DATA SHEET VOCIA® VO-4e ENHANCED OUTPUT DEVICE



The Vocia VO-4e is an enhanced networked audio output expansion device that allows the user to add four line-level and CobraNet* output channels to be added 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 of the device provide redundant connectivity to process control data, audio and power over an 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.

FEATURES

- Speaker line monitoring and ambient noise compensation supported using ELD-1 and ANC-1 devices
- 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 unit identification
- Dual Ethernet ports for redundancy
- CobraNet audio output
- Channel-to-channel and device-to-device failover

- · LED status and fault indication
 - o Chassis Fault, Activity and Status
 - o PoE Power
 - o Aux Power
 - Output Channel Amp Fault, Activity and Signal Present
- Local storage of Emergency Messages in non-volatile memory
- Four Page Active Relays, Control Inputs and Control Outputs
- IP30 Compliant
- CE marked and RoHS compliant
- Covered by Biamp Systems' 5-year warranty

ARCHITECTS & ENGINEERS SPECIFICATION

The audio output device shall be designed exclusively for use with Biamp* Vocia systems. It shall support audio and monitoring connections to 3rd party amplifiers. It shall support the use of Vocia ANC-1 ambient noise compensation devices and ELD-1 end of line devices for automatic level control and speaker line supervision monitoring. It shall support CobraNet outputs to supported 3rd party CobraNet enabled amplifiers and/or audio/digital signal processors such as Biamp AudiaFLEX and Tesira. The audio output device shall support relay input connections for supervision of 3rd party amplifiers or powered speakers. It shall be CE marked and shall be compliant with the RoHS directive. Warranty shall be five years. The output device shall be a Vocia VO-4e.

VOCIA VO-4e SPECIFICATIONS

Network Connection: Dual RJ45 with shielded Ethernet (CAT5, CAT5e, CAT6, or CAT 7)

Network Audio: 20-bits, 48kHz, 5-1/3 ms (fixed)

Memory: 5.625 MB

Maximum Output Level: +22dBu

Maximum Output Load: $2k\Omega$ Dynamic Range:>100dB

Frequency Response (20Hz-20kHz): ± 1dB

Power:

PoE: 802.3af Class 3

802.3at Type 1 Class 3

< 0.05%

-10dBu, OdBu, +4dBu (selectable)

Aux Voltage Nominal: 24V DC; <100mV Ripple (Max 15W)

Fault & Control Input Ports:

Nominal Output Level:

THD+N (20Hz-10kHz):

Assert: Voltage free contact to ground Un-assert: Open Circuit

 $\begin{array}{ll} \mbox{Input Impedance:} & 100 \mbox{k}\Omega \\ \mbox{Max. short circuit current:} & 1 \mbox{mA} \end{array}$

Page Active Relays & Control Out Relays:

Type:Single Form C voltage free change over contact

Max Operating Voltage: 125 V AC, 60 V DC Max Switching Capacity: 37 VA

Min Operating Load: 10µA 10mV DC

Dimensions:

 Height:
 1.75 inches (44.5 mm)

 Width:
 19 inches (483 mm)

 Depth:
 10 inches (254 mm)

 Weight:
 6.6 lbs. (3 kg)

Environment:

Ambient Operating

 Temperature Range:
 23-104° F (-8 - 42° C)

 Humidity:
 0 - 95% non-condensing

 Altitude:
 0 - 10,000 Feet (0 - 3000 Meters) MSL

Compliance:

FCC Part 15B (USA) CE marked (Europe) RCM (Australia) RoHS Directive (Europe)

VOCIA VO-4e BACK PANEL



