NGTC-0404 Digital Signal Processor

The NGTC-0404 is a Dante™ enabled digital signal processor with flexible I/O for the NEXGENTEC AUDIO distribution solution.

The NGTC-0404 is capable of simultaneously transmitting and receiving up to 64 channels of Dante™ audio (64 x 64) and has a completely flexible DSP design platform.

The NGTC-0404 can be easily interfaced with 3rd party control systems via the network. It can also be used with the NGTC-SDM, the software defined Dante™ matrix and monitoring device to deliver a virtually unlimited audio matrix system.

The nexgentec DSP super modules enable efficient design and deployment of the NGTC audio network system, featuring the highest levels of functionality and performance.

Key Features

- 4 Analog inputs / 4 analog outputs
- Configurable signal processing
- Rich palette of processing and logic objects, nexgentec DSP super modules
- Dante™ audio, 64 x 64 audio input / output channels per device
- LAN port for Dante™
- LAN port for control
- Informative front panel display
- 2 Control inputs and 4 logic outputs for GPIO integration
- Interface kit for third party control system integration

Power and Dimensions

Mains Voltage:	PoE+
Power Consumption:	< 25.5 Watt
BTU Rating:	< 85 BTU / hr
Operation Temperature Range:	5° to 30°C
Dimensions (H x W x D):	44 mm x 208 mm x 228 mm – 1/2 U
Weight:	2.4 kg

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Technical Specifications

Front Panel Led Indicators:	signal present, LCD display, data activity
Analog Inputs:	4 balanced
Mic/Line Inputs:	nominal gain 0 dB, 12, 24, 44 or 54 dB with +/- 24 dB trim
Input Impedance:	8 kΩ balanced, 4 kΩ unbalanced
Maximum Input Level:	+ 23 dBu
CMRR:	> 76 dB at 1 KHz
THD + Noise:	< 94 dB, unweighted; 1 kHz @ + 22 dBu with 0 dB gain
A/D Latency:	0.28 ms
Analog Outputs:	4 balanced
Maximum Output Level:	+ 24 dBu (+ 22.8 dBu into a 2 kΩ min. load)
Frequency Response:	20 Hz - 20 KHz (+ 0.5 dB / -1 dB)
THD + Noise:	< 95 dB, unweighted; 1 kHz @ + 22 dBu with 0 dB gain
Dynamic Range:	> 117 dB, A - weighted
Inpedance:	300 Ω balanced, 150 Ω unbalanced
D/A Latency:	0.60 ms
Control Ports:	2 inputs and 4 outputs
Control Input Voltage:	0 to 4.5 v
Control Input Impedance:	4.7 kΩ to + 5 V (2 - wire mode), > 1 MΩ (3 - wire mode)
Logic Output Voltage:	0 or + 5 V unloaded
Logic Output Impedance:	440 Ωs
Logic Output Current:	10 mA source, 60 mA sink
Watchdog Output:	Phoenix / Combicon connector for failsafe control
Opto Output Current:	14 mA maximum
Withstanding Voltage:	80 V maximum (Off)
Series Impedance:	220 Ω (isolated)
Control Network:	RJ45 Ethernet connector
Maximum Cable Length:	100 m / 300 ft, category 5 / 6 / 7
Digital Audio Bus:	1 x RJ45 Ethernet connectors
Maximum Cable Length:	100 m / 300 ft, category 5e /6 / 7
Maximum Number of Nodes:	60
Latency per Node:	4 (+/-1) Fs
Dante™ Audio Network:	1 x RJ45 connectors
Maximum Cable Length:	100 m / 300 ft, category 5e / 6 / 7

Recommendations

Use the PRCA phoenix to RCA converters for easy connection.

NGTC-PRCA-6	Phoenix to RCA interface input board
NGTC-PRCA-7	Phoenix to RCA interface output board