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ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

MICROPROCESSOR CONTROL FOR A CHICKEN FARM

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BY: MICHALIS YEROUDIS

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SUBMITED BY
MICHAEL YEROUDIS

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INTRODUCTION

Nowadays , in the age of the technology , all is done by electronics means, the automatic feeding for animals couldn't be an exception.

The main purpose of this project is to design, construct and program a controlled feeding unit for chicken farm.

The main advantages of the system it is that has a low cost of production, easy programming and installation and can control up to six chicken feeders.

Also it can control the temperature of the facility constant, about 25°C and regulate the light during the night in the farm.

For better presentation this project is divided into seven chapters as follows:

Chapter 1 : Sensors and controllers such as thermistors, photoresistors, infrared and LED.

Chapter 2 : The INTEL 8051 microcontrollers are explained with their features and requirements. Also it is explained how peripherals like ROM, RAM, programmable peripheral interface (8255A).

Chapter 3 : The block diagram of the project is explained so that the reader can understand the procedure followed for the design of the circuit diagram.

Chapter 4: In this chapter, the design of the circuit diagram is fully explained.

Chapter 5: Various testing and troubleshooting testing and troubleshooting techniques and testing equipment are explained in this chapter.

Chapter 6: This chapter deals with the programming of the controlled display. Also the program of the controlled display is presented with explanations.

Chapter 7: Finally in this chapter some conclusions are derived.