

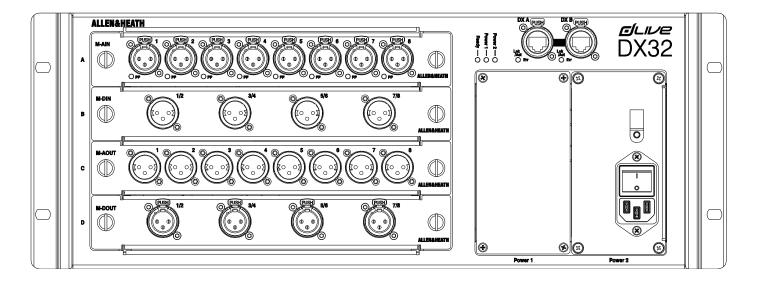
Allen & Heath Limited Kernick Industrial Estate Penryn, Cornwall, TR10 9LU, UK www.allen-heath.com



DX32 Technical Datasheet

Overview

- dLive modular Expander
- 4x slots, up to 32ch
- Any combination of analogue / digital I/O modules
- New preamp design for extra transparency
- Unique Active PAD circuit for consistent performance with any source
- Redundant Cat5 connection to dLive MixRack or Surface
- Dual redundant, hot swappable power supply
- Can be rack-mounted or used on stage floor



A&E Specifications

The expander shall be rack-mountable and shall include plastic feet for shelf or floor operation. It shall provide 4 slots to fit any combination of analogue or digital 8-channel I/O modules.

A pair of Ethercon ports shall be provided for redundant connection to the control surface or mix engine over Fast Ethernet. This connection shall carry up to 32x32 channels of uncompressed audio at 96kHz and control data. It shall also provide automatic firmware update to the expander at power up of the system when a firmware mismatch is detected.

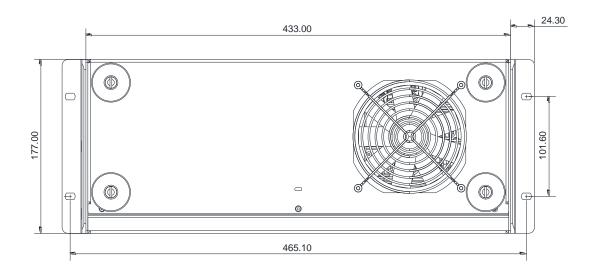
Available I/O modules shall include:

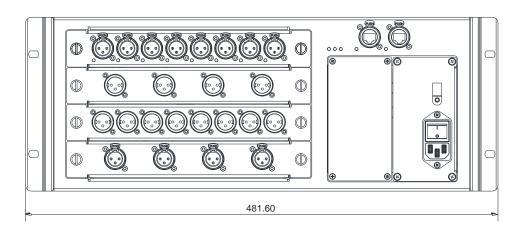
 8 recallable preamps with XLR connectors for balanced or unbalanced microphone and line level signals. Gain, Pad and 48V shall be digitally controlled within the preamp. A phantom power indicator shall be provided.

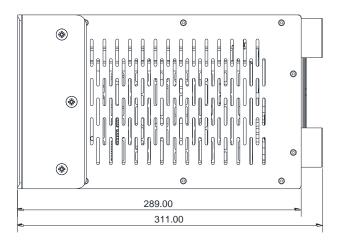
- 8 line level, balanced XLR outputs. The outputs shall be relay protected to prevent power on or off thumps.
- 4x stereo AES3 inputs on XLR with SRC (32kHz 192kHz sampling rate). It shall be possible to bypass Sample Rate Conversion for each socket.
- 4x stereo AES3 outputs on XLR (44.1kHz, 48kHz or 96kHz switchable).

The unit shall have a modular power supply accepting AC mains voltages of 100~240V, 50/60 Hz, 300W max via an earthed 3-pin IEC male connector. A rocker switch shall be provided near the mains inlet to isolate the mixer from the incoming mains supply. The unit shall also provide the option for a second, hot-swappable, redundant power supply. This shall be of the same type and interchangeable with the power supply fitted as standard.

The expander shall be the Allen&Heath dLive DX32.







Technical Specifications

Inputs		System	
Mic/Line XLR Inputs	Balanced XLR, +48V phantom power	Sampling Rate	
Mic/Line Preamp	Fully recallable	ADC	24-bit Delta-Sigma
Input Sensitivity	-60 to +15dBu	DAC	24-bit Delta-Sigma
Analogue Gain	+5 to +60dB, 1dB steps		
Pad	-20dB Active PAD	Latency	+ 8 samples, DX32 to Mixrack or DX32 to Surface (DX hop)
Maximum Input Level	+30dBu (PAD in)	System latency	0.7 ms (MixRack XLR in to XLR out, Input to Mix)
Input Impedance	$>4k\Omega$ (Pad out), $>10k\Omega$ (Pad in)		+ 5 samples, Surface to Mixrack (GigaACE hop)
Mic EIN	-127dB with 150 Ω source		
Phantom Power indication	Per socket, internal or external phantom power sensing, triggered at 24V	Operating Temperature Range	O deg C to 35 deg C (32 deg F to 95 deg F)
		Power	
Digital Inputs	AES3 2 Ch XLR, 2.5Vpp balanced terminated 110 Ω	Mains Voltage Operating Range	100-240V AC, 50/60Hz
	SRC on each pair, range 32k - 192kHz, with bypass option	Mains Power Consumption	300W max (MPS16 V1 300W)* 250W max (MPS16 V2 250W)*
		① MPS16 power consumption is printed under AC inlet	
Outputs		Temperature	
		Operating Temperature Range	
Analogue XLR Outputs	Balanced, Relay protected	Fitted with:	
Output Impedance	<75Ω	MPS16 V1 300w	0°C to 35°C (32°F to 95°F)
Nominal Output	+4dBu = 0dB meter reading	MPS16 V2 250w	0°C to 40°C (32°F to 104°F)
Maximum Output Level	+22dBu		
Residual Output Noise	-92dBu (muted, 20-20kHz)		
	-90dBu (muted, 20-40kHz)		
Digital Outputs	AES3 2 Ch XLR, 2.5Vpp balanced terminated 110 Ω	Dimensions and Weights	
	96kHz sampling rate, switchable to 48kHz, 44.1kHz		Width x Depth x Height x Weight
		DX32	433 x 290 x 177 mm x 10.5kg (23lbs)