



plann

Unite MSS - D1 - Plann - Stage 2 | SLAVSE Overview

Stage 2 - February 2022

INTRODUCTION

The D1 interior space is a multipurpose venue and will be fitted out with technical audio-visual and theatrical lighting systems. The space shall be required to accommodate performances, music events, presentations, functions, dry hire events and a rehearsal space which will require the use of stage lighting and audio-visual equipment.

The space will be equipped with loose seating and rostra to allow for different room configurations depending on the function of the space.

The primary focus will be the longitudinal section along the glass wall where there will be a projection screen and focussed audio.



Manalo & White, 2021. *Unite Middlesex Street D1 interior concept design: Final presentation.*



Manalo & White, 2021. *Unite Middlesex Street D1 interior concept design: Final presentation.*

1 STAGE ENGINEERING

1.1 Overview

This multipurpose event space will be supplied with portable staging modules to allow for different stage configurations and locations.

1.2 Staging

A set of lightweight yet robust staging modules will be supplied. The advantages of these modules is that they can be used in different configurations. They come with detachable legs meaning less storage space is required. A trolley will be provided for easier moving and storage. Additional decks, stairs, handrails can be purchased to expand the system offering full flexibility.



Prolyte, 2022. *Lite Deck*. [image] Available at: <<https://www.prolyte.com/products/portable-stages>>

2 STAGE LIGHTING SYSTEM

2.1 Overview

The stage lighting system design is to provide an installed infrastructure with an initial stock of lanterns. The space will be lit by LED fixtures to keep heat and power consumption down. They will be rigged from the installed IWB's (internally wired bars) and fixtures can also be used at floor level.

2.2 Power and DMX distribution

There will be an installed power distribution panel providing relay control of the dedicated 230volt stage lighting outlets. All stage lighting services shall be star wired from this power distribution panel to the three high-level (IWB) and four low-level facility panels.

Alongside this there will be a separate larger power outlet at low level for temporary dimmer racks if and when required.

The LED lights will be controlled via DMX and the distribution system will include a DMX splitter star wired to outlets on the IWB's and facility panels.

Power Distribution: 24 Ways of relay control star wired to 16A outlets on three IWB's and facility panels.
 Temporary Power: 32A Three phase socket outlet for temporary event lighting equipment as required.
 Data: Distributed DMX network to outlets on three IWB's and facility panels.

2.3 Control desks

Performance events - A dedicated stage lighting control console shall be provided for the venue for full control of the lighting fixtures for shows. There will be two locations where this lighting desk can be operated from; one within the main space and another at balcony level.

General events – At the day control position there will be a button panel to select a number of pre-recorded lighting scenes. These scenes can be setup on the lighting desk and recorded meaning that non-technical staff can operate the system for general events.



Zero 88, 2022. FLX S48. [image] Available at: <<https://zero88.com/control/flxs>>

2.4 Stage Lighting Fixtures

LED luminaires have been allowed for in the loose equipment cost provision, these are formed of fixed and zoom lens profiles, zoom RGBW PAR fixtures, floor battens and accessories. No allowance had been made for automated fixtures at this stage.



Example: LED RGB Stage lighting Luminaires from ETC Ltd, Martin by Harman, Chauvet Professional

3 AUDIOVISUAL SYSTEMS

3.1 Overview

The audio-visual system design is to allow for the provision of an installed wiring infrastructure, equipment rack, speaker system and a portable playback rack on wheels.

A projector and large screen in the venue will allow for video playback.

3.2 Audio visual Infrastructure

Customised facility panels are provided to house the various audio-visual facilities. These include audio, data and speaker tie lines to support the source, mixing and output equipment. These panels allow for the temporary connection of audiovisual equipment throughout the venue and are cabled back to the centralised audio rack for patching to other panels as required.

Infrastructure system consists of:

- High level facility panels - for audio tie lines, data network and speaker tie lines
- Low level facility panels - for audio tie lines, data network and speaker tie lines
- Audio equipment rack – star wired tie lines for audio, data network and speaker either connected directly to rack equipment or via patch bays.

The facility panels include a selection of:

- Mic / Tie Lines: For the connection of microphones throughout the space (if required).
- Ethernet Lines: For the movement of control data or digital audio/video throughout the audiovisual network.
- Speaker Lines: For the connection of speakers throughout the space as required.
- Power: For the provision of dedicated audiovisual power to temporary audiovisual equipment in use throughout the space.
- Temporary Power: 32A socket outlet for temporary event sound equipment as required.

3.3 Audio visual Control Systems

Performance events – A portable playback rack on wheels allows for safe storage and movement of the equipment. It can be used in two locations, one within the main space and other at balcony level. The playback rack will house a basic digital mixing console, radio microphone receivers and a CD player with Bluetooth. For simple events the installed analogue tie lines at the facility panels can be used or for larger events the supplied digital audio snakes can be utilised using the installed infrastructure.

General events – At the day control position there will be a selection panel to select a number of different audio sources with volume control. These include a Bluetooth option or a 3.5mm audio jack input allowing non-technical staff to easily operate the system for general events.

An audio DSP (digital signal processor) will allow for selectable source inputs and output routing for different room functions. The DSP will also optimise the audio coverage for the venue and protect the system equipment.



Example: Portable playback rack with mixing console



Example: Day control of DSP

3.4 Loudspeakers and Amplifiers

The loudspeaker system installed in the venue will be suitable for a variety of different functions and events. The system includes for amplifiers to be housed in the equipment rack supplying passive high quality speakers and a pair of Subs. There will also be a pair of fold back speakers which, via the installed infrastructure, can be used at different floor levels.

There will be a number of selectable options on the DSP such as for main stage performance where the sound source will be focussed from the stage/ projection screen or general purpose audio from each side of the room for general overall coverage.

3.5 Microphones and Accessories

There will be a selection of static and radio microphones and accessories.

3.6 Video Systems

A projector and large screen are proposed for the venue. This includes a Laser-DLP projector with lens with a large drop-down motorised screen sized appropriately for a 16:10 image.

The video source can be used either from the portable playback rack for technician led performance events or from the day control location for non-technical operation. In both of these locations the video audio will be routed through to the audio system.

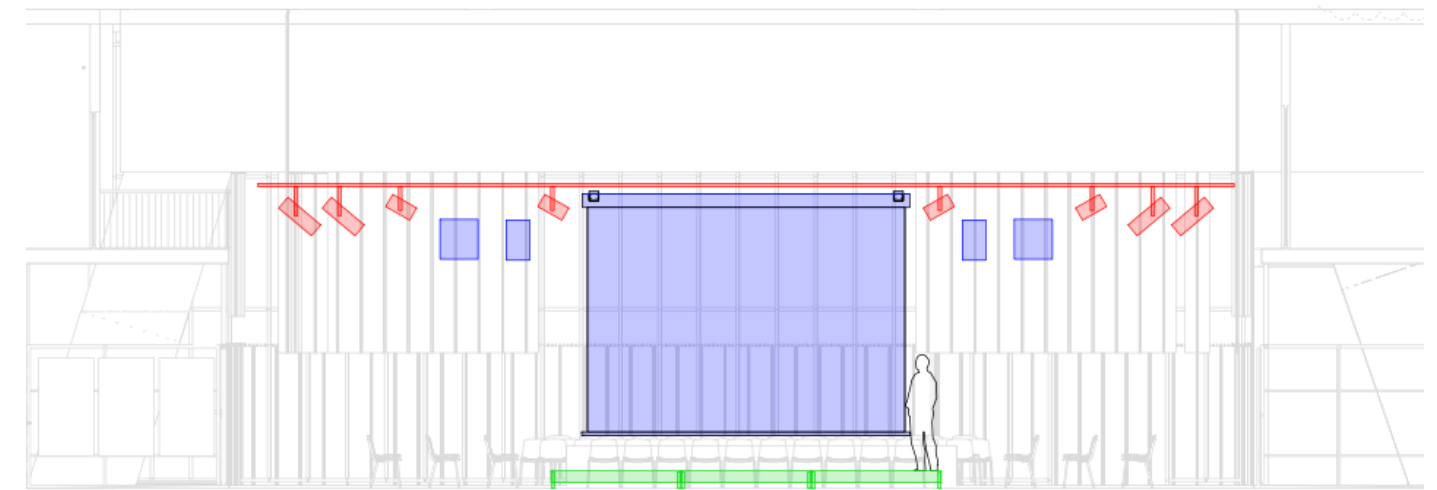


Example: Laser DJP Projector and large format screen

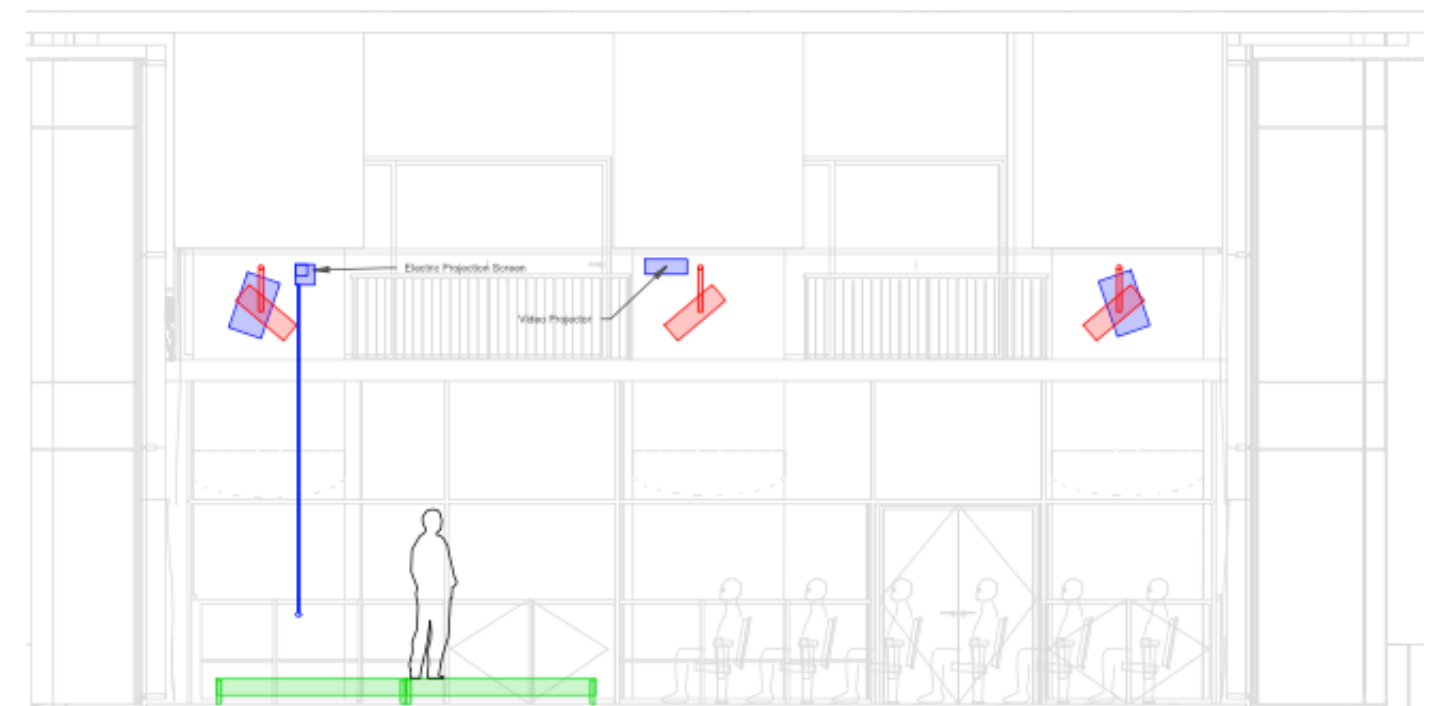
3.7 Access

An installed induction loop underneath the floor will enable hearing aid wearers to assist them to hear more clearly in the venue. The audio will be picked up via an ambient microphone at high level and routed through the DSP to the induction loop amplifier.

4 SECTIONS OF PROPOSED SYSTEM LAYOUTS



(A) Longitudinal Section - towards stage



(B) Section - through stage