M-DX32-INPR PRIME module fitting note

Using the very latest converter and component technology, PRIME modules are designed to deliver next-level audio quality for critical live, broadcast and studio applications. They offer improved SNR, THD+N, slew rate, frequency response at low frequencies, consistency across channels, and crosstalk.

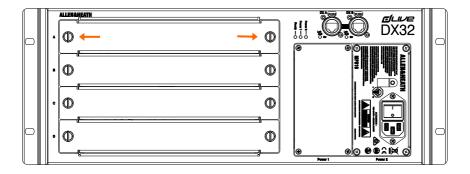
M-DX32-INPR can be fitted to the Allen & Heath DX32 Expander and used in conjunction with other I/O.

(i) PRIME modules require dLive firmware V1.71 / SQ firmware V1.4.0 or higher.

Fitting the module

The DX32 provides 4x slots for 8ch modules labelled A, B, C, D. Any combination of analogue or digital I/O modules can be fitted.

To fit a module, switch the Expander off, and remove the blank panel by loosening the 2 thumb screws; remove the film protection from the module's multipin connector, slide the module into the slot and press it firmly into the mating connector, then secure it by tightening the thumb screws.

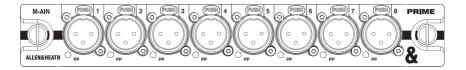


Use the dLive / SQ I/O screen to patch signals from or to the DX32 I/O.

(i) For more information please refer to the DX32 Getting Started Guide and dLive / SQ Firmware Reference Guides available for download at www.allen-heath.com.

Front panel

M-DX32-INPR provides 8x mic/line XLR inputs with Phantom Power indicators.

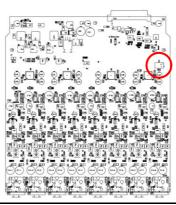


DIP switch settings

Two DIP switches allow customisation of the converters' digital decimation LPF settings to suit the application. Note that the settings interact with each other. The default factory setting is Normal Latency, Slow Roll-off.

SW1	SW2	Latency*
Controls the roll-off of the filter	Controls the latency of the filter	,
On (switch down)	On (switch down)	458µs
Sharp Roll-off	Normal Latency	430μ3
On (switch down)	Off (switch up)	312µs
Sharp Roll-off	Low Latency	012μ3
Off (switch up)	On (switch down)	333µs
Slow Roll-off	Normal Latency	ουσμο
Off (switch up)	Off (switch up)	312µs
Slow Roll-off	Low Latency	312μ ο

^{*}Latency measured when routing Direct Out to a DX32 PRIME output, default switch settings.



The DIP switches can be found on the right side of the PCB board

Technical specifications

ADC 96kHz, 32-bit Delta-Sigma

Mic/Line XLR Inputs Balanced XLR, +48V phantom power

Mic/Line Preamp Fully recallable
Input Sensitivity (dLive) -60 to +15dBu
Input Sensitivity (SQ) -60 to +20dBu

Analogue Gain (dLive) +5 to +60dB, 1dB steps

Analogue Gain (SQ) 0 to +60dB, 1dB steps

Pad -20dB Active PAD

Maximum Input Level +38dBu (PAD in)

Input Impedance $>4k\Omega$ (Pad out), $>10k\Omega$ (Pad in)

Mic EIN -127.5dBu with 150Ω source

Phantom Power indication Per socket, internal or external phantom power

sensing, triggered at 24V

Measured Prime in to AES out, 20-20kHz, minimum Gain, Pad out.

Full Signal Dynamic Range 114.8dB
Noise at 0dB gain -96.8dBu

Frequency Response to AES output

 At 0dB gain
 10Hz - 20kHz +0/-0.3dB

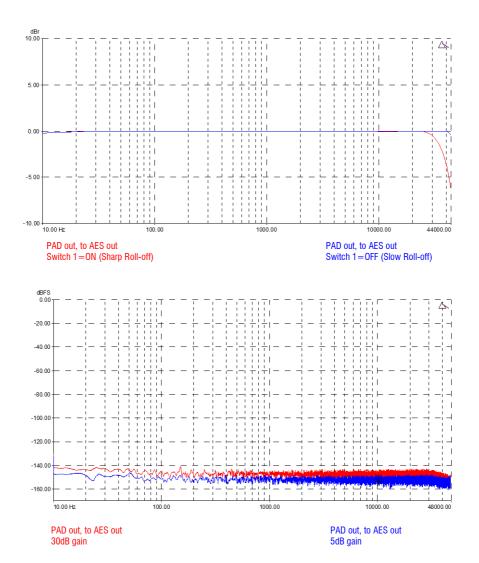
 At 30dB gain
 10Hz - 20kHz +0/-0.3dB

 At 60dB gain
 10Hz - 20kHz +0/-0.25dB

THD+N (analogue in to AES out) 0.0009% @ +10dBu out 0dB gain

0.0009% @ +10dBu out 10dB gain 0.001% @ +10dBu out 20dB gain 0.0011% @ +10dBu out 30dB gain

Frequency Response and Residual Noise



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