

Why TiMax SoundHub?

TiMax SoundHub is a state-of-the-art spatial audio processor using a bespoke combination of Level and Delay to provide accurate sound localization.

Its Level-Delay matrix can also be used in conjunction with any object-based approach to be a flexible speaker management platform for more challenging PA configurations.

It's powered by advanced FPGA cores driving TiMax delay-panning algorithm, operating at 48KHz or 96KHz while providing real-time delay morphing for all sound sources at the astonishing in-to-out latency of just 42 samples!

TiMax SoundHub is the perfect platform to create complete 3D spatial environments, each one customizable through a virtually infinite number of Image Definitions.

Image Definitions are the most powerful feature in the TiMax workflow. They can be used to map multiple spaces, carefully calibrating any speaker topology and multi-room setup to tailor the ultimate sonic experience: the sound system will simply disappear through fine management of the Haas Effect.

Thanks to a wide range of benefits in object-based audio you'll be able to shift the narrative from a channel-based approach to active audience engagement and a more natural experience for the listener.

Our OSC control window and OSC dictionary allow a constant flow of modern integrations, perfect for Object Tracking data, ready-to-go ADM-OSC standards as well as the ability to map any custom OSC strings.

TiMax SoundHub can be custom fitted with a variety of I/O cards, all running in parallel to feed up to 64 processing channels as well as providing a flexible range of Outputs for all levels of system integration (built-in fallback).

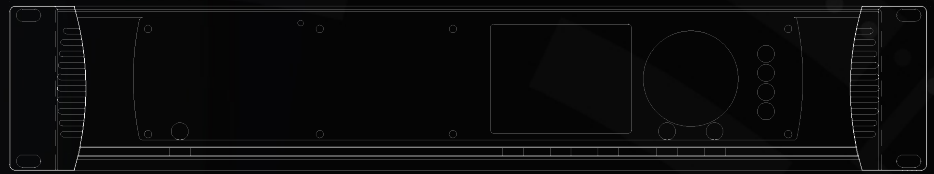
Enhance your sound design with our Internal Playback Engine: a Timeline equipped with audio playback editor and cue-specific show control tools, including markers to fire off MIDI, MTC and UDP messages.

TiMax2 (free download for Windows and MacOS) will be your full Show Control suite: detailed Cue List section, OSC Mappings, embedded Object Tracking functionality, built-in-cue dynamic movement and position recall, native MIDI integration for Group control of 32 customizable DCAs and much more!

Connect to the hardware in multi-client and check the results of your spatialisation from multiple calibration points, even over Wi-Fi.

Speed up your workflow by working in Offline-Edit mode and migrating whole libraries between show files: EQ's, Image Definitions, Group Assignments, Channel Labels, System Presets, custom OSC Mappings.

In short: we believe Immersive Audio is here to stay and TiMax is the optimal solution for you and your audiences.



Power

Power supply	100 to 240V - 50/60Hz
Mains Connector	Dual IEC with fuses - 5A 250V
Nominal Power Consumption	54W ^[1]
Boot time	18 seconds
Fan	Dual - front outlet

Size & Weight

Size W x H x D	483 x 86 x 433mm / 19 x 3.38 x 17inches [2U]
Weight	9.3Kg

Ratings

Operating Temperature	0 - 46 °C / 32 - 115 °F
Fan Noise	Idle - 30dB(A) Full Load - 44dB(A)
Humidity range	up to 65% relative humidity ^[2]
Dynamic range	144dB Digital 111dB Analog
THD	< 0.0006%

Interface

Ethernet Control Port	1x RJ45
Front panel	3.5" LCD screen navigation encoder dual PSU indicator dual Fan indicator
Multi-client access	Yes - up to 4
Operative System	MacOS Windows
Cue Triggers	OSC MIDI MTC Show Clock UDP Date-Time stamp
OSC Dictionary	Yes

Connectivity

Analogue	AIO card	16x16 Analogue I/O over D-sub max 4 cards per unit
AES3	MIO card	16x16 AES3 I/O over D-sub + 16 Analogue Outputs over D-sub SRC from 44.1KHz / 48KHz / 96KHz max 4 cards per unit
Digital	Dante64 card	64x64 @ 48KHz 32x32 @ 96KHz Primary/Secondary ethernet
	Dante64X card	64x64 @ 48KHz and 96KHz Primary/Secondary ethernet
	MADI64 card	64x64 @ 48KHz 32x32 @ 96KHz
MIDI		Coaxial BNC In/Out Optical SC In/Out Word Clock BNC In/Out
Clock Source		2x MIDI In 2x MIDI Out on 5-pin DIN
		Word Clock BNC MADI Dante Internal

Processing

Processing channels	32 or 64 ^[3]
In-to-Out Latency	42 samples ^[4]
Input Processing	Input Source Mix +22dBu headroom 8-band PEQ Polarity Solo Mute Group Link
Output Processing	up to 1000ms Delay +22dBu headroom 8-band PEQ Polarity Solo Mute Group Link
Group Processing	32 customisable DCAs Solo Mute

Playback Engine - 48KHz only

Files Accepted	Lossless up to 96KHz - 24bit
Internal Storage	250GB on SSD

[1] for 64ch on Analogue-AES cards [2] prolonged exposure above 65% may affect reliability [3] field update available [4] plus digital network latency