

35770-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

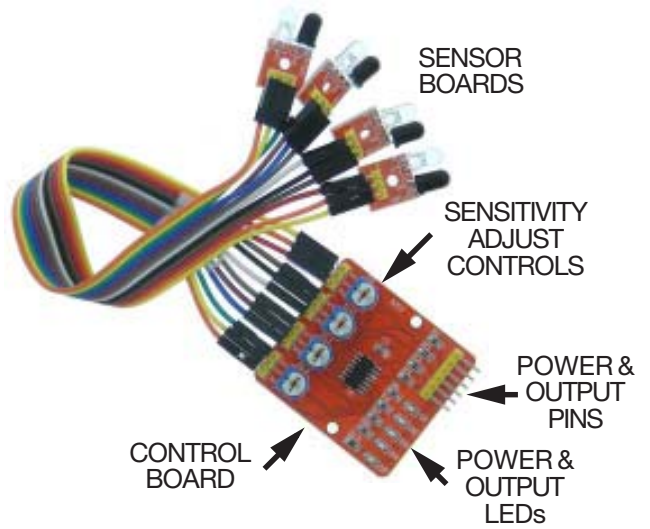
Output: Digital, TTL Current sink 20mA, 10K Pull-up

Connections: .1in. Pitch Headers.

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

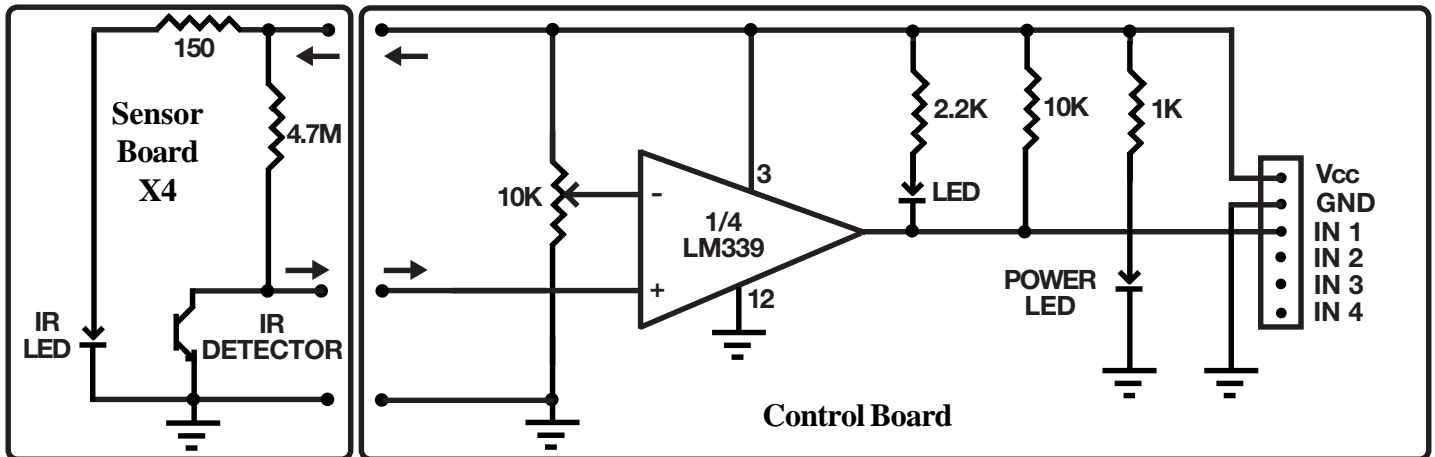
Control: L: 1-3/4" W: 1-5/8" H: 1/2" O/A

Sensors: L: 1" O/A W: 1/2" O/A H: 5/16" Ship WT: .04



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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