# DME24N

# **Digital Mixing Engine**



# Substantial processing power plus head amp and analog I/O for fast, easy system implementation.

- Configurable as multiple audio processors for a wide range of applications mixers, equalizers, compressors, crossovers, speaker processors, effects, feedback suppressors, wav file players, and much more.
- Easily configured and controlled via the DME Designer software application.
- 8 channels of built-in analog I/O with precision 24-bit 96-kHz A/D and D/A converters.
- High-performance analog preamplifiers that equal the sound and quality of those found in top-line Yamaha mixing consoles.
- Optimally-tuned 24-bit, 96-kHz digital processing.
- In addition to the eight built-in I/O channels, a rear-panel slot accommodates an optional MY card for an extra 16 I/O channels in a variety of analog and digital formats - for a total of 24 I/O channels.
- Network connectivity with optional MY16CII CobraNet<sup>™</sup> card or MY16-ES64 EtherSound Card.
- Seamless control Integration with compatible Yamaha digital mixing consoles.
- Up to 16 DME24N, DME64N and ICP1 Intelligent Control Panel units can be networked via their RJ45 connectors using CAT5 Ethernet cables.
- GPI, RS232C/RS422, USB, and MIDI Interfaces.
- Large LCD Display with Comprehensive Panel Controls.
- The DME24N and ICP1 Intelligent Control Panel, can display scene and function names in 5 languages: English, Japanese, French, German, and Spanish.

#### OPTIONS

## MY4-AFC

Acoustic Echo Canceller Card Provides 4 channels of acoustic echo cancellation.



# **REMOTE CONTROL PANELS**

# ICP1



ICP1 connects via Ethernet. Functions include scene recall and six user-defined keys at the top and bottom of the LCD screen, which can be assigned to DME parameters such as microphone and music source levels. Up to 4 sets of "pages" are available - giving up to 24 parameters.

LCD display shows names and scenes and function keys in five languages - English, German, French, Spanish and Japanese.

CP4SF

Four switches and four faders control panel Wall-mountable remote control panel for GPI control. Uses a standard (US-type) 3 gang wall box.



hox

Four switches control panel Wall-mountable remote control panel for GPI control. Uses a standard (US-type) 1 gang wall





control. Uses a standard (US-type) 1 gang wall box.

One switch and one fader control panel Wall-mountable remote control panel for GPI

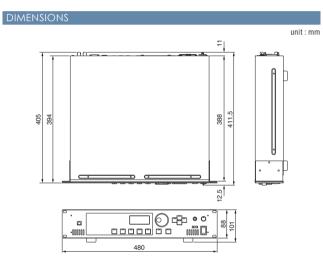


# DME24N

#### GENERAL SPECIFICATIONS

Sampling frequency rate	Internal :44.1kHz,48kHz,88.2kHz,96kHz			
	External :44.1kHz (-10%) to 48kHz (+6%), 88.2kHz (-10%) to 96kHz (+6%)			
Signal delay	0.5msec (Ch input to Ch output@96kHz)			
Total harmonic distortion*1	Less than 0.05, +14dBu into 600Ω			
Frequency response	0, +0.5, -1.5dB			
Dynamic range	106dB			
Hum & noise level*2	-128dBu (EIN), -82dBu (Residual noise)			
Crosstalk (@1kHz)	-80dB (Adjacent channel)			
Phantom Power	+48V			
Configurations	Max. 16			
Scene	Max. 999			
Maximum input channel	24ch			
count				
Maximum output power	24ch			
channel count				
Power requirements	AC100V-240V 50Hz/60Hz			
Power consumption	75W			
Dimensions (W x H x D)	480 x 101 x 411.5mm (18.9" x 3.9" x 16.2"), 2U			
Weight	8kg (17.6lbs)			

\*1 Total harmonic distortion is measured with a 18dB/Oct filter @80kHz. \*2 Hum & noise level is measured with a 6dB/oct filter @12.7kHz; equivalent to 20kHz filter with infinite dB/Oct attenuation.



### ANALOG INPUT SPECIFICATIONS

Input terminal		A	E	Input level		
	GAIN	Actual load impedance	For use with nominal	Nominal	Max. before clip	Connector
INPLIT 1-8	-60dB	01-0	50-600Ω Mics & 600Ω Lines	-60dBu	-40dBu	Euroblock*
	+10dB	3kΩ		+10dBu	+30dBu	

### ANALOG OUTPUT SPECIFICATIONS

Output terminal	Actual Source Impedance	For use with nominal	Output level		
			Nominal	Max. before clip	Connector
OUTPUT 1-8	75Ω	600Ω Lines	+4dBu	+24dBu	Euroblock*
PHONES	15Ω	8Ω	75mW	150mW	ST Phone Jack**
		40Ω	65mW	150mW	

#### CONTROL I/O SPECIFICATIONS Terminal Format Level Connector USB 0V-3.3V USB1.1 B type USB Connector IN MIDI DIN-5pin MIDI OUT MIDI DIN-5pin MIDI THRU DIN-5pin $TTL/75\Omega$ IN BNC Connector \_ WORD CLOCK (terminated) OUT $TTL/75\Omega$ BNC Connector 0V-5V Euroblock IN GPI 16IN/160UT OUT \_ TTL Euroblock +V \_ 5V Euroblock RS232C REMOTE D-Sub Connector 9P (Male) RS422 ETHERNET RJ-45 Ethernet

#### COMPONENT LIST

Category	Component					
	Remote Controlled Internal HA					
	Delay	Delay Long, Short				
		Gate, Ducking, Expander, Compander,				
	Dynamics	Compressor, De-Esser, Limiter				
	Filter	BPF, HPF, LPF, Notch				
	EQ	PEQ, GEQ				
	Fader	Fader				
	Pan LR, LCR, 3-1, 5.1, 6.1					
	Meter					
Mixers	Simple Mixer					
	Auto Mixer	Auto Mixer (II)				
	Matrix Mix	Matrix Mixer				
	Delay Matrix					
I/O functions	Analog I/O					
	MY card I/O					
Source	Oscillator					
	Wav File Player					
Routing functions	Source Selector					
	Router					
Crossover	Crossover					
	Crossover processor (II)					
Speaker Processor	Speaker Processor					
Other functions	Room Combiner					
	Feedback suppressor					
	Ambient Noise Compensator					
	Audio Detector					
	Auto Gain Control					
	Event Scheduler					
	SPX					
	Program Ducker					