**E47** 

A comfortable wearable ECG measurement device for monitoring health condition

Wearable bio-measurement device using the human body transmission path

IOWN Evolution Well-being · Lifelong Health Support

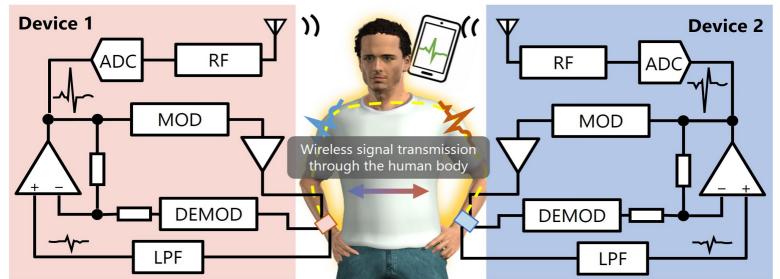


## Background

ECG is an important indicator of people's health and requires electrodes and wiring on both sides of the heart but is uncomfortable. Measuring ECG on the wrist is more comfortable but restricts hand movement.

## Summary

If both wires are disconnected to enable hand movement, the electrical connection between the electrodes is broken and ECG measurement cannot be conducted. This technology uses the human body as the signal-transmission, eliminating the need of wiring during ECG measurement.



## Features

- Circuit technology that does not require wiring essential for ECG by using the human body as the signal-transmission path
- Analog FM electric-field transmission system makes it possible to transmit signals in a safe, e.g., suppressing unnecessary radiation, and adverse effects on the human body
- The processing of the heart-rate-detection algorithm capable of eliminating noise caused by life activities is based on the shape of the waveform, enabling stable ECG measurement

## Future\_benefits

NTT aims for a healthier and more energetic society in which biosignals can be easily measured without the user being aware.

Exhibiting Company

NIPPON TELEGRAPH AND TELEPHONE CORPORATION

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