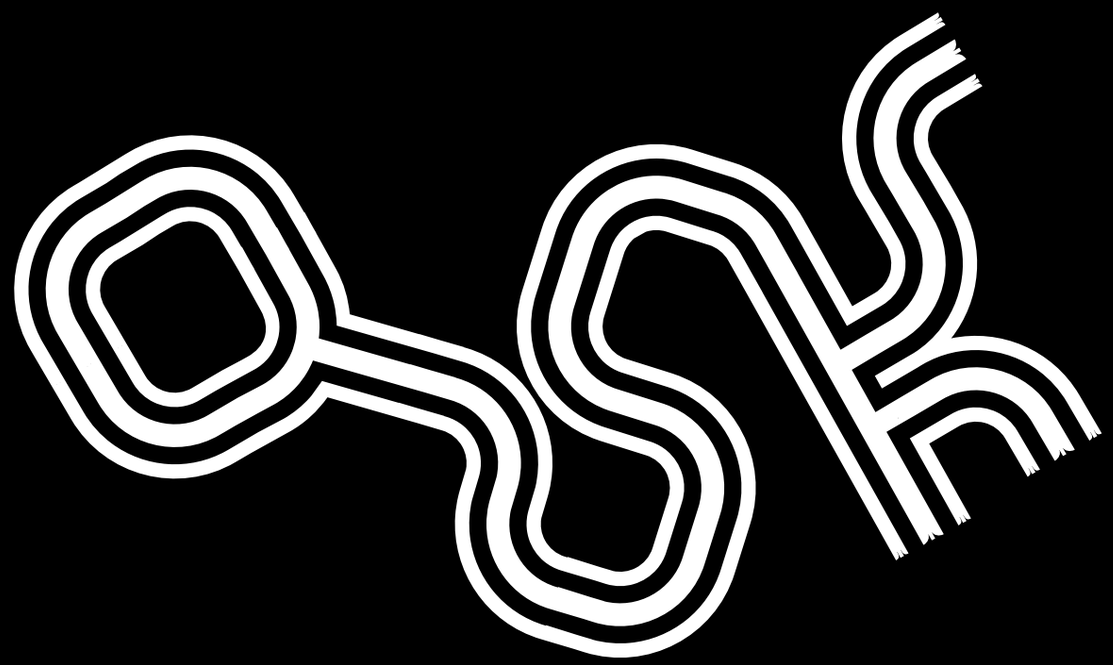
Offener Schaltkreis

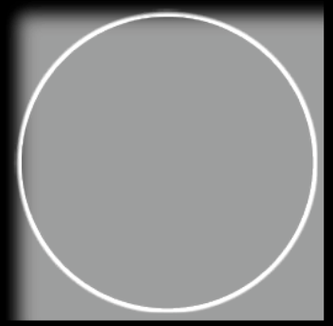
An Interactive Sound Installation



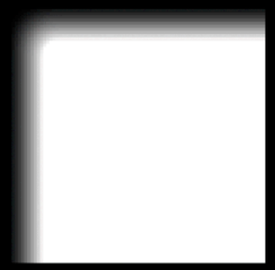
By Christoph Haag, Martin Rumori, Franziska Windisch and Ludwig Zeller

http://osk.openkhm.de

K L A N G



L A B O R



Kunsthochschule für Medien Köln
Academy of Media Arts
École Supérieure des Arts et Médias

Video

Academy of Media Arts (KHM)

OSFA

- Open Source for Arts (formerly known as Open Source for Audio)
- seminar series at Klanglabor (sound lab) at KHM
- e. g. UNIX basics, Linux install parties, workshops: pd,
- supercollider, open lab sessions
- summer term 2006, OSFA lab: → OSK (OffenerSchaltkreis)

OSFA

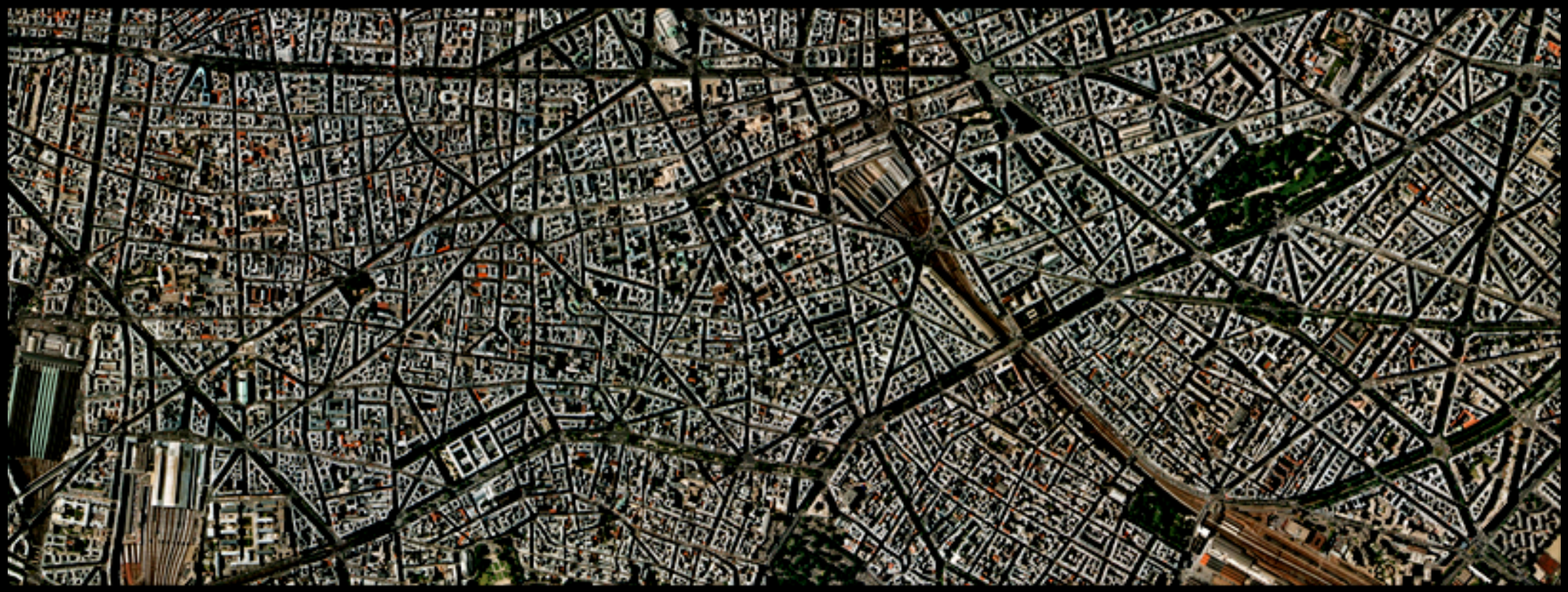
Workshop with Frank Barknecht at Klanglabor, KHM

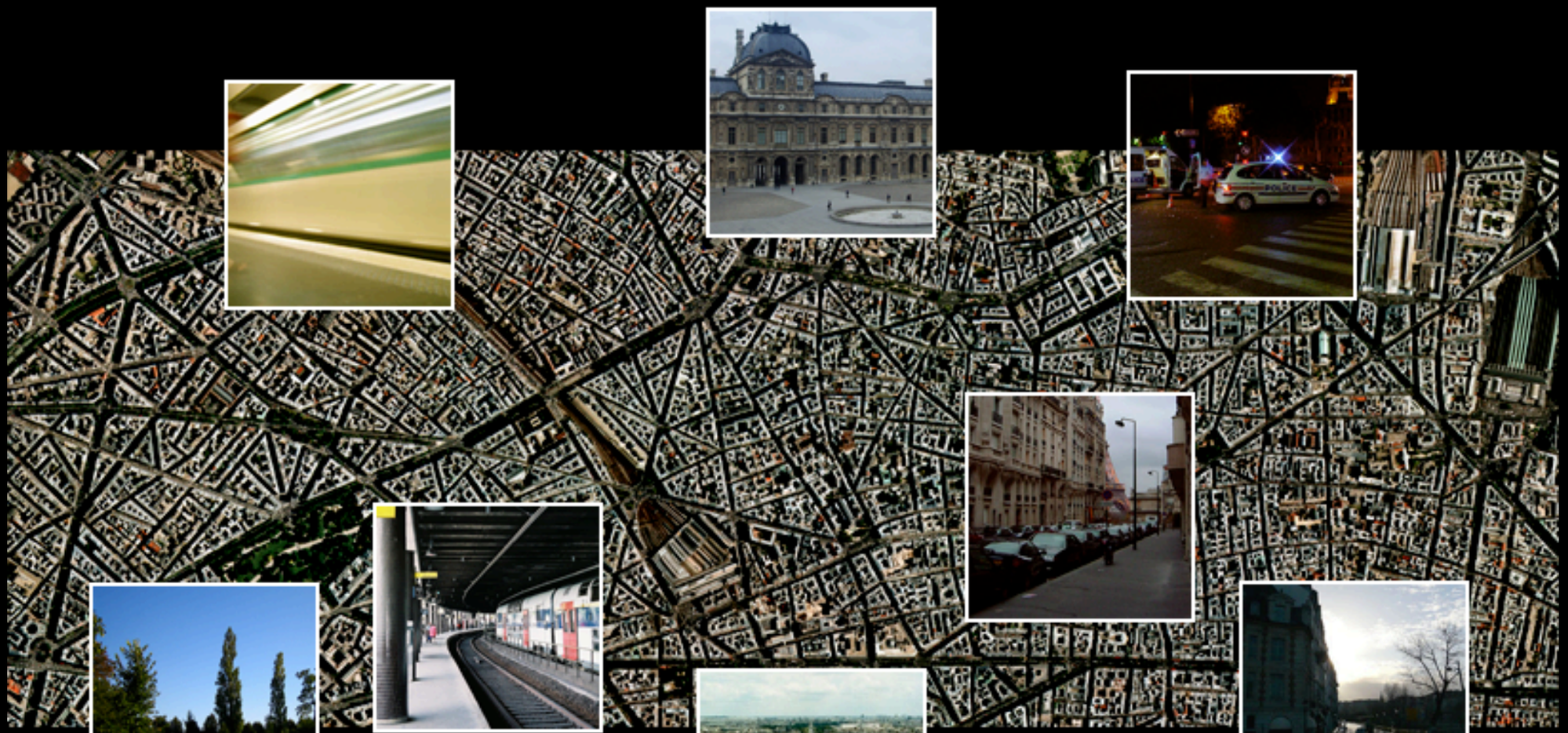
Design “Offener Schaltkreis”

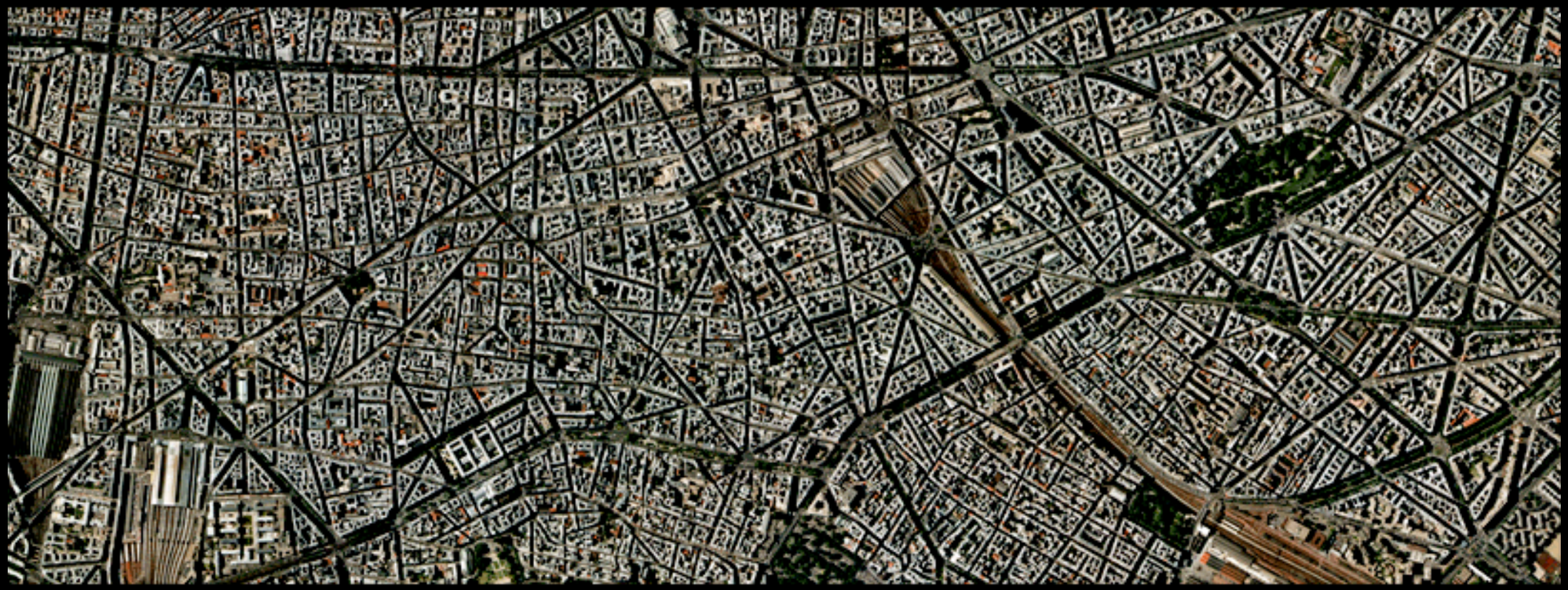
- audio displays for an exhibition about architecture, urbanism
- reflect the theme of the exhibition in functions of the displays

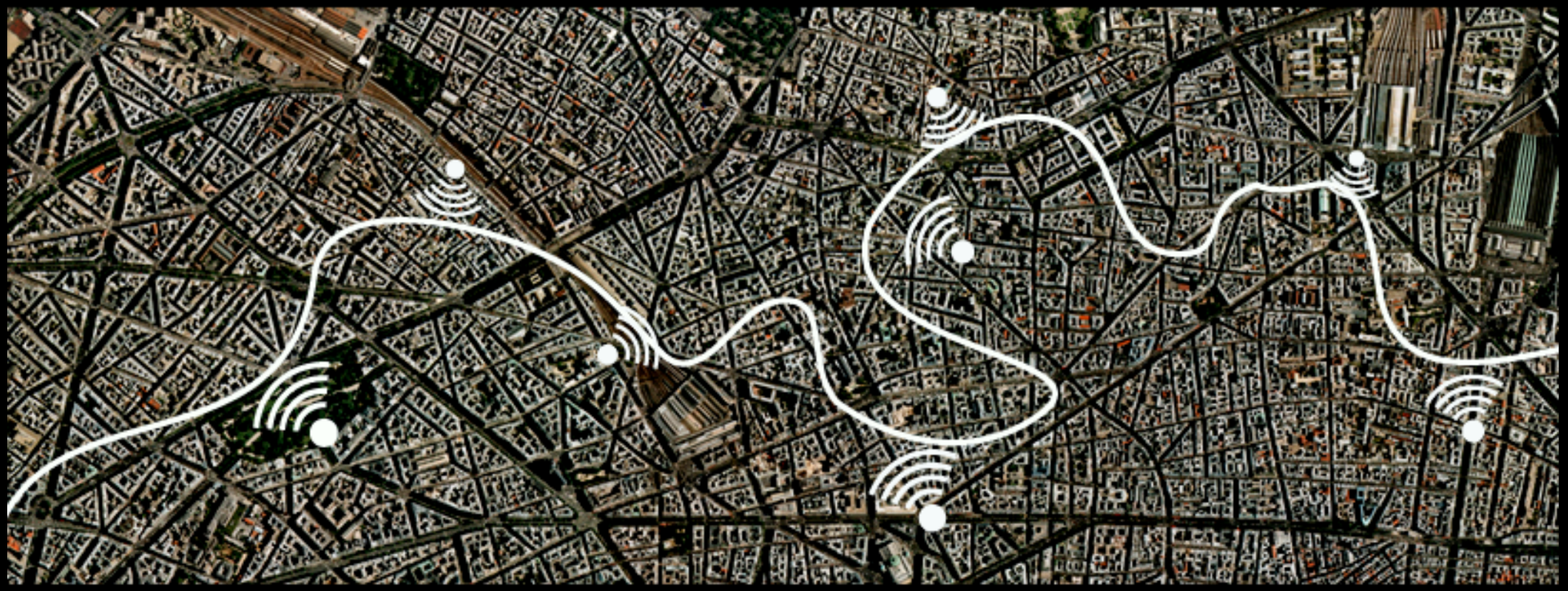
the micropolitics of urban space

- "a dialogue on reconfiguring and reactivating the marginal, residual and public spaces of our cities."

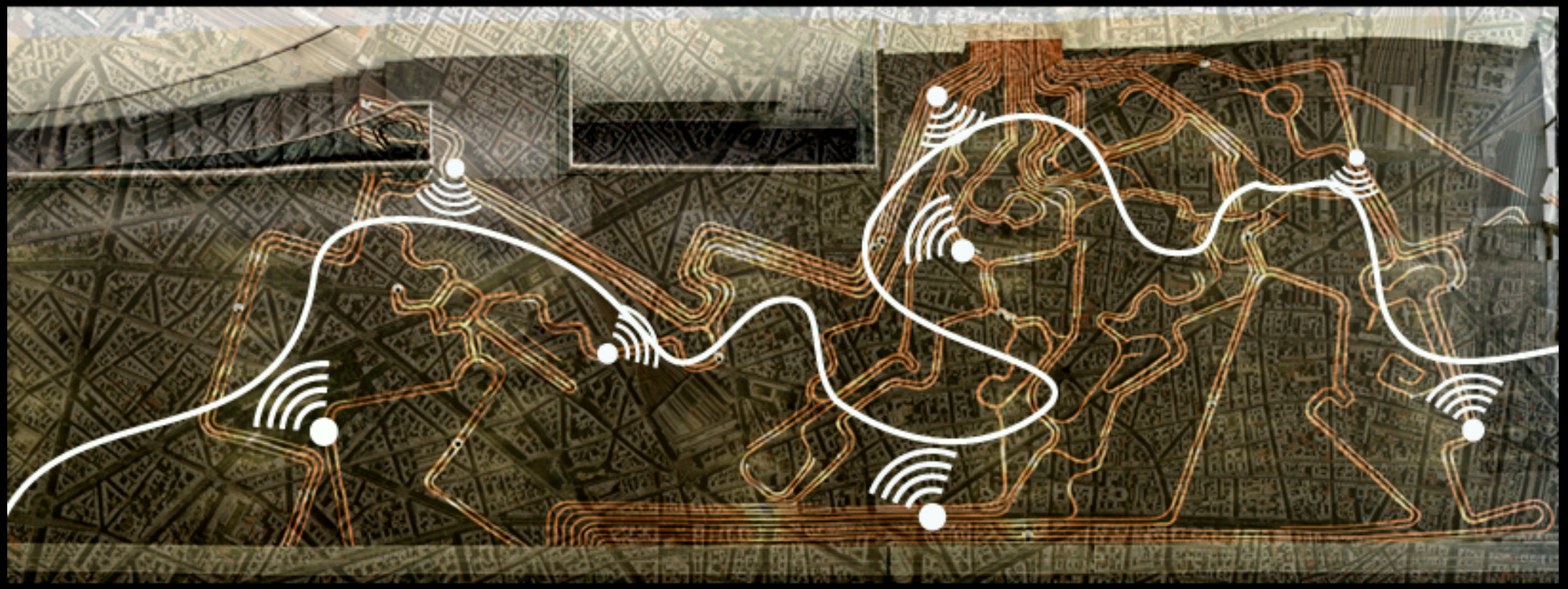








Acoustic cityscape scaled down to an exhibition space



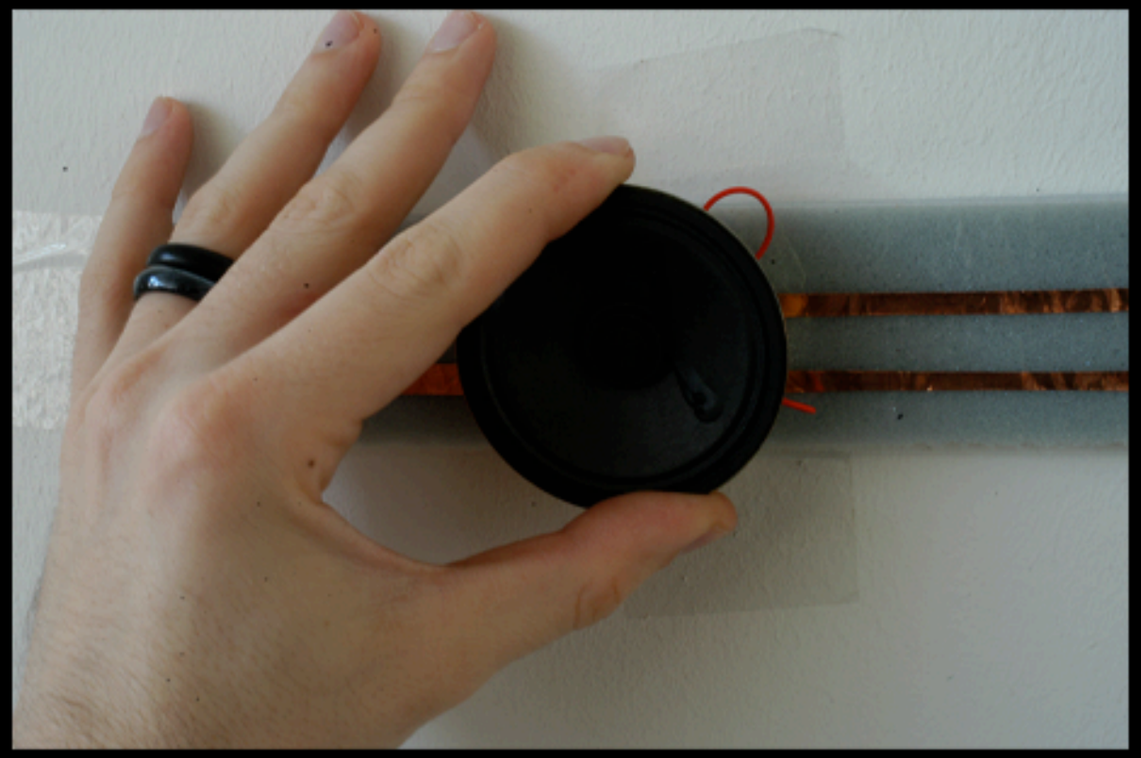
Acoustic cityscape scaled down to an exhibition space

Acoustic cityscape scaled down to an exhibition space

Acoustic cityscape scaled down to an exhibition space

Visitors activating "silent" audio sources

- open copper tracks as transmitter
- lofi speakers as receiver

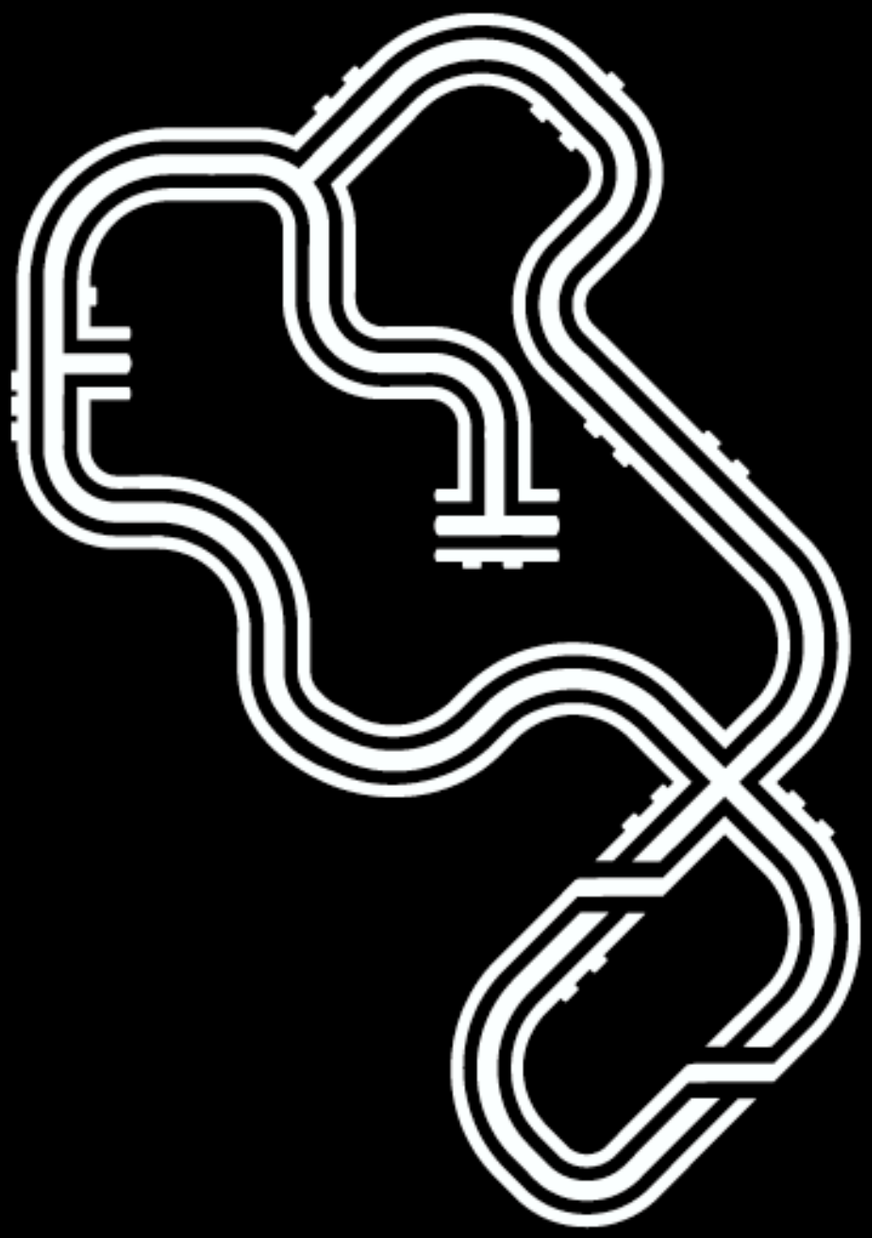


"silent audio"

open copper tracks and speakers for TCR and OSK

- modular system recalling a transporation network
- adaptable to different spaces

Talking
Cities
Radio



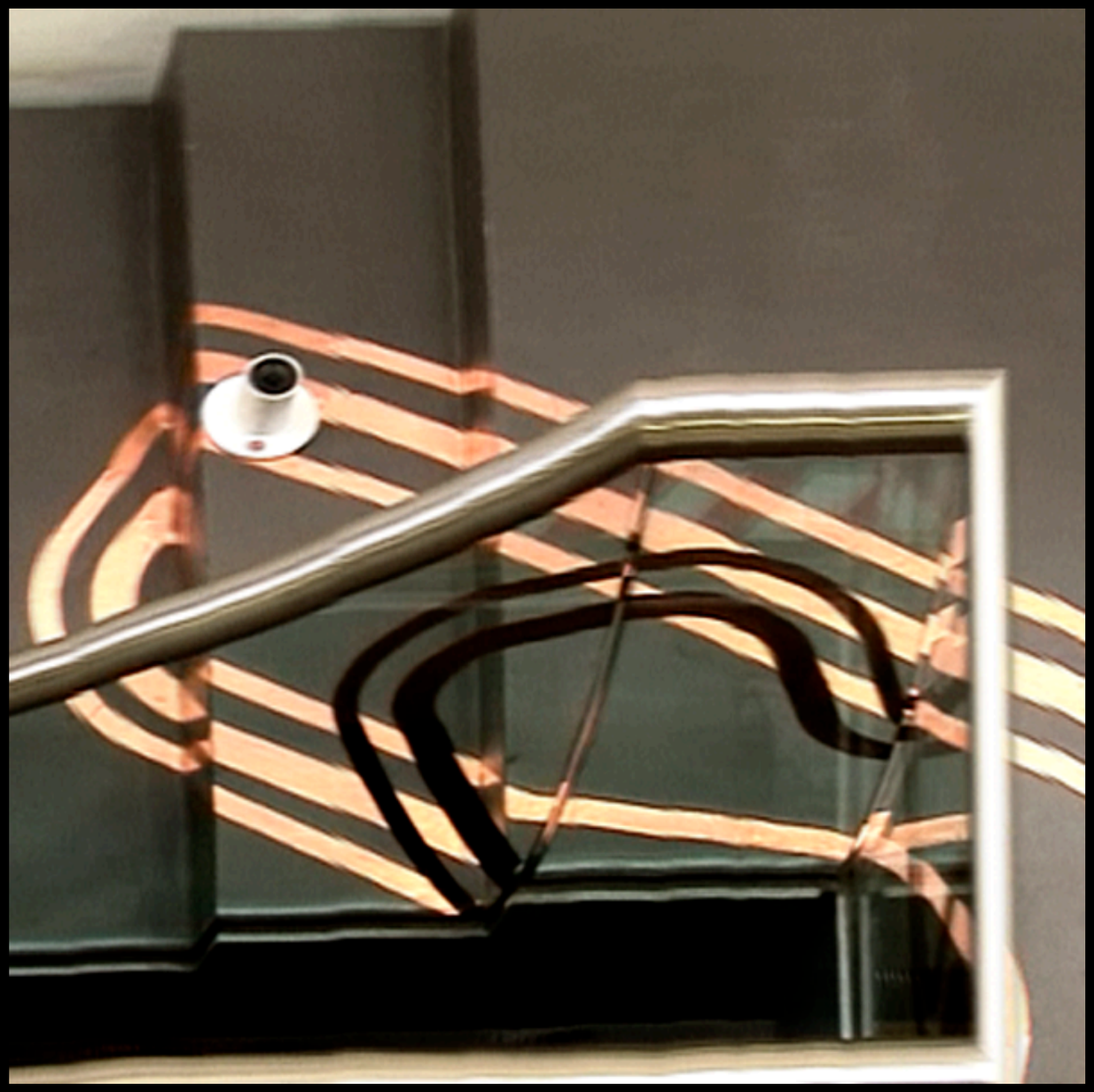
Talking Cities Audio Lounge, Zeche Zollverein

Offener Schaltkreis, 2006 November, Cologne

Offener Schaltkreis, 2006 November, Cologne

the cropped copper elements

half-way done

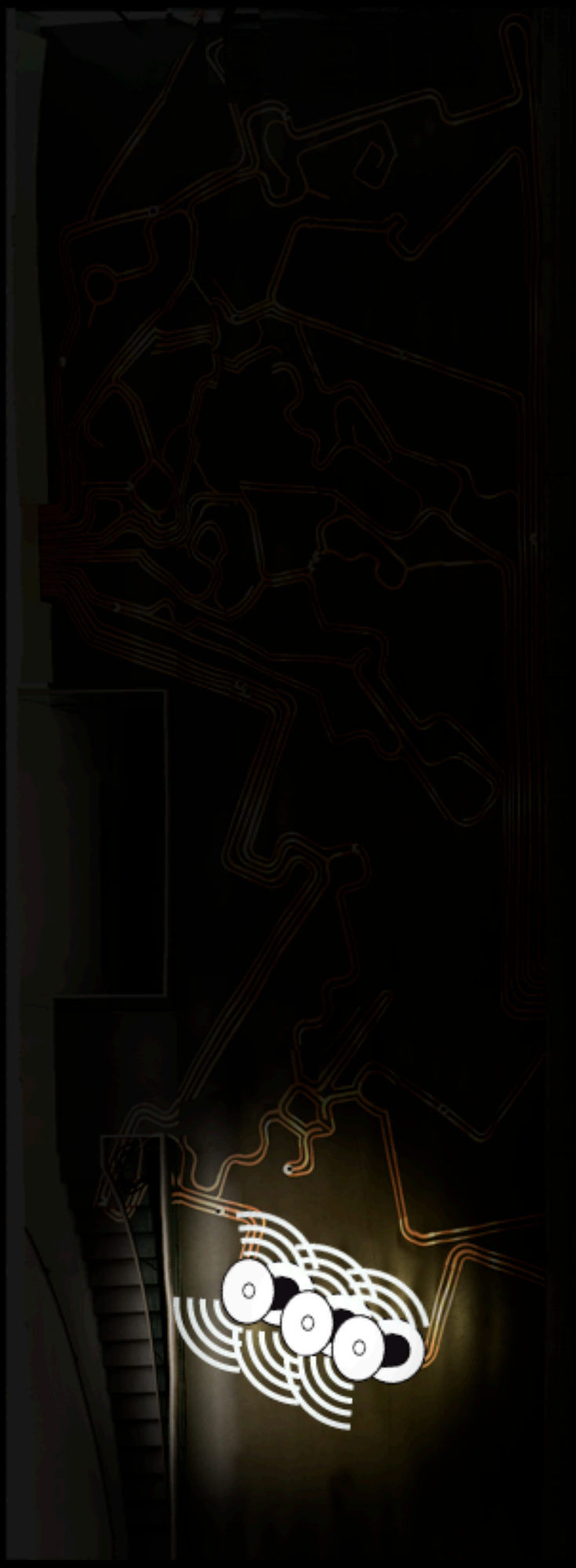


details of the osk

details of the osk

details of the osk

speaker cylinder on track



Sound

sound

- acoustic urban context
- production process
- arrangement: auditory scenes

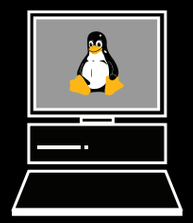
Recording examples

Recording examples

creating acoustic landscapes

spatial arrangement
agglomeration and spreading of audio sources

Technical overview



Linux machine

flow of signals

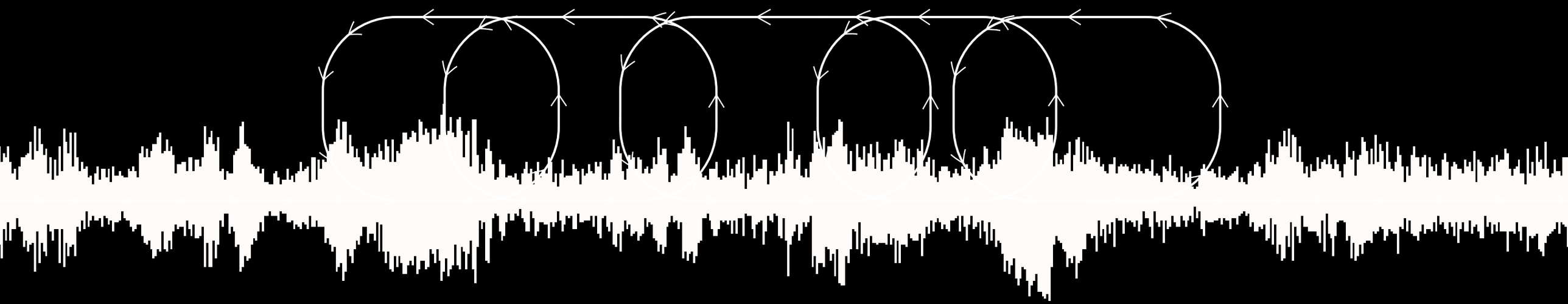
speaker cylinder for OSK

speaker cylinder for OSK

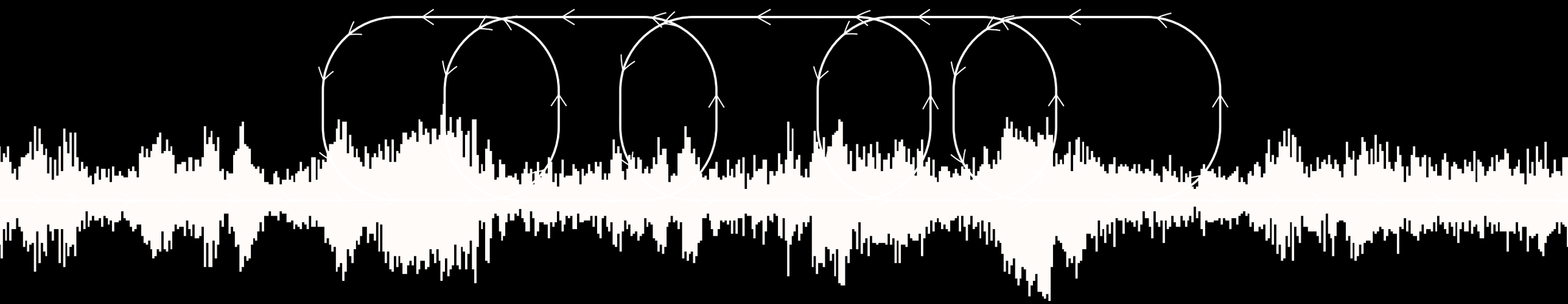
pure data

- loop player
- macro-granular sequencing / synthesis
- visitor activity sensing / reacting

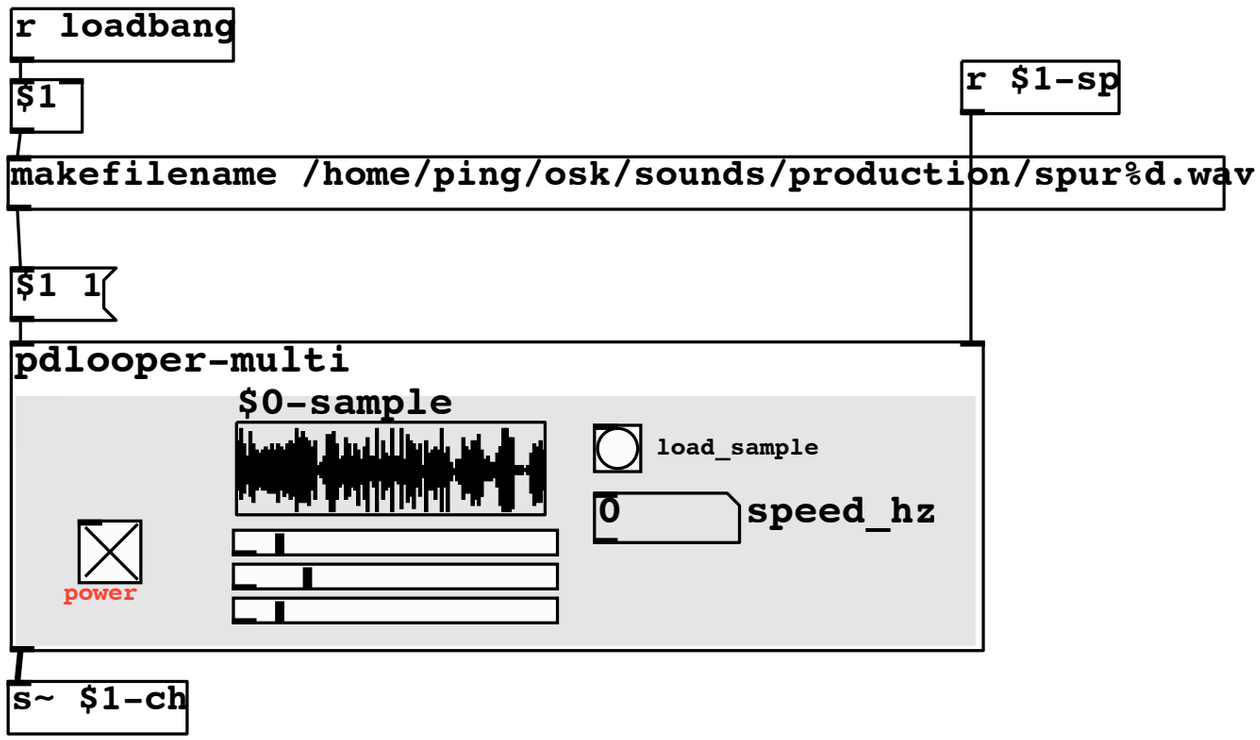
patch available at http://osk.openkhm.de/



macro-granular synthesis/sequencing



macro-granular synthesis/sequencing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$1
r $1-sp
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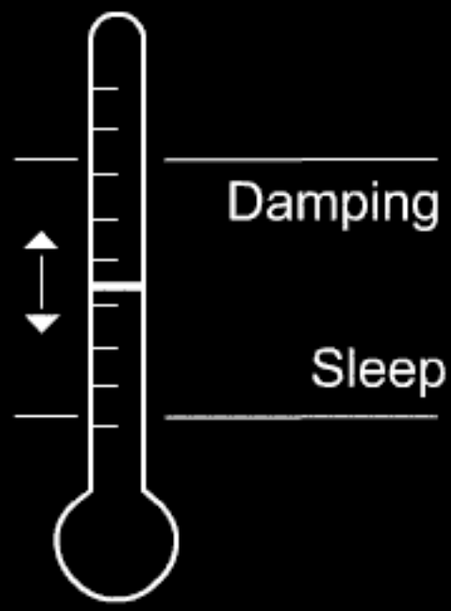
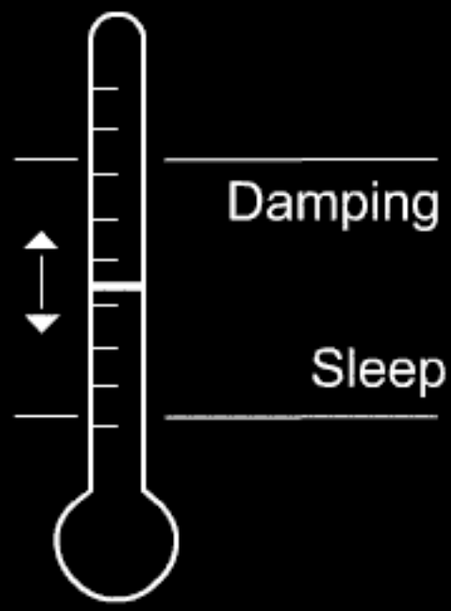
$0-sample
load_sample
0
speed_hz
power
s~ $1-ch

loop player



activity response



activity response

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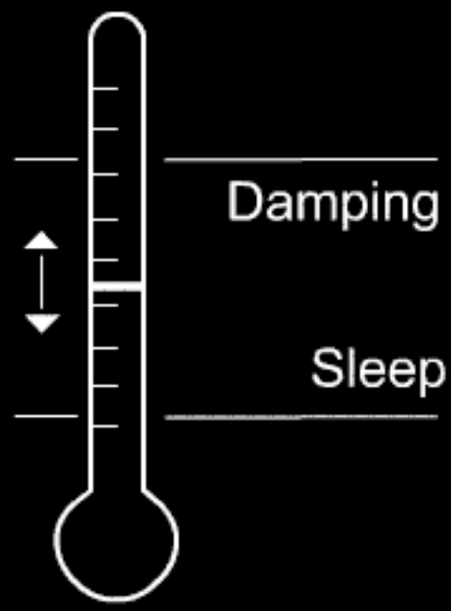

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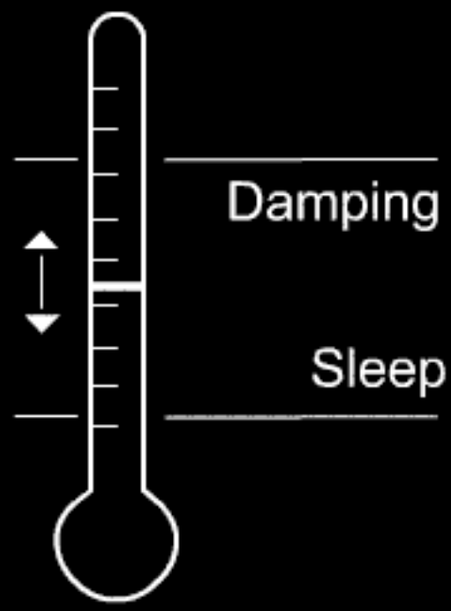

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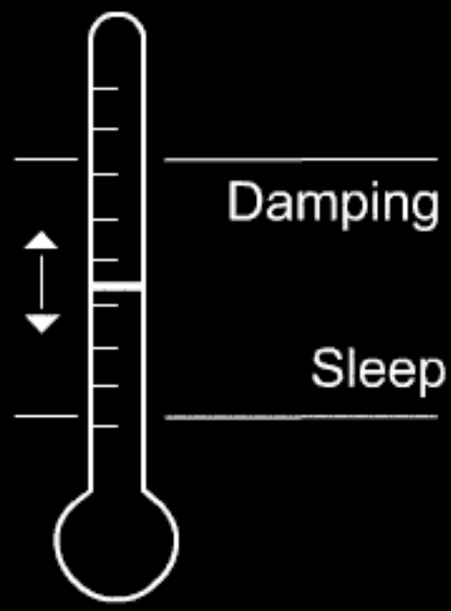
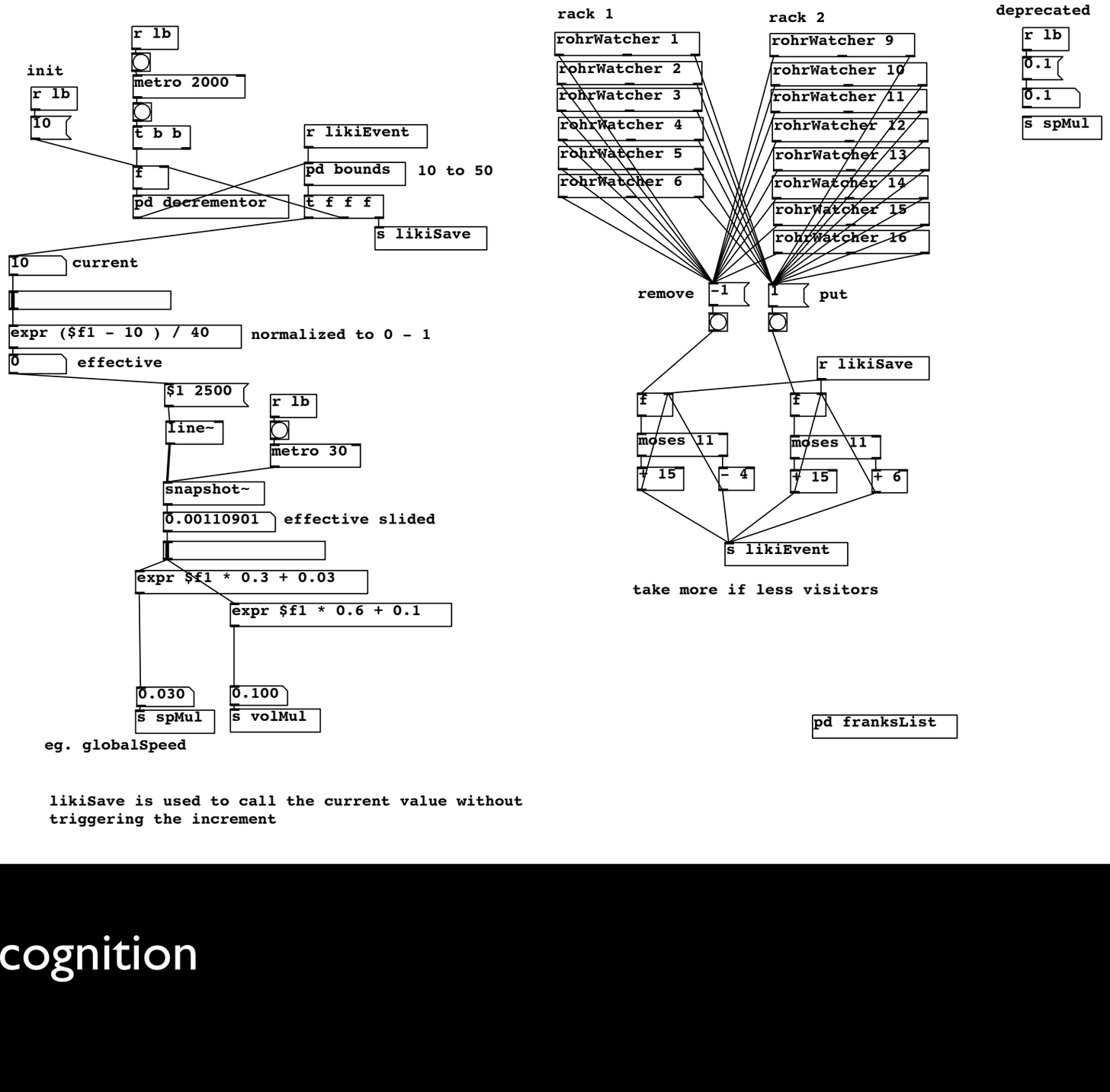
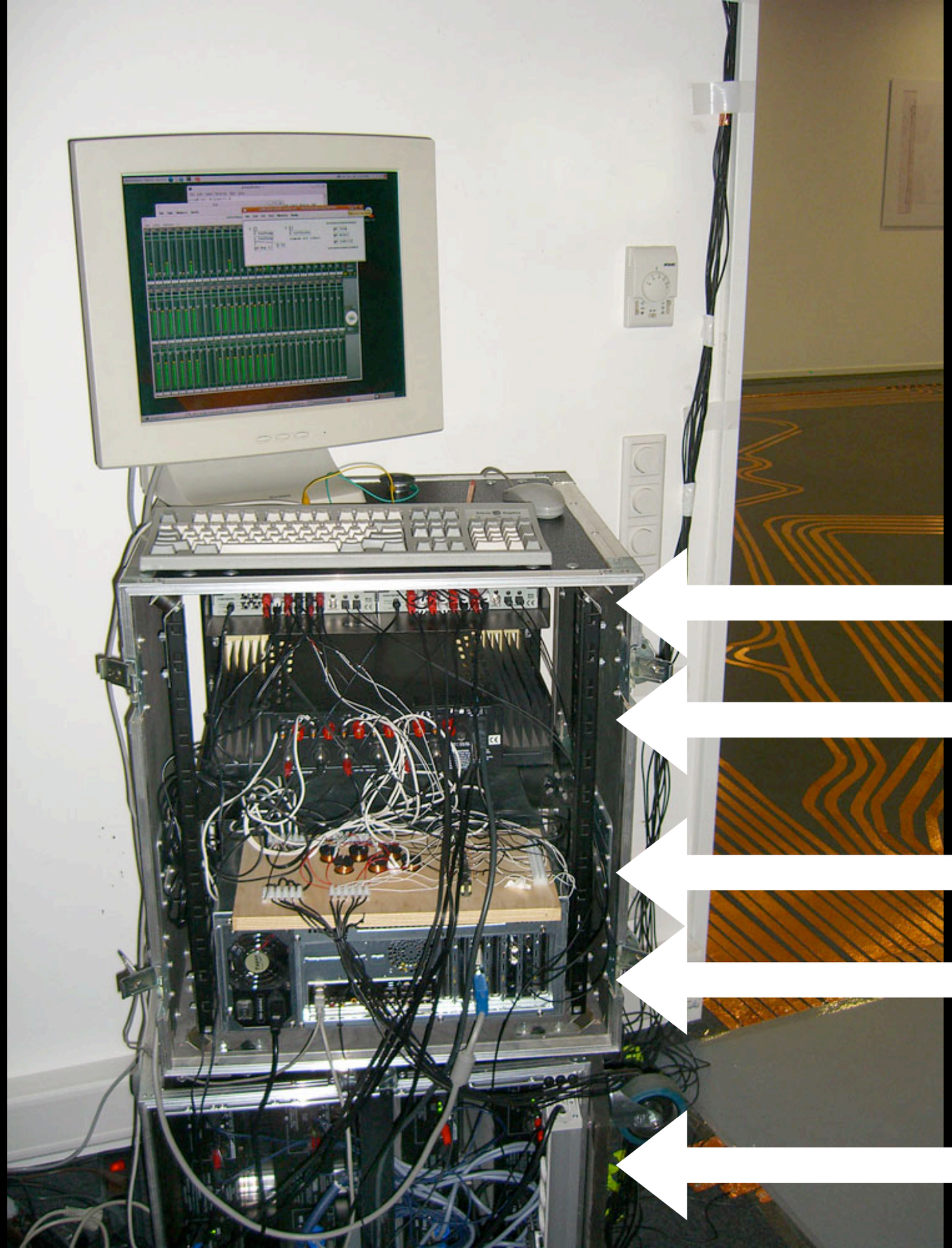


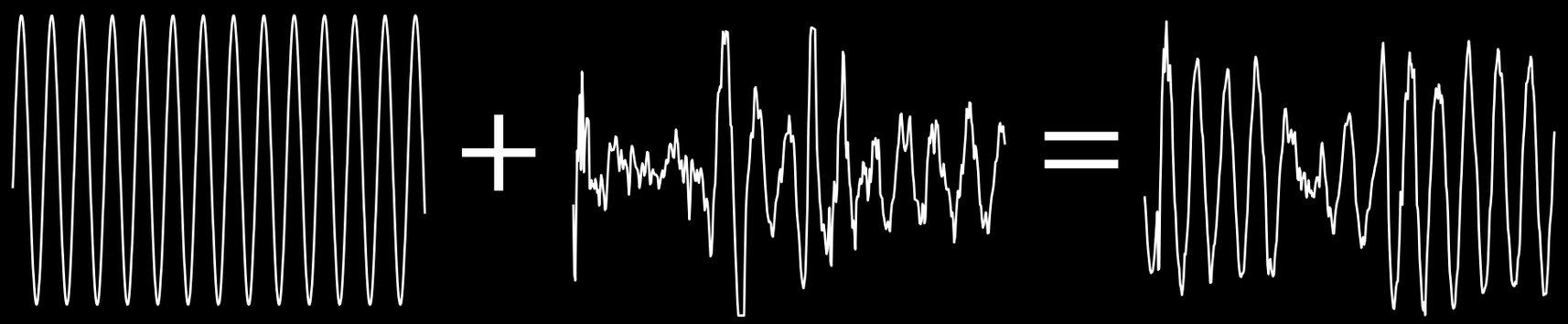
activity response



event recognition

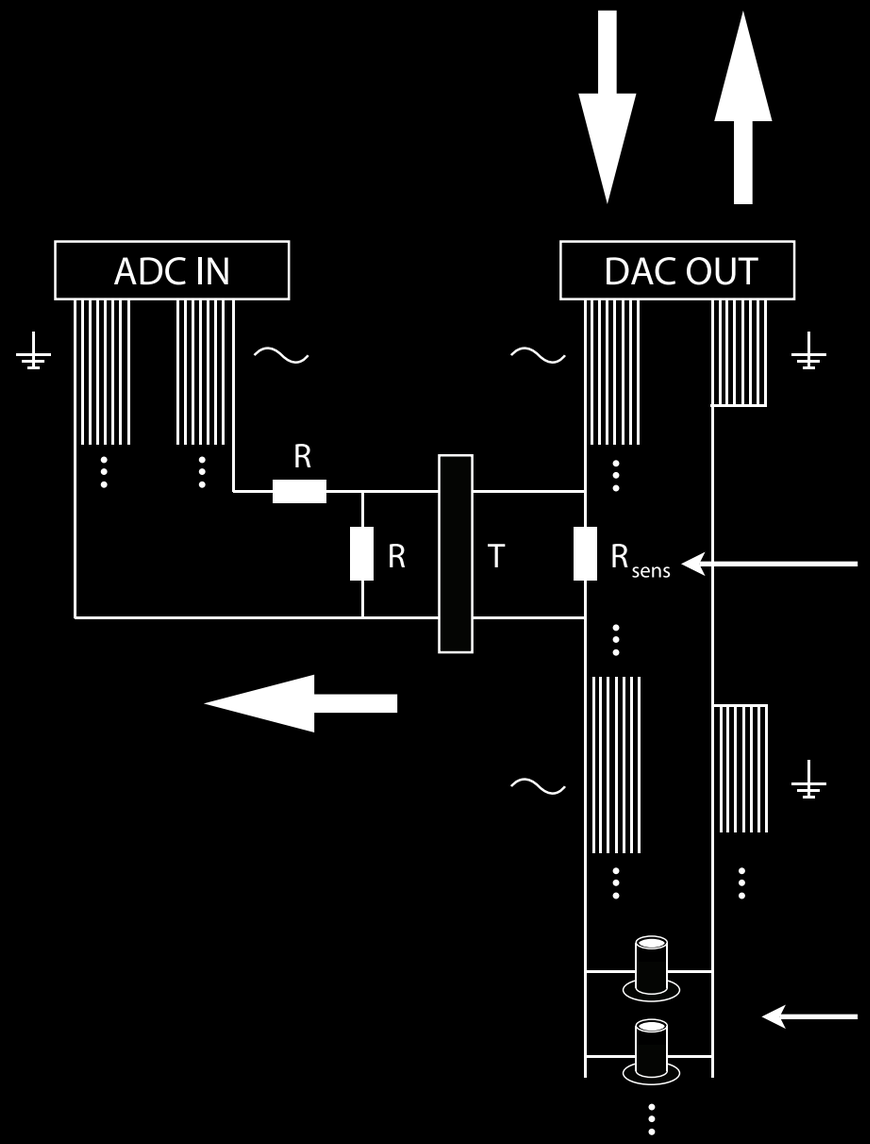
Hardware


ADAT I/O
amplifiers
circuit board
Linux machine
amplifiers

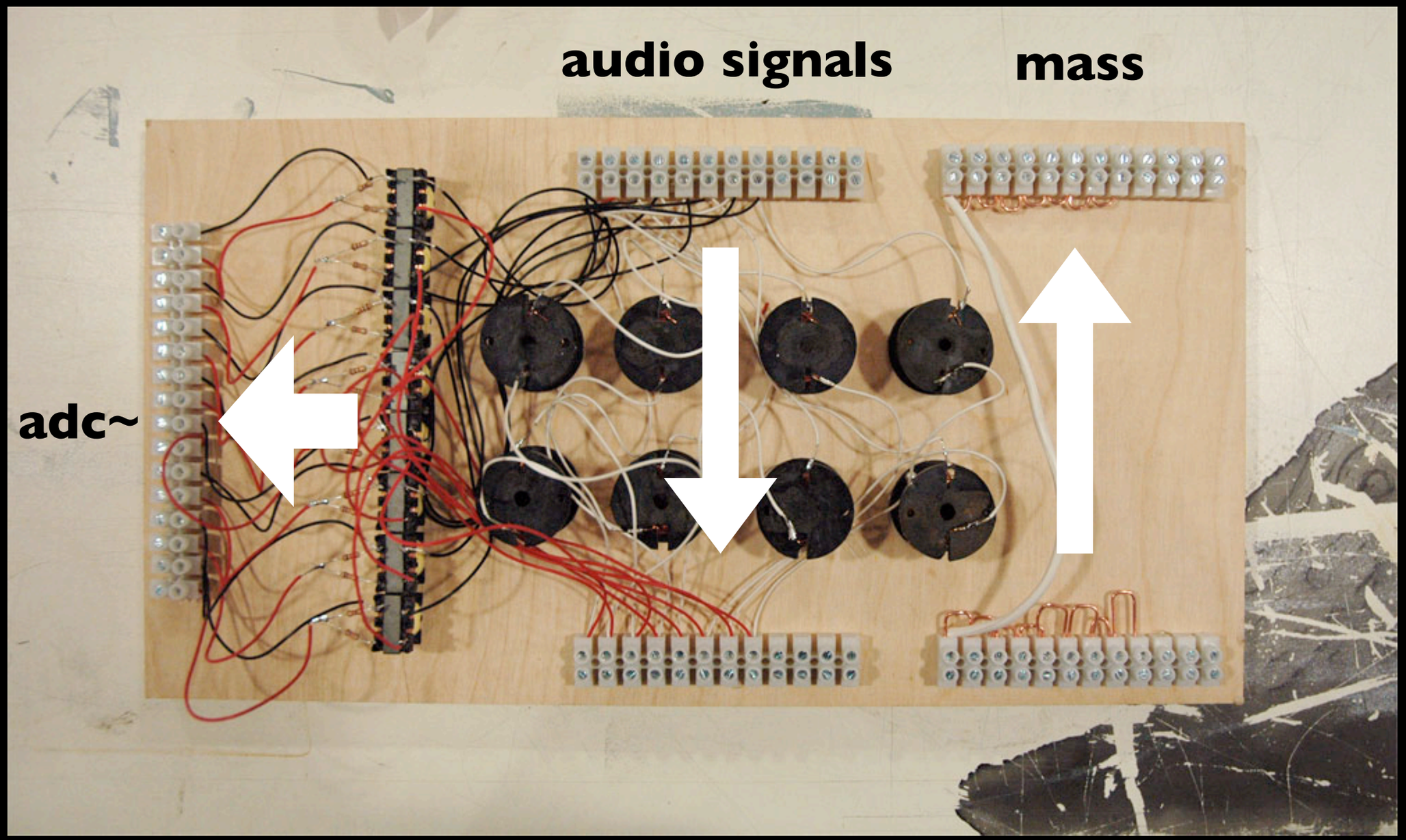


reference signal content signal sum signal

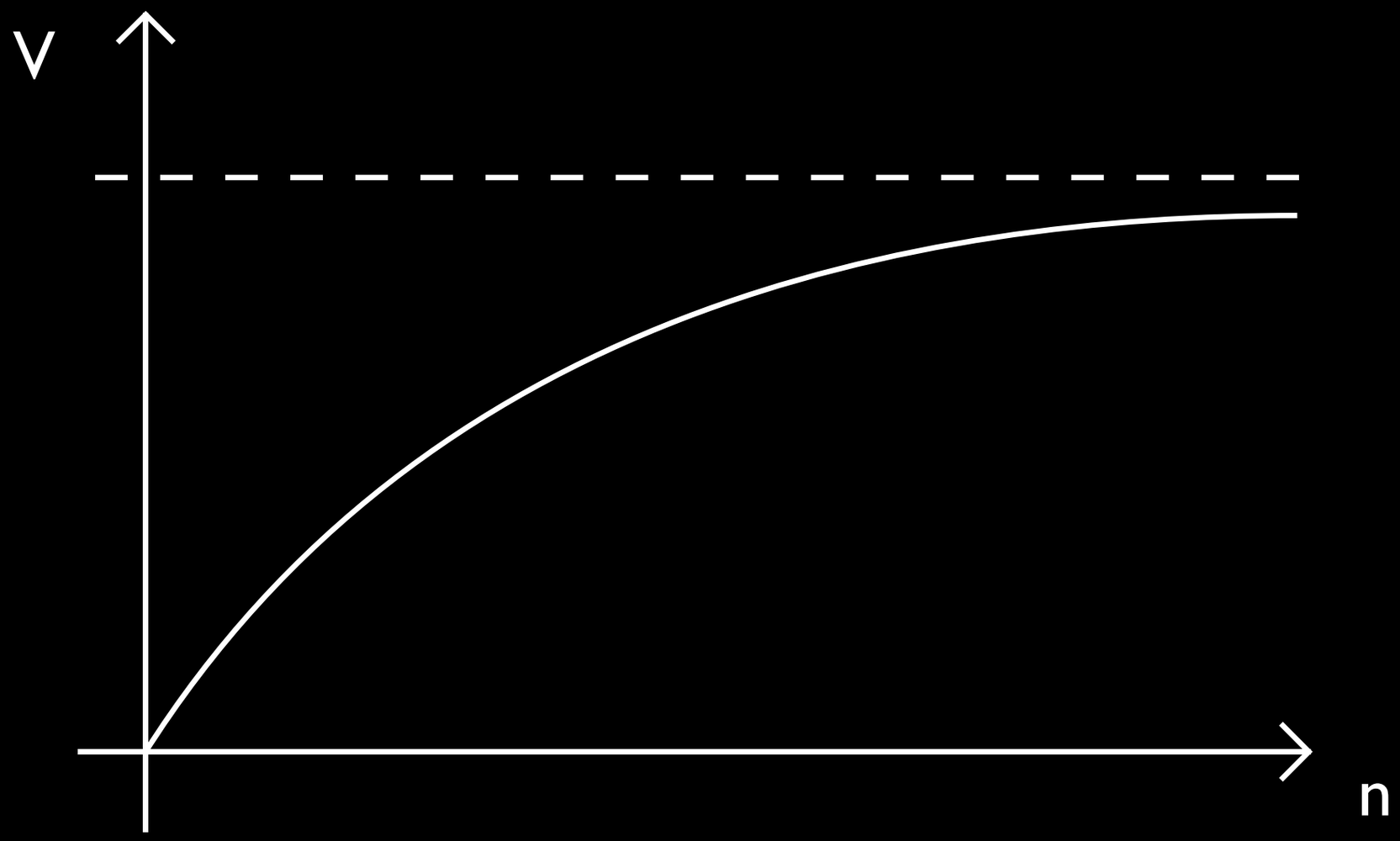
signal composition



circuit diagram



circuit interface board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2007 April 3 - 8

make art festival,
Full installation of osk,

Maison de l'Architecture,
Poitiers, France