Recently, the functions and capabilities of on-board vehicle devices have, in response to customers' needs, become multifunctional leading to an increase in man-hour for the development and assessment of "On-board display control systems".

In order to ensure product quality within a limited timeframe, it is essential to minimize unproductive man-hour related to system evaluation and to maximize the efficiency of the evaluation process.

With the goal of creating a more efficient system evaluation process, the authors have developed an "Automatic evaluation tool for on-board display control systems" that can replace human beings with automatic functions in the evaluation of on-board display control systems. In this paper, we present the operation results of this on-board system evaluation tool for the 2005 models.

Abstract

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Development/Operation of an Automatic Evaluation Tool for On-Board Display Control Systems
Development/Operation of an Automatic Evaluation Tool for On-Board Display Control Systems

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2.1 Definition of System Test

(A) Perform an evaluation with a heightened error detection ratio
(B) Minimize unproductive man-hours related to system evaluation

2.2 Ensuring on-board display control system quality
Development/Operation of an Automatic Evaluation Tool for On-Board Display Control Systems

3.1 Structure

3.2 Functions

(1) Automatic operation

- Touch switch operation
- Panel switch operation
- On/Off of vehicle signal
- Use of a testing device to create a test pattern for power fluctuation.

(2) Automatic judgment

(2-1) Image data

(2-2) Voice data

(3) Other functions

- Evaluation report creation
- E-mail notification of error
4.1 Implementation of effective evaluation

Major evaluation items

- Operability test
- Actual in-vehicle evaluation

4.2 Reducing man-hours for acceptance test evaluation

4.3 Reducing man-hours for the error reproduction test

4.4 Secondary effects: Preventing the recurrence of identical errors
4.5 Overview of operational effectiveness

Conclusion

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