

***Kata Kunci : Bluetooth 2.1, EDR, Interphone, Headset***

## **ABSTRACT**

Conversation between two or more people usually can be a saturate deterrent when doing a job in a very long time. In riding a motorcycle for example, sometimes a lot of people who like to communicate but do not pay attention to the situation around. Communicate with friends or anyone even received a phone while driving is actually not very good because it can disrupt concentration.

The final project using Bluetooth 2.1 connection as the primary device for receiving telephone and as Interphone (intercom). Where is the bluetooth module as a DAC (Digital to Analog Converter), ADC (Analog to Digital Converter) and the antenna as a bluetooth transmitter and receiver signal. Input of the analog signal from the microphone will be processed by the ADC, while the output of the processed digital signal from DAC will be converted into voice through the speakers. The voltage source from the battery is processed in the output of 3.3VDC regulator where required by the module. In this final project also uses LEDs and switches. LED is used as a sign that the module is in the process, then the switch is used as a control volume and to turn on or turn off the module. The switch can also be used to receive calls directly.

The output of this final project work is a device that can connected to a mobile phone that has Bluetooth 2.1 connectivity for headsets but input sound from microphone was not clear and devices that serve as an intercom between rider and pillion and tools that can help motorcyclists to receive or make calls to cellular phones. The frequency from this device is between 20Hz to 20kHz

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