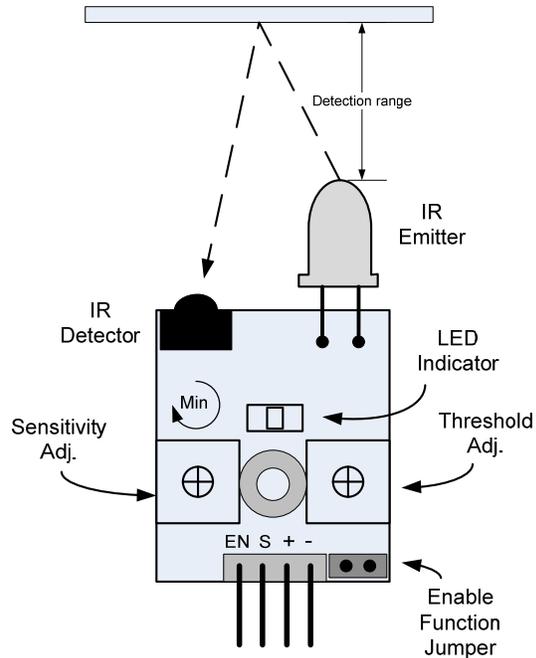


Gobotics Specification Sheet	Description: IR Obstacle Detection Sensor	
	Gobotics #:	008-01-SB02

GENERAL DESCRIPTION

The IR Obstacle Detection sensor from RobotBase is specifically designed for robust indoor operation. The sensor module employs a modulated LED light source and a tuned IR receiver to detect if the radiated IR light is reflected back to the sensor. When this happens, the on board LED lights and the output signal S is set to logic low.

The Module employs two adjustment potentiometers. One adjustment controls the IR receiver sensitivity. By adjusting the sensor more sensitive, a longer detection distance is available, but more false detections may occur. On the other, reducing detection sensitivity will result in less false detection, but less range. A threshold adjustment is used to provide the point at which the sensor determines an obstacle, and to provide adequate range of detection for any given sensitivity setting.



The module may be driven using a three wire interface, or a four wire interface. For the three wire interface, all that is needed is +5VDC, ground and a signal output line. In this case, the Enable Function jumper is required. In four wire mode, the jumper is removed, a fourth signal ENABLE, is available. If the enable line is held low, the sensor is enabled, and the light source is activated. When the enable input is held high, the sensor output is placed into a power saving state.

DETAILED SPECIFICATIONS

Rated Input Voltage (+) : 3.5V to 5.0 VDC
Rated Input current : 15ma typical during enabled operation.
Detection distance: 6 to 8 inches typical
Signal Output (S): High is no obstacle, low if obstacle detected.
Module Enable (EN): Low = enabled, High = disabled. (NOTE: remove jumper if using EN signal).

<p style="font-size: small; margin-top: 5px;">1000 N. GreenValley Pkwy, #440-348 Henderson, NV, USA PHONE: (702) 798-5355 FAX: (702) 798-5354</p>		DRAWN BY: 09-25-2012	CHECKED BY EO	APPROVED BY Eric
	REV A	CHANGE NOTICE	DRAWING NO 008-01-SB02- DWG	SHEET 1 OF 2

Mechanical Dimensions:

