

THE NATIONAL THEATRE 2024 TECHNICAL SPECIFICATIONS

Version 3

Last Updated: 20/09/2024

GENERAL

ADDRESS

The National Theatre Melbourne

20 Carlisle Street

St Kilda VIC 3182

[The National Theatre Google Maps](#)

BUILDING ACCESS

The Dock Doors are the main point of access for the stage. The doors are accessed via the metal staircase next to the Goods Lift in the carpark on Albert Street.

CONTACTS

NAME	ROLE	EMAIL	PHONE
Rod Gilbert	Venue Operations Manager	venue@nationaltheatre.org.au	0412 195 975
Rob Hornbuckle	Production Manager	production@nationaltheatre.org.au	0417 100 678
Bec Poulter	Technical Manager	technical@nationaltheatre.org.au	0438 400 091

PARKING

On street parking is available on Carlisle and Barkly (please check signage).

The closest paid parking is located at the Acland Court (183 Barkly St), near Coles Supermarket and just a short walk from The National Theatre Melbourne – entry and exit is via Barkly Street. Paid parking is also available on Irwell Street, Belford Street and beside The Palais Theatre.

PUBLIC TRANSPORT

TRAM

Catch the Route #16 to Stop #33 - Barkly St/Carlisle St.

Catch the Route #96 to Stop #138 - Luna Park/The Esplanade, then walk 5 minutes east (away from the beach) along Carlisle Street.

TRAIN

The closest train station to the National Theatre Melbourne is Balaclava Station on the Sandringham line. From here, catch the Route #16 towards Melbourne University to Stop #33 - Barkly St/Carlisle St.

AUDITORIUM

Raked auditorium with total capacity of 783 people.

CONFIGURATION

The auditorium is divided into two sections by a crossover between Rows H and J.

The front section contains 264 lounge armchairs.

The rear section contains 519 tip up seats.

ACCESS

Wheelchair access can be accommodated, but seating is limited to Row J.

BUMP IN

GOODS LIFT

Weight Capacity: 3000kg (3 tonne)

Height: 2800mm

Width: 2800mm

Depth: 4000mm

The goods lift is accessible via a loading zone in the rear carpark on Albert Street.

LOADING DOCK

Equipment is transported to the loading dock via the goods lift. The loading dock is 880mm below stage level. There is a set of stairs leading up to stage level, or ramps are available when required.

The loading dock door is 1565mm wide x 4000mm high.

ELECTRICAL SAFETY

All electrical equipment must be tested and tagged to AS/NZS 3760 and display a current and valid tag.

Any electrical equipment not tested and tagged will be tested and tagged at the hirer's expense.

STAGING

CONFIGURATION

The National Theatre is configured as a proscenium arch performance space, with an apron between the proscenium arch and the auditorium. The orchestra pit resides underneath the apron, and the flooring in this area can be removed should an open orchestra pit be required.

STAGE SURFACE

The stage surface at The National Theatre is black masonite. Drilling into the stage is not permitted without prior permission from the venue.

ALTERNATIVE STAGE SURFACES

QUANTITY	ITEM	DIMENSIONS
6	Black Tarkett Roll	13500mm wide x 2000mm deep

Please inform the venue if you require the use of the Tarkett. Extra charges may apply.

STAGE WEIGHT LOADING

The Live Weight Loading Limit (WLL) at The National Theatre is different for different areas of the stage.

Upstage of the Proscenium Arch: 7.2kPa

Downstage of the Proscenium Arch: 2.0kPa

DIMENSIONS

NB: the setting line is the upstage edge of the proscenium arch.

Setting line to upstage floor limit:	10920mm
Setting line to cyclorama:	10680mm
Setting line to centre of apron:	4228mm
Stage width with legs in:	9500mm
Stage width without legs in:	13740mm
Width of proscenium arch:	10624mm
Height of proscenium arch (centre):	5500mm
Height of proscenium arch (edge):	5100mm
Stage to underside of grid (drift):	13970mm

FIRE PRECAUTION AND SAFETY REQUIREMENTS

All scenery, props, masking, etc., must be rendered non-flammable to the satisfaction of The National Theatre.

No scenery, props, making, etc., shall be placed in a way that hinders the operation of the Fire Curtain, nor in any way affect the smoke seal created by the Fire Curtain.

The Fire Curtain release mechanisms must not be covered or made inaccessible at any time.

STAGE DRAPES

QUANTITY	ITEM	DIMENSIONS
10	Black Pleated Legs	3200mm wide x 6400mm drop
5	Black Pleated Borders	12000mm wide x 1500mm drop
4	Black Tabs (2x Sets of 2)	7000mm wide x 6500mm drop
1	Red Velvet House Curtain	13000mm wide x 7000mm drop
1	Black Gauze Scrim	12500mm wide x 6500mm drop
1	White Cyclorama	14000mm wide x 6000mm drop
9	Black Drapes (Push Up)	3100mm wide x 4200mm drop

FLY BARS

The National Theatre maintains a standard hanging plot. Please refer to the 2023 National Theatre Standard Hanging plot for detailed hanging positions.

QUANTITY	OPERATION POSITION	TYPE
3	Prompt Side	Chain Motor Control Lighting Bar
2	Opposite Prompt	Single Purchase Counterweight Lighting Bar
17	Prompt Side	Single Purchase Counterweight
4	Opposite Prompt	Single Purchase Counterweight

NOTE: changes may not be made to the standard hanging plot without prior permission from the venue.

STAGING DECKS

QUANTITY	ITEM	DIMENSIONS
4	Black Rostra Riser	2400mm wide x 1200mm depth x 300mm height
8	CLSA Rostra	2400mm x 1200 mm x various heights (Avail on REQ)

LIGHTING

CONTROL

QUANTITY	EQUIPMENT	ACCESSORIES
1	ETC Eos Nomad with Eos Programming Wing (6,144 Outputs)	2x ETC Eos 20 Fader Wing 2x Monitors 1x Keyboard 1x Mouse

The lighting console is located at the rear of the auditorium in the bio box, but can be moved to the crossover for design/programming.

DMX

The National Theatre uses sACN DMX Architecture.

QUANTITY	EQUIPMENT	UNIVERSES
2	LSC Nexus Node	Universes 1 through 10

DMX Universes are run as per the following:

UNIVERSE	LOCATION
1	Analogue Dimmers and Stage Floor Traps
2	Front of House Bridge
3	Lighting Bar 1
4	Lighting Bar 2
5	Lighting Bar 3
6	Lighting Bar 4
7	Lighting Bar 5, Star Cloth, Haze
8	
9	
10	

POWER

QUANTITY	EQUIPMENT	LOCATION	WATTAGE
74	JTM Analogue Dimmers	Dimmer Room	2000
17	JTM Analogue Dimmers	Dimmer Room	5000
6	Hot Power Patches	Dimmer Room	4800
6	Switchable Hot Power	Dimmer Room	2400
24	Hot Power Distribution	Dimmer Room	1920
1	63 Amp Ceeform Outlet	Opposite Prompt Side	

FIXTURES

The National Theatre maintains a standard rig comprised of the fixtures in the table below. Please refer to the 2024 National Theatre Standard LX Plan for hanging positions.

QUANTITY	TYPE	ACCESSORIES	WATTAGE
12	Robe Robin 300 LEDWash		225
8	Fine Art 600L BSWF		800
12	Fine Art 420L Spot		550
8	ACME Oxygen CM-400Z		380
20	RGBWA LED Par		350
12	RGBWA LED Cyc		350
8	ShowPro LED Par Quad-18		150
1	RGB Starcloth		300
6	ETC Source Four 26°	6x Top hat 6x Gel frame	750
2	ETC Source Four 36°	2x Gel frame	750
5	Selecon Pacific 23-50°	5x Gel frame	1000
16	Selecon Acclaim Axial 24-44°	16x Gel frame	600
4	Selecon SPX Zoomspot 15-	4x Gel frame	600
3	Molefay Duet Blinder		1300

NOTE: changes may not be made to the standard rig without prior permission from the venue.

FOLLOWSPOTS

QUANTITY	TYPE	ACCESSORIES	WATTAGE
2	Selecon Performer Followspot	6x Gel Frame Slots (each) "Bullseye" followspot sights	1200

ATMOSPHERE & EFFECTS

QUANTITY	TYPE	NOTES
1	MDG ATMe Haze Machine	DMX Controlled
2	JEM ZR-25 Smoke Machine	DMX Controlled
2	H-SW3000 Low Fogger	DMX Controlled
1	600mm Mirror Ball	Non-DMX Controllable

Mineral oil based atmospherics, including but not limited to haze, smoke, and fog, are not to be used at The National Theatre under any circumstances. No exceptions.

AUDIO**CONTROL**

QUANTITY	EQUIPMENT	POSITION	ACCESSORIES
1	Allen & Heath Avantis	Rear of auditorium, in bio box.	GX4816 & DANTE
1	Meyer Galileo 616 Processor	Opposite Prompt side in audio rack.	
1	Yamaha DM3 Mixer	Prompt side at Stage Management Desk.	DANTE
1	Mac Mini with QLab 5 (shared with Vision)	Prompt side at Stage Management Desk.	1x keyboard 1x mouse 1x monitor

Seats can be held from sale and audio operation can be moved to the following options below if audio operation needs to be outside of the bio box.

Prompt Side of Bio Box: T20-23, U20-22, W21-23

In Front of Bio Box: S20-29, T20-29

Please inform the venue as early as possible if you require seats to be held from sale.

POWER

QUANTITY	EQUIPMENT	LOCATION	WATTAGE
1	Green Power Outlet	Prompt Side	2400
1	Green Power Outlet	Centre of Auditorium	2400
1	10 Amp Distribution Rack	Opposite Prompt	2400
1	32 Amp 3-Phase Outlet	Opposite Prompt	

SPEAKERS

QUANTITY	TYPE	NOTES
4	Meyer CQ-1P	2x Front of House Left and 2x Front of House Right.
4	Meyer 650-P Sub	2x Front of House Left and 2x Front of House Right.
2	Meyer UPA-2C	Centre Fill; flown.
4	Meyer M1-D	Front Fill; placed on front of apron.
4	Meyer UPM-1	Delays.
2	Meyer UPA-1A	On stage foldback; flown on LX1.
8	Meyer UM-1A	Foldback wedges on 5 x sends
4	RCF ART 312-A	

INSTRUMENTS & ORCHESTRAL EQUIPMENT

QUANTITY	EQUIPMENT
1	Steinway Model B Grand Piano
1	Upright Piano
25	Music Stands with Sconce Lights

MICROPHONES

QUANTITY	TYPE
2	Sennheiser e845 wireless handheld microphone
2	Sennheiser e935 wireless handheld microphone
2	Sennheiser e835 wired handheld microphone
2	Sennheiser ewG4 wireless bodypack
2	Sennheiser ew-100 G3 wireless bodypack
2	Jag Audio V6 Headset Mic
4	DPA-4099 clip on microphone
6	SDC Condenser microphone

MICROPHONE STANDS

QUANTITY	TYPE
8	Boom Stand
3	Small Boom Stand
4	Straight Stand

COMMUNICATIONS

QUANTITY	EQUIPMENT	POSITION
1	Clearcom MS-702 Encore Basestation	Prompt Side, Stage Management Desk
1	GreenGo Wireless System	Prompt Side, Stage Management Desk
1	GreenGo/Clearcom interface	Connects Green go to Clearcom
1	GreenGo/2way interface	Connects GreenGo to Motorolas
5	Motorola DP2400e	
4	Clearcom RS-601 Single Channel Beltpacks	2x Followspots 2x Spare
1	Clearcom RS-602 Dual Channel Beltpacks	1x Spare
2	Clearcom RS-701 Single Channel Beltpacks	1x Lighting Operator 1x Audio Operator
3	GreenGo Wireless Beltpacks	

VISION

CONTROL

QUANTITY	EQUIPMENT	POSITION	ACCESSORIES
1	Mac Mini with QLab 5 (shared with Vision)	Prompt side at Stage Management Desk.	1x keyboard 1x mouse 1x monitor

PROJECTORS

QUANTITY	TYPE	NOTES
1	Panasonic PT-MZ20K	.45 to .55 lens, line 13 for cyc projection
1	Stumpfl 16' x 9' screen	Front project surface

VIDEO RECORDING/BROADCASTING

QUANTITY	TYPE	ACCESSORIES
1	Blackmagic ATEM Mini	1x Quad-view Monitor 1x Dual-view (Preview/Program) Monitor 1x Portable Monitor
1	Atomos Ninja Recorder	
3	Canon XA45 4K UHD Camcorder	3x camera tripods

Seats can be held from sale and reserved for camera option in the following position:

Centre of Auditorium: G21-22, H21-22

Please inform the venue as early as possible if you require seats to be held from sale.

FACILITIES

DRESSING ROOMS

NUMBER	SIZE	FACILITIES
1	19m ²	2x basins, fixed hanging rail
2	22m ²	2x basins, fixed hanging rail
3	22m ²	2x basins, fixed hanging rail
4	6m ²	1x basins, fixed hanging rail

All dressing rooms have chairs, makeup tables and wall mounted mirrors with LED makeup lighting.

BREAKOUT/FLEXIBLE SPACES

ROOM	SIZE	NOTES
Diana Gibson Room	56m ²	The Diana Gibson Room is only accessible via a staircase and is located a floor below stage level.

All dressing rooms, as well as the Diana Gibson Room, receive show relay feeds and Stage Management tannoy announcements.

LAUNDRY

The National Theatre has a small laundry facility located in Dressing Room 1 with the following equipment:

QUANTITY	EQUIPMENT	CAPACITY
1	Euromaid Washing Machine	7kg
1	Euromaid Condenser Dryer	6kg

TOILETS

There is currently 1x male toilets and 1x female toilets located adjacent to the dressing rooms at the rear of the theatre.

ADDITIONAL STUDIOS

The following studios may be available for hire should additional spaces be required. The studios are located a floor below stage level. Please contact the Venue Operations Manager if you require any or all of the

ROOM	SIZE	NOTES
Studio 1	13m x 9.6m	
Studio 2	8.6m x 12.9m	
Studio 3	6m x 3.75m	
Studio 4	12.6m x 9.7m	
Studio 5	9.7m x 16.8m	
Studio 6	9.6m x 13m	