## MATRIX AUDIO PROCESSOR

INPUTS 1 2 3 4 5 6 7 8 9 10 11 12 • • • • • • • • • • • • • • •

## MAP Series

USB

STATUS +48V COMM LINK



OUTPUTS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16











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I 2 3 4 5 6 7 8 9 10 11 12

MAP-1216 12 INPUTS TO 16 OUTPUTS MATRIX AUDIO I

# MATRIX AUDIO PROCESSOR

Altair presents the new Matrix Audio Processors MAP series dedicated to commercial audio installations and professional applications demanding audio automation on small form factor enclosure.

Working in conjunction with a specific software package 3cMAP, it's easy to program the unit in an intuitive console view manner, and then unplug the computer ensuring nothing would change. A whole combination of settings can be stored as presets to be recalled by any non audio specialist operator transforming a daily conference setup to a music hall in seconds.

Proprietary RS-485 remote controls can be daisy chained to different areas for personnel attending in preset setup, volume controls, source selection... Remote control access is restricted to a set of parameters previously defined by the installer.

Software control is managed with either USB front panel for a quick setup or with Ethernet connection that allows local or distant computer operation. Wireless access is carried out by using Wi-Fi link over the Ethernet LAN operating the unit. Abbreviated 3cMAP software apps are available to run on android devices for easy move-around control.

The unit offers a full set of audio components as high performance mic/line preamps, virtual input routing, mixers, EQs, filtering, dynamics, delays, crossovers, output matrices, priority ducking, frequency shifters, remote controls, presets, meters and more to satisfy the most demanding applications.

The MAP series does not compromise your processing by using the last generation analog to digital converters and leading edge high-speed digital signal processors running in parallel with the ALTAIR renowned input preamps and output balanced drivers developed from Altair's legendary console manufacturing knowledge.

A real time clock and calendar integrated on the unit allow scheduled tasks for automated setup. Your system would change some defined operating parameters depending on the time of the day without user intervention.

When more inputs or outputs are needed, the system can be upgraded by cascading other unit using the Link connections. With a GPIO interface built-in, some tasks can be easily done as preset change, up-down volume control, mic muting, relay control and so on. Voice messages can be stored securely inside the unit allowing built-in emergency services or call messages.





#### Features

12 Mic/Line/+48V INPUTS | 8 or 16 OUTPUTS. Control by USB, Ethernet, REM2 remotes and GPIO. 3cMAP Soft for PC and wireless control on Android devices. Link connection for increased number of in/outs.

#### AUDIO COMPONENTS:

- Mixing: routing, matrix, auto-mixing, priority ducking.
- Dynamic Processing: Compressor, limiter, expander, ducker.
- AF-Frequency shifting effect for increased acoustic gain.
- Equalisation: PEQ, HP&LP shelving, notch.
- Crossovers: 2 to 8 ways multi type.
- Delays 0 to 1000 ms INPUTS | 0 to 300 ms OUTPUTS.
- Stored messages, meters, tone and pink noise generators.

Specially made for unattended conference mixing.

**ZONE MIXING AND PAGING** Multiple zones could be individually processed. Remote controls act as distributed intelligence mixers.

LOUDSPEAKER MANAGEMENT Each driver is optimized for frequency band, dynamic power, time alignment and room acoustics.

**AUDIO ROOM COMBINING** Flexible rooms require complex setups now solved by a simple keystroke.

#### SOUND REINFORCEMENT

Quick configuration allows club and restaurants to mix live music on the go.





Proprietary RS-485 remote controls can be daisy chained to different areas for personnel attending in preset setup, volume control, source selection, etc. Remote control access is restricted to a set of parameters previously defined by the installer.

#### **APPLICATION EXAMPLE**



#### **GENERAL PURPOSE REMOTE CONTROLLER**

- Remote control for MAP series Processors.
- Source selection/Program selection/Presets.
- Volume and Mute control. Infrared control included.

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- Simple Cat5 parallel wiring.



MAP128/MAP1216	MAPSeries	Technical Specifications
CONFIGURATION MODELS	MAP128 12 Mic/Line Balanced Inputs, 8 Balanced Outputs.	
	MAP1216 12 Mic/Line Balanced Inputs, 16 Balanced Outputs.	
DISTORTION	• THD+N < 0,03% @ 0 dBu (25Hz- 50KHz).	
FREQUENCY RESPONSE	• 20 Hz- 20KHz (-2, -0.5 dB) at +4 dBu input level.	
NOISE (preamp)	• -124 dBu (EIN) 20 Hz-22KHz, 60 dB gain, 150 ohm.	
DYNAMIC RANGE	• >105 dB, 0.1% THD, un-weighted (U/W 20-20 KHz).	
INPUT IMPEDANCE (mic/line)	• 4 KΩ. Electronically balanced.	
INPUT LEVEL	• 0 dBu nominal / +20 dBu maximum at 0dB gain.	
INPUT GAIN	• 0dB to +60dB, 1 dB step.	
CROSSTALK (channel to channel)	• Better than 80 dB at 1KHz. (>70 dB from 20 Hz to 20 KHz).	
C.M.R.R.	• Typical value: Better than 65 dB at 1KHz.	
PHANTOM POWER	+48Vdc. Individually selected on each input channel.	
OUTPUT IMPEDANCE	• 100Ω. Electronically balanced and floating.	
OUTPUT LEVEL	• 0 dBu nominal / +20 dBu maximum.	
INPUT and OUTPUT CONNECTIONS	Analog balanced. Connectors by 3 pin Phoenix ™ 3.5 mm Type.	
FRONT PANEL INDICATORS	Input/Output levels: Signal present/nominal/peak.	
	Phantom power: Indication on every input individually.	
	Device Status/ Phanto	om Power/Communication Events/Link status.
COMMUNICATIONS	<ul> <li>USB. Front panel.</li> </ul>	
		proprietary). RJ11 6/6 connector.
	<ul> <li>Ethernet 10/100. RJ45</li> </ul>	connector.
	<ul> <li>Link (proprietary). Dua</li> </ul>	
SOFTWARE CONTROL	<ul> <li>3cMAP for PC/android</li> </ul>	
A/D and D/A CONVERTERS	• 24 bit.	
SAMPLING RATE / LATENCY	• 48 KHz / 1.425 ms (analog In to analog Out).	
LINK OPERATION	Allows up to 24 Inputs/32 Outputs full control. (2xMAP1216 linked).	
<b>GPIO INPUT/OUTPUT CONNECTIONS</b>	• 6 Inputs/4 Outputs on 3 pin Phoenix ™ 3.5 mm Type.	
LINE POWER	• Auto-range 90 to 260 Vac, 50-60 Hz.	
POWER CONSUMPTION	• 60 VA.	
DIMENSIONS/WEIGHT	• 483x44x250 mm. (19" x 1U)/6Kg net.	

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## **BCMAP**









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CONFIGURING THE WHOLE AUDIO CHAIN HAS NEVER BEEN THIS EASY The software 3cMAP is an intuitive visual editor based on current mixer screens. Configuring a complex project would not be a time consuming experience. The panels are distributed each time as per your convenience.



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