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 Red 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 red 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
#define O5 3
#define I0 A0
#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(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
}