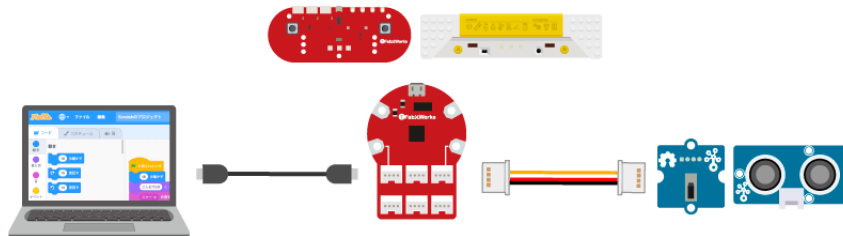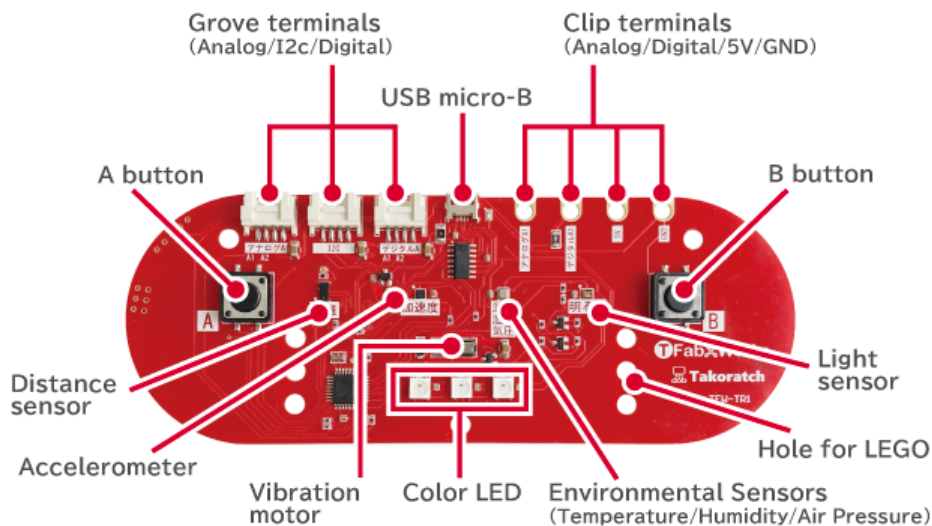# Takoratch(TFW-TR1)

The AkaDako series comprises expansion boards that enable control of Grove sensors and actuators via Scratch, simply by connecting a USB cable.

Takoratch is a cost-effective extension board that connects to PCs via USB, enabling the use of Grove sensors and actuators from Scratch's enhanced environments (Xcratch or Stretch3). This board comes with a range of built-in sensors for light, temperature, humidity, atmospheric pressure, human detection, distance, and acceleration, as well as a color LED. Takoratch offers an affordable entry into exploratory learning, making it an excellent choice for STEM educators seeking affordable solutions.

https://akadako.com/en/

Sensor

- Laser distance (10cm to 200cm)
- Brightness (0 to 64,000lx approx.)
- Temperature (-40 to 85°C ±1°C)
- Humidity (0 to 100% error ±3%)
- Air pressure (300 to 1,100hPa ±1hPa)
- Acceleration (3 axes ±8g)

Actuator

- Vibration motor (PWM control)
- Full color LED (24bit color x 3)

Input/output terminals

- Clip terminals (analog input x 1, digital input/output x 1, 5V, GND)
- Grove terminals (analog input x 1, digital input/output x 1, I2C x 1)

Size and weight

160mm x 60mm x 5mm, approx. 35g

Operating Environment

- Supported OS: Windows 10 or later, ChromeOS 89 or later, iOS 15 or later, Android OS
- Supported browsers: Chrome browser 43 or later, Edge 79 or later, Scrub 1.1.1 or later, Chrome for Android 113 or later
- Designed to work with - The Takoratch is designed to work with Scratch's enhanced versions, Xcratch and Stretch3.

Related Pages

Tutorial & Quick start: https://akadako.com/en/guide/intro/
AkaDako Techniques: https://akadako.com/en/dict/
Grove list for AkaDako: https://akadako.com/en/grove/
For additional information, please visit: https://akadako.com/en