APPLICATION GUIDE

Outdoor Event



A TiMax SoundHub speciality is creating effective spatial immersive mixes on largescale and often challenging outdoor stagings for Musicals, Opera, Music and Events.

TiMax creates engaging voice and musical instrument localisation with greater intelligibility, focus and immersion for everyone, sometimes involving non-ideal speaker locations.

TiMax can also add enhanced surround reinforcement on a large scale that still manages to deliver intimately enveloping fx and reverb soundfields for the whole audience.

The unparalleled versatility of TiMax SoundHub means it can achieve effective immersive spatialisation over a wide range of sizes and shapes of outdoor venue, using a variety of loudspeaker configurations tailored to the venue or show,using virtually any brand and type.

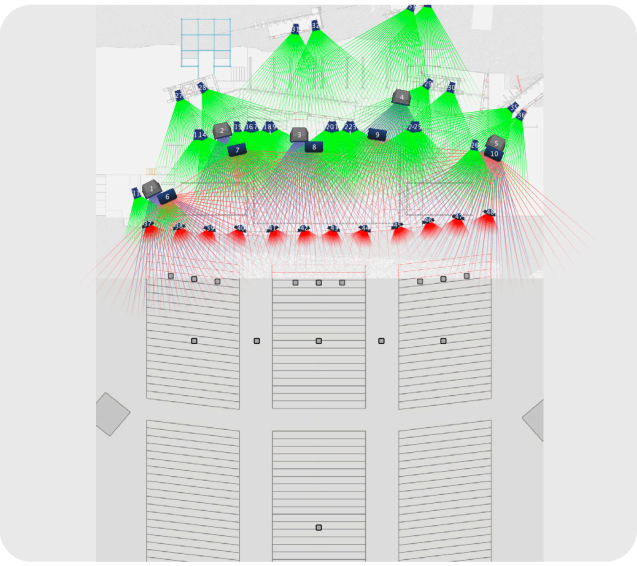
Compared to conventional stereo, or LCR, or even multichannel systems using only levelonly panning, **TiMax delay-imaging creates fully immersive focus and engagement for the entire audience on the performers, playback and fx, and not on the PA.**

© TiMax, Focusrite Plc.

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EXTRA ARRAYS – Blending additional small spatialisation speaker arrays with a large-format stereo festival system, TiMax achieves effective vocal and orchestral localisation across even a large stage for audiences of four to five thousand people Tracking handles actors' movements.

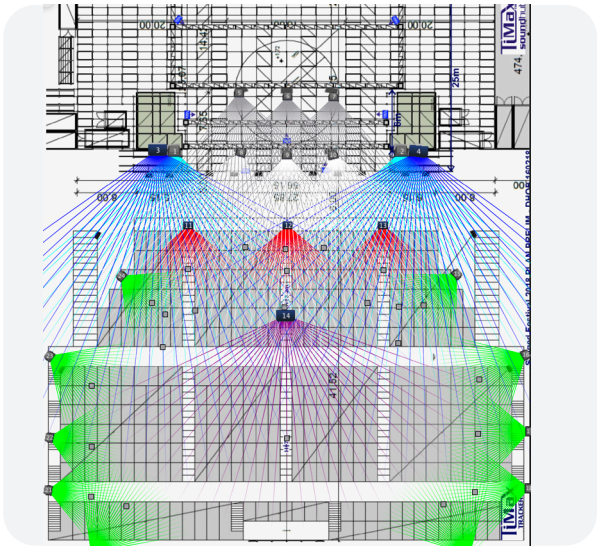
The addition of surrounds allows inclusion of immersive effects and upmixes of several stereo reverbs for voices and band.



COMPLEX STAGING

STEREO SYSTEM – TiMax object-based delay-imaging applied in place of regular console level-panning has been shown to work effectively on a stereo festival system, for certain source/artist types such as orchestral plus vocals and band.

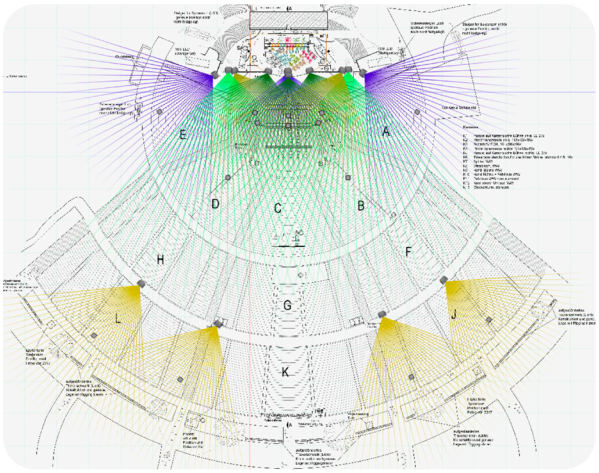
Adding upstage anchor speakers on trusses or in the set can help maintain voices and instrument imaging for higher levels of overall amplification.



MEDIUM FESTIVAL

BESPOKE SYSTEM – complex staging with irregular placement of speakers hidden in the set is readily handled and easily rendered in the versatile TiMax SoundHub object-based workflow.

Arrays of upstage anchors and complementary delay reinforcement plus surrounds combine to create uniform spatial immersion across large audiences of six or seven thousand people .



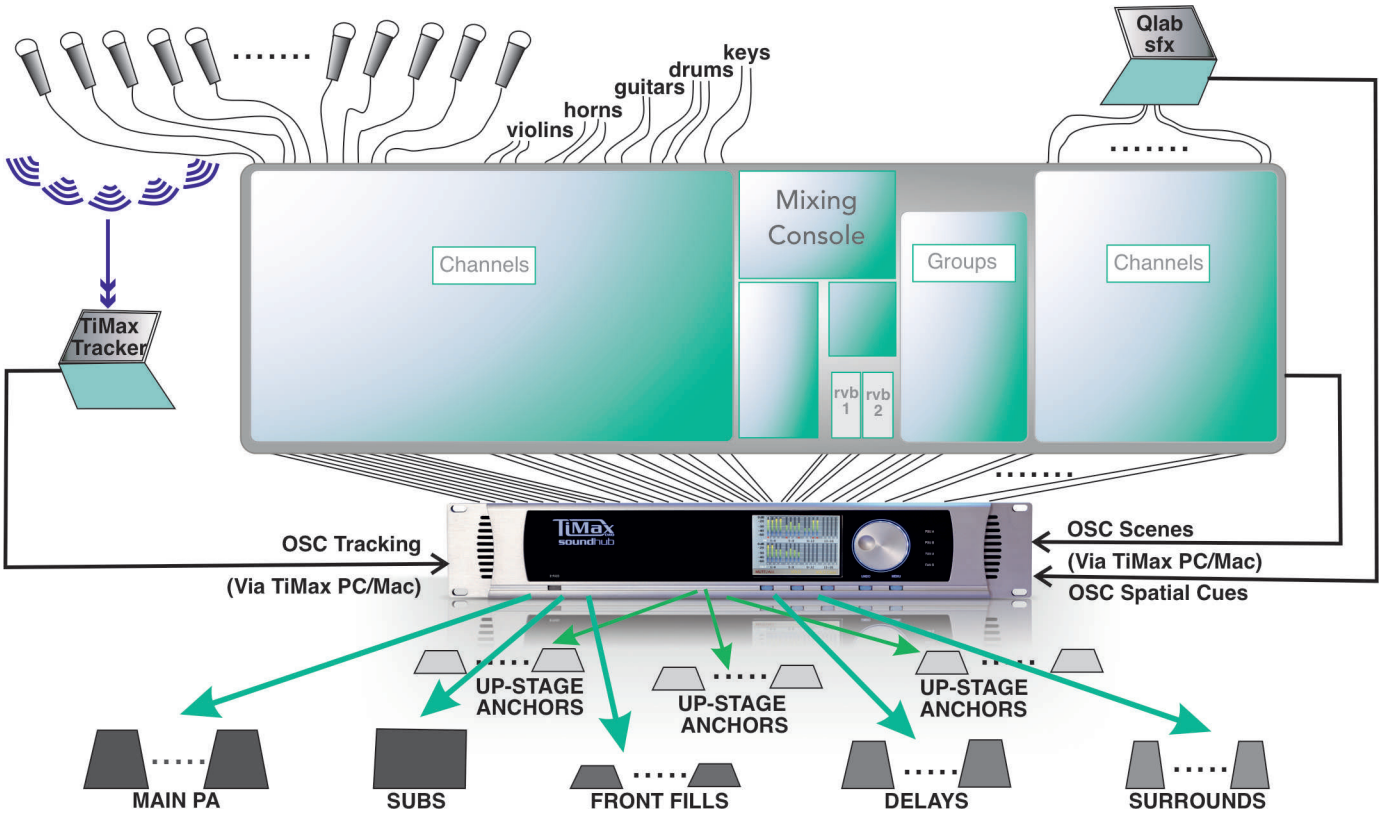
STEREO FESTIVAL

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TiMax SPATIAL MIX PATCH



CONCEPT

Spatial mixes create improved separation beyond stereo via enhanced focus on 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 of the audience, making all acoustic sources arrive early relative to the PA, eliminating the system from the audience's perception.

Any surround effects, both static and moving, will be more seamless due the combination of level- and delay-panning.

Conventional external or console stereo 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 sources direct to speaker channels, for maximum Haas Precedence effect imaging control across the whole audience.

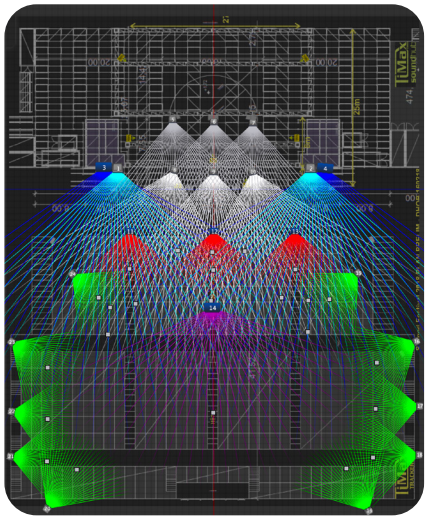
Upstage anchor speakers to support localisation are fed from desk auxes or TiMax for control by TiMax TrackerD4.

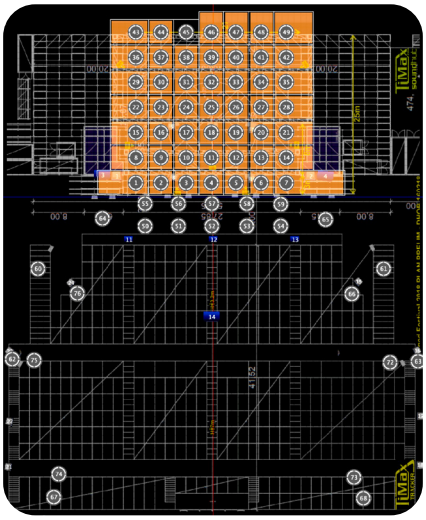
Vocal localisation can be Cue'd by OSC from the console or QLab, or driven live by TiMax TrackerD4 stagetracking

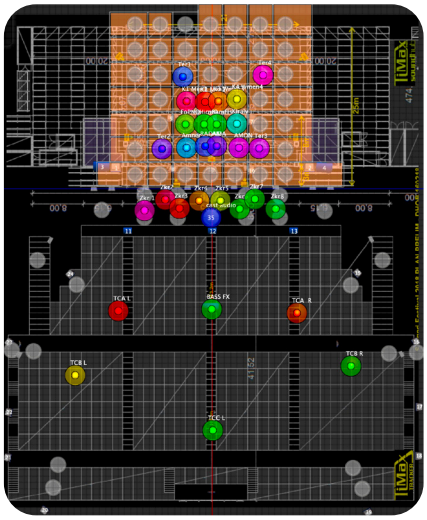
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Venue/Speakers → Image Definitions → Spatialisation

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, Reverb, Surround etc. Hit auto-Calculate to program level/delay into the Image Definitions.

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

TiMax TrackerD4 automates vocal localisation via PanSpace, or spatial scenes and pan Cues can be triggered from the console or QLab via 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.

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

Vocal localisation can be maintained at higher volumes using HF EQ roll-off on mics, allowing a higher fader level while still keeping the vocals localised over louder amplified sources.

Upstage anchor speakers greatly assist PA delay-imaging, fed with time-zero vocal mics level-panned by console auxes to help avoid feedback on the anchors, or automated by TiMax TrackerD4.

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