

# NYQUIST SYSTEM CONTROLLER

# **Model NQ-SYSCTRL**



#### DESCRIPTION

Bogen's Nyquist System Controller offers contractors a cost-effective means to deploy Nyquist based solutions using a state-of-theart processing platform preinstalled with the Nyquist application server software. The Nyquist System Controller facilitates quick installs and offers high-performance operation for even the largest Nyquist system configurations. Developed with commercial sound in mind, the Nyquist System Controller can simultaneously distribute a virtually unlimited number of audio streams anywhere across the network, making it perfect for background music applications.

The Nyquist System Controller can manage applications that require nearly any mix of multi-zone paging, intercom calling, or background music distribution at businesses, restaurants, retail stores, industrial facilities, and many other venues.

Nyquist systems also support a licensable option for using a secondary System Controller to provide Automatic Failover capability in cases where the primary System Controller fails or goes offline for whatever reason. When this occurs, the secondary System Controller automatically takes over and returns the system to normal service.

#### FEATURES

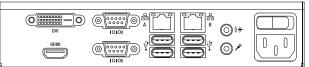
- Configuration and management via a web-based graphical user interface (GUI)
- Remote access from almost any PC/MAC, tablet, or mobile device
- Continuous monitoring of stations and appliances to ensure system operation
- Front panel power LED
- SIP tie-line and trunking support for connection to external phone systems or VoIP service providers
- Station and zone capacity for any Nyquist application (determined by system license)
- · Talkback capability in any zone
- Multicast support for all zone paging and audio distribution
- Paging and announcement support across multiple facilities
- Pre-recorded and (optional) text-to-speech announcements
- Built-in streaming Internet radio and access to subscription-based music services
- Automatic Failover option available (requires a second System Controller and software license)

- Simultaneously distribute a virtually unlimited number of audio streams
- Music automatically added to music library from USB port
- Network-based audio that can be sourced (input) from any number of Nyquist appliances (NQ-P0100, NQ-GA20P2, etc.)
- Ample storage for music files, recorded announcements, and call recordings
- G722 and OPUS audio codec support to deliver superior HD audio quality
- Event scheduling of tones and audio distribution to all or select paging zones
- Emergency notifications that have higher priority over normal audio events
- Convection air cooled, fanless design for quiet, maintenance free operation
- Wall-, Rack, or Shelf-mountable 1 RU package
- 19" Rack Mount Kit (NQ-RMK03; sold separately)

# A & E SPECIFICATIONS

The Bogen System Controller shall be the Nyquist NQ-SYSCTRL for commercial paging needs. It is designed specifically for the high degree of scalability and flexibility required in commercial paging and audio distribution applications. The System Controller interfaces with the customer's data network to leverage the ultimate level of scalability for single or multiple locations and system sizes ranging from two to tens of thousands of stations. The System Controller shall be capable of being configured via the web-based GUI from virtually any PC/MAC, tablet, or mobile device. The System Controller shall continually monitor the Nyquist devices connected to the system and shall report via email when a device stops functioning correctly. The System Controller must support SIP tie-line and trunking support for connection to external phone systems. The System Controller shall use G722 and OPUS audio codec support to deliver superior HD audio quality. The NQ-SYSCTRL shall be capable of providing pre-recorded and (optional) text-to-speech announcements. The System Controller shall be capable of simultaneously distributing a virtually unlimited number of audio streams anywhere across the data network. The NQ-SYSCTRL shall be capable of being paired with a secondary NQ-SYSCTRL to provide Automatic Failover capability when licensed appropriately. The System Controller is a convection air cooled, fanless design for quiet, maintenance free operation. System Controllers that don't provide the these features shall not be considered equivalent.





## TECHNICAL SPE

CIFICATIONS		NQ-SYSCTRL
Video Display		HDMI, DVI-D
Network Support		Dual 10/100/1000 Mbps NICs
Protocol Support		HTTPS, UDP, RTP, FTP, TFTP, SSH, SIP2, Unicast, Multicast
Codec Support		G711, G719, G722, G723, G726, G729, OPUS, Speex, a-law, µ-law, SIREN7, SIREN14, ADPCM
Connectors:	Power	10A Line Cord C14 IEC Inlet
	Line/MIC Input	3.5mm Line Out / 3.5mm Mic In (RESERVED FOR FUTURE USE)
	Network	2 x RJ45
	Misc. Outputs	4 x USB 3.0 ports, 2 x Serial ports (1 x RS232, 1 x RS232/422/485)
AC Input Voltage Range		100 VAC to 240 VAC 50/60 Hz
Maximum AC Current		1.5A
Indicators		Power LED (front) / Network LEDs (rear)
Operating Temperature Range		0° C to +60° C
Certifications		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
Physical Dimensions:		1/2 Rack Width x 1RU
Single Rack Space (1RU)		8.0"~W~x~1.70"~H~x~10.25"~D (Depth includes Phoenix connectors: width is without rack mount brackets attached: height excludes rubber mounting fee

### Limited Warranty, Exclusion of Certain Damages

The NQ-SYSCTRL is warranted to be free from defects in materials and workmanship for two (2) 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.

07/2018



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.