

**Transport Group**  
**Marcy in the Galaxy**  
**Sound Design by Michael Rasbury**  
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## **Sound Equipment List**

### **General Overview**

- This is a six channel sound system (counting a small, powered monitor for the Conductor).
- There will be a main left and right house pair, a stage left and right pair for piano monitoring and sfx, and mono subwoofer under the audience seating.
- The orchestra (at this point) will consist of an acoustic grand piano, cello, viola, and clarinet. The orchestra will be located to the right of the audience in the house.
- The stage sound will be reinforced primarily with CROWN PCC-160 microphones. Key dialogue will be reinforced with mini-shotgun microphones hung above the stage, behind the proscenium.
- All microphone channels will have compressors inserted.
- All special sound effects will be played back using the Transport Group's Mac Mini, MOTU Ultralite Audio Interface, and qLab software. Five audio channels will be broadcast from this system.
- The design requires a mixing console with a minimum of 24 channels, 4 busses, and four aux sends.
- All playback equipment and amplifiers should be located in the center of the theatre's balcony, as close to the edge as possible.

### **SFX Playback (NO RENT owned by Transport)**

- 1 Qlab installed on Mac Mini, MOTU Ultralite utilizing seven outputs

### **Microphones**

- 5 Crown PCC-160 Black (across the front of the stage and upstage corners)
- 4 Audix 1290 SG with rigging hardware *or comparable* (Mini shotguns)
- 2 Sennheiser Q6 with MKE2 Capsule *or comparable* (XY Alignment under piano lid) (Piano Left and Right)
- 3 Crown CM-700 *or comparable* (Cello, Viola, and Clarinet)
- 2 Switched Dynamic Microphone (for GOD microphones)
- 4 Boom Stands (Cello, Viola, Clarinet, SM, Sound)

### **Mixing Console:**

- 1 24 CHANNEL minimum, 4 bus, Master Stereo Out, minimum 4 aux send (three pre, one post), minimum 3 band EQ with sweepable MID, Phantom Power, console lights

### **Equalization/Crossover:**

- 2 Rane ME60 *or comparable*

1 Ashly XR1001 Crossover *or comparable*

**Compression:**

4 BSS DPR-404 Quad Compressor *or comparable*  
(NOTE: minimum of 12 channels of compression are required)

**Amplification:**

1 Chevin Q6, four-channel amplifier *or comparable*  
(NOTE: I can use other amp configurations... 2 channel amps, etc. Five channels of amplification minimum)  
1 Single Channel Amp, capable of driving requested subwoofer

**Speakers:**

2 EAW JF200 (Main Left and Right) with mounting hardware *or comparable*  
2 EAW JF60 (SL and SR Piano Monitors/Special SFX) with mounting hardware *or comparable*  
1 EAW SB (Subwoofer) *or comparable*  
1 Yamaha MS-101 or other Active Personal Monitor (At Piano for Vocal Monitoring)

**Cabling:**

**\*Please contact Travis Walker at [travwalk@gmail.com](mailto:travwalk@gmail.com) for specific lengths)**

**General List**

1 16 Channel Snake with at least one Balanced TRS output for Piano Monitor  
This snake will travel from the sound position in center balcony to orchestra at house right  
6 6' TRS cables for connecting the Transport's MOTU Ultralite to the Console  
9 \*100' XLR Microphone Cables (stage mics to snake at orchestra)  
8 15' XLR Microphone Cables (for orchestra microphones)  
16 12' Insert Cables (compression inserts from rack located to right of console)  
16 6' XLR Cables (for console outs to EQ; from EQ out to Amp inputs)  
8 \*100' Speakon to Speakon Speaker Cable (Amps to Speakers)

**UNKNOWN---**

- Need cable from snake end to Power Personal Monitor based on its input
- Based on the console you spec- what cable do we need to get from its Aux Out to a (most likely) balanced input of an EQ Channel or crossover input?

**Final Equipment List (provided by Graham Johnson on March 12, 2008)**

5 Crown PCC-160  
4 Audio Technica AT875R  
2 Sennheiser E912  
3 Crown CM-700  
2 Shure SM58S

4 Boom Mic Stands  
1 Allen and Heath GL2400  
2 Rane ME60  
1 DBX 223 Crossover  
6 DBX 266XL Compressors  
2 QSC PLX 1804 Power Amplifier  
1 Yamaha P7000S Power Amplifier  
2 EAW JF200 With Rigging  
2 EAW JF80 With Rigging  
1 EV Force IE Subwoofer  
1 Yamaha MS101-III Powered Monitor  
1 200' 28 Channel Fan – Fan XLR And ¼ inch connectors Snake  
All Other Required Cable

### **INSTALLATION NOTES (SEE ACCOMPANYING GROUND PLAN)**

On Friday, March 21, 2008, I will bring a hand held meter and flatten the system. If possible, I may do this a day earlier, if lighting will allow.

### **MIX LOCATION**

The mixing console should be placed center as close to the edge of the balcony as possible. The compressors, EQ, and Amps should be to the right of the console. The Transport Group's Mac Mini and MOTU Ultralite should reside on top of these rack items. Please put the compressors in the top of the racks if possible. We'll be adjusting these most often.

### **GOD MIC**

The God Mic should physically run from the console position into the center of the audience seating. Place it on a boom stand and set next to the Stage Manager's desk.

### **FRONT OF HOUSE SPEAKERS**

**All speaker cable will run directly from the balcony mix position to each respective speaker. There are holes in the balcony allowing cable to run through the proscenium.**

The EAWJF200's should be installed where the balcony meets the proscenium arch. There is a guardrail around the balcony that C-clamps and other rigging can be attached to. Each speaker should be positioned both horizontally and vertically so they focus on the center of the line between the fourth and fifth rows of audience seating.

### **STAGE MONITORS/SFX SPEAKERS**

Given the scenic elements of this play, my opinion for placement is stage left and right directly behind the proscenium on the lighting booms rigged at ear level off the stage (roughly six feet high). The stage right JF80 should point directly across stage the upstage left corner. Reverse this for the stage left speaker.

## **SUB**

The sub should be positioned under the audience risers as close to the center as the dimensions of the sub will allow.

## **CONDUCTOR MONITOR**

The Yamaha MS-101 will sit on top of the piano to the left of its music stand and face directly at the pianist/conductor. It will receive its program through the snake connected to AUX 3 of the console set to prefader.

## **STAGE MICROPHONES**

Across the front of the stage there will be three Crown PCC-160's. One should be placed on the center line and the other two evenly spaced to the right and left of the center position. There should be about eight feet of space between each mic.

I would like to start similar spacing for the three shotguns. However, given the business of the scenic elements of the ground plan, I'm not sure yet where we can rig them. The goal here is to use the PCC's for downstage business and the shotguns for business on the upstage platform. Take a look at the ground plan to see what I mean.

I have rented from you two extra Crown PCC-160's as back up/alternate microphone positions.

## **ORCHESTRA MICROPHONES**

The CROWN CM-700's should be placed on three booms and left in the area between the piano and the stairs leading to the stage, house right. We will arrange them when the instrumentalists arrive.

The Sennheiser E912's should be taped under the lid of the piano arranged for standard stereo miking. The lid will remain shut during performance.

## **AUDIO SNAKE**

The fan to fan audio snake should run from the back of the console in the balcony to house right and end in the house right corner next to the stairs leading on stage. This will allow access through the stage door to all stage microphones as well as the microphones in the house right orchestra area.

