



Australian  
National  
University

# Llewellyn Hall

[llewellynhall.anu.edu.au](http://llewellynhall.anu.edu.au)



## Technical Specifications

Updated April 2016

**Centralised Venues Manager:**

**Deanna Riddell**

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Venue Information:

Situated inside the School of Music at the Australian National University, Llewellyn Hall houses a concert platform ideal for classical and contemporary music performances, as well as guest speakers. It has continental stalls seating and gallery arrangement and is capable of seating 1335 people.

The venue underwent a major refurbishment in 2008 and is now a state of the art performance facility.

The regular performances at Llewellyn Hall by the Canberra Symphony Orchestra, as well as many contemporary artists, speakers, orchestras, and ensembles have created a hub for cultural activity in Canberra. Recently, Llewellyn Hall has hosted Matt Corby, Dame Kiri Te Kanawa, Neil deGrasse Tyson, RockWiz, the Australian Chamber Orchestra, the Australian Youth Orchestra, Musica Viva and many more, with a view to consistently provide high quality entertainment to the community.

As one of the best acoustic venues in Australia, the ANU Centralised Venues team also provides professional sound, lighting and production staff.

The venue is situated on William Herbert Place, off Childers Street in City West. Biginelli's Café is located on Level 5, and the Wig & Pen craft brewery and bar is located on Level 2. Llewellyn Hall is a short walk to a number of restaurants as well as a SPAR supermarket.

**STAGE****Brief Stage Description:**

Llewellyn Hall has an unranked stage with Tasmanian ironbark floor boards.

**There is to be no screwing in to the floor surface.**

NB Due to the nature of the hardwood floor some point load pressure may dent the floor. Point loads are therefore subject to venue manager's discretion.

Stage distributed load limit: **750 kg/m<sup>2</sup> (7.5 kPa)**

Stage point load limit: **450 kg (4.5 kN) – subject to venue discretion**

Stage rake: **No**

**Stage Dimensions:**

**Setting Line** Use edge of stage

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

|                                |              |
|--------------------------------|--------------|
| SL to DS edge of Orchestra Pit | <b>4.2m</b>  |
| SL to rear wall                | <b>13m</b>   |
| CL to OP wall (or obstruction) | <b>9.75m</b> |
| CL to PS wall (or obstruction) | <b>9.75m</b> |
| Stage to underside of ceiling  | See below    |

**Staging Notes:**

Soundboard US Limit: **13m from edge of stage**

Soundboard DS Limit: **8m from edge of stage**

Wings US limit: **11m from edge of stage**

Wings DS limit: **4.5m from edge of stage**

Access to the FOH house catwalk system is via level six of the building and is subject to approval by venue technical supervisor.

**Stage Covers: N/A**

**Stage Traps: There are no stage traps**

**Safety Curtain: N/A**

**Flying Facilities:**

The Hall does not have a flying system apart from the designated LX bars.

**Banner Bar:**

There is a bar capable of attaching banners, the banner bar is attached to the moving sound board and is operated by a hand winch.

**Drapery and Acoustic Panelling:**

| Type                         | Material                                 | Colour     | Width | Height | Quantity          |
|------------------------------|--|------------|-------|--------|-------------------|
| Sound Board                  | European Beech Acoustic Wooden Panelling | Light wood | 15.1m | 10m    | 1                 |
| Wings                        | European Beech Acoustic Wooden Panelling | Light wood | 3.4   | 10m    | 6<br>(3 per side) |
| Drape<br>(sound board cover) | Cotton Drill                             | Black      | 15.1m | 10m    | 1                 |

Staging Units:

(40) StageRight riser decks. Double sided with black Polytrac hard surface, and ground pepper colour carpet surface.

Length: **1800mm (nominal)**

Width: **1200mm (nominal)**

Height: **80mm** (deck directly on floor)

Height on legs: **200mm, 400mm, 600mm to 1000mm (in 50mm increments)**

(4) StageRight riser decks. Double sided with black Polytrac hard surface, and ground pepper colour carpet surface.

Length: **1200mm (nominal)**

Width: **1200mm (nominal)**

Height: **80mm** (deck directly on floor)

Height on legs: **200mm or 400mm only**

*For StageRight system*

Limited 200mm skirting available

Limited number of chair stops available

Back & side railings available

Treads to suit various heights

Various riser configurations can be constructed

(1) Megadeck riser with black carpet surface.

Length: **1100mm**

Width: **1000mm**

Height: **200mm or 300mm**

Skirting available

Back railing available

*Primarily intended as Conductor's Riser*

Additional Rigging Notes

There are two heavy-duty outriggers, used for hanging alternative/extra FOH speaker systems, fixed to the columns PS and OP side of stage at ~10750mm. Each outrigger is rated at a maximum SWL of 4500 kg. The distance between these rigging points is 19 metres.

Other rigging points are available in the venue (FOH and Stage) and are evaluated on a case by case basis. Please contact the Venue Technician to discuss further.

Access Equipment:**Elevated Work Platform**

Upright Inc, Push around mast lift [www.upright.com](http://www.upright.com)

Capable of lifting one person only

Maximum reach **9.75m**

**EWP Restrictions**

Out-riggers must be used at all times, one staff member to be located at the base whilst in use. Safety documentation is to be read before use of lift.

**Ladders**

**Bailey fiberglass Extension ladder** 120kg max SWL

Ladder height **2.92m**

Maximum Extension height **6.4m**

**Bailey Platform Ladder** Fibreglass 5 step 150kg max SWL

Step ladder height **2.45m**

Platform Vertical height **1.43m**

**Rhino double sided step ladder** Fibreglass 4 step 120kg max SWL

Step ladder height **1.2m**

Reach height **2.6m**

Loading Dock:**Access**

Access to Llewellyn Hall for touring rigs can be loaded through front door of venue. Goods can be unloaded from circular driveway on William Herbert Place (there is no Loading Ramp/dock).

**Restrictions / Obstructions**

Ramp/Incline to stage door from front door of venue: is approximately **25 Degrees**,

Corridor width: **1.7m at tightest doorway**

Corridor height: **2.2m at tightest point**

**AUDITORIUM**

Auditorium consists of stalls and a gallery seating area.

Stalls seating capacity with orchestra pit installed **850**

Stalls seating capacity without orchestra pit installed **960**

Gallery seating capacity **375**

Wheel chair allocated seating positions **8**

NB: If FOH stalls sound position is being used a minimum of **15** seats need to be removed from stalls.

|   |             |
|---|-------------|
| Seating capacity with additional<br>Orchestra pit seating installed | <b>1335</b> |
|---|-------------|

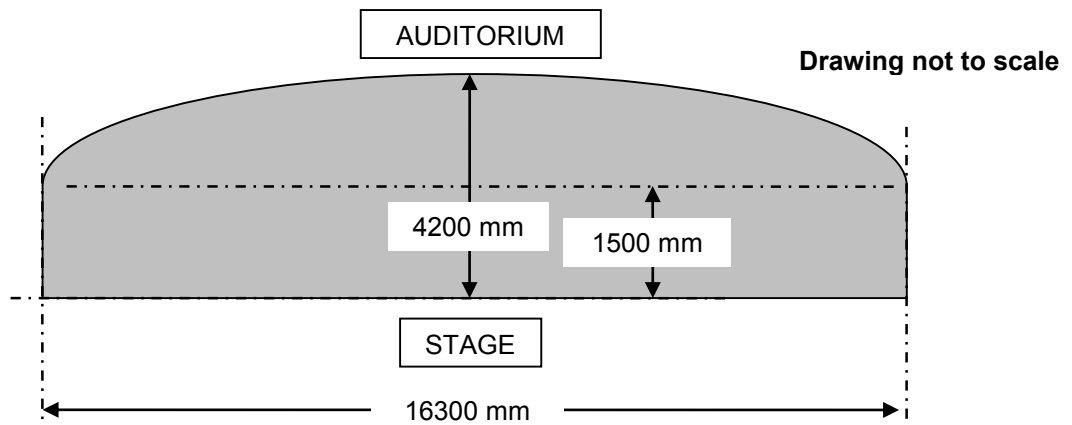
|   |             |
|---|-------------|
| Seating capacity without<br>Orchestra pit seating installed | <b>1226</b> |
|---|-------------|

Orchestra Pit:

The Orchestra pit is covered with fixed floor sections that require four crew to remove.

Stage level above auditorium = **1000 mm**

Orchestra pit level below auditorium = **1100 mm**

Dimensions of the orchestra pit

Orchestra pit maximum capacity: **40**

**LIGHTING****Positions:****Stage LX Bars**

There are 4 LX bars over stage, As the Sound Board is moved further downstage, access to LX 3 & 4 becomes restricted. The sound board cannot be moved when lanterns are rigged on LX 3 or 4.

Each lighting bar has a Rated Capacity (Working Load Limit) of 300 kg and a Maximum Point Load of 75 kg. The lighting bars on the FOH bridges have a rating of 45 kg/m

**LX #1**

Edge of Stage to lighting bar **1.850m (@ 9.5m)**  
Bar length **14m**

**LX #2**

Edge of Stage to lighting bar **6.2m (@ 8.39m)**  
Bar length **14m**

**LX #3**

Edge of Stage to lighting bar **9m (@ 10.36m)**  
Bar length **14m**

**LX #4**

Edge of Stage to lighting bar **11.950m (@ 10.29m)**  
Bar length **14m**

**FOH Bridge #1**

Edge of Stage to lighting bar **23.5m 47 degrees from edge of stage**  
Usable bar width **18m**

**FOH Bridge #2**

Edge of Stage to lighting bar **12.8m 57 degrees from edge of stage**  
Usable bar width **18m**

**Balcony Bar**

Edge of Stage to lighting bar **18.3m 21 degrees from edge of stage**  
Usable bar width **9m**

Notes: there are two balcony bars separated by a central concrete feature. See auditorium photo

**Control:**

Lighting desk **ETC ION 2000**  
Control channels **2048**  
Signal output **3x sACN via Pathport Quattro**  
Signal distribution **single universe distribution at Bio Box and Organ Loft**  
Remote rigger available onstage: **YES, ETC Net 3 RFR**

**Control positions:**

**Bio Box, Stage OP side, Stalls x2**

**Dimmer Racks:**

**Total Dimmers (10) Jands WMX9 (digital) 12ch 2.4 kW dimmers**  
**Dimmers Location Level 7**

House Lights:

- Independent control      **YES – Controlled via Dynalite wall plates**
- Control positions        **Bio Box, Stage Managers desk**
- Fade time adjustable    **No – 4 second fade to (2) Show preset levels.**

Stage Luminaires:**Profiles**

| Make    | Model       | Angle       | Detail / Accessories | Watt | Total |
|---------|-------------|-------------|----------------------|------|-------|
| Selecon | 80V Pacific | 5 -13 deg   |                      | 1200 | 6     |
| Selecon | Pacific     | 12 - 28 deg |                      | 600  | 36    |

**Fresnels**

| Make    | Model   | Detail / Accessories   | Watt | Total |
|---------|---------|------------------------|------|-------|
| Selecon | Arena   | Barn doors/ Gel Frames | 2000 | 12    |
| Selecon | Compact | Barn doors/ Gel Frames | 1200 | 24    |

**Wash**

| Make     | Model   | Detail / Accessories | Watt | Total |
|----------|---------|----------------------|------|-------|
| Iris One | MOD3772 | One cell per unit    | 1250 | 2     |

Followspots:

| Make   | Model    | Angle | Detail / Accessories | Watt | Total |
|--------|----------|-------|----------------------|------|-------|
| Lycian | SuperArc |       | 7 colour magazine    | 400  | 2     |

Patching:

| Location | Quantity | Numbering<br>(PS to OP) | Detail / Accessories       |
|----------|----------|-------------------------|----------------------------|
| FOH 1    | 20       | 79-63                   | Typically patched 61 - 80  |
| FOH 2    | 30       | 110-81                  | Typically patched 81 - 110 |
| LX1      | 15       | 1-15                    | Typically patched 1- 15    |
| LX2      | 15       | 16-30                   | Typically patched 16 - 30  |
| LX3      | 15       |                         | Typically patched 31 - 45  |
| LX4      | 15       |                         | Typically patched 46 - 60  |

There is a Jands PDS power distribution system located in the dimmer room. This system has 6 dedicated 20 AMP circuits.

Power:**3 Phase Outlets**

3x OP, 32A sockets, 2 metres above stage level directly beneath circuit breakers and link box. OP side next to Organ Loft

1x PS, 32A socket Upstage Prompt

One 250A distribution board US OP (electrician required to access)

\*Powerlock tails can be installed on this board with prior notice at cost.

Cabling:

**240v Extension Cable:** Llewellyn Hall has a good stock of extension leads to accommodate the venue's standard lighting rig. Any additional equipment will require additional cable stock to be sourced.



**AUDIO**Control Positions:**Bio Box**

The Bio Box is on Level 6 at the rear centre, behind gallery seating.

There are inward swinging glass doors between the Bio Box and the gallery.

Note: access to control room from stage is via foyers and a lift, or four flights of stairs.

**Hearing Assistance**

Hearing assistance is provided by an FM personal induction loop system. Transmitter is a MiPro MTS-100T unit which broadcasts at **847.74 MHz**. Audio is mixed from both the flown recording mic system and a separate full range output from the PA processors. This mix is fed as a mono feed to the transmitter above. 10 receivers are available for public use and are issued by FOH staff.

**Auditorium**

There are two mix positions within the stalls seating,

FOH 1 is located in the centre of the stalls.

Seat allocation: seats **24-28** of rows **M, N, P** are required.

FOH 2 is located centrally at the rear of the stalls

Seat allocation: seats **22-26** of rows **V, W, X** are required.

Total seat allocation: Minimum of **15**

Control & Amplification:**Mixing Console**

Roland M-400 Digital Mixing Console <http://www.roland.com/products/en/M-400/>

**Amplifiers**

(3) Jands, JBL SR1500, 2 Channel, 700w per channel @ 4Ω

(3) Jands, JBL SR3000, 2 Channel, 1400w per channel @ 4Ω

Speakers:**FOH Speakers**

JBL 'Array 4892' System (Left, Right and Centre cluster configuration.)

**Foldback**

(4) Yamaha MSR400 Powered Loudspeakers

Microphones:

| Make           | Model    | Detail / Accessories            | Use        | Total |
|----------------|----------|---------------------------------|------------|-------|
| Audio Technica | ATM31R   | Cardioid Condenser              | Instrument | 4     |
| Beyer Dynamic  | M88      | Hypercardioid Dynamic           | Instrument | 2     |
| ElectroVoice   | RE90B    | Half-Cardioid Desktop Condenser | Speech     | 1     |
| ElectroVoice   | RE90-P12 | Cardioid Gooseneck Condenser    | Speech     | 2     |
| Rode           | NT3      | Cardioid Condenser              | Instrument | 2     |
| Rode           | NT5      | Cardioid Condenser              | Instrument | 4     |
| Sennheiser     | MD 421   | Cardioid Dynamic                | Instrument | 1     |
| Sennheiser     | MD 441   | Supercardioid Dynamic           | Instrument | 1     |
| Shure          | SM57     | Cardioid Dynamic                | Instrument | 2     |
| Shure          | Beta58A  | Supercardioid Dynamic           | Vocal      | 4     |

Accessories:

| Item             | Model     | Detail / Accessories             | Total |
|------------------|-----------|----------------------------------|-------|
| Microphone Stand | Black K&M | Tall boom                        | 12    |
| Microphone Stand | Black K&M | Short boom                       | 2     |
| Speaker Stands   | Hercules  | Black/Yellow Friction/Pin system | 4     |

Cabling:**Audio Cable**

The theatre has a good stock of signal cable to accommodate the venue's equipment. Various patch leads are available upon request.

Line Patching:

| Location                                   | Quantity | Numbering        | Detail          |
|--|----------|------------------|-----------------|
| Mid-Stage Left (MSL)                       | 8        | 9 -12 and 81 -84 | 8 sends         |
| Mid-Stage Left (MSL)<br>fold back          | 2        | E,F              | 2 returns       |
| Mid-Stage Right (MSR)                      | 8        | 1-4 and 73-76    | 8 sends         |
| Mid-Stage Right (MSR) Fold-back            | 2        | A,B              | 2 returns       |
| Prompt side fold back                      | 2        | AA<br>BB         | 4 returns       |
| Downstage Right (DSR)                      | 12       | 13 – 24          | 12 sends        |
| Downstage Right (DSR) fold back            | 2        | G,H              | 2 returns       |
| Downstage Right Centre (DSRC)              | 12       | 25 – 36          | 12 sends        |
| Downstage Right Centre (DSRC)<br>fold back | 2        | I,J              | 2 returns       |
| Downstage Left Centre (DSLCL)              | 12       | 37 – 48          | 12 sends        |
| Downstage Left Centre (DSLCL)              | 2        | K,L              | 2 returns       |
| Downstage Left (DSL)                       | 12       | 49 – 60          | 12 sends        |
| Downstage Left (DSL) fold back             | 2        | M,N              | 2 returns       |
| Orchestra Pit tie lines                    | 12       | 61 -72           | 12 Sends        |
| Stalls Fold Back sends (side aisles)       | 12       | O - Z            | 12 Return Lines |

Speaker Patching:

FOH speakers are in a LEFT, RIGHT and CENTRE cluster configuration.

The Speaker system is fixed and cannot be moved.

This is patched via the Organ Loft store room OP side of stage.

The amplifier rack and system processor is also situated in the Organ Loft store room.

## **AUDIO VISUAL**

### **Vision**

Llewellyn Hall has a double stacked 16:9 projection system with a 20' x 11'3" Stumpfl front project screen. The system utilises HDSI processing and cabling to transport the vision signal. A mobile control rack with vision mixing/routing control can be located at various points in the venue for operation. The screen is assembled and rigged as required and can be flown on any lighting bar or installed freestanding if required. Please note that use of vision equipment is charged additionally to your hire if required.

### **Projectors**

2x NEC PX700W WXGA 7000 ANSI Lumen projectors with NP-10ZL lenses (long throw) or NP-08ZL (standard).

### **Screen**

1x Stumpfl Monoblox64 20' x 11'3" 16:9 aspect front project screen with suspension clamps for rigging on lighting bars.

### **Signal processing**

- **Portable Production rack**
- 1x ATEM 1/ME Broadcast switcher (4x HDMI Inputs, 4x SDI Inputs 1x Component/Composite input)
- 1x Teranex 2D standards converter
- 1x Smartview Duo 2x 8" SDI Screens
- 1x HyperDeck Studio Pro
- 1x 16x16 Micro Videohub
- 1x Smartview HD (in separate 6 RU Rack)

### **SDI/Standards Conversion**

4x Blackmagic HDMI to SDI Mini Converter  
1x Blackmagic Analog to SDI Mini Converter  
1x Blackmagic SDI to Analog Mini Converter  
2x Blackmagic SDI to HDMI Mini Converter  
2x TV one 1T-VS-624 RGB (VGA) to HDMI Scaler

### **Patch Positions**

For further detail about BNC patch points in the venue, Please contact the Technical Services Officer.

### **Cameras**

2x JVC Everio GZ-EX355  
1x JVC GX-PX100  
(all cameras have basic tripods)

### **Operating positions**

Vision operations can be positioned at various locations around the venue. Please contact the Technical Services Officer for further information.

### **Streaming Equipment**

1x Livestream Broadcaster

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

The Stage Managers desk is located on the OP(stage right) side of stage. The desk can be moved within this area and is fitted with a light, clock, HHB Professional dual drive CD recorder, and House and Work Lights control panel.

**Talkback**

Master Unit **ClearCom (model MS-704) system running 2 loops**  
 Total sub stations **4 Belt packs**  
 Total headsets **4**  
 Talkback patching located at: **Stage Managers Desk (Master Unit)**  
**Control Room**  
**Talkback can be routed to anywhere in house**  
**Talkback can be routed to Follow spots**

**Paging / Show relay**

Paging and show relay to Dressing Rooms 1 & 2, Rehearsal Room 1, and Larry Sitsky Recital Room is available from the stage managers desk.  
 Separate announcement microphones to house and foyer are available at the stage managers desk.  
 House recall is operated from stage managers desk only.

**Stage Monitor**

Stage-view LCD screen at SM position

**Cue Light System**

The is no in-house Cue Light System

**Dressing Rooms:**

| <b>Dressing Room</b>                     | <b>Capacity</b> | <b>Toilets</b>               | <b>Shower</b>                | <b>Details</b>                              |
|--|-----------------|------------------------------|------------------------------|---|
| Dressing Room 1<br>(11.9m <sup>2</sup> ) | 3               | 1 Via<br>Corridor            | 1 Via<br>Corridor            | Hanging Rack, Sink, Makeup Mirror,<br>Power |
| Dressing Room 2<br>(10.5m <sup>2</sup> ) | 3               | 1 Via<br>Corridor            | 1 Via<br>Corridor            | Hanging Rack, Sink, Makeup Mirror,<br>Power |
| Dressing Room 3<br>(10.8m <sup>2</sup> ) | 3               | Adjacent<br>male &<br>female | Adjacent<br>male &<br>female | Hanging Rack, Mirror, Power                 |

**Laundry / Wardrobe:**

Washing Machines **N/A**  
 Dryers **N/A**  
 Drying rooms **N/A**  
 Iron / ironing board **2**  
 Clothes racks **5**  
 Steamer **1**  
 Free-standing mirror **4**

Production Facilities:

**Production Desk:** A production desk can be set up in (2) positions within the stalls.

**WiFi:** Guest access available upon request.

**Production Office:** Production office space is available upon request.

**Phone:** Access to phone in Venue office or stage managers console.

**Access to Ethernet for internet access:** Access to technical office Ethernet line on arrangement with Technical Management.

Greenroom:

Tea / Coffee facilities      **YES**

Fridge / freezer              **YES**

Microwave                      **YES**

Running water                 **YES**

Stage Door:

There is no stage door. Access for artists and staff is through the main FOH entrance.

Catering:

On request. Please contact the Events and Venues Production Coordinator.

**REHEARSAL SPACES****Rehearsal Room 1:**

**10.6m x 10.6m**, timber flooring, general fluorescent light.

Bookings required for use.

**Larry Sitsky Recital Room:**

**22m x 9.5m**, timber flooring (7m x 9.5m).

Bookings required for use.

**Lighting Specifications:**

General fluorescent light, in four banks, individually switched and dimmable  
4 x 1K Theatre Fresnels, 2x 500w Patt 123 (non-dimmable, Off / On only)  
4 x FOH: (2 x OP, 2 x PS), focused centre stage; 2x P123, US downfill

**Audio Specifications:**

2 x Yamaha MSR12 powered speakers, wall mounted only  
1x JBL System Controller  
1 x Yamaha 166CX Mixer with 12 Mic inputs and 2 stereo line inputs  
1 x Sony CD Player  
1 x XY pattern condenser microphone pair for recording  
1 x HHB CDR-830 CD recorder  
1x Marantz PMD580 Solid State Stereo Recorder

**AV Specifications:**

Lecture Console also interfaces with audio system  
BluRay Disc, CD Player, VGA and HDMI inputs, Sony

**Big Band Room:**

**27m x 36m** Timber floor with optional carpet covering.

**Audio Specifications:**

1 x Sony DMR-100 Digital Mixing Console  
4 x Mackie SRM450 powered speakers hung as FOH  
1 x Tascam CDRW 411 CD recorder  
1 x XY pattern condenser microphone pair for recording  
Microphones and stands available upon request.

**Lighting Specifications:**

Jands 12 Chanel FPX dimmer  
Minim LSC 12ch Lighting Console

A small selection of theatre lamps are placed over performance area.  
A simple 3 colour overhead wash and FOH are preconfigured.  
Houselights are controlled from the LSC Console.  
Worklights/fluoros controlled by touch panel in entrance and biobox.

**ADDITIONAL FACILITIES & INFORMATION**Instruments and other equipment:

- (2) Steinway Model D pianos. Tuning to be arranged prior to use.
- (1) Allen Renaissance Quantum Series Q-345C Organ
- (1) Harpsichord
- (1) Fortepiano
- (100) Wenger Classic 50® music stands
- (1) Wenger Preface™ conductor's music stand
- (45) "Tempo" adjustable orchestral chairs (black cloth)
- (280) Sebel "Optima" non-adjustable chairs (blue vinyl, blue cloth, black cloth, red cloth)
- Piano stools
- Adjustable stools
- Cello boards
- Instrument stands
- Polecats, cross arms and black draping

**VENUE:**Contacts:

Venue Postal & Street Address: **Building 100, William Herbert Place, Acton, ACT 0200**

**Technical Services Officer**  
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**TICKETEK PTY LIMITED – Breanna Werner**



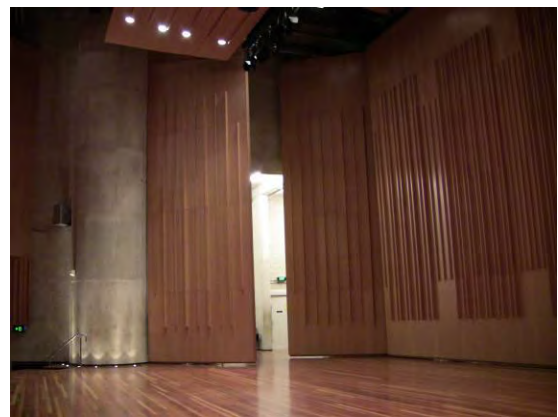
Front of venue access



Auditorium



Stage Managers desk and Organ loft  
(patch bay) OP side



Looking towards OP side showing  
permanent side-panels and moveable  
back-wall (with the access-door to stage in  
the background)

For interactive panoramas of performing spaces follow the links below:

[Llewellyn Hall](#)

[Larry Sitsky Recital Room](#)

[Big Band Room](#)



