

4 Series Audio Management System



Audio. Under new management.

The 4 Series from XTA

www.xta.co.uk



Raising the industry standards.

As audio systems become increasingly powerful and complicated, our approach to Audio Management has evolved. Drawing on the success of the industry standard DP226, we have developed new technology to meet the needs of today's live sound professionals.

Based on a completely new processing platform, running at a native sample rate of 96kHz, the 4 Series sets a new standard in terms of performance, flexibility, and ease of use. Combining masses of DSP power with multiple I/O (including digital), the 4 Series provides a range of products that make it easy to configure even the largest and most demanding audio systems.



DP424 - 2 In 4 Out



DP444 - 4 In 4 Out



DP446 - 4 In 6 Out



DP448 - 4 In 8 Out

Features

Using the latest digital signal processing and high sample rates would be wasted if attention was not paid to capturing the signal as faithfully as possible, and reproducing it accurately. The range uses high-performance 24-bit converters on the inputs and outputs, running at 96kHz to give a bandwidth of over 30kHz and a dynamic range in excess of 116dB.

With two or four fully-balanced inputs, and up to eight fully-balanced outputs, it's possible to realise four two-way monitor systems, or your favourite DP226 configuration with an additional stereo processing channel, all in a single 1U unit.



The 4 Series processing platform has been designed to operate at a native sampling rate of 96kHz, and also be powerful enough to cope with the additional inputs and outputs. Available on each input channel is a 28-band graphic equaliser, in addition to 8 bands of fully parametric equalisation. Each output path features each gain control, polarity, delay and up to 9 parametric sections, in addition to the crossover filters which offer slopes from 6dB/Octave up to 48dB/Octave.

All parametric sections can be re-configured to many alternate filter behaviours, including the familiar high and low shelves and notch filters, along with bandpass, elliptic & variable 'Q' shapes, and phase adjustment, in 2 degree steps. Each output also features a combination of limiters - a limiter which is designed to protect individual drivers from over-excursion/over-driving, and an additional look-ahead "D-Max" limiter for added safety.



With multiple inputs and outputs, the 4 Series are able to offer much more than a simple crossover system. To make configuration as simple as possible, a selection of templates are available to set the system up, taking care of routing and selecting useful crossover points. However all of this is easily adjustable, including the routing. Any output may be fed from any input, or combination of inputs, forming a completely flexible matrix.

Equalisation

- Parametrics - 8 per input / 9 per output
- 28-band graphic on each input
- Each parametric can be switched to Bandpass, Allpass, Notch, VariQ, Shelf and Elliptical response
- Phase filtering - 2 degree steps on each input and output

Crossover Filters

- Bessel / Butterworth 6/12/18/24/48dB per octave and Linkwitz-Riley 12/24/48dB per octave

Limiter

- 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

Inputs

- Electronically balanced (transformers optional)
- AES/EBU fitted as standard to all Series 4 units
- Impedance >10k Ohms
- CMRR >65dB 50Hz - 10kHz

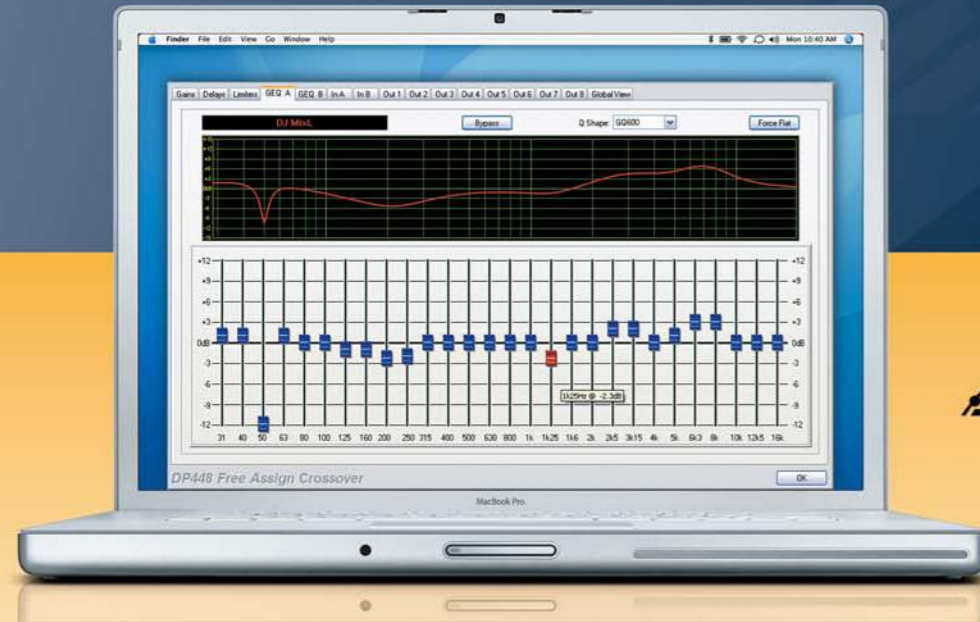
Outputs

- All electronically balanced (transformers optional)
- AES/EBU fitted as standard to all 4 Series units

Connectors

- Inputs - 3 pin female XLR
- Outputs - 3 pin male XLR
- RS485 In/Out XLRs
- RS232 9 Pin (Female) D Connector

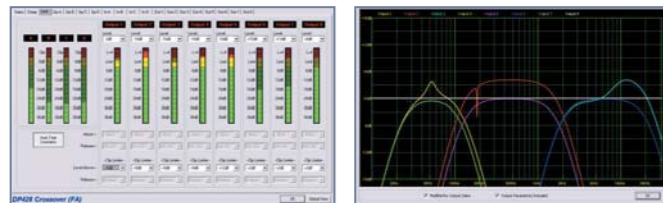
Networking and control with AudioCore



AudioCore - complete control of your networked audio system from your PC

AudioCore allows you to control and monitor up to 128 XTA devices using a simple XLR cable, or connect with TCP/IP to work through a standard Ethernet system, either cabled or wireless. Intuitive access and interface layout allows for quick and easy set-up of complete systems either on or off-line, with intelligent copy and paste functions to facilitate rapid configuration.

Once you're up and running, great features such as the 'System Monitor' allow you to keep an eye on the entire network at a glance, with real time metering and temperature readouts and instant access to anything that needs attention. Powerful 'Array Control' groups any outputs anywhere on the system and gives 'Virtual VCA' control of gains mutes and solos, for up to 28 zones. 'Global Ganging' allows grouping of EQ and delays for system-wide EQ tweaks.



4 Series Audio Management System

4 Series Full Specifications

Inputs - Electronically balanced (transformers optional)
AES/EBU fitted as standard to all Series 4 units

Impedance >10k Ohms
CMRR >65dB 50Hz - 10kHz

Outputs - All electronically balanced (transformers optional)
AES/EBU fitted as standard to all Series 4 units

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 >116dB 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

Filters Parametrics - 8 Per input / 9 per output
Additional filters 28-band graphic on each input
Each parametric can be switched to Bandpass, Allpass, Notch, VariQ, Shelf and Elliptical response
Phase filtering - 2 degree steps on each input and output

Crossover Filters

Bessel / Butterworth 6/12/18/24/48dB per octave
and Linkwitz-Riley 12/24/48dB per octave

Limiter

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

Connectors

Inputs 3 pin female XLR
Outputs 3 pin male XLR
RS485 In/Out XLRs
RS232 9 Pin (Female) D Connector

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

Due to continuing product improvement the above specifications are subject to change

