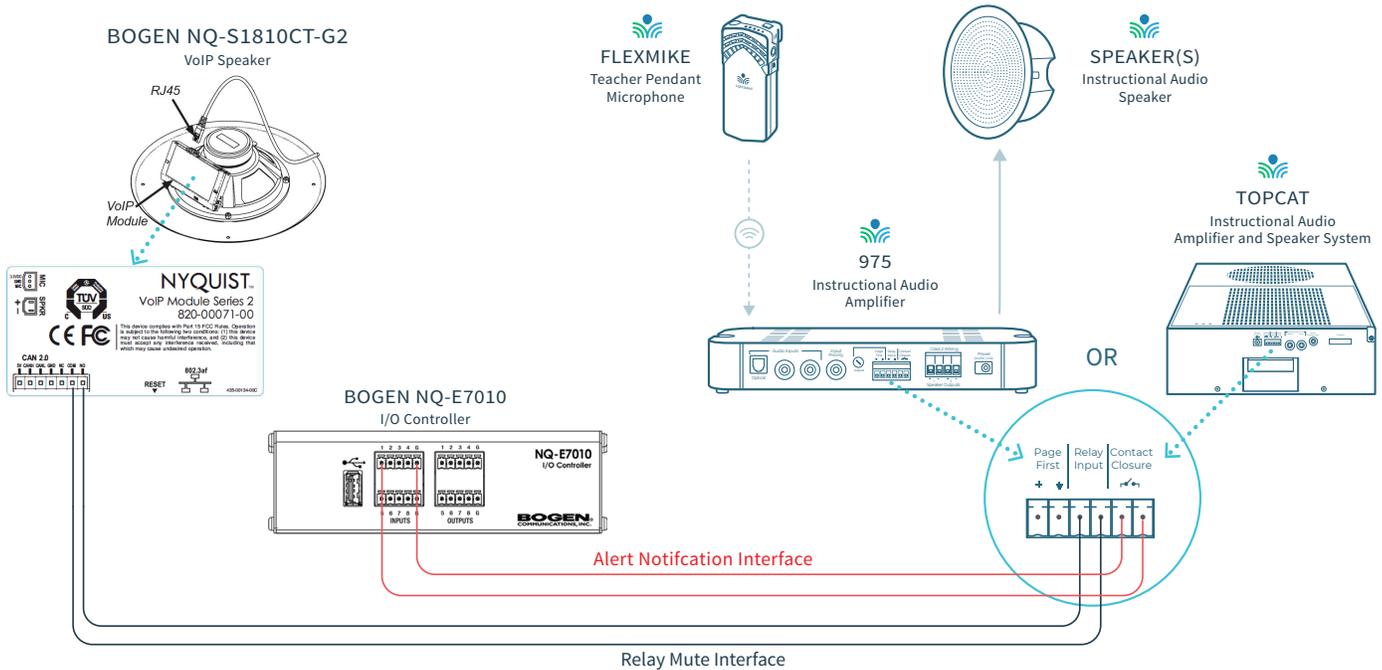


Lightspeed + Bogen VoIP Speaker Interface

The following shows how to interface the Lightspeed 975 and Topcat Instructional Audio systems together with the NQ-S1810CT-G2 or NQ-S1810WT-G2 VoIP Speakers in combination with an NQ-E7010 I/O Controller on Bogen's Nyquist E7000 system. These simple interfaces enable key functionality including a mobile solution for the teacher to initiate an alert in the classroom directly from the pendant microphone.

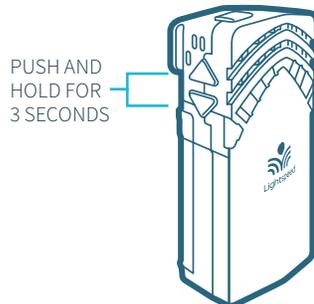


ALERT NOTIFICATION

An alert notification through the Bogen Nyquist paging & intercom system can be initiated from the Lightspeed Flexmike pendant microphone worn by the teacher. A simple connection from the Lightspeed 975 or Topcat to the Bogen NQ-E7010 is all that's required.

Connect from the "Contact Closure" output on the Lightspeed 975/Topcat to an Input (Input Pin & GND) on the Bogen NQ-E7010 I/O Controller and configure the rules for that input to trigger a Routines based Emergency Call for the classroom when activated. A single NQ-E7010 can service up to 8 classrooms in this fashion.

Once connected and configured, the teacher simultaneously presses and holds the volume up/down buttons on the microphone for 3 seconds. The 975 or Topcat sends the signal to the Bogen NQ-E7010 via the contact closure and the Flexmike mode light will begin flashing for a few seconds to tell the teacher the alert was activated.



OVERHEAD PAGE/INTERCOM CALL MUTE

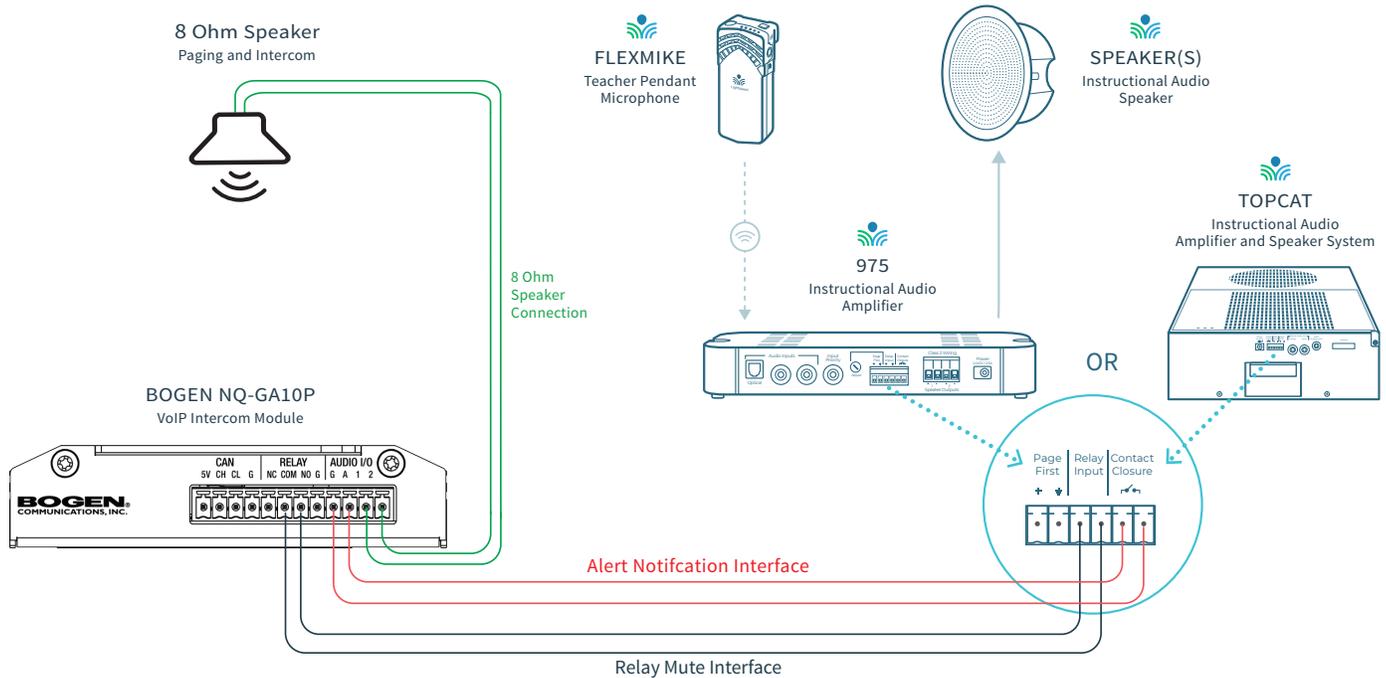
Lightspeed's 975 and Topcat systems can be configured to mute all audio when an overhead page or intercom call comes through from the Bogen Nyquist system. Once the paging/intercom audio begins, all audio from the 975 or Topcat, including the teacher and student microphones (as well as any multimedia audio) will be muted to ensure the page/intercom call is clearly heard by everyone in the classroom.

Connect from the "COM" and "NO" terminals on the Bogen Nyquist speaker's VoIP module to the "Relay Input" on the 975 or Topcat system.

Once an audio signal is detected from the Bogen system it will send a relay signal to the 975 or Topcat to mute all audio coming through the Lightspeed speaker (microphones and connected multimedia). Once the announcement or call through the Bogen system ends, the Lightspeed system will un-mute, resuming all regular audio.

Lightspeed+ Bogen NQ-GA10P Interface

The following shows how to interface the Lightspeed 975 and Topcat Instructional Audio systems together with the NQ-GA10P on Bogen's Nyquist E7000 system. These simple interfaces enable key functionality including a mobile solution for the teacher to initiate an alert in the classroom directly from the pendant microphone.

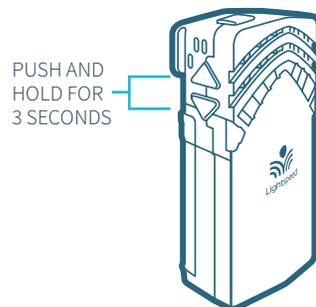


ALERT NOTIFICATION

An *alert notification** through the Bogen Nyquist paging & intercom system can be initiated from the Lightspeed Flexmike pendant microphone worn by the teacher. A simple connection from the Lightspeed 975 or Topcat to the Bogen NQ-GA10P is all that's required.

Connect from the "Contact Closure" output on the Lightspeed 975/Topcat to the "G" and "A" call switch terminals on the Bogen NQ-GA10P VoIP Intercom Module.

Once connected, the teacher simultaneously presses and holds the volume up/down buttons on the microphone for 3 seconds. The 975 or Topcat sends the signal to the Bogen NQ-GA10P via the contact closure and the Flexmike mode light will begin flashing for a few seconds to tell the teacher the alert was activated.



*Note: The alert notification will result in an intercom call to the Admin Station assigned to the classroom. The status level of that intercom call (Normal / Urgent / Emergency) is determined by the "Call in Level" configured in the Class of Service (CoS) profile for that classroom.

OVERHEAD PAGE/INTERCOM CALL MUTE

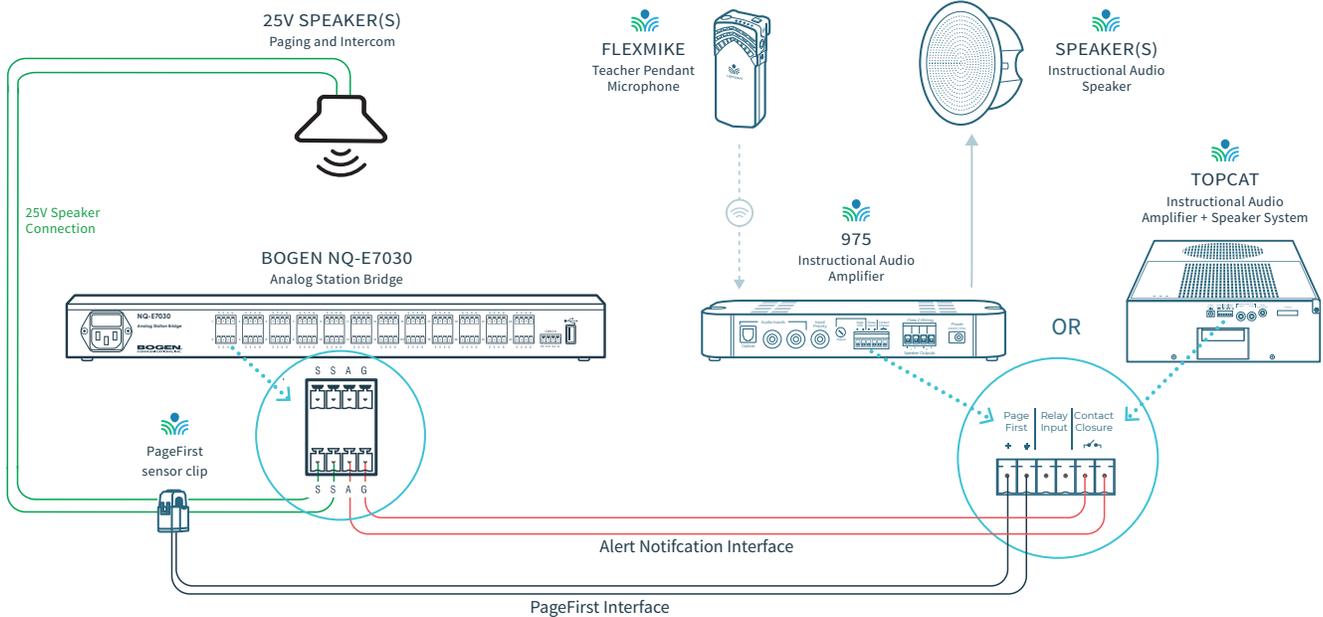
Lightspeed's 975 and Topcat systems can be configured to mute all audio when an overhead page or intercom call comes through from the Bogen Nyquist system. Once the paging/intercom audio begins, all audio from the 975 or Topcat, including the teacher and student microphones (as well as any multimedia audio) will be muted to ensure the page/intercom call is clearly heard by everyone in the classroom.

Connect from the RELAY "COM" and "NO" terminals on the Bogen NQ-GA10P Intercom module to the "Relay Input" on the 975 or Topcat system.

Once an audio signal is detected from the Bogen system it will send a relay signal to the 975 or Topcat to mute all audio coming through the Lightspeed speaker (microphones and connected multimedia). Once the announcement or call through the Bogen system ends, the Lightspeed system will un-mute, resuming all regular audio.

Lightspeed+ Bogen NQ-E7030 Interface

The following shows how to interface the Lightspeed 975 and Topcat Instructional Audio systems together with the NQ-E7030 ASB on Bogen's Nyquist E7000 system. These simple interfaces enable key functionality including a mobile solution for the teacher to initiate an alert in the classroom directly from the pendant microphone.

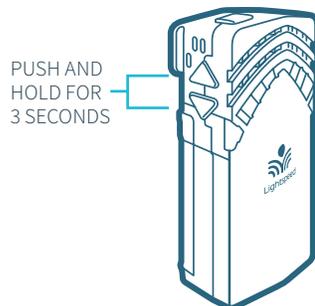


ALERT NOTIFICATION

An **alert notification*** through the Bogen Nyquist paging & intercom system can be initiated from the Lightspeed Flexmike pendant microphone worn by the teacher. A simple connection from the Lightspeed 975 or Topcat to the Bogen NQ-E7030 is all that's required.

Connect from the "Contact Closure" output on the Lightspeed 975/Topcat to the "A" and "G" terminals on the Bogen NQ-E7030 Analog Station Bridge station port associated with the classroom.

Once connected, the teacher simultaneously presses and holds the volume up/down buttons on the microphone for 3 seconds. The 975 or Topcat sends the signal to the Bogen NQ-E7030 via the contact closure and the Flexmike mode light will begin flashing for a few seconds to tell the teacher the alert was activated.



*Note: The alert notification will result in an intercom call to the Admin Station assigned to the classroom. The status level of that intercom call (Normal / Urgent / Emergency) is determined by the "Call in Level" configured in the Class of Service (CoS) profile for that classroom.

25V PAGE/INTERCOM PRIORITY MUTE

Lightspeed's 975 or Topcat systems can be interfaced with a 25V paging speaker to detect an audio signal during a page or intercom call and then mute all other audio. Once the paging/intercom audio begins, all audio from the 975 or Topcat, including the teacher and student microphones (as well as any multimedia audio) will be muted to ensure the page/intercom call is clearly heard by everyone in the classroom.

Hang the Lightspeed PageFirst sensor clip on the 25V speaker wire between the Bogen NQ-E7030 and the paging/intercom speaker(s). Wire the PageFirst sensor clip back to the Lightspeed 975 or Topcat system, connecting to the PageFirst terminals. Test the system to ensure it mutes properly and adjust the sensitivity on the 975 or Topcat as needed.

Once an audio signal is detected along the 25V line, the 975 or Topcat will mute all audio coming through the Lightspeed speaker (microphones and connected multimedia). Once the announcement or call through the Bogen system ends, the Lightspeed system will un-mute, resuming all regular audio.