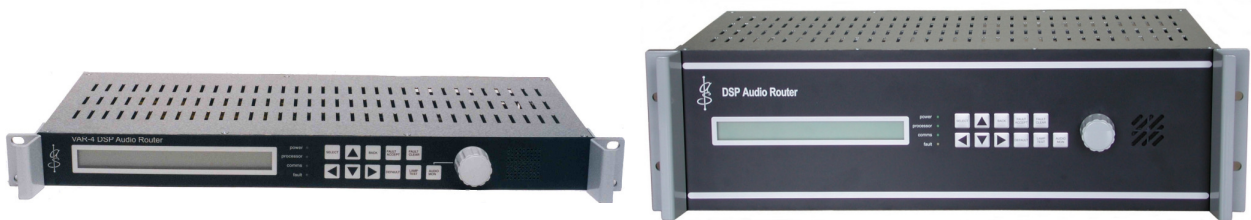


VAR4 / VAR12 / VAR20

DSP Audio Router



- EN54 and original versions available
- EN54 versions have fully compliant Indicators, Controls and Fault Display
- Original versions have legacy Indicators and Controls

The VAR4, VAR12 and VAR20 are DSP-based Voice Alarm & Public Address routers, allowing routing of 4, 12 or 20 audio inputs to any combination of 4, 12 or 20 outputs with EN54 compliance. In addition to audio routing these units provide full system control and fault reporting functions for ASL's rack mount Voice Alarm systems. This includes the monitoring and control of up to 64 amplifier mainframes (V400 and X400) and their associated amplifier interface card/surveillance units.

The VAR4 router provides digital storage for 2 x 66 second and 2 x 50 second DVA messages, four audio outputs, and four universal mic/line inputs. The VAR12 has all functions of the VAR4, but offers 12 universal audio inputs, 12 audio outputs, and storage for 4 x 66 second and 4 x 50 second DVA messages. The VAR20 again has all functions of the VAR4, but offers 20 universal audio inputs, 20 audio outputs, and storage for 6 x 66 second and 6 x 50 second DVA messages.

Each input can be used with an ASL multi-zone paging microphone, Fire Microphone, Station Announcement Point, or other source. All-call or zoneable Fire Microphones may be connected to inputs 1 & 2. These act as all-call failsafe override microphones in the event of processor failure, as required by BS5839 Pt 8.

Fire alarm interfacing is built in, as are numerous routing and general control inputs. A serial control port enables interfacing to ASL's VIPA IP PA products and iVENCs Control Systems, and also to third party PC/DVA or site control systems. This port also gives the router the ability to be remotely monitored and configured. There are many other built in functions which are accessible via the front panel LCD display or via the PC based Router Configuration Tool.

The router has a front panel display and control interface for commissioning the system, fault monitoring, diagnostics and for audio monitoring. Access to all configuration settings is controlled by a 4 digit PIN code. The indicators and controls are EN54 compatible or use the original GUI and indications according to the selected version. The EN54 version is the standard product. The original version is for use for spares on existing systems and may be used for non-EN54 installations.

Datasheet

Specification

Audio Routing

VAR4

Universal Mic / Line audio inputs with serial control, surveillance tone, and phantom power4
 Audio outputs with surveillance tone4 (Separate A and B outputs for each)
 Built In DVA Storage4 (2 x 66 second & 2 x 50 second)

VAR12

Universal Mic / Line audio inputs with serial control, surveillance tone, and phantom power12
 Audio outputs with surveillance tone12 (Separate A and B outputs for each)
 Built In DVA Storage8 (4 x 66 second & 4 x 50 second)

VAR20

Universal Mic / Line audio inputs with serial control, surveillance tone, and phantom power20
 Audio outputs with surveillance tone20 (Separate A and B outputs for each)
 Built In DVA Storage12 (6 x 66 second & 6 x 50 second)

All Variants

Hardware Bypass Fire Microphone Inputs 2 (Universal Mic / Line Inputs 1 & 2)
 Background Music Line audio inputs 2 * Stereo Pairs (Internally Mixed)
 Mixed Listen In monitoring audio output1

General

VAR4

Analogue Input Interfaces10
 Opto-Isolated Digital Control / Fault / Routing / Fire Alarm Panel Input Interfaces.....12
 Remote I/O Expander Unit (BMB01) Interfaces3

VAR12

Analogue Input Interfaces10
 Opto-Isolated Digital Control / Fault / Routing / Fire Alarm Panel Input Interfaces.....32
 Remote I/O Expander Unit (BMB01) Interfaces6

VAR20

Analogue Input Interfaces10
 Opto-Isolated Digital Control / Fault / Routing / Fire Alarm Panel Input Interfaces.....52
 Remote I/O Expander Unit (BMB01) Interfaces9

All Variants

Control / Fault Reporting Display and Button Interface On Front Panel
 Fault Log 200 Events
 Real Time Clock Built In (Externally Synchronisable)
 Remote Diagnostics / Control / PC/DVA Interface 1 (RS232)
 Auxiliary DC supply for external equipment18 – 36V DC @ 100mA
 Change Over Fault Relays 2 (One monitored)

Audio Signal Processing

Input

Graphic Equalisation	3 band plus LF Cut
Input overload margin.....	40dB
Input attenuator range	0dB to – 63dB
Phantom power	≥12V DC
Chime Generation	None / 1 / 2 / 3 Chimes

Output

Graphic Equalisation	8 band
Level and impedance	0dBu @ Z=660Ω
Hard limiter threshold	+2.5dBu
Induction loop	2-6 channels compression, gain, EQ

General

Gain control	Input / Output / External Volume Control
Ambient Noise Sensing	Programmable Output Level Control
Night volume control.....	7 day scheduler function / Output Level Control
Gain control range	0dB to –63dB
THD input to output	<0.1% @1kHz
Crosstalk.....	>70dB @1kHz
Residual noise	<78dBu (A)
S/N line	>70dB (A)
S/N mic	>60dB (A)
Frequency response (input to output)	100Hz to 20kHz –3dB

Current Consumption

VAR4

Backlight on and sounder on.....	400mA @ 24V DC supply
Backlight off and sounder off.....	350mA @ 24V DC supply

VAR12

Backlight on and sounder on.....	1.1A @ 24V DC supply
Backlight off and sounder off.....	1A @ 24V DC supply

VAR20

Backlight on and sounder on.....	1.6A @ 24V DC supply
Backlight off and sounder off.....	1.5A @ 24V DC supply

Dimensions and Weight

VAR4

Dimensions (H x W x D) 44mm x 436mm x 222mm (excl. connectors)
Weight.....2.2kg

VAR12 and VAR20

Dimensions (H x W x D) 133mm x 436mm x 222mm (excl. connectors)
Weight.....6.0kg

Environmental

Temperature (storage and operating) -5°C to +50°C
Humidity range..... 0% to 93% Non-condensing

PRODUCT PART NUMBERS

VAR4 (EN54) 4 * 4 DSP Audio Router (EN54 Version)
VAR12 (EN54) 12 * 12 DSP Audio Router (EN54 Version)
VAR20 (EN54) 20 * 20 DSP Audio Router (EN54 Version)
VAR4 4 * 4 DSP Audio Router (Original Version)
VAR12 12 * 12 DSP Audio Router (Original Version)
VAR20 20 * 20 DSP Audio Router (Original Version)



This equipment is designed and manufactured to conform to the following EC standards:

EMC: EN55103-1/E1, EN55103-2/E5, EN50121-4, ENV50204

Safety: EN60065

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