Design and Implementation of the Monitoring System for the Vehicle Dual Braking System Testbench

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ABSTRACT

With the vigorous progress of vehicle technology industry, people pay more attention on the road safety nowadays. Based on the braking system directly relating to the safety of drivers, the relative studies of its dual braking system have comparatively brought up the importance as well. The purpose of this study is to explore the setting of simulating platform of dual braking system as well as the functional response, and to test the hydraulic source of the dual braking system. Its aim is to utilize the function of braking system in designing a braking simulating platform, design a dynamic real time monitoring interface according to the platform built with LabVIEW graphic software, and then discuss the dual braking system of its functional response. LabVIEW graphical control software program the vehicle dual braking system for moving response. And brake simulation test platform, which the simulation of the vehicle walking, each sensor's signal source, and control. The test results indicated that, vehicle dual braking systems program monitoring, for the dynamic response can immediately follow the changes in the brake hydraulic response and actuation.

Keywords : dual braking system、LabVIEW

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