INTRODUCTION TO ELECTRONICS LABORATORY

EXPERIMENT REPORT

Deney Adı	Linear Power Supplies
Deneyi Yaptıran Ar. Gör.	Hacer Atar Yildiz
Raporu Hazırlayan (İsim / Numara / Bölüm)	Uğur Uysal– 150140012 – Bilgisayar Mühendisliği
Grup Numarası ve Deney Tarihi	B-10 – 29.11.2018

Rapor Notu	Teslim Edildiği Tarih	Teslim Alındığı Tarih
	06.12.2018	

1. Introduction

In this experiment, we implement, half wave rectifiers, full wave rectifiers with negative and positive power supply and measure the current and voltage values. We also implemented a circuit with positive regulated power supply with different values of capacitors and interpret the result in graphs.

2. Experiment

Positive power supply

The first circuit we implemented is this.

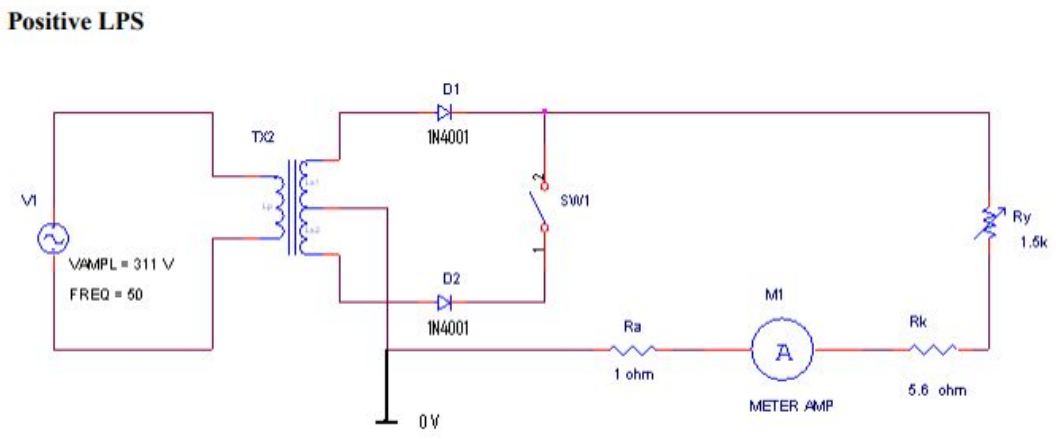


Fig.1.4 Positive rectifier circuit

We adjust the rheostat in order to see output current as 50mA. Then we changed the switch and measure the output signal from oscilloscope. The results graph can be seen in protocol paper.

Negative power supply

In this part of the experiment we only changed the sign of sign of the current.

Negative LPS

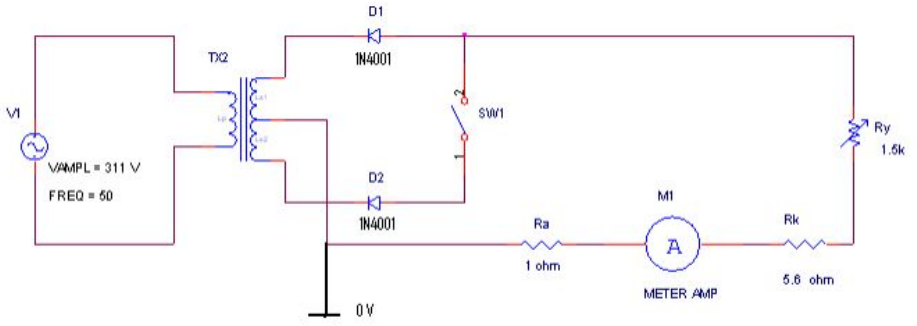


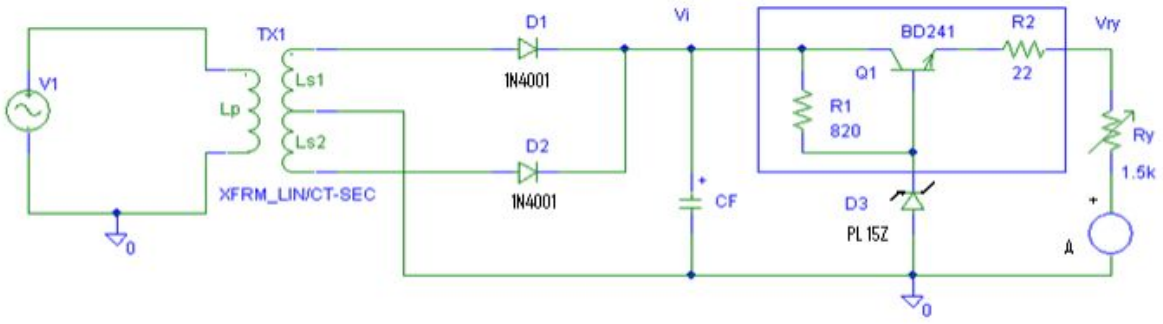
Fig. 1.5 Negative rectifier circuit

We adjust the rheostat in order to see output current as 50mA. Then we changed the switch and measure the output signal from oscilloscope. The results graph can be seen in protocol paper.

Regulated Positive Power Supply

We implemented the circuit below and with different capacitors we measured the output.
We were not able to see clearly effect of small capacity capacitor due to some technical reasons.

Regulated Positive LPS



The graphs can be seen in protocol paper.

3. Conclusion

In conclusion, we observed that changes in DC current and changes from half wave to full wave rectifier would change the amount and direction of generated DC current and voltage. In this experiment, we learned so much about rectifiers, transformers, filters etc. Thus, I can say it was a teachful and fun experiment.