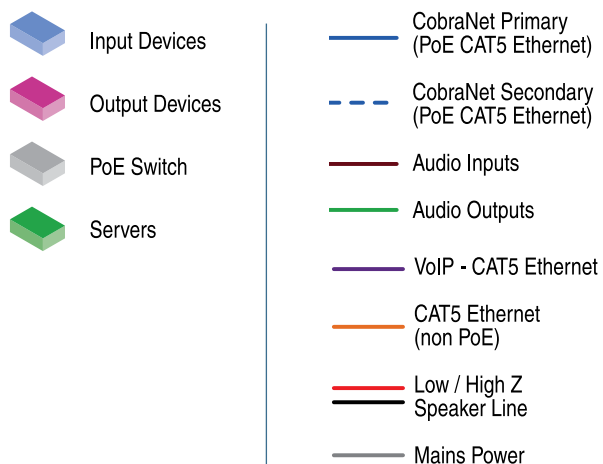
For more information, product details and case studies, visit www.biamp.com/vocia

VOCIA® SYSTEM OVERVIEW

Vocia offers a high degree of scalability, from simple overhead paging applications to advanced, networked public address systems spanning multiple zones and structures. With decentralized processing and page routing, Vocia's smart units use network technology to distribute intelligence—eliminating the potential for a single point of system failure. And with Biamp's commitment to meeting the various system needs around the world, we built Vocia from the ground up to meet the exacting requirements for Voice Alarm Control and Indicating Equipment (VACIE).



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



AUDIO INPUTS



The DS-10 is a desktop networked paging station featuring embedded DSP and on-board memory, supporting both standard and advanced public address functionality. All device-specific configuration information is stored locally, which means the DS-10 does not rely on a centralized controller for processing and page routing.

- Push-to-talk button with status indication
- Up to 999 user-configurable page codes
- 4 software configurable non-emergency priority paging levels
- Local digital signal processing, including gain, filters and compressor/limiter
- Auxiliary Port provides connection for 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
- CobraNet audio/control with dynamic use of available bundles, plus power over a single cable
- Backlit liquid crystal display (LCD)
- Optional PIN to restrict unauthorized use
- High-quality gooseneck cardioid dynamic microphone with dual transducer (monitored)
- Rotary ID switches for unit identification
- CE marked, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

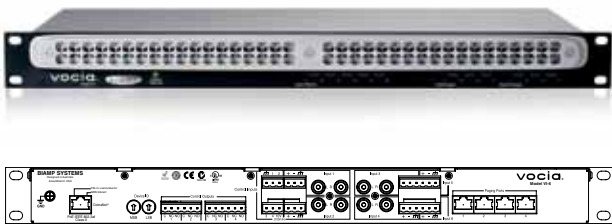
DS-10
VOCIA DESK STATION



The DS-4 is a desktop networked paging station featuring embedded DSP and on-board memory, supporting both standard and advanced public address functionality. All device-specific configuration information is stored locally, which means the DS-4 does not rely on a centralized controller for processing and page routing.

- Push-to-talk button with status indication
- 4 user-configurable page codes
- 4 software configurable non-emergency priority paging levels
- Local digital signal processing, including gain, filters and compressor/limiter
- Auxiliary Port provides connection for 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
- CobraNet audio/control with dynamic use of available bundles, plus power over a single cable
- Backlit liquid crystal display (LCD)
- Optional PIN to restrict unauthorized use
- High-quality gooseneck cardioid dynamic microphone with dual transducer (monitored)
- Rotary ID switches for unit identification
- CE marked, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

DS-4
VOCIA DESK STATION



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
- Rotary switches for unit identification
- CobraNet audio/control with dynamic use of available bundles, plus power over a single cable
- Status LEDs to indicate signal and clip
- CE marked, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

VI-6
VOCIA INPUT

AUDIO INPUTS

WS-4
VOCIA WALL STATION



The WS-4 is a wall-mounted networked paging station featuring embedded DSP and on-board memory to support both standard and advanced public address functionality. All device-specific configuration information is stored locally, which means the WS-4 does not rely on a centralized controller for processing and page routing.

- Push-to-talk button with status indication
- 4 user-configurable page codes
- 4 software configurable non-emergency priority paging levels
- Local digital signal processing, including gain, filters and compressor/limiter
- Auxiliary Port provides connection for 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
- CobraNet audio/control with dynamic use of available bundles, plus power over a single cable
- Backlit liquid crystal display (LCD)
- Optional PIN to restrict unauthorized use
- High-quality, noise-cancelling handheld microphone with dual transducer (monitored)
- Rotary ID switches for unit identification
- CE marked, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

WS-10
VOCIA WALL STATION



The WS-10 is a wall-mounted networked paging station featuring embedded DSP and on-board memory to support both standard and advanced public address functionality. All device-specific configuration information is stored locally, which means the WS-10 does not rely on a centralized controller for processing and page routing.

- Push-to-talk button with status indication
- Up to 999 user-configurable page codes
- 4 software configurable non-emergency priority paging levels
- Local digital signal processing, including gain, filters and compressor/limiter
- Auxiliary Port provides connection for 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
- CobraNet audio/control with dynamic use of available bundles, plus power over a single cable
- Backlit liquid crystal display (LCD)
- Optional PIN to restrict unauthorized use
- High-quality, noise-cancelling handheld microphone with dual transducer (monitored)
- Rotary ID switches for unit identification
- CE marked, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

VAM-1
VOCIA AUXILIARY MICROPHONE



The VAM-1 device is an independent microphone assembly that functions as a slave device to the Vocia Wall and Desk Station (WS-4/10 and DS-4/10) series microphones and to the Vocia Input 6 (VI-6) for paging via the Paging Ports. Up to four VAM-1 slave microphones can be connected per VI-6. The VAM-1 incorporates a PTT switch and has LED indication of the Wait, Talk Now and Unavailable paging states. The microphone latch is magnetic for easy docking to the cradle. Power is provided by the host device.

- Slave device to non-emergency Vocia paging stations and VI-6 devices
- Visual feedback of Paging and Zone status
- Suitable for mounting on a wall or desk
- Audio and Control over a single Ethernet cable
- IP30 Compliant
- CE marked, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty



The EWS-4 is the emergency, wall-mounted networked paging station used in an EN 54-16 certified life safety system. It features all the same configurable page codes, memory and features as the WS-4 paging station.

- Push-to-talk button with status indication
- 4 user-configurable page codes
- 4 software configurable emergency priority paging levels
- Local digital signal processing, including gain, filters and compressor/limiter
- Auxiliary Port provides connection for 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
- CobraNet audio/control with dynamic use of available bundles, plus power over a single cable
- Backlit liquid crystal display (LCD)
- Optional PIN to restrict unauthorized use
- High-quality, noise-cancelling handheld microphone with dual transducer (monitored)
- Rotary ID switches for unit identification
- EN 54-16 certified, EN 60849 & AS 60849 verified, CE marked, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

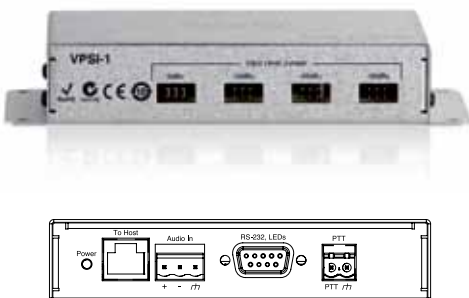
EWS-4
EMERGENCY WALL STATION
EN 54-16 CERTIFIED



The EWS-10 is the emergency, wall-mounted networked paging station certified for use in an EN 54-16 compliant life safety system. It features all the same configurable page codes, memory and features as the WS-10 paging station.

- Push-to-talk button with status indication
- Up to 999 user-configurable page codes
- 4 software configurable emergency priority paging levels
- Local digital signal processing, including gain, filters and compressor/limiter
- Auxiliary Port provides connection for 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
- CobraNet audio/control with dynamic use of available bundles, plus power over a single cable
- Backlit liquid crystal display (LCD)
- Optional PIN to restrict unauthorized use
- High-quality, noise-cancelling handheld microphone with dual transducer (monitored)
- Rotary ID switches for unit identification
- EN 54-16 certified, EN 60849 & AS 60849 verified, CE marked, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

EWS-10
EMERGENCY WALL STATION
EN 54-16 CERTIFIED



The VPSI-1 device is designed to allow third party microphones and LED indicators to interface as slave devices to the Vocia standard and emergency Wall Station and standard Desk Station (WS-4/10, EWS-4/10 and DS-4/10) series microphones and to the Vocia Input 6 (VI-6) device for paging via the Paging Ports. Up to four VPSI-1 interfaces can be connected per VI-6 when configured for Vocia Auxiliary Microphone mode. The VPSI-1 can also facilitate third party microphones and control system interfacing with Vocia Wall and Desk Stations (WS-4/10 and DS-4/10). The host Paging Station must be configured for 'Remote control' mode within the software.

- Slave interface to Vocia Paging Stations and VI-6 device
- Visual feedback of Paging and Zone status
- Suitable for surface mounting
- Audio, Power and Control over a single Ethernet cable
- IP30 Compliant
- Power is provided by the host device
- CE marked, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

VPSI-1
VOCIA PAGING STATION INTERFACE

AUDIO OUTPUTS

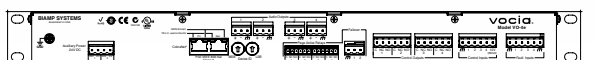
VO-4 VOCIA OUTPUT



The VO-4 is a networked audio output expansion 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
- Rotary switches for unit identification
- Power over Ethernet (PoE)
- CobraNet audio/control with dynamic use of available bundles, plus power over single Ethernet cable
- Status LEDs to indicate signal and clip
- CE marked, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

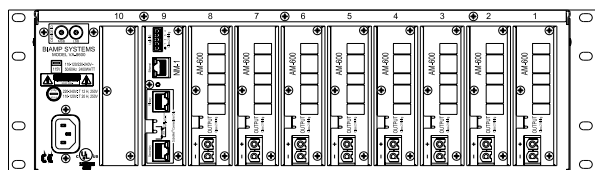
VO-4e VOCIA OUTPUT



The VO-4e is an enhanced networked audio output expansion device allowing the user to add four line-level and CobraNet output channels to a Vocia system. The VO-4e can be configured for channel-to-channel or device-to-device failover and uses comprehensive fixed-chain digital signal processing within the device, including volume control, ducking, equalization, compressor/limiter, speaker crossover, delay, and output gain. Emergency messages for life safety systems are stored in non-volatile memory. Two RJ45 connectors on the rear panel of the device provide redundant connectivity to process control data, audio and power over a single Ethernet cable. In addition to this the VO-4e also has dual inputs for accepting power from an auxiliary supply. The per-channel paging relay provides a contact closure when paging is active on an associated channel.

- CobraNet audio output
- Channel-to-channel and device-to-device failover
- Local non-volatile storage of Emergency Messages
- Dual PoE capable with alternate powering from auxiliary 24V DC supply (dual inputs)
- LED status and fault indication
 - Chassis Fault, Activity and Status
 - PoE Power
 - Aux Power
 - Output Channel Amp Fault, Activity and Signal Present
- Four Page Active Relays, Control Inputs and Control Outputs
- Speaker line monitoring and ambient noise compensation using ELD-1 and ANC-1
- Software-configurable signal processing including volume control, filters, compressor/limiting, delay, speaker equalization, and output level
- CobraNet audio/control with dynamic use of available bundles over single Ethernet cable
- Dual CobraNet ports for redundancy
- Rotary switches for device identification
- IP30 Compliant
- CE marked, UL listed & RoHS compliant
- Rack mountable (1RU)
- Covered by Biamp Systems' five-year warranty

VA-8600 VOCIA AMPLIFIER



The VA-8600 is a networked multi-channel amplifier. It is CobraNet enabled and features eight channels of modular amplification and DSP with optional channel-to-channel or device-to-device failover.

- Modular based design
- Amplification modules with software configurable power levels/load options
- 8 amplification modules per frame with 100 to 600 Watts per module (maximum of 2400W peak per chassis)
- 70V or 100V with direct drive capability, or low-impedance (4 Ω or 8 Ω) operation
- Failover capability between channels and amplifiers
- Storage of emergency messages in local non-volatile memory
- LED indication:
 - Amplifier failure
 - Clip present
 - Fan stuck-rotor
 - Heat sink temperature fault
 - Signal peak
 - Signal present
- Software monitoring features:
 - Amplifier failure
 - Excessive clipping
 - Fan stuck-rotor
 - Heat sink temperature fault
 - Peak present
 - Short circuit on output
- Software-configurable signal processing including volume control, filters, compressor/limiting, delay, speaker equalization and output sensitivity
- CobraNet audio/control with dynamic use of available bundles
- Dual Ethernet ports for redundancy
- Heavy duty removable terminal block connectors for speaker line connections
- Rotary switches for unit identification
- Rack mountable (3RU)
- CE marked, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty



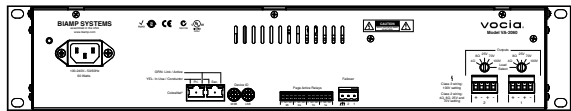
The VA-8600C is a networked multi-channel amplifier. It is CobraNet enabled and features eight channels of modular amplification and DSP with optional channel-to-channel or device-to-device failover.

VA-8600C
VOCIA AMPLIFIER
EN 54-16 CERTIFIED



The VA-2060 is a digital networked two-channel amplifier. It is CobraNet enabled and capable of delivering continuous audio power at 60 Watts RMS per channel. The VA-2060 also has comprehensive failover capability with device-to-device and channel-to-channel failover.

VA-2060
VOCIA AMPLIFIER
EN 54-16 CERTIFIED

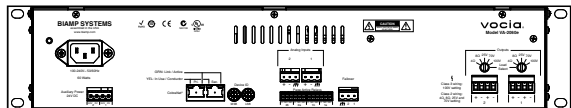


- Two channels of 60W RMS per channel
- Transformer coupled outputs, Low impedance (4 or 8 Ω) or 25V, 70V or 100V (hardware selectable)
- Comprehensive failover
 - Device-to-device
 - All-to-1 channel
 - 1:1 channel
- Supports Page Active Relay (PAR), ELD-1 and ANC-1
- Local non-volatile storage of emergency messages
- LED status and signal indication
- Software-configurable signal processing including volume control, filters, compressor/limiting, delay, speaker equalization and output sensitivity
- CobraNet audio/control with dynamic use of available bundles
- Dual Ethernet ports for redundancy
- Rotary switches for device identification
- Rack mountable (2RU)
- EN 54-16 certified, EN 60849 & AS 60849 verified, CE marked, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty



The VA-2060e is a digital networked two-channel amplifier. It is CobraNet enabled and capable of delivering continuous audio power at 60 Watts RMS per channel. It has local analog inputs and dual power supply. The VA-2060e also has comprehensive failover capability with device-to-device and channel-to-channel failover.

VA-2060e
VOCIA AMPLIFIER
EN 54-16 CERTIFIED



- Two channels of 60W RMS per channel
- Transformer coupled outputs, Low impedance (4 or 8 Ω) or 25V, 70V or 100V (hardware selectable)
- Comprehensive failover
 - Device-to-device
 - All-to-1 channel
 - 1:1 channel
- Supports Page Active Relay (PAR), ELD-1 and ANC-1
- Local non-volatile storage of emergency messages
- LED status and signal indication
- Software-configurable signal processing including volume control, filters, compressor/limiting, delay, speaker equalization and output sensitivity
- CobraNet audio/control with dynamic use of available bundles
- Local background source support with single mic/line analog audio input for each channel (gain-adjustable, switchable phantom power)
- Dual power supply
 - AC Mains
 - Single or Dual 24V DC inputs
- Dual Ethernet ports for redundancy
- Rotary switches for device identification
- Rack mountable (2RU)
- EN 54-16 certified, EN 60849 & AS 60849 verified, CE marked, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

AUDIO OUTPUTS

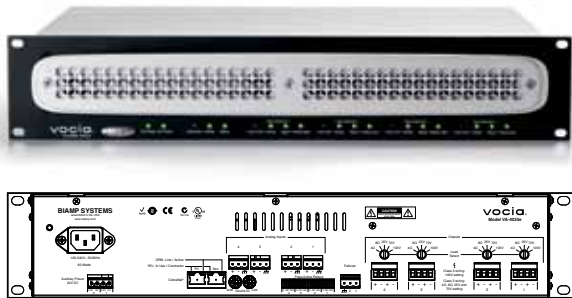
VA-4030 VOCIA AMPLIFIER EN 54-16 CERTIFIED



The VA-4030 is a digital networked four-channel amplifier. It is CobraNet enabled and capable of delivering continuous audio power at 30 Watts RMS per channel. The VA-4030 also has comprehensive failover capability with device-to-device and channel-to-channel failover.

- Four channels of 30W RMS per channel
- Transformer coupled outputs, Low impedance (4 or 8Ω) or 25V, 70V or 100V (hardware selectable)
- Comprehensive failover
 - Device-to-device
 - All-to-1 channel
 - 1:1 channel
- Supports Page Active Relay (PAR), ELD-1 and ANC-1
- Local non-volatile storage of emergency messages
- LED status and signal indication
- Software-configurable signal processing including volume control, filters, compressor/limiting, delay, speaker equalization and output sensitivity
- CobraNet audio/control with dynamic use of available bundles
- Dual Ethernet ports for redundancy
- Rotary switches for device identification
- Rack mountable (2RU)
- EN 54-16 certified, EN 60849 & AS 60849 verified, CE marked, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

VA-4030e VOCIA AMPLIFIER EN 54-16 CERTIFIED



The VA-4030e is a digital networked four-channel amplifier. It is CobraNet enabled and capable of delivering continuous audio power at 30 Watts RMS per channel. It has local analog inputs and dual power supply. The VA-4030e also has comprehensive failover capability with device-to-device and channel-to-channel failover.

- Four channels of 30W RMS per channel
- Transformer coupled outputs, Low impedance (4 or 8Ω) or 25V, 70V or 100V (hardware selectable)
- Comprehensive failover
 - Device-to-device
 - All-to-1 channel
 - 1:1 channel
- Supports Page Active Relay (PAR), ELD-1 and ANC-1
- Local non-volatile storage of emergency messages
- LED status and signal indication
- Software-configurable signal processing including volume control, filters, compressor/limiting, delay, speaker equalization and output sensitivity
- CobraNet audio/control with dynamic use of available bundles
- Local background source support with single mic/line analog audio input for each channel (gain adjustable, switchable phantom power)
- Dual power supply
 - AC Mains
 - Single or Dual 24V DC inputs
- Dual Ethernet ports for redundancy
- Rotary switches for device identification
- Rack mountable (2RU)
- EN 54-16 certified, EN 60849 & AS 60849 verified, CE marked, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

ELD-1 VOCIA END OF LINE DEVICE



The ELD-1 is a networked safety device for use with the VA-8600 amplifier and is an integral part of standards-compliant voice evacuation and paging notification systems.

- Line monitoring
- Looks for inaudible signal from Vocia amp module
- Reports shorts or opens in the speaker line to the network
- Surface mountable
- Power and data over a single Ethernet cable
- Status LED
- Removable terminal block connector
- CE marked, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

**AM-600:** Basic Amplifier Module for VA-8600.

- 100 to 600 Watts per module
- Low impedance (4, 6, 8 Ω), 70-Volt or 100-Volt line direct drive
- Power levels/load options are software configurable
- Front-panel LED indication for module fault, activity and signal presence
- UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

AM-600
VOCIA AMPLIFIER
MODULE

**AM-600c:** Amplifier module with standards-compliant ground fault detection for VA-8600.

- 100 to 600 Watts per module
- Low impedance (4, 6, 8 Ω), 70-Volt or 100-Volt line direct drive
- Power levels/load options are software configurable
- Front-panel LED indication for module fault, activity and signal presence
- Reports fault upon detection of short to ground on speaker line, where this short would compromise capability of amplifier to deliver emergency messages
- EN 54-16 certified, EN 60849 & AS 60849 verified, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

AM-600c
VOCIA AMPLIFIER MODULE
EN 54-16 CERTIFIED

**IM-16:** The Interface Module 16 physically fits into the LSI-16 option slot. The IM-16 offers an additional 16 control inputs that can be configured in the Vocia software as alarm, fault or reset inputs.

- 16 control inputs
- Each input can be programmed as TTL, high range or monitored high range
- Monitoring for short-to-ground, open circuit and over voltage
- Suitable for the LSI-16 option slot
- Power, processing and indication by the LSI-16
- Cable connections via pluggable screw terminal blocks
- EN 54-16 certified, EN 60849 & AS 60849 verified, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

IM-16
VOCIA INTERFACE MODULE
EN 54-16 CERTIFIED

**PARM-1:** Page Active Relay Module for VA-8600 (optional).

- Allows control of external devices during paging (e.g. attenuator over-ride relays)
- Suitable for the VA-8600 Option Slot
- Powered from and controlled by the VA-8600
- 8 relay circuits
- Connections via 3.5mm pluggable screw terminal blocks
- UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

PARM-1
VOCIA PAGE ACTIVE
RELAY MODULE

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

- 7:1 channel failover
OR
Two sets of 3:1 channel failover
- EN 54-16 certified, EN 60849 & AS 60849 verified, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

VFOM-1
VOCIA VA-8600 FAILOVER
MODULE EN 54-16 CERTIFIED

CONTROLLERS/SERVERS

ANC-1 VOCIA AMBIENT NOISE COMPENSATION DEVICE



The ANC-1 allows automatic output level adjustments in response to changes in ambient noise levels. The ANC-1 is a networked device for use with the Vocia VA-8600. The Vocia software interface permits comprehensive adjustment of ANC parameters and utilizes IEEE compliant Power over Ethernet (PoE) technology.

- Automatic, adaptive volume adjustment based on ambient noise sensing and processing
- 48V phantom power
- Wall mountable
- CobraNet audio/control with dynamic use of available bundles, plus power on a single Ethernet cable
- Status LEDs
- CE marked, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

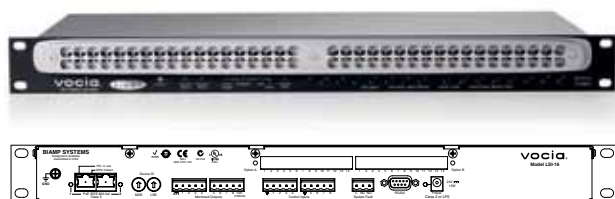
GPIO-1 VOCIA GENERAL PURPOSE INPUT/OUTPUT



The GPIO-1 provides 16 general purpose inputs and outputs to control various aspects of a Vocia system. The GPIO-1 is a monitored device and can be used with an LSI-16e in life safety applications where more logic inputs or outputs are required. The GPIO-1 has dual powering from PoE Ethernet ports and alternate powering from dual 24V DC inputs. In the event of power loss, changeover between power sources will provide uninterrupted operation.

- 16 general purpose logic inputs and outputs
- Device monitoring
- Able to be used to directly interface with fire alarm and emergency equipment
- PoE capable with alternate powering from auxiliary 24V DC supply (dual inputs)
- Software-configurable
- Control over a single Ethernet cable
- Dual Ethernet ports for redundancy
- Rotary switches for device identification
- IP30 Compliant
- CE marked, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

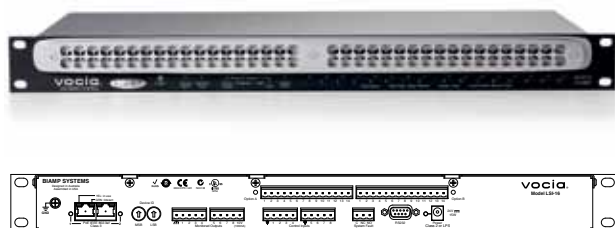
LSI-16 VOCIA LIFE SAFETY INTERFACE EN 54-16 CERTIFIED



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

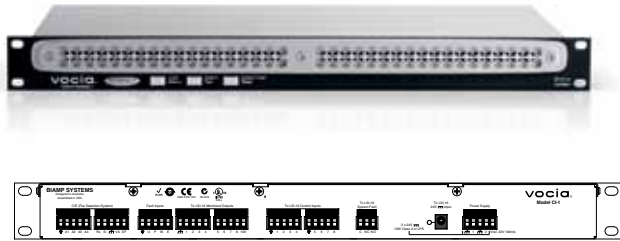
- Parallel I/O ports for direct interface with fire alarm and emergency equipment
- 8 monitored I/O and 8 control inputs
- Redundant network connection and power supply options
- Power and data over a single Ethernet cable
- Local storage of configuration data
- Rotary switches for unit identification
- Accepts the Interface Module 16 (IM-16) for 16 additional general purpose inputs
- Status LEDs
- Rack mountable (1RU)
- Up to 4 discrete emergency inputs
- Up to 500 virtual inputs via RS232 port or Ethernet
- EN 54-16 certified, EN 60849 & AS 60849 verified, UL listed & RoHS compliant
- Covered by Biamp Systems' five-year warranty

LSI-16e VOCIA LIFE SAFETY INTERFACE EN 54-16 CERTIFIED



The LSI-16e is an enhancement to the LSI-16 adding 16 additional control inputs. 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 utilize 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
- Rotary switches for unit identification
- Up to 4 discrete emergency inputs
- 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
- Status LEDs
- Rack mountable (1RU)
- EN 54-16 certified, EN 60849 & AS 60849 verified, CE marked & RoHS compliant
- Covered by Biamp Systems' five-year warranty



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/LSI-16e to meet EN 54-16 standards.

- High reliability switches for Local Sounder Silence, System Test and System Fault Reset
- High level sounder for Fault/Alarm warning
- Dual power summing with power loss fault connection
- Provides terminating resistors for Alarm and Fault Inputs
- Provides terminating resistors for any unused monitored outputs
- Current limited reference voltage output
- Rack mountable (1RU)
- EN 54-16 certified, EN 60849 & AS 60849 verified, CE marked & RoHS compliant
- Covered by Biamp Systems' five-year warranty

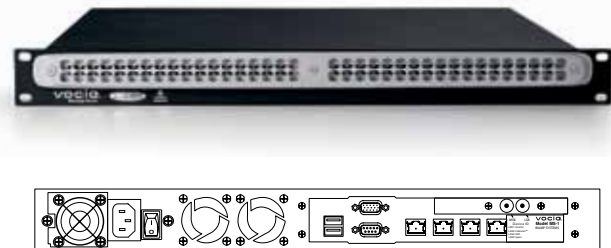
CI-1
VOCIA CONTROL INTERFACE
EN 54-16 CERTIFIED



The WR-1 is a networked wall remote designed to control background audio in user-defined music zones. Utilizing 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.

- Wall mountable (US 2-gang)
- Power and data over a single Ethernet cable
- Backlit liquid crystal display (LCD)
- Rotary switches for unit identification
- Software-configurable settings, including volume, source selection, paging inhibit and mute source control
- CE marked & RoHS compliant
- Covered by Biamp Systems' five-year warranty

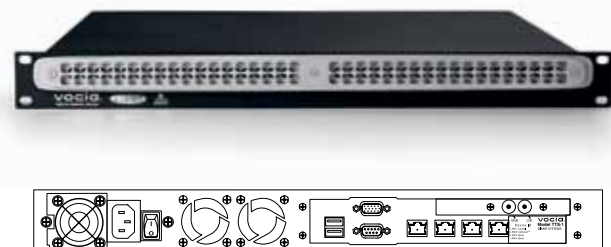
WR-1
VOCIA WALL REMOTE



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.

- Recorded message storage and playback
- Event scheduling
- Storage of logged system data
- VoIP paging interface
- Inter-world paging support
- System configuration storage and service
- Time server support
- CobraNet audio/control with dynamic use of available bundles over single Ethernet cable
- Remote third party control capability
- Status LED
- Separate Ethernet ports for TCP/IP Control, CobraNet and VoIP
- Rotary switches for unit identification
- Rack mountable (1RU)
- CE marked, UL listed & RoHS compliant
- Covered by Biamp Systems' three-year warranty

MS-1
VOCIA MESSAGE SERVER



The TTS-1 and the TTS-1nc are designed to work in conjunction with a Vocia Message Server 1 (MS-1) to enable text to speech messaging as part of a Vocia system solution. The TTS-1 and TTS-1nc use 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
- Status LED
- Rotary switches for unit identification
- Rack mountable (1RU)
- CE marked, UL listed & RoHS compliant
- Covered by Biamp Systems' three-year warranty

TTS-1 and TTS-1nc
VOCIA TEXT-TO-SPEECH SERVER

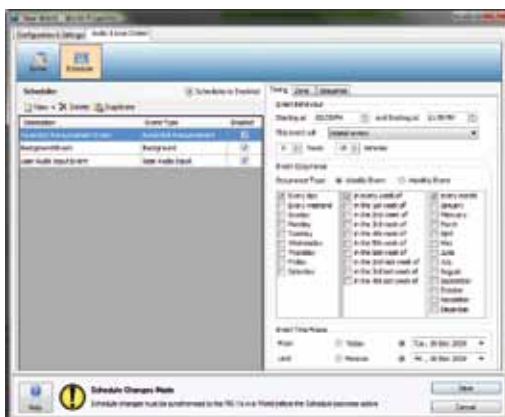
SOFTWARE



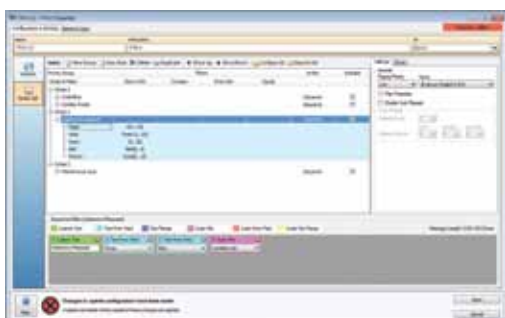
The main screen of the Vocia software provides an easy, at-a-glance overview of your universe, whether it contains a single world or several. This hierarchical view lists all devices included in the Universe by World, Device ID, online and configuration status, along with the loaded firmware version. The colors indicate the health of each device listed. An overall system alarm tab ("Acknowledge Alarms" in the upper right corner) flashes when an alarm or fault is detected in the system.



The software is designed for ease-of-use and intuitive interfacing. Most of Vocia's devices offer fixed-chain DSP parameter adjustment and live control. This screen shows the properties sheet of the VI-6 with its audio and live control settings; filters are applied to the input levels, representing one possible configuration. The filters are displayed as individual lines in the EQ filter graphic.



The scheduler feature (requires MS-1 to be available) (found under world properties by double clicking on the world icon) is used to configure schedules for recorded announcements (MS-1 required), background events (e.g. background music coordinated with the time of day) and user audio input events (e.g. an announcement that broadcasts for a certain period of time in a specified zone).



The TTS-1nc Text-to-Speech Nursecall Middleware server supports the same windows client that is used to enter text segments for speech conversion as the standard TTS-1. However, the TTS-1nc server supports a direct RS-232 serial interface to Rauland-Borg Responder 4 or 5 pocket page servers to allow automatic text conversion. It also provides a software user interface that allows graphical configuration of the Middleware and Matching Rules Engine that is available on the TTS-1nc.



Features of the Vocia software are 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 voice evacuation.

NOTE: A VO-4 or VO-4e is required for each four CobraNet outputs from Vocia into Audia. For example, if 10 outputs are required from Vocia into Audia, three VO-4s or VO-4e's will be required to establish the outputs. No additional hardware is required for inputs to Vocia from Audia.



The Vocia TTS-1 Text-to-Speech server supports a windows client that is used to enter the text segments for speech conversion. The LSI-16/ LSI-16e supports a browser interface for remote monitoring of emergency faults.

