

Tech Spec

Date: 29 August 2019. Earlier versions should be destroyed.

Information believed correct at time of writing. Please contact us for any updates.

We also have a venue Users Guide available.

Updates in this version:

- There are now 2 separate DMX universes cabled
- Speaker connections and patch panel have been upgraded
- New Foyer sound system installed

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Contact Info

Jermyn Street Theatre
16b Jermyn Street
London
SW1Y 6ST

There is no off-street parking or loading bay.
On street parking and loading is controlled by Westminster.

Web: www.jermynstreettheatre.co.uk
Email: info@jermynstreettheatre.co.uk
Telephone: 020 7434 1443

Venue Specification

Layout

- Raked seating for 70 with 5 rows facing, 2 rows on stage-left side.
- Flat floor-level stage with lighting grid.
- Stage space is 8 metres long x 4 metres deep x 3.5 metres high (to grid).
- Refer to the separate *Seating Plan* and *Grid Plan* documents.
- There are 2 dressing rooms with fridges, sofas, microwaves, kettles, iron and board.

- The venue is situated in the basement, accessible from street level via a flight of stairs to:
 - Foyer
 - Box Office
 - Office
- Then there is a further small flight of stairs to:
 - Auditorium, with Fire Exit
 - Bar servery
 - Stage
 - Control Box
 - Backstage corridor
 - Toilets x 3
 - Dimmer Room
 - Piano Store
- Backstage facilities are located in the sub-basement, via a curved flight of stairs:
 - Stage Managers Room
 - Equipment “Cage”
 - Chair Store
 - Dressing Rooms 1 & 2
 - Workshop, with Fire Exit
- There is a separate set of stairs to a street level Fire Exit, also typically used for load-in and load-out.
- There is no lift to any level.

Productions

Typically, we host a **main show** with a run of several weeks with a number of **ad-hoc events** taking place between main show performances, such as daytimes or Sunday evenings. These ad-hoc events can include rehearsed readings, showcases, touring shows etc. which take place ‘on top’ of the main show stage, set, technical rig and backstage arrangements.

Technical Inventory

All equipment is for appropriate use by competent personnel only, who should check/test it before use. Please check with us as some equipment may be out for repair. Technical documents for most equipment are available in soft copy. All our equipment is registered and security marked. If you wish to bring your own or hired equipment you must agree this with us in advance, and all equipment must have a valid safety test.

Lighting

Desk		
1	ETC Element	With Midi and Ethernet connectivity
Dimmers		
6	Betapack (DMX 1 thru 36)	Total of 36 channels of 10A max each
Patch		
72	Patchable circuits using 15A connectors	From dimmers or hard power to grid with 15A connectors unless noted
Lanterns		
6	Vision 1200W Fresnel 45/80	1.2kw T29
12	Vision 650W Fresnel 45/80	650w T27
4	Prelude F Fresnel	650w T27
10	Vision PC 45/80	650w T27
6	Vision Profile Wide 23/40	650w T27
2	Vision Profile Narrow 14/30	650w T27
4	Source4 Junior 25/50	575w HPL575
2	Source4 Par	575w HPL575
1	Par 64	1kw
2	Patt 743	1.2kw T29
10	ETC Color Source LED Par (DMX)	89w (with Powercon connectors)
Other		
1	AYRA Flash 60 LED Strobe DMX (3 pin)	60w
1	Hitachi LCD Projector CPX1	with remote and mounting bracket
House lighting		
Via separate dimmer by DMX (501 thru 504) and/or manual control panels		

Sound

Playback		
1	Mac Mini	With mouse, keyboard, display, wi-fi
1	QLab	With pro audio and basic video licenses
1	Saffire 24 Pro Firewire audio interface with Saffire MixControl software	In: 4 analogue, 1 S/PDIF-2 and 1 optical digital (S/PDIF-2 or ADAT-8) Out: 6 analogue and 1 S/PDIF-2 digital Midi: 1 in, 1 out
1	Allen & Heath Zed 24 mixer	In: 16 Mono, 4 Stereo, 1 Stereo USB Out: Main Stereo, Main Mono Sum, Alt Stereo, Stereo USB, 4 Aux (2 pre & 2 post fade)
1	Sony CD Player	No remote
1	Yamaha SPX990 effects unit	Two channels
1	Behringer Ultrapatch Pro PX3000	For routing audio, with default patch
Amps		
3	Carver pm700 two-channel amps 225w@8ohm or 350w@4ohm	
Speakers		
2	Martin EM26 125w/8ohm (speakon)	Hung in grid as Mains.
6	Martin EM15 75w/15ohm	Four fixed in rig as Fills.
1	Martin EM150 400w/4ohm	Fixed under steps as Bass sub.
2	Martin WM0.5 wedges 150w/8ohm (speakon)	
6	JBL Control One 50w/8ohm	Four rigged as Rear Surrounds
1	Speakon patch panel	For routing speakers
Microphones		
2	SM58 mics	1 as show relay mic
2	PG58 mics	
1	Sennheiser ew100 Lavalier radio mic	Transmitter pack (2xAA battery) plus Receiver
	Mic stands	Assorted

Other Equipment

Piano – Kawai upright with stool	Stored in Piano Store
Ladders (medium & high)	Stored in Dimmer Room
Stage weights	Stored in Dimmer Room/Control Box
Power Cables, Adaptors and Grelcos	Stored in Dimmer Room
Gel frames, gobo holders and barn doors	Stored in Dimmer Room/Control Box
Spare lamps and fuses	Stored in Dimmer Room/Control Box
Spare cable and connectors	Stored in Cage
Audio Cables and Adaptors	Stored in Control Box

Please do not modify our equipment or cables etc. without our permission.

Lighting

If agreed in advance with us, you may re-configure the lighting grid and program the lighting desk to suit your show. If you wish to bring your own or hired equipment you must agree this with us in advance, and all equipment must have a valid safety test.

Main shows will have priority on lighting configuration.

Ad-hoc events during a main show run will have to make use of the lighting configuration fixed for the current show. In these cases, do not move, refocus or re-patch the fixed configuration lanterns. Do not alter the main show program in the lighting desk (but you can create your own separate program).

When handling lanterns remember they contain fragile glass lamps (bulbs) and lenses. Do not drop or bash them. Do not move lanterns while turned on or still hot as this will break the lamp filament.

You should return the lighting to an agreed configuration at your final get-out.

Programming the Lighting Desk

Each production is responsible for programming the lighting desk for their own show.

When programming the lighting desk for a **main show** run, please also program a sub-master on the desk, set up to provide an as good as possible general cover of lighting for use by other users between your sessions, e.g. ad-hoc events, rehearsals etc.

Please note your configuration and save your program in the desk, taking a backup on USB drive (please bring your own). Other users may use the system between your sessions and while they should not alter your programming, it's better to play safe!

Gels and Gobos

Lighting designers are advised to obtain their own lighting gels and gobos.

We do not keep a stock of gels, only those left behind by other users which you may use. These are filed by colour in the Cage, and ideally will have the gel number marked on them by whoever left them (if you leave some behind please label them).

Similarly, we only have those gobos left behind by other shows, held in the Control Box, which you may use.

Spare gel frames and gobo holders for lanterns are stored in the drawers in the Dimmer Room.

DMX

There are two DMX universes (1 and 2) cabled with 5-pin XLR connectors to the corresponding universe on the lighting desk. If you bring any 3-pin devices you will need to bring your own adapters.

Universe 1 (colour coded Yellow) runs from Control Box to Dimmer Room and is terminated in the Grid at DSL. DMX channels on Universe 1 are allocated as follows:

1 thru 36:	Dimmer channels 1 thru 36
501 thru 504:	House Light dimmer channels 1 thru 4 (see below)

Universe 2 (colour coded Brown) runs from Control Box via loop-in points around all four sides of the Grid and is terminated in the Grid at DSR.

Note that the DMX loop-in points on the front lighting bar can be re-patched onto Universe 1 in the Grid at DSL. If you do this, make sure termination is maintained on both universes and put it back onto Universe 2 at your final get-out.

House Lights

Our House Lights have a dedicated 4-channel dimmer, operated manually via control panels in the Control Box and Box Office, or by the lighting desk using DMX.

One House Light channel controls a socket near the lighting patch typically used for an illuminated Toilets sign indicating to the audience which door they should use to reach the Toilets. This should be on with House Lights but be faded out when the toilets are closed prior to curtain up.

House Light Areas		Dimmer	DMX
AUD	Foyer and rear seating	1	501
STG	Over stage	2	502
LOO	Socket for Toilets sign	3	503
B/S	Backstage corridor	4	504

Control Panel Programs

1	ON	All House Lights on at approximately 75% including Toilets sign.
2	LOO OFF	As 1 but without Toilets sign. Use this program for day-to-day use with no audience.
3	50%	approximately half light
4	25%	approximately quarter light
☼	ALL ON	All House Lights full on
●	ALL OFF	All House Lights off

Note that the highest value from either the control panel or the lighting desk will take precedence.

- When controlling from the desk, the control panel should be at ALL OFF. So before opening the house set House Lights levels from the desk then set panel to ALL OFF.
- When the desk is off, use the panel programs. So before shutting down the desk, set the panel to ON or ALL ON.

A diagram located by each control panel provides guidance.

The House Light dimmer should remain powered on at all times. It is integrated with emergency lighting.

Working Lights

Our working lights are LED floodlights operated by two-way switches in the Control Box and Box Office.

Emergency Lights

There is full cover of maintained and non-maintained emergency lighting and illuminated exit signage. These are regularly tested.

Projector

The projector, remote, suspension-bracket and video cables are kept in the Control Box and are typically mounted in the Grid as required. Check the remote battery and replace as required. Hard power can be connected to the projector via the lighting patch. The projector should be switched off using the remote before powering it down. The projector should be derigged during your final get-out and all items returned to the Control Box.

CCTV

There are two CCTV cameras covering the stage and the backstage corridor, working in all lighting conditions (colour in good light, monochrome in low light).

A control unit in the Control Box allows the operating technician to select one or other or both camera images in a range of variations on a display monitor in the Control Box. This display is replicated to monitors in the backstage corridor and the Stage Managers Room. The backstage corridor monitor can also directly select the backstage corridor camera – useful for checking that the audience is clear of the corridor.

Note that the monitor in the Stage Managers Room can be relocated by arrangement with us to the sub-basement corridor by the Cage should the room be re-designated as a dressing room.

There is a separate security CCTV system controlled by the Office.

Use of Smoke or Haze

If you wish to use smoke or haze you must agree this with us in advance, and all equipment must have a valid safety test. It may be necessary to arrange for smoke detectors to be isolated by Front of House during its use, and for this to be incorporated into the production pre-show and post-show checklists.

Air Conditioning

Due to the environmental conditions in the theatre, air-conditioning must be on for all performances. We can adjust the settings to suit the circumstances.

There are three a/c units, operated using the control panels in the control box, and situated above the grid:

1. Stage right.
2. Centre.
3. Stage left.

Each unit can be turned on or off at the control panel. Do not alter any settings without checking with us first.

Sound

We have a standard default sound configuration. If agreed in advance with us, you may re-configure the system to suit your show. If you wish to bring your own or hired equipment you must agree this with us in advance, and all equipment must have a valid safety test.

Main shows will have priority on sound configuration. **Ad-hoc events** during a show run will have to preserve the configuration fixed for the current show.

However, do not move the fixed speakers, nor any cables in trunking or fixed with cable ties without our prior permission. These are part of our standard rig. You can re-patch or reroute at the patch panels. Do not cut, modify or otherwise alter cables, connectors etc.

Please keep a note of your routing and levels as other users may use the system between your sessions and you may have to reset the system.

You must return sound (including patching and speakers) to the default configuration at your final get-out.

Note that sound may be subject to interference from mobile phones so ensure these are off. Radio mics may also be subject to local radio interference.

Mac Mini, QLab and Saffire Interface

The Mac Mini is fitted into the Control Room rack, with the Saffire interface. Audio is connected via the patch panel and USB ports are extended to the desk level. The Mac power switch is accessible between Mac and Saffire.

Sound Default Configuration

The default audio set up is a 1-to-1 mapping from QLab output channels 1 thru 6 to Amps 1 thru 6:

- QLab “Saffire” audio patch channels 1 thru 6 map to Saffire DAW inputs 1 thru 6 respectively.
- Saffire MixControl routes DAW inputs 1 thru 6 to line outputs 1 thru 6 respectively.
- Audio patch panel routes outputs 1 thru 6 to Amps 1 thru 6 respectively*.
- Audio patch panel also routes Mixer Main outputs L and R to Amps 1 and 2 respectively*.
- Audio patch panel routes Mac Mini built-in output (L mono) to Foyer sound system*.

*The audio patch panel set up is with all cables removed.

The default mixer set up is:

- CD source connected to mixer as Stereo.
- 3.5mm jack sources connected to mixer as Stereo.
- Radio mic receiver source connected to mixer as Mono.
- Mixer Main L & R outputs set up as House Left & Right.

The default speaker set up on the speaker patch panel (see below) is:

- Amp 1 to Main Left
- Amp 2 to Main Right
- Amp 3 to Bass bin
- Amp 4 spare
- Amp 5 spare
- Amp 6 spare

Sound levels are set as follows:

- All Amps have gain controls set at maximum.
- Saffire levels (outputs 1 and 2 have manual controls) set at maximum.
- QLab cue levels are set to achieve desired output levels.
- Mixer channel gain is set to achieve desired output levels when channel and master faders are at 0dB.

Left and Right for stereo are oriented from the audience perspective – i.e. Stage Left is audience Right.

Audio Patch

There is an audio patch bay in the Control Room rack which can be used to (re)route audio between the various pieces of equipment:

- Mixer
- Saffire interface
- Mac Mini
- Effects (FX) unit
- Amps
- Foyer sound system

The default set up (see above) is with no patch leads installed.

Refer to the diagram in the Control Box for other options. There should be no need to remove equipment from the rack or to access the rear of the rack.

Speakers and Patch

There is a speaker patch behind the Control Room rack which can be used to (re)route the arrangement of speakers to amps. Colour-coded speakon fly leads connect to the patch panel for the speaker circuits and the Control Box Tie Lines (see below).

The following fixed speakers and circuits are installed. Others can potentially be added.

- Main Left (colour-code Black) – EM26
- Main Right (Red) – EM26
- Bass bin (Silver) – EM150
- Overhead Fills
 - Left (White) – EM15 (a second parallel connection point is available)
 - Centre Left (Purple) – EM15
 - Centre Right (Blue) – EM15
 - Right (Green) – EM15 (a second parallel connection point is available)
- Rear Surrounds
 - Left (White) – JBL Control One
 - Centre Left (Purple) – JBL Control One
 - Centre Right (Blue) – JBL Control One
 - Right (Green) – JBL Control One

The Bass bin, Fills and Surrounds are in fixed positions. The Mains are hung from the Grid and extension speakon cables are available if they need to be relocated. There should be no need to alter installed speaker cabling. The default set up is as above. See also Tie Lines below.

Tie Lines

There are tie lines running from a panel in the Control Box to similar panels in the backstage corridor by each door to the stage (Stage Left and Stage Right).

Tie lines include XLR balanced audio, Speak-on speaker, and XLR intercom connections. Take care to only use the tie lines at the appropriate voltage/current rating to prevent damage. Some tie lines are permanently allocated to Show Relay and Intercom (see below).

Most tie lines run one-one between all panels. However, this is not the case for **speaker tie lines**. Control Box Speaker Tie 1 runs to Ties 1 & 2 in parallel on each other panel (labelled B/S A), and Control Box Tie 3 runs to Ties 3 & 4 in parallel on each other panel (labelled B/S B). Control Box Ties 2 & 4 run to fly leads at the speaker patch behind the Control Room rack.

DMX tie lines are separate – see DMX section above.

Show Relay

Audio from a mic over the stage is sent via a pre-amp in the Control Box rack and labelled tie lines to a speaker in the sub-basement corridor by the Cage. Typically show relay cables are colour coded orange. Make sure the show relay pre-amp in the Control Box rack is turned on, and the speaker by the Cage is turned on.

Levels should be set during get-in by the house technician. Avoid interfering with the settings once set up. Do not interfere with the mic and tie line patching for show relay.

On the pre-amp the mic is in channel 1 which should be set to Mic (not Line) level. The output should be set to Mono. The levels on the mic input and pre-amp outputs should be adjusted for the desired levels – the left output feeds the hearing loop and the right feeds show relay.

Hearing Loop

There is a hearing loop installed in the auditorium, receiving audio from the show relay system (see above).

Intercom (Ring)

There is an intercom system with fixed TecPro stations in the Office (for Front of House) and outside the Dressing Rooms, and TecPro/similar belt-packs with headsets in the Control Box (for the operating technician) and backstage corridor (for Stage Manager). There is a belt-pack situated outside the main auditorium door, typically for use as a cue light should there be entrances from there. Other locations can be set up if agreed in advance.

Please do all you can to avoid damaging back-packs and headsets through dropping them!

The system uses labelled tie lines and is powered from a TecPro PSU in the Control Box. It should come on with the Control Box equipment. Typically, intercom cables are colour coded Green/Yellow. Do not interfere with the tie line patching for the intercom.

Live Music

We recommend that vocalists bring their own preferred microphone and stand – ours are for general use and may not suit your performance. Any instruments requiring a feed to our PA system should bring their own DI boxes. We can provide limited on-stage monitor speakers by prior arrangement.

You should also bring your own music stands and lights, and if you need multiple power sockets bring multiway sockets to plug in to our on-stage power.

Piano

If you wish to use our upright piano please discuss with us in advance as access and on-stage positioning will be dependent on the set layout. It is tuned regularly, but special tuning can be arranged by agreement.

Foyer Sound System

There is a standalone sound system for background music in the Foyer operated by Front of House staff. This can play music from a local source (e.g. USB stick with MP3 tracks) and/or receive show sound from the Control Box via a dedicated tie line (see above).

Appendix 1 – Power Distribution

Office

Office Distribution Board

1. 3x Twin 13A sockets in Control Box and Twin 13A sockets at left rear of auditorium
2. Sockets in Office, Box Office, Bar
3. Fire Alarm
4. Backstage Sockets inc. piano store and Water Heater
5. Lighting on Street Stairs and Outside
6. Lighting in Toilets, Office and Workers in theatre

Control Box

Equipment Isolator and Equipment Breakers DB1

1. Twin 13A sockets at right rear of Auditorium
2. Equipment rack and sockets
3. 16A socket at left rear of Auditorium
4. 16A socket in Control Box below DB1
5. Twin 13A sockets for stage sound

Dimmer Room

Stage Lighting (3 Phase)

1. Dimmer One – L1 Red phase
2. Dimmer Two – L2 Yellow phase
3. Dimmer Three – L3 Blue phase
4. Dimmer Four – L1 Red phase
5. Dimmer Five – L2 Yellow phase
6. Dimmer Six – L3 Blue phase
7. Mains sockets to left of dimmers – L1 Red phase
8. Dimmer fan spur – L2 Yellow phase
9. Twin 13A and single 15A adjacent to DB – L3 Blue phase.

House Lighting Isolator and House Lighting Dimmers & Breakers (L3 Yellow phase)

1. Foyer and over rear seating
2. Over stage
3. House socket to left of dimmers
4. Backstage corridor

Emergency Lighting Isolator

Box Office lighting, Control Box lighting, Bar lighting, Emergency Maintained/Non-maintained Lighting

Dressing Room

Sub-basement DB2

1. Lighting Corridor
2. Lighting this Dressing Room
3. Lighting other dressing Room
4. Lighting Old Office
- 5/6. RCD for circuits below:
- 7.
- 8.
- 9.
10. Rest Room
- 11.
- 12.
13. Sockets Prop Room
14. Sockets Old Office