



# SoundPack®

Immersive 3D Audio rendering  
for the 3D Via Virtools™  
environment

## Immersive 3D Sound for 3D Via Virtools™

SoundPack allows you to use **advanced audio features** from within your 3D Via Virtools™ environment.

SoundPack includes more than 50 new Building Blocks that may be used in your compositions in order to bring a professional dimension to your audio contents.

SoundPack features **3D audio spatialization** algorithms, high quality room simulation and standard protocols in use in the pro-audio world.

## Professional sound communication protocols

SoundPack includes a comprehensive set of building blocks for managing emission and reception of commands in MIDI (Musical Instrument Digital Interface) and Open Sound Control.

3D Via Virtools™ can furthermore **interact seamlessly** with standard MIDI capable audio gear and software.

### Requirements

PC, Windows XP or Vista (all versions), Virtools Dev 3.5 – 4.0 – 4.1, any ASIO compatible sound device or driver (including software ASIO wrappers).

### Spatialization and rendering

SoundPack's audio spatialization algorithms use numerous source-related parameters: propagation time, attenuation, relative speeds (Doppler effect).

Included audio renderers: Binaural, 3D stereo, enhanced Stereo, multichannel and VBAP.

## High quality spatialization

SoundPack uses an audio engine capable of rendering **3D audio scenes** through headphones and stereo speakers by using customizable psycho-acoustic binaural, 3D-Stereo and multichannel VBAP processing.

The audio engine also includes a **room simulator** supporting a statistical reverb tail and spatialized early reflections that track the dimensions and dampening properties of the virtual room.

## Low latency audio outputs

By using ASIO drivers instead of standard DirectSound, SoundPack enables very low latency audio and precise synchronization with video output or motion-tracking data.

With ASIO output, Virtools™ can be used with **multichannel professional audio** devices.

### Room effects

Spatialized early reflections, reverb, occlusion and obstruction.

### Low latency audio rendering

ASIO support, up to 32 internal audio channels, output channel routing, free routing of background sources.

### External communication protocols

Fully supported MIDI and OpenSoundControl I/O.

### Audio generation and processing

VSTi virtual instruments hosting, built-in param EQ & reverb.

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