ABSTRACT

One function of the SAR team is looking for and rescue victims of disasters or accidents at the disaster site. The search process is based on information and hints and traces - traces of the victim. Trail - this trail should be recorded and given a description of the time, and location of the discovery of these traces. In remote areas, the location is determined based on longitude and latitude coordinates of the world. For the purposes of coordination among relief teams we need a mapping and coordination center in helping the rescue process.

GPS is a tool that can map the coordinates of the earth's surface. This tool is often used in a variety of navigational tools because of its ability in terms of mapping that can be used for recording the coordinates for the surveyors of the rescue teams.

By utilizing GPS technology, designed a microcontroller based handheld ATMega162 to record short notes that contain information, coordinates, and time will be found in locations that will be stored in EEPROM memory. Note will be entered using the keypad and display on the lcd which can then be stored into the EEPROM memory with time and location coordinates and data can be distributed to other users with the RF module with a maximum distance of 390 meters on the LOS in order to inform the incident and also the data stored in memory will can be transferred to the PC via RF communication transceivers to be used as a database.

Keywords: GPS, serial, coordinate, ATMega162, surveyor, RF module, memory, handheld