

SKU Number: XND24-DSP-0000-0204

Description

The XN D24 is a 2-IN/4-OUT digital speaker management system for fitting any crossover configuration, with suitable processing and control for live application use.

2 analog inputs and 4 analog outputs are managed by a powerful DSP Engine, in addition to 24 Bit AD/DA Converters.

Each input channel provides PEQ, Gain Control, Dynamic Low Boost, Noise Gate Function, RMS Compressor, Internal White/Pink Noise Generator and a Configurable Delay.

Each output offers up to 7 PEQ with crossover filters which slopes from 6 up to 48dB/Octave. Each output path also features peak limiter or RMS Compressor selectable, Dynamic Loudness filter (only Output 1,3) and driver alignment delay.

The XN D24 supports a full matrix mixing mode where inputs may be routed/ mixed in any ratio to any output. For remote configuration and control the XN D24 can be connected via USB or RS485 connections to the dedicated PC control Software.

Features

1. Outstanding Performance:

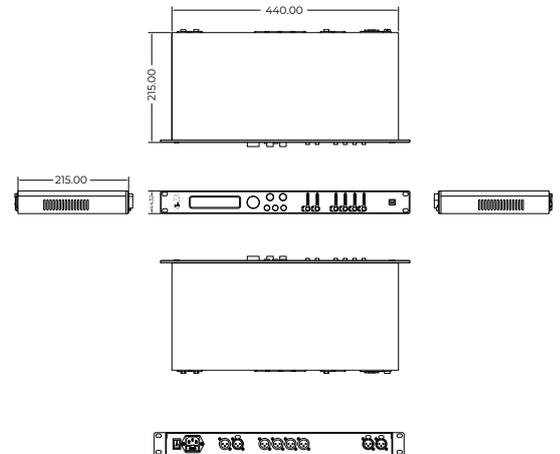
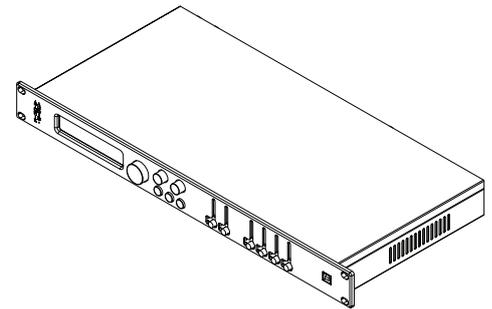
- Excellent sonic performance with 24bit high end converters coupled with 48kHz sample rate 2 inputs, 4 outputs with full matrix mixing.

2. Top-grade DSP Engine:

- 11 band parametric equalization per input channel.
- 7 band parametric equalization per output channel.
- Each band can be switched to Bell, Shelving.
- Crossover filters with slopes from 6dB/Octave up to 48dB/Octave including Butterworth, Bessel, Linkwitz-Riley.
- Each output features a dynamic range controller composed of a Peak Limiter and RMS Compressor.
- Adjustable Delay time up to 900 ms for every input channel upto 340ms for every output channel.

3. Direct PC/Network Connection and Control:

- Rear panel USB connector for direct PC communications.
- RS485 connection for system setup, monitoring and control via fully manageable remote PC software.
- Front panel interactive LCD display for local access and configuration.
- Simultaneous control up to 32 units via PC software.
- Up to 48 storable user presets.
- Security Lockout.



Dimensions in mm

Technical Specifications

1. Audio

- Analog Input : 2 x XLR electronically balanced
- Analog Output : 4 x XLR electronically balanced
- Minimum Load : 150 ohm
- THD+N : 0.001% at 1kHz OdBu
- S/N : >106dBA
- Frequency Response : 20Hz - 20kHz; -0.5dBu at 20Hz and 20kHz
- AD & DA Converters : 24bit - 48kHz

2. DSP & Processing

- DSP Resolution : 24bit (data) x 24 bit (coeff), 54 bit accumulation registers
: 96 bit precision on intermediate processing data
- Parametric Equalization : 11 filters per input
: 7 filters per output
- Filter Type : Bell, Shelving
- Filter Gain : From -12dBu up to +12dBu by 0.5dBu resolution steps
- Center Frequency : From 20Hz up to 20kHz with 1Hz resolution steps
- Filter Q/BW : Q from 0.4 up to 128
- Input gain : From -12dB to +12dB by 0.1dBu resolution steps
- Output gain : From -18dB to +12dB by 0.1dBu resolution steps
- Crossover Section HPF/LPF : Butterworth 6/12/18/24/36/48 dB per octave
: Bessel 12/24 dB per octave
: Linkwitz-Riley 12/24/36/48 dB per octave
- Internal Noise Generator : White/ Pink Noise; Level from -30dBu to 0dBu
- Input Noise Gate : Threshold from -90dBu up to -60dB
: Attack time from 1ms up to 1000ms;
: Release time from 10ms up to 1000ms
- Input RMS Compressor : Threshold from -14dBu up to +16dBu and Bypass
: Ratio 2:1~100:1; Knee: 0% ~ 100%
: Attack time from 5ms up to 200ms;
: Release time from 0.1 sec up to 3 sec
- Output RMS Compressor (if selected) : Threshold from -14dBu up to +16dBu and Bypass
: Ratio 2:1~100:1; Knee: 0% ~ 100%
: Attack time from 5ms up to 200ms; Release time from 0.1 sec up to 3 sec
- Output Peak Limiter (if selected) : Threshold from -14dBu up to +16dBu and Bypass
: Attack time from 5ms up to 200ms; Release time from 0.1 sec up to 3 sec
- DLF : Input - Boost Filter from 0% to 100%; Frequency from 20Hz to 20KHz;
: Output (only for Output 1,3) - Attenuation Filter from 0dBu to - 6dBu;
: Frequency - 20Hz to 1kHz; Q from 1 to 9.9 step 0.1
- Delay : 900 ms 10.4 us increment/decrement steps per input channel
: 340 ms 10.4 us increment/decrement steps per output channel
- Ground Noise : -90dBu

3. General

- Device Presets : 48 user presets
- Dimensions : 19" x 1.75" x 9" (482x44x230mm) 1RU
- Weight : 3 Kg