

# NGTC-0404NX Digital Signal Processor

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

The NGTC-0404NX 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-0404NX 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
- Slot for one option card
- 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
- 8 x 8 USB audio interface
- Redundant Dante™ ports (PRIM / SEC)
- LAN port for control
- RS232 port
- Informative front panel display
- 4 Control inputs and 8 logic outputs for GPIO integration
- Interface kit for third party control system integration

## Power and Dimensions

Mains Voltage:	100 - 240 VAC, 50 / 60 Hz
Power Consumption:	< 60 Watt
BTU Rating:	< 200 BTU / hr
Operation Temperature Range:	5° to 30°C
Dimensions (H x W x D):	44 mm x 480 mm x 240 mm – 1 U
Weight:	5.9 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 k $\Omega$  balanced, 4 k $\Omega$  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 k $\Omega$  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
- Impedance: 300  $\Omega$  balanced, 150  $\Omega$  unbalanced
- D/A Latency: 0.60 ms
  
- Control Ports: 4 inputs and 8 outputs
- Control Input Voltage: 0 to 4.5 v
- Control Input Impedance: 4.7 k $\Omega$  to + 5 V (2 - wire mode), > 1 M $\Omega$  (3 - wire mode)
- Logic Output Voltage: 0 or + 5 V unloaded
- Logic Output Impedance: 440  $\Omega$ s
- 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  $\Omega$  (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 5 / 6 / 7
- Maximum Number of Nodes: 60
- Latency per Node: (+/-1) Fs
  
- Dante™ Audio Network: 1 x RJ45 connectors
- Maximum Cable Length: 100 m / 300 ft, category 5 / 6 / 7

## Recommendations

Use the PRCA phoenix to RCA converters for easy connection.

NGTC-PRCA-6  
NGTC-PRCA-7

Phoenix to RCA interface input board  
Phoenix to RCA interface output board