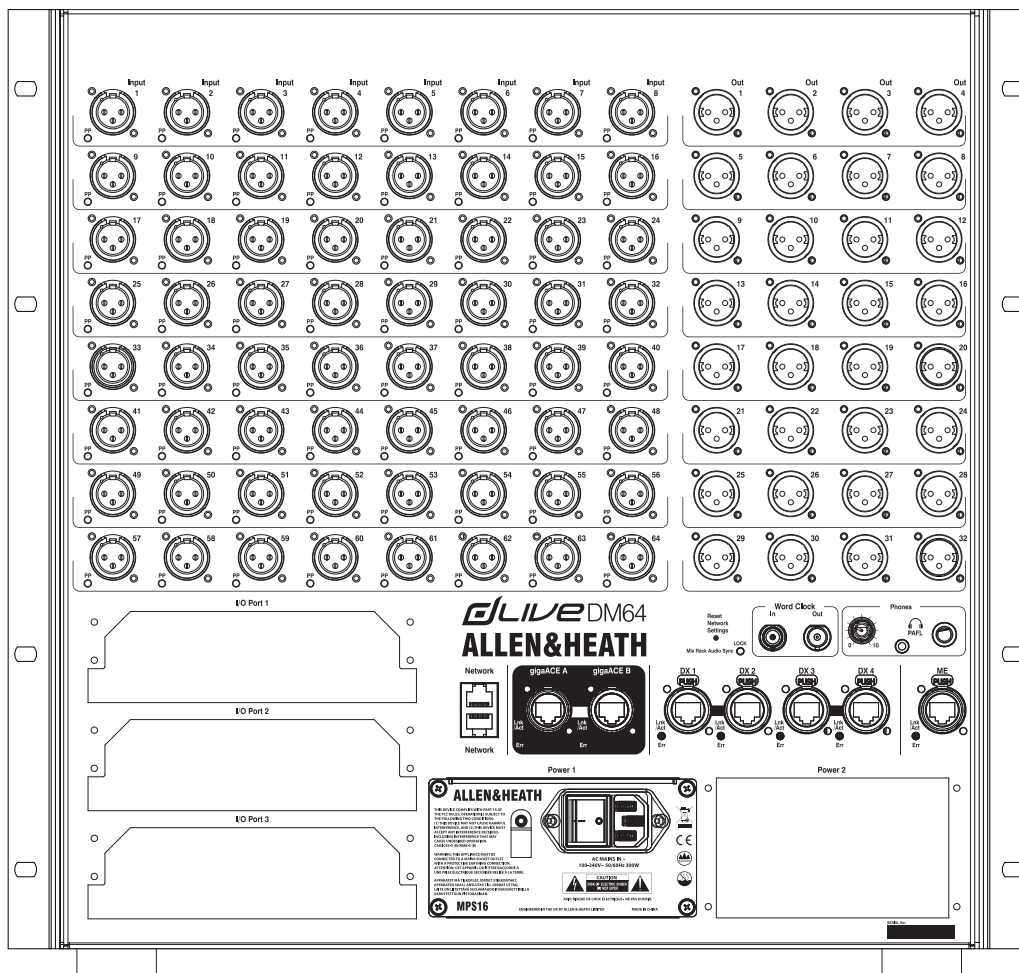


DM64 Technical Datasheet

Overview

- 64 mic/line inputs, 32 line outputs
- **XCVI** 160x64 FPGA core
 - 96kHz sample rate
 - Variable bit-depth for ultimate precision and noise performance
 - Virtually infinite mix headroom thanks to 96bit accumulator
 - Class leading, ultra-low latency 0.7ms
- 128 Input Channels with full processing
- 64 Mix Outputs with full processing
- Configurable 64 bus architecture (group, FX, aux, matrix, mains)
 - LR, LCR and up to 5.1 mains mode
 - Multiple PFLs
- 16 **RackExtra FX** with dedicated stereo returns
- Automatic Mic Mixer (AMM) up to 4 zones, 64 ch
- **DEEP** processing – powerful embedded plugins including GEQ and compressor modelling
- 24 DCAs
- Built-in signal generator, RTA and spectrogram
- New preamp design for extra transparency
- Unique Active PAD circuit for consistent performance with any source
- Connection hub
 - Dual redundant GigaACE gigabit link to Surface
 - 2x redundant DX links for I/O expansion
 - 3x I/O Ports – 128 ch 96 kHz each
 - Dedicated ME-1 48kHz port
 - 2x Network ports
 - Wordclock BNC I/O
- Dual redundant, hot swappable power supply
- Flush front panel with ultra quiet fan
- Reversible rack ears design



Technical Specifications

Inputs

Mic/Line XLR Inputs	Balanced XLR, +48V phantom power
Mic/Line Preamp	Fully recallable
Input Sensitivity	-60 to +15dBu
Analogue Gain	+5 to +60dB, 1dB steps
Pad	-20dB Active PAD
Maximum Input Level	+30dBu (PAD in)
Input Impedance	>4k Ω (Pad out), >10k Ω (Pad in)
Mic EIN	-127dB with 150 Ω source
Phantom Power indication	Per socket, internal or external phantom power sensing, triggered at 24V

Outputs

Analogue XLR Outputs	Balanced, Relay protected
Output Impedance	<75 Ω
Nominal Output	+4dBu = 0dB meter reading
Maximum Output Level	+22dBu
Residual Output Noise	-92dBu (muted, 20-20kHz)
	-90dBu (muted, 20-40kHz)

Dimensions and Weights

	Width x Depth x Height x Weight
DM64	482.6 x 313 x 458 mm (19"x 12.3"x 18") x 21kg (46lbs)
DM64 - boxed	590 x 420 x 585 mm (23.2"x 16.5"x 23") x 24kg (52.9lbs)

System

Measured balanced XLR in to XLR out, 20-20kHz, minimum Gain, Pad out, signal @ 0dB (meter)	
Dynamic Range	110dB
System Signal to Noise	-92dB
Frequency Response	20Hz - 30kHz +0/-0.8dB
THD+N (analogue in to out)	0.0015% @ +16dBu output, 1kHz 0dB gain
Headroom	+18dB
Internal operating Level	0dBu
dBFS Alignment	+18dBu = 0dBFS (+22dBu at XLR output)
Meter Calibration	0dB meter = -18dBFS (+4dBu at XLR out)
Meter Peak indication	-3dBFS (+19dBu at XLR out)

Sampling Rate	96kHz +/- 20 PPM
ADC	24-bit Delta-Sigma
DAC	24-bit Delta-Sigma
Latency	0.7 ms (MixRack XLR in to XLR out, Input to Mix) + 5 samples, Surface to Mixrack (GigaACE hop) + 8 samples, DX32 to Mixrack (DX hop)

Power

Mains Voltage Operating Range	100-240V AC, 50/60Hz
Mains Power Consumption	300W max (MPS16 V1 300W)* 250W max (MPS16 V2 250W)*

ⓘ MPS16 power consumption is printed under AC inlet

Temperature

Operating Temperature Range	
Fitted with MPS16 V1 300w	0°C to 35°C (32°F to 95°F)
Fitted with MPS16 V2 250w	0°C to 40°C (32°F to 104°F)