#### Lab 5: RC Circuits

Adam Olson, Nick Lonsdale, Zack Garza ${\it April~4,~2014}$ 

## Contents

1	Inti	roduction	1
2	The	eory	2
3	Equ	nipment List	3
4	Methodology		
	4.1	Differentiator	4
	4.2	Integrator	4
	4.3	Low-Pass Filter	4
	4.4	High-Pass Filter	4
	4.5	Band-Pass Filter	4
5	Results		
	5.1	Differentiator	5
	5.2	Integrator	5
	5.3	Low-Pass Filter	5
	5.4	High-Pass Filter	5
	5.5	Band-Pass Filter	5
6	Appendicies		6
	6.1	Derivations	6
	6.2	Equipment Photographs	6
	6.3	Circuit Diagrams	6
	6.4	Circuit Photographs	6

#### Abstract

This is some abstract stuff.

## Introduction

This is an introduction.

Theory

## **Equipment List**

- 1. Function Generator
- 2. Digital Oscilloscope (2 Channel)
- 3. Breadboard
- 4. Resistors;
  - (a)  $1x \ 1.0 \ k\Omega, \ (\frac{1}{4}W)$
  - (b)  $2x \ 10.0 \ k\Omega, \ (\frac{1}{4}W)$
- 5. Capacitors
  - (a)  $1x.01 \mu F$
  - (b) 1x 100 pF
  - (c)  $2x .001 \mu F$

# Methodology

- 4.1 Differentiator
- 4.2 Integrator
- 4.3 Low-Pass Filter
- 4.4 High-Pass Filter
- 4.5 Band-Pass Filter

### Results

- 5.1 Differentiator
- 5.2 Integrator
- 5.3 Low-Pass Filter
- 5.4 High-Pass Filter
- 5.5 Band-Pass Filter

# Appendicies

- 6.1 Derivations
- 6.2 Equipment Photographs
- 6.3 Circuit Diagrams
- 6.4 Circuit Photographs

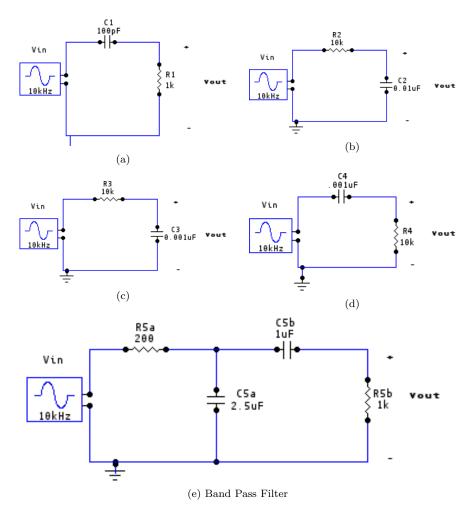


Figure 6.1: Circuit Diagrams