



TinkerKit Blue LED [10mm]



## 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 10mm 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 O0
```

```
This example code is in the public domain.  
*/
```

```
#define O0 11  
#define O1 10  
#define O2 9  
#define O3 6  
#define O4 5  

```

```
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(O0, HIGH); // set the LED on  
  delay(1000); // wait for a second  
  digitalWrite(O0, LOW); // set the LED off  
  delay(1000); // wait for a second  
}
```