



Technical Specifications • Main Hall [2020]

PA SYSTEM

The Main Hall features an **8 speaker PA system**.

4 speakers operate at ground level and 4 operate at balcony level. They can be controlled individually / by zone. The PA system has been phase aligned and optimised using acoustic analysis software to ensure that the audio is clear and even across the hall.

PA System equipment list:

- 4x Noise Control Audio - Aysm2s2 full range speakers
- 4x Noise Control Audio - CX8 full range speakers
- 8x Power-drive tilt speaker brackets
- 1x Noise Control Audio - FF408 loudspeaker management system
- 2x Noise Control Audio - FFA 4004 amplifier (1000W @ 2 ohms)

AUDIO CONTROL

Option 1: On stage audio control

- 1x Soundcraft EMP12 audio mixer (12x mono + 2x stereo channels, 2x aux)
- 1x 31 bands LA EQ graphic EQ • 1x Tascam professional CD player

Option 2: FOH audio control at the back of the room

- 1x Roland M300 digital mixing desk • 1x Tascam professional CD player
- 2x Tascam solid-state recorders (main + back up, records to USB, CF & SD flash cards)

Audio playback

Q-Lab software - installed on a Conway Hall laptop

MICROPHONES

Radio microphones installed in FOH rack

- 2x Sennheiser EW152 G3 headset radio microphone system (licensed frequency)
- 2x Countryman E6 headset microphone (option for above system)
- 2x Sennheiser EW100 G3 handheld radio microphone system (licensed frequencies)
- 1x Sennheiser Active antenna system with passive paddle antenna

Other radio microphones • All radio microphones are licensed with OFCOM

- 6x Sennheiser EW152 G3 headset radio microphone system (licensed frequency)
- 6x Countryman E6 headset microphone (option for above system)
- 2x Sennheiser EW100 G3 handheld radio microphone system (licensed frequencies)

Condenser microphones

- 2x AKG CS1000 microphone



Lectern & table microphones

- 2x Audio Technica ES915 19" lectern microphone + clip
- 4x Audio Technica ES916 6" table microphone + K&M table stand
- 2x Beyer dynamic ES615 8" table microphone + table stand

DI BOXES

- 2x Radial AV2 stereo passive DI box

INDUCTION LOOP

- 1x Induction loop master station (with headset to test system)

MULTICORE, TIE LINES & STAGE BOXES

- 1x Roland S-1608 digital stage box
- 1x RSS digital multicore system with back up lines (from FOH to stage)
- 1x XLR tie line (from FOH to stage) • 1x XLR tie line (from stage to FOH)
- 1x DMX line (from FOH to stage) • 3x XLR tie line (across from stage right to left)

PROJECTION

Main projector

- 1x Panasonic PT-EZ580EJ - 6000 Lumen WUXGA - full HD (1920x1080p 16:9 resolution)

Back-up projector (wired in parallel, in case of main projector failure)

- 1x Panasonic PT-EW600 - 6000 Lumen XGA (downscales to 720p resolution)

Lens

- 2x Long throw projection lens - Panasonic ELT20 2.8 - 4.6:1 ratio

Screen

- 1x 3.2m x 2.55m 4:3 projection screen (motorised and mounted on the back wall, used in 16:9 format)

VIDEO SWITCHING

- 2x Kramer VP100 video switcher, controlled from the stage and FOH
(4x VGA inputs and 2x HDMI inputs, fade through black)

VIDEO INPUTS & CABLING • All AV inputs are sent via HDMI/DVI-D over CAT6 to switchers & projector

Stage left: 3x VGA input • 1x HDMI input

Stage right: 1x VGA input • 1x HDMI input

Control: 4x VGA input • 1x HDMI input • 1x VGA output • 1x HDMI output

LAPTOPS

- 2x PC laptops with HDMI and VGA outputs • 1x MacBook Air



VIDEO STREAMING / RECORDING

- 4x Sony EVI-H100 PTZ cameras (full HD)
- 1x Controller for PTZ cameras
- 1x USB3 DVI capture card
- 1x Kramer VGA - DVI scaler
- 1x Black Magic quad link capture card (8x HD-SDI inputs/outputs)
- 1x Black Magic output card (1x HDMI + 1x HD-SDI outputs)
- 1x USB 2-in 2-out soundcard
- 1x 4TB Thunderbolt hard drive
- 1x Core i7 iMac running Wirecast (back up recording)
- 1x SD card video recorder (back up)
- 1x i9 PC streaming server (installed August 2020, 64GB RAM, RAID hard drives, Wirecast 6)
 - top-of-the-range NVidia graphics card transcodes the stream without using CPC
 - built-in SDI and HDMI capture
 - accepts up to seven incoming streams from off-site presenters via Zoom or other platforms
 - streams to any social media platform + multiple platforms simultaneously
 - streams and records simultaneously
 - makes two back-up video recordings of the stream
 - can feed the live mix of video and cameras back into the venue's video system
 - live video production facilities, with title slides, overlays, etc.

VIDEO CONFERENCING • *System utilises the venue's PTZ cameras (see above)*

- 1x 13" MacBook Pro (running Zoom, Google Hangouts or similar)
- 1x USB3 HDMI capture card (captures the mixed output from PTZ cameras)



LIGHTING

Fixtures

- 12x PAR64 wash lights - CP88 500W medium flood lamps
(3 per side at back of hall • 3 per side in front of stage)
- 6x 650W Fresnels (2 per side from front of balcony, 1 per side at side of stage)
- 4x Source 4 zoom 15-30 degree - 750W profile (2 per side - high level lighting from rear of balcony)
- 2x Source 4 profile 50 degree - 575W profile (1 per side at side of stage)
- 2x Source 4 profile 26 degree - 575W profile (1 per side at rear of stage)
- 4x Source 4 profile 36 degree - 575W profile (2 per side at side of stage)
- 4x RGBW high powered LED PAR - 3 DMX channels, RGB (2 per side at side of stage)

Dimmers & buffer • *There are 4x spare dimmer channels for adding extra lights*

- 2x Zero88 6 channel dimmer (fed from a 1P32amp supply per dimmer)
- 2x Zero88 Alpha Pack 3 channel dimmer (13amp supply per dimmer)
- 1x DMX buffer

Lighting control (stage)

- 1x Showtec Showmaster 24 channel DMX lighting desk

Lighting control (wireless)

- 1x Zero 88 Juggler 24 channel DMX lighting desk
- 1x Wireless DMX transmitter and receiver • 1x DMX merge unit

The lighting control can be moved anywhere in the venue, by prior arrangement, allowing the flexibility of controlling lighting from the balcony, stage or the back of the room.

STAGING

The stage has a usable area of 8.94m x 3.79m. *On-stage risers are available by prior arrangement.*

CONTROL HIDES FOR FOH • *Oak veneer hides are available to mask the FOH control area*

- 1x 5ft x 4ft • 1x 4ft x 4ft • 1x 4ft x 4ft returns

CONTACT FOR FURTHER INFORMATION

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