BOGEN.

4-CHANNEL MATRIX MIXER PRE-AMP

Model NQ-P0100

DESCRIPTION

Bogen's Nyquist networked 4-Channel Matrix Mixer Pre-Amp (MMPA) offers cost-effective performance for permanent installations and commercial sound and is designed to meet the rigorous requirements of today's sophisticated sound systems. Developed with the sound contractor in mind, the MMPA provides unparalleled flexibility and versatility without the need for add-on modules. It includes state-of-the-art, built-in DSP for extensive and comprehensive signal processing – allowing users to skillfully manage and mix multiple audio input channels. The resulting audio signal mix can be directed to the MMPA's line out, or streamed over the Nyquist network where it can be used for audio distribution to one or more zones.

The Nyquist MMPA is now capable of Standalone Operation for use in audio applications where a networked mixer/pre-amp is desired for remote mixing and DSP control from a web browser-enabled device.

FEATURES

- **4- MIC/Line Inputs**
  - CH1-CH4 configurable balanced/unbalanced inputs via 3 XLR and 4 screw-terminal connections
  - Any single channel can be configured to support Push-to-Talk Mic applications
  - Mic inputs can be configured to supply Phantom Power when needed
  - CH1 can alternately be configured as an AES3 digital input

- **Web based DSP control**
  - 16-band Graphic Equalizer
  - Signal Present and Clip Monitor
  - Adjustable High Pass, Low Pass, and Bandpass Filters
  - Noise Gate
  - Compressor/Limiter
  - 7-band Parametric Equalizer

- **Standalone Operation**

- **Mixed signal can be routed to Line Out or over the Nyquist network**

- **Nyquist network-based audio input (paging, audio distribution)**

- **Line-Level Monitor Output to drive input to "legacy" (i.e., non-Nyquist) amplifiers**

- **Safety: CAN/CSA C22.2 No. 62368-1:2014; UL62368-1:2014; EN 62368-1:2014**

- **EMC: FCC Part 15b Class A; ICES-003, Issue 6: 2016; EN 55032:2012; EN 55035:2017**

- **Wall-, Rack-, or Shelf-mountable: 8.0" W x 1.70" H x 8.6" D (2" H with rubber feet installed)**

- **19" Rack Mount Kit (NQ-RMK03; sold separately)**

A & E SPECIFICATIONS

The Nyquist NQ-P0100 Matrix Mixer Pre Amp (MMPA) is designed to bring external audio into the Nyquist system. The MMPA interfaces with a local sound system by accepting one or more analog audio sources, mixing them, and outputting them to either, a) the network for Audio Distribution, or b) the MMPA's line level output that can then be inserted into an external amplifier to drive local sound system in gyms, cafeterias, auditoriums, etc. The MMPA supports the following: four (4) software selectable Mic or Line Input channels via three (3) XLR connectors and four (4) sets of screw-terminals; any single input channel shall be capable of being configured to support a Push-to-Talk microphone (e.g., Bogen DDU-250); one input shall be alternately configurable as an AES3 digital input.

The MMPA shall support the following features: line-level output to drive input on a local amplifier; one (1) USB 2.0 host port (Type-A connector) for future use; two (2) x RGB "full spectrum" LED status indicators.
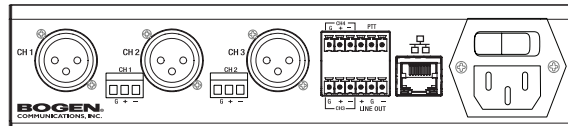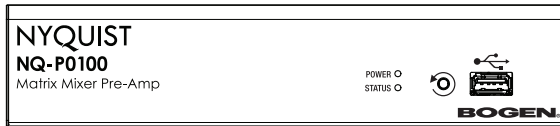
The MMPA shall include GUI based DSP controls; 16-band Graphic Equalizer; Signal Present and Clip Monitor; Adjustable High Pass, Low Pass, and Bandpass Filters; Noise Gate; Compressor/Limiter; and 7-band Parametric Equalizer.

The MMPA shall be powered by Universal mains supply (100VAC – 240VAC) and shall be wall- or shelf-mountable and include the required mounting bracket hardware.

The Nyquist MMPA shall be capable of Standalone Operation for use in audio applications where a networked mixer/pre-amp is desired for remote mixing and DSP control from a web browser enabled device.

POWERED BY NYQUIST™

The **C4000 Series** is built upon Bogen's award-winning Nyquist software-based IP communications platform, which provides users with unparalleled flexibility and scalability, whatever their application.

NYQUIST
NQ-P0100
Matrix Mixer Pre-Amp

POWER ○
STATUS ○

BOGEN

TECHNICAL SPECIFICATIONS

	NQ-P0100
MIC Input Sensitivity (Gain min./max.)	Continuously variable from 0.1V to 0.006V RMS
MIC Phantom Power	+15 VDC
MIC Equivalent Input Noise (EIN)	100 dB
S/N Ratio (20 kHz BW)	97 dB
Line Input Sensitivity (Gain min./max.)	Continuously variable from 2V to 0.1V RMS
Line Out Bandwidth	20 Hz - 20 kHz <0.03% THD+N
Line Out Level	3 V (+10 dB)
Line Output	600-ohm electronically balanced, via 3-pin Phoenix on 6-pin Phoenix Plug/Header
THD+N @ 1 kHz	<0.03%
Connectors: **Power**	10A Line Cord C14 IEC Inlet
Line/MIC Input	Channels 1, 2 Balanced 3-pin Phoenix Plugs/Headers and Balanced 3-pin Neutrik XLRs; Channel 3 Balanced 3-pin Phoenix on 6-pin Phoenix Plug/Header and Balanced 3-pin Neutrik XLR; Channel 4 Balanced 3-pin Phoenix only via 6-pin Phoenix Plug/Header; RJ45; USB 2.0 Type A
(PTT) Push-to-Talk Mic Connection	DDU250 or equivalent; 500-ohm impedance with a 4-conductor cable (2 shielded); PTT dry contact switch input on pin-5 of 6-pin Phoenix Plug/Header
Outputs	Line Out balanced via 3-pin Phoenix on 6-pin Phoenix Plug/Header; Streaming out via Nyquist network
AES3 (IEC-60958 Type-I) Digital Input	Channel 1 alternately functions as an AES Digital Input (110-ohm Input Impedance)
AC Input Voltage Range	85 VAC to 265 VAC 50/60 Hz
Maximum AC Current	0.6A
Indicators	Status & Power LEDs (front) / Network LEDs (rear)
Operating Temperature Range	-15 C to +40
DSP Based Audio Features	16-band Graphic Equalizer; Signal Present and Clip Monitor; Adjustable High Pass, Low Pass and Bandpass Filters; Noise Gate; Compressor/Limiter; 7-band Parametric Equalizer
Networking	Cat5 or better 10/100 network connectivity to Bogen's Nyquist network
Product Weight	2.6 lbs.
Physical Dimensions:	1/2 Rack Width x 1RU
Single Rack Space (1RU)	8.0" W x 1.70" H x 8.6" D (Depth includes Phoenix connectors; width is without rack mount brackets attached; height excludes rubber mounting feet)