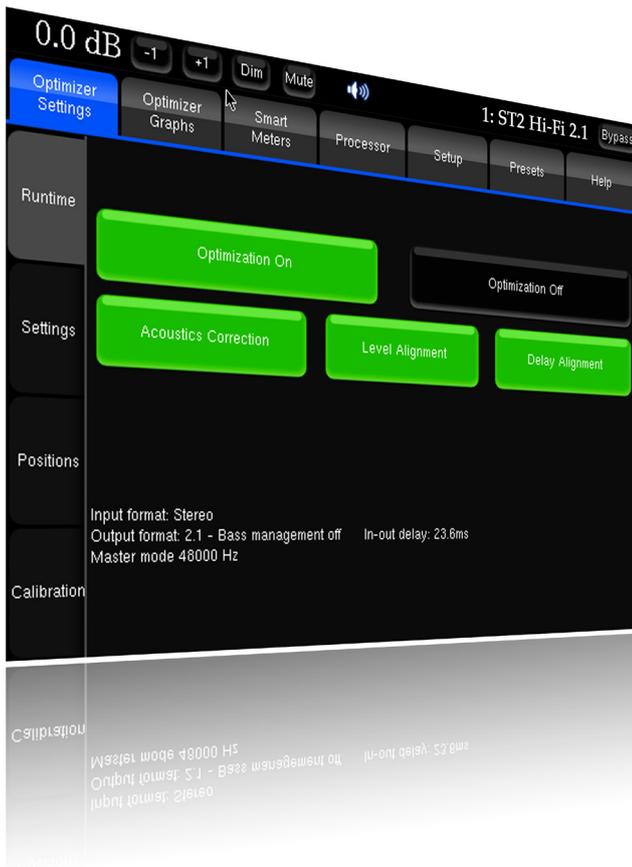


Trinnov ST2-HiFi

4 Channels Room/Speaker Optimizer, AD/DA Converter



Acoustic

The weakest element of any high-fidelity system is the **room**. Typical rooms introduce up to 10dB of **distortion** in the frequency response. Furthermore, loudspeakers with a perfect impulse response don't exist.

Fidelity

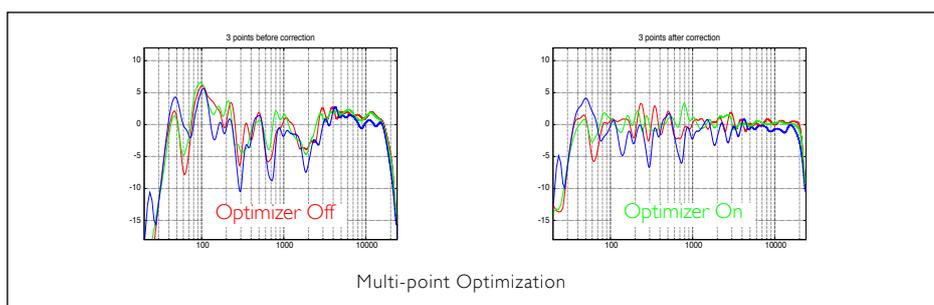
Trinnov's ST2-HiFi **solves** the acoustic equation. It takes your high-end system to a whole new level of **accuracy**, from high-fidelity to **acoustic-fidelity**.



Trinnov Audio
3D Measurement Microphone

Wide Listening Area and Multi-point

Trinnov's sophisticated multipoint algorithms can take into account the measurements of *different positions* to perform the optimization. You can assign a higher **weight** to the most important listening position(s), and lower weights to the other points.



Easy Fine Tuning

Intuitive parameters can be modified, such as the **maximum boost** and **maximum attenuation**. Manual FIR, parametric and graphic EQs are included to **fine-tune** the results of the automatic optimization. Your ears have the final word.

Intelligent Crossover Alignment

Individual driver and system measurements are acquired and analyzed, including the impulse response, delays and gains of every driver. The Trinnov calibration engine computes the ideal filters, finding the best compromise to improve **flatness**, directivity and attack in the **overlapping** frequency region.

Press Reviews

stereoplay

"We never had the opportunity to hear such a musicality with any other digital acoustic correction. Our near-perfect Magico M5 revealed us all their skills. The richness and the clarity of reproduction made us rediscover the content selected by listening: the soft whispers and breaths stood out more, the body of the instruments accurately reproduced, the subtleties of a touch on the piano restored with power and precision. The correction could never be perceived and does not add any coloration to the sound. Everything finally seemed more true, as if our audio chain had been released from a burden. It may seem daring to say that the rendering of the optimizer is a miracle, but we're pretty damn close!" **Raphaël Vogt, Stereoplay**

haute fidélité
LE MAGAZINE DE LA HAUTE HAUT DE GAMME

"The introduction of this device in a system is spectacular, and once the optimization is performed, it becomes impossible to do without its contribution. The benefits in terms of tonal perfection, precision of the stereophonic image and cleanliness of listening is such that removing the ST2-HiFi correction is heartbreaking." **Patrice Philippe, Haute Fidélité**

sixmoons.com

"The Trinnov ST2-HiFi is a definite bargain given its price and astonishing versatility. It represents a broad range of features that will have you reconsider your overall playback chain. With the ST2-HiFi digital room correction no longer is a private secretive matter for specialists. Even the fully automated corrections calculated by the optimizer algorithms are a great improvement over the uncorrected prior performance. The ST2-HiFi can unite home theatre and hifi expectations in one single system. The range of prospective users is thus rather larger than purist audiophiles. It represents a very efficient way to manage low frequencies and oversee the successful integration of subwoofers. The results achieved with coherence especially relative to timbre and timing are truly amazing. There is no particular lack of dynamics as is unfortunately often the case with less sophisticated room correctors." **Joël Chevassus, Six Moons**

Trinnov ST2-HiFi

From High-Fidelity to Acoustic-Fidelity

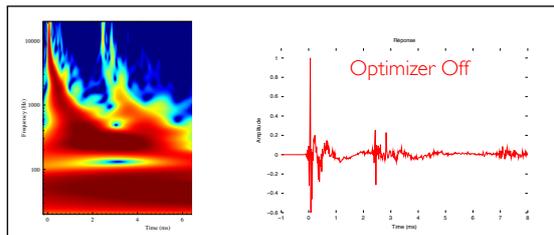
Room acoustics are anything but transparent. In fact, when you consider your system as a whole, the room is the only element that introduces large amounts of **distortion**. Therefore, as long as the room is adding its own sound to the music, the **fidelity** of your system is highly compromised. Trinnov's breakthrough research solves this complex equation. The ST2-HiFi loudspeaker/room optimizer takes your system from **high fidelity** to **acoustic fidelity**.

Modern Acoustic Measurements

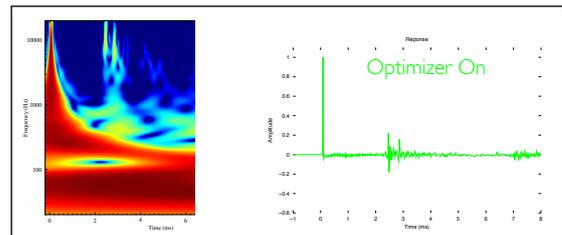
The ST2-HiFi uses MLS signals to measure the full **impulse response** of every loudspeaker in the room. This adds the **time** dimension to the frequency response, and enables the Optimizer to see the **full picture** of the loudspeaker's behavior in the room.

Exclusive Acoustic Analysis

Trinnov's state-of-the-art **time-frequency** analysis algorithms identify room modes, first reflections and late reverberation. Every acoustic aspect is analyzed and compensated with a specific technique. All the subtlety of the Optimizer resides in knowing which defects can be corrected with **acoustic transparency**.



Wavelet and impulse response before correction



Wavelet and impulse response after correction

Powerful Equalization

The ST2's intelligent acoustic engine **automatically** computes FIR and IIR filters to improve the consistency of **direct sound** against **late reverberation**. Full-phase, time domain techniques are applied compensating for the loudspeaker's **group delay** and for very early reflections (deconvolution), while later reflections are left untouched.

Comprehensive Graphs

The integrated acoustic analysis tools provide insight on the measurements. You can easily overlay multiple graphs to compare the loudspeakers, the measurement points, or the results of the optimization against the graphs without optimization.

Tonal Balance and Target Curves

The loudspeaker's sound (including the **early reflections**) and the room (**energy response**) are separately equalized, opening up the listening window. Trinnov corrects the tonal balance to obtain a neutral timbre for every speaker. If a specific target curve is defined, the optimization algorithms automatically compute the filters to reach it.

Stereophonic Image and Phase Response

The ST2-HiFi also corrects the **phase** response by applying **FIR** filters that work in the time domain. The result is a high resolution stereophonic image with well-focused phantom sources.

Trinnov ST2-HiFi: 4 Channels Room/Speaker Optimizer, AD/DA Converter

Easy Setup

1. *Insert* the system between your player/pre-amplifier and the amplifiers, and connect the microphone
2. *Run* the measurements at one or multiple mic positions.
3. *Listen* to the optimized sound
4. *Change* the **target curves** and other optimization parameters
5. *Store* up to **6 customisable profiles and 29 user-defined presets**

Powerful Algorithms

- **Multi-point** measurements of all loudspeakers
- **Time-frequency** analysis: the **loudspeakers** and the **room** are separately equalized
- Automatic optimization of **amplitude** and **phase** response according to **Target Curves**
- Intelligent active crossovers: **automatic** alignment of delays and gains for every driver

Flexible

Fine-Tuning

- Comprehensive acoustical **graphs**
- Optimization **parameters**: maximum boost, maximum attenuation...
- **Manual** FIR, parametric and graphic EQs

High Performance Audio

- All audio boards **designed and manufactured by Trinnov Audio**
- A/D signal-to-noise ratio: 119 dBA
- D/A signal-to-noise ratio: 118dBA
- Advanced jitter-rejection technology
- **64-bit** floating point processing
- 96 kHz (192kHz ready)
- 4 simultaneous inputs and outputs processing channels
- Available speaker settings : one stereo pair, bi-amplified stereo, two stereo pairs, 2.1, 2.2, LCR, LCRS, 3.1, quad.

Remote control

- Via optional IR module and/or KVM
- Using optional touchscreen
- From any PC, Mac, iPad, iPhone or Android phone (using a **VNC** client application, through the network)
- **Real-time** control of the processor

Inputs

- 1 AES on XLR connector
- 1 Spdif on RCA connector
- 4 single ended analog on RCA connectors
- 4 balanced analog on XLR connectors

Outputs

- 1 AES on XLR connector
- 1 Spdif on RCA connector
- 4 single ended analog on RCA connectors
- 4 balanced analog on XLR connectors

Power Supply

- **2 Independent Power Supply Units** for audio and processing sections

Dimensions

- Width x Height x Depth: 444 x 88,5 x 405 mm



Request a demo from a Trinnov partner near you

