

Darwin Entertainment Centre

Playhouse Theatre

Technical Specifications

Updated
24/10/08

Technical Manager: Garry Ferguson

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Venue:

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Additional contact details are located on the final page

STAGE

Brief Stage Description:

Unraked Proscenium arch with flying facilities. Hardwood floor covered with Masonite sheets. Screwing into surface permitted but larger holes to be authorised by Technical Manager. Stage crossover behind US fly line (line 80)

Stage distributed load limit: Information not available at present.

Stage point load limit: Information not available at present.

Stage rake: No.

Stage Dimensions:

Proscenium

Width **14.4 metres**

Height **7.8 metres**

Setting Line

1600mm from lip of stage

Allows for fire curtain and house curtain

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

SL to DS edge of apron **1600mm**

SL to DS edge of Orchestra Lift/Pit **3800mm @ centre**

SL to first fly line **300mm**

SL to last upstage fly line **12.75 metres**

SL to rear wall **15.5 metres**

CL to OP wall (or obstruction) **11 metres**

CL to PS wall (or obstruction) **16.25 metres**

Stage to underside of grid **19.7 metres**

Overhead obstructions

O.P. Transverse bar (line 77) is obstructed by air conditioning duct 12 metres from stage.

Auditorium:

Stalls and Dress Circle

Seating capacity with additional
Orchestra lift/pit seating installed **1070**

Seating capacity without
Orchestra lift/pit seating installed **1001**

Orchestra Lift / Pit:

Orchestra Pit

Screw jack drive lift (This cannot be operated as part of a performance)

4 crew are required to remove seating (rows AA, BB and CC) before pit can be used

Set positions for orchestra lift where lift at auditorium level is 0mm

Stage level at **1015mm** above auditorium.

Orchestra pit level at **1585mm** below auditorium.

Lift can be set at any height **YES**

SWL of orchestra lift **Information not available at present**

Dimensions of the orchestra pit **3m max depth @ centre 13m width, narrows to 1.5m depth at P and O.P edges**

Orchestra pit capacity **30 musicians on lift with room for 15 under stage apron**

Flying Facilities:

Fly System

Single purchase counterweight system

Fly System Details

Operating position **O.P. at stage level**

Total number of lines **80**

Panorama Lines **2 lines O.P. line 77, P.S. line 78**

Batten Drift **18.5m starting 600mm above stage level**

Batten type **50mm O/D pipe**

Batten length **18.4 metres**

Batten point load **Information not available at present**

Batten W.L.L. **450kg**

Cradle capacity **450kg**

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	Line Type	W.L.L	Venue Allocation	Intended Use <i>(hiring company use)</i>
				Front Curtain	
1	300mm	Sp	450kg		
2	450mm	Sp	450kg	Teaser	Not available for use
3	600mm	Sp	450kg	Tormentor	Not available for use
4	750mm	Sp	450kg		
5	900mm	Sp	450kg	LX 1	
6	1200mm	Sp	450kg		
7	1350mm	Sp	450kg		
8	1500mm	Sp	450kg		
9	1650mm	Sp	450kg		
10	1800mm	Sp	450kg		
11	1950mm	Sp	450kg	Orchestra Sound Ceiling	Not available for use
12	2100mm	Sp	450kg		
13	2250mm	Sp	450kg		
14	2400mm	Sp	450kg		
15	2550mm	Sp	450kg	Border	
16	2700mm	Sp	450kg	Leg	
17	2850mm	Sp	450kg		
18	3000mm	Sp	450kg		
19	3150mm	Sp	450kg		
20	3300mm	Sp	450kg	LX 2	
21	3600mm	Sp	450kg		
22	3750mm	Sp	450kg	Projection Screen	
23	3900mm	Sp	450kg	Orchestra Sound Ceiling	Not available for use
24	4050mm	Sp	450kg	Tab	
25	4200mm	Sp	450kg		
26	4500mm	Sp	450kg		
27	4650mm	Sp	450kg		
28	4800mm	Sp	450kg	Border	
29	4950mm	Sp	450kg	Leg	
30	5100mm	Sp	450kg		
31	5250mm	Sp	450kg		
32	5400mm	Sp	450kg		
33	5550mm	Sp	450kg		
34	5700mm	Sp	450kg	LX 3	
35	5850mm	Sp	450kg		
36	6000mm	Sp	450kg		
37	6150mm	Sp	450kg		
38	6300mm	Sp	450kg		
39	6450mm	Sp	450kg	Orchestra Sound Ceiling	Not available for use
40	6600mm	Sp	450kg		
41	6750mm	Sp	450kg		
42	6900mm	Sp	450kg	Tab	
43	7050mm	Sp	450kg	Border	
44	7200mm	Sp	450kg	Leg	

45	7350mm	Sp	450kg		
46	7500mm	Sp	450kg		
47	7800mm	Sp	450kg		
48	7950mm	Sp	450kg	LX 4	
49	8100mm	Sp	450kg		
50	8250mm	Sp	450kg		
51	8400mm	Sp	450kg		
52	8550mm	Sp	450kg		
53	8700mm	Sp	450kg	Border	
54	8850mm	Sp	450kg		
55	9000mm	Sp	450kg		
56	9150mm	Sp	450kg	Leg	
57	9300mm	Sp	450kg		
58	9450mm	Sp	450kg		
59	9600mm	Sp	450kg	LX 5	
60	9750mm	Sp	450kg		
61	9900mm	Sp	450kg		
62	10050mm	Sp	450kg		
63	10299mm	Sp	450kg		
64	10350mm	Sp	450kg		
65	10500mm	Sp	450kg		
66	10650mm	Sp	450kg		
67	10800mm	Sp	450kg		
68	10950mm	Sp	450kg	Border	
69	11100mm	Sp	450kg	Legs	
70	11250mm	Sp	450kg	Tab	
71	11400mm	Sp	450kg		
72	11550mm	Sp	450kg		
73	11850mm	Sp	450kg		
74	12000mm	Sp	450kg		
75	12150mm	Sp	450kg		
76	12300mm	Sp	450kg		
77		Sp	450kg	Transverse O.P.	Side masking
78		Sp	450kg	Transverse P.S.	Side masking
79	12750mm	Sp	450kg	Border	
80	12900mm	Sp	450kg	Cyclorama	

Drapery:

*Type	Material	Colour	Width	Height	Quantity
House Curtain	Velvet 50% fullness	Rose	19000mm	9000mm	1
Borders	Wool 0% fullness	Black	18400mm	4000mm	6
Legs	Wool 0% fullness	Black	3500mm	9000mm	6 pairs
Tabs / Smother	Velvet 50% fullness	Black	18000mm	9000mm	2
Tabs/ Smother	Wool 0% fullness	Black	18000mm	9000mm	1
Cyclorama	Filled Cloth	White	16000mm	9000mm	1
Scrim	Sharkstooth Gauze	White	16000mm	9000m	1
Scrim	Sharkstooth Gauze	Black	16000mm	9000mm	1

Access Equipment:

Elevated Work Platform

Tallescope Model 524

Maximum reach is **7.5 metres**

EWP Restrictions

Outriggers must be used at all times. One staff member to be located at base whilst in use.

Ladders

1 * 6m Aluminium A frame

1 * 10.8m Extension ladder

1 * 4.8m Aluminium A frame

1 * 2.4m double sided step ladder

Staging Units:

4 * 1800 * 1200 * 300 timber, hinged, gate rostra

4 * 1800 * 1200 * 450 timber, hinged, gate rostra

4 * 1800 * 1200 * 600 timber, hinged, gate rostra

4 * 1800 * 1200 * 900 timber, hinged, gate rostra

14 * 2400 * 1200 rostra tops with interchangeable legs @ 150mm, 300mm, 450mm, 600mm (aluminium frame and legs, ply deck)

2 * 2 step treads 300mm

2 * 3 step treads 450mm

2 * 4 step treads 600mm

2 * 6 step treads 900mm

Stage Covers:

Style N/A

Dimensions N/A

Colour N/A

Stage Traps:

There are 3 stage traps

1 @ 2300mm US of setting line, 300mm OP of centre. Trap is 600mm * 600mm

1 @ 5500mm US of setting line, 500mm PS of centre. Trap is 800mm * 800mm

1 @ 11750mm US of setting line, 100mm OP of centre. Trap is 2000mm * 1200mm

The use of any traps must be pre-arranged and authorised by the Technical Manager

Safety Curtain:

Safety Curtain installed **Yes**

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

Thickness of Fire Curtain **175mm**

Distance from setting line **600mm DS of setting line**

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

Loading Dock:

Access

Heavy rigid trucks can access loading dock via Mitchell St, up the ramp (between DEC and backpackers hostel) and reverse to loading dock door. Prime movers with pan need to reverse up the ramp from the Esplanade, this is a tricky and time consuming manoeuvre and is more easily done with a "cab-over" type prime mover, without a cab-over it is almost impossible to get the pan any closer than 6m from loading dock, in this case the pan must be unloaded at car park level and lifted up to dock level.

Loading Dock Height	1200mm
Door Dimensions	3200mm High 3500mm Wide

Restrictions / Obstructions

There are no restrictions/obstructions between loading dock and Playhouse stage

Staging Notes:

All flown items must be rigged with rated equipment and is subject to approval by the Technical Manager or Duty Technician

Limited rigging gear is available including shackles, rated chain and flexible steel wire rope in various lengths.

LIGHTING

Positions:

Stage LX Bars

LX bars can be swung if required
See hanging plot for standard LX bar locations

Orchestra Bar

Setting Line to lighting bar **n/a**

Setting Line to lighting bar **FOH Bridge #1
14m @ 60 degrees**
Usable bar width **18m**

FOH Bridge #2

Setting Line to lighting bar **17m @ 47 degrees**
Usable bar width **20.7m**

FOH Bridge #3

Setting Line to lighting bar **21m @ 36 degrees**
Usable bar width **2 * 8m**

Balcony Bar

Setting Line to lighting bar **16m @ 18 degrees**
Usable bar width **11.4m**

FOH Booms (PS & OP)

There are 5 boom positions on either side of the auditorium:

3 levels either side of the orchestra pit:

- a) Stage level. 0 to 2500mm, 3 lamps @ 48 deg. 4000mm from setting line.
- b) Mid level. 3000mm to 5500mm, 3 lamps @ 63 deg. 6000mm from setting line.
- c) Top level. 5750mm to 8750mm, 3 lamps @ 70 deg. 8500mm from setting line.

2 levels US of Bridge:

- d) Mid level. 5500mm to 8000mm, 3 lamps @ 55 deg. 10000mm from setting line.
- e) Top level. 8500mm to 11000mm, 3 lamps @ 63 deg. 12250mm from setting line.

Maximum lanterns per boom: 3 lamps per boom as part of a standard rig except for a) which are rarely used.

Notes: All boom positions can accommodate 6 lamps rigged side by side on 3 levels. However lamps on the upstage edge must cross to opposite side of stage to avoid lighting the proscenium.

PC

Make	Model	Detail / Accessories	Watt	Total
N/A				

Par Cans

Make	Model	Angle	Detail / Accessories	Watt	Total
N/A	Par 64	MFL		1Kw	24

Wash

Make	Model	Detail / Accessories	Watt	Total
Ianaro Quartzcolour	Pallas 4	4 cells per unit	750w	7
Ianaro	Iris 4	4 cells per unit	1k	5

Movers

Make	Model	Control Channels	Detail / Accessories	Watt	Total
N/A					

Followspots:

Make	Model	Angle	Detail / Accessories	Watt	Total
Selecon	Performer MSR		5 colour magazine	1.2k	2

Additional Lighting:

Item	Make	Model	Detail / Accessories	Watt	Total
Mirror ball			500mm with motor		1
UV Flouro				36w	4
Hazer/ Smoke	Robe	Faze	DMX Controllable		1
Shimmer boards			500mm * 400mm		3

Patching:

Location	Quantity	Numbering (PS to OP)	Detail / Accessories
FOH Bridge 1	40	1 – 40	All FOH patch points terminate at a patch bay near the OP end of bridge 2. This is hard wired to dimmers 1 – 40
FOH Bridge 2	40	41 – 80	
FOH Bridge 3	40	81 – 120	
Balcony Bar	20	182 – 201	
PS FOH Booms	28	126 – 153	
OP FOH Booms	28	154 – 181	
Stage			There are 5 small patch bays on P.S. level 1 gallery. These are hard wired to dimmers. There are also 3 auxiliary patch points P.S. which can be allocated to dimmers in the dimmer room
LX 1	36	1 -36	41 – 55
LX 2	36	37 – 72	61 – 70

LX 3	36	73 – 108	71 – 80
LX 4	36	109 – 144	81 – 90
LX 5	36	145 – 180	91 – 100
Floor Traps			
DSP	6	101 – 106	1 to 1 patch to dimmers
USP	4	107 – 110	1 to 1 patch to dimmers
DSOP	6	111 – 116	1 to 1 patch to dimmers
USOP	4	117 – 120	1 to 1 patch to dimmers

Production Desk:

N/A

Power:

3 Phase Outlets

3 * 32 amp D.S.P

1 * 150 amp supply P.S. stage wall. Requires electrician to connect supply to distribution board.

Cabling:

240v Extension Cable

Sufficient extension leads for all performances in 1m, 5m, 10m and 20m lengths. All with piggy back 240v plugs.

Looms

All 4 way looms approx. 4m long, designed specifically to go from boom stands to dip trap LX patch, all with piggy back 240v plugs.

3 phase Extensions

1 * 32amp 3 phase to 3 * 15amp GPO per phase distribution board. RCDs on all GPO's.

Lighting Notes:

6 * mobile booms with 2 * Pacific 23/50 rigged on each boom.

Extensive in-house colour stock available. Special colour requirements can be ordered and charged to hirer.

AUDIO

Control Positions:

Control Room

We actively discourage anyone using the control room for audio, even with the window open it is impossible to assess auditorium volume or audio quality

Auditorium

Rear centre of stalls, permanent position. Seats have been removed from plan.

Other

On stage P.S. or O.P. Mixer is patched through main console.

Control & Amplification:

Primary Mixer

Yamaha M2000, 32 Channels, 2 Stereo Inputs, 6 Aux. sends, 8 Groups, 4 * 8 Mtx.

Secondary Mixer

Yamaha Promix 01, 8 + 8/2 Digital console.

Soundcraft CB8, 32 Channels, 8 Aux. sends, 8 Groups, 11 * 4 Mtx.

Amplifiers

10 * Perreaux 6000C, 300w per channel into 8Ω. Note: These amps are used only for foldback and FX. The house PA is a powered Meyer system

EQ

2 * dbx 1231

2 * Yamaha Q2031 Stereo Graphic Eq (8 discreet graphic equalisers)

FX

1 * Yamaha SPX 90 Mkii

2 * Yamaha SPX 990

Compression / Limiter / Gates

1 * dbx 166XL

Speakers:

FOH Speakers

3 * Meyer CQ1. Flown L, R, C.

3 * Meyer CQ2. At stage level L & R, flown C.

2 * Meyer 650P Subs

2 * Meyer UPM1P. Stalls in-fill.

3 * Meyer UPM1P. L, R & C as delay fill for rear of stalls.

Foldback

None at present.

Playback:

Item	Make	Model	Detail	Total
CD/MP3 Player	Denon	DN-D4500	Dual CD/MP3 player	1
CD/cassette	Denon	620	CD/cassette player	2

Microphones: (Refer to hire list for additional concert and choral microphones)

Make	Model	Detail / Accessories	Use	Total
Shure	Beta 58		Vocal dynamic	5
Shure	Beta 57		Instrument Dynamic	8
Shure	SM91		Boundary PZM	2
AKG	C451 EB		Condensor	1
Sennheiser	406		Shotgun	4
Sennheiser	MD421		Instrument Dynamic	2
Countryman	Lectern Microphone		Lectern	2
Ultra	DI	Active DI with -20db pad and earth lift		4
SCV	DI			2

Accessories:

Item	Model	Detail / Accessories	Total
Tall Microphone stands	Tripod Base	With Boom Arm	17
Short Microphone Stands	Tripod Base	With Boom Arm	15
Table Stands	Tripod Base	No Boom	10
Banquet stands (table top)	Round Base	No Boom	3
Straight Microphone Stands	Round base		2

Line Patching:

Location	Quantity	Numbering	Detail
Prompt Corner	24	35-56	These 24 patch points are duplicated as male and female for onstage monitor mix
Mid stage prompt trap	8	17-24	All line patching terminates at control room patch bay where it can be routed to mixing console via 2 * 16 way multi pin looms
Up stage prompt trap	8	24-32	
Mid stage OP	8	1-8	
Up stage Op	8	9-16	
Orchestra Pit	8	57-64	
LX Bridge	8	65-72	
OP Fly Gallery	8	73-80	

Speaker Patching:

Location	Quantity	Numbering	Detail
Not required as all speakers are self powered			

Cabling:

Audio Cable

The Theatre has an extensive stock of audio cables, mic leads 5m, 10m, 20m, 8 way drop boxes, patch leads (XLR, RCA and TRS jack in various combinations) Speakon and XLR speaker leads with joiners and converters.

Multicore

- 2 * 20m 8 way drop box (female XLR box to male XLR tails)
- 2 * 12m 8 way drop box (female XLR box to male XLR tails)
- 1 * 12m 12 way female XLR tails to male XLR tails

Audio Notes:

The left, right, centre and sub outputs of the desk feed 2 * BSS Soundwebs. The Soundwebs process audio feed to each individual speaker in the system using parameters recommended by Meyer. Hirers can change these parameters if required but only at the Centre Audio Technicians discretion.

For shows which require playback only, audio can be operated from Prompt Corner.

AUDIO VISUAL

Projection Room:

N/A

Projectors:

Type	Model	Detail / Accessories	Total
Panasonic	PT-D5500E	Mounted on dress circle	1
Dell	2300MP	2300 A/L DLP. No mounting bracket	1
Sanyo	PLC-XT20	Permanently mounted in Studio	1

Screens:

Projection Screen

High def projection fast fold screen available. Normally sits on bar 22 with legs to mask sides. Border is on bar 21. This screen can be moved if sufficient notice is given.

Screen dimensions **6m * 3.4m**

Additional Screens

Information available on request.

Screen dimensions

AV Playback Equipment:

Item	Model	Detail / Accessories	Total
Yamaha	S540	DVD, Video CD and CD player	1
LG	DR389	DVD Recorder, Player	1

Projector Rigging Points:

N/A

Cabling:

Limited stock of coax and RCA cable available

Audio Visual Notes:

Coax patch points in Control Room, Dress Circle Trap and Prompt corner.

1 * Video Distribution Amplifier available.

Closest position for front projection is balcony bar 16m from setting line.

BACKSTAGE

Communications:

Stage Managers Desk

Stage manager's desk is located in prompt corner. The desk has limited mobility within this area. It is fitted with gooseneck light and clock

Talkback

Master Unit **Intercom Matrix 708-80 located in Audio rack outside technicians office**

Total sub stations **Production communications are available to all working areas via cabled belt packs and head sets – sufficient for all productions.**

Total headsets **Sufficient for all productions.**

Radio Units In-house **N/A**

Talkback patching located at: **There are talkback patch points in every conceivable position throughout the auditorium (stalls and dress circle), stage, fly galleries, LX Bridges, Follow spot booth, control room.**

Paging / Show relay

Paging to the dressing rooms is available from the stage managers desk. Show relay is distributed to all dressing rooms and green room. Each room has individual volume control. Show relay is routed via Media Matrix and can be sent to Foyers, Box Office, Tech office etc.

Stage Monitor

Camera located on Balcony Bar. Small colour monitor at Stage Managers desk

Q Light System

In house Q light system available **No**

Number of units **N/A**

Dressing Rooms:

Dressing Room	Capacity	Toilets	Shower	Details
2	6	1	1	Stage Level
3	2	1	1	Stage Level
1 Female	15	5	4	Sub Stage Level
2 Male	15	5	4	Sub Stage level

Laundry / Wardrobe:

Washing Machines	1 * Maytag Heavy Duty
Dryers	1 * Maytag Heavy Duty
Drying rooms	N/A
Iron / ironing board	1 * Ironing Board, 1 * Steam Iron
Clothes racks	2

Production Facilities:

Production Desk

Production desk is usually positioned mid stalls and is a temporary arrangement of tables and plinths, DMX, talkback, desk lamps and hand held radio mic (to talk with company on stage). House light control is not available at production desk.

Production Office

No, but spare dressing room (if available) is often used.

Phone

Phone access can be pre-arranged and charged on your final invoice.

Fax

No back stage Fax. Access to Admin fax can be arranged

Access to phone for internet access

Internet Access can be pre-arranged. Charges apply.

Greenroom:

Tea / Coffee facilities	Yes
Fridge / freezer	yes
Microwave	Yes
Running water	Yes

Stage Door:

Access

Stage Door is located at the top of the vehicle ramp which runs between the Darwin Entertainment Centre and Globetrotter's Backpacker Hostel. The Stage Door is usually locked except by prior arrangement pre-show. On request and at the discretion of the Technical manager or Duty Technician, the Stage Door may be left closed but unlocked. If deemed necessary a DEC staff member may be rostered to monitor stage door access. This will be at the hirer's expense.

ADDITIONAL FACILITIES & INFORMATION

Orchestral:

60 metal music stands, 20 with scone

54 black, padded seat and backrest, non adjustable orchestra chairs

4 black, adjustable double bass stools

Steinway Model D grand Piano (hire and tuning charges apply)

Kawai Upright Piano (hire and tuning charges apply)

Rehearsal Space:

Rehearsal room is 16m * 9.5m and has a sprung, polished hardwood floor. Ballet Barres are mounted on 2 walls and floor to ceiling mirrors are mounted on the wall opposite Barres. This room is independently air conditioned (1 hour timer switch) and can be accessed with a pass key issued by Venue Co-ordinator, this enables hirers to gain access outside normal working hours. Hirers also get access to one dressing room with toilets (5) and showers (4)

VENUE:

Venue Contacts:

Venue Address 93 Mitchell Street, Darwin, NT 0800.

Venue Postal Address GPO Box 1993, Darwin, NT 0801

Staff Contacts:

Lighting Technician

Mobile

Email Address

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Audio Technician

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Venue Co-ordinator

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Administration

Phone Number

08 8980 3366

Venue Plans:

Venue Plan Available

YES, hard copy at 1:50 can be mailed, or a PDF, Vectorworks or DWG file emailed upon request

Venue Section Available

YES, hard copy at 1:50 can be mailed, or a PDF, Vectorworks or DWG file emailed upon request