



Theatre Royal Hobart

Technical Specifications

Updated
April 2018

Technical Manager:

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Venue:

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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 **200mm**

SL to last upstage fly line **9050mm**

SL to rear wall **PS=12900mm, OP= 14900mm**

CL to OP wall (or obstruction) **7100mm**

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**

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
Batten Point Load	100Kg
Batten W.L.L.	280Kg
Cradle Capacity	280Kg (provision to extend any 4 lines to 400Kg)
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 previously

Line Type: SP = Single purchase, DP = Double purchase, MW = Motor Winch, HW = Hand Winch, HL = Handline

W.L.L.: Maximum distributed load including bar weight

Line #	Distance from SL (mm)	Line Type	W.L.L	Venue Allocation	Intended Use (hiring company use)
HC	-200	SP	280Kg	House Curtain	Not Available for use
1	200	SP	280Kg		
2	400	SP	280Kg	LX 1	
3	600	SP	280Kg		
4	800	SP	280Kg		
5	1000	SP	280Kg		
6	1200	SP	280Kg		
7	1400	SP	280Kg	Border	
8	1600	SP	280Kg	Legs (with return)	
9	1800	SP	280Kg		
10	2000	SP	280Kg		
11	2200	SP	280Kg		
12	2400	SP	280Kg	Border	
13	2600	SP	280Kg		
14	2800	SP	280Kg		
15	3000	SP	280Kg	LX 2	
16	3200	SP	280Kg		
17	3400	SP	280Kg	Legs (with return)	
18	3600	SP	280Kg		
19	3800	SP	280Kg		
20	4250	SP	280Kg	Border	
21	4450	SP	280Kg		
22	4650	SP	280Kg		
23	4850	SP	280Kg	LX 3	
24	5050	SP	280Kg		
25	5250	SP	280Kg	Legs (with return)	
26	5450	SP	280Kg	Tabs	
27	5650	SP	280Kg		
28	5850	SP	280Kg		
29	6050	SP	280Kg		
30	6250	SP	280Kg	Border	
31	6450	SP	280Kg		
32	6650	SP	280Kg		
33	6850	SP	280Kg	LX 4	
34	7050	SP	280Kg		
35	7250	SP	280Kg	Border	
36	7450	SP	280Kg	Legs (with return)	
37	7650	SP	280Kg	LX 5 (Cyc lights bar)	
38	7850	SP	280Kg		
39	8050	SP	280Kg		
40	8250	SP	280Kg		
41	8450	SP	280Kg		
42	8650	SP	280Kg	Legs (no return)	
43	8850	SP	280Kg	Cyc	
44	9050	SP	280Kg	Tabs	

45	Panorama	SP	280Kg		
46	Panorama	SP	280Kg		

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

EWP Restrictions

N/A

Ladders

(1) 3m 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

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 XE**

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	156
Dimmer Locations	36 in ceiling space for FOH position
	54 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
2.4Kw Dimmer Racks	LSC ipro (digital)
Total dimmers @ 2.4kw per dimmer	144
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	12
Selecon	Pacific	12/28	M size gobos, (12) holders to suit, (4) iris	800	28
Selecon	Pacific	14/35	Nil	800	1
CCT	Minuette	Zoom (18/40)	Nil	650	8
Strand	SL	15/32	B size gobo, (9) holders to suit, (4) iris	600	18
Strand	SL	23/50	B size gobo, (9) holders to suit, (4) iris	600	12

Fresnel's

Make	Model	Detail / Accessories	Watt	Total
Selecon	Arena	(8) Barndoors	2000	8
Selecon	High Performance	(20) Barndoors	1200	20
Coemar	Passo	(25) Barndoors	1000	26
Coemar	Solar	(5) Barndoors	650	5

PC

Make	Model	Detail / Accessories	Watt	Total
Coemar	Solar	(5) barndoors	650	8

Par Cans

Make	Model	Angle	Detail / Accessories	Watt	Total
	Par 64	MFL	(4) 4 par bars, 6 x NSP lamps available, 120V	1000	24
	Par 64	MFL	240V	1000	12
	Raylights			500	4

Wash

Make	Model	Detail / Accessories	Watt	Total
	CODA 4	(4) cells per unit	500	8
	IRIS 4	(4) cells per unit	1000	4

Followspots:

Make	Model	Angle	Detail / Accessories	Watt	Total
Robert Juliat	Margot	8.5 - 16	'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

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:

Robe 400 FT hazer (hire rates apply)

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.

Laptop access to Yamaha DME24N

(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 with link from laptop

- (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 (4) EV SX200

Playback:

Item	Make	Model	Detail	Total
CD Player	Denon	DN1000f	Single CD player	1
CD/MP3 Player	Denon	DN-D4500	Dual CD player	1

Microphones:

Make	Model	Detail / Accessories	Use	Total
AKG	414B – XL2			2
AKG	C3000 B			2
AKG	C1000 S			2
Sennheiser	E945	Hand held wireless		2
DPA	406	Omni lapel with Sennheiser SK500 G3 bodypack transmitter		2
Shure	SM58			2
Shure	Beta 58			2
Shure	SM57			2
Shure	Beta 52A			1
Beyer	M-600			2

Accessories:

Item	Model	Detail / Accessories	Total
Microphone Stand	Tall K & M	Boom	5
Microphone Stand	Short K & M	Boom	3
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

AUDIO VISUAL

None

BACKSTAGE

Communications:

Stage Managers Desk

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

Talkback

Master Unit **Two ring intercom system to all working points and dressing rooms. TB 1 is show relay and dressing room paging, TB 2 is the technical circuit.**

Total sub stations **10 totals - (6) Audio telex belt packs + (4) Telex Radio Com Belt packs**

Total headsets **10 Total – (4) Beyer DT 108 headsets + (6) Telex Radio Com headsets**

Radio Units In-house **4 – Telex Radio Com**

Talkback patching located at: **Stage Managers Desk (Master Unit)**
Lighting Control Room
FOH Sound position
Follow Spot Box
Fly Floor
Amp Room
Production Desk (auditorium)

Paging / Show relay

Paging to the dressing rooms is available from the stage managers desk. Show relay is distributed to all dressing room and green room. Each room has individual volume control.

Stage Monitor

Monitors in Prompt Corner and U/S P.S. – 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
DR#1	2	1	YES	
DR#2	2	1	YES	
DR#3	5	2	YES	
DR#4	5	2	YES	
DR#5	12	2	YES	
DR#6	10	0	NO	Room located 1 level below stage. There are toilets located on this level but not within the dressing room.

Laundry / Wardrobe:

Washing Machines	(1) domestic top loading 7.5Kg washing machine
Dryers	(1) tumble dryer
Drying rooms	N/A
Iron / ironing board	(1) Iron, (1) ironing board
Clothes racks	N/A

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

Yes – access to phone in Technical Managers office by arrangement with Technical Manager

Fax

Yes – access to fax through Theatre Royal administration

Internet access

Yes – Wi-Fi access available by arrangement with Technical Manager.

Greenroom:

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

Stage Door:

Access

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.

ADDITIONAL FACILITIES & INFORMATION

Pianos:

Yamaha C7 7 ½ ft Grand Piano (on stage truck) located on stage level. Additional hire cost applies. Tuning to be arranged prior to use.

Yamaha Upright. Tuning to be arranged prior to use.

Music Stands

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

Rehearsal Space:

Subject to availability

Staffing and Scheduling :

A minimum of 2 Theatre Royal technical staff is required per performance

Staff is employed by the hour with a minimum (3) hour call Monday through Saturday, minimum (4) hour call on Sundays and Public Holidays.

Staff working after midnight or before 7am or on Sundays 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.

VENUE:

Venue Contacts:

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

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

Staff Contacts:

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Venue Plans:

Venue Plan Available

CAD2000 drawing can be emailed upon request; hard copy at 1:25 can be mailed upon request.

Click here to view 1:25 @ AO PDF stage plan

Venue Section Available

YES, CAD2000 drawing can be emailed upon request, hard copy at 1:50 can be mailed upon request.