

Adrienne Arsht Center

FOR THE PERFORMING ARTS OF MIAMI-DADE COUNTY



John S. and James L. Knight Concert Hall

Technical Specifications



Courtesy of Arsht Center

Address & Telephone Information

1301 Biscayne Boulevard
Miami, FL 33132

Main: 786-468-2000

Fax: 786-468-2004

Box Office: 305-949-6722

Security/Stage Door: 786-468-2081

Production Department

Director of Production	Christy Havard	914-419-9646 chavard@arshtcenter.org
Production Manager	Kristen Pieski	330-524-6683 kpieski@arshtcenter.org

House Crew

Head Carpenter	Fred Schwendel	786-468-2411 fschwendel@arshtcenter.org
Head Electrician	Chad Eaton	786-575-9829 ceaton@arshtcenter.org
Head Audio	Jarkevis "DJ" Howell	239-306-0898 jhowell@arshtcenter.org

John S. and James L. Knight Concert Hall

The John S. and James L. Knight Concert Hall (KCH) may be acoustician Russell Johnson's most complete vision, hosting a variable acoustic system including a $\frac{3}{4}$ round reverb chamber and an adjustable spiral shaped canopy. The KCH is closed off from the outer reverb chamber by 84 large doors and a system of drapes which can be adjusted to control the dynamics of the room. This design, along with isolation channels throughout the building ensures the hall is completely removed from ambient sound and vibration. The KCH is acoustically adaptable to any kind of performance, from a small chamber ensemble to a full orchestra, or from spoken word to jazz.

The stage is in the shape of a shallow half circle with a mean radius of 44'. There are two lifts. The inner, the piano lift, is an 18' wide by 9' deep ellipse evenly inset between the stage and the outer pit. The area of the outer stage extension measures 63'10" wide by 8'1" deep at center and increases to 13' deep off stage. When lowered to orchestra pit position, the area is 63'10" wide by 27' deep.

Suspended above the stage is an acoustical canopy in three units. Each section moves independently to further tune the hall. The preset positions are designed for the specific nature of the performance. The canopy also houses 93 moving lighting instruments which comprise most of the hall's concert lighting.

**** Please reference: [Concert Hall Ground Plan](#)**

Labor

The Center holds a collective bargaining agreement with the International Alliance of Theatrical Stage Employees (I.A.T.S.E). KCH Department Heads (4) and any additional stagehands called to work in the theater are members of I.A.T.S.E. Local 500. House equipment, including but not limited to personnel lifts, lighting consoles, sound consoles, stage lifts, and canopies will be operated by an Arsht Center Department Head or a stagehand designated by the venue Steward.

Fire Safety

City of Miami Fire

City of Miami Fire Rescue Inspectors are contracted for any performance or event that uses open flame, smoke, haze or pyrotechnic effects. **Fire Watch requests should be provided as part of the advance, and should be submitted to Production *no later than 2 weeks before the date of the event.***

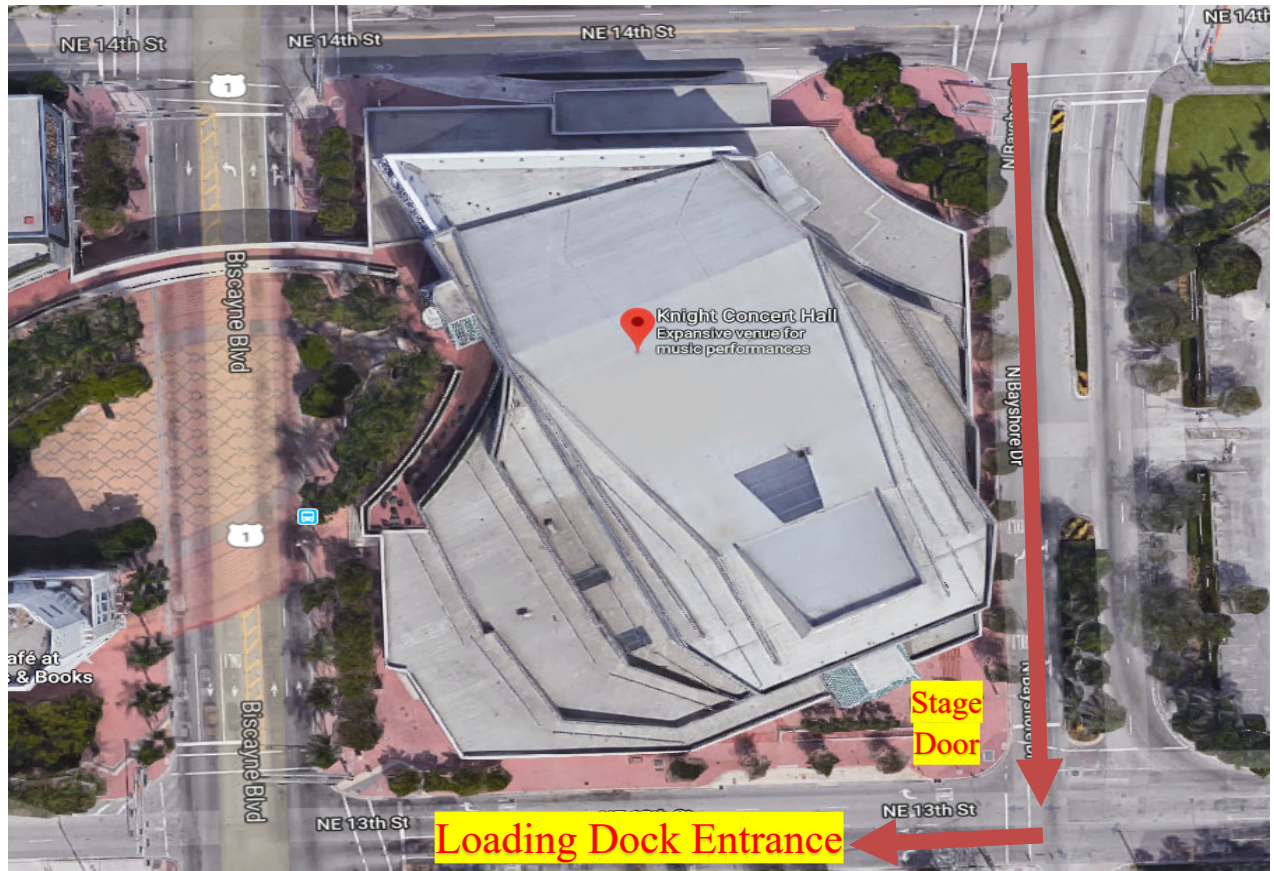
Seating

The Knight Concert Hall has a seating capacity of 2,166 distributed among an Orchestra level and three tiers, including 200 choral seats up stage that may be used for seating.

Orchestra Pit	95
Orchestra Main	467
Orchestra Circle	432
Box Tier	100
Second Tier	334
Third Tier	489
Choral Risers	128
<u>Choral Wagons</u>	<u>72</u>
Grand Total	2167

Loading Dock

The loading dock is located on Northeast 13th street between Biscayne Blvd. and North Bayshore Drive. The dock has three bays and can accommodate two full-size 53' trailers (cabs do not fit inside the gate). The full area of the dock is sheltered from weather. There is a direct push from each bay onto the stage. Backstage head clearance is 6' 9". All props/set pieces must clear 6' 9" standing or laying.





The Stage Door is located at the intersection of North Bayshore Dr. and Northeast 13th Street. For safety and security of guest and staff, anyone working or visiting the Knight Concert Hall is required to check in with Security at this entrance, without exception. Those not having proper identification and authorization will be denied entry and asked to leave.

Swanee and Paul DiMare Stage

The KCH stage is symmetrical about centerline.

Dimensions

Stage depth:	44' -6"
Stage width:	79'
Piano Lift:	18' wide x 9' deep (elliptical)
Pit size large configuration	63'10" wide x 27' deep
DCS to Follow Spot Booth:	117'
DCS to Projection Booth:	100'
DCS to Sound and Light Booth	104'4"
DCS to FOH lighting cove at center	97'10"
DCS to FOH lighting cove near	88'10"
Stage elevation from Orchestra floor	3'6"
House mix positions to stage:	66'7"
Backstage minimum clearance	6'9"

The Knight Concert Hall stage has two staging elements that can be configured to provide the best use of space and acoustic reinforcement:

[Orchestra Riser Palette](#) which can be deployed to create a multi-tiered playing space, adjustable to a variety of configurations according to the needs of the orchestra.

[Choral Wagon](#) ([detail drawing](#)) Positioned along the back curvature of the stage to create a more intimate playing area. Both architectural elements are time and labor intensive to reconfigure.

Any changes to the positioning or configuration of these elements must be discussed ahead of time and taken into consideration in both the production schedule and budget.

Electrical Information

Show Power Distribution

Loading Dock	1 - 400A, 1 - 200A and 1 - 100A 5-wire disconnects
Stage Left	1 - 60A isolated for sound, 5-wire disconnect
Upstage Left	1 - 100A, 5-wire disconnect
Back wall	1 - 400A, 5-wire disconnect
Stage Right	1 - 100A, 5-wire disconnect
Basement	1 - 200A isolated for sound, 5-wire disconnect

Lighting Information

Overhead lighting plot consists of approximately 93 automated fixtures arranged in concentric half circles radiating upstage from the center speaker cluster. Plot must be used as hung. Due to rigging limitations it is cost prohibitive to alter the hang on the overhead acoustical canopy.

Please specify if your production will require a lighting designer or if additional time is needed for show specific cueing. Additionally, there are several conventional units to be used from the FOH cove and balcony hanging positions.

**** Please Contact a Production TD for the [Knight Concert Hall Section](#) and [Light Plot](#) details**

Lighting Equipment

- Lighting Console is a Grand MA3 Light (4096 parameters).
- Backup Console consists of a Grand MA3 RPU with a NPU.
- Wireless handheld remote via Apple iPad running Grand MA3 Application.
- House Lights, Work Lights, and non-dims run off the separate Paradigm control system with local button controls and touchscreens on stage left, stage right, and at FOH booth position.
- DMX 8 port at lighting booth location to accommodate inputs and outputs. Also any MA3 Nodes can be converted on various locations to accommodate 2 DMX inputs.
- Dimmers: 311 [Strand CD-80](#) 2.4k dimmers plus 1 Strand CD-80 6k dimmer

Fixtures:

16	ETC Source 4 10° @ 750w
24	ETC Source 4 15°/30° Zoom @ 750w
8	ETC Source 4 25°/50° Zoom @ 750w
16	HES Solaframe 1000
10	HES Solaframe 3000 Ultrabright
2	Lycian SuperStar 1275 1.2kw follow spot
8	HES Quads
81	HES Solaframe Theatre Ultrabright
8	HES Turbo Ray

Audio Information

Mix Position

The Front of House sound mix position is 9' deep x 8' wide—can be expanded to 16' wide—and is located 66'-7" from the plaster line. *If your production requires the **Expanded Position**, advance notice must be given, in writing, to allow for seat removal and adjustment in ticket sales.*

Sound Control Room

- 1 Meyer Galileo Galaxy 816-AES3
- 1 L'Acoustics P1
- Mic / Line Level Patch-bay
- Double-paned windows can open to the house

Consoles

- FOH Yamaha Rivage PM7
 - 1 HY256-TL (Twinlane, Multi-Mode Fiber)
 - 1 HY144-D-SRC (Dante)
- 1 RPi0622
 - 1 HY256-TL
 - 5 RY16-ML-SILK (80 Channels)
 - 1 RY16-DA

- MONITORS Yamaha CL5
 - 2 Rio3224-D2

Mains L & R

- 14 L'Acoustics Kara II Line Array
- 3 L'Acoustics KS28 Subs (Cardioid Configuration)

Center Cluster

- 10 L'Acoustics Kiva II Line Array
- 3 L'Acoustics SB15P (Cardioid Configuration)

Front Fills

- 10 L'acoustics 5XT

Side Fills

- 2 L'Acoustics X8 (Orchestra Level)
- 4 L'Acoustics X12 (Box Tiers 1, 2)

Under Balcony Speakers

Tannoy 70v

Monitors

- 12 EAW SM200iH Passive Wedges
- 8 Crown Macro-Tech 2402 Power Amps
- 4 EAW NT26 Active Speaker
- 10 Shure P6HW wired IEM packs

On Stage Split

Whirlwind 52 Channel 3-Way Isolated Split

Microphones, Direct Inputs, RF

- 5 Shure AD4Q Axient Digital Receivers (20 Channels)
- 20 Shure AD1 Body Packs
 - 2 Point-Source EO-8WL Lavalier, Black
 - 2 Point-Source CO-8WL Ear Worn, Beige
 - 14 Point-Source CO-8WL Ear Worn, Brown
- 8 Shure AD2 Handheld Transmitters
 - 8 Beta 58 Capsules
 - 8 DPA 2028 Capsules
- 9 Astatic 1700VP Variable Pattern Condenser (Choir Mics)
- 1 Schertler DYN-GP-SET (of 2) Piano Transducers
- 1 DPA 3552 Piano Kit (2 DPA 4052 Omni Condenser)
- 4 DPA 4099 with: 3 guitar clips, 2 violin clips, 4 horn clips, 2 bass clips, 2 magnetic piano mounts
- 3 AKG C414 XLS
- 1 Earthworks DK25L Drum Kit (3 x SR25, 1 x Kick-pad)
- 4 Earthworks SR30
- 2 Earthworks SR20
- 1 Electro-Voice RE20
- 3 Sennheiser MD 421 II
- 3 Sennheiser e904
- 3 Sennheiser e604
- 6 Crown PCC160
- 4 Shure Beta 181c
- 4 Shure KSM 313
- 2 Shure KSM 44
- 6 Shure Beta 57
- 1 Shure Beta52
- 3 Shure Beta 98 D/S (Drum & Horn Clips)
- 3 Shure Beta 98 AMP (Drum Clips)

- 12 Shure Beta 58
- 4 Shure SM 58
- 2 Shure SM 58S (Switched)
- 6 Shure SM 57
- 4 BSS AC133, Mono, Active DI
- 4 Whirlwind Director, Mono, Passive DI
- 2 Whirlwind Direct 2, Stereo, Passive DI
- 2 Whirlwind PCDI, Stereo, Passive DI
- 1 Radial JPC Stereo, Active DI
- 1 Radial JD6 6-Channel Passive DI
- Various - Stands/Cables/Sub-snakes

Other

- 9 Clearsonic A2466x6 6-Panel Plexiglass Drum Baffles (12'W x 5.5'H)
- 2 Clearsonic A2466x5 5-Panel Plexiglas Drum Baffle (10'W x 5.5'H)
- 2 Clearsonic A1224x4 4-Panel Plexiglas Baffle (4'W x 2'H)

Dressing Rooms

- 1 Conductor Dressing Room (with private sink, toilet and shower)
- 5 Soloist Dressing Rooms (with private sink, toilet and shower)
- 1 Large Men's dressing Room (with sinks, toilets and showers)
- 1 Large Women's Dressing Room (with sinks, toilets and showers)
- 2 Choral Assembly Rooms (with sinks and toilets)
- 1 Performers Lounge
- 2 Visiting Company offices

**** Please refer to [Dressing Room Schedule](#) for assignment**

Other Spaces

Peacock Education Center	53' 0" D x 68' 0" W
*** PEC is shaped like a right trapezoid and can be split into 2 separate spaces	
	Space A: 55' 0" D x 33' 6" W (Angular)
	Space B: 53' 0" D x 33' 8" W (Rectangular)
Joyce and M. Anthony Burns Green Room	25' 0" D x 34' 0" W
Mrs. Paul J. Cejas Patrons Salon	39' 0" D x 34' 0" W

Bucket & Scissor Lifts

(These lifts are shared amongst all 3 stages on campus. If needed, please confirm scheduling and use with your Technical Director before load in begins.)

- 2) 40' Genie AWP-40S Single Person lift
- 1) 25' Genie GS-1930 Scissor lift
- 1) 32' Sky Jack SJIII4632 Scissor lift