

Silver Aid 1.0 - User Manual

Welcome

Thank you for choosing the Open Source Silver Aid 1.0 by BBMPulser. This manual provides detailed information on operation, features, safety, and care instructions.

Models: <https://bbmpulser.org/silver-aid/>

This device is part of the Dr. Bob Beck Protocol: “Beck Protocol First Aid Kit of the Future – A Radical, Safe, Proven, and Inexpensive Approach to Health using Micro-Currents of Electricity.”

Document: <https://bbmpulser.org/wp-content/uploads/2019/12/document.pdf>

Being open-source, we are transparent in our design. You may also build it yourself. The BBSA 1.0 consists of 8 components and 2 modules.

Safety Warnings

Do Not Use In The Following Cases

- During pregnancy (safety has not been tested).
- If you have an implanted device (e.g., pacemaker).
- Near water, while driving, or when operating heavy equipment.

Micro-Pulsing Cautions

- Do not place pads on lesions, cuts, abrasions, scars, eruptions, or sunburn.
- Stop use if pulsing feels unusual or prickly, or if the red low-battery light turns on.
- Avoid use with recreational or prescription drugs; interactions are unknown.
- Do not Micro-Pulse while sleeping.

Ionic Colloidal Silver Cautions

- Take breaks from consumption to reduce risk of argyria (bluish skin discoloration).
- Risk is higher with incorrectly made silver or selenium/vitamin E deficiency.
- When made correctly, risk of argyria is extremely rare.

General Caution

This technology is generally considered safe, but rare individual reactions may occur. Use of BBMPulser products constitutes acceptance of responsibility and agreement to hold BBMPulser harmless from damages.

Summary of lights

Internal light (visible true the case)

- Blinking Red: indicates Unit is ready for micro-pulsing or Ionic Colloidal Silver

Whats Included in the kit:

1. BBSA 1.0 (Bob Beck Silver Aid 1.0) Unit
2. AC/DC Adapter 30VDC 400mA (120VAC or 220VAC compatible). If you travel to Europe, you may need 120VAC to 220VAC adapter, (not included) please ask if you need one
3. TDS EC meter (to measure Silver Ions concentration in distilled water)
4. 10 pairs of pads for Micro-Pulsing
5. Two 6" 14AWG 99.99% Silver Rods
6. Soft hand wrist
7. Electrode Wire (Cable)
8. 3D printed plate (Silver Rods holder)
9. 2x Alligator clips (to hold Silver Rods inside the plate while making Ionic Silver water)
10. Laser Pointer (used for visual confirmation of Silver Ions in distilled water)
11. Digital timer with alarm (to time Colloidal Silver water production)
12. Carry case
13. User Manual

Kit Futures:

- Operating Voltage 30VDC (this model requires AC-DC wall adapter to operate)
- 2 modes of operation, Colloidal Silver and Micro-Pulsing, build in selector switch
 1. Colloidal Silver Generator – outputs 30VDC
 2. Micro-pulsing – outputs bipolar 30VDC at 4Hz ~50% duty
- Build in adjustment for Micro-Pulsing, allows user to adjust power output to the comfortable levels
- Build in protection, in case electrodes are shorted
- Simple design, built of 8 components & 2 modules (PWM & Power Supply modules)

Functions of each item in the kit

1. **Digital TDS meter.** TDS – stands for “Total Dissolved Solids”. In our case we are going to be measuring dissolved Silver Ions in our batch of distilled water.
 Distilled water is also refers as a pure water, it has no minerals or other impurities in it.
 The way TDS meter works – it measures electrical conductivity of the water. Pure “Distilled Water” will have little to no conductivity. If we measure it, it will read 0 PPM. That’s what we want to start with. “PPM” stands for Parts Per Million of Dissolved Solids in the water.
 As we place connected and energized Silver Electrodes in our batch of distilled water, the Currents of Electricity will strip microscopic pieces of silver from one of the electrode and will “dissolve” them in the water, this particles are so tiny that they submerge in water and won’t full out.
 With our TDS meter we can measure the concentration of this dissolved Silver Ions (particles) in the water. When making Colloidal Silver water we should target ~15 PPM of dissolved Silver Ions in our batch of water. 20 PPM is the maximum of what we can make. Distilled water won’t be able to hold above 20 PPM of Silver Ions with out adding “stabilizers”.
 15 PPM is fairly concentrated Silver Water (solution) which can be diluted before use
 Replacement battery 1x 3V CR2032

2. **Laser Pointer**

Red Laser pointer wavelength - 650nm used for visual confirmation of dissolved Silver Ions in the water.

In the beginning when shining laser light true the water we won't be able to see any dissolved silver in the water, light will go straight true the water with out any trace. As we dissolve Silver Ions in the water, we will start seeing red line when shining Laser true the water. The more Silver Ions dissolves in the water the more visible line becomes.

Replacement battery size 3x AG3 batteries

3. **Digital Timer with alarm**

Used to time production of Colloidal Silver Water and to time Micro-Pulsing session.

Times has 3 buttons, "Min", "Sec", "Start/Stop"

To turn on the timer press "Start" button, timer will shut off automatically when not in use.

With "Min" and "Sec" buttons, you can set your count down time. You can set 1-99 min.

By pushing "Start" button – your timer will start counting down set time

When set time counts down to 0, alarm will sound, to reset alarm, press "Start/Stop" button.

To reset timer set time, press "Min" and "Sec" buttons simulaniusly

Replacement battery size 1x AG10

4. **AC-DC Wall adapter**

30VDC 400mA AC-DC power supply, (wall adapter).

Used to power BBSA 1.0 Unit during Colloidal Silver Water production and Micro-Pulsing Power Supply has US Plug but can be use in Europe with 220VAC as well with basic adapter to convert from US plug to EU plug. Adapter is available, price \$3 USD. Please ask if you need one.

Unplug your wall adapter when not in use

5. **3D Printed Silver Rods Holder Plate**

The plate is used to hold Silver rods in place when making Colloidal Silver Water

The plate can be use for wide and narrow 1 quart glass jars, it sits on the top of the jar ears up, flat side bottom, Silver Rods are inserted in the plate holes so that they hang down into the glass jar from the plate. Top of the electrodes should be flash with the plates top part of the ears.

Alligator clips will clip on to the Silver Electrodes inside the plate ears openings.

Don't use this plate with hot water.

Plate can be printed white or other colors incl. see true filaments

PETG or ASA plastics

6. **Silver Rods**

Two 6" 14AWG 99.99% purity Silver Rods.

Used in Colloidal Silver Water production.

Over time, as you produce Colloidal Silver Water, electrodes slowly will wear out, that's normal.

Store in plastic bag, clean after each use.

When producing Colloidal Silver Water, some of the silver Ions will oxidize with oxygen in the water, that's normal. Oxidized Silver on the electrodes will look black, you need to wipe it off from the electrodes using clean (paper) towel after 30-35 min of run. It takes 70 min to produce

a batch of ~15ppm of Colloidal Silver water. During production, you will need to stop it in the middle (35min in) and wipe off oxidized Silver from both electrodes ones and the second time at the end.

7. **Alligator Clips**

Alligator clips are used to hold Silver Electrodes inside the Plastic Plate while making Colloidal Silver Water.

8. **3.5mm Plug Electrode Cable Wire**

Used for connecting BBSA 1.0 Unit to the Pads or Alligator clips.

9. **Tens Electrode Pads**

Non-woven fabric electrode pads, self adhesive re-usable, long life, dry out resistive

Low impedance, more uniform Micro-Currents distribution, used for Micro-Pulsing.

Wash it in warm water after use, re-apply back on to original clear plastic, allow to dry, re-use.

Please note: Tens pads size is 2 3/4"x5/8". You need to shorten both pads before use. Use scissors or sharp utility knife to cut off 1/3 of it's length down to 2".

10. **Elastic Wrist**

Used for holding Tens Electrode Pads on the wrist during Micro-Pulsing session

11. **BBSA 1.0 Unit**

BBSA 1.0 – (Bob Beck Silver Aid 1.0) Unit. It contains electronic circuit which converts 30VDC into by-polar 30VDC for Micro-Pulsing & 30VDC for Colloidal Silver.

You can only use one at the time, either Micro-Pulsing or Ionic Colloidal Silver.

With build in Selector Switch you can choose between 2 modes.

With build in Potentiometer, you can adjust intensity for Micro-Currents.

Please note: Adjust intensity all the way up (clockwise) for Colloidal Silver water production.

You will hear clicking relay when set to Micro-Pulsing, it's normal.

You will see blinking red light inside the Unit when Micro-Pulsing, it's normal.

Unplug from AC-DC wall adapter when not in use.

12. **Carry Case, User Manual**

Carry case used for storing all of the accessories for the kit (excluding glass jar).

Please Note: To make Ionic Colloidal Silver water you will need Distilled Water (1 Gal) and 1 quart Canning Glass Jar. Both items are not supplied with this kit. You can find them in your grocery stores.

How to make Ionic Silver Water

Things you will need:

1. BBSA 1.0 Unit
2. AC/DC Wall Adapter (power supply)
3. Two 6" 14AWG 99.99% purity Silver Rods
4. White Electrode Cable Wire (3.5mm Plug)
5. Alligator Clips (2 pcs)
6. Holder Plate for Silver Rods (plastic)
7. Red Laser pointer
8. TDS meter
9. Digital timer
10. 1 quart canning Glass Jar
11. Distilled water
12. Clean piece of paper towel

Link to the video showing how to make Ionic Colloidal Silver water
<https://youtu.be/y49IWWE1pTA?si=lHODqDO43cGuQvt1>

Start with:

Wash your hands. Make sure your 1 quart glass jar is clean, wash it with mild soap, rinse with clean water first, then rinse with distilled water before use.

Fill it up with distilled water almost all the way, leave only ¼” of empty space on the top.

Take your Silver Electrodes and insert them into the plastic Holder Plate, use Alligator Clips to secure Silver Rods inside the plate. Alligator clips should go inside the plate ears and clip onto Silver Electrodes.

Silver Electrodes should stick out from the bottom side of the plate (flat side) and should be flat with the top of the ears (top side of the plate).

Make sure electrodes are straight and parallel to each other, if needed straighten them out.

Connect Alligator Clips wires to the white Electrode Cable Wire, then connect Electrode Cable Wire to the Unit. Connect AC/DC power supply wire to the Unit and plug in your Power Supply.

On the side of the unit you will find selector toggle switch, move the switch to Colloidal water position. Turn on digital timer (supplied). Set 35min, start counting down

Place electrodes into glass jar with water, center them in the jar (water needs to be room temperature).

Make sure your glass jar is not exposed to direct Sun light

Let it run for 35 min. During this process stir your water a few times with electrodes.

At the end of 35 min, alarm will sound, turn it off. Pull out electrodes and wipe them out with clean paper towel. With the laser pointer shine the light true the glass jar, you should see faded red line in the water, that's your Ionic Silver which dissolved in the water reflecting laser light. At the end of process, your light beam will be more visible as more silver dissolves in the water

Take your PPM meter, turn it on, submerge it around 1” in the water to take measurement, you should be reading around 4ppm

Resume with the process. Set your alarm for another 35 min. During this time stir your water a few times 7-10 min intervals. When alarm will sound, you will be done with the process.

Take electrodes out, wipe them clean and place them in the plastic bag for storage.

Take measurements again, now you should be reading around 15ppm of dissolved Silver Ions

Shine laser light true the glass jar, you should see vivid red beam of light in the water.

Color: Ionic Colloidal Silver remains colorless to about 5 or 6 ppm. At a slightly higher ppm it will be a pale gold color.

Clarity: The Silver electrolyte should be clear, do not drink if it is cloudy.

There will be some oxidized un-dissolved Silver (black in color) which will full to the bottom of the jar during the process.

Close jar with the lid (place it in a dark place), allow your Colloidal Silver to settle for 24h, then transfer your Silver water into dark GLASS container for storage leaving un-dissolves Silver on the bottom during transfer. Dispose un-dissolved Silver.

15ppm concentration is fairly strong solution, you will need to dilute it before use.

Please Note: Over time, light will degrade Ionic Colloidal Silver if stored in clear container by turning the electrolyte grey or black. Discard if this occurs.

Replacing the Silver Rods: The Silver Rods are of the highest grade .9999 or 99.99% or 4 Nine pure fine Silver. When Silver Rods wear too thin, do not replace with sterling silver, as it contains nickel, which can be toxic.

General Use

Quantity: Start with 4 ounces (125 ml) per day for the first week. After 1 week, increase to 8 ounces (250 ml) per day, 5 days per week. The daily amount can be taken all at once, divided into 2 amounts per day - morning and evening, or broken up into several smaller amounts throughout the day.

It is best to drink ionic~colloidal Silver on an empty stomach.

Length of use: 3-4 month

Strength: Laboratory testing indicates Ionic Colloidal Silver is effective as low as 2 ppm. When ingesting on a regular basis, it is suggested to limit the strength to less than 10 ppm.

How to use the micro-pulsing function:

1. Connect AC/DC power supply cable to the Unit.
2. Connect white Micro-Pulsing cord to the Unit.
3. Connect 2 Pads to the Cord. Note: sticky pads are reusable, do not dispose original clear plastic sheet used for storing pads, after use, wash them in warm water, allow to dry and place them back onto clear plastic sheet for future use.
4. On the side of the unit, find selector switch and move it into "Micro-Pulsing" position.
5. On one of your hand clean the wrist area to remove oils from the skin with alcohol. If you have hairs growing on the wrist, shave it, this will allow for better conductivity.
6. Sticky side to the skin, place your Pads on the wrist in line with the pulse points.
7. Use Wrist Strap to secure sticky Pads to the wrist.
8. Turn the unit on by plugging wall adapter to the outlet.
9. By rotating potentiometer knob on the unit clockwise or counter-clockwise you can adjust intensity of the Micro-Currents. Turn the knob slowly until you feel the current.
10. When finished, turn the unit OFF by un-pluging it from the power.
11. Unplug the micro-pulsing cord, unplug wall adapter cord before storing.
12. Clean the wrist and apply a healing lotion to avoid irritation.

Notes: Suggestions for feeling the Current: Increase intensity to manageable levels. Drink enough water to keep the body well hydrated. Hydration can affect the ability to feel the current.

How Micro-Pulsing should feel

1. The sensation is a gentle pulsing. While the Micro-Currents should be felt, it is not necessary to turn the intensity control up to an uncomfortable level.
2. With repeated use, the ability to feel the Micro-Currents may change. It may be necessary to increase the intensity in order to feel the Micro-Currents.
3. Twitching of the fingers is normal at a higher intensity.
4. During the first weeks of use, the skin may become irritated. Over time, irritation usually decreases or disappears. Alternate wrists each session to minimize the potential for irritation.

Sensitive skin

Some individuals may be particularly sensitive to Micro-Currents and the irritation may continue. To minimize irritation:

1. Wash wrists thoroughly after each session and apply a healing gel or lotion such as aloe vera, vitamin E or MSM cream.

2. Micro-Pulse for shorter periods of time until the irritation disappears.

General Use:

- Alternate wrists daily.
- **Length of Session:** Build up time gradually, start with 10 minutes a day for the first 3 to 4 days, add 20 minutes every 3 to 4 days until you reach a minimum of 2 hours per day.
- **Length of Use:** 3-4 month 2h daily, once completed, setting a schedule for ongoing use is beneficial.
- **Drink plenty of water:** It is important to drink enough water when using the unit. drinking ozonated water is especially helpful.
- **Stop gradually:** Reduce the amount of time each day for the last week of use.

Output Specifications:

The output voltage is a nominal 30 Volts.

Micro-Pulsing application: Frequency through the Pads is ~3.92 Hz or 1/2 of the earth Schumann frequency of 7.83 hz, (+/- 0.5 Hz) with a Bi-phasic Square Wave @ 30 Volts (+/- 1 Volt) peak per cycle. Maximum current through the metal pins is ~21 milli Amperes into 1,000 Ohms, ~42 milli Amperes into a short circuit at 30 Volts peak per cycle.

Ionic Colloidal Silver application: The maximum current through the Silver Rods is 42 milli Amperes (+/- 2 mA) @ 30 VDC compliance Voltage when the Silver Rods are touched together to short the circuit.

Replacement accessories

To replace your accessories, please contact BBMPulser support@bbmpulser.org

Warranty

The Silver Aid model BBSA 1.0 is covered by a three (3) year parts and labor warranty on all internally mounted components. Please keep proof of purchase. Warranty is void if the failure is due to abuse or negligence.

Repairs

Please contact BBMPulser for return instructions
support@bbmpulser.org or call 1(216)309-8522 (USA)