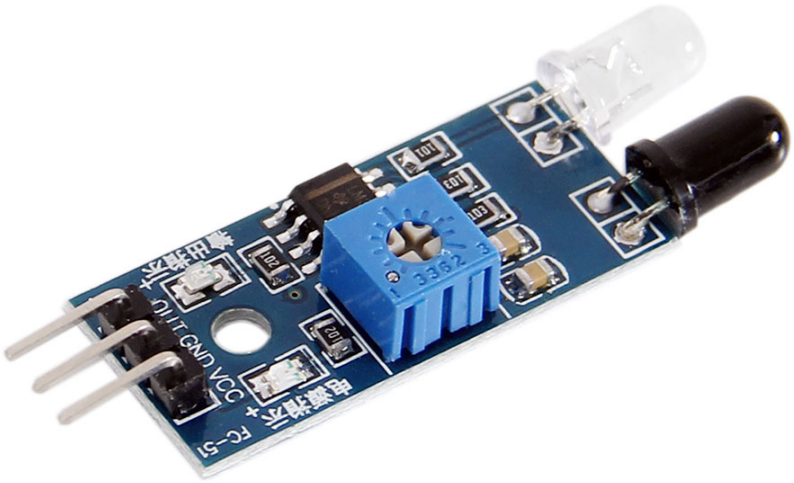
Infrared Obstacle Avoidance Sensor For Arduino Smart Car

Model: C7A4



Description:

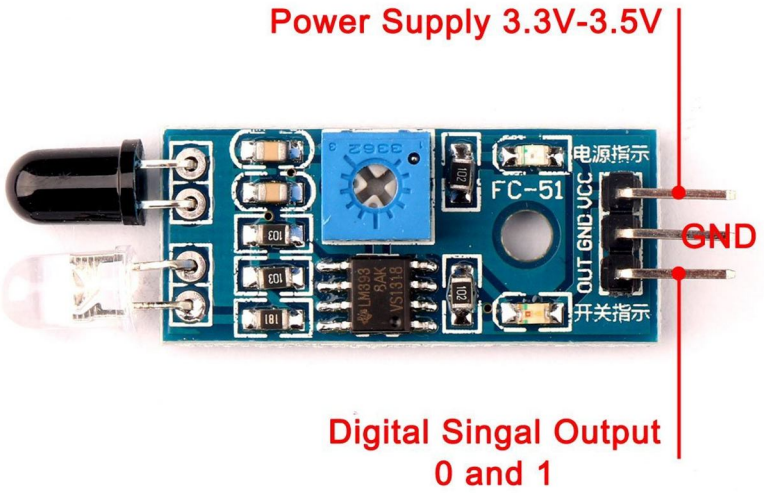
The sensor module light is adaptable to the environment, it has a pair of infrared transmitting and receiving tube, tube infrared emit a certain frequency, when detecting direction meet with obstacles (reflecting surface), reflected infrared receiving tube, after the comparator circuit processing, green indicator will light up, at the same time signal output interface to output digital signal (a low level signal), can be through the potentiometer knob adjust the detection distance, effective distance range 2 ~ 30cm, working voltage is 3.3V to 5V. The sensor detection range can be through the potentiometer to adjust and have small interference, easy to assemble, easy to use, etc, can be widely used in robot obstacle avoidance, obstacle avoidance car, line count, and black and white line tracking and so on many occasions.

Module Parameters:

1. When the module detects an obstacle in front of the signal, the green indicator light on the board level , while low-level continuous output signal OUT port , the module detects the distance 2 ~ 30cm, detection angle 35 °, the distance can detect potential is adjusted clockwise adjustment potentiometer to detect the distance increases ; counterclockwise to adjust the potentiometer to reduce the detection distance .
2. Active infrared sensors to detect the reflected, thus the shape of the reflectivity of the target detection range is the key. The minimum detection distance is black, white maximum; the distance of small objects is short, vice versa.
3. The output port OUT sensor module can be directly connected to the microcontroller IO port, you can directly drive a 5V relay, Connection: VCC-VCC; GND-GND; OUT-IO
4 .Using the comparator LM393, stable.
5. Able to be used for 3-5V DC power supply modules; when the power is turned on, the red power indicator light.
6. With the screw holes of 3mm, simple fixed installation.
7. Board Size: 3.1cm * 1.5cm
8. Each module shipments comparing the threshold voltage has been right adjusted by the potentiometer. Without exceptional circumstances, do not arbitrarily adjust the potentiometer.

Interface Description (3-wire):

- 1. VCC: external 3.3V-5V voltage (can be directly connected to 5v MCU and 3.3v MCU)
- 2. GND: GND External
- 3. OUT: small board digital output interfaces (0 and 1)



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