

## Evaluation Using a Bidirectional Microphone as a Pressure Pulse Wave Meter

**Authors :** Shunsuke Fujiwara, Takashi Kaburagi, Kazuyuki Kobayashi, Kajiuro Watanabe, Yosuke Kurihara

**Abstract :** This paper describes a novel sensor device, a pressure pulse wave meter, which uses a bidirectional condenser microphone. The microphone work as a microphone as well as a sensor with high gain over a wide frequency range; they are also highly reliable and economical. Currently aging is becoming a serious social issue in Japan causing increased medical expenses in the country. Hence, it is important for elderly citizens to check health condition at home, and to care the health conditions through daily monitoring. Given this circumstances, we developed a novel pressure pulse wave meter based on a bidirectional condenser microphone. This novel pressure pulse wave meter device is used as a measuring instrument of health conditions.

**Keywords :** bidirectional microphone, pressure pulse wave meter, health condition, novel sensor device

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