What's in the Open TPU?

by Leon Stepanian – a.k.a. wattsup

1.0 Well here we are after over a year of mulling over this evasive device that has been presented to the world by Mr. Steven Mark (SM). This document will concentrate solely on the Open TPU (OTPU) although it will be hard not to stray to the others as it is always so tempting. I will not attempt to scold SM for not taking the high road, as it is evident that creative invention is not a remedy for courage and total altruism. Suffice it to say that we should simply be thankful for what is given and leave it at that.

1.1 This document will have numbered paragraphs that will permit the reader to quickly refer to these during Forum exchanges. I hope also that the drawings will be used to standardize the design locations for the components when also discussing of these in Forums and elsewhere. One great word of thanks must be given to Stefan Hartmann a.k.a. hartiberlin for managing to keep the overunity.com Forum alive and well through all it past trials and tribulations, and for his great notion of decency and fair play that he has most eloquently maintained as Forum moderator.

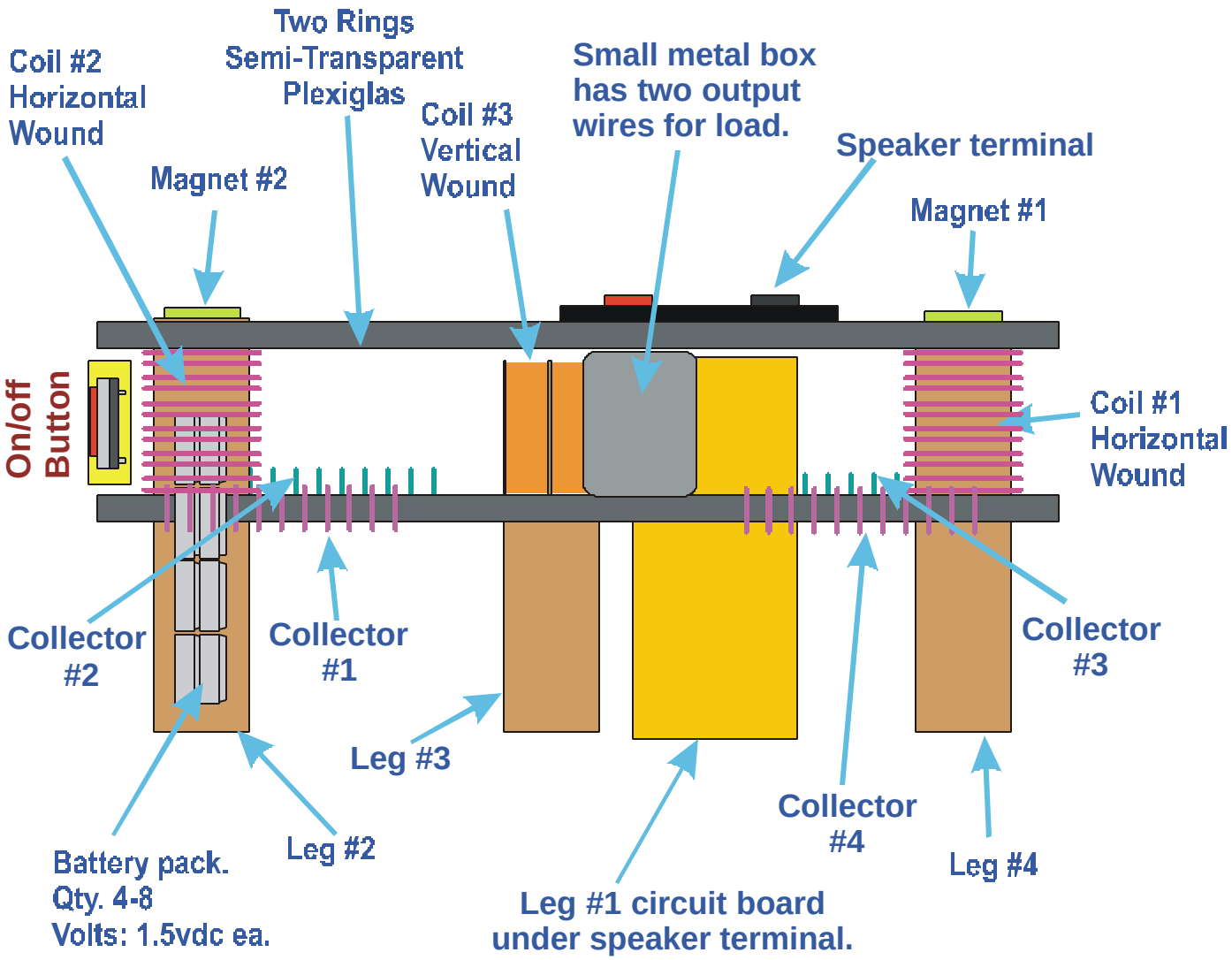
1.2 Needless to over-emphasize the fact that there are many who will read this document and see in it many ponderations, machinations of all sorts that we have all had to fight with during this travel of discovery.

1.3 What is a theory and what is a fact? Yes. We all know the difference. A theory is an explanation that is mainly based on the intuitive rendition of reality. Fact is simply a description of what is evident to the observer through the visual and reactive observations. So we all have to be very careful of what we consider a theory and what we consider to be hard facts. If one can accumulate all the facts, then the theory to come out of these facts will be closer to the reality of the event. This document is an attempt to bring those who are working to the clearer discovery of the OTPU to make their theories based on stronger facts.

1.4 I do not claim to have the absolute truth of the facts presented and welcome any corrections that are presented in factual and clearly explained format. If agreed, any or all changes will be made to the next version of this document as a work in progress.

1.5 I do not claim to have the necessary knowledge to delve on the electronic methodology of the workings of the OTPU but have enough logical skills to analyze and ask the main questions that will help others get the answers through further bench top testing, etc. It is my hope that this document will be a blueprint that can be used by you all to prepare a logical and practical method of testing certain parameters that will finally result in closing the knowledge gaps that still exist in the OTPU.

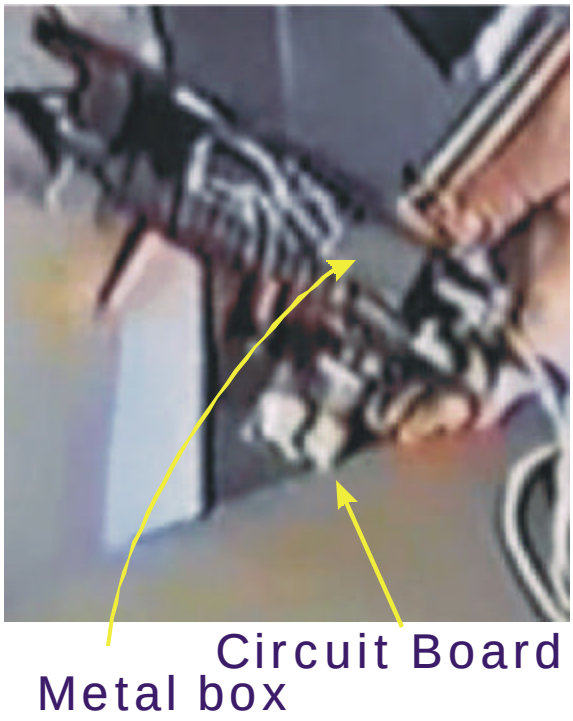
2.0 OK, so let's take a look.

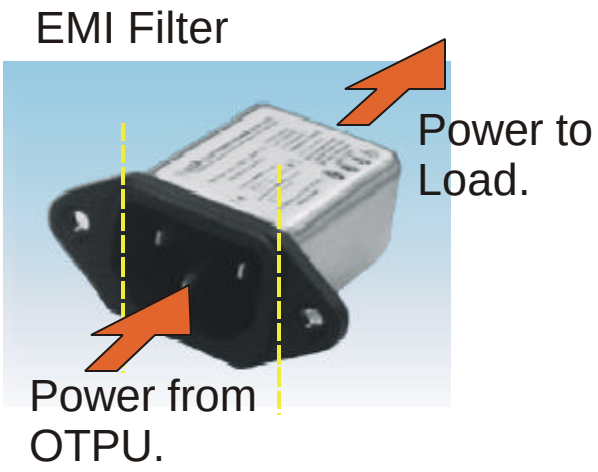


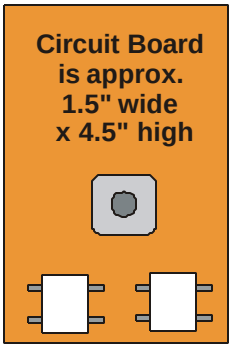
3.0 The following sections will simply show and explain the evidence as observed in order to leave now doubt of what these parts are.

3.1 The small metal box and the circuit board.

3.2 The small metal box has two leads coming out of it going to the lamps. This box resembles very closely to an EMI Filter. Usually the EMI Filter is used in any electronic equipment to accept an AC plug from the outside and the other side of the filter supplies this AC current to the inside of the equipment. The difference in the OTPU is that the EMI Filter is being used backwards. The output of the OTPU is going to the plug side of the EMI Filter and the output of the EMI Filter is going to the lamps. Usually, such EMI filter is chromed on the output side, but if you took an EMI filter with a side voltage selector switch, these are held together with a thin plastic mold and can be easily separated. The output side of such an EMI Filter is black plastic that coincides with what is observed on the OTPU. Usage of such a device would be logical in the current produced by the OTPU would most likely be filled with unstable conditions.







3.3 The Circuit board acts as Leg#1 and in fact it is slightly longer than the other three legs and explains why the OTPU wobbles when SM connects the output plug or places the magnets. It is very difficult to see what is on the board but I have managed to identify three components that are two identical four legged components, possibly Transistors, ICs or Pots, plus one variable capacitor. There is no more than 6-8 components on the board including those above and some resistors and/or capacitors and/or diodes.

4.0 The OTPU Legs – A mixed bag. (Or, no pair is alike.)

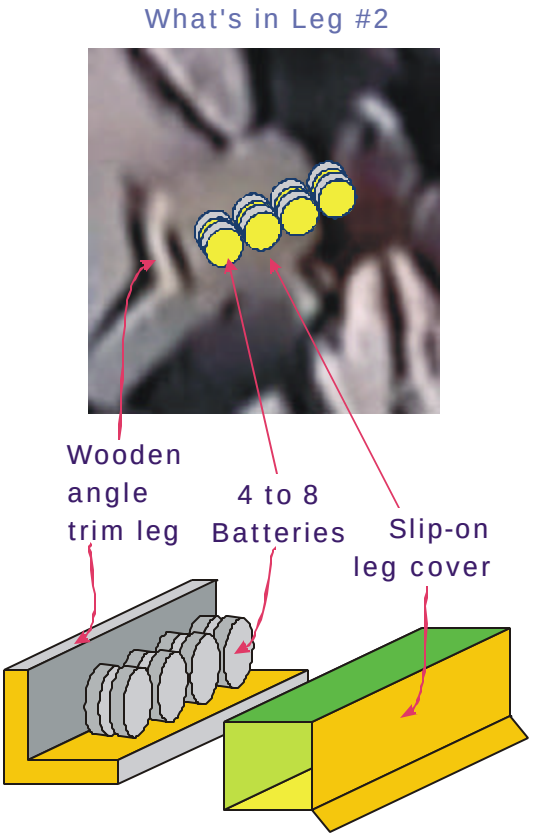
4.1 Does the OTPU use batteries. I am supposing it does for now because all the evidence points in that direction. The use of batteries does not take away from the importance of the device but only simplifies the start-up for any theory of the OTPU. It does not explain how this battery power is used and/or recycled either fully or partially. It could be used to just produce one spark, or, it could be used in millionths of a watt continuously. This is left to discover.

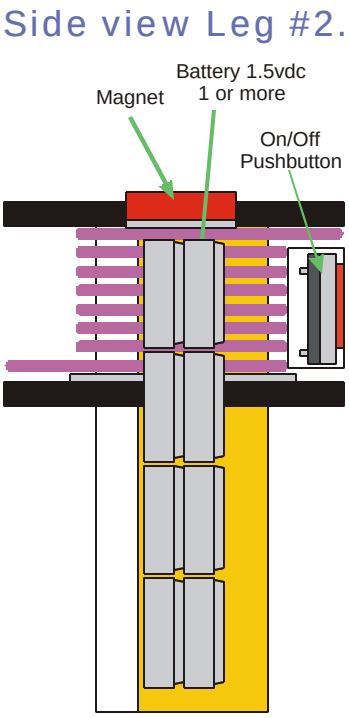
OK, Leg #2 is made of a wooden corner trim. The fact that this leg is not tapped like Leg #3 implies that this leg has another means of support. The only other means available is for it to pass through the bottom ring and at least through or partially through the center of the horizontally mounted coil #2.

So let's first identify all the legs;

4.1 Leg #1 – Is a circuit board that is mounted on the speaker terminal that is mounted on the top ring. See item 3.3.

4.2 Leg #2 – Wood corner trim through bottom ring and coil #2 and partially the top ring. The Corner Trim provides a good open area to hold batteries. The fact that the trim goes to the top ring provides easy conduit access to reach the on/off button mounted on coil #2, plus to harbor the connection therein. yes there is a button as you will read further.





5.1 Leg #3 – Wood block stops after the bottom ring. Coil #3 is placed vertically so the leg cannot rise further leaving it weak. This is why SM tapped this leg to hold it and the coil in place.

Leg #3 with electrical tape wrapped vertically to hold it and the vertically mounted Coil #3

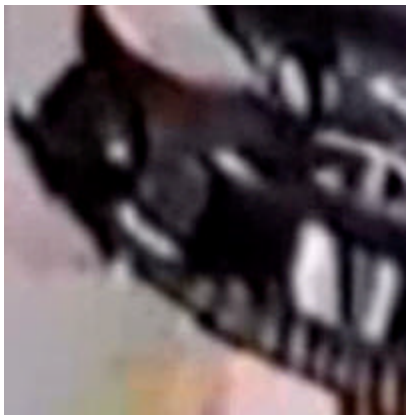
5.2 Leg #4 – Wood trim through bottom ring and coil #4 and partially the top ring. There is no switch on this leg since SM never extended his hand to the side when putting on the first magnet. He only went back to that area when he put the meter terminals and I looked and looked at that footage and there is no indication that he pressed another button on Leg #4. So as far as I can say, Leg #4 is a real leg. lol

5.3 The fact that the rings are not held anywhere else together but by the leg #2 and #4 also explains why SM handled the OTPU mostly by holding it at legs #2 and #4. He knew where the OTPU had the best support.

5.4 Also, the fact that SM held it mostly at those two points sort of pushes out the theory that the legs with the magnets are either pulsed solenoids or some other vibration scheme. Why would SM hold the unit at these same points if they needed to be loose to vibrate. I know, enough about the legs already. But it is important to identify these as they really are.

6.0 The on/off button

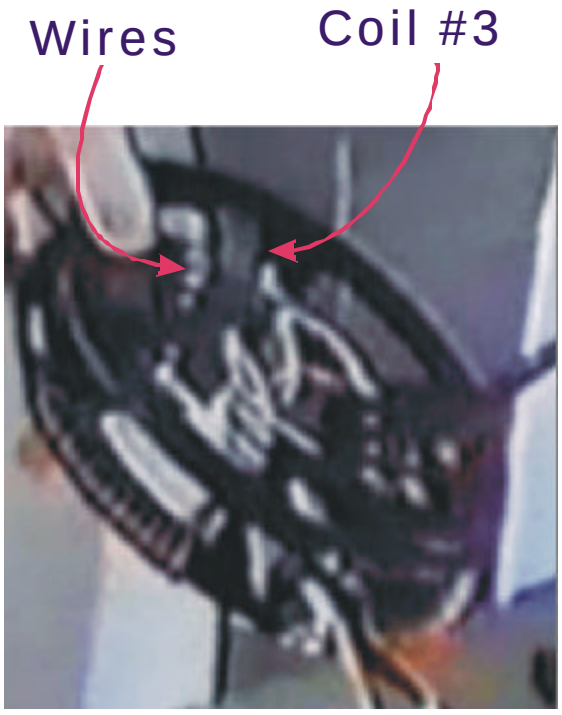
6.1 Yes SM pushed a button while doing the demo. Right after he places the second magnet, his left hand goes to the side of coil #2 and he pushes on the button with his index finger. You can see it and hear it. Clic-clic. Very fast. It cracks me up each time. Here it is .....



6.2 The Vertical Coil #3 – Control Coil

6.3 Vertically mounted Coil #3 is held in place with vertically wound electrical tape. You can see some wire leading into the coil. This coil could be wound as follows.

1) If the assumption is that an OTPU is two small TPUs, and the collectors are working in pairs or two in parallel, there are two control coils inside the coil #3.
2) If the assumption is that an OTPU is unique unto itself and the collectors are working in fours or in series, there is only one control coil.



7.0 The Ring Material

7.1 So far, in this document, we can realize that there is no corner of the OTPU that is left to chance. Every coil, collector, leg, button, circuit, and others have a clearly defined purpose. So why would it be different for the ring material. The photo below shows it all at 38:40.

7.2 A. Is a view under the ring with the lamps lighting it from the top side. You can clearly see through the ring. The dark edge is expected and is not a wire. It's only the normal darkness of the ring edge. The light is shinning on SM's thumb that you can clearly see through the ring. Now when you advance the video frame by frame, you can see his thumb moving through the ring.

7.3 B. Is a curved shadow made by the light hitting the outer top right side of the ring and you can see this shadow on leg #2. Again you can see the dark outline caused by the ring edge. An opaque ring would have given a black shadow. A semi-transparent ring would give exactly what we see, a gradually lighter shadow.

7.4 Finally, you would have to look at the video and see how the OTPU is being handled so easily to understand that it is not made of any moderately to extremely heavy material. Look at when SM plugs the device to the plug box and you will see the OTPU move or wobble. If it had any decent weight, it would never have wobbled so freely.

7.5 Another confirmation that this is a lightweight material is that since the circuit board is longer than the legs, I don't think SM would have allowed so much weight on the circuit board.

7.6 Plexiglas is a known dielectric and it would be advisable if some did further research in this regard.

8.0 The Four Collectors

8.1 Here I feel is the point of most contention, were we have stumbled left and right and up and down for so long. So let's try and put a lid on this question once and for all, but only regarding the OTPU as the other larger models tell another story (but I promised I would not touch on those – but it's so tempting.) Discipline. Discipline.

8.2 Let's start by asking ourselves what we already have on the plate. Well we already have two coils #1 and #2, and we already have either a single or dual control coil #3. So what's left. Oh yeah, the collector coils. So if we already have all the others, then why would I have dual wrapped collectors. There is absolutely no need for this. Whatever the collectors will collect can easily be well collected with one collector so why would you have two.

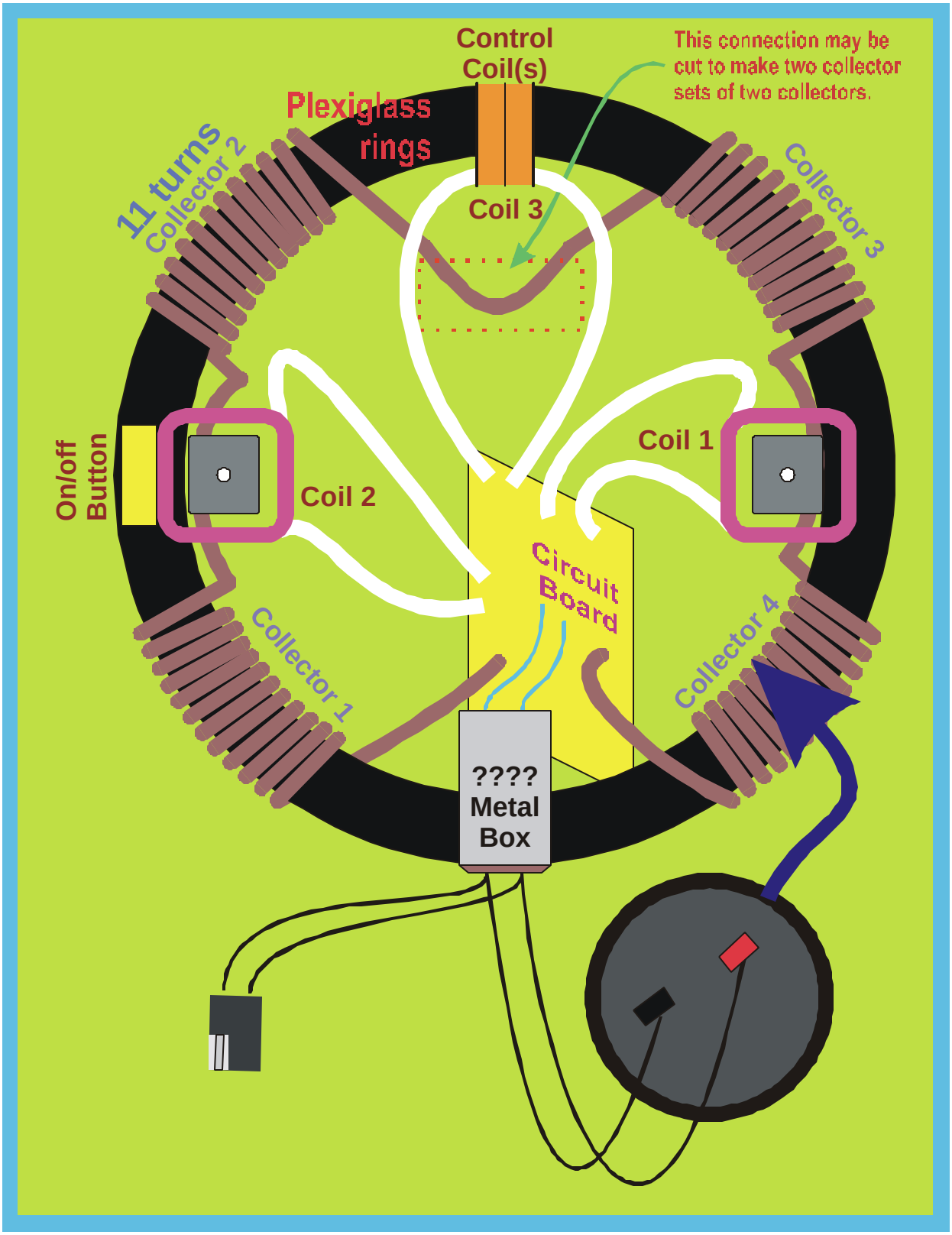
8.3 The best working analogy for the OTPU collector is a solar panel. When the solar rays are transformed to electrons in the gel, these electrons "migrate" to the electrical conduits that will take them to the power grid. So, explain to me how electrons know there is a conduit that it should follow. This is in the nature of electrons. This same nature is evident in the OTPU. We'll get to this later but for now, let' say the collector has both a positive and negative direction so any migration of electrons will happen as a natural subset once the right conditions are set in motion.

8.4 I have spent many hours just looking at the collectors. Yes some may see black lines between lighter lines, but those black lines are not wires. They are simply the shadow of the closest wire to the light source. You will notice the black lines never reach the wire turns. They always finish pointy. This is because the wire has a slight looseness on the horizontal thus bulging out and this is why the shadows are all pointy. There is no double wind either. This is also pointless since collection is a function of surface area and would not be advangates by additional depth.

8.5 Photo above shows a collector neatly wound with turns being side by side. The black lines are shadows and not a second winding.

9.0 General Wiring Diagram

Open TPU wiring diagram



10.0 Wire is important!!!!

10.1 Yes it is. I know all of us have wound coils, collectors, tpu's, you name it we've wound it. But in almost all cases, all were using standard multi-strand wire that actually equals one strand of wire.

10.2 SM said it and we'd repeat it millions of times. Wire is important.

10.3 In the TPU, we can see white wires that have very gagged edges when they turn and twist. This is indicative of LITZ wire. This is a multi-strand but each one is insulated. So if you use a 26 strand Litz wire for a coil, you now have 26 coils in one. If you use 176 strand Litz for the collector, you now have 176 collectors.

10.4 So, I'll ask this simple question. What's better, 1 collector or 176 collectors. What's more sensitive, 1 fat collector or 176 fine collectors. I think you get the drift, so we'll leave it at that.

10.5 What do we know?

10.6 There are 4 collectors with Litz wire windings that can be wound as follows;

- all in series,
- two in series then two series sets in parallel,
- odd with odd and even with even collectors in series and the two series sets in parallel
- all collectors in parallel

10.7 There are two coils with probably Litz wires. Each coil is wound to produce the maximum magnetic field possible at the least energy consumption possible. The coils are pulsed to reduce even more power consumption.

10.8 The control coils are wound either in one single coil or two coils side-by-side with again Litz wire. This coil must be designed to capture magnetic pulses that charge the collectors or that is emanated by the coils.

10.9 We know that having collectors in parallel will result in more amperage production and less voltage production. So parallel would be at the bottom of the list since the OTPU is producing more voltage than amperage.

10.10 We know the collector are getting hot and this may be another confirmation of Litz wire using very thin strands that can charge easily but may heat up. Once this stage is conclusive, we can work at lower the heat problem or sell the unit as a block heater. lol

10.11 We know the circuit board is very simple and according to my observations, there are no frequencies used in the OTPU. Surprised. I know it's a shock. So here's a quote from SM himself.

"Your interest in the harmonic resonance is also stepping toward the right direction of things. But then again it depends on your viewpoint about exactly what harmonic resonance is and how it relates to mag fields and converting energy as does my power unit."

10.12 Wattsups' – Theory of Operation

10.13 Yes I know what you will say, "Not another theory". I was telling myself the same thing. So I decided to put it out anyway but this is specifically applicable to the OTPU. OK, it may be a guide for you guys for any testing that can be done to confirm or reject this theory. The more we can reject theories, the tighter the noose will pull around the right theory. Process of elimination is going to be a prerequisite to find the right operational parameters. So here goes for the next 467 pages. Just joking.

11.0 Theory of OTPU Operation (See page 12)

11.1 Figure A shows the OTPU at rest. I am only showing two collectors, one coil and the control coil(s) plus the two Plexiglas rings.

11.2 Figure B shows the magnet placed on the coil. Why is this magnet placed there and not anywhere else. Well I have put magnets on coils millions of times and there is not much to gain by doing so. So I am thinking the magnet has nothing to do with the coil, but is placed there at the center point to cause a static fields to accumulate around the top Plexiglas ring.

11.3 This has been shown to act like a capacitor having the Plexiglas ring act as a dielectric that can have static accumulate around it without actually absorbing the field into its ring structure.

11.4 Figure C shows the coil receiving a very tiny low voltage capacitor discharge. The smaller the discharge, the faster it will be possible to make the discharges. The generated magnetic field goes over the top ring and drags the static towards the collectors. These charges will accumulate on the collector in the same manner as a solar panel has accumulated electrons on its conductors.

11.5 Figure D shows the control of this is done by the control coil that also receives each pulse from the coil as well as the increased field developing around the collectors and transfers some of that pulse into a small current that simply resets the pulsing circuit.

11.6 There could be many variations of this theory but in general, if this theory was taken to its extreme in build and test procedures, we would be able to start canceling the variables of this theory fast enough to lock into the proper methodology.

11.7 Building and Testing Procedures

11.8 At this stage, I would recommend that a standard build spec be developed using most of the information contained in this document. Along with the build spec, there should be testing procedure written as a standard test protocol so everyone active in testing can work off the same methods. As test confirm a positive or negative outcome, the actual workings of the OTPU will reveal itself

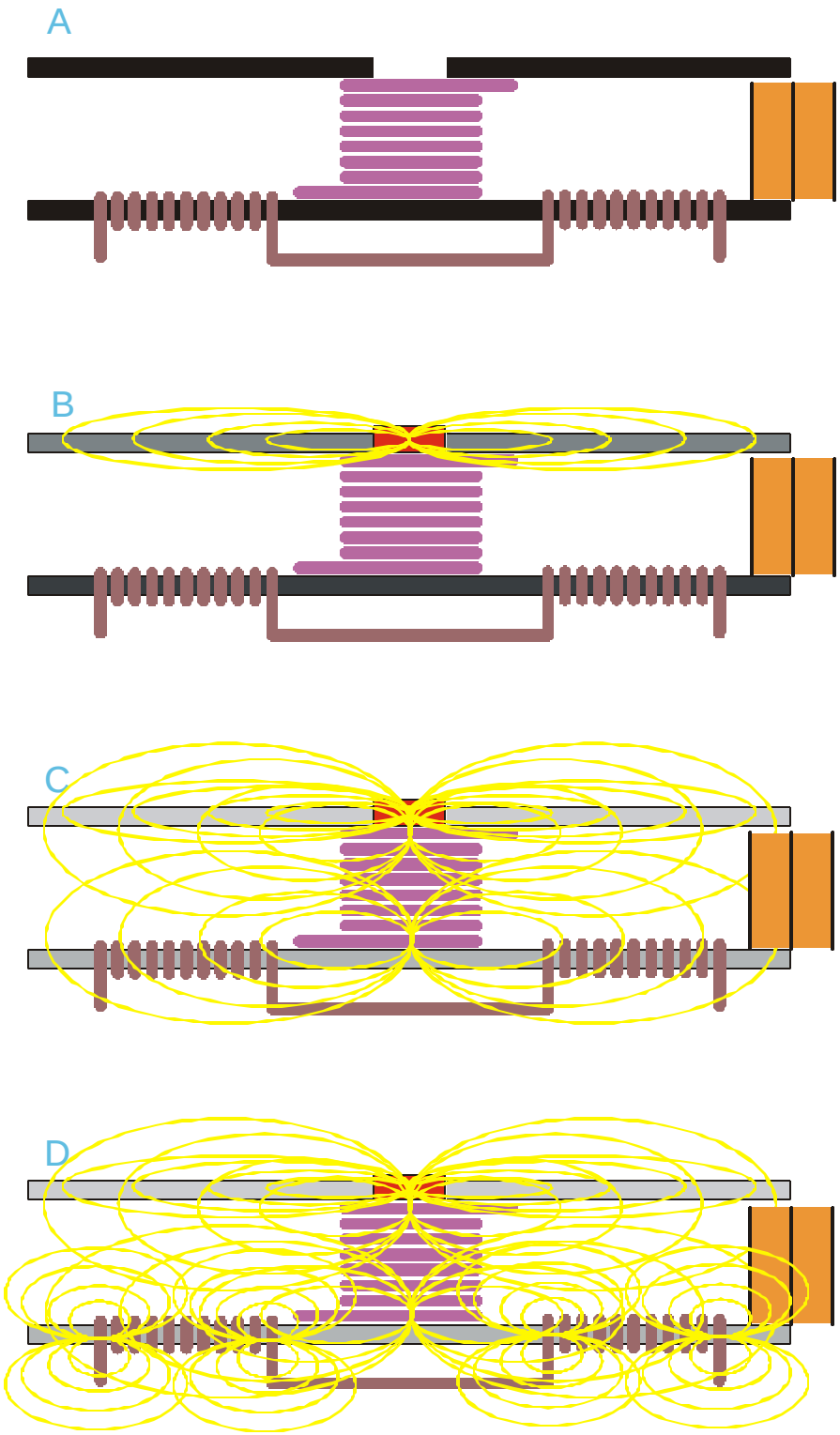
11.9 Conclusion

11.10 There is a danger is working on this device and I do not think it is relative to any potential blown devices. The danger is in overcomplicating the system. SM was not a rocket scientist, nor a physicist, nor did he have a doctorate in energy conversion systems. I am convinced that SM was your regular TV technician and this can be noticed in the way he talks.

11.11 Contrast this with the level to sophistication of members on this venture and I can say that you guys are light years above SM in many of the principles and techniques you wish to bring to this endeavor. The problem is, you will have to leave this entire prowess behind and bring yourself "down" to SM's level.

11.12 SM took two roads to build his TPUs. The smaller units have certain commonalties with the larger TPUs. There are some parallels, but the main difference is that the larger TPUs are working with a real form of vibration. (I will explain this in another document). The smaller TPUs are wound much to tight to have use of any vibration advantages, save the vibrations that can be sensed by a pulsing coil. I know some of you will say this is bullshit, so I invite you to prove me wrong.

11.13 Proposing theories of operation can go on for years. Before you propose a theory, please point to a specific part of the OTPU you are talking about. Don't just talk about standing waves. Show me where you think they stand. Don't just talk about driving a frequency, show me where and what this frequency will physically do on an OTPU. The more your theories are directed to a specific physical aspect of the OTPU, the faster this endeavor will advance, otherwise we will be stuck in theoretic limbo for years. I wish you all the best of success.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