

# Trinnov MC Processor

Multichannel Loudspeaker Processor

## Integrated

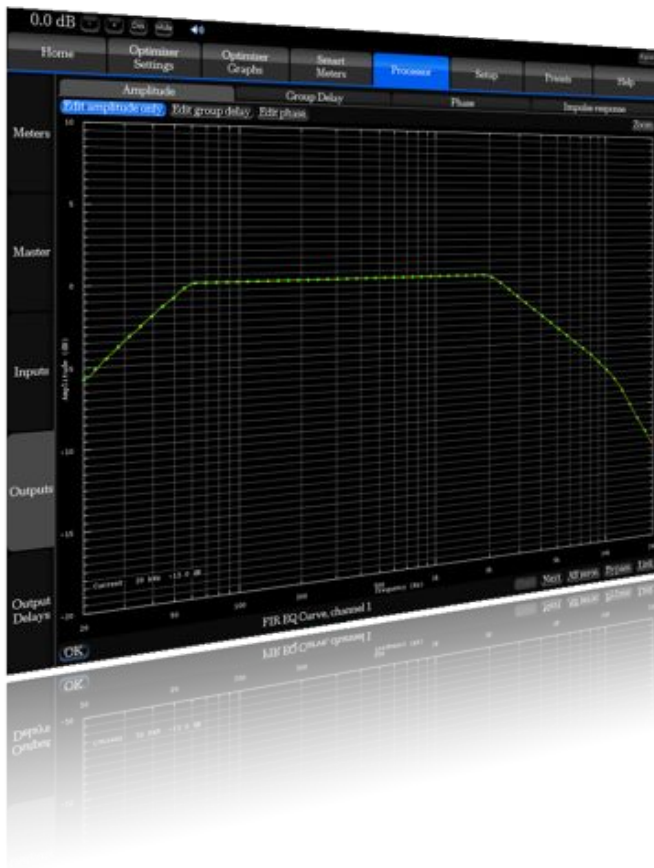
Trinnov Audio's Integrated Monitoring Solutions are definitely gathering all what's required for accurate audio monitoring... in a single processor: *Pristine AD/DA converters, reliable metering toolkit, Digital Room/Speaker Optimization* and *Loudspeaker Controller*.

## 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 format 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

### 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 station can handle at the same time processing capabilities, acoustic analysis and graphic representation, Digital Room/Loudspeaker correction and accurate metering. This not only provides the engineer a comprehensive 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
- AntiPop relays on each analog output.

### Evolutionary 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 may 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-8 Setups can be expanded to a maximum of 64 processing channels.

### Comprehensive processing

Comprehensive 64 bits floating point processing tools are included in standard on each MC: Routing and Mixing Matrixes, Manual FIR filters, Parametric EQs, Graphic EQs, Gains, Trims, Peak and RMS Meters, Delays, Bass Management, Active crossovers, Inputs formats, Noise Generators, Polarity Control, advanced xml programming...

These functions can be enriched with optional software modules such as Loudspeaker/Room acoustic Analysis, Trinnov's State-Of-The-Art Digital Room Optimization and EBU-Compliant Metering Toolkit.

### Customisable Profiles

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

### Remote Control

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

Dual Screen Management

Each processor is also supporting FTP reporting and USB parameters storage/backups.

## Ready to Go configurations



**MC-ANA8-2U:** Analog Only Multichannel processor with 8 active analog I/O  
Includes 1 TAC, 2 ADA4 Expansion Boards, and Trinnov Standard Processing software.  
Can be expanded with additional AES8 and/or ADA4 expansion boards for more active I/O  
Can be upgraded with the Trinnov Multichannel Loudspeaker/Room Optimization and/or the Smart-Meter software options.



**MC-AES8-2U:** AES Only Multichannel processor with 8 active AES I/O  
Includes 1 TAC, one AES8 Expansion Board, and Trinnov Standard Processing software  
Can be expanded with additional AES8 and/or ADA4 expansion boards for more active I/O  
Can be upgraded with the Trinnov Multichannel Loudspeaker/Room Optimization and/or the Smart-Meter software options.



**MC-Madi8-4U:** MADI Only Multichannel processor with 8 active Madi I/O.  
Can be expanded to up to 64 simultaneous Channel via software licenses.  
Can be upgraded with the Trinnov Multichannel Loudspeaker/Room Optimization and/or the Smart-Meter software options.

## Build your own one



**MC-Custom-2U:** Custom configurations can also be built from an Empty Chassis by adding Expansion boards and software options according to very specific and/or evolutive needs. Empty chassis are only including one TAC, the complete rear panel connectivity, PC motherboard and processor, separate power supplies, Firmware and Processing software.

## Hardware and Options



### Trinnov Audio Core (TAC)

This is where the story begins. This is the entire audio management section. The TAC manages all the incoming audio signals, bring them to the processing Core, before returning them back to the output section. The TAC also supervises the output relays, the Clock, the Routing and Mixing Matrixes.



### ADA4 Expansion Boards

One ADA4 Expansion Board is adding 4 Analog I/O Channels of pristine AD/DA Conversion  
A total of 4 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 2 AES8 Expansion Boards can be installed on a single processor.



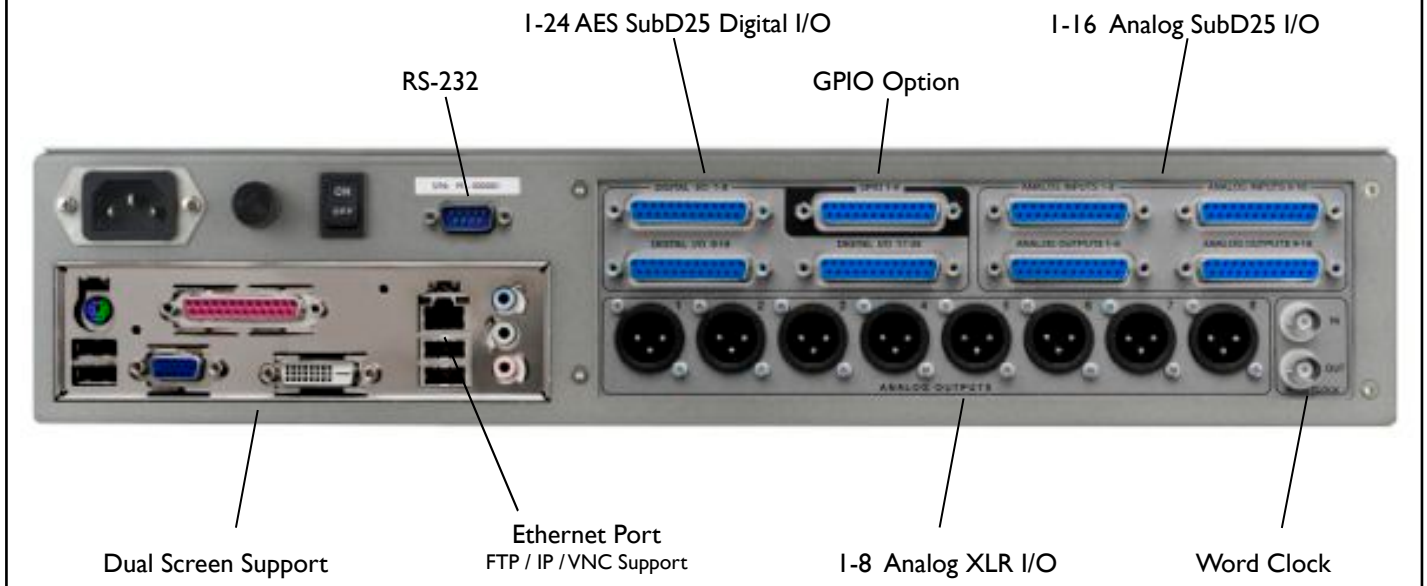
### GPIO8i4o Remote Option

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

# Hardware Configurations and Software Options

Product	Hardware	Analog I/O	Digital I/O	Simultaneous Processing I/O	Expansion Boards	Max Channels Expandability	Processing Engine	Available Software Options	Clock	Supported Bit Resolution & Sample Rates	Chassis	Dimensions (mm)
MC-ANA 8	1x Trinnov Audio Core 2x ADA4	8 on SubD25 1-8 Outputs also on XLRs	Optional	8	2x ADA4 2x AES8 2x GPIO4:80	16	Routing Matrix Manual FIR filters Parametric EQs Graphic EQs Gains Trims RMS Meters Peak Meters Delays Bass Management Active crossovers Inputs formats Noise Generators Polarity Control advanced xml programming...	Optimizer Runtime 8 Optimizer Toolbox 8 SmartMeter 8 Additional Full Channel Additional Output Channel	WC	24Bits/96kHz 192k Ready	2U Rackmount (4U with TS Optional)	439 x 88.5 x 410 (435 x 169 x 430)
MC-AES 8	1x Trinnov Audio Core 1x AES8	Optional	8 on SubD25 3x8AES source Selection	8	2x ADA4 1x AES8 2x GPIO4:80	16		Optimizer Runtime 8 Optimizer Toolbox 8 SmartMeter 8 Additional Full Channel Additional Output Channel	WC AES	24Bits/96kHz 192k Ready	2U Rackmount (4U with TS Optional)	439 x 88.5 x 410 (435 x 169 x 430)
MC-MADI 8	1x RME HDSP MADI	None	8 Coaxial and Optical	8	GPIO8	64		Optimizer Runtime 8 Optimizer Toolbox 8 SmartMeter 8 Additional Full Channel Additional Output Channel	WC	24Bits/96kHz 192k Ready	4U Rackmount (4U with TS Optional)	430 x 160 x 430 (435 x 169 x 430)
MC-CUSTOM	1x Trinnov Audio Core	Optional	Optional	None	4x ADA4 2x AES8 2x GPIO4:80	16		Optimizer Runtime 4 Optimizer Runtime 8 Optimizer Toolbox 4 Optimizer Toolbox 8 SmartMeter 4 SmartMeter 8 Additional Full Channel Additional Output Channel	WC AES if installed	24Bits/96kHz 192k Ready	2U Rackmount (4U with TS Optional)	439 x 88.5 x 410 (435 x 169 x 430)
ADA4 Expansion Boards	/	4	None	/	/	/	/	/	/	24Bits/192kHz	/	/
AES8 Expansion Boards	/	None	8	/	/	/	/	/	/	24Bits/192kHz	/	/

## MC rear panel (16 AES and/or 16 Analog I/O version + GPIO Option)



Request a demo from a Trinnov partner near you

