

# DATA SHEET

## VOLTERA D

### AMPLIFIED LOUDSPEAKER CONTROLLER



Voltera D series amplified loudspeaker controllers are available in 1200W 4-channel, 1200W 8-channel, 2400W 4-channel, and 2400W 8-channel configurations. They feature support of audio via AVB, Dante, and AES67. Dante can be dual redundant.

All models of the Voltera D provide high power and channel density while maintaining high efficiency and low idle power. They are capable of high peak voltage output and can deliver up to 75% of the total power on any channel using power sharing. They also offer both Lo-Z or Hi-Z per channel to support hybrid systems.

Configured by either the Tesira or VenueTune software, the Voltera D series is ideal for a wide variety of applications, from houses of worship to transportation.

#### FEATURES

- Powerful onboard DSP
- Redundant media interface (AVB, Dante, and AES67)
- Lo-Z or Hi-Z per channel to support hybrid systems
- Configurable with Tesira or VenueTune software
- Power sharing up to 75% (4-channel models) of the total power into any channel
- Wide dynamic range
- Low power consumption during use, idle, and standby
- Limiting for maximum reliability and zero clipping
- High peak voltage output capability (up to 160Vpk)
- High power and channel density

## VOLTERA D SPECIFICATIONS

Model	D 1200.8	D 1200.4	D 2400.8	D 2400.4
<b>General</b>				
Number of amplifier channels	8	4	8	4
Total output all channels driven	1200 W	1200 W	2400 W	2400 W
Maximum output voltage	145 Vpk	145 Vpk	145 Vpk	160 Vpk
Maximum output current	24 Apk	29 Apk	33 Apk	40 Apk
<b>Power per channel all channels driven</b>				
Hi-Z (70 / 100 V)	150 W	300 W	300 W	600 W
16 ohm	150 W	300 W	300 W	600 W
8 ohm	150 W	300 W	300 W	600 W
4 ohm	150 W	300 W	300 W	600 W
2.7 ohm	150 W	300 W	300 W	600 W
<b>Max power per channel using power sharing</b> (available on any channel)				
Hi-Z (70 / 100 V)	600 W	900 W	1200 W	1800 W
16 ohm	600 W	650 W	650 W	800 W
8 ohm	600 W	900 W	1200 W	1600 W
4 ohm	600 W	900 W	1200 W	1800 W
2.7 ohm <sup>1</sup>	430 W	630 W	810 W	1200 W
<b>Network</b>				
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			
<b>Processing</b>				
Latency (analog input to output)	2.5 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 ( $\leq 2$ s), polarity and mute			
Per output	Very comprehensive processing supporting loudspeaker profiles including <ul style="list-style-type: none"> <li>• 2048 tap FIR, 24 biquads</li> <li>• Dynamic EQ</li> <li>• Peak, program and thermal limiters with side chains</li> </ul>			
Startup time with PoE+	<1 s			
<b>Audio performance</b>				
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			
<b>Back panel interface</b>				
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 <sup>2</sup> (8.2 AWG) cables			
Detachable mains connector	3-pin IEC C14 inlet for C13 cables			
<b>Front panel interface</b>				
NFC status reading	Tamper proof design Extensive status and network information can be read with a phone via NFC			
Locate	Bi-directional locate functionality			
System status indicator	Shows if there are faults within the greater system			
Device status indicators	Status, activity and faults			
Channel status indicators	Mute, signal, limit and temp			
<b>Power and environmental</b>				
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			
<b>Mechanical</b>				
HxWxD (rack rail to rear panel)	1.7 x 17.5 x 16.9 inches (44 x 444 x 430 mm)			
Weight	18.1 lbs (8.2 kg)	17 lbs (7.7 kg)	18.3 lbs (8.3 kg)	17.2 lbs (7.8 kg)
Included accessories	Rear support kit for 19" 1 RU mount			

<sup>1</sup>The power ratings for 2.7 ohm are reduced to guarantee that the same voltage can be delivered in impedance dips that are 25% lower. As an example: 1200 W into 2.7 ohm is 80 Vpk, which into impedance dips of 2 ohm (75% of 2.7 ohm) resulting in extremes with 40 Apk and a burst power of 1600 W.

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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