Technical Descriptions

Room Dimensions

14,65m x 9,1m, with 8,35m height.

Video Features

4 LED displays.

Dimension (each one): 1,5m x 4m.

Resolution (each one): 576 x 1536 px.

The modules have a pixel pitch of 2.60 mm, a maximum brightness of 800 nits, and a contrast ratio of 6,500:1.

Audio Features

24 speakers distributed throughout the room at three different heights.

A first set of columns (labeled A0 to A9) at a height of 1,5 m from the floor.

A second set of columns (labeled B0 to B9) at a height of 3,25 m from the floor.

A final set of columns (labeled C0 and C1) at a height of 5 m from the floor.

Two subwoofers marked on the floor plan as S0 and S1.

The 22 speakers are Genelec 4040A. They are active, bi-amplified with 120 W for the low frequencies and 120 W for the high frequencies, generating a sound pressure level of 109 dB (Short Term Max SPL). Each speaker features a 6.5-inch woofer and a 0.75-inch tweeter. They have a frequency response of 50 Hz – 25 kHz (-6 dB).

The 2 subwoofers are RCF SUB 808-AS models. They are active, with 2000 W peak power, generating a sound pressure level of 129 dB (@ 1 m). Each subwoofer has two 8-inch speakers. They have a frequency response of 40 Hz – 400 Hz.

Tactile Device

There will be an automatic device for transducing sound into tactile vibrations (through the hands and feet)

Output Files

The video file should be in a 4K format. It should be a single video file, to feed the four screens as if they were all combined into a single display.

The 24 audio files must have a sampling rate of 48 kHz and a bit depth of either 16 or 24 bits. They must have the same duration and start simultaneously. The following naming scheme must be followed:

- trackA0 • To be played on speaker A0
- trackA1 • To be played on speaker A1
- trackA2 • To be played on speaker A2
- trackA3 • To be played on speaker A3
- trackA4 • To be played on speaker A4
- trackA5 • To be played on speaker A5
- trackA6 • To be played on speaker A6
- trackA7 • To be played on speaker A7
- trackA8 • To be played on speaker A8
- trackA9 • To be played on speaker A9
- trackB0 • To be played on speaker B0
- trackB1 • To be played on speaker B1
- trackB2 • To be played on speaker B2
- trackB3 • To be played on speaker B3
- trackB4 • To be played on speaker B4
- trackB5 • To be played on speaker B5
- trackB6 • To be played on speaker B6
- trackB7 • To be played on speaker B7
- trackB8 • To be played on speaker B8
- trackB9 • To be played on speaker B9
- trackC0 • To be played on speaker C0
- trackC1 • To be played on speaker C1
- trackS0 • To be played on subwoofer S0
- trackS1 • To be played on subwoofer S1

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Multimedia Room