

Lab 5: RC Circuits

Adam Olson, Nick Lonsdale, Zack Garza

April 4, 2014

Abstract

Contents

| | | |
|----------|---------------------------------|----------|
| 1 | Introduction | 2 |
| 2 | Theory | 3 |
| 3 | Equipment List | 4 |
| 4 | Methodology | 5 |
| 4.1 | Differentiator | 5 |
| 4.2 | Integrator | 5 |
| 4.3 | Low-Pass Filter | 5 |
| 4.4 | High-Pass Filter | 5 |
| 4.5 | Band-Pass Filter | 5 |
| 5 | Results | 6 |
| 5.1 | Differentiator | 6 |
| 5.2 | Integrator | 6 |
| 5.3 | Low-Pass Filter | 6 |
| 5.4 | High-Pass Filter | 6 |
| 5.5 | Band-Pass Filter | 6 |
| 6 | Appendicies | 7 |
| 6.1 | Derivations | 7 |
| 6.2 | Equipment Photographs | 7 |
| 6.3 | Circuit Diagrams | 7 |
| 6.4 | Circuit Photographs | 7 |

Chapter 1

Introduction

This is an introduction.

Chapter 2

Theory

Chapter 3

Equipment List

Chapter 4

Methodology

4.1 Differentiator

4.2 Integrator

4.3 Low-Pass Filter

4.4 High-Pass Filter

4.5 Band-Pass Filter

Chapter 5

Results

5.1 Differentiator

5.2 Integrator

5.3 Low-Pass Filter

5.4 High-Pass Filter

5.5 Band-Pass Filter

Chapter 6

Appendices

6.1 Derivations

6.2 Equipment Photographs

6.3 Circuit Diagrams

6.4 Circuit Photographs