

# University of Buffalo School of Engineering



## SUMMARY

### • **LOCATION**

Buffalo, NY

### • **FACILITY SCOPE**

Large lecture hall seating 100+

### • **OBJECTIVES**

The client wanted to implement a system that could accommodate students attending class both in-person and remotely, creating a seamless experience that made everyone feel included.

### • **BIAMP SOLUTIONS**

Parlé™ and Tesira™

### • **OUTCOME**

By integrating Biamp's Parlé ceiling microphones with the lecture hall's preexisting camera system, the client was able to achieve the desired results and plans to use the same set-up in all future HyFlex classrooms.

### • **EQUIPMENT**

- Parlé TCM-X ceiling microphones
- Tesira SERVER-IO

The largest public engineering school in New York state, the University of Buffalo School of Engineering and Applied Sciences serves a very large cohort of international students who could not enter the country during COVID restricted months. To address this, the school wanted to offer a hybrid class, allowing students to attend either in-person or online; to achieve this, the school's lecture hall needed to be updated with microphones at every seat to enable online students to hear questions and participate in conversations.

Assistant Dean for Online Education Dr. Lisa Stephens needed a solution that worked with both a multi-camera auto tracking system and the university's AV control software. She made this request to John Pfeffer, a designer for Learning Spaces, in April 2021, asking that this capability be added to a key lecture hall in time for the start of the fall 2021 term.

Pfeffer was skeptical about meeting this deadline as the request came outside of the university's normal process and timeline for this type of project. On further examination, he realized it wouldn't be feasible to add wired microphones to all 190 seats in the lecture hall, as there was no pathway to the many desktops for adding tabletop mics.

## SOLUTION

Pfeffer reached out to Audio Video Corp, an integrator he'd worked with in the past. Together they decided to use Biamp's Parlé ceiling microphones and leverage their patented Beamtracking™ technology. Pfeffer had previously used Biamp's Tesira products, installing them within a camera tracking system for the university's school of medicine.

The Beamtracking technology in the ceiling microphones was originally designed for conference rooms to identify and focus on who was speaking at any one time, tracking their voices if they moved around the room. He decided there was no reason this technology couldn't also be used to find and focus on speakers in a room of 100+ people.

Audio Video Corp installed Parlé ceiling mics around the lecture hall, integrating them with a camera system in the room. Using data from the microphones, the control system automatically identifies who's speaking and switches from a wide-angle camera shot of the room to another shot focused on the area of the speaker.

As a bonus, the availability and ease of installation of the Parlé microphones with the Tesira SERVER-IO enabled Audio Video Corp to finish by early August, allowing a month for testing before class started.

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## CONCLUSION

With the Parlé microphones in the ceiling tracking voices, the students can focus on learning and communicating, rather than fiddling with equipment to mute or unmute themselves. Thanks to its success, the University at Buffalo would like the same system in all their lecture halls going forward.

"We really haven't had any issues with it. Usually, when you turn on a new technology like this, you're running back and forth for a few weeks trying to perfect it," Pfeffer said. "I think we've only been in the room once for an unrelated issue since we started using it a few months ago."

Dr. Stephens greatly appreciated that the solution worked exactly as it was proposed to her. "I have previous experience in broadcasting, and if you told me you could get a system like this to function well without a board operator, I would have denied it," she said. "This is one of the few times that a salesman told me this is how it would work, and it does. It works really well."

### ABOUT BIAMP

Biamp® is a leading provider of innovative, networked media systems that power the world's most sophisticated audiovisual installations.


Recognized worldwide for delivering high-quality products and backing each one with a commitment to exceptional customer service, Biamp's mission is connecting people through extraordinary audiovisual experiences.

Founded in 1976, Biamp is headquartered in Beaverton, Oregon, with offices and manufacturing facilities located around the world.

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