

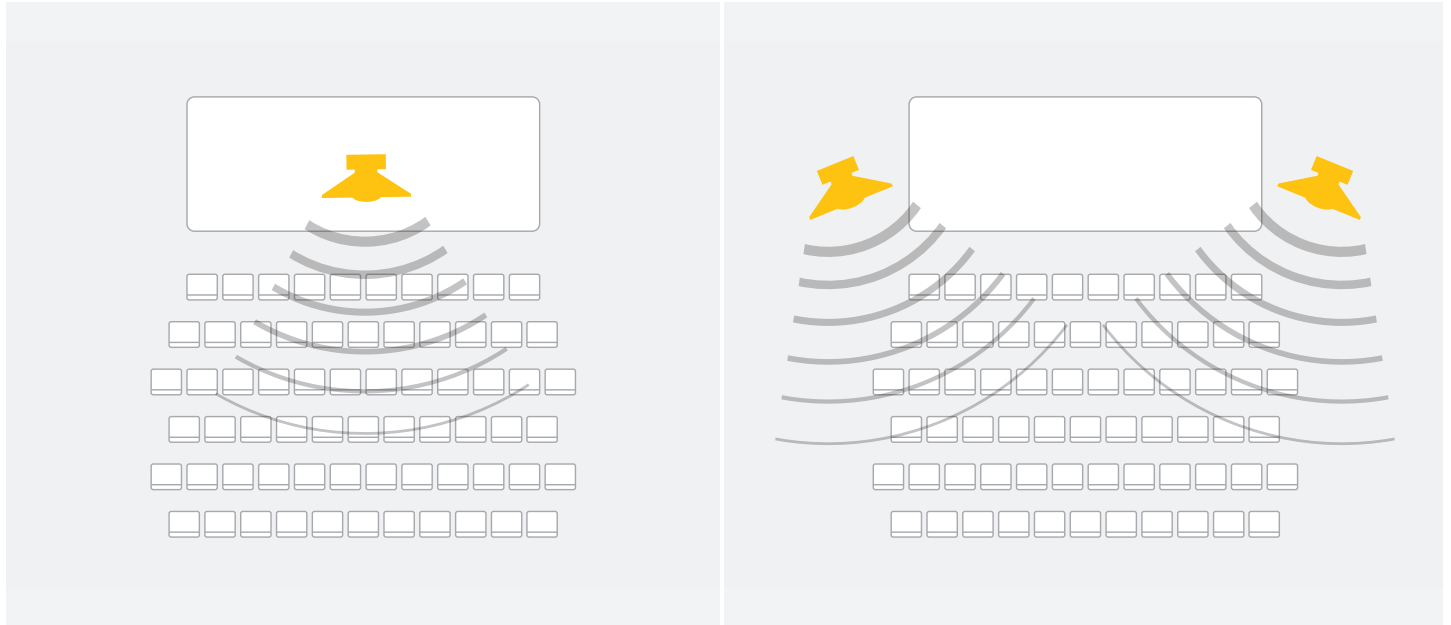


# Sound localisation and audio tracking

When hearing is better than seeing

■ **Localising voices and sounds**, taking in moving images and reading charts: following the events on a stage can be really hard work for an audience as the senses have to process a large amount of information at the same time. That demands a lot of concentration in theatres, at concerts and shows as well as at congresses, conferences and presentations.

## Mono and stereo sound in a typical stage/audience situation



Sound is generated here from the front, the left and the right. In most case, the majority of the audience localises the sound to the speakers and not to the actual sources. Phantom source locations in the so-called "sweet spot" are only created for a small section of the audience. This leads to an extremely position-dependent, and therefore very unbalanced, auditory experience.

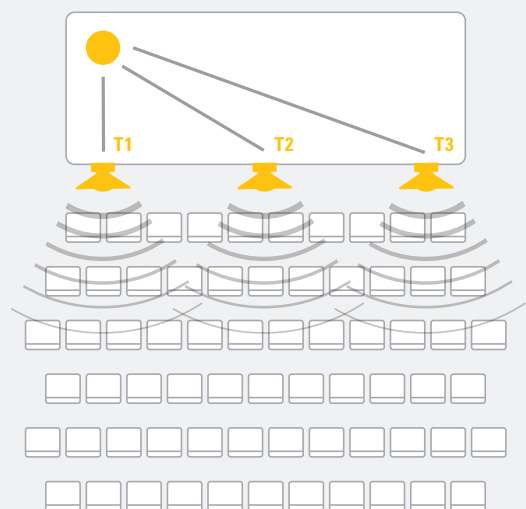
## Object-related sound

Creating a genuine audio reality by means of object-related sound means that all members of the audience can follow even complex content with ease. Seeing and hearing are no longer separated from one another, even at a low volume.

Regardless of their distance to the speakers, listeners perceive the sound exactly as it was produced. They always localise the source of the sound to exactly the same place in the room, even if they are moving around.

- identical auditory and visual perception all around the room
  - ▶ natural auditory experience
- excellent speech clarity
- ultra-precise separation
- loss-free transmission

Audiences find it easier to concentrate and to synchronise what they hear with what they see. What's more, they don't tire as easily.



Klassik am Odeonsplatz, Munich



Schlossfestspiele, Schwerin



Jonas Kaufmann, Waldbühne Berlin



St. François d'Assise, Teatro Real Madrid



## Tracking audio sources

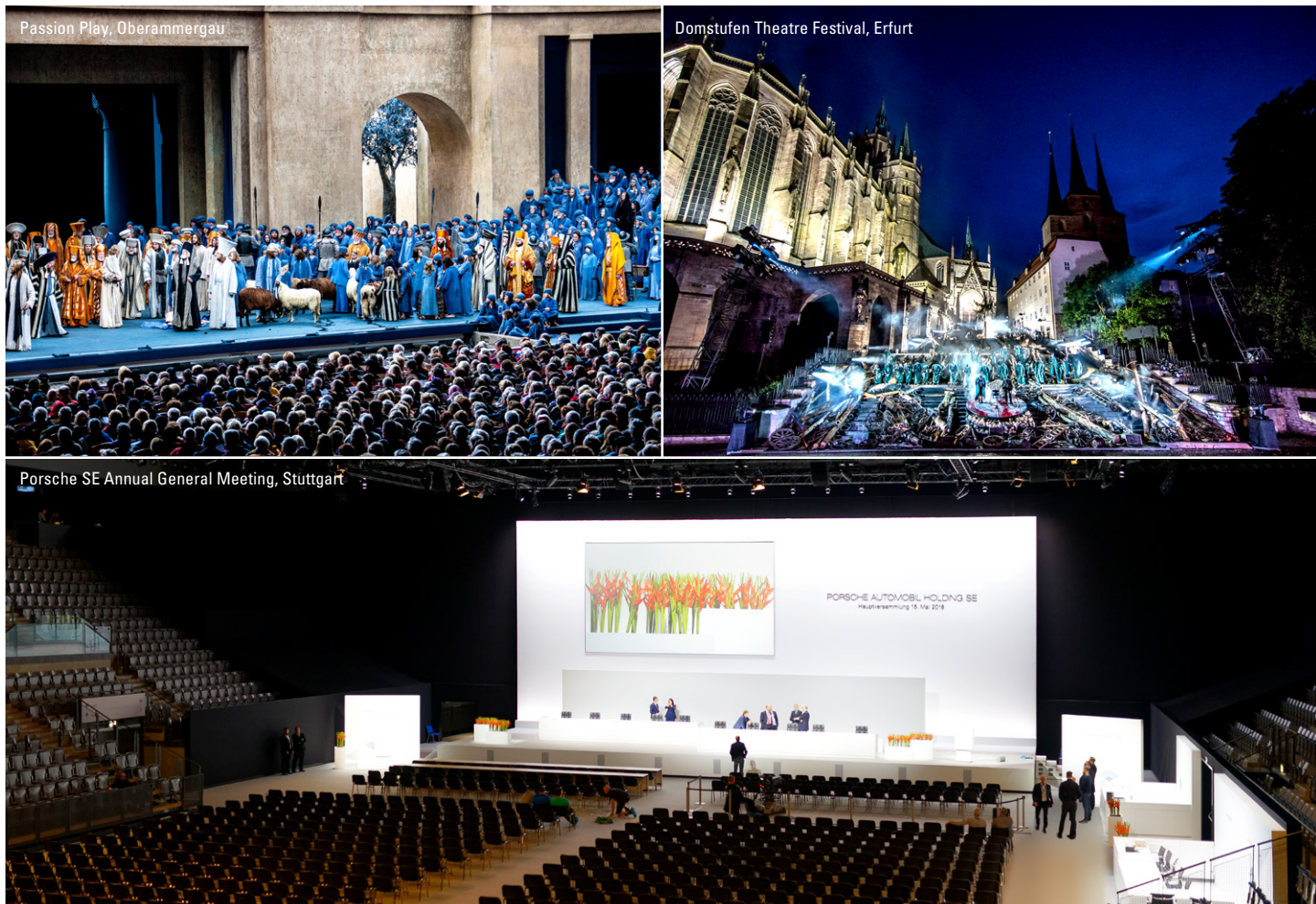
Originally developed for industry to monitor and automate logistics processes, nowadays these systems are used for process automation in event technology.

The technical solutions we use enable not only zone-based localisation but also object tracking. If sound sources move on stage, the system is automatically and dynamically adjusted to the changing positions.

Find out more online:







## Always a fitting technology solution

Finding the right system for your own event is not always easy as different event formats all have their own demands and challenges. That's why we have a wide range of perfectly fitting solutions. These include, for example, TiMax Soundhub from Out Board, DS100 Soundscape from d&b audiotechnik and Vivace from Müller-BBM as well as various tracking systems for various specific applications. Having deployed these systems on many occasions, we have gained a lot of know-how and we also share our extensive experience with the product manufacturers. As a result, we are not only able to guarantee our clients high-quality execution but can also deliver an inspiring auditory experience to music fans, conference guests and trade fair attendees.