PHONIC

DMA8825
2000 Watt 8x8 Digital Matrix Amplifier

▸ 8-channel amplifier – 250 watts per channel
▸ 4 ohm and constant voltage models available (70V or 100V)
▸ 8-in x 8-out sophisticated matrix mixing makes routing easy

DMA8413
520 Watt 8x4 Digital Matrix Amplifier

▸ 4-channel amplifier – 130 watts per channel
▸ 4 ohm and constant voltage models available (70V or 100V)
▸ 8-in x 4-out sophisticated matrix mixing makes routing easy

Overview

PHONIC introduces the DMA series digital matrix amplifiers – combining smart signal processing with a flexible modular mixing matrix and robust amplification. Sound complex? It's not, because all routing and processing is adjusted through the simple yet intuitive software.

The DMA series provides racks-full-o-gear in a modest 2U construct. Combining many great products into a simple design, the DMA series simplifies your installation and saves you money.

With extensive onboard signal processing, flexible matrix routing and optional audio interface capabilities, the DMA series matrix amplifiers do it all.

Our engineers have ingrained each DMA with versatile and extensive signal processing, including full 31-band GEQs, 4-band parametric EQs, compressors, limiters, VCAs, auto-mixing and auto-leveling, and page ducking. The DMA series also features password protected user accounts, extensive event scheduling capabilities, and flexible audio networking (optional Dante expansion).

Whether designing or installing systems in auditoriums, restaurants, houses of worship, boardrooms, courtrooms or performance spaces, there is a DMA matrix amplifier that will fit your exact requirements.

▸ Fully-featured DSP processing (see page 2)
▸ Stand-alone control possible with monitor and mouse
▸ 10/100MB Ethernet interface as standard
▸ Intuitive user interface for Windows
▸ 8 mic/line inputs through Euroblock or RCA
▸ 24-bit AD/DA converters
▸ 8x4 and 8x8 configurations available
▸ Optional 8x8 Dante networking (DT88)
▸ Streamlined automatic mixer through matrix software
▸ Preset recall and remote level through euroblock
▸ Built-in memory with 50 scenes
▸ SD card slot for audio playback
▸ Event scheduling for on/off, playback and more
▸ Compatible with third-party controllers
▸ Input and output metering viewable through software
▸ Password-protected user accounts
▸ Detailed Email reports triggered by protect modes
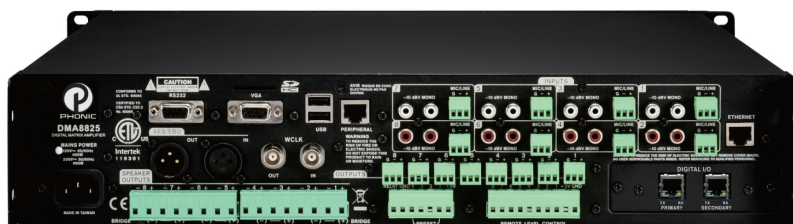
Dante Card Optional

System Specifications

Signal to Noise (20Hz-20KHz, unweighted)	>110dB
Distortion (THD-N, typical) - 8 ohm load, 10dB below rated power, 20Hz-20kHz	<0.5%
Frequency Response	20Hz-20kHz, +/-1dB
Damping Factor (8 ohm load, <1kHz)	>250
Input Impedance	Euroblock: 3.53 KΩ RCA: 8.8 KΩ
Maximum Input Level	+24dB
Cooling	Temperature dependent speed-controlled axial fan
Control Network	Onboard, compatible with standard 10/100MB Ethernet hardware
Front Panel Indicators	8 x Clip, -10dB, -20dB, Signal, Bridge (per pair), Power, Standby, Protect, Power Disable
Attenuators	8 x front panel, software, and remote
Input Connectors	Euroblock & Stereo RCA
Output Connectors	Euroblock
Amplifier Protection	Inrush current limitation, temperature monitoring, output over-current protection, mains fuses
Power Supply Unit	120VAC, 230VAC, 50/60Hz, region dependent
Dimensions (W x H x D)	483 x 89 x 394 mm (19" x 3.5" x 15.5")
Weight	9.53 kg (21 lbs)

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DSP Specifications

Function	Parameter	Range
Compressor / Limiter	Compressor Threshold	-50 dB to 0 dB
	Ratio	1:1 to 20:1
	Limiter Threshold	-50 dB to 0 dB
	Output Gain	0 dB to 18 dB
	Attack / Release	1 ms to 8 seconds
Gate	Threshold	-50 dB to 0 dB
	Range	-90 dB to 0 dB
	Attack / Hold / Release	1 ms to 8 seconds
Expander	Threshold	-50 dB to 0 dB
	Ratio	1:1 to 20:1
	Attack / Release	1 ms to 8 seconds
Delay	Delay Time (mS)	0.0 to 680.0 ms
	Delay Time (meters)	0.0 to 245.5
	Delay Time (feet)	0.0 to 805.4
	Temperature (C)	0° to 50°
	Temperature (F)	32° to 122°
4-band Equalizer	Type	BPF, Notch, Peak, HPF, LPF, High Shelf, Low Shelf
	Gain	-18 dB to +18 dB
	Frequency	20 Hz to 20 kHz
	Q	0.1 to 10
31-band Graphic EQ	Frequencies	20 Hz to 20 kHz
	Range	-12dB to +12dB
	Q	1.6 to 10
Filters	Type	HPF (6 dB, 12 dB, 18dB, 24dB), LPF (6 dB, 12 dB, 18dB, 24dB), High Shelf, Low Shelf, Peak, APF, BPF, Notch
	Gain	-18 dB to +18 dB
	Frequency	20 Hz to 20 kHz
	Q	0.1 to 10
Feedback Silencer	Threshold	-50 dB to 0 dB
	Release Time	10 sec/dB to 300 sec/dB
	Gain	-20 dB to 0 dB
	Frequency	20 Hz to 20 kHz
	Q	4.5 to 10
VCA	Gain	-∞ to 6 dB
Automatic Level Control	In Target	0 dB to -50 dB
	Below Target	-30 dB to 0 dB
	Ratio	1:5~20:1
	Increase Gain	40ms/dB to 1000ms/dB
	Decrease Gain	1000ms/dB to 40ms/dB
	Hold Time	0s to 10s
Ducker	Source	Analog 1 to 8, Network 1 to 8, AES/EBU
	Threshold	-50 dB to 0 dB
	Depth	-80 dB to 0 dB
	Attack / Release	0.2s to 20s
Crossover	HPF / LPF Type	Butterworth 12dB, 18dB, 24dB
	HPF / LPF Frequency	20 Hz to 20 kHz
Signal Generator	Sine Wave Frequencies	20Hz to 20KHz
	Sweep Wave Start / End Frequencies	20Hz / 20KHz
	Sweep Wave Hold Time	50ms to 2000ms
	Signal Level Range	-60dB to -10dB
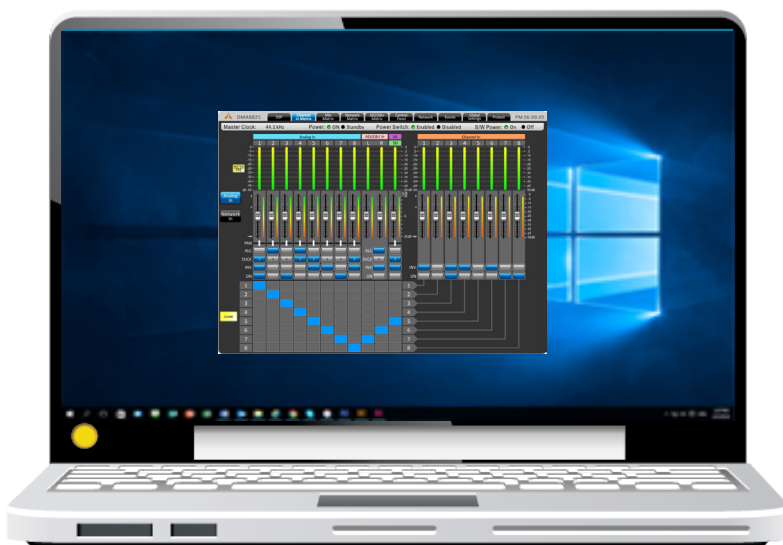
Remote Software

Each and every one of the signal processors ingrained in the DMA series digital matrix amplifiers can be controlled using the included Windows software. This software is compatible with Windows XP, Windows Vista, Windows 7, Windows 8.1 and Windows 10.

Installation and setup is simple, where the software simply seeks out your NT amplifier connected to your local area network. Using a pre-determined IP address, you're able to then activate the unit and control it via the software.

A number of function tabs can be found to the top of the software. Each of these can be used to access different routing and setup functions of the DMA amplifier's software. The DSP tab will be concerned mainly with setting all the processing for the input and output mixes.

Available functions can all be found to the left of this page. These include comprehensive compressors/limiters, gates, expanders, delays, equalizers, filters, feedback silencers, variable controlled amplifiers, automatic level controls, duckers, crossovers and a signal generator. Each has a wide array of user-adjustable parameters that can significantly improve the operation of these functions.

Initial setup may be overwhelming considering the sheer number of parameters you have to work with. Thankfully we offer a number of pre-defined programs that can be utilized to help make it easier. In addition to this, any settings you yourself make - and find to be substantially useful - can be saved in your own user-defined scenes.

Amplifier Specifications

	DMA8413	DMA8825
Low Z, Stereo Mode, all channels driven (RMS Power Ouput Per Channel)		
8Ω, 20Hz-20kHz 1%THD	80W	150W
4Ω, 20Hz-20kHz 1%THD	130W	250W
Low Z, Bridge Mode, all channels driven (RMS Power Output)		
8Ω, 20Hz-20kHz 1%THD	260W	500W
70V, 100V distributed output (RMS Power Output Per Channel)		
20Hz-20kHz 1%THD	130W	250W
Models Available	4Ω and 8Ω / 70.7V Constant Voltage / 100V Constant Voltage *Please consult your sales assistant for information on ordering the model that is best for you*	
Line Current Draw (all channels driven)		
Line Current, Standby	190mA	190mA
Line Current, Idle	540mA	540mA
Line Current, Typical	2.85A	2.85A
Line Current, Maximum	6.00A	6.00A

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