

Design of a digital compass control circuit using electronic GYRO

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Abstract: In practical applications, ensuring accurate vehicle orientation is an important issue. This topic focuses on the design and implementation of a digital compass control system based on an electronic GYRO sensor. The objective of the research is to build an effective solution to enhance vehicle orientation accuracy by integrating GYRO with modern signal processing technology. The research method includes both a theoretical phase on the operating characteristics of GYRO and an experimental phase on the implementation of the digital compass control system. The expected outcome of the topic is an accurate orientation system that can be widely applied in fields such as autonomous vehicles, GPS mobile devices, and navigators. This topic contributes to the development of positioning and navigation technology, while also opening up many opportunities for further research on GYRO sensor applications.

Keywords: Electronic GYRO, digital compass, orientation control