

ADVANCED LINE FOLLOWING BOT

It is called the advanced line following bot because of its advanced actions i.e. the way it works when it gets an intersection on its path and moreover it does not get confused when the path is curved unlike other simple line followers and it can also take sharp turns. We can control its speed.

The equipment required for making of the bot are as follows:

- Chasis
- Arduino UNO
- L298N motor driver
- Side shaft BO motors(150 RPM)
- Normal wheels
- Castor wheel
- IR module
- 12V battery
- Jumper wires

Its working can be explained as, The IR sensors attached in front of the BOT, distinguishes two i.e. BLACK & WHITE. The IR sensors consists of a photo diode and a IR led. When the BOT moves to white part the IR led glows and reflects the light which is absorbed by the photo diode and a signal i.e. 0 is sent to the system. Due to the internal inverter (NOT gate) in the system the input signal reverses and the output out-stands to be 1. As for a left turn the output from the five different IR's is 111 or 1111 OR in case of a right turn it is 11100 or 11110.

It has vivid range of real life application, starting from industries and factories to household purpose as well it can be of great use for carrying

goods by assigning it a definite path in factories and in houses also one can use it as a sweeper or cleaner or carry household goods through a definite path.

By

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