hakosalo_tuohino technical rider

The duo consists of Osmo Hakosalo, kantele, and Jussi Tuohino, computer. hakosalo_tuohino performs with spatial sound systems, for which a 4-speaker setup is a bare minimum. The duo brings their own instruments and a microphone for the kantele, as their musical expression is based mainly on live sampling the kantele and processing the recorded loops (and the kantele instrument itself with mechanical preparations) with various DSP techniques. The performance lasts typically approximately 30 minutes.

1 performing space

The most suitable performance setting is a circular one, where the performers will be in the middle with the audience encircling them. hakosalo_tuohino can also perform from a stage, but in that case a stereo monitoring should be provided by the venue.

2 performing tables

The duo plays seated, so the following items will be needed from the venue:

- 2 tables with the minimum width of 120 cm and minimum length of 60 cm. Tables should be set to face each other in the circular performing position and in the stage position next to each other
- 2 chairs without armrests
- 3 power sockets

3 sound system

In the following the minimum requirements for the sound system are provided.

- minimum setup: quadraphonic 4-speaker setup with speakers in the corners of the performing space
- preferred setups:
 - o circular speaker system with 8 or more speakers encircling the audience
 - o Ambisonic sound dome, 3rd order or more
 - o sound system designed for Dolby Atmos sound (access to the amplifier channels is needed which bypass all the Atmos processing)
- stereo monitoring if the performance is done from the stage position
- sound system should be calibrated so that in the center position all the speakers will be evenly gained, delayed and EQ'd the duo can help with setting and calibrating the speaker system, if there is enough time before the performance

4 sound system connection

Duo's computer system will need a suitable connection for the venue's sound system. Their sound will be completely mixed by Jussi Tuohino live from the performing position, but some overall sound level adjustment can be made by the in-house technician during the performance, if needed.

Possible connection schemes to the sound system:

- analog cabling: in this scheme a suitable USB audio interface (enough output channels for the speakers/amplifiers and 1 microphone XLR input) will need to be provided by the venue. Common professional brands preferred, i.e. RME, Focusrite and MOTU
- Dante connection via Ethernet and Dante Virtual Soundcard or a suitable audio interface (like RME DanteFace)
- straight USB connection to a digital mixer, robust cabling to the performing position
- MADI connection with a suitable USB audio interface (like RME MadiFace)
- Duo travels with a lightweight RME interface from which the possible stage monitoring signal can be delivered. In this case suitable cabling (XLRs) to the speakers/amplifiers will be needed
- Duo will gladly discuss the sound system practicalities with the technical crew of the venue, if needed

5 light

Duo prefers a dimmed environment where the music matters the most. In the circular position a stylish table light will provide an atmospheric feel to the performance. Otherwise, the venue can be lit with dim tones. The usage of moving lights is discouraged.

6 contact

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