VS1838B Infrared Receiver Module



General Description:

Use this simple IR receiver module for infrared remote control of your next project. With low power consumption and an easy to use package, it mates well with embedded electronics and can be used with common IR remotes. It is a miniaturized receiver for infrared remote control systems with the high speed PIN phototransistor and the full wave band preamplifier.

The PIN diode and preamplifier are assembled on lead frame, the epoxy package is designed as an IR filter. The demodulated output signal can be directly

decoded by a microprocessor. The VS1838B is compatible with all common IR remote control data formats and is the standard IR remote control receiver series, supporting all major transmission codes.

Specifications:

- On-board VS1838B high sensitivity infrared receiving head
- Support 3-5 v input voltage
- On-board RC filter, work more stable
- Output matching TTL, CMOS level digital signal
- PCB size: 21.2 (mm) x9.3 (mm)



Pin Configuration:

- 1. VCC
- 2. Output
- 3. Ground

Schematic Diagram:



How to Test:

- 1. Connect your Arduino microcontroller to the computer.
- 2. Connect the VCC pin of your module to the to the 5V pin of your Arduino.
- 3. Connect the GND pin of your module to the GND pin of your Arduino.
- 4. Connect the Output pin of your module to the A0 pin of you Arduino.
- 5. Enter this program to your Arduino Integrated Development Environment (IDE):

boolean STATUS = false;

```
void setup()
{
   Serial.begin(9600);
}
void loop()
{
   while (digitalRead(A0))
   {
     if (STATUS) Serial.println("ON");
     else Serial.println("OFF");
     delay(100);
   }
```

STATUS = !STATUS;

delay(500);

}

- 6. Click the Upload Button
- 7. Lastly, click the Serial Monitor button.

Testing Results:

When the remote control is not press:



<u> </u>	Send	
OFF		
OFF		Ē
OFF		
OFF		Ξ
OFF		
OFF		
Autoscroll	No line ending 9600 baud	

When the remote control is pressed:



com4			
		Send	
ON			*
ON			
ON			4
V Autoscroll	No line ending 🚽	9600 baud	-