

ABSTRACT

In the project, RF guided missile prototype will be built. The most crucial part of RF guided system: parameters and ideals of RF navigational system. Thus, the core technology that involved in the navigational part. RSSI features.

The guided missile prototype will be replaced by robot. It is inadequate to build a missile models based on materials and technology involved. Therefore, mobile robot is much more effective for building in this project.

First, by combining the RSSI-based technology into robotics, the RF guided robot will act anonymous and detecting the transmitter beacon automatically. PIC16F877A microcontroller will be the brain of the system, it will collect RSSI values and analyzed into details. Move on, there will be a servo drive circuit connected to the microcontroller. The drive circuit will executing two servo motors whatever its rotate 360 degree or forwarding.

After completion of the project, it will conduct several testing sections in order to measurement the results and also determine the system stability. Finally, the essential goal for the project is to achieve successful RF navigation implementation based on RSSI technology.