



## **Overview**

The **LED** is possibly the simplest actuator available. It's a low power light source available in many colors. It lights up when powered from an Arduino pin.

**Input**: Arduino provides a maximum of 40 mA per pin; this is enough to light up the LED through the **digitalWrite()** and **analogWrite()** functions.

**Module description**: This module features a 5mm Blue Light Emitting Diode, the standard TinkerKit 3pin connector and a green LED that signals that the module is correctly powered and a tiny yellow LED that shows the current brightness of the blue LED. A resistor provides the optimal amount of current when connected to an Arduino.

This module is an **ACTUATOR** therefore the connector is an INPUT that need to be connected to one of the **OUTPUT** connectors on the **TinkerKit Shield**.

## **Code Example**

```
/*
based on Blink, Arduino's "Hello World!"
Turns on an LED on for one second, then off for one second, repeatedly.
The Tinkerkit Led Modules (T010110-7) is hooked up on 00
This example code is in the public domain.
#define 00 11
#define 01 10
#define 02 9
#define 03 6
#define 04 5
#define O5 3
#define IO AO
#define I1 A1
#define I2 A2
#define I3 A3
#define I4 A4
#define I5 A5
void setup() {
// initialize the digital pin as an output.
// Pin 13 has an LED connected on most Arduino boards:
pinMode(O0, OUTPUT);
void loop() {
digitalWrite(00, HIGH); // set the LED on
delay(1000); // wait for a second
digitalWrite(00, LOW); // set the LED off
delay(1000); // wait for a second
}
```