

Stimulierte Emissionen klingen

sound/light/movement immersive interactive installation

'Stimulierte Emissionen klingen' is a musical instrument based on a 2mts * 2mts frame that holds 16 lasers targeted to 16 photoresistors, creating a two dimensional grid of laser beams. Both lasers and photoresistors are connected to an Arduino board, and a specially made Arduino shield, that provide current to the lasers, and detect tiny voltage variations in the photoresistors. These voltage variations are received with a computer and used to trigger sounds.

The frame holds 8 lasers in the horizontal axis + 8 lasers in the vertical axis, with their respective photoresistor on the other side of the frame. With this configuration I receive information from 16 laser beams, plus 64 nodes that come from the encounter point between two lasers, having the possibility of triggering 80 different sounds; Most frequently, 16 long evolving sounds for single beams plus 64 punctual sounds for the nodes between two lasers.

In a slightly more complex configuration, we created as well a visual representation of the instrument using the same mechanism; through the midi signals, different animations are responding to the interaction of the executer with the instrument.

This instrument can be used for a live performance, or as a sound installation, where the audience is invited to discover how the instrument works and actively experience it for themselves.

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Technical requirements:

- Space that can be darkened or dimly lit. The usage of a fog machine works very well with the installation, but because of its invasive character, it is not always possible. Its utilization remains then under consideration of the organizers.
- PA system (powered speakers or speakers + amplifier)

Setup time: 2 hours

Dismantling time: 30 minutes

video available at:

<http://www.youtube.com/watch?v=ajMtrghPKCk>

