

General Equipment Notes

All equipment must be as specified or similar and by major manufacturers. Any substitution must be cleared through the technical director. Please break up any quotes by section. All cabling, snakes, and connectors should be of high quality, such as Monster Cable or Mogami.

Section 1 – Seating, Electrical, Racks, & Snakes

Seating

- 3 right-hand of Irwin #02 Springfield Ends
- 3 left-hand model of Irwin #02 Springfield Ends to match original order #5085. Chair type is 11.6.02 Springfield - They were installed sometime around 1994 during a major renovation. Received the price of \$2,952 for the 6 ends from Will Carraher: 201-661-5233, 201-280-9818 cell
(Secondary Contact -Bill Carraher [bcar@longoinc.com])

Brass railing parts as needed
Electrical plates & boxes as needed
Wood as needed

Racks

- 3 – Raxxess CPROTR-35 w/Perforated Front door. (2 basement – 1 stage)
- 6 – Raxxess ESD-4 Drawers
- 22 – Single Space Blanks

Electrical

- 1 – 150 Amp Circuit box
- 8 – 15 amp outlets with necessary plates and boxes
- Conduit as needed
- 2 – Furman ASD-120 (Power Distro)
- 3- Furman PL-Plus-DMC

Snakes

- 1 – 24x4 XLR Snake @ 25 feet (Center of Pit to Patch)
- 1 – 24x4 XLR Snake @ 50 feet (Back Wall to Patch)
- 1 – 12x4 XLR Snake @ 25 feet (SL to Patch)
- 1 – 12x4 XLR Snake @ 75 feet (SR to Patch)
- 1 – 12x4 XLR Snake @ 75 feet – no box (SM Panel to Patch)
- 1 – 48x8 XLR Snake @ 100 feet – no box (Patch to break)

Section 2— Stage Box & Patch

- 3 – Switch Craft Studio PPatch 9625
<http://www.switchcraft.com/products/studiopatchtt.html>
- 60 – ¼ Stereo Patch Cables
- 12 – Male XLR to DB25 (for studio patch)
- 18 – Female XLR to DB25 (for studio patch)
- 4 – ¼ to DB25 (for studio patch)

- 1 – Alesiss MultiMix 12R
<http://www.alesis.com/multimix12r>
- 1 – Tascam CD-A700 CD/Tape Pitchable CD Player

Section 3-2 - Speakers

- 12 – JBL VRX928LA
- 4 – Rigging Hardware for VRX928LA
- 2 – JBL VRX918S (Subwoofer)
- 2 – Dollies for VRX918S
- 5 – Crown I-Tech 6000
- 1 – Drive Rack (Model 4800)
- 6 – Network Patch Cables
- 1 – 24 port 100/10 network switch
- 4000' – Speaker Cable on Reel (Wire 4/C 11GA .558OD BLK)
- 8 – Wall Plates – Nutrik Speakon NL-4 (ProCo Sound Pre-Solderd)
- 8 – Wall Boxes
- 4 – 10' Speaker Cable w/ Nutrik Speakon NL-4
- 8 – 3' Speaker Cable w/ Nutrik Speakon NL-4
- 2 – 15' Speaker Cable w/ Nutrik Speakon NL-4
- 8 – 1 ¼ Cheeseborough (Swivel)

Section 4 - Wireless

- 1 – Shure UA845 (Antenna Distribution System)
- 2 - Shure UA870
- 500' - Antenna Wire and connectors (UHF Remote Antenna Extension Cable, RG213/U)
- 2 – Shure UR4D – Dual Channel Receivers
- 2 – Shure UR1
- 2 – Shure UR2 (SM58 - Handheld)
- 1 – 24 port 100/10 network switch
- 2 – 5' Network Patch Cable

Section 5 - Gallery

- 15 – 70v 2 way white ceiling speakers (with mini cut-off switch)
- 4 – Small 70v Speakers (Lobby coverage)
- 1 – 70v, 2 zone amplifier (minimum 4 input)
- 1000' Speaker Wire (*14 GA CL3 Rated Install Wire*)
- 1000' Microphone Wire (*2/C 23GA Braid .238OD BLK*)
- 1 – Tascam CD01U Pro CD Player (Rack mount)
- 1- Furman PL-Plus-DMC

Section 6 – Sound Board

- 1 - Yamaha LS9-32
- 2 - Lights for LS9
- 1 - Road case for LS9 with wheels and fold-down legs
- 1 – High Quality (With Heavy Duty Case) Touch screen Laptop

Section 7 – Wired Microphones

- 4 – Crown PCC-160
- 8 – Audio Technica U835A Coral Microphones
- 1 – Sennhieser 3 mike drum package
- 2 – Sennhieser e835
- 2 – Shure KSM137
- 2 – AKG Kick D112
- 2 – Electro Voice RE20
- 2 – Shure SM27 Black
- 2 – Shure SM81
- 1- Shure Beta52
- 2 – Sennhieser e609
- 2 – Sennheiser MD421
- 4 – Radial Passive Direct Box
- 2 – Stereo Radial Passive Direct Box
- 4 – Shure SM57
- 2 – Shure SM58
- 4 – Tripod Short Telescope Microphone Stand
- 6 – Tripod Tall Telescope Microphone Stand
- 8 – Round Base Straight Microphone Stand
- 4 – Latin Percussion Mic Claw
- 3 – 50’ – 8 Channel Snakes
- 10 – 3’ Microphone Cable
- 10 – 10’ Microphone Cable
- 25 – 25’ Microphone Cable
- 10 – 50’ Microphone Cable
- 10 – 24’ ¼ Cable
- 2 – Microphone Road Cases

Section 8 – Stage Monitors

- 1 – Crown I-Tech 6000
- 2 – JBL MRX515 (15” Two Way)
- 2 – Mounting brackets for speakers (pipe, right angle & wall plate)
- 500’ - Speaker Cable on Reel (Wire 4/C 11GA .558OD BLK)
- 2 – Wall Plates – Nutrik Speakon NL-4 (ProCo Sound Pre-Soldered)
- 2 – Wall Boxes
- 8 – JBL PRX512M 2-Way Self-powered Monitor

Section 9 – Additional Wireless Microphones

- 1 – Shure UA845 (Antenna Distribution System)
- 3 – Shure UR4D – Dual Channel Receivers
- 6 – Shure UR1
- 2 – Shure UR2 (SM58 - Handheld)
- 6 – 5' Network Patch Cables

Section 10 – Projector & Surround Sound

- 1 – Screen 16'x27'6" with Frame, Skirt & Legs (Front & Rear Projection)
- 1 – DMX Projector Dowser
- 1 – Projector (12000 Lumens or better, 4000:1 contrast or better, 16:9 & 4:3 aspect ratio, 1400x1050 resolution or better, Keystone correction, Must have VGA, HDMI, Component Video & Composite Video)
- 1 – Lens for Projector (115' to 130' long throw)
- 300' - VGA Cable
- 300' - HDMI Cable
- 300' - Component Video
- 300' – Composite Video
- 1 – Stage box for video connections (with boosters/amplifiers as needed)
- 1 – Rack Mount PC
- 1 – Rack Mount Keyboard/Video/Mouse
- 2 – Crown I-Tech 6000
- 1 – JBL 4675C
- 1 – Caster Kit or Dolly for Stage Speaker
- 2 – JBL 8340A
- 2000' - Speaker Cable on Reel (Wire 4/C 11GA .558OD BLK)
- 3 - Wall Plates – Nutrik Speakon NL-4 (ProCo Sound Pre-Soldered)
- 2 – 10' Speaker Cable w/ Nutrik Speakon NL-4
- 1 - 50' Speaker Cable w/ Nutrik Speakon NL-4
- 1 – Travel Track and related hardware for main rag
- 1 – Arbor, Cable, Pipe and related hardware for new lineset

Section 11 – More Wireless

- 3 – Shure UA845 (Antenna Distribution System)
- 5 – Shure UR4D – Dual Channel Receivers
- 10 – Shure UR1
- 10 – 5' Network Patch Cables

General Setup Notes

All work is to be completed under the direction of the Technical Director and/or technical staff of the theater.

Section 1 – Seating, Electrical, Racks, & Snakes

Seating

- 1) Take eight (8) seats from the center of Row M of the orchestra. Move four (4) to either side of the orchestra on the raised platforms to create row N. (Place them against the back wall starting at the edge of the platform.
- 2) Move and extend the brass railing around the new sound area. The railing should indent so that row M patrons cannot walk into the sound area. Also adjust brass railings at each of the platforms so patrons cannot step easily onto the platform from the seating sections in front. Continue the railings on the stairs from the lobby up and around the corners so as to allow better mobility for unstable patrons.
- 3) Move electrical plates and connections on the floor forward and create a new snake box at new sound area. Repair the rug at the old location
- 4) Put in snake channel under house right aisle. Creating a hatch behind row M of orchestra right and center.
- 5) Get plaques and relabel all seats that have been moved, including house right rows C and D.

Racks

- 1) Securely place 2 racks across from tech office.
 - 2) Remove old SM rack and replace with new (floor standing).
 - 3) Move all old equipment into new SM rack and reconnect.
 - 4) Move old SM rack to gallery (removing cabinets as needed).
- Notes: See spreadsheet for rack layouts.

Electrical

- 1) Upgrade H panel to 150 amp service.
- 2) Run 15 amp to break.
- 3) Run 15 amp to SL.
- 4) Run 15 amp to back wall.
- 5) Run 15 amp to SR (SM rack).
- 6) Run 100 amp to sound racks (to Furman).
- 7) Run 3 (three) 15 amp to right basement sound rack.

Snakes

- 1) Run 24x4 snake from center of pit back wall to patch.
- 2) Run 24x4 snake from back wall of stage to patch.

- 3) Run 12x4 snake from SL to patch.
- 4) Run 12x4 snake from SR to patch.
- 5) Run 12x4 snake from SM panel to patch.
- 6) Run 48x8 snake from break to patch.

Section 2 – Stage Box & Patch

- 1) Install patch as indicated on attached spreadsheets.
- 2) Install Alessis MultiMix and Tascam as indicated on attached spreadsheet.

Section 3 - Speakers

- 1) Three (3) VX928LA should be mounted using rigging hardware, cheesbouroughs, and pipes, one rung under lowest set of lights on ladders on each side. They should be focused and set to cover the orchestra and loge (see attached drawing).
- 2) Three (3) VX928LA should be mounted using rigging hardware, cheesbouroughs, and pipes from the top railing of the perches (inside side). They should be focused and set to cover the mezzanine and tier (see attached drawing).
- 3) Run speaker cable within the walls from amp rack in basement to plates and connectors in each speaker location.
- 4) Run speaker cable to stage left and right with plates and connectors at each location.
- 5) Place amps in racks as indicated by attached spreadsheet.
- 6) Check and adjust focus and setting as needed for optimal sound coverage.

Section 4 - Wireless

- 1) Mount antenna on either side of proscenium about 10' from stage floor. Run antenna cable to Distro System in sound racks in basement.
- 2) Mount units in racks as indicated on attached spreadsheet.

Section 5 - Gallery

- 1) Install ten (10) ceiling speakers in locations over standard dinner theater setup.
- 2) Install two (2) speakers evenly in ceiling over well.
- 3) Install three (3) speakers evenly in alcove by the window.
- 4) Install three (3) speakers in the inner lobby for adequate coverage.
- 5) Install one (1) speaker in the outer lobby.
- 6) Take old rack from stage and mount in gallery kitchen (location to be decided on at installation time by technical staff).
- 7) Mount amplifier, CD player, and Furman in rack and wire
- 8) Wire all speakers to amplifier, running and securing the wires through the ceilings and walls.

Section 6 – Sound Board

No work needed.

Section 7 – Wired Microphones

No work needed.

Section 8 – Stage Monitors

- 1) Mount two (2) JBL MRX speakers on the wall either side of the proscenium about 10 feet up and tilted slightly to hit far back corner of the stage.
- 2) Mount plates and run wires back to racks in basement.

Section 9 – Additional Wireless Microphones

- 1) Mount units in racks as indicated on attached spreadsheet.

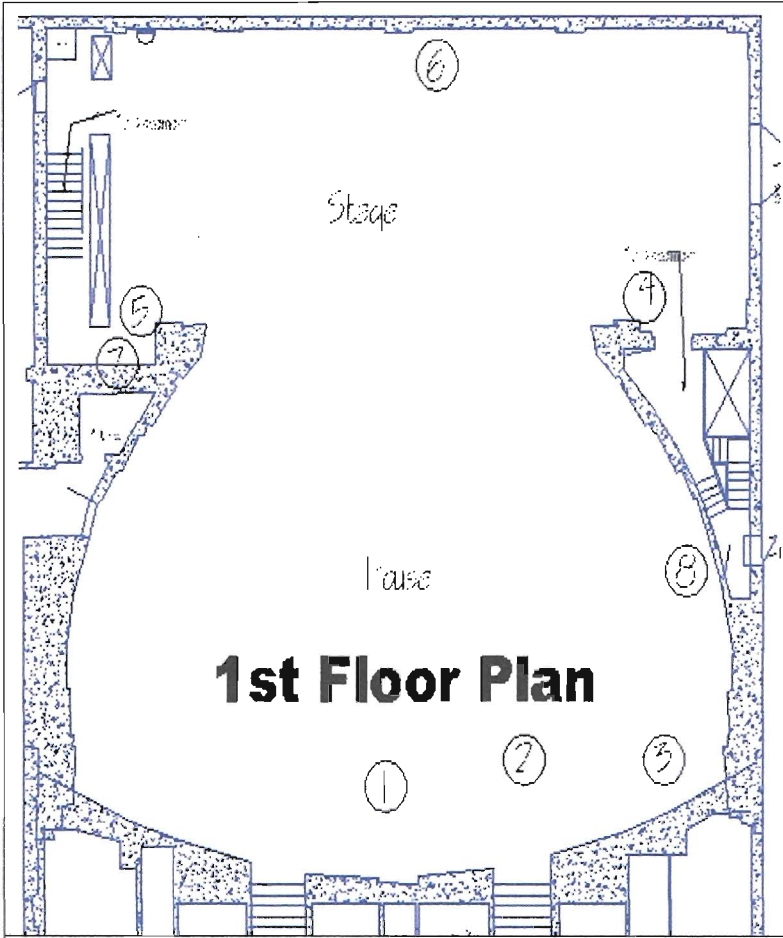
Section 10 – Projector & Surround Sound

- 1) Mount units in racks as indicated on attached spreadsheet.
- 2) Mount projector in spot booth.
- 3) Run cables as needed from booth through ceiling to stage.
- 4) Run cables from amps to wall boxes on stage as needed.
- 5) Install traveler track on main rag.
- 6) Build screen and hang on #3 line set.
- 7) Build new line set in #4 position

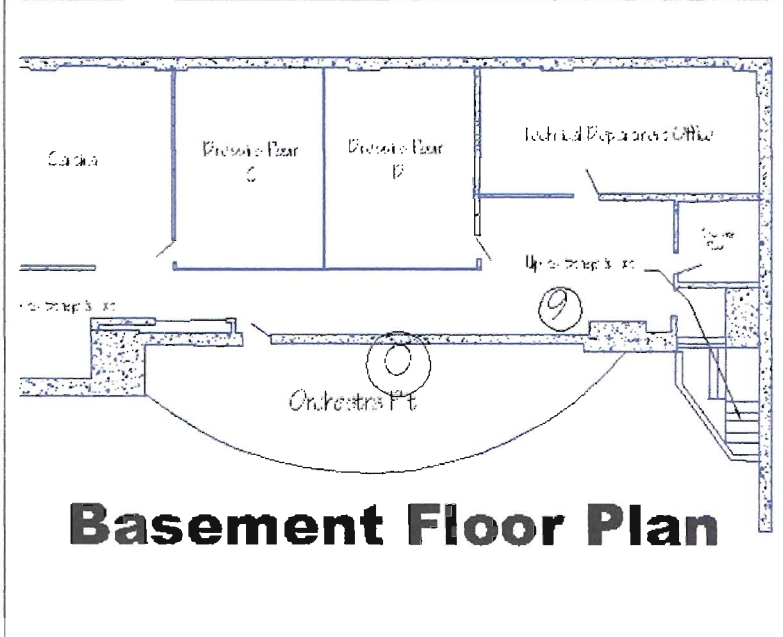
Section 9 – Additional Wireless Microphones

- 1) Mount units in racks as indicated on attached spreadsheet.

Locations & Pictures

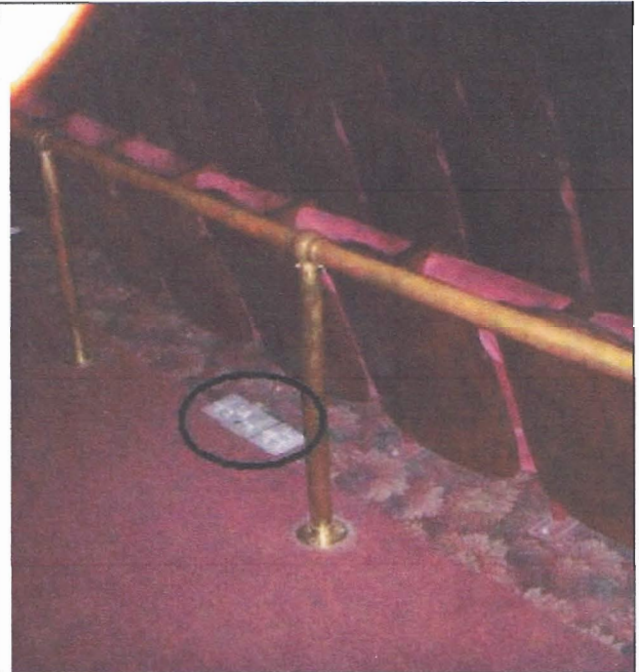


- 1) Center of Orchestra
- Move seats & floor box
- 2) House Right Aisle
- Create two doors and trough under aisle.
- 3) Platform House Right
- Move outlet into box
- Place 4 seats from Row M
- Do same to House Left
- 4) Stage Left Snake Location
- 5) Stage Right Snake Location
- 6) Center Rear Snake Location
- 7) New SM Rack Location
- 8) Trough under Ramp
- 9) Basement Rack Location
- 10) Pit Snake Location

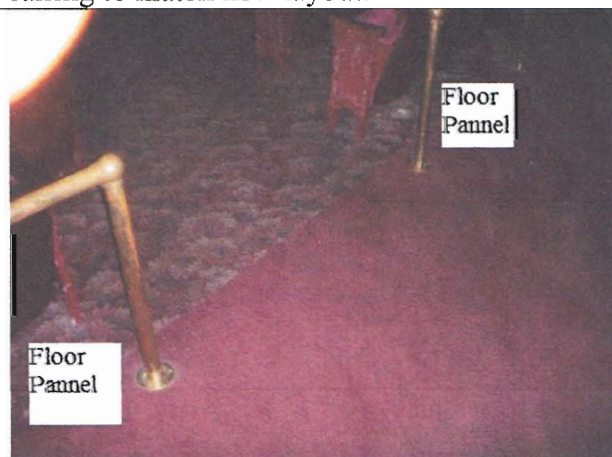




1) Row M – Remove center 8 seats & change railing to match new layout.



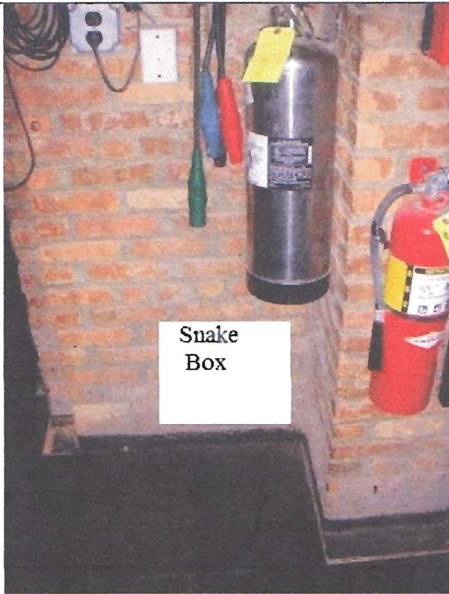
1) Move all floor connections forward and create floor opening and box for new snake.



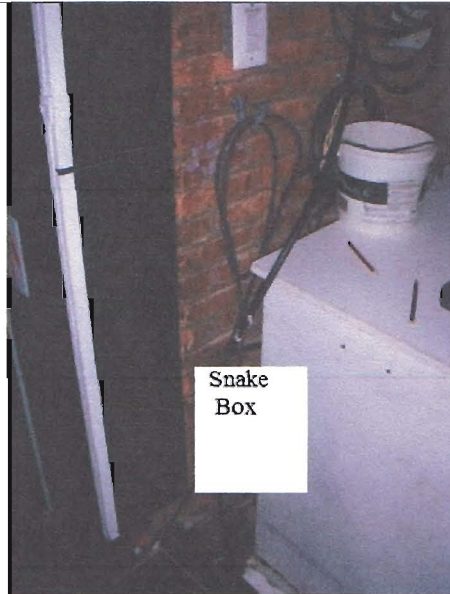
2) Create floor panels and trough to go under right aisle for snake and other cables.



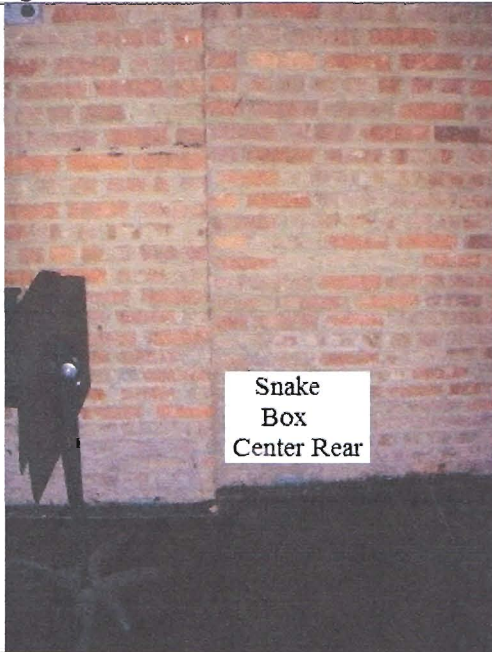
3) Place 4 of the seats removed from Row M along back of platform to create Row O. Move outlet to inside box.



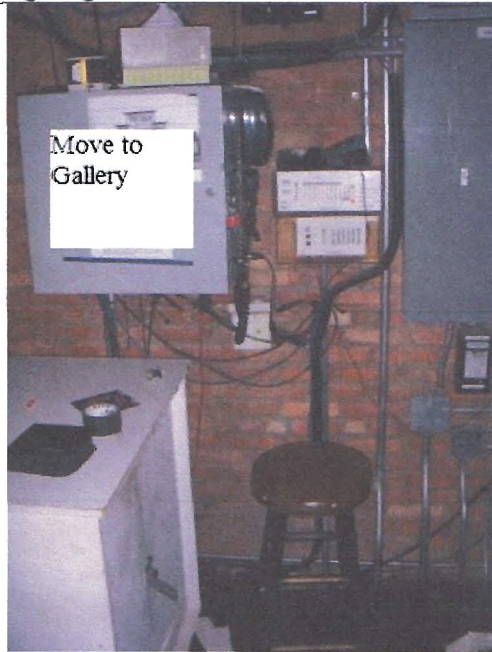
4) Stage left snake box location



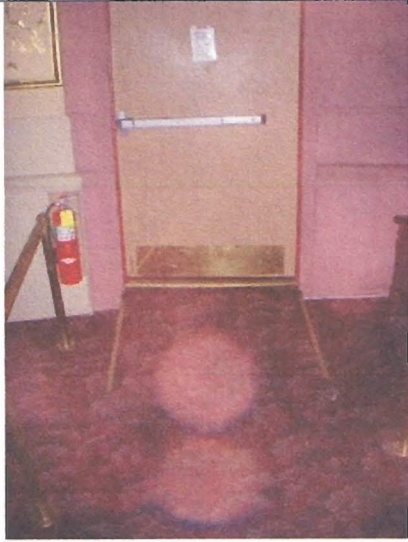
5) Stage right snake box location



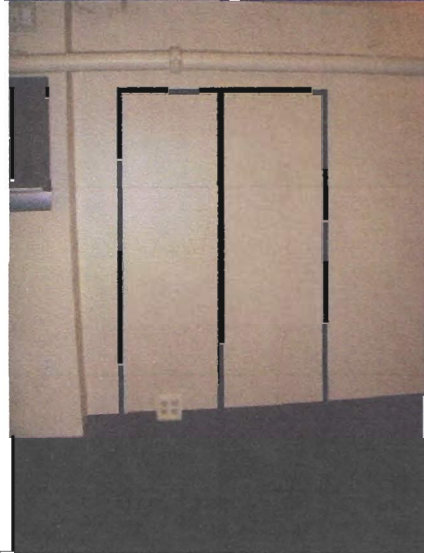
6) Center rear snake box location



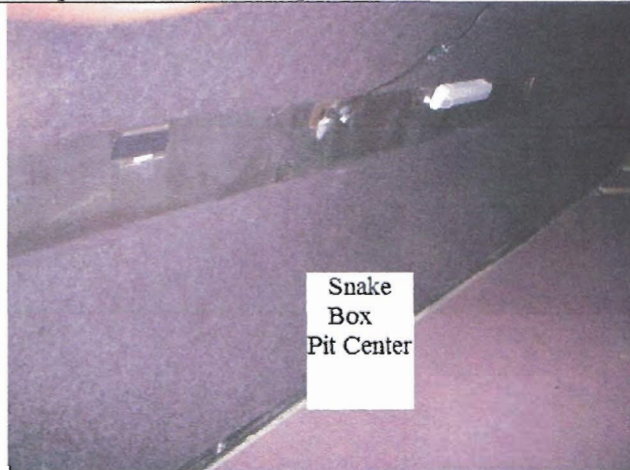
7) SM rack location – Take old rack and use in gallery for sound gear. Place new rack on floor in same location.



8) House right exit – create flip-up section of ramp so cables can be passed underneath.



9) Basement rack locations – Place 2 racks side by side.



10) Pit snake location – center rear wall of pit



Sample of chair end piece.