

News Flash: SIDD, C2 & D2
Dynamics inside



DP648

Audio System Processor

- 4 Input 8 Output System Processor
- 4 Inputs Patchable from 12 Input Sources
- Analog/ AES/ EBU and optional Dante/ AES67
- Automatic Input failover
- 8 x Outputs : Analog / AES/ EBU and optional Dante/ AES67 card
- Flexible Dynamic Processor - FIR Filtering - Extensive Speaker Preset Library

The DP648 builds on the legacy of the SIDD, C2, D2 processing, the XTA DP448 and DPA amplifiers. Providing ethernet control of this suite of IIR, FIR and dynamic processing essential for sound system management. The Dante/ AES67 option and flexible routing make it a comprehensive system processor, for overall system management or for traditional loudspeaker management.

The DP648 works as a system processor for any audio system, the XTA system scales for more advanced control when partnered with other XTA products. This includes the MX36 console/ source switcher, DPA and DNA amplifiers which come with or without dsp.

Series 6 Comprehensive Audio System Processing



xta
www.xta.co.uk

System Control Solution

DP648

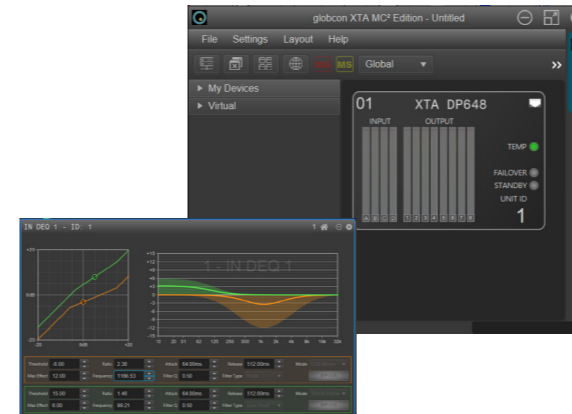


The DP648 is equally suited to FOH racks as a system processor providing overall system management or located in amplifier racks as a more traditional crossover providing stereo 2, 3, 4+ way loudspeaker processing. The extensive XTA preset library makes this even easier.

To deliver this precise control the DP648 has the full suite of classical IIR filters, phase, all pass and delay on both inputs and outputs, input dynamic eq and an extensive loudspeaker preset library containing both IIR and FIR setting.

The DP648 has full front panel control, PC remote software control by Audiocore Amped edition. PC & MacOS control using globcon XTA MC² Edition. Full or partial locking of front controls is possible when required.

Multiple DP648s can be elegantly controlled by fast software grouping, inputs and or outputs can appear in up to 32 groups, making complex systems easy to manage. Grouping is effectively a virtual 32 output processor across compatible amplifiers and processors.



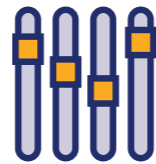
MX36



Announcement /
Emergency Microphone



Continuity Music



9 x 4 buss or
stereo console



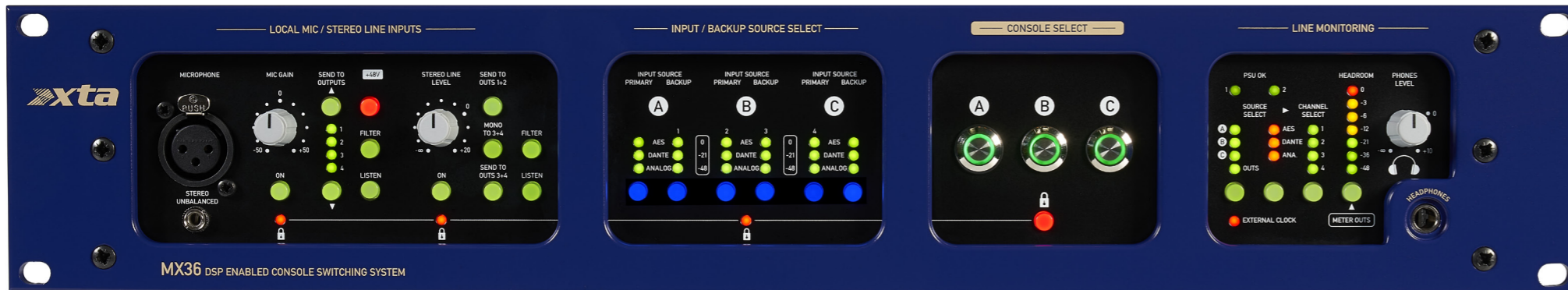
Fast Front Panel
Selection



Headphone Line
Checking



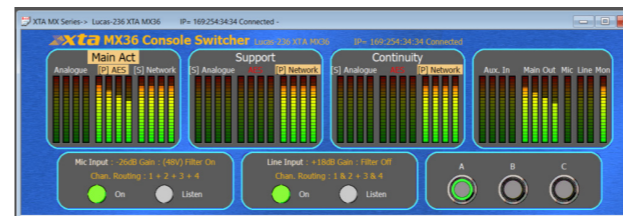
Dual Power
Supply



The MX36 has proven itself in FOH racks as a source and console switcher/mixer at the heart of many systems. The DP648 is designed to complement the MX36 providing comprehensive Audio system management solution.

The MX36 provides front panel switching & mixing of 9 x 4 buss sources (analog, AES3, Dante and AES67) additionally a stereo line input and separate mic input. Line Monitoring is provided for all sources on headphone output and meter. Outputs are provided in analog, AES3, Dante and AES67. Essentially all switching & mixing can be done via the front panel and bi directional control software is available.

Two GPI allow alarm muting and enabling the microphone and /or stereo line as priority inputs



XTA's precise processing and proven control software, cutting-edge ADC/ DAC technology and proprietary algorithms, have protected speakers and delivered exceptional audio experiences for over 30 years. From its origins in touring, XTA processing has become a trusted solution for diverse venues, including: Sports venues, Houses of Worship, Nightclubs, Theatres & Cruise Ships



The system includes :

- MX36 for easy source selection via front panel or remote control
- 6 series for overall system control and routing
- DPA amplifiers - with 6 series (4 x 8) processing inside
- DNA amplifiers - without dsp

This processing can be controlled by Audiocore Amped Edition and (in Q3 2025) globcon MC² Edition

Control options

- Ethernet control RJ45 provides control via Audiocore Amped Edition & in (Q3 2025) globcon XTA MC² Edition
- Optional Dante card provides 2 x RJ45 for audio delivery by Dante/ AES67
- GPIO for control & reporting and evacuation fire system integration



Clever Simple Quick Easy



DP648

Audio System Processor



Specification

Inputs

4 x XLR Electronically balanced Analog Inputs
 XLR C & D remote / front panel switchable to AES/EBU
 Impedance >10k Ohms CMRR >65dB 50Hz - 10kHz
 Analog input to Analog Output latency = 0.5mS

Outputs

8 x electronically balanced analog outputs.
 AES/EBU (XLR 2,4,6,8) remote / front panel switchable
 Source Imp < 600 Ohms
 Minimum Load 600 Ohm
 Maximum Level +20dBm into 600 Ohm load
 Sampling Rate 96kHz internal, up to 192kHz can be accepted and converted
 Frequency Response ± 0.5 dB 10Hz - 32kHz
 Dynamic Range >117dB 20Hz - 20kHz.
 Unwtd Distortion < 0.001% @ 1kHz, +10dBm
 Maximum Delay 650 mS. (increment 0.325 μ s steps)
 Output gain Adjustable +15dB to -40dB in 0.1 dB steps and mute

Equalisation

Parametric Filters - 8 Per input / 9 per output
 9 different filter types including PEQ, Bandpass, All pass, Notch, Vari Q, Shelf and Phase filtering - 2 degree steps on each input and output
2 x DEQ pre input, Configurable as cut above, cut below, boost above and boost below as hi shelf, low shelf, parametric EQ and full bandwidth modes. This enables compressors, de-essers, multiband compression etc to be configured.*

*DEQ / FIR processing pool is dynamically assigned

Crossover Filters

Bessel / Butterworth 6/12/18/24/48dB per octave and Linkwitz-Riley 12/24/48dB per octave
 FIR processing up to 5600 taps @ 48K and 2900 taps @ 96K available spread across all outputs.*

Limiters

Threshold +22dBu to -10dBu
 Attack time 0.3 to 90 milliseconds
 Release time 4, 8, 16 or 32 times the attack time
 Clip/D-max Limiter - Look-ahead attack time, Fast, Medium or Slow release times
 Input DEQ provide Multiband comp /limiting options

Connectors

Inputs 3 pin female XLR
 Outputs 3 pin male XLR
 1 X Control port : RJ45 for Audiodcore Amped Edition, globcon and firmware updates
 Option Dante Card : 2 x RJ45 - configurable as primary / redundant or 2 switch ports.
 Power 3 pin IEC Power 60VAC - 240VAC
 Consumption < 40 watts

Weight 3.5kg. Net (5kg. Shipping)

Size 1.75"(1U) x 19" x 12" (44 x 482 x 305mm) excluding connectors



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Due to continuing product improvement, all specifications subject to change. E&OE

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