

A Visibility Check Method for Obstruction Warning Signals by Cab-mounted Camera

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An obstruction warning signal is important signalling equipment used at a level crossing. However, it is not possible to check the visibility of such equipment during the train operating hours, because this would require interruption of providing traffic service. In this paper, we propose a method that employs near infrared LEDs, and can check the visibility of obstruction warning signals in the business hours. It has been proven that the method which we have developed, namely an image processing method using a near infrared camera and a pan-tilt camera by feedback control installed on a vehicle, can track and detect specific blinking of signal correctly. Finally, we report the results of functional field tests.