## **ABSTRACT**

The needs of awareness, especially when driving a motorcycle is now increasing. This is because the vehicle is not in line with the growth capacity of the road causing traffic density is increasing more and more. One of the vigilance when traffic was congested is the rider must maintain preparedness to control the motorcycle. Therefore, we need a viewer system which allows the rider to constantly monitor the vehicle information but still keep his eyes focused on the road. The viewer head-up display system is designed using the principle of reflection on the object, related to the LCD which is reflected in the visor will produce output in the form of a semi-transparent display. This viewer system displays general information on the motorcycle such as signal indicators, speed, rpm and fuel gauge.

The system can be integrated with the viewer system of motorcycles by using Bluetooth to display information about the turn signal, rpm, speed, and fuel gauge well, in which the success rate of the display system to properly represent information is 100% according to the input data received by the system, and the average time which is required to process the data of display system is 0.14325 seconds. the implemented head up display system obtains good response with rating of 3.866667.

**Key:** head up display, turn signal, speed, traffic accidents.