

Sound Design for Theatre Performance: A Guide

By Claire Morris

There's nothing more disappointing as an audience member - or frustrating as a performer - than bad sound on stage. Whether you're an actor, musician, dancer or public speaker, nothing kills that post performance buzz more than an audience member saying 'it looked great but I couldn't really hear anything'.

And you can't blame them for their feedback, audience members look forward to being totally immersed in a performance - having often paid good money for the experience - but nothing breaks the spell of the theatre more than a faulty mic or a crackling speaker.

Along with lighting and set design, sound is a key component of good, moving theatre. It's emotive and can play a pivotal part in guiding the audience's perception of the mood on stage.

What exactly does a sound designer do?

Imagine you're at a performance of your favourite musical. The lights go down and excitement builds as the curtain rises. Then, somewhere at the back of the theatre, someone clicks on a CD player and a tinny, pre-recorded version of the opening number starts up. Not quite the sound quality you expected, right?

Part of the magic of live theatre is the live music. Audiences expect to hear quality sound in all aspects of the performance. And from the orchestra in the pit to the actors on stage, the theatre's sound designer is responsible for delivering the expected standard of quality in everything the audience hears.

The sound designer's responsibilities will vary depending on the type of performance and the venue they're working in, and they should adapt their work based on what is required for the production, designing a bespoke sound system to complement this and give audiences the best sound quality possible.

Working with the director and stage crew, the sound designer is responsible for all aural aspects of the event. They will often come on-board early in the pre-production process to get an idea of the director's vision and aims for the piece. With these in mind, they'll adapt the equipment they use accordingly, perfecting the sound throughout rehearsals- particularly the technical and dress rehearsals before opening night.

When working with performers, a sound designer will decide what's necessary to best showcase their vocal or instrumental performance. They'll have a working knowledge of acoustics, and may want to make changes to the existing set or auditorium with these in mind. They will also decide on the best microphones to use for the performance style- whether this be radio (wireless and portable) or float (placed at the front edge of the stage) mics. A good sound designer will have a well-developed, refined sense of hearing and will be

sensitive to a musician's timbre, tone, volume and tuning when fitting a microphone and controlling its levels.

Any sonic effects, ambiences or textures necessary for the show - as well as the sound effects for onstage props - will also be provided by the sound designer, and these aspects are often crucial in portraying the world and atmosphere of the story and in increasing the audience's emotional connection with what's happening on stage.

Sound designers must have a good creative and technical understanding of live performance, as well as a knowledge of computer operating systems and the varying software that may be used in different venues. They'll usually be approachable, hardworking and an excellent team player- understanding the whole ethos of the company they're working for and the message they want to portray through their performance.

A sound designer has done their job when audiences are transported to the world of the performance and are lost in the story for however long the production lasts. Since sound is such a huge contributor to an audience's experience of what's going on onstage, good sound design will mean they won't forget what they've seen in a hurry. Most importantly, when a good sound designer is involved in a production, you'll only ever see a CD player being used as an onstage prop!

Before beginning, a sound designer should consider these important factors:

The Venue

Church hall? Theatre? Pub? The type of venue itself is the first challenge to overcome when approaching sound design. Since most buildings aren't really designed with the sound quality they'll produce in mind (unless they're theatres or concert venues) the size, layout and acoustics of the room all need to be taken into account before any other aspects can be considered.

Even specially designed concert spaces can present challenges with amplifying sound though. All rooms have their own resonance, and individual features of the room like balconies, wooden stages and upholstered seating have their own reflective or absorptive characteristics. All interior wall, floor and ceiling surfaces – as well as finishing and furnishings – will have an effect on the acoustical environment of a live venue.

The Audience

Where will the audience be located? Will they be seated or standing? How many audience members will there be? Asking these kinds of questions is essential in determining the quality of sound that will be received off stage.

Depending on the size and layout of the venue, various audience seating areas may receive sound differently, so the designer needs to take into consideration the architectural and acoustic features of the venue, and how to distribute levels more evenly in the environment.

As a result, carefully considered speaker choice and placement is the key to overcoming challenges of audience location.

Style of Performance

Whether it's a musical or poetry recital, the sound design will need to reflect the tone and style of the piece and the expectations of the audience. People who've paid to see an opera won't expect to come into a standing-only venue with sound-levels akin to that of a rock concert. And similarly, rock fans would probably start asking questions if they were seated for a gig in a plush, upholstered auditorium with the volume balanced in favour of emphasising the singer's voice and blending the all-important electric guitars into the background.

However, many live venues will want the flexibility to deliver a multitude of different performance genres to attract wide audiences and enhance their revenue streams. As a result, a sound system needs to be capable of handling theatre, pop concerts, orchestral performances, stand-up and even DJ sets. A high performance and versatile sound system, allowing visiting sound designers and engineers to enhance their own individual performances, then, is paramount.

Budget

Once the challenges of the venue, audience and performance style have been overcome, a sound designer must then decide on the appropriate equipment to use. From vocal and instrument microphones to audio speakers, arrays, monitors and consoles, they must be confident that the kit they're using will enhance the stylistic features of a performance and ensure that every audience member receives clear, quality sound- all the while thinking about the budget available to buy and install the equipment.

You might have big plans to use top of the range speakers or high-tech microphones that will put the sound quality of the performance on par with something at the O2 Arena, but if there's no budget for it your client probably won't be on board with the suggestion.

Naturally though, budget plays a huge part in the quality, performance and flexibility of the sound system and most venues will see it as a necessary investment for the nature of their business. There's usually always a return on the investment, as a high-quality sound system ensures a successful performance and impressed audiences who'll return to the venue to experience the impact of the sound design time and time again.

Live performance is a big business and live venues need to provide excellence in sound reproduction. Designing and installing a high performance, considered sound system can be a major investment both in time and cost. However, getting it right can lead to a highly effective, immersive and ultimately unforgettable experience that attracts more performers and audiences to the venue, and leaves them talking about what they've seen and heard long after the curtain has fallen.

Claire Morris is theatre enthusiast and writer for [PG Stage](#)