

# CAROLINA PERFORMING ARTS

## Memorial Hall TECHNICAL SPECIFICATIONS

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### CONTACT INFORMATION

Travis Creed	<i>Director of Production</i>
<i>Email</i>	jtreed@unc.edu
Aaron Pickett	<i>Senior Production Manager</i>
<i>Email</i>	picketta@email.unc.edu
Radu Iftimie	<i>Production Manager</i>
<i>Email</i>	iradu@unc.edu
<i>Production Office</i>	919-843-3455

### MAILING ADDRESS

Memorial Hall  
CB# 3233  
Chapel Hill, NC 27599-3233

### SHIPPING ADDRESS

Memorial Hall Loading Dock  
140 E Cameron Avenue  
Chapel Hill, NC 27514

### DRIVING DIRECTIONS

I-40 to NC-86 (Exit # 266)  
Travel toward Chapel Hill until Cameron Ave.  
Left on Cameron  
Memorial Hall is 3<sup>rd</sup> building on the right

### SEATING CAPACITY

Total Capacity	1434
Orchestra Level	916
Balcony Level	518

### STAGE DIMENSIONS

*NOTE: All US/DS dimensions are taken from plaster line*

Proscenium	48' 3" W x 30' H
Stage Material	Sprung, oak hardwood (ROSCO ToughPrime black)
Stage Deck	
Width <sup>1</sup>	87' 5" SL lockrail to SR wall
Depth <sup>2</sup>	44' 2" Plaster line to US wall
CL to SL Lockrail	40' 6"
CL to SR Wall	46' 11"
CL to SL Midrail	36'
CL to SR Midrail	38' 9"
Stage Height above house floor	3' 4"
Plaster Line to edge of apron at CL	7' 9"
Plaster Line to edge of apron at SL/SR	5' 9"

**LIGHTING**

Theatrical lighting control	
ETC Ion w/ 2x20 Fader Wing	
Remote focus via iRFR app	
ETC Nomad USB key	
Console location options <sup>3</sup>	
Back of balcony, back of orchestra level, DSL, DSR, midrail SR	
Architectural lighting control	
ETC Paradigm control system	
Architectural lighting control locations	
DSL and DSR permanent, one portable unit	
Dimmers ETC Sensor+ installation racks	
Theatrical 20A	282
Architectural 20A	37
alternate ThruPower 20A	6
Lighting fixtures <sup>4</sup>	
Altman Lighting 4-circuit 8'6" ZipStrip	5
Chroma-Q Color Force II 72	10
DeSisti Monet Fresnel 2K	10
ETC Source 4 Fixture Body 575W	157
10° Lens Tube	13
19° Lens Tube	58
26° Lens Tube	41
36° Lens Tube	40
50° Lens Tube	14
ETC Source 4 PARNet 750W	38
ETC Source 4 PAR 575W	66
WFL, MFL, NSP, VNSP lens options	
Followspots	
Lycian SuperArc 400	2
Lighting cable	
5' Stagepin cable	40
10' Stagepin cable	40
25' Stagepin cable	40
50' Stagepin cable	10
100' Stagepin cable	6
10' Multicable extension	5
20' Multicable extension	5
25' Multicable extension	5
50' Multicable extension	4
3' Multicable break-out	4
3' Multicable break-in	4
Multicable batten lay break-out <sup>5</sup>	25
Two-fer	35
Lighting accessories	
PARNet/PAR barndoor	20
Drop in iris	10
Source 4 A size pattern holder	10
Source 4 B size pattern holder	10
Source 4 Top Hat	40
20' boom	10
10' boom	10
50 lbs boom base	10
Super-Mega Side Arm 18"	50
Scenery bumpers	8
Starhazer II	1
12" Pigeon plates	10

**LIGHTING cont.**

Circuit locations	
<b>Cir #</b>	<b>Location</b>
1-36	Cove
37-42	Light Booth
43-48	Balcony Rail
49-66	SR MidRail
67-72	Orchestra Pit
73-256	Stage Overhead
257-259	DSL
260-262	DSR
263-270	USL
271-274	USC
275-282	USR

**PROJECTION**

Projector	
Panasonic PT-RZ12K	12000 ANSI Lumens
Lenses	
Panasonic ET-D75LE30 2.4-4.67 Zoom	1
Projection Surfaces	
AV Stumpfl 9'x16' (FP)	Ground supported or hung
The Screen Works 4'x12' (FP)	Hung only
Projection Measurements <sup>7</sup>	
Balcony Rail	
Distance	61'
Angle	9°
Cove	
Distance	61'
Angle	47°
First row of Orchestra Level	
Distance	19' 8"
Angle <sup>8</sup>	-17°
Last row of Orchestra Level	
Distance	80'
Angle	0°
First row of Balcony Level	
Distance	64'
Angle	11°
Last row of Balcony Level	
Distance	102'
Angle	15°
FOH Mix Position	
Distance	83'
Angle	0°
Lighting Control Booth	
Distance	106'
Angle	17°

**VIDEO**

40" Flatscreen Monitor	2
42" Flatscreen Monitor	3
Signal Converters	
Decimator MD-HX (scalable)	2
Decimator MD-LX	2
LiveStream Package	
Mac Pro Rack	1
Focusrite Rednet Dante Card	
BlackMagic DeckLink SDI Card	4 port
OBS Controller, sent to CPA YouTube	
Panasonic HD Camcorder	2

**AUDIO**

FOH consoles	Midas M32
Inputs	32 mic + 8 aux
Mix busses	25
Mute groups	6
DCA's	8
FOH console placement	
Centered in back of house on orchestra level	

House speakers	
Mains	EAW KF855e x 4
Subs	EAW SB625z x 2
Downfills	EAW MK2364 x 2
Frontfills	EAW UB22i x 9
Balcony delay	EAW MK5366 x 4

Monitor speakers	
Community XLT48E	8
EAW JFX88	8

Amplifiers	
Monitors	QSC PL224A x 3
Frontfills	QSC CX254 x 2
Mains	QSC CX404 x 2
Balcony/Downfills/Mains	QSC CX702 x 6
Subwoofers	QSC Powerlight 6.0 II
Portable / Flight Cased <sup>9</sup>	QSC PL224A X 2

Wired microphones	
Shure Beta 57A	6
Shure Beta 58A	6
Shure Beta 87C	6
Shure SM58S	1
Shure SM81	2
Shure PG48S	2
Shure KSM 32	4
Crown PCC 160	4
AKG D112	1
Audio Technica ES933PM/H	2
Sennheiser MD421	6
DPA 4099	4
Shure CVG 18	1
Shure MX 418/C	2

Wireless receivers/transmitters	
Shure Axient Digital AD4Q rec.	2 (8 channels)
ADX2 Handheld transmitters	8
ADX1 Bodypack transmitters	8
RF Venue Distro4	1

Wireless microphones	
Shure Beta 58A	8
Shure Beta 87C <sup>9</sup>	8
Shure WL184	8
Shure WL51B	8
Countryman E6 Isomax Omni-Beige	2
Countryman E6 Isomax Omni-Black	3
Countryman E6 Isomax Omni-Brown	2
Countryman E6 Isomax Omni-Tan	4

Playback equipment	
Mac Studio M2 Extreme	
QLab 5 - Audio and Video license	
Denon DN-T625 CD/Cassette Deck <sup>9</sup>	

Audio Power (all audio power has isolated ground)	
100A 3-phase company switch	DSR
20A circuit locations	
DSR, FOH mix, Mid house mix	

**AUDIO cont.**

Accessories	
Tripod mic stands	Tall Boom 11
	Short Boom 7
Tall Round base mic stands	5
BSS DI box (1-ch. Active)	10
Radial JPC DI (2-ch. Active)	1
RadialPRO DI (1-ch. Passive)	2
Whirlwind PCDI (2-ch. Passive)	2
Intercom system <sup>10</sup>	
Clear-Com base station <sup>11</sup>	4 channel
	1-ch. beltack 11
	2-ch. beltack 2
FreeSpeak II base station	4 channel
	2-ch.wireless beltack 5
Single ear headset	18
Signal flasher	1

**RIGGING SYSTEM**

Type	Single Purchase Counterweight
Lockrail location	SL Stage level
Linesets <sup>12</sup>	55
Batten length	61' with 4' extensions on each end
Batten type	Schedule 80 1.5" ID steel
Lifelines per lineset	6
Liftline locations	6' 18' 30' left and right of CL
Height to gridiron working surface	74'
Height from gridiron to overhead steel <sup>13</sup>	8'
Number of overhead beams	6
Height from gridiron to trolley beams <sup>13</sup>	1' 9"
High batten trim	66'
Low batten trim	4'
Total batten travel distance	62'
Arbor capacity	1825 lbs
Available weight	60236 lbs
	43.5 lbs bricks 926
	21.75 lbs bricks 920
Pin rail location	Mid rail SL and SR
SL Mid rail:	
	Height to bottom 30' 9"
	Height to walking surface 32' 1"
	Height to pin rail 35' 7"
	Width 4' 2"
SR Mid rail:	
	Height to bottom 31' 2"
	Height to walking surface 32' 2"
	Height to pin rail 35' 7"
	Width 8'
Loading gallery:	
	Height to walking surface 68'
	Distance, gallery floor to arbor 1'
	Width 4' 7"
Additional Rigging Equipment:	
	12" Light Duty Ladder Truss, 5' 2
	12" Light Duty Ladder Truss, 10' 6
	12" Light Duty Triangle Truss, 10' 10
	1/2 Ton Chain Hoist, 80' Chain 4
	1/2 Ton Chain Hoist, 60' Chain 12

**ORCHESTRA PIT**

Square footage	
Of permanent floor	320
Of pit lift	360
Height to house floor	4' 8"
Height to stage floor	8'
Access	Doors from basement on SL/SR <sup>14</sup>

**ORCHESTRA PIT LIFT**

Pit lift is a Gala Systems Spiralift	
Control locations	Stage, Orchestra Pit, Lift
Lift points	4
Rated load	
Static	60,000 lbs
Dynamic	17,000 lbs
Total lift travel distance	8'
Playing positions	
	Orchestra Pit, House Floor, Stage <sup>15</sup>

**POWER**

Company Switches <sup>16</sup>	6
400A 3-phase (SR)	3
200A 3-phase (Grid)	1
100A 3-phase (Loading dock)	1
100A 3-phase (DSR) <i>*see Audio Power</i>	1
Bus bars	
100A (Light booth)	1
100A (Catwalk)	1

**SOFT GOODS**

Valence	
Color	COPEN BLUE
Material	CHARISMA 24oz IFR POLYVELOUR
Size	55' W x 16' H
Main Drape (two panels)	
Color	COPEN BLUE
Material	CHARISMA 24oz IFR POLYVELOUR
Size	29' W x 32' H/per panel
Type	Travel or Guillotine
Masking drapes	24oz IFR POLYVELOUR
Legs - 12' W x 32' H	12
Borders - 60' W x 8' H	6
Blackout (Charisma, flat)	60' W x 30' H
Blackout (Charisma, flat) <sup>17</sup>	2 panels @ 36' W x 30' H
Scrim (sharkstooth, black)	61' W x 32' H
Cyclorama (muslin, white)	61' W x 30' H
Projection Fabric (Boost, white)	60' W x 28' H

**ORCHESTRAL EQUIPMENT**

Orchestra Shell	
Wenger Diva Acoustical Shell ( <i>Red Mahogany</i> ) <sup>18</sup>	
Staging	
Wenger Musician Chairs	110
AdjustRite Cello Chairs	2
Cello Riser (5' x 2.5')	1
Wenger Conductor Podium	1 (2-step)
Conductor Stand	1
Music Stands	
Wenger Roughneck Stands	100
Pianos	
Steinway & Sons Hamburg Model D	SN 572783
Steinway & Sons New York Model D	SN 564866
Kawai Upright	SN K777209

**STAGING**

Portable Stage Decking	
Wenger Versalite 4x4 Deck <sup>19</sup>	2
Wenger Versalite 4x8 Deck <sup>19</sup>	10
Stairs	
Single step	8
2-step unit	2
3-step (with railing)	1
4-step (with railing)	2
Rugs	
Decorative Area Rugs (9'x12')	3
Drum Rugs (8'x8')	2
<i>Various carpet runners available upon request</i>	
Ceremony Staging	
Commencement Lectern (with step)	1
Wood Lectern	1
Water Table (black, 30")	1
Water Table (wood, 30")	1

**DANCE**

Marley / Vinyl Floor	
Stagestep Superbravo (Black/White) <sup>20</sup>	57' x 12m
<i>Intended for modern or contemporary dance</i>	
Stagestep Superbravo Pro (Black/Grey) <sup>20</sup>	65' x 12m
<i>Intended for jazz, moden, ballet and tap</i>	
Dance barres (6' x 45")	6

**WARDROBE**

Steamer <sup>21</sup>	2
Ironing Board	2
Iron	2
48" Portable Dressing Mirrors	2
Washer/Dryer	1
Washer/Dryer Hook-ups <sup>22</sup>	1
Portable wardrobe racks	6
Laundry room (in Basement) <sup>23</sup>	1
Bath towels (assorted colors)	100
Hand towels (assorted colors)	100

**TOOLS AND FACILITY**

Ladders	
6'	2
8'	2
12'	1
8'-14' Adjustable Podium	1
Personnel Lift	
Genie AWP-30	1
Flatbed Dolly	8
Handtruck	1
Tools	
Assorted hand tools	
Drills	<i>Corded and Cordless</i>
Sanders	<i>Orbital and Belt</i>
Grinder	<i>Angle Grinder</i>
Pneumatics	<i>Nailer and Finish Nailer</i>
Saws	<i>Reciprocating, Jig, Circular, Compound miter, and Chop</i>
6' tables	16
Loose Chairs ( <i>including dressing room chairs</i> )	65
Assorted tablecloths and skirts	
44 gallon trashcans	4
Pipe and Drape	60 Linear Feet
8' Black Banjo cloth	

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**CATERING**

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Residential Refrigerator	1
Coffee Grinder/Brewer	2
3.0L Coffee Airpot	6
Coolers	5
Assorted silverware	
Assorted diningware	
Assorted glassware	
Assorted paper and cloth napkins	
Assorted serving pieces	

NOTE: Additional catering equipment available with prior notice.

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**DRESSING ROOMS** <sup>24</sup>

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Room	Capacity	Location
A	2	Stage level (SR)
B	1	Basement
C	4	Basement
D	5	Basement
E	5	Basement
F	4	Basement
G	10	Basement
H	10	Basement

NOTE: All dressing rooms have direct access to bathroom with a toilet, sink, and shower.  
Rooms C & D share a bathroom.  
Rooms E & F share a bathroom.  
Rooms G & H can be combined into large room for 20.

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**TOURING PRODUCTION OFFICE INFORMATION**

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Office Equipment	
Color Printer	
Copier	
Internet hook-ups <sup>9</sup>	Throughout the venue
WiFi	Throughout the venue
NOTE: Personal computers must be configured for campus network. See Production Manager for details. Touring productions MAY NOT bring in wireless routers without prior approval from Production Manager.	

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**BUS AND TRUCK INFORMATION**

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Loading Dock	2 bay
One dock with leveler, one fixed at 40"	
Roll-up doors	9' W x 10' H
Dock plate	5' W x 3' D, 10,000 lbs capacity
NOTE: Ground-level access on east side of building	
NOTE: Bus/Truck parking for two vehicles available in dock.	
Parking for more than two vehicles must be arranged prior to arrival with a Production Manager.	
Parking for up to 10 personal cars available with prior notice.	

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Shore power	
100A 3-phase company switch	Loading Dock
NOTE: Must be arranged prior to arrival with a Production Manager.	
Vehicle must provide at least 25' cable w/ camlock connector or bare-ends for tie-in.	

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**FOOTNOTES**

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- 1 = Measured to onstage edge of pilasters in SR wall. Pilasters are 1' 4" deep  
2 = Measured to downstage edge of pilasters on US wall. Pilasters are 1' 8" deep  
3 = Console located at back of orchestra level unless otherwise instructed  
4 = All ETC Source4 instruments capable of housing 750w lamp  
5 = Batten lay break-out has stagepin connectors on 18" centers  
7 = Distance measured from Plaster Line at center. Angle measured from Plaster Line at center, 6' above stage  
8 = Angle in a downward direction  
9 = Available with prior notice  
10 = Intercom system also serves as backstage paging system  
11 = Located on stage, DSR  
12 = Five linesets are permanently committed with items that cannot be removed. See line schedule for details  
13 = Overhead beams run US/DS, trolley beams run SL/SR  
14 = Wheelchair access to orchestra pit from SL pit door  
15 = Can be positioned anyplace in travel range  
16 = Company switches accept camlock connectors or bare wire. Must give advance notice for bare wire tie-in  
17 = Curtain can operate as a traveller with prior notice  
18 = Orchestra Shell drawing available upon request  
19 = Can be set with 8", 16", 24", or 32" legs. Locking wheels available (+6")  
20 = Downstage panels of house marley cut for procenium arch (48' wide) with downstage edge set 3'3" downstage of plaster line.  
21 = Steamer can only be used in approved areas. Contact Production Manager for details  
22 = Washer/Dryer hook-ups in wardrobe room are in addition to house washer/dryer  
23 = The room typically used as the green room can be converted into a wardrobe room with prior notice  
24 = See Basement level drawing for room layout