

PLENUM-RATED VoIP INTERCOM MODULES

Models NQ-GA10P, NQ-GA10PV





Model NQ-GA10P Model NQ-GA10PV

DESCRIPTION

Bogen's plenum-rated Nyquist VoIP intercom modules offer a convenient and cost-effective means of transforming any low-impedance analog speaker into a full-featured Power-over-Ethernet (PoE) IP speaker. They utilize the latest technology to deliver superior audio quality, making them perfect for IP paging and audio distribution, while the built-in talkback capability allows them to be used in VoIP intercom applications. Designed with the commercial sound contractor in mind, these intercom modules' plenum-rating provides unparalleled flexibility and versatility to help simplify site design.

In addition to their wide-ranging flexibility, these intercom modules use the latest in Class D amplifier technology and provide unmatched sonic quality, exceptional reliability, and reduced power consumption to permit standalone PoE operation over the local network.

These 10-watt, single channel, intercom modules are available with or without an HDMI video output, depending upon the application needs. They also offer a CAN bus interface to work with the NQ-E7020 Digital Call Switch (DCS) and a Form-C relay for controlling third-party devices. Additionally, when paired with Bogen's ANS500M microphone module (optional), these intercom modules can be turned into an ambient noise sensor to help maintain paging and background music intelligibility in high-noise environments.

FEATURES

- PoE 802.3af compliant
- · Low-impedance (8 ohm) speaker output
- Network-based audio output (paging, intercom, audio distribution)
- Talkback support
- Push-to-Talk (PTT) Microphone support (Bogen DDU250 or equivalent)
- Audio input that can be routed anywhere over Bogen's Nyquist network
- DSP-based noise rejection and voice bandwidth optimization
- · Web-based configuration

- Analog Call Switch support (Bogen CA15C, or equivalent)
- DCS support (Bogen NQ-E7020)
- Control Relay Output
- HDMI Video Output (NQ-GA10PV model only)
- Automatic selection of the highest compatible display mode from probed modes of the attached HDMI display
- In-wall, in-ceiling, shelf, or device mountable UL 2043 plenum-rated package
- Integrated slotted mounting flanges
- Optional 48VDC External Power Supply (PS4815W; sold separately)

A & E SPECIFICATIONS

The Nyquist based plenum-rated VoIP intercom module shall be a model (NQ-GA10P or NQ-GA10PV) rated at 10 watts RMS and shall utilize UL 2043 plenum-rated packaging. The intercom module shall be capable of being powered by either 802.3af compliant Power-over-Ethernet (PoE) switch, PoE injector, or model PS4815W 48 - 56VDC .3A (5.5mm x 2.1mm Barrel Jack) power supply when PoE isn't available. The intercom module shall provide a frequency response @ 1 Watt 20-20 kHz +/- 0.25 dB at rated power. Distortion shall be less than 0.03%. The intercom module shall contain one control relay output SPDT Rated 2A; NC (Normally Closed); Common; NO (Normally Open); and G (Ground). The intercom module shall be capable of supporting Digital Call Switch(es) model NQ- E7020 and/or CA-15C or CA-21B analog call switches. The intercom module shall provide support for a Bogen DDU250 Push-to-Talk microphone. Intercom modules that don't provide Push-to-Talk microphone support shall not be considered equal. The intercom module output shall provide 8-ohm speaker output. The NQ-GA10PV version intercom module shall contain one HDMI output supporting HDMI 1.3 (max. 1920 x 1080 @ 24/30 Hz and 1280 x 720 @ 60 Hz) for connection to an LCD display or other compatible display device. The NQ-GA10PV shall support automatic selection of the highest compatible display mode from probed modes of the attached HDMI display. The amplifier shall employ convection air cooling. Amplifiers that require fans for cooling shall not be considered equal.



TECHNICAL SPECIFICATIONS

FICATIONS	NQ-GA10P	NQ-GA10PV
Power Output	10W @ 8 ohms	
S/N Ratio (20k BW)	80 db	
Power Output Bandwidth	20 Hz - 20 kHz < .1% THD+N	
THD+N @ 1 kHz Rated Power	< .05% THD+N	
Rated Load Impedance	8 ohms	
Frequency Response @ 1 Watt	20 Hz -20 kHz +/- 0.25 dB	
Audio Amplifier Class of Operation	D	
External DC Power	48 - 56VDC .3A (5.5mm x 2.1mm Barrel Jack)	
DC Input Range	15-Watt 48V to 56V	
PoE (Power over Ethernet)	IEEE 802.3af standard, Class 3 device (RJ45)	
Input/Output Connector	12-pin Phoenix Plug/Header	
CAN Bus Port (1)	5VDC; CH (CAN Hi); CL (CAN Low); G (Ground); Bus Speed 125 kbits/sec	
Call Switch Input (2)	Dry Contact Closure on Phoenix Plug Terminals G & A	
Analog Speaker Connection	Phoenix Plug Terminals 1 & 2	
Audio Talkback	Half-Duplex using the analog speaker for talkback; Phoenix Plug Terminals 1 & 2	
Ambient MIC Input	Ambient Noise Sensor Microphone (ANS500M); Phoenix Plug Terminals 1 & 2	
Push-to-Talk Mic Connection	DDU250 or equivalent; 500-ohm impedance with a 4-conductor cable (2 shielded) PTT dry contact switch on Phoenix Plug Terminals G & A; Mic audio on Phoenix Plug Terminals 1 & 2	
Relay Contacts	SPDT Rated 2A; NC (Normally Closed); Common; NO (Normally Open); G (Ground)	
HDMI Output	N/A	HDMI 1.3 (max. 1920 x 1080 @ 30 Hz and 1280 x 720 @ 60 Hz
Indicators	Power & Status LEDs (front) / Network LEDs (front)	
Operating Temperature Range	-15 C to +40 C	
Protection	ESD, RF, DC, Low Frequency, Thermal, Low Impedance, Short Circuit, Clip Limiting	
Networking	Cat5 or better 10/100 network connectivity to Bogen's Nyquist network	
Certifications	CE and FCC Part 15b Class A: ICES-003, Issue 6: 2016: EN 55032:2012: EN 55035:2017: UL 2043	
Product Weight	0.7 lbs.	
Physical Dimensions:	3.75" W x 7/8" H x 6.2" D (depth includes Phoenix connector)	

(1) For connection to Bogen's NQ-E7020 Digital Call Switch: (2) Bogen CA-15C or equivalent

Limited Warranty, Exclusion of Certain Damages

The NQ-GA10PV are 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 repaired 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 items. 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.

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

09/2017