



# *The Silver Pulser*

## Model ZBB1 Manual

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## WELCOME TO SOTA

Thank you for allowing us to be a part of your Wellness Team.

The Silver Pulser is a consumer product designed to be used as part of a Wellness Lifestyle. A commitment to healthy lifestyle choices is an important factor in the journey to Wellness.

The SOTA Silver Pulser has two functions – Micropulsing and making Ionic~Colloidal Silver. Micropulsing offers gentle microcurrents that work with the body's natural electricity for more energy, general health and well-being. Ionic~Colloidal Silver is one of nature's gifts and can be made easily and inexpensively at home.

The Silver Pulser is designed to be used independently, but can also be used together with any of the SOTA Products.

With proper care, your Silver Pulser should provide you many years of trouble-free use.

Please understand that results will vary.

## BEFORE USING

Please read the manual thoroughly before using your Silver Pulser.

We've made every effort to ensure the information in your manual is up-to-date at the time of printing ... since that time however, new information may have become available. For the most up-to-date manual, please visit our website **[www.sota.com/manuals](http://www.sota.com/manuals)**.

## LEARN MORE

To learn more about the Silver Pulser we invite you to visit the SOTA website:

**[www.sota.com](http://www.sota.com)**

The website offers Videos, Frequently Asked Questions, *The SOTA Wellness Program Guide*, SOTA News ... and more.

## COMPLETE UNIT INCLUDES

- One (1) Silver Pulser Unit
- One (1) 9-Volt Alkaline Battery
- One (1) Product Manual



## **FOR MICROPULSING APPLICATION:**

- One (1) Micropulsing Cord
- One (1) Neoprene® Velcro® Wrist Strap
- One (1) Dark Glass Dropper Bottle
- Two (2) Pair All Cotton Sleeves

## **FOR MAKING IONIC~COLLOIDAL SILVER:**

- One (1) Green Scrub Pad

### **SILVER WIRE CORD OPTION**

- One (1) Cord with Two Silver Wires .9999 (4 Nine) Purity

### **SILVER WIRE HOLDER OPTION**

- One (1) Silver Wire Holder
- Two (2) Silver Wires of .9999 (4 Nine) Purity

## **DO NOT USE**

1. Do not use in the following situations as safety has not been explored using the Micropulsing function:
  - a. In the case of pregnancy.
  - b. With an active implanted device such as a pacemaker, etc.
2. As with all electrical products do not use near water, when driving a car or when operating heavy equipment.

## **MICROPULSING CAUTIONS**

1. Do not place the Micropulsing Probes over skin lesions, abrasions, new scars, cuts, eruptions or sunburn.
2. Caution is advised if using potentially harmful substances such as recreational and prescription drugs, as it is not known if microcurrents will interact or if individual reactions may occur.
3. Caution is required in the following situations as a burn may occur, which could scar:
  - a. Do not apply the bare metal pins to the skin.
  - b. Do not allow the Cotton Sleeves to dry out while Micropulsing.
  - c. Do not Micropulse while sleeping, as the Cotton Sleeves may dry out.

## IONIC~COLLOIDAL SILVER CAUTIONS

We recommend taking occasional breaks from consuming Ionic~Colloidal Silver for the following reason:

A handful of people have experienced argyria after drinking large amounts of Ionic~Colloidal Silver daily, over a long period of time. Argyria is a bluish tinge of the skin. This occurs when excess silver is eliminated through the skin and exposed to light. Darkening of the moons of the finger nails is usually an early sign.

The risk of argyria is considered greater for those who are ingesting incorrectly made Ionic~Colloidal Silver and to a lesser degree, those who are deficient in selenium or vitamin E.

When making and drinking Ionic~Colloidal Silver as currently recommended by SOTA, the risk of argyria is extremely rare.

## GENERAL CAUTION

While this technology is generally considered safe, there exists potential for rare individual reactions that cannot reasonably be foreseen. Therefore, your use of the SOTA Products constitutes your agreement that you are responsible for your decision to use the technology and that you hold SOTA harmless for any injuries or damage believed to arise from using the SOTA Products.

## SUMMARY OF LIGHTS

**GREEN:** Flashes alternately with RED light to indicate Micropulsing function is ready for use.

**RED:** Flashes alternately with GREEN light to indicate Micropulsing function is ready for use.

To save batteries, the GREEN and RED lights will not flash when Micropulsing cord is plugged into the unit. They will continue to flash, however, when making Ionic~Colloidal Silver.

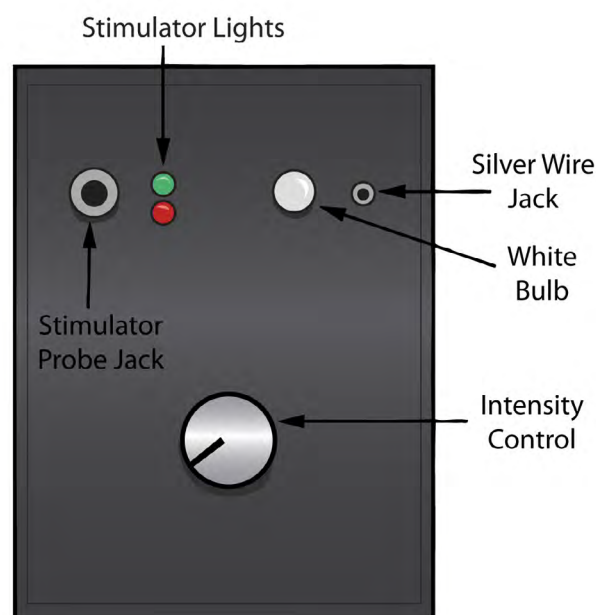
**WHITE:** Indicates impurities in the water or that the wires are touching when making Ionic~Colloidal Silver.

## HOW TO USE THE MICROPULSING FUNCTION

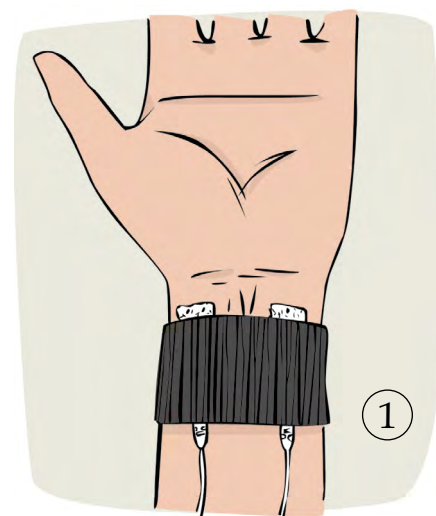
1. Place the 9-Volt Alkaline battery in the unit.

a. On the back of the unit, slide off the battery cover.

- b. Attach the positive (+) and negative (-) terminals on the 9-Volt Alkaline battery to the positive (+) and negative (-) clips in the battery compartment.
  - c. Slide the 9-Volt Alkaline battery into the case and push down. Slide the cover back onto the unit.
2. Clean the wrist area to remove oils from the skin. This will allow for better conductivity.
  3. Insert the Micropulsing cord into the jack on the unit.
  4. Place the unit in a pocket.



- Option: If preferred, the unit can be placed in an arm strap and held in place on the arm. A short probe cord is best for this option.
5. Prepare one pair of Cotton Sleeves. Each Cotton Sleeve is sewn on three sides; to find the open end of the Cotton Sleeve, squeeze the long sides of the sleeve and the unsewn end will pop open.
  6. Insert one probe from the Micropulsing Cord into the open end of each Cotton Sleeve. Use a gentle twisting motion to work the probes into the Cotton Sleeves.
  7. Wet the Cotton Sleeves with water.
  8. Put the Wrist Strap on.
  9. Position one of the covered probes over the pulse point on the thumb side of the wrist, under the Wrist Strap as in image 1.
  10. Place the other covered probe in line with the pulse point on the little finger side of the wrist. This pulse point is usually harder to feel. It is located in the soft hollow on the wrist, in line with the little finger.
  11. Turn the unit ON by rotating the ON/OFF knob clockwise. Turn the switch slowly until you feel the current. If you do not feel the current, see Notes on page 7.





When the Micropulsing Cord is plugged into the unit, the flashing GREEN and RED lights will not be on. This helps conserve the battery.

12. When finished, turn the unit OFF by rotating the ON/OFF knob counter clockwise until it clicks. Do not force the ON/OFF knob past its natural stopping point.
13. Clean the wrist and apply a healing lotion to avoid irritation.

#### Notes:

**Suggestions for Feeling the Current:** If the current is not felt with wet Cotton Sleeves, prepare a mild salt solution to wet the sleeves. Add a few grains of salt to the water in the 50 ml dropper bottle.

Drink enough water to keep the body well hydrated. Hydration can affect the ability to feel the current.

**Care of Micropulsing Cord:** Discoloration of probes is normal. Buff occasionally to remove stains to ensure good electrical contact.

**Care of Cotton Sleeves:** Wash or rinse sleeves occasionally. Periodically discard and replace Cotton Sleeves.

#### Alternatives to Cotton Sleeves:

- a. Sponge Sleeves: available from SOTA.
- b. Cotton Sleeves with Velcro® used with a Velcro® Wrist Strap: available from SOTA.
- c. Unbleached Paper Towel: Cut a small square of paper towel large enough to wrap around the probe 2 or 3 times.
- d. Cotton Flannel: Cut a small square of cotton flannel and wrap around the probe. Secure it in place with thread.

**Testing the Micropulsing Function:** Unplug the Micropulsing Cord with the unit on. The GREEN and RED lights on the unit should flash alternately. If lights do not flash, check battery. If lights still do not flash, contact your supplier or your closest repair depot. See 'Repairs' on page 13.

**Power Supply:** When Micropulsing, as a safety feature, the unit can only be powered by a 9-Volt battery.

**Replacement Batteries:** When purchasing replacement 9-Volt batteries, take the Silver Pulser with you to ensure a proper fit, as 9-Volt batteries vary in size. Alkaline or rechargeable batteries are recommended.

## HOW MICROPULSING SHOULD FEEL

1. The sensation is a gentle pulsing. While the microcurrents should be felt, it is not necessary to turn the control up to an uncomfortable level.
2. With repeated use, the ability to feel the microcurrents may change. It may be necessary to increase the intensity in order to feel the microcurrents.
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 microcurrents and the irritation may continue. To minimize irritation:

1. Use Sponge Sleeves - available from SOTA.
2. Wash wrists thoroughly after each session and apply a healing gel or lotion such as aloe vera, vitamin E or MSM cream.
3. Micropulse for shorter periods of time until the irritation disappears.
4. Wet the Cotton Sleeves with distilled water, Ionic~Colloidal Silver or conductive gel. If unable to feel the current, try a commercial saline solution for the eyes. This is gentler than adding salt to the water.
5. Users with sensitive skin have reported less or no skin irritation when switching to Conductive Pads. We recommend Premium Reusable Conductive Pads (for 2mm PIN connectors), cut to 1/4" (6.35 mm) wide and 1 1/2" (38 mm) to 2" (50 mm) long. Refer to the *SOTA Wellness Program Guide* for instructions.

## TYPICAL USE

**Wellness Program:** To use as part of the *SOTA Wellness Program* the Guide is available at: [www.sota.com/wellness](http://www.sota.com/wellness)

### General Use:

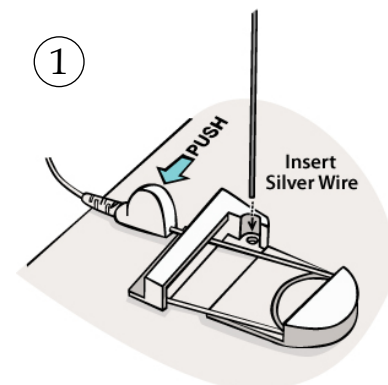
- **Alternate wrists daily.**
- **Length of Session:** Build up time gradually. Start with 10 minutes a day for the first 3 to 4 days. Add 20 minutes every 3 to 4 days until you reach a minimum of 2 hours per day.



**Length of Use:** We suggest following the SOTA Wellness Program for 6 to 12 months. 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. If using more than one SOTA unit, it is suggested to stop only one unit at a time.



## HOW TO USE THE IONIC~COLLOIDAL SILVER FUNCTION

### HOW TO ASSEMBLE THE SILVER WIRE HOLDER OPTION

1. The Silver Wires fit into the two small holes in the Silver Wire Holder as in image 1.
2. To insert the Silver Wires, move the spring clip away from the hole.
3. Push the wire through the hole. Most of the wire should be below the holder. Release the spring clip to hold the Silver Wire snugly in place. It may be easier to insert from the underside of the holder.
4. Repeat Step 2 for the second Silver Wire.
5. Plug the Silver Wire Holder into the Silver Pulser.

### HOW TO MAKE IONIC~COLLOIDAL SILVER

1. Insert Silver Wire Cord or Silver Wire Holder into the unit.
2. Heat 2 cups (500 ml) of distilled water to the boiling point – preferably in a non-metal container. Do not use a glass measuring cup on the stove top as it may explode.
3. Use a heat-resistant glass container to make Ionic~Colloidal Silver.

### SILVER CORD OPTION

4. Place the Silver Wires in the glass container immersing at least 70% of the Silver Wires into the water. Keep them at least 1 inch (25 mm) from the bottom of the container and 1 inch (25 mm) between the wires. See image 2 on page 11.

### SILVER WIRE HOLDER OPTION

4. Place the Silver Wire Holder on the glass container immersing at least 70% of the

Silver Wires into the water. Keep them at least 1 inch (25 mm) from the bottom of the container. See image 3.

## TURNING THE UNIT ON

5. Turn the unit ON by rotating the ON/OFF knob clockwise until it clicks. It is not necessary to turn up the intensity.

The WHITE light should remain off or be dimly lit. If on, refer to Notes below. The GREEN and RED lights will continue to flash when making Ionic~Colloidal Silver.

6. Stir occasionally with a non-metal utensil. Occasionally, wipe off the grey or black silver oxide that builds up on the Silver Wires.
7. Brewing 2 cups (16 ounces or 500 ml) for 15 minutes will produce a 3 to 5 ppm batch of Ionic~Colloidal Silver, depending on the brand of distilled water. The concentration of silver is measured in parts per million or ppm.
8. When finished, wipe the Silver Wires with paper towel to remove residue. Buff lightly with the Green Scrub Pad when needed to keep them free of sediment. Excessive buffing will wear away the silver faster.

## Notes:

**Impurities:** If the WHITE light comes on while making Ionic~Colloidal Silver, it means there are too many impurities in the water. Try a different brand of distilled water. The WHITE light also comes on if the two wires are touching.

**Color:** Ionic~Colloidal Silver remains colorless to about 5 or 6 ppm. At a slightly higher ppm it will be a pale gold color. Do not drink if it is darker than pale gold or if it is dark grey as this indicates a higher level of impurities or larger particle sizes.

**Clarity:** The silver electrolyte should be clear. Do not drink if it is cloudy.

**Storage:** Pour the Ionic~Colloidal Silver into a dark glass bottle – never metal – and store in a dark, dry place. Over time, light will degrade Ionic~Colloidal Silver by turning the electrolyte grey or black. Discard if this occurs.

When made and stored properly, Ionic~Colloidal Silver retains freshness for many weeks. It is suggested, however, that you use as soon as possible. If settling occurs, it is losing potency. Do not drink any sediment.

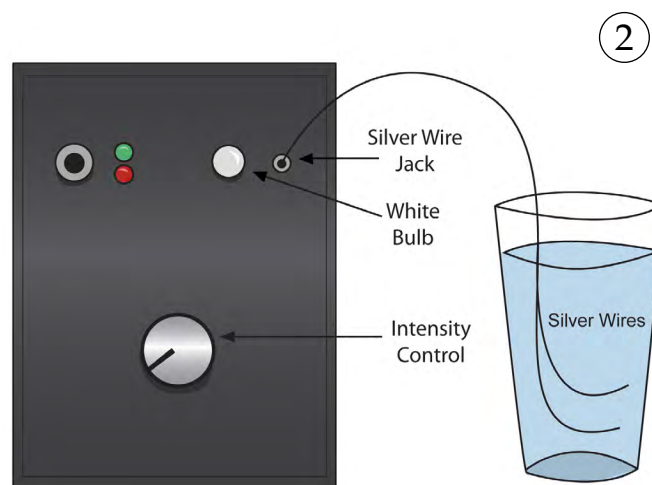
Do not freeze, refrigerate, or expose Ionic~Colloidal Silver to extremes of temperatures as its potency may be affected.

**Save on Batteries:** When making Ionic~Colloidal Silver the unit can be powered by an AC-DC wall adaptor. See 'Optional Power Input' on page 12.

### Switch Silver Wire Positions - Silver Wire Holder Option:

The silver ions only come off the wire in the positive (+) or anode terminal into the water. To equalize the wearing of the Silver Wires, periodically exchange the position of the wires. If left in the same position, only one Silver Wire will gradually wear away.

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



## TYPICAL USE

**Wellness Program:** To use as part of the *SOTA Wellness Program* the Guide is available at: [www.sota.com/wellness](http://www.sota.com/wellness)

### General Use:

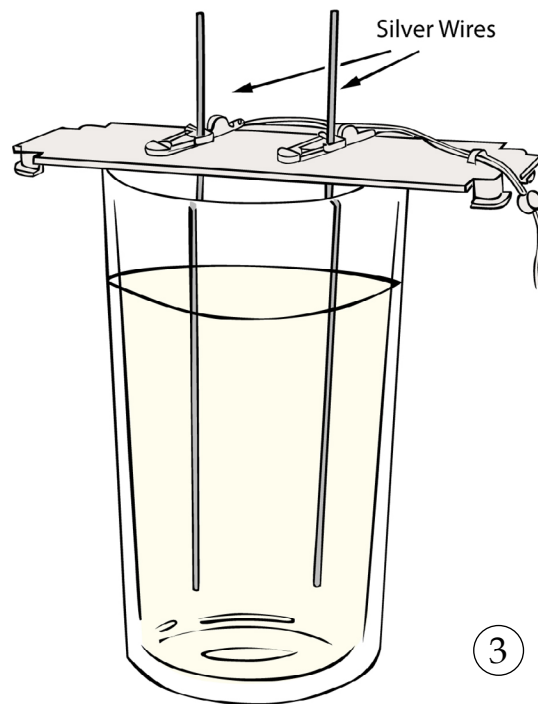
- **Quantity:** Start with 4 ounces (125 ml) per day for the first week. After 1 week, increase to 8 ounces (250 ml) per day, 5 days per week.

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:** We suggest following the *SOTA Wellness Program* for 6 to 12 months.

Once completed, when consumed on a regular basis it is best to drink 1 to 2 ounces



(30 to 60 ml) at a time.

**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.

## ELECTRICAL SPECIFICATIONS

### POWER REQUIREMENTS

Use a 9-Volt Alkaline battery for optimal operation.

### OPTIONAL POWER INPUT

Both functions of the Silver Pulser can also be operated using NiMH rechargeable batteries. When purchasing rechargeable batteries, it is suggested to take the unit with you to ensure the batteries will fit the enclosure.

To use a wall adaptor for making Ionic~Colloidal Silver the output should be from 6 to 12 Volts DC with a **Tip or Center Positive** pin and a minimum of 500 mA (milliamperes) of current. The wall adaptor that comes with other SOTA units can be used for making Ionic~Colloidal Silver.

**Caution:** Exceeding the voltage rating or reverse connection may result in injury or unit failure. This will **void** the warranty.

To operate the Ionic~Colloidal Silver Function from a 12 Volt DC source, such as an automobile battery or an appropriate Solar Panel, purchase a Universal Power Cord with **Tip or Center Positive**.

### OUTPUT SPECIFICATIONS

The output voltage is a nominal 27 Volts.

**Micropulsing Application:** Frequency through probes is ~3.92 Hz or  $\frac{1}{2}$  of the Earth Schumann frequency of 7.83 Hz, (+/- 1 Hz) with a Bi-Phasic Square Wave @ 27 Volts (+/- 1 Volt) peak per cycle.

Maximum current through the probes is ~13 milliamperes into 1,000 ohms, ~23 milliamperes into a short circuit at 27 Volts peak per cycle.

**Ionic~Colloidal Silver Application:** The maximum current through the Silver Wires is 40 milliamperes (+/- 0.5 mA) at 27 VDC compliance voltage when the Silver Wires are touched together to short the circuit.

## **REPLACEMENT ACCESSORIES**

To replace your accessories, please contact your supplier.

## **WARRANTY**

The Silver Pulser Model ZBB1 is covered by a limited parts and labor lifetime 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 your supplier for return instructions. For information about your closest repair depot, contact [repairs@sota.com](mailto:repairs@sota.com) or call Toll-Free: 1.800.224.0242 (Canada & USA) or 1.250.770.2023.

Designed, Engineered and Made in Canada.

• The SOTA units are consumer products designed to be used as part of a Wellness Lifestyle • The SOTA units are not medical devices nor are they intended to diagnose, treat or cure any medical or health condition • The use, safety or effectiveness of the SOTA units has not been approved by any government agency • Please consult a health practitioner for any medical or health condition • Results using the SOTA Products will vary for each person • Please note that all purchases of SOTA Products are deemed to be made in Penticton, BC, Canada •