

Perth Concert Hall

Technical and Production Information



June 2015



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Introduction and Venue Contacts

Perth Concert Hall is renowned as one of the finest music acoustics in the Southern Hemisphere. The reflective surfaces in the auditorium have been designed to maximise the acoustic music experiences for both artist and audiences.

These Technical Specifications are subject to change without notice.

Please liaise with venue technical staff to verify or enquire further regarding any of the specifications.

Venue Address:

Perth Concert Hall
5 Saint Georges Terrace
Perth WA 6000
Australia

Mailing Address:

Perth Concert Hall
GPO Box 3041
East Perth WA 6892
Australia

Website: www.perthconcerthall.com.au

Technical contacts:

Bradley Matthews
+61 8 9231 9900
+61 408 766 029
matthewsb@perthconcerthall.com.au
Operations Co-Ordinator

Paul Richardson
+61 8 9231 9953
richardsonp@perthconcerthall.com
Operations Administrator

Bookings:

Penelope Briffa
+61 8 9231 9900
briffap@perthconcerthall.com.au
Events Manager

General Information

Venue History

Perth Concert Hall was constructed between 1971 and 1973 on land that was originally part of the Government Domain. The building was opened in January 1973.

Since its construction, the venue has been in continuous use for musical performances and other events, such as school and university graduations and ceremonies as well as weddings, business conventions and other civic functions.

Seating

The Concert Hall auditorium has a maximum seating capacity of 1891. This comprised of the three levels of auditorium seating and choir stalls.

The stalls has a capacity of 1117, however if you have a half thrust installed you will lose 75 seats; if you have a full thrust, you lose 194 seats. There are 260 seats in the Lower Gallery there seats and 354 in the Upper Gallery. The choir stalls is not suitable to go on sale for all shows, but has a capacity of 160.

All levels have removable seating for mobility-impaired patrons, when requested.

Accessibility

Perth Concert Hall has a lift that operates to all levels and the underground car park below, which has disabled parking nearby. All levels have removable seating to make positions for mobility-impaired patrons.

Public Transport

With bus stops located directly in front of PerthConcert Hall on St Georges Terrace, transport to the venue is a breeze. The Perth train stations are a short way from the venue.

For bus and train timetables please click on the following link: www.transperth.wa.gov.au

Taxis are able to drive down the driveway to collect patrons with walking difficulties from the door.

Public Parking

City of Perth Parking operate an underground parking area at Perth Concert Hall, which has 399 standard parking bays, 5 ACROD bays and 12 motorcycle bays. Access to this parking area is off Terrace Road, where you will also find a large open air parking area that has 776 standard bays, 8 ACROD bays and 26 motorcycle bays. A short walk down St Georges Terrace, there is the Council House parking area which has 92 standard bays, 2 ACROD bays and 2 motorcycle bays. For further information on rates and height restrictions please check www.cityofperthparking.com.au

VIP Parking

Access to Perth Concert Hall's VIP Parking area is via St Georges Terrace, using the driveway to the East of the building. Once you travel down the ramp that runs along the side of the Concert Hall building, you will come to a white gate that secures the parking area. Clients hiring the main auditorium are entitled to 6 parking bays during the day and 20 at night.

Loading Dock

Access to Perth Concert Hall's loading dock is via St Georges Terrace, using the driveway to the East of the building. The easiest way for trucks is to travel east along Adelaide Terrace until it becomes St Georges Terrace, then taking the driveway immediately after the Duxton Hotel. A ramp or tail lift is required to unload and load equipment from trucks. The loading dock has a fixed height of 620mm and width of 2750mm.

Risk Management

The Management at Perth Concert Hall produce a risk assessment for all shows that take place within the venue. We reserve the right to ask hirers to provide their own risk assessment to highlight any risks involved in their production.

As part of the risk management process all electrical equipment brought into the venue must have a current test tag compliance attached. A qualified rigger must rig all overhead equipment and we reserve the right to refuse to rig an object if it is deemed to not be safe. Lighting equipment must have a safety chain attached.

Stage Specifications

Dimensions

The following measurements should be confirmed for any critical planning. See the below plan for the stage plans

Stage measurement plan coming soon.

Stage height:	86cm
Distance from follows spots to front edge of stage:	
Distance from mix position to front edge of stage:	
Distance from back of auditorium to stage:	
Height from stage to auditorium ceiling:	16.5m
Height from stage to top of choir stalls ashtray:	3.78m
Width of auditorium:	25m

Stage Extensions

There are two possible extensions that can be installed to increase the stage size. The first is the half thrust, which is made up of 6 individual platforms that are rolled into place, and have a timber surface that matches the main stage. The half thrust adds an extra 1.82m to the front of stage and is 15.12m wide. It also requires the removal of A & B rows (loss of 75 seats). If you require the full thrust, which is 4.18m deep and 15.45m wide, this is operated by hydraulics and has a black surface. It requires that A – E rows are removed (loss of 194 seats).

Access

The Loading dock at the Perth Concert Hall is 600mm high, so that any truck delivering heavy equipment will need to have a ramp or tail lift. The loading dock doors are 2.49m high and 3.62m wide, opening directly into the backstage area (but there is a small ramp to get to stage level). The height of the ceiling at the edge of stage is 2.46m and the height of the concertina doors that close the stage are 2.82m high.

Plans

Maximum Loads

Rigging Facilities and Equipment

Special Note: The Perth Concert Hall does not have a theatrical fly gallery!

The ceiling is 16.5m high from the stage and has limited rigging positions. See the below plan for locations in which can be rigged above the stage. It is also possible to rig a FOH truss approximately 1.5m from the downstage edge. Please contact us for further information regarding rigging in the venue.

Drapes

The Perth Concert Hall has the following drapes available on request:

Organ blue blacks	Used to mask the organ pipes.
Large black drapes	Used to mask the Upstage area. Good for more intimate performances.
Choir blacks	These hang from the top of the choir stalls to stage.
Ashtray border	These hang from the top of the choir stalls to mask the white concrete.
Black theatre border	1 only
Black theatre legs	1 set only
Cyclorama	10m x 2.4m

Instruments

Pianos

There are 3 Steinway concert grand D models stored at stage. The piano assigned to your production will be determined by venue management dependant on the type of show and use of the piano. Under no circumstance is there to be any direct contact with the strings on any of the Perth Concert Hall pianos. If any of the repertoire being played includes this as a requirement, Perth Concert Hall reserves the right to substitute an alternative piano at our discretion. If prior notice is not provided, post event repair charges may apply.

Harpsichord

The harpsichord is made by Michael Johnson Harpsichords and is strung to A. 415. The soundboard decoration was done by Kyle Turner with Australian insects, flowers and butterflies.

Pipe Organ

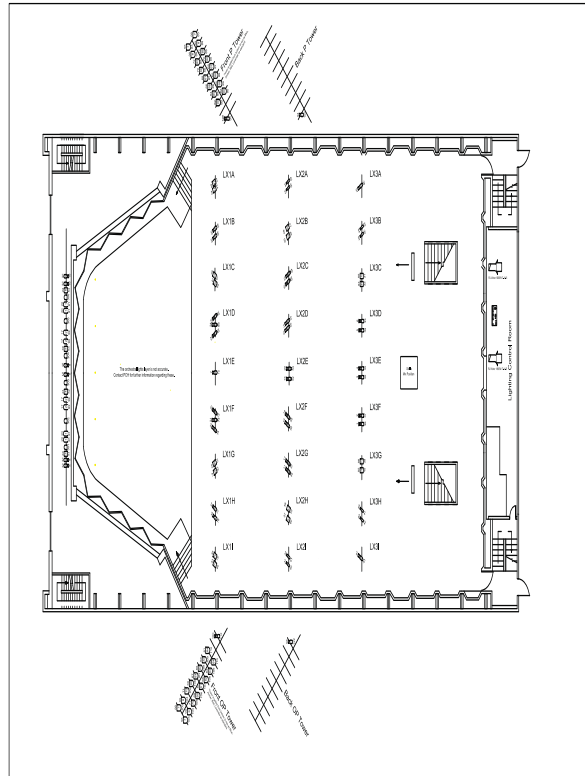
The organ was designed by Ronald Sharp of Mortdale (New South Wales). The organ contains over 3,000 pipes, of which 66 are visible from the auditorium and are constructed of zinc and tin. The balance are made of zinc, tin, lead alloy and wood. When Perth Concert Hall opened, only the front visible pipes were installed.

Lighting

In-House Desk

The desk used as standard is a Jands Vista I3 digital.

Standard Lighting Rig



Perth Concert Hall has approximately 154 fixtures of varying types in use within the main auditorium. To reduce labour cost involved, in general, fixtures are not physically moved. Wherever possible, it is preferable to work within the standard rig and refocus where applicable. Lighting gel needs to be arranged beforehand to ensure that we have the specific colours available. The height of the ceiling from stage is 16.3m.

Front of House: There are three lines of lights, constructed within the ceiling of the auditorium.

14 x Source 4 14° profiles with frost for O/W full stage wash arranged in three horizontal lines. With the positions available in the venue, the front of house wash is relatively 'toppy', ie has a steep angle. 8 x Source 4 15°-30° zoom profiles for miscellaneous use. When a full thrust stage is used, four of these are required to supplement the O/W full stage wash to ensure proper coverage.

4 x Warp 22°-50° zoom profiles for miscellaneous use. These are located almost directly above the edge of stage. They are suitable for top gobo washes or tight orchestral light. 6 x Pacific 5.5°-

13° zoom profiles for specials. 6 x Cadenza 2k Fresnels O/W to fill the full stage wash.

4 x Cadenza 2k Fresnels available for front colour wash. Two lights per colour are needed for a reasonable stage wash.

Backlight Bar: Single bar upstage above organ pipes at a 16 meter trim height. If any overhead truss or draping is hung, this position will most likely be obstructed. Due to the angle of this position and the overhanging ledge around the stage, it is impossible to backlight the very far upstage edge of stage.

6 x Warp 12°-30° zoom profiles for miscellaneous use. They are suitable for back gobo washes. When aisle lighting for processions are required, these fixtures are required. 4 x RGBWA LED wash units. They are used for full stage washes. 4 x Cadenza 2k Fresnels for extra backlight colour. They are gelled as blue and red as standard, with two lights for each colour.

8 x Par 64 110V MFL paired side by side. As standard, these are used in O/W as an orchestral wash, but they can be gelled for extra backlight colour. 4 fixtures per colour gives good coverage for a no thrust stage.

Front Perch Towers: There are two perch towers fixed to the auditorium walls approximately in line with the downstage edge of stage proper. Both towers are arranged the same, and the information below relates to each tower. They are best suited for front high side colour.

16 x Par 64 110V MFL paired side by side. They are gelled with four fixtures per colour from bottom to top in blue, red, amber and lavender. 1 x Pacific 23°-50° zoom profile at the base of the tower. This is usually used to project sponsor gobos onto the timber at the side of the organ. However, they can be moved and focused onto stage.

Rear Perch Towers: There are another two perch towers fixed to the auditorium walls approximately 5 meters in the downstage direction from the front perch towers. Both towers are arranged the same, and the information below relates to each tower. They are rarely used as there are limited angles to stage from this position due to the upper gallery seating obstructing a lot of the stage.

1 x Warp 22°-50° zoom profile for miscellaneous use. They are best suited for specials in the choir stalls. If the organ is in use, this fixture provides the special for the player. In addition, if an AV screen is in use, this fixture may be required to fill the up stage shadow created by the screen. 2 x Strand T Spots for use as a colour wash on the organ pipes.

Orchestral downlights: There are a number of Lekos arranged within the ceiling to act as orchestral downlights onto stage from directly overhead. They are permanently mounted within the ceiling and are not able to be refocused or gelled. The quality of this wash is suitable for reading light only and requires extra front and backlight to supplement it.

32 x Leko Profiles used for Orchestral down light only.

Follow Spots

There are 2x Robert Julliat Victor's available for use. Please note that operators are an additional cost.

Rigging Positions

Additional Equipment (cross-hires)

The staff at Perth Concert Hall is happy to arrange any extra equipment that you require for your production. Advice can also be provided by our lighting department as to what would work best for your show.

Special Effects

Special Effects such as strobe and haze can be used for any show, however we require advice of this in advance so that patrons can be advised. For pyrotechnics, we require a licensed operator to be present and in control.

Sound & Audio Visual

Acoustics

Perth Concert Hall is renowned as having some of the finest music acoustics in the Southern Hemisphere. The reflective surfaces in the auditorium have been designed to maximise the acoustic music experience for both artist and audience.

Speaker System

Line Array

- 10 x d&B Q1

Out Fill (flown either side of line array) These speakers address side of stage Upper Gallery

- 1 x d&B Q7 per side
- 1 x d&B Q10 per side

Left & Right Stalls Level

- 1 x d&B Q7 per side
- 1 x d&B Q-Sub per side

Please note – the Left/Right Stalls Level can be augmented to suit your event. Extra charges apply. Suggested configurations, depending on the nature of the concert or event, are available.

- 3 x d&B Q1 with 2 x d&bB 2Sub per side or
- 3 x d&B J8 with 2 x d&B J-Sub per side

Front Fill Downstage Edge

- 8 x d&B E3

Delays Under Balcony Stalls Level

- 3 x pairs d&B E3

Monitors

- 4 x d&b MAX12 (4 x sends)

All PA controlled by proprietary d&B power amplifiers and processors with tablet PC.

A centre cluster is our preferred PA hang due to the nature of the Concert Hall's high reflective surfaces on all four concrete walls. It has been found that using the single point source of the centre cluster helps reduce these reflections from the upper part of the hall. A stereo image is achieved in the stalls seating with the Left/Right stacked speakers onstage.

In-House Desk

Perth Concert Hall has a Digidesign Venue Profile Digital Console with 5 x DSP Cards that can be supplied for use in the front of house mix position.

Microphones & Dis


- Sennheiser Digital 9000 series (Radio Microphone)
- Sennheiser 2000 series (Radio Microphone)
- Neumann KM184
- AKG C414
- Shure B52A
- Shure B56A
- Shure B58A
- Shure MX412
- Rode NT5
- DPA4061
- ARXDI

Please note – Quantities are limited so please check with technical staff to ensure we have the numbers required for your production.

Show Relay

Headset Communication

Projectors

The Perth Concert Hall has one main projector for the auditorium which is a Sony VPL-FE40 4000 ansi-lumens. There are also 2 NEC  projectors available for functions.

Screens

The screen available from Perth Concert Hall is a Stumpfl fastfold 12' x 9' which is a 4:3 ratio screen. Also available for functions are 2 tripod screen that are 5' x 5'.

Additional Equipment (cross-hires)

The Perth Concert Hall staff are happy to help you arrange alternative equipment. We can give advice on is regularly used and what works best in the venue. Please contact operations staff for further assistance.

Backstage Facilities

Greenroom

More information coming soon!

Orchestral Assembly Room

More information coming soon!

Main Dressing Rooms

More information coming soon!

Conductors Dressing Room

More information coming soon!

Production Office

More information coming soon!

Star Dressing Rooms

More information coming soon!

Chorus Room

More information coming soon!

Wi-Fi

More information coming soon!

Function Spaces

Main Stage

The main stage within the auditorium can be impressively constructed into a 3-tiered gala ballroom to seat 300 guests. Our highly-skilled technical crew can help enhance your event with props, staging and special effects – from the glamour of Hollywood to somewhere from outer space (or anywhere in between), we'll tie in the perfect performer or act for an unforgettable evening.

Foyers

Perfect for registration, trade displays, welcome cocktail receptions and speaker lectures. Using both levels, the foyers can comfortably house an exhibition of 44 booths while also allowing enough floor space for catering stations. Both levels have floor to ceiling glass windows that provide plentiful natural light.

Wardle Room

Whether you require a room to start the day with breakfast, or finish the day with dinner and dancing, the Wardle Room is incredibly versatile and seats up to 330 guests.

Corporate Lounge

With an abundance of natural light this is an ideal small meeting room, breakout area, VIP cocktails area, committee or exhibitor lounge.

VIP Lounge

This area is extremely versatile with magnificent views over the Swan River. Most commonly used for informal meetings, workshops, poster displays and pre-show catering.

Veranda

More information coming soon!

Northern Forecourt

More information coming soon!

Southern Top Forecourt

More information coming soon!

Southern Low Forecourt

More information coming soon!

Basement

More information coming soon!

Tunnel

More information coming soon!