

Greenwood Theatre

Technical Specification

October 2016

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Contact Details

All enquiries regarding venue hire should be initially directed to King's Venues:

- 020 7848 1700
- kingsvenues@kcl.ac.uk

All other enquiries including technical aspects and venue tours should be directed to the theatre manager, Catherine Sharman:

- 020 7848 8629
- catherine.sharman@kcl.ac.uk

If you need to contact theatre technicians, you can call the campus Audio Visual team and ask for Simon Taylor, Peter Stoughton or Adrian Reader:

- 020 7848 6671
- simon.taylor@kcl.ac.uk
- peter.stoughton@kcl.ac.uk
- adrian.reader@kcl.ac.uk
- greenwood@kcl.ac.uk

The address for the theatre is:

The Greenwood Theatre
55 Weston Street
London
SE1 3RA

Seating Capacity

Total seated: 454

Usher requirement: 4

Wheelchair spaces: 2-4

If you wish to use your own sound console in the auditorium, then 4 seats in the back row will be removed.

Please note that whilst our seating has been re-upholstered, the chairs are original to the building and some do occasionally break. Whilst we endeavour to fix any broken seats as soon as possible, we cannot guarantee 100% seating availability.

Access

The Greenwood Theatre has a loading bay, however, due to nearby construction work and a temporary hospital backup generator it is no longer possible to access our loading dock by any means except by foot. It is possible to reverse a vehicle as close as possible and have crew ready to unload the vehicle. Access to the loading dock is through Guy's Hospital deliveries area. If the vehicle is larger than a Ford Luton (or similar), then it is advisable to park on Snowfields and have a crew ready to unload the truck quickly. The loading bay / scene dock floor is approximately 0.6m above ground level.

Level access, double doors and large foyer space does allow for set and equipment to be moved through the rear doors and loaded onto the orchestra pit which is then raised to stage level.

Please feel free to call and discuss arrangements if needed.

Stage Information & Dimensions

The stage is finished in a black Harlequin Standfast dance, performance and stage floor. It is not permitted to paint or screw anything into this floor. The wings are covered with unfinished plywood.

Please see below for approximate dimensions. Whilst CAD files are available on request, we strongly encourage clients to measure the space themselves to ensure that any set will fit.

- Width of Harlequin floor - 15m
- Width of stage including wings - 19m
- Width of proscenium arch - 11m
- Width of orchestra pit at downstage edge - 11.4m
- Width of orchestra pit at upstage edge - 8.9m
- Width of on stage fly bars (longest bars) - 13.4m
- Width of scene dock and stage shutter - 2.1m

- Height of visible proscenium arch - 5m
- Height of grid above stage level - 13.8m
- Height of cyclorama rail - 6.4m
- Height of stage from auditorium - 0.6m
- Height of lowered orchestra pit from stage - 2.6m
- Height of lowered orchestra pit from auditorium - 2m

- Depth of orchestra pit - 2.6m
- Depth of stage from downstage edge of pit to back wall - 17m

Flying

The Greenwood Theatre has a mix of both single purchase counterweight bars behind the proscenium arch, and motorised bars in front of the pros arch. The 30 counterweight bars are 48mm diameter and most are approximately 13.4m long, however to accommodate the curved cyclorama rails, they are shorter towards the rear of the stage. The maximum load is 300kg (uniformly distributed). The bars are operated from the fly floor on stage right. 4 bars are fitted with IWBs. 2 additional bars run parallel with the wings (1x SL, 1x SR). These bars are not often used and cannot be fully utilised as the cyclorama rail obstructs their path.

The motorised bars in front of the pros arch and above row B of auditorium are 48mm diameter IWBs designed for lighting use only, they must be operated by line of sight only and not moved during shows. The maximum load is 250kg (uniformly distributed). There are 3x Stagemaster SR2 hoists per bar, each can be independently operated if needed. The control panel is located downstage stage left and is equipped with a 10m wired remote control.

The motorised bars above the middle and rear of the auditorium are 2inch diameter. The bars above the middle of the auditorium are currently fitted with 4 way 48mm diameter IWBs per bar. The bars above the rear of the auditorium are not fitted with any IWBs however there are dimmer outlets located adjacent to the hoist motor in the ceiling area. There is one Hall Stage Equipment pilewind hoist per bar. The control panel is located downstage left with a 20m wired remote control.

The cyclorama rail has a lift out section downstage right, above the prompt desk which is used to store the cyclorama when not in use. This lift is operated from the stage right fly floor, or grid.

The safety curtain, drencher, lantern release and orchestra pit lift is operated from the prompt desk on stage right.

Stage Equipment

- Aluminium Access Products Telescope model 50512
- Various Zarges Spymaster ladders
- Various A-frame stepladders

- 6x black wool serge legs 3m x 6m
- 1x black wool serge backcloth 12m x 8m
- 1x white sharks tooth gauze 9m x 6m
- 1x black sharks tooth gauze 9m x 6m
- 3x black headers various lengths x 2.7m
- 1x cyclorama (installed on cyclorama rail) 19m x 6.4m

- 6x ProLyte StageDex 1m x 2m rostra

- 24x 300 - 450mm legs for decking
- 24x 450 - 900mm legs for decking
- 8x 300mm fixed legs for decking
- 2x ProLyte StageDex stair unit

Hard masking is currently in place and tied to the grid, please contact us if this will be an issue.

A selection of sandbags, stage weights, counterweights, stage braces, conduit, scaffold tube, tank traps and tripod stands are available for use.

Outlets for comms are in each corner of the stage, and one on the fly floor.

Orchestra Pit

The orchestra pit lift has a SWL of 2000kg (uniformly distributed). When lowered a door is revealed into the under stage corridor, access is then available to backstage. 2x 13A sockets are available in each of the three floor boxes in the pit, a comms outlet is provided in the centre stage floor box. Please note that any other cables must be lowered into the pit from stage level.

Whenever the pit is below auditorium level, railings must be placed to protect the audience. Where possible, it is advisable to place a border over the railings to provide an improved look. A white tape line must also be placed on the new edge of stage whenever the pit is below stage level.

Stage Management

The Greenwood Theatre has an opposite (bastard) prompt corner, that is to say is located downstage right.

It has access to the backstage tannoy system which is fed from a Soundcraft Spirit Notepad mixing console under the stage managers desk. A Shure SM58 is provided for the stage manager. Additional mics can be added to this mixer for backstage relay.

A 15in screen is provided to allow the stage manager to view a variety of cameras around the theatre, currently these are:

- On stage view with accurate colours
- On stage view with infrared illuminators for blackouts
- Fly floor camera
- Stage right wing
- Audience

- Upper foyer
- Lower foyer

The stage manager also has access to on stage and auditorium working and 'show blues' lighting controls.

Communications is done by way of TecPro BP111 beltpack and single muff headset. Comms throughout the building are on a single channel.

Control Room

The control room is located at the rear of the auditorium and houses all PA equipment as well as the lighting desk, and all projection equipment, it is also the follow spot position.

From stage right to left we have: radio mic rack, in house sound console, outboard & amplifiers, lighting desk, show projection rack including Mac Mini, projector and follow spot.

At the back of the room is a comfortable sofa, tables as well as the FOH announcement system (Dedicated PC, Soundcraft Spirit Foilio F1 mixer and amplifiers) AV control and switching rack.

Dressing Rooms

There are 6 dressing rooms as well as a costume and makeup room. Dressing room 1, 2 and 3 are on the ground floor. Dressing room 4, male & female toilets (including showers) and costume & makeup is on the first floor. Dressing rooms 5 and 6 are on the second floor. All dressing rooms have sinks.

- Dressing room 1 can hold approximately 2 principals or can act as production office. It also has a shower.
- Dressing room 2 can hold approximately 3 people. It also has a toilet and shower.
- Dressing room 3 can hold approximately 5 people. It is also used as a storage area and is equipped with high power outlets (see below).
- Dressing room 4 can hold approximately 15-20 people.
- The costume and makeup can hold approximately 5-7 people.
- Dressing room 5 can hold approximately 10-15 people.
- Dressing room 6 can hold approximately 20-40 people.

Power

- 1x 63A single phase DSL
- 1x 32A single phase DSL on fly floor
- 4x 32A single phase at rear of auditorium (2x house left of house left aisle, 1x house right of house left aisle, 1x house left of house right aisle)
- Either 2x 32A or 1x 63A single phase (selectable by changeover switch) in dressing room 3 (on 60A fuse) – UNTESTED – Please advise if you plan to use this socket.
- 4x double 13A on upstage wall
- 1x double 13A USL
- 3x double 13A DSR
- 3x double 13A DSL
- 3x double 13A at front of stage (orchestra pit) (1x double 13A per floor box)
- Multiple 13A in control room
- 4x 13A at rear of auditorium (2x on house left of house left aisle, 2x house right of house right aisle)
- Various 13A in foyer spaces
- Various 13A in auditorium void
- 1x 315A three phase hard wired connection to dimmers (100A max per dimmer)

An exterior cable pass is available behind the exit door DSR (in front of pros arch) for connection to OB truck, or external generator. Access to ceiling void is also via this staircase, allowing cables to be easily routed to the control room, or stage as required.

Lighting Equipment

Please note that we do request a basic standard rig after shows, so please always allow time for this if plan to deviate from our rig. The basic rig is as follows: 4x Robe DL4S on FOH LX2, 8x Showtec Compact Par 18 and 6x 1/2 kW Strand Quartet Fresnel's on FOH LX1, 2x Rove DL4S on LX2 and 8x Showtec Compact Par 18 and 1x Martin Atomic Strobe on dedicated LX3. 4x Par 64 cans on each perch. Permeant power and DMX has been installed to these locations where required, and we request that this isn't removed without prior permission. You are welcome to add to this rig and we don't require you to remove this equipment after shows and bear this in mind when planning your rig. Our cable stock isn't listed here, but it is normally enough for most shows. If you have specific cable requirements, we would recommend hiring it in.

For control we use an ETC ION with a 20 fader wing and 208 channels of dimming provided by 9x Strand LD90 Dimmers located on the fly floor.

Maximum load per dimmer is 100A, total load must not exceed 315A. Channels 1-200 are protected by a 13A MCB at the dimmer and feed out to facility panels around the theatre. Each channel has two 15A outlets. Channels 201-208 are protected by 25A MCB at the

dimmer and feed out to facility panel around the theatre, each channel has 1x 32A connector and 4x 15A outlets locally protected by 4x 15A MCBs at the facility panel.

FOH LX1 and 2 are fed from DMX universe 2 and all on stage equipment is fed from universe 1. A DMX patch sheet is available on request.

Equipment	QTY.
Profiles	
CCT Freedom 15/32	4
Strand Cantata 18/32	6
Strand Harmony 15/32	3
Strand Harmony 12	3
Strand SL 50	2
Strand SL 30	2
Strand SL 16/32	2
Strand Optique 15/42	3
Strand Optique 15/25	3
Strand Patt 264*	2
Strand Patt 23*	2
Strand T-Spot II*	2

Fresnels	
CCT Starlette 1000*	2
CCT Minuete	5
DTS Scena 650/1000s	4
Strand Cantata F	24
Strand Prelude F	2
Stand Quartet F	3
Stand Harmony F	1
Strand Patt 123*	2

Equipment	QTY.
PCs	
Strand Cantata PC	4
Strand Quartet PC	3
Strand Patt 814*	2

Par Cans	
Par 64 (long nose)	12
Par 64 (short nose)	2
Par 16 (25w 240v)	12

Floods	
Strana Coad 500/1 (8 as HL)	9
Strand Coda 500/4	4
Strand Patt.S63 S Batten	4

Followspots	
Teclumen Arena MSR 1200w	1

DMX Controlled Lighting	
Martin Atomic 3000	1
Pulse Par 56 LED (chrome)	8
Showtec Compact Par 18 MkII	16
Robe DL4S	6

*not recommend for use

Sound Equipment

Please note that most of this equipment is installed and cannot be moved or changed, please contact us if you have any questions. Our cable stock isn't listed here, but is normally enough for most shows.

Details of how the equipment is connected is available on request.

Equipment	QTY.
PA	
Soundcraft Series two 24-channel Mixing Desk	1
Martin Audio EM76 Speakers	4
QSC CS404 Amplifier	1
Turbosound IQ18B	2

Equipment	QTY.
Monitors	
RCF TT25-SMA Stage Wedge Monitor Speakers	2
Behringer Truth B1030A Studio Monitors	2

Outboard	
Behringer FBQ3102 Pro Graphic EQ	1
Behringer Composer Pro-XL MDX 2600	1
Yamaha SPX990 Professional Multi-Effect Processor	1
DAP Audio CDMP-150 CD/MP3 Player	1
Apple Mac Mini (with QLab 3 Pro Bundle)	1

Other Audio	
DI boxes	10+
Studiospares 15m 8x4 XLR Multicore	1
XLR tie lines from stage to control room (sends)	10
XLR tie lines from control room to stage (returns)	2
Microphone stands	7+
Music stands	20

Microphones			
Sennheiser EW100 G3 Radio Lapel (fully licenced)	8	AKG C 568 B	3
Sennheiser EW100 G3 Handheld (fully licenced)	4	AKG C 451 EB	2
Shure SM58	4+	Studiospares S930	2
		Sennheiser ME66	1
		Shure SM57	1

Projection Equipment

Our newly installed AV system is now full HD. A short summary of the equipment is available below. For more information, please contact us.

- Panasonic PT-DZ21K (will be replaced with PT-RZ31K when released) (fixed in control room, fed with HDBaseT from AV rack)
- Panasonic PT-RZ970 available as a portable unit. HDBaseT Cat6 outlets (fed from AV rack) available above FOH LX1 and FOH LX2
- Panasonic PT-RZ370 fixed in upper foyer (fed from HDBaseT AV rack as well as local inputs)
- Crestron DM-TX-401-C installed in control room, to accomplish basic switching and provided HDMI, DisplayPort, VGA, and composite inputs from the control surfaces.
- 3x MTP fibre runs from orchestra pit floor boxes to control room, and 1x MTP fibre run from stage left patch bay to control room. All terminated on a choice of Neturic OpticalCon MTP, or MTP connectors. Limited Short lengths of OpticalCon MTP are available.
- Lectern with Dell All-In-One PC, Wolfvision Visualiser, VGA, HDMI, DisplayPort and Composite inputs. 2x Network outlets, Mitel IP Phone (connected to KCL telephone network), and Crestron control panel are also available.
- Control room AV rack is equipped with the Crestron 16x16 matrix and Biamp Audiaflex DSP units.

Plans

Whilst CAD plans are available on request, these drawings should not be entirely relied upon for accurate measurements.

A socket plan should be attached with this document.