



**ROY THOMSON
HALL**



**TECHNICAL
INFORMATION**



Technical Information

Roy Thomson Hall

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**ROY THOMSON
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Auditorium

The facility is a classical concert hall configuration. It features a trapezoidal shaped stage area with natural hardwood floors.

The auditorium is grey concrete with wood paneling in a clear maple finish. Drilling or screwing into the stage floor is not permitted.

The stage contains no masking and minimal stage left and stage right wing space. There is no proscenium.

The entrance to the stage is via upstage and downstage double doors.

Due to building code regulations the use of indoor pyrotechnics is forbidden.



Variable Acoustics

Roy Thomson Hall is configured with a fully automated variable acoustic system. The system is comprised of two overhead canopy's that can be configured at variable heights to accommodate differing acoustic or electro acoustic requirements.

In addition to the canopy a series of mechanically controlled heavy acoustic baffles and drapes can be deployed or removed around the perimeter of the auditorium. Deploying these banners greatly reduces the overall reverb time and reflectivity and is strongly recommended for any event using amplification.

Our house audio team is very familiar with the varying acoustic modes and can assist in recommending the most appropriate configuration for each event.



Typical Acoustic Configuration



Typical Amplified Configuration

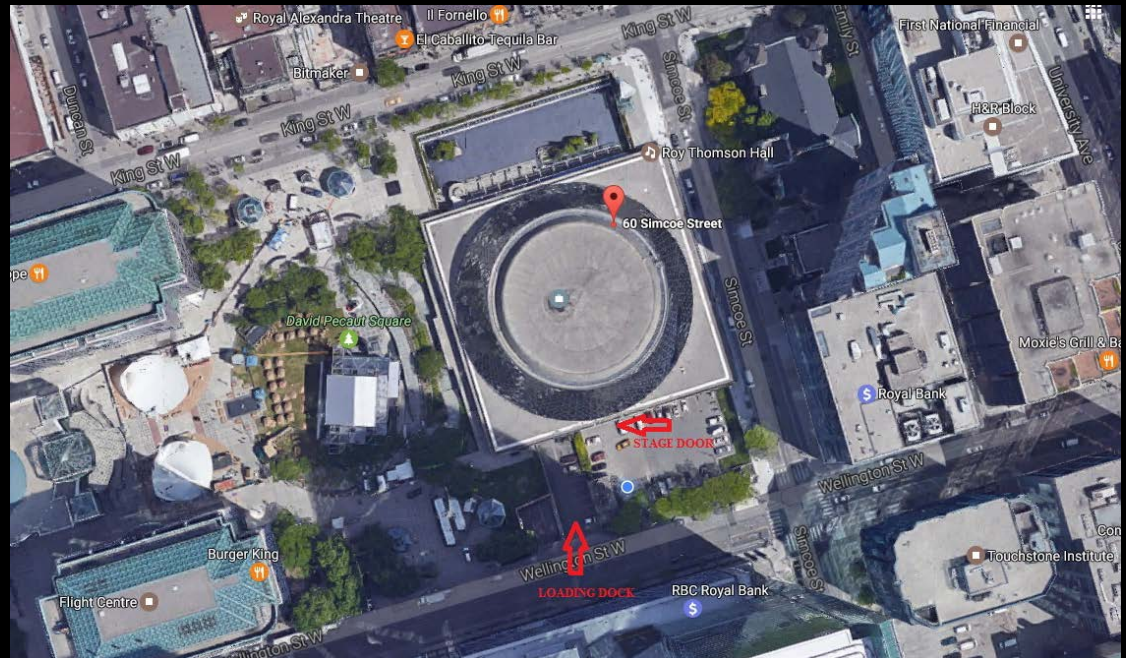
Parking

Loading Dock

Access must be prearranged, as there is an access gate. Loading ramp is inclined down from street level at an approximate 8-percent grade. Dock is at truck bed level. Two roll-up dock doors provide access to the hall. Loading doors are 100-inches high by 94-inches wide and lead directly on to the stage. Interior restrictions require that any stage material must fit through a 79-inch wide by 95-inch high door to reach the wing area, and 84-inches wide by 101-inches high to access the stage.

Parking Restrictions

Downtown parking is extremely limited; some production vehicle parking is available at the venue. Arrangements must be made in advance with venue management.



Auditorium Touring Power

Lighting Power

Location.....	Downstage right
Capacity.....	400AMPS
Phase.....	3
Voltage.....	120/208
Cycles.....	60
Connector	Cam Lock J Type
<i>Ground & Neutral Reversed</i>	

Audio Power

Location.....	Upstage left
Capacity.....	100AMPS
Phase.....	3
Voltage.....	120/208
Cycles.....	60
Isolated ground	
Connector	Cam Lock J Type
<i>Ground & Neutral Reversed</i>	

Video Power Stage

Location.....	Downstage left
Capacity.....	100AMPS
Phase.....	3
Voltage.....	120/208
Cycles.....	60
Connector	Cam Lock J Type
<i>Ground & Neutral Reversed</i>	

Video Power Projection

Location.....	Projection booth
Capacity.....	100AMPS
Phase.....	3
Voltage.....	120/208
Cycles.....	60
Connector	Cam Lock J Type
<i>Ground & Neutral Reversed</i>	

Loading Dock Power

Broadcast Power

Location.....	Loading dock
Capacity.....	400AMPS
Phase.....	3
Voltage.....	120/208
Cycles.....	60
Connector	Cam Lock J Type
<i>Ground & Neutral Reversed</i>	

Shore Power x 2

Location.....	Loading dock
Capacity.....	50AMPS
Phase.....	2
Voltage.....	120/208
Cycles.....	60
Connector	Range Plug

Facility Power

Patio Power

Location.....	Outdoor patio
Capacity.....	100AMPS
Phase.....	3
Voltage.....	120/208
Cycles.....	60
Connector	Cam Lock J Type
<i>Ground & Neutral Reversed</i>	

Lobby Power x 2

Location.....	L5 / R5 Lobby platforms
Capacity.....	100AMPS
Phase.....	3
Voltage.....	120/208
Cycles.....	60
Connector	Cam Lock J Type
<i>Ground & Neutral Reversed</i>	



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A wide-angle photograph of the interior of Roy Thomson Hall during a concert. The orchestra is performing on a stage at the bottom, with musicians seated with their instruments. The audience is seated in multiple tiers of balconies and the main floor, filling the large, circular hall. The lighting is dramatic, with blue and purple hues. The ceiling features a large, circular chandelier and various stage lights.

AUDIO

Auditorium Audio System

Centre Cluster

The cluster consists of the following:

- 11 - **Meyer JM-1P** Upper Main
- 3 - **Meyer UPQ-1P** Middle Main
- 1 - **Meyer UPQ-1P** Down Fill
- 1 - **Meyer UPQ-1P** Center Rear Fill
- 2 - **Meyer UPQ-2P** Center Corner Fill

Speakers are flown at a fixed bottom trim height of 26 feet and are in a cluster array above downstage center.

The cluster can be fully mechanically retracted to be hidden inside the acoustic canopy when not required.

FOH Drive Equipment

- 6 - **Meyer Galileo 616**
- 6 - **Opticore X6R**

Drive and FOH processing is not moveable and is located in various racks throughout the facility.

Front of House Console

AVID S6L 32 with **E6L 192** Engine

(Easily movable between main booth and main floor mix with advance notice)

Stage Rack System 1 - Control Booth Location

- 1 - **AVID Stage 64** I/O Rack
- 6 - **AVID SRI-192** Analog Input Card
- 2 - **AVID SRO-192** Analog Output Card
- 2 - **AVID DSO-192** Digital Output Card

Stage Rack System 2 - Stage Left Rack Location

- 1 - **AVID Stage 64** I/O Rack
- 6 - **AVID SRI-192** Analog Input Card
- 2 - **AVID SRO-192** Analog Output Card
- 2 - **AVID DSO-192** Digital Output Card

Stage Rack System 3 - Stage Right Location

- 1 - **AVID Stage 64** I/O Rack
- 1 - **AVID DSI-192** Digital Input Card
- 1 - **AVID DSO-192** Digital Output Card

Main Floor On-Deck Speakers

On-stage speaker stacks on custom cart, stage right and stage left, each containing:

- 4 - **Meyer JM-1P**
- 2 - **Meyer 700HP** Subwoofers (Standard configuration is 1 Subwoofer per side)

Distributed Support System

Stage apron front fill

- 7 - **D & B Audiotechnik F9**
- Under Mezzanine (for rear Orchestra)
- 18 - **Meyer UPM-1P** Delay Fills

Amplification

All speakers are self-powered excluding front fills

Monitor Console

AVID S6L 24 with **E6L 144** Engine

Monitor Console is located stage left and is easily moveable on a rolling cart
Monitor Console shares stage racks with FOH console via gain sharing

Monitors

- 12 - **L'Acoustics X12** Single 12' Monitor Wedge - Can be pole mounted
- 3 - **L'Acoustics LAX4** 4 Channel DSP Amplifier

Amplifiers are located in a installed rack stage left.

Monitor System can be fed AES or Analog

Touring Audio Consoles

Touring consoles are typically located house right at the rear of the right parterre seating section. This position offers a clear view of the stage. This position is 75' from downstage center and is underneath the mezzanine over hang.

Wired Microphones

Audio Technica

8 - 2020 Large Diaphragm

AKG

4 - C621E (Lectern Mic)

Beyer Dynamic

4 - 160

1 - M88

Crown

3 - PCC160

1 - PZM 6LP

Calrec

4 - Cardioid

Milab

3 - DC96

5 - DC73

3 - VM41

Neumann

5 - KM184

Radial

6 - Pro DI

Sennheiser

7 - MD 421

6 - E904

4 - E906

Shure

8 - SM 57

10 - SM 58

1 - SM 87

4 - Beta 57

2 - Beta 52

5 - Beta 58

4 - Beta 87

2 - Beta 91

Wireless Microphone System

Receivers

1 - **Sennheiser EM 9046 SU** System Unit Mainframe with Analog and AES Output Module

8 - **Sennheiser EM9046 DRX** Digital Receiver Module

2 - **Sennheiser AD9000** Active Directional Antenna w 25ft cables

Transmitters

8 - **Sennheiser SKM 9000** Handheld Transmitter with **MMK 965** Capsules

8 - **Sennheiser SK 9000** Body pack Transmitter with **MKE 1-4**

Lavalier Microphones

4 - Sennheiser Lemo to Instrument cable adapters

*Note body packs are equipped with **Lemo** connectors*

All transmitters are equipped with BA 60 and BA 61 rechargeable battery packs

Lobby and Portable Sound System

Lobby Main Sound:

4 - Meyer UPJ-1P speakers. 2 located on North Platform, 2 located on South platform. Speakers can operate independently or in tandem via Crestron control

4 - L'Acoustics 108P Powered Monitors. Can be used as monitors or pole mounted.

Portable Mixing Systems:

2 complete systems each contained in a custom rolling rack with:

1 - APB Dynasonics Pro Rack - House H1020 with 12 + 4 input stereo mixer with 6 switchable AUX sends

1 - Denon DN-C635 CD Player

1 - Sennheiser 2000 Series Wireless Handheld and Lavalier Combo Kit

Additional Mixers:

1 - AVID S3L

2 - AVID Stage 16 remote input boxes

Intercom System:

A two-channel ClearCom system with 12 locations: lighting control booth, sound mixing booth, spot booth x 2, stage-left wing area, stage-right wing area and 6 belt packs and headsets



LIGHTING

Lighting Fixtures

Overhead Stage positions

40 Robe DL7S Profile Moving Lights
60 ETC Source 4 Luster 2
Orchestra Wash focus cannot be altered

FOH positions

House Right
6 - 10-degree Source Four
2 - 5-degree Source Four

Centre

4 - 5-degree Source-Four

House left

6 - 10 degree Source Four
2 - 5 degree Source Four

Spotlights

2 - 2.5K Xenon Gladiator IIs w/ 6 colour frames.
Located in followspot booth house center. *Throw is 130'*



Lighting Control

Lighting Console

Grand MA2 Full-size. Located in the house control booth on the mezzanine level. MA on PC Backup with NPU located Stage Left.

DMX 512 Control

Pathport C-Series Nodes with 2 DMX ports
2 in the lighting control booth
1 in the followspot booth
1 in the Stage manager's booth, stage right
2 in the projection booth, centre, rear house
2 parterre seating, house left
2 parterre seating, house right
2 down stage right wing
1 offstage left utility room
Others in attic spaces in the auditorium, integral to circuit

panels

Connectors

L5-20 twist lock - 20 Amps, 120 Volt

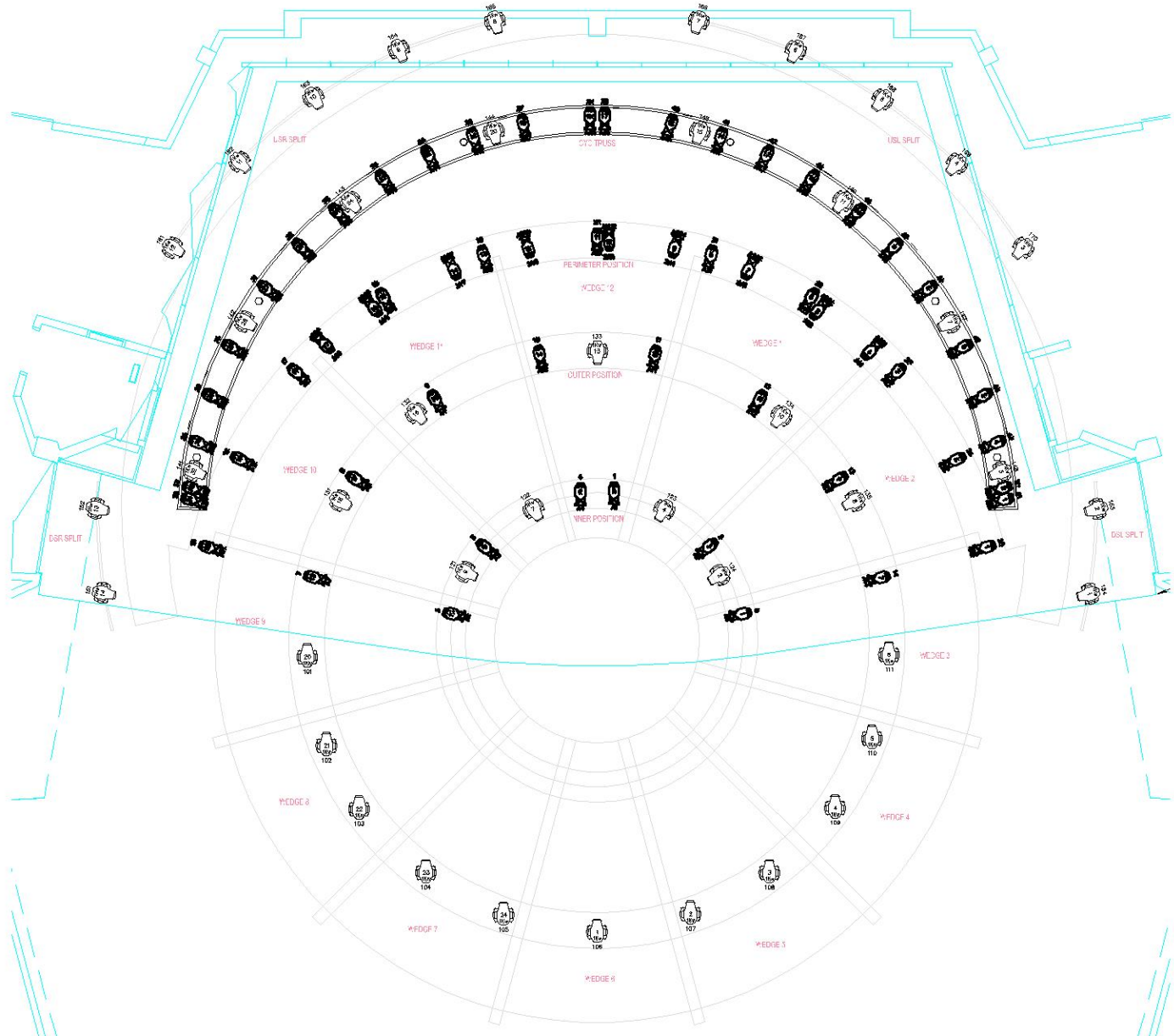
Lighting Circuits

Dimmers and Relays as required for house fixtures

Touring Lighting Consoles

Touring lighting consoles are typically located house left at the rear of the left parterre seating section. This position offers a clear view of the stage and is supported with ClearCom.

Lighting Plot

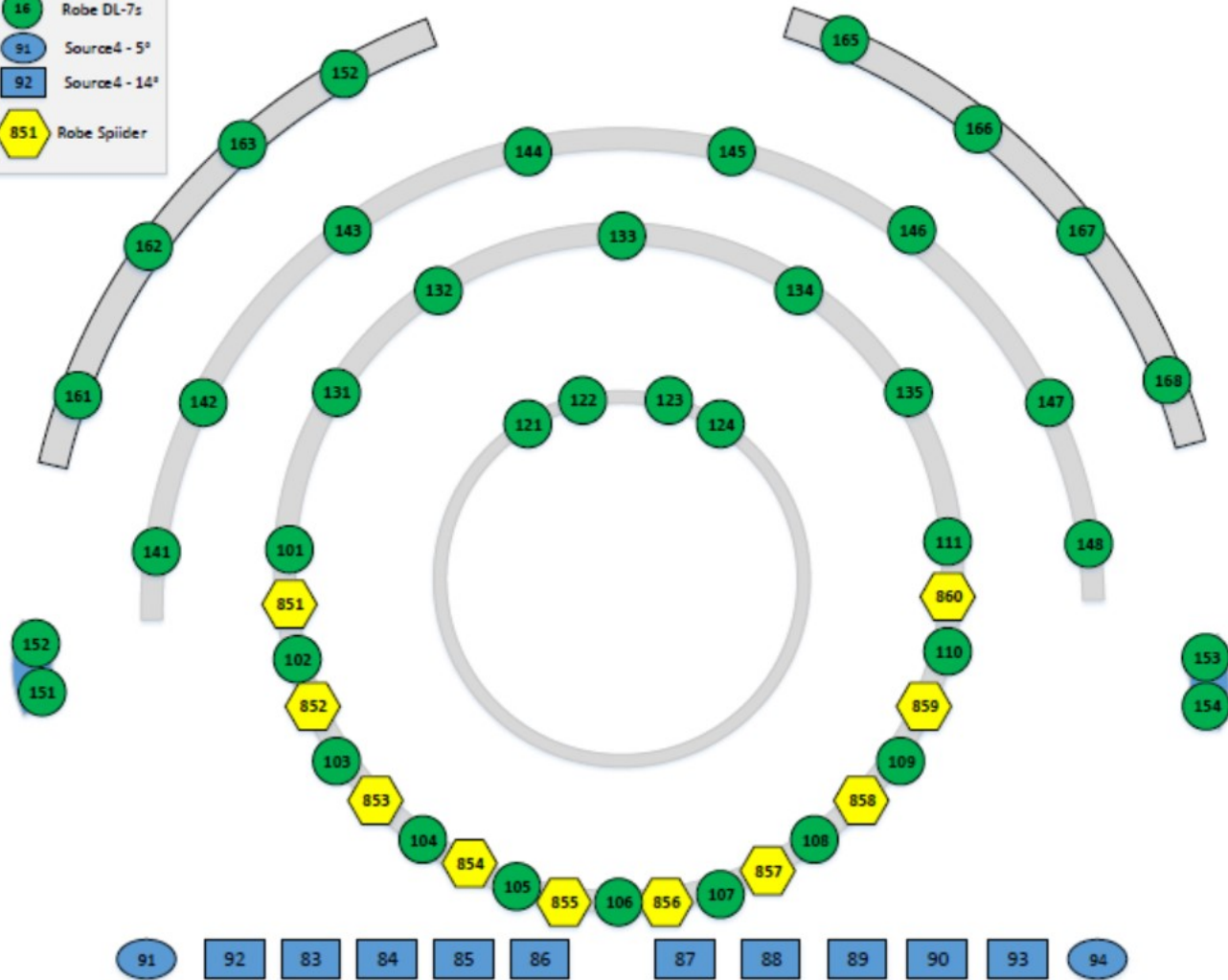




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- 16 Robe DL-7s
- 91 Source4 - 5°
- 92 Source4 - 14°
- 851 Robe Spider





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tiff

tiff



VIDEO



Dual Screen 1080p Video System

Projectors

- 2 - Christie Digital D16WU-HS 16K laser phosphor projector
- 2 - Christie Digital .84-1.02:1 short throw lens

Screens

- 2 - Da-Lite 40398 16' x 9' rear projection screens permanently hung upstage.
- 2 - TorkStar winch to allow screens to raise out of sight when not in use.



Centre Stage 1080p Video System

Projectors

- 2 - Christie Digital Crimson HD25 25K laser phosphor projector
- 2 - Christie Digital 4.5-7.3SX+/4.1-6.9 HD lens

Screen

- 1 - Da Lite 19' x 32' front projection screen with flying modification and floor stand



Live Switching and Control System

- 1 - Analog Way Eikos 2 Switcher with 19 inch preview monitor
- 1 - Blackmagic Design 4 M/E Broadcast Studio 4K
- 1 - Blackmagic Design ATEM 1 M/E Control Panel

- 1 - Ross OGX-FR-CN Card frame for Opengear broadcast converter cards
- 2 - Blackmagic Design Analog to SDI converter Opengear card
- 8 - Blackmagic Design HDMI to SDI converter Opengear card
- 1 - Blackmagic Design Sync Generator Opengear card
- 1 - Blackmagic Design Up/Down cross converter Opengear card
- 2 - Blackmagic Design SDI output distribution Opengear card

- 1 - Blackmagic Design Teranex Standards Converter
- 1 - Blackmagic Design Audio Monitor 12G
- 1 - Blackmagic Design Smart View dual SDI Monitor
- 1 - Blackmagic Design SmartScope Duo 4K

- 1 - Cisco SG300 10 port POE managed switch

Converters

Various SDI,HDMI, DVI,VGA video and audio format converters, embedders and testers

Remote Cueing

- 1 - DSAN Perfect Cue for wireless remote AV cueing - 2 remotes available

Archival Video Recording

Capability to record a digital audio or video file from the house feed with program sound embedded. Please note this recording is for archival purposes only and the image is imbedded with a visual time stamp. Any other use of captured audio or video material will be subject to IATSE Recording Premium Fee.





A live performance at Roy Thomson Hall. A conductor in a dark suit stands on a raised platform, leading an orchestra. The orchestra includes violinists, violists, cellists, and double basses. In the foreground, a guitarist in a grey suit and hat plays an electric guitar. To the right, a soloist in a bright red outfit plays an acoustic guitar. The stage is lit with warm, golden lights, and the background features a large, dark curtain.

CONTENT CAPTURE

Video Capture Studio

PTZ Camera System

7 - Panasonic HE-130 1080i PTZ Camera

Permanent Camera locations

House Left
Center Rear 1
Center Rear 2
House Right
Upstage Center (Reverse Shot)
Floater 1 - stand mounted can be placed anywhere
Floater 2 - stand mounted can be placed anywhere

***Cameras control and signal are transmitted over Singlemode fiber via Multidyne Multi-Rate serial & Fiber-Optic Transmitter and receiver pairs.*

PTZ Camera Control

1 - RCT CS-3 PTZ Remote panel and CCU with HE-130 Firmware

Live Switching & Control System

1 - Blackmagic Design 4 M/E Broadcast Studio 4K
1 - Blackmagic Design ATEM 1 M/E Control Panel
1 - Blackmagic 12G-SDI Smart Video Hub
2 - Blackmagic Design Multiview 16
1 - Blackmagic Design Teranex Standards Converter
1 - Blackmagic Design Audio Monitor 12G
1 - Blackmagic Design SmartScope Duo 4K

Control Room Video Monitoring

1 - Marshall QVW-1708-3G 17" Production QC Monitor
2 - Samsung 55" UHD monitors - Multiview Cameras and Preview/Program
1 - Samsung 32" UHD monitor (Audio Console Program)

Video Recorders

9 - Blackmagic Design Hyperdeck Studio Pro 2 Camera ISO Recorder
1 - AJA Ki Pro Rack Program Feed Recorder

***Please contact your Roy Thomson Hall Production Coordinator to advance recording media requirements and specifications.*



Streaming Interface

1 - Blackmagic Design Web Presenter Streaming Interface
1 - Blackmagic Design Smart Panel

Video System PC, Storage & Software

1 - Apple Mac Pro w 32GB RAM 2TD SSD
1 - LG Ultrafine 5K 27" Display
1 - Blackmagic Design Multidock 2 Thunderbolt 4-Bay SSD Chassis
1 - AJA Ki Pro SSD Dock

***Wirecast Pro, OBS, Final Cut Pro, Various Blackmagic hardware control software*

Building Wide Video Distribution

1 - Contemporary Research QMOD-SDI 2 HDTV Modulator/IPTV Encoder

System Clock and Timecode

1 - Tascam CD-1800 Master Clock Generator

Audio Capture Studio

Audio Recording Console

- 1 - AVID S6L 24C Console
- 1 - AVID E6-112 Engine 112 x 48 Ch + 16 Matrix
- 1 - AVID Stage 32 Stage Rack 24 x 8 (Portable Rack)
- 1 - AVID Stage 32 Stage Rack 24 x 8 (Portable Rack)
- 1 - AVID Stage 32 Stage Rack 24 x 8 (Installed in Control Room)
- 1 - Dell P2418HT 24" Touchscreen Monitor

Audio Monitoring

- 2 - Focal Trio6 BE Nearfield Studio Monitors
- 1 - Focal Sub 6 Subwoofer

Audio System PC, Storage & Software

- 1 - Apple Mac Pro w 32GB RAM 2TD SSD
- 1 - Dell P2418HT 24" Touchscreen Monitor
- 1 - Synology DS918+ Raid drive with 4TB NAS Drives

Pro Tools 12 with live sound production bundle 128 Track 96K Record

Backup Hardware Audio Recorder

- 1 - **Tascam DA6400** 64 Channel Solid State Recorder
- 2 - **Tascam IF-MA64-BN** 32 Ch MADI I/O Card for DA-6400

Analog Tie Lines

- 12- XLR to Acoustic Canopy over stage
- 14 - XLR Auditorium Ceiling over house
- 2 - XLR Upstage Left
- 2 - XLR Upstage Right
- 4 - Audience Booth Input
- 7 - Audience booth Trunk Lines

Fibre Tie Lines

- 2 - Downstage Left Dual Multimode LC connector
- 2 - Downstage Right Dual Multimode LC connector
- 1 - Downstage Left Opticon Quad Multimode (Avid Stage Rack Connection)
- 1 - Downstage Right Opticon Quad Multimode (Avid Stage Rack Connection)

Communication

- 1 - Clearcom MS 702 2 Channel Base Station - Integrated with house COM





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RIGGING

Rigging points exist in a grid-like pattern above the stage and above the auditorium for additional lighting, video or other uses.
Each point is rated for 1500 pounds. Refer to plot for point locations

House Chain Hoists

- 16 Way **Show Distribution** motor controller
- 1 - 16 Way **Show Distribution** Motor distro located in ceiling

House motors are inverted with the motor body in the ceiling. Motors can be manually moved between points.

Load Monitoring

- 8 - **Motion Lab Cell Mate** wired load cells
- 1 - **Motion Lab 8 cell Cell Mate** control hub

Client Chain Hoists

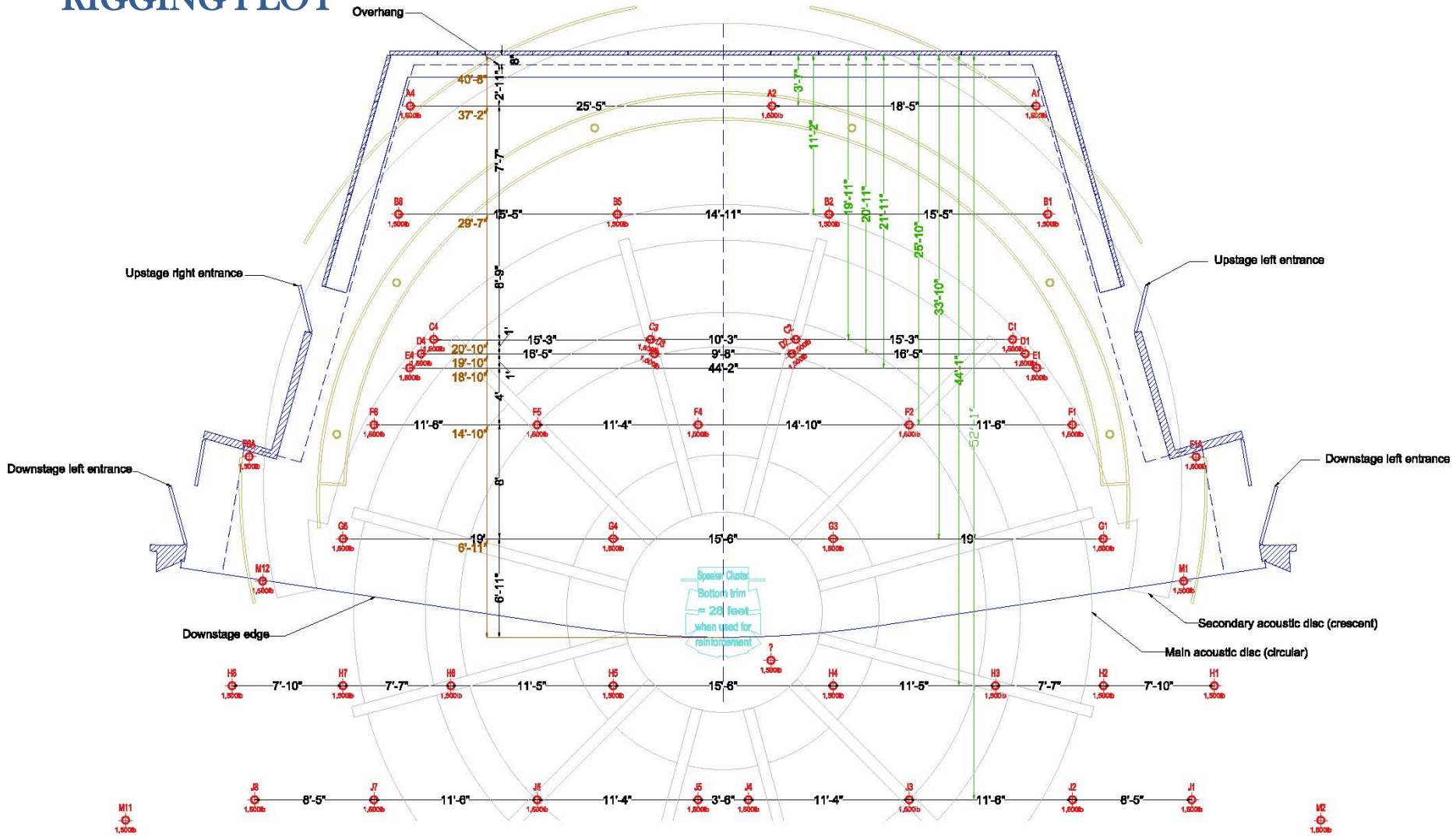
Client Chain Hoists may be hung on any house points required in standard configuration.
House motor restore charges may apply

Additional Rigging and Supplies

All truss and rigging connections to house motors must be supplied by a venue arranged local rental or client. Contact your production coordinator for trussing and rigging options and pricing.



RIGGING PLOT



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DREAM
SERENADE



PROPS

Stage Drapes

Various stage drapes available, please contact RTH Production for available quantities and sizes.

Risers

House choral seating risers are 72" x 34". There are 7 riser at each of 8", 23", 38", 53", and 68"

In addition there are 6, 4'x 8' x 1' high risers

Music Stands

Music Stands.....	100
Conductor Stand.....	1
Music Stand Lights.....	60
Black Orchestra Chairs.....	200

Musical Instruments

- 1 - Steinway D (Hamburg) grand 9-foot
 - 1 - Yamaha C9 (Previously owned by Glenn Gould) in main lobby
 - 1 - Heintzman upright piano (Pitch A440) in an artist dressing room
 - 2 - Yamaha upright pianos in artist dressing rooms
 - 1 - Full concert pipe organ with remote console option
 - 1 - Heintzman Baby Grand 6'
- All other pianos by arrangement.

Piano Tuner

Pianos tuned by house tuner as required.

Lecterns

- 2 - Podium Pro VH1 lecterns steel and maple
- 1 - clear Lucite lectern
- 2 - custom gray lecterns with logo card rails

