REMOTE METAL DETECTION SYSTEM

Prepared by: Wong Khoon Yung

ABSTRACT

Nowadays, metal detector is widely used ranging from food industry to security and military purpose. Metal detector is usually use in dangerous zone such as the area full of landmine or toxic. Because of this, remote metal detection system is build. This system uses a remote control to control the movement of the vehicle wirelessly. The detection data is then sent back to the remote control for further analysis. The remote unit must have a very robust design because the working environment is usually in open field.

The main objective of this project is to design a remote metal detection system which is use to detect metal underground. The vehicle will control by a remote control unit wirelessly. When metal is detected, the data will be sent back to the computer wirelessly and trigger a buzzer. The computer will equip with a graphical user interface to analyze the data. The operating range of the remote control and the vehicle is about 100 meter line of sight.

This project is carried out successfully and meets the objectives of the project. Each of the subsystems is functioning well and has reached it maximum efficiency. Besides, it shows no problem when combine all the subsystem together which means that the subsystems can works with each other to achieve the main objective of this project.