Technical Specification for The Malthouse Theatre

Lighting

Overview

The lighting system comprises of ETC ColourSource Thrupower dimmers providing 240 dimming channels. These are distributed throughout the theatre. Any socket can be set to hot power to allow for a hybrid of conventional and LED fixtures to be used. There are four DMX universes, again distributed throughout the theatre through the use of patchbays and XTBA Smart 10i/RJ45 splitters.

Control

ETC ION XE20, with 5 pin DMX, 4 universes (main control Desk)

ETC Ion lighting control, with detachable fader wing, currently operating 2 universes (spare)

Lighting Bars

14 motorised bars over stage, 6 upstage of the centre stage bridge and 8 down stage. Controlled from either stage left or stage right using control tablet.

3 bridges FOH, with 1 lighting bar either side of the bridge. Bars also run perpendicular to the stage both at bridge level and also on the slips.

Cables

There is a full complement of 15A plug to socket cables in 3m, 5m, 10m and 15m lengths. DMX cables are available in 1m, 2m, 5m, 10m, and 20m lengths.
There are socapex cables in 10m and 15m lengths, with breakout tails mostly to 15A round pin but one to 16A ceeform.
A variety of adapters are available to convert between 13A, 15A, 16A and Powercon, as well as Grelcos to split 15A supplies.

Effects

- Antari HZ-500 hazer - DMX controlled
- Stairville M-Fog 2500 DMX Fog Machine – DMX controlled
- Mirror Ball - DMX controlled

Plans

A DWG file to allow a lighting plan to be created is available on the website along with architect's plans of the various stage layouts.

Lighting Fixtures

Fixture	Notes	Manufacturer	Quantity
Par Can 64	Gel Frames	N/A	18
Par Can 56 short	Short conventional Parcan	N/A	2
Source Four 750 (body only)	Without lens tube	ETC	18
Source Four 750 Zoom	15- 30 degree lenses	ETC	12
Source Four 750 Zoom	25-50 degree	ETC	12
Source Four 750 Lens tubes	19°	ETC	6
Source Four 750 Lens tubes	26°	ETC	10
Source Four 750 Lens tubes	36°	ETC	19
Source Four 750 Lens tubes	50°	ETC	1
Source Four Juniors	25- 50 degree zoomable profile, with gobo holder, shutters and gel holder	ETC	11
Source Four LED Series 2 Lustr	LED profile with 36 degree lens	ETC	12
Source Four Fresnel	Conventional Fresnel with barn doors and Gel holders	ETC	22
Cantata F Fresnel	Conventional Fresnel with barn door, and gel holder	Strand	4
Cantata PC Fresnel	Conventional Fresnel with barn doors, and gel holder	Strand	6
Acclaim Fresnel	Conventional Fresnel with barn door, and gel holder	Strand	6
Quartet F	Conventional Fresnel with barn doors, and gel holder	Strand	4
Quartet Pc	Conventional Fresnel with barn doors, and gel holder	Strand	4
743 Fresnel	Conventional Fresnel with barn doors, and gel holder	Strand	10
Kudos 350zs	360-degree spot and wash mover RGB led 3 pin & 5 pin DMX Power con power supply	Elumen8	4
CYC 100 RGB 100W	Cyclorama wash. Full RGB LED Fixture	Elumen8	8

Pixel Storm 12 HEX Batten	12 individually controlled RGB LED Pixel Batten	LEDJ	10
Showbar Tri-Led Batten	18 x 3W tri colour LEDs	Stairville	8
Event Spot DL/WW	Pin spot 4-degree spot with optional 10 degree and 45 degree lens	LEDJ	2

Projection/AV

- 6m wide 16:9 motorised drop down screen - centre stage
- Christie D13HD-HS 13000 lumen Projector
- Extron IN1606 6 input AV Switcher
- HDMI over Cat 6 link from stage

Stage Power

There are multiple 13A outlets on facility panels at locations on stage and in the wings. In addition to this the following is also provided.

Provision	Purpose	Location
32A Single Phase	Audio	DSM & Theatre Store – Facility Panels
32A Three Phase	Lighting	USL & R – Facility Panels
32A Three Phase	General	USL & Workshop – Wall socket
63A Three Phase	General	Workshop – Wall socket

Audio

Overview

The in-house sound system comprises of six Lab Gruppen IPD2400 amplifiers feeding a selection of EM Acoustics point source cabinets, namely EMS-51, EMS-61, EMS-81 full-range and EMS-112 Subwoofers. These are distributed and arranged throughout the theatre to provide even coverage for the whole audience. The system utilises Dante Audio Networking providing maximum flexibility and allowing FOH mix position to be placed either in control box or anywhere within the main auditorium.

Control & Routing

- Dante Audio Network
- Yamaha QL1 32 channel sound desk
- Yamaha Rio 3224-D2 Stage Box 32 in/16 out
- 2 Mac Minis to run Qlab and other software as required
- Full Video and Audio Qlab Licence
- Facility for 3.5mm audio and HDMI video inputs in control room

Microphones, Stands and DI boxes

Microphone	Type	Quantity
Shure SM58	Dynamic vocal mic	6
Shure SM57	Dynamic instrument mic	6
Shure Beta 57a	Hyper-cardioid dynamic mic	2
Shure Beta 52a	Kick Drum mic	1
Shure Beta 91a	Boundary mic	1
AKG C214	Large Diaphragm Condenser mic	2
AKG C451b	Pencil Condenser mic	1
Sennhesier e604	Clip-on dynamic instrument mic	3
Shure CVO-B/C	Installed Sound Overhead Microphone	3
Sennheiser ew G4	Radio microphone – e835 Handheld or SK300 bodypack transmitters	2
Sennheiser ME2	Omni-Directional Lapel Microphone	2
Sennheiser	HSP Essential Lightweight Omni KE4 Headmic 3.5mm Beige	1
Pulse MIC-3000LJ	Headworn mic	4
Microphone Stands	Tall Boom	4
	Tall Telescopic Boom	4
	Adjustable height (telescopic) with telescopic boom	2
	Mid-height with telescopic boom	2
	Low level boom	4
	Low level telescopic boom	4
BSS AR-144 DI Box	Phantom powered Direct injection box in rugged ABS casing	8

Cables

Quality XLR cables in 2m, 5m, 10m, 15m and 20m lengths