

# **Clayton Center for the Arts**

**Ronald and Lynda Nutt Theater | Technical Specifications | December 2014**

**David Rasnake, Technical Director | Rachel Jarnagin, Assistant Technical Director**

*Backstage Office: (865) 981-8580*

## **Stage Specifications**

<b>Specification</b>	<b>Description</b>
Stage Size	99'5"W x 42'2" D
Proscenium Opening	47'4"W x 27'10" H
Proscenium Arch Thickness	28"
Gridiron Elevation	62'10"
Front of Stage to Upstage Wall	48' at CL
Front of Proscenium to Upstage Wall	42'2"
Front of Orchestra Pit to Upstage Wall	60'2" at CL
Height to Pin Rail	30'6"
Stage Right Wing	27'0"
Stage Left Wing	26'0"
Orchestra Pit Width	59'0"
Orchestra Pit Depth	8'8"
Proscenium to Front of Stage	5'10" at CL
Proscenium to Front of Orchestra Lift at Stage Level	18'0" at CL
Front of Stage to Front Center of Orchestra Pit	12'2" at CL
Front of SR+SL Stage to Orchestra Pit	5'0"
House Floor to Stage	3'7"
Height of Catwalks at Stage Level	41'0"
FOH 1 to Plaster Line	51'10"
FOH 2 to Plaster Line	59'9"
FOH 3 to Plaster Line	88'4"
Spot Booth to Plaster Line	110'6"
Center Stage to Side Stage Floor Pockets	37'0"
Deflector Height to Lowest Point at Stage Level	27'10"
Balcony Rail Height at Stage Level	13'0"
Center Balcony Rail Height at Stage Level	14'0"
Stage Floor	Oak
Floor Construction	Sprung (neoprene pads)
Floor Color	Flat Black
Dance Floor Overlay	70'Wx50'D, Black Marley
Lagging to Deck	OK with TD approval

**Rigging Notes**

<b>Description</b>	<b>Notes</b>
Fly Rail	SL, operable from deck or mid rail/jump
Gridiron Over Stagehouse	106'x39' Structural Grating
Counterweight Linesets	36
System Design	Single Purchase, Underhung Loft Blocks
Battens	71'0", 1-1/2" Schedule 40
Lift Line Attachment	Batten Clamps/Trim Plates
Arbor Capacity/Batten Load	1350 lb maximum over pipe weight
House Iron	20,000 lb total, 20 lb/30 lb bricks

**Lineset Schedule**

<b>Lineset</b>	<b>Distance to PL</b>	<b>Batten</b>	<b>**Note: Linesets in BOLD cannot be moved</b>
1	1'2"	<b>Main Border</b>	
2	1'10"	<b>Main Curtain</b>	
3	3'2"	<b>1st Electric (raceway)</b>	
4	4'6"	OPEN	
5	5'2"	Legs	
6	6'4"	<b>Shell Ceiling</b>	
7	7'8"	<b>Projection Screen</b>	
8	8'6"	OPEN	
9	9'10"	OPEN	
10	10'6"	OPEN	
11	11'10"	Border	
12	12'6"	Legs	
13	13'10"	2nd Electric (multi)	
14	15'2"	OPEN	
15	15'10"	OPEN	
16	16'6"	OPEN	
17	17'10"	<b>Shell Ceiling</b>	
18	20'4"	Border	
19	21'	Legs	
20	21'8"	<b>Traveler</b>	
21	22'4"	OPEN	
22	23'2"	3rd Electric (multi)	
23	24'6"	OPEN	
24	25'2"	OPEN	
25	26'6"	OPEN	
26	27'2"	Border	
27	27'10"	Legs	
28	29'3"	<b>Shell Ceiling</b>	
29	30'6"	4th Electric (multi)	
30	31'10"	Border	
31	33'2"	Legs/Black Scrim	
32	34'6"	5th Electric - Cys (multi)	
33	35'2"	OPEN	
34	36'6"	OPEN	
35	37'2"	Cyclorama	
36	37'10"	Blackout Curtain (4 Legs)	

**Theatrical Draperies**

<b>Description</b>	<b>Quantity</b>	<b>Notes</b>
Main Drapery <i>* Can guillotine or travel</i>	1	Maroon/Yellow Stripe
Main Border	1	Maroon
Legs	5 sets	15'W x 30'H, Black Velour
Midstage Traveler	1	Black Velour
Cyclorama	1	70'W x 30'H, White Leno
Black Scrim	1	70'W x 30'H, Black Sharkstooth
White Scrim	1	70'W x 30'H, White Sharkstooth
Blackout Curtain	1	60'W x 30'H, Black Velour (4 Legs)
Motorized Fire Curtain	1	
Motorized Variable Acoustic Draperies	**	In the Auditorium

**Orchestra Pit Lift**

- \* Area: Aproximately 12'D x 58'W at Center
- \* Travel: 8'8"
- \* Total Capacity: 20,000 lb
- \* The pit typically has three preset positions: Stage Level, Auditorium Level, and Pit Level

**Orchestra Shell**

<b>Description</b>	<b>Quantity</b>	<b>Notes</b>
Shell Towers	10	Opens to 11'8"W x 28'H
Shell Ceilings <i>* Mounted on counterweight linesets with lighting fixtures attached</i>	3	11'0"W x 47'L
Maximum Area Inside Shell	33'0"D x 47'4"W x 29'0"H	

**Video Projection System**

<b>Description</b>	<b>Quantity</b>	<b>Notes</b>
Projection Screen	1	480" diagonal surface
Digital Projectons Titan 1080P	1	10K lumens, mounted at balcony rail
Mac Mini Server	1	qLab 3 projection control
Sony Blu-Ray Player	1	
Kramer VP-728 Switcher/Scaler	1	In booth, anamorphic control available
VGA and HDMI Inputs	2 each	SR panel and booth

**Supplemental Power**

<b>Service Type</b>	<b>Location</b>	<b>Notes</b>
400A 120/208V 3-phase (wye)	USR	Camlock (reverse N+G) or bare tails
400A 120/208V 3-phase (wye)	USR	Camlock (reverse N+G) or bare tails
200A 120/208V 3-phase (wye), isolated ground	USL	Camlock (reverse N+G) or bare tails

**Accessories**

<b>Quantity</b>	<b>Description</b>	<b>Notes</b>
24	35 lb Sandbag	Black, with handle
24	15 lb Sandbag	Black, with handle
15	Cable Jacket	Black, Linebacker brand
150	Performer Chair	Black Padded, Wenger
100	Music Stand	Wenger and Manhasset
7	4-Step Choir Riser	
24	3'x8' Platform	8", 16", 24" and 32" legs available

**Instruments**

<b>Quantity</b>	<b>Description</b>	<b>Wattage</b>
12	10 Degree ETC Source Four	750w
24	19 Degree ETC Source Four	750w
18	26 Degree ETC Source Four	750w
18	36 Degree ETC Source Four	750w
12	50 Degree ETC Source Four	750w
24	ETC Source Four Par	750w
6	ETC Source Four ParNel	750w
36	Par 64 WFL (other lenses available w/advance notice)	1000w
6	High End Systems Studio Color 575 Moving Wash	575w
8	Cyc lights, 4 circuit, 1000w Altman SkyCyc	1000w
6	Cyc lights, 6 circuit, 1000w Altman GroundCyc	1000w
2	Lycian Super Arc Follow Spot	400w

**Accessories**

<b>Quantity</b>	<b>Description</b>	<b>Notes</b>
20	Revolving Barndoors	ETC ParNel and ETC Par
18	Size A Pattern Holders	ETC Ellipsoidals
8	Drop In Iris	ETC Ellipsoidals
12	15' Steel Pipe Booms w/ base	

**Power and Control**

<b>Quantity</b>	<b>Description</b>	<b>Notes</b>
3	ETC Sensor+ Dimmer Racks	
270	Dimmable Circuits	
18	Dimmable House Light Circuits	
24	Work light/relay/non-dim circuits	
1	ETC ION Performance Lighting Console	
3	Front of House Catwalk Lighting Positions	60 Circuits Total (15/30/15)
1	1st Electric with Raceway Circuit Strips	27 Circuits
15	Six-Circuit Multicable from Grid	For Remaining Electrics, Drops SR
1	Remote Focus Unit for ETC ION	
5	Portable Ethernet Nodes	

**Lighting System Notes**

- \*\* Box Booms, Balcony Rail and Floor Lighting Positions Available
- \*\* Ethernet Control Distributed Throughout Auditorium and Stagehouse

**Power/System Control**

<b>Quantity</b>	<b>Description</b>	<b>Notes</b>
1	Midas Pro2 digital mixing console <i>56 inputs; 8 groups; 16 auxes; 8 assignable VCAs; 4-band fully parametric EQ</i>	FOH console
1	SoundCraft MH3-48 analog mixing console <i>48 inputs; 8 groups; 8 auxes; 8 assignable VCAs; 12x4 matrix mixer; 4-band EQ (fully parametric mids)</i>	Monitor console
1	Yamaha LS-9 digital mixing console <i>32 inputs; 16 mixes; 8x8 matrix mixer; 4-band fully parametric EQ; onboard digital FX</i>	Production booth console
6	Lab.Gruppen C 48:4 power amplifier <i>Dedicated main array and subwoofer amplifiers</i>	1200 watts x 4 channels
2	Lab.Gruppen C 10:4x power amplifier <i>Dedicated stage/pit rail and under-balcony fill speaker amplifiers</i>	250 watts x 4 channels
2	Lab.Gruppen C 48:4 power amplifier <i>Stage monitor amplifiers; 8 total channels; routable from FOH, stage, or booth mix positions</i>	1200 watts x 4 channels
2	EAW UX8800 4x8 digital loudspeaker processor <i>Line array controllers for LCR and balcony fill mains</i>	
1	Bag End INFRA-MX2 Low Frequency Integrator <i>Crossover and controller unit for subwoofers</i>	

**Mains**

<b>Quantity</b>	<b>Description</b>	<b>Notes</b>
1	EAW AX396/AX366 two-enclosure array	Flown, stage left
1	EAW AX396/AX366 two-enclosure array	Flown, stage right
1	EAW AX364/AX366 three-enclosure array	Center stage
1	EAW AX364/AX366 three-enclosure array	Flown, middle of house (balcony fill)
2	BagEnd QUARTZ-I 4x18 subwoofer enclosure	L/R deck corners; movable enclosures
1	BagEnd QUARTZ-I 4x18 subwoofer enclosure	Flown, middle of house (balcony fill)

**Monitors**

<b>Quantity</b>	<b>Description</b>	<b>Notes</b>
8	ElectroVoice QRX115 full-range enclosure	Bi-amp capable
5	ElectroVoice QRX112 full-range enclosure	Bi-amp capable
2	Altec-Lansing FM912-8A wedge enclosure	Compact floor monitor
2	RCF TT22A active full-range enclosure	750 watts per enclosure
4	RCF TTS18A active 1x18 subwoofer enclosure	1000 watts per enclosure

**Outboard Gear**

<b>Quantity</b>	<b>Description</b>	<b>Notes</b>
6	BSS FCS966 dual-channel 1/3 octave graphic EQ	12 total channels, monitor or FOH use
2	Denon DNC615 professional CD player	Rack mounted
1	Alesis Masterlink 9600 HD/CD stereo recorder	Rack mounted
1	TC Electronic EQ8 digital equalizer	8 channel, preset for house EQ/delay
2	DBX 1066 stereo comp/gate/limiter	Rack mounted
1	Yamaha SPX-2000 stereo multi-FX processor	Rack mounted