APPLICATION GUIDE

Proscenium Theatre



Any type of proscenium show or venue, for Drama, Musicals, Opera, Classical, Jazz or other Music and Events benefits massively from TiMax SoundHub spatialisation.

TiMax creates engaging vocal and musical instrument localisation that gives audiences greater intelligibility, focus and immersion in a performance.

TiMax also adds enhanced surround and overhead reinforcement that delivers intimately enveloping fx and reverb soundfields.

The unparalleled versatility of TiMax SoundHub means it can achieve effective immersive spatialisation over a wide range of Good, Better and Best flexible and minimal loudspeaker configurations, using virtually any brand and type.

Compared to conventional stereo, or LCR, or even multichannel systems using only level-only panning, **TiMax delay-imaging creates fully immersive focus for the entire audience on the performers, playback and fx, and not on the PA.**

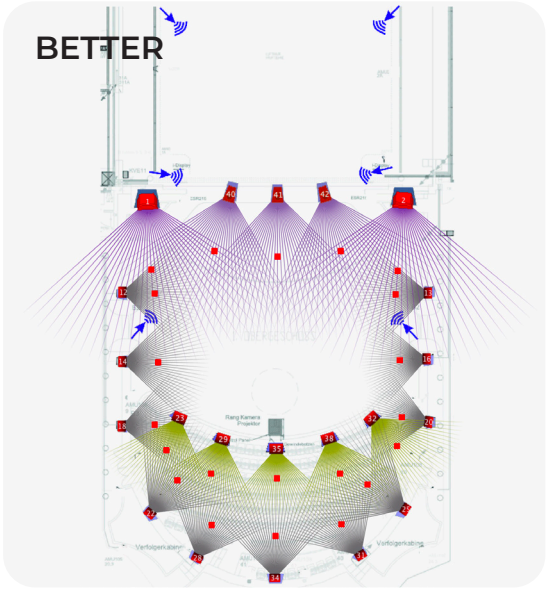
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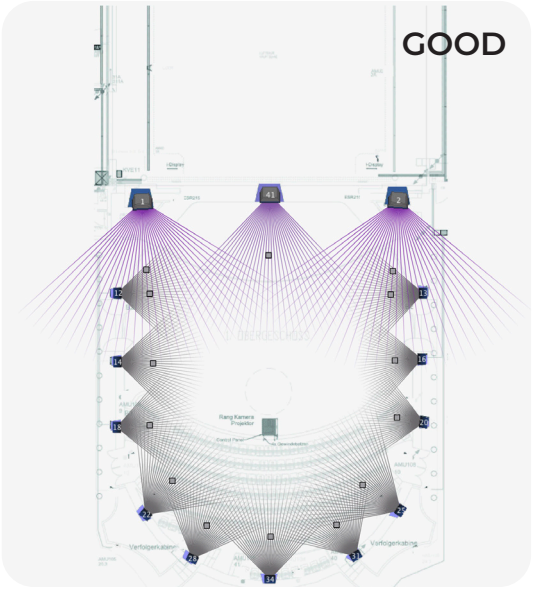
LCR – with just a carefully balanced LCR system such as a 2-channel prosc system plus centre cluster, TiMax can achieve effective vocal and instrument localisation across even a big stage for large sections of the audience.

Cueing or tracking can handle actors' movements. The addition of surrounds allows inclusion of immersive effects and upmixes of stereo playback and reverbs.



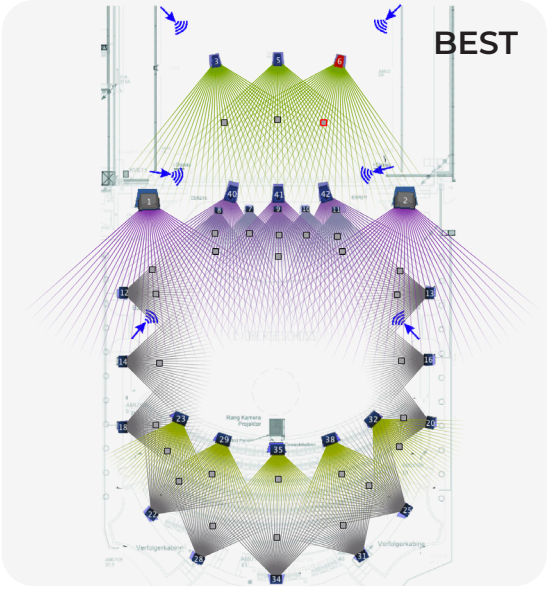
ANCHORS & FILLS – adding front-fills allows greater control of imaging across the front of the audience, and also helps pull the image down nearer the stage for larger parts of the audience further away.

Adding upstage anchor speakers on trusses or in the set helps maintain imaging for quiet voices or over a loud pit-band.



VOCAL SYSTEM – splitting the centre into a three channel vocal system provides more control over TiMax delay-matrix imaging to spread the benefit across even more of the audience. Tracking matches the imaging to moving actors in real-time

Adding over- and under-balcony delays also can improve imaging accuracy into the additional balcony audience areas.

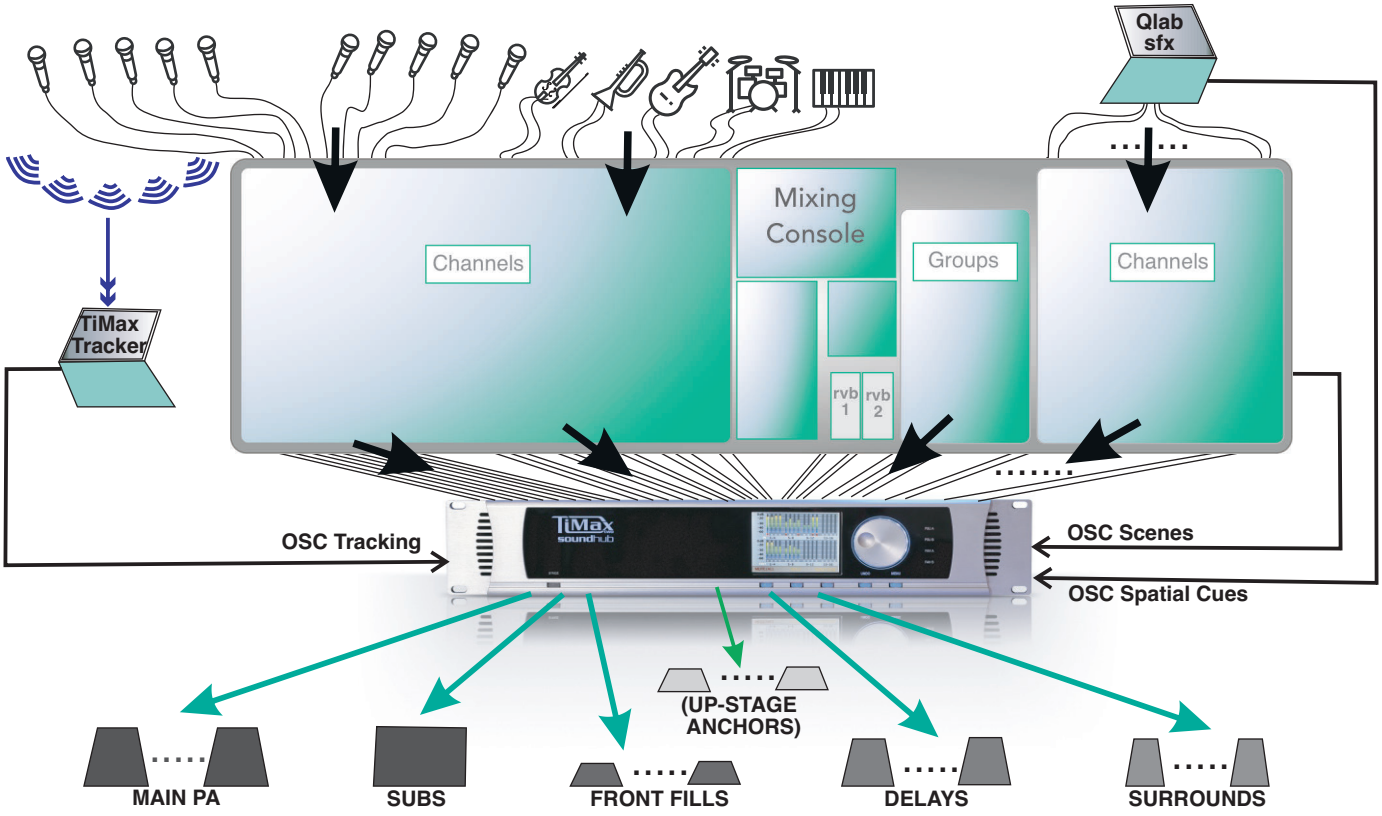


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TiMax SPATIAL MIX PATCH



CONCEPT

Spatial mixes create realism and immersive impact via enhanced focus from vocal and instrument localisation, with enveloping reverbs and effects.

Every mic and other source type effectively has its own PA in terms of level and delay to all audience members, making all acoustic sources arrive early relative to the PA, thus eliminating the system from the audience's perception.

Surround effects, both static and moving, are achieved without hotspots & holes via a combination of level and delay-panning.

Conventional stereo external or console reverb returns also go to TiMax to be upmixed into immersive 3D spaces.

SYSTEM AND PATCH

No speaker delays get applied to the system, except to combine main and sub alignment. Direct home run feeds from TiMax to sub allow optimum flexibility.

Mic or Mic Group direct outs from the console feed individual TiMax inputs. TiMax matrix delays map to sources direct via ideally radial speaker patterns, for maximum Haas Precedence effect control across the whole audience.

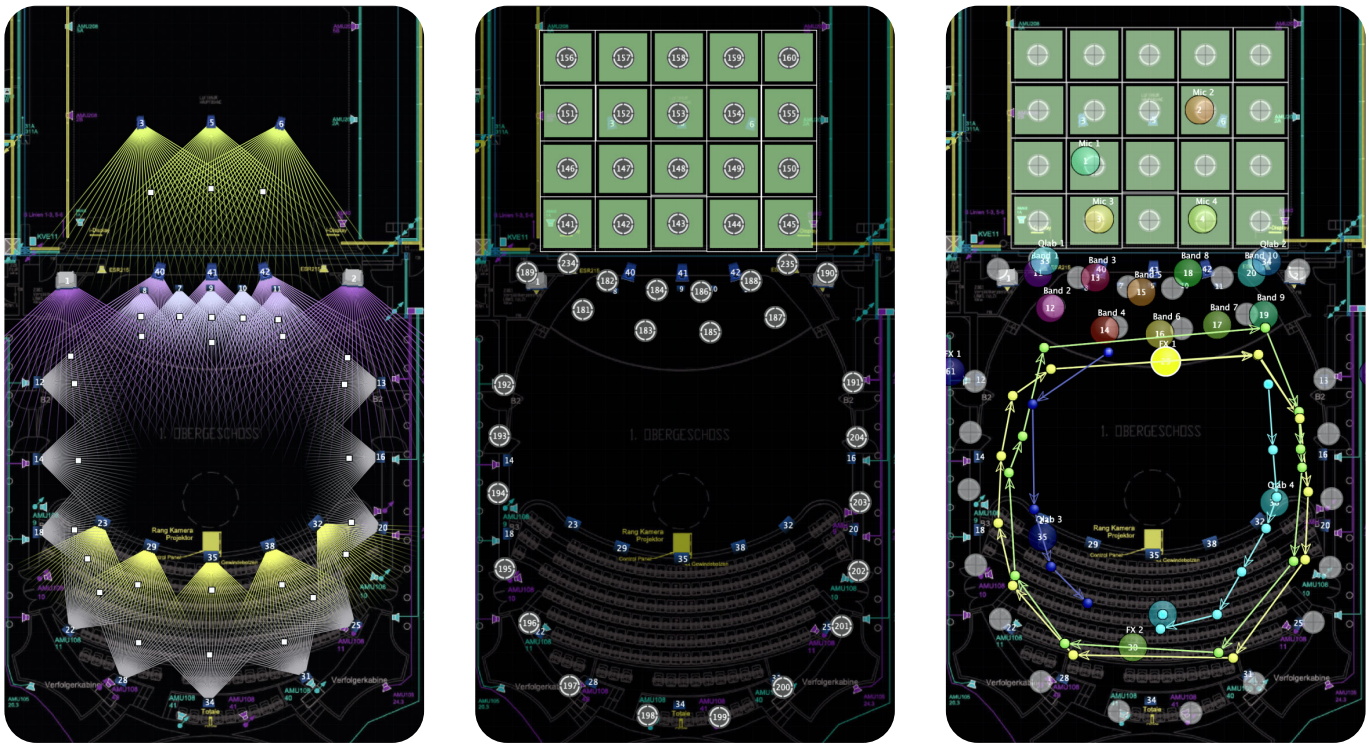
For larger outdoor venues or shows with loud bands or quiet voices, upstage anchor speakers support localisation.

Source panning can be Cue'd by OSC from eg Qlab and/or driven live by TiMax TrackerD4 stagetracking.

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Venue/Speakers → Image Definitions → Spatialisation

WORKFLOW

Import a Venue diagram, choose a datum reference point and known dimension. Add loudspeakers and “lucky-seat” targets, divided into functional Types.

Decide on spatial objectives and specify Image Definition spatial matrix routing objects grouped as Types like Stage, Band, Surround etc. Hit auto-Calculate to program level/delay into the Image Defs.

Spatialisation window programs static and moving pans to Cues. Use SubSpaces to create and separate specific spatial combinations of Image Definitions.

Multiple TiMax Cues trigger static or spatial pan events, or onboard playback. Consoles or Qlab trigger Cues by OSC.

TIPS & TRICKS

Image Definition auto-Calculate lets you apply varied speaker level-shading, usually flatter for mains or delays and more extreme for nearfills and surrounds.

Vocal localisation can be maintained for lower level sources using HF EQ roll-off on mics allowing higher fader level to get quiet voices over a loud pit band.

Upstage anchor speakers, with time-zero vocal mic signals level-panned by stagetracking also assists PA delay-imaging, for quiet voices and big outdoor venues.

Surrounds use extreme level-shading as well as delay panning for a broad, even soundfield, and stereo reverbs upmixed to surround use softer level-shading.

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