APPLICATION GUIDE

House of Worship



TiMax SoundHub brings immense benefit to houses of worship of all shapes and sizes, for pastor focus and message impact plus immersive prelude, praise and worship segments.

TiMax creates voice and musical instrument spatial localisation that gives congregations greater engagement and stimulus from pastor, choir, praise team and special productions.

TiMax also adds enhanced surround and overhead reinforcement that delivers intimately enveloping fx and enriched reverb soundfields across the whole Sanctuary.

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, even some already existing systems, and using virtually any brand and type.

Compared to conventional stereo, LCR, or even multichannel systems using only levelpanning, TiMax delay-imaging creates fully immersive focus for the entire congregation on the message and worship team, not on the sound system.

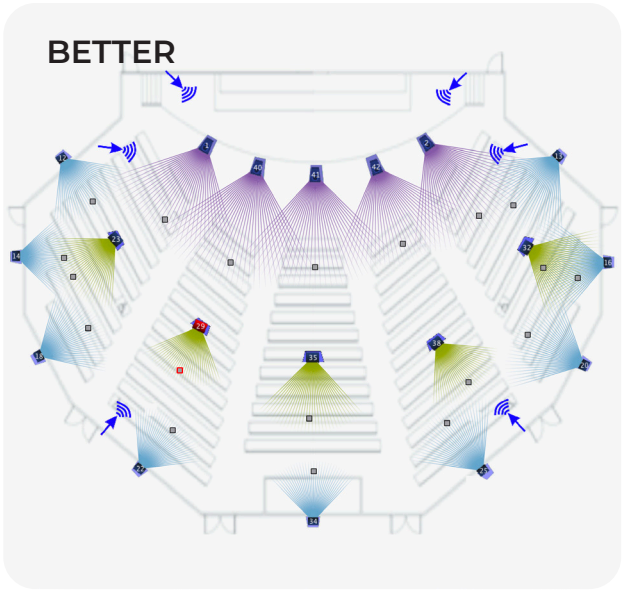
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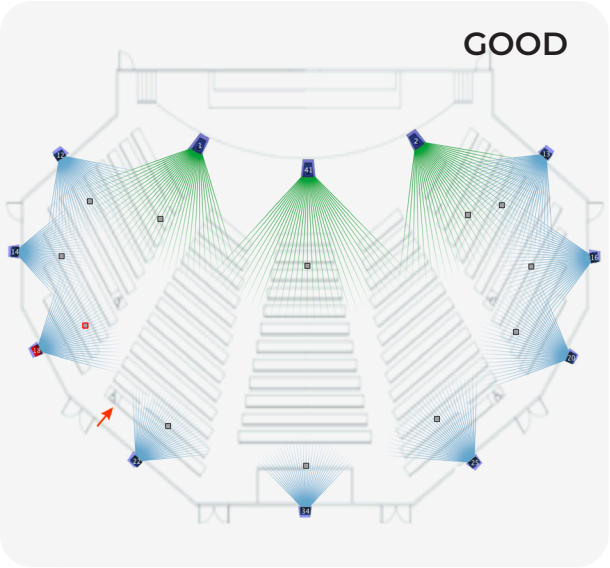
LCR – with just a carefully balanced LCR system such as a 2-channel main system plus centre cluster, TiMax can achieve effective voice and music localisation across even across a big platform for large sections of the congregation. Worship team movements can be Cue'd or tracked.

The addition of surrounds allows inclusion of immersive effects and upmixes of stereo playback and reverbs.



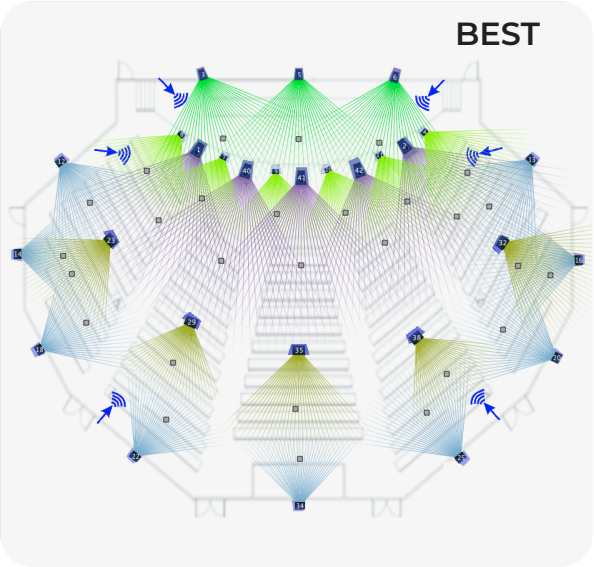
ANCHORS & FILLS – adding front-fills allows greater control of imaging across the front of the platform and also helps pull the image down for more of the congregation both closer and further away.

Adding upstage anchor speakers on trusses or in the set helps maintain imaging for quiet vocals or over a loud praise team band and choir.



VOCAL SYSTEM – adding some additional main system channels provides more control over TiMax delay-matrix imaging to spread the benefit across even more of the Sanctuary. Add tracking to spatially match a roving pastors' audio in real-time.

Adding delay speaker systems can improve spatial imaging accuracy into the deeper congregation areas or balconies.

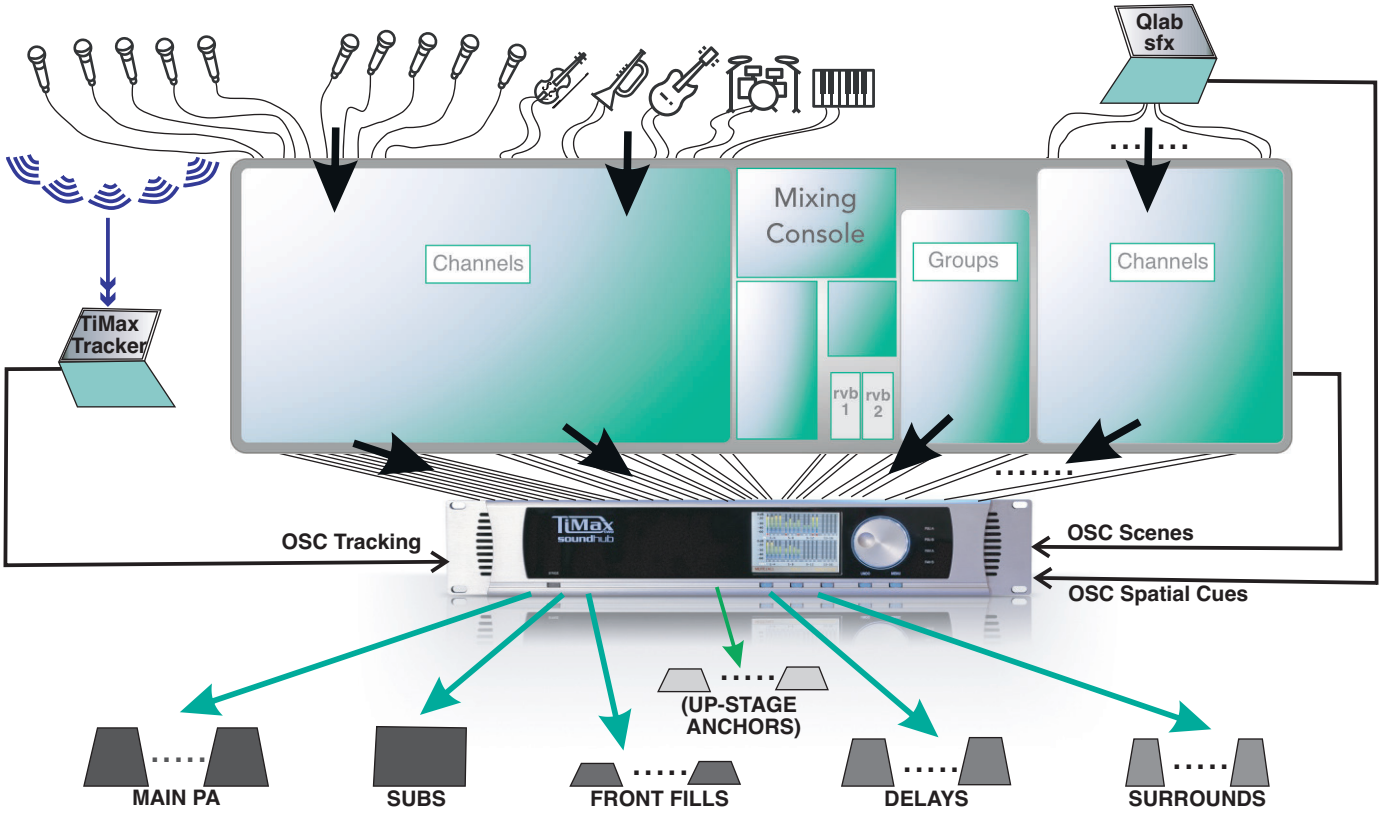


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TiMax SPATIAL MIX PATCH



CONCEPT

Spatial mixes create message impact and immersive worship 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 the congregation, making all acoustic sources arrive early relative to the PA, thus eliminating the system from the worshippers' 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 congregation.

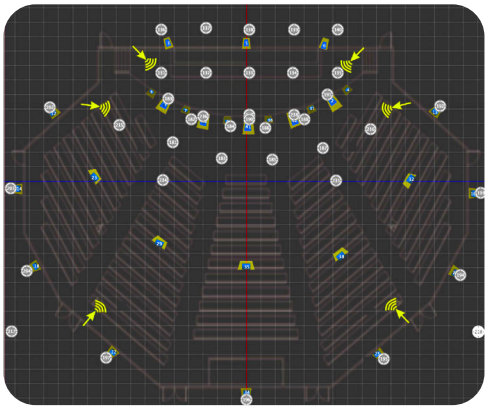
For larger sanctuaries & praise segments with loud bands or quiet voices, upstage anchor speakers support localisation.

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

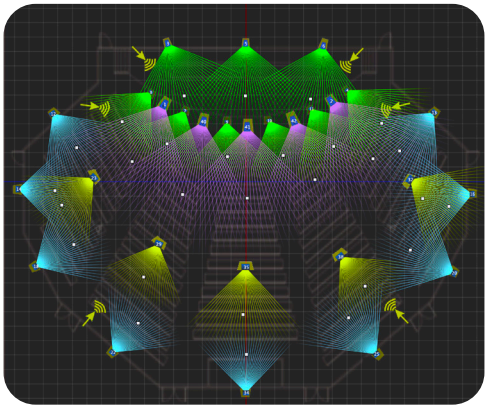
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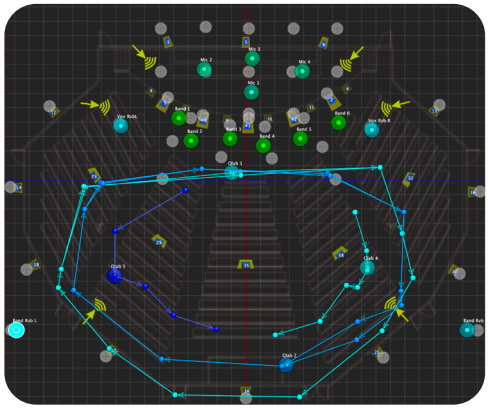
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Venue/Speakers → Image Definitions → Spatialisation





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 praise team.

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

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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