# 2019 MILLER OUTDOOR THEATRE TECH PACK





Building Occupancy (Including Miller Staff) 150						
Building Capacities	Seating Capacity (Covered)	1704				
	Seating Capacity (Hill)	6000 (Blankets) / 9000 (Standing)				
	Proscenium Width	58' 8"				
	Proscenium Height	25' 10"				
	Stage Width	64' 2"				
	Stage Depth (Curtain to Back Wall)	41' 2"				
Stage Dimensions	Apron Depth (Curtain to Upstage Edge of Pit)	8' 2"				
	Deck to Grid	65' 8"				
	Deck to Bottom of Split Rail	8' 1"				
	Plaster Line @ Center to Front-of-House Control Booth	135' 6"				
	Plaster Line @ Center to Front-of-House Lighting Catwalk	82'				
	System Pipes	54 (Grand Drape & 10 Electrics Are Motorized				
	System Pipe Length	1½" Schedule 40; 63' long				
Els Dall	Pipe Trim #2-12 (Split Rail)	High trim 52' 6"; Low trim 4' 3"				
Fly Rail	Pipe Trim #1 (Split Rail) & #13-54	High trim 60' 10"; Low trim 4' 3"				
	Arbor Capacity	1750 lbs.				
	Counter Weight (30,000 lbs. total)	(1) Brick = 20 lbs.				
Looding Dook	Loading Dock Door Dimensions	W: 7' 9" H: 10' 0"				
Loading Dock	Note: The Loading Dock is at street level. A ramp, fork lift,	or lift gate is required for unloading trucks.				
	Orchestra Pit Width	78' (Refer to drawings)				
	Orchestra Pit Depth	20' (Refer to drawings)				
Orchestra Pit	Orchestra Pit Rate of Travel (DOWN)	1 Minute 8 Seconds				
Ordiestra Pit	Orchestra Pit Rate of Travel (UP)	52 Seconds				
	Pit Low Trim	7' 6"				
	Weight Capacity of Orchestra Pit	27,000 lbs.				

<b>Draperies</b>						
ltem	Linesets	Fabric	Size	Quantity	Weight	
Grand Drape	1	32 oz. Cherry IFR; 100% Fullness	30' H x 63' W (7' Overlap @ Center)	1	945 lbs.	
Split Black (2 Panels)	20, 54	25 oz. Black IFR; Flat	30' H x 34' W (Each Panel)	1	300 lbs.	
Black Borders	2, 11, 21, 31, 40	25 oz. Black IFR; Flat	10' H x 60' W	6	120 lbs.	
Black Legs	3, 12, 22, 32, 41	25 oz. Black IFR; Flat	30' H x 15' W	6 Pairs	150 lbs.	
Sharkstooth Scrim	42	Black	30' H x 60' W	1	90 lbs.	
Plastic / Front Projection	44	Rosco Twin White Plastic	30' H x 60' W	1	240 lbs.	
Bounce	53	Rosco Twin White Plastic	30' H x 60' W	1	240 lbs.	
Fiber Optic Star Drop	43	Black	30' H x 60' W (3 Vertical Panels; 2 Fiber Trunks per Panel)	1	465 lbs.	
Rear Projection Screen	8	Da-Lite Curved Series 300 Lace and Grommet Frame	18' H x 32' W	1	240 lbs.	

Properties				
Item	Size	Quantity	Item	Quantity
	1' Height	12	Music Stands	60
5' x 4' Risers	2' Height	12	Padded Orchestra Chairs	50
	3' Height	12	Aria LED Music Stand Lights	50
	8' x 3'	8	Wenger Conductor's Podium, Stand, Chair & TechBridge	1
Plastic Tables	6' x 3'	8	Rosco Black/White Dance Floor (60' L x 63" W)	8
	4' x 3'	2	10' Ballet Barres	4



	Lineset Schedule					
Lineset	Travel	Distance From Plaster Line	Name	Notes	Weight	
1		0' 6"	Red Grand Drape	Titan Adjustable Speed Motor	N/A	
2		1' 3"	#1 Black Border		15 wts.	
3		1' 10"	#1 Black Legs	22' From Center	11 wts.	
4	1	2' 7"	#1 Electric + Audio Monitors - House Trim is 28'-0"	Power Assist Motors; Pipes Are	N/A	
5	1	3' 4"	#2 Electric - House Trim is 28'-0"	Married	N/A	
6	T	4' 3"				
7	Travel: 48'-3"	4' 11"	Barco Projector (Rear Clamps)		3 wts.	
8	40-3	5' 7"	18' x 32' Rear Porjection Screen		15 wts.	
9		6' 3"	Barco Projector (Front Clamps)		3 wts.	
10	1	6' 11"				
11	1	7' 7"	#2 Black Border		8 wts.	
12	1	8' 3"	#2 Black Legs	22' From Center	11 wts.	
13		9' 0"	#3 Electric - House Trim is 27'-0"	Power Assist Motors; Pipes Are	N/A	
14		9' 9"	#4 Electric - House Trim is 28'-0"	Married	N/A	
15		10' 8"	Spare Batten Storage		20 wts.	
16		11' 4"	1			
17		12' 0"				
18		12' 8"				
19		13' 4"				
20		14' 0"	Mid-Stage Split Black Curtain		14 wts.	
21		14' 8"	#3 Black Border		7 wts.	
22		15' 4"	#3 Black Legs	22' From Center	10 wts.	
23		16' 1"	#5 Electric - House Trim is 27'-0"	Power Assist Motors; Pipes Are	N/A	
24		16' 10"	#6 Electric - House Trim is 28'-0"	Married	N/A	
25		17' 9"				
26		18' 5"				
27		19' 1"				
28		19' 9"				
29 30		20' 5" 21' 1"				
31		21' 9"	#4 Black Border		7 wts.	
32		22' 5"	#4 Black Legs	22' From Center	10 wts.	
33	Travel:	23' 2"	#7 Electric - House Trim is 27'-0"	Power Assist Motors; Pipes Are	N/A	
34	56'-7"	23' 11"	#8 Electric - House Trim is 28'-0"	Married	N/A	
35		24' 10"	Spare Batten Storage		20 wts.	
36	1	25' 6"	, ,			
37		26' 2"				
38		26' 10"				
39		27' 10"	#9 Electric (CyberLights) - House Trim is 27'-0"	Power Assist Motor	N/A	
40		28' 10"	#5 Black Border	2015	6 wts.	
41	-	29' 6"	#5 Black Legs	22' From Center	9 wts.	
42 43	1	30' 2" 30' 11"	Black Sharkstooth Scrim Fiber Optic Star Drop		5 wts.	
43	1	31' 8"	Rosco Twin White Plastic (Front Projection Screen)		42 wts. 12 wts.	
45		32' 4"	#6 Black Border		6 wts.	
46	1	33' 0"	#0 Black Border		J 1710.	
47	1	33' 9"	#10 Electric (Cyc Lights) - House Trim is 27'-6"	Power Assist Motor	N/A	
48	1	34' 6"	, , , , , , , , , , , , , , , , , , , ,			
49		35' 2"				
50		35' 10"	#6 Black Legs	22' From Center	9 wts.	
51		36' 6"				
52		37' 2"				
53		37' 10"	Rosco Twin White Plastic (Bounce)		11 wts.	
54		38' 6"	Black Cross Over Curtain		15 wts.	

Linesets #2 through #12: Travel is 48'-3".

Linesets #1 and #13 through #54: Travel is 56'-7".

Loft blocks are permanently installed (ie, kicking sheaves in the grid to adjust lineset spacing is not possible).

House Electrics are on 22ft./min. Arbor Assist Motors.

Pipes are 1½" Schedule 40 and are 63' long.

Weights are ⅓" Cut Steel: 20lbs. Arbor maximum capacity is 1750 lbs.



	Audio			
	Sound System			
	Mixing Console			
1	SSL L500 Plus 256 Channel Digital Mixing System			
	Stereo Main Arrays			
10 Left / 10 Right	Electro-Voice XLC (with DVX Driver) Full Range Cabinet			
5 Left / 5 Right	Electro-Voice XLC 2x15 Sub Enclosure			
	Stereo Delay Arrays			
6 Left / 6 Right	Electro-Voice XLC (with DVX Driver) Full Range Cabinet			
	Center Cluster			
6	Electro-Voice EVH-D15 Full Range Cabinet			
6	Electro-Voice EVF 2151D Sub Enclosure			
	Pit Front Fill Speakers			
8	Electro-Voice EVU 1062/95			
Amplifiers				
38	Electro-Voice TG-5			
	Processing			
	FIR Processing via Electro-Voice IRIS-Net			
	Rack Gear / Playback			
2	Tascam 1U CD Player			
1	Tascam SS-CDR200 CF/SD Player			
1	Tascam DV-RA1000HD Audio Recorder			
1	MacBook Pro with MOTU 828x Audio Interface and QLab 3 Pro Bundle License			

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	Microphones					
Dynamic Microphones		Small Diaphragm Condenser Microphones				
12	Shure SM57	Cinai Biapinagin Conacilco inicropilo				
2	Shure Beta 57	8	Audio-Technica Pro 835			
6	Shure Beta 57A	16	Shure KSM137			
14	Shure SM58	9	Shure SM81			
4	Shure Beta 58A	5	AKG C451 EB			
1	Sennheiser 409	5	AKG SE300B			
4	Sennheiser 609	3	AKG C 460B			
8	Sennheiser 906	7	KM184B			
15	Sennheiser MD421II	3	KM184S			
8	Sennheiser MD441	4	Audix SCX One			
10 Electro-Voice N/D468		Lore	o Dianbraam Candanaar Micronhanaa			
3	Electro-Voice RE-20	Large Diaphragm Condenser Micropho				
8	Beyer Dynamic M88 TG	6	Audio-Technica 4050			
1	Beyer Dynamic M88 N(C)	11	AKG C414B			
2	Neumann KMS105		Specialty Microphones			
	Direct Boxes	1	Helpinstill Model 280 Piano Pickup			
17	Countryman Type 85 FET	2	Audix D6			
17	Active DI	2	AKG D112			
2	Whirlwind Director	7	Shure Beta 98DS			
	Passive DI	2	Shure Beta 91A			
2	Radial Engineering R800	4	Crown PCC 160			
	Passive Stereo DI	6	Bartlett Floor Mics			

Wireless Microphones					
12	AKG DSR700 RF Receiver				
24	AKG DHT700 Hand-Held Transmitter w/ AKG D5 Super-Cardioid Capsule				
28	AKG DPT700 Body-Pack Transmitter				
24	Point Source Audio CO-8WL Lavalier Microphone				
12	DPA d:fine FIO66 Omni-Directional Headset Microphone				
Communication					
	Communication				
1	Communication Clear-Com 4-Channel, 12-Matrix Base Station SB-412 A				
1					
	Clear-Com 4-Channel, 12-Matrix Base Station SB-412 A				
1	Clear-Com 4-Channel, 12-Matrix Base Station SB-412 A Clear-Com 4-Channel, 10-Matrix Base Station SB-704				
1 24	Clear-Com 4-Channel, 12-Matrix Base Station SB-412 A Clear-Com 4-Channel, 10-Matrix Base Station SB-704 Clear-Com Beltpack/Headset				

#### Stage Management 6-Circuit Cue Light Control Switchbox

HME Pro-850 2-Channel Wireless Com Telex BTR-80N 2-Channel Wireless Com

> 4-Channel Clear-Com Base Station Dressing Room Paging Microphone Show Feed Monitor Front-of-House Video Camera Monitor

Optional Orchestra Pit Conductor Video Camera Monitor

Zildjian A-Custom Cymbals

### **Backline Inventory**

Mapex Heavey Duty High Hat Stand

"Dogbone" Boom Arm for Splash Cymbal

Yamaha Snare Stand

### Piano

Boston by Steinway & Sons 7' Grand Piano

Drum Kit - Mapex Saturn Series Silver Sparkle Drums					
22" Diameter x 18" Depth Bass Drum	14" x 14" Floor Tom				
18" Diameter x 14" Depth Bass Drum	16" x 16" Floor Tom				
10" x 8" Mounted Tom	14" x 5" Snare with 2.3mm Power Hoops				
12" x 10" Mounted Tom	13" x 6" Black Panther Maple Snare				
14" x 6.5" Mapex Black Panther Hand Hammered Brass "Sledgehamm					
Drum H	lardware				
Mapex Falcon P1000TW Chain Drive	(4) Mapex Combination Straight/Boom				
Double Bass Drum Pedal	Cymbal Stands				

Gibralter Prowler 5611 Chain Drive

Single Bass Drum Pedal

Mapex Snare Stand

20"/51cm China Cymbal 20"/51cm Medium Ride Cymbal 16"/40cm Medium Thin Crash Cymbal 10"/25cm Fast Splash Cymbal 18"/45cm Medium Thin Crash Cymbal 14"/36cm New Beat High Hats Additional Cymbals

Zildjian Avedis 16" Crash Cymbal Sabian Solaris 14" High Hats

#### Percussion / Accessories

RhythmTech Hat Trick (High Hat Mounted Tambourine) LP 229 Mambo 9" Cowbell Roc-N-Soc Drum Throne Zildjian Stick Bag LP Microphone Claws Drum Rug



	Lighting	3		
ETC Eos Lighting Network				
Quantity	Item			
2	ETC Eos TI Console (Front-of-House and Stage Right Booth)	١		
1	ETC Gio Console (Portable Remote Console)	١		
1	ETC Eos RPU3 Primary Processor (4,096 Outputs)	١		
1	ETC Eos RPU3 Tracking Backup Processor (4,096 Outputs)			
1	ETCnomad Puck (Front-of-House Designer Display)			

House Plot Fixtures					
Quantity	Fixture Type	Wattage			
2	Lycian 1290XLT Follow Spots	2kW			
3	ETC Source 4 5°	750w			
26	ETC Source 4 10°	750w			
19	ETC Source 4 14°	750w			
49	ETC Source 4 19°	750w			
99	ETC Source 4 26°	575w			
128	ETC Source 4 36°	575w			
72	ETC Source 4 PAR WFL	750w			
3	ETC Source 4 Fresnel	750w			
8	Selecon Aurora 4-Cell Cyc Unit	1kW per circuit			
8	Selecon Aurora 4-Cell Groundrow Unit	1kW per circuit			

Moving Lights & Intelligent Accessories			
13	HES CyberLight SV	1200w	
6	Vari-Lite VL2500 Spot	700w	
3	Martin Atomic 3000 Strobe	3kW	
12	Rosco I-Cue	17w	
11	City Theatrical DMX Iris	6w	
5	Apollo EZ Iris		
1	City Theatrical EFX Plus2		
1	Mirror Ball w/ American DJ DMX Motor	18"	

ln	ventory		
	ETC Eos Accessories		
	Quantity	Item	
	1	Eos Motorized Fader Wing 20	
	1	Eos Motorized Fader Wing 10	
	2	2x20 Universal Fader Wing	
	1	2x10 Universal Fader Wing	
	1	ETC Net3 Show Control Gateway	

Spare Fixtures			
Quantity	Fixture Type	Wattage / Size	
56	ETC Source 4 Fixture Body	575w or 750w	
4	ETC Source 4 5° Lens		
10	ETC Source 4 10° Lens		
15	ETC Source 4 14º Lens		
24	ETC Source 4 19º Lens		
38	ETC Source 4 26° Lens		
26	ETC Source 4 36° Lens		
20	ETC Source 4 50° Lens		
12	ETC Source 4 PAR (VNSP, NSP, MFL or WFL)	750w	
12	PAR 64 (VNSP, NSP, MFL or WFL)	1kW	
10	Altman 3-Circuit Strip (EYC or EYF Lamps)	750w per circuit	
8	ETC Selador Vivid R 11" LED	125w	

	Atmosphere	
2	Look Solutions Unique 2.1 Hazer	1500w
2	Reel EFX DF-50 Hazer	480w
2	Barco FQ-100 Fog Machine	
4	Chauvet Pro Vesuvio II	1488.5w
2	AquaFog 3300	3300w

	Star Drop
	30' H x 60' W (3 Vertical Panels; 2 Fiber Trunks per Panel)
3	Martin RUSH FiberSource 1 LED Fiber Illuminator
3	DiCon FiberLamp 5100



DMX Addresses			
Unit	Position	DMX Address	
Movi	ing Lights		
Cyberlight #1	9th Electric	3 / 1	
Cyberlight #2	9th Electric	3 / 21	
Cyberlight #3	9th Electric	3 / 41	
Cyberlight #4	9th Electric	3 / 61	
Cyberlight #5	9th Electric	3 / 81	
Cyberlight #6	9th Electric	3 / 101	
Cyberlight #7	9th Electric	3 / 121	
Cyberlight #8	9th Electric	3 / 141	
Cyberlight #9	9th Electric	3 / 161	
Cyberlight #10	9th Electric	3 / 181	
Cyberlight #11	Storage	3 / 201	
Cyberlight #12	Storage	3 / 221	
VL2500 Spot #1	9th Electric	3 / 437	
VL2500 Spot #2	9th Electric	3 / 459	
I	-Cues		
Rosco I-Cue #1	Cove	2 / 164	
Rosco I-Cue #2	Cove	2 / 169	
Rosco I-Cue #3	Cove	2 / 174	
Rosco I-Cue #4	2nd Electric	2 / 179	
Rosco I-Cue #5	2nd Electric	2 / 184	
Rosco I-Cue #6	2nd Electric	2 / 189	
Rosco I-Cue #7	2nd Electric	2 / 194	
Rosco I-Cue #8	6th Electric	2 / 199	
Rosco I-Cue #9	6th Electric	2 / 204	
Rosco I-Cue #10	8th Electric	2 / 209	
Rosco I-Cue #11 Rosco I-Cue #12	8th Electric Storage	2 / 214 2 / 219	
	Storage IX Irises	27219	
City Theatrical DMX Iris #1	Cove	2 / 168	
City Theatrical DMX Iris #2	Cove	2 / 173	
City Theatrical DMX Iris #3	Cove	2 / 178	
City Theatrical DMX Iris #4	2nd Electric	2 / 183	
City Theatrical DMX Iris #5	2nd Electric	2 / 188	
City Theatrical DMX Iris #6	2nd Electric	2 / 193	
City Theatrical DMX Iris #7	2nd Electric	2 / 198	
City Theatrical DMX Iris #8	6th Electric	2 / 203	
City Theatrical DMX Iris #9	6th Electric	2 / 208	
City Theatrical DMX Iris #10	8th Electric	2 / 213	
City Theatrical DMX Iris #11	8th Electric	2 / 218	
Apollo EZ-Iris #1	Storage	2 / 223	
Apollo EZ-Iris #2	Storage	2 / 224	
Apollo EZ-Iris #3	Storage	2 / 225	
Apollo EZ-Iris #4	Storage	2 / 226	
Apollo EZ-Iris #5	Storage	2 / 227	

DMX Addresses			
Unit	Position	DMX Address	
	LEDs		
ETC Selador Vivid-R #1	Storage	3 / 241	
ETC Selador Vivid-R #2	Storage	3 / 249	
ETC Selador Vivid-R #3	Storage	3 / 257	
ETC Selador Vivid-R #4	Storage	3 / 265	
ETC Selador Vivid-R #5	Storage	3 / 273	
ETC Selador Vivid-R #6	Storage	3 / 281	
ETC Selador Vivid-R #7	Storage	3 / 289	
ETC Selador Vivid-R #8	Storage	3 / 297	
Elation SixPar 300IP #1	Storage	3 / 305	
Elation SixPar 300IP #2	Storage	3 / 317	
Elation SixPar 300IP #3	Storage	3 / 329	
Elation SixPar 300IP #4	Storage	3 / 341	
American DJ Pin Spot #1	Storage	3 / 353	
American DJ Pin Spot #2	Storage	3 / 359	
Strand PL1	Storage	2 / 64	
	Star Drop	_, , ,	
Martin RUSH FiberSource #1	Star Drop	2 / 125	
Martin RUSH FiberSource #2	Star Drop	2 / 130	
Martin RUSH FiberSource #3	Star Drop	2 / 135	
DiCon LED Emitter #1	Star Drop	2 / 140	
DiCon LED Emitter #2	Star Drop	2 / 148	
DiCon LED Emitter #3	Star Drop	2 / 156	
	jers / Hazers	0./507	
FQ-100 #1 FQ-100 #2	Storage Storage	3 / 507 3 / 508	
Vesuvio II #1	Storage	3 / 377	
Vesuvio II #2	Storage	3 / 392	
Vesuvio II #3	Storage	3 / 407	
Vesuvio II #4	Storage	3 / 422	
Unique 2.1 #1	Storage	2 / 228	
Unique 2.1 #2	Storage	2 / 230	
Strobes			
Martin Atomic Strobe #1	2nd Electric	3 / 365	
Martin Atomic Strobe #2	2nd Electric	3 / 369	
Martin Atomic Strobe #3	9th Electric	3 / 373	
ETC Dimmer 4-Pack	mmer Pack / Relay Storage	3 / 509	
Fleenor Relay	Storage	3 / 500	
	er Devices	3 / 300	
American DJ Mirror Ball Motor	Storage	2 / 87	
City Theatrical EFX Plus2	Storage	3 / 499	
Aria Music Stand Light #1	Storage	3 / 501	
Aria Music Stand Light #2	Storage	3 / 504	



	Miller Outdoor Theatre Video Inventory			
		Barco HDX-W20 FLEX 20,000 Lumen HD Projector		
Projector	Barco FLM	HD20 20,000 Lumen HD Projector (only used as a back-up in the event the HDX fails)		
Projector	Lamana	Barco 0.67 HD Fixed Lens (34'W x 19'H image when front projected)		
	Lenses:	Christie 1.16 – 1.49 HD Zoom Lens (21'-26'W x 12'-15'H image when front projected)		
Projection		Da-Lite Curved Series 300 18'H x 32'W		
Surfaces	Rosco	Twin White Plastic (Front Projection: Lineset 44 or 53; Rear Projection: Lineset 8)		
		Barco DCS-200 Switcher		
Rack Gear		Denon DN-500BD Blu-Ray Player		
Nack Geal		MOTU 112D Digital Audio Signal Converter		
		Mac Pro with QLab 4 and Dante Virtual Soundcard		
	Ma	ximum distance from switcher to projector is 150'. Signal is over HD-SDI cable.		
		Switcher has 6 Analog (VGA, 5-wire, or Composite) inputs.		
		Switcher has 2 Digital (DVI or HDMI) inputs.		
Additional Notes	When used for front projection, projector hangs on linesets 7 & 9 (Linesets 6, 8, & 10 CANNOT be used). Imagins projected onto the Rosco Twin White Plastic on lineset 44 or 53.			
	When used for re	ear projection, projector mounts to stand up-center stage. Image is projected onto the Da-Lite 18'H x 32'W on lineset 8.		