



2016

Application Note on Interfacing Arduino with Potentiometer



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Reviewer:

Version1.0

Interfacing Arduino UNO with Potentiometer

Introduction

In this application note we will be discussing on interfacing potentiometer with Arduino UNO to control the brightness of an LED.

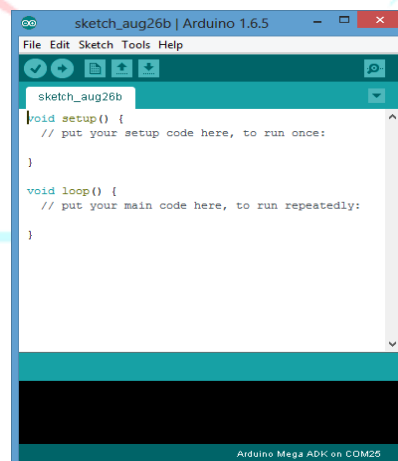
Arduino UNO: [Arduino](#) is an open-source prototyping platform based on easy-to-use hardware and software. [Arduino boards](#) are able to read inputs - light on a sensor, a finger on a button, or a Twitter message - and turn it into an output - activating a motor, turning on an LED, publishing something online. All this is defined by a set of instructions programmed through [the Arduino Software \(IDE\)](#).

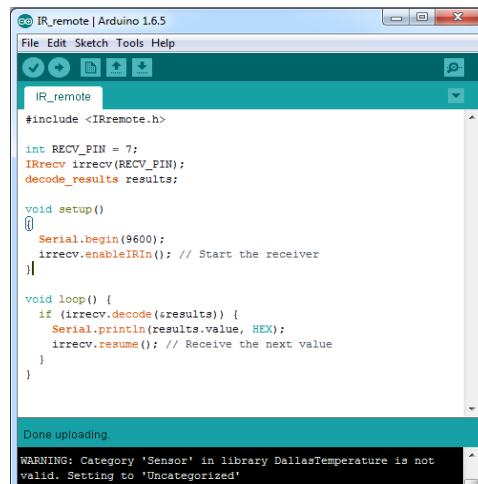
Potentiometer: A **potentiometer**, informally a **pot**, is a three-terminal resistor with a sliding or rotating contact that forms an adjustable voltage divider. If only two terminals are used, one end and the wiper, it acts as a variable resistor or rheostat.

Step1. The Materials required are:

- [Arduino UNO](#)
- potentiometer Breakout
- Male to male Jumpers

1. Open Arduino sketch on your PC or Laptop to start the programming.





```
IR_remote
#include <IRremote.h>

int RECV_PIN = 7;
IRrecv irrecv(RECV_PIN);
decode_results results;

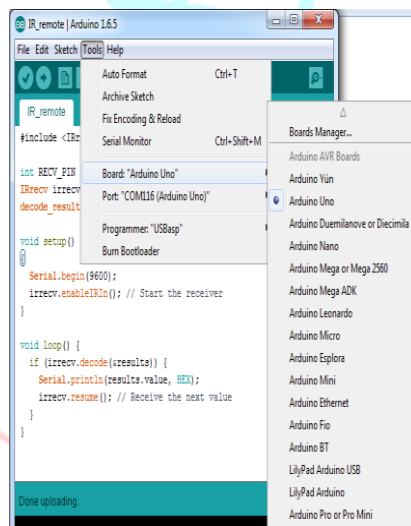
void setup()
{
  Serial.begin(9600);
  irrecv.enableIRIn(); // Start the receiver
}

void loop() {
  if (irrecv.decode(&results)) {
    Serial.println(results.value, HEX);
    irrecv.resume(); // Receive the next value
  }
}
```

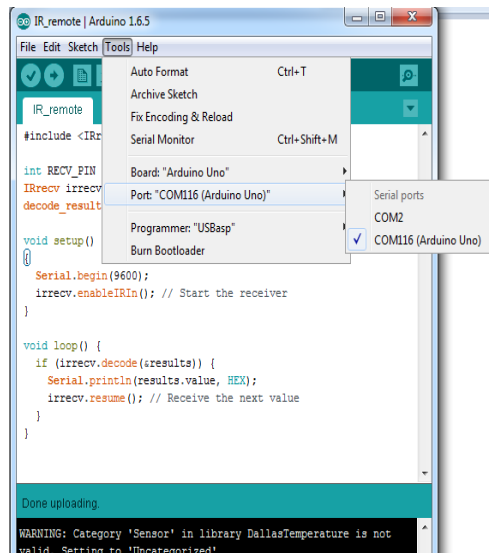
Done uploading.

WARNING: Category 'Sensor' in library DallasTemperature is not valid. Setting to 'Uncategorized'

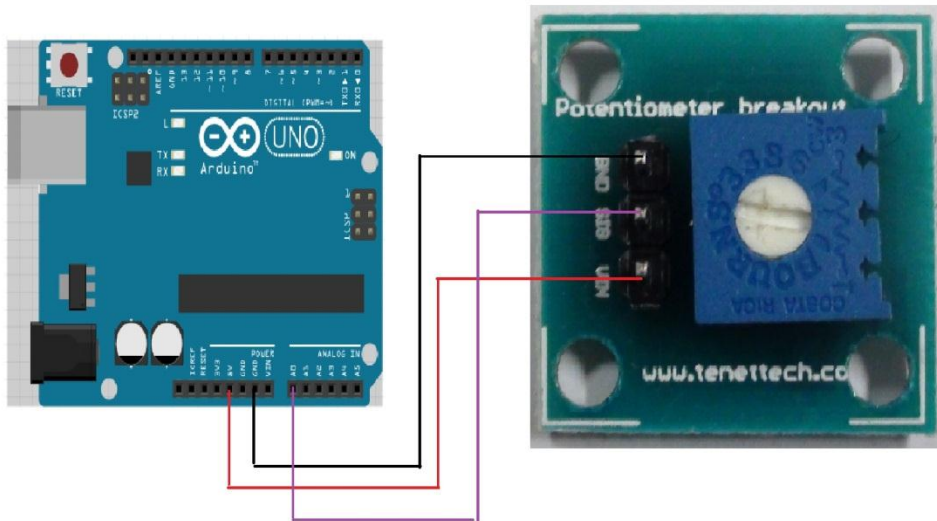
- Type the program for the LED to turn on for 1 sec and turn off 1 sec.
- Click on verify and check for any errors in the program. If no errors are present select the Arduino UNO in IDE. Go to tools> Board> Select Arduino UNO.



- Select port of programming by Tools> Port> Select the port for programming



- Now Upload the program to the arduino



CODE:

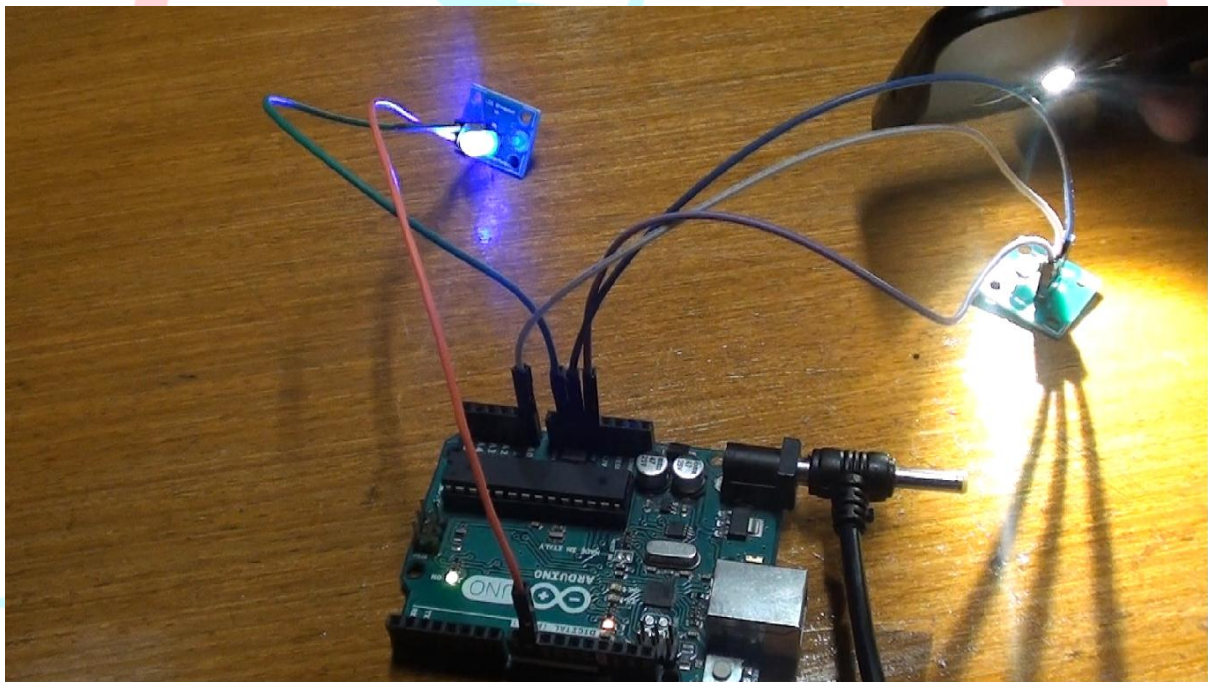
```
void setup() {
  pinMode(9,OUTPUT);
  Serial.begin(9600);
}
```

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```
void loop() {  
  
  int A0 = analogRead(A0);  
  
  Serial.println(A0);  
  
  int y= A0;  
  
  y = map(y,0,1023,255,0);  
  
  analogWrite(9,y);  
  
}
```

OUTPUT:



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For technical query please send an e-mail: info@tenettech.com

For product info:

1. <http://www.tenettech.com/search?q=arduino+uno&r1=default>

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