# TESIRA® FORTÉ

BIAMP® SYSTEMS

## YOUR FORTÉ IS INSTALLING AUDIO SYSTEMS.
## OURS IS MAKING YOUR AUDIO SOUND GREAT. NO MATTER WHAT.

When we created Tesira®, it was always part of our plan to complement our enterprise-level platform with devices built for everyday audio. The TesiraFORTÉ family is the next step in our plan: four different models with optional AVB networking, and optimized for specific applications with fixed I/O configurations.

By combining our experience with market feedback, we've identified a need for this kind of audio solution from our user community. Each TesiraFORTÉ model is designed and optimized to address a different business challenge, with an eye towards accommodating evolutions in audio technologies.

We also recognize that some applications don't require audio networking. That's why we offer an AVB and a non-AVB version for each model. Don't worry, both versions offer the same full set of features. The only difference is the ability to transport audio using AVB.

[ NOT EVERY PROJECT REQUIRES NETWORKED AUDIO,
BUT EVERY PROJECT REQUIRES GREAT SOUND. ]

## AVB PREPARES YOU FOR TOMORROW
### AND TOMORROW STARTED YESTERDAY.

Audio Video Bridging (AVB) is a collection of IEEE 802.1 open standard networking protocols that allow media streams to be carried over Ethernet networks (using existing cable infrastructure) alongside traditional data without interference. Networking with AVB leverages the intelligence of Ethernet switches to the point where the switch actually becomes an active, intuitive part of the AV system. It automatically handles all the QoS, bandwidth reservation, mixed media usage, and operates with a very low latency.

The wider adoption of AVB is a networking trend that continues to grow. With the full support of the AVnu Alliance and innovative companies like Biamp®, Intel®, Bose®, Cisco®, and Broadcom®, AVB is the most advanced media data management and processing technology available today.
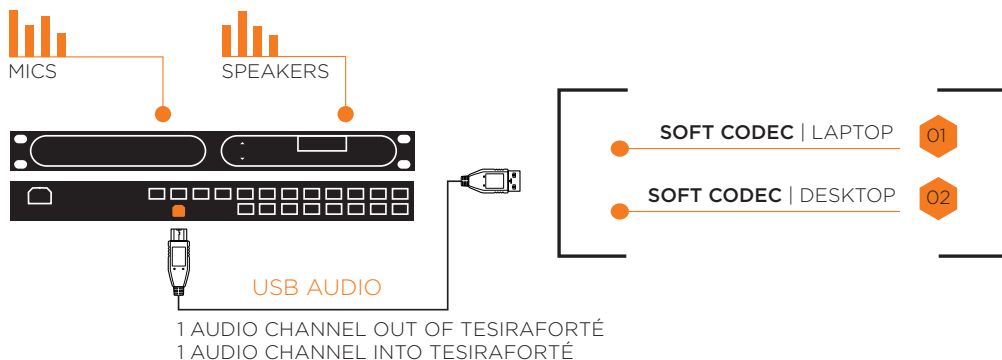
**By choosing an AVB-enabled processor, you're choosing a smarter, more efficient audio solution for your customers, and one that will last them long into the future.**
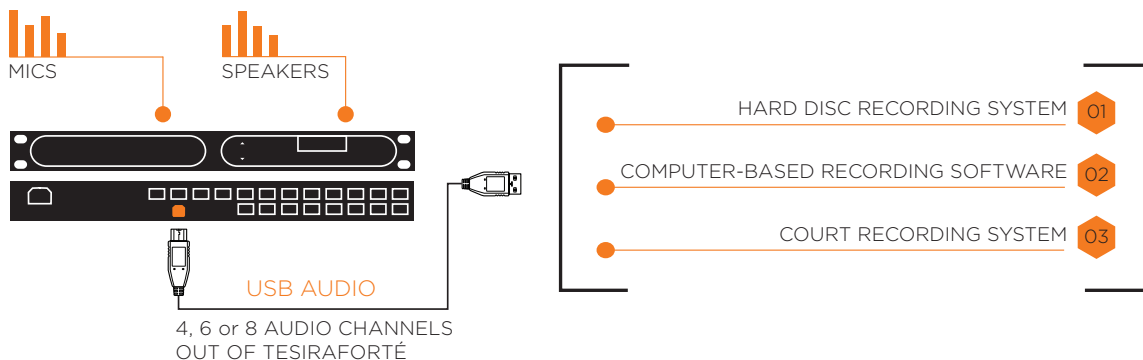
# THE FIRST AVB DSP WITH USB AUDIO.

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:

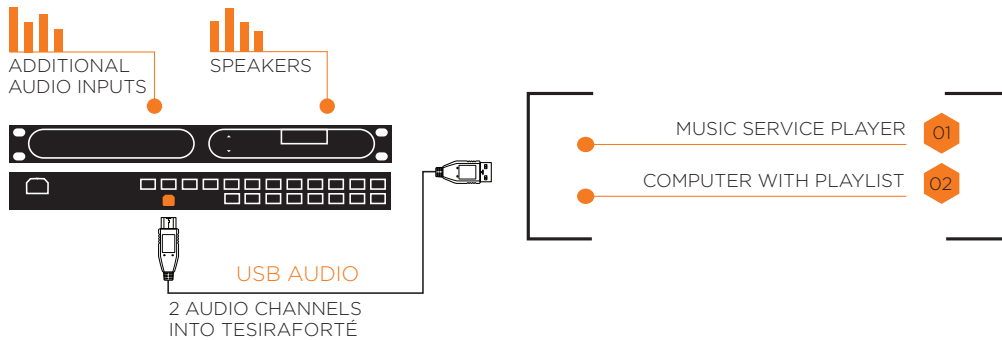## CONFERENCING | Connect directly with a soft codec device

MICS          SPEAKERS

USB AUDIO

SOFT CODEC | LAPTOP     01
SOFT CODEC | DESKTOP    02

1 AUDIO CHANNEL OUT OF TESIRAFORTÉ
1 AUDIO CHANNEL INTO TESIRAFORTÉ

## COURT RECORDING | Interface directly with court recording devices

MICS          SPEAKERS

USB AUDIO

HARD DISC RECORDING SYSTEM          01
COMPUTER-BASED RECORDING SOFTWARE   02
COURT RECORDING SYSTEM              03

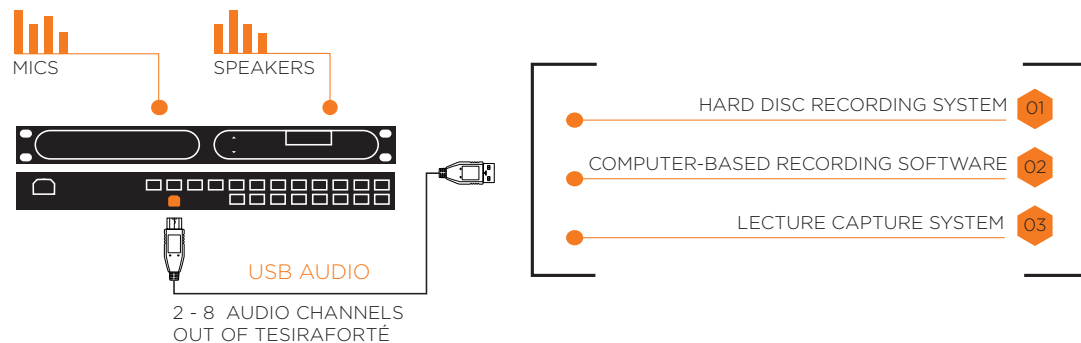4, 6 or 8 AUDIO CHANNELS
OUT OF TESIRAFORTÉ

# 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

ADDITIONAL
AUDIO INPUTS

SPEAKERS

USB AUDIO

2 AUDIO CHANNELS
INTO TESIRAFORTÉ

MUSIC SERVICE PLAYER    01
COMPUTER WITH PLAYLIST    02

## LECTURE/MEETING RECORDING | Interface directly with recording devices

MICS

SPEAKERS

USB AUDIO

2 - 8  AUDIO CHANNELS
OUT OF TESIRAFORTÉ

HARD DISC RECORDING SYSTEM    01
COMPUTER-BASED RECORDING SOFTWARE    02
LECTURE CAPTURE SYSTEM    03

# WHY ARE THERE SO MANY TESIRA**FORTÉS?**

Because you shouldn't have to pay for functionality you don't need.

That's the answer in a nutshell. Some audio DSP platforms perform best in small, 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 AVB AI:** Standard Model for High-Quality Audio

- 128 x 128 channels of AVB
- 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)
- Internal universal power supply
- Tesira server-class device

**TesiraFORTÉ AVB CI:** External Codec Conferencing Solution

- Includes all features of the standard AI model, plus Sona™ AEC technology on all 12 inputs

**TesiraFORTÉ AVB TI:** Conferencing over Standard Telephone Service Solution

- Includes all features of the standard AI model, plus Sona AEC technology on all 12 inputs and standard telephone interface via an RJ-11 input connector

**TesiraFORTÉ AVB VI:** VoIP Conferencing Solution

- Includes all features of the standard AI model, plus Sona AEC technology on all 12 inputs and VoIP connectivity via an RJ-45 input connector

The non-AVB models have all the same functionalities listed previously, except those specifically related to AVB networking. They can still interface with third-party controls and be controlled and programmed remotely over a network.

The non-AVB TesiraFORTÉ models offer a cost-competitive, quality audio solution for environments where audio networking isn't needed. These models are ideal for conference rooms that require their own audio DSP in the room.

TesiraFORTÉ hosts a Tesira configuration file and, therefore, does not require a SERVER or SERVER-IO in order to function. TesiraFORTÉ can also host a Biamp Canvas™ file and can be controlled by Biamp Canvas interfaces. The AVB models can host all expander-class devices (audio and logic expanders) as well as send firmware updates via the Ethernet port. All TesiraFORTÉ models can host Tesira TEC-1 control devices, EX-LOGIC devices and can connect via Ethernet or RS-232 with third-party control systems. TesiraFORTÉ is accessible locally or remotely over Ethernet for management and maintenance.

**TESIRAFORTÉ** IS A SERVER-CLASS DEVICE BY DEFINITION

# Tesira**FORTÉ** AVB AI
## STANDARD MODEL FOR HIGH-QUALITY AUDIO

At its best in small- to medium-sized rooms such as conference rooms or council chambers, the sweet spot for the AI 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 is a better choice for those environments where a standalone DSP is needed for localized audio per room.

# Tesira**FORTÉ** AVB CI
## EXTERNAL CODEC CONFERENCING SOLUTION

Soft codec conferencing is quickly becoming 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, both the AVB and non-AVB CI models are built for truly collaborative communications.

# Tesira**FORTÉ** AVB TI
CONFERENCING OVER STANDARD TELEPHONE SERVICE SOLUTION

The TesiraFORTÉ TI models are built to provide specialized conferencing capabilities using standard telephone service. For those customers who conference over analog telephone lines, the TI model is a cost-effective solution for getting quality audio in their conference rooms, without having to pay the cost of reconstructing existing infrastructure.

Whether you plan to link multiple rooms together, add them to an existing Tesira AVB network, or keep the units separate, the TI models facilitate broad communication over standard telephone lines and leverage AEC, with or without AVB.

# Tesira**FORTÉ** AVB VI
VOIP CONFERENCING SOLUTION

Equipped with AEC and VoIP technologies, the TesiraFORTÉ VI models were born for conferencing. Audio solutions using VoIP can be challenging, complex, and time-consuming to design and install. With the VI, VoIP teleconferencing has never been easier.

We've leveraged our years of experience creating high-quality VoIP solutions to bring you the VI model for high-level VoIP teleconferencing. Having the USB port and VoIP capabilities gives you two options for conferencing, and even more ways to manage your network.

# SO MANY TESIRAFORTÉS TO CHOOSE FROM.

All of our models are well-suited for many applications, from background music to soft codec integration.  The chart below illustrates some of the differentiating factors for each model.

| FUNCTIONALITY | AI | CI | TI | VI |
|---|---|---|---|---|
| AEC | | ⬡ | ⬡ | ⬡ |
| VOIP CONFERENCING | | | | ⬡ |
| STANDARD TELEPHONE CONFERENCING | | | ⬡ | |
| AUDIO NETWORKING (AVB MODELS ONLY) | ⬡ | ⬡ | ⬡ | ⬡ |

**All MODELS ARE EXCELLENT FOR:**

GENERAL ROOM AUDIO

BACKGROUND MUSIC

COURT RECORDING

LECTURE/MEETING RECORDING

VOICE LIFT AND/OR MIX-MINUS

SOFT CODEC INTEGRATION

## AVB MODELS

**TesiraFORTÉ AVB AI**: A digital server-class device with fixed I/O configuration of 12 mic/line level inputs and 8 mic/line level outputs, 4 GPIO connections, up to 8 channels of configurable USB audio, and networked audio via AVB.

**TesiraFORTÉ AVB CI:** A digital server-class device with fixed I/O configuration of 12 mic/line level inputs (with Sona AEC technology) and 8 mic/line level outputs, 4 GPIO connections, up to 8 channels of configurable USB audio, and networked audio via AVB.

**TesiraFORTÉ AVB TI:** A digital server-class device with fixed I/O configuration of 12 mic/line level inputs (with Sona AEC technology) and 8 mic/line level outputs, 4 GPIO connections, up to 8 channels of configurable USB audio, 1 channel of standard analog telephony, and networked audio via AVB.

**TesiraFORTÉ AVB VI:** A digital server-class device with fixed I/O configuration of 12 mic/line level inputs (with Sona AEC technology) and 8 mic/line level outputs, 4 GPIO connections, up to 8 channels of configurable USB audio, 2 channels of VoIP telephony, and networked audio via AVB.

## NON-AVB MODELS

**TesiraFORTÉ AI:** A digital server-class device with fixed I/O configuration of 12 mic/line level inputs and 8 mic/line level outputs, 4 GPIO connections, and up to 8 channels of configurable USB audio.

**TesiraFORTÉ CI:** A digital server-class device with fixed I/O configuration of 12 mic/line level inputs (with Sona AEC technology) and 8 mic/line level outputs, 4 GPIO connections, and up to 8 channels of configurable USB audio.

**TesiraFORTÉ TI:** A digital server-class device with fixed I/O configuration of 12 mic/line level inputs (with Sona AEC technology) and 8 mic/line level outputs, 4 GPIO connections, up to 8 channels of configurable USB audio, and 2 channels of standard analog telephony.

**TesiraFORTÉ VI:** A digital server-class device with fixed I/O configuration of 12 mic/line level inputs (with Sona AEC technology) and 8 mic/line level outputs, 4 GPIO connections, up to 8 channels of configurable USB audio, and 2 channels of VoIP telephony.

## ETHERNET CONTROLS

**TEC-1s:**   PoE Ethernet Control Surface Mount
**TEC-1i:**   PoE Ethernet Control In-wall Mount

## 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 input and/or output cards

**EX-LOGIC:** PoE logic expander with 16 logic GPIO (4 GPIO are configurable for potentiometer interface)
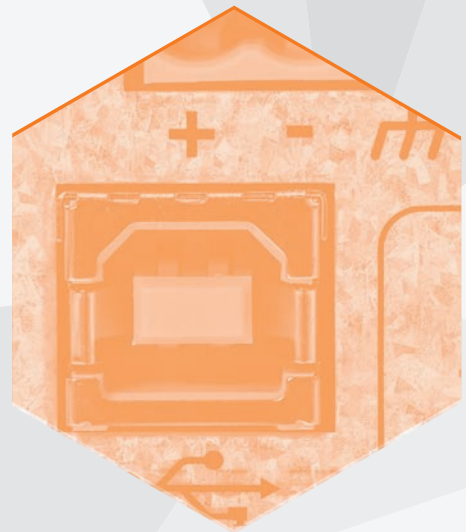
# WHEN YOU NEED TRASINING & SUPPORT, WE'VE GOT YOUR BACK.

Our 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 and as part of the in-person Tesira certification training course. To learn more about upcoming courses, including schedules, go to biamp.com/training.**

## CONTACT US

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