TESIRAFORTÉ biamp.





FOR THE LOVE OF SOUND™

• he TesiraFORTÉ® family offers several different models. Each TesiraFORTÉ model is designed and optimized to address a different business challenge, with an eye towards accommodating advancements in AV technologies.

Because some applications don't require audio networking, most models are available in an AVB, non-AVB, or Dante™ compatible version. All versions include the same full set of features; the only difference is the ability to transport audio using AVB/TSN or Dante. Our Dante equipped models allow for interfacing with Dante enabled microphones.

Audio Video Bridging/Time Sensitive Networking (AVB/TSN) is a set of open IEEE standards that have been adopted across multiple industries, including the automotive and industrial sectors, and by major companies such as Intel® and Cisco®. With an AVB/TSN backbone, media streams can travel throughout your facility over the corporate network.

Tesira AVB audio devices are Avnu™ certified. This is a significant milestone, and demonstrates Biamp's commitment to supporting the adoption of AVB/TSN by providing customers with future-proofed, robust networked media solutions. The Avnu Alliance provides certifications for member products that meet all requirements set forth by the Avnu Certified Logo Program.

By selecting TesiraFORTÉ, you're choosing a smarter, more efficient audio solution for your customers, and one that will last them long into the future.

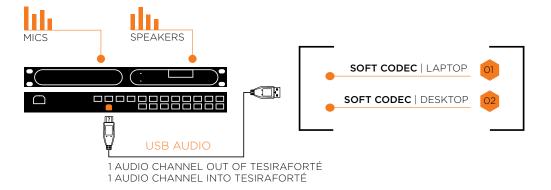
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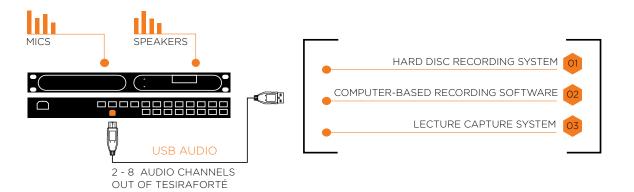
### AVB DSP WITH USB AUDIO.

To enhance the functionality and flexibility of TesiraFORTÉ, we added a USB port to each model. The port can interface directly with third-party technologies, allowing you to take full advantage of today's most sophisticated conferencing solutions. Here are a few applications where you may want to consider using USB audio:

**CONFERENCING** | Connect directly with a soft codec device



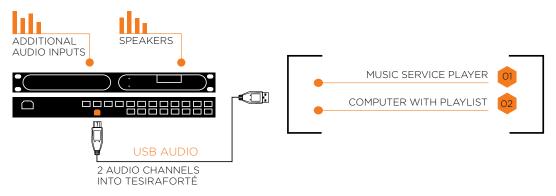
COURT RECORDING | Interface directly with court recording devices



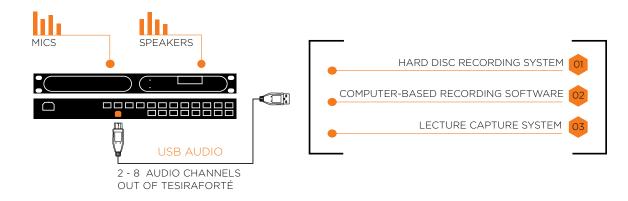
### **CUTTING EDGE, ANYONE?**

Each TesiraFORTÉ model supports up to 8 channels of configurable audio I/O that can be allocated in the programming interface. With multiple combinations of inputs and outputs, transporting audio over USB makes TesiraFORTÉ a powerful solution for a number of common business challenges.

BACKGROUND MUSIC | Receive digital audio directly from a music source



LECTURE/MEETING RECORDING | Interface directly with recording devices



### TesiraFORTÉ MODELS

Why are there so many TesiraFORTÉ models? Because you shouldn't have to pay for functinalilty you don't need. Some audio DSP platforms perform best in non-networked spaces, while others do better in distributed, networked installations. TesiraFORTÉ lets you decide what's right for your project and budget.

#### HERE ARE THE SPECIFIC FEATURES OF EACH MODEL:

#### TesiraFORTÉ Platform Features

- 128 x 128 network channels (AVB model only)
- 32 x 32 network channels (DAN model only)
- Gigabit Ethernet control port
- RS-232 serial port
- Up to 8 channels of configurable USB audio

- 4-pin GPIO
- 2-line OLED display with capacitivetouch navigation
- Rack mountable (1RU)
- Internal universal power supply
- Tesira fixed I/O digital signal processor

#### TesiraFORTÉ AI: Standard model for high quality audio

- 12 mic/line inputs
- 8 mic/line outputs

#### TesiraFORTÉ CI: Soft codec conferencing solution

- 12 mic/line inputs with AEC technology
- 8 mic/line outputs

#### TesiraFORTÉ VT: Telephony conferencing solution

- 12 mic/line inputs with AEC technology
- 8 mic/line outputs
- 2-channel VoIP interface and standard FXO telephone interface

#### **TesiraFORTÉ VT4:** Telephony conferencing solution for smaller conference rooms

- 4 mic/line inputs with AEC technology
- 4 mic/line outputs
- 2-channel VoIP interface and standard FXO telephone interface



## TesiraFORTÉ AI

STANDARD MODEL FOR HIGH-QUALITY AUDIO

At its best in conference rooms or council chambers, the sweet spot for the Al model is installations requiring high-quality audio solutions such as those with voice lift and mix-minus.

For those customers who want to link multiple rooms together for centralized control, or add them to an existing Tesira AVB network, TesiraFORTÉ AVB AI models are the right choice for general audio applications.

The TesiraFORTÉ AI and DAN AI are better choices for those environments where a standalone DSP is needed for localized audio per room.

# TesiraFORTÉ CI

EXTERNAL CODEC CONFERENCING SOLUTION

Soft codec conferencing is the way the world does business, and TesiraFORTÉ CI is the ideal model to help you get the most from this technology. By passing all audio signals through a powerful DSP that's built to make sure every word is heard, you get the best of both worlds.

With the USB port enabling direct integration with soft codec technologies, and AEC technology ensuring superior conferencing audio, all TesiraFORTÉ CI models are built for truly collaborative communications.



## TesiraFORTÉ VT

TELEPHONY CONFERENCING SOLUTION

The TesiraFORTÉ VT combines both standard telephone service and a 2-line VoIP interface together in one solution, giving customers a choice between these technologies and soft codec calls via USB audio. The VT brings all this technology together so if there's ever a need to update a telephony platform, you won't have to upgrade your DSP solution.

Whether you plan to link multiple rooms together, add them to an existing Tesira AVB network, or keep the units separate, the VT models facilitate broad communication over VoIP or standard telephone lines, while leveraging AEC.

## TesiraFORTÉ VT4

TELEPHONY CONFERENCING FOR SMALLER CONFERENCE ROOMS

As conferencing solutions continue down the path of all digital, analog I/O becomes less of a requirement. The TesiraFORTÉ VT4 takes all the power of a standard TesiraFORTÉ product and reduces not only the price, but also the analog I/O, making it a perfect solution for digital microphones or for installations requiring less analog I/O.

The VT4 offers customers a choice between AVB/TSN and Dante technologies – allowing them to select the model that best fits their conferencing needs.



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### **PRODUCTS**



### **DIGITAL SIGNAL PROCESSORS**

FIXED I/O DSP		
TesiraFORTÉ AI*	Fixed I/O configuration of 12 mic/line level inputs and 8 mic/line level outputs. Supports up to 8 channels of configurable USB audio.	
TesiraFORTÉ CI*	Fixed I/O configuration of 12 mic/line level inputs with AEC and 8 mic/line level outputs. Supports up to 8 channels of configurable USB audio.	
TesiraFORTÉ VT*	Fixed I/O configuration of 12 mic/line level inputs with AEC, 8 mic/line level outputs, SIP VoIP and standard telephone interface. Supports up to 8 channels of configurable USB audio.	
TesiraFORTÉ AVB VT4	Fixed I/O configuration of 4 mic/line level inputs with AEC, 4 mic/line level outputs, 1 channel of analog telephony, and 2 channels of VoIP telephony. Supports up to 8 channels of configurable USB audio.	
TesiraFORTÉ DAN VT4	Fixed I/O configuration of 4 mic/line level inputs with AEC, 4 mic/line level outputs, 1 channel of analog telephony, and 2 channels of VoIP telephony. Supports up to 8 channels of configurable USB audio.	
VIDEO ENCODERS AND DECODERS		
TesiraLUX™ IDH-1	AVB video encoder; includes one HDMI* port and one DisplayPort™ 1.2 port. Accepts 8 channels of embedded PCM audio and includes 2 mic/line level analog inputs.	
TesiraLUX OH-1	AVB video decoder; includes one HDMI port. Outputs 8 channels of embedded PCM audio and includes 2 mic/line level analog outputs.	

#### **CONTROLS**

CONTROLS	
TEC-1s	PoE Ethernet control - surface mount
TEC-1i	PoE Ethernet control - in-wall mount
EX-LOGIC	PoE controller with 16 logic GPIO
HD-1	Hardware dialer with 12-key standard dial pad and 4 navigation buttons

<sup>\*</sup> Available in AVB and Dante networked models.

### AMPLIFIERS, EXPANDERS, AND MORE

AMPLIFIERS	
AMP-4175R	4-channel, 175W, supports optional I/O card
AMP-8175R	8-channel, 175W, supports 2 optional I/O cards
AMP-4350R	4-channel, 350W, supports optional I/O card
AMP-4300R CV	4-channel, 300W, constant voltage, supports optional I/O card
AMP-A460H	4-channel, 60W amplifier
AMP-450P	4-channel PoE+ conferencing amplifier

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EXPANDERS*		
EX-IN	PoE+ 4-channel mic/line input expander	
EX-AEC	PoE+ 4-channel mic/line input expander with AEC	
EX-OUT	PoE+ 4-channel mic/line output expander	
EX-IO	PoE+ 2-channel mic/line input and 2-channel mic/line output expander	
EX-MOD	Modular expander that can be configured with up to three I/O cards	
EX-UBT	PoE AVB/USB expander with Bluetooth* wireless technology	

MICROPHONES	
TCM-1	AVB Beamtracking™ ceiling microphone
TCM-1A	AVB Beamtracking ceiling microphone with 2-channel PoE+ amplifier
TCM-1EX	Expansion AVB Beamtracking ceiling microphone
CM1-6W	Miniaturized gooseneck ceiling microphone, cardioid capsule
CM1-6WS	Miniaturized gooseneck ceiling microphone, supercardioid capsule

<sup>\*</sup> Expanders are only compatible with AVB-enabled DSPs.



ur Technical Support team has won accolades for the high level of service they provide to our customers day in and day out. With unparalleled worldwide support, Biamp's applications engineers walk you through solutions, and assist you with new system designs, programming, or troubleshooting.

They also perform our in-person and online equipment and concept trainings. From webinars and tutorials on YouTube®, to articles and tech notes on Cornerstone—our online technical support knowledgebase—to in-person multi-day certification trainings, Biamp has invested in your success.

TesiraFORTÉ is backed by our 5-year warranty. Training is available online. To learn more about available courses, visit biamp.com/training. WHEN
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