

for anna lockwood

BOTH

requires the following equipment:

- 1 OMNI-DIRECTIONAL OR BI-DIRECTIONAL MICROPHONE WITH PRE-AMPLIFICATION
- 2 CONTACT MICROPHONES WITH INDIVIDUAL PRE-AMPLIFICATION
- 1 BALANCED (RING) MODULATOR OR SINGLE-SIDEBAND GENERATOR*
- 1 STEREO MIXER OR TWO MONO MIXERS (LINE LEVEL)
- 2 MONO OR STEREO TAPE RECORDERS (1 FOR RECORD/TAPE MONITOR AND 1 FOR PLAYBACK ONLY)
- 1 STEREO TAPE RECORDER - FOR PLAYBACK ONLY
- 2 STEREO AMPLIFIERS
- 4 HIGH QUALITY SPEAKERS- REFER TO SET-UP INSTRUCTIONS
- 2 GRAND PIANOS
- 1 STEREO TAPE - SUPPLIED BY THE COMPOSER

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sides of the performance area are lit in a cool color (e.g. blue, green, etc.) and in the center are placed two stools set about 2 1/2 feet apart. Between the stools is placed an omni-directional microphone which will pick up the sounds produced vocally by either performer. If two separate microphones are used they must be mixed and monitored as a monophonic system. The throat microphones are pre-amplified and taken to the program and carrier inputs of a balanced modulator. *- if a single-sideband generator is used it should be set to produce the upper sideband and the lowest voice must serve as the carrier. In any case both channels must be carefully balanced so that there is no leakage when only one performer is singing. The modulator output is taken to the line input of a monophonic tape recorder (or one channel of a stereo tape recorder). This machine is set to monitor the recorded signal and the signal is taken to a channel of a stereo amplifier. The tape is then threaded from the feed-reel of this machine to the take-up reel of a second tape recorder with care taken to make sure that the tape makes contact with the playback head of this second machine. With this deck set for playback its line output is taken to the other input of the stereo amplifier and at the same time is split with Y plugs and fed back into the line input of the first tape recorder (this may be accomplished with a mixer or with Y plugs). The two machines must be separated by a distance of at least 3 1/2 feet - to result in a delay of about 5 seconds at 7 1/2 i.p.s. Before the performance begins the relative gain levels are to be set that about 4 or 5 delayed echos are produced (each decaying exponentially) for each event which reaches the tape recorder input. The output from the pre-amplified omni-directional microphone is split and taken to the inputs of two separate mixers (two mono or one stereo)..The respective mixer outputs are then patched to the respective inputs of a second stereo amplifier. The monitor speaker baffles for this system should be small enough to fit face down over the strings of a grand piano (one piano per channel) in such a way that the baffle is as close as possible to the strings without making direct contact. The sustain pedal of each piano must be held down with tape or a weight so that the strings are free to resonate. The third tape recorder (stereo) is used for

the playback of the supplied tape and its outputs are patched to the two respective mixers of the same system. The desired effect of this system is that any vocal or taped sound which is monitored through these speakers will resonate the piano strings- thereby using the piano as an acoustical reverberation chamber. Locating each speaker in each piano will involve a certain amount of experimentation for achieving maximum resonance.

The two systems described will now produce the following events:

any sound produced by either performer will be heard via the speakers placed in the piano and will be perceived as a monophonic event

because of the throat microphones any simultaneous event produced by the singers will be gated through the modulator and processed through the delay system- alternating echos being heard from alternating channels

the prepared tape will be heard from each of the monitor piano speakers as a stereophonic system

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performers enter from opposite sides of the performance area and meet in the center (the throat microphones may already be in place or may be attached at this time). Crossing arms and grasping each others hands (right to right and left to left) they seat themselves on facing stools and begin to concentrate on a mutual time to begin singing. As soon as the two performers have touched hands the playback of the prepared tape is to begin. The performers are responsible for three different events which may be controlled in one of two manners. The events are:

- 1) PERFORMER A SINGING ALONE WHICH WILL REACH BOTH PIANO SPEAKERS VIA THE AIR MICROPHONE
- 2) PERFORMER B SINGING ALONE WHICH WILL REACH BOTH PIANO SPEAKERS VIA THE AIR MICROPHONE
- 3) BOTH PERFORMERS SINGING SIMULTANEOUSLY- THEREBY GATING THE MODULATOR AND SUPPLYING INFORMATION TO THE DELAY SYSTEM- THIS MAY OCCUR AS A SIMULTANEOUS ATTACK OR ONE VOICE MAY BEGIN BEFORE THE OTHER BEGINS

these events are controlled via thought transmission by one of the performers. It is up to this person to decide which event is to be produced. If event 1 is chosen then the controlling performer must keep the other from interrupting. If event 2 is chosen the controlling performer must mentally evoke this response from the other performer. If event three is chosen the main area of concentration will be a simultaneous attack by both performers. In some instances visual contact between the two performers results in false cues so it is suggested that they work with their eyes closed. After several rehearsals and performances the performers

may discover that both can act as mutual controllers- either performer can decide on the time and nature of the event and communicate it to the other.

The singing is to consist of long sustained sounds in a variety of ranges utilizing a variety of vowels. As the performers become more acquainted with this type of communication then the duration, attack and decay characteristics and choice of vowel formant may become a controlled parameter.

The two pianos should be located at the extreme right and left edges of the performance area and the two monitor speakers for the delay system should be about 7 to 10 feet apart between the pianos. Depending upon the environment the performers may wish to experiment with placing the delay system speakers at various planes or heights between the two pianos.

Perform realistically- some performances may consist only of the sounds produced by the prepared tape. There is no time limit imposed on the performers and the production may last well beyond the length of the prepared tape.

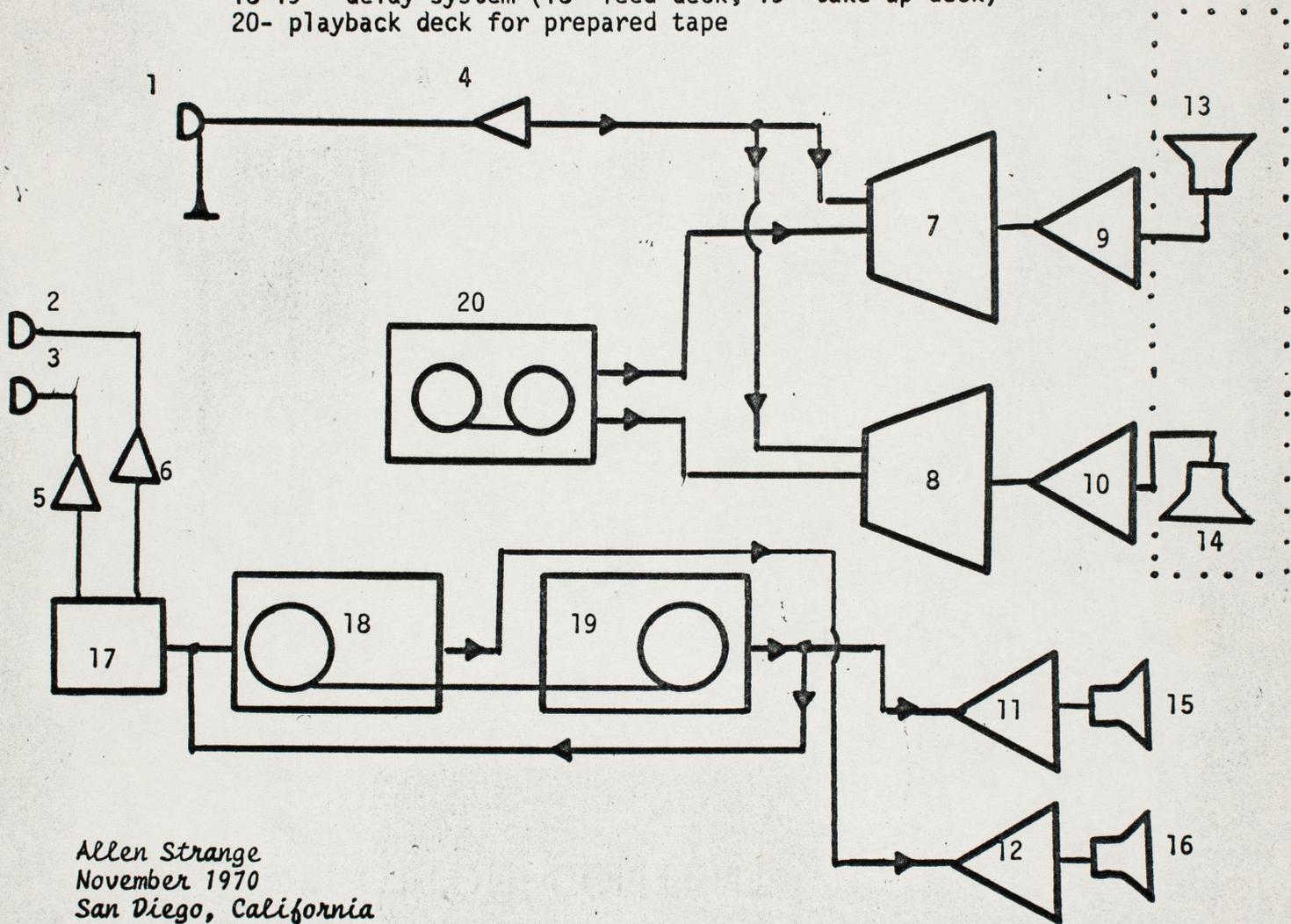
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patching diagram

- 1- omni-directional microphone
- 2-3 - throat microphones
- 4- pre-amplifier for omni-directional mike
- 5-6 - pre-amplifiers for throat mikes
- 7-8 mixers
- 9-10 stereo amplifier for piano system
- 11-12 - stereo amplifier for delay system
- 13-14 - speakers for piano system
- 15-16 - speakers for delay system
- 17- modulator
- 18-19 - delay system (18= feed deck, 19= take-up deck)
- 20- playback deck for prepared tape



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