ABSTRACK

An ultrasonic sensor is a device that can detect the distance and angle from the target by emitting electromagnetic waves to the target, then translating the reflected signal back from the target. Many kinds of radar applications for example in the military and police, and many more. On this occasion, the experiment was used to help the performance of the TNI in protecting the border areas of the Republic of Indonesia from various threats such as the illegal entry of foreign countries. This research makes a radar sensor ultrasonic sensor as a detecting object distance, servo motor as a determinant of object angle, processing application as a measurement obtained by the system will be processed by processing software and displayed on the monitor, buzzer as a sound source when the sensor detects the movement of objects, SMS gateway as notification via SMS to the destination number and Arduino Uno as input and output of commands given to the hardware to be used. Measurement data obtained with a minimum distance of 3 CM and a maximum of 400 CM.

Keywords: *Arduino Uno, Application Processing, Buzzer, SMS Gateway*