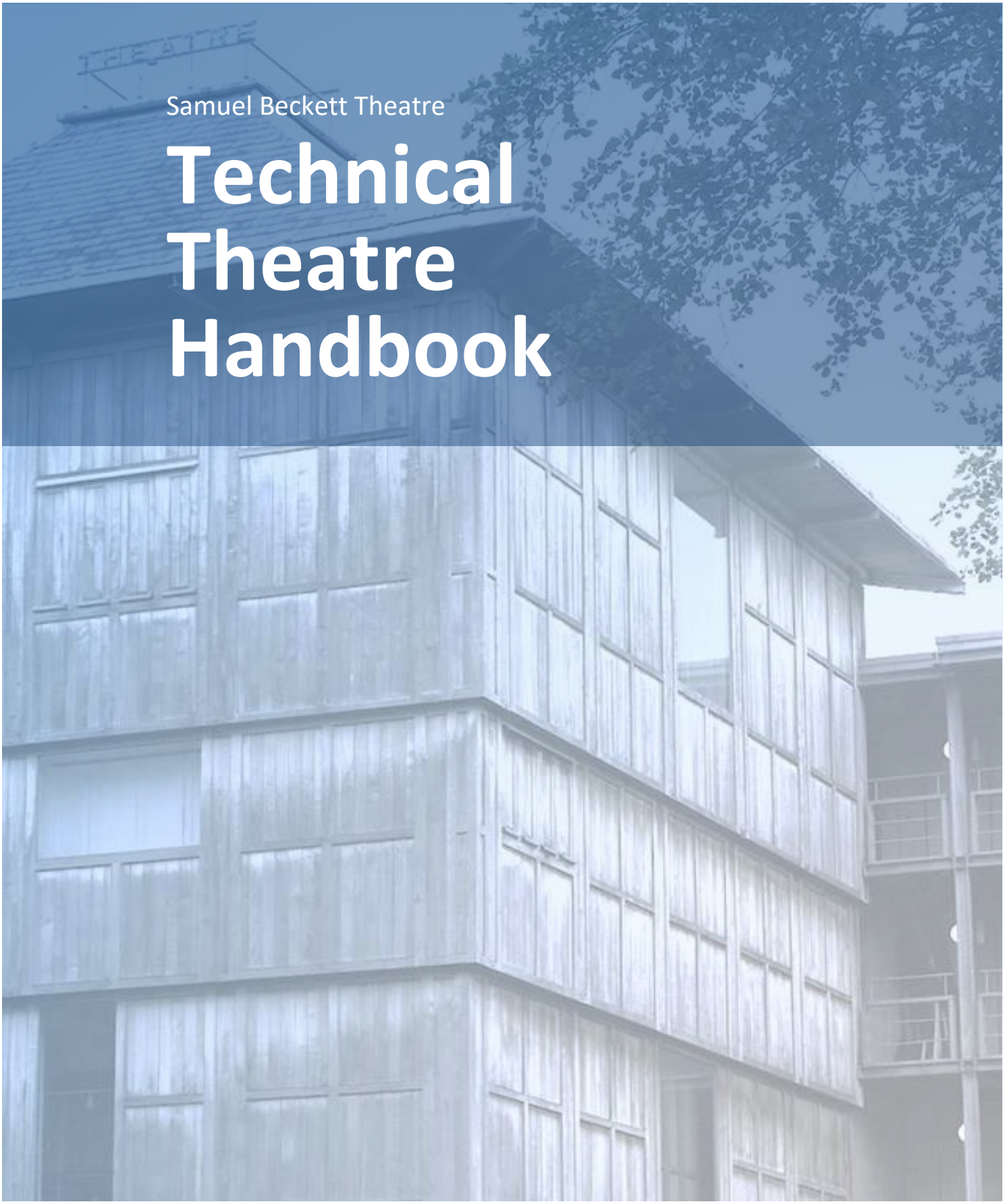
Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin



Samuel Beckett Theatre

Technical Theatre Handbook

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Preface: A note on this handbook

This handbook is intended to help orient students to working at the Samuel Beckett Theatre (SBT). It contains technical information and instruction that is largely site-specific to SBT, with a focus on safety. Consider it a 'Get Started' reference manual.

The subject of Technical Theatre encompasses multiple disciplines and specialised skillsets. For further information on many of the various disciplines, an extensive recommended reading list is included in the postscript.

List of abbreviations

A/V – Audio/Visual

H&S – Health and Safety

IIPP – Illness and Injury Prevention Program

LD – Lighting Designer

LX – Lighting Engineer

PA – Personal Address (speaker system)

PAT – Portable Appliance Testing

PM – Production Manager

SBC – The Samuel Beckett Centre

SBT – The Samuel Beckett Theatre

SCA – School of Creative Arts

SDS – Safety Data Sheet

SM – Stage Manager

SPM – Supervising Production Manager

SWL – Safe Working Load

TCD – Trinity College Dublin

Tech Spec – Technical Specifications

The Samuel Beckett Theatre

Our Theatre

The Samuel Beckett Theatre was opened in 1992 to celebrate Trinity's quatercentenary. It is located in the Samuel Beckett Centre (SBC), a learning hub operated by the Drama department under the School of Creative Arts.

SBT is a black-box theatre with retractable raked seating providing capacity for approximately 200 audience members end-on. Total floor area is 24x13m; with raked seating in place the stage area is 13x13m. A reception foyer, box office and two dressing rooms are available to production companies.

SBT is staffed by House Technicians, a Supervising Production Manager and a Theatre Manager. A breakdown of these roles as they pertain to students are as follows:

House Technicians: Your points of contact for all queries around technical theatre and production at SBT. They are keyholders with responsibility for looking after the theatre space, and have broad technical experience across theatre-making. Office hours are held during term-time. The tech office is located inside SBC through the 'school corridor' and next to the scene dock.

Technical Manager: Responsible for overall management and maintenance of the theatre, and Supervising Production Management of all student productions.

School Safety Officer: Sets safety standards and ensures Health and Safety codes are adhered to.

Theatre Manager: Responsible for bookings, hires, box office, and securing licensing for student productions at SBT.

Current Role Holders and Contacts

Staff	Role	Email
Michael Canney	Technical Manager/School Safety Officer	canneym@tcd.ie
Tim Scott	Theatre Manager	scotttf@tcd.ie
Aaron Sullivan	Theatre Technician	aasulliv@tcd.ie
Fia Kavanagh	Theatre Technician	kavanaf1@tcd.ie

House Rules and Etiquette

The Samuel Beckett Theatre is a resource available to students. It is not under student control or administration, and bookings and production elements are subject to approval by theatre staff, the Drama Department and the School of Creative Arts. A code of conduct is described below.

As with every collaborative space, rules and good etiquette ensure the smooth running of productions at SBT. Please bear in mind the following House Rules when working in the theatre:

- Health and Safety best practices must be observed at all times.
- Do not enter the theatre space unless granted access by theatre staff.
- The gantry is a restricted area and should not be entered without permission.
- Never attempt to operate installed equipment in the theatre (trusses, seating bank etc.)
- Theatre equipment and property must not be abused, damaged or removed without permission.
- Personal property and waste materials must be removed after productions wrap.

Code of Conduct

Dignity and respect are paramount to our conduct policy. Bullying and harassment are not tolerated. Courtesy and consideration must be shown to those around you.

This is a learning environment, and as such students are not expected to know everything. Do not attempt to complete a task or to use equipment without instruction, and please always ask if you need help or guidance.

SBT staff are professionals. Please behave as you would in any professional setting.

Health and Safety

Health & Safety at Trinity College

Trinity College Dublin is committed to providing a safe and healthy educational environment for staff and students. At SBT, good Health and Safety (H&S) practice on the job is paramount.

When it comes to H&S and managing risk, vigilance, experience and common sense are your friends. Avoid risks, and don't attempt dangerous tasks without training. Take responsibility for your work and be conscientious when installing or rigging anything that could potentially cause harm to you or others, such as a light overhead or an elevation on stage.

A note on Duty of Care to patrons

Additional to risks presented to crew, when opening our doors and inviting members of the public to gather and enjoy our performances, we accept a duty of care to patrons.

Negligence can lead to injury and death. Duty of care is a legal obligation to demonstrate reasonable care and consideration to audience members and must always be a primary concern for theatremakers.

At the beginning of every public performance, an approved Fire Announcement detailing emergency exit strategies must be played. Fire exit signs must never be obscured and fire exits must be kept clear. Announcements must also be made in the case of strobe lighting or other features of a production where a potential health risk exists.

Recognising and managing risk

Identifying hazards within your performing arts activities and managing these effectively is central to all activities taking place at SBT. The principal reference document for all Health and Safety matters is the School of Creative Arts Safety Statement (*see* Resources.) All heads of departments (PM, Lighting, Set, Costume, Props, SM etc.) should familiarise themselves with this document.

Different productions will present different hazards. Blank Risk Assessment templates are available in the Resources section. Use these to identify production-specific risks and mitigation strategies, and submit to staff for authorisation and sign-off prior to public performances.

First Aid Procedures at SBT

First Aid may be required in one of two situations: that of a minor injury, for example a small cut or burn; or a life-threatening situation such as severe bleeding.

For minor injuries: alert a member of theatre staff and locate your nearest First Aid kit. These are available in the scene dock at SBT, as well as the tech office and dance studio. Kits include:

- Eye wash
- Burn kits
- Ice packs
- Plasters and bandages
- Sterile saline wash

If further attention is needed, medical assistance is available from Student Health located in House 47 (beside rugby pitch) Ext. 1556. After hours contact Ext. 1999.

In life-threatening situations: call an ambulance and notify a member of staff immediately. Campus Security must also be called.

Accident Investigation & Incident Reporting

An accident is an unplanned event that results in injury, illness, or property damage. A near miss is an unplanned event that does not result in significant injury, illness, or property damage but had the potential to do so; for example: a ladder becomes unstable while you are reaching but it rights itself, you regain your balance, and you do not fall off the ladder. Both accidents and near misses should be investigated.

When accidents occur, employees and students must inform their supervisors immediately so appropriate medical treatment and follow-up procedures can be initiated. In the event of a serious or life-threatening injury or illness, Campus Security should be called immediately, in addition to an ambulance. Once the injured person has been attended to, notifications must be made to the College Safety Officer and in more serious cases to the Health and Safety Authority.

Electrical Safety

Modern theatre-making usually involves the use of electrical equipment. It's important to understand the risks involved in working with electricity and to take the necessary precautions to avoid electric shock.

Before plugging in any fixture, look it over to make sure there are no obvious faults. Frayed cables, exposed wires, presence of liquid, loose pins or a plug without a cable clamp at the base all indicate equipment that should not be used. Alert a House Technician to the fault.

Most electrical equipment in Ireland is earthed, meaning that any metal (and thus conductive) parts of the casing are connected to an Earth wire. This ensures that in the event of a fault, current is carried to the Earth and a circuit breaker is tripped, stopping the flow of current to the device. All electrical equipment must be periodically PAT tested (Portable Appliance Testing) to ensure it is earthed.

Power & Hand Tools

SBT has a limited stock of power and hand tools including drills, screw guns, jigsaw and circular saw.

Prior to use, students must receive training on safe handling.

While each tool has specific guidelines, the following are general safety guidelines for all tools:

- Follow all manufacturers' instructions on the use and care of the tools.
- Inspect tools before use to check for any defects or damage. Remove defective tools from service and report them to House Technicians.
- Never carry or hoist a power tool by its power cord.
- Unplug power tools before loading them, changing blades or bits, making adjustments or cleaning.
- Never use power tools on wet surfaces or in wet weather.
- Never alter or remove any machine or blade guards.

Ladders and Working at Height

Ladders present specific risks including fall risks and risk of injury or amputation. Knowledge of safe handling can mitigate these risks.

Inspect ladders before use, every time. Faulty ladders must be removed from service. Adjustable ladders must have their joints correctly locked back into place according to manufacturer's instructions after a reconfiguration to avoid collapse.

For more on ladder safety, see the Ladder Association Code of Practice included in Further Reading.

Working at height involves the risk that the person working could fall and suffer injury. Specific training must be received before mounting a ladder and working at height. Contraindications to working at height include:

- Feeling unwell, faint or dizzy
- Fear of heights
- Vertigo

Work at height also presents a risk to anyone present below. Usually, hard hats are required in environments where work at height is happening. In some cases, fall protection such as a harness may be necessary.

Tallescope

The theatre has one Tallescope available for supervised use. The Tallescope is a height-access device frequently used in theatre for focusing lamps. There are specific rules around the use of the Tallescope, particularly regarding moving the device while a person is at height. This is designated a high-risk activity and can only be undertaken with prior instruction, technical supervision and sufficient crew.

Manual Handling

Back pain and injury related to incorrect lifting and manual handling are common.

To avoid injury, practice safe lifting techniques:

- Stand close to the load: lifting, carrying, and lowering an object as close to your body as possible will reduce the strain on your back and help you maintain balance.
- Lift with your legs: bend from the knee while keeping your back straight to activate your glutes and leg muscles and reduce the load on your lower back.
- Grip the load securely: get a good handle on the load before you lift to avoid slipping. If the load starts to fall, let it go.

Stage pieces are often awkward, heavy, or oddly shaped. Ask yourself these questions before attempting a lift:

- Is it too large or heavy for one person to carry? Do you need a mechanical aid or partner?
- Are there any trip hazards on your route?
- Will you be able to get through doorways or corridors as you are carrying the object?

Remember to wear supportive, non-slip, closed-toe shoes to help avoid a fall while carrying. In some cases, such as the handling of stage platforms or rostra, protective work boots with steel toe reinforcement may be required.

Chemical Hazards

The key to safe chemical use is to understand the health hazards posed by the materials you use and implement safe handling precautions.

Each chemical container has a manufacturer's label with the chemical name, hazard warnings, and the manufacturer's name and address. Labels must not be removed. If secondary containers are used, those containers must also be labelled with this information.

Each product will have a Safety Data Sheet (SDS) detailing the following:

- Physical properties.
- Flammability and fire-control information.
- Health hazards.
- Emergency and first aid procedures.
- Stability and special storage considerations.
- Spill, leak, and disposal procedures.
- Personal protection information.

There are many types of paints, inks and dyes used in theatre. While each product will have specific manufacturer's instructions, the following safety guidelines apply to all products:

- Read the product labels and the SDS to help you identify the potential hazards of the product you are using.
- Know the ventilation requirements of the products you are using.
- Avoid ingestion of materials by not eating or drinking in your work area and wash your hands before eating or drinking.
- Keep containers closed when not in use.
- Control ignition sources in areas where flammable liquids are used.
- Never puncture aerosol cans or expose them to high heat.

Protocol for proper storage of tools and materials is as follows:

- Store flammable and combustible materials in the designated flammable storage cabinets.
- Store materials at least 24 inches below the ceiling.
- Never obstruct exits.
- Never obstruct access to firefighting equipment such as extinguishers, hose stations, or alarm break-glass stations.
- Maintain a clear unobstructed space of at least 36 inches in all directions from electrical service equipment.

A note on managing chemical waste

The chemicals used to generate some special effects may result in the generation of hazardous waste. Dispose of waste according to manufacturer's guidance and in accordance with your Campus Hazardous Waste Management Program. Contact the College Safety Officer for guidance on hazardous waste management.

Technical Theatre at SBT

Working Roles

Production Manager (PM)

The PM coordinates production from budget through Get Out, making sure different production elements deliver on time and within budget.

Stage Manager (SM)

The SM liaises with technical crew and performers, and calls the show at showtime.

Lighting Designer (LD)

The LD designs the lighting for a production. It's their responsibility to create the lighting plans and elevations, and to call the focus at focus time.

Lighting Engineer (LX)

Lighting Engineers assist the LD with lighting install and focus, and operate the show.

Sound Designer

The Sound Designer selects the music and designs the foley for the show, as well as curating the speaker set-up.

Sound Engineer

The Sound Engineer installs the sound systems and operates the show.

Lighting

Lighting at SBT

SBT have an ETC Ion Classic lighting console and a full stock of house lighting fixtures, see Technical Spec in Resources for complete list.

The house patch system operates 240 circuits with 156 straight to dimmers.

There is also a patch bay on the gantry. This uses 15 A plugs distributed at various points on the gantry, allowing for flexibility in lighting design where there are 36 available inputs, but 84 available patch points.

The theatre has a small selection of gels and gobos. Individual orders must be made by production teams for each show according to the LD's requirements.

Stage Lighting

Stage lighting is designed by the Lighting Designer. The lighting plan plots the LD's design. Originally drafted on paper, AutoCAD has largely replaced hand-drawn plans.

The plan (or 'plot') is the bird's-eye two-dimensional representation of the venue and includes lighting positions, fixtures, colour and channel information. The lighting crew use the plan to rig and focus fixtures while the LD refers to it to find dimmer channels when setting light levels.

The Lighting Plan

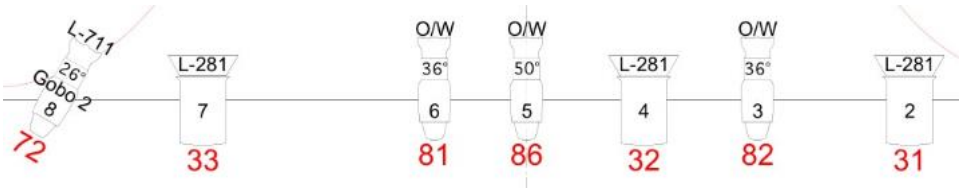
The plan doesn't need to be complex. Don't forget that *drawing* a lighting plan is different from *designing* a plan – try not to let extensive symbol libraries overwhelm you.

A good start is a tidy scale drawing of the venue with some standard lighting symbols and clear text. Scale drawings are important, even if they are only simple line representations of bars and fixtures. It's impossible to use the lighting plan to make design decisions if bars are not the represented length, or in the wrong place, and the lantern symbols are out of proportion.

A simple computer drawing with a software like Sketchup, or pencil and paper will suffice. 5mm squared paper is great as a quick aid to scale drawing. Using tracing paper layers can keep your set drawings separate from the LX plan.

Using Fixture Symbols

Lighting fixture symbols must be clear, recognisable and leave room for information such as gel colours, gobo numbers etc. Where possible, use standardised symbols for each type of fixture.



The scale of the symbols should roughly represent how much room a lantern will take up on the bar. When drawing lantern symbols, it's good to 'point' the lantern in the direction of focus. This shows up any potential problems with fixtures rigged too close to each other – another reason symbol scale is important.

Stage Lighting Safety

Plug Wiring: Regularly check the wiring of plugs. The cable clamp should hold the cable firmly, the colour code should be correct and to the latest standard: brown (live); blue (neutral); green & yellow (earth). Wires should be fully inserted, and screw terminals tight.

Always Unplug: Never open up a lamp while it is plugged into power. Even if you switched the circuit off before you climbed the ladder, someone else may have switched it back on in ignorance of what you were doing.

Lighting Bars: Ensure that lighting bars have at least 3 attachment points, so that the bar can remain in position if one fixing fails.

Safety Chains: Always fit a safety chain between the lighting fixture and the suspension point. Never rely on a hook clamp or bolt alone.

Accessories: Ensure that accessories such as barndoors, colour frames and gobos are secure and cannot fall out of the guides.

Lamps: Always wait a few minutes before removing a lamp or gobo holder from a working spotlight. They will be extremely hot for several minutes after the light has been switched off. Tungsten halogen lamps may explode when hot. Never use a higher wattage lamp than is specified for the spotlight.

Discharge Lamps: You may encounter discharge lamps in follow-spots. Discharge lamps produce ultraviolet radiation which is contained inside the spotlight by glass lenses and light baffles. Never look directly at a discharge lamp during operation without protective goggles. Always treat discharge lamps with extreme care.

Dark Exits: It is as important to illuminate backstage as on-stage. Actors may be dazzled by the lighting on stage. It will take time for their eyes to adjust, so if there is a dark exit offstage, illuminate it with a small spotlight or floodlight fitted with a blue filter so as not to distract the audience.

Fire Precautions: Never enclose a spotlight in scenery, and always ensure that the light is at least 0.5m from the nearest flammable object. Always know the position and type of fire extinguisher nearby when working onstage, and find out how to use it in an emergency. Never obstruct a fire exit with lighting or cables.

Focusing: When focusing, try to keep the temperature of the lamp as low as possible. Switch on the lights you want to focus as you reach them. Remember that shutter blades get hot. When fitting a colour frame, barndoor or gobo, take care not to drop it.

Using Stands: Ensure that stands cannot tip over by checking that they are stable and locked firmly in position, and that cables are secured out the way. If possible, attach a safety chain from the top of the stand to an immovable fixing point, or weight the stand to prevent tipping.

Process for Hanging Lights

1. Place the lighting fixture's clamp over the lighting bar and tighten it by hand only. Do not use a spanner to tighten at this stage.
2. Wrap a safety chain around the bar and secure the end to the fixture.
3. For a Fresnel: spot in and open the barn doors out wide. For a Profile: open out the shutters.
4. Plug in the fixture at the nearest available socket, leaving enough slack on the cable to allow adjustment during focus. If the cable does not reach the nearest socket, an extension cable should be run from the socket to the light.
5. Note the circuit that the fixture is plugged into on the lighting plot.
6. Point the fixture in the direction of focus.

Once lights are hung, glow the rig to about 20% to ensure that all fixtures are working and being controlled by the lighting desk. The cabling on the lighting bars should then be tidied up and gels inserted into lights before raising to trim height. Only house technical staff may operate trusses.

A note on cable management

Keeping your cable runs tidy makes further adjustments much easier. PVC tape, often referred to as lx tape or 'peev', is a good choice for securing cabling. Other types of tape such as gaffer, dancefloor or masking tape are **not** suitable for this purpose.

It is always helpful to bear in mind the next person who will deal with your cabling, be it troubleshooting from the top of a ladder or stripping out the rig at the end of a run.

Sound and A/V

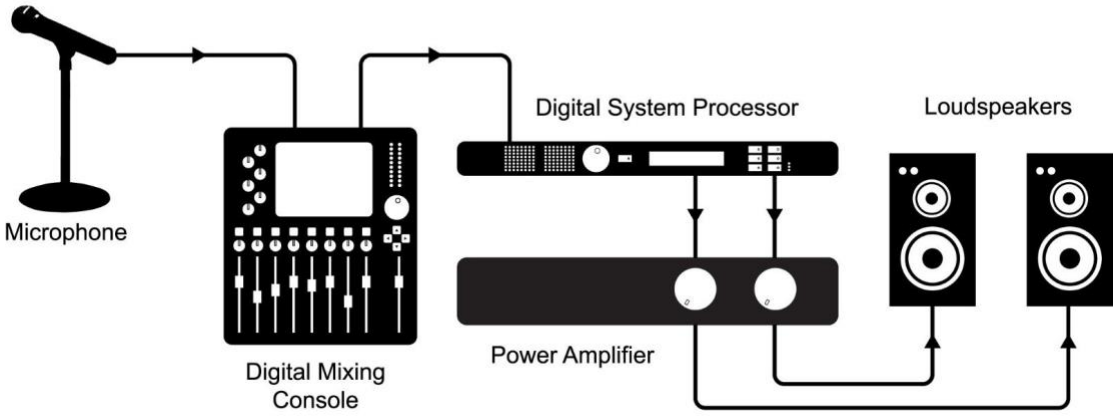
Sound at SBT

SBT has 10 Meyer UPM-1P powered speakers and 1 Meyer UMS-1P powered sub, rigged to facilitate 7.1 surround-sound in the theatre space. See Resources section for PA diagram with speaker positions.

Audio send and return is via Cat5 to a Midas DL32 stage rack. An analog loom is also available. The theatre has two mixing desks: a digital Midas M32R, and an analog Midas Venice. MacBook Pro (OS 11.4) with QLab license is available to students working in-house.

Sound System Fundamentals

Theatre sound systems, from the most basic to complex, all use the same signal path. Audio enters the system at source (microphone or playback), the signal is processed by a mixing desk and a processor, and is then sent to an amplifier which drives the output of the speakers. The speaker system is often referred to as the PA.

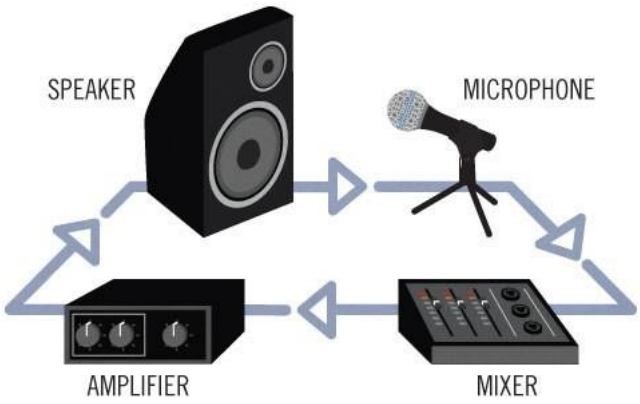


From the microphone or computer to the speaker, the audio is an electrical signal which can be manipulated using various hardware and software applications. Once the audio has left the speaker it has been converted to a sound pressure wave which can still be affected by speaker placement and room acoustics.

When operating sound, don't allow sudden pops or bangs through the PA. To avoid these, make sure your desk in on and all outputs muted **before** powering on the PA. You must also avoid plugging in or out cables while corresponding channels are unmuted.

Feedback

Feedback is an unpleasant sound produced by a PA system which occurs when a signal leaves a speaker and re-enters the system through an open mic. It is then amplified in a continuous loop, resulting in a sustained tone that can range from a low rumble to a piercing screech.



If this happens, first mute the mic on the desk. Then identify the speaker that is feeding into the microphone and move the two away from each other. You may need to adjust gain structures and overall volume in the room.

Playback and Operation

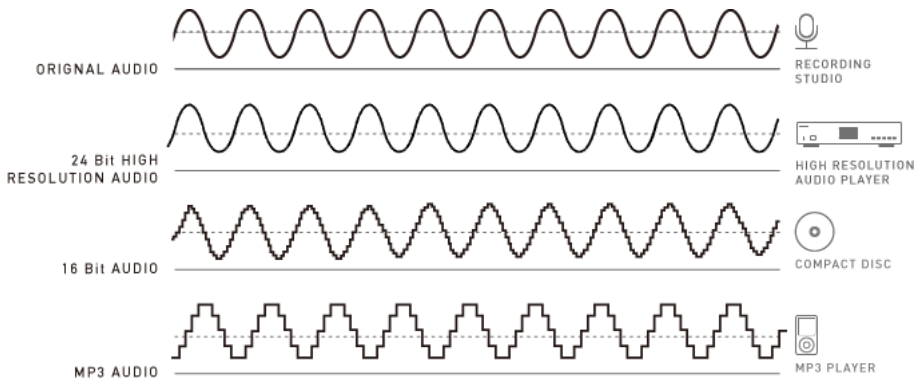
A number of different programming and playback software applications for theatre exist. The industry standard is QLab.

Qlab is a software playback engine for audio, video and lighting cues which can also be used to send MIDI and OSC commands to external devices.

Digital Audio

It's important to use high-fidelity audio files in your productions. Bit depth and sample rate are factors in determining digital audio file fidelity.

The bit depth (measured in bits) is the number of bits of information in each sample, and the sample rate (kHz) is the number of samples per second. The higher the bit depth and sample rate, the higher fidelity audio.



MP3s

MP3s and other lossy-compression file formats **must be avoided**. MP3s are incompatible with QLab and result in parsing issues leading to playback problems.

A note on musicals

The Musical is a specialist form of theatre at the crossover between traditional theatre and live concert. As such, special technical considerations must be made when planning a musical production. At SBT, we generally discourage musicals where there is no Musical Director available. An experienced Sound Engineer is also required for the staging of musicals.

As always, production companies are invited to chat with us about staging opportunities and possibilities, so don't be afraid to discuss it with the Theatre Techs if you would like to stage a musical.

Audio/Visual at SBT

SBT has two projectors:

Sanyo PDG-DHT8000L 1080p, 8000 lumen HD projector with lens: LNS S50 Standard Zoom & LNS W52 Short Throw. Usually rigged in cradle above seating bank.

Panasonic PT-DW100E with lens: Panasonic ET-D75LE1.

Also in stock are a cyclorama and projector screen.

Set Design and Construction

Set Design

Set designs allow all departments to visualise the set and anticipate required resources, as well as any potential hazards.

A set design may be represented in three-dimensional 'model box' form, or as a 2D drawing. There are 4 basic types of set design drawing:

- Plan: A scaled map of the stage area showing the outline of each set element.
- Section: A cross-section representation of the stage which will show the shapes and heights of set elements.
- Elevation: A side elevation representing the set from right or left at ground level.
- Perspective: This is essentially a sketch of the set – a drawing showing three dimensional objects. It has the advantage of communicating colour, texture and overall aesthetic.

Student set designs must be reviewed and approved by theatre staff before materials can be ordered or building commenced.

Set Construction

Set construction is a highly specialised aspect of technical theatre which may involve high-risk hazards. Set designs are approved on the basis that the set design can be delivered safely, on time and within budget. The experience and skill-level of available crew will also be taken into account. In general this will mean that the set can be constructed safely within 2-3 days, either in-situ on the stage or in the SBT scene dock. All construction-related equipment and tools are under the direct supervision of the house technicians and should only be used with permission. If in any doubt about construction it's important that you ask the technical staff for assistance and advice.

During construction, fall protection systems must be in place where work is being carried out at an elevation of 3 metres or more.

Overhead Rigging

Rigging describes the process of suspending an object at height. Rigged objects can be 'dead hung', meaning they don't move; or 'flown' as part of the action, for example a petal drop or a painted drape. All rigged objects must be inspected prior to use to ensure they're fit for purpose and operating within Safe Working Load (SWL). All rigging proposals are submitted for prior approval, usually as part of a set design drawing, and the installation is directly supervised by house technical staff.

Special Effects

Special effects are used in theatre to enhance the action.

Examples of Special Effects include:

- Atmospheric fog and haze
- Laser and strobe lights
- Confetti, snow, and foam
- Open Flame and Pyrotechnics

Special effects pose hazards that increase the risk of personal injury and property damage; for this reason, at SBT their use must be approved by House Technicians and/or the Campus Fire Officer.

Atmospheric Fog and Haze

Fog or haze can be produced using a variety of commercially available machines using propylene glycol, glycol/water mixtures, mineral oil, or dry ice.

Many people are sensitive to the airborne constituents of hazers – primarily propylene glycol. When fog or haze is approved for use in a production, warnings must be posted at front of the house, at entrance doors to the theatre, and in the program.

As an example, the following communication could be posted:

"**WARNING: Synthetic fog is used during this performance**."

Excessive use of haze has the potential to change a non-hazardous confined space into a hazardous confined space by limiting visibility.

Laser and Strobe Lights

Laser and strobe lights can induce seizure in some people with epilepsy or photosensitivity. When laser and/or strobe lights are approved for use in a production, warnings must be posted.

As an example, the following communication could be posted:

"**WARNING: Laser and/or strobe lights are used during this performance**."

Only Class 2 lasers may be used.

Snow, Confetti and Foam

Artificial snow may be made from chemical mixes, shredded paper or plastic. Chemically produced snow may pose hazards such as skin and eye irritation or internal ingestion risks. Check the SDS (Safety Data Sheet) for any warnings and safe use directions and share these warnings and directions with the performers and crew.

Shredded paper, plastic, or foam may be used as confetti or artificial snow. These materials can produce dust that can be a fire hazard, and/or result in eye or respiratory irritation.

Always use flame-proofed materials, and never use these materials when an open flame or other ignition source is present.

Disbursed material must be cleaned up immediately following each performance or rehearsal. Provide dust masks to crews assigned to clean up the material.

Open Flame and Pyrotechnics

The use of open flame (candles, lighters etc) and pyrotechnics of any kind require careful management. At SBT, because of obvious fire and combustion risks they are generally discouraged and may only be used when approved and subject to a separate Risk Assessment.

Fight and Weaponry

Permission and approval must be granted for the use of weapons before they are purchased, made, or used.

If approved, access as well as handling of weapons should be restricted to authorized stage management representatives, supervisors, performers, and crew.

Training

All those who do handle weaponry must be trained in proper handling and must use appropriate PPE (Personal Protective Equipment), such as hearing, eye, or face and body protection.

Document all training.

Provide adequate time during rehearsals to allow the performers to become comfortable using the weapons.

Storage

Store all weapons in secure areas at the end of each performance.

Use & Handling

Only use weapons as intended by the choreography of the play.

Never play with the weapons or engage in horseplay onstage or offstage.

Never remove the weapons from the stage/backstage area.

Edged Weapons

Piercing weapons are included in the category of edged weapons. Examples include knives, swords, rapiers, razors, arrows and bows, pitch forks, maces, hatchets, axes, saws, spears and darts.

Dull the edges of edged weapons.

Blunt the tips of piercing/pointed weapons.

Only use edged weapons designed for stage combat.

All weapons should be suitable for use on stage and constructed so as not to break during use.

The Production Process

The Production Schedule

The production schedule is a critical component of production planning and execution. It should assign teams and blocks of time to certain tasks as per the needs and time resources of the show. See Resources for a sample production schedule.

The Get-In

The process of building the set in-situ along with installation of sound and lighting is known as the Get-In.

The Get-In typically takes 1-2 days on student productions. For professional theatre productions scheduled for a long run, the Get-In can last up to a matter of weeks with complex set construction, tech rehearsals and tailoring of sound and lights happening in the venue.

Make a plan and circulate delegated tasks to the relevant teams prior to Get-In. The Get-In should be overseen by an experienced and qualified person, usually the production manager (PM). Teams should report to the PM and work concurrently to deliver a streamlined and efficient installation.

The Get-Out

Set deconstruction and clearance is known as the Get-Out or Strike.

As with the Get-In, a plan should be made ahead of time. As there are costs associated with deconstruction, the strike plan should be developed at the design stage in order for these to be included in the budget.

For productions at SBT, the strike plan should take into account the Campus's sustainability plan when determining what will be recycled and what will go to landfill.

A note on time management

At every stage of the production process, from Get-In to showtimes to the Get-Out, it is imperative that time is managed effectively, schedules are stuck to and that shows **run on time**. Keeping an audience waiting, or deviating from agreed production schedules, is unacceptable.

Licensing

Licensing is acquired via the Theatre Manager, and must be secured before any public production of copyrighted material can proceed.

Procurement Procedures

When ordering equipment for your show 'on account,' i.e. using the Department budget allocation, there are certain steps that need to be followed.

Due to College procurement rules, **only** technical staff can place these orders, and they can only place them with **approved suppliers**. A current list of approved suppliers is included in the Resources section. Occasionally it may be possible to place an order with a non-approved supplier, but this can only be done by adding them to the list – this may take up to 10 days.

- First, a quote for materials must be obtained from the supplier by the students working on the production. It should be on headed paper and with VAT included.
- Once an official quote has been obtained, this can be forwarded to technical staff **no later than 5 days before the Get In.** This allows the necessary time for the order to be placed via the College Procurement System and fulfilled.
- Finally, once the order has been placed, it is the responsibility of students working on the production to follow up with the supplier to arrange delivery, and to receive the delivery.

See 'Notes for Directors & Designers' in Resources for more.

Resources

Blank Lighting Elevations: Left Right

Blank Lighting Plan: PDF Vectorworks file

Covid-19 Template Risk Assessment

Festival Rig Lighting Plan

Fire Announcement

Gantry Dimmers Circuit Plan

Notes for Directors and Designers with Approved Suppliers

PA Plot

Risk Assessment Documents

Sample Production Schedule

SBT Technical Spec

SCA Safety Statement

Further Reading

Ladder Association Code of Practice

Recommended Reading