Tower Theatre
Technical Specification
v6.0 April 2021

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

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)
1x 4-way **ETC SmartModule** (portable rack for VL1000s) DMX 509-512
1x 4-way **ETC SmartModule** racks (portable rack – can be positioned around the space) DMX 73-76
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°

2x **Generic COB LED** wide PARs

Tungsten

20x **Selecon Acclaim Fresnel**	(T 26/T27 - 650w) [18 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) [in fixed rig]
3x **Selecon Pacific 23-50 Mk II Zoom Profile**	(GKV 600w) [in fixed rig]
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)
2x **Strand Patt 23 Mk 11 profile spot**	(T17/T24 - 500W) [in fixed rig]
4x **CCT Minuette PC spot**	(T18/T25 - 500W)
1x **Strand Quartet Fresnel**	(T18/T25 - 500W)
4x **Strand Patt 223**	(T11/T19 - 1kW)
7x **PAR64**	(mainly CP62 medium beam)

4x Vari✷lite VL1000TS   (tungsten moving profiles with gobos and shutters)[in rig]

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

Lantern	Desk Channel	DMX Address
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
VL1000TS	113	Dimmer 509, Ctrl 401-427
VL1000TS	114	Dimmer 510, Ctrl 428-454
VL1000TS	115	Dimmer 511, Ctrl 455-481
VL1000TS	116	Dimmer 512, Ctrl 482-508
LED PAR	117	273-280 [not rigged]
LED PAR	118	281-288 [not rigged]

LED Roof cover

Wash	200	300
MiniPAR	201	305

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

Effects Lanterns
Martin Destroyer disco light (DMX control)
Abyss Water/Flame effect projector

Smoke and Haze
1x **QTX H-3** Hazer (DMX control of fan [Ch 98] and haze [Ch 99])
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
Code: 1 – 2 – 3 – 4

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 **Tannoy V12** + **dB Technologies Opera 12** Active Sub (fed via Tannoy TX-2 controller)
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