Percussa Audiocubes

Audio Cubes – more than a performance tool

What are audiocubes, what can you use them for and what technology is inside the audiocubes?

Bert Schiettecatte of Percussa:

"The audiocubes consist of 2 parts: hardware and software, and can be used for many different tasks depending on what software you use with the hardware. Professionals are using the cubes for algorithmic composition and generative music, but also for sound design and music education. And of course we have people who use the cubes in their live shows, to control effects or instruments, or to trigger loops or sounds. We also have installation artists who integrate the cubes in their own interactive sound installations.

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The AudioCubes work on Mac and PC without drivers. They communicate over USB HID and transmit data at a rate of 1kHz, which means there is very little latency involved. Each cube is like a small computer, processing and generating infrared signals and sensing distance to your fingers and hands or other objects, as well as detecting other cubes nearby, including orientation. One cube stays connected to the PC or Mac while the other cubes can be wireless. To learn more about the electronics of audiocubes see Percussa – Audiocubes.

The data from the cubes is sent to the computer which can translate it into MIDI or OSC or use it to generate sound, music, visuals, … depending on the software you run. You can make your own software using our free development kit for Max/MSP, PD, C++, Supercollider, … or you can use our ready to use free applications, for composition (improvisor), sound design (evolvor), live Performance (midibridge), ….

Percussa Audiocubes – Evolvoer Software (for Sound Design)

The cubes are charged over USB and have a built in battery which lasts about 4 hours. Each cube also has built in RGB LED lighting which can be mixed and controlled via USB (and via MIDI and OSC). The audiocubes are truly hot-pluggable, you can plug them in and out while software is running without having to reboot or restart software."

If you want to connect your harware Synthesizer, this graphic might be of interest:

Percussa AudioCubes – Controlling hardware synthesizers

Here are two video examples: Live Perfomance und Sound Design.

Learn more about what AudioCubes are at Percussa – Audiocubes.