



TinkerKit PushButton



Overview

The **Pushbutton Module** is possibly the simplest sensor available. It detects when a person or an object presses on its circular cap.

Output: This module outputs 5v when the button is pressed and 0v when released. Pressing the button closes the circuit. When connected to an input on the Arduino using the TinkerKit Shield, you can expect a value of 1023 while the button is pressed and 0 when released.

Module Description: This module features a 12mm pushbutton, the standard TinkerKit 3pin connector, a green LED that signals that the module is correctly powered and a yellow LED that is lit only when the button is pressed.

This module is a **SENSOR**. The connector is an **OUTPUT** which must be connected to one of the **INPUT** connectors on the **TinkerKit Shield**.

Code Example

```
/*
Button

Turns on and off a T010111 LED Module connected to O0 (digital
pin 11), when pressing a T000180 pushbutton attached to I0 (analog pin 0).

created 2005
by DojoDave <http://www.0j0.org>
modified 17 Jun 2009
by Tom Igoe
modified 7 dec 2010
by Davide Gomba

This example code is in the public domain.

based on http://www.arduino.cc/en/Tutorial/Button
*/

#define O0 11
#define O1 10
#define O2 9
#define O3 6
#define O4 5
#define O5 3
#define I0 A0
#define I1 A1
#define I2 A2
#define I3 A3
#define I4 A4
#define I5 A5

// constants won't change. They're used here to
// set pin numbers:
const int buttonPin = I0; // the number of the pushbutton pin
const int ledPin = O0; // the number of the LED pin

// variables will change:
int buttonState = 0; // variable for reading the pushbutton status

void setup() {
  // initialize the LED pin as an output:
  pinMode(ledPin, OUTPUT);
  // initialize the pushbutton pin as an input:
  pinMode(buttonPin, INPUT);
}

void loop(){
  // read the state of the pushbutton value:
  buttonState = digitalRead(buttonPin);
```

```
// check if the pushbutton is pressed.  
// if it is, the buttonState is HIGH:  
if (buttonState == HIGH) {  
  // turn LED on:  
  digitalWrite(ledPin, HIGH);  
}  
else {  
  // turn LED off:  
  digitalWrite(ledPin, LOW);  
}  
}
```