H.T.I.

HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING COURSE

DIPLOMA PROJECT

DEVELOPMENT OF AN ALARM SYSTEM

E/1026

PANAYI STELIOS

1996

DEVELOPMENT OF AN ALARM SYSTEM

by

PANAYI STELIOS

Project report
submitted to

the department of electrical engineering
of the Higher Technical Institute
Nicosia - Cyprus

in partial fulfilment of the requirements
for the diploma of

TECHNICAL ENGINEERING

in

ELECTRICAL ENGINEERING

JUNE 1996

HIGHER TECHNICAL
PROJECT NO.
2562

Dedicated to
my family
and friends

ACKNOWLEDGEMENTS

First,I would like to thank all H.T.I electrical department teachers for their understanding,and patient during the three years of my study.I would also like to extend my sincere appreciation to Mr S.Hadjioannou,my supervisor,for his guidance during the design,construction and testing of this project.

Finally,I Would like to thank my family for their help during this project

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Project number: E.1026

Title :Development of an ALARM SYSTEM Interface to an IBM PC

Student :Stelios Panayi

Supervisor :Mr S Hadjioannou

ABSTRACT

The objectives of this project are:

1.To design, construct and test an interface card for an IBM PC.

2.To design, construct and test a sensor interface circuit for the above card.

3. To develop the appropriate software so that the information from the sensor is displayed on the screen of the PC.

The sensor interface circuit can accept only the sensor which is used for the purpose of this project, but with a small modification to this circuit and to the software it can accept all kinds of sensors.

The interface card developed for this project can be used for many other applications, and improvements for this project.

The software developed offers a friendly environment to the user:reading of the sensor, self test,massages on the screen and control of the buzzers.

INTRODUCTION

As modern society gets more and more complex and industrialized, the problem concerning safety in the industry are in our days more than ever present. Thatswhy every living industry is seeking to find a way to overcome the problem of safety against thief and internal vandalism.

For providing such safety services a wide range of modern analog and digital devices has been developed in the field of electronic engineering

Seeking for possible solutions needed to provide the necessary safety of modern industries and manufacturing plants a wide range of alarm system has been developed today.

This project is focused on the design, developing and testing of an alarm system which is compatible to modern PC's for better operation concerning speed response, optimum control and reliability under a 24 hours operation.