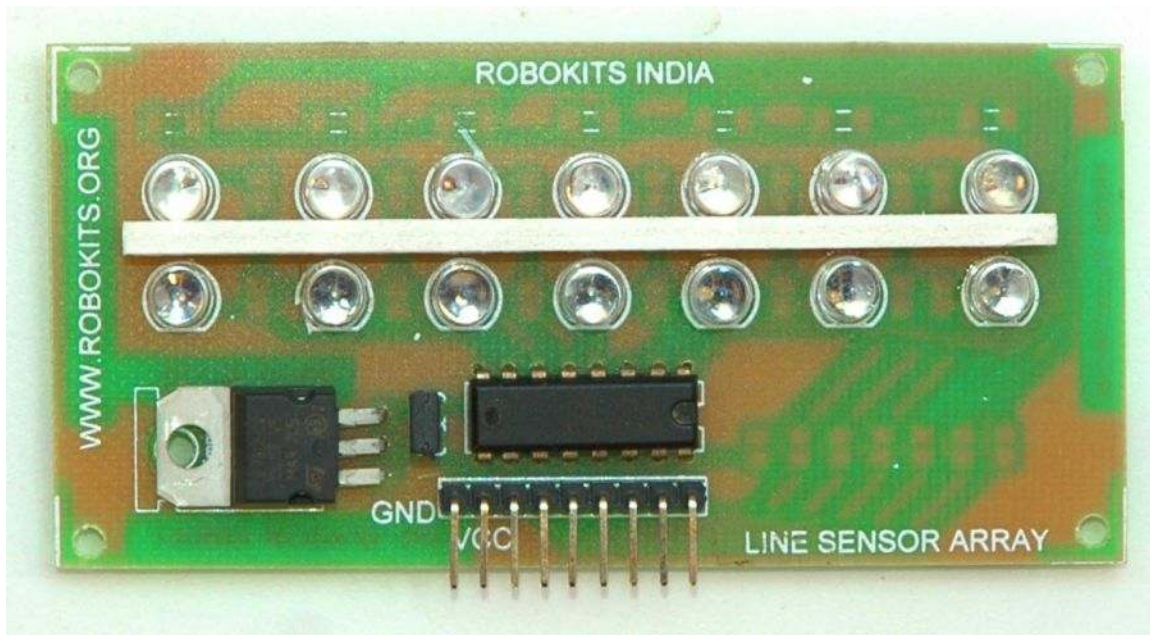




Line Sensor Array



Users Manual

Robokits India

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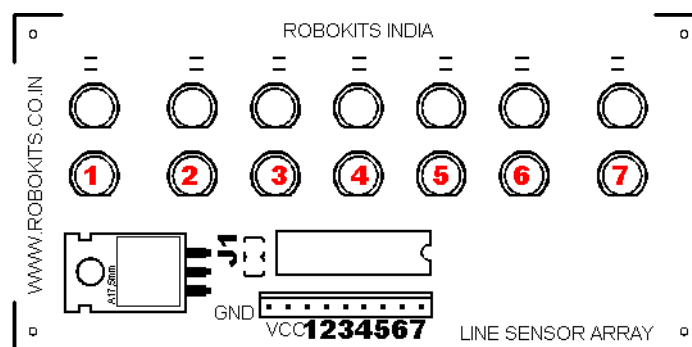
Thank you for purchasing Line Sensor Array. This unit has been carefully engineered and tested to provide superior performance. This document covers the features and operation of Line Sensor Array.

This is an easy-to-use module with 7 reflective sensors. It can be easily used with a microcontroller as it gives TTL compatible outputs. The output pins can be directly connected to microcontroller pins which give active low output when white line is detected. The main use of this module is for very fast line following.

Features

- **Simple interface (VCC, GND, 7 Outputs)**
- **Open drain pulled up TTL compatible outputs**
- **On Board Regulator**
- **Operating voltage from 5V - 20 V**
- **7 Sensor in a array form**
- **Indicator LEDs on top side for current status of sensor**
- **Less sensitive to external ambient light**
- **Can Detect colour difference**

Board Top Layout





Jumper Function

- Jumper J1 can be used to select input voltage.
- If you are giving input of +5V keep the jumper closed.
- If you want to give more than 5V remove the jumper. This will enable the onboard 5V regulator.
- The board requires about 300ma of current. So if your 5V supply is not enough to drive both your microcontroller board and the sensor board you can directly plug in your +VE battery supply to VCC pin
- Make sure you are not giving more than 5V to VCC pin when the jumper is closed. This may damage the board permanently.

Interface

- Pin 1 is Ground. Do not forget to short this pin with your microcontroller board ground grid.
- Pin 2 is VCC. You can supply either +5V directly from the board or battery voltage. Please read the above section carefully before giving the voltage.
- Pin 3-9 are output pins. These pins provide active low outputs. This means it will provide Ground to microcontroller pins when the sensor is sensing light color.

Service and Support

Service and support for this product are available from Robokits India. The Robokits Web site (<http://www.robokits.co.in>) maintains current contact information for all Robokits products.

Limitations and Warrantees

The Line sensor array is intended for personal experimental and amusement use and in no case should be used where the health or safety of persons may depend on its proper operation. Robokits provides no warrantee of suitability or performance for any purpose for the product. Use of the product software and or hardware is with the understanding that any outcome whatsoever is at the users own risk. Robokits sole guarantee is that the software and hardware perform in compliance with this document at the time it was shipped to the best of our ability given reasonable care in manufacture and testing. All products are tested for their best performance before shipping, and no warranty or guarantee is provided on any of them. Of course the support is available on all of them for no cost.

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