

Under Ground Fault Detection Using Op-amp

Abstract

Presently most of the electric cables of MSEB are underground. It is very difficult to find out fault and the location of fault. If we don't know the location of fault, it is very difficult to repair it. This project is solution for the problem. In this project we use opamp to sense the voltage variation when fault is occur. We know that the length of cable offer certain resistance. By measuring the resistance and voltage drop across it for normal and faulty condition, we get threshold value. We use opamp as a comparator and setting threshold value as measured previously, we can identify the fault. This fault can be indicated by LED or on LCD connected to Arduino.

Block Diagram:

