

Lost Objects

Technical Rider

Sample Only – Not for Production Use

Contact:

Kenny Savelson
Executive Director, Bang on a Can
Kenny@bangonacan.org; +1 718 852 7755 ph;

Overview

Lost Objects is an operatic work featuring a baroque orchestra, a chorus, a rock ensemble, 3 vocal soloists, 1 DJ and 6 dancers placed or moving around a 3-tired stage structure.

Venue specifications

Lost objects is designed and intended for a large, proscenium venue with a fully equipped fly loft and grid, and an orchestra pit. Minimum stage dimensions are a proscenium opening of 45 feet (13.7 meters) in width by 27 feet (8.25m) high; stage width should be no less than 75 feet (23m) and stage depth from plaster line should be 35 feet (10.7m). The depth from the orchestra pit railing to the stage apron should be no less than 6 feet (1.8m) at the center. The stage floor should be black: painted black wood or black marley are both acceptable.

Description of Scenic Design

The major scenic element for lost objects is a 68 ft. (20.7m) wide by 8 ft. (2.44m) deep by 31 foot (9.45m) tall two-level "bridge" constructed out of steel truss uprights and horizontals, with stair units at either end stage left and right for access to both levels and flooring for both levels. Please see the attached pdf drawings for a visual idea. The first level sits at 10 ft. 6 in. (3.2m) above the stage and the orchestra for the piece sits on it, with chairs and music stands. In the center is the conductor's position. The upper level is an additional 9 ft. 6 in. (2.9m). The band plays in the center of this level, and chorus members perform various numbers on this level, as well. The stair units at either end provide support and anchor the ends of the bridge, and the center is supported on 4 1-foot box truss uprights, located 8 feet (3.2m) on either side of center on the upstage and downstage sides of the bridge. **The point load on each of these uprights is considerable – in excess of 3000 pounds.** The center uprights are 31 feet (9.45m) tall, and can be picked up by chain motors or cables from the theater grid to help relieve weight and provide stability. This structure also requires guy wires at either end on the upstage and downstage sides to be

anchored to the venue walls or floor. When constructed as specified, the bridge is very stable and hardly shakes.

We strongly recommend the use of 6 1-ton chain motors to facilitate assembly of the bridge.

In addition, the stage floor downstage and upstage of the bridge is almost completely covered with small piles of "lost objects," including clothes, books, toys, phones, umbrellas, etc.

In the orchestra pit we require a scissor lift with a platform dimension of 6 feet (1.8m) deep by 8 feet (2.44m) wide. DJ Spooky is raised and lowered on this lift 4 times during the performance. The travel of the lift will depend on the depth of the orchestra pit, but the usual height traveled is about 8 feet (2.44m). The lift should be quiet, which may mean that the motor or hydraulics should be located separate from the lift itself under the stage. Lift will travel with some lighting instruments and audio monitors.

The flying elements in Lost Objects include:

- 1) a fullstage scrim (sharkstooth) hung just upstage of the proscenium, which is projected upon for most of the performance. It is in its 'in' position at the top of the show.
- 2) Upstage of the bridge is a fullstage cyc, preferably plastic, with a scrim hung just downstage of it.
- 3) Directly downstage of the bridge are hung a full stage flat black drape, a horizontal flat black drape 11 feet (3.35m) tall by 60 feet (18.25m) wide, and a vertical flat black drape 17 feet (5.2m) wide. These 3 drapes all fly during the show.
- 4) A flying propeller, resembling an old-fashioned airplane prop, which is 8 feet (2.44m) wide. The propeller has a small 110v motor and turns slowly as it is flown in. It needs to be cable to house power. This piece also needs to be hung on four points to 2 flying bars to maintain level and not wobble during use.

Masking should be provided by the venue. The production requires 6 to 7 sets of legs and borders. The width of the legs and the height of the borders need to be adequate to mask for the far side sightlines of the auditorium. The venue should also provide the downstage scrim, the cyc and scrim, and the 3 flying black drapes.

The production will provide the bridge with all hardware, the 'lost objects,' and the propeller.

Video Monitoring of the conductor

Because the conductor is located on the first level of the bridge with the orchestra, while the singers, band and chorus perform either on the second layer

or at wide variety of positions on the floor, the production requires fairly extensive video monitoring of the conductor. We require a small video camera positioned to capture the conductor, and we will place video monitors for the performers in various positions on the stage and in the house. The exact number and type of video monitors must be determined with the company production manager. Ideally, the video monitors would include two large monitors placed on a balcony rail; 4 6-inch conductor monitors which can be attached to the music stands of the band members; a 15-inch monitor hung off the back of the first layer of the bridge; 3 20-inch flat screen monitors placed among the 'objects' on the stage.

The video monitoring system must be provided by the venue.

Projection System and requirements

Lost objects uses a single front of house projector, which must be located center as near to the height of the midpoint of the proscenium opening as possible. Presumably, this position will frequently be in the balcony or on the balcony rail. We require a very specific, high definition projector, which is specified below, with a back up. This specific projector is necessary because we are projecting text with a custom-designed font on a black scrim filling the proscenium opening with significant lighting behind it. The brightness, high-definition output and the special aspect ratio of the specified projector are needed to make the text to be legible and maintain its specific look.

- 2 DPI Lightning 35HD DLP projectors (**venue to provide**)
- 2 DVI cables [length as needed per venue -- projection operation booth to projector. frequently included in projector rental package] (**venue to provide**)
- 1 DVI switcher (**venue to provide**)

- 1 Dataton Watchout playback system, (**provided by the company**).

Lighting requirements

Lighting for lost objects is comprised of a number of overstage lighting bars with side booms, a modest number of front of house instruments, a row of 3 inch fresnels on the floor just upstage of the downstage black scrim, striplights for the upstage cyc. In addition, there are a significant number of lighting instruments attached to the bridge, including:

- 1) rows of strip lights at the upstage and downstage edges of each level of the bridge to light each level;
- 2) upstage and downstage booms at each end of the bridge
- 3) music stand lights for the musicians, especially for the orchestra on the first level of the bridge.

The lift for DJ Spooky also has a single 8 foot strip light and 2 or 3 practical lights.

The following list of lighting instruments needs to be provided by the venue:

Instruments hanging on pipes or on booms:

35 36° Source-4 lekos @575w
80 36° Source-4 lekos @575w
43 36° Source-4 lekos @575w
TOTAL: 158 lekos

12 6" fresnels @ 2000w
6 Par 64 MFL @ 1000w

5 9' 3 Circ T-3 strips (or similar to cover 50'-0" of cyc)
9 4' 3 circ cyc lights (or similar to cover 50'-0" of cyc)

Instruments mounted to set or to floor:

20 3" fresnels (inkies) @ 200w mounted to set and to deck
36 6'-0" 3 circuit ministrip mounted to set
1 8' R-40 striplight (or similar for DJ platform)

Accessories:

16 Scrollers for fresnels and Source-4s with 11 colours
11 Variable speed single gobo rotators
15 Drop-in iris for Source-4 units

Smoke/Haze needs:

2 Silent haze machines (high output) such as MDG Atmosphere
2 High volume smoke machines
1 Low volume smoke machine (for DJ platform)

Music Stand Lights:

Additional 10 music stand lights (company owns 25), preferably little light style gooseneck lamps

Wardrobe requirements

The performers wear only simple costume elements, for the most part black coats. There are no quick changes during the show. We will need access to laundry facilities and wardrobe personnel for washing between performances.

Crew requirements

Lost objects will travel with a sound designer/operator and a monitor mixer, a lighting supervisor, a projection designer/operator, stage managers (to be determined) a production manager and a technical director. The company's operators must be permitted to handle and operate the equipment used for the show in their specific areas.

The venue's production manager should discuss with the company production manager regarding the number of run crew needed from the house, given that work rules and crewing conditions will be different from venue to venue. At a minimum the show requires:

2 flymen – we operate two separate fly moves simultaneously

4-8 prop crew – the band needs to be struck from the top bridge level and set on the deck level during the same change.

2-4 sound – there is extensive use of body mics in the show, as well as moving of musical instruments and amps during the performance.

1 – qualified video technician

Load-in (Get-in) requirements

The estimated load-in time for lost objects is four days, depending on the venue and crew. The number of load-in crew should be determined in discussion with the company production manager. We recommend the following load-in schedule:

Day 1 – hang overstage lights and sound; hang masking and flying goods (scrims, cyc, drapes); position chain motors in the grid; unload freight and deliveries.

Day 2 – assemble set; deliver and install pit lift; deliver and install projector; hang set electrics; complete installation of electrics and sound.

Day 3 – Focus lighting instruments; place objects on set floor; complete sound cabling on bridge; install conductor video monitor system; seat orchestra.

Day 4 – Sound checks for band, chorus, singers, DJ Spooky and orchestra;

Day 5 – Technical rehearsal

Day 6 – Technical notes; Technical dress rehearsal; Performance # 1

Audio Requirements and Conductor video monitor systems

The sound reinforcement system must be of a standard that can easily reproduce demanding audio program at reasonable volumes with clarity. In addition, it is critical that the audio system be in excellent condition, with no audible hums, buzzes or interference.

We will require a stereo audio system capable of delivering undistorted sound to all seats of the venue, including adequate balcony or under balcony coverage when necessary. These requirements will vary according to venue size and capacity. An overview of a typical system can be found later in this document.

The house mix position should be located in the main seating area of the house, and ABSOLUTELY MUST NOT be located in any enclosed booth.

We will require a monitor system capable of providing the performers with adequate levels of clear, full-range sound. In addition, we will require an experienced English-speaking operator familiar with mixing for in-ear monitors who will work with our audio engineer during the setup of the monitor mixes and operate the console during the performance. An overview of our monitor system requirements can be found later in this document.

If there is any question of the quality of the system or its ability to represent the work it is essential that a technical representative from the venue with a working knowledge of the system get in touch with Bang on a Can well in advance of the show to discuss options.

The production also requires a distributed video monitoring system in order to provide sightlines for all of the performers to see the conductor at all times. Please pay careful attention to the unique requirements of this system, including mounting hardware requirements and cable lengths.

HOUSE REINFORCEMENT

- Stereo flown line array – minimum 4 cabinets per side. JBL VerTec, Meyer M3D, or VDosc are all acceptable.

The system MUST be flown in such a way as to be above the projection. If this is not an option, a ground-stacked system will be considered.

- 2 Subwoofers per side, wired in mono, fed from an aux send from the house console.
- In venues with a balcony (or balconies), supplemental reinforcement must be provided to adequately cover the entire balcony area. It is preferable to maintain a stereo configuration whenever possible.
- Under balcony coverage must be provided in situations where the balcony is particularly deep or beyond the sight lines of the main PA array.

Front of House mix position requirements:

- Minimum 48 Channel mixing console with fully parametric EQ's and a minimum of 4 individually switchable pre/post auxiliary sends. Preferred consoles include: Yamaha PM1D /PM5D, Midas H3000.
- An additional 24 channel mixing console will be utilized for chorus mic sub mixing. Midas Venice, Yamaha O1V or similar. If a PM1D or PM5D console with adequate inputs is available, this additional 24 channel console may be omitted.
- High-quality 1/3 octave equalizers for every zone of sound, including main left and right, mono subs, and any center clusters, balcony fills or delay zones.
- 1 High quality reverb unit – Lexicon PCM91 or similar.
- 4 channels of high quality compression, Summit DCL200 preferred.

MONITORS

An experienced, English speaking monitor engineer who is comfortable working with acoustic instruments and in-ear mixes.

Minimum 48 channel monitor console with fully parametric EQ's and a minimum of 14 fully discrete mix outputs.

Preferred consoles include: Yamaha PM1D/PM5D, Midas H3000, Cadac.

- 1 High quality reverb unit – Lexicon PCM91 or similar.

- 16 mixes, distributed as follows:
 - 1 - Conductor – 1 wedge (Meyer UM1 or similar)
 - 2 - Orchestra Stage Right 1 – 1 wedge (Meyer UPM or similar)
 - 3 - Orchestra Stage Right 2 – 1 wedge (Meyer UPM or similar)
 - 4 - Orchestra Stage Left 1 – 1 wedge (Meyer UPM or similar)
 - 5 - Orchestra Stage Left 2 – 1 wedge (Meyer UPM or similar)
 - 6 - Proscenium sidefill stage Right – 1 wedge (UPA-1P or similar)
 - 7 - Proscenium sidefill stage Left – 1 wedge (UPA-1P or similar)
 - 8 – Top level fill, flown – 4 cabinets (Meyer UPM or similar)
 - 9 - DJ left – 1 wedge (Meyer UM1 or similar)
 - 10 - DJ right – 1 wedge (Meyer UM1 or similar)
 - 11 - Drummer – STEREO wireless in-ear (Generic Ear Molds)
 - 12 - Keyboardist – STEREO wireless in-ear (Generic Ear Molds)
 - 13 - Guitarist – STEREO wireless in-ear (Generic Ear Molds)
 - 14 - Bassist – STEREO wireless in-ear (Generic Ear Molds)

This totals 4 stereo wireless in-ear systems, and 10 wedge mixes distributed across 13 wedges, NOT including a cue wedge.

MICS, CABLES, MISC.

Please refer to the attached input list for microphone preferences. Substitutions are acceptable, with advance approval.

Lost Objects utilizes 25 wireless mic systems. Due to the nature of the staging, it is essential that the chorus members be reinforced individually. Please contact the production in advance if it seems that an adequate number of wireless systems are not available.

The production will require a full compliment of mic stands of various sizes. In addition, please provide 12 claw-mounting devices for clamping microphones onto the structure of the set.

Conductor Video Monitor system

Lost Objects requires a conductor video monitoring system. This system includes a small camera focused on the conductor whose image is distributed among 10 video displays placed around the stage.

Sample Equipment list:

- 1 x spy camera with clamps and mounting hardware.
- 4 x 12" crt video monitors with flying hardware (deck level upstage and 3rd level)
- 2 x 15" crt video monitors with tripod mounts (Orchestra Pit)
- 4 x 5" LCD monitors for music stand mounting
- 2 x VDA for distribution
- Adequate cabling to reach all locations.

Likely Monitor locations:

- 2 monitors suspended overhead in the staging structure on the stage level.
- 2 monitors flown on a lineset, visible to performers on the top level.
- 2 large monitors on tall tripod stands placed in the pit, for downstage viewing.
- 4 very small display units to be mounted on music stands for the band members.

BANG ON A CAN: LOST OBJECTS BACKLINE/INSTRUMENT LIST

Percussion

- 1 Large Tam-tam + stand
- 2 Vibraphones
- 2 Concert Bass Drums + stands (medium sized – ex. 26”)
- 2 Drumsets as follows (2x each of the following):
 - Kick Bass Drum + pedal
 - Snare Drum + stand high enough to play while standing
 - 2 rack toms, mounted on kick
 - 1 floor tom
- 2 Drum Thrones, highest extension possible
- 1 Brake Drum

Note: NO CYMBALS OR CYMBAL STANDS ARE NECESSARY.

Harpsichord & Keyboard

- 1 Harpsichord Tuned to 415
 - 2 Kurzweil PC88 Keyboards + Stands
- Similar 88-note weighted keyboards are possible. Requirement is that it can be tuned down one half-step (semitone) to 415.*

Amps

- 1 Fender Guitar Amp [Fender “The Twin” or Fender Twin Reverb are fine]

DJ Equipment

- Pioneer DJ M600 mixer (or a DJ M500)
- 2 Pioneer CDJ 1000 CD players/"digital turntables"

NOTE: Additional backline/instruments may be required if orchestra cannot bring them. This depends on the location of the engagement. The additional items may include 2 timpanis and 2 double-basses.

Lost Objects Audio Input List

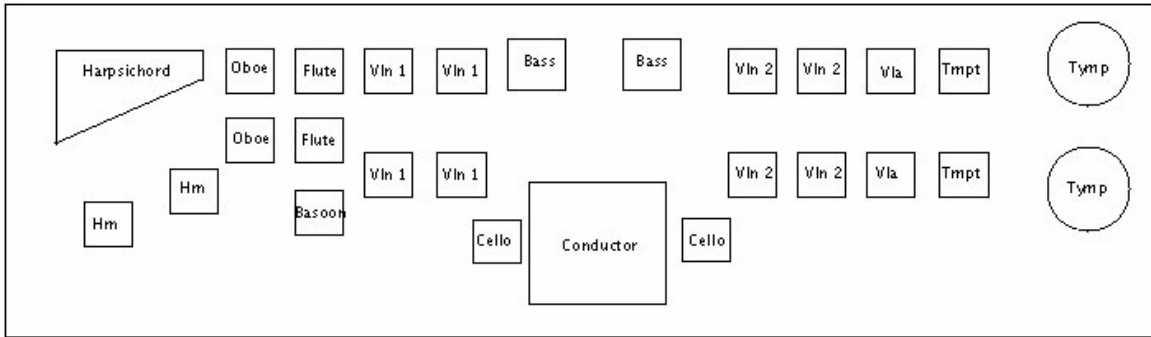
1	Violin 1 - 1	AT 4050
2	Violin 1 - 2	AT 4050
3	Violin 2 - 1	AT 4050
4	Violin 2 - 2	AT 4050
5	Viola 1	AT 4040
6	Viola 2	AT 4040
7	Cello 1	AT 4040
8	Cello 2	AT 4040
9	Bass 1	AT 4047
10	Bass 2	AT 4047
11	Flute	AKG 460
12	Oboe	AKG 460
13	Bassoon	AKG 460
14	Horn 1	AKG 414
15	Horn 2	AKG 414
16	Trumpet	AKG 414
17	Harpsichord	DPA 4061
18	Tympani 1	KM 184
19	Tympani 2	KM 184
20	Kick UP	SM91
21	Snare UP	SM 98
22	Tom 1 UP	Senn. 604
23	Tom 2 UP	Senn. 604
24	Concert Bass Drum	KM 184
25	Keys UP L	DI/Line
26	Keys UP R	DI/Line
27	Vibes UP	AKG 414
28	Kick DOWN	SM91
29	Snare DOWN	SM 98
30	Tom 1	Senn. 604
31	Tom 2	Senn. 604
32	Concert Bass Drum	KM184
33	Keys DOWN L	DI/Line
34	Keys DOWN R	DI/Line
35	Vibes DOWN	AKG 414
36	Bass	RF Inst.
37	Guitar	RF Inst.
38	Spooky L	DI
39	Spooky R	DI
40	Tenor 1	DPA 4088 headset RF
41	Tenor 2	DPA 4088 headset RF
42	Soprano	DPA 4088 headset RF
43	Choir Submix L	
44	Choir Submix R	
45		
46		
47		
48		
49		

Lost Objects

Choir submix audio inputs

1	Bass 1	RF DPA 4061 or MKE2
2	Bass 2	RF DPA 4061 or MKE2
3	Bass 3	RF DPA 4061 or MKE2
4	Bass 4	RF DPA 4061 or MKE2
5	Bass 5	RF DPA 4061 or MKE2
6	Tenor 1	RF DPA 4061 or MKE2
7	Tenor 2	RF DPA 4061 or MKE2
8	Tenor 3	RF DPA 4061 or MKE2
9	Tenor 4	RF DPA 4061 or MKE2
10	Tenor 5	RF DPA 4061 or MKE2
11	Alto 1	RF DPA 4061 or MKE2
12	Alto 2	RF DPA 4061 or MKE2
13	Alto 3	RF DPA 4061 or MKE2
14	Alto 4	RF DPA 4061 or MKE2
15	Alto 5	RF DPA 4061 or MKE2
16	Soprano 1	RF DPA 4061 or MKE2
17	Soprano 2	RF DPA 4061 or MKE2
18	Soprano 3	RF DPA 4061 or MKE2
19	Soprano 4	RF DPA 4061 or MKE2
20	Soprano 5	RF DPA 4061 or MKE2

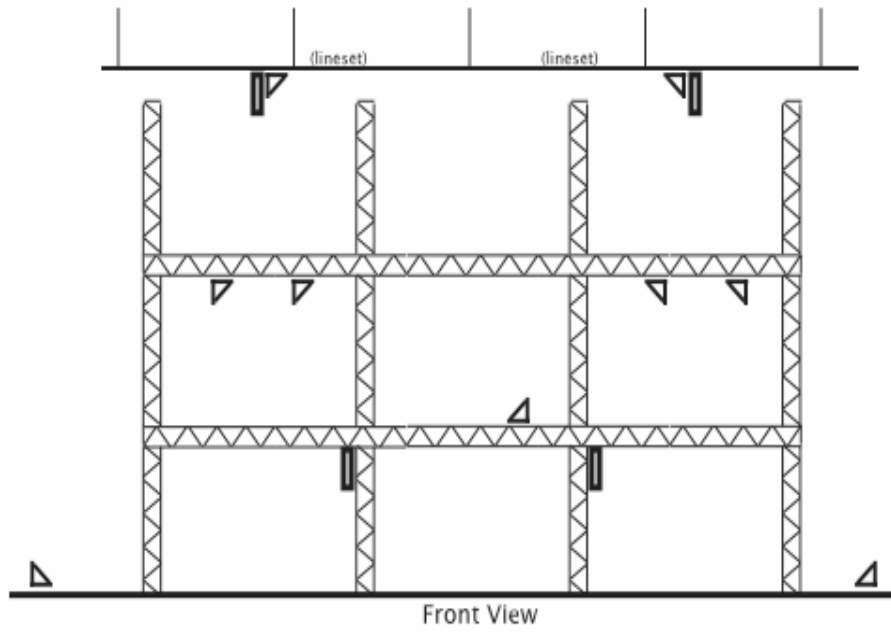
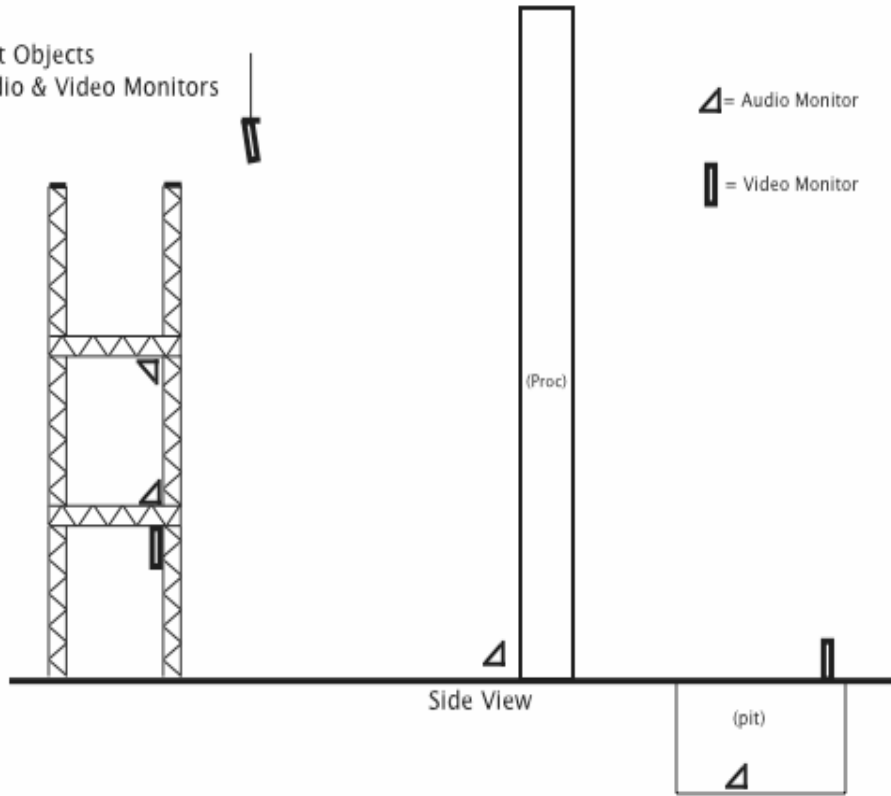
Lost Objects
Orchestra Seating Plan



Lost Objects
Audio & Video Monitors

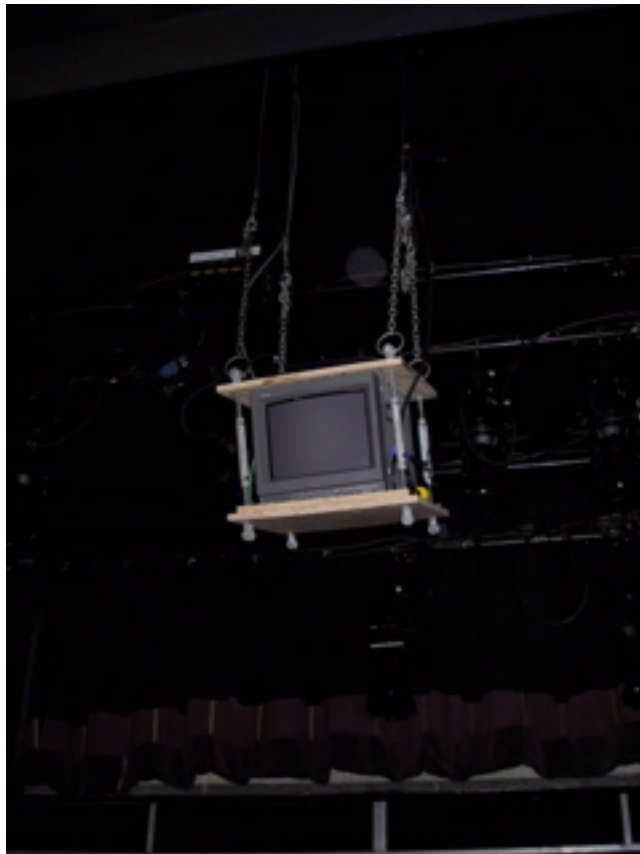
△ = Audio Monitor

▮ = Video Monitor





Stage level video monitor



Top level, lineset flown video monitor



Middle level orchestra audio monitors (x4)



Stand mounted video displays



Front stage view