



FREMONT STREET EXPERIENCE



LAS VEGAS, USA
AMERICAS

To coincide with major investment in its lavish and world-famous multimedia infrastructure, the vibrant Fremont Street Experience in downtown Las Vegas has upgraded its TiMax SoundHub immersive audio processor to include the all-new HARDCore FPGA audio processing platform.

The upgrade provides extended delay-matrix crosspoint memory of up to one second, plus new ultra-smooth holistic delay-panning algorithms across the street's vast and unusual 52.4 channel audio system. With 26 pairs of loudspeakers distributed down the five-city-block space, the powerful new TiMax platform updates extend the necessary resources needed to deliver fully immersive dynamic effects



• Above Fremont Street is a fully immersive, unique experience.

spatialisation for the huge scale of the street's stunning show content. TiMax also handles basic routing and housekeeping for all audio aspects of Fremont Street's daily activities. The browser-based TiMax Portal bespoke touchscreen controller enables mode-selection of background music, audio mix assignment and imaging between three different live stages, plus focussing to a DJ stage as well as various performers and events on the street. The latest TiMax SoundHub sonic enhancements complement multimillion-dollar upgrades to Fremont Street's HD video canopy – the record-breaking

world's longest screen – for which marketing and creative agency, Contend, won the bid to create content for the screen's brand-VivaVision public launch event. Contend's Bill Wadsworth, who led the project, explained: "Even before I'd realised what TiMax was capable of, the point of interconnection between the video side and the aural side was where we felt most excited and we brought the most energy towards that." Bill's first impression of TiMax as a simple and unassuming 19-inch rack-mounted unit, by his own admission, was initially underwhelming. Upon deeper

investigation, and shortly before reaching out to 1602 Group's Duncan Crundwell who represents TiMax in the US, Bill claimed: "...I was like, 'I'll be damned! Somebody was smart enough to put that in at Fremont Street...'" Duncan Crundwell partnered with Contend's audio engineer, Dave Wein, to provide TiMax workflow familiarisation and programming assistance. Between them they rendered the immersive sound fields using the tightly integrated TiMax PanSpace and TimeLine tools, animating them through the length of the street to support the movement of the aerial native HD resolution video content. 



• Above
Already
full of
incredible AV
technology,
the TiMax
upgrade
really makes
Fremont
Street an
unmatched
spectacle.

The simplicity of control impressed those at Contend, prompting Bill's comments that, "...It's awesome of TiMax to simplify something that was borne from an engineering and live tool perspective and make it into a friendly interface for those of us that come from the post-production side of things"

The multimedia content, according to Bill, is "an amalgamation of different things to massively excite the senses", and is thematically and metaphorically, 'out of this world', including spaceships, asteroids and other galactic entities moving across the full length of the street's sky-screen. He explained: "The experience is so big that you hear things you can't see. Happily, TiMax is exponentially smarter than I ever will be and achieves the level of computational process necessary to handle the level and time correction

of assets that are moving through the sound space. Give TiMax accurate inputs about where everything is, what the components are, how things move in a space like that, and you can do – and this is so important – just about anything." The fact that they would do something really special with the sound was, Bill claimed, clear from the early stages of the project. However, he added: "It wasn't until I got down there and actually laid my eyes on what they had going on that I realised how epic the thing was going to be."

The audio setup at Fremont Street was an inspiration to Bill. He explained: "It got us thinking there was a real opportunity to do some amazing sound stuff that's never been heard before on a system that doesn't exist anywhere else, a system that's so impressive in its massiveness you can

really do things with the physics of sound that you're not able to do in any other situation.

"You could shut your eyes and move someone in a really profoundly deep way with just the audio mix and energy, but the spatialisation is something that will capture people in a different way... I've predicted for Fremont street that people will probably talk about the sound more than anything else because it's so unusual to be on the receiving end of an absolutely real spatialised audio experience of that scale."

Bill discovered that, "With TiMax, we had a tool that you could just blow people's minds with – being able to control sound in that way, and I dare anyone else to try to do that – nothing else on the market has that control or anywhere near what that box does." ⁴

