

# Queen's Hall Arts Centre Technical Specification

Last updated September 2023

## Introduction

Welcome to the Technical Department here at Queen's Hall in sunny Hexham. Or at least it's sunny today, anyway. Hooray!

Please note this document is designed to be read by technicians and written by technicians - a more casual overview of the equipment available for our hire spaces can be found at the end of this document.

In this Tech Spec, you will (hopefully) find all the information you need, whether it's still early days and you're wondering if we could be the right venue for you, or if you have a date booked and you're checking venues on your tour, hoping they all stock a specific item so you don't have to!

As you will see, our programme is varied, so it's very likely we are the right venue for most shows (well, up to a point – but more of that later). Don't forget to check out our programming policy on our website for more information about whether we're the right venue for you and key information such as lead times.

## Key tech team contacts

Lead technician – Scoon Ferguson [scoon.ferguson@queenshall.co.uk](mailto:scoon.ferguson@queenshall.co.uk)

QHA technical department - [technical@queenshall.co.uk](mailto:technical@queenshall.co.uk)

## Overview

We operate two performance spaces; the Main Theatre and Studio Theatre. We also programme in our Library space, White Room, gallery spaces and occasionally outside our venue.

The Studio Theatre is situated underneath the rake of our main auditorium (meaning we're usually unable to stage performances in both spaces simultaneously).

## Dressing rooms

Both our Main Theatre and Studio are served by the same two six-person dressing rooms, recently refurbished, with showers / WC / fridge / kettle / iron & ironing board / Wi-Fi.

A little laundry cupboard is nearby, with a domestic washing machine and tumble dryer available for use. When available, the Studio itself can be booked as an overspill dressing room / wardrobe room / crew room / yogic retreat.

# Main Theatre

Our main house, a traditional proscenium stage with full-height fly tower, small apron / forestage, unranked.

It has a capacity of 250 in the stalls and 100 in the balcony.

There is no restricted view, although there is a slightly annoying glass barrier on the front of the balcony to dissuade audience members hoping to crowd-surf on those in the stalls.

Stalls Rows A-C can be removed in blocks of 3, however much like things going up and down, things removed have to be placed somewhere else; in this case, on the stage itself, either in the wings or behind the blacks in the US storage area which is usually full already.

## Playing area:

- 9m x 6.7m without apron, including soft leg masking
- 9m x 7.8m with apron, including soft leg masking

For the avoidance of doubt, those measurements mean if your show is bigger than that, then it won't fit. Apologies to those already fully aware the average theatre techie is unable to alter the laws of physics, but you're speaking to someone who once helped build a proscenium arch set-piece which was so huge it was hidden from the audience behind our actual proscenium arch.

## Wing space:

- SR 7.5m x 2.9m including soft leg masking
- SL 7.5m x 0.8m including soft leg masking

No, that's not a typo. Yes, you have less than a metre of space in the SL wing. And that includes space for the legs, a pile of stage weights, a wall-mounted heater, and various other important bits and bobs which get in the way.

Please note the full floor area (including wings) is comprised of a semi-sprung natural wood flooring – which means no screwing into it, no painting it, no using Tesco own-brand gaffer – but above all it means it is not black.

Stage-level crossover is behind the stage wall, accessed through doors USR and USL.

## Flying

Grid height: 12m

LX trim height: 6m

A combination of double-purchase counterweight bars and three-line hemp bars.

Operated from the SR fly floor (including the house tabs, which means the DSM at stage level can't "just do that as well").

Please note, it should come as no surprise to learn most of our CW bars are permanently rigged with extremely heavy theatrical drapes or even heavier lighting equipment.

Most of our hemp bars are free, but please note the majority of available bars are in the MS area.

Owing to many peculiar decisions (early-80s, local council, budgetary), one of the historical issues we can't get around is the limit on the number of CW weights available – our in-house LX rig leaves us with about a dozen spare. Any toured equipment to be rigged (other than a few lanterns here and there) will usually require our lanterns to be derigged – and there is nowhere else to store those other than at stage level, either in the wings or in the US storage area which is usually... you get the idea.

# Lighting

## Conventionals

90 x 2.3K Strand dimmers, distributed as follows:

- 24 FOH, shared between the bridge, balcony bar and auditorium perches (for information only – FOH lanterns are fixed)
- 48 overhead, 12 per bar
- 18 dips, 12 of which are mirrored across stage

## Lantern stocks

- 24 x Lito 1K fresnels
- 6 x Selecon 1.2K fresnels
- 20 x 1K CP62 parcans
- 6 x ETC Source 4 23/50 profiles
- 6 x Strand SL 25/50 profiles
- 6 x Strand SL 15/32 profiles
- 6 x Showtec birdies (LED bubbles only)

## Small selection irises

Small selection Rosco gobos & holders, B-size only

Small selection Lee colour

Small selection TRS & grelcos

## LEDs

Overhead we have a permanently fixed rig of 12 x Chauvet Colorado, 2 Quad Zoom LEDs, complemented by 2 additional units on our auditorium perches. 3 x Quads per LX bar, and we rig your design around them. Please refer to the Fixed Rig positions plan for more information.

Cyclorama lights are 7 x Chauvet Colorado Batten 144s, fixed and hard-wired on CW9.

Side-lights are 6 x Chauvet Ovation P56s, a semi-fixed rig.

Uplighters are 5 x Chauvet Ovation Cyc 1s, we usually have 2 fixed in place uplighting the prosc'.

## FOH

We are a fixed FOH LX venue (for clarification, that just means the lanterns stay where they are and do not get re-rigged – it doesn't mean they can't be refocused, although it is tricky and time-consuming accessing the top of the auditorium perches)

Bridge – our main position. No, it is not an advance bar. Yes, the angle is pretty steep. You get 6 x Source 4 15/30s and 4 x Strand SL 15/32s, hung alternatively and mirrored from centre

Balcony bar – 2 x Lito PCs used as tab warmers, with 2 extra dimmer sockets for additional fixtures. Please note the lenses of the lanterns at this position are very much at performer eye-level

Auditorium perches – on our auditorium walls, you get a 15/32 at the top, a fresnel, our FOH LED Quads, a basic moving light, and another fresnel, mirrored across

## Side-lights

What we use gets called many things – an up-down bar, a side-light bar, side bars – but what they are not is side-light booms. We don't have any. No boom bases, no booms themselves, no boom arms. What it is is a bar running US-DS in the wings, lanterns are rigged at just over head-height for obvious reasons (so lens-height is about 2m), you get 2 conventionals per bay, 3 bays per side. Then shins on the deck on H-stands. That totals 18 circuits, which matches the number of dips we have funnily enough.

However, running a load of lanterns blasting out 1000s of watts is possibly not something we should be encouraging in the current world of endangered furry things and rising temperatures, so the house rig uses Chauvet Ovation P56s – 1 lantern per bay and a multitude of colours. (And a low-end dimmer curve which goes from blackout to nuclear sunset in a single percentage, but you knew that already.)

## Houselights

GDS ArcSystem wireless LEDs, controlled by presets on dedicated control panels next to the LX desk and DSR

These proved to be a great improvement a number of years ago, and still manage to vaguely behave themselves most of the time, despite them now having to operate in an endless swamp of 2.4GHz devices from the audience – which is of course the frequency band the system uses

## Control

ETC Congo Jr with fader wing. Stop laughing. We like it.

Operated from the Control Room at the back of the balcony only

Runs Cobalt 7.3.1. Rigger's remote (programmable keyboard) DSR. 2 universes maximum

Offline Cobalt software for importing new fixture profiles

Also used for transferring ETC showfiles recorded on EOS desks – but please note, there is no such thing as part cues on a Congo, and there is no such thing as zero, so those will need manually adjusting

Common response to my informing people of the make and model of our desk: “Er, I'll probably just use our Nomad.”

## Sound

Basic vocal reinforcement / playback PA, suitable for theatre, spoken word and the occasional folk gig. Bigger or more complex requirements usually result in equipment being hired in.

PA:

- 4 x Tannoy V12 full-range boxes on the wall
- 2 x Lab Gruppen iP2100s driving the above
- 2 x RCF 705 ASii 15” subs on the floor
- 2 x Meyer UPM-1P compacts as front fills
- 4 x unbranded loudspeakers as under-balcony fills
- 3 x Turbosound TFX152M-AN wedges / foldback

Basic mic package:

- 3 x Shure SM58s
- 3 x Shure SM57s

- 2 x SE V7s
- 2 x Sennheiser 664 condensers
- 1 x Sennheiser 602 drum mic
- 3 x Audio Technica / Shure ambient choir mics – installed above stage
- 2 x Sennheiser EW-D receivers and transmitters
- 2 x Sennheiser EW receivers and transmitters
- 2 x Sennheiser EW handheld mics
- 2 x Countryman headset mics

Small selection Sennheiser lavalier mics:

- small selection unbranded condensers
- small selection K&M mic stands
- small selection DIs & XLRs

### Control

Allen & Heath Avantis with GX4816 stagebox

Operated from the Control Room at the back of the balcony, or rear of stalls on request

Avantis MixPad iPad remote

## Stage Power

USR only

3 x 63A singles OR 1 x 63A 3-phase

Small selection power distribution 32A / 16A / 13A

## AV

Panasonic PT-DW640 DLP 6000L projector, HDMI input only, tie-lines at DSR and the Control Room only, permanently rigged FOH on our balcony bar.

Sony PHZ50 5000L projector, HDMI input only, usually installed in the Studio but used on stage when rear projection is necessary.

AV Stumpfl 16 x 9' front projection screen, permanently rigged on CW3, can not be used for rear projection.

Draper 12 x 9' fast-fold free-standing rear projection screen, when rear projection on stage is necessary – please note the position of the screen is roughly the same, ie CW3.

- 2 x Samsung 46" domestic LED panels
- PowerPoint 2019 laptop

- QLab 4 laptop
- Denon DN500 BD deck

## SM

Bastard prompt position (including all in-house control cable termination / multicores / DMX splitters).

Antique Sound Logic stage management station, fully installed and working until recently. After professional building contractors finished with it, we are left with the following limited SM infrastructure:

- Show Relay to the dressing rooms corridor only
- Backstage Tannoy to the dressing rooms corridor only

As our comms packs now need to be daisy-chained, their positions are limited – the Control Room, DSR, SR flys and rear of stalls

FOH Tannoy unaffected

## Misc

Staging

Drum riser – black, 8 x 6 x 1'

Old-school stage blocks – black (or at least they were once), 10 x 60 x 60 x 38cm

No follow-spot

## Access

Tallescope 50518

Zarges 8-rung

Zarges 6-rung

## Accessibility

FlexStep wheelchair lift from Stage Door level to stage level

There is an accessible WC at Stage Door level – we can prepare the room as a temporary dressing room on request.

## Get-in

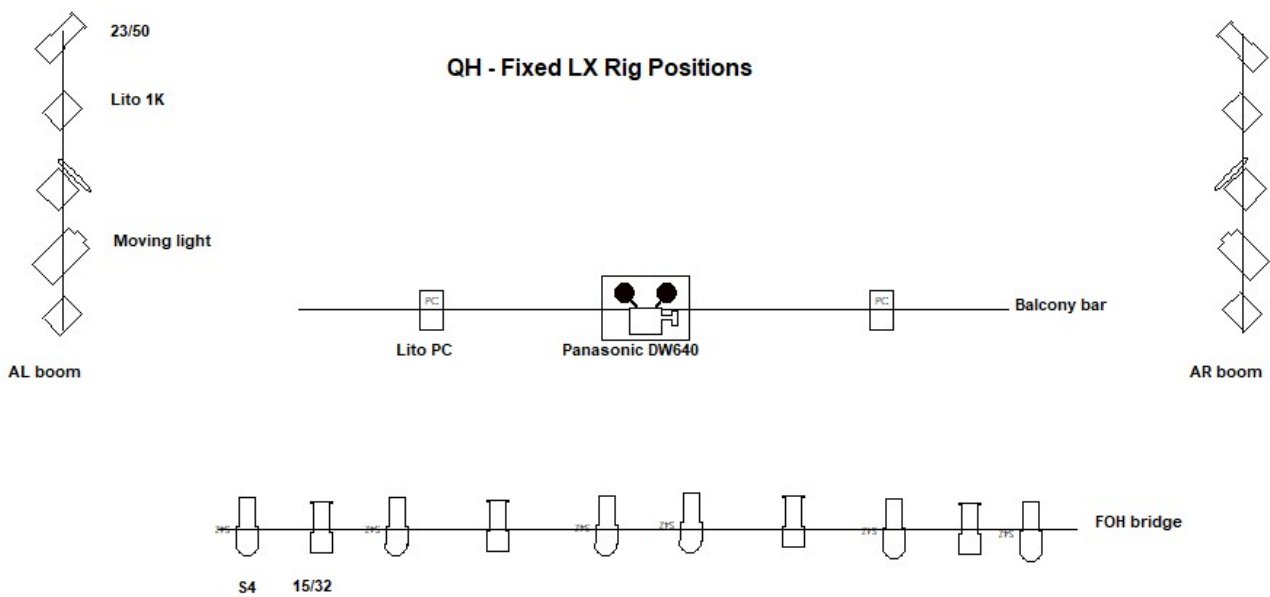
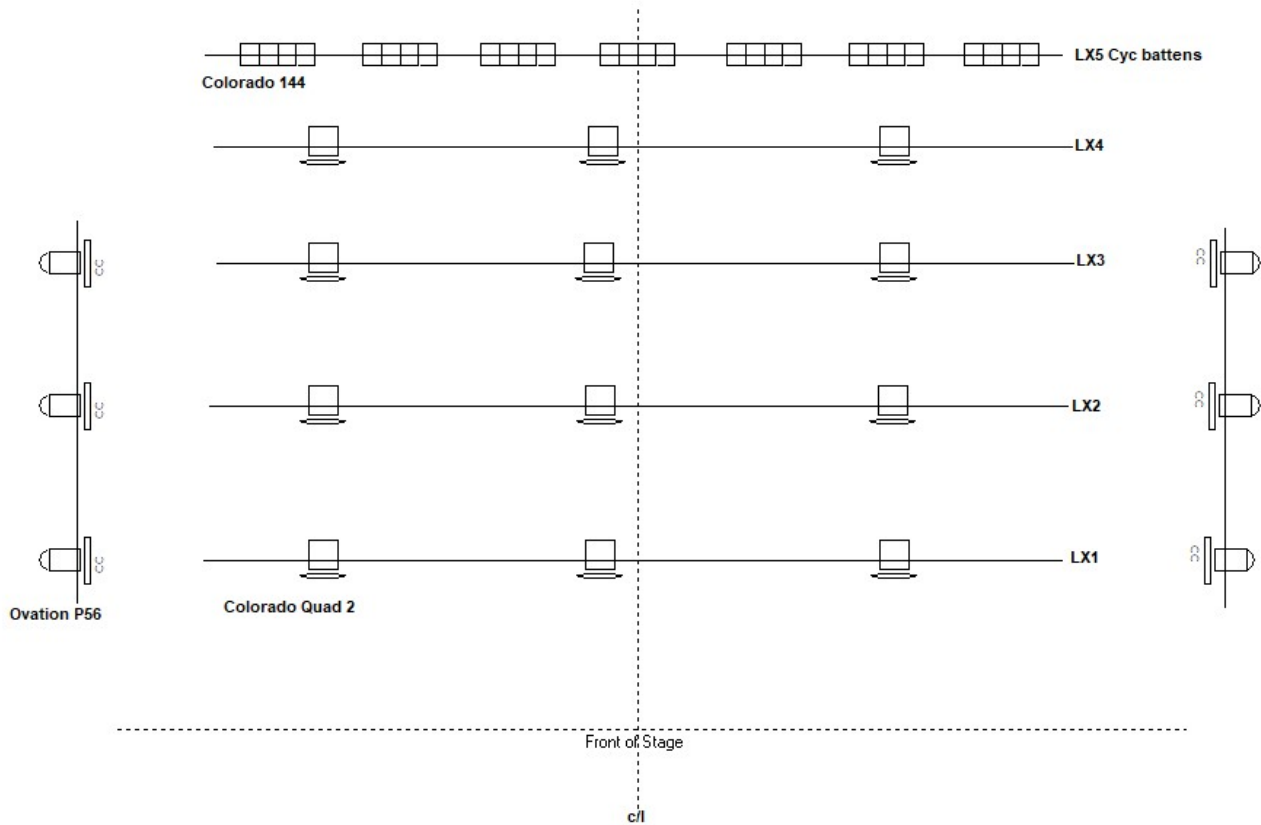
2.25 x 2.9m blue dock doors around the back of the building (turn into St Mary's Wynd) leading directly onto stage USR, however they're 5' up in the air and we do not have a ramp. There is a narrow alley leading up to the loading bay where touring vehicles can be left. W3Ws is roughly [here](#).

Level access is down the lane between us and the church, through the auditorium fire exit just off DSL (standard width double-doors). There is sometimes space to leave smaller production vehicles on our side of the lane. W3Ws roughly [here](#).

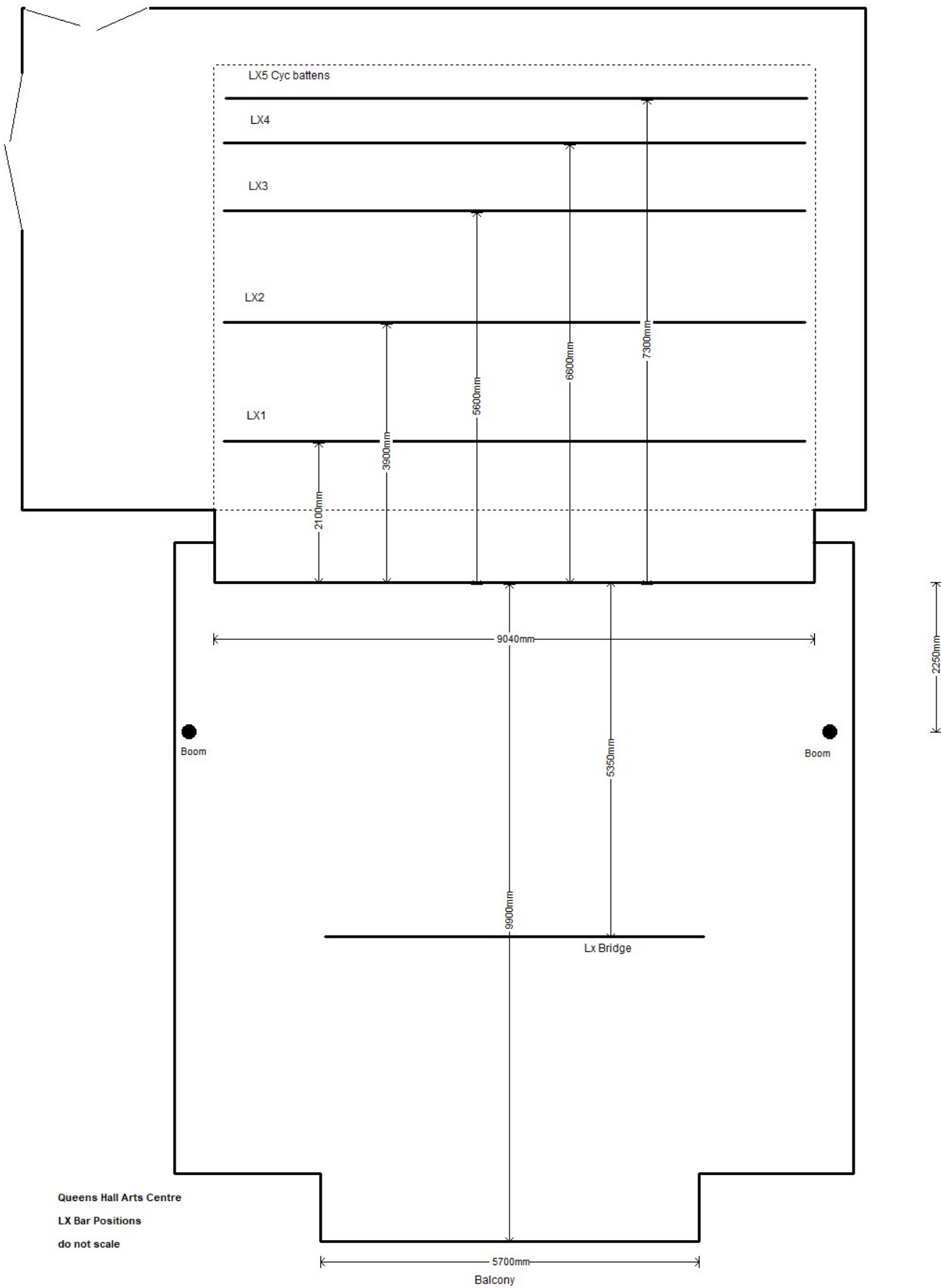
## Parking

Please note we do not have proper parking facilities – asides from the areas indicated for get-in / load-in vehicles, we only have a small staff car park at the base of the fly tower. W3Ws roughly [here](#).

## Main Theatre Fixed Rig Positions

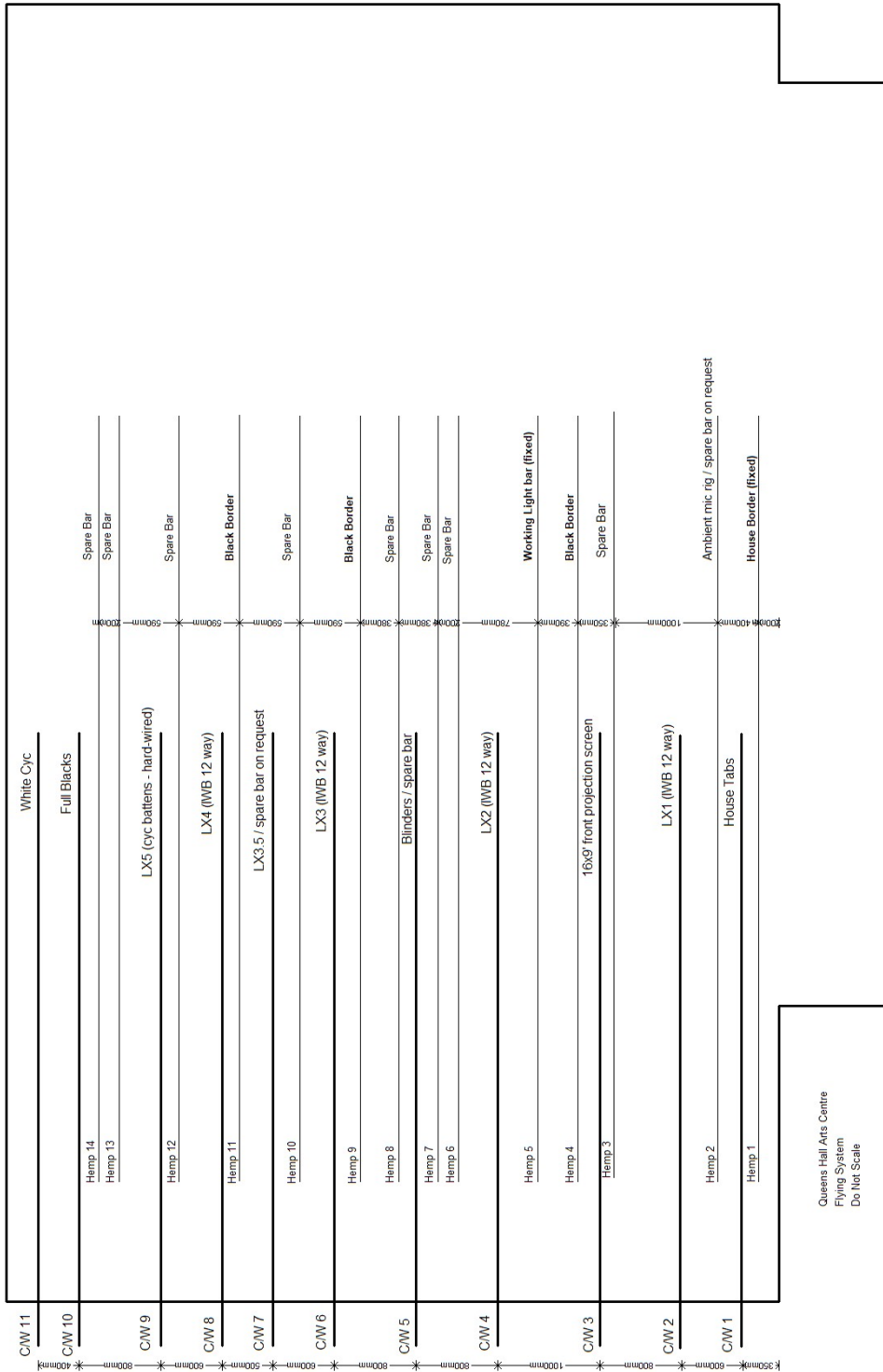


# Main Theatre LX Bar Positions

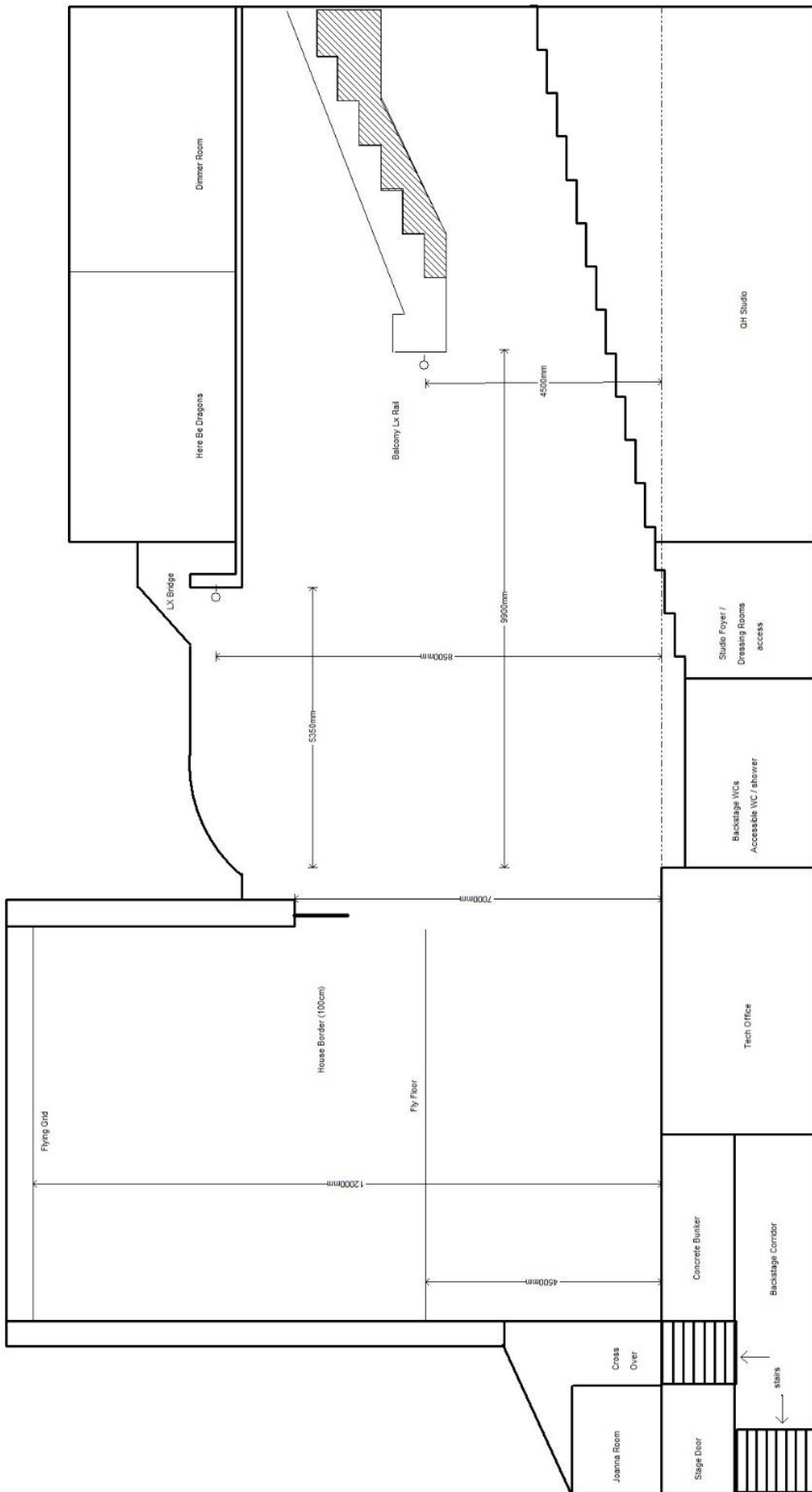




# Main Theatre Flying System

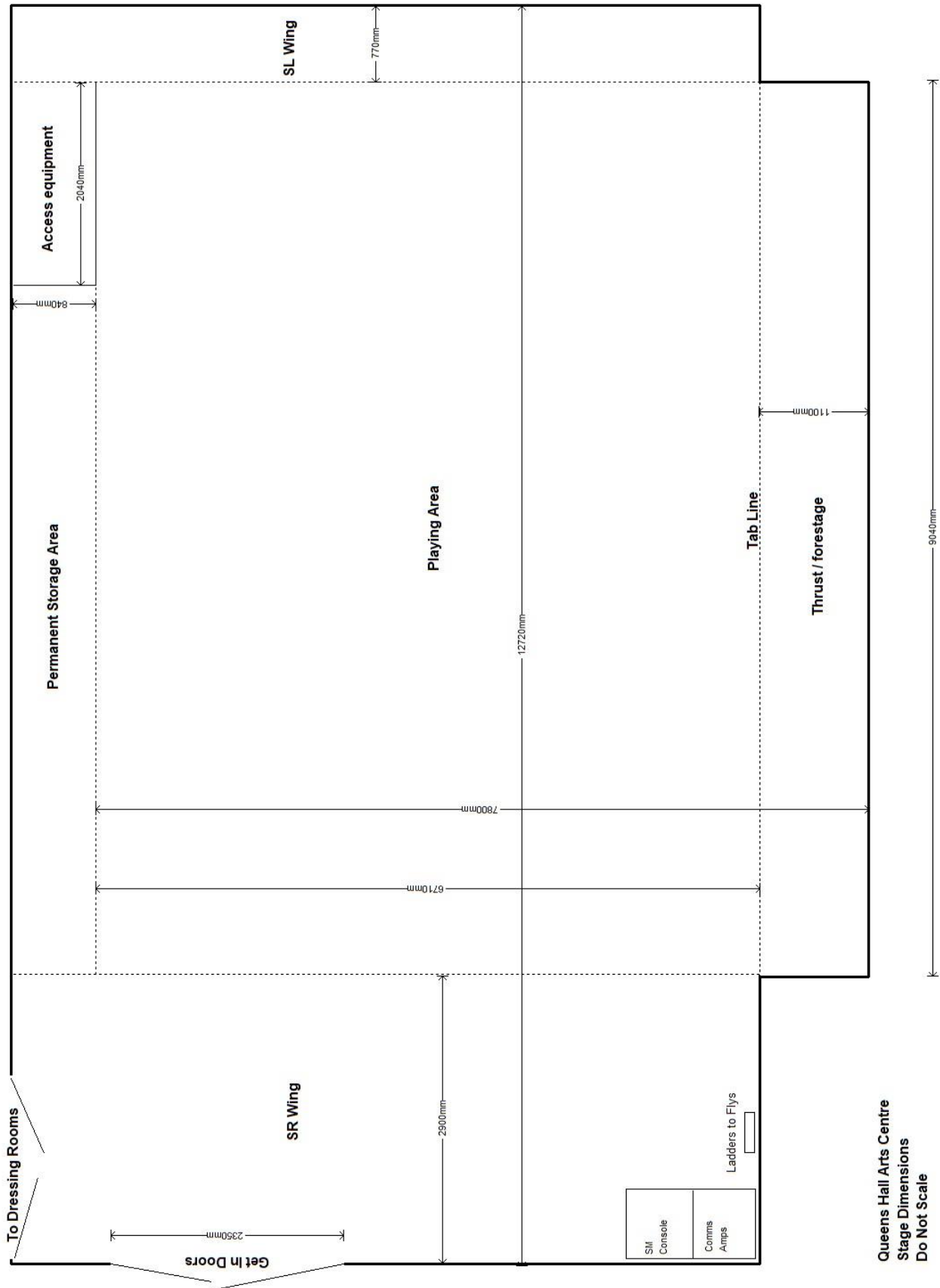


# Main Theatre Side Elevation



Queens Hall Arts Centre, Side Elevation, do not scale

# Main Theatre Stage Dimension



Queens Hall Arts Centre  
Stage Dimensions  
Do Not Scale

# Studio Theatre

Our Studio Theatre is a black-box studio space (although please note the floor is light grey), suited to end-on performances, other configurations possible

Capacity: 50

Playing area: 7 x 4m

## Lighting

Semi-fixed LED rig across 2 LX bars, consisting of:

- 6 x Chauvet Ovation 415 fresnels
- 3 x Chauvet EVE E100 profiles
- 3 x Rosco 805s & holders, M-size only
- 1 x alphapack for practicals etc
- 1 x ETC Element 2

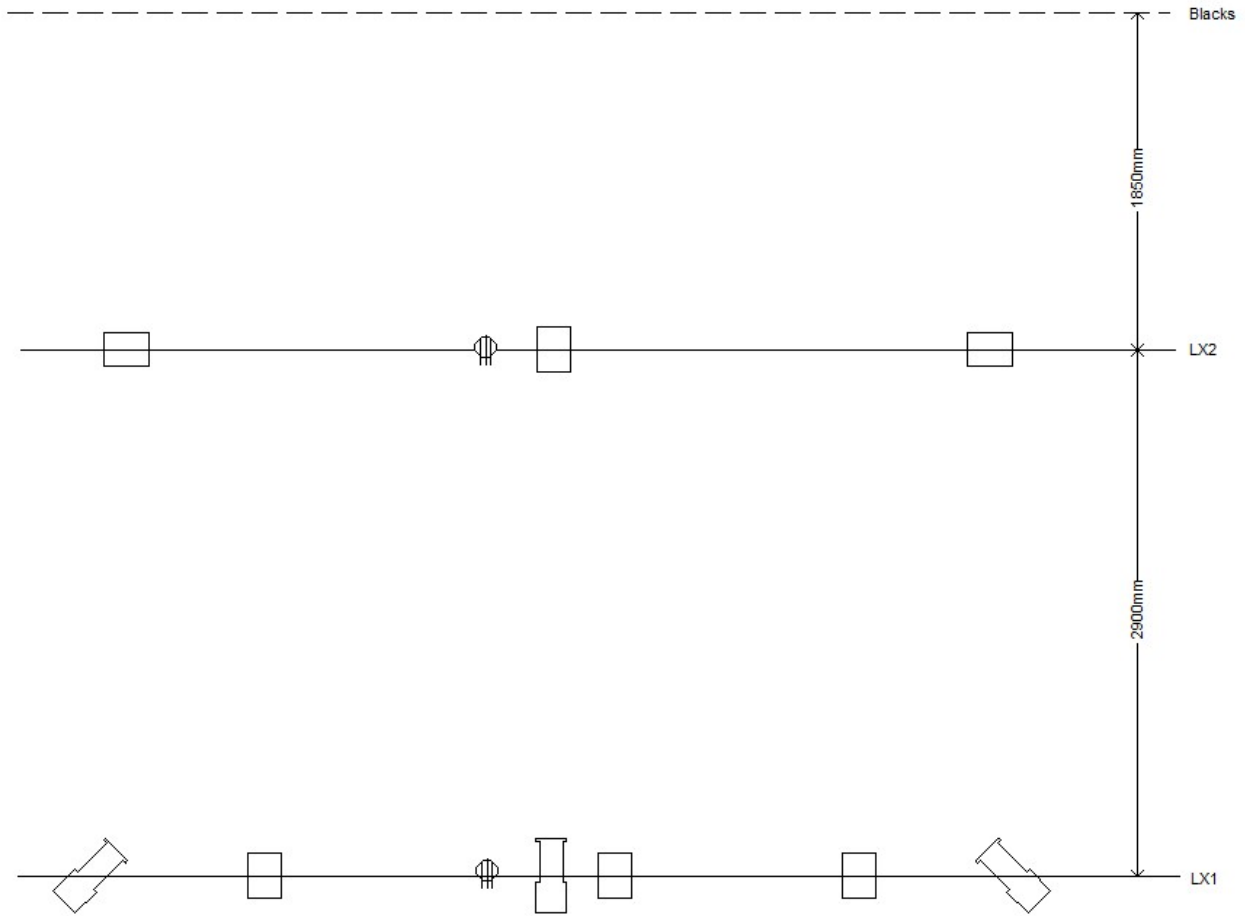
## Sound

- 2 x RCF NX32
- 1 x Gale 10" sub
- 1 x Yamaha MG16 mixer

All other tech requirements need to be taken from the main theatre kit, dependent on availability.


Control position is a temporary set-up at the back of the room.


# Studio Fixed LED Rig



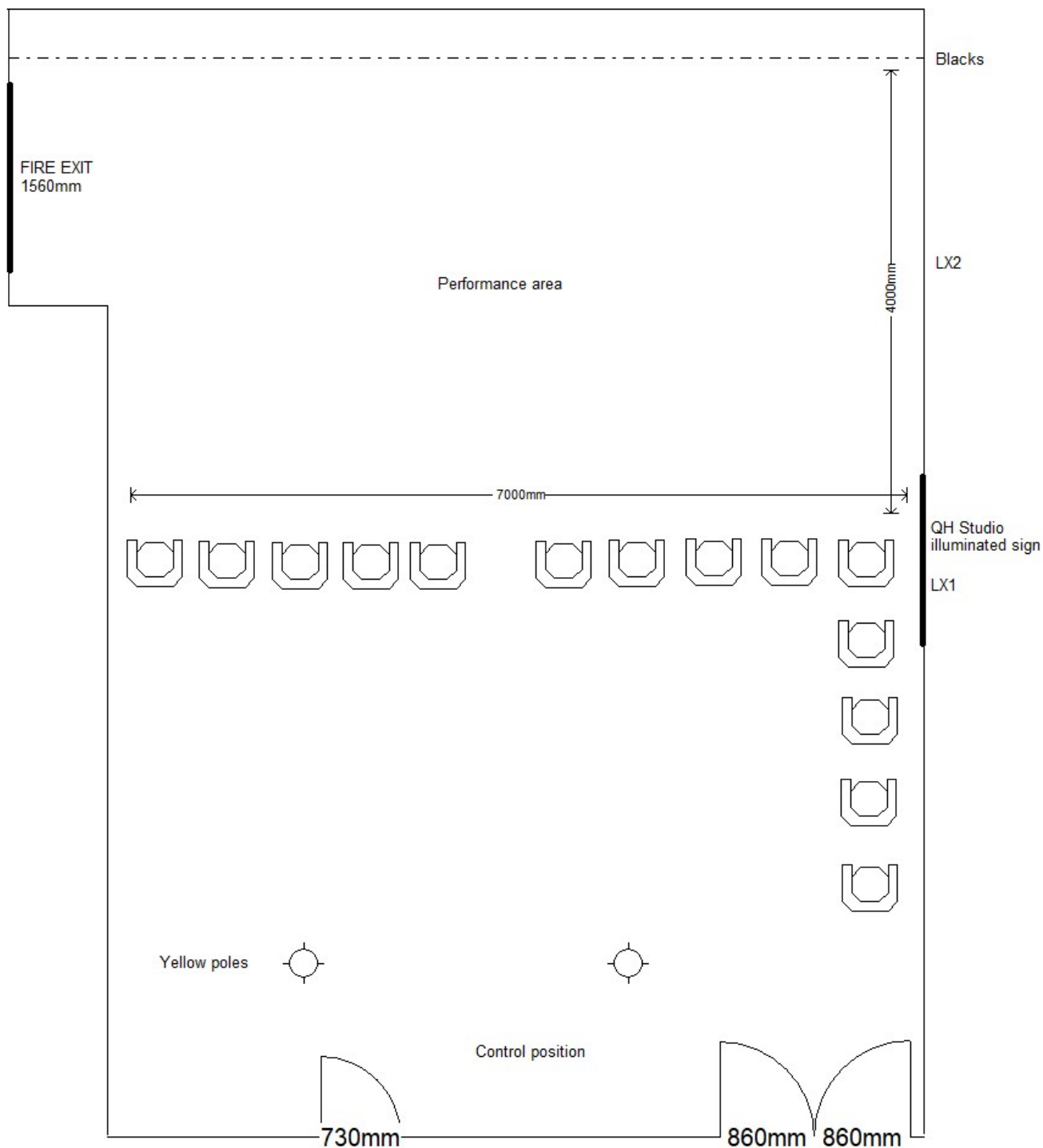
**QH Studio - Fixed LED LX Rig**

 Chauvet Eve E100 profile

 Chauvet Ovation F415 fresnel

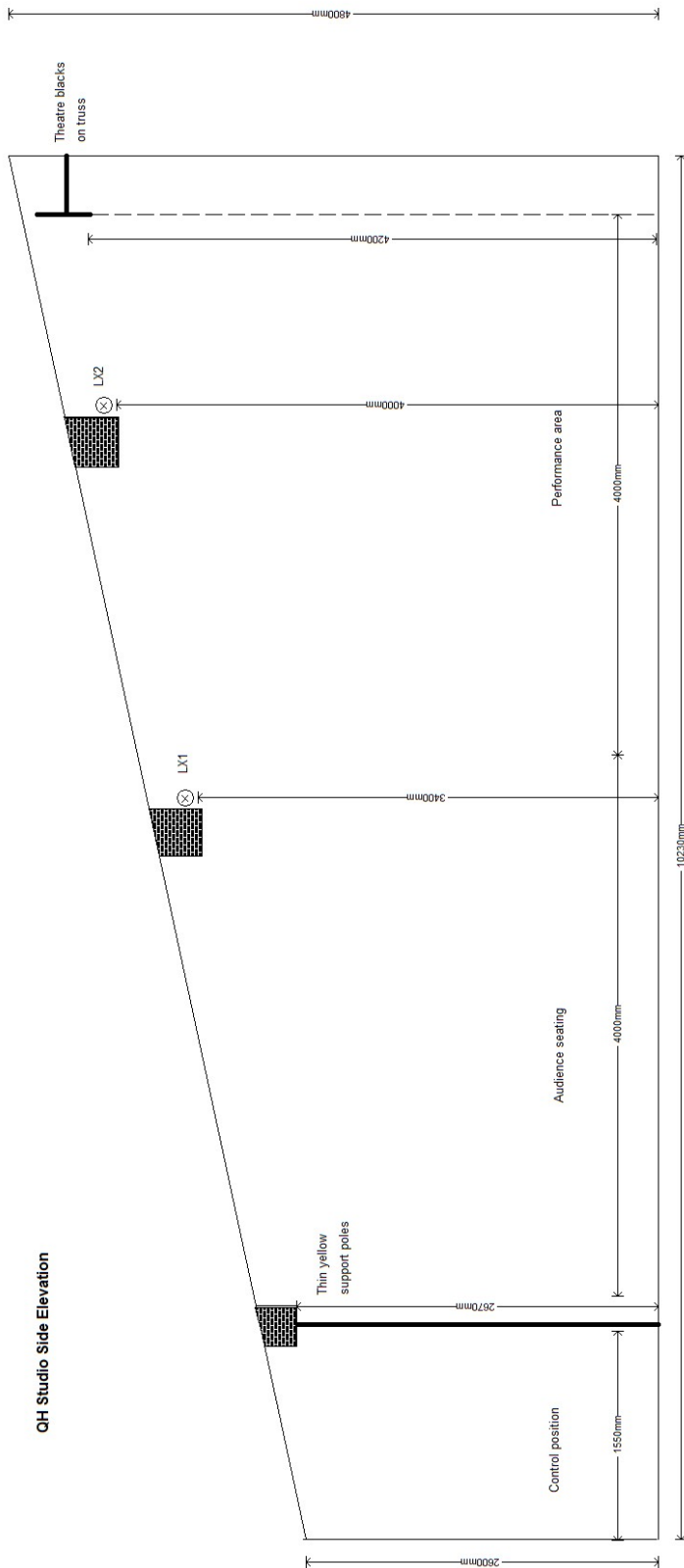
 16A hard power

# Studio Ground Plan



QH Studio Groundplan

# Studio Side Elevation



# Hire Space Equipment

All hire spaces are equipped with projection equipment and basic sound playback.

The White Room and Studio also have dedicated projection screens.

Video input for ALL spaces is HDMI only. If your device does not output HDMI you will not be able to connect it to our projectors.

Basic Bluetooth playback systems in the Studio and White Room.

Please note any equipment brought onto QH premises which you intend to plug into the wall must have a valid PAT certificate (usually just a sticker on the item's plug or cable).

# Hire Space Pro Equipment

We also have a number of solutions for events and performances in these spaces, however please note this equipment is not part of any basic room hire.

- Bose F1 stereo PA with subs
- HK Audio Lucas Nano portable vocal reinforcement / mini PA
- X32 Compact mixer
- X32-Mix iPad remote

Basic theatrical LX for lighting performers (please note the Studio has a small, but fully controllable LED LX rig)

Chauvet Well Fit kit for architectural LX

Portable stage decking (aluminium, not steel, surface carpeted light grey) – 4 x 2 x 1m / 4 x 1.5 x 1m / 8 or 16" legs, handrails / treads available.

All other tech requirements need to be taken from the main theatre kit, dependent on availability.