

OCTOPUS Magnetic Switch

User Guide

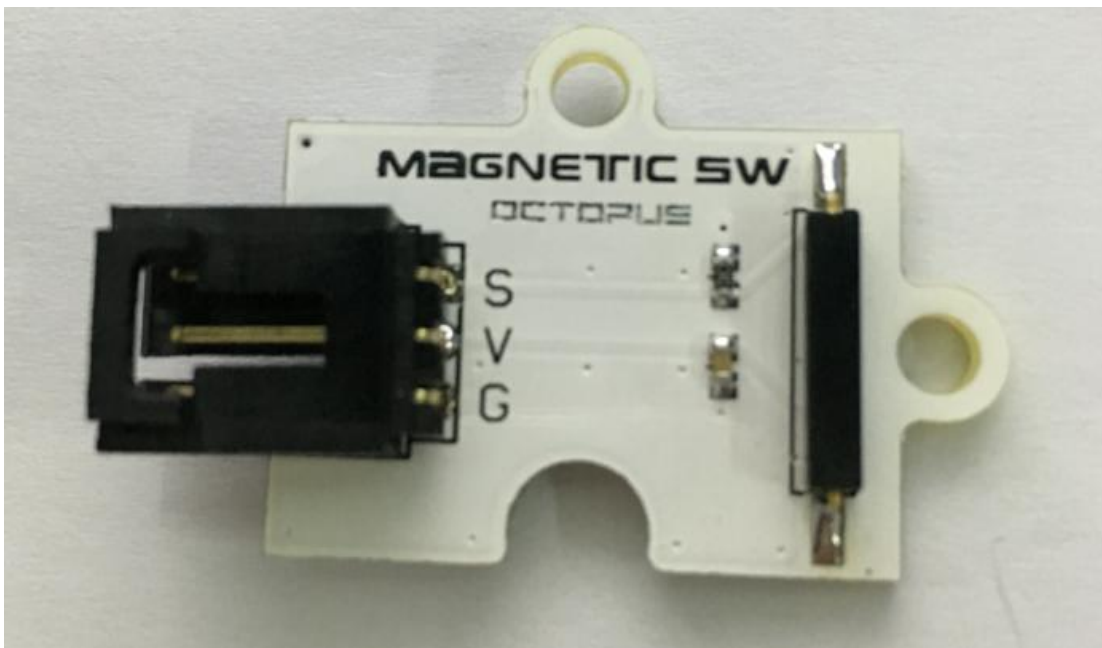


www.electfreaks.com

1、 Introduction

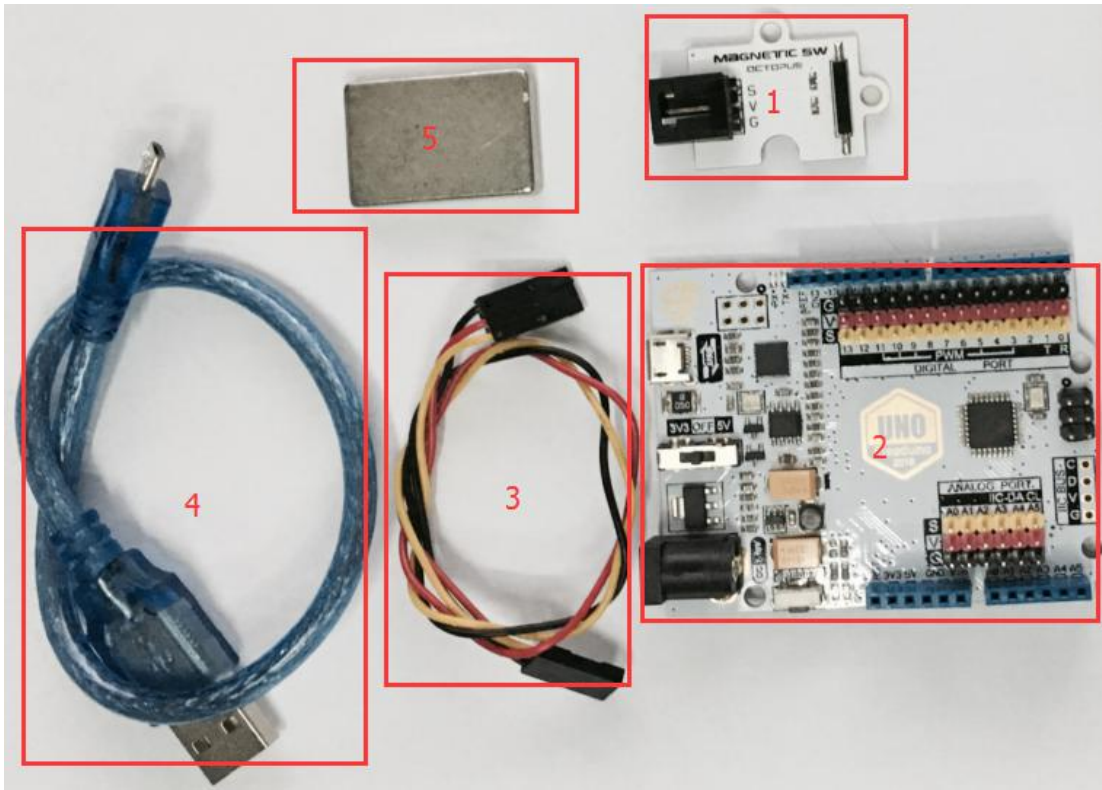
OCTOPUS Magnetic Switch is a simple electric brick module with magnetic control switch. It is normally combined with electromagnet or components with magnet. It can be used to security alarming system, door magnetic switch and so on.

Please note:



(Picture 1)

2、 Hardware and Software Preparation



(Picture2)

Hardware:

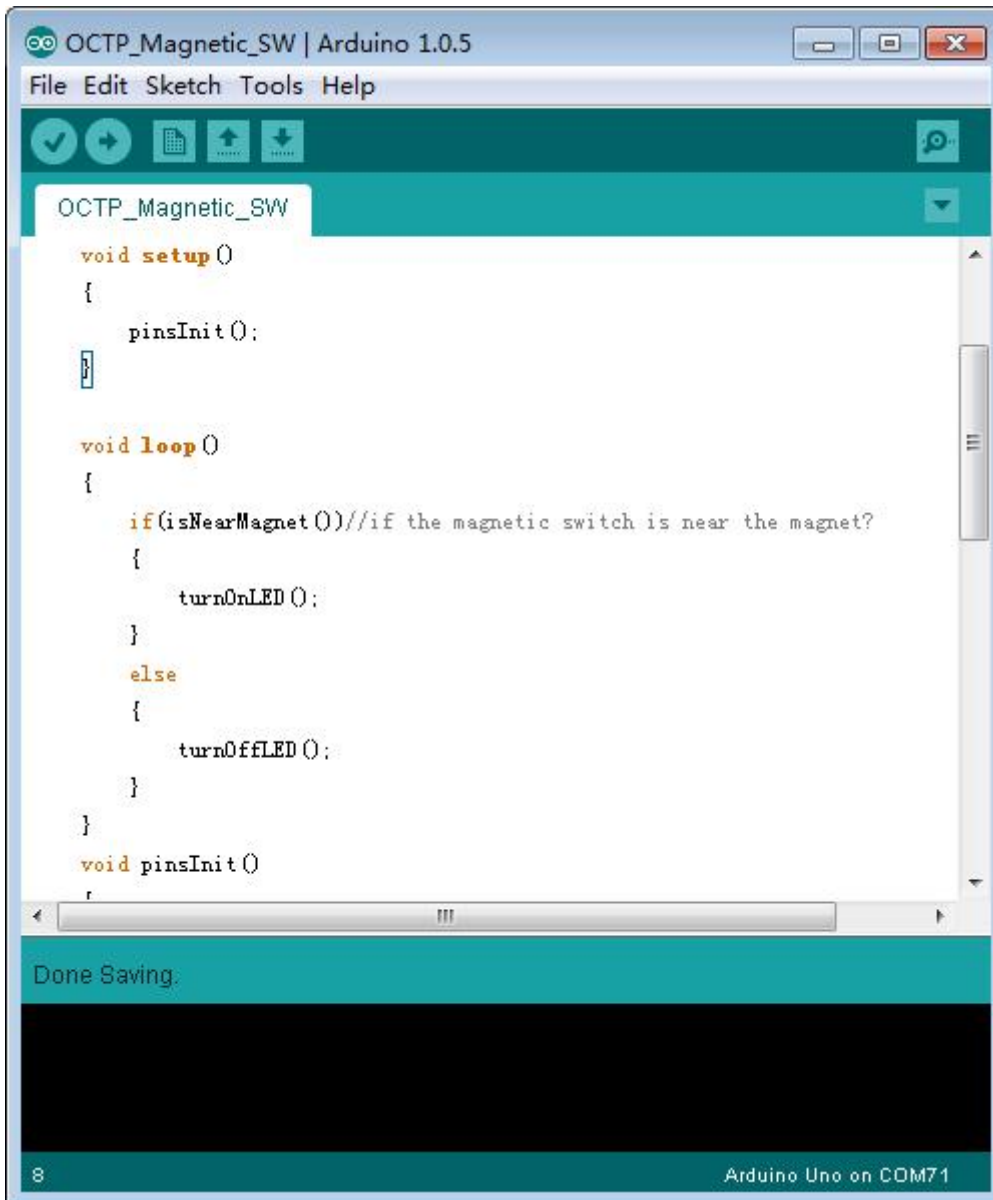
- 1、 OCTOPUS magnetic switch module
- 2、 Arduino UNO mainboard
- 3、 3P electric brick cable
- 4、 Micro USB Cable
- 5、 Magnet

Software:

- 1、 OCTP Magnetic SW Code
- 2、 Arduino IDE (1.0.5)

3、 Test Part

1. On our website Wiki, try to find“OCTOPUS Brick->OCTOPUS Magnetic Switch”, then double click it and open product Wiki,find“Paint code”, click to download test code.
2. Under the downloaded file“Paint code”, open “OCTP_Magnetic_SW” file with Arduino IDE(1.0.5) interface (IDE) . It will appear like the following picture 3 .



```
OCTP_Magnetic_SW | Arduino 1.0.5
File Edit Sketch Tools Help
OCTP_Magnetic_SW
void setup()
{
  pinsInit();
}

void loop()
{
  if(isNearMagnet())//if the magnetic switch is near the magnet?
  {
    turnOnLED();
  }
  else
  {
    turnOffLED();
  }
}

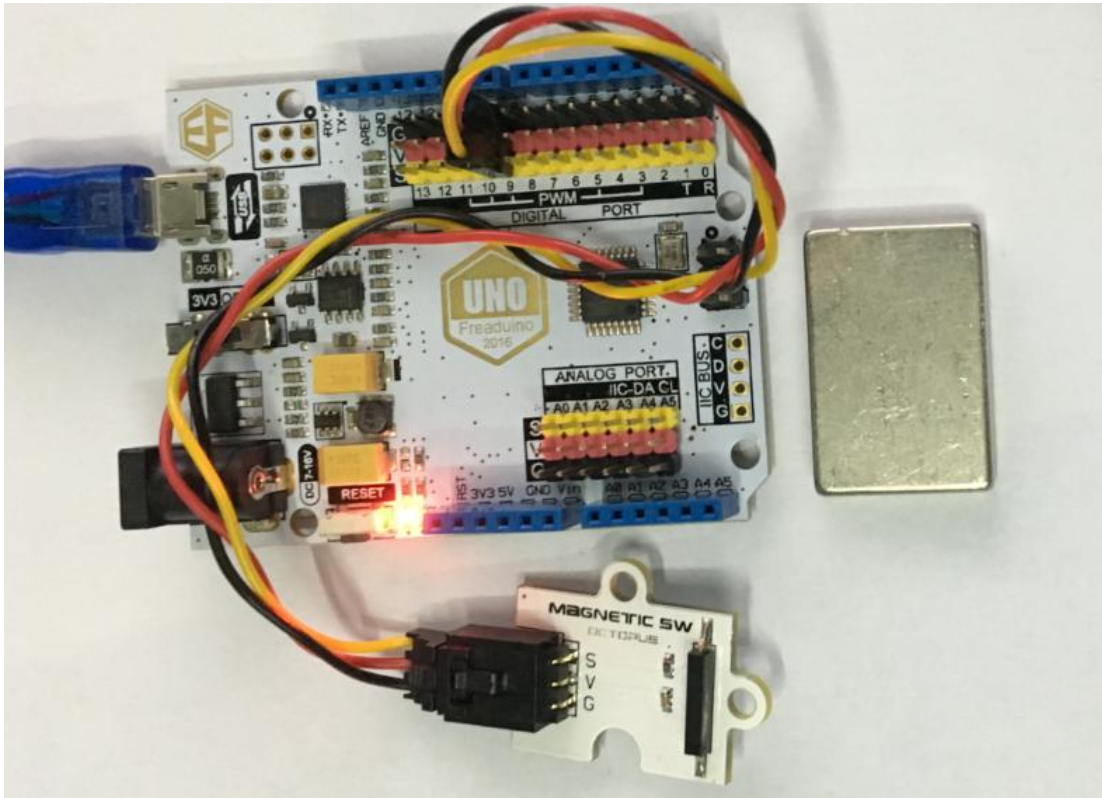
void pinsInit()
```

Done Saving.

8 Arduino Uno on COM71

(Picture 3)

3. Combine UNO motherboard with computer by Micro USB cable, then use 3 P electric brick wire connect OCTOPUS Magnetic Switch module to UNO mother board (see picture 4) . 3P electric brick wire connection with UNO motherboard shall refer to the cable rank described in column 1.



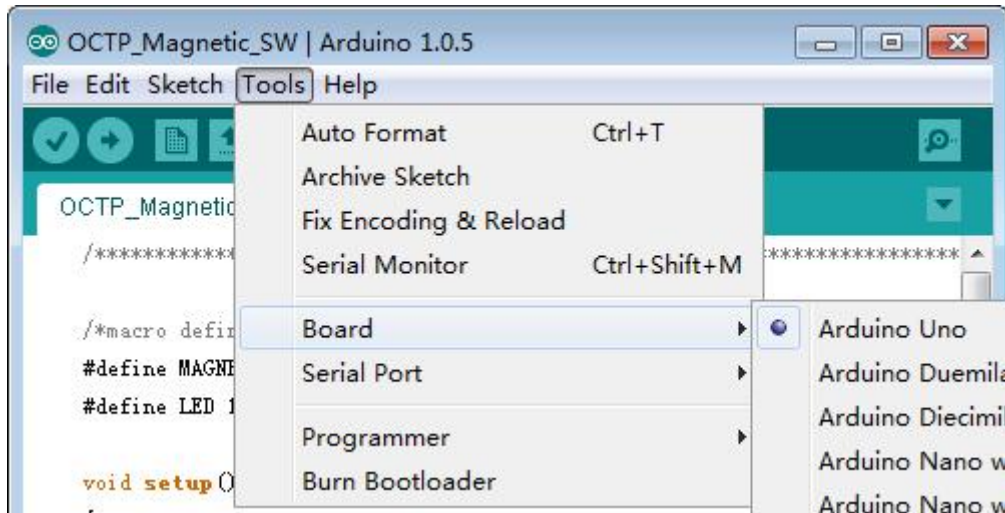
(Picture 4)

OCTOPUS Magnetic Switch&Arduino UNO Cable Relative Connection

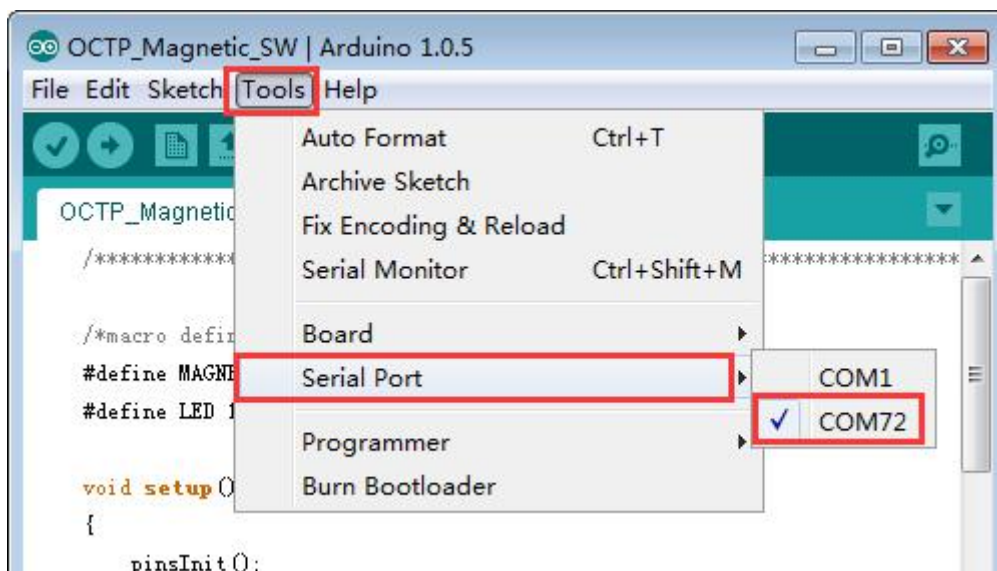
| OCTOPUS Magnetic Switch | Arduino UNO |
|-------------------------|-------------|
| GND | GND |
| V | +5V |
| S | D9 |

(Column 1)

4. Back to IDE interface in step 2, choose COM port and UNO motherboard ready to burn program, then recording codes. See the following Picture:

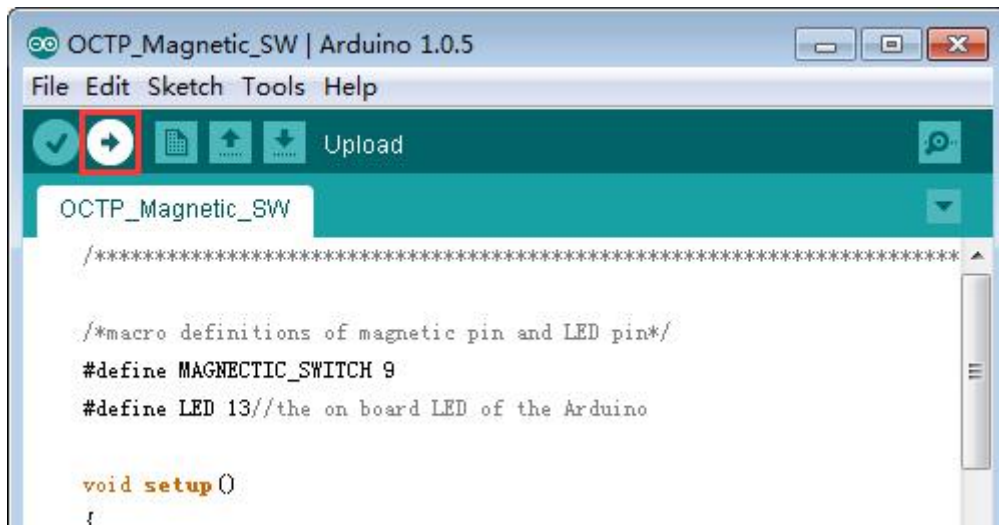


Choose UNO motherboard for burning program



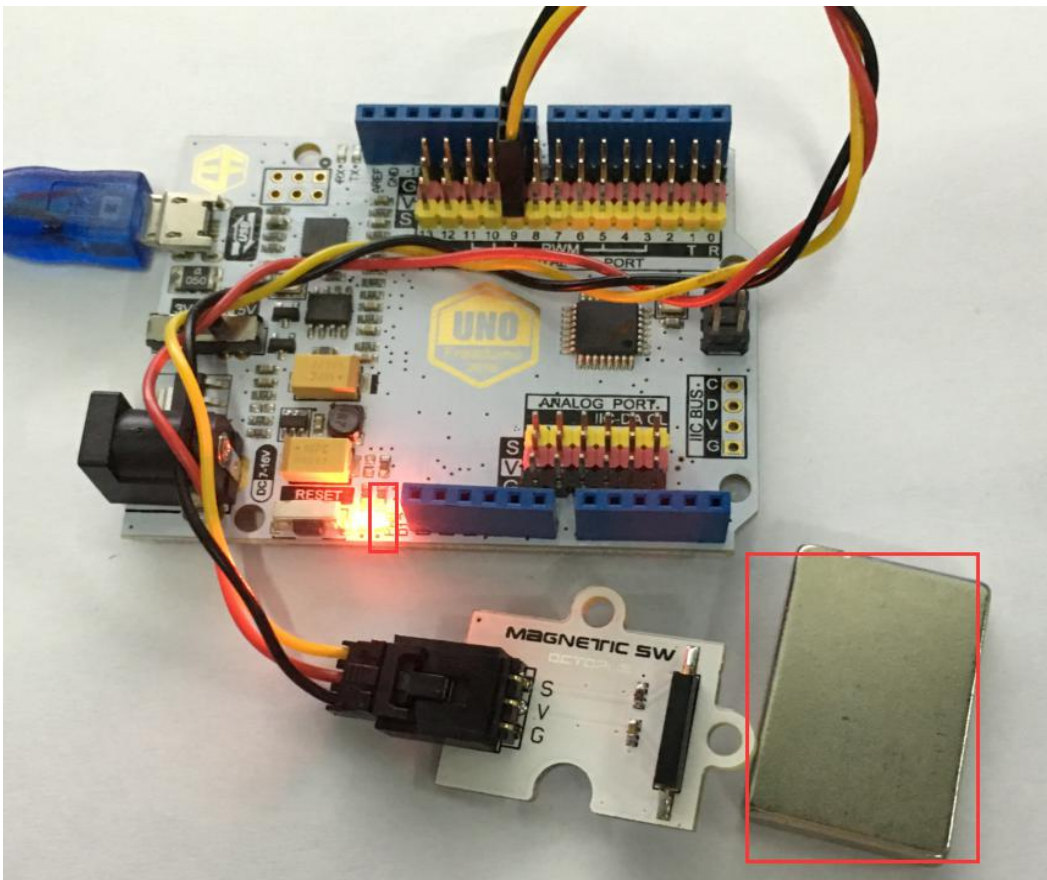
Choose COM Port

Please note : Different computers have different COM ports. Please choose the UNO-COM port recognised by your computer.

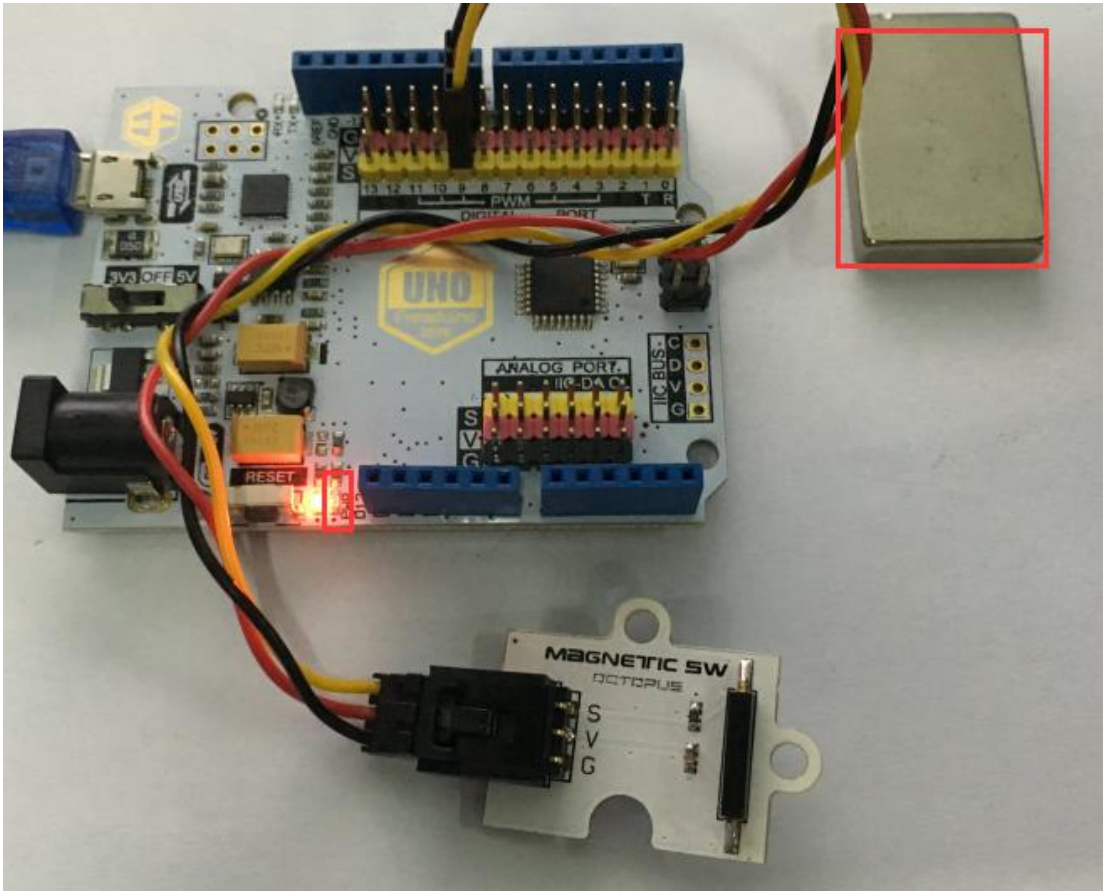


Click arrow point and start burning program

5. Close magnet to black magnetic control switch, D13 bulb on UNO mother board will turn on .Take away magnet, then D13 will turn off. We can judge whether magnetic control switch is operating by watching D13 light.(See the picture below)



Magnet close switch, D13 light turn on



Take away magnet, D13 light turn off