

## Bogen Nyquist 2-Channel AoIP Gateway (Model NQ-GA400P)



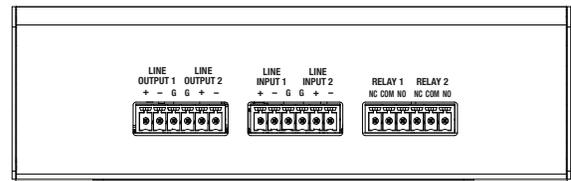
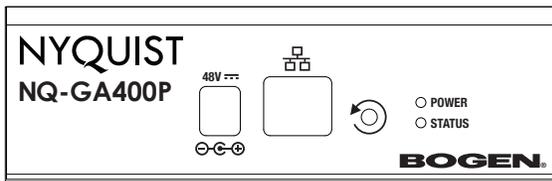
### Description

The Nyquist 2-channel Audio over IP (AoIP) Gateway provides customers with a bridge between analog and digital signal channels. The GA400P digitally encodes analog signals and transmits them over the network, where they are then decoded by a second AoIP device to provide line-level audio to analog systems, such as amplifiers, and analog paging or sound systems. Similarly, the GA400P can take analog audio signals, encode them in digital format and distribute them over the Nyquist network.

The NQ-GA400P incorporates two balanced line-level inputs and two balanced line-level outputs, along with two Form-C SPDT-type 2-amp dry contact relays that activate when a signal is present on a corresponding line-level output. Designed to operate over a 10/100 Ethernet network, the NQ-GA400P AoIP Gateway is IEEE 802.3af-compliant and can be powered using Power over Ethernet (PoE) switch or PoE injector when a PoE switch isn't available.

### Key Features & Benefits

- ✓ **PoE powered:** Customers can connect these appliances to standard PoE switches
- ✓ **A gateway between analog and digital systems** enables users to encode/decode audio for transmission across a network
- ✓ **Create a digital bridge between two analog systems** A cost-effective solution to interconnect analog audio systems quickly and easily in different locales or buildings for wide-area communications
- ✓ **Standalone capability** Connect to 3rd party SIP and/or multicast capable systems and use as a Line-out audio endpoint for digital-to-analog communications. Encoder capable of generating unicast or multicast audio streams in a variety of codec formats.



## Technical Specifications

<b>S/N Ratio (20k BW)</b>	80 db
<b>Power Output Bandwidth</b>	20 Hz - 20 kHz < .1% THD+N
<b>THD+N @ 1 kHz Rated Power</b>	<.05% THD+N
<b>Frequency Response @ 1 Watt</b>	20 Hz - 20 kHz +/-0.25 dB
<b>Audio Amplifier Class of Operation</b>	D
<b>External DC Power</b>	48-56VDC .1A (5.5mm x 2.1mm Barrel Jack)
<b>PoE+ (Power over Ethernet)</b>	Class 1 device (RJ45)
<b>Relay Output Connectors</b>	2x 3.5mm Phoenix 3 pin header
<b>Relay Outputs</b>	Form-C, SPDT, 2-Amp dry contact relays
<b>Audio Line Level Output Connector</b>	2x 3.5mm Phoenix 3 pin header
<b>Audio Line Level Input Connector</b>	3-pin 3.5mm Phoenix Plug/Header
<b>Audio Line Level Input Sensitivity</b>	Continuously variable from 2V to 0.1V RMS
<b>Audio Line Level Output</b>	2.2V RMS @ 10k Ohms (+27dB) Electronically Balanced
<b>Indicators</b>	Power & Status LEDs (front) / Network LEDs (front)
<b>Operating Temperature Range</b>	-15 C to +40 C
<b>Protection</b>	ESD, RF, DC, Low Frequency. Thermal, Low Impedance, Short Circuit, Clip Limiting
<b>Networking</b>	Cat5 or better 10/100 network connectivity
<b>Certifications</b>	Carries UL602638 Safety Mark
<b>Product Weight</b>	1.4 lbs
<b>Physical Dimensions</b>	5.32" L X 5.5" W X 1.7" H
<b>Accessories</b>	PS4815W, NQ-RMK01, NQ-RMK02

## Applications



Healthcare



Education



Corporate



Transportation

## A & E Specifications

The Nyquist NQ-GA400P 2-Channel Audio over IP (AoIP) Gateway is a versatile device designed to seamlessly integrate analog audio systems with modern digital networks. Its encoder/decoders are designed to serve as a bridge between analog and digital signal channels, offering the ability to encode analog signals for network transmission and decode received digital signals to provide line-level audio to analog systems. The gateway is compatible with line level devices and operates within the Nyquist system for reliable and low-latency audio transmission. It finds applications in scenarios such as upgrading analog setups, integrating legacy audio systems with Nyquist C4000/E7000 systems, and facilitating smooth audio signal transmission between analog and digital systems. Two NQ-GA400P modules can be placed in Standalone operation and serve as a virtual wire between two analog systems without the need of a Nyquist System. The gateway complies with industry standards and regulations for audio equipment and network devices. Systems that don't offer these capabilities shall not be considered equivalent.

### LIMITED WARRANTY, EXCLUSION OF CERTAIN DAMAGES

**Bogen Nyquist GA400P** is warranted to be free from defects in materials and workmanship for five (5) years from the date of sale to the original purchaser. Any part of the product covered by this warranty that, with normal installation and use, becomes defective (as confirmed by Bogen upon inspection) during the warranty period will be repaired or replaced by Bogen, at Bogen's option, with new or refurbished product, provided the product is shipped insured and prepaid to: Bogen Factory Service Department: 4570 Shelby Air Drive, Suite 11, Memphis, TN 38118, USA. Repaired or replacement product(s) will be returned to you freight prepaid. This warranty does not extend to any of our products that have been subjected to abuse, misuse, improper storage, neglect, accident, improper installation or have been modified or altered in any manner whatsoever, or where the serial number or date code has been removed or defaced.

**THE FOREGOING LIMITED WARRANTY IS BOGEN'S SOLE AND EXCLUSIVE WARRANTY AND THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY. BOGEN MAKES NO OTHER WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED AND EXCLUDED TO THE MAXIMUM EXTENT ALLOWABLE BY LAW.** Bogen's liability arising out of the manufacture, sale or supplying of products or their use or disposition, whether based upon warranty, contract, tort or otherwise, shall be limited to the price of the product. **IN NO EVENT SHALL BOGEN BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, LOSS OF DATA OR LOSS OF USE DAMAGES) ARISING OUT OF THE MANUFACTURE, SALE OR SUPPLYING OF PRODUCTS, EVEN IF BOGEN HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR LOSSES.** Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

Products that are out of warranty will also be repaired by Bogen Factory Service Department -- same address as above or call 201-934-8500, at owner's expense. Returned products which do not qualify for warranty service, may be repaired or replaced at Bogen's option with a previously repaired or refurbished item. The parts and labor involved in these repairs are warranted for 90 days when repaired by the Bogen Factory Service Department. All parts and labor charges as well as shipping charges will be at the owner's expense.

All returns require a Return Authorization number. For most efficient warranty or repair service, please include a description of the failure.

07/2023

**BOGEN.COM | 1.800.999.2809**

© Bogen Communications LLC 740-00208 20230727