



Theatre Royal

Technical Specifications

Updated
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PRESHOW ANNOUNCEMENTS

The Theatre Royal Management Board has a pre-recorded Acknowledgement of Country and FOH Housekeeping announcement that is played prior to all performances in our venues. The announcements are played when the FOH Supervisor provides the stage manager / TR mechanist clearance and the house lights have faded to half. If you believe playing the FOH Housekeeping announcement at this time will affect the artistic integrity of your show, please discuss the timing with the Operations team prior to your bump in.

STAGE

Brief Stage Description:

Proscenium Arch with flying facilities. Floor surface is Masonite skin hardboard on trudek. Screwing into surface permitted but larger holes to be authorised by Technical Manager. Stage crossover behind US fly line.

Stage distributed load limit **=750 kg/m² (7.5Kpa)**

Stage point load limit **=320 kg (3.2KN)**

Stage rake **NO**

Stage Dimensions:

Proscenium.

Width **7860mm**

Height **6770mm (at centre point)**

Setting Line

-400mm upstage from the rear of proscenium (allows for fire curtain and house curtain)

Distance From (SL = Setting Line, CL = Centre Line)

SL to DS edge of apron **1300mm**

SL to DS edge of Orchestra Lift/Pit **N/A**

SL to first fly line **180mm**

SL to last upstage fly line **9030mm**

SL to rear wall **PS=12990mm, OP= 14080mm**

CL to OP wall (or obstruction) **7085mm**

CL to PS wall (or obstruction) **6310mm**

Stage to underside of grid **15900mm**

Overhead obstructions

-I beam extends 850mm from OP wall at height of between 5600 – 5900mm

- Under the I beam hangs a duct with the lowest point being at 5000mm
- Work light bar running US to DS extending 120mm at a height of 2800-2850mm

Auditorium:

3 levels, Stalls, Dress Circle, Gallery

Seating capacity with
Front row stalls seating installed **700**

Seating capacity without
Front row seating installed **683**

Hearing Loop:

Yes – Mipro FM transmitter to belt backs with either headphones or neck loops.

Orchestra Pit:

Orchestra Pit

Orchestra pit fixed with no net, it extends under the stage and only 1300mm protrudes in front of the stage apron. There are two large circular support columns within the orchestra pit.

The Orchestra Pit can be extended through a removable front section. This requires four crew, 1.5 hours and results in the removal of the front row of seating.

Stage level at **1160mm** above auditorium

Orchestra pit level at **1340mm** below auditorium.

Dimensions of the orchestra pit **8300mm wide at DS edge**

5870mm wide at US edge

5550mm deep when fully extended

4240mm when not extended

Orchestra pit maximum capacity

When not extended approx 17 pieces

When extended approx 27 pieces

Flying Facilities:

Fly System

Jands single purchase double guided 4 line counterweight system

Fly System Details

Operating Position	Prompt side from gallery 1 at 8000mm(except house curtain is from downstage prompt at floor level)
Total number of Lines	44
Panorama Lines	1 Prompt (line 46), 1 OP (line 45)
Batten Drift	Stage +400mm to +15 500mm
Batten Type	48mm OD steel pipe
Batten Length	10 500mm
Batten Extensions	Possibility to extend 4 lines by 300mm each end.
Batten Pick-ups	4 – evenly spaced

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Batten Point Load	100Kg
Batten W.L.L.	280Kg
LX Batten W.L.L.	240Kg
Cradle Capacity	280Kg
LX bars can be swung	YES
Fly bars can be swung	YES

SEE HANGING PLOT FOR LINE ALLOCATIONS AND FURTHER INFO

Hanging Plot:SL: Setting Line as indicated previouslyLine Type: **SP** = Single purchase, **DP** = Double purchase, **MW** = Motor Winch, **HW** = Hand Winch, **HL** = HandlineW.L.L.: Maximum distributed load including bar weight

Line #	Distance from Apron (mm)	Distance from SL (mm)	Venue Allocation	Intended Use (hiring company use)	Intended Weight	W.L.L	Line Type
HC	1190	-110	House Curtain	Not Available for use		280Kg	SP
1	1480	180				280Kg	SP
2	1680	380	LX 1			280Kg	SP
3	1880	580				280Kg	SP
4	2080	780				280Kg	SP
5	2280	980				280Kg	SP
6	2480	1180				280Kg	SP
7	2680	1380	Border			280Kg	SP
8	2880	1580	Legs (with return)			280Kg	SP
9	3080	1780				280Kg	SP
10	3280	1980				280Kg	SP
11	3480	2180				280Kg	SP
12	3680	2380	Border			280Kg	SP
13	3880	2580				280Kg	SP
14	4080	2780				280Kg	SP
15	4280	2980	LX 2			280Kg	SP
16	4480	3180				280Kg	SP
17	4680	3380	Legs (with return)			280Kg	SP
18	4880	3580				280Kg	SP
19	5080	3780				280Kg	SP
20	5530	4230	Border			280Kg	SP
21	5730	4430				280Kg	SP
22	5930	4630	Tabs			280Kg	SP
23	6130	4830				280Kg	SP
24	6330	5030	LX 3			280Kg	SP
25	6530	5230				280Kg	SP
26	6730	5430	Legs (with return)			280Kg	SP
27	6930	5630				280Kg	SP
28	7130	5830				280Kg	SP
29	7330	6030				280Kg	SP
30	7530	6230	Border			280Kg	SP
31	7730	6430				280Kg	SP
32	7930	6630				280Kg	SP
33	8130	6830	LX 4			280Kg	SP
34	8330	7030				280Kg	SP
35	8530	7230	Border			280Kg	SP
36	8730	7430	Legs (with return)			280Kg	SP
37	8930	7630	LX 5 (Cyc light bar)			280Kg	SP
38	9130	7830				280Kg	SP
39	9330	8030				280Kg	SP
40	9530	8230				280Kg	SP
41	9730	8430	Legs (no return)			280Kg	SP
42	9930	8630				280Kg	SP

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43	10130	8830	Cyc			280Kg	SP
44	10330	9030	Tabs			280Kg	SP
45		Panorama				280Kg	SP
46		Panorama				280Kg	SP

Drapery:

*Type	Material	Colour	Width	Height	Quantity
House Curtain	Velvet 50% fullness	Burgundy	8500mm	7500mm	1
Borders	Velvet 50% fullness	Black	1200mm	3000mm	5
Legs	Velvet 50% fullness	Black	3500mm	7500mm	5
Tabs / Smother	Velvet 50% fullness	Black	6000mm	7600mm	2 (sets)
Cyclorama	Filled Cotton	White	11000mm	7500mm	1
Scrim	none				

Access Equipment:

Elevated Work Platform

Tallescope – extendable between 3900 – 5900mm

MUST be operated by Theatre Royal staff only, requires minimum 2 Staff at all times

Genie AWP-30S push around vertical lift *Subject to availability

Maximum reach is 11.0 metres

EWP Restrictions

N/A

Ladders

(1) 3m Aluminium A Frame

(1) 2.4m Aluminium A Frame

(1) 1.8m aluminium A Frame

(1) aluminium extension ladder – extendable between 5000 – 8500mm

Safety Curtain:

Safety Curtain installed **Yes = 500Kg steel automated curtain running against the upstage edge of the proscenium**

Safety Curtain must be unobstructed at all times **Yes**

Thickness of Fire Curtain **150mm**

Distance from setting line **-400mm – setting line is up stage of Fire Curtain**

Note: Measurement is to the downstage edge of the Fire Curtain.

Additional Requirements

Fire Curtain must remain in the down position whilst venue not in use

Venue Fly System to be operated by Venue Staff only.

Loading Dock:**Access 1 – Hedberg Loading Dock**

Truck access from Collins Street (between Campbell St and Sun St) to the Theatre Royal/Hedberg Loading Dock. Reverse up ramp on south eastern side of building. Articulated vehicles may require traffic management, please consult with venue management prior to arrival. Large vehicles and articulated vehicle will need to approach the dock by driving down Collins Street in an easterly direction.

Dock Leveller **Yes: 0885mm High (flat) x 2132mm Wide**

Maximum clear height in Loading Dock **4400mm**

Loading Dock Exterior Door Dimensions **4470mm High x 3260mm Wide**

The Hedberg Loading Dock is a shared facility for the precinct and has been designed for companies to load/unload promptly and vacate the area. The Theatre Royal does not offer long term parking within this controlled area to hirers. Access to this space must be prearranged including duration with the Theatre Royal Operations department to make sure that all occupants of the precinct are able to use this facility.

Access 2 – Theatre Royal Stage

Truck access is Sackville St, off the Brooker Highway. Trucks to enter forwards and stop past the winched platform. Truck exit forwards onto Campbell St. Loading dock doors open directly on to OP stage.

Loading Dock Height **variable height hydraulic ramp to 1500mm loading dock**

Door Dimensions **3500mm High**
3000mm Wide

Restrictions / Obstructions

Truck parks on a slight slope towards access platform.

Nearby residents – noise is an issue during late night bump-out.

Additional Rigging Notes

1.5 tonne point load I beam spreader bar in grid - movable

Staging Notes:

All flown items must be rigged with rated equipment and are subject to approval by a venue representative.

Limited rigging gear available in house, including straps, shackles, FSWR, slings

LIGHTING**Positions:**

Stage LX Bars 5 x LX Bars, 22 outlet each, 10500mm long, bars can be swung up to 3000mm from standard position.

See hanging plot for standard LX bar locations

Stage Perch Bars PS and OP, just US of proscenium, 6 outlets each, 500mm from stage to top of proscenium (approx +6700mm)

Stage Floor Circuits 3 x dip trap on each side of the stage, DS, mid stage and US, 3 outlets per trap

Gallery Rear

Setting Line to lighting bar **19 900mm at 35 degrees**

Usable bar width **2000mm**

Notes 4 outlets

Gallery Centre

Setting Line to lighting bar **14 000mm at 45 degrees**

Usable bar width **7 000mm**

Notes **16 outlets**

Gallery Roof sides

Setting Line to lighting bar **13 900mm at 45 degrees**

Usable bar width **3500mm**

Notes OP and PS one bar per side, 9 outlets per bar

Dress Circle

Setting Line to lighting bar **13 900mm at 23 degrees**

Usable bar width **3200mm**

Notes OP and PS, one bar per side, 9 outlets each

Royal Boxes

Setting Line to lighting bar **3500mm at DS, 2000mm at US**

Usable bar width **1500mm**

Notes 1 box boom per side, horizontal bar running US/DS, 6 outlets per side

Control:

Lighting desk **ETC ION XE20**

Control channels

Signal output **DMX 512**

Signal distribution **(2) Universes available at various points throughout stage and auditorium**

Remote riggers available onstage **YES**

Dimmer Racks:

Total Dimmers

192

Dimmer Locations

24 in ceiling space for FOH position**102 on fly floor level for stage bars****66 at mezzanine patch bay, USPS of stage****Venue has a patch system such that access from almost any outlet to any dimmer is possible**

144 x 2.4Kw Dimmer Racks

LSC ipro (digital)

36 x 2.4Kw Dimmer Racks

Jands FPX (digital)Total dimmers @ 2.4kw per dimmer **180**

5Kw Dimmer Racks

LSC ipro (digital)Total dimmers @ 5kw per dimmer **12****House Lights:**

Independent control

YES

Control positions

Lighting control room, Prompt Corner, Box Office

Fade time adjustable

Yes – time and intensity adjustable, 3 pre-set intensity positions - full, preset and out.**Stage Luminare:****Profiles**

Make	Model	Angle	Detail / Accessories	Watt	Total
CCT	Silhouette 30	Zoom (19/41)	B size gobos, (6) holders to suit, (4) Iris	1000	25
Selecon	Pacific	12/28	M size gobos, (12) holders to suit, (4) iris	800	23
CCT	Minuette	Zoom (18/40)	Nil	650	4
Strand	SL	15/32	B size gobo, (9) holders to suit, (4) iris	600	17
Strand	SL	23/50	B size gobo, (9) holders to suit, (4) iris	600	8

Fresnel's

Make	Model	Detail / Accessories	Watt	Total
Selecon	Arena	(8) Barndoors	2000	8
Selecon	High Performance	(20) Barndoors	1000	20
Coemar	Passo	(25) Barndoors	1000	24
Coemar	Solar	(5) Barndoors	650	2

PC

Make	Model	Detail / Accessories	Watt	Total
Coemar	Solar	(5) barndoors	650	4

Wash

Make	Model	Detail / Accessories	Watt	Total
	CODA 4	(4) cells per unit *Kept in storage, but available on request*	500	8
	IRIS 4	(4) cells per unit	1000	4

Followspots:

Make	Model	Angle	Detail / Accessories	Watt	Total
Ushio	Sai-500 LED	1.9m Ø @ 20m	'A' size gobo holder, (6) way manual colour changer with boomerang system fitted with removable filter frames	2500	2
Strand	Solo	9 -15	(5) colour changer magazine	2000	1

Additional Lighting Available to hire – Subject to Availability:

Item	Make	Model	Detail / Accessories	Watt	Total
ETC	Source Four	15-30 deg	24 Gobo holders for A size gobos, 36 top hats, 10 drop-in iris', 26 Balancing Yokes	750w	6
ETC	Source Four	25-50 deg		750w	10
ETC	Source Four 150mm -175mm Fresnel		24 Barndoors	750w	12
ETC	PAR EA	VNSP, NSP, MFL, WFL	Four lenses for each unit: Very Narrow Spot (VNSP), Narrow Spot (NSP), Medium Flood (MFL) and Wide Flood (WFL). Round beam for VNSP and NSP, oblong beam shape for MFL and WFL. 24 Barndoors	750w	24
ETC	ColorSource PAR - LED Deep Blue	14.5 deg	Red/Green/Indigo/Lime	90w	18
	Maximum DMX channels per fitting (RGBL, Intensity & Strobe)				

Power:

3 Phase Outlets

- (8) 40amp at mezzanine patch bay (6 for dimmer use only)
- (4) 32amp at mezzanine patch bay
- (10) 40amp on Fly Floor (5 for dimmer use only)
- (2) 40 amp DSOP Stage level
- (3) 40 amp Gallery ceiling (for dimmer use only)

Effects:

None

Cabling:**240v Extension Cable**

The Theatre Royal has a good stock of extension cable in 1mt, 2mt, 5mt, 10mt and 20mt lengths all with piggyback plugs.

Looms

(7) 20m 4 way Weiland

(1) 17m 4 way Weiland

3 phase Extensions

None

AUDIO**Control Positions:****Control Room**

None

Auditorium

Rear of stalls OP side – 6 removable seats in R row (back row) and another 6 in P row.

Total seat allocation **Min 3 – Max 12****Other**

DSOP on stage from “sound cupboard

OP Royal box (by arrangement)

Control & Amplification:**Primary Mixer**

Soundcraft GB8, 24 mono inputs, 4 stereo line inputs (can be used as 4 mic inputs), 8 groups, 8 aux sends, 11 x 4 matrix mix, individual phantom power on all mic inputs, 4 mute masters

Secondary Mixer

Soundcraft GB2R, 12 mono inputs, 2 stereo line level inputs, 2 groups, 6 auxiliary sends. Switchable phantom power on all mic inputs.

Amplifiers**FOH system**

CAMCO VORTEX 3 (4 channel amp 750w x 4 @ 4 Ohms)

CAMCO TECTON 38.4 (2 channel amp 1900W x 2 @ 4 Ohms)

CAMCO TECTON 24.4 (2 Channel amp 1200w x 2 @ 4 Ohms)

NEXO NX 242 (Digital loudspeaker controller to suit GEO-S)

NEXO PS.10UTD (Loudspeaker controller to suit PS10)

ON STAGE System

(2) EV P1200

(1) Yamaha PC2002M

EQ

FOH system EQ - 3 x 31 band digital for L, C, R and 1 x 10 band digital for subs.

(1) Dual 31 band Klark Teknik SQ1 (analogue)

(1) Dual 31 band Klark Teknik DN3600 (digital)

FX

T.C Electronic M One dual effects processor

Compression / Limiter / Gates

None

Speakers:**FOH Speaker:** Left, Centre, Right, Sub System – (programmable to LCR or LR only)

Controlled by Yamaha DME24N

- (6) NEXO PS10 (L and R stalls, dress circle and gallery)
- (5) NEXO GEO S803 – Centre Array
- (2) QUEST HPI-218S subs (in orchestra pit)
- (4) Front fill spkrs located along stage lip (Electrovoice Evid 3.2)
- (5) delay ring spkrs located under Stalls balcony (RCF Monitor 55)
- (5) delay ring spkrs located under D/circle balcony (RCF Monitor 55)

Foldback (6) EV SX200

Playback:

Item	Make	Model	Detail	Total
CD/MP3 Player	Denon	DN-D4500	Dual CD player	1

Microphones included in venue:

Make	Model	Detail / Accessories	Use	Total
Sennheiser	E945	Hand held wireless	Vocal	2
DPA	406	Omni lapel with Sennheiser SK500 G3 bodypack transmitter	Vocal	2
	DI			2

Microphones – available to hire

Make	Model	Detail / Accessories	Use	Total
AKG	414B – XL2 *		Choir Vocal	2
AKG	C3000 B *		Choir Vocal	2
AKG	C1000 S *			4
Shure	SM58 *		Vocal	2
Shure	Beta 58 *		Vocal	2
Shure	SM57 *		Instrument	2
Shure	Beta 52A *		Kick Drum	1
Beyer	M-600 *		Vocal	2
*Shared with Studio Theatre, Subject to availability				

Accessories:

Item	Model	Detail / Accessories	Total
Microphone Stand	Tall K & M	Boom	8
Microphone Stand	Short K & M	Boom	8
Microphone Stand	Tall K & M (threaded)	Round Base	2

Line Patching:

Location	Quantity	Numbering	Detail
Orchestra Pit	10		XLR Female
Prompt Corner	8		XLR Female
DS Centre dip trap	5		XLR Female
OP Corner	2		XLR Female
PS & OP centre dip trap	2 (each)		XLR Female
PS & OP US dip trap	2 (each)		XLR Female
US Centre dip trap	6		XLR Female
Fly Floor	1		XLR Female

Speaker Patching:

Location	Quantity	Numbering	Detail
Orchestra Pit	2		Speakon or XLR
Prompt Corner	1		Speakon or XLR
DS Centre dip trap	2		Speakon or XLR
OP Corner	1		Speakon or XLR
PS & OP DS dip trap	1 (each)		Speakon or XLR
US Centre dip trap	6		Speakon or XLR

Cabling:**Audio Cable**

Adequate leads for normal purposes

Multicore

Permanent multicore to FOH operating position, 32 lines, 24 sends, 8 returns

(1) x 20m multicore, 20 sends, 4 returns

(1) x 10m drop box – 6 x XLR, 2 X TRS

Audio Notes:

FOH speaker positions are fixed.

FOH operating position requires the removal of seats. Exact number determined by size of mixing console and associated equipment

BACKSTAGE**Communications:****Stage Managers Desk**

Stage Managers desk is located in prompt corner, fixed to wall. The area has a clock, light and phone.

Talkback

SM Panel **Riedel RSP213**

Total sub stations **6 totals - (6) C33 Digital Partyline with 3 programable Channels**

Total headsets **10 Total – (10) Riedel Medium Headsets**

Radio Units In-house **4 – Riedel Bolero**

Talkback patching located at: **Stage Managers Desk (Master Unit)**
Lighting Control / Follow Spot Room
FOH Sound position
Fly Floor
Additional Patches can be run from either Prompt Corner or Opposite Prompt Corner

Paging / Show relay

Paging to the dressing rooms is available and programmable to the SM Panel or Bolero Headsets

Stage Monitor

Monitors in Prompt Corner, U/S P.S. all Dressing Rooms and Green Room – camera located underneath the gallery balcony.

Q Light System

In house Q light system available **NO**

Number of units **N/A**

Dressing Rooms:

Dressing Room	Capacity	Toilets	Shower	Details
TR#1	5	1	YES	Level 2
TR#2	5	1	YES	Level 2
TR#3	5	1	YES	Level 2
TR#4	5	1	YES	Level 2
TR#5	6	1	YES	Level 1
TR#6	4	1	YES	Level 1
TR#7	10	0	NO	Level 1 There are toilets and showers located on this level but not within this dressing room.

Laundry / Wardrobe:

Located on Level 2 in the loading dock. **NOTE: This is a shared facility.**

Washing Machines **(2) BOSCH WAY32891AU Front Load 6.5kg washing machines**

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Dryers	(2) BOSCH WTY877WOAU front Load 9.0kg tumble dryers
Drying rooms	N/A
Iron / ironing board	Shared with Theatre Royal 1 x Iron, 2 x Ironing Boards
Clothes racks	1 portable rack per dressing room + several in Laundry

Production Facilities:

Production Desk

Production desk set up centre of the stalls or front of Dress Circle. Table accommodates 2 – 3 people with dimmable or switchable lighting, DMX for the lighting desk, 240V power and talkback.

Production Office

There is no dedicated Production Office but production staff can use a dressing room (if available).

Phone

No

Internet access

Yes – Wi-Fi access available.

Greenroom:

Located on Level 1 close to TR Stage Door. **NOTE: This is a shared facility.**

Tea / Coffee facilities	YES
Fridge / freezer	YES
Microwave	YES
Running water	YES

Stage Door:

Access

Theatre Royal Stage Door is located on Sackville St. Access during bump-in / out will be controlled by venue staff. During performance access is controlled by Venue Staff in consultation with touring management. Pin code for access are available for touring companies which is scheduled as per production schedule.

ADDITIONAL FACILITIES & INFORMATION**Orchestral:**

Piano (Yamaha Upright) \$70 per performance, plus tuning if required (approx \$275)

Piano (Yamaha C7: 7 ½ ft) \$120 per performance, plus tuning if required (approx \$275)

Music Stands

14 music stand and (1) conductors stand with sconces plus separate dimmable scone circuit controlled in Prompt Corner.

NOTE: Shared instruments with Studio Theatre – Check availability.

Rehearsal Space:

Subject to availability

Staffing and Scheduling :

A minimum of 3 Theatre Royal technician must be engaged prior to and during a performance. Additional Theatre Royal technical staff may be required dependant on the technical requirements of the event.

Theatre Royal staff are employed by the hour with a minimum (3) hour call Monday to Saturday, minimum (4) hour call on Sundays and Public Holidays. Staff working between midnight and 7am, or on Sundays and public holidays, are subject to overtime rates.

Staff must receive a (10) hour break between finishing work on one day and commencing work on the next day or overtime rates apply.

VENUE:

Web Site: <https://www.theatreroyal.com.au/>

Venue Contacts:

Venue Address **Theatre Royal – Studio Theatre, 29 Campbell St, Hobart, Tasmania, 7000**

Venue Postal Address **Theatre Royal, PO Box 145, GPO Hobart, TAS, 7001**

Box Office

Address **Theatre Royal Box Office, 29 Campbell Street, Hobart**

Opening Hours 9am - 5pm Monday to Friday

Phone Number +61 (03) 6146 3300

E-mail Address boxoffice@theatreroyal.com.au

Staff Contacts:**Operations Manager****Nick Toll**

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Venue Hire**Mark Brooks**

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Box Office

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Venue Plans:**Venue Plan Available**

YES, PDF available on Theatre Royal website, www.theatreoyal.com.au, CAD2000 drawing can be emailed upon request, hard copy at 1:25 can be mailed upon request.

Venue Section Available

YES, CAD2000 drawing can be emailed upon request