AUTOMATIC MEASUREMENT OF RESONANT SERIES CIRCUIT USING THE THURLBY THANDAR 1906 (TTi1906) MULTIMETER
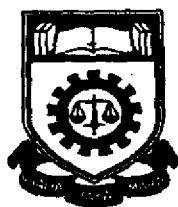
This thesis is presented in partial fulfillment for the award of the
Bachelor in Electrical Engineering (Honors) of
INSTITUT TEKNOLOGI MARA

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APRIL 1998

ACKNOWLEDGEMENT

In The Name of Allah, the Most Beneficient, the Most Merciful.

First and foremost, I wish to give my deepest gratitude and appreciation to Puan Fatimah Ibrahim, for her support, guidance, encouragement, and patience all the way from the beginning till the end of this project.

A special thanks goes to Puan Wahidah Mansor, Encik Ahmad Maliki and Encik Mohd Room, who taught me about QBASIC and Visual Basic program to complete this project. Also thanks to the lab assistants, Encik Rashid for his co-operation.

And last but not least, I wish to give my highest appreciation, gratitude and love to my parents; Haji Mohd Dom Mohd.Amin and

my sisters and brothers and Encik Lokman Yusof, for the financial support and motivation and for the encouragement, patience and prayers, which I enable to finish the project as required.

May God less them all.

Wassalam

ABSTRACT

This thesis describes the automatic measurement of resonant series circuit using the Thurlby Thandar 1906 (TTi1906) Multimeter. The TTi1906 multimeter is interfaced with the personal computer (PC). The communication between the TTi1906 multimeter and the PC are made through the RS232 controller using the serial COM port of the PC [1]. The control software to automate the measurement is written in Qbasic and is presented in window environment by using the Visual Basic program.

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CONTENTS

1.0 BACKGROUND

This project is based on the research work entitled *RS232 control of Thandar Digital Multimeter*. At present, the Faculty of Electrical has embarked on upgrading exercise to adopt more RS232 based instrument. The department has recently obtained twenty set of Thandar Digital multimeter (Model TTi1906) for use in the laboratories. The purpose of the research is to automate measurement process by using the TTi1906 multimeter interfaced with the PC. The RS232 controller is used as connection between the TTi1906 multimeter and the PC at serial COM port of PC [1].

In the research, the control software to automate the measurement of RC circuit is written in QBasic. This project proposed another new application software as the sample experiment to automate the measurement. The laboratory experiment chosen was the Resonant Series Circuit. This experiment is currently done manually by the electrical diploma student in semester four.