

Tech Spec

Date: 1 March 2021. Earlier versions should be destroyed. Printed versions may be out of date.
Information believed correct at time of writing. Please contact us for any updates.

Contents

Tech Spec	1
Contact Info	2
Venue Specification.....	3
Layout.....	3
Productions	3
Technical Inventory	4
Lighting.....	4
Sound.....	5
Other Equipment.....	6
Consumables.....	6
Tools	6
Lighting	7
Lighting Desk	7
Lanterns	7
Lamps	7
Gels and Gobos.....	7
DMX.....	7
House Lights.....	8
Working Lights.....	8
Desk Lamps	8
Emergency Lights.....	8
Projector.....	9
CCTV.....	9
Use of Smoke or Haze	9
Air Conditioning	9
Network	10
Power.....	10
On Stage Power	10
Sound.....	11
Mac Mini, QLab and Saffire Interface.....	11
Sound Default Configuration	11
Audio Patch	12
Speakers and Patch	12
Tie Lines	13
Show Relay & Paging.....	13
Hearing Loop.....	13
Intercom (Ring).....	13
Live Music.....	13
Piano	14
Foyer Sound System	14
Appendix 1 – Power Distribution	15
Office	15
Control Box	15
Dimmer Room	15
Dressing Room 2	16

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

We have a separate Venue Users Guide and Design Guidelines available on Dropbox [here](#).

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).
- Where measurements are critical, they should be checked on site.
- Refer to the separate *Seating Plan* and *Grid Plan* documents on DropBox [here](#).
- There are 2 dressing rooms with fridges, microwaves, kettles. Iron and ironing board available.

- 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 / Dressing Room A
 - Room 0 – *The Folly*
 - Dressing Room 1
 - Dressing Room 2
 - Workshop and Tech Store, with Fire Exit to staircase to street level
- There is a separate staircase 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.

Main shows will have priority on use and configuration of theatre and equipment.

Ad-hoc events during a main show run will be restricted from making changes to the main show configuration, subject to arrangements with management.

Technical Inventory

All equipment is for appropriate use by competent personnel only, who should check/test it before use. Do not use any damaged or faulty items, and report any problems to us.

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

Please check with us as some equipment may be out for repair. Technical documents for most equipment are available in soft copy on DropBox [here](#).

All our equipment is registered and covertly security marked, with visible markings in green paint or tape. Some equipment is secured with locks – access is available only to authorised users.

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.

Please provide any tools and sufficient consumables you need for your production.

Lighting

Qty	Control	Notes
1	ETC Ion Xe desk (2048 channel)	With single display and optional 20 Fader Wing
3	Transcension HS2 DMX and Powercon splitter	2-way splitter for grid mounting
1	ETC Element desk	Spare in Tech Store
	Dimmers	
5	Betapack (DMX 1 thru 30)	Total of 30 channels of 10A max each Plus 1 spare Betapack (DMX 31 thru 36)
	Patch	
72	Patchable circuits using 15A connectors	To grid or floor 15A sockets
18	Hard power sockets using 15A connectors	12 switchable circuits
	Lanterns	with 15A connectors unless noted
5	Vision 1200W Fresnel 45/80°	1.2kw T29
11	Vision 650W Fresnel 45/80°	650w T27/T26
4	Quartet F Fresnel 10/40°	650w T27/T26
10	Vision PC 45/80°	650w T27/T26
3	Vision Profile Wide 23/40°	650w T27/T26
3	Vision Profile Narrow 14/30°	650w T27/T26
8	Source4 Junior Zoom 25/50°	575w HPL575
2	Source4 Par Lens MFL 21° x 34°	575w HPL575
1	Par 64 CP62 MFL 24°	1kw CP62
2	Patt 743 Fresnel 8/60°	1.2kw T29
10	ETC ColorSource LED Par 14.5° (DMX)	LED 89w (with Powercon connectors)
	Other	
1	Hitachi LCD Projector CPX1 (VGA)	With remote and mounting bracket. No screen.
1	Martin Atomic 3000 DMX Strobe	
	House lighting	
	Via separate dimmer by DMX (501 thru 504) and/or manual control panels	

Sound

Qty	Playback	Notes
1	Mac Mini	With mouse, keyboard, display, wi-fi
1	QLab V4	With Pro Audio bundle (& free video and lighting)
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	Yamaha SPX990 effects unit	Two channels, rack mounted.
1	Behringer Ultrapatch Pro PX3000 patch	For routing audio, with default patch. Rack mounted.
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	Behringer Ultra-DI active DI box	Uses 9v battery. Portable.
Amps		
3	Carver pm700 two-channel amps 225w@8ohm or 350w@4ohm	Rack mounted
1	Lepy LP-2024A+ two-channel amp 20w RMS 4-8ohm	Portable. With 12v DC power supply
Speakers		
2	Meyer UPM-1P Powered	Hung in grid as Mains.
6	Martin EM15 75w/15ohm	Four fixed as Fills. 2 in Tech Store.
1	Martin EM150 400w/4ohm	Fixed under steps as Bass sub.
6	JBL Control One 50w/8ohm	Four fixed as Rear Surrounds. 2 in Tech Store
2	eAudio B406A 80w (Peak not RMS)/8ohm	For spot audio with Lepy amp
1	Speakon patch panel	For routing speakers
Microphones		
1	Shure SM58 mic	Rigged as show relay mic
2	Shure PG58 mic	Switched
4	Behringer C-4 pair	Total of 8 mics in 4 matched pairs
1	Sennheiser ew100 Lavalier radio mic	Transmitter pack (2xAA battery) plus Receiver
4	Mic stand – boom	
4	Mic stand	
Musical		
1	Piano – Kawai upright with stool	Stored in Piano Store
1	RAT stand with light	
2	Music stand	Stored in Piano Store
1	Keyboard stand	Stored in Piano Store

Other Equipment

	Notes
Ladders (medium & high)	Stored in Dimmer Room
Stage Weights	Stored in Dimmer Room
Audio Cables and Adaptors	Stored in Control Box
Speaker Cables and Adaptors	Stored in Control Box
DMX Cables and Adaptors	Stored in Control Box
Power Cables, Adaptors and Grellcos	Stored in Dimmer Room
Safety bonds	On lanterns; spares in Tech Store
Gel frames	On lanterns; spares in Tech Store
Barn doors	On lanterns; spares in Tech Store
Gobo holders and Irises	Stored in Tech Store
Toolchest (see below)	Stored in Dimmer Room

Consumables

	Notes
Gobos (limited stock – see below)	Stored in Tech Store. Bring what you need.
Spare lamps (for stage lanterns – see below)	Stored in Control Box (overflow in Tech Store)
Spare bulbs (desk lamps and practical lights)	Stored in Control Box (overflow in Tech Store)
Spare bulbs (front of house and domestic)	Ask General Manager
Spare fuses (dimmers: 10A 6.3mmx32mm Fast)	Stored in Dimmer Room
Spare fuses (domestic)	Stored in Control Box
Spare batteries	No stock held. Bring what you need
Spare cable and connectors (limited stock)	Stored in Tech Store
Gel (limited stock – see below)	Stored in Tech Store. Bring what you need.
Tape (limited stock)	Stored in Control Box. Bring what you need.

Please provide sufficient consumables for your production.

Tools

You should bring the tools you will need for your specific purposes, especially for get-in and get-out.

There is a toolchest with a limited set of tools available for supplementary use during get-in, get-out and for running repairs. Please take good care of these tools, and return them to the correct drawer of the tool chest between uses. Check for any damage before use, do not use any damaged items, and report any problems to us.

If any tools are lost or damaged, they won't be replaced unless paid for by the show.

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. A grid load test certificate is available on request.

Main shows will have priority on lighting configuration. Leave a lighting plan/diagram/description of your show's configuration in the Control Box.

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.

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!

Please do not update the lighting desk software or system configuration without our permission.

The lighting desk is secured by "Kensington" cable locks in the Control Box. If it is necessary to relocate the desk to a production desk, you will need to unlock and resecure to the production desk. Codes are available to authorised users.

Lanterns

All our lanterns are fitted with clamps and bonds. Lanterns which use them have a gel frame and barn doors fitted. They should be left like this after your final get-out.

Spare gel frames are available for some lantern types. There is a recent inventory available in soft copy on our DropBox [here](#).

We have a limited stock of gobo holders and irises. There is a recent inventory available in soft copy on our DropBox [here](#).

Lamps

We keep a stock of spare lamps for our lanterns, and bulbs for desk lights, practicals, and general front of house and domestic lighting. There is a recent inventory available in soft copy on DropBox [here](#). We have converted to LED lamps for lighting other than theatre lanterns. Please bring your own lamps and spares for any equipment or practicals you bring.

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 Tech Store, 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 by other shows which you may use. There is a recent inventory available in soft copy on our DropBox [here](#).

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 then 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.

Specific fixtures are labelled with their default DMX address ranges starting as follows. In the unlikely event they need to be changed, return them to the default at final get-out.

50, 60, 70, 80 ... 130, 140	10 off ETC ColorSource PAR (5-channel mode)
400	Martin Atomic 3000 DMX Strobe (4-channel mode)

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. The majority of House Lights have LED bulbs.

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 (Universe 1)
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. A copy is available on DropBox [here](#).

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

Working Lights

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

There are blue LED working lights in the backstage corridor, controlled by a standalone dimmer at stage right. There is an LED working light for the backstage stage managers position, with an adjacent switch.

The sub-basement working lights are controlled by a switch at the top of the stairs. The stairs lighting can be switched between white LED strip light and blue LEDs using switches alongside.

Desk Lamps

There are a number of desk lamps for use backstage, fitted with blue LED bulbs such that they do not need to be covered in blue gel.

Emergency Lights

There is full cover of maintained and non-maintained LED emergency lighting and illuminated exit signage. These are regularly tested. These lights must not be obscured or disabled; however, we may be able to reduce the brightness of some maintained lights in certain circumstances with prior approval.

Projector

The projector is permanently fitted in a cradle and is typically mounted in the Grid as required. The projector is stored in the Tech Store, and the remote and video cables are kept in the Control Box. We do not have a screen as projection is usually onto part of the set. Check the remote battery and replace as required. Clean the projector filter regularly to prevent overheating and unexpected shutdown. Hard power is typically connected to the projector via the lighting patch. The projector should be shutdown using the remote before removing power. The projector should be derigged during your final get-out and all items returned to the correct store.

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 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. Air comes from outside and is not recirculated, so complies with COVID regulations. 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.

Network

There is a BT network router with 4 port ethernet switch (yellow ports) and Wi-Fi for technical use only. It is not connected to the internet (red port not connected).

The Wi-Fi SID, passwords and address allocations are available to authorised users.

The default router/gateway IP address is xx.xx.xx.254, and it allocates IP addresses via DHCP in the same subnet with mask 255.255.255.0.

When adding devices to the network, configure them to obtain IP addresses automatically via DHCP from the router. No other device should be providing a DHCP service (including the lighting desk).

The following devices are normally connected to the network and allocated fixed IP addresses via DHCP:

- | | | | |
|---------------------|-------------------|-----------|--------------|
| • Mac Mini | by ethernet cable | JST-MAC | xx.xx.xx.70 |
| • ION Lighting desk | by ethernet cable | JST-IONXE | xx.xx.xx.100 |

The default configuration allocates maximum 21-day leases for IP addresses, so devices should be allocated same address over a production run.

Do not update software or reconfigure the network unless absolutely necessary and only with our permission. Any changes must be documented and displayed in the Control Box, then reverted to default at your final get-out.

Trouble shooting connectivity:

- Check router is on and set to default settings as above.
- Check devices are connected by cable to the router port or by WiFi on the correct SID as above.
- The Mac and Lighting desk should be set to the default settings as above.
- Devices should connect using DHCP to obtain valid IP addresses on the default subnet as above.
- Use device settings apps to check the connections and PING or other network tools to check connectivity.
- Note that the ION Lighting desk has two ports, which can be configured separately.
- The ION must be in normal operating mode (not settings) to accept connections.

Power

There is a 3-phase power supply to the building – see Appendix 1 – Power Distribution for more details. **Please be aware that there can be 415v between nearby sockets, depending on how the lighting patch is configured.**

On Stage Power

There are no 13A sockets available backstage for on-stage power, other than in/near the dimmer room.

For on-stage lighting, use the lighting patch to provide dimmed or hard power from the dimmer room to the 15A sockets backstage, adjacent to each door.

For on-stage sound/video (only) there is a twin 13A socket adjacent to the Control Box. Bring extensions and multiway adaptors for any on stage equipment you bring.

There are also 2 off general purpose 13A twin sockets and one 16A socket at the rear of the auditorium, and one 13A socket on the side wall under seat G3, however running of cables from here must not introduce risks for the audience. Typically, these sockets can be used for video equipment recording a show or rehearsal.

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. Leave a diagram/description of your show's configuration in the Control Box.

Racked or fixed-installation equipment should not be removed nor relocated to any production desk.

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. Passwords are available to authorised users.

Sound Default Configuration

The default audio set up is:

- 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 and 2 to Main powered Speakers Left & Right respectively, via Ties.*
- Audio patch panel routes outputs 3 thru 6 to Amps 3 thru 6 respectively*.
- Audio patch panel also routes Mixer Main outputs L and R to Main powered Speakers Left & Right respectively, via Ties.*
- Audio patch panel routes Mac Mini built-in output (R mono) to Foyer sound system*.

*The default 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.
- Mixer Main L & R outputs set up as Main Left & Right.

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

- Amp 1 to (Yellow) Speaker Tie in Control Room
- Amp 2 to (Orange) Speaker Tie in Control Room
- Amp 3 to Bass bin
- Amp 4 to Rear Left Surround
- Amp 5 to Rear Centre Left, Centre Right and Right Surrounds
- Amp 6 to Left, Centre Left, Centre Right and Right Fills

There are photographs of the default configuration patch connections on Dropbox [here](#).

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
- Powered Main speakers
- Foyer sound system
- Show relay system

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

Refer to the diagram in the Control Box for other options or on Dropbox [here](#).

The audio patch panel makes audio inputs and outputs available in one place, avoiding the need to remove equipment from, or get around the back of, the rack. This also reduces wear and tear on fixed cabling and terminations. It should be possible to do pretty much everything needed to re-patch sound using the patch panel, which is effectively self-documenting.

Through ‘normalisation’ default connections are made for the commonly used/standard setups. Different connections can be made by plugging patch cables between the appropriate patch sockets. This will disconnect the normalised connections if necessary.

By referring to the diagrams you can see which socket goes where and what the ‘normal’ connections are. There are even spare connections for use for connecting additional equipment or to the tie lines, or connections can be made to those directly from the panel itself. Any cables present indicate where re-patching has been done. This approach enables an ad-hoc show to understand any changes made and temporarily revert any connections if necessary, reinstating them afterwards. It also makes resetting the system at the get-out much easier.

Please ensure that any routing and connections done at get-in use the patch panel as much as possible, rather than unplugging equipment or running extra cables, and that any changes are recorded. Then please ensure it’s all reset at get-out, including any ‘behind the scenes’ changes – colour-coding, labels and photos show how things should be connected in the rack.

Note: The patch and wiring are set up for balanced signals (apart from the Mac Mini built-in audio in/out) so use TRS connections in the patch panel. There are TRS patch cables and TRS-XLR cables available.

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 Speak-on 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 circuit (colour-code Black) – to speakon connector in Grid[^]
- Main Right circuit (Red) – to speakon connector in Grid[^]
- Bass Speaker (Silver) – EM150
- Overhead Fill Speakers
 - 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 Surround Speakers
 - Left (White) – JBL Control One
 - Centre Left (Purple) – JBL Control One
 - Centre Right (Blue) – JBL Control One
 - Right (Green) – JBL Control One

[^] Note that our default Main speakers are powered and fed by line level signals through tie lines, so the Main speakon connections are not used in the default set up. Hard power for the Mains is provided from the Dimmer Room 13A supply via LX patch circuits 40 and 60.

The Mains are hung from the Grid and extension cables are available if they need to be relocated.

The Bass, Fill and Surround speakers are in fixed positions.

There should be no need to alter installed speaker cabling. The default set up is as above. See also Tie Lines below.

A number of additional speakers are available for show specific purposes.

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 in the panels 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 Main speakers, Show Relay, Paging Mic, 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 & Paging

Audio from a mic over the stage is fed to a mixer/pre-amp (channel 1) in the Control Box rack. Paging mics in Control Box (channel 2) and Backstage corridor (channel 3) feed into the same mixer/pre-amp via tie lines. A line feed input (channel 6) is available on the Audio Patch for playback into show relay.

The mixed output is sent via a dedicated line to an amplifier in the sub-basement SM Room, then to speakers (with volume controls) in each Dressing Room, SM Room, corridor and Workshop. 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 amplifier in the SM Room is turned on.

Levels on mixer/pre-amp, amplifier and speakers should be set during get-in by the house technician using a logical gain structure, and parameters agreed for adjustment, if necessary, during the production. Levels can be set on the mixer/pre-amp inputs and outputs—the left output feeds the hearing loop and the right feeds show relay—and on the show relay amplifier, and individual speakers. Brief actors on the need to keep individual speaker levels in their dressing rooms sufficient to ensure they hear their cues and calls.

Do not interfere with the mic and tie line patching for show relay. On the mixer/pre-amp, ensure the mic channels are set to Mic (not Line) level, and the playback feed to Line (not Mic) level; the output should be set to Mono.

Hearing Loop

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

Intercom (Ring)

There is an intercom system with fixed TecPro stations in the Office (for Front of House) and sub-basement (for Backstage), and TecPro/ChromaQ 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 belt-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 currently cannot provide on-stage monitor speakers.

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 13A sound-only power supply, located adjacent to the Control Box.

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, or Bluetooth audio device) and/or receive show sound from the Control Box via a dedicated line from the Audio Patch (see above).

Appendix 1 – Power Distribution

Office

Main Power (inside panel behind main desk)

- Theatre Busbar
- Unknown main switch
- Stage Lighting main switch
- Office light and power main switch
- Auditorium light and power
 - With Aircon Distribution Board – 3 circuits, one per aircon unit

Office Distribution Board (above filing cabinet)

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 (control panel in Foyer store)
4. Backstage Sockets inc. piano store and Water Heater
5. Lighting on Street Stairs and Outside
6. Lighting in Toilets (including emergency), Office and Workers in theatre

Control Box

Equipment Isolator fed from 32A breaker feeding to Equipment Breaker DB1

Main breaker [100A]

1. [32A] Twin 13A socket at right rear of Auditorium
2. [32A] Light & Sound Equipment rack and sockets
3. [16A] 16A socket at left rear of Auditorium
4. [16A] 16A socket in Control Box below DB1
5. [16A] Twin 13A sockets for stage sound only

Dimmer Room

Stage Lighting Distribution Board (3 Phase)

Main Breaker

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. Hard power – 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.

Auditorium 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 2**Sub-basement DB2**

Main breaker [100A]

1. [6A] Corridor Lights incl. workshop
2. [16A] Not used
3. [32A] Not used
4. [6A] Office Lights – SM and Office

RCD [80A 30mA] for circuits below:

1. [32A] Dressing Room Power #2
2. [32A] Dressing Room Power #1
3. [16A] Office Power – SM and Office
4. [6A] Dressing Room Lights
5. [6A] Not used
6. [32A] Not used
7. [16A] Workshop Power
8. [16A] Not used