

80

REQUEST FOR FUNDING

May  
Date

Course Number / Activity : 202 Electronic Performance

Estimated Cost: \$600

Explanation of Request: Stereo 1/2 octave equalization  
for tuning spaces. \*

Nature of Request: Special \_\_\_\_\_ Quarterly  Annual \_\_\_\_\_  
F W S

Requested By: Paulmi Oliveira  
Name Date

For Student Requests  
Faculty Sponsor: \_\_\_\_\_  
Name Date

Approved: \_\_\_\_\_  
Chair Date

NOTES:

\* purchased with year-end equipment money 6/78

Box B  
#17

(Dwight Cannon's) CHECKLIST FOR PERFORMANCE ELECTRONICS

Sources: Pauline Oliveros, Allen Strange, Lew Prince, Robert Erickson,  
David Gamper, Vladimir Vooss, Charlie Buel, some experience.

"Is it plugged in...?  
Is it turned on....?  
Is it plugged in all the way?" Pauline's

"Now what's wrong...?" (anyone's)

"If it can happen, it will...!"  
Erickson

A. TOOLS AND SUPPLIES

1. Set of screwdrivers--ordinary and phillips head, small to large.
2. Soldering iron--gun or pencil--and solder (Rosin core only).
3. Long-nose pliers.
4. Regular pliers.
5. Awl.
6. Scout knife.
7. Wire stripper and cutters.
8. Flashlight.
9. Fresh batteries (needed for power equipment).
10. Scissors.
11. Electrical tape.
12. Masking tape.
13. VOM, (or continuity tester--check conductance only).
14. Nut drivers.
- 15.
- 16.

B. CABLES, CONNECTORS, AND ADAPTORS

1. Set of alligator clips.
2. Complete set of various adaptors.
3. Mic and Mic-stand holders, as necessary.
4. Cannon-to-phone, phono, Cannon, balanced and unbalanced lines--  
(proper way to unbalance a balanced line is to connect a jumper  
between pins 1 & 2 of the Cannon and connect shielded lead to  
pins 1 & 2, and the hot to pin #3).
5. Zip cord #16 or #18, and #14 (for transistor amps-to-speaker=less loose  
in power in long runs).
6. Shielded cable and assistance plugs for special connectors.
- 7.
- 8.
- 9.

(UCSD CONCERT KIT - Switchcraft preferred)

- 6--dbl female RCA adapters
- 8--female RCA -  $\frac{1}{4}$  phone
- 3--female phone - RCA
- 2--minifon female - RCA
- 2--RCA female - minifon
- 1--dbl minifon "Y"
- 6--RCA "Y" connectors
- 1--RCA female - clips
- 2--Cannon dbl male
- 2--Cannon dbl female

ADAPTORS

- 2--62' RCA-RCA
- 2--25' microphone
- 1--4' RCA - RCA
- 8--6' RCA - RCA
- 1--10' RCA - RCA
- 3--6' RCA - RCA male - female
- 2--20' RCA - RCA
- 1--3' RCA - RCA stereo
- 2--6' minifon - RCA
- 3--10' minifon - RCA
- 1--12' minifon - RCA

CABLES

- |   |        |
|---|--------|
| 3--1' Cannon (male) - RCA                   | CABLES |
| 1--5' Cannon (male) - RCA                   |        |
| 1--6' $\frac{1}{4}$ fon - $\frac{1}{4}$ fon |        |
| 2--10' Cannon (female) - RCA                |        |
| 1--10' $\frac{1}{4}$ fon - minifon          |        |

C. POWER SUPPLY -- AC

1. Number of circuits needed?
2. Load? (Allow 1 amp per 100 watts--refers to power consumption of each device)
3. Number and distribution of AC receptacles?
4. Check circuit fuses? Supply on hand?
5. Number and length of extension cords--w/outlet boxes & Rubber cube Taps?
6. Number of 3-to-2 prong AC adaptors?
7. Spare fuses for equipment as necessary?
8. Fresh batteries for battery powered equipment?
9. Is available power 117v or 220v?
10. Distribution of AC connections in receptacles? Overload circuit?
11. *IF HALL IS ALIEN - CONTACT ELECTRICIAN WHO KNOWS.*
12. *LOCATION OF FUSE BOX.*

D. BASIC SOUND SYSTEM COMPONENTS - Transducers, Pre-Amp, Power Amp, Speaker

1. Transducer (microphone, tapehead, phono-cartridge, etc.)
  - a. Output level of transducer--high or low? Is Pre-Amp necessary?
  - b. Output impedance of mic? Is transformer necessary?
  - c. Proper quality?
  - d. Contact mics - associated gear?
  - e. Multi-channel Mixer, Stacked Mixers, etc.

2. Pre-Amp

- a. Does pre-amp have input selector--mic, tape-head, phono, monitor, or auxillary?
- b. Does pre-amp have gain control?
- c. Impedence and equilization relationships to power amp? (500, or 600 ohms output?)
- d. Does pre-amp have equalization filters (octave & 3rd octave), each channel?
- e.
- f. (Tape deck which has playback function only is low-level impedance and utilizes tape head input of pre-amp. Regular tape recorder utilizes monitor, or auxillary input of pre-amp--high-level).

3. Power Amp

- a. Input gain control?
- b. Is output power sufficient to drive speakers to a level adequate for needs (size of hall, etc.)?
- c. Transistor? or Tube? (If transistor? use #14 Zip cord for speaker connections.)
- d. Multiple taps? 4? 8? or 16? ohms--check speaker for proper impedance.
- e. Is amp OFF? --Avoid output short, speakers not connected, inserting input signal, change modes, etc. while amp is ON.

*TURN OFF BEFORE DISCONNECTING SPEAKERS OR REPLUGGING...*

4. Speakers

- a. Impedance?
- b. Efficiency for Needs?
- c. Dispersion?
- d. Multiple, i.e., sweet 16, polyplanar arrays, multiple horns, etc.
- e. *properly coupled TO THE SPACE FOR MAXIMUM EFFICIENCY.*
- f.

PERFORMANCE ELECTRONICS CHECKLIST - 3

SET-UP PROCEDURES:

Lew Prince says:

1. Connect speakers to power amp--check impedance match if taps exist
2. Turn ON amps--turn gain control up (no input to amp at this time)--listen for speaker "hiss"--will tell if amp's working and if speakers are properly connected.
3. Turn amp(s) OFF and connect pre-amps.
4. Turn amp(s) ON and repeat #2 above.
5. Turn gain control down and connect each device to be used, checking each--one by one--by turning gain control up each time. This locates source of trouble, if any.
6. CHECK POINTS WITH EARPHONES FOR SILENCE.

Allen Strange says:

1. Set up everything to be used.
2. Turn everything on, beginning with amps, setting gain controls at a middle point.
3. If anything seems wrong, check power supply, fuses, and then begin checking from the speakers backwards through the system--checking connections, shorts, gain controls, etc.
4. Once working, set various controls and drink a beer.

David Gamper adds:

1. Check available time for set-up and for a complete check of set-up
2. Check neatness of set-up, location possibilities.

"SOMETHING'S WRONG...LISTEN...WHAT THE HELL IS HAPPENING...?"

1. Phase?
2. Amp(s) over-driving?
3. Proper impedances--mics, speakers, etc.?
4. Line hum?
5. Clicks? Flashing lights, circuits outlets, etc.?
6. Intermittant cord(s)--shorts, plugged in all the way, etc.?
7. Speaker misplacement, or channel imbalance?
8. Are performers drinking too much beer?
9. Tape delay problems?
  - a. check tension--use faster (but not too fast) machine on take-up.
  - b. check for feed back--constant gain monitor?
  - c. are recorders matched (brand)? Best to do so.
  - d. Is process (delay) obvious? Something's wrong--should be exact response from one source to the other.
  - e. check area where tape flows from one recorder to the other.
10. Backup equipment

ADDITIONAL PERFORMANCE CONSIDERATIONS

1. Performance space--equipment (tables, chairs, lighting, etc.)
2. Acoustics of area--listen to area, consider audience damping, seating, etc.
3. Accessibility to performance area? Storage?
4. Length of program--program order (determined by set-up complexities?)
5. Printed programs--live or printed notes? Publicity?
6. Additional equipment--time clocks, lighting controls, props, etc.
7. Nearest store for supplies--fuses, batteries, beer.

"DON'T BE A NERVOUS POT TWIDDLER."

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