

# HOW IT'S DONE | Sector: Performance

## Proscenium Theatre: Spatial Reinforcement & Immersive Audio

TiMax  
CWO  
soundhub

TiMax  
TRACKER

TiMax  
PORTAL

Tanz der Vampir musical Ronacher Theatre, Vienna

TiMax provides immersive panoramic Spatial Reinforcement with performer tracking showcontrol and immersive 3D audio for vocal localisation, acoustic enhancement, effects and orchestra, in a proscenium theatre format.



TiMax delivers authentic and immersive Spatial Reinforcement so that all actors' radio mics and orchestral instruments are localised to exactly where they are on stage. Simple, flexible and fine-tunable object-based spatial rendering in the TiMax dynamic delay-matrix ensures all audience members experience realistic immersive localisation, with no sweet-spot. TiMax Tracker real-time performer stage-tracking makes the localisation follow them automatically. TiMax spatial imaging objects and events are also used for immersive 3D effects and music elements plus spatial acoustic enhancement .

## Performance: Proscenium Theatre

TiMax SoundHub receives mic signals via AES/Analog/Dante or MADI from mixing desk and theatre playback systems like QLab or Ableton. Desk mic channel direct outs and groups feed actors radio-mics and orchestra mics to TiMax. Spatial Image Definition objects in TiMax SoundHub apply independent level/delay relationships between every mic and every speaker, creating transparent spatial imaging for every audience member with no sweet spot. On-stage speakers support main spatial reinforcement by providing strong dynamically tracked anchors for mic sources. Multiple localisations are quickly mapped by adaptive StageSpace AutoCalc tools which also allow detailed shaping and fine-tuning by the sound designer.

TiMax Tracker sensors covering the stage area follow actors around stage so TiMax SoundHub morphs mic channels between stage zones to maintain actor localisation.

Built-in MIDI ports allow spatial showcontrol integration with eg QLab or Ableton multichannel FX and music playback sources, also 64 tracks of internal playback. Dynamic immersive spatial effects are rendered using evolutionary TiMax object-based TimeLine and PanSpace, integrated with showcontrol events and timings.

