



The VRAM Variable Resource Automixer is a 10-in / 2-out programmable automatic mixer, which is completely user tamper proof, providing no external controls. All mixer parameters are under microprocessor control, and are easily programmed via Windows® 95/98/NT/2000/XP software. The VRAM is extremely versatile, with an extensive set of features, and is designed to adapt to a variety of applications. A second model, VRAMeq, includes 3-band channel equalization, with variable mid-frequency. The VRAM is covered by a 5-year warranty.

FEATURES

- 8 balanced mic/line inputs on plug-in barrier connectors
- 2 balanced auxiliary line inputs on plug-in barrier connectors
- balanced main & aux outputs on plug-in barrier connectors
- phantom power, trim, HPF, level, & gating on channels 1~8
- model VRAMeq includes 3-band, variable-mid, channel EQ
- aux line inputs include mix-minus & teleconferencing mode
- independent mixing to main & aux outputs (pre/post gate)
- direct outputs from channels (programmable pre/post gate)
- eight logic outputs (programmable timing & pre/post gate)
- eight logic inputs (programmable for remote switch control)
- sixteen non-volatile memory presets store all mixer settings
- NOM attenuation, last/default mic, & hold time selectable
- selectable channel-off gating attenuation (-10db to -80dB)
- expansion in & out for linking of units for more mixer inputs
- controls & indicators provided by software graphic interface
- software peak & level meters - front panel active indicators
- software for Windows® 95/98/NT/2000/XP & cable included
- remote control via RS-232 & programmable logic inputs
- incorporates AES recommended grounding practices
- CE marked and UL / C-UL listed power source
- covered by Biamp Systems' five-year warranty

ARCHITECTS & ENGINEERS SPECIFICATION

The programmable automatic mixer shall provide 8 balanced mic/line inputs, 2 balanced auxiliary line inputs, a balanced main output, & a balanced auxiliary output, all on plug-in barrier strip connectors. Mic/line inputs shall include 36V phantom power, trim, high-pass filter, level & selectable gating to both outputs. Each mic/line input shall also include a direct output, with selectable gating. A special model shall include 3-band channel equalization, with variable mid frequency. Aux line inputs shall include pad, level, mix-minus, & teleconferencing mode. All inputs shall mix to main & aux outs independently.

Automatic mixing functions, such as NOM attenuation, last mic, default mic, hold time, & channel-off attenuation shall be selectable. Timing & gating of 8 logic outputs shall be selectable, for control of external circuits. Mixer control via 8 logic inputs shall be programmable, for remote contact-closures. Non-volatile memory shall store/recall all mixer settings in as many as 16 presets. Expansion ports shall link multiple units, for increased input capability.

The mixer shall be tamper proof, providing no manual controls. Channel status indicators & a power switch shall be provided on the front panel. Rear panel serial & link ports shall be provided for RS-232 control. Windows® 95/98/NT/2000/XP software & a serial cable shall be provided, for programming all mixer parameters. Mixer controls, options, indicators, & metering shall appear as part of the software graphic interface. Remote control shall be via RS-232 and/or programmable logic inputs.

Frequency response shall be +0/-0.3dB (20Hz~20kHz @ +4dBu). THD+N shall be less than 0.03% (20Hz~20kHz @ +4dBu). Equivalent Input Noise shall be -126dBu (20Hz~20kHz). Power consumption shall be less than 27 Watts. Dimensions shall be 1.75 inches (1 rack space) high, 19 inches wide, and 11 inches deep. Weight shall be 10 lbs. Warranty coverage shall be 5 years. The unit shall be CE marked, include a UL / C-UL listed power source, and incorporate AES recommended grounding practices.

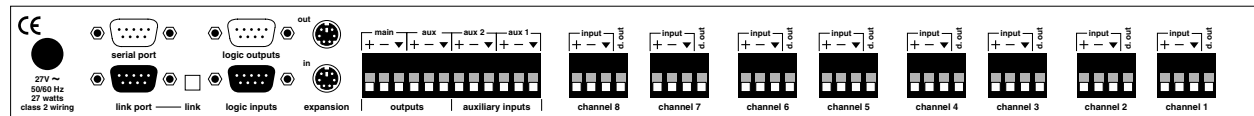
The programmable automatic mixer shall be a BIAMP VRAM.

The channel equalization model shall be a BIAMP VRAMeq.

VRAM SPECIFICATIONS

Frequency Response (20Hz-20kHz @ +4dBu):	+0/-0.3dB	Phantom Power:	+36VDC (7mA/channel)
THD+N (20Hz-20kHz @ +4dBu):	< 0.03%	Input Gain Range:	
Equivalent Input Noise (20Hz-20kHz, 60dB gain, 150 ohm):	-126dBu	mic/line inputs (variable trim)	-6dB ~ +63dB
Output Noise (20Hz-20kHz, main & 1 channel @ nominal):	< -83dBu	aux line inputs (selectable pad)	-6dB or +6dB
Maximum Gain:		Channel Equalization (model VRAMEq):	
mic/line inputs to main & aux outputs	85dB	low-frequency (shelving)	±9dB @ 100Hz
aux line inputs to main & aux outputs	28dB	mid-frequency (variable peaking)	±9dB @ 220Hz-3.6kHz
Crosstalk (channel-to-channel @ 1kHz):	< -95dB	high-frequency (shelving)	±9dB @ 3.3kHz
Output Impedance:		High-Pass Filter:	6dB/octave @ 110Hz
main & aux outputs (balanced)	200 ohms	Automixing:	
channel direct outputs (unbalanced)	560 ohms	gate attack time (signal dependent)	4mS (minimum)
Input Impedance:		release time (variable)	200mS ~ 2 Seconds
mic/line inputs (balanced)	6.6k ohms	channel-off attenuation (variable)	-10dB ~ -80dB
aux line inputs (balanced)	20k ohms	NOM attenuation (doubling of active inputs)	-3dB
Maximum Output:		Feedback/Noise Improvement (8 channels)	9dB
main & aux outputs (balanced)	+24dBu	Power Consumption (115/230VAC 50/60Hz):	< 27 watts
Maximum Inputs:		Dimensions (HxWxD):	1.75"x19"x11" (44x483x279mm)
mic/line & aux line inputs (balanced)	+24dBu	Weight:	< 10 lbs. (4.55kg)

VRAM REAR PANEL DIAGRAM



VRAM BLOCK DIAGRAM

