DATA SHEET
TESIRAFORTÉ® AVB VT

The TesiraFORTÉ® AVB VT is a digital audio server with 12 analog inputs with Acoustic Echo Cancellation (AEC) technology and 8 analog outputs. It includes up to 8 channels of configurable USB audio, a 2-channel VoIP interface, and a standard FXO telephone interface. USB audio allows TesiraFORTÉ to interface directly with USB audio hosts, as well as to take full advantage of today's most sophisticated conferencing solutions. TesiraFORTÉ AVB VT includes Audio Video Bridging (AVB) digital audio networking. It can be used as standalone device or combined with other TesiraFORTÉ AVB devices and Tesira® servers, expanders, endpoints, and controllers. TesiraFORTÉ AVB VT also provides extensive audio processing, including but not limited to: AEC technology, signal routing and mixing, equalization, filtering, dynamics, and delay, as well as control, monitoring, and diagnostic tools; all configured through the Tesira configuration software. TesiraFORTÉ AVB VT is best-suited for rooms that require high-quality audio solutions using VoIP, voice lift, mix-minus, and AEC.

BENEFITS

- Integrates VoIP, POTS, and USB audio into one product allowing integrators to choose the type of audio conferencing that works best for their installation
- AVB allows audio networking via IEEE open standards protocol
- Includes default configuration file, allowing for plug-and-play usage
- Highly scalable and cost-effective solution that can grow over time with the needs of the customer
- SpeechSense™ technology to enhance speech processing
- Integrates directly with soft codecs and other USB audio hosts

FEATURES

- 128 x 128 channels of AVB
- 12 mic/line level inputs; 8 mic/line level outputs
- 12 channels of AEC
- Gigabit Ethernet port
- Up to 8 channels of configurable USB audio
- RS-232 serial port
- 4-pin GPIO
- 2-line OLED display with capacitive-touch navigation
- Rack mountable (1RU)
- System configuration and control via Ethernet
- Internal universal power supply
- SIP VoIP interface via RJ-45 connector
- Standard FXO telephone interface via RJ-11 connector
- Fully compatible with Tesira AVB servers, endpoints, expanders, and controllers
- Signal processing via intuitive software allows configuration and control for signal routing, mixing, equalization, filtering, delay, and much more
- CE marked, UL listed, and RoHS compliant
- Covered by Biamp Systems' 5-year warranty

ARCHITECTS & ENGINEERS SPECIFICATION

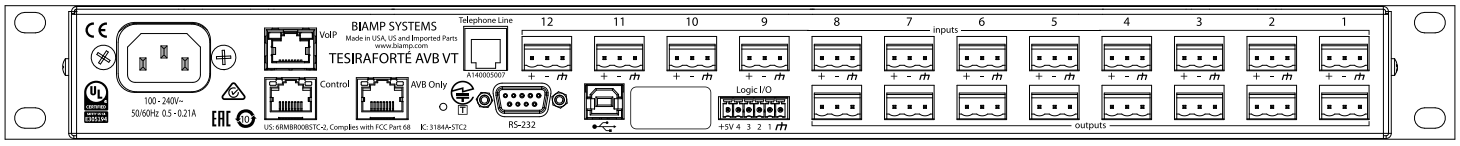
The digital audio network server shall be designed exclusively for use with Tesira systems. The AVB model server shall support Audio Video Bridging (AVB) digital audio networking that shall allow up to 128 x 128 channels. The AVB networking connection shall be implemented on a RJ-45 connector on the AVB model. The server shall support Ethernet connection for programming and control on a RJ-45 connector. The server shall have internal DSP processing. The server shall include 4 channels of General Purpose Input and Output connection (GPIO) for sending or receiving logic signals. The programming of the GPIO ports shall be software configurable. The server shall include a RS-232 connection for control data transmission into or out of the server and such operation shall be software programmable. The server shall include a Universal Serial Bus (USB) connection on a standard USB-B type connector. The server shall be software configurable to stream up to 8 channels of digital USB Audio Class 1 transmission either into or out of the server or simultaneous input and output. The server shall provide 12 balanced input connections for receiving microphone or line level analog audio signals on screw-down, removable connectors. The input connections shall include Acoustic Echo Cancellation (AEC) hardware and firmware; the parameters, routing, and operation of which shall be software programmable. The server shall provide 8 balanced output channels for the transmission of microphone or line level analog audio signals on screw-down, removable connectors. Each individual channel shall have its own dedicated connection. The server shall integrate to Voice Over Internet Protocol (VoIP) systems on a RJ-45 connector for two lines of VoIP communication and shall support Session Initiation Protocol (SIP) v2.0 or later. The server shall integrate to standard telephony communications on a RJ-11 connector for a single line of telephone communication. The server shall provide front panel OLED identification of server power, status, alarm, and activity as well as system wide alarm. The server shall be rack mountable (1RU) and feature software configurable signal processing, including but not limited to: signal routing and mixing, equalization, filtering, dynamics, and delay, as well as control, monitoring, and diagnostic tools. The server shall control and proxy all Tesira expander, endpoint, and control devices. The server shall be CE marked, UL listed, and shall be compliant with the RoHS directive. Warranty shall be five years. The server shall be TesiraFORTÉ AVB VT.

TESIRAFORTÉ AVB VT SPECIFICATIONS

Frequency Response:	
20Hz to 20kHz ,+4dBu output	+0.25dB/-0.5dB
THD+N (22Hz to 22kHz):	
0dB gain, +4dBu input	< 0.006%
54dB gain, -50dBu input	< 0.040%
EIN (no weighting, 22Hz to 22kHz):	< -125dBu
Dynamic Range (in presence of signal):	
22Hz to 22kHz, 0dB gain	> 108dB
Input Impedance (balanced):	8kΩ
Output Impedance (balanced):	207Ω
Maximum Input:	+24dBu
Maximum Output (selectable):	+24dBu, +18dBu, +12dBu, +6dBu , 0dBu, -31dBu
Input Gain Range: (6dB steps):	0dB to 66dB
Overall Dimensions/Weight:	Height: 1.75 inches (44 mm) Width: 19.0 inches (483 mm) Depth: 10.5 inches (267 mm) Weight: 8 lbs (3.63 kg)
Environment:	
Ambient Operating Temperature Range:	32-113° F (0 – 45° C)
Humidity:	5 – 95% non-condensing
Altitude:	0-10,000 Feet (0-3000 Meters) MSL

Phantom Power:	+48 VDC (7mA/input)
Crosstalk, channel to channel, 1kHz:	
0dB gain, +4dBu input	< -85dB
54dB gain, -50dBu input	< -75dB
Sampling Rate:	48kHz
A/D – D/A Converters:	24-bit
Power Consumption (100-240VAC 50/60Hz):	< 35W
USB:	
Bit Depth:	16- or 24-bit
Number of Channels:	up to 8
Sample Rate:	48kHz
Compliance:	FCC Part 15B (USA) Industry Canada CS-03 (Canada) CE marked (Europe) UL and C-UL listed (USA & Canada) RCM (Australia) RoHS Directive (Europe)

TESIRAFORTÉ AVB VT BACK PANEL



DATA SHEET
TESIRAFORTÉ® VT

The TesiraFORTÉ® VT is a digital audio server with 12 analog inputs with Acoustic Echo Cancellation (AEC) technology and 8 analog outputs. It includes up to 8 channels of configurable USB audio, a 2-channel VoIP interface, and a standard FXO telephone interface. USB audio allows TesiraFORTÉ to interface directly with USB audio hosts, as well as to take full advantage of today's most sophisticated conferencing solutions. TesiraFORTÉ VT provides extensive audio processing, including but not limited to: AEC technology, signal routing and mixing, equalization, filtering, dynamics, and delay, as well as control, monitoring, and diagnostic tools; all configured through the Tesira® configuration software. TesiraFORTÉ VT is best-suited for rooms that require high-quality audio solutions using VoIP, voice lift, mix-minus, and AEC.

BENEFITS

- Integrates VoIP, POTS, and USB audio in one product allowing integrators to choose the type of audio conferencing that works best for their installation
- Includes default configuration file allowing for plug-and-play usage
- Highly scalable and cost-effective solution that can grow over time with the needs of the customer
- SpeechSense™ technology to enhance speech processing
- Integrates directly with soft codecs and other USB audio hosts

FEATURES

- 12 mic/line level inputs; 8 mic/line level outputs
- 12 channels of AEC
- Gigabit Ethernet port
- Up to 8 channels of configurable USB audio
- RS-232 serial port
- 4-pin GPIO
- 2-line OLED display with capacitive-touch navigation
- Rack mountable (1RU)
- System configuration and control via Ethernet
- Internal universal power supply
- SIP VoIP interface via a RJ-45 connector
- Standard FXO telephone interface via RJ-11 connector
- Signal processing via intuitive software allows configuration and control for signal routing, mixing, equalization, filtering, delay, and much more
- CE marked, UL listed, and RoHS compliant
- Covered by Biamp Systems' 5-year warranty

ARCHITECTS & ENGINEERS SPECIFICATION

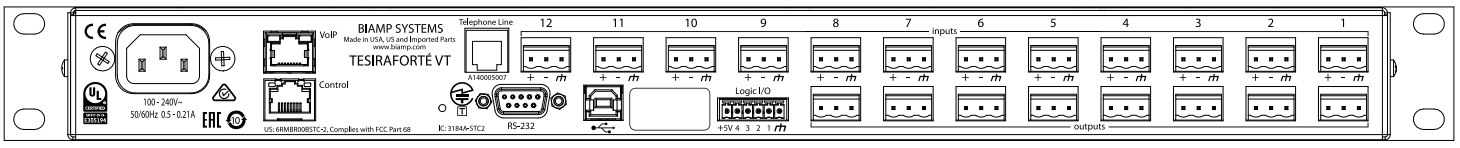
The digital audio network server shall be designed exclusively for use with Tesira systems. The server shall support Ethernet connection for programming and control on a RJ-45 connector. The server shall have internal DSP processing. The server shall include 4 channels of General Purpose Input and Output connection (GPIO) for sending or receiving logic signals. The programming of the GPIO ports shall be software configurable. The server shall include a RS-232 connection for control data transmission into or out of the server and such operation shall be software programmable. The server shall include a Universal Serial Bus (USB) connection on a standard USB-B type connector. The server shall be software configurable to stream up to 8 channels of digital USB Audio Class 1 transmission either into or out of the server or simultaneous input and output. The server shall provide 12 balanced input connections for receiving microphone or line level analog audio signals on screw-down, removable connectors. The input connections shall include Acoustic Echo Cancellation (AEC) hardware and firmware; the parameters, routing, and operation of which shall be software programmable. The server shall provide 8 balanced output channels for the transmission of microphone or line level analog audio signals on screw-down, removable connectors. Each individual channel shall have its own dedicated connection. The server shall integrate to Voice Over Internet Protocol (VoIP) systems on a RJ-45 connector for two lines of VoIP communication and shall support Session Initiation Protocol (SIP) v2.0 or later. The server shall integrate to standard telephony communications on a RJ-11 connector for a single line of telephone communication. The server shall provide front panel OLED identification of server power, status, alarm, and activity as well as system wide alarm. The server shall be rack mountable (1RU) and feature software configurable signal processing, including but not limited to: signal routing and mixing, equalization, filtering, dynamics, and delay, as well as control, monitoring, and diagnostic tools. The server shall be CE marked, UL listed, and shall be compliant with the RoHS directive. Warranty shall be five years. The server shall be TesiraFORTÉ VT.

TESIRAFORTÉ VT SPECIFICATIONS

Frequency Response:	
20Hz to 20kHz ,+4dBu output	+0.25dB/-0.5dB
THD+N (22Hz to 22kHz):	
0dB gain, +4dBu input	< 0.006%
54dB gain, -50dBu input	< 0.040%
EIN (no weighting, 22Hz to 22kHz):	< -125dBu
Dynamic Range (in presence of signal):	
22Hz to 22kHz, 0dB gain	> 108dB
Input Impedance (balanced):	8kΩ
Output Impedance (balanced):	207Ω
Maximum Input:	+24dBu
Maximum Output (selectable):	+24dBu, +18dBu, +12dBu, +6dBu , 0dBu, -31dBu
Input Gain Range: (6dB steps):	0dB to 66dB
Overall Dimensions/Weight:	Height: 1.75 inches (44 mm) Width: 19.0 inches (483 mm) Depth: 10.5 inches (267 mm) Weight: 8 lbs (3.63 kg)
Environment:	
Ambient Operating Temperature Range:	32-113° F (0 – 45° C)
Humidity:	5 – 95% non-condensing
Altitude:	0-10,000 Feet (0-3000 Meters) MSL

Phantom Power:	+48 VDC (7mA/input)
Crosstalk, channel to channel, 1kHz:	
0dB gain, +4dBu input	< -85dB
54dB gain, -50dBu input	< -75dB
Sampling Rate:	48kHz
A/D – D/A Converters:	24-bit
Power Consumption (100-240VAC 50/60Hz):	< 35W
USB:	
Bit Depth:	16- or 24-bit
Number of Channels:	up to 8
Sample Rate:	48kHz
Compliance:	FCC Part 15B (USA) Industry Canada CS-03 (Canada) CE marked (Europe) UL and C-UL listed (USA & Canada) RCM (Australia) RoHS Directive (Europe)

TESIRAFORTÉ VT BACK PANEL



DATA SHEET
TESIRAFORTÉ® DAN VT

The TesiraFORTÉ® DAN VT is a digital audio server with 32 bi-directional channels of Dante™ digital audio, 12 analog inputs with Acoustic Echo Cancellation (AEC) technology, and 8 analog outputs. It also includes up to 8 channels of configurable USB audio, a 2-channel VoIP interface, and a standard FXO telephone interface. USB audio allows TesiraFORTÉ to interface directly with USB audio hosts, as well as to take full advantage of today's most sophisticated conferencing solutions. TesiraFORTÉ DAN VT also provides extensive audio processing, including but not limited to: AEC technology, signal routing and mixing, equalization, filtering, dynamics, and delay, as well as control, monitoring, and diagnostic tools; all configured through the Tesira® configuration software. TesiraFORTÉ DAN VT is best-suited for rooms that require high-quality audio solutions using VoIP, voice lift, mix-minus, and AEC.

BENEFITS

- Integrates VoIP, POTS, and USB audio into one product allowing integrators to choose the type of audio conferencing that works best for their installation
- Includes default configuration file allowing for plug-and-play usage
- Highly scalable and cost-effective solution that can grow over time with the needs of the customer
- SpeechSense™ technology to enhance speech processing
- Integrates directly with soft codecs and other USB audio hosts

FEATURES

- 32 x 32 channels of digital audio networking via the Dante protocol
- 12 mic/line level inputs; 8 mic/line level outputs
- 12 channels of AEC
- Gigabit Ethernet port
- Up to 8 channels of configurable USB audio
- RS-232 serial port
- 4-pin GPIO
- 2-line OLED display with capacitive-touch navigation
- Rack mountable (1RU)
- System configuration and control via Ethernet
- Internal universal power supply
- SIP VoIP interface via a RJ-45 connector
- Standard FXO telephone interface via RJ-11 connector
- Signal processing via intuitive software allows configuration and control for signal routing, mixing, equalization, filtering, delay, and much more
- CE marked, UL listed, and RoHS compliant
- Covered by Biamp Systems' 5-year warranty

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ARCHITECTS & ENGINEERS SPECIFICATION

The digital audio network server shall be designed exclusively for use with Tesira systems. The server shall support Dante™ digital audio networking that shall allow up to 32 x 32 channels. The Dante networking connection shall be implemented on a RJ-45 connector. The server shall support Ethernet connection for programming and control on a RJ-45 connector. The server shall have internal DSP processing. The server shall include 4 channels of General Purpose Input and Output connection (GPIO) for sending or receiving logic signals. The programming of the GPIO ports shall be software configurable. The server shall include a RS-232 connection for control data transmission into or out of the server and such operation shall be software programmable. The server shall include a Universal Serial Bus (USB) connection on a standard USB-B type connector. The server shall be software configurable to stream up to 8 channels of digital USB Audio Class 1 transmission either into or out of the server or simultaneous input and output. The server shall provide 12 balanced input connections for receiving microphone or line level analog audio signals on screw-down, removable connectors. The input connections shall include Acoustic Echo Cancellation (AEC) hardware and firmware; the parameters, routing, and operation of which shall be software programmable. The server shall provide 8 balanced output channels for the transmission of microphone or line level analog audio signals on screw-down, removable connectors. Each individual channel shall have its own dedicated connection. The server shall integrate to Voice Over Internet Protocol (VoIP) systems on a RJ-45 connector for two lines of VoIP communication and shall support Session Initiation Protocol (SIP) v2.0 or later. The server shall integrate to standard telephony communications on a RJ-11 connector for a single line of telephone communication. The server shall provide front panel OLED identification of server power, status, alarm, and activity as well as system-wide alarm. The server shall be rack mountable (1RU) and feature software configurable signal processing, including but not limited to: signal routing and mixing, equalization, filtering, dynamics, and delay, as well as control, monitoring, and diagnostic tools. The server shall be CE marked, UL listed, and shall be compliant with the RoHS directive. Warranty shall be five years. The server shall be TesiraFORTÉ DAN VT.

TESIRAFORTÉ DAN VT SPECIFICATIONS

Frequency Response:	
20Hz to 20kHz ,+4dBu output	+0.25dB/-0.5dB
THD+N (22Hz to 22kHz):	
0dB gain, +4dBu input	< 0.006%
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Bit Depth:	16- or 24-bit
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Sample Rate:	48kHz
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TESIRAFORTÉ DAN VT BACK PANEL