

EM Forster Theatre: Technical Specification

Access & get-in:

- The theatre's scene dock is located at the end of an access road within the Tonbridge School grounds (use Avenue Gate entrance (satnav TN10 3AB) & take first left). Map at end of this document
- The maximum size vehicle able to safely access the scene dock is a 12t Luton.
- As a guide, no single item can be bigger than 7ft width x 8ft height.
- There is no designated Stage Door or Stage Door keeper.

Stage:

- Dimensions: SL – SR between proscenium "pillars" 8780mm.
- Dimensions: D/S setting line – Cyc 8800mm.
- Surface: 6mm MDF mounted on 25mm ply, painted matt black.
- Orchestra pit: Underneath DS, constructed of steel deck sections, no sightline to stage

Overhead:

- No fly tower - Fixed height grid at 5580mm. Lattice of RSJs overlaid with further steel struts.
- 5x Electric Drill Winch Bars (LX1-5). (**SWL 225Kg**)
- 4x pairs of black legs, set at 30 degree angle, dead hung. (Hard masking plus soft masking)
- One border at proscenium, dead hung.
- One border down stage of each LX2, 3 & 4; dead hung.
- One tab track, upstage of each border, dead hung.
- Border downstage of Cyc, dead hung.
- Cyclorama (full width/height, white)
- One manual winched tab track (Tab 1) for House Tabs (Black). Winch position on gallery level DSL
- Approximate bar positions from proscenium line. LX 1-5 Winch bars, all remainder are all dead hung: FOH bridge: -7200mm

Border 1:	+0400mm	(Height to bottom of cloth:	4515mm)
Tab 1:	+0580mm	(Height to bobbin:	5290mm)
LX 1:	+1200mm	(Full Out position trim:	5000mm)
Border 2:	+2410mm	(Height to bottom of cloth:	4510mm)
Tab 2:	+2520mm	(Height to bobbin:	5130mm)
LX 2:	+3175mm	(Full Out position trim:	5000mm)
LX 2A:	+3930mm	(Fixed Height:	5410mm)
Border 3:	+4230mm	(Height to bottom of cloth	4510mm)
Tab 3:	+4250mm	(Height to bobbin:	5480mm)
LX 3:	+4580mm	(Full Out position trim:	5050mm)
Border 4:	+6200mm	(Height to bottom of cloth:	5020mm)
Tab 4:	+6230mm	(Height to bobbin:	5460mm)
LX 4:	+6650mm	(Full Out position trim:	5050mm)
LX 4A:	+7580mm	(Fixed height:	5400mm)
LX 5:	+8430mm	(Full Out position trim:	5200mm)
Tab 5:	+8620mm	(Height to bobbin:	5420mm)
Cyc:	+8800mm	(Fixed height:	5300mm)

Dressing rooms & Wardrobe:

DR1 – 25 Person Capacity

- Basement level.
- 6 mirrored dressing positions
- 2 non mirrored dressing positions.
- Sink with mirror.
- Individual toilet & shower rooms.
- Audio and video relay

DR2– 25 Person Capacity

- 1st floor level.
- 10 mirrored dressing positions.
- Sink with mirror.
- Toilet & shower room.
- Audio and video relay

DR3 – 40 Person Capacity

- 2nd floor level.
- 15 mirrored dressing positions.
- No sink.
- No shower room.
- Toilet
- Audio and video relay

Wardrobe space – 10 Person Capacity

- 2nd floor level.
- Washing/drying machines.
- Ironing facility.
- Audio relay only.

Additional dressing rooms (upon request and subject to additional charges):

Studio theatre – 80 Person Capacity

- Ground Floor (accessed through FOH)
- No mirrored dressing positions.
- No sink, toilet or shower room.
- Seating upon request
- Tables upon request
- Audio and video relay upon request

Teaching Room – 50 Person Capacity

- 2nd floor level (accessed via FOH)
- No mirrored dressing positions.
- Toilet room.
- No shower room.
- Audio and video relay upon request

Lighting:

Control:

ETC ION XE20 Lighting console. 4 dmx universes. Lightshark LS-4 Artnet node in the grid with 4 dmx outputs & 3 x 6 output dmx buffers. Second Lightshark LS-4 Artnet node DSL with 4 dmx outputs & 2 x 6 output dmx buffers. Physical dmx distribution to DSR and DSL, Dimmer rack, House Light dimmer rack and Grid.

Dimmable Power:

Dimmers located in SL wing, 120 x ETC Colorsound ThruPower 2.5kw. All sockets are 15A. 36 ways on FOH bridges. 8 dimmers at stage level, 2 in each corner. LX1-5 each have 12 x 15A sockets. 4 dimmers in the Orchestra Pit. 6 dimmers on each balcony, 2x15A sockets per way. 12 additional dimmers at grid level DSC, 2 x 15a sockets per way. Limited amount of additional Socapex Multicore and 15A Fan In/Outs

Hard Power:

10 x 16A single phase Ceeform commando sockets are located on the grid. 5 SR and 5 SL.
2 x 16A single phase Ceeform commando sockets FOH lighting gallery
2 x 16A single phase Ceeform commando sockets located both SL and SR at circle level perch position.
2 x 32amp single phase Ceeform sockets, located downstage centre of the grid.
3 x 32amp three phase Ceeform sockets located downstage centre of the grid.

Additional 6 x 15A single phase Ceeform sockets via portable distro (on 32A single phase trailing lead), usually located DSC of the grid

1 x 32amp single phase Ceeform socket located DSR. Stage level. Clean Sound Power

Multiple 13a sockets around the proscenium and wing walls.

Tungsten Fixtures:

19 x ETC Source 4 Bodies (750w)

13 x ETC S4 Zoom lens tubes 25/50 (To fit above and/or Colorsource/Lustrs)

12 x ETC S4 Zoom lens tubes 15/30 (To fit above and/or Colorsource/Lustrs)

3 x ETC S4 50deg LED EDLT lens tubes (To fit above and/or Colorsource/Lustrs)

7 x ETC S4 50deg lens tubes (To fit above and/or Colorsource/Lustrs)

7 x ETC S4 19deg lens tubes (To fit above and/or Colorsource/Lustrs)

10 x ETC S4 Jnr 25/50 (575w)

4 x Strand SL 15/30 (600w)

8 x Selecon Rama Fresnel (1200w)

8 x Selecon Compact Fresnel (1200w)

8 x Strand Patt 743 Fresnel (1000w)

30 x Par 64, CP62 (Plus selection of CP61 and CP60 lenses)

6 x Par 20 (Birdies)

LED Fixtures:

6 x ETC Source 4 LED Lustr 2 light engines to fit any of the Source 4 lenses listed above

11 x ETC Colorsource light engines to fit any of the Source lenses listed above

4 x ETC Colorsource V Spot light engines to fit any of the Source 4 lenses listed above

8 x ETC Colorsource V Fresnels

16 x Chauvet Colorado Tri-Tour 1 LED Par's (Permanently rigged back light on LX4A and LX2A)

7 x Selecon PLCYC1 LED Floods (Permanently Rigged LX4A)

10 x Chauvet Rogue R1 Washes

6 x Chauvet Rogue R2 Spots (2 are R2X)

6 x Chauvet Rogue R2 Washes (2 are R2X)

8 x Chauvet EVE P-130 RGB Pars (25deg/45deg lenses)

10 x LEDJ Slimline 12Q5 RGBW Battens

Follow Spots (Additional Cost):

2 x Robert Juliat Cricket (Check for availability)

Projection:

Projectors (Additional Cost)

1 x Panasonic PT-RZ970 Projector (10,000 lumens, 16:10) with 1.7 to 2.4:1 zoom lens. Fixed position FOH focused to main cinema screen. Can be moved to LX1 and used with 0.85:1 Short Throw lens (ET-DLE085) on to Cyclorama. Also have Ultra Short Throw lens (ET-DLE030) for back/front projection from various positions

Also available 1 x Sony VPL-FE40 Projector (4,000 lumens, 4:3). Can be rigged from any position.

SDI outputs FOH and above Grid fed from Control Room. HDMI and SDI inputs in control for sources.

Screens

1 x 7m x 5m main Cinema Screen permanently fixed at proscenium line. Motorised in/out.

1 x 4.1m x 2.3m (13.5' x 7.5') 16:9 ratio back projection screen with stand and skirt
1 x 8' x 6' (2.25m x 1.6m) 4:3 ratio back projection screen with stand and skirt.

Sound:

Mixer

Yamaha QL5 (32 analogue inputs; Dante digital inputs possible via TIO1608D)
(16 local analogue outs; Dante digital out and 8 analogue outs routed to Symetrix audio distribution system)
Symetrix SymNet Radius 12x8 control platform via Dante

Amps

1 x Powersoft K3 amplifier (2600w per channel at 4 ohms – W8VDQ full range passive pair)
1 x Powersoft K10 amplifier (4000w per channel at 4 ohms – WS218X Sub pair)
1 x Powersoft M28Q amplifier (700w per channel at 4 ohms (4 channel) – WT15+, AQ5 L&R, AQ8)

Foldback:

1 x Carver PM420 (In main amp rack) *Additional amps* (for additional foldback/effects):
2 x Yamaha P3500S amplifier

Audio Distribution

16 x XLR Inputs DSR. Fed to control room
10 x XLR Outputs DSR. Fed from control room
6 x XLR Inputs DSL. Fed to control room
10 x XLR M/F crossover tie lines SR<>SL
4 x CAT5e Ethercon sockets SR. Fed to control room
4 x CAT5e Ethercon sockets SL. Fed to control room
Additional Cat5e sockets in Orchestra pit and in the grid
Yamaha TIO 1608D. Rack mount portable Dante based digital interface, 16 Analogue ins, 8 Analogue outs

Speakers

2 x Martin Audio W8VDQ (passive) – Main Left/Right (proscenium hung)
2 x Martin Audio WS18X – Main Left/Right SUBS (on ground underneath main L/R)
4 x Martin Audio WT15+ (*Stage Front Fills*)
4 x Martin Audio AQ8 (*Circle Delays*)
4 x Martin Audio AQ5 (*Rear Under Balcony Delays*)
2 x Martin TX12 (Moveable foldback: usually DSR and DSL on stage)

Additional Speakers: (For addition foldback/effects)

2 x Yamaha SV115V speakers
2 x Ohm RW3 speakers
2 x Pulse PVS12 Wedge

Mics

Radio Mics - 6 Channels of RF Radio (Additional Cost):
6 x Sennheiser ew300 G3/G4 belt pack radio microphone transmitters with lapel mics. Some headset mics
4 x Sennheiser e865 handheld microphones

6 x ew300 G3/G4 rack mounted radio receivers for the above (any six). Standard licenced frequencies.
 6 x Shure SM58 microphones
 8 x Shure SM57 microphones
 1 x AKG D112 (Kick)
 3 x Shure PGA 56 (Snare/Toms)
 1 x Shure Beta 56a (Snare)
 2 x Audio-Technica AT835b shotgun mics
 2 x RODE NT5 matched pair condenser microphones
 1 x Sennheiser e945 vocal mic

Playback & accessories

1 x Numark CDN-77 USB (Dual Player)
 4 x Behringer ULTRA-DI DI20 DI boxes
 8 x Boom microphone stands (Long)
 6 x Boom microphone stands (Short)
 Mac Mini c/w QLAB v4/v5 in to 4 channel Roland R44 Rubix audio device + HDMI video output.
 Denon BD500 II Blu-Ray player (HDMI out)
 Black Magic Television Studio vision mixer (HDMI/SDI in/out) – inputs in Control Room
 Black Magic ATEM 1 M/E Constellation 4K (SDI in/out) – inputs in Control Room

Comms:

Multiple installed comms points around venue including control room and prompt corner.
 4 x Stonewood Audio/ Granite Cans units and single muff headsets (hard wired)
 4x Wireless Altair WBP-200 Comms packs
 1 x Cloud FOH and Backstage call system.

Effects:

These are subject to additional charges and should be booked at point of contract.

2 x UV cannon (400W)
 1 x Base Hazer Pro
 1 x Unique Hazer (Check for availability)
 1 x Stairville 1500W DMX Strobe

Staging:

8 x 8ft x 4ft Steel Deck
 2 x 4ft x 4ft Steel Deck
 6 x 1m x 2m Steel Deck
 8 x Tank Traps
 Large Selection of Scaff
 Dance Floor (Black or Grey Harlequin)
 6 x Boom Frame Stands (3 fixed mounting positions per boom)

Additional Masking:

1 x Pair mid stage blacks (manual swipe, normally behind LX2)
 1 x White Gauze
 1 x Gold House Tabs

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