

# **Open Space for Arts and Community**

Grand Hall

Sound System

Technical Rider

Revision

Sept 5, 2011

## OVERVIEW

The Grand Hall at Open Space provides a professionally installed high performance PA system comprised of a JBL VRX900 Series Line Array loudspeaker system, dbx DSP room processing, 150ft 32x8 snake, and 24 channel Allen & Heath analog mixing console. In addition, two JBL monitor wedges are available on stage.

Open Space does not provide the following sound system components:

- Microphones, DI boxes, cables, or stands
- Outboard signal processing (compressor, gate, reverb, etc.)
- Prerecorded playback (e.g. CD Player)
- Recording equipment
- Wireless

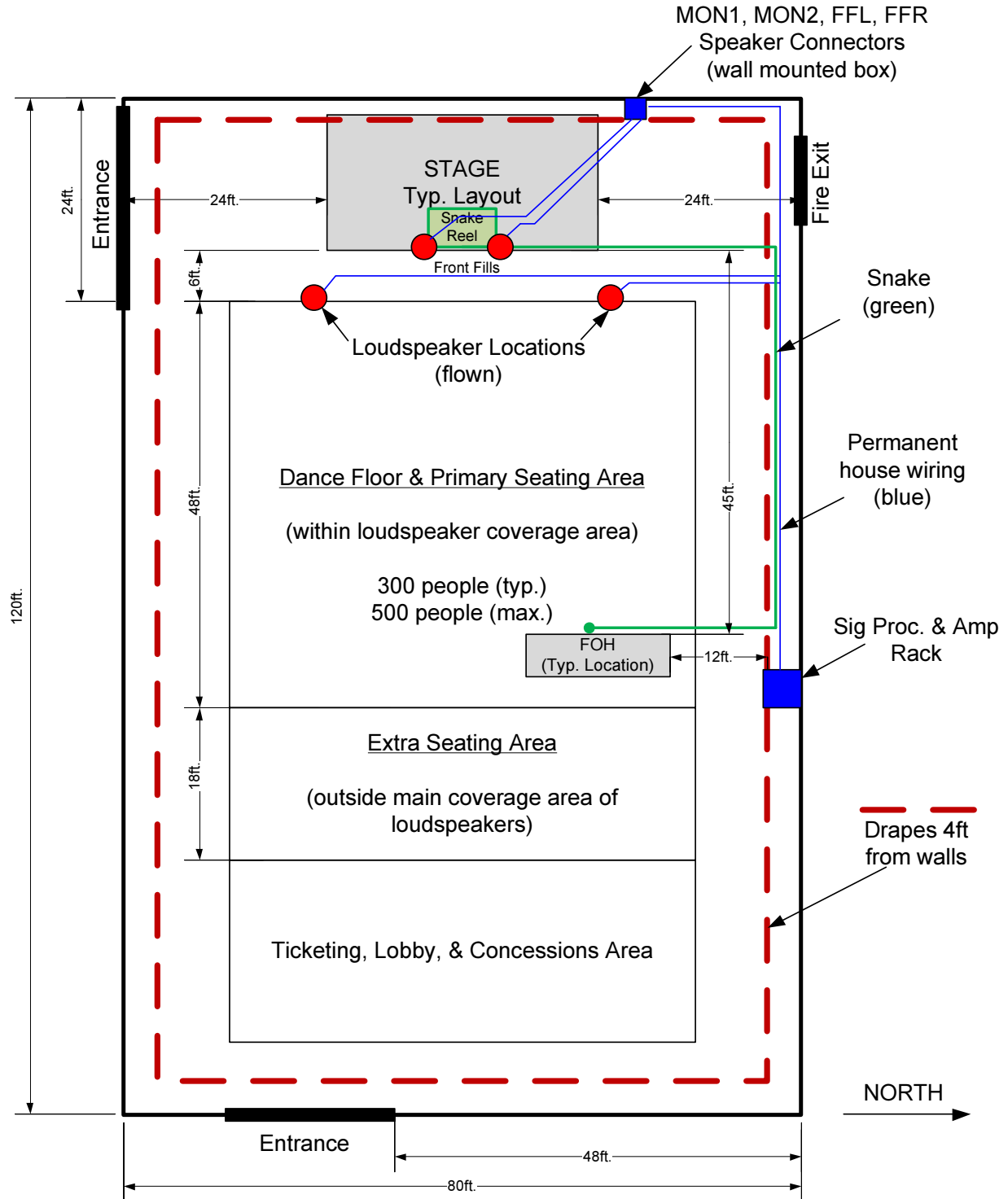
In general, the backline (everything on stage) is the responsibility of the user. Everything from the stage to loudspeakers is provided by Open Space.

The design goal of the Open Space PA System was to provide excellent sound rivaling anything a touring band or theatrical group would bring in, thereby allowing users of the space to leave their system in the truck (or not bring a PA system at all).

### Special Note About Bass Response:

The stereo 18 inch subwoofers on the VRX900 Line Array provide ample bass response for most types of content. However, if strong “punchy” low end is desired (e.g. for high volume rock music) it may be necessary to add additional subwoofers. These are the responsibility of the user.

# GRAND HALL SOUND SYSTEM LAYOUT



All dimensions are approximate.

The above figure shows the layout of the sound system components in the Grand Hall.

### STAGE

The stage is modular and many configurations are possible. A typical 32ft x 16ft stage is shown in the diagram. Contact Open Space for information on other configurations.

### SNAKE



The 32x8 Snake is 150ft long with reel on one end and fantail on the other end. All connections are XLR. The reel is typically located under front center stage center stage.

A separate 30ft XLR 8x4 “subsnake” is also available for moving signals from positions on stage to the reel.

### FOH

Front of House is not permanently positioned in the space. It is typically located about 45 feet back from the stage and 12 ft out from the North wall. The only constraint on the FOH location is the length of the tether (approx. 40 ft) from the console to the Signal Processing & Amp Rack.



The FOH mixing console is a 24-channel Allen & Heath GL3300. This mixer provides stereo main outputs, 8 aux sends (two are typically connected to the MON1 and MON2 stage monitors), and 12x2 matrix (typically connected to the Front Fills). A meter bridge is not usually mounted to the mixer but is available for optional use.

## **SIGNAL PROCESSING & AMP RACK**

A small rack houses the signal processing for the Mains, Fills, and Monitors as well as the amps for Fills and Monitors. Audio inputs to these loudspeaker feeds are connected to the FOH console via a 40 ft tether with the following fan out:

<b>MAIN-LEFT</b>	<b>MAIN-RIGHT</b>	<b>FILL-LEFT</b>	<b>FILL-RIGHT</b>	<b>MON1</b>	<b>MON2</b>
XLR-F	XLR-F	TRS-M	TRS-M	XLR-F	XLR-F

The Fills and Monitors have *Behringer Ultra Curve Pro* EQ/delay units on each channel and are powered by *Mackie M1400i* amplifiers. Monitor and Fill levels are adjusted via front panel gain controls on the Mackie amps. The EQ/delay in the Behringer units are professionally calibrated for the room and are locked out and not adjustable by the user.

A *dbx DriveRack 260 Equalization and Loudspeaker Management System* processes the MAIN-L and MAIN-R feed from the FOH console. It has been professionally configured and locked out, and is not adjustable by the user.

## **LOUDSPEAKER (MAINS)**

The main loudspeakers are *JBL VRX 932LAP* 12 inch 2-way boxes (three per side) coupled with *JBL VRX918SP* 18 inch subwoofers (one per side), hung from the ceiling approximately 6ft in front of the stage. These loudspeakers are self-powered and permanently wired to the Signal Processing & Amp Rack near FOH. The coverage area extends from about 6 ft in front of the stage to about 50ft back, and to within about 10 ft of each side wall. Maximum sound pressure level (SPL) in the main coverage area is approximately 100db. AC Power for the line array loudspeakers is switched via two circuit breakers in the building office area. Contact your friendly Open Space representative for details.

## **LOUDSPEAKER (FILLS)**

The Front Fills (FFL and FFR) are *JBL AC18/26* 8 inch 2-way loudspeakers positioned on the stage and connected to a wall-mounted box via Speakon cables run under the stage. The Fills are primarily intended for audience members seated within a radius of about 15 feet from the front/center of the stage (an area where the main line array provides reduced coverage). The Fills may be removed if no audience seating is anticipated in this area.

## **MONITORS**

Two *JBL MRX512M* monitor wedges are available for use. These monitors are typically fed by the AUX1 and AUX2 outputs of the FOH mixer with EQ and amplification located in the Signal Processing & Amp rack. The outputs of the Monitor Amps are permanently wired to the wall-mounted Speakon box back stage.

**ADDITIONAL INFORMATION**

For additional information about the Open Space Sound System, please contact:

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