THE EFFECT OF CAPACITOR AND INDUCTOR IN A SIMPLE MULTI BAND RECEIVER

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TABLE OF CONTENTS

			Page
ACKNO	OWLEDGEMENTS		iii
TABLE	OF CONTENTS		iv
LIST O	F TABLES		vi
LIST OF FIGURES			- vii
ABSTR	ACT		viii
ABSTR	AK	a	ix
СНАРТ	ER 1 INTRODUCTION		
1.1	Background		1
1.2	Problem Statement		3
1.3	Significance of study		4
1.4	Objectives of Study		5
СНАРТ	ER 2 LITERATURE REVIEW		
2.1	Multi Band Radio		6
2.2	Radio Basics		8
	2.2.1 Characteristic of samples		12
	2.2.2 An FM Broadcast Band Radio Receiver		13
	2.2.3 Architecture of a radio receiver	7	15
СНАРТ	ER 3 METHODOLOGY	:	
3.1	Process overview		17
3.2	Apparatus		19
3.3	Instrument		20
	3.3.1 Multi Band Radio circuit	· ·	20
	3.3.2 Multiband Radio Description		20
3.4	Circuit Description		21
	3.4.1 Suggested layout on Solderless Connection Board (SCB)		22
3.5	Crystal Detector Radio Receiver Set Varactor Capacitor Tuned		23
СНАРТ	ER 4 RESULT AND DISCUSSION .		
4.1	Frequency Range and Voltage Gain		25
	Discussion		30

ABSTRACT

Simple multiband circuit was made from TDA 7000 integrated circuit. TDA 7000 integrated circuit is a monolithic integrated circuit for mono FM portable radios, where a minimum on peripheral components is important. In order to study the effect of the antenna length to the voltage gain besides the power supply, two examples length of antenna L=20cm and 40cm have been analyzed by connect the copper wire to the circuit, then observed on the oscilloscope by referred the shape of the sinusoidal graph. The power supply 2V to 10V was set up to measured the voltage gain and the output voltage produced by oscilloscope. The output voltage produced lower than input voltage where the input voltages are constant when frequency increased. The voltage gain measured by a ratio between output voltages over the input voltage in its unit in decibels (dB).