DATA SHEET TESIRAFORTÉ AI TESIRAFORTÉ AVB AI



The TesiraFORTÉ AI is a digital audio server with 12 analog inputs and 8 analog outputs and includes up to 8 channels of configurable USB audio. 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 AI adds Audio Video Bridging (AVB) digital audio networking. The AVB model can be used as a standalone device or can be combined with other TesiraFORTÉ devices and Tesira servers, expanders, and controllers. TesiraFORTÉ AI also provides extensive audio processing, including but not limited to: 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 AI is best-suited for small- to medium-sized rooms that require high-quality audio solutions using voice lift and mix-minus, such as conference rooms or council chambers.

BENEFITS

- Allows integrators to choose which model works best for the installation environment.
- Application-specific models make system design, configuration, and installation easier and faster.
- Included default configuration file allows for plug-and-play usage.
- · Highly scalable and cost-effective solution that can grow over time with the needs of the customer.
- SpeechSense[™] technology enhances speech processing.
- Integrates directly with soft codecs and other USB audio hosts.

- 128 x 128 channels of AVB (AVB model only)
- 12 mic/line level inputs, 8 mic/line level outputs
- 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
- Fully compatible with Tesira servers, endpoints, expanders, and controllers (AVB model)
- 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



TESIRAFORTÉ AVB AI & TESIRAFORTÉ AI: STANDARD MODEL FOR HIGH-QUALITY AUDIO

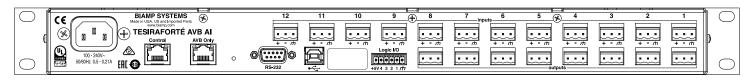
ARCHITECTS & ENGINEERS SPECIFICATION

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 Class 1 Audio transmission either into or out of the server or simultaneous input and output. The server shall provide 12 balanced input connections for receiving of microphone or line level analog audio signals on screw-down, removable connectors. 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 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-class devices (AVB model only) and Tesira 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 AI (for AVB model) or TesiraFORTÉ AI (for non-AVB model).

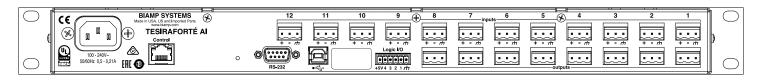
SERVER SPECIFICATIONS

Frequency Response: 20Hz to 20kHz ,+4dBu output	+0.25dB/-0.5dB	Phantom Power:	+48 VDC (7mA/input)
20112 to 201112, Taba oatpat	0.2342, 0.342	Crosstalk, channel to channel,	
THD+N (22Hz to 22kHz):		1kHz:	
OdB gain, +4dBu input	< 0.006%	OdB gain, +4dBu input	< -85dB
54dB gain, -50dBu input	< 0.040%	54dB gain, -50dBu input	< -75dB
EIN (no weighting, 22Hz to 22kHz):	< -125dBu		
		Sampling Rate:	48kHz
Dynamic Range (in presence of signal):	> 108dB		
22Hz to 22kHz, OdB gain		A/D - D/A Converters:	24-bit
Input Impedance (balanced):	8kΩ	Power Consumption	
		(100-240VAC 50/60Hz):	< 35W
Output Impedance (balanced):	207Ω		
		USB:	
Maximum Input:	+24dBu	Bit Depth:	16- or 24-bit
		Number of Channels:	up to 8
Maximum Output (selectable):	+24dBu, +18dBu, +12dBu, +6dBu , 0dBu, -31dBu	Sample Rate:	48kHz
		Compliance:	FCC Part 15B (USA)
Input Gain Range: (6dB steps):	OdB to 66dB		Industry Canada CS-03 (Canada)
			CE marked (Europe)
Overall Dimensions/Weight:	Height: 1.75 inches (44 mm)		UL and C-UL listed (USA & Canada)
	Width: 19.0 inches (483 mm)		RCM (Australia)
	Depth: 10.5 inches (267 mm)		EAC (Eurasian Customs Union)
	Weight: 8 lbs (3.63 kg)		RoHS Directive (Europe)
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TESIRAFORTÉ AVB AI BACK PANEL



TESIRAFORTÉ AI BACK PANEL





DATA SHEET TESIRAFORTÉ CI TESIRAFORTÉ AVB CI



The TesiraFORTÉ CI is a digital audio server with 12 analog inputs and 8 analog outputs and includes Acoustic Echo Cancellation (AEC) technology on all 12 inputs. It also includes up to 8 channels of configurable USB audio. 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 CI adds Audio Video Bridging (AVB) digital audio networking. The AVB model can be used as a standalone device or can be combined with other TesiraFORTÉ devices and Tesira servers, expanders, and controllers. TesiraFORTÉ CI 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 CI is best suited for small- to medium-sized rooms that require high-quality audio solutions using AEC, voice lift, and mixminus, such as conference rooms or distance learning environments.

BENEFITS

- Allows integrators to choose which model works best for the installation environment.
- · Application-specific models make system design, configuration, and installation easier and faster.
- Included default configuration file allows for plug-and-play usage.
- · Highly scalable and cost-effective solution that can grow over time with the needs of the customer.
- Acoustic Echo Cancellation (AEC) technology on all 12 inputs.
- SpeechSense[™] technologies to enhance speech processing.
- Integrates directly with soft codecs and other USB audio hosts.

- 128 x 128 channels of AVB (AVB model only)
- 12 mic/line level inputs with AEC, 8 mic/line level outputs
- · 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
- Fully compatible with Tesira servers, endpoints, expanders, and controllers (AVB model)
- 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



TESIRAFORTÉ AVB CI & TESIRAFORTÉ CI: EXTERNAL CODEC CONFERENCING SOLUTION

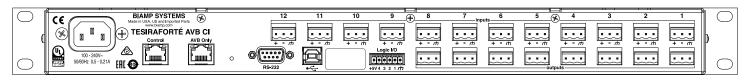
ARCHITECTS & ENGINEERS SPECIFICATION

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 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 of 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 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-class devices (AVB model only) and Tesira 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 CI (for AVB model) or TesiraFORTÉ CI (for non-AVB model).

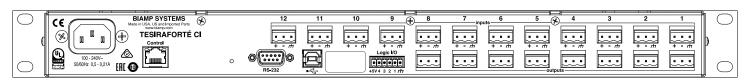
SERVER SPECIFICATIONS

Frequency Response: 20Hz to 20kHz ,+4dBu output	+0.25dB/-0.5dB	Phantom Power:	+48 VDC (7mA/input)
THD+N (22Hz to 22kHz): OdB gain, +4dBu input 54dB gain, -50dBu input	< 0.006% < 0.040%	Crosstalk, channel to channel, 1kHz: OdB gain, +4dBu input 54dB gain, -5OdBu input	< -85dB < -75dB
EIN (no weighting, 22Hz to 22kHz): Dynamic Range (in presence of signal):	< -125dBu > 108dB	Sampling Rate:	48kHz
22Hz to 22kHz, OdB gain		A/D - D/A Converters:	24-bit
Input Impedance (balanced):	8kΩ	Power Consumption (100-240VAC 50/60Hz):	< 35W
Output Impedance (balanced):	207Ω	USB:	
Maximum Input:	+24dBu	Bit Depth: Number of Channels:	16- or 24-bit up to 8
Maximum Output (selectable):	+24dBu, +18dBu, +12dBu, +6dBu , 0dBu, -31dBu	Sample Rate:	48kHz
Input Gain Range: (6dB steps):	OdB to 66dB	Compliance:	FCC Part 15B (USA) Industry Canada CS-03 (Canada) CE marked (Europe)
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)		UL and C-UL listed (USA & Canada) RCM (Australia) EAC (Eurasian Customs Union) ROHS Directive (Europe)

TESIRAFORTÉ AVB CI BACK PANEL



TESIRAFORTÉ CI BACK PANEL





DATA SHEET TESIRAFORTÉ TI TESIRAFORTÉ AVB TI



The TesiraFORTÉ TI is a digital audio server with 12 analog inputs and 8 analog outputs and includes Acoustic Echo Cancellation (AEC) technology on all 12 inputs. It also includes up to 8 channels of configurable USB audio, and a standard telephone interface via a RJ-11 connector. 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 TI adds Audio Video Bridging (AVB) digital audio networking. The AVB model can be used as a standalone device or can be combined with other TesiraFORTÉ devices and Tesira servers, expanders, and controllers. TesiraFORTÉ TI 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 TI is best-suited for small- to medium-sized rooms that require high-quality audio solutions using voice lift, mix-minus, and AEC such as conference rooms or training facilities that require a standard telephone interface.

BENEFITS

- Allows integrators to choose which model works best for the installation environment.
- · Application-specific models make system design, configuration, and installation easier and faster.
- Included default configuration file allows for plug-and-play usage.
- Highly scalable and cost-effective solution that can grow over time with the needs of the customer.
- Acoustic Echo Cancellation (AEC) technology on all 12 inputs.
- SpeechSense[™] technologies to enhance speech processing.
- Integrates directly with soft codecs and other USB audio hosts.

- 128 x 128 channels of AVB (AVB model only)
- 12 mic/line level inputs with AEC, 8 mic/line level outputs
- 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
- Standard telephone interface via a RJ-11 connector
- Fully compatible with Tesira servers, expanders, and controllers (AVB model)
- 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



TESIRAFORTÉ AVB TI & TESIRAFORTÉ TI: CONFERENCING OVER STANDARD TELEPHONE SERVICE SOLUTION

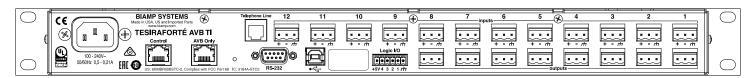
ARCHITECTS & ENGINEERS SPECIFICATION

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 of microphone or line level analog audio signals on screw-down, removable connectors. The inputs 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 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-class devices (AVB model only) and Tesira 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 TI (for AVB model) or TesiraFORTÉ TI (for non-AVB model).

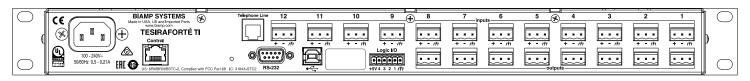
SERVER SPECIFICATIONS

Frequency Response: 20Hz to 20kHz ,+4dBu output	+0.25dB/-0.5dB	Phantom Power:	+48 VDC (7mA/input)
	0.2502, 0.002	Crosstalk, channel to channel,	
THD+N (22Hz to 22kHz):		1kHz:	
OdB gain, +4dBu input	< 0.006%	OdB gain, +4dBu input	< -85dB
54dB gain, -50dBu input	< 0.040%	54dB gain, -50dBu input	< -75dB
EIN (no weighting, 22Hz to 22kHz):	< -125dBu		
, , , , , , , , , , , , , , , , , , , ,		Sampling Rate:	48kHz
Dynamic Range (in presence of signal):	> 108dB		
22Hz to 22kHz, OdB gain		A/D - D/A Converters:	24-bit
Input Impedance (balanced):	8kΩ	Power Consumption	
, , , , , , , , , , , , , , , , , , , ,		(100-240VAC 50/60Hz):	< 35W
Output Impedance (balanced):	207Ω	(,	
		USB:	
Maximum Input:	+24dBu	Bit Depth:	16- or 24-bit
		Number of Channels:	up to 8
Maximum Output (selectable):	+24dBu, +18dBu, +12dBu,	Sample Rate:	48kHz
•	+6dBu , OdBu, -31dBu		
		Compliance:	FCC Part 15B (USA)
Input Gain Range: (6dB steps):	OdB to 66dB	•	FCC Part 68 (USA)
			Industry Canada CS-03 (Canada)
Overall Dimensions/Weight:	Height: 1.75 inches (44 mm)		CE marked (Europe)
	Width: 19.0 inches (483 mm)		UL and C-UL listed (USA & Canada)
	Depth: 10.5 inches (267 mm)		RCM (Australia)
	Weight: 8 lbs (3.63 kg)		EAC (Eurasian Customs Union)
	Weight. 0 lb3 (3.03 kg)		RoHS Directive (Europe)
			Rons Directive (Europe)

TESIRAFORTÉ AVB TI BACK PANEL



TESIRAFORTÉ TI BACK PANEL





DATA SHEET TESIRAFORTÉ VI TESIRAFORTÉ AVB VI



The TesiraFORTÉ VI is a digital audio server with 12 analog inputs and 8 analog outputs and includes Acoustic Echo Cancellation (AEC) technology on all 12 inputs. It also includes up to 8 channels of configurable USB audio, and a 2-channel VoIP interface via a RJ-45 connector. 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 VI adds Audio Video Bridging (AVB) digital audio networking. The AVB model can be used as a standalone device or can be combined with other TesiraFORTÉ devices and Tesira servers, expanders, and controllers. TesiraFORTÉ VI 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 VI is best-suited for small- to medium-sized rooms that require high-quality audio solutions using VoIP, voice lift, mix-minus, and AEC such as board rooms or distance training facilities.

BENEFITS

- Allows integrators to choose which model works best for the installation environment.
- · Application-specific models make system design, configuration, and installation easier and faster.
- Included default configuration file allows for plug-and-play usage.
- Highly scalable and cost-effective solution that can grow over time with the needs of the customer.
- Acoustic Echo Cancellation (AEC) technology on all 12 inputs.
- SpeechSense[™] technologies to enhance speech processing.
- Integrates directly with soft codecs and other USB audio hosts.

- 128 x 128 channels of AVB (AVB model only)
- 12 mic/line level inputs with AEC, 8 mic/line level outputs
- · 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
- Fully compatible with Tesira servers, endpoints, expanders, and controllers (AVB model)
- 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



TESIRAFORTÉ AVB VI & TESIRAFORTÉ VI: VOIP CONFERENCING SOLUTION

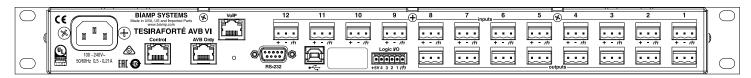
ARCHITECTS & ENGINEERS SPECIFICATION

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 of 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 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-class devices (AVB model only) and Tesira 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 VI (for AVB model) or TesiraFORTÉ VI (for non-AVB model).

SERVER SPECIFICATIONS

Frequency Response: 20Hz to 20kHz ,+4dBu output	+0.25dB/-0.5dB	Phantom Power:	+48 VDC (7mA/input)
THD+N (22Hz to 22kHz): OdB gain, +4dBu input 54dB gain, -50dBu input	< 0.006% < 0.040%	Crosstalk, channel to channel, 1kHz: OdB gain, +4dBu input 54dB gain, -50dBu input	< -85dB < -75dB
EIN (no weighting, 22Hz to 22kHz):	< -125dBu	Sampling Rate:	48kHz
Dynamic Range (in presence of signal): 22Hz to 22kHz, OdB gain	> 108dB	A/D - D/A Converters:	24-bit
Input Impedance (balanced):	8kΩ	Power Consumption (100-240VAC 50/60Hz):	< 35W
Output Impedance (balanced):	207Ω	USB:	
Maximum Input:	+24dBu	Bit Depth: Number of Channels:	16- or 24-bit up to 8
Maximum Output (selectable):	+24dBu, +18dBu, +12dBu, +6dBu , 0dBu, -31dBu	Sample Rate:	48kHz
Input Gain Range: (6dB steps):	OdB to 66dB	Compliance:	FCC Part 15B (USA) Industry Canada CS-03 (Canada) CE marked (Europe)
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)		UL and C-UL listed (USA & Canada) RCM (Australia) EAC (Eurasian Customs Union) ROHS Directive (Europe)

TESIRAFORTÉ AVB VI BACK PANEL



TESIRAFORTÉ VI BACK PANEL

