



Tower Theatre

Technical Specification v4 April 2020

Lighting

The Tower has a fixed lighting rig affording good general cover. While colouring and focusing these fixtures is expected, they should not be moved or derigged. They may have to be refocused to achieve the desired cover. There are sufficient spare dimmed and hard-power circuits remaining, along with a good stock of additional lanterns, to cover the most complicated designs. Plans of the fixed rig along with suggested cover and an outlet plan are available separately

Lighting Desk

ETC Eos Ti (4096 channels, Universes 1 & 2 via 5XLR). Software current at Sept 2019

Dimmers

72x **ETC SmartPack** installation channels (36x dimmer/hard power switchable, 36x dimmer/hard power/relay switchable). Check the dimmer cases to identify the relay-enabled channels

Dimmers hard-wired to installed IWBs and wall sockets on mezzanine (no hard patching available)

2x 4-way **ETC SmartModule** racks (portable racks – can be positioned around the space)

2 channel Houselights dimmer (located next to desk)

DMX

Universes 1 & 2 on 5XLR outputs on desk

Universe 1 – via splitters to installed dimmers and 12x DMX outlets around the rig

Universe 2 – locally to House Lights dimmer

Outlets

Dimmers to 15A sockets on IWBs and 2x panels on mezzanine (see separate plan)

Tech Rings A – C: 16A outlets at 32A per ring on IWBs (see separate plan)

DMX Universe 1 to 12x outlets on IWBs (see separate plan)

Various 13A outlets

Lanterns

LED

6x **ETC Source4** Lustr+ StudioHD

6x **ETC Source4** Series 2 Lustr CE (silver body)

All Source4s are set to 'HSIC StrFan' giving colour picker control along with Hue, Saturation, Intensity, Colour Temperature, Strobe and Fan

Source4 lenses: 12x 50°, 4x 36°

Tungsten

12x **Selecon Acclaim Fresnel**

(T 26/T27 - 650w) [10 in fixed rig]

6x **Strand Prelude 28-40 Zoom Profile**

(T 26/T27 - 650w) [4 in fixed rig] - 1 with only 3 shutters

9x **Strand Prelude 16-30 Zoom Profile**

(T 26/T27 - 650w) [2 in fixed rig]

1x **Selecon Pacific 23-50 Mk I Zoom Profile**

(GKV 600w)

3x **Selecon Pacific 23-50 Mk II Zoom Profile**

(GKV 600w)

2x **Selecon SPX 25-50 Zoom Profile**

(GKV 600w)

1x **Strand SL 23-50 Zoom Profile**

(GKV 600w)

2x **Selecon Zoomspot 18-34**

(T 26/T27 - 650w) - no shutters

13x **Strand Patt 23 Mk1 + 2 profile spot**

(T18/T25 - 500W)

6x **Strand Patt 123 Fresnel spot**

(T18/T25 - 500W)

10x **CCT Minuette Fresnel spot**

(T18/T25 - 500W) [10 in fixed rig]

1x **Strand Quartet Fresnel**

(T18/T25 - 500W)

6x **Strand Patt 223**

(T11/T19 - 1kW)

7x **PAR64**

(mainly CP62 medium beam)

The number of tungsten fixtures may change due to maintenance and acquisitions – please check

Lanterns (stored)

A selection of Patt 23s, 123s, Sil30s, Mole 2050 Fresnels, Coda floods, Minims and an assortment of vintage lanterns is available from our basement store. These are PAT inspected and all work, but are in varying condition

House lights

5x **Strand Patt 137** flood (150w) – Desk channel: **513** (Universe 2)

Roof lights

2x **Mini LED PAR** (Desk channel: **201**)

2x **Beamz Lucid 1.2** LED wash (Desk channel: **200**)

Blues

Blue LED Birdies are positioned around the edge of the space. These are controlled by a switch by the door to the Dressing Room. Individual units can be unplugged as necessary

Misc

Spare lamps for most lanterns

Colour frames for most lanterns

Barndoors for most Fresnel lanterns

Hook clamps and safety bonds for all lanterns

Gobo holders for Patt 23, Prelude, Pacific and SPX lanterns

Selection of 'A' and 'B'-size gobos

Small selection of scaff stubs and clamps

Small selection of longer ali tubes

Small selection of twisted boom arms

6x Tank traps with centre or offset tube receptor positions

Small selection of DMX cable

Substantial selection of 15A TRS

15A Grelcos

Short 16A-16A and PowerCon–PowerCon extension cables

16A Y-cords

4-way 13A extension leads

Selection of cut colour

Fixture addresses and channels

<i>Lantern</i>	<i>Desk Channel</i>	<i>DMX Address</i>
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LED Profile

Source4	101	101-107
Source4	102	116-122
Source4	103	131-137
Source4	104	146-152
Source4	105	161-167
Source4	106	176-182
Source4	107	191-197
Source4	108	206-212
Source4	109	221-227
Source4	110	236-242
Source4	111	251-257
Source4	112	266-272

Please ensure these are re-addressed as above at the end of your show if you have to change them

LED Roof cover

Wash	200	300
MiniPAR	201	305

Effects Lanterns

Martin Destroyer disco light (DMX control)

Abbyss Water/Flame effect projector

Smoke and Haze

1x **QTX H-3** Hazer (DMX control of haze and fan)
2x Smoke machines (local control only)

MD Video Relay

Components for a 2-screen, low latency Musical Director/Conductor video relay comprising:
Video camera with hook clamp fitting
2x Composite Video to VGA convertors
2x 22" LCD monitors with VESA scaff tube fittings
2x 40m BNC drums

Sound

Sound desk

Soundcraft FX16 II - configured for 8-channel QLab play back, 2x mic channels and spare line inputs
Desk Channel control:
Ch 1-4: QLab channels 1-4 direct feed to FoH, rear stage speakers via Main and Sub Masters
Ch 5-8: QLab channels 5-8 direct feed to rear auditorium speakers and stage level sockets
Ch 9 + 10: inputs from Ch 9 + 10 on multicore from Upper Mezz

Power system

EMO CR6 'The Switcher' – sequential power switcher that powers up and down sound equipment in a safe order

Playback

QLab system with licence
Apple Mac Mini computer (internal SSD), monitor, keyboard and mouse
PreSonus Studio 18/24 Audio Interface (Mac USB output to desk)
CD player:
Minidisc player:

Power

RCD protected 13a sockets in all areas. There is no dedicated sound ring although the amp rack and the control desk sound equipment have dedicated feeds

Amplifiers

4x **Crown LXi800** Stereo (Amp 1 – FoH speakers, Amp 2 – spare, Amp 3 - Rear Auditorium speakers, Amp 4 – Stage level sockets)
2x **Quad 303A2** (bi-amp configuration for rear stage JBL speakers)

Speakers

FoH – 2x (disco speakers)
Rear Stage – 2x **JBL** 3-way
Rear Auditorium – 4x **JBL Control 1 Pro** (2 channels)
Selection of small FX speakers

Multicore

Multi 8 + 9 from mezzanine to desk mic inputs 8 + 9
Multi 1-8, 10-32 not allocated
Multi returns - 6 QLab channel feed to amps

Mics

2x **AKG D5** Cardioid dynamic cabled mics with stands

Wired Comms

2x RTS belt packs, headsets and PSU (N.B. these are not compatible with Tecpro systems)

Radio Comms

6x Kenwood TK3160 UHF 2-way radio sets with G-shape earpieces or lightweight headsets on UK Simple Lite licence. Shared with FoH team

Tannoy

Audio show relay to SM Room, Dressing Room, Meeting Room (as overflow dressing room)

Video Relay

Stage camera feed to monitors in SM/Props Room, Dressing Room, Meeting Room (as overflow dressing room)

Misc

Small selection of 3XLR mic cables

Small selection of various XLR/Speakon TRS speaker cables