

# The Silver Pulser

# Model ZBB4 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. For the most up-to-date manual, please visit our website **www.sota.com/manuals**.

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.

# **LEARN MORE**

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

#### www.sota.com

The website offers Videos, Frequently Asked Questions, *The SOTA Products User 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
- Three (3) Pair All Cotton Sleeves

#### FOR MAKING IONIC~COLLOIDAL SILVER:

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

#### 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**

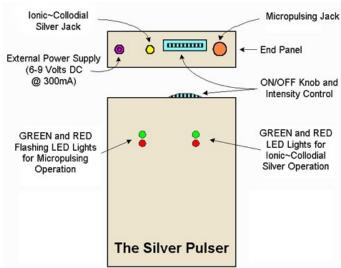
Left GREEN: Flashes alternately with left RED light to indicate Micropulsing function is ready for use.

Left RED: Flashes alternately with left GREEN light to indicate Micropulsing function

is ready for use.

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

Right GREEN: Solid light indicates Ionic~Colloidal Silver function is working. Right RED: Solid light 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. Slide the unit into the arm strap.
- 5. Slide the unit and the Cord up the arm to a comfortable position. Tighten the band to secure it in place.
  - Option: If preferred, the unit can be placed in a pocket. A longer Micropulsing Cord is needed for this option.
- 6. 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.
- 7. 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.
- 8. Wet the Cotton Sleeves with water.
- 9. Put the Wrist Strap on.
- 10. Position one of the covered probes over the pulse point on the thumb side of the wrist, under the Wrist Strap.
- 11.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.

12. Turn the unit ON by rotating the thumbwheel switch clockwise. Turn the switch slowly until you feel the current. If you do not feel the current, see Notes below.



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

- 13. When finished, turn unit OFF by rotating the thumbwheel switch fully counterclockwise until it clicks. Do not force the ON/OFF knob past its natural stopping point.
- 14. 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 left side of 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 12.

**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 intensity 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.

#### **TYPICAL USE**

Alternate wrists daily.

**Length of Session:** Build up time gradually. It is best to start slowly. Start with 10 to 20 minutes a day. Increase gradually to a minimum of 2 hours each day.

**Length of Use:** The SOTA Products User Guide available at www.sota.com/spug offers suggestions for Focused, Basic and Ongoing Wellness Plans.

General Guideline: Use daily for a minimum of 8 to 12 weeks. Once completed, setting a schedule for ongoing use is beneficial.

**Drink Plenty of Water:** It's important to drink enough water when using the unit. Drinking ozonated water is especially helpful.



Insert Silver Wire

**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.

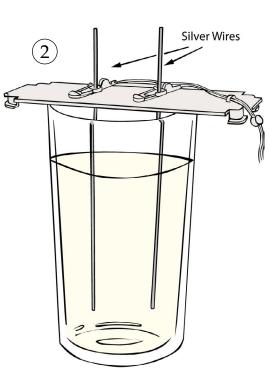
# HOW TO USE THE IONIC~COLLOIDAL SILVER FUNCTION

#### **HOW TO ASSEMBLE**

- 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 snuggly 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.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.
- 2. Use a heat-resistant glass container to make Ionic~Colloidal Silver.
- 3. Place the Silver Wire Holder on the glass container immersing <u>at least</u> 70% of the Silver Wires into the water. Keep them at least 25 mm or 1 inch from the bottom of the container. See image 2.
- 4. Turn the unit ON by rotating the thumbwheel switch clockwise, until it clicks. It is not necessary to turn up the intensity.
  - When the Silver Wire Holder is plugged into the unit, the GREEN light on the right side of the unit will come on steady. The lights on the left side of the unit will continue to flash.
- 5. Stir occasionally with a non-metal utensil.





Occasionally, wipe off the grey or black silver oxide that builds up on the Silver Wires.

- 6. Two 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.
- 7. When finished, wipe the Silver Wires with paper towel to remove residue. Buff lightly when needed to keep them free of sediment. Excessive buffing will wear away the silver faster.

#### **Notes:**

**Impurities**: If the RED light on the right side of the unit 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 RED 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.

Tip for Self-Stirring: Use boiling hot water to make the Ionic~Colloidal Silver.

**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' below.

**Switch Silver Wire Positions**: 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**

**Quantity:** There is no definite amount to drink. When consumed on a regular basis — daily or several times a week — it is best to drink no more than 1 to 2 ounces (30 to 60 ml) at a time.

Larger amounts of Ionic~Colloidal Silver—1 cup or more—can be consumed for short periods of time, for example, a few weeks. It is better to take smaller amounts throughout the day rather than all at once.

**Length of Use:** The SOTA Products User Guide available at www.sota.com/spug offers suggestions for Focused, Basic and Ongoing Wellness Plans.

General Guideline: 1 to 2 ounces (30 to 60 ml) or more daily for 2 or 3 months. Ionic~Colloidal Silver can be used as needed. The initial program can be repeated at any time. If using for an extended period, it is wise to take breaks.

**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 31 Volts.

**Micropulsing Application:** Frequency through probes is  $\sim$ 3.92 Hz or  $\frac{1}{2}$  of the Earth Schumann frequency of 7.83 Hz, (+/- 1 Hz) with a Bi-Phasic Square Wave @ 31 Volts (+/- 1 Volt) peak per cycle.

Maximum current through the probes is ~8 milliamperes into 1,000 ohms, ~12 milliamperes into a short circuit at 31 Volts peak per cycle.

**Ionic~Colloidal Silver Application:** The maximum current through the Silver Wires is 40 milliamperes (+/- 0.5 mA) at 31 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 ZBB4 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 your supplier for return instructions. For information about your closest repair depot, contact 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 •