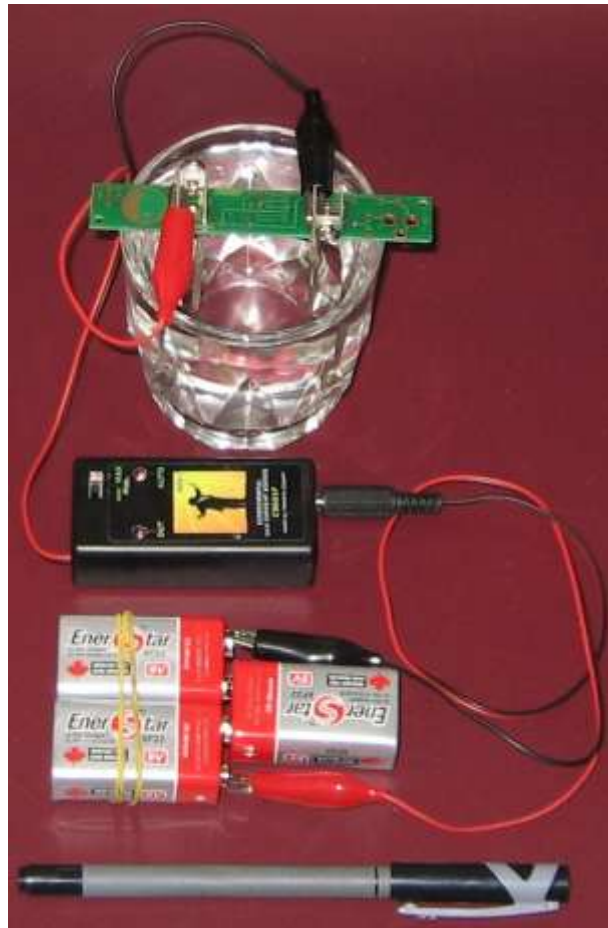


CSG01F-Auto Maestro-Zapper

USER'S MANUAL



**Maestro-Zapper : Designer and
manufacturer of electronic devices
intended for well-being**

<http://www.maestro-zapper.com>
info@maestro-zapper.com

Some important notes

**If, driven back by despair, you expect a miracle,
this product is not for you.**

We believe in miracles, but we do not sell them.

Legal disclaimer :

**We do not prescribe, diagnose, or make any medical claim or advice.
The principles, assumptions or theories exposed in this manual have no medical or scientific
value officially recognized.**

**Please note that this information or devices described have not been evaluated by Health
Canada (Canada) or Food and Drugs Administration (USA), and then, have not received any
guarantee on their effectiveness or their safety.**

**CSG can only be sold or used as experimental devices for educational research.
They are not intended for use in the cure, treatment, prevention or diagnostic of any disease.**

**If illness is an issue, please consult a licensed health professional
before attempting any self health program.**

**By using this information without the approval of a licensed health professional, you are
prescribing for yourself, as permitted by law, and you take full responsibility for the results.**

These results may vary depending on individuals

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<p>HUMAN WORLD WOULD BE MUCH BETTER, IF THE HUMAN KIND HAD READ-IT WELL !</p>	<p>Do not make the same mistake with your CSG</p> <p>READ-IT, THE DAMN MANUAL!</p>
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1.0 INTRODUCTION

First thing first :

Thank you for your interest in our products, and the purchase of this Colloidal Silver Generator, sincerely hoping you will enjoy its use in the way of your own well-being.

This small electronic device is a CSG (Colloidal Silver Generator) which allows the production of colloidal silver suspended in a liquid. It is intended, without any pretension, for domestic use, making 200ml to 500ml (6 to 16oz) of colloidal silver suspended into distilled water, in a few hours.

It has been optimized for a concentration ranging from 10 uS to 20 uS.

Colloidal silver has 1001 interesting uses in a household.

Its therapeutic use remains in the domain of personal experimentation, for itself and on itself.

This manual doesn't describe ANY medical use of CS

**You are in an area where too many "politically correct", heavily graduated persons, wishing you happiness at all costs, want you to make "obvious" mistakes ... You are also in an area where charlatans prosper.
Be careful.**

1.1 RECEIVED MATERIAL

- **CSG01F-Auto** control enclosure
- Two pure silver wires AWG#12 (99.99%) No included on "**CSG01F-Auto-Alone**"
- A wire terminal board
- A power supply connector 5.5x2.1mm with 12" wires and alligator clips
- This manual

CSG01F-Auto-Alone



Please note: Due to postal restrictions, we don't include a 9V battery.

Be sure you have 3x 9V batteries ready, when your KISS zapper will be delivered.

The cheapest ones (3x for \$2.00/2Euro will do)

Any other kind of 9V battery (Alkaline, rechargeable ...) will do too

CSG01F-Auto



1.2 REQUIRED MATERIAL



1_ We provide you the "High Tech" part (hard to build) in a compact and inexpensive package.

2_ We provide too the 99.99% pure silver, AWG #12 (2mm in diameter) difficult to find (and quite often very expensive).

3_ We provide the manufacturing process documentation : This manual

You provide the (almost) easy part, to find locally :

1_ The glass container (a simple glass of water about 6oz (180ml) is enough to start with.

2_ You provide the power source: 3x 9V batteries will do well and for a long time. A wall plug transformer feeding 24Vdc, is perfect too.

3_ You provide the distilled water

Like this, you have paid the minimum price for this outstanding CSG.

In this picture, we show :

= **REQUIRED:** A CSG01F-Auto kit:
= **REQUIRED:** A glass container: . Here, a 6oz (180ml) wine glass
= **REQUIRED:** Distillated water: (from our local supermarket) (1.3uS measured at 24°C).
= **REQUIRED:** A voltage source: Here a 3x 9V battery, connected in series (27V) are a good choice, a 24Vdc wall plug with 2.1mm tip is a good choice too.

= Facultative: A voltmeter to measure output voltage.
= Facultative: An instrument to measure uS conductivity

Measuring instruments shown here:

- 1_ EC/TDS / TEMP COM-100 from HM Digital, giving the conductivity in 1/10 uS increments, on a 99uS scale.
- 2_ A DVM voltmeter, to measure the output voltage in between the electrodes.

Because the **CSG01F-Auto** has been calibrated, **on the automatic mode**, you will not need any measurement instrument. But having some will not hurt!

A simple VOM or DMM, having a 30+v scale and a 20mA scale will permit you to test the CSG, and follow the generation of the Colloidal Silver (CS)

What about ppmTDS testers? They are almost useless.

Their scale is too high to make precise measurements in the 0 to 50uS range used to generate CS.

The only instrument I could recommend is the CS100, from HM Digital (around \$65 on eBay) Giving a good resolution and precision, with a uS scale of 100uS.

What about a laser pen? Interesting but not absolutely necessary if you use distillated water (2uS and less) and pure silver 99.99%, with a constant current source as we use.

Note about distillated water: Some people don't make a difference between distillated water, demineralized water, "osmose" water and other names.

Distillated water is demineralized, but demineralized water is most of the time not pure enough to be used with automatic stop circuits. Reverse osmosed water is not pure enough neither in auto mode.

Why?

Automatic mode will trigger for a conductivity level of 9uS or 18uS at 25°C.

If you start with water having a conductivity of 35uS, the automatic mode will trigger right on the start of the generation. Only manual mode can then be used.

1.3 BEFORE DOING ANYTHING, YOU SHOULD KNOW ...

Many people say not to worry about U.S. FDA (Food and Drug Administration) or other government agencies: Colloidal Silver is a pre-1938 healing modality, making it exempt from FDA jurisdiction under the grandfather clause. Well ...

In August 1999, the U.S. FDA banned colloidal silver sellers from claiming any therapeutic or preventive value for the product, noting that colloidal silver was being marketed for numerous diseases without evidence of safety or effectiveness.

The product now has the status of a dietary supplement in the USA : It can be promoted with general claims, but cannot be marketed as preventing or treating any illness. Following this ruling, the FDA has issued numerous warnings to Internet sites which have continued to promote colloidal silver as an antibiotic or for other medical purposes.

Important note: Due to an extremely restrictive North American legislation, these generators are sold as educational and experimental devices, intended to use on undrinkable water, and as plant growth stimulators.

What you do with them is your own responsibility and you must comply with the laws applicable in your place of use.

1.4 PRODUCTION OF COLLOIDAL SILVER

We will proceed to the manufacture of a product of a very high purity, usually done in laboratory conditions. And we will do it with what we have around, in a domestic behavior.

To put all odds on our side, we will need to use the best, pure ingredients easily available.

- The silver wire will be at least 99.9% pure. The provided silver wire is 99.99% pure.
- The water must have a conductivity of 2uS (micro-Siemens) maximum. Distilled water is just fine (ours measure 1.5uS at 24°C).
- Demineralized water is not suitable most of the time, because it has a conductivity ranging from 0 to 100uS, depending on its source.
- The osmosis water is not suitable neither.
- As for tap water, it is considered drinkable if below 1000uS, and "very good" if reading 100uS. We will not talk about beer... (-:-)

What we will do will have usually a conductivity between 9uS to 18uS, in automatic mode (5uS is good enough most of the time for all uses around)

Do not be surprised then, if sometimes the generation goes wrong, or the concentration obtained is not quite what we expected.

WE WILL SEE LATER THAT THE MARGIN OF MANEUVER IS STILL QUITE WIDE, AND THE GENERATION OF CS IS AN EASY TO DO ROUTINE...

2.0 THE CSG01F-AUTO

2.1 : DESCRIPTION

The **CSG01F-Auto** kit consists, essentially, of :

- ◆ A small board with 2 screw terminals, holding the "U" shaped silver wire
- ◆ Two wires, AWG#12 (2mm) 5" long (12.5cm), 99.99% pure silver, "U" shaped.
- ◆ Power supply cable with a 5.5x2.1mm connector at one end, and alligator clips on the other end.
- ◆ A small plastic box, housing all the electronic circuits:
 - ◆ This enclosure has a 3 position selector
 - ◆ = Left: Minimal concentration on automatic shut off mode (around 9uS)
 - ◆ = Center: Manual mode, without automatic shut off
 - ◆ = Right: Maximal concentration on automatic shut off mode (around 18uS)
 - ◆ A LED showing we are in automatic mode
 - ◆ A LED showing the output current flowing in between the electrodes.
 - ◆ Two output wires connecting to the terminal board. RED wire is the positive output. Black wire is the negative output.
 - ◆ An input connector (5.5x2.1mm) for the power supply
 - ◆ A Constant Current Source of 0.95mA nominal.
 - ◆ A trigger comparator, stopping the process when the right voltage (concentration) is reached

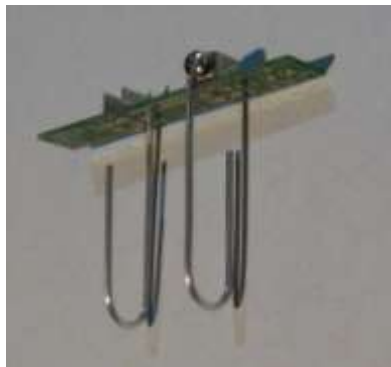


2.2 PRELIMINARY TEST / TRIAL

Note: This quick test is made with tap water containing up to 500 ppmTDS of "contaminants". The detection circuit will trigger with a concentration of 9uS to 18uS in 24°C.

Note: 1ppmTDS = 2uS (usually)

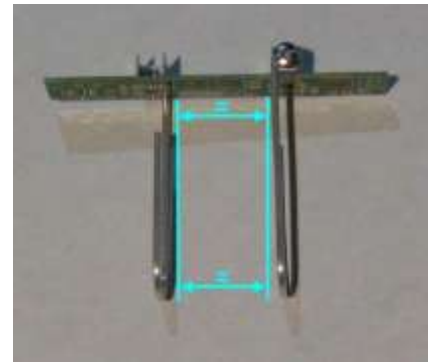
Do not be surprised at how quickly the circuit responds in test mode, with tap water!



= Spread out in front of you, the material received.

= Mount silver wires to their respective place, taking great care to place them parallel with respect to each other. The "U" shaped wire will go under the board, facing one each other, when well placed.

<==





= Connect 3x 9V batteries to the alligator clips. Here, we measure 29.9V

= Note: The **CSG01F-Auto** sinks so little current, that Carbone-Zinc Batteries (SHD) 3x for 2 Euros, are enough on this use. For sure, Alkaline or rechargeable batteries will do too, but their high price is not recommended here.



TEST-1: No-water!

- ◆ Select the manual mode (center)
- ◆ Connect the alligator clips of the control box, to the board holding the electrodes. Polarity doesn't matter.
- ◆ If you have a VOM or DMM, connect it on the output terminals, to measure the voltage. Here, we have 27.8V



Measuring the output current

- ◆ Disconnect the voltmeter, and use a 200mA scale to measure the output current. Re-connect the VOM on the output. Here, we measure 1.09mA

TEST-2: MANUAL MODE

= Take a glass of water and fill with tap water up to 6mm (1/4 ") of the top edge.

= Select the manual mode (center)

= Place your generator on the glass of water, gradually

If everything is well connected, the OUT_LED will illuminate indicating the passage of 0.95mA nominal (constant current source).

= The Auto_LED remains off, indicating that the Auto circuit is not activated.



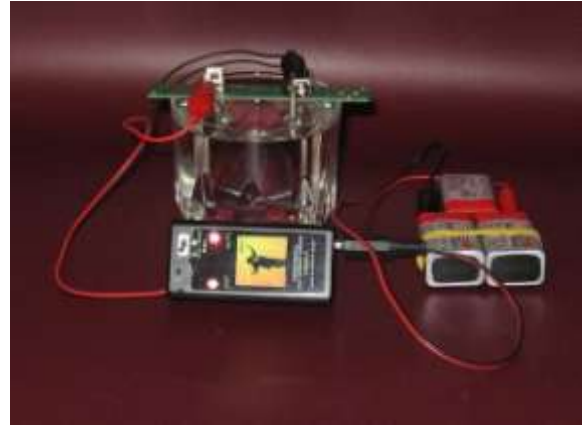
We can use a VOM or DMM to check the output current on manual mode only.

On Auto mode, the internal comparator will see a "short-circuit", shut off everything, and you will not be able to read anything.

TEST 2 : IN AUTO MODE

Note: A voltage of at least 18V is required in this mode. A lower voltage can trigger the automatic shutdown before generation begins, and nothing will work as expected (see chart on page 17)

= Remove the board from the top of the glass of water
= Select the Auto_Maxi
= The LED_Auto will light: Auto circuit is powered
= LED_OUT is (almost) OFF (no output current yet)
= Very gradually plunge the electrodes into the water: The LED_OUT will turn on gradually (and quite fast) to full illumination.
= Then both LED's will suddenly turn off, and will remain off: Tap water has too many impurities, and the detection circuit cut off all the CSG circuits.



Everything is "normal" in these circumstances

= To re-start, you must reboot the detection circuit. :

- Select MANUAL mode (center position), and select Auto_Maxi again
- You can remove the power supply, wait a few seconds and reconnect the CSG.

PRELIMINARY TEST OF THE CSG01dAuto DONE. EVERYTHING WORKS NORMALLY

2.3 I WANT TO TRY-IT NOW!

LET'S GO AHEAD...

How to do 6oz (180ml) of CS, the easy way, watching the CSG work for you.

This first trial is easy to do ... and easy to succeed.

You need distilled water (distilled one time only is enough), a **CSG01F-Auto** and 3x 9V batteries.

If the water is distilled two or three times, it will be almost an insulator, and it will take MUCH

longer to generate colloidal silver. It is also quite a bit more expensive ...

Needless to use batteries at 15 Euros each. 3 for 2 Euros will be perfect.

With this type of battery, you should be able to make at least 40 liters of colloidal silver, 9uS.

Not bad!

If you have a voltmeter, use-it.

Otherwise, we will do this CS the blind way, simply by following the instructions.

We will assume that the CSG was well assembled and verified.

We will also assume that you purchased three 9V batteries.

Here's what we'll do: In a wine glass (6oz or 180ml) filled with distilled water, we will first check

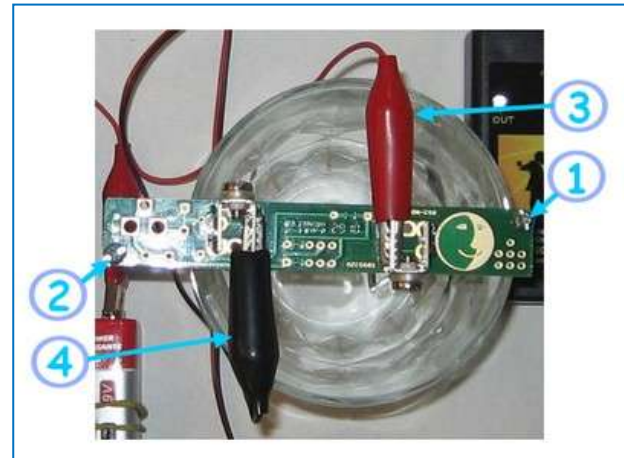
the quality of the water in the glass, with the CSG in Auto_mini mode.
 Then we will make a concentration of about 9uS in Auto_mini mode.
 Then, after checking / cleaning the electrodes, we will continue the generation on Auto_Maxi mode until we reach about 18uS.
 We will taste the water to detect any difference in taste, at each stage of our generation.

2.4 CSG01F-Auto – How to USE-IT

Preliminary set up:

Use a wine glass (about 180ml), very clean, rinsed with a little distilled water and well wiped.

- Wipe / clean too the two electrodes with a kleenex. The electrodes can be dull (not shiny) but not dirty (no deposit).
- Fill the container up to 5 or 6mm of the top edge, with **distilled water**.
- Choose the lowest concentration in Auto mode (min: about 9US)
- Connect the power supply to the CSG (20V to 30VDC). The LED_OUT is off. LED_Auto is ON.
- Connect the output of the CSG over the board terminals.



- In this board, there are two screws, one at each corner (1) and (2). These screws prevent the board to fall inside the glass

If that happens ... Don't panic. A short circuit at the output will not damage anything. Disconnect the power supply, the wiring, and dry all in open air, or with a hair dryer. That's all ...

- The board (and terminals) is quite light. To keep-it well in place, clip each alligator on one of the wings of the terminal, face to face, as shown in the photo. Symmetric weight of the clips will keep the board straight. You will have enough room to connect a voltmeter to the terminals too, if you want.
- Note the start time.
- If you have a voltmeter, choose a scale that can measure 30V and connect the terminals of the bar. Doing so, you have the output voltage across the electrodes. Here 25.7V.



Start

SW: Left (min_Auto)

Led-Auto is and remains lit. **Led-Out** is off (no output current)

- Immerse gently the silver wires in water
The LED_Auto remains lit (auto mode)
The LED_OUT lights a little, evidence that the current (small, small) is going through the output.

Trick to "measure" the purity of the water, at the very beginning of the generation: Put the selector on Manual mode, and with wires immersed, check the OUT light: If the



water is pure enough, you will see no light

Come back to the mini_Auto mode.

With a mA-meter, you could measure the very low output current, measuring 0.1 to 0.2 mA: Distilled water is almost an insulator, and the current has great difficulty to pass through. If using double-distilled water or (even worse) tri-distilled, the current will be even lower.

At this stage of our demonstration, we must learn some theory and important details for us (we have 1 hour behind us, while our first

mixture just builds-up ...)

If the ingredients are of good quality, the result may only be good ... as long as the current is well controlled (we guarantee it) and that everything is not contaminated by bad handling, or bad procedures.

Many variables can change the result:

- Fouling of the electrodes
- An exaggeration in the desired concentration (up 24uS concentration is relatively easy to do. Up to 30uS it becomes an "interesting exercise" – Higher than 30uS, with our behavior, it becomes almost an "Impossible Mission Task" ...)
- The temperature can strongly influence. Remaining in the vicinity of 24 ° C (room temperature), the variance will not be too strong.
- The shape, the distance, the degree of wear of the electrodes may influence the results.
- The amount generated at once. At the beginning, it is better to stick to small amounts – meaning 180ml. Using higher amounts of water will take longer to generate ...

In summary, the AC generation must follow an established routine for predictable results.

Luckily, a concentration of 5 to 7uS is already efficient, and using a concentration of 50 or even 100uS will not generate any adverse effect, other than the waste of our resources. I think that the generation of 9uS to 18uS may fulfill 98% of our uses.

Let's go back to our generation

We can divide this generation into two phases (see chart, page_17)

Phase-1: The current increases constantly, from almost 0mA, to about 1mA, using all the available voltage.

This phase is the longest one. Current follows a logarithmic curve. The more the distilled water is pure, the more it has a low starting current, and the more time it will take to reach the 1mA level.

That's why wanting to use a tri-distilled water is a nonsense in practice, if a single-distilled water is sufficient (the important word here is "sufficient").

But this is not so important, as we will learn in Chapter 3.3: "Seeding"

If you have a voltmeter, you can connect it on the output terminals, and check when you leave this phase_1:

As long as the voltage stays the same (around 24V with three 9V batteries), the current will increase (faster nad faster). In our actual trial, this phase should last between 1/2h and 3/4h, depending on the initial conductivity of the water, and quantity of water used.

Phase-2: The current reached a maximum of 1mA and the constant current source begins to act, limiting the current to this 1mA level. To maintain the current to 1mA, the current regulator will decrease the available voltage on the output.

From this point, the voltage will begin to drop slowly. The rest of the generation will be done at constant and predictable rate.

The first trigger level (mini) is about 9uS or approximately 15.8V output

The second trigger level (Maxi) is about 18US, or approximately 8.9V output

If you have a voltmeter connected to the output, monitor between 16.5V and 15.5V

You will notice that the LED-Auto intensity decreases, while the Led-Out remains lit, when approaching the threshold ...

Suddenly, both LEDs get off and remain off. The automation has played its part.

Time elapsed since the beginning of this essay: about 1/2h with distilled water I use. This may be different in your trial.

That's it!

You've got a mixture of very pure water (distilled) and so fine silver particles, that the water remained clear.

The amount of silver is about 9uS or 9ppm_Ag.

If you measure this with a TDS concentration instrument, and if you're lucky to have a well calibrated instrument at these readings, you should read between 4 and 5ppmTDS (half the number of uS or ppmAg)

The generator has by now its two LEDs off, and consumes almost nothing.

Over time, the water will mix with the silver cloud between the electrodes, and the measured concentration will decrease. Normal.

Taste the mixture produced.

Before tasting: Nothing produced in this generation is "bad", even if it doesn't looks tasteful.

But if what "floats" or remains sink in the bottom of the glass, or sticks in the electrodes hurts your sense of cleanliness, you can filter the AC through a paper coffee filter (white

paper).

Rinse the filter with a little bit of distilled water, as the whiteness of the paper is obtained with chlorine (bleach), and some residues may still be present.

Transparent water could then become slightly blurred (Silver Chloride)

Depending on the sensitivity of your taste buds, you might find a very slight bitter taste.

As such, the solution of colloidal silver is already "active" and can be used in a thousand ways.

This mixture can then be used in an emergency. But if you have time, go further ...

2.5 From "mini" to "Maxi"

To go further on our concentration:

Remove and wipe your silver electrodes with a white cotton or Kleenex WITH CARE, because pure silver is soft enough to bend easily.

Go from Auto-mini (left) to Auto-Maxi (right) on the selector, via the manual mode (center). This makes a reset of the automatic mode: The LED-Auto is on again.

Beginning of the second step, to reach the 18uS concentration.

Note the time of this new beginning.

Replace the electrodes in the glass of water, and let the concentration increase from 9US (actual) to 18US, which should take around 30 min more. The Led_Out is on as soon as the electrodes are immersed. Normal. We actually continue in our phase_2, 1mA cycle.

Generation will continue until the next trigger level: 8.5 V output, equivalent to a concentration of about 18uS

You will find that the electrodes become "dirty" faster. Normal.

Wipe the electrodes if needed, especially close to the end time.

.....

When the generator will stop again, you should still have a transparent water, or slightly tinged with yellow / gold, indicating that the mixture is still of an EXCELLENT QUALITY.

Note the generation time

End of generation! That's all! Again!!

We will not go further into this first test, but you can repeat it ... again and again.

You can just turn it off, remove the generator from the glass, and taste again the resulting mixture. This time, the bitter taste will be more pronounced, and you can recognize a slight metallic taste.

You have made two different active concentrations, both with, as main activity, the contemplation of your work!

Other generations should be as easy to do in Auto mode

In manual mode, other experiments are possible.

In Auto mode, other concentrations are also possible (by varying the distance between the electrodes)

But you made the crucial work, and the good experience will be invaluable for future experiments.

Note: With time and rest, the concentration will decrease significantly.
The generator triggered from the concentration BETWEEN ELECTRODES. Over time, all the water between the electrodes, and outside them, will mix, and average concentration will read lower.

That's why, with larger amounts of water, you need a way to stir your mix.

On the other hand, part of the silver particles ionized positively, will find "their" electron, will combine with them, and become neutral. These particles have not disappeared, but the uS-meter cannot see them ... Another reason to have a lower reading.

An easy way to increase the concentration is to wait about 24 hours, and to restart the generator, which will add silver, until the SCG trigger again on the same limit. The resulting mixture will be more "stable".

Note: Now that you've done a full glass, you can keep it in a big 1 liter (or so) clean glass bottle, and keep the "holy water" in a location quiet and dark. The refrigerator is not recommended.

This colloidal silver mixture will be "good" for several weeks / months without problem.

Despite what the experts say, I did not see a significant difference if left to light, or stored in an opaque or transparent bottle, demonstrating the stability of the product mixture.

I noticed (very suggestive) that AC seems more active when it comes to be done.

-----☺-----

3.0 INFORMATION

3.1 CLEANING SILVER WIRES

When a run of CS has been made, and before starting a new one, rub the silver wire with a Kleenex or white cotton cloth, to remove any trace of dust.

Some prefer to restore the shiny luster of silver by rubbing with fine #200 to #500 emery cloths. Do not exaggerate too much. In this process, it is the silver that is expensive ...

3.2 TEMPERATURE:

All measurements on our experiences had been made around 24°C (room temperature).

A higher temperature (40°C, for example) will increase the conductivity of water, and accelerate the process. It will also distort the measures of the automatic shutdown of the CSG01F-Auto, who will stop at a lower concentration.

You will need a ppm meter compensated in temperature to have a good reading.

3.3 SEEDING

In the generation of CS, we can distinguish two different stages:

1_ In stage_1, the current is very, very low at the beginning, because distilled water is almost isolating. Then, very slowly, it increases exponentially.

2_ In stage_2 for the **CSG01F_Auto**, a current regulator maintains a steady current of about 0.95mA, making the generation of the AC at a constant rate, trading speed for quality.

In both cases, we can accelerate the phase_1 by adding a bit of CS produced last time.

This new generated CS has been "seeded" with "old" CS.

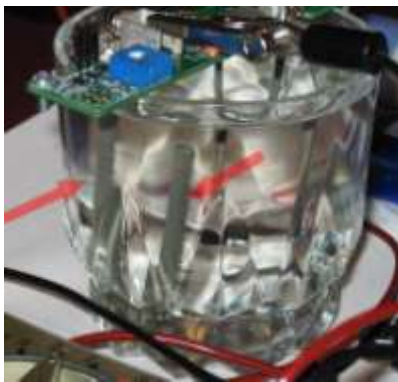
Conductivity being higher, current will be higher and time of pahse_1 will be shorter.

3.4 POWER SUPPLY

A DC power supply of 20 to 28V is recommended.

A lower power supply, as low as 7V will work too, in manual mode.

3.5 DEPOSITS



During the generation of the CS, an electro-chemical reaction will break down water into oxygen and hydrogen.

The negative electrode (-) will release oxygen which, when combined with silver, will make a dark deposit of silver oxide on this electrode.

The positive electrode (+) will release hydrogen which will trap silver molecules, making a whitish deposit.

These deposits are not dangerous, but nobody likes to see them.

Eventually, they will interfere with the process and slow it down.

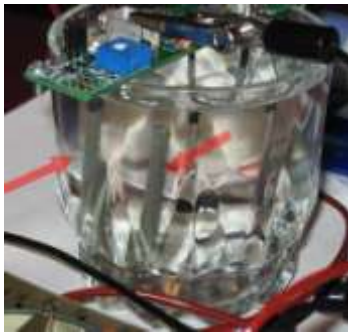
If such deposit becomes too "heavy », stop the process, remove carefully the CSG (do not stir the water with the electrodes and their delicate deposit (-:-) and clean the electrodes (with a cotton cloth or a tissue), and continue the process.

Every time you use your CSG, change the output polarity. This will wear out both silver wires equally (only the (+) electrode "gives" silver).

When you reach the proper concentration, you can filter the CS with a simple paper coffee filter, rinsed beforehand with distilled water, to remove any ugly deposit.

3.6 CS COLOR

A high quality CS is transparent.



Here we see the end result of a CS glass made with the older **CSG01cAuto** (older version), to a concentration of around 24uS. Result is definitively "transparent"

Many experimenters often seeks a slightly yellowish or gold tinted color - not because "yellow is better," but because this color shows that going further is unnecessary:

This color is a sign of crystallized silver particles, large enough to absorb all colors except yellow.

Going further will only maker bigger particles (not out goal)

Transparent is better, but this light tint is very good too.

On the right we see a very strong golden color, obtained during our tests. The solution measured 48uS.



Other colors: Red, brown, purple, ...

Your water was not pure enough, slightly polluted, or «something», mixed with the CS, turned the color this way. Keep this mixture as household cleaner. Avoid using on "humans"



Note: You can "break" the silver crystals, giving the yellowish color, by adding a few drops of hydrogen peroxide (3%) (2-3 drops per 200ml) WHEN THE CS IS WELL STABILIZED - 12 to 24h at least. The yellowish color will disappear (almost) completely in a few hours.

Here are the results of the same stuff, 2 h later.

CAUTION: If you add a single drop of peroxide before its time (when the CS is just done), a quick reaction will occur, and your AC will turn into

a dirty brown.

Try a small amount before you waste all your production. Yes, I speak from experience...



3.7 STABILIZATION OF THE CS

When the process is finished, you will note as the time pass over, than the concentration decreases by about 20% over nest 24 hours, or so.

A measured concentration of 36ppm will stabilize at about 28ppm after 24h. Normal.

If you want to retrieve the original concentration, install the CSG again, and let it reach a new time its concentration. (You can repeat this process up to 3 times, if you wish)

3.8 HOW MUCH COLLOIDAL SILVER CAN WE MAKE WITH THE SILVER WIRE PROVIDED?

Silver wire provided has a weigh of about 8gr.

1ppm (part per million) = 1mgr = ~ 0.000 001 liter

In theory, if you put all this weight (8gr) into distilled water, you could make 888 liters of colloidal silver at 9 ppmAg, or 444 liters of CS at 18ppmAg.

With a daily use of 1 table spoon (15ml) for our domestic needs, per day (a common number), we should have enough for 29630 days with 444 liters. In other words, you have enough for a looong time!!

In practice, let's say that you will make 300 liters, and this will last for about 3 to 5 years of daily use. My own production of CS for the last 18 months (2 persons) has decreased the diameter of the silver wire from 2.00mm to 1.87mm

3.9 WHAT ABOUT PPM?

Ppm means Parts Per Million, and is a relative measure as % could be.

In fact 1ppm is 1% of 1% of 1%, or 0.000 001.

So, when you see "PPM", you should always ask **"PPM of what?"**

There is a lot of cheap ppm-meters out there, in the \$15 to \$20 range, but they had not been made for CS. These instruments measure the conductivity of drinkable water, (or pool water, or aquarium water...) and convert the measurement into "something" giving an idea of the Total Dissolved Solids (or TDS)

In North America, the standard will convert 2 uS (micro-Siemens, measure of conductivity) into 1ppm_TDS.

There is more...

The ppm_TDS can run for "standard water" from 50ppm_TDS to 500ppm_TDS, so most instruments will give a precision of 2% of the full scale.

With a common scale of 1000ppm_TDS, this will mean a precision of (2% of 1000ppm_TDS=) +/-20ppm_TDS or +/- 40uS

We, interested on Colloidal Silver, we measure conductivities of 50uS and less.

So a measurement of 15uS +/- 40uS means not much!! (:-(

That's why a "TDS meter" is almost useless for our use.

In fact, there is no instrument in the market giving directly Colloidal Silver concentration.

So, what do we do?

- ◆ Most of the Low Voltage Direct Current (LVDC) generation produces around 80% of ionic silver, and around 20% of pure metallic silver.
- ◆ Conductivity meters only can measure ionic silver, and ignore stable, non ionic silver.
- ◆ Lab measurements show that 1uS is equivalent of 1 ppm_Ag.
- ◆ Colloidal silver starts being "active" at around 5 to 7 ppm_Ag, and doesn't seems to be much more "active" at 50 to 100 ppm_Ag
- ◆ In fact, quality is far more important than concentration

So, if we make a brew of around 9 to 18 uS, we will be "right enough" to use this brew almost anywhere.

So... Why bother so much about concentration? Yes, Why?!?

If you are still curious about the concentration of your CS, don't buy a ppm_TDS. Go for a COM-100 from HM Digital (around \$65 on eBay). You will have an instrument giving you a reading inside 2uS. Much better than 40uS for other instruments!

3.10 TECHNICAL SPECS

All numbers are approximate

Generator mounted inside a plastic enclosure

68mm x 34mm x 22mm

= Electronic using surface mount technology, 1% resistors all mounted on a PCB, industrial grade

= Current source: 0.95mA nominal

= 3 position selector

Left : Auto-Stop « mini » triggers at 9uS nominal with actual « U » electrodes.

Center: Manual mode, non stop

Right : Auto-Stop « Maxi » triggers at 18uS nominal with actual « U » electrodes.

= LED_Auto lights when on Auto mode

= LED_OUT lights when a current flows on the output

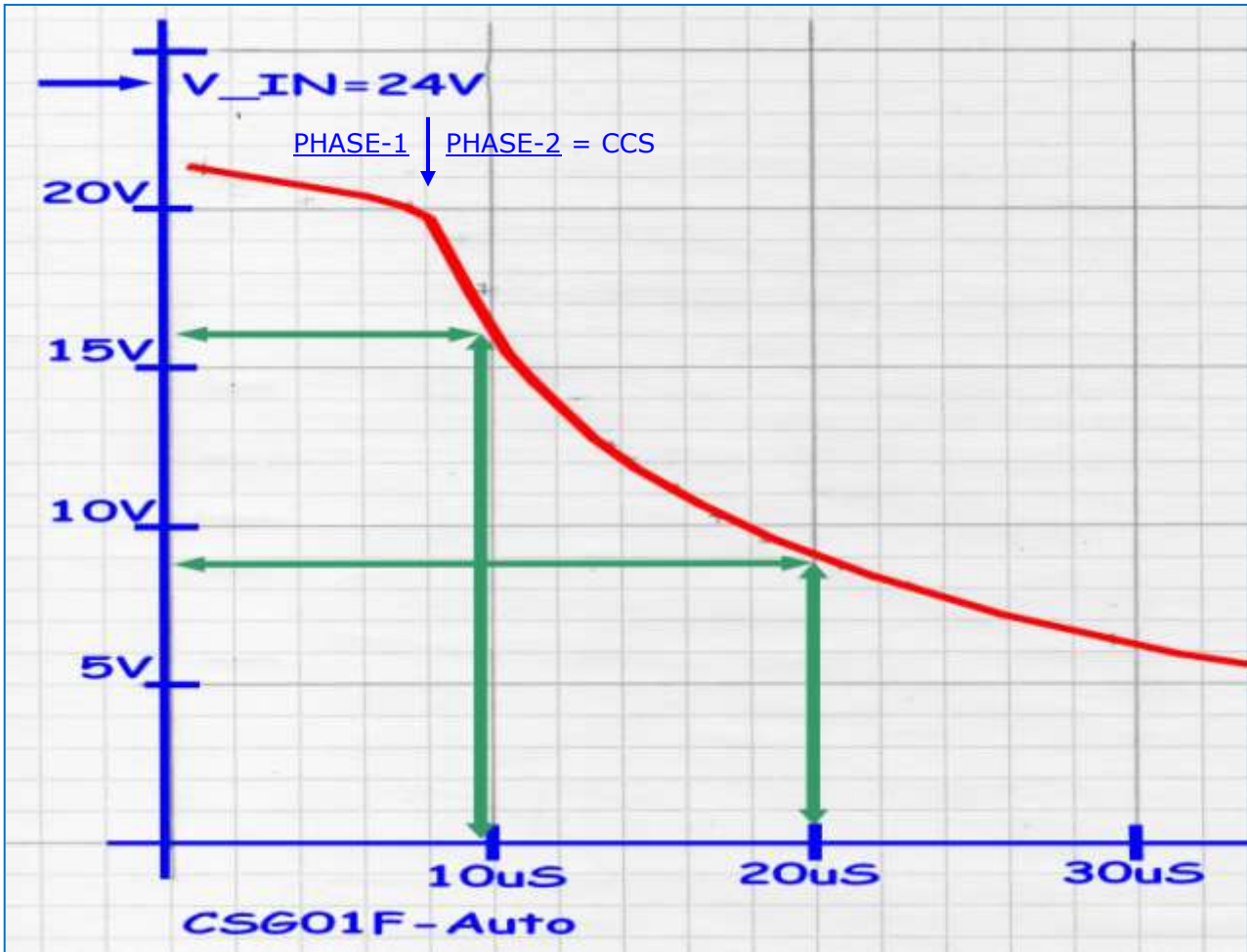
= Printed circuit board with 6.32 screw terminals. Used to hold silver wires

= 2x silver wires AWG#12 (2mm) 5" long (12.5"), 99.99% pure

= Power supply cable with alligator clips at one end, and 5.5x2.1 PS connector.



Valid for the CSG01F-Auto, with 6oz of distilled water, at around 24°C



3.11 WARRANTIES, AND RETURN POLICIES

Return instructions :

Please, e-mail us at : info@maestro-zapper.com

Repair Return :

* Date of purchase, P/O number, Model, How «it» happened, what is wrong.

You will receive Email instructions for a quick return, repair or refund.
Please, note that transport & insurance costs are under your responsibility.

Warranty against defects (All MZ products) :

Assembled units are guaranteed against defects in materials and workmanship for a period of 12 months from date of purchase. Not covered by this warranty, are damages resulting from misuse, abuse, neglect, accidents, or acts of god and nature.

At our option, we will either repair or replace a defective unit or part which is covered by warranty. It is the customer's obligation to provide shipment to our service center for repairs.

We will provide return shipment by standard ground delivery.
The customer may request special delivery at his/her own expense.

Trial or Money Back Guarantee : (Not applicable to **CS01** series)
 There is no trial warranty on CSG.

3.12 OTHER MAESTRO-ZAPPER PRODUCTS



The **KISS Zapper (MZ4V03)** (Available end of June 2011) is build around a 7555, and can be called a "traditional" zapper. This zapper is the smallest two frequency zapper in the market, using a plastic cabinet. There is no automatic sequence. Output is ON as long as the zapper is ON. An ON_Led indicator is used to indicate when the zapper is well connected to you. A wonderful "entry" zapper for the beginner, due to its very aggressive pricing. Its electrical specs are better than the original H.Clark's zapper.

The MZ6 : is built on the platform of the **MZ3c**, holding many of its functions. This zapper, using a uC, is a serious contender to many 555 zappers using 2 or 3 frequencies with a 555, at a similar price. It is intended for a daily use, without any "supernatural" claim. Its 6 frequencies available trough 2 selectors are : 30kHz, 10kHz, 2.5kHz narrow sweep, 1kHz for zappicator use, 15Hz and for the first time, 7.83Hz (Schumann frequency)



There is now (Nov. 2012) 4 different versions of this zapper:
MZ6: 6 frequencies (shown on picture)
MZ6CVS: 6 frequencies + 11V regulator
MZ6AK: 5 frequencies + Deep Sleep program
MZ6AK_CVS: 5 frequencies + Deep Sleep program + 11V regulator



MZ3c: Powered by a micro-controller, it offers 6 frequencies, including 2 sweep frequencies (FV and 2.5kHz), 4 automatic programs, Adjustable Constant Current Source, and many other features : One of the best zapper on the market today, at the price of some 555 zappers. Intended for the health professional and advanced zapper's user. A very good option to frequency zappers using modules. New in this version, a "DS" program intended to give a **Deep Sleep** experience

Maestro-Zapper
Designer and manufacturer of electronic devices
Intended for well-being

<http://www.maestro-zapper.com>
info@maestro-zapper.com
 Laval - QC - Canada - H7K 1J4

