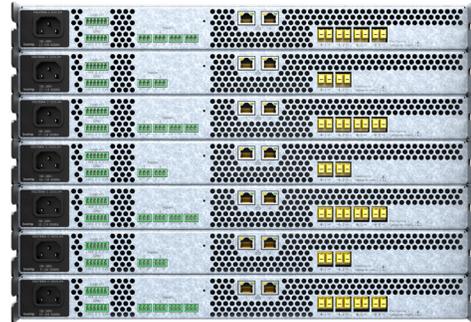


DATA SHEET

VOLTERA D M

AMPLIFIED LOUDSPEAKER CONTROLLER



Voltera D M Series seamlessly integrates amplification into a powerful loudspeaker controller, while also adding a fully programmable DSP onboard with enough headroom to handle even complex audio processing and distribution needs.

A host of one-of-a-kind features drive flexibility, reliability and extraordinary audio performance. The combination of integrated DSP, high power and channel density, high efficiency and low idle power – along with support for power sharing and networked audio – delivers significant space and cost savings.

Available in 2 and 4 channel configurations from 600 to 4800 W, Voltera D M amplified loudspeaker controllers are perfect for smaller venues where their ability to replace an external DSP can have a significant proportional impact on the total system cost. However, larger systems can also benefit when more DSP power is needed.

100% software configurable, by either Tesira or Biamp VenueTune software, depending on user preference and audio network protocols, Voltera D M amplified loudspeaker controllers make setup and use easier.

FEATURES

- Powerful onboard DSP with ample headroom for large systems – the equivalent of a TesiraFORTÉ
- Up to 4800W and 4 channels in single RU
- No central resource to limit system size
- High peak voltage output capability (up to 237Vpk)
- Power sharing provides up to 100% of total power through any single channel
- Each model supports AVB, Dante, and AES67
- Each channel can drive low impedance (2.7, 4, 8, and 16 ohm), 70V, or 100V
- Onboard processing means system cost scales with power requirements
- The ALAMOS loudspeaker profile library, with nearly 700 unique profiles covering over 200 Biamp models, streamlines commissioning when using Tesira or VenueTune software
- Group-controlled raised cosine EQ making it attractive for large systems
- Accurate raised cosine EQ for the entire frequency band
- Comprehensive limiter scheme avoids protective mutes and shutdowns
- Processor can be sustained through POE – no main power required and no reboots
- Support for failover-to-analog operation
- 5-year warranty
- Compliant with the US Trade Agreement Act (TAA)
- Biamp Workplace Ready

VOLTERA D M SPECIFICATIONS

| Model | D 1200.2M | D 2400.2M | D 600.4M | D 1200.4M | D 2400.4M | D 4800.2M | D 4800.4M |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------|--------------------|----------------------|----------------------|----------------------|
| General | | | | | | | |
| Number of Class D amplifier channels | 2 | 2 | 4 | 4 | 4 | 2 | 4 |
| Total output all channels driven | 1200 W | 2400 W | 600 W | 1200 W | 2400 W | 4800 W | 4800 W |
| Maximum output voltage | 145 Vpk | 160 Vpk | 145 Vpk | 145 Vpk | 160 Vpk | 237 Vpk | 237 Vpk |
| Maximum output current | 35 Apk | 40 Apk | 23 Apk | 29 Apk | 40 Apk | 65 Apk | 57 Apk |
| Power per channel all channels driven | | | | | | | |
| Hi-Z (70 / 100 V) | 600 W | 1200 W | 150 W | 300 W | 600 W | 2400 W | 1200 W |
| 16 ohm | 600 W | 1200 W | 150 W | 300 W | 600 W | 2400 W | 1200 W |
| 8 ohm | 600 W | 1200 W | 150 W | 300 W | 600 W | 2400 W | 1200 W |
| 4 ohm | 600 W | 1200 W | 150 W | 300 W | 600 W | 2400 W | 1200 W |
| 2.7 ohm | 600 W | 1200 W | 150 W | 300 W | 600 W | 2400 W | 1200 W |
| Max power per channel using power sharing¹ | | | | | | | |
| 100 V | 1000 W | 2000 W | 450 W | 900 W | 1800 W | 4660 W | 3600 W |
| 70 V | 1000 W | 2000 W | 450 W | 900 W | 1800 W | 3300 W | 3300 W |
| 16 ohm | 650 W | 800 W | 450 W | 650 W | 800 W | 1750 W | 1750 W |
| 8 ohm | 1000 W | 1600 W | 450 W | 900 W | 1600 W | 3500 W | 3500 W |
| 4 ohm | 1000 W | 2000 W | 450 W | 900 W | 1800 W | 4800 W | 3600 W |
| 2.7 ohm | 1000 W | 2000 W | 450 W | 900 W | 1800 W | 4800 W | 3600 W |
| ¹ Available on any channel | | | | | | | |
| Network | | | | | | | |
| Ports | 2 1000Base-T ports | | | | | | |
| Networked media formats supported | Dante, AES67 and AVB | | | | | | |
| Network modes supported | Converged, split or redundant | | | | | | |
| PoE+ support | If port 1 is connected to a PoE+ switch with a UPS, then the Voltera D will not reboot when mains power is lost | | | | | | |
| Network latency | AVB: 2 ms, Dante : 1 / 2 ms | | | | | | |
| Sample rates supported | 96 and 48 kHz | | | | | | |
| Remote interface | Tesira, VenueTune | | | | | | |
| Third party interface | TTP | | | | | | |
| Processing | | | | | | | |
| Latency (analog input to output) | 2.65 ms (includes look-ahead delay in zero overshoot peak limiters) | | | | | | |
| Default gain (analog input to output) | 29 dB | | | | | | |
| Per input | Supports input redundancy and failover to analog sources Multilayered group control of raised cosine EQ, gain, delay (≤ 2 s), polarity and mute 2048 tap FIR for optimization | | | | | | |
| Per output | Very comprehensive processing supporting loudspeaker profiles including <ul style="list-style-type: none"> • 2048 tap FIR, 24 biquads • Dynamic EQ • Peak and thermal limiters with side chains | | | | | | |
| Startup time with PoE+ | <1 s | | | | | | |
| Audio performance | | | | | | | |
| THD+N (1000 Hz, at 1 dB below max output) | <0.05% | | | | | | |
| THD+N (20 - 20000 Hz for 1 W) | <0.05% | | | | | | |
| Frequency response | +/-0.5 dB (20 - 20000 Hz, 8 ohm, unweighted) | | | | | | |
| Channel separation (crosstalk at 1 kHz) | >70 dB | | | | | | |
| Dynamic range | 117 dB | | | | | | |
| Back panel interface | | | | | | | |
| Control and monitoring IO | Mute all channels (input), Health (output), Sleep mode status (output), Sleep mode (input) | | | | | | |
| Programmable GPIO | 4 logic/voltage control pins, defined using Tesira software | | | | | | |
| Analog input connectors | 3-pin terminal block connectors with 0.15" (3.81 mm) pitch | | | | | | |
| Output connectors | 2-pin terminal block connectors rated for 41 Arms. Can take up to 8 mm ² (8.2 AWG) cables | | | | | | |
| Detachable mains connector | 3-pin IEC C14 inlet for C13 cables | | | | | | |
| Front panel interface | | | | | | | |
| Locate | Tamper proof design | | | | | | |
| System status indicator | Bi-directional locate functionality | | | | | | |
| Device status indicators | Shows if there are faults within the greater system | | | | | | |
| Channel status indicators | Status, activity and faults | | | | | | |
| | Mute, signal, limit and temp | | | | | | |
| Power and environmental | | | | | | | |
| Cooling | Variable speed fans, front to back airflow | | | | | | |
| Operating temperature | 32-104F (0-40C) | | | | | | |
| Relative humidity | 0-95% non-condensing altitude 0 - 2000 m (0-6562 ft) | | | | | | |
| Nominal Voltage | 100-240 VAC, 50/60 Hz | | | | | | |
| Mechanical | | | | | | | |
| HxWxD (rack rail to rear panel) | 1.7 x 17.5 x 16.9 inches (44 x 444 x 430 mm) | | | | | | |
| Weight | 16.8 lbs (7.6 kg) | 17 lbs (7.7 kg) | 17 lbs (7.7 kg) | 17 lbs (7.7 kg) | 17.2 lbs (7.8 kg) | 17.2 lbs (7.8 kg) | 18.3 lbs (8.3 kg) |
| Included accessories | Rear support kit for 19" 1 RU mount | | | | | | |

The power figures are measured using a 25 ms burst repeated every 400 ms with a sustained average at 1/8th power (i.e. a 12 dB crest factor)

Biamp strives to improve its products on a continual basis. Specifications are therefore subject to change without notice.

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