



## Features

- » Rendering of max. 64 simultaneous sound objects for 128 speaker outputs
- » Real time control of object parameters via open sound control (IOSONO Spatial Audio Workstation, Max/MSP, MATLAB)
- » Internal Hard Disk for storage and playback of pre-produced content
- » Synchronization using Time Code (LTC)
- » Interface for integration with show control systems
- » Control Unit software for configuration and maintenance
- » Easy Control software for playback/demo operation
- » Remote Control software for Windows and Linux clients

## Technical Data

- » 64 input channels @48 kHz, 24 bit
- » 128 output channels @48 kHz, 24 bit
- » 7" Touch display (native 800\*480)
- » MADI or ADAT or AES/EBU in/out
- » Wordclock in/out
- » 4 RU 19"
- » Max. current: 4A-230V, 8A-120V
- » Input voltage: 100-240 VAC
- » Weight: 19.84 lbs (9 kg)

## Contact

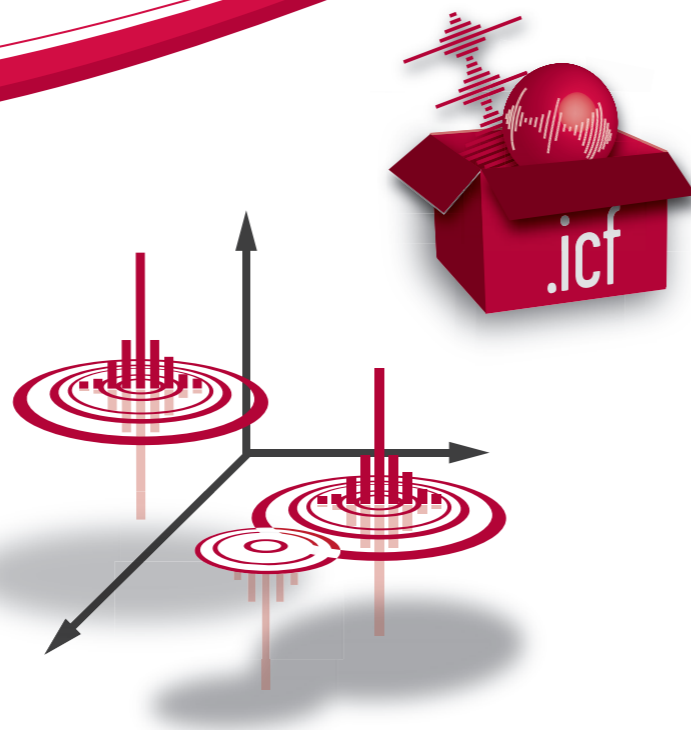
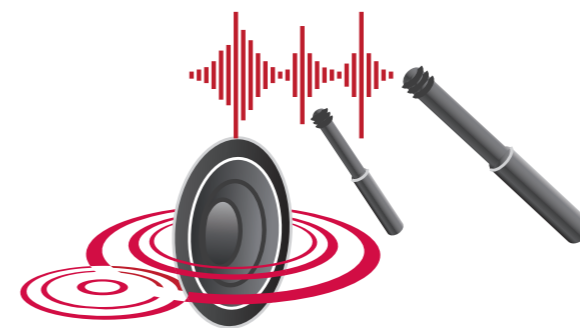
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## Spatial Audio Processor IPC 100

The SPATIAL AUDIO PROCESSOR is an all-in-one tool for reproducing IOSONO content or enhanced multichannel playback on flexible 3D speaker layouts. Using the speaker of your choice, the IPC 100 puts the whole audience in the middle of the auditory scene. The system includes a graphical user interface, features different user levels, and depending on the desired application, a variety of processing plug-ins are available. The IPC 100 can be configured on a preset basis and configured and controlled remotely using Linux or Windows systems. A cluster of processors can be combined using a single user interface to control very large channel counts (>128). The system can be integrated into complex installations using the media control extension to control the IPC 100 remotely via TCP/IP commands.

- » **Immersive true 3D sound** experience in all venues (cinemas, live-events, theme-parks, showrooms, virtual reality environments or theatres)
- » Reproduction of **all conventional and future** multichannel speaker **formats**
- » High quality algorithms based on patented **IOSONO** technology
- » **Seamless integration** in any installation
- » **Scalable** processing platform





## Algorithm

The **IOSONO** algorithm processes the incoming spatial audio scene to a perceptual optimized sound field in a given listening area. The synthesis of the sound field is optimized for each individual speaker utilizing the power of the multi-core processor and multiple speaker configurations are possible.

The IOSONO algorithm supports speaker configurations from 5 to 500 loudspeakers to reproduce IOSONO content or spatial enhanced multichannel material. It reproduces audio sources with stable source positions or directions over the entire listening area. The possibility of focused source creates a complete new listening experience.

The IOSONO algorithm is based on the principles of Wave Field Synthesis (WFS) and was perceptually optimized with several patented new methods for spatial audio reproduction developed by IOSONO.



Easy Control software



## Room Tuning:

The **IPC 100** can optimize various loudspeaker setups. Individual real time IIR filters and FIR filters for all speaker channels can be configured by the user. The room tuning plug-in enables an acoustic adaptation of the loudspeaker setups to the current venue.

## Source Configuration:

The positions of up to 64 virtual sound sources can be set in the control interface and saved within different presets. The source setups can also be edited in real time while listening to the spatial audio scene. Therefore, compatible configurations for playback of Stereo, 5.1, 7.1, 9.1, 22.2 etc. can easily be created.

## Scene Display:

The current spatial audio scene can be monitored in real time. The movements of all sound sources are displayed while the scene is rendered. This even works for scenes controlled live from external playback devices.

## Monitoring and Routing:

A routing matrix to the physical outputs makes the system extremely flexible. All hardware channels can be monitored in real time for checking levels, headroom and input/output channel activity. This enables the operator with an easy way to proof routings or connections.

