

# Sound Matters: Taking Noise Off The Menu

*Hewshott, one of the leading technology, acoustics, and theatre consultants in the world, delivered exceptional spatial experiences at Otra, Kala Ghoda, Mumbai. The team anticipated the problems and made decisions for clients' immersive experiences at the restaurant, simplifying complex acoustics into seamless installations. PALM Expo Magazine team gets in touch with Hewshott to discuss the installation in brief.*



The space opens with a main door designed with influences of Central American architecture

The optics that social media apps have brought to an already competitive restaurant industry have pushed restaurateurs to make acoustics a high priority consideration, beyond food and wine. People dine out to socialise, so no matter how good the food or service is in a restaurant, the experience will not be positive if customers are subjected to poor restaurant acoustics. Even more important: Loud noises distract diners from smelling and tasting their food to its full effect.

Usually, as dining rooms fill up, there is a noticeable strain in guest conversation as well as in back-and-forth staff communication. The noise level in the restaurant continues to increase until people are talking over one another in an effort to compete to be heard alongside the background music and reverberation.



Salvaged wood, sourced from the client's family farm, forms the frames across the walls and the bar cladding



**Electro-Voice EVID 6.2 speakers blend into the restaurant ceiling while providing excellent sound quality and coverage**

Now, imagine a restaurant where the ambience is lively, yet you are able to have intimate conversations, the clinking of glasses and cutlery is present but not overpowering, and every note of background music blends seamlessly into the atmosphere. This was the vision for Otra, the second dining venture by Chef Alex Sanchez and his partner Malleyka Watsa in Mumbai's vibrant Kala Ghoda district.

At Otra, acoustics are not just an afterthought but a core element of the dining experience, meticulously tuned to create an environment where diners can enjoy their meals and conversations without straining to hear or speak.

Recognising the need for expertise to get the acoustics rights and to achieve his vision for Otra, Chef Alex engaged Hewshott as the acoustic consultants and audio system designers for the project. The goal was clear: provide a comfortable music listening experience for guests, enhance conversations between patrons and staff, and have the capability to raise audio levels when needed. Not to mention, this all had to be achieved within a limited budget.

### Setting the Performance Criteria

The very first step was setting the performance criteria for acoustics and audio based on the brief received from the client. Hewshott's design team, led by Karan Jaitly and supported by associate Divyang Row Kavi, meticulously analysed the space, and established a target reverberation time of 0.8 seconds. This reverberation time was chosen to ensure clarity in conversations while maintaining a pleasant background ambience.

In terms of audio levels, the ideal performance range for the system was determined to be between 70dBA and 95dBA. This range ensures that the music is audible without being intrusive when guests are dining, while also allowing the restaurant to be able to raise the background music level to unveil a vibrant club-like atmosphere as the evening progresses.

### Design Challenges and Solutions

With the performance criteria set, the next challenge was to design an audio system and acoustic treatment plan that met the requirements within the constraints of a limited budget and keeping the restaurant aesthetics in mind. Hewshott's team used EASE to simulate the acoustic and audio system performance. This simulation allowed Karan and Divyang to experiment with different design options, speaker locations, acoustic treatments and placement, in order to predict how the space would sound once completed.

The choice of individual components was crucial in balancing performance with budget constraints. Electro-Voice EVID 6.2 speakers were selected for their excellent sound quality and coverage, making them ideal for the restaurant's main dining area. In the washrooms, QSC AC-C2T-LP speakers were chosen for their compact size and reliable performance.

The Dynacord L1 300FD amplifiers provide ample power to drive the speakers while maintaining superb audio fidelity. QSC KS112 subwoofers were included to enhance the low-frequency response, adding depth to the music without overwhelming the space. Finally, the Dynacord MXE-5 audio DSP was chosen for its advanced processing capabilities, allowing precise control over

the audio system.

Moreover, due to a zoning requirement for the speaker system, a PC acts as the music source for the system, with two pairs of audio channels routed to the MXE-5 audio DSP using the DANTE protocol. This setup allows for independent routing of music content to the restaurant and washrooms, ensuring that the audio experience is tailored to each area.

### Integrating Acoustics and Aesthetics

One of the key challenges in the project was integrating the acoustic treatment and audio system within the space without adversely affecting the aesthetic vision of the restaurant. To achieve this, Hewshott's team worked closely with Case Design, one of the renowned interior design firms, to ensure that the acoustic solutions complemented the restaurant's design.

The collaboration with Case Designs involved careful planning and execution. Acoustic panels were strategically placed to minimise visual impact while maximising their effectiveness. Even the restaurant's layout was meticulously planned to reduce sound reflections and enhance sound absorption, creating a balanced acoustic environment.

### System Installation and Commissioning

With the design finalised, the next step was the installation and commissioning of the system. Sigmabyte AVIT, one of the trusted AV integrators, was tasked with supplying and installing the audio system. Their expertise ensured that the installation was carried out smoothly and efficiently.

Commissioning the system was a critical phase in the project, led by Divyang Row Kavi. This involved setting levels for each of the speaker zones, applying equalisation to address problematic room mode frequencies, and setting crossover frequencies for the speakers and subwoofers. The goal was to fine-tune the system to achieve the desired acoustic performance and ensure that the audio levels were consistent throughout the space. "It was great fun figuring out how to tune the room to sound great throughout the night – from when guests are dining in the early evening to the zenith of the night when drinks are being had and the place gets bustling. The audio sounds balanced throughout all these dynamics, and I am very pleased with the results we have achieved," stated Divyang.

Thanks to the routing of the audio through the DANTE protocol, the music that plays in the restaurant's bathroom is sounds of nature, specially crafted by Shantam Khanna; whereas the music played in the dining area is distinctly fashioned playlists by Chef Alex and Malleyka.

### Achieving the Desired Outcome

The final outcome is a comfortable listening environment where guests can enjoy their food and conversation with music acting as an enhancer of the experience rather than a disturbance.

The successful integration of acoustics and audio system design at Otra is a testament to the importance of specialist expertise in creating the perfect dining environment. By carefully considering every aspect of the acoustic and audio experience, Otra has managed to create a space where the background



**The position of the speakers and acoustic panels were strategically placed to minimise visual impact while maximising their effectiveness**

music and overall restaurant ambiance enhance the dining experience without overshadowing it.

## **Conclusion**

In the bustling heart of Mumbai's Kala Ghoda, Otra stands as a beacon of how thoughtful acoustic design can transform a dining experience. Through meticulous planning, expert collaboration, and innovative solutions, Otra has

achieved an acoustic ambiance that is both inviting and enjoyable.

For restaurateurs and designers, the success of Otra serves as an inspiration. It highlights the importance of investing in acoustic expertise and demonstrates how even with budget constraints, it is possible to create a soundscape that enhances the dining experience. At Otra, every meal is accompanied by a symphony of sound, carefully crafted to delight the senses and elevate the art of dining.

