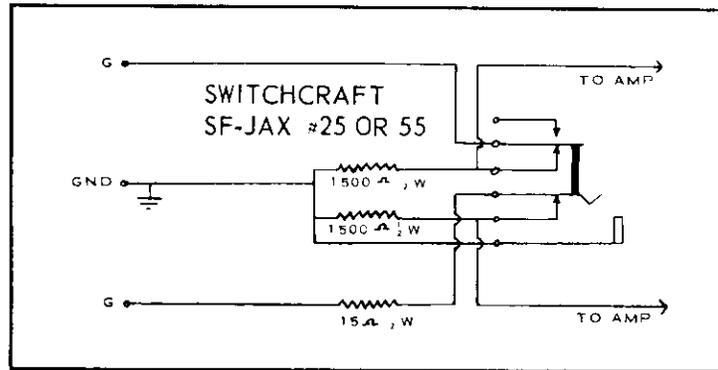


## MONAURAL EARPHONE CONNECTIONS

Earphones can be added to the console for practice purposes so as not to disturb others. Earphones at best cannot replace the tonal quality achieved from the instruments' own speakers but do make the organ "more available".

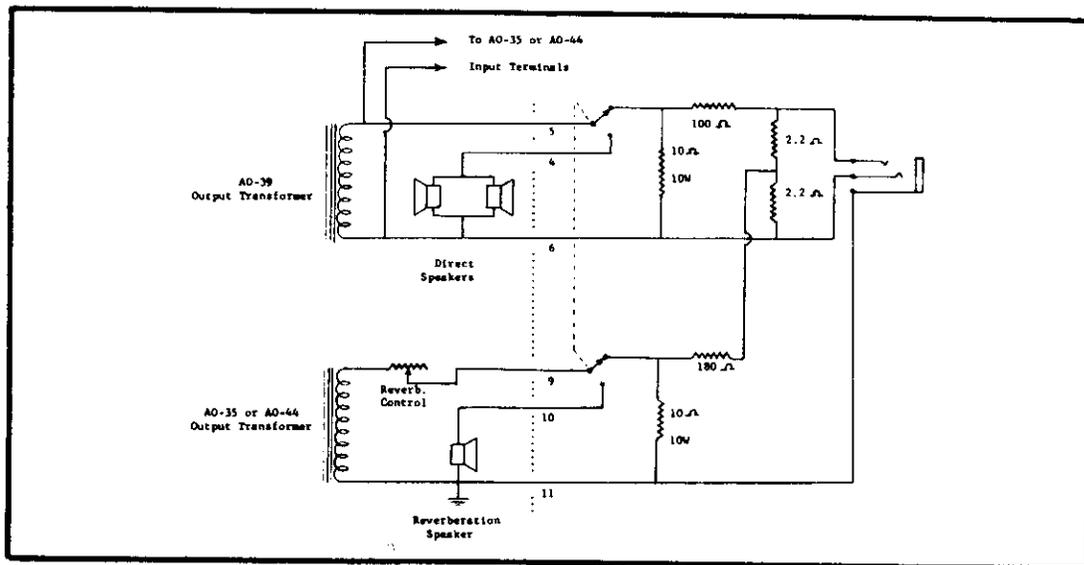
One method of attaching earphones is shown in the sketch below, using a reluctance type headset of good quality. Inserting the phone plugs silences the speakers in the console. Wiring is between the preamplifier terminals marked "G" and the main amplifier input.



## STEREO EARPHONE CONNECTIONS

A second method of attaching earphones is given below. This will provide a stereo effect that is well worth the cost and effort expended. Koss or Jensen 4 ohm stereo phones are recommended.

1. Turn over AO-39 chassis and disconnect two black wires from the BN-BK speaker terminal inside of the amplifier. Leave output transformer lead connected. Connect the two wires removed, to the center lug of the three lug terminal strip nearest the front of the chassis and solder connections.



2. Replace amplifier and place a solder lug under the mounting screw nearest the output transformer.
3. Remove the brown wire from the BN-BK speaker terminal on the AO-39 and solder it to the lug just installed.
4. Remove the green wire from the GN speaker terminal on the AO-39 amplifier and splice on an additional length of wire long enough to reach the earphone jack and switch which will be mounted on the front of the console.
5. Solder a wire to the GN speaker terminal on the AO-39 long enough to reach the earphone jack.
6. Solder a wire to the BN-BK speaker terminal on the AO-39 long enough to reach the earphone jack.
7. Identify the green and black wires on the center speaker that connect to the AO-35 or AO-44 amplifier. Remove these wires and connect the green wire to the GN speaker terminal and the black wire to the BN-BK speaker terminal on the AO-39 amplifier.
8. Identify the speaker terminals on the reverberation amplifier AO-35 or AO-44. If a black wire is soldered to the left speaker terminal on the amplifier, reverse the speaker leads at the amplifier so that the gray wire is on the left lug and the black wire is on the right lug of the amplifier speaker terminals.
9. Remove the blue wire that is connected to the speaker directly above the reverberation amplifier. Splice on an additional length of wire long enough to reach the earphone jack.
10. Solder a wire to the empty lug on the speaker long enough to reach the earphone jack.
11. Solder a wire to the right speaker terminal long enough to reach the earphone jack. (This terminal is grounded inside the AO-35 or AO-44 chassis.)
12. Mount all components to the right of the dotted line shown on the diagram in a suitable box and connect as shown. Numbers shown under wires identify these leads based on the preceding steps.
13. Mount box containing switch and earphone jack at a convenient point at the front of the console.

### PHONO INPUT

A microphone or record player pickup may be used through the organ if desired. The preamplifier is equipped with a standard phonograph input jack. The input impedance is approximately 1 megohm and the circuit requires a maximum input signal of about 1/2 volt. A volume control will have to be installed between the microphone or record player input and the organ inasmuch as the swell control of the organ does not affect this input.