

Alvin Lucier

Wave Songs

for

female voice with pure wave
oscillators

Description

Wave Songs consists of 11 solos for female voice with 2 pure wave oscillators. For each solo the oscillators are tuned various distances apart. As they sound, the singer sustains tones against the oscillator sounds, creating audible beats—bumps of sound produced as the sound waves collide. The farther apart, the faster the beating. At unisons, no beating occurs.

Oscillators

The oscillator tones, recorder on DAT tape, compact disk or iPod, are faded in and out at the beginning and end of each song. Silences between songs vary and are indicated by small Arabic numbers at the end of each song. The letters R and L under Osc. 1 and 2 indicate stereo channeling, which alternates for each song. Large numbers enclosed in square blocks above the beginning of each song indicates the distances, in cycles per second, between the 2 oscillators. Numbers above and below the notated oscillator pitches indicate the frequency, in cycles per second, of each oscillator tone. Pluses and minuses before each tone indicate that the tone above or below the notated pitch.

Female Voice

The singer stands between the 2 loudspeakers from which the pure waves flow. Throughout the course of the work she sings pure tones on the vowel "oo" matching the sounds of the pure waves, in order to create the most vivid beating. Zeros above and below her notated pitches indicate unisons with the upper and lower oscillator tones respectively. Minus and plus numbers above and below indicate micro tunings above and below the notated pitches, in cycles (beats) per second.

For example, the first tone in *Song 1* the singer tunes in unison with the upper oscillator tone, which is 48 cycles higher than the lower. The second tone is tuned 8 cycles lower than the upper tone, 40 cycles higher than the lower. The singer may check her intonation by listening for the number of beats she is supposed to produce.

In *Song IV* She sings a 5th above and an 4th below the oscillator tones, producing less vivid beating but creating possible combination tones.
In *Song X* she chants a text extracted from Lee Lozano's writings.

Note

As the oscillator tones get closer and closer together as the work progresses, it becomes virtually impossible for the singer to accurately tune her pitches; therefore approximations are acceptable.

Wave Songs was commissioned by the Matrix Gallery at the Wadsworth Atheneum, Hartford, Connecticut. It was composed in response to artist Lee Lozano's *Wave Series*, eleven abstract canvases that explore the notion of wave phenomena. It was first performed by Joan La Barbara on March 29, 1998, at the Wadsworth Atheneum.

