

HIGHER TECHNICAL INSTITUTE

**ELECTRICAL ENGINEERING
DEPARTMENT**

DIPLOMA PROJECT

**“DEVELOPMENT OF A DUAL AXIS
STEPPER MOTOR CONTROLLER
USING THE IBM PC”**

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BY: DEMOSTHENOUS STRATOS

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PROJECT REPORT

“DEVELOPMENT OF A DUAL AXIS STEPPER MOTOR CONTROLLER USING THE IBM PC”

SUBMITTED BY:

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**In partial fulfillment of the requirements for award of
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PREFACE

In today's competitive world computers have invaded into our lives for good. The need for faster and easier methods to control our lives and our work tends to computerized almost everything.

In the near future everything will be probably controlled by microprocessors. Programming languages must offer the user simple and easy to use applications. **Visual Basic 4.0** is one of the above languages; it is the language of today!

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Thank You,

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INTRODUCTION

This project mainly deal with the development of an application program for controlling the **Programmable Stepper Motor Controller (2-axis)** Therefore, throughout this project, before the program listing and its explanation, an overall description of the stepper motors and drives as their characteristics and capabilities is given and discussed.

More analytically, the main body of this project consist of five chapters.

Chapter 1, is an introduction to stepper motors. It explains briefly what is a stepper motor, gives the types and modes of the stepper, gives its applications and finally compares stepper motor with other types of motors showing its advantages as well as its disadvantages.

Chapter 2, deals with and describes stepper motor drives.

Chapter 3, describes the RS-232 serial interfacing used to interface the board and explains in detail how it is done.

Chapter 4, describes the programming language used to create the GUI and explains in detail how the application works.

Chapter 5, refers to the programming language of the board and explains in detail the program developed to control the board.

Finally a small conclusion is provided as well as a set of appendices.