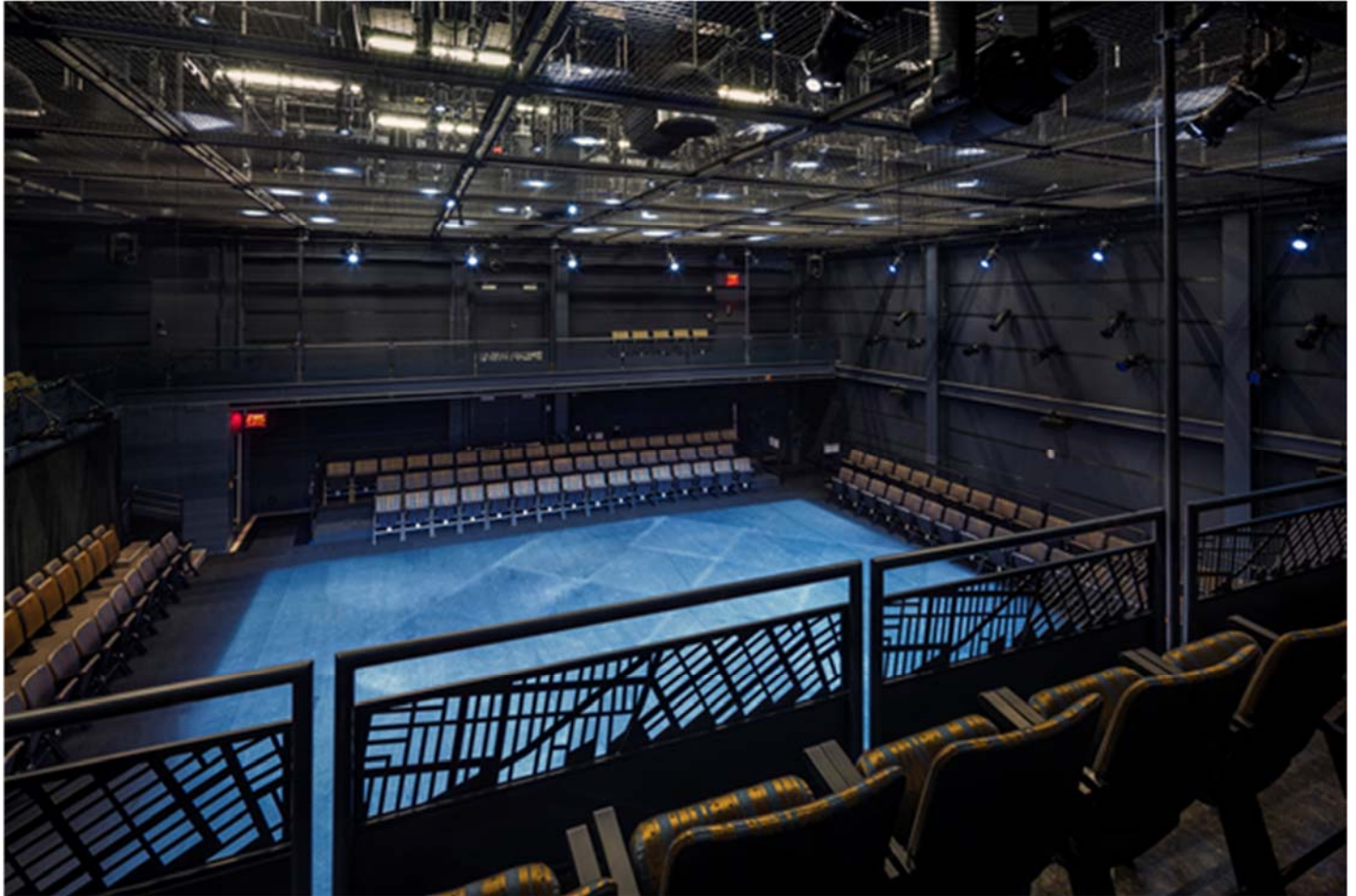# TECHNICAL SPECIFICATIONS

Richard B. Fisher Building

Version: January, 2018

Revised: January 31, 2018

Revised By: R. Gastelum

Brooklyn Academy of Music
30 Lafayette Ave
Brooklyn NY, 11217
Phone: 718-636-4146
Fax: 718-857-166

Contents

Introduction

BAM's technical specifications, seating charts, photos, stage drawings and more can be found on our private box.net website. Plans and Sections are available in AutoCAD, Vectorworks, and PDF (1/4" imperial and 1:50 metric scale).

Email BAM's Director of Production for the site address and password.

Seating Capacity (Straight-on Configuration)
Orchestra   204
Balcony   55

Seating Capacity (Flexible Configurations)*
Orchestra   182-214
Balcony   39-85

* As a flexible space, the seating capacity of the Fishman can vary greatly. Per fire code, 300 is the maximum allowed capacity. Please contact BAM Production for further information.

Contact Information
Phone: 718-636-4146
Fax: 718-857-166

Mailing Address	Loading Door	Stage Door
30 Lafayette Ave.	321 Ashland Pl.	321 Ashland Pl.
Brooklyn NY, 11217	Brooklyn NY, 11217	Brooklyn NY, 11217

Load-In Area
The loading ramp is at street level and is in the alley between the BAM Opera House and the Fisher Building. The door opens directly onto the SR section of the stage. Directly outside the door is a platform that connects to a loading ramp leading to the street. All theatrical equipment will need to be able to make the turn into the door.

Ramp Width	4'-0"	1.2mm
Ramp Length	48'-0"	14.63m
Platform Width	8'-6"	2.59m
Platform Length	19'-3"	5.87m
Loading Door Wdith	6'-0"	1.82m
Loading Door Hight	7''-4"	2.23m
Ramp Max Weight	1,000lbs	453.5kg
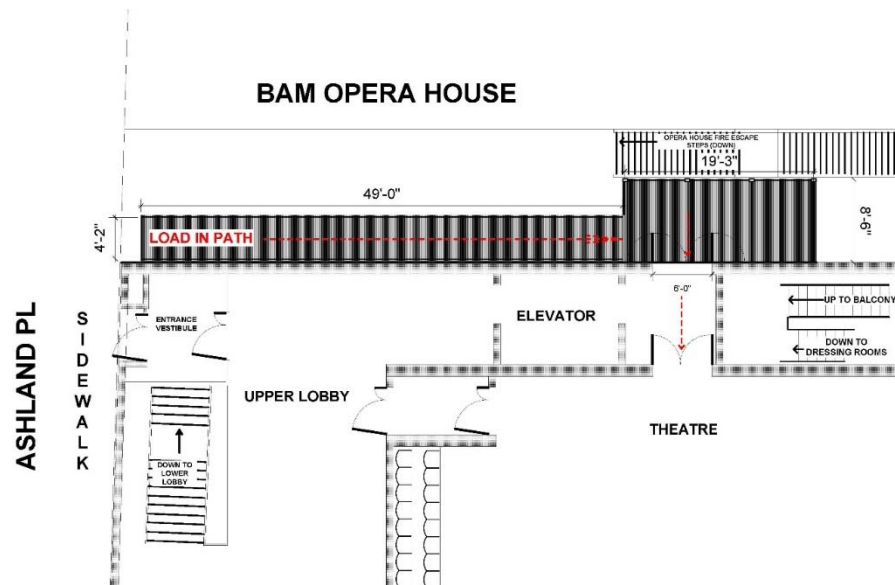
International Freight

Normal U.S. Customs clearance usually takes 3-4 days But there can sometimes be added security holds which could delay clearance for another 4-5 days if they decide to X-ray the container(s), or another, additional two weeks if they decide to de-van the shipment for inspection.

While Customs does regularly see BAM as the consignee on a lot of theatrical shipments that do not have problems clearing Customs, and consequently will infrequently if ever go to the extra lengths to inspect our freight, it's always possible, and we will try to plan for the worst case-- so we suggest that a minimum of two weeks and preferably three would be advisable between arrival in New York and the needed load in date at BAM.

Open Flame and Effects

Companies coming into BAM must provide BAM with all necessary flame proofing documentation for their scenery, stage properties, and costumes, and information as necessary for all open flame effects, including the use of cigarettes, etc. It is understood and accepted that no open flame is allowed downstage of the setting line. BAM will make all reasonable efforts to obtain the appropriate open flame permits; however, the use of all open flame is at the sole discretion of the New York City Fire Department.

Stage Dimensions

Plans and Sections are available in AutoCAD, Vectorworks, and PDF (¼" imperial and 1:50 metric scale). Please allow a 3" or 75mm variance for all dimensions.

Please allow 6" or 150mm around all decorative elements and curved elements of the theatre. Critical measurements require a site survey.

The Fishman Space has flexible seating. Dimensions for different seating arrangements can be requested.

Stage (No Seats)

Seating risers (collapsed to back wall)	53'-3"	16.23m
SL wall to SR wall	57'-10"	17.63m
Deck to bottom of balcony	9'-10"	3m

Stage (Seats Straight On)

Full seating capacity (204 seats)	24'-4"	7.41m
With 1 row cut (183 seats)	27'-4"	8.33m
With 2 rows cut (163 seats)	30'-4"	9.24m
With 3 rows cut (142 seats)	33'-4"	10.16m

*3' clearance from the first row of seating is required.

Balcony

Width of balcony	8'-0"	2.44m
Width of opening between balcony	42'-7 ½"	12.99m

Grid

Deck to bottom of mesh grid	21'-0"	6.40m
Mezzanine to bottom of mesh grid	10'-7"	3.23m
Mesh grid to unistrut grid	7'-1"	2.16m
Mesh grid to lighting pipes 1-7	3'-6 ½"	1.08m
Mesh grid to lighting pipes A-C	3'-8 ½"	1.13m

Carpentry

Crossovers

Crossovers are possible under the stage. Stairway entrances downstairs are located UR and UL, and have restricted height and width. The lobby may also be used during performances for entrances DR and DL.

Stage Floor

The floor is a sprung dance floor with a black ¼" masonite surface.

Platforms

All platforms are aluminum framed stock platforms that can be legged to any height in 7" increments. The platforms are used for audience seating in certain configurations. Availability of platforms will be determined by BAM's Director of Production.

46	3'x6'

Soft Goods

Main Curtain

1	Split ink blue velour 50% fullness-each side	23'-0"w x 19'-5"h	6.17m x 5.92m
1	Split black velour-each side	22'-0"w x 20'-3"h	6.71m x 6.17m

Legs

10	Black velour	8'-0"w x 20'-3"h	2.44m x 6.17m

Borders

3	Black velour	42'-0"w x 5'-0"h	12.80m x 1.52m
1	Black velour	42'-0"w x 3'-0"h	12.80m x 0.91m
1	Ink blue velour border 50% fullness	42'-0"w x 5'-0"h	12.80m x 1.52m

Blackout Drops

1	Black velour blackout drop	42'-0"w x 20'-3"h	12.80m x 6.17m

Scrims

1	Black sharkstooth scrim	42'-0"w x 20'-3"h	12.80m x 6.17m
1	White sharkstooth scrim	42'-0"w x 20'-5"h	12.80m x 6.22m

Plastic Cyc

1	White	42'-0"w x 20'-5"h	12.80m x 6.22m

Under Balcony Masking

22	Black velour	8'-0"w x 8'-10"h	2.44m x 2.69m

Other

1	Full stage traveler track		
1	Bleached muslin	40'-0"w x 18'-10"h	12.19m x 5.49m

Stage Rigging

Chain Hoists

- (4) Half ton CM chain hoists
- (6) Quarter ton StageMaker chain hoists

Lighting

Shared Inventory

BAM's moving light and LED inventory is shared between all of its venues. Please see Appendix A for a complete list of shared inventory.

Overview

Except during the Next Wave Festival there is a Repertory Light Plot in use. For Rep Plot policy and relevant inventory please see the information in the lighting folder on box.net.

During the Next Wave Festival or when the Rep Plot is not in use, all inventory in the space is available. Please see the "Complete Fishman Lighting Inventory" section below for the complete inventory.

Power Locations

1	400 amp service at 120/208v 3 phase 60Hz	Basement (powers 6kw rack)
1	100 amp service at 120/208v 3 phase 60Hz	Tension Grid Level (powers motor control)

Dimmers

Dimmer-per-circuit system.

264 @ 2.4kw and 6 @ 6kw ETC Sensor CEM+ dimmers.

2.4kw: (36) at stage level, (12) at balcony level, (216) at grid level

6kw: (2) at stage level, (4) at grid level

This is an ETC Net3 system with power over Ethernet. Theatrical lighting network taps are available in various locations on the grid, balcony, and stage levels. Portable DMX / RDM Gateway nodes plug into any tap to provide 2-ports of DMX-512 and Remote Device Management protocols into or out of any port. Gateways are programmed via network computer to assign any of the ports in the system to any address in the system.

Control Console
Light Booth is located in the rear of the balcony level. The windows can be opened or removed.

(1) ETC Ion console with synchronized backup and the following features:
- Full featured moving and conventional lighting console
- NET3 (ACN based) network system with 32 DMX universes
- DMX input/output available via Ethernet ports and portable NET3 DMX Gateways.
- Offline programming on PC (Vista or XP) and native on Macintosh (OS X Power PC or Intel)
- Show data importing from Obsession, Express/ion, Emphasis and Strand 500/300 series show files via ASCII

There is an RVI unit with dual monitors, keyboard, and mouse.

House Lights
Optional dimming is available at the lighting console. The house lights can also be controlled via the Unison touchscreen panel in the booth

Lighting Positions
- (12) overhead electrics above the tension grid
- (4) positions under the tension grid that run the perimeter of the theater
- (2) under balcony positions

Complete Fishman Lighting Inventory

25	50° Source Fours	575w*
63	36° Source Fours	575w*
33	26° Source Fours	575w*
17	19° Source Fours	575w*
7	14° Source Fours	575w*
1	90° Source Fours (barrel only)	N/A
12	70° Source Fours (barrel only)	N/A
8	26° Source Fours (barrel only)	N/A
55	Source Four PAR (EA)	575w*
12	Source Four PAR XWFL Lens	N/A
55	Source Four PAR WFL Lens	N/A
55	Source Four PAR MFL Lens	N/A
55	Source Four PAR NSP Lens	N/A
55	Source Four PAR VNSP Lens	N/A
7	Altman Fresnel (6" Lens)	1kw
4	ARRI Fresnel (7" Lens)	2kw
2	ARRI Fresnel (8" Lens)	5kw
24	Focusing Cyc Borderlight	1kw, can be used as individual units or sets of 3

7	6' 3-cir strips (EYC 12v/75w)	750w per circuit
20	Birdies	100w
8	Altman Spectra Cyc 200	200w
5	Vari*Lite VL1100TS**	1000w
18	ETC Desire D60 Vivid	161w
18	D60 Medium Round Lens	N/A
18	D60 Narrow Round Lens	N/A
8	D60 Medium Oval Lens	N/A
8	D60 Wide Round Lens	N/A
15	D60 Very Narrow Round Lens	N/A

*Can also be lamped to 750w. Check on availability. Remove BOLD
** (8) Additional VL1100TS units are permanently installed in the space. See the space drawing for specific locations.

Accessories

30	Source Four top hats, 6"
50	Source Four short stackable top hats, 6"
30	Source Four half hats, Eyelash Style, 6"
35	Source Four short stackable half hats, Eyelash Style, 6"
16	Source Four color extenders, 6"
24	Source Four short color extenders, 6"
45	Source Four PAR color extenders, 7.5"
10	Source Four PAR top hats, 7.5"
35	Source Four PAR 4-way barn door, 7.5"
18	Desire D60 4-way barn doors
4	ARRI 2k Fresnel 4-way barn doors
2	ARRI 5k Fresnel 4-way barn doors
10	Source 4 Donuts, 6"
10	Drop-in irises for Source Fours
30	A size gobo holders
26	B size gobo holders
2	GAM Film FX unit
6	Rosco Revo Pro (gobo rotator)
1	Rosco DMX iris

Haze/Fog

1	LeMaitre Neutron XS Hazer
1	Rosco Vapour Fog Machine with manual/DMX remote

Availability of Haze machines will be determined by BAM's Production Manager.

Personnel Lifts

- Genie Runabout GR-20 single lift - maximum platform height 20'-0" (6.1m)

Sound

Shared Inventory

Some of BAM's sound inventory is shared between all of its venues. Please see Appendix A for a complete list of shared inventory.

System and Power

The system consists of two zones, Mains and Surround. The Mains Zone is made up of: Left, Right, Center, Delays and Sub. The Surround Zone consists of (16) loudspeakers: (5) on the North wall, (5) on the South Wall, (3) on the East Wall, and (3) on the West Wall. All zones can be controlled separately. Please see drawing package for specific loudspeaker locations.

All loudspeakers are time-aligned with preset delays via the Meyer Galileo Loudspeaker Management System.

Standard EQ consists of a low pass on the mains and a high pass on the subs.

There is a Hubbell Circuit-Lock, 100A 120V/208VAC, three phase isolated ground company switch in the basement.

The theater is equipped with a Sennheiser InfraRed Assistive Listening System.

There is Cat6 and HD/3G-SDI infrastructure with tie lines throughout the building.

Mixing Locations

The Control Booth is located in the rear of the balcony level in the booth with windows. The windows be can opened or removed.

An in house mix position is available in the balcony at the rear of the seating risers, just in front of the booth. (8) seats need to be removed to allow enough space for the mixing console and egress. This position is subject to approval by the Production Manager and General Manager.

FOH Mixing Console

1	Yamaha CL3	(64) mono, (8) stereo inputs. (24) mix buses
2	Yamaha Rio1608-D stage boxes	(16) inputs and (8) outputs
1	Yamaha Rio3224-D stage box	(32) analog and (8) AES inputs, (16) analog and (4) AES outputs

Intercom System

(4) Channel Clear-Com party line system with multiple drops at key locations throughout stage, house and all technical areas, along with an (8) channel CellCom wireless com system.

Loudspeakers and System Processing

Main Zone

Left	1	Meyer UPA-1P (hung just above the tension grid)
Right	1	Meyer UPA-1P (hung just above the tension grid)
Center	1	Meyer UPA-1P (hung just above the tension grid)
Delay	3	Meyer UPA-1P (hung just above the tension grid)
Subs	2	Meyer 500-HP (on balcony, USL and USR)

Surround Zone

Stage Right	6	Meyer UPM-1P
Stage Left	6	Meyer UPM-1P
Up Stage	3	Meyer UPM-1P
Down Stage	3	Meyer UPM-1P

Additional Loudspeakers

2	Meyer UPA-1P
2	Meyer UPA-2P
4	Meyer UPJunior
2	Meyer 500-HP

System Processing

1	Meyer Galileo 408 (Main System)
1	Meyer Galileo 616 (Surround System)

Playback

2	Apple Mac Pro w/ QLab3	Connects to console via Dante
1	Tascam SS-CDR200	CD Player

Microphones

2	AKG	C414 XLS
4	DPA	d:fine Black headset
2	DPA	4088 Black headset
5	DPA	4060 Black
4	DPA	d:vote 4099 (w/ assorted instrument clips)
2	Neumann	KM-184
2	Sennheiser	MD-421 II
1	Sennheiser	e906
2	Sennheiser	e604
4	Shure	SM 57-LC
4	Shure	SM 58-LC
4	Shure	SM 58S-LC
2	Shure	BETA 87A
2	Shure	SM81
2	Shure	SM137
4	Shure	MX202B/C
2	Shure	MX418C

Wireless Microphones

BAM Fisher's wireless mic inventory is shared across the Fisher Building, with (8) channel in the Fishman Space, plus another (4) channel of shared inventory pending availability.

Availability will be determined by BAM's Director of Production.

3	Shure	ULXD4Q G50 Receivers (12 channels)
12	Shure	ULXD1 G50 Belt Pack Transmitters
8	Shure	Shure ULXD2 G50 Handheld Transmitters
8	Shure	Shure RPW112 (SM58 Wireless Capsule)
2	Shure	Shure RPW184 (KSM9 Wireless Capsule)

Direct Boxes

2	BBS Audio	BSS AR-133
4	Radial	ProD2 Stereo DI
1	Radial	ProAV1
1	Radial	ProAV2
2	Whirlwind	HOTBOX Active DI
2	Whirlwind	DIRECT-JT Passive DI

Additional Equipment

1	Radial	Reamp
1	Artcessories	Artcessories MyMonitor (Personal Monitor Mixer)
1	RME	Fireface 800

Video

Shared Inventory

BAM's video inventory is shared between all of its venues. Please see Appendix A for a complete list of shared inventory.

There is optical glass in the center pane of the Control Booth windows and the smaller outside panes to prevent loss of image quality.

There is a Cat6 infrastructure with tie lines throughout the building. These can be patched into a Cisco Catalyst 2960-S Ethernet switch.

There is a 3G-SDI infrastructure with tie lines throughout the building.

Projectors

| 3 | Panasonic | Panasonic PT-DZ6710U (6,000 Lumens) |

6K Lenses

3	Panasonic	1.8 – 2.4 lens (Standard)
2	Panasonic	2.3 – 3.6 lens (ET-DLE250)
1	Panasonic	.8 – 1.1 lens (ET-DLE80)

Accessories

| 1 | Draper Screen | 12'-6" x 20'-0" (3.81m x 6.10m) |

1	Draper Screen	8'-3/4" x 14'-0" (2.7m x 4.3m)
1	Barco	DCS 200 Dual Channel Switcher
3	Chief	Chief RPMA6500 Mounts
1	BrightEye	Mitto (DVI to HD-SDI)
8	TrippLite	VGA Extenders
3	Aja	HD5DA (HD/SD Distribution Amp)
3	Aja	HI5 (HD-SDI to HDMI)
1	BlackMagic	Audio to SDI Mini Converter
1	BrightEye	NXT 410 Clean HDMI Switcher/Router

Properties

Marley Floor

Reversible (black and white) marley flooring is available. Each of the (7) available Marley floor pieces are 6'6 ¾" x 55' (2m x 16.76m).

Props Equipment

10	Black Wenger Musician's Chairs
10	Music stands with lights as available
2	Lucite lecterns

6' plastic folding tables and folding chairs available as necessary.

Wardrobe

Facilities

There is a well-equipped separate wardrobe room located in the basement equipped with a laundry room with (2) front loading washing machines and (2) front loading dryers.

Wardrobe Equipment

- (8) rolling clothing racks
- (2) steamers
- (2) clothing irons
- (2) ironing boards
- (2) portable sewing machines

Dressing Rooms

Keys

Dressing room locks are opened with a number code. They are available from the Production and Artist Services staffs.

There are two dressing rooms, each accommodating 10 people.

Rooms

There is one ADA accessible room at stage level, two group dressing rooms in the basement (up to 20 people), and two group dressing rooms on the 4th floor (up to 12 people). Access from the stage to the dressing rooms is via stairs.

Bathrooms and Facilities

All dressing rooms are equipped with bathroom facilities. Basement and 4th Floor dressing rooms are also equipped with showers.

Green Room

There is no green room on the premises. Coffee and beverages are set up at the basement level.

Visiting Company Office

There is an office in the basement designated for use by visiting companies with the following available for use:

- Computer with internet access
- Printer
- Phone line (718-724-8290)

Appendix A – Shared Inventory

The below inventory is shared between BAM's three venues. Availability will be determined by BAM's Director of Production

Lighting

6	VL4000 Spot luminaire	1200w
24	ETC D60 Vivid	
4	Martin Mac Aura XBs	
2	LeMaitre Neutron XS Hazer	
1	Unique Hazer 2.0	
1	Unique Hazer 2.1	
2	MDG Atmosphere hazers	

Sound

1	Yamaha M7CL-48ES	Monitor Mixing Console
1	ProTools Recording System	
4	Sennheiser IEM monitors 2050xp	

Video

2	Panasonic 20K Projector	PT-DZ21K2U (20,000 Lumens)
2	Panasonic 10K Projector	PT-DW8700U (10,000 Lumens)
2	Panasonic	2.4 – 4.7 lens (ET-D7LE30)
1	Panasonic	1.7 – 2.4 lens (ET-D7LE20)
1	Panasonic	1.3 – 1.7 lens (ET-D75LE10)
1	Panasonic	.9 – 1 lens (ET-D75LE6)
1	Panasonic	.36 lens (ET-D75LE90)
1	Barco	ImagePro II Switcher/Scanner
1	Barco	DCS 200 Dual Channel Switcher
1	Draper Screen*	15' x 24" (4.72m x 7.31m)
1	Draper Screen*	12'6"x20' (3.81m x 6.10m)

*Only one screen can be used at once.