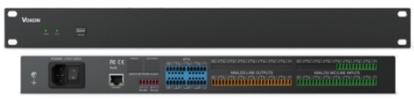
Digital Audio Processor [8R+4C]/[8R+8C]/[8R+12C]/ [12R+8C]/[16R+8C]/[12R+12C]/[16R+16C]

VM-X0804/VM-X0808/VM-X0812/VM-X1208/VM-X1608/ VM-X1212/VM-X1616



VM-X0804



VM-X1208



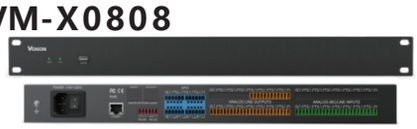
VM-X1616



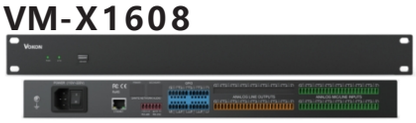
VM-X0808



VM-X1608



VM-X0812



VM-X1212

Functional description:

1.Supports 8/12/16 channels of balanced microphone/line input, using terminal block connectors, balanced wiring.

2.Supports 4/8/12/16 channels of balanced line output, using terminal block connectors, balanced wiring.

3. Processor: ADI SHARC 21489 @ 450 MHz SIMD.

4. DSP Processing Power: 400 MIPS, 1.6 GFLOPS.

5.Sampling Rate: 48 KHz, ± 100 ppm.

6.24-bit / 48kHz AD/DA conversion.

7.Input channels support +48V phantom power. Support no less than 16 sensitivity switch levels. Support phase reverse, mute.

8.Input channel gain range: -72 to +12dB, can customize min/max within this range.

9.Input channels have built-in signal generator, supporting sine wave, white noise, pink noise test signals.

10.Input channels have 16 independent feedback suppression points (can select 8, 12, or 16 based on actual conditions), using notch filter algorithm, notch attenuation up to 24dB.

11.Input and output channels support switching between two EQ modes (PEQ, GEQ). Can select 5-band, 8-band, or 12-band PEQ (British-style Parametric EQ) based on needs, each band offering 5 filter types. Can also switch PEQ to GEQ (Graphic EQ) based on user preference. GEQ supports 10-band, 15-band, or 31-band.

12.Input channel features: pre-amplification, parametric EQ (or graphic EQ), expander, compressor, ducking, noise gate, noise gain compensation, delay (up to 1200ms), AGC (Automatic Gain Control), AM (Automatic Mixing - Gated or Gain Sharing), AFC (Adaptive Feedback Cancellation), AEC (Acoustic Echo Cancellation), ANC (Ambient Noise Cancellation), audio matrix.

13. Output channel features: parametric EQ (or graphic EQ), crossover (high-pass/low-pass filters), delay (up to 1200ms), limiter.

14.Audio DSP processing module is configurable and can be freely replaced based on needs.

15.Input and output channels support LINK and grouping functions, channel copy, paste, and linked control.

16. Has 1 USB port, built-in 1-in/1-out USB player, supports music playback, recording, and soft video conferencing (e.g., ZOOM, Tencent Meeting, DingTalk Meeting).

17. Has 8×4 input/output audio matrix switching, can route processed audio via matrix (USB, Auto Mixing, Echo Cancellation, Noise Suppression), achieving 12×5 routing matrix.

18. Has 16 scene presets.

19. Has 8 programmable GPIO control interfaces (configurable as input/output), can interface with other devices via high/low level signals.

20. Has 1 bidirectional RS232 interface for central control. Can control system power, signal switching, environmental controls, audio, etc., achieving one-touch system startup. Can also integrate with central control system.

21. Has 1 RS485 interface, can link with cameras for camera tracking function.

22. Has 1 Ethernet multi-purpose data transmission & control port. Supports browser access to device, downloading dedicated software for management/control. Supports real-time management of single or multiple devices.

23.Supports power-off auto-save and memory recall.

24.Supports simultaneous online operation of up to 8 devices.

25.Supports iOS, iPad, Android phone/tablet APP for operation/control. Supports end-user interface customization. Supports up to 30 devices managed on the same interface.

26.Supports optional channel signal indicator lights for real-time channel status.

27.Supports optional 2.23-inch OLED display showing device name, IP address, real-time levels, firmware info, MAC address.

Technical specifications:

Frequency Response	20～20KHz (±0.15dB), THD+N: -94dB @17dBu
THD+N	0.002% @1KHz, +4dBu
Input Sensitivity Steps	0/3/6/9/12/15/18/21/24/27/30/33/36/39/42/45/48 dB
Phantom Power	+48V/10mA max
Max Level	+18dBu
Channel Separation @1KHz	108dB
Input Impedance (Balanced)	5.4KΩ
Output Impedance (Balanced)	600Ω
System Latency	<3ms
Power Supply	AC220V,50Hz/60Hz
Dimensions (W×D×H)	482*260*45mm
Weight	3.5KG
Power Consumption	20W