ABSTRACT

Information becomes a very important part of human life today and be one of the needs that can not be negotiable. Along with the development of technology, demands the fulfillment of the need for greater information. Ignoring the limitations of place to access information. Especially in the sea like a ship journey. Ship that is on the way the sea, only direct access from the satellite and difficult to get access to information due to limited space. Needed a tool that can track the whereabouts of the satellite continuously.

To meet these problems required an automatic finder in place that mobility will continue to change, such as on ships. Needed a tool that can continue to work with the movement of the position. With these tools the antenna will move in the right position to a point that we want, namely the satellite. Used ATMEGA microcontroller technology. This technology will be integrated in the drive combined with a second antenna and GPS module servo motor to drive the transmitter antenna to the position we want.

The output of this final project is an automatic finder to direct the antenna with deviation of elevation angle is 5.408630667 degrees and azimuth angle deviation of 2.423567 degrees. With the reliability of GPS is pretty good at the outdoor with capturing latitude and longitude after 37 meters.

Keywords: automatic finder, longitude, latitude, microcontroller ATMega 8535, GPS, motor servo