

FROM THE YELLOW CASTLE

by GERALD SHAPIRO
in collaboration with
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Score:

Close your eyes.
Don't initiate any movement; don't hinder any movement.
Don't imagine any sound; don't ignore any sound.
When you are finished, help someone else to begin.
Leave when you like.

Instructions for Performance:

"From the Yellow Castle" may be performed by itself as an evenings entertainment or it may be presented as the last event in a concert. In either case, copies of the score must be printed and circulated among the audience prior to the performance.

There are three smooth, white cylinders, each approximately five feet long by eight inches in diameter. These tubes are equipped to transmit information by radio about their attitude (angles of rotation and inclination). This information is used to control the auditory environment in the performance area.

Six to eight performers manipulate each tube according to the score printed above. A technician controls the amplitude of the various sounds in the room. To begin the piece, the three groups of performers take positions around the performance area. They must have a large flat space as accessible to the audience as possible. Each group gathers around its cylinder, holding it vertically about six inches off the ground. As the technician allows the sound to be heard in the room, the performers close their eyes and begin the piece.

When the piece is fully under way the performers may step away from the cylinders, one at a time, open their eyes, and invite members of the audience to participate in the piece. When an audience member agrees to participate, the performer asks him to close his eyes and slowly and gently leads him by the hand to one of the cylinders. During this time the performer may repeat a few phrases from the score.

After he has replaced himself, each performer has a special responsibility to see that the piece continues to move smoothly. He may continue to bring new audience members up, especially if the audience members forget to replace themselves as they leave the cylinders. He may attach himself to any cylinder which does not seem to be moving well and even repeat pertinent phrases from the score in a soft voice if necessary. Finally, as members

of the audience begin to leave, a few performers should stand by the exits and say goodnight, thanking the audience for attending.

The piece continues until all members of the audience who want to participate have had the opportunity to do so.

Technical Information:

Two oscillators (fig. 2) with frequencies of approximately 100 hz. and 5 k hz. respectively, two sinusoidal 360° potentiometers (fig. 3) and an F.M. transmitter are mounted inside each of the three cylinders. The potentiometers are mounted so that their shafts rotate at a 90° angle to one another. Sufficiently heavy weights are attached to one side of the shafts to keep that side always facing down so that when the cylinder is moved the bodies of the potentiometers rotate around their shafts. These potentiometers are used to variably attenuate the outputs of the two oscillators according to the attitude of the cylinder. The two signals are then further attenuated, mixed and fed into the transmitter.

The three transmitters broadcast on three unused frequencies to the receivers so that each receiver picks up information from only one cylinder. This information is divided by the filter (fig. 4) into the two original frequencies, rectified and used to control the voltage controlled oscillators (V.C.O.s) and voltage controlled amplifiers (V.C.A.s) as shown in fig. 1.

The six attenuators, R_7-R_{12} are controlled by the technician. The six sound sources may be mixed into any combination of two or more loudspeakers placed around the perimeter of the performance area. At the beginning of the piece only sound coming directly from the V.C.A.s should be heard. Later sound from the ring modulators may be introduced gradually and eventually may replace the original sound. Any change of this sort should be made very gradually. When the technician is not making such a change he should move away from the equipment so that it is left unattended in full view of the audience. If it is necessary to end the piece before all the performers and audience have left, this can be done by slowly attenuating all of the sound in the room to zero.

FIG. 1

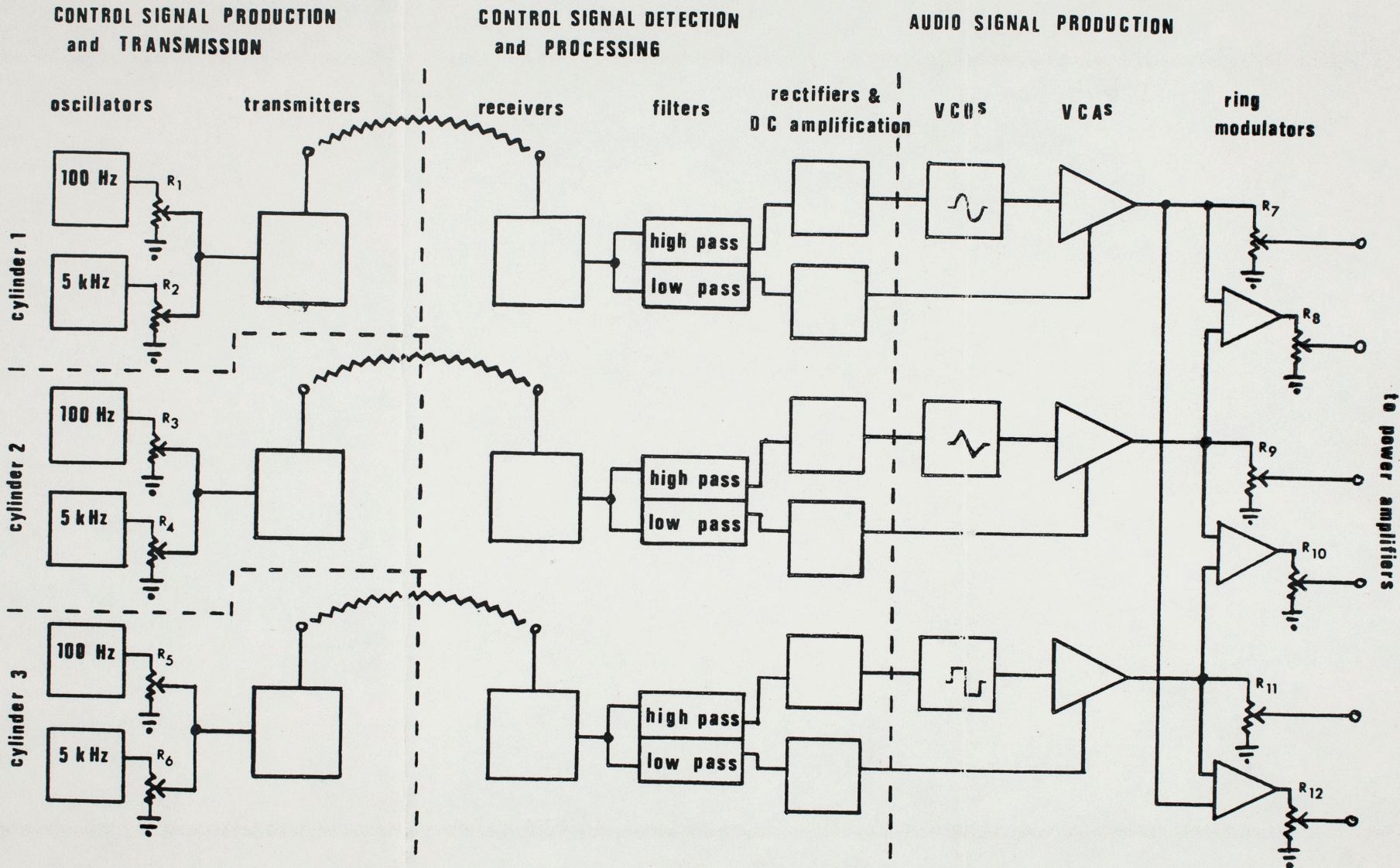


FIG. 2

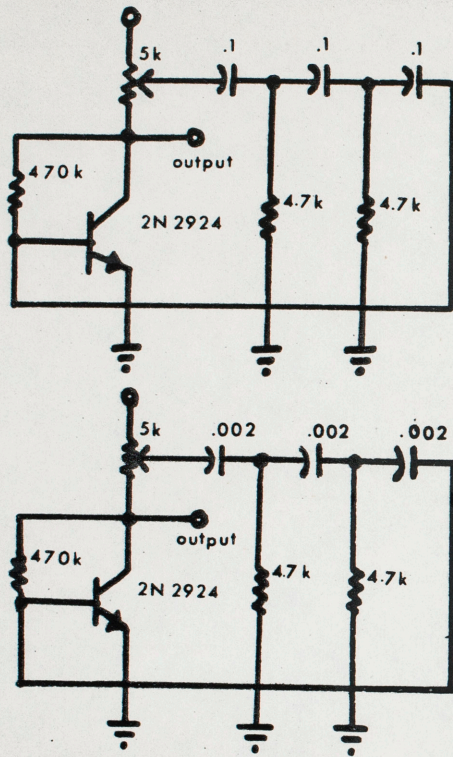


FIG. 4

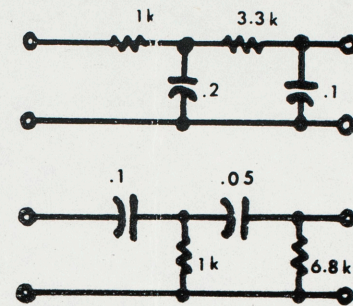
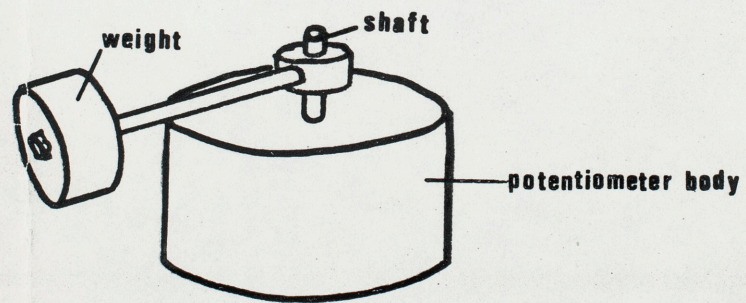


FIG. 3



Equipment:

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| 1. | Oscillators | see fig. 2 |
| 2. | Transmitters | Kinematix "Imp II" |
| 3. | Receivers | Any F.M. receiver w/line level output |
| 4. | Filters | see fig. 4 |
| 5. | Rectifiers | Moog Model 912 Envelope Follower |
| 6. | V.C.O.s | Moog Model 901 Voltage Controlled Oscillator |
| 7. | V.C.A.s | Moog Model 902 Voltage Controlled Amplifier |
| 8. | Ring Modulators | Moog Model 6402 Bode Ring Modulators |

Items 1 and 2 are mounted inside the cylinders described above. The cylinders, as well as item 4, are available from the composer. All of the Moog equipment may be replaced with equivalent modules manufactured by Buchla Associates.