

# A Performance of The SINE WAVE ORCHESTRA

Kazuhiro Jo<sup>§\*</sup>, Ken Furudate<sup>§</sup>, Daisuke Ishida<sup>§</sup>, Mizuki Noguchi<sup>§</sup>

<sup>§</sup> The SINE WAVE ORCHESTRA

<http://swo.jp/>

\*Research Center for Advanced Science and Technology, University of Tokyo  
4-6-1 Komaba, Meguro, Tokyo, 153-8904, Japan

[jo@jp.org](mailto:jo@jp.org), [anagma@arch-project.com](mailto:anagma@arch-project.com), [daisuke-ishida@jp.org](mailto:daisuke-ishida@jp.org), [miznog@mac.com](mailto:miznog@mac.com)

## ABSTRACT

This paper presents a performance of The SINE WAVE ORCHESTRA. The SINE WAVE ORCHESTRA is a participatory sound project. Under the concept that each participant plays a sine wave, people are invited to create collective sound representation. In this paper, we describe the performance from a perspective of participatory design. We describe the performance in terms of participants, registration, device procedure and guidance. Then we discuss the type of participation of people to the performance. Finally, a list of links to the previous works is provided.

## Author Keywords

Sine wave, participatory sound performance, collective sound representation.

## ACM Classification Keywords

J5. Arts and humanities: Performing arts.

## INTRODUCTION

We would like to describe a performance of The SINE WAVE ORCHESTRA [6]. This is a participatory sound performance and is a part of The SINE WAVE ORCHESTRA series. Under the concept that each participant plays a sine wave, people are invited to create collective sound representation. Each participant can use any device that can produce a sine wave. In the performance, the boundary between who is the performer and who is the listener is blurred. Each participant is a performer to other participants, and is a listener of other participants. As each participant moves freely with his/her device, the position of each sound source keeps changing during the performance. Therefore, each participant will listen a different sound representation. Through sharing the time and the space, the sine wave played by each participant interferes with each other's and provide a shared experience of the collective sound representation to the participants.

## DESCRIPTION OF THE PERFORMANCE

### Participants

Participants are invited from public by announcement through website, flyers and posters. There is no specific participation qualification. We expect the number of participants about 100 to 200. However, we have no limits in the number of participants.

### Registration

We provide online registration form for people who want to participate in this performance. The names of participants will be listed on our website as a member of The SINE WAVE ORCHESTRA with their permission. We also provide an on-site registration for those who just walk by the performance site. There are no differences between online registered participants and on-site registered participants except for appearance of their names on the website.

### Device

Sine wave is played by a device equipped with an individual speaker brought by each participant. Participants may bring any kinds of device that can produce a sine wave, such as laptop PCs, synthesizers, analog oscillators, loudspeaker equipped iPods, PDAs or mobile phones. The volume of a sine wave should be the same grade as people's voice. The frequency of a sine wave has no limitation. Those devices must work with battery. We also prepare devices that can produce a sine wave for those who do not have these kinds of device. The number of the devices that we prepare is about 50.

### Procedure

The performance takes place over 1 hour. It should be carried out in a public open space those who just walk by to participate. Participants come and leave at any time during the performance. Before participating in the performance, participants confirm their name on a reception. If they do not bring their own device, they can get a prepared device there. Then, each participant plays a sine wave and creates collective sound representation. The devices that we prepare should be returned after the performance.

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## Guidance

We distribute a guidance of the performance for participants. The guidance will include descriptions on "The physical characteristic of a sine wave," "How to use the device," and "What is The SINE WAVE ORCHESTRA."

## TYPES OF PARTICIPATION OF PEOPLE

We would like to argue that there are three types of participation of people in this performance [1]: participants, organizers, and spectators. Participants are those who play sine waves and listen to the resulted sound representation. Organizers are those who make the performances take place. The four core members have been playing as organizers of The SINE WAVE ORCHESTRA. We design how people engage in collective sound representations, design and develop devices as instruments for sound performance, provide an environment where people collaborate through the sound representations. However, the resulted collective sound representations may not be regarded as designed by us, the organizers. The resulting sound is a simple collection of sine waves, and each sine wave is totally controlled by each participant. Rather, it could be argue that the organizers design the participants experience through the design of sound, and the design of how participants share the time and space. Spectators [5] are passers-by or visitors at the performance site. They do not play sine wave, but listen to the sound representation and have a potential to become participants. A collective sound representation by a group of people can be viewed as forming a small community, or a participative system [4]. Communities can only be sustained by having newcomers gradually involved more to the center of the community [3]. To have ongoing musical experiences that sustain the motivation of people to participate, new comers, or spectators, should be encouraged to become participants.

## PREVIOUS WORK

### 2005

The SINE WAVE ORCHESTRA nomadic (International triennale of contemporary art YOKOHAMA, Yokohama, Japan)

The SINE WAVE ORCHESTRA stay (open nature, ICC, Tokyo, Japan)[2]

The SINE WAVE ORCHESTRA in transmediale (transmediale 05, Berlin, Germany)

### 2004

The Stairway of The SINE WAVE ORCHESTRA (n\_ext: New Generation of Media Artists, ICC, Tokyo, Japan)

The SINE WAVE ORCHESTRA picnic (Donaupark, Linz, Austria)

The Garden of The SINE WAVE ORCHESTRA (sonarsound tokyo 04, Yebisu Garden Place, Tokyo, Japan)

The SINE WAVE ORCHESTRA district (DEAF04, V2, Rotterdam, Netherlands)

### 2003

The SINE WAVE ORCHESTRA in Tama Art University (Tama Art University, Tokyo, Japan)  
The SINE WAVE ORCHESTRA static (Tokyo Designers Block, United Nation University, Tokyo, Japan)

### 2002

The SINE WAVE ORCHESTRA and if you like, some clicks. (warszawa 4f, Tokyo, Japan)

## PRIZE

Prix ARS Electronica, Honorary Mention of Digital Music, 2004.

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