BSI Energy Holdings Limited Demonstrations

1. Sound Resonance – Lead-out Kinetic Energy of Air Molecules
2. Milkovic 2-Stage Pendulum, Peru Blind Scientist's Force Multiplier, Tong Wheel (Video only) – Lead-out Gravitational Energy
3. LEDs requires two AA batteries to light (3V specification)
4. One AA battery lighted a 3V LED with Joule Thief Circuit
5. FLEET circuit lighting 38 LEDs in the letters BSI with battery removed – Lead-out Electron Motion Energy at Tseung Resonance
6. FLEET circuit getting dimmer and then much brighter showing Tseung Resonance (created by Geoffrey Sun)
7. FLEET circuit driving a fan with no-battery
8. FLEET circuit with Timer cutting electricity bill by > 90%
9. FLEET circuit using < 80 watts to light up 1KW LEDs (USA)
10. FLEET circuit using < 80 watts to light up 1 KW LEDs (Taiwan)
11. FLEET using < 5 watts to light up > 200 LEDs (Hong Kong)

12. Use two DC Power Supplies. One to power LEDs with NO FLEET and another with FLEET to same brightness and compare digital readings on the DC Power Supplies.

Demonstration 1 Sound Resonance

Lead-out Kinetic Energy of Air Molecules

(1) Use a signal generator to produce sound via a speaker at around 700 Hertz. The loudness can be very low.

(2) Put the cup on top of the speaker. The sound will be much louder.

(3) Adjust the frequency of the sound (change the knob at the Signal Generator) until the sound is loudest.

(4) Remove the cup and compare the loudness of the sound with and without the cup.

Scientific Question: Why is the sound so much louder with the cup at the experimental frequency?

From the Lead-out Theory, kinetic energy of air molecules has been lead-out to provide the added loudness.

Optional improvement: use the Winscope program with a microphone to display the amplitude on a laptop computer.

Demonstration 2 Lead-out Gravitational Energy

We can look up the following from the Internet.

Milkovic 2 stage Pendulum:

http://www.youtube.com/watch?v=gC6Qlj1Mbo8

Peru Blind scientist force multiplier:

http://peswiki.com/index.php/Directory:_Fernando_Sixto_Ramos_Solano:_Force_Multiplier_System

Tong Wheel

http://www.youtube.com/watch?v=BBRCs6sWjQw

Demonstration 3 Light a 3V LED directly needs 2 batteries

(1) Use one battery to check whether the LED lights up. Make sure that the longer side of the LED (marked red) is connected to the +ve end of the battery.

(2) The LED should not light.

(3) Put the two batteries together. Repeat the experiment.

(4) The LED should now light up.

(5) There are two LEDs with different colors. The result should be the same.

Demonstration 4 Joule Thief Circuit

One AA battery will light up the 3V LED brightly with the Joule Thief Circuit.

(1) Use the battery to connect the first joule thief circuit that has the toroid connected. The +ve end of the battery should be connected to the joint wires of the toroid. The –ve end of the battery should be connected to the white wire. The LED will be ON.

(2) Examine the toroid at the first circuit carefully. Disconnect it and plug it into the second joule thief circuit.

(3) The LED in the second Joule thief circuit should be ON.

(4) Optionally, all the components in the second joule thief circuit can be unplugged. The user can then plug everything back and see if the LED can be ON again.

This experiment is similar to the use of the DIY KIT to build the Joule Thief from the components. It is the most educational and hands-on of the demonstrations.

Demonstration 5 Light 38 LEDs that making up the letters BSI The board was set up and tuned so that the LEDs could be on for close to 30 minutes. This illustrates that Electron Motion Energy can be lead-out at resonance.

(1) Connect the battery to light up the LEDs for 20 seconds.

(2) Disconnect the battery.

(3) The LEDs continue to be bright for at least 10 minutes.

(4) Note the start disconnection time.

(5) Note the time when the LEDs were OFF.

Demonstration 6 The Geoffrey Set up

FLEET circuit getting dimmer and then much brighter showing Tseung Resonance (prototype created by Geoffrey Sun)

(1) Connect the battery to light up the LEDs for 30 seconds.

(2) Disconnect the battery. The LEDs remain ON.

(3) After 2 minutes, the LEDs started to get dimmer.

(4) At around the 3 minute mark, the LEDS started to get brighter again. There would be a jump in brightness.

(5) The brightness would be stronger than initially started.

(6) The LEDs will get dimmer and dimmer. They will be OFF after a total time of approximately 6 minutes.

This experiment is a good illustration of Tseung resonance. The circuit drifted across a resonance configuration and lead-out more electron motion energy from the circuit and the surrounding. That logically explained the extra brightness.

Demonstration 7 Turning a toy motor

This experiment uses a toy fan and a board with a higher end transistor (2n3055). The 2n3055 can take and generate more power. The starting voltage can be 2.5 Volts.

(1) Use the DC Power Supply on the FLEET circuit to start the process. The voltage can be set to 2.5V.
(2) Connect the toy fan to the two wires at the LED. Switch on the fan and it will rotate.
(3) Turn the DC power off. The fan continues to run.
(4) Check and record the no-battery time.

This experiment shows that the FLEET circuit works for motors.

Demonstration 8 Use of timer to cut electricity bill

This experiment shows one way to cut the electricity cost. The 30 LEDs will be almost as bright as the beginning after two minutes. The timer was set so that it is OFF for 2 minutes and then ON for 15 seconds. Thus out of a 135 second cycle, only 15 seconds was ON. This means we are using only 11% (15/135) of the electrical power.

(1) Put the battery into the battery holder.
(2) Turn the Timer ON.
(3) Wait for 2 minutes and see that the 30 LEDs started to get bright.
(4) After a few cycles, the LEDs will appear to be of constant brightness all the time.
(5) The effective electricity bill is almost reduced by 89%.

Demonstration 9 The 1KW demonstration at USA

This is the first commercial resonance FLEET done at G-LED on April 12, 2012. It used less than 80 watts to light 1KW LEDs.

Demonstration 10 The 1KW demo in Taiwan

Dr. Raymond Wang set up this demonstration in Taiwan to light up 1,000 LEDs rated at 1 Watt each.

Demonstration 11 The over 300 LED demonstrations

The DC Power Supply showed that the voltage was 2.8V and the current was 0.4A when 306 LEDs were lighted. The DC power drawn was 1.12 watts. If the LEDs were to be lighted in the normal way without the FLEET circuit, the voltage required will be 12V. The LEDs are rated at 0.2 watts each. The required power would be 61.2 watts (306 x 0.2).

(1) Connect the board with 2n3055 to the DC power supply.
(2) Connect the 216 LEDs (eighteen 12 LED strips) to the Secondary Output and the LED lamp with 90 LEDs to the Primary Output.
(3) Turn on the DC power supply and set it to 2.8V.
(4) The initial current will be higher but will settle down at around 0.4A. The Input Power was 1.12 watts.
(5) When the DC power was turned off, the 306 LEDs remained ON for over 2 minutes.

This is the most powerful demonstration in terms of actual output power.

Demonstration 12 Using two DC Power Supplies

One Power Supply is used to light the LEDS directly with no FLEET circuit.

The other Power Supply is used to light the LEDs with a tuned FLEET circuit.

The LEDS can be placed side-by-side for brightness comparisons.

The voltages at the DC Power Supply can be adjusted so that the two sets of LEDs show same brightness.