## **IJARSCT**



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 5, June 2023

# **Pneumatic Braking with Soft Bumper**

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**Abstract:** The aim of the project is to reduce the damaged caused to vehicle during a sudden accident or collision between vehicles. The system consists of pneumatic bumper system, control unit, IR transmitter and receiver circuit. IR sensors are used to detect objects in front of the vehicle, forward signal is given to the control unit for bumper activation system. Bumper will only get activated when the vehicle speed is between the range 40-50 km per hour. In conclusion this project produces smooth application of the low-cost automation for safety.

Keywords: Pneumatic Bumper, IR Transmitter, Arduino, Control Unit

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DOI: 10.48175/IJARSCT-11602



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Impact Factor: 7.301 Volume 3, Issue 5, June 2023

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DOI: 10.48175/IJARSCT-11602

