

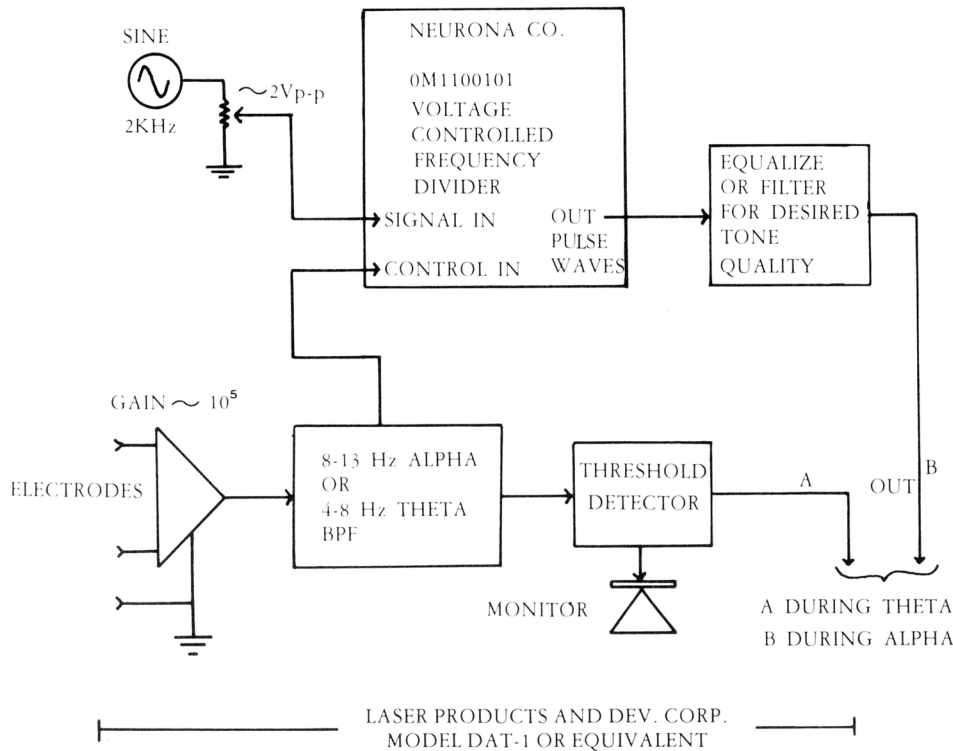
PORTABLE GOLD AND PHILOSOPHERS' STONES (Music With Trills)

for MIMI

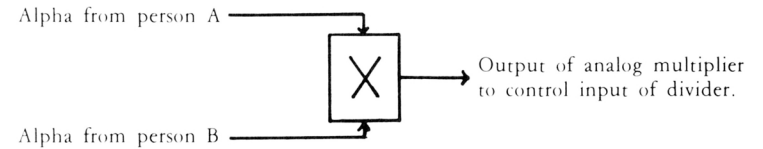
David Rosenboom

The piece may be played by one to four individuals, using EEG Theta and Alpha feedback, or one or two performers wired for "dual-contingent" feedback. The beginning, length, and ending of the performance are all left up to the performers. A sequence of Theta-Alpha-Theta, however, is to be maintained. When performers are making Theta waves, there will be clicking sounds corresponding to the frequency of the Theta waves. When performers are making Alpha waves, there will be music according to the score. All sounds are fed into a regenerative, stereo, tape delay system as shown in the equipment diagram.

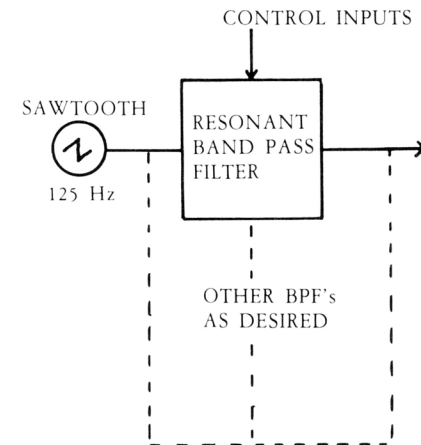
DIVIDING EQUIPMENT:



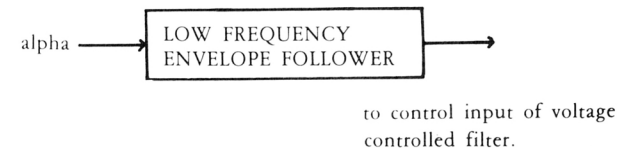
This system may be duplicated for up to four performers, but all should use the same sine wave source. For "dual-contingent" feedback, (one or two pairs of performers), hook up as follows. Only one or two frequency dividers will be used in this case.



MULTIPLYING EQUIPMENT:



Three control modes are possible for these filters. One, they may be performed by hand. Two, they may be controlled by envelope generators. Three, (most desirable), they may be controlled by Alpha envelopes, thus:



THE MUSIC:

Start with a drone, chosen from intervals 1:2:3:4, from the multiplying system. Slowly begin to make Theta waves with clicking sounds. When finished with Theta, switch to Alpha and bring in divider sounds. Proceed by making music with trills. There are two types of trills: 1. Fast trills from the frequency divider system. 2. Slow trills from the frequency multiplication, (filters), system, preferably following Alpha envelopes. The sound should move among the harmonic series tones in correspondence with Alpha burst lengths, whatever control mode is used. The trills will, thus, be extremely slow and get slower as Alpha bursts lengthen and Alpha production gets smoother.

The intervals used are derived from a harmonic, (multiplication), and a subharmonic, (division), series, used simultaneously. The chords shown contain the intervallic relationships to be emphasized. Chords may be built up with the delay system. Notes in parenthesis may be deleted or added at will.

SUBHARMONIC

1/16

HARMONIC

Detailed description: This block contains two musical staves. The top staff is labeled 'SUBHARMONIC' and shows a series of notes on a treble clef staff, with a 1/16 time signature. The bottom staff is labeled 'HARMONIC' and shows a series of notes on a bass clef staff. Both staves have various accidentals and note heads.

CHORDS

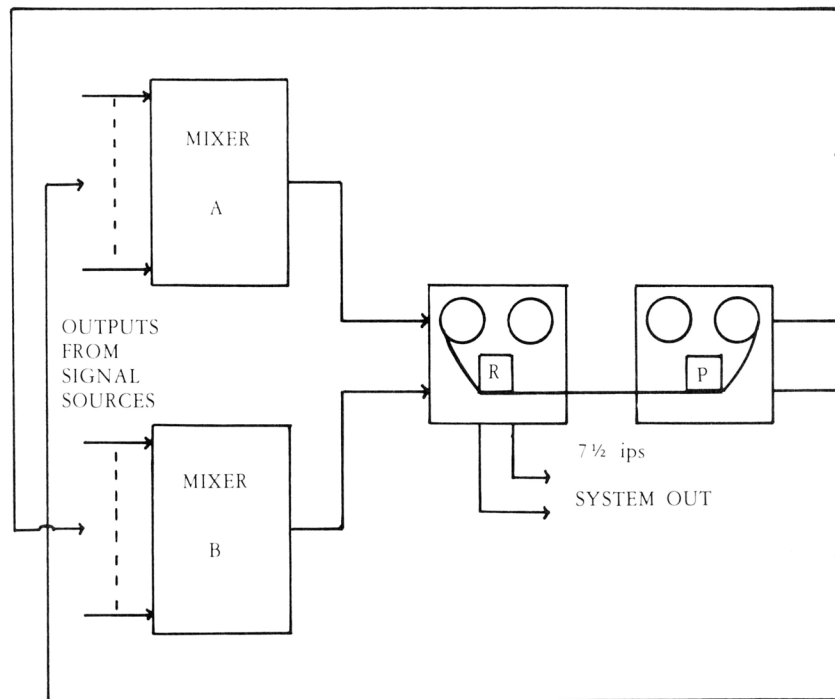
→ ALSO

Detailed description: This block contains two musical staves showing chord progressions. The top staff is on a treble clef and the bottom staff is on a bass clef. Chords are indicated by groups of notes with accidentals. Some notes are enclosed in parentheses, as mentioned in the text. An arrow labeled '→ ALSO' points from the top staff to the bottom staff.

It is most important to start and end with Theta. It helps clear the mind for what is to come in the beginning and helps to consolidate the memory of what has happened in the end.

When finished with Alpha and maximum desired harmonic complexity is reached, move into Theta clicking and let die naturally with delay.

TAPE DELAY SYSTEM:



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 1972