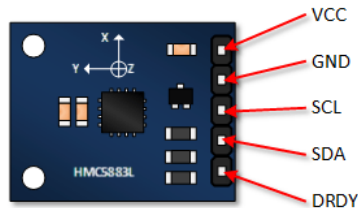


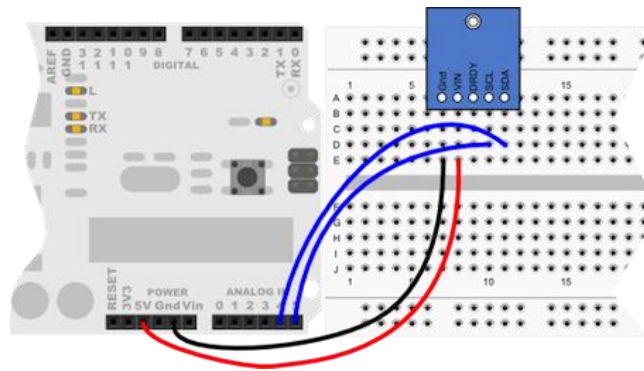
GY-273 Sensor Module

Application: Find Your Heading with an Arduino.

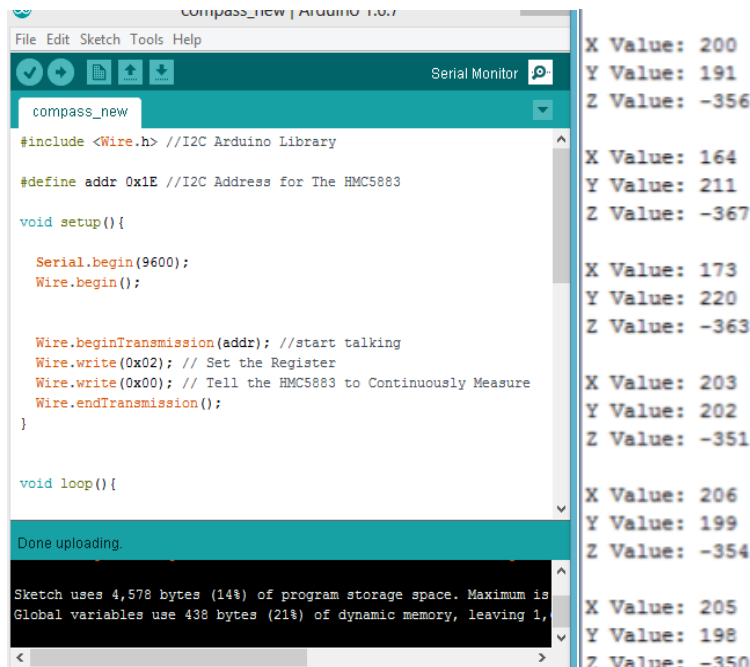
The device has five pins, in most applications and we just need four of them.



To start the project, connect circuit as shown below. Then copy the code into arduino.ide.



Open the Serial Monitor and Verify The Output.



```

Compass_new | Arduino 1.0.7
File Edit Sketch Tools Help
Serial Monitor
compass_new
#include <Wire.h> //I2C Arduino Library

#define addr 0x1E //I2C Address for The HMCS883

void setup() {

  Serial.begin(9600);
  Wire.begin();

  Wire.beginTransmission(addr); //start talking
  Wire.write(0x02); // Set the Register
  Wire.write(0x00); // Tell the HMCS883 to Continuously Measure
  Wire.endTransmission();
}

void loop() {

  X Value: 200
  Y Value: 191
  Z Value: -356

  X Value: 164
  Y Value: 211
  Z Value: -367

  X Value: 173
  Y Value: 220
  Z Value: -363

  X Value: 203
  Y Value: 202
  Z Value: -351

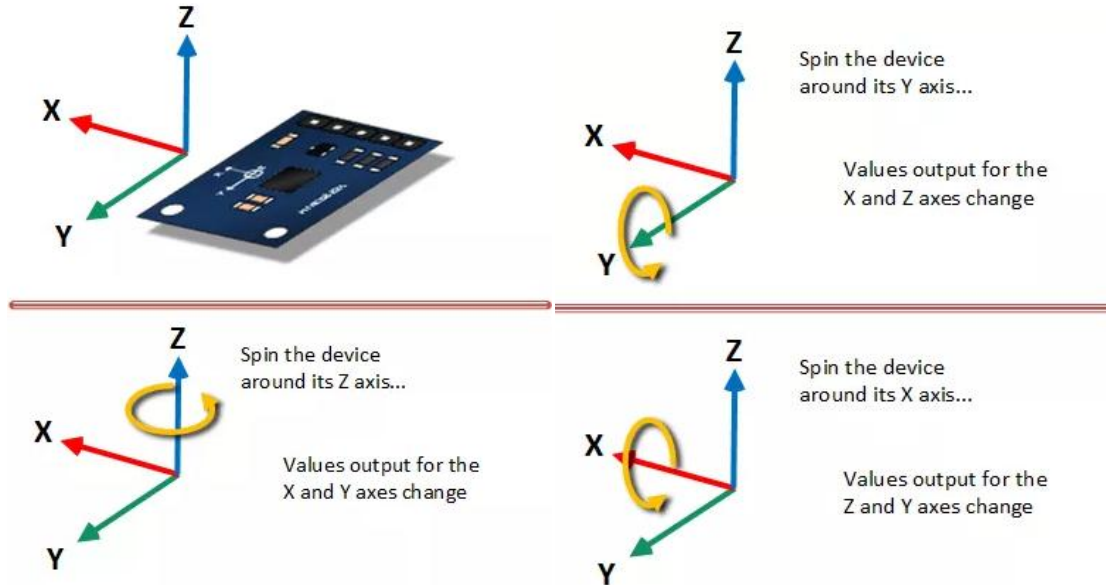
  X Value: 206
  Y Value: 199
  Z Value: -354

  X Value: 205
  Y Value: 198
  Z Value: -350
  
```

Done uploading.

Sketch uses 4,578 bytes (14%) of program storage space. Maximum is Global variables use 438 bytes (21%) of dynamic memory, leaving 1,

Once the output is displayed, try turning the device along its various axes and view the results. Twisting or turning the device will provide the corresponding outputs.



The purpose of this application is to verify that serial monitor can displayed the output. The Honeywell HMC5883L sensor used is sensitive to the earth's magnetic fields in three axes. These axes are labeled as X, Y, and Z. An output is provided for each of these axes that describe the position of these axes relative to the earth's magnetic field.