# **DMP SERIES**



#### Digital Matrix Processors and Automatic Mixers

# **DMP8800**

8-in x 8-out Digital Matrix Processor

# DMP8800

#### **Overview**

The Asystems DMP8800 digital matrix processor promise simple integration into any live commercial setup. These systems combine smart signal processing with a flexible modular mixing matrix. Sound complex? It's not, because all routing and processing is adjusted through a simple, intuitive graphical user interface. DMP8800 processors provide racks-full-o-gear in a modest 2 unit construct. Combining many great products into a simple design, the DMP8800 simplifies your installation and saves you money. The input and output count on the DMP8800 are ideal for small-to-medium sized venues, with possible expansion for larger venues through optional 8x8 networking.

With extensive onboard signal processing, flexible matrix routing and optional Dante audio interface capabilities, the DMP8800 matrix processors do it all. Asystems engineers have also ingrained each DMP8800 with versatile and extensive signal processing, including full 31-band GEQs, 4-band parametric EQs, compressors, limiters, gates, automixing and auto-leveling, and page ducking. All control is accomplished through the included Windows software that allows for remote operation through local area networks or the internet. With password protected user accounts, extensive scheduling capabilities, and flexible audio networking (optional), the DMP8800 digital matrix processor is a flexible yet reliable center for any commercial installation.

- 8 input channels available via 3-pin euroblock connections and dual RCA inputs
- VGA and USB connectors enable use as a self-contained system
- 40-bit floating point processor with internal sampling selectable between 44.1 and 48 kHz
- Optional 8x8 networking capabilities through Dante audio streaming card (model no. DT88)
- Digital AES/EBU input and output connectors (plus BNC Word Clock in and out)
- Playback of digital audio files from SD cards on cue or on schedule through pre-programmed events
- ▶ 10/100 Ethernet computer interface standard
- Automatic DHCP network IP configuration
- Easy and intuitive control Windows software from Asystems
- ▶ Schedule system events down to the very second
- 4-band parametric EQs and 31-band graphic equalizers
- Seamless automatic mixing through dynamic channel gating and attenuation
- ▶ Compressors, limiters and noise gates
- Autoleveler (Loudness Control) and level ducking with trigger control
- ▶ All signal processors flexible and user-controllable

## **DMP808**

12-in x 8-out Digital Matrix Processor



#### Overview

Designed specifically for installed sound, the Asystems' DMP808 automatic mixers combine clean, simple designs with smart signal processing. These systems offer fast-acting, noise-free microphone normalization that automatically adjusts to changes in background room noise. This essentially helps maintain high quality audio despite the number of open microphones. Networking capabilities allow integration of any number of DMP808 mixers for expanding the system to up to 400 microphones.

Input on the DMP808 is achieved through professional-standard 3-pin euroblock connectors for balanced connections. Two sets of stereo RCA connectors are also included for extended application. All inputs and outputs are utilized through the flexible matrix routing system, controlled via the included user-intuitive PC software. This software also allows you to control the extensive on-board signal processing, including 4-band parametric EQs, feedback silencers, duckers, noisegates, compressors, limiters and, of course, automatic mixing including NOM (Number of Open Microphones) compensation. With flexible networking capabilities (including a Dante networking option) and highly accurate automixing, the DMP808 automatic mixer is a must-have for all large commercial installations.

- ▶ 8 balanced mic/line input channels via euroblock connections
- 8 output channels through euroblock connections
- Non-automatic auxiliary input through unbalanced stereo RCA connectors
- Gain controls for each input available on front panel
- Seamless automatic mixing through dynamic channel gating and attenuation
- Network up to 400 microphones for flexible, large-scale application (Dante option required)
- ▶ 4-band parametric EQs with low-cut, high-cut and shelving boost/cut
- ▶ Fully functional compressors on all input channels
- Adjustable peak limiters available on outputs
- ▶ Delay on each output with variable time/distance control
- ▶ Accurate feedback silencing technology built-in
- Program-intuitive ducking function
- ▶ Ethernet connectivity for networking and control application
- ▶ +48V phantom power on input channels
- Easy and intuitive control software from Asystems
- Compatible with Asystems' range of remote controls



# **DMP SERIES**



#### Digital Matrix Processors and Automatic Mixers

# **DMP801**

8 Channel Digital Automatic Mixer



#### Overview

Designed specifically for installed sound, the Asystems' DMP801 automatic mixers combine clean, simple designs with smart signal processing. These systems offer fast-acting, noise-free microphone normalization that automatically adjusts to changes in background room noise. This essentially helps maintain high quality audio despite the number of open microphones.

Input to the DMP801 is achieved through professional-standard 3-pin euroblock connectors for balanced connections. All inputs and outputs are controlled via the included user-intuitive Windows software. This software allows you to control the extensive on-board signal processing, including 4-band parametric EQs, feedback silencers, compressors, limiters and, of course, automatic mixing including NOM (Number of Open Microphones) compensation. With flexible networking control capabilities and highly accurate automixing, the DMP801 automatic mixer is a must-have for all large commercial installations.

- ▶ 8 balanced mic/line input channels via euroblock connections
- ▶ Balanced master output through 3-pin euroblock connector
- 8 insert points available through 1/4" TRS phone jacks
- Gain controls for each input available on front panel, plus signal/clip indicators
- Seamless automatic mixing through dynamic channel gating and attenuation
- ▶ 4-band parametric EQs with low-cut, high-cut and shelving boost/cut
- ▶ Fully functional compressors on all input channels
- ▶ Adjustable peak limiters available on outputs
- Accurate feedback silencing technology built-in
- ▶ Ethernet connectivity for networking and control application
- ▶ +48V phantom power on input channels
- ▶ Easy and intuitive control software from Asystems

# **DMP81**

8 Channel Digital Automatic Mixer



#### **Overview**

Designed uniquely for sound reinforcement scenarios, the Asystems DMP81 Digital Automatic Mixer combines intuitive operation with state-of-art signal processing technology. Asystems DMP81 features 8 mic/line inputs via balanced Euroblock connectors, all of which offer selectable +48V phantom power for condenser microphones. The 8 1/4" TRS insert jacks can directly route incoming signal to external sound processing devices, or simply be used as additional input or output connectors. All channels are equipped with front-panel low- and high-pass filter control.

The DMP81 automatic mixer's adaptive threshold distinguishes fluctuating audio signals from background noise and continuously adjusts the audio signal to be louder than background noise. Furthermore, when several channels "receive" one particular signal source, DMP81 can be set to control the number of channels that activate when triggered by one signal source through which the best input quality is guaranteed for every input channel. The last input source lock-on feature keeps the most recently used channel activate to get a natural uninterrupted signal flow.

Asystems DMP81 also provides a 1/4" headphone output jack, an AUX input jack (both are with level control knob), and LED indicators, offering intuitive control that caters a wide-range of system setups.

- Seamless automatic mixing through dynamic channel gating and attenuation
- Adaptable, quick-acting technology automatically makes active microphones a priority
- ▶ 8 balanced mic/line input channels (Euroblock connector)
- ▶ Selectable +48V phantom power on each input channel
- ▶ 8 unbalanced 1/4" TRS insert jacks
- ▶ Balanced mono master output through 3-pin Euroblock connector
- ▶ Master output 3-mode peak limiter (+16 dbm/+ 8 dbm/+4 dbm)
- ▶ Last input source lock-on
- Individual gain control knob per channel
- On-board HPF (high pass filter) and LPF (low pass filter)
- ▶ 1/4" headphone output with level control
- ▶ 1/4" AUX input with level control
- ▶ Fully functional compressors per input channel



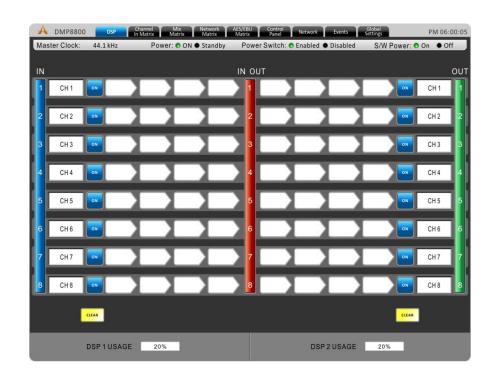


## **REMOTE SOFTWARE**

#### **DSP**

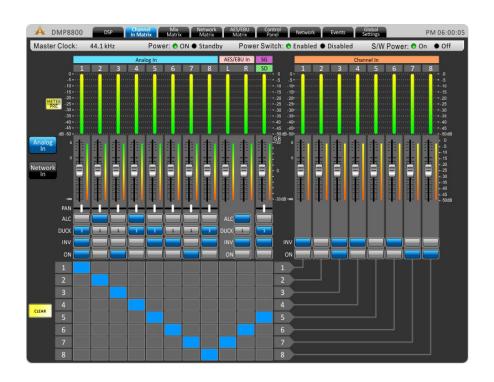
The DMP8800, DMP808, and DMP801 software offers a number of digital signal processors that can activated at will on any of the input and output mixes. This page will also allow you to edit the names of input and output mixes.

Up to 4 signal processors can be added to each of the individual inputs and outputs on the DMP8800 and DMP808, with delay, VCAs, graphic equalizers, parametric equalizers, feedback silencers, and more all available.



#### **Channel Matrix**

This page allows you to adjust the signal flow of the inputs from both the input channels and the network function. Numerous controls commonly found on analog mixers can also be found on this page, laid out in a familiar analog style. Level faders can be adjusted, as well as the panning, on/off status, phase invert, ducking and ALC status, and automixing. Meters are also included on this page for monitoring incoming signals and mixes. It also allows direct access to the signal generator and SD card audio player (SD card playback available on the DMP8800 only).





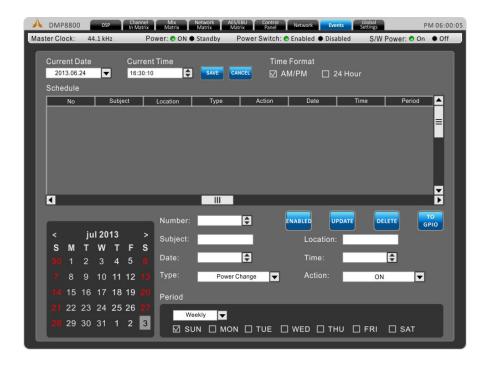




## Digital Matrix Processors and Automatic Mixers

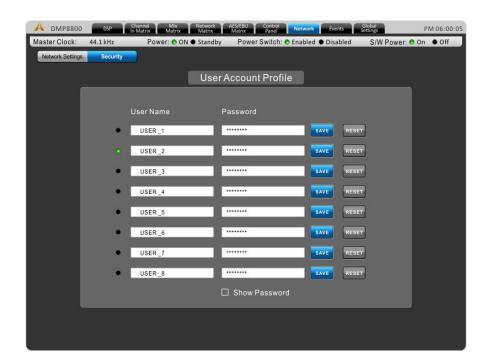
#### **Events**

Pre-program events into the DMP8800 and DMP808 digital matrix processors. Using the event scheduler you can determine what kind of event you wish to schedule, whether it be power on or a memory recall, and when the event should occur - right down to the minute. You can even program the unit to play music at a specific time on a specific day. This feature allows you to set routinely scheduled events, such as musical interludes or power disable, or single events that may involve channel muting or level adjustment.



#### Security

Up to 8 user profiles can be activated on the DMP8800, DMP808, and DMP801. Users can define their own user names, while each account is protected by a user-defined password. User accounts provide a means to ensure there is no unauthorized access to the control software.







# Digital Matrix Processors and Automatic Mixers

## **SPECIFICATIONS**

	DMP8800			
Overall Sonic Performance	Analog In, Digital Out	Digital In, Analog Out		
Frequency Response, 20Hz to 20kHz	+/-0.1dB	+/-0.25dB		
Dynamic Range, 20Hz to 20kHz, unweighted	>115dB	>114dB		
Latency at 48 kHz	<1 ms	<1ms		
Audio Inputs	Analog Mic/Line	AES/EBU Digital		
Input Type	Active balanced Euroblock + unbalanced RCA	Transformer balanced female XLR		
Input Impedance	Euroblock: 3.37KΩ, RCA: 8.2KΩ	118Ω		
Max Input Level	+20 dBu	7.0 Vpp		
Audio Outputs	Analog Output	AES/EBU Digital		
Output Type	Servo-balanced Euroblock	Transformer balanced male XLR		
Output Impedance	20Ω	110Ω		
Max Output Level	+20 dBu	5.0 Vpp		
Word Clock				
Input/Output Type	75 ohm	75 ohm BNC		
Lock Range	48 kHz +/-4%			
Input Impedance	Selectable 75 ohm or high impedance			
Input Voltage Range	1.0Vpp - 7.0Vpp			
Output Impedance	75 ohm BNC			
Output Level	5.0 Vpp nominal, unterminated			
Master Clock				
Sources	Audio Network, Word Clock, AES/EBU, Internal Crystal Clock			
Modes	Prioritized auto switching or manual			
Digital Audio Hardware				
Sampling Rates / Clock Sources	44.1KHz, 48KHz, Network, AES/EBU, Word Clock			
DSP Processing	40-bit floating-point share processor array			
Audio Input Source Selection	Selectable in adjacent channel pairs from analog, digital, or network inputs			
Network Audio Routing	Selectable between input/ouput or internal to matrix mixer			
Digital Control				
Ethernet Control	Standard RJ45 10/100 Ethernet with auto-configuration			
Programmable Remote	RJ-45 for Asy	RJ-45 for Asystems RM-6E		
Relay	7-pin, 5VDC			
Analog Control				
Remote Attenuators	10-pin Euroblock for (8) assignable 5VDC passive remote attenuators			
Power Requirements	100V to 240V VAC, 50-60Hz, 70W maximum			
Dimensions (W x D x H)	482 x 295 x 95 mm (18.97" x 37.4" x 11.61")			
Weight	5.1 Kgs (11.2 lbs)			







# **DMP SERIES**

## Digital Matrix Processors and Automatic Mixers

	DMP808	DMP801	DMP81
Input Connections	8 x Balanced Euroblock & 4 x Unbalanced Stereo RCA	8 x Balanced Euroblock	8 x Balanced Euroblock
Output Connections	8 x Balanced Euroblock	1 x Euroblock, 8 x 1/4" TRS (insert / direct output)	1 x Euroblock, 8 x 1/4" TRS (insert / direct output)
Control Network	ADnet, Compatible with standard 10/100 MBit/s Ethernet hardware	ADnet, Compatible with standard 10/100 MBit/s Ethernet hardware	N/A
Front Panel Indicators	8 x Input/Clip, 8 x Output/Clip, 1 x Power, 1 x Network	8 x Input/Peak, 1 x Mix Output/Peak, 1 x Power, 1 x Disable	8 x Input/Peak, 1 x Master Output/Peak, 1 x Power, 1 x Limiter
Signal to Noise (20Hz-20KHz, unweighted)	>110dB	>110dB	<-120dB (Hum & Noise)
Frequency Response	20Hz-20KHz, +/-1dB	20Hz-20KHz, +/-1dB	20Hz-20KHz, +/-1dB
Input Impedance	Euro: 3.52ΚΩ, RCA: 8.8ΚΩ	3.35KΩ, balanced	Mic: 3.2KΩ, Line: 14KΩ, AUX: 7.5KΩ
Maximum Input Level	20dBu	20dBu	20dBu
Total Harmonic Distortion	0.002%	0.002%	0.002%
Processor	40-bit floating point	40-bit floating point	40-bit floating point
Input A/D Conversion	24-bit	24-bit	24-bit
Output D/A Conversion	24-bit	24-bit	24-bit
Sample Rates	44.1 kHz, 48 kHz	48 kHz	48 kHz
DIP Switches	Network ID, 0 - F	Network ID, 0 - F	Auto/manual, Last-mic, hold time, off-att, limiter threshold, +48V phantom power
Parametric Equalizers	4-band, adjustable Q, freq. and level	4-band, adjustable Q, freq. and level	N/A
EQ filters	All pass, band pass, hi/lo shelf	All pass, band pass, hi/lo shelf	N/A
Compressor	Threshold, range, attack, release	Threshold, range, attack, release	Switchable limiter threshold
Ducker	Trigger, release, depth	N/A	N/A
Delay	Adjustable input and output delay	N/A	N/A
Feedback Silencer	Fixed / Dynamic	Fixed / Dynamic	N/A
Auto-mixing	Input level, output level, priority, NOM attenuation max.	Input level, output level, priority, NOM attenuation max.	Automatic/manual, last mic lock-on, hold time, off-att
Phantom Power	+48V DC	+48V DC	+48V DC
Crossover	Butterworth	Butterworth	N/A
Power & Physical			
Power Supply	120VAC/240VAC switching power supply, 15A Edison cable	120VAC/240VAC switching power supply, 15A Edison cable	120VAC/240VAC switching power supply, 15A Edison cable
External Power	2-pin euroblock, +24V DC	2-pin euroblock, +24V DC	N/A
Dimensions	44 x 484 x 295 mm (1.7" x 19" x 11.6")	44 x 484 x 295 mm (1.7" x 19" x 11.6")	480 x 295 x 45 mm (18.89" x 37.4" x 1.77")
Weight	4.2 kg (9.3 lbs)	4.2 kg (9.3 lbs)	4.2 kg (9.3 lbs)





#### **DMP801**











### Digital Matrix Processors and Automatic Mixers

## REMOTE CONTROLS

Asystems offers the RM series of remote controls for the DMA series of digital matrix amplifiers. The RM-2VR offers remote level control of up to two channels off a single control, while the RM-4 can be used to recall presets at the touch of a button. The RM-6E is a microprocessor-based control unit with 6 function select buttons and 2 parameter buttons for controlling a range of assigned functions within the connected product.

Multiple units of the RM remote controls can be utilized at any one time. The RM-2VR and RM-4 can be connected to the DMA using euroblock connectors. The RM-6E includes RJ-45 ports for connection, as well as 3 DIP switches for setting the remote ID. For more flexible commercial installations, the RM series is the ideal companion to the Asystems DMP matrix processors.



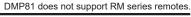


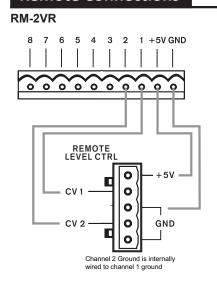


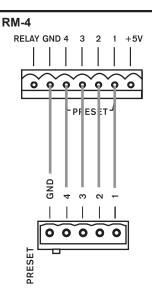
RM-6E

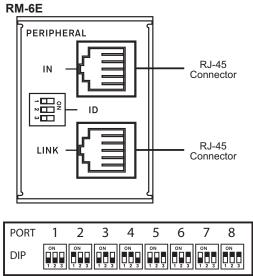
- ▶ Control levels, recall presets, and control other properties of the product
- ▶ Clear display field to label all rotary controls and/or buttons for easy reference
- ▶ RM-2VR includes two rotary VR controls for remote level control of up to two channels
- RM-4 allows for immediate remote recall of presets through interlocking push-buttons
- ▶ Each button of the RM-6E buttons can be programmed to allow gain control, channel mute and zone source select
- RM-2VR and RM-4 can be wired with standard euroblock connectors; RM-6E offers RJ-45 connectivity
- ▶ RM-4 and RM-6E controls are compatible with Asystems DMP808 and DMP8800 Digital Matrix Processor
- ▶ RM-2VR controls are compatible with Asystems DMP8800 Digital Matrix Processors
- 'Light-switch style' design for discrete installation

#### **Remote Connections**







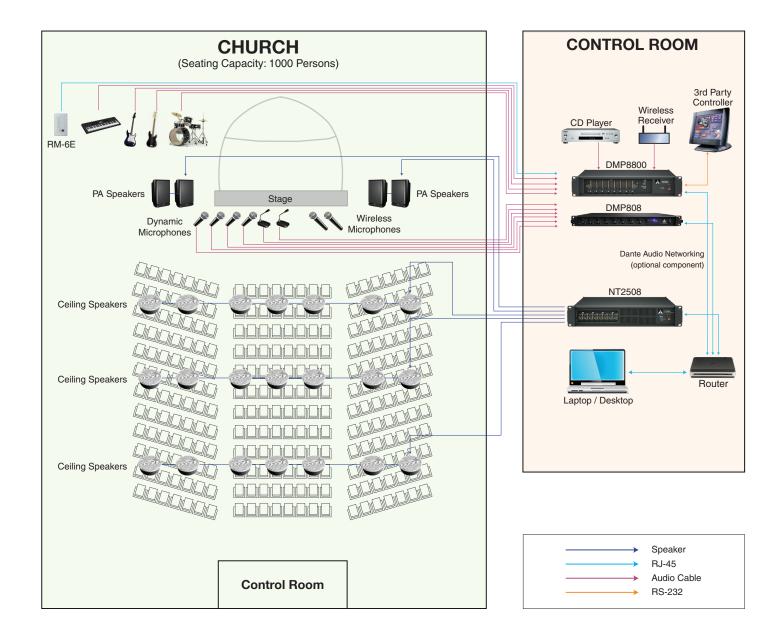






## **APPLICATION**

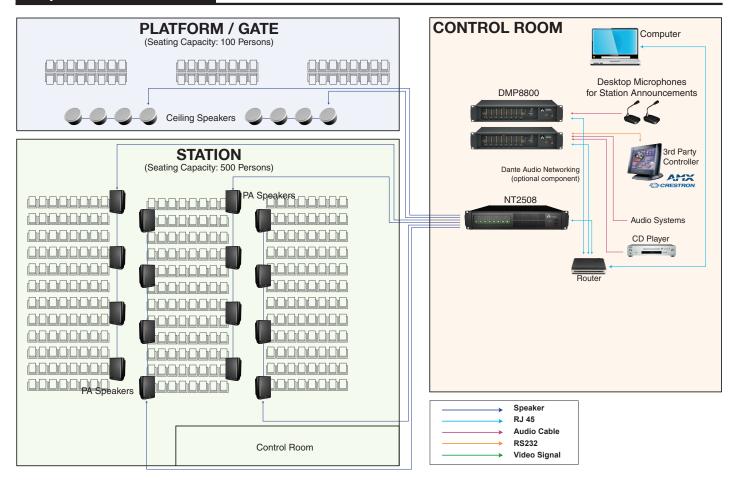
## **Houses of Worship**







## **Airport or Train Station**



## Corporate

