Sound and Video Reproduction and Recording

Overview

The LIVELab contains a suite of sound and video reproduction and recording equipment that meets most research and artist needs. For specific projects, it may be possible to bring in specialized additional equipment.

Our staff will assist in reviewing a research or recording design to ensure you get the most out of your LIVELab experience.

All research conducted in the LIVELab is subject to appropriate ethics approval and secure data handling.

Research Examples

- Recording performances for later analysis
- Testing hearing aids

Frequently Asked Questions

How many channels of audio are available for use during a live performance?
The Digico SD9 console can handle up to 48 input channels and 16 output channels.

How many channels of audio can be simultaneously recorded during a live performance?
The protocols used in the LIVELab allow for simultaneous recording of up to 32 channels of audio.

Technical Specifications and Software Output

Acoustics Research Tools
SINUS Apollo Acoustics Analyzer
- 4 analysis channels
- Low noise GRAS 12AQ and 12HF preamplifiers
- GRAS 40HF ultra low noise microphones
- Samurai 2.0 software

Hearing Aid Acoustic Measurement Tools
KEMAR Head and Torso Simulator
- GRAS model 45BB
- Accommodates hearing aid testing
- Binaural and HRTF recording

Video Recording Software and Hardware
- Sony PXW-X70 camera
- Black Magic Cinema Cam 2.5k
- Multiple Marshall CV342 HD-SDI cameras
- 8 simultaneous channels of HD-SDI and HDMI capture (Black Magic)
- MOTU HDX-SDI capture (thunderbolt)
- Video switching/routing via VMIX video mixing software

Videowall
- 9 Mitsubishi Electronic LCD Display Monitors, LM55S1(W)
- Dimensions: 3 x 3 units (6.9' x 12')
- The LCD monitors were specially selected because they emit no noise, and allow performers to approach the back wall without casting a shadow on the presentation, as would be the case with a front projection screen.

Sound Recording and Production Software
- Reason
- Logic Pro
- Protools
- Ableton Live
- Max/MSP/Jitter
- Qlab (Mixed audio/video production)

Sound Recording and Production Hardware
- Digico SD9 console
- Focusrite Rednet series AD/DA hardware (DANTE)
- Up to 64 analog and 64 digital input and output channels
- Various high quality microphones and discrete 500 series preamps including Neurmann U87AI, AKG C414, C451 matched pairs, and DPA d:vote V04.

Technical Synchronization

All technologies included in the LIVELab are built to interact with each other.