

The Place, Bedford PERFORMANCE SPACE

Technical Overview and Equipment List Issue 10

The Performance Space at The Place comprises a fully-equipped theatre facility seating 134 people in a thrust format.

This document gives an overview of the technical aspects of the theatre (stage lighting, sound, etc), together with details of the equipment available to hirers of the facility. It should be read in conjunction with the “Seating and General Layout Diagram”, which shows the general layout of the auditorium including seating positions and entrance doors; and with the “Technical Layout Diagram”, which shows the positions of the stage lighting bars and circuit outlets, and of the sound and communication connection points. Both of these documents are available for download in Adobe PDF format from the ‘Information for Hirers’ section of our web site, at <http://www.theplacebedford.org.uk/>



House Rules

All hirers should keep in mind the following ‘House Rules’. These rules are designed primarily to protect the fabric of the building (particularly given the very close proximity of the audience to the stage area), to minimise disruption to subsequent shows, and to ensure safety. But do please talk to us if any of these rules appear to leave you with an insurmountable problem - we’re always happy to work with hirers to find solutions!

- Permission may be given to paint the stage floor to an alternative colour scheme, but any hirer who wishes to do this must contact the venue management to discuss their requirements. Paint of the agreed colour will then be supplied by the venue, the cost being invoiced to the user. Note that the hirer must then **repaint the floor back to matt black** at the end of the hire period (unless specifically agreed otherwise with the management), again with paint supplied by the venue. Any ‘spill’ onto floor or walls caused when painting scenery must also be made good, and the carpeting must be protected from paint spill at all times. **No paint other than that supplied by the venue must be applied to the floor** - use of inappropriate types of paint has caused major problems in the past.
- No screws or other fixings may be screwed into the floor, and the surface must not be damaged in any way. Likewise, no screws, nails, rawbolts, or other fixings may be driven into any wall or other permanent structure without having first sought specific explicit approval from the management - alternatives should always be sought, as this is one area where approval is likely to be refused. In general, assume that all sets must be free-standing and self-supporting.
- No changes should be made to any installed electrical, sound, or communications system

without permission (this means the permanent installed wiring and systems - obviously you are completely at liberty to move or add lanterns, microphones, etc, as per normal theatre practice!). The loudspeakers covering the main seating blocks should **not** be moved without permission, although permission will generally be granted if there are good technical reasons for moving them!

- Any items brought onto the premises by the hirer must be removed from the theatre immediately after the final performance, unless otherwise agreed - we often have shows running almost back-to-back. Ultimately, failure to do so may result in the Trust hiring contractors to dispose of the items, the full cost of which will be billed to the hirer.
- No changes to the Performance Space seating or step layout (including, but not limited to, the removal of side seating for scenic or other reasons) are permitted without the agreement of the management. We operate as a 'deep thrust' format, and set design and blocking should work within this as far as possible!

The Acting (Stage) Area

The Acting Area is approximately 7 metres square, with audience seating arranged to the front and sides and a black-painted wall behind. Seating capacity is 134 seats. Note that the first row of seats are at the same level as the Acting Area, and when in use the legs of audience members are likely to intrude into the Acting Area, particularly at the sides; This row of seats can be removed if required, resulting in a slightly larger usable acting area, at the expense of a reduction in capacity to 108 seats. The Acting Area floor consists of 3/4-inch tongue-and-groove chipboard, laid on a foam underlay on a solid base, and is normally painted black (see above).

A black gauze and a white cyclorama are available within the venue, to be rigged over the back wall if required - contact us for details.

The Stage Lighting System

The Stage Lighting system consists of a **48-channel 'Frog' lighting control desk** from Zero88, driving a **72 circuit dimmer system** from Light Processor. The dimmers (and some non-dimmer circuits - see later) are fed by a dedicated three-phase supply rated at 63 amps (roughly 15kW) per phase, via 30mA RCD breakers for electric shock protection.

The 72 dimmer circuits are distributed to five internally-wired lighting bars forming part of the lighting grid, and to four low-level positions, almost entirely on a dimmer-per-socket basis (the exceptions being some of the low-level sockets, which are paired); The final socket outlets are **15Amp** round-pin sockets. The low-level dimmer sockets are adjacent to the vertical perch bars placed roughly at the stage corners, to feed lanterns placed low on the perch bars or on the floor: These sockets are on the same phase as the 13A mains sockets in the theatre, ensuring that all ground-level equipment is on the same phase for safety. Full details of the grid and circuit layout are shown in the "Technical Layout Diagram", which is available from our website.

In addition to the 72 dimmer circuits detailed above, four switched (non-dim) circuits are available, feeding eight 15-Amp round-pin sockets at grid level above the front of the stage. These circuits are controlled by manual switches positioned above the lighting desk, and are designed to feed strobes, UV floods, and other equipment requiring a non-dimmer supply. The

four circuits are rated at 10 Amps per pair, and are fed via 30mA RCD breakers for electric shock protection.

The 'Frog' lighting desk is a combined manual/memory desk, providing an individual manual control slider for each of the 48 control channels. The desk also has 12 sub-master sliders (each selectable from one of 20 'pages' - a total of 240 lighting states), which can be loaded either directly from the manual sliders or from previously-recorded memories. The desk also has full timed memory playback facilities. The board thus supports operating styles from simple manual control, through to full memory-based show playback. Further information on the desk, including a downloadable manual, is available from the Zero88 web site - a direct link is available from The Place web site downloads page.

The 48 control channels available on the 'Frog' lighting desk are patched to the 72 dimmers using the desk's internal soft-patch facility. For simple rigs, a 'standard' soft-patch (shown on the "Technical Layout Diagram") can be loaded from disk: This patches all of the grid-level sockets onto the 48 desk channels, and gives a combination of unique and paired circuits on each lighting bar, thus making all grid-level sockets available without further patching, albeit with many of them paired. However, the user is entirely at liberty to reconfigure the soft-patch to the needs of their show, should the standard patch be unsuitable.

As available funds have been directed towards the installed 'infrastructure' (wiring, dimmers, etc), the number of lanterns and accessories available in-house is currently restricted to a basic inventory. Our current lantern and cable stock is as follows (although the cable stock is slightly variable, as cables seem to 'come and go!'):

- **42 x Strand Quartet Mk2 Fresnel**, 650W, each with barn door and safety chain;
- 9 x 1.5 metre 15A extension cables (colour-coded white/green);
- 9 x 2.5 metre 15A extension cables (colour-coded red/green);
- 9 x 5.0 metre 15A extension cables (colour-coded blue/green).

A small number of older lanterns, mainly by Strand Lighting, may also be available in the venue - some of these are in quite poor condition but still usable - users should enquire near their get-in dates. Users are obviously at liberty to hire-in additional lanterns and equipment as required, subject to any electrical equipment having a current Portable Appliance Test (PAT) certificate or label. We have a limited stock of filter, gobos, gobo holders, etc - but the user is advised to supply any specific needs themselves. A small stock of additional aluminium scaffold bars of various lengths is available, together with a selection of scaf clamps and joiners, which can be rigged as additional lighting bars or to hang drapes, etc.

Access to the lighting bars is provided by a Youngman Minimax wheeled aluminium tower, and a Zarges Skymaster 41523 three-section trestle ladder. A simple radio-linked remote 'rigging control' is also available, which allows individual circuits to be faded up and down using a small hand-held unit during rigging.

The Stage Sound System

The main sound system in The Place is centred on a **Spirit LX7/24 mixing desk** from Soundcraft, feeding a set of three **RMX850 stereo amplifiers** from QSC Audio rated at 200W

per channel. The amplifiers drive three pairs of **SX80 speakers** from Electro-Voice, rigged on the lighting grid above the acting area and arranged as follows:

- One amplifier driving a stereo pair of speakers covering the main audience seating block;
- A second amplifier driving a second stereo pair of speakers covering the stage-left audience seating block;
- A third amplifier driving a third stereo pair of speakers covering the stage-right audience seating block.

The amplifier rack is also equipped with a **DCA250 stereo amplifier** from RCF, rated at 100W per channel. This amplifier generally feeds a number of pairs of speaker sockets positioned at ground level as follows:

- One pair of sockets on the stage audio connection box at floor-level at the back of stage;
- One pair of sockets off stage left, upstage, in the passage behind the stage-left seating block;
- One pair of sockets off stage right, upstage, by the upstage right entrance door from the Foyer;
- One pair of sockets in the Foyer itself, adjacent to the entrance doors into the Performance Space.

This arrangement enables easy connection of up to two additional speakers, in various locations on or off stage, for playing back on- or off-stage ‘spot’ sound effects. Two **DAS Factor 8 speakers** are available for use with this amplifier.

Also available are eight audio tie-lines, running between the stage connection box and the mixing desk, for on-stage microphones or other sound sources - these inputs are balanced, on fixed 3-pin XLR sockets with standard pin allocations.

An audio tie-line also exists between the mixing desk and the Foyer bar area, enabling pre-show music playing in the theatre to also be played over the sound system in the bar area.

The following source equipment is currently available:

- **2 x Denon DNC615 CD Players** (CD-R and CD-R/W compatible);
- **1 x Denon DCD485 CD Player** (CD-R and CD-R/W compatible);
- **2 x Denon DRM555 Cassette Players** (rigged only if required);
- **1 x Shure SM58** general-purpose microphone, with boom stand and desk stand.

The LX7/24 mixing desk provides 16 primary input channels, each with 4-band equalisation, insert points, and auxiliary sends: Our standard configuration is for eight of the channels to be dedicated to the CD and Cassette players, with the other eight connected to the eight tie-lines from the stage connection box. The desk has four output groups, and standard configuration is for two groups to feed the left- and right-channel amplifier/speakers covering the main audience

seating block, with the other two groups feeding the left- and right-channel amplifiers/speakers covering the two side audience seating blocks, thus allowing some independent adjustment of levels; The main 'mix' output generally drives the RCF amplifier for the on-stage speakers, if used; The 'mono' output generally feeds the tie-line to the Foyer bar area. However, the desk may be reconfigured as required for unusual applications. Further information on the desk, including a downloadable manual, is available from the Soundcraft web site - a direct link is available from The Place web site downloads page.

The Communications (Headset) System

The Place has a headset communication system based on '**Tecpro**' **beltpacks and headsets** from Canford Audio; The system is fully compatible with similar units from Clearcom and Strandsound. The installed cable infrastructure, which uses fixed 3-pin XLR male connectors at the connection points, is powered by a Tecpro PS711 power supply unit, capable of supporting up to 16 beltpacks. Currently, the following units are available in-house:

- **1 x HS121 Fixed Headset Station**, with headset, positioned on the Control Balcony adjacent to the lighting desk;
- **1 x HS121 Fixed Headset Station**, with headset, positioned on the Control Balcony adjacent to the sound desk;
- **1 x HS121 Fixed Headset Station**, with headset, positioned at the Stage Manager's position in the Dressing Room lobby. This station also allows the Stage Manager to make calls over the Show Relay system;
- **1 x LS312 Fixed Speaker Station**, positioned in the Front of House kitchen, for communication with the FOH team;
- **2 x BP111 Portable Beltpack Units**, with headsets, for use at any location required.

Further units can be provided by the user as required. Connection points for communication beltpack units are currently available at the following locations:

- At several low-level positions within the auditorium, as shown on the Technical Layout Diagram;
- In the Dressing Room;
- In the Dressing Room sitting area;
- In the Box Office;
- In the Foyer, adjacent to the main entrance doors;
- In upstairs Room 3 (for use when Room 3 is used as overflow dressing room).

The Hearing Aid Induction Loop

The auditorium is equipped with a hearing aid induction loop system, powered by an **ET300 induction loop amplifier** from Current Thinking Ltd. This is generally fed by a pair of **MCE86 shotgun condenser microphones** from Beyer Dynamic, rigged on the downstage lighting grid

and covering the stage area; However, for special situations the induction loop amplifier can also driven from an output on the sound desk.

The Show Relay System

The shotgun microphones mentioned above also feed a Show Relay system based on a **Toa A1061 amplifier** driving a 100V-line speaker system. Show Relay speakers are currently located as follows:

- In the Dressing room (2 speakers);
- At the Stage Manager's position in the Dressing Room lobby;
- In the Dressing room sitting area;
- In the Foyer/Bar area;
- In the Foyer, adjacent to the main entrance doors;
- In the main downstairs Kitchen;
- In upstairs Room 3 (2 speakers) (for use when Room 3 is used as overflow dressing room).

Additionally, the headset communications station at the Stage Manager's position in the Dressing Room lobby allows the Stage Manager to make calls over the Show Relay system - particularly useful when Room 3 is in use as overflow dressing room.