

33025-MP

4 Channel Reflective Obstacle Detector

Quad Reflective Obstacle Sensor

Each of the 4 sensor boards has a I/R LED and a I/R detecting photo transistor. Sensor boards connect to the control board containing a LM339 voltage comparator IC and trigger level adjustment pots. The detection distance is a function of target reflectivity and shape. Each circuit has a LED indicator turns on when an object is detected (Output switches LOW). The outputs can be connected directly to microcontroller ports or add a driver transistors to the output, & it could switch a relay or other loads exceeding 20mA.

Power: 3.3V to 5V

Supply Current < 1mA (LEDs off)

LEDs: 4: 1 Red for each channel for Detection

Output: Digital, TTL Current sink 20mA, 10K Pull-up

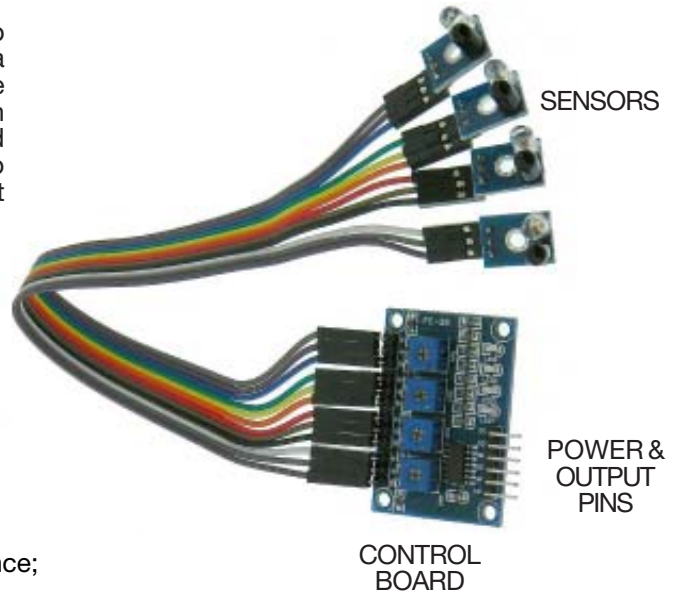
Connections: .1in. Pitch Headers.

Includes: 4 Sensor Boards, 1 Control Board, 7in. Jumpers

Control: L: 2-3/4" W: 1-3/16" H: 3/8"

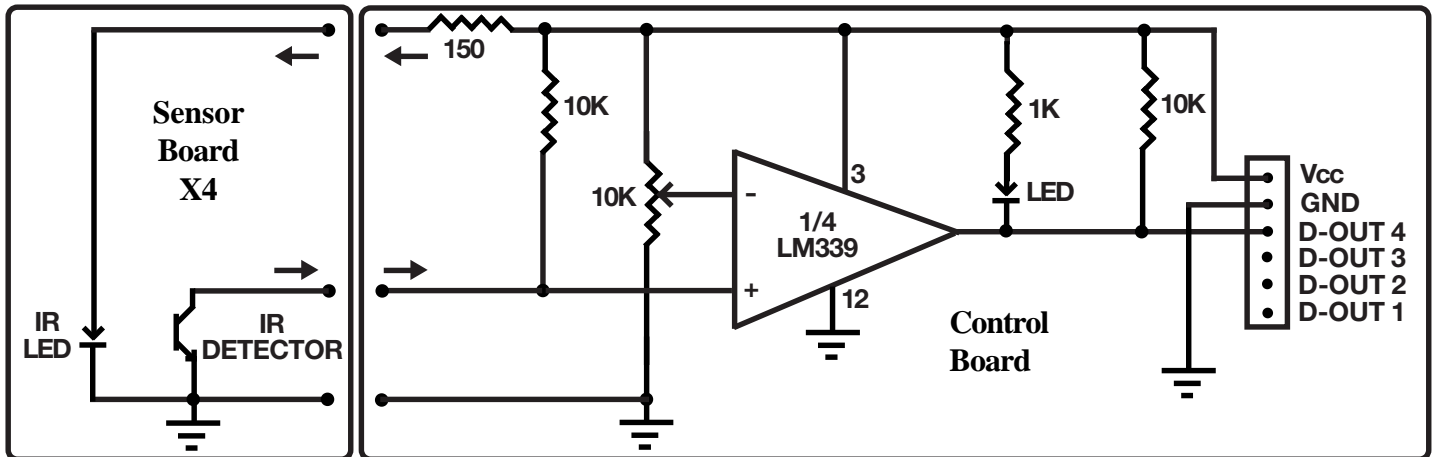
Sensors: L: 5/8" W: 7/16" H: 5/8"

Ship WT: .06



Operation

- 1: Adjust potentiometer clockwise to increase the detection distance; counterclockwise to reduce the detection distance.
- 2: The detection distance is a function of target reflectivity and shape.
Dark objects: Minimum detection range
White objects: Maximum detection range
Small objects: Close detection range. Large objects: Farther detection range
- 3: Module has the threshold voltage set for general use.
Only adjust if needed



1 Circuit Shown
Repeated 4 Times

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