

ABSTRACT

As many as 89% of Indonesian citizens use television as a home entertainment media. To access television broadcasts, an antenna is needed to transmit signals into images on the TV. People usually place the TV antenna on the roof of their houses to obtain a good signal. The antenna's position on the rooftop can change at any time due to natural factors such as strong winds and rain. When the antenna's position changes, the signal received by the antenna also changes, causing disturbances in TV broadcast quality. Adjusting the antenna's position back requires extra effort because it is located on the rooftop.

In this research, a solution is developed to address the above issues. The solution to be developed is a device that can control the rotation of the TV antenna based on Android technology. This device can adjust the antenna's position when it changes and return it to the optimal position. The system will consist of a developed motor driver that can be connected to the internet and an Android smartphone as the control medium for the motor.

The testing of this system is conducted by attaching a TV antenna to the motor driver and controlling it through an Android smartphone. The testing is considered successful when the motor driver can be controlled through the Android smartphone and can adjust the antenna's position, resulting in improved TV broadcast quality.