

Sound's hidden journey under Nordic waters – tech rider & installation setup guide

16ch looping sound installation

Tech requirements for exhibition

Venue supplies:

- 12 speakers of similar choice, preferably active Genelec Speakers
- 1 subwoofer
- Speaker cables needed for signal
- Power cables needed for amplification
- Stands for eight (8) speakers on stands, to be installed around the listening area
- Hanging points or other rigging method for four (4) speakers above the listening area

Between Music supplies with:

- Computer with DAW
- Audio files
- Sound card
- Custom made 6-cone speaker

Venue requirements:

Minimum Size of room is 30m², with a ceiling height preferably at 3m or higher

1. Setting up the sound installation

This is a 16 channel sound installation. 12 of the channels in the system are speakers of similar choice (preferably active Genelec-speakers) but this is somewhat depending on size of the venue. Two additional special speakers are the 6-cone mono speaker Fox which is custom made for this installation and is provided with an amplifier of its own, and a Sub speaker with a crossover at 100Hz or lower.

Turning the installation “ON” will require to power on the system, starting up the computer, opening the DAW and pressing play. Turning the installation “OFF” will require quitting the DAW and powering down the system.

2. Playback

In order to set up playback you'll need the following:

- a) The relevant audio files. These audio files are 48kHz/24Bit mono .aiff files, and are numbered 1-16. The file numbers correspond to the output channels and speakers and this has been done in order to create a straight 1 to 1 soft and hard patch out easy.
- b) a computer running a DAW (ex. Reaper). Import the relevant audio files onto separate, discrete channels. 16 files equals 16 channels out on the DAW – a straight

patch to 1-16 out is assumed. If your sub does not have a crossover / low pass filter, add one in the DAW to the sub channel.

c) a sound card (for ex. Behringer UMC1820) or mixer or any D/A with 16 physical outputs that can have input connected to the computer and output connected to the amplifiers or speakers,

3. The Sound System

This document includes a speaker plot. The plot is not in scale and is to be adapted to the venue in question.

The patch from the DAW out to the speakers is assumed to be 1 to 1. The numbering of the speakers in the plot below corresponds to output channels / file names. The speakers 1-8 are to be installed on stands on the floor, roughly 100 cm to 120cm above floor level. Speakers 9-12 are to be rigged above, roughly 280cm-300cm above floor level. Channel 13 is the Fox speaker and is installed on the floor. Channel 14 is the bass channel and should be installed on floor level.

The balance between speakers should be adjusted from the DAW, and EQ can be applied (such as a low-pass filter on the sub channel) to correct before opening.

The plot below is a representation of the speaker setup in the original installation, and not in scale.



