# HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

### **DIPLOMA PROJECT**

DEVELOPMENTS OF A PC INTERFACED TESTING/FAULT FINDING UNIT OF A RADIO RECEIVER SYSTEM

by

**ARGYRIDES CHRISTODOULOS (E/947)** 

**JUNE 1995** 

# HIGHER TECHNICAL INSTITUTE

# **ELECTRICAL ENGINEERING COURSE**

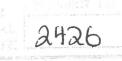
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ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

1994/95

Project Number, E. 974

### Title:

Development of a. PC Interfaced Testing/Fault Finding Unit of a Radio Receiver System

#### Objectives:

- To study different types of PC Interfaced Testing/Fault Finding Systems.
- To select, design, develop, construct, test and calibrate a PC Interfaced Testing/Fault finding unit of a Radio Receiver system.
- 3. To develop the required software for the system.

### Terms and Conditions:

- 1. The following items are suppled:
  - (a) PC computer
  - (b) Super heterodyne Receiver
  - (c) Screen Room

Student : Christodoulos Argyrides

Supervisor : Mr D Lambrianides

External Assessor:

DL/ML

# DEVELOPMENT OF A PC INTERFACED TESTING/FAULT FINDING UNIT OF A RADIO RECEIVER SYSTEM

by

**Argyrides Christodoulos** 

**Project Report** 

Submitted to

the Department of Electrical Engineering

of the Higher Technical Institute

**Nicosia Cyprus** 

in partial fulfilment of the requirements

of the diploma of

IN ELECTRICAL ENGINEERING

**JUNE 1995** 

PROJECT SUPERVISOR: Mr. D. Lambrianides

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# DEVELOPMENT OF A PC INTERFACED TESTING/FAULT FINDING UNIT OF A RADIO RECEIVER UNIT

### **INTRODUCTION**

In our days the computer technology get with a rabid evolution more intelligent and more powerful. The personal computers are getting smaller and faster with larger memory available in it and processing power even powerful.

Today, probably all the searching, storage and controlling work is done with computers, because computers are working smaller amount of time and easier for someone to work on a computer.

In relation to this many companies offers PC's interface cards.

The PCL-711 is an interface card and can used for laboratory work and small time industrial monitoring. It is a quite powerful card with 16 bit digital output.

This project is intended to lay the foundation for the development of a computerized testing and finding fouls system in a radio receiver.

The basic operation of this project is to give to the user the ability to control the radio receiver. Also the user can understand the operation and the faults that a radio receiver can be caused.

With the software the user give a number from 1 to 16 and the output of the PCL-711 with the help of the fault card will caused the faults in the radio. The computer will give a message in the monitor

about the fault that was chosen. The software is developed using Turbo Pascal Language which is a high level language.

The fault circuit indicates with LED's the number of the fault. Faults also can be caused and manually from the fault card.

The project also can used in other controlling systems i.e. 16 machines or any other devices that can be switched ON and OFF.