

# Silver Aid 3.0 - User Manual (BBSA 3.0)

## Welcome!

Thank you for choosing Silver Aid 3.0 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>

## 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,
- If the red “Low-Battery” light turns on, please re-charge the battery
- 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 (LEDs)

### Internal (visible through the case)

- Red - indicates unit is charging
- Blue - indicates Unit is fully charged

### External (LEDs)

- Blue – Power indicator. Visible when unit turned on and built in battery is charged. LEDs will turn off when battery is low.

- Red (blinking) – Low Battery indicator. Please stop using and re-charge when red light comes on. It's Ok to use it for micro pulsing and while making Colloidal silver water while re-charging. You don't have to keep it on charger while making colloidal water.
- Yellow – Ionic Colloidal Silver water indicator. The LED brightness indicates the concentration (strength) of Ionic Silver in distilled water. NOTE: Distilled water itself will cause the LED to glow dimly; as silver content increases the LED will get brighter.

## Whats Included in the kit:

1. BBSA 3.0 (Bob Beck Silver Aid 3.0) Unit
2. USB-C re-charge cable
3. TDS & EC (PPM) meter (to measure Silver Ions concentration in distilled water)
4. 10 pairs of pads for Micro-Pulsing (washable, re-usable)
5. Two 6" 14AWG 99.99% Silver Rods
6. Soft hand wrist as a default option and or (plastic wrist with electrode holders + 2 Oz of electrode gel)
7. Electrode Wire (Cable)
8. 3D printed white plate (Silver Rods holder), 3D printed from food grade PLA plastic (do not expose to the hot water above 50C or 122F)
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 or Micro-Pulsing session)
12. Carry case
13. User Manual

## Kit Futures:

- Operating Voltage 30VDC. Built in DC to DC voltage booster
- 2 modes of operation, Colloidal Silver and Micro-Pulsing, you can use both at the same time.
  1. Colloidal Silver Generator – outputs 28VDC 2mA
  2. Micro-pulsing – outputs bipolar 30VDC at ~ 4Hz, 50% duty, 28mA when electrodes are shorted and 14mA into 1k Ohm resistance
- Built in adjustment for Micro-Pulsing, allows user to adjust power output to the comfortable levels
- Built in protection if Micro-Pulsing electrodes or Colloidal water electrodes are shorted (try not to short them)
- Built in re-chargeable 2.5A 3.7V Polymer Lithium Battery, please re-charge your battery before use
- Run time: Micro-pulsing ~150 hours, Colloidal Generator ~120 hours
- Charge time – 10h (with 5V 0.5A or higher AC/DC power adapter)
- You can use Micro-pulsing and Colloidal Silver generator both at the same time (extra electrode wire is required, not included)

## Functions of each item in the kit:

1. **Digital TDS & EC meter.** TDS & EC – stands for “Total Dissolved Solids & Electrical Conductivity”. In our case, because we are using electrolysis to strip ionic silver particles and disperse them into the distilled water we are going to be measuring “dispersed” Ionic Silver particles as opposed to “dissolved solids”.

(NOTE: The TDS &EC meter should be calibrated from the manufacturer. If you choose to verify or recalibrate it, the procedure is detailed in the video “How to Calibrate the Vivosun TDS & EC Meter” here: <https://www.youtube.com/watch?v=fK3sSYgKDRo>

**NOTE:** The TDS Meter replacement battery is: 1x 3V CR2032

You may get PPM meter which does not have calibration option. This type of meter will come pre-calibrated from the factory. Replacement battery for this meter 2x 1.5V (button cells) size LR44

Distilled water is a pure water, it has no minerals or other impurities in it.

How TDS meter works – it measures electrical conductivity in the water. Pure “Distilled Water” will have little to no conductivity. If we measure it, it will (should) read 0 PPM. That’s what we want to start with. “PPM” stands for Parts Per Million of Total Dispersed Solids in the water.

2. As we place connected and energized Silver Electrodes in our batch of distilled water, DC currents of Electricity will strip microscopic ions of Silver from one of the electrode and will “disperse” them in the water. These particles are so tiny that they will stay suspended in water and will not settle out. With our TDS meter we can measure the concentration of this dispersed Silver Ions (particles) in the water. When making Colloidal Silver water we should target ~15 PPM of dispersed Silver Ions in our batch of water. 20 PPM is the maximum of what we can make (under right conditions). Distilled water won’t be able to hold above 20 PPM of Silver Ions without adding “stabilizers”.

15 PPM is fairly concentrated Colloidal Silver water (solution) which can be diluted before use.

## 3. Laser Pointer

Red Laser pointer wavelength - 650nm used for visual inspection (confirmation) of dispersed Silver Ions in the water.

In the beginning when shining laser light through the water we won’t be able to see any Colloidal Silver in the water; the light beam will go straight through the water and will be nearly invisible. As we disperse Silver Ions in the water, we will start seeing a “sparkly” red line when shining Laser through the water. The more dispersed Silver Ions in the water, the more visible the line becomes.

**NOTE:** Laser Pointer replacement battery size - 3x AG3 batteries

## 4. 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 simultaneously

NOTE: Digital timer replacement battery size 1x AG10

## 5. **USB-C cable**

Used to re-charge BBSA 3.0 Unit

## 6. **3D Printed Silver Rods Holder Plate**

The plate is used to hold Silver Rods in place while making Colloidal Silver water. The plate can be used for wide and narrow 1 quart glass jars, it sits on the top of the jar ears up, flat side to the 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 flush with the plate's 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.

## 7. **Silver Rods**

Two 6" 14AWG 99.99% purity Silver Rods. Used for 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 available 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 each 30 min of run. It takes ~4.5h to produce 1 quart (a batch) of ~15ppm of Colloidal Silver water (starting with 0 PPM distilled water) in room temperature ~73F. During production - remember: you will need to pull out and clean your Silver electrodes by wiping them with a clean paper towel ones every 30min.

## 8. **Alligator Clips**

Alligator clips are used to hold Silver Electrodes inside the plastic plate while making Colloidal Silver water.

## 9. **3.5mm Plug Electrode Cable Wire**

Used for connecting BBSA 3.0 Unit to the Pads or Alligator clips.

## 10. **TENS Electrode Pads**

Non-woven fabric electrode pads, self adhesive & re-usable, long life, more uniform Micro-Currents distribution, used for Micro-Pulsing.

Wash it in warm water after each use, allow them to dry, re-apply on to original clear plastic, re-use 5-10 times.

**Please note:** Tens pads measure 2 3/4" long and x 5/8" wide. You will need to shorten both of your pads before use. Use scissors or sharp utility knife & off 1/3 of it's length down to 2". Included 1 example set for your reference.

## 11. **Elastic Wrist**

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

Please Note: For best electrical connection, make sure you do not have hairs on your wrist.

## 12. **BBSA 3.0 Unit**

BBSA 3.0 – (Bob Beck Silver Aid 3.0) unit. It contains electronic circuit inside which converts 30VDC into by-polar 30VDC for Micro-Pulsing & 28VDC for Colloidal Silver generator. You can use both at the time, Micro-Pulsing or Ionic Colloidal Silver generator. With built in Potentiometer, you can adjust intensity for Micro-Currents.

**Please note:** Intensity adjustment does not effect Colloidal generator output current. It's fixed at 2mA.

### 13. 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 or online.

### How to make Ionic Silver Water:

Things you will need:

1. BBSA 3.0 Unit
2. Two 6" 14AWG 99.99% purity Silver rods
3. White electrode cable wire (3.5mm plug)
4. Alligator clips (2 pcs)
5. Plastic holder plate for Silver rods
6. Red laser pointer (optional)
7. TDS & EC meter
8. Digital timer
9. 1 quart canning glass jar
10. Distilled water (min. 1 quart)
11. Clean peace of paper towel

### 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 room temperature distilled water to the top, leaving ~ 1/4" 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). The ends of the electrodes should be 3/8" to 1/2" from the bottom of the glass jar.

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. Turn on digital timer (supplied). Set 30min, push start, digital timer will start counting down. Place electrodes into glass jar filled with distilled water, center them in the jar.

Make sure your glass jar is not exposed to direct Sunlight

Let it run for 30 min. During this process steer your water a few times with electrodes.

At the end of 30 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 dispersed in the water reflecting laser light. At the end of process, your light beam will be more visible as more Silver disperses in the water.

Take your PPM meter, turn it on, immerse it around 1" into the water to take measurement, you should be reading around 1-2ppm.

Resume with the process. Set your alarm for another 30 min. During this time, stir your water a few times. When the alarm sounds, you will need to repeat the process every 30 min until Silver Ions concentration raises to ~15PPM. It will take around 4.5 hours.

After you are done, take electrodes out, wipe them clean and place them in the plastic bag for storage.

**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-dispersed Silver (black in color) which will full to the bottom of the jar during the process. Allow to set, then transfer your Ionic Colloidal Silver water to dark glass container. Ionic Colloidal Silver water can typically be stored at room temperature for several **months to over a year** if kept in optimal conditions, though some studies suggest that the maximum stability in the dark might only be for around **7 days** if exposed to air. The specific shelf life is highly dependent on several critical factors:

#### **Storage Conditions:**

- **Light:** The solution should be stored in the dark, away from direct sunlight, as light can cause degradation and affect stability. Dark glass or high-quality plastic bottles are often used for storage.
- **Temperature:** Room temperature is generally fine, but the solution should be kept in a cool place and away from extreme heat. Avoid freezing.
- **Exposure to Air and Electronics:** Keep the bottle tightly sealed to limit air exposure. It is also recommended to store it away from sources of electromagnetic fields, such as Cell phones, TVs, WiFi routers etc.

15ppm concentration is fairly strong solution, you will need to dilute it 2-4x before use.

**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. **AGAIN, DO NOT USE STERLING SILVER.**

#### **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 white Micro-Pulsing cord to the Unit.
2. 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 worm water, allow to dry and place them back onto clear plastic sheet for future use.

3. On the side of the unit, find Intensity adjustment / On/Off switch. Rotate it to power on your Unit
4. On one of your hand clean the wrist area to remove oils from the skin with alcohol
5. Sticky side to the skin, place your Pads on the wrist in line with the pulse points
6. Use wrist Strap to secure sticky pads to the wrist
7. By rotating potentiometer knob on the unit you can adjust intensity of the Micro-Currents. Turn the knob slowly until you feel the currents
8. When finished, turn the unit OFF
9. Unplug the micro-pulsing cord
10. Clean the wrist and apply a healing lotion to avoid irritation if needed.

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 (+/- 0.5 Volt) peak per cycle. Maximum current through the metal pins is ~14 milliamperes into 1,000 Ohms, ~28 milliamperes into a short circuit at 30 Volts peak per cycle.

**Ionic Colloidal Silver application:** The maximum current through the Silver Rods is 2 milli Ampere (+/- 0.5 mA) @ 28 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](mailto:support@bbmpulser.org)

## **Warranty**

The Silver Aid model BBSA 3.0 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 RMA instructions  
[support@bbmpulser.org](mailto:support@bbmpulser.org) or call 1(216)309-8522 (USA)