

IR remote control experiment

Overview



This is an experiment on the infrared reception. This experiment uses the infrared decoder, which involves the content of complex, so only the introduction of the use of methods.

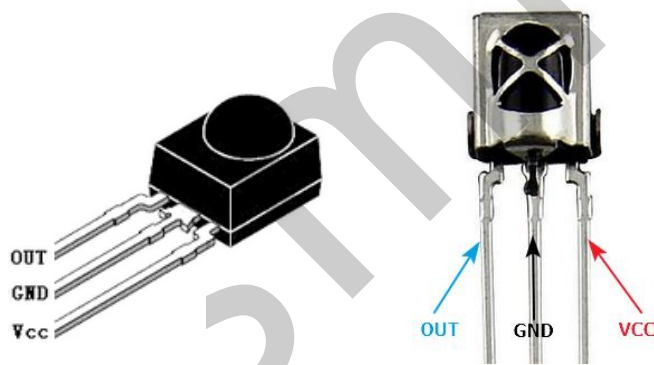
Specification

IR Receiver:





Please view "IR Receiver-datasheet.pdf"

Path: \Public_materials\Datasheet\ IR Receiver-datasheet.pdf



Pin definition



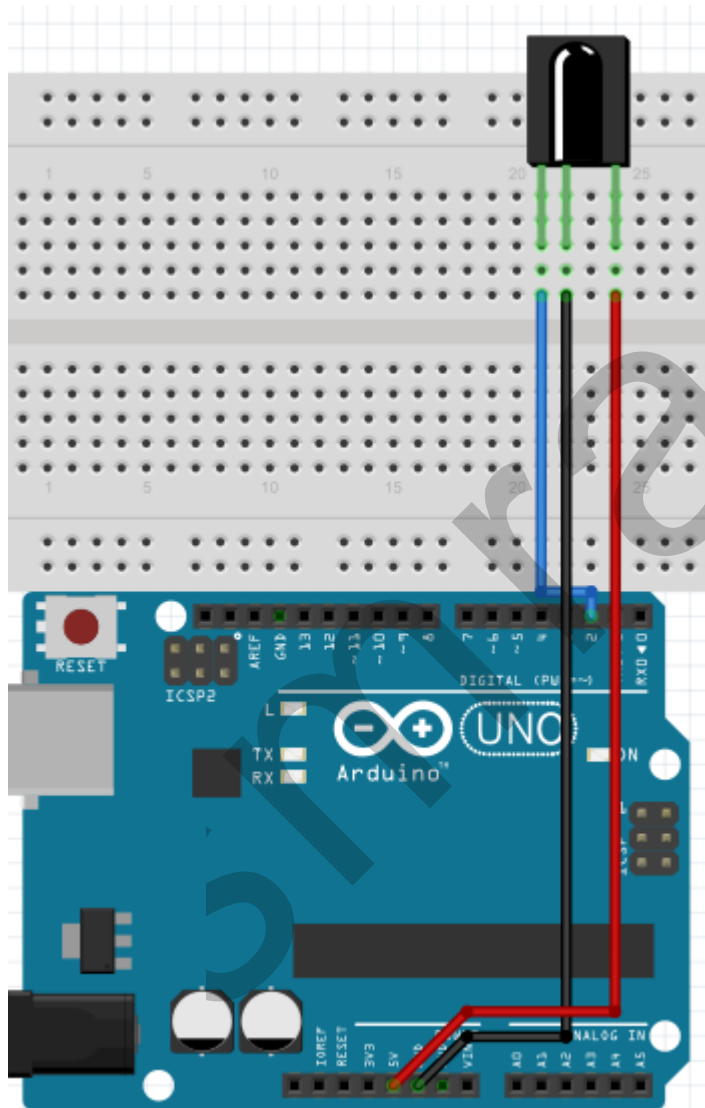
Hardware required

Material diagram	Material name	Number
	IR Remote	1
	IR Receiver	1
	USB Cable	1
	UNO R3	1

V1.0

	Breadboard	1
	Jumper wires	Several

Connection diagram



Note : Please view **Pin definition**.

Connection

UNO R3		IR Receiver
D2	->	OUT
GND	->	GND
+5V	->	VCC

Sample code

Note: sample code under the **Sample code** folder

You need to add the **IRremote** to the Arduino library file directory, otherwise the compiler does not pass. **Please refer to 'How to add library files.docx'.**

```
#include <IRremote.h>
const int irReceiverPin = 2;
IRrecv irrecv(irReceiverPin);
decode_results results;

void setup()
{
  Serial.begin(9600);
  irrecv.enableIRIn();
}
void loop()
{
  if (irrecv.decode(&results))
  {
    Serial.print("IR_Code: ");
    Serial.print(results.value, HEX);
    Serial.print(", Bits: ");
    Serial.println(results.bits);
    irrecv.resume();
  }
  delay(600);
}
/*Tips: Open the serial port monitor, press the button of the remote control, you will see
that each button will have the corresponding coding. Because each button has a specific
code, so you can write a function, specify the function of the button, to achieve a variety
of complex experiments, such as infrared control lights, control servo motor, control relay,
etc.
*/
```

Language reference

Null

Application effect

Open the serial port monitor, press the button of the remote control, you will see that each button will have the corresponding coding.