

# Trinnov MC Processor

## Multichannel Loudspeaker Processor Platform

## Integrated

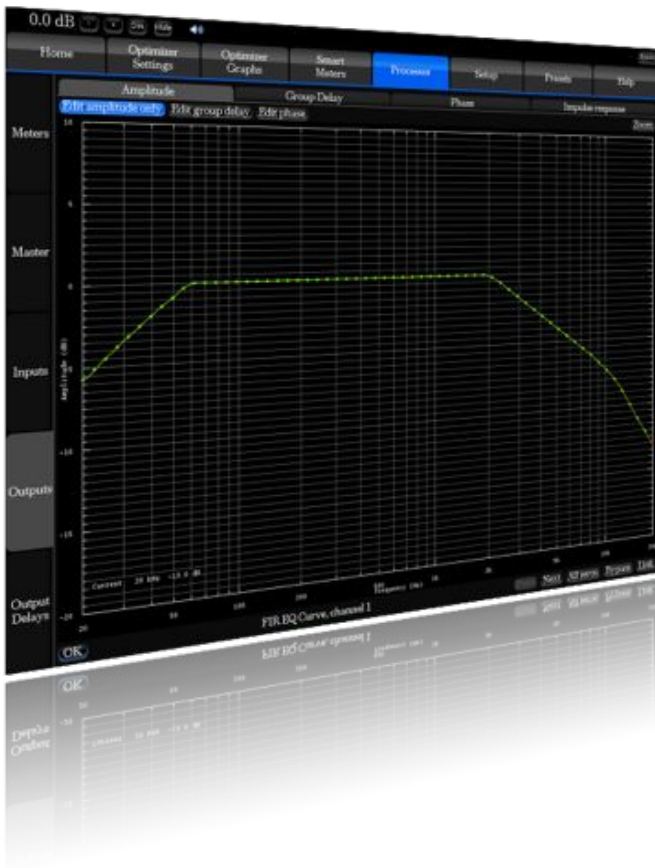
Trinnov Audio's Integrated Monitoring Solutions gather in a single processor all the required tools for accurate audio monitoring.: *High Quality AD/DA converters, Monitor Controller, Editable Submix Engine, Dynamic Range Controller, reliable Timecode-aware metering toolkit, and Digital Room/ Speaker Optimization.*

## Monitoring

Whether it's for music, film, radio or TV productions, monitoring relies on both consistent *measuring* and *best possible listening conditions*. The industry is guided by many monitoring standards such as EBU R-128 for loudness or SMPTE / ITU / AES for sound systems, and that's where Trinnov brings *a new level of expertise*.

## Platform

The Trinnov Processor is an *expandable hardware platform* that can handle any multichannel formats and any loudspeaker layouts from 2.0 to 22.2. In addition to the extensive built-in processing tools, MC Processors are designed to host optional software modules such as the *Optimizer* and/or the *SmartMeter*.



# Trinnov MC Processor

## Multichannel Loudspeaker Processor Platform

Integrated Monitoring

### All-in-one Solutions

Trinnov Integrated Monitoring Solutions are based on a no compromise quality and expandable hardware Processor platform capable of receiving complementary optional software module. A single Processor can handle at the same time high performance speaker processing capabilities, acoustic analysis and graphic representation, Digital Room/Loudspeaker correction and accurate metering. This not only provides the engineer a comprehensive all-in-one monitoring solution, but also a flexible, intuitive and centralized control panel.

### High Performance Audio

- All audio boards designed and manufactured by Trinnov
- A/D signal-to-noise ratio: 119 dB (A-Weighted)
- D/A signal-to-noise ratio: 118 dB (A-Weighted)
- 24 bits/96k support. 192k ready
- Independent power supplies for audio and processing sections
- Clock Recovery: jitter attenuation better than 50dB above 100Hz
- Relays on each analog output.

### Evolutive I/O Architecture

Both AES8 and Analog8 standard configurations allow for 8 simultaneous I/O and 8 processing channels. Optional AES8 and/or ADA4 boards can be added to provide up to 16 simultaneous I/O channels. Alternatively, AES inputs can be configured for input source switching of 3 groups of 8 inputs (3x AES8). Madi Setups can be expanded to a maximum of 64 channels of I/O.

### Comprehensive processing

Comprehensive 64 bits floating point processing tools are included in standard on each processor platform: Routing and Mixing Matrixes, Manual FIR filters, Parametric EQs, Graphic EQs, gains, trims, Peak and RMS meters, manual delays, Bass Management, 4-ways active crossovers, inputs formats, noise generators, Polarity Control, editable Submix matrixes, Monitor Controller, Dynamic Range Controller, advanced xml programming...

These functions can be enriched with Trinnov optional software modules such as Loudspeaker/Room Optimization, EBU-R128 Compliant Metering Toolkit.

### Customisable Profiles

Trinnov combines automatic processes with flexible fine-tuning tools that allow the sound system designer and the Engineer to reach the best results, while making the whole process easier and faster. 8 Customisable Profiles allow to mix up different parameters independantly from any of the 29 existing user presets.

### 4-Ways Intelligent Crossover Alignment

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

### Remote Control

Real-Time remote capabilities can be achieved using R-232, Ethernet IP protocol, optional GPIO boards, optional IR module, KVM, optional VGA/DVI touchscreens, and/or from any PC, Mac, iPad, SmartPhone (using VNC client applications, through the network)

Each processor is also supporting File Transfer Protocol, and USB storage/backups.

## Available Configurations



**MC-ANA8-2U:** 8 analog I/O processor platform. 2U rackmount chassis  
Can be expanded to 16 analog I/O and 16 AES I/O.

**MC-ANA16-2U:** 8 analog I/O processor platform. 2U rackmount chassis  
Can be expanded with 16 AES I/O

**MC-AES8-2U:** 8 AES I/O processor platform  
Can be expanded to 16 AES I/O and 16 analog I/O.

**MC-AES16-2U:** 16 AES I/O processor platform. 2U rackmount chassis  
Can be upgraded with 16 analog I/O.

**MC-MADI-4U:** 64 MADI I/O. 4U rackmount chassis.

## Available Hardware Options



### Trinnov Audio Core (TAC)

The TAC supervises all the incoming and outgoing audio signals, output relays, Clock settings, Routing and Mixing Matrixes...

A maximum of 2x TAC can be installed on a single processor.



### ADA4 Expansion Boards

One ADA4 Expansion Board is adding 4 Analog I/O Channels of pristine AD/DA Conversion  
A total of 4x ADA4 Expansion Boards can be installed on a single processor.



### AES8 Expansion Boards

One AES8 Expansion Board is adding 8 AES I/O Channels  
Alternatively, AES inputs can be configured for input source switching of 3 groups of 8 inputs (3x8 unsimultaneous AES input channels).

A maximum of 2x AES8 Expansion Boards can be installed on a single processor.



### GPIO8i4o Remote Option

Permits Profiles recall from any external devices equipped with GPIO commands.  
2x GPIO8i4o Expansion Boards can be installed on a single processor.

## Available Software Options



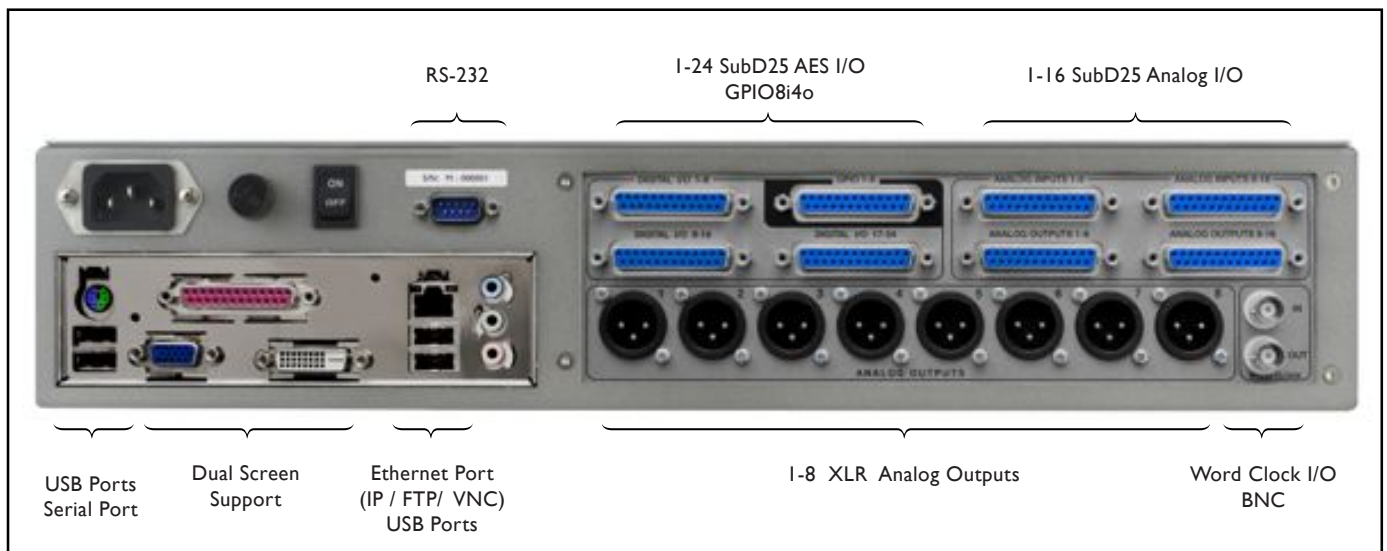
Each configuration is designed to host Trinnov Optional software modules:

- Trinnov **OPTIMIZER**: Multichannel Loudspeaker/Room Optimization
- Trinnov **SMARTMETER**: Timecode-aware Metering Toolkit

## Hardware Configurations and Software Options

Product	Hardware	Analog I/O	Digital I/O	Available Expansion Boards	Max Channels Expandability	Processing Engine	Available Software Options	Resolutions / Sample Rates
MC-ANA 8 -2U	1x TAC 2x ADA4	8 on SubD25 1-8 Outputs also on XLRs	Optional	2x ADA4 2x AES8 1xTAC 2xGPIO4i8O	16	Routing Matrix Input formats Monitor Controller Editable Submix Engine Dynamic Range Controller Bass Management Active crossovers Delays Gains BM Trims, Manual FIR filters Parametric EQs Graphic EQs Polarity Control RMS Meters Peak Meters Noise Generators xml programming ...	Optimizer Runtime Optimizer Toolbox SmartMeter Supervizer	24Bits/96kHz 192k Ready
MC-ANA 16 -2U	1x TAC 4x ADA4	16 on SubD25 1-8 Outputs also on XLRs	Optional	2x AES8 1xTAC 2xGPIO4i8O	16			24Bits/96kHz 192k Ready
MC-AES 8 -2U	1x TAC 1x AES8	Optional	8 on SubD25 3x8AES source Switch	4x ADA4 1x AES8 1xTAC 2x GPIO4i8O	16			24Bits/96kHz 192k Ready
MC-AES 16-2U	2x TAC 2x AES8	Optional	16 on SubD25 1x8 + 1x16 Input Switch	4x ADA4 2x GPIO4i8O	16			24Bits/96kHz 192k Ready
MC-MADI-4U	1x RME HDSP MADI	None	64 Coaxial and Optical	1x GPIO8	64			24Bits/96kHz 192k Ready

### MC rear panel (16 AES + 16 Analog I/O + GPIO8i4o)



Request a demo from a Trinnov partner near you

[www.rinnov.com](http://www.rinnov.com)

