

Sensors

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Temperature Sensor

Soil Humidity Sensor

Ultrasonic Sensor

Light Sensor

Pulse Oximeter Gadget

The pulse oximeter gadget allows for measuring the user's heart rate and SpO2 (blood oxygen).

Before You Start

Warning

No CodyNick device, gadget, or service has ever been approved for medical use, nor are any CodyNick staff or instructors licensed medical professionals. All gadgets are intended to be used exclusively for educational purposes, and are not suitable for medical uses of any kind.

Always consult a licensed healthcare professional for health concerns.

NEVER use CodyNick Health Gadgets while they are connected to live power. Always use BATTERY PACKS or UNPLUGGED BATTERY POWERED DEVICES to power your CodyNick Health Gadgets

Setting up your gadget

There are no specific setup steps for this gadget. Simply connect your gadget to a processor and upload your code.

Using your gadget

Simply put your finger on the red LED on the front side of the gadget. The gadget should detect your finger and send your heart rate and SpO2 readings to the processor.

Code Blocks

1. [Pulse Oximeter Pulse Rate] - integer value starting from 0
2. [Pulse Oximeter SpO2] - integer with value within [0, 100]

Health Gadget: reference ranges

- Heart Rate for Adults: 60bpm to 100bpm
- SpO2: 95% to 100%

Important: these are reference ranges only. A measurement outside these ranges does not automatically imply illness or abnormality. Always consult a licensed healthcare professional if in doubt.

ECG Gadget

The ECG gadget allows for displaying the user's ECG waveform (single lead)

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Setting up your gadget

This is an event-only gadget. Instructions will be provided by your event coordinator.

Using your gadget

This is an event-only gadget. Instructions will be provided by your event coordinator.

Code Blocks

None. The waveform will be displayed on the device's built-in LCD.