

Abstract

Mohamed Saad Zaghloul

Computerized Gate control and Identification System

This paper is a practical design and implementation of an electronic Computerized Gate control and Identification System. It is computer-based Identification System can be used in any types of gates, not only for control but also for identification. Generally in telecommunications, identification, friend foe (IFF) is an identification system designed for command and control. It enables military and national (civilian-located ATC) interrogation systems to identify aircraft, vehicles forces as friendly and to determine their bearing and range from the interrogator. Our designed system can operate as stand alone interfaced with a complete control system for the protecting, monitoring, alarm, guard etc. The system can control and display information of incoming at gate and allow certain preset privilege to each one, for a group of them. The designed system use control key board using a remote control and the system respond to the input from the gate comer input by open not the gate and give certain audio output predetermined for each expected comer, by this way the people inside the building as example the observers will be able to recognize and distinguish the incoming person by the gate. The designed system can prevent the comer to the gate from access unless the right store code is entered, also it can let the comer access only for certain specific previously determined time, prevent at certain conditions stop completely in case of danger. The system is powered by 220V Ac supply available in all building, and also can operate by 12V dc battery. Further, it was demonstrated that the program is used in actual work for the system to the microcontroller type16F84A. The software is preferred for design using software PIC Basic for microcontroller. This Program is a window based Software and friendly user. To enhance the system, different techniques can be employed such as camera day night, passive infrared detector, flex pressure sensor, the output from enhanced module is taken via USB port for monitoring purpose and through a relay used as one of the controls to the microcontroller type 16F84A which will result in the required action.