

# PRODUCTION & TECHNICAL INFORMATION

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## GENERAL INFORMATION

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TECHNICAL REQUIREMENTS FORM	<p>The Sanders Theatre Technical Requirements Form must be submitted to the Production Manager at least two weeks before the event date. This form communicates event needs, times, and indicates contacts for technical personnel. A meeting with the Production Manager may be needed for technical staff orientation or to discuss particularly detailed events or set-ups. Call the Production Office for specific questions and/or to arrange a meeting.</p> <p>The Technical Requirements Form is available through the Administrative offices, or on-line (<a href="http://www.fas.harvard.edu/~memhall/techregst.html">http://www.fas.harvard.edu/~memhall/techregst.html</a>) in the Usage, Policies and Forms sections of the web site.</p>
ARRIVAL AND DEPARTURE TIMES	<p>All arrival and departure times must be coordinated with the Program Manager and production staff. Early arrivals will not be accommodated unless prior arrangements have been made. Occupancy in excess of the agreed upon time will result in additional rental charges. Be sure to include time for lighting, audio and/or video equipment set up and strike when arranging rental periods.</p>
STAGE MANAGEMENT	<p>The Producer should provide a Stage Manager/stagehand to be responsible for stage setup changes and getting performers on/off stage.</p>
THE SANDERS THEATRE PRODUCTION TEAM WILL:	<ul style="list-style-type: none"><li>? Act as consultant to producer's technical staff, orienting them to facility use</li><li>? Provide access to music stands, chairs, tables and other facility owned equipment</li><li>? Move the Sanders Theatre piano</li><li>? Operate the wheelchair lift as needed</li></ul>
THE PRODUCING ORGANIZATION OR THEIR VENDORS WILL:	<ul style="list-style-type: none"><li>? Perform set changes during performance and cue performers on and off stage</li><li>? Operate the lighting system</li></ul>
PARKING	<p>THERE IS NO PARKING AT SANDERS THEATRE. Parking is not permitted in the circular drive at any time. Contact the Production Manager for arrangements regarding parking for producers, technical staff and performers. See the directions page for information on public transportation and parking for event patrons.</p>

## FACILITY INFORMATION

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GENERAL POLICIES	<p>Please note the following practices are not permitted in Memorial Hall:</p> <ul style="list-style-type: none"><li>? open flame or pyrotechnics</li><li>? helium balloons</li><li>? animals</li><li>? smoking</li><li>? storage or use of bicycles, rollerblades, skateboards or other transport</li><li>? blocking of exits</li><li>? removal or alteration of furnishings</li><li>? affixing items to building structure or furnishings</li></ul>
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SANDERS THEATRE PROHIBITS:	<ul style="list-style-type: none"> <li>? food and beverages</li> <li>? sitting on stairs; standing in aisles or rear of house</li> <li>? photography and audio/video recording unless arrangements have been made</li> </ul>
STAGE	For specific dimension information, please refer to the <i>Stage Diagram</i> .
STAGING, HANGINGS	<u>All</u> staging, hangings, and set ups must be approved by the Production Manager.
ELECTRICAL SPECIFICATIONS	Sanders Theatre has ten 100 amp/three phase cam-lock panels. The locations: backstage right and left; house right and left in the choir loft above the stage; house right, left, and center in the balcony; and house right, left and center in the lighting gallery. The stage has 32 pairs of 115 volt, 20 amp outlets on 5 separate circuits. The Theatre has numerous 115 volt 20 amp outlets on all levels.
FLOOR CARE	The installation of any hardware, equipment or device (including dance shoes) which may damage the stage floor is strictly prohibited. Producers whose activity could damage the floor may use the space if they provide the proper protective floor covering, and receive permission from the Production Manager. Please make sure that all equipment used on the floor, including musical instruments, have rubber tips to prevent scratching.
SANDERS THEATRE EQUIPMENT	<p>For non-Harvard organizations and Harvard departments the production staff will work with the organization's stage manager to install the initial set up of music stands, chairs, tables and other stage equipment. The production staff will not assume responsibility for the set up or moving of equipment that is not the property of Sanders Theatre.</p> <p>All Sanders Theatre producers should inform the Production Manger of their equipment needs at least two weeks prior to their use of the facility via the <i>Technical Requirements Form</i>.</p>
PIANO	<p>The Sanders Theatre piano (Steinway D Concert Grand) may be used by arrangement. There is a fee for use and tuning. Piano tuning is arranged for by the Production Manager and done by the Harvard University Piano Shop. The production staff will set and move the piano as necessary. If the Technical Requirements Form does not indicate a need for the piano, the piano will be stored off stage.</p> <p>The pitch of the instrument will be between A 440-442 Hz. In the event that a different pitch is requested, a fee in addition to the normal piano cost will be charged.</p>
PIANO LIFT	The stage lift in Sanders Theatre is to be operated by the production staff for the movement of equipment only. It may not be used to move performers, scenery or for any other theatrical effect.

EQUIPMENT DELIVERY  
AND STORAGE

All producer equipment must be removed at the end of each event. All deliveries must be coordinated with the Sanders Theatre Production Manager. There is no long term storage at Sanders Theatre. Short term storage may be available and is coordinated by the Production Manager. Always assume that there is no storage available unless informed otherwise. **Harvard University is not responsible for any damage or loss of any item that is stored in the facility.**

EQUIPMENT AND  
SEATING

Lighting and sound equipment should not obstruct the view of the paying patrons. The Producer must take full responsibility for responding to complaints and providing refunds for those patrons whose view is obstructed by any equipment. If it is known that obstructed view seats will be created by equipment, the Box Office shall be notified before the seats are put on sale so that these seats can be pulled from sale or sold as "partial view". Please refer to the *Box Office Information* for more details.

DRESSING ROOMS

Included with your rental are the Green Room (038), two adjacent dressing rooms with private toilets, and three seminar rooms (Rooms 028, 029 and 030). All rooms are equipped with audio monitors enabling performers to hear activity in the Theatre. Room 028 is also wired for video. Producer must supply a video monitor and a BNC type video cable.

A dressing room key will be given to the Producer or Stage Manager to secure personal belongings. At the Producer's request and expense, a Harvard University security guard may be scheduled for this duty.

There are no showers at Sanders Theatre.

VIDEO & AUDIO RECORDING, BROADCASTING

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EQUIPMENT  
LOCATIONS

In the interest of public safety, and in compliance with safety and fire codes, please note:

It is not permissible to set up any video equipment in any aisle way in Sanders Theatre. All video camera operators or producers in charge of a shoot must obtain tickets for seats in which they can put tripods, cameras and related equipment. If no tickets are available, no video shoot will be allowed. If any video equipment and/or operators interfere with the audience's enjoyment of an event, the offending equipment and/or operator will be required to leave the Theatre.

Camera locations and press seats must be arranged with the Harvard Box Office in advance. Any seats obstructed by camera locations must be accounted for.

PRESS TAPING

Anyone taping for a news broadcast must first contact the Harvard News Office (617.495.1585) before the event. All such taping will be limited to the first 15 minutes of the event, after which time all press personnel and equipment must leave the Theatre.

AUDIO/VIDEO  
RECORDING  
AUTHORIZATION

A Recording Authorization Form and fee must be returned to the Director's office not less than two weeks before the event. This form and a schedule of fees may be obtained by calling the Memorial Hall Director's office at 617.496.4595. Recording authorization does not constitute a license to broadcast.

It is imperative that anyone planning a video shoot in Sanders Theatre contact the Production Manager of Memorial Hall/Lowell Hall Complex two to three weeks prior to the event. On the day of the event, the Production Manager on duty will make the final decision granting permission to record.

The Memorial Hall/Lowell Hall Complex staff and management reserve the right to decline authorization to record at any time.

VIDEO/AUDIO  
RECORDING/INTERNET  
BROADCAST  
AUTHORIZATION

*An Application for License to Broadcast* must be completed one month prior to intended broadcast. Permission is not guaranteed, and additional fees may be applied.

#### AUDIO/VISUAL SPECIFICATIONS

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AUDIO SYSTEM

Sanders Theatre is equipped with a sound reinforcement system.

The Sanders Theatre sound system is designed to be as flexible and user friendly as possible while meeting the requirements of several different types of events. It can be operated independently or in conjunction with a user's own system. It has installed processing, EQ, and delays that are set for a typical lecture scenario.

ALL SETTINGS ARE FIXED AND CANNOT BE ADJUSTED BY THE USER.

The central cluster and its Soundweb processor can be used alone independent of the other components. The cluster is divided into upper and lower halves that can be mixed separately.

Sanders Theatre does not have any playback devices or mixers other than the one listed above.

Please call the Production Department at 617.495.5595 for further information.

Groups that wish to use the audio system in a manner that goes beyond a simple one or two microphone set up must employ a professional audio services provider. A list of recommended vendors can be found at the end of this document.

Components include:

- ✍ One center of the house cluster consisting of four Meyer UPA 2 powered loudspeakers and 2 Meyer UPA 1 powered loudspeakers.
- ✍ One Soundweb 9088MM Processor for the center cluster.
- ✍ One under balcony speaker system.

- ✍ One over balcony speaker system.
- ✍ The over and under balcony systems are driven by a series of Crest CA900 amplifiers.
- ✍ Several installed XLR microphone runs.
- ✍ Multipin connector runs providing 32 channels of audio between the stage and the front-of-house mix position. 16 channels of audio between the stage and the rear of house mix position. And 16 channels of audio between the stage and the system patch bay.
- ✍ Two sets of 16 channel snake boxes and tails (wired for send only).
- ✍ A system patch bay allowing for custom microphone run configurations.
- ✍ 2 Shure wireless handheld mics and 2 Shure wireless lavalier clip on mics operating on two frequencies: 182.200 MHz and 180.400 MHz one handheld and one lav each.
- ✍ One 4 channel Shure mixer for the microphones listed above.
- ✍ Recording booth located above the stage with view of the stage by closed circuit television camera
- ✍ Eight input tie line for microphones; connects from loft rail above stage to recording booth
- ✍ Adjustable aircraft wire microphone suspension system

VISUALS  
Operated exclusively by  
Harvard Audio/Visual  
617.495.9460

- ✍ Remotely operated Stewart Film screen Model B with ultra matte 130 projection screen suspended above the stage (image size 12'h x 24'w)
- ✍ Barco 5100LC video projector
- ✍ Two Navitar 560 xenon 35mm slide projectors
- ✍ Projection distance from screen to A/V counter at the back of Mezzanine Section D: 70 feet.

VIDEO

Video patch system (BNC-type connectors) tie-ins throughout house. Patch system connects to central patch bay in basement.

EXTERIOR PATCH  
PANEL

Panel on outside of building, north side, which has provisions for audio and video patches from production truck/trailer into house systems.

PRODUCTION  
COMMUNICATION  
SYSTEM

- ✍ Six ClearCom RS-501/CC-85 units with cables
- ✍ Patch in receptacles at 18 positions in the Theatre
- ✍ ClearCom system operates on channels A and B, separately or combined

ASSISTIVE LISTENING SYSTEM

- ⚡ Sennheiser infrared transmission system
- ⚡ 48 Sennheiser HD 1407 headset receivers and 24 Sennheiser RI100-J loops
- ⚡ The system will transmit audio signals sent through the in-house system.

Audio engineers using an independent sound system must supply a signal to the in-house audio system in order to provide infrared transmission.

LIGHTING SYSTEMS

GENERAL DESCRIPTION

The Production staff can provide names of approved lighting designers or technicians who may be hired, at the producer’s expense, to assist with and supervise the set up and operation of the theatrical lighting system. (See the Vendor Requirements and Referral List, page for approved lighting vendors.) Producers must remember to reserve enough time for the set up, focus and strike of lighting equipment.

All lighting in Sanders Theatre is controlled via one ETC brand Sensor 24 installation dimmer rack. The rack contains 48 D20 2.4 kW dimmers that can be controlled via DMX 512 input or via the theatre’s Unison architectural control system. 27 of the theatres 48 dimmers are dedicated to controlling the architectural fixtures in the theatre and are not available for use. The remaining 21 dimmers are used for theatrical lighting purposes via the theatres distribution system. Sanders theatre uses 2P&G connectors. Sanders owns a number of ETC Source 4 ellipsoidal and pars. They are hung in a fixed focus designed for classical music concerts and lectures. The instruments cannot be moved or refocused. You may however, gel them for your needs or disconnect them and use the circuit for some other instrument.

SANDERS THEATRE DOES NOT OWN A LIGHTING CONTROL CONSOLE!

DIMMING AND DISTRIBUTION

As stated above, Sanders is equipped with one ETC brand Sensor 24 installation dimmer rack containing 48 D20 2.4 kW dimmers. The dimmer rack is located in the tower above the theatre. Twenty-one dimmers are available through the distribution system for your use. Sanders uses a one-to-one dimmer / circuit configuration. Our dimmers start at DMX address 201 to facilitate shorter load in periods for events that will use additional dimmer racks in conjunction with the installed equipment.

Sanders is also equipped with 10 100A 3 phase 12/208 VAC Cam-Lok panels to provide power to additional lighting or audio equipment. The panels are located stage left and stage right upstage, in the choir loft, 3 in the balcony, and 3 in the lighting gallery. The panels in the balcony and gallery are distributed house left, center, and right.

THE PANELS HAVE REVERSED NEUTRALS AND GROUNDS AND MAY REQUIRE “TURN AROUNDS”

The center Cam-Lok panel in the balcony has 3 20 circuit breakers feeding duplex U-ground receptacles. The Cams and breakers are all fed from the same 100A supply.

The theatre’s distribution system is equipped with 2P&G (stage pin) connectors. The distribution system contains the following circuits:

Circuits	Location
228-244	Distributed throughout the Lighting Gallery

CONTROL

The theatre is equipped with installed DMX control lines to control the installed rack and any additional racks. A lighting control device can be plugged in stage right upstage, at the rear of the orchestra, and at the rear of the mezzanine center house at the Audio Visual desk. The theatre is equipped with DMX out connections at each of the aforementioned Cam-Lok panels. The DMX signal is optically split in the Dimmer Room.

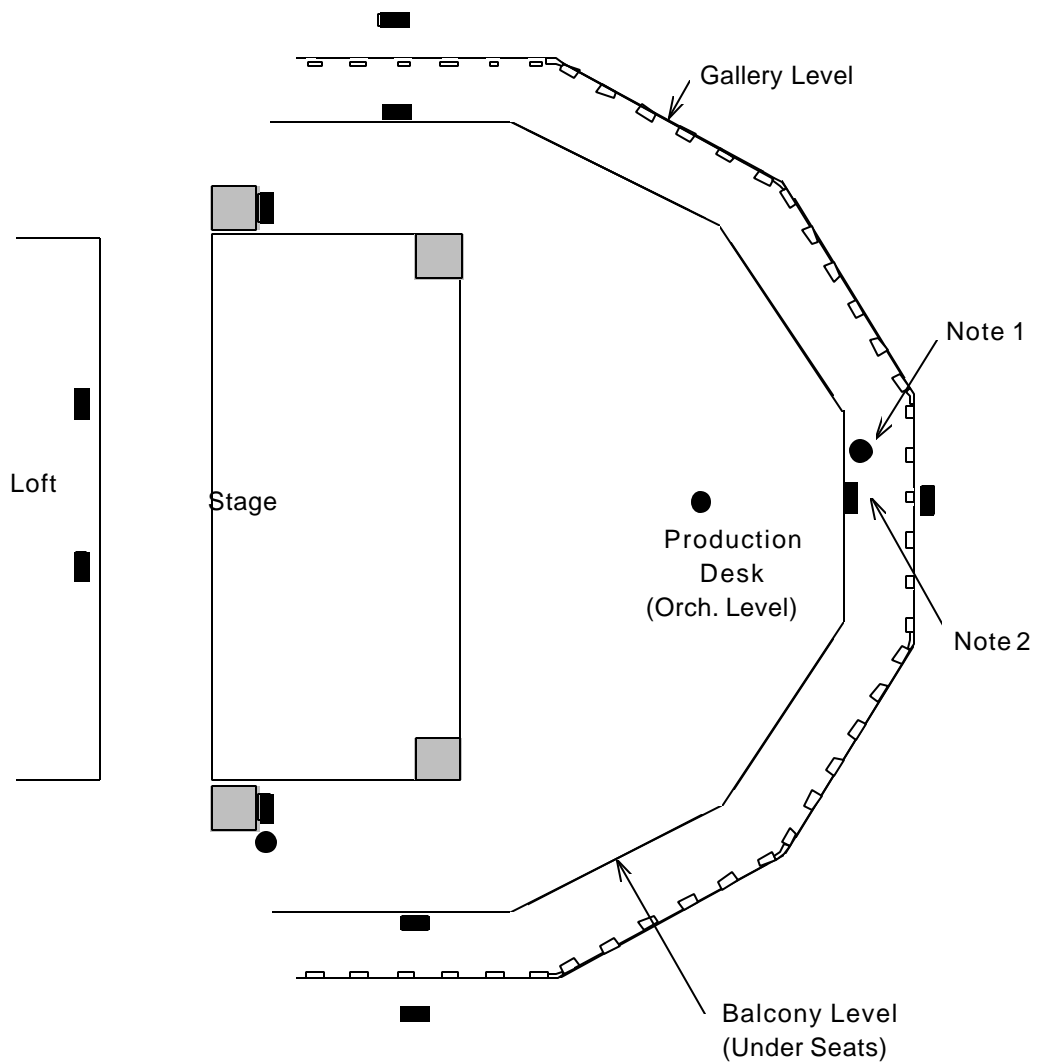
The theatre's lighting system can also be controlled via ETC's Unison system. The system is an architectural control system that has the ability to control groups of dimmers (zones) and take "snapshots" of different lighting looks to be used later on. The system can be controlled via proprietary controllers that can be plugged in stage right upstage, at the rear of the orchestra, and at the rear of the mezzanine center house at the Audio Visual desk. Contact the Production Office for more information on the Unison system.

FIXTURES

Sanders Theatre is equipped with the following instruments:

Instruments	Quantity
ETC Source 4 Ellipsoidal 19 degree	6
ETC Source 4 Par MCM	22

The fixtures may not be moved or refocused. You may however, gel them for your needs or disconnect them and use the circuit for some other instrument.



■ 100 Amp 3 Ø 4 wire Cam-Lok Panel (Hots are female, N & G are male, E1016 type)  
Each includes DMX output

● DMX Control Input

Note 1: Input in A/V desk  
Note 2: This Cam-Lok panel includes 3 duplex outlets each with a 20A breaker

**Sanders Theatre**  
Power and Stage Lighting Control  
APS 7 Feb. 1997