

- Pro-Sound Quality IP Voice Alarm Router
- Advanced Energy Management Functions
- Powerful DSP Audio Functions
- Large DVA Storage
- 12 Analogue Audio Inputs and 12 outputs
- EN54-16 compliant



The VIPEDIA-12 is a Pro-Sound quality IP Voice Alarm Audio Router, which provides 12 analogue audio inputs and 12 outputs, together with multiple Ethernet IP ports and Intellevac safety audio networking.

The VIPEDIA allows for routing of any combination of its audio inputs to any combination of the 12 outputs, while up to four VIPEDIA routers can be linked by the high speed Digital BackBone (DBB) bus to provide simultaneous routing from any or all of their inputs to their outputs in a 48 by 48 matrix. Built in IP networking enables the VIPEDIA to offer audio routing and control over IP, extending the system's audio matrix across the IP Network. The IP networking can use existing site IP infrastructure or can be constructed as a standalone Cat5 or fibre ring. Connecting pairs of VIPEDIAs at each PA Node enables full dual redundant synchronised 'A' and 'B' VA systems to be constructed.

The front panel display and keys provide all EN54-16 mandatory indicators and controls, together with basic setup, and built in debug and fault reporting information.

The VIPEDIA's advanced energy management functions include automatically powering down unused functions, such as removing power from paging microphones during out of hours periods. Two of the microphone inputs have hardware bypass capability to provide continued emergency operation even if the VIPEDIA DSP CPU has failed, and these inputs are also compatible with Intellevac hardware bypass safety networks.

The full analogue and digital audio signal path is of Pro-Sound quality, enabling the VIPEDIA to meet very high quality audio requirements, and Pro-Sound IP networking is provided by means of an Audinate Dante™ interface module, which can be fitted as an addition to the standard VIPA PMC VoIP protocol.

The VIPEDIA-12's standard DSP engine provides powerful audio functions, including dynamic input processing and individually adjustable digital output delay and parametric equalisation, while the optional MIX-DSP module adds channel mixing functions.

Technical Specification

General

Power Supply Inputs	Dual 18 to 26V DC
Current Consumption (Max.)	2.0A @ 24V DC supply Plus Audio Input / Mic Ports Peripheral Power Load
IP Network Connectivity	100baseT Ethernet
Base Unit	2 RJ45 Ports
VIPA Module	2 RJ45 Ports and 2 SC Fibre Ports
Built-In Monitored DVA Storage	8 x 60 second
Front Panel	EN54-16 Compliant
LCD Display and Buttons	1
Fault Reporting & Status Display plus Audio Monitoring	
USB OTG	1
DVA Download & Laptop Configuration Port	
Fault Log	200 Events
Real Time Clock	Built In (Externally Synchronisable)

General Purpose I/O Interfaces

Combined digital and analogue contact inputs	12
PA routing / fault inputs / ANS inputs / SCADA status inputs	
Opto-isolated digital / OV referenced analogue	
Digital contact outputs	12 open collector
PA zone busy / fault outputs / SCADA control outputs	
BMB01 Remote I/O Unit RS485 Interfaces	1
Connectivity for up to six BMB01 remote I/O units	
Legacy Control / PC/DVA RS232 Host Port	1
Fault Relays (With N/O, C/O, N/C connections)	2

Audio Inputs and Outputs

Audio Input Channels - Analogue	12 ports
Monitored Universal Mic / Line / DANS audio inputs	
Hardware Bypass Fire Microphone Inputs	2 ports
With Mixed Listen In monitoring audio output	
Green Economy power shutdown capability	All 12 ports
Phantom Power	8 ports
With VIPA Option Module	
RS485 Terminal Server capability	All 12 ports
Audio Output Channels - Analogue	12 ports
Dual monitored & isolated A and B audio output channels	
Audio I/O Channels – IP	
Simultaneous IP Audio Matrix Inputs and Outputs	
Standard VIPEDIA	2 in, 2 out
With VIPA Module	6 in, 6 out
With Dante™ Module	32 in, 32 out
IP Audio Protocol	
Standard	ASL PMC
With Dante™ Option Module	Audinate Dante™

Audio Performance

Audio - General	
Digital Audio I/O	24 bits 48 kHz
Internal and Expansion Bus	32 bits floating point
THD Input to Output	<0.01% @1 kHz
Crosstalk	>70 dB @1 kHz
Residual Noise	<90 dBu (A)
Frequency Response	20Hz to 20kHz +/- 0.5dB
Audio Input Channels - Analogue	
Input Sensitivity	0 / -20 / -40 / -60 dBu
Input Overload	+20 dB
Input Trim	+10 to -90 dB (1 dB steps)
Mute	Click free
Surveillance Tone Detection	
Frequency Range	20 Hz-30 Hz
Level	-64 to 0 dB
Switchable High-Pass Filter	20 - 500 Hz / 12 dB/oct
4 band parametric EQ / Gate / Compressor / Peak Limiter	
All with settable parameters & on/off bypass switch	
Chime Generator	OFF / 1-note / 2-note / 3-note / Custom
Audio Output Channels - Analogue	
Nominal Output Level	18 dBu
Output Impedance	200Ω
Mixing	Up to 16 simultaneous input sources
With MIX-DSP Module	
Master Level	+10 to -90 dB (1 dB steps)
Night Volume Control	All outputs
Output Mute	Click free
Delay	1 ms -1000 ms (1ms steps)

10 band parametric EQ	
With settable parameters & on/off bypass switch	
Hard Limiter	2 - 20 dBu
LF Surveillance Tone Generator	30 Hz / 10 to -60 dBu
HF Surveillance Tone Generator	20 kHz / 10 to -60 dBu
Ambient Noise Sensing Gain Adjustment	-40 to 0 dB

Environmental

Temperature Range	
Storage	-20°C to +55°C
Operating	-10°C to +55°C
Humidity Range	0% to 95% non-condensing
Ingress Protection	IP20

Dimensions and Weight

Dimensions (H x W x D)	44mm x 436mm x 395mm
(excluding handles) / 1U height, 19" rack mount	
Weight	4.5 kg



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Company Policy is one of continuous improvement, we reserve the right to change specification without prior notice

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