

Seamless Audio Solution in Hybrid enabled CATS



Seamless Audio Solution in CATS

There are eleven Centrally Allocated Teaching Spaces (CATS) which have been equipped with a seamless audio solution to enhance student engagement and improve online participation. Microphones installed in the ceiling allow in-person students' audible responses to be included in a recorded lecture (i.e., Echo360, Teams, Zoom, Blackboard Collaborate) and to be heard by online students in a hybrid class delivery.

There are two different types of ceiling microphones installed:

- Ceiling mounted microphones **without** Voice Lift capability
- Ceiling mounted microphones **with** Voice Lift capability

Ceiling-mounted microphones with Voice Lift enhance in-room audio clarity, ensuring better sound for everyone in large spaces. They also improve audio quality for online students in recordings, livestreams, and hybrid classes.

Depending on how the class is delivered, making use of the seamless audio setup is useful for:

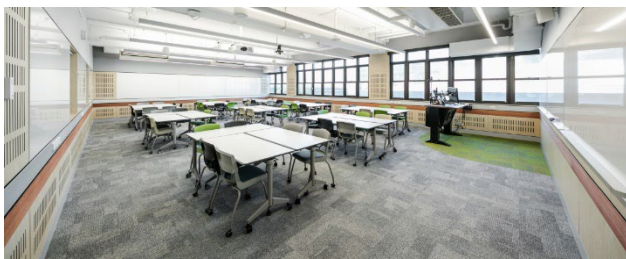
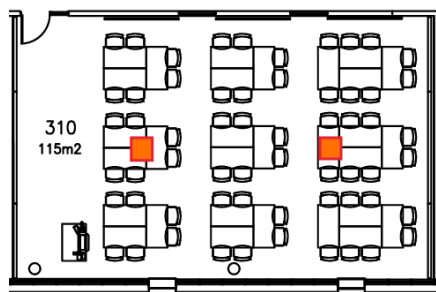
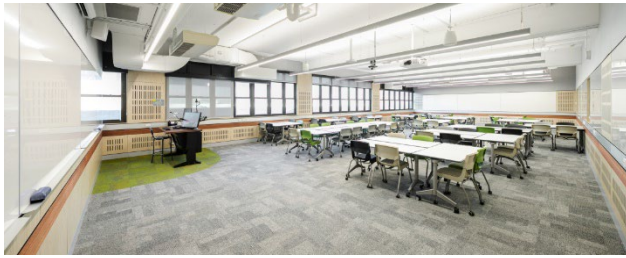
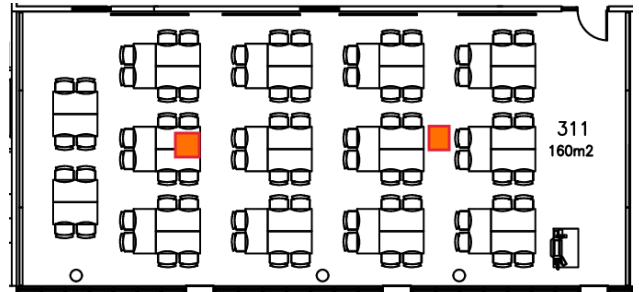

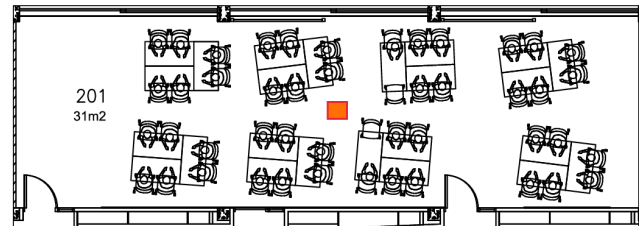


- **Synchronous** class delivery, which may include:
 - **Face to face:** In-person student cohort only (in-person students can hear & participate in class discussion and Q&A in 'real time').
 - **Echo360 Livestream:** In-person & online student cohort (online students can hear & only participate in class discussion and Q&A via chat).
 - **Hybrid:** In-person & online student cohort (online students can hear & participate in class discussion and Q&A verbally as well as chat).
- **Recording** the class session includes:
 - A recorded teaching session in Echo360, Teams, Zoom or Blackboard Collaborate. Students can listen to class discussions and Q&A that has been recorded.

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Ceiling-mounted microphones *without* voice lift capability

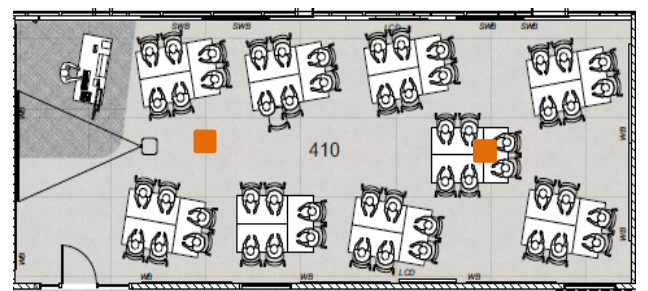
The seven rooms are located at Kensington and Randwick campuses:

Room layout	Room floor plan NOTE: ■ indicates location of ceiling microphone(s)
 <p>K-F23-310 Mathews 310</p>	
 <p>K-F23-311 Mathews 311</p>	
 <p>R-R14-201 Randwick 201</p>	
 <p>K-E4-214 Squarehouse 214</p>	

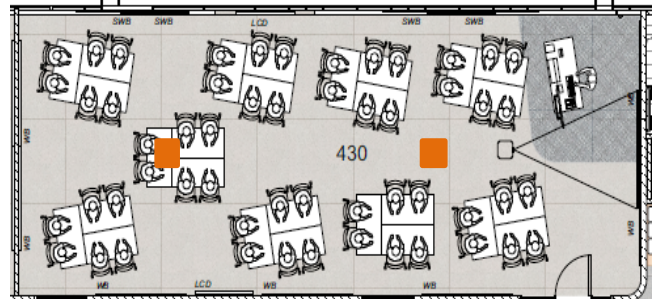
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[K-M15-410 Rupert Myers 410](#)



[K-M15-430 Rupert Myers 430](#)



[K-C27-LG03 - Wurth LG03](#)



Using Seamless Audio in your class

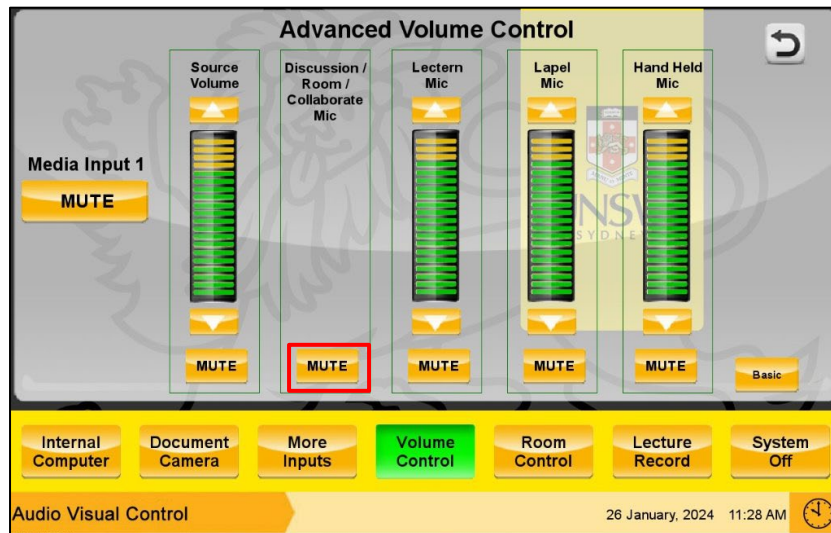
From the AMX Panel at the lectern in CATS, you will need to select **Volume Control** to access the **Discussion / Room / Collaborate Mic** option. By default, the ceiling microphones are turned **on**, which means that in-person student voices will be picked up by these microphones and be audible for any online students or captured as part of a recorded teaching session.

To turn the ceiling microphones **off**, select the **MUTE** button for the **Discussion / Room / Collaborate Mic** option.

Seamless Audio Solution in Hybrid enabled CATS


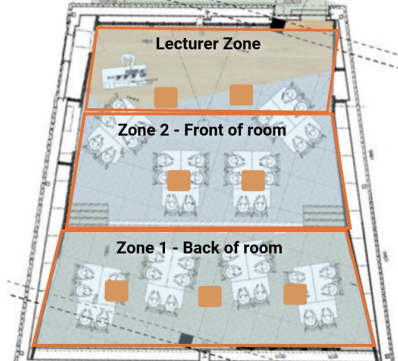


There is no volume control for this microphone option.



Ceiling mounted microphones *with* voice lift capability

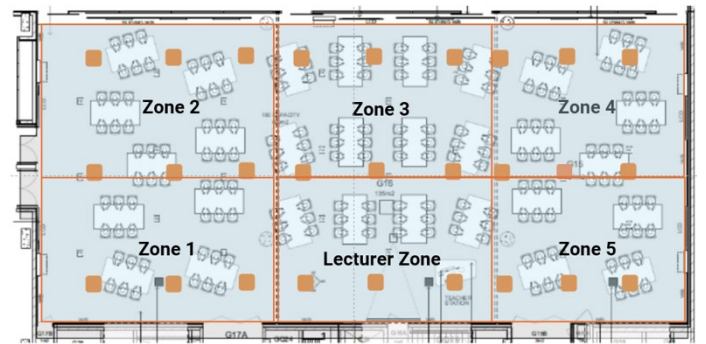
The four rooms are located at Kensington campus:

Room layout	Room floor plan
 <p>K-M15-1001 Rupert Myers Room 1001</p>	<p>NOTE: indicates the location of ceiling microphones with voice lift</p> 

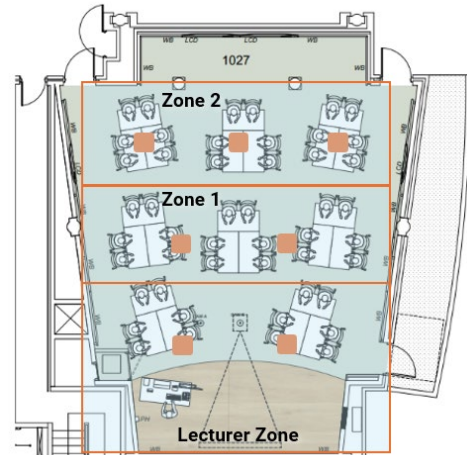
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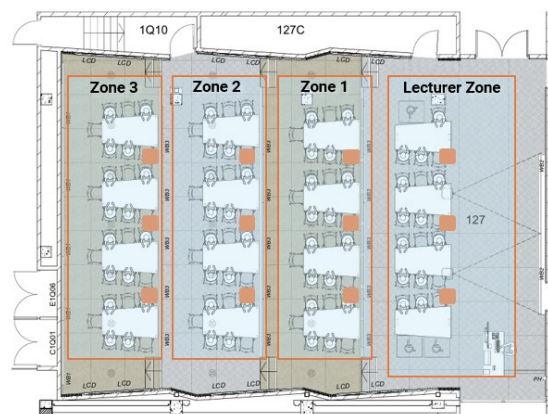
[K-H6-G16 Tyree Energy Technology G16](#)



[K-E15-1027 - Macauley Room 1027](#)



[K-G14-127 - New South Global Room 127](#)



Using Seamless Audio in your class

The new audio solution installed in these four rooms combines ceiling microphones, ceiling speakers with state-of-the-art audio digital signal processing. The ceiling array microphones deliver clear voices to the far end of the room, even with multiple people speaking, via the digital audio outputs.

This means that in a large room like **Tyree Energy Technology Building G16**, students irrespective of where they are seated, will be able to easily hear other students in the room.

From the AMX Panel at the lectern in CATS, you will need to select **Volume Control** to access the **Voice Lift** option.

Seamless Audio Solution in Hybrid enabled CATS



By default, the ceiling microphones with Voice Lift are turned **on**, which means in-person student voices will be picked up and heard by online students and captured in a recorded session.

To turn the ceiling microphones with Voice Lift **off**, select the **ALL MUTE** button in the **Voice Lift** column. There is no volume control for this **Voice Lift** option.

In each room, the ceiling microphones have been grouped in zones. Academics can mute and unmute ceiling microphones by zones.

The microphone may be used singly or in multiples (for larger meeting spaces) to capture every person speaking in a room with clear, natural audio that reduces distracting environmental sounds.

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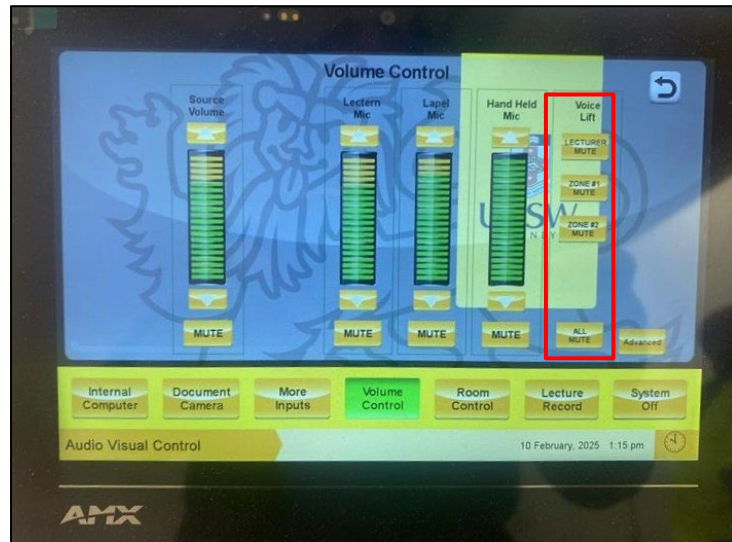


Figure 1- Rupert Myers Room 1001, AMX Panel, Volume Control

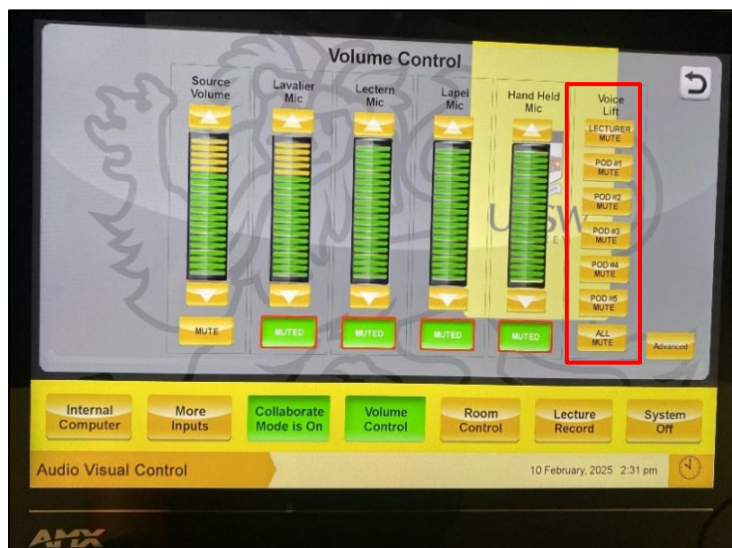


Figure 2 - Tyree Energy Technology Building G16, AMX Panel, Volume Control



Potential Scenarios

The following teaching scenarios may assist when teaching in a **Seamless Audio Solution CATS**:

Lecture / Synchronous class only / Echo360 recording.

- During a lecture session in Mathews 311, students are encouraged to discuss a possible solution to a problem with other students sitting at the same table. One student from each group shares their findings. Each student remains in their seat, with the ceiling microphones picking up their responses. The Echo360 recording should capture the students' responses, thus making the recording a more complete representation of the teaching session.

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Tutorial / Hybrid delivery / Teams recording.

- The tutorial class allows students the choice to attend in-person or online. Attendance is taken from the Teams Attendance document and marking off the in-person students. Students must attend the tutorial, although they have the flexibility to either attend in-person or online each week. The Tutor encourages students to contribute to the discussion, by answering questions posed during the session. As each student responds, the ceiling microphones will allow the online students to hear these responses and as such, be able to follow the thread of the discussion more comprehensively. The Teams recording will also include all student responses.

Lecture / Synchronous class / Echo360 Live Stream & recording.

- There are more students in your lecture class than seats in the allocated CATS for the term. Enabling Echo360 livestream option allows students to choose whether to attend in-person or online for the weekly lecture. Students who attend online are encouraged to ask questions in the Echo360 Discussion section, which will be read and addressed at set times during the teaching session. Online students can hear the academic, who would be using a wireless microphone, as well as any questions posed by students in the room. This enhances the experience for online students, and for students who watch the recording afterwards.