



# **Montgomery Hall Theatre Technical Specifications**

**2025 - 2026**

For further details on any information contained in this specification, please contact:

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Postal address: Montgomery Hall Theatre Church Street, Wath on Dearne, Rotherham,  
S63 7RD

## **Stage & Masking**

The stage is flat (no rake) and has a matt black ply surface.

## **Stage Dimensions**

Width of proscenium: 319" (inches)

Height of proscenium: 148.5" (inches)

Depth of stage (u/d): 233" (inches)

Width between flats (dsl & dsr) downstage: 299" (inches)

Width between flats (csl & csr) flats centre stage: 273" (inches)

Width between flats (usl & usr) flats upstage: 250" (inches)

Largest entry path from wing to stage: 42" (inches)

General entry path from wing to stage: 40.5" (inches)

Smallest entry path from wing to stage: 16" (inches)

Height of stage from auditorium floor: 40.5" (inches)

Height from stage to underside of swipe tracks: 188" (inches)

## **Hard Masking**

Please note all masking on stage is permanent and cannot be moved or adjusted. If you require borders to be moved, please speak to us well in advance of your production. (Fees & costs will apply).

X6 Hard masking flats complete the wing space both stage left & right.

X3 Hard masking borders.

X1 Hard proscenium located downstage behind the house tabs.

## **Soft Masking**

Please note there is no soft masking on stage.

## **Swipe Tracks**

Please note the swipe tracks cannot be repositioned or moved. Please speak to a member of staff for more information.

X4 Swipe tracks located, (upstage & centre stage).

## **Electronic Fly Bars**

The Montgomery Hall Theatre has X3 electronic fly systems that allow the fly bar to be lowered to stage level for rigging purposes. Please note that we do not have a fly tower, and scenery cannot be flown in or out. Scenery such as clothes can only be mounted directly to the fly bar if the cloth is remaining within a static position. Swipe tracks are available on all fly bars to allow cloths to be struck.

Fly Bar (1) – Located up stage. (WLL: 300KG)

Fly Bar (2) – Located centre / up stage. (WLL: 300KG)

Fly Bar (3) – Located centre stage. (WLL: 300KG)

*Please note, we do not allow external companies, touring shows and clients access to operate our electronic fly bars. Montgomery Hall Theatre technicians will operate the system during the load in and load out of your production.*

For information regarding certification & load limitations, please speak with the technical theatre manager.

## **Temporary Power**

### **Up-Stage Left & Right**

X2 Two gang 13amp sockets (stage deck)

### **Downstage Centre**

X1 Two gang 13amp sockets (stage deck)

### **Backstage Prompt Desk**

X3 Single gang 13amp sockets

### **Backstage (Crossover)**

X1 CRS 63 AMP Socket (Single Phase)

X1 Single 36 Amp Socket

### **Stage Right**

X6 13amp Single Sockets

Please note, use of the above power points must be agreed with theatre management prior to your booking, (fees & charges may apply).

## **Lighting Equipment**

Please note, no lanterns or equipment are to be adjusted or moved by visiting companies. Our rig is generically focused to cover all areas of the stage with adequate scope for desired looks. If you require lanterns to be focused, please speak with our technical theatre manager, (fees & charges will apply).

## **Lighting Console**

Chamsys Quickq 30 console. Output network / DMX (hardwired).

All of our lighting system us fully LED, we do not use a dimmer system. Portable dimmer systems may be intergraded if your production requires this. Multiple positions backstage & front of house have been allocated for networking purposes. Please speak to a member of staff in advance of arrival regarding networking.

Zero 88 FLX24 lighting console is also available as a back up desk.

*\*Please note, only MHE technicians are permitted to operate & program our inhouse consoles. If you are providing your own lighting or sound operators, you must provide your own lighting & sound console\*.*

## **Profiles**

X8 Marqu Onset Warm White 120W – 26 degree fixed lens tube.

## **Fresnel**

X4 Eluman8 MP 75 LED RGBW MKII 10 – 50 degree.

## **Par 64**

X16 QTX ZP18 Zoom Par Can

## **Moving Head Spot**

X20 Uking 50W Moving Head Spot

X5 Ayra Vision 360 BSW LED Moving Head with CMY & CTO

## **Moving Head Wash**

X2 Lanta Neptune Moving Head Wash RGBW

X6 Generic 40W RGBW Moving Head Wash – Custom Unbranded Fixture (Fixture Head File Available).

## **Wash Lights**

X2 LEDJ Slimline 1WW20 Cob Wash

X2 Eurolite LED Theatre COB 100

X4 Chauvet DJ ColourBand Pix M ILS Bar

## **Follow Spot**

X1 Halogen Powered 1000W Minni Ins Follow Spot (iris included).

## **Networking**

There are numerous networking points around the theatre stage & auditorium.

Access to universe 1, 2 & 3 can be accessed within the control booth & top of the tiered seating gantry.

Networking via universe (1) is terminated and not accessible.

Networking via universe (2) can be found stage right, under the stage.

Networking via universe (3) can be found towards the front of the stage.

Please note that all networking points are hardwired copper 3 pin DMX male & female.

X2 - CAT5 snake lines are available from control to stage. (Stage left terminated).

## **Sound Equipment**

### **Mixing Desk**

**Midas M32 Live Digital Mixing Console**

### **Processing**

- **Input Processing Channels:** 32 Input Channels, 8 Aux Channels, 8 FX Return Channels
- **Output Processing Channels:** 16

- **16 aux buses, 6 matrices, main LRC:** 100
- **Internal Effects Engines (True Stereo / Mono):** 16
- **Internal Show Automation (structured Cues / Snippets):** 500 / 100
- **Internal Total Recall Scenes (incl. Preamplifiers and Faders):** 100
- **Signal Processing:** 40-Bit Floating Point
- **A/D Conversion (8-channel, 96 kHz ready):** 114 dB Dynamic Range (A-weighted\*)
- **D/A Conversion (stereo, 96 kHz ready):** 120 dB Dynamic Range (A-weighted\*)
- **I/O Latency (Console Input to Output):** 0.8 ms
- **Network Latency (Stage Box In > Console > Stage Box Out):** 1.1 ms

### Connectors

- **Midas PRO Series Microphone Preamplifier (XLR):** 32
- **Talkback Microphone Input (XLR):** 1
- **RCA Inputs / Outputs:** 2
- **XLR Outputs:** 16
- **Monitoring Outputs (XLR / ¼" TRS Balanced):** 2
- **Aux Inputs/Outputs (¼" TRS Balanced):** 6
- **Phones Output (¼" TRS):** 2 (Stereo)
- **Digital AES/EBU Output (XLR):** 1
- **AES50 Ports (Klark Teknik SuperMAC):** 2
- **Expansion Card Interface:** 32 Channel Audio Input / Output
- **ULTRANET P-16 Connector (No Power Supplied):** 1
- **MIDI Inputs / Outputs:** 1
- **USB Type A (Audio and Data Import / Export):** 1
- **USB Type B, rear panel, for remote control:** 1
- **Ethernet, RJ45, rear panel, for remote control:** 1

### Mic Input Characteristics

- **Design:** Midas PRO Series
- **THD+N (0 dB gain, 0 dBu output): THD+N (+40 dB gain, 0 dBu to +20 dBu output): Input Impedance (Unbalanced / Balanced):** 10 kΩ / 10 kΩ
- **Non-Clip Maximum Input Level:** +23 dBu
- **Phantom Power (Switchable per Input):** +48 V
- **Equivalent Input Noise @ +45 dB gain:** -125 dB (22 Hz-22 kHz, unweighted)
- **CMRR @ Unity Gain (Typical):** >70 dB
- **CMRR @ 40 dB Gain (Typical):** >90 dB

### Input/Output Characteristics

- **Frequency Response @ 48 kHz Sample Rate:** 0 dB to -1 dB (20 Hz-20 kHz)
- **Dynamic Range, Analogue In to Analogue Out:** 106 dB (22 Hz-22 kHz, unweighted)
- **A/D Dynamic Range, Output (Typical):** 109 dB (22 Hz-22 kHz, unweighted)
- **Crosstalk Rejection @ 1 kHz, Adjacent Channels:** 100 dB
- **Output level, XLR Connectors (Nominal / Maximum):** +4 dBu / +21 dBu
- **Output Impedance, XLR Connectors (Unbalanced / Balanced):** 50  $\Omega$  / 50  $\Omega$
- **Input impedance, TRS Connectors (Unbalanced / Balanced):** 20 k $\Omega$  / 40 k $\Omega$
- **Non-Clip Maximum Input Level, TRS Connectors:** +21 dBu
- **Output Level, TRS (Nominal / Maximum):** +4 dBu / +21 dBu
- **Output Impedance, TRS (Unbalanced / Balanced):** 50  $\Omega$  / 50  $\Omega$
- **Phones Output Impedance / Maximum output Level:** 40  $\Omega$  / +21 dBu (Stereo)
- **Residual Noise Level, Out 1-16 XLR Connectors, Unity Gain:** -85 dBu 22 Hz-22 kHz unweighted
- **Residual Noise Level, Out 1-16 XLR Connectors, Muted:** -88 dBu 22 Hz-22 kHz unweighted
- **Residual Noise Level, TRS and s Monitor out XLR Connector:** -83 dBu 22 Hz-22 kHz unweighted

## Display

- **Main Screen:** 7" TFT LCD, 800 x 480 Resolution, 262k Colours
- **Channel LCD Screen:** 128 x 64 LCD with RGB Colour Backlight
- **Main Meter:** 24 Segment (-57 dB to Clip)

## Power

- **Switch-Mode Power Supply:** Auto-Ranging 100-240 VAC (50/60 Hz)  $\pm$  10
- **Power Consumption:** 120 W

## Physical

- **Standard Operating Temperature Range:** 5°C – 40°C (41°F – 104°F)
- **Dimensions:** 891 x 612 x 256 mm (35.1 x 24.1 x 10.1")
- **Weight:** 25 kg (55 lbs)

Please note that the Midas M32 is fixed in our control booth located to the upper back of the auditorium and is in a fixed position that is not movable. For alternative live sound mixing positions please speak with the technical theatre manager.

## Sound Networking

- X1 CAT5C snake from control to stage, terminating stage right, with X10 meter excess each end.
- X2 CAT5/6 lines from control to stage, terminating stage left, with 3-meter excess at termination.
- X1 24 channel stage snake from control to stage, 24 inputs & 6 outputs.
- X1 Midas DL32 Digital Stage Box.

## **Playback Equipment**

Please note, we require all sound files to be provided on a USB pen, in a WAV file format. (Fees & charges may apply for file conversion).

X2 Windows PC desktop computers running multiplay sound playback software.

X2 Windows CD drives for media uploading.

## **PA & Monitoring System**

The house PA system cannot be removed under any circumstances. The PA system is flown (L/R) front of house to the front of the stage.

X1 SubZero HiCAST LA12 Professional Line Array System

- Modular PA system with 16 4" speakers and two 12" subwoofers
- Powerful 8160W Max power projection with articulate lows and smooth highs

X2 IMG Stageline Flat-M100 – Front Fill: located front stage left & right.

X2 The Box Pro Achat 206 – On Stage Monitoring – Passive.

## **Mixing Positions**

The main mixing position for the theatre is located within our technical room positioned centrally to the stage within row (N) – top of raised seating gantry. Alternative mixing positions can be fulfilled, please speak with the technical theatre manager.

## **Radio Microphones**

X6 Generic handheld radio mics.

X16 JTS R4 System

X1 W Audio Antenna Distribution System

X2 Sennheiser XSW 1-825 Dual Wireless Microphone System, E Band

## **Hard Wired Microphones**

X3 Hard wired handheld microphones

## **Hard Wired Boundary Mics**

X3 Hard wired boundary mics. (Please note these mics can only be used across the front of the stage).

\*These microphones are not designed to amplify vocals\*.

## **Show Relay & Talkback System**

We have a fully integrated show relay system that can be configured to relay any aspect of your shows audio to various departments within the theatre. Please see below all areas of the show relay;

## **Show Relay**

- Dressing Rooms 1,2
- Backstage Dressing Room Corridor
- Back Stage
- Auditorium General Areas
- Bar & Foyer Areas
- Technical Box

## **Talkback System**

We have X4 wired showcoms intercom units. Please see below locations for intercom use.

- Technical Box
- Stage Left (Prompt Desk)
- Stage Right
- Top of Tiered Seating (Follow Spot Gantry)

If you require a different location for the talkback system, please speak with the technical theatre manager, (fees & charges may apply).

## **Internet**

Internet and WiFi connections are available backstage and on stage please ask a member of the Tech Dept for access password.

## Address

Montgomery Hall Theatre  
Church Street  
Wath Upon Dearne  
Rotherham  
S63 7RD



## Access

The load in & our access is located to the front of the building on Church Street via the main foyer. Access from load-in to stage is flat and ground level.

Please use the intercom located to the right of the main entrance upon arrival at the theatre.

## Technical Crew Availability

Crew member availability is limited to production schedules. When theatre crew are required on site, please email ahead of your booking or email the team directly.

## Contact Information

Technical Team: [mhetheatre.tech@gmail.com](mailto:mhetheatre.tech@gmail.com)

Theatre Management: [mhetheatre@gmail.com](mailto:mhetheatre@gmail.com)

Website: [www.montgomery-hall.com](http://www.montgomery-hall.com)

Call: 01709 513160

## Theatre Fly Systems & Rigging

For theatrical rigging services, please contact the Technical Theatre Manager ahead of your booking. We do not allow use of our in-house fly systems by touring companies. Working Load Limitations are available upon request.

### Static Rigging Locations

- Front of house LX truss (X2 – 2tn manual chain block) – WLL: 200kg \*when bar is not already loaded\*.
- Up stage LX truss (X2 - 1tn manual chain block) – WLL: 200kg \*when bar is not already loaded\*.
- Up stage fly bar #1 (X1 – 1tn electric hoist) – WLL: 300kg \*when bar is not already loaded\*.
- Up stage fly bar #2 (X1 – 1tn electric hoist) – WLL: 300kg \*when bar is not already loaded\*.
- Up stage fly bar #3 (X1 – 1tn electric hoist) – WLL: 300kg \*when bar is not already loaded\*.