

FEETBACK

for any number of performers with
with brass or woodwind instruments,
simple electronics, and one assistant

Preparation

A dry space with a large performance area is preferred for this piece. Prepare each instrument by installing a miniature microphone (such as a Sony ECM-16) inside its mouthpiece or in the bore as near to the mouthpiece or embouchure as possible. For each instrument set up one channel of amplification consisting of a microphone preamp, an audio limiter, a power amplifier, and a speaker. Place the speakers anywhere along the perimeter of the performance area where they can be seen by the audience. Run long microphone cables from the center of the area to the preamps; coil the excess neatly in the center and leave the ends unmarked, so that none of the performers can tell which cable leads to which speaker.

When the gain of any channel is raised high enough, the performer can use the instrument as a variable acoustical filter in order to reinforce or cancel different frequencies of the resultant feedback.

Performance

Walk into the center of the performance area. Pick up the end of any cable and tie it around your waist.

Connect your instrument's microphone to the cable. Once the entire group is attached, the assistant raises the gain of each channel to the threshold of feedback. After he has done so click the keys or thunk a valve or the slide a few times until you have determined to which speaker you are connected.

Walk towards that speaker. At each step along the path try to prevent your channel from feeding back by finding fingerings or spatial orientations of the instruments (aimed away from the speaker, blocked by your body, etc.) that cancel feedback, or by clicking or thunking, which usually drive the limiter to decrease the gain. You may only take a step when no one in the group is feeding back.

Continue moving in this fashion until you can no longer sustain any silence, and therefore neither you nor anyone else in the group can progress any farther; disconnect yourself and leave the area. The performance ends when the last person has left.

An FM wireless microphone system can be used in place of the cables. If a short version of the piece is desired the assistant can hasten the end of the performance by raising the gain of the amplifiers high enough to make silence impossible, thereby forcing all the performers to disconnect.

October 1975