# UNIVERSITI TEKNOLOGI MARA KAMPUS BUKIT MERTAJAM MAC 2003

FINAL REPORT OF DIPLOMA PROJECT

FACULTY OF ELECTRICAL ENGINEERING



ELECTRONIC TOUCH ORGAN

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Electronic Touch Organ

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Unforgettable, to our family and friends who gave us moral support, thank you very much! We appreciate it.

Lastly, our hope is, we can create and expand this Electronic Touch Organ and may be we can make it a business one day.

Last but not least;

"Man was designed for accomplishment, Engineered for success, and endowed With seed of greatness"

Zig Ziglar

Project 380 UITM, Pulau Pinang

Electronic Touch Organ

## ABSTRACT

An electronic Touch Organ (1ETO) is a musical instrument that is made from a simple circuit. It has ten keys. It can be played like a professional organ or a keyboard. Just touch the keys and listen to variables sound. This circuit can be used to create melody notes. The circuit can produce 8 tones which are Do (C), Re (D), Mi (E), Fa (F), So (A), La (B), Ti (G), Do ( $C\uparrow$ ). Even though, this ETO cannot record the tones but it can be adjusted using low, medium, or high pitch by applying semitone or octave. This project used two integrated circuits (ICs). There are 1.2W Audio Amplifier and 1M Hz BiMOS Operational Amplifier with MOSFET Input/CMOS Output. The real organ or keyboard is expensive in the current market. Thus, this project is replica of the organ and it is cheap.

> Project 380 UiTM, Pulau Pinang

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> Project 480 UrTM, Pulau County

## **1.0 INTRODUCTION**

Electronic Touch Organ

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#### 1.1 BACKGROUND ETO

The ETO is a musical instrument that contains 8 notes, semitone and octave. Semitone is an amount by which one sound is a higher or lower another equal to ½ of an octave. Octave is a series of 8 musical notes in a musical.

The ETO is an organ that operates by touching the switches. First, push the switch ( push on/off button ) to generate the organ. After that, touch the switches ( keys ) and there is the sound we have always wanted to hear. We also can create our own melody.

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