

Delta, DNA Series

Analogue Crossover Card for DNA20 and Delta 20

Introduction

The MC² Delta 20 and the DNA20 from XTA may both be fitted with a four channel analogue crossover card that offers the following facilities:

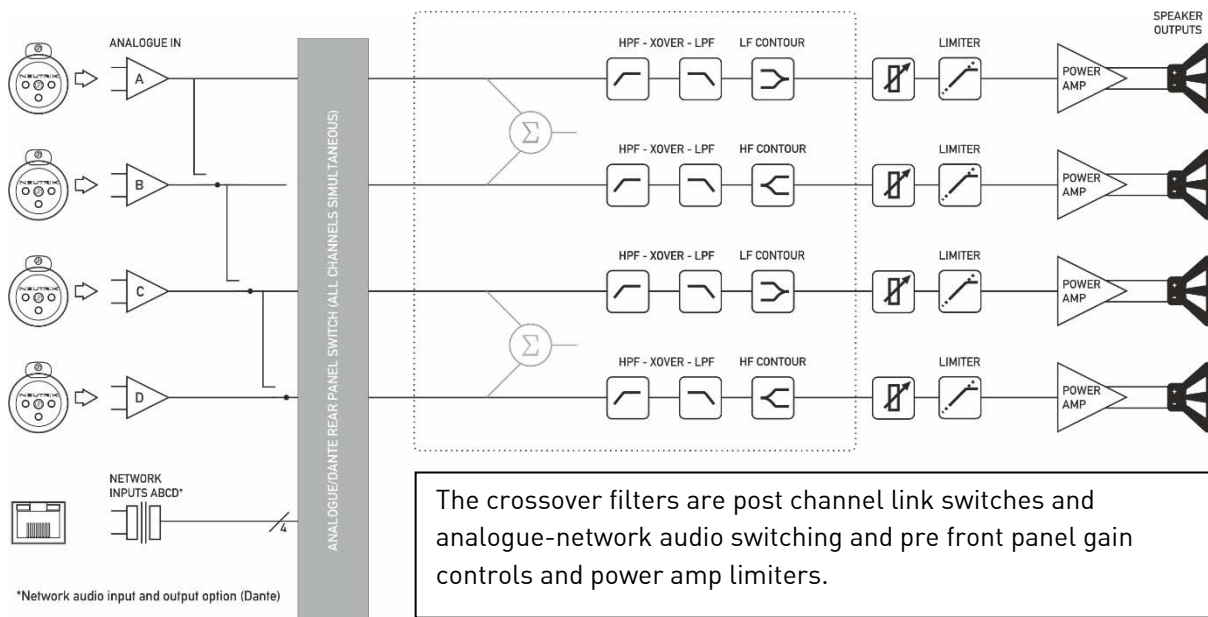
- Four channels of 12 or 24dB/Octave slope high and low pass crossover filtering (including Linkwitz-Riley)
- Mono summing of channels A+B or C+D for sub-bass applications – mono summing will reduce the roll-off available on the high pass filter to 12dB/Oct.
- Low frequency contouring (shelving filter) on channels A & C, high frequency contouring on channels B & D. Preset turnover frequency but internally adjustable cut/boost.

Example Configurations

Using the channel link switches on the rear panel, and the bridge switches, a variety of different crossover configurations are possible.

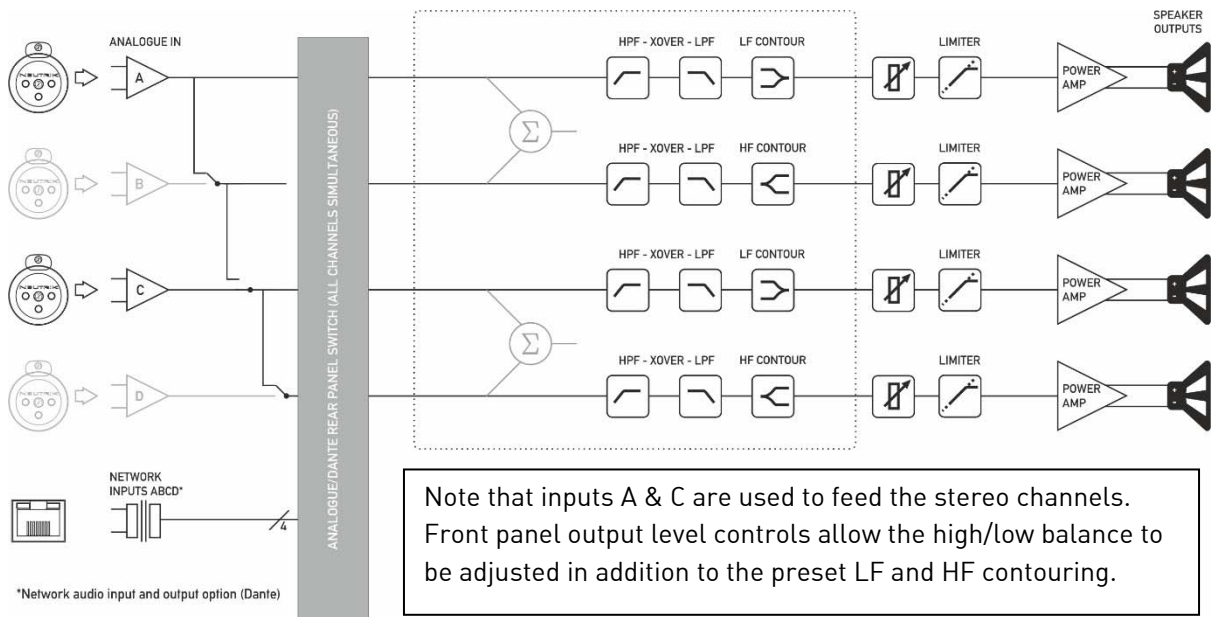
4 x 1 way crossover

The card is inserted in the signal path as shown below:



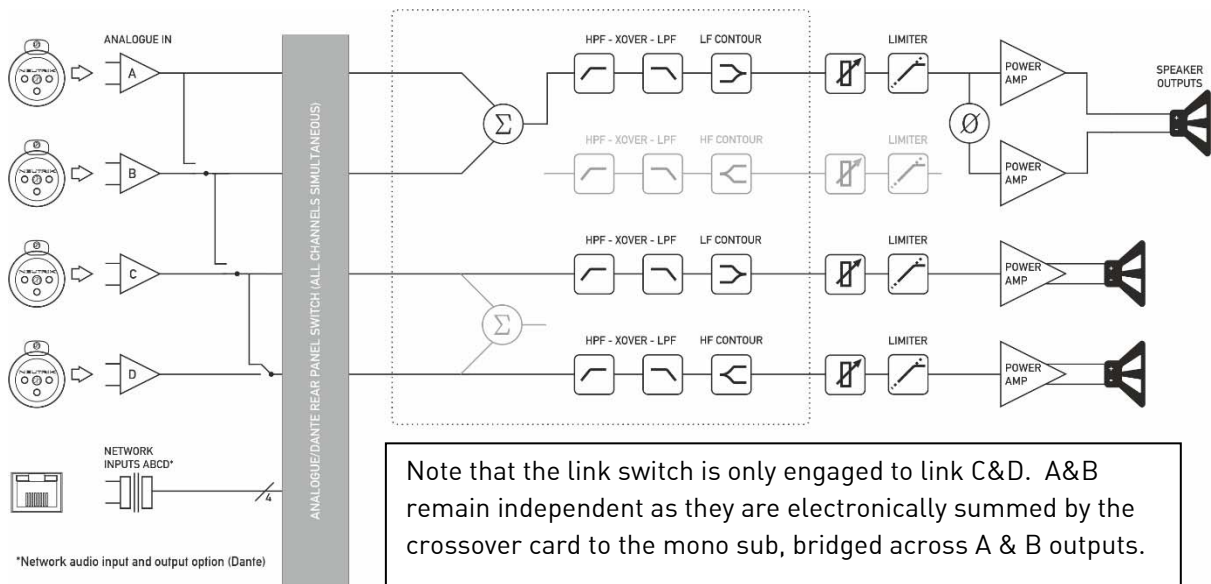
This shows a 4 x 1 way crossover with all channels independent (no link switches engaged) and so four totally separate crossover configurations. Engaging channel link switches will allow stereo or even 1 x 4 way configurations to be realised.

2 x 2 way crossover



Linking channel B to A and channel D to C means a stereo 2 way system can be configured. This layout means that an NL4 can carry an HF/LF to each cabinet.

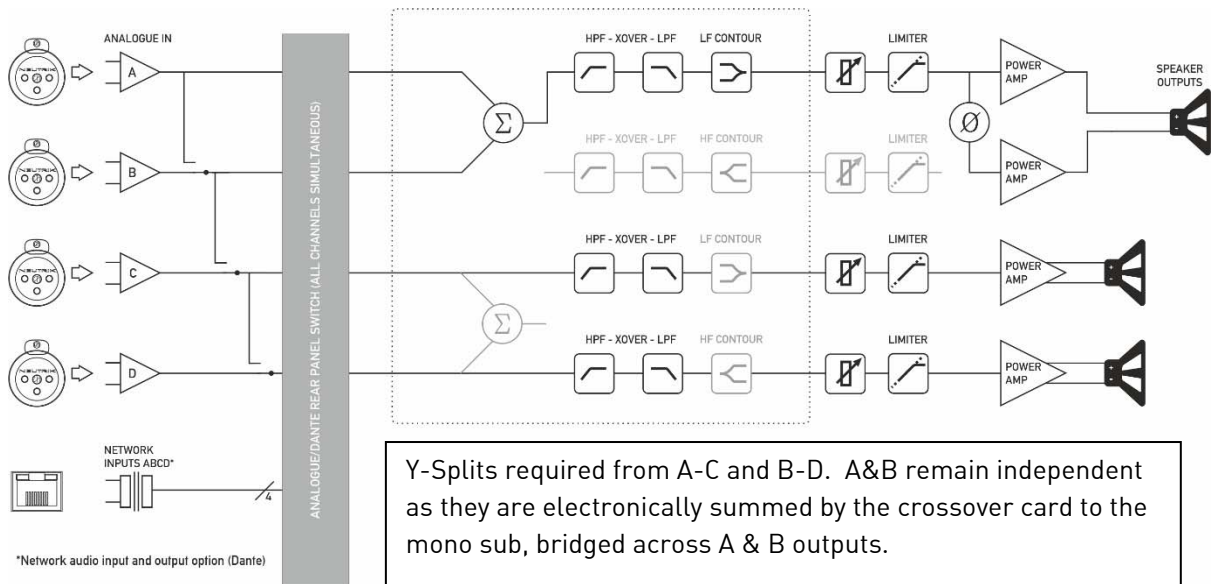
Mono sub + 1 x 2 way crossover



The Bridge switch is enabled on outputs A & B enabling higher power subs to be used creating a stereo 3 way system using two amplifiers.

Note that due to the internal electronic summing on the channels feeding the sub, the high pass crossover can now only be configured as a 12dB/Octave slope.

Mono sub + 2 x 1 way crossover



The Bridge switch is enabled on outputs A & B enabling higher power subs to be used creating a stereo system with full range cabs that can additionally have some LF roll-off to integrate better with the sub and increase headroom.

External Y-Splits are not be required if the system is using Network Audio inputs.

Note that due to the internal electronic summing on the channels feeding the sub, the high pass crossover can now only be configured as a 12dB/Octave slope.

Additional Notes

Crossover cards are only available for four channels at a time – individual channels may however be specified as full range (with or without contouring) if no crossover filtering is needed.

Crossover frequencies and slopes, HF and LF contours (turnover frequency only - cut/boost level is adjustable via internal presets) and mono summing on A+B and/or C+D must be specified at the time of ordering.

Limiting is preset only for amplifier clipping prevention – the card does not offer additional speaker limiter protection.