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
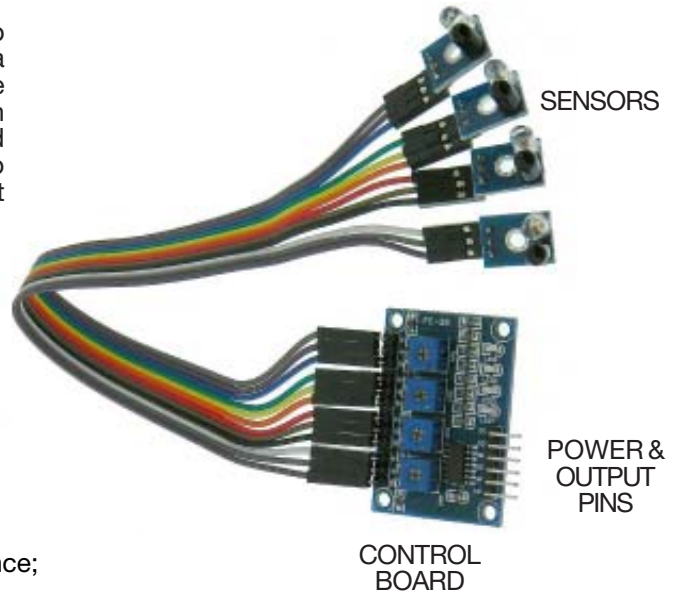Output: Digital, TTL Current sink 20mA, 10K Pull-up
Connections: .1in. Pitch Headers.
Includes: 4 Sensor Boards, 1Control Board, 7in. Jumpers
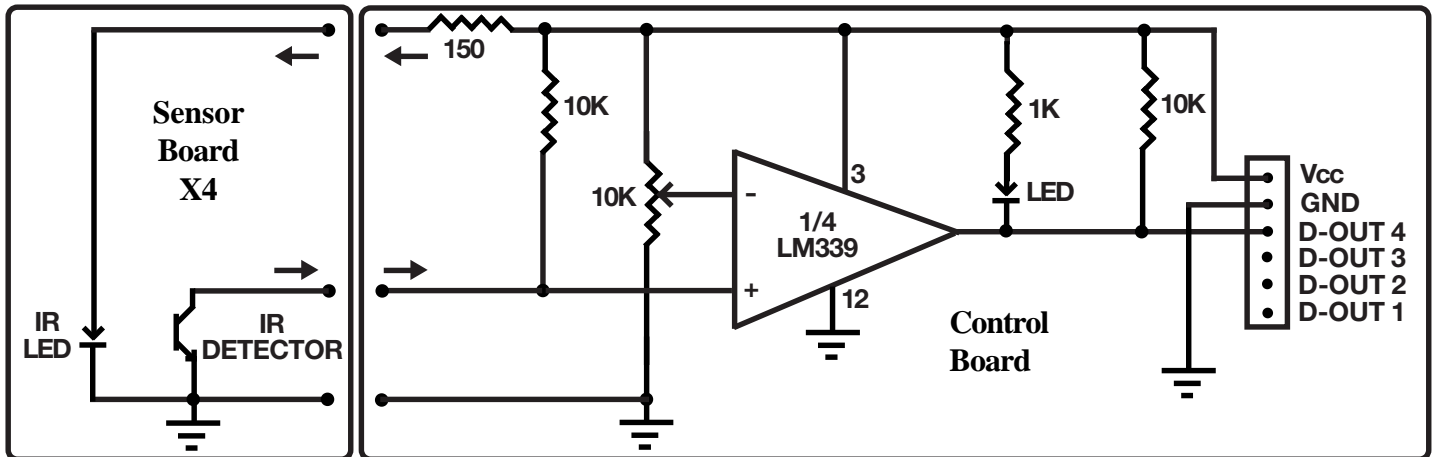**Control: L:** 2-3/4"   **W:** 1-3/16"   **H:** 3/8"
Sensors: L: 5/8"   **W:** 7/16"   **H:**5/8"   **Ship WT:** .06

SENSORS

POWER & OUTPUT PINS

CONTROL BOARD

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**