

BOGEN®

E7000 SERIES

The Modern Educator's Digital Communication Solution



System Features

Administration/Staff FEATURES

- Microsoft Active Directory via LDAP support
- iOS and iPadOS support
- All Call Paging
- Emergency All Call Paging
- District-Wide All Call
- District-Wide Emergency All Call
- Zone Paging
- Unlimited number of Paging Zones
- Unlimited simultaneous Paging Calls
- Multi-facility paging/announcements
- Location Monitoring (Modes: Spy, Whisper, Barge)
- Web-based GUI Dashboard (Audio, Alarms, Announcements, Calling, Paging, Tones)
- Web-based GUI Directory Menus for Announcements, Alarms, Paging Zones, Stations, Tones
- Web User Interface: SIP Client (softphone) - allows calls, paging, etc., from Web UI
- Executive override to access intercom paths
- Admin can override others and interrupt page
- Admin Groups: "Emergency" admin group
- Admin Phone Menus: Alarms, Announcements, Paging Zones, and Tones
- Direct Select Rooms from VoIP Admin Phone
- Multi-Station Page Exclusion (Ability to turn off paging into an area as needed, e.g., for testing, mtg's, etc.)

Analog Station Bridge FEATURES

- Built-in Amplification (max. 40W per port) (Intercom, Paging, and Program Distribution)
- Supports both traditional Analog and/or Digital Call Switches (NQ-E7020-G2)

- 24 Ports or Classrooms supported per Analog Station Bridge; unlimited number of ASBs supported per system
- Facilitates Head-End Replacement/Reuse of Existing Cable Infrastructure
- Analog Speaker Support (25V / 70V) and Analog Call Switch Support

Audio Distribution & Announcement FEATURES

- NQ-ZPMS-G2 Zone Paging Mic Station support
- Tablet Based Zone Volume and Audio Distribution Control
- Sound Masking S/W Feature option
- Unlimited Announcement Files
- Upload and Manage WAV & MP3 Announcement Files
- Audio Program Control via DTMF - Admin Phone (i.e., can turn on or off from phone)
- Toggle Music Sources On/Off
- GUI-based Program Distribution
- Playlists (with easy title drag-n-drop capability)
- Music Import and Management
- Automatic Playlist Creation from USB Stick (Places all music files into a single playlist)
- Record Announcements from an Admin Phone or Web UI
- Separate Zone Volume Controls for Paging vs. Audio distribution
- Audio Distribution to multiple zones simultaneously
- Integrated Streaming Internet radio (airable)
- Integrated commercially licensed streaming music service (SoundMachine)
- Scheduled Audio from any source (airable Radio, SoundMachine, Playlists, and Line-Input)
- Recurring Scheduled Announcements
- Targeted Announcements to any specified zone(s)
- Pink noise and white noise tones to assist with setting-up paging zone volumes

Traditional Intercom FEATURES

- Unlimited System Capacity (The number of stations/ports on the system)
- Always an Answer (calls can be put into admin groups so call will always be answered)
- Intercom Call-in (From classroom call switch)
- Unlimited Simultaneous Intercom Calls Per Facility
- Priority Paging Mic (external Mic for emergency page)
- Unlimited Program Channels
- Unlimited Number of Class of Service (CoS) Profiles
- Unlimited Paging, Time, and Audio Zones
- Emergency Call-in (Emergency calls from classroom ring with special ring & alert)
- Call Assurance Audio File plays in room to confirm call (analogous to Call Assurance LED)
- 3 Call Priorities for Call Switch (Normal, Urgent, Emergency)
- Relay Input to trigger Events or Routines
- Relay Driver Output Controls (Used to control events, e.g., open door, turn on lights, etc.)
- Emergency Call from Normal Call Switch (If call is in progress, it can be escalated to emergency status)
- Transfer Call from Room Speaker to Room Phone (Call to ceiling speaker can be dropped to the phone for privacy)
- Change/Modify Preannounce Tone
- Create Text-To-Speech Based Announcements (Optional)
- Legacy Analog Amplifier Support
- Page Stacking / Queuing
- Ambient Noise Sensing (requires one or more NQ-GA10P paired with an ANS500M)
- High quality Opus codec used on Intercom calls

IP Phone Support FEATURES

- Nyquist Zone Paging Microphone Station (NQ-ZPMS-G2) and video calling between NQ-ZPMS-G2 phones
- VoIP Admin Phone (NQ-T1100) with Customizable Phone Button Placement via the Nyquist GUI
- VoIP Staff/Classroom Phone (NQ-T2000)
- Support for third party ATA devices for FXO and FXS connections with custom configurations for FXS operation for feature like Off-Hook Ring Down
- Supports Ring Central, Twilio, and Zoom SIP calls

Event Schedules & Master Clocks FEATURES

- 72-Hour Backup Bell Schedule
- Powerful, Innovative Web-based Scheduling Interface
- Activate a Routine in Conjunction with a Scheduled Event
- Execute Any Routine Action when a selected schedule is activated
- Conditional Execution of Routine Actions based on User-Supplied Statements/Parameters
- Scheduled Volume Level changes via Routines
- Master Clock Capability
- Unlimited Number of Holiday Schedules (Ability to change Event Schedules so that tones and bells don't disturb surrounding areas when school is not in session)
- Ability to Sync External Master Clock with I/O Contact Closure
- NTP Server Support (Ability to act as or sync to an external NTP Server)
- Unlimited Schedules (Restricted Edit & View by User Role)
- Unlimited Scheduled Events
- Ability to Import/Export Holiday Schedules
- Monthly Calendar Views
- Tones: Generate/Create Tones, Upload Tones, Manage Tones

Networked Audio Power Amplifier Support FEATURES

- Gen2 Amplifier Support (NQ-A2xxx-G2/NQ-A4xxx-G2)
4-Ch. x60W, x120W, and x300W models available
2-Ch. x60W, x120W, and x300W models available
- Public Address Mixer/Amplifiers NQ-PA120/240/600
- Integrated Pro-Audio Digital Signal Processing
- Enhanced DSP Controls
- 20W PoE+ Plenum-Rated Amplifier Module with Line Output
- 40W PoE++ Plenum-Rated Amplifier Module with Line Output

I/O Related Equipment FEATURES

- Networked Matrix Mixer Pre-Amp with Pro-Audio DSP (NQ-P0100) (External MIC, AUX, & Digital Audio Support)
- Networked I/O Controller (NQ-E7010) (8 Inputs/8 Outputs per I/O Controller)
- Networked 2-Ch. AoIP Gateway (NQ-GA400P) (2 Line-Level Inputs and 2 Line-Level Outputs)

Configuration & Maintenance FEATURES

- System Controller with pre-installed OS & E7000 application software
- Embedded Nyquist DHCP Server Support
- Ability to Create a Self-Signed Bogen Root SSL Certificate
- Simplified Zone Configuration
- Automatic server software and firmware check & download
- Wizard-based Appliance Discovery
- Wizard-Based System Setup & Configuration (when using the NQ-SYSCTRL Nyquist System Controller)
- Multiple NTP servers allow the system to be configured using more than one NTP server
- Web GUI Programming and Diagnostics (Ability to program and test from anywhere)
- Log File Viewing and Export (Server and System)
- Web GUI Station Status (Real-time status of VoIP devices)
- Custom Normal, Urgent, and emergency call audio - Installers can change Normal, Urgent, Call and Emergency Call Audio Files by uploading custom audio files
- System Backup/Restore
- Automated/Scheduled System Backup
- GUI-based System Status (Current operations displayed on Dashboard)
- Monitoring of Server Status via SNMP
- Unlimited Definitions of Users, Roles, and Permissions
- Software Adjustable Paging Zone Volume
- Device & Station Supervision (with Dashboard Notifications and Email Alerts)
- Automatic update of Appliance Firmware (to match server S/W version)
- Remote Facility Status (via Routines)

IP Speaker Support FEATURES

- Digital Call Switches (NQ-E7020-G2)
- Combo Clock / Messaging Wall Baffle Speaker (NQ-S1810WBC)
- VoIP Ceiling Speaker w/Talkback (NQ-S1810CT-T1)
- VoIP Wall Baffle Speaker w/Talkback (NQ-S1810WT-G3)
- CAN Bus Device Support (e.g., NQ-E7020-G2 DCS)
- PoE Plenum-Rated VoIP Intercom Module (NQ-GA10P) (Turns any 8-ohm speaker into a VoIP talkback speaker)
- PoE Plenum-Rated VoIP Intercom Module with HDMI output (NQ-GA10PV) (Turns any 8-ohm speaker into a VoIP talkback speaker and HDMI TVs/monitors into combo clock/message displays)
- Nyquist IP Entry Door Phone (NQ-EDP01)
- Nyquist VoIP Indoor/Outdoor IP Horn with Talkback (NQ-IPHRN01)

- Nyquist VoIP Double-Sided LED Message Display & Flasher (NQ-DSC01)
- Nyquist Digital Remote Volume Control Call Switch (NQ-VCTRL)

Security & Safety FEATURES

- SIP TLS and SRTP Secured audio between all Nyquist Appliances and most third-party hardware
- Automatic Failover option for Nyquist System Controller (NQ-SYSCTRL)
- Secure SIP (TLS 1.2) and SRTP for PBXi SIP Trunks
- Backup Paging via NQ-T1100 Admin Phones or NQ-ZPMS Mic Stations
- Clock/Messaging Display capability with NQ-GA10PV, NQ-DSC01, and NQ-S1810WBC
- Routines API v2 for 3rd Party Integrations (allows images and audio to be passed to Nyquist)
- Routines API v2: Support for incoming CAP messages
- Support inbound POSTs with JSON files from 3rd party systems; this allows images and audio to be passed to Nyquist
- Routines (allow automatically launching of a sequence of actions, that the Nyquist system executes as a result of a "triggering" system event or manual input. Routines can support your crisis plans for situations such as school lockdown, weather events, or emergency evacuation.)
- Emergency Check-In feature that can be used for lockdowns
- Check-in status displayed via NQ-GA10PV-driven monitor
- NWS Alert to display specific Emergency Alert System (EAS) events on the displays connected to the NQ-GA10PV or can be used to trigger routines that display one-line NWS-related alerts on the NQ-DSC01 and NQ-S1810WBC.
- Pop up of a room's video feed via the Maps view (using standard camera URLs)
- Optional password protection for all-call paging, emergency all-call paging, multi-site paging, facility paging, audio distributions, zone paging, alarms, and tones.
- Play Pre-Recorded Message with Contact Closure (via NQ-E7010 I/O Controller program logic)
- Speed-Dial Access to Common System Features (used to make system easy to use for Administrators)
- Input Contact Closure Puts System Into Page Exclusion Mode (via NQ-E7010 I/O Controller program logic)
- Output Contact Closure Triggers an External Event (via output relay control on the NQ-E7010 I/O Controller)
- Input Contact Closure Triggers an Internal Event (via NQ-E7010 I/O Controller program logic)
- Call Recording and Playback (911, Emergency, Normal)
- Emergency Page with Pre-Programmed Messages (WAV, MP3) (ex. "There is a Fire Emergency, please exit building, this is not a drill.")
- Interactive Map-Based Paging and Intercom (hierarchical drill-down views of multiple maps - including across multiple facilities)
- Text-to-Speech Based Announcements (optional feature) (Copy & paste-in complex emergency notifications & instructions)
- Routines API to Integrate with Security/Access Control Systems
- NWS event-based weather alerts

General Telephony*

FEATURES

- Voice-Prompted Features (via embedded IVR functionality) (Users are instructed as to what the next step should be)
- Intercom Access from IP Phone System (SIP ATA or Tie-Line interface to IP-PBX)
- Voice-Prompted Call Forwarding Status (via embedded IVR functionality)
- Call Monitoring (modes: Spy, Whisper, Barge, non-DISA)
- Call Detail Recording: Display, Manage, and Export (no limit to record count)
- Call or Page via Mobile Device: SIP Client Application
- Call or Page via Mobile Device: Web UI
- SIP Trunking to PSTN/Cloud or IP-PBX
- SIP trunk management to include PBX Connection access
- SIP Trunk can be used to register Nyquist with an iPBX as a SIP endpoint
- Allow Intercom Calls to Route to PBX Extensions via SIP Trunk
- 911 Call Alerts: Notifications sent to Web UI and Admin Phones with option to monitor call
- 911 Dial Through (provisioned via CoS allows any authorized station to direct dial 911)
- Walking CoS
- Trunk Queuing (searches for first available outside line/trunk)
- Unlimited Number of Admin and/or Staff Phones (limited only by system licensing)
- Analog PSTN Trunk Support (requires use of an FXO Gateway)
- Unlimited Number of Simultaneous Talk Paths (limited only by system licensing)
- Architectural Room Numbers and Names Displayed on Web UI and Admin devices
- Off-Site Call Transfer (transfer calls to phone numbers outside of the system)
- Routing to an External Number (provisioned via CoS)
- Route selected call priorities (e.g., Emergency) to an external number (Provisioned via CoS)
- Remote Call Pickup (ability to answer a phone from anywhere in the building/facility)
- Voice Mail (assignable to any station via CoS)
- Analog Intercom Access from a PBX (via FXO or FXS ports)
- Voicemail Message Waiting Indication Light (on all Bogen VoIP phones)
- Call Forwarding (automatically sends calls to another station on the system)
- Callback Request with associated Callback Request Indicator
- DID Call Routing (direct inward line routes to office phone)
- DISA Call Routing (allows direct inward station access from outside the system)
- Security DISA Call Routing (allows direct inward station access from outside the system using a passcode)
- Password Protected Access to Admin Phone Features
- Ability to Place Normal or Emergency Calls
- Dial Out to PSTN/PBX (requires optional ATA FXO ports)
- Receive Outside Calls (PSTN/PBX)
- Analog Telephone (aka 2500 Set) Support (via 3rd-party 24-port FXS VoIP Gateway integration)
- Password Protected Access for DTMF-Executed Routines

