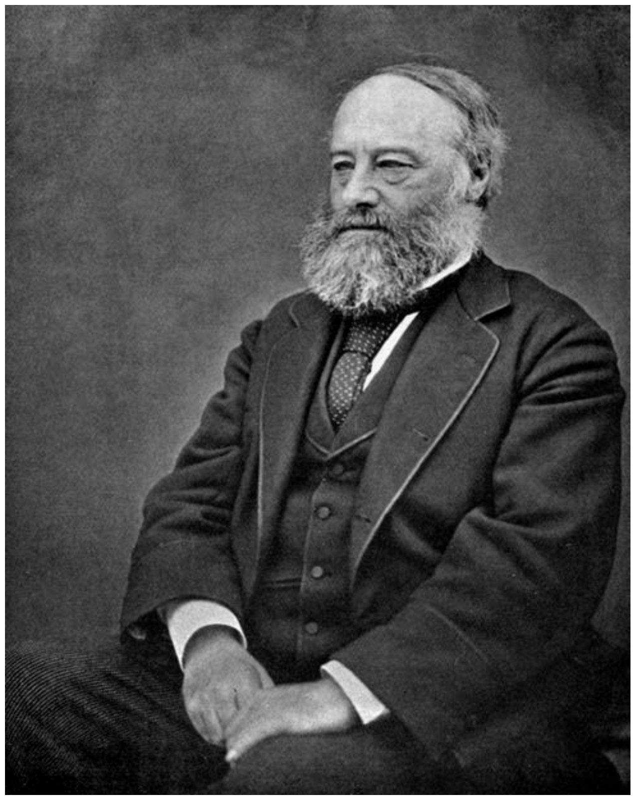
Overunity Joule Thief



(The circuit has almost nothing to do with Joule James, I Just lie to remember him)

Leonard Teasca, BSc Electrical Engineering
Phone No: +40 723 520 684; Email: leonard.teasca08@yahoo.com

1. Introduction

This presentation is intended for both technical and nontechnical people so if you see an inexact nontechnical explanation keep in mind that it is not my intention to mislead or insult anyone's inteligence.

The Joule Thief is one of many overunity devices out there. It has been around for many years yet is stands as a simple voltage booster. I think that is why it still exists and also because they can't control the internet (we know they tried).

A **JT** (Joule Thief) is a very simple and easy to build self oscillator.

!

To understand the concept of an oscillator think about switching the light in your bedroom on and off **once** every second. That will give you a switching frequency of 1 Hertz. Now imagine the you have an electronic device that does this for you automatically. So now the light in your room will **oscillate** with the frequency of 1 Hertz (will turn on and off every second)..."

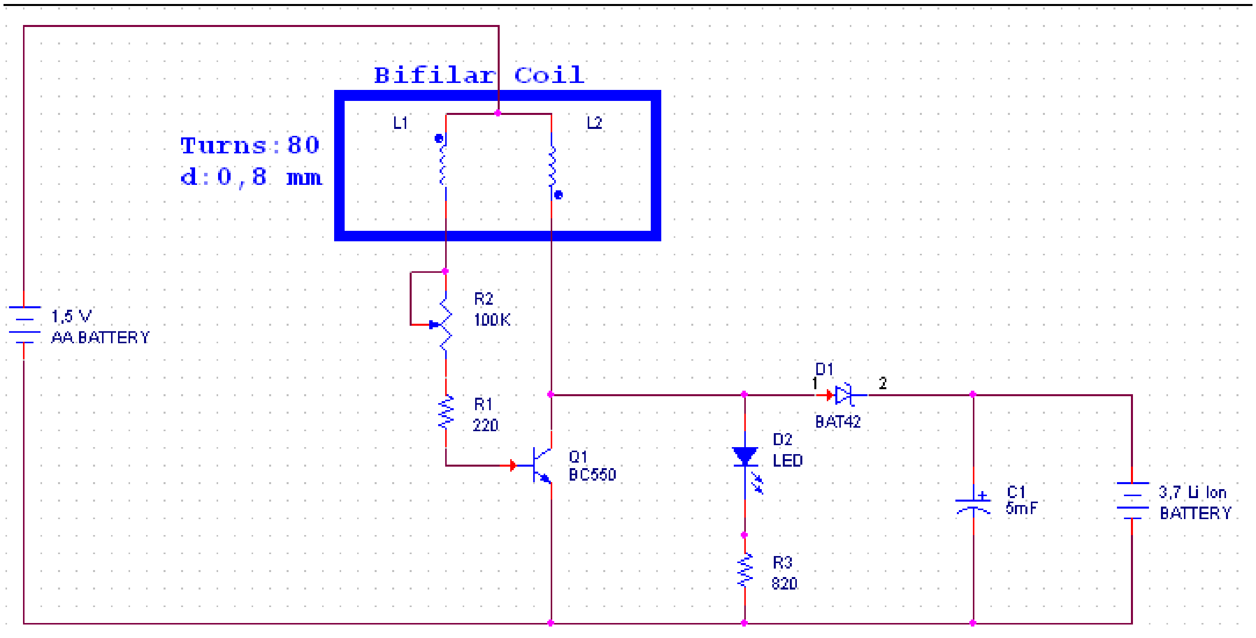
I believe that the **JT** oscillates at the resonant frequency of the circuit (I'm unable to determine this due to lack of equipment – LCR meter)

The working principle of such a circuit is simple at first glance but simplicity is the genius in all.
In fact I think the circuit has a lot of free energy principles rolled up into one very simple very cheap circuit that even the average Joe can build.

Leonard Teasca, BSc Electrical Engineering
Phone No: +40 723 520 684; Email: leonard.teasca08@yahoo.com

2.Schematic and principle

Explaining the schematic will take too long so I will explain a possible priciple of overunity.

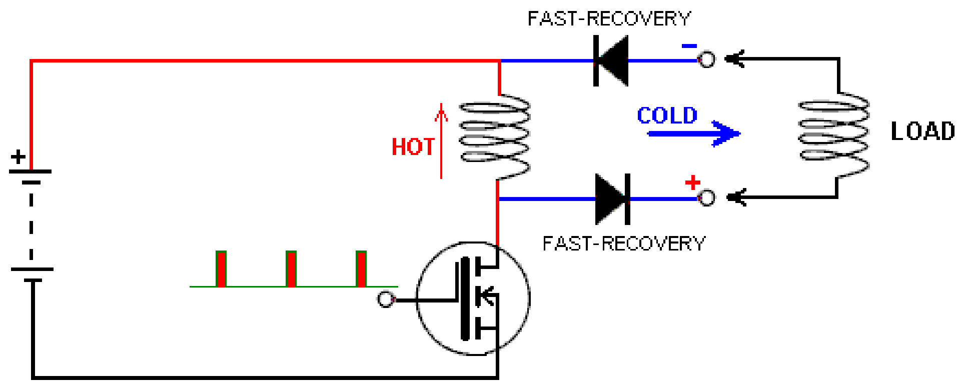


The main component in the schematic above is the Bifilar Coil. There is a very interesting fenomenon when a coil is pulsed at it's resonant frequncy. A Bifilar Coil has unusual magnetic properties. More details about the coild can be found here.
http://www.magnetricity.com/Bifilar.php

!
Pulsating is the same as switching on and off the light bulb in your bedroom. The only difference is that the switching is no longer done by your hand but by an electrical current called a PULSE or a SIGNAL. So when you PULSE a coil you switch the current through it on and off. A diode is a device that only allows current in one direction like a water valve that allows water to flow in one direction only ..."

For example a very unusual and important insight can be found in the following circuit (A clip can be found on youtube by searching COLD ELECTRICITY – user UfoPolitics). If a coil is pulsed, using a circuit like this:

Leonard Teasca, BSc Electrical Engineering
Phone No: +40 723 520 684; Email: leonard.teasca08@yahoo.com



then conventional hot electricity pulses the coil when the transistor is switched ON, but if that current is switched OFF rapidly, then there is an inflow of cold electricity into the coil from the vacuum.

That inflow of energy can be collected and diverted to power a load through the use of two high-speed diodes which can carry considerable current as the power inflow is substantial. The inflow of energy occurs when the transistor is switched OFF and so it is desirable to have the transistor switched off for most of the time, in other words, a low

percentage Duty Cycle for the transistor. There must be a significant load on the cold electricity output. If there is not, then the cold electricity will flow back into the hot electricity section of the circuit and it may damage the transistor. Tom Bearden states that resistors boost cold electricity rather than hindering it's flow, so the load should be a coil, a DC motor with brushes or a fluorescent light bulb.

!

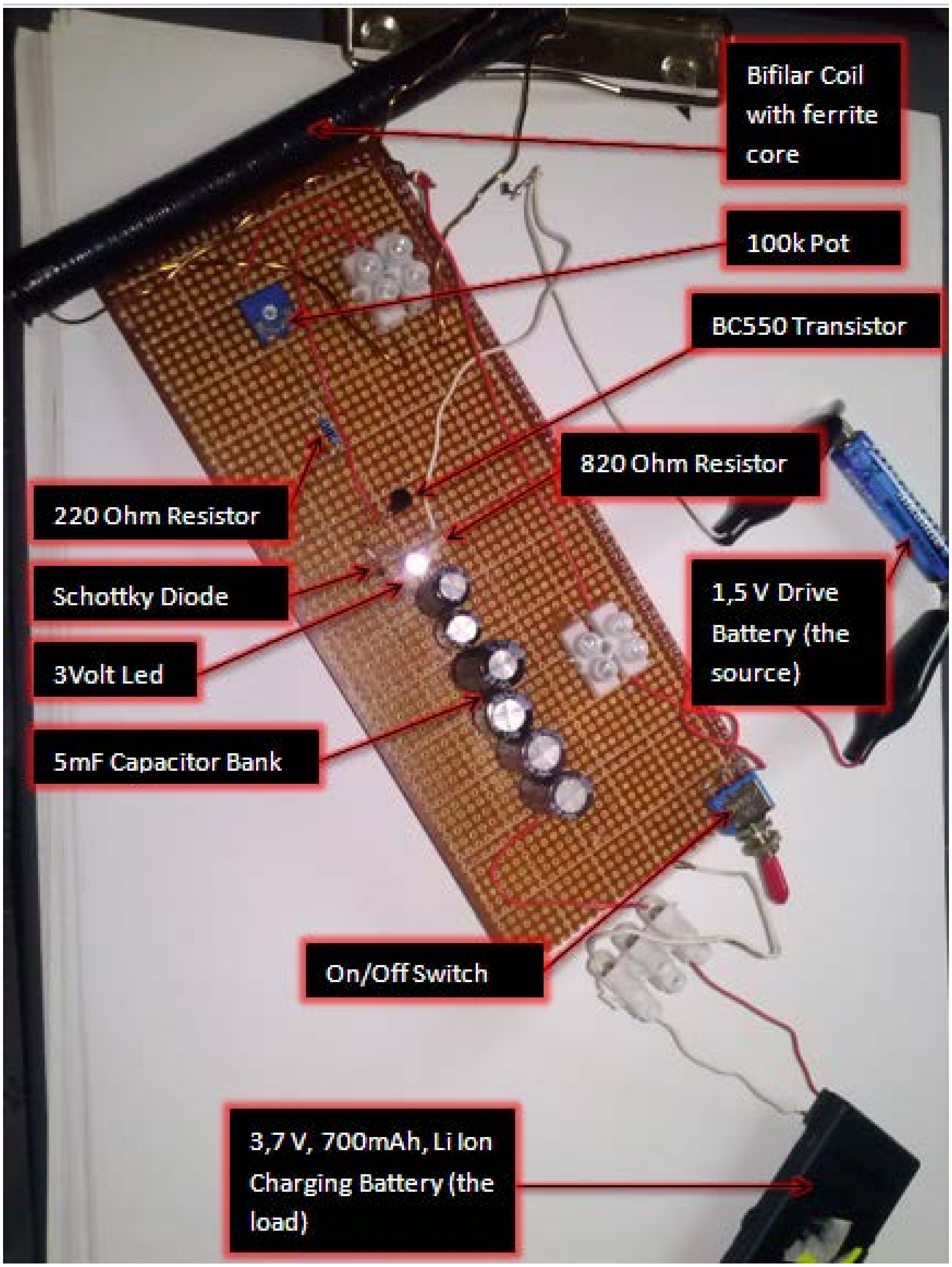
Cold electricity is explained by Tom Bearden in a document called "Fact Sheet – Source Charge problems" ..."

To conclude this part of the presentation :

I think that pulsing a coil (rather letting it pulse itself) at it's resonant frequency and collecting the excess cold electricity through the use of diodes , resistors and capacitors is what charges the Li Ion battery of my setup with a power consumption of at least three times smaller.

3.Real Setup and Test Results

Leonard Teasca, BSc Electrical Engineering
Phone No: +40 723 520 684; Email: leonard.teasca08@yahoo.com



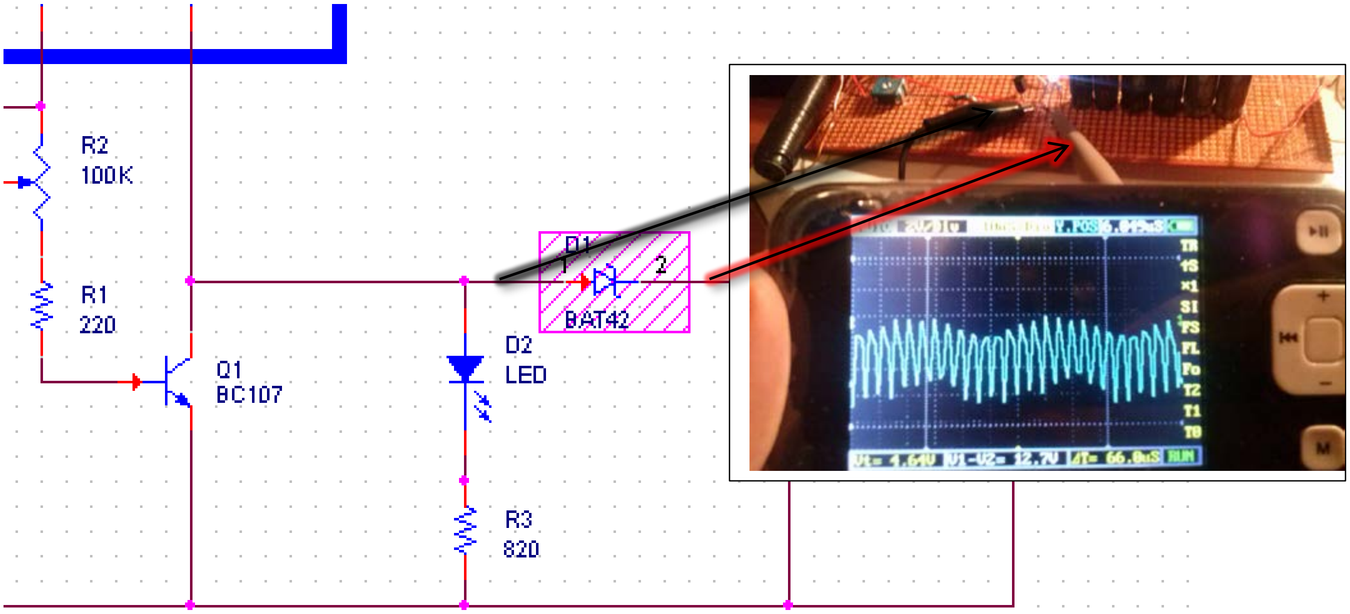
The above picture depicts my first successful prototype of an overunity device. I believe that the modifications that I made and will make to the JT circuit will improve it's performance.

In the following section I will show a few pictures of the oscillation (or HOT electrical signal) across some of the components.

Leonard Teasca, BSc Electrical Engineering
Phone No: +40 723 520 684; Email: leonard.teasca08@yahoo.com

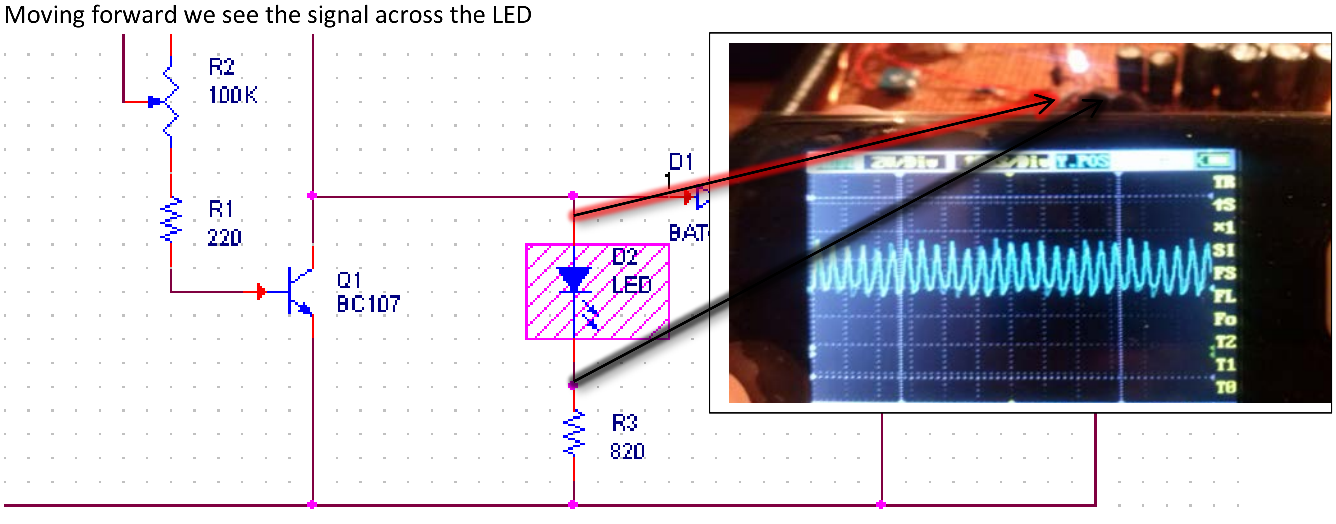
In the picture below there can be seen the signal across the fast switching BAT42 diode.

The signal here is inverted. The probes of the oscilloscope are reversed. This problem is solved for the next two tests. Keep in mind that this small measurement error does not influence in any way the outcome of the measurement and all the data is correct.And also I'm too lazy to take another picture.



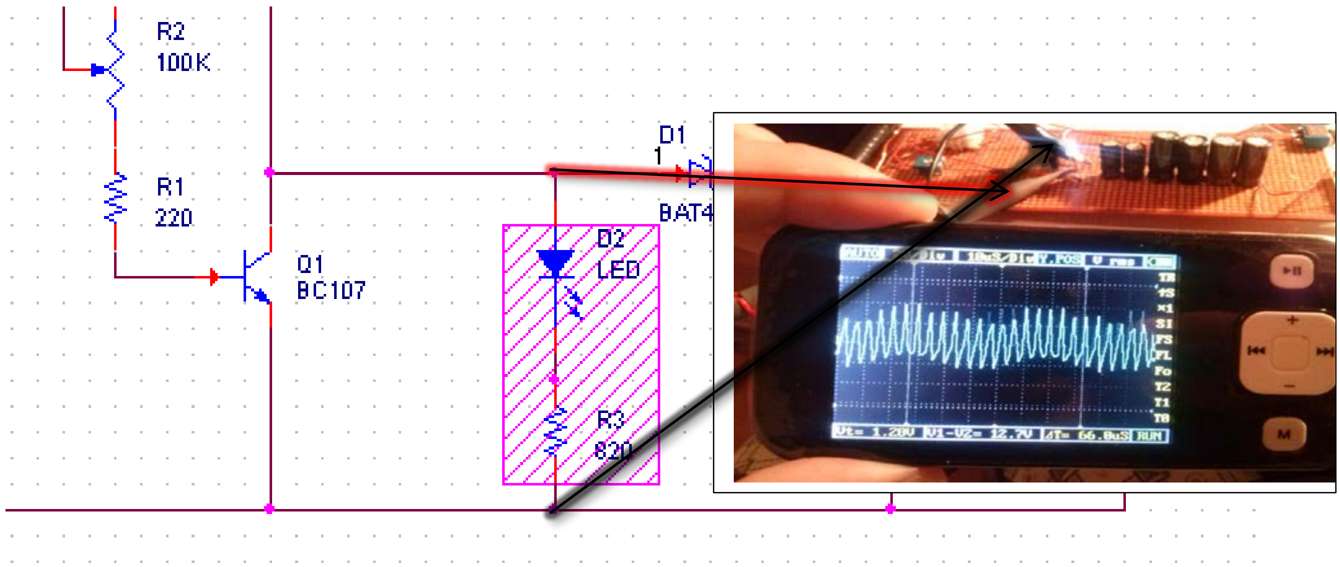
Also the oscilloscope is able to calculate the average voltage drop, the frequency and other useful information about this electrical signal.

Moving forward we see the signal across the LED



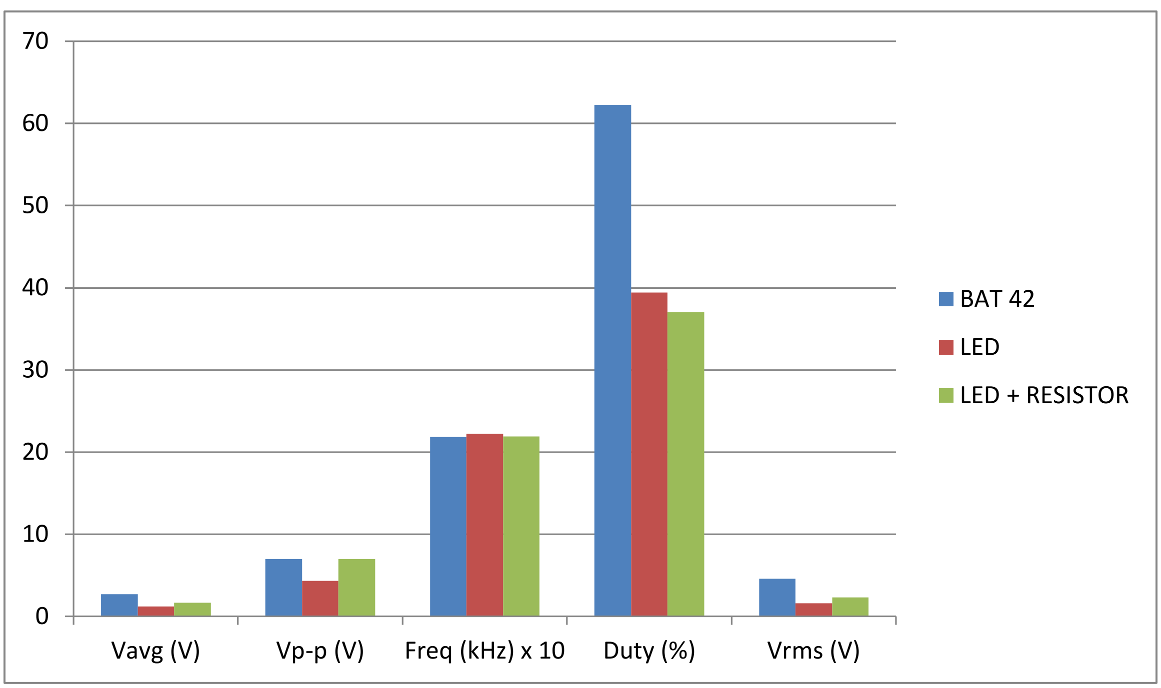
And finally the signal across the LED and the resistor:

Leonard Teasca, BSc Electrical Engineering
Phone No: +40 723 520 684; Email: leonard.teasca08@yahoo.com



The data collected by the oscilloscope is shown it the table below:

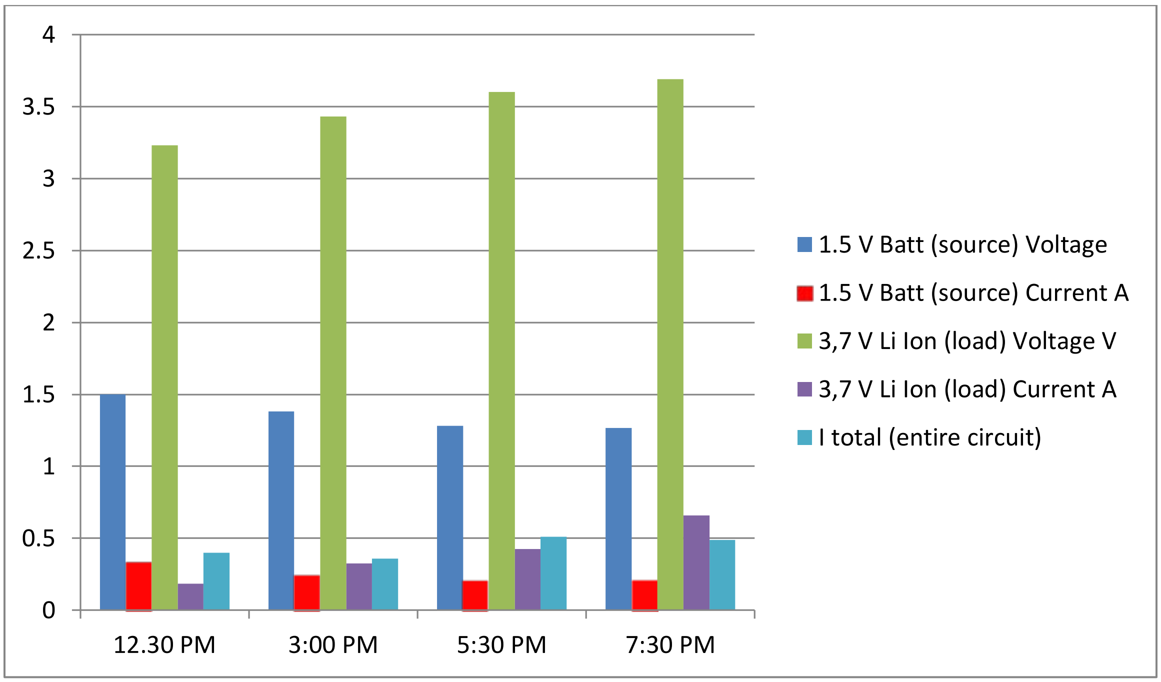
	BAT 42 fast diode	LED	LED + Resistor
Vaverage	2.72 V	1,2 V	1,68 V
Vp-p (peak to peak)	6,960 V	4.32 V	6,960 V
Frequency	218,8 kHz	222,5 kHz	219 kHz
Duty Cycle	62,22%	39,45%	37,03%
VRMS	4,560 V	1,6 V	2,3 V



Leonard Teasca, BSc Electrical Engineering
Phone No: +40 723 520 684; Email: leonard.teasca08@yahoo.com

The next table will provide information on the power efficiency of the circuit.

Time	1,5 Battery (source)		3.7 V Li Ion Battery (load)		I total (entire circuit)
	Voltage V	Current mA	Voltage V	Current mA	
12: 30	1.5 V	335 mA	3.23 V	185 mA	40 mA
15	1.383 V	246 mA	3,43 V	324 mA	36 mA
17:30	1.28 V	210 mA	3.6 V	427 mA	51 mA
19:30	1,267 V	215 mA	3.68 V	660 mA	49 mA



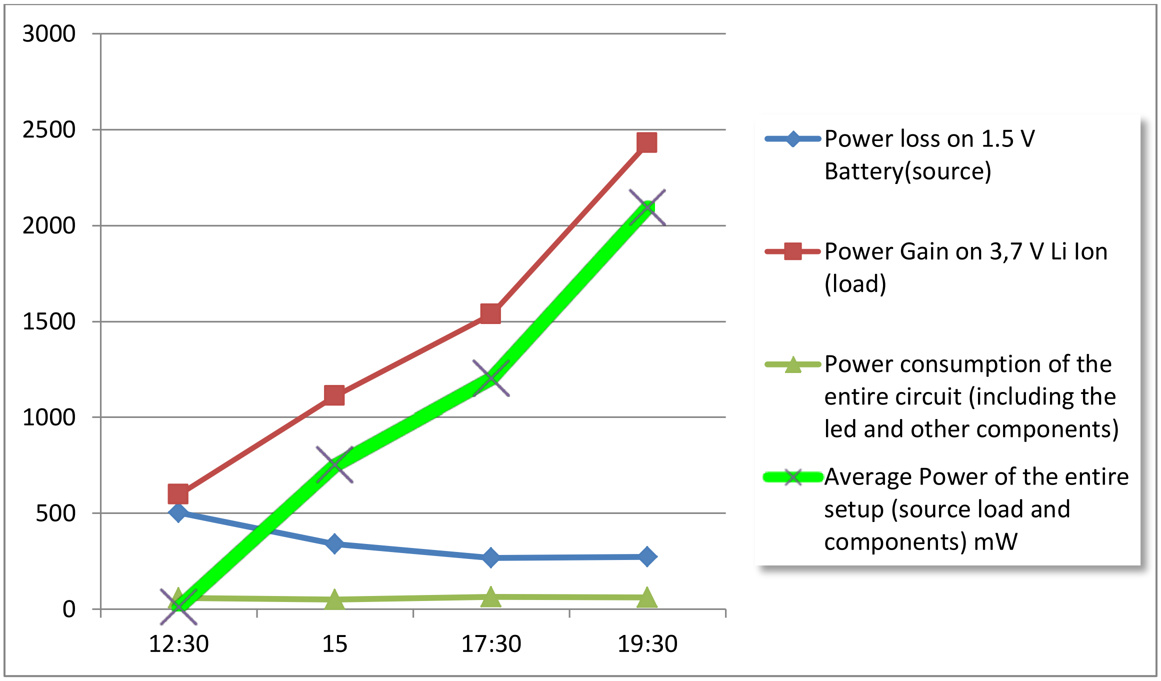
So the power consumption of my circuit will be:

Ptotal = Source Voltage x Total Current consumption (I total)

Leonard Teasca, BSc Electrical Engineering
Phone No: +40 723 520 684; Email: leonard.teasca08@yahoo.com

In the next table the power consumption for the entire circuit and for the two batteries is calculated

Time	Power 1,5 V Battery (Source)	Power 3,7 V Li Ion Battery (load)	Power Entire Circuit
12:30	502.5 mW	597.55 mW	60 mW
15	340.218 mW	1111.32 mW	49.788 mW
17:30	268.8 mW	1537.2 mW	65.28 mW
19:30	272.405 mW	2428.8 mW	62.083 mW



So the efficiency of the circuit will be:

(Total Power Gain / Total Power Loss) x 100 %

Total Power Gain = Final load Power - Initial load Power = 2428.8 mW - 597.55 mW = **1830.45 mW**
Total Power Loss = Initial Source Power - Final Source Power + Total Circuit Consumption = 502.5 mW – 272.405 = **230.095 mW**

So the effiecieny will be : $\eta = 1830\ \mathbf{mW}/230.095\ \mathbf{mW}\ \ \mathbf{x}\ 100\% = 795.3\ \%$

That means that the output is almost 8 times bigger than the input so the circit should be able to turn on a 3 Volt led and charge 2 Li Ion 3.7 V 700 mAh batteries with the power of a 1,5 V AA battery.

Leonard Teasca, BSc Electrical Engineering
Phone No: +40 723 520 684; Email: leonard.teasca08@yahoo.com

Thank you for your time

Leonard Teasca, BSc Electrical Engineering
Phone No: +40 723 520 684; Email: leonard.teasca08@yahoo.com