phase difference between two windows by using line vibrations

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When I got the floor-plan of the Window Gallery, I paid attention to the shape of the space and the windows. I began to think about a function of the windows. Usually there is a window in order to get natural light into a room (and we can enjoy the landscape through the window as well). But this gallery's windows have a different function. They are showing the inside of room. So I wondered what to show through the windows. I decided to show the vibrating motion of the window itself. This means a self reference concerned with seeing and the object. In addition, I wanted to show the difference between the two windows, because I think the windows have subtle differences on each of the functions.
In this work, I installed three sets of a unit which consists of a pair of optical cables and solenoid coils. The unit represents the phase difference on a specific frequency of the window's vibrations (the frequency depends on the length of the optical cable, thus this work can show three kinds of phase differences on specific frequencies). The vibration of each window is detected by a contact microphone, and the microphone's signal is amplified in order to drive the solenoid. As a result, the window's vibration appears in the optical cable. We may be able to see the difference between the phase of the two windows, because of the cable's vibrations working in pairs.