ABSTRACT

VACUUM CLEANER ROBOT WITH TWO FLOOR SCAN MOTION MODES

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A vacuum cleaner is a modern device used to clean floors. There are two types of vacuum cleaners, manual and automatic. This research uses an automatic vacuum cleaner as the research object. Vacuum cleaners available on the market have random movement patterns, thus affecting the effectiveness of floor cleaning. Researchers want to design a robot vacuum cleaner with two floor scanning motion modes, namely the "n" scan mode to be able to compare the results of floor cleaning effectiveness with the "random" motion mode. Vacuum Cleaner Robot uses an Arduino Uno microcontroller, LDR Sensor, Laser, 18650 Battery, DC Motor, Buzzer and L298N Module. The development method used refers to prototyping. Based on the results of the tests carried out, it shows that the "n" motion mode produces suction effectiveness of 81% and the "random" motion mode produces suction effectiveness of 54%.

Keyword ***:*** *Vacuum Cleaner*

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