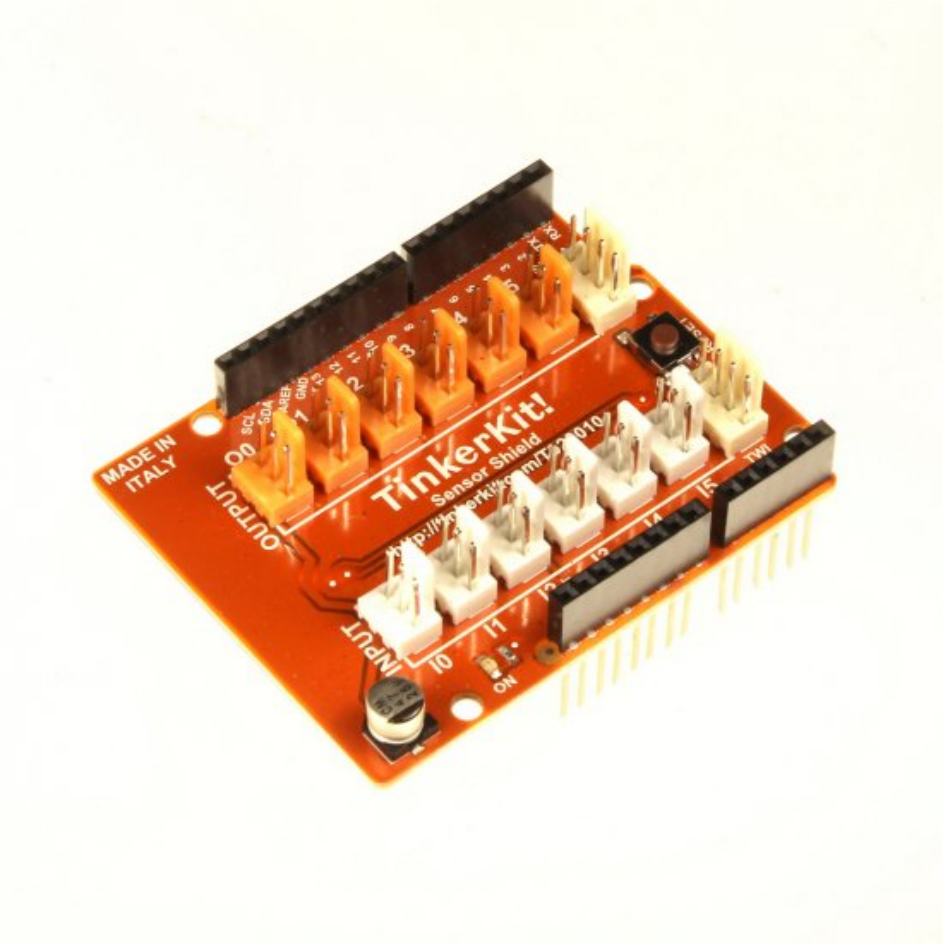
TinkerKit Sensor Shield V.2



Overview

The **Sensor Shield v.2** allows you to hook up the TinkerKit **SENSORS** and **ACTUATORS** directly to the Arduino, without the use of the breadboard.

It has 12 standard TinkeKit 3pin connectors. The 6 labeled **I0** through **I5** are **Analog Inputs**. The ones labeled **O0** through **O5** are **Analog Outputs** connected to the PWM capable outputs of the Arduino Board (it is possible to change these to Digital Inputs, in which case they will report either HIGH or LOW, but nothing in between).

On a Standard Arduino DuemilaNove board the pins are:
Pin 11 on the Arduino is O0 on the shield.
Pin 10 on the Arduino is O1 on the shield.
Pin 9 on the Arduino is O2 on the shield.
Pin 6 on the Arduino is O3 on the shield.
Pin 5 on the Arduino is O4 on the shield.
Pin 3 on the Arduino is O5 on the shield.

Module description: A green LED signals that the shield is correctly powered, a standard 6mm pushbutton allows you to RESET the board.

The **4pin TWI socket** allows communication to any device supporting the I2C protocol through the Wire library on Arduino. 5V and Ground are provided on the socket. Note that on Arduino the I2C bus uses Analog Input 4 and 5, using the TWI connection precludes the use of those analog inputs.

The **4pin SERIAL socket** allows the board to communicate with other devices that support serial communication. 5V and Ground are provided on the socket for your convenience.

Note: If you're sending or receiving data to and from the computer this serial connector is not available.

Two mounting holes are provided in the same position found on the Arduino board. A third hole allows you to see the led connected to pin 13 of the Arduino.