



# The Bio Tuner

Model BT7 Manual

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## WELCOME TO SOTA

Thank you for allowing us to be a part of your wellness team.

The Bio Tuner 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 Bio Tuner supports the mind-body connection by offering harmonic frequencies that help create an inner sense of calm, balance and tranquility.

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

With proper care, your Bio Tuner 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 Bio Tuner.

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 Bio Tuner 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) Bio Tuner Unit
- One (1) Arm Band and Clip
- One (1) 9-Volt Alkaline Battery
- One (1) Carrying Case
- One (1) Product Manual



## **HEADSET OPTION**

- One (1) Headset
- Six (6) Cotton Sleeves

## **EAR CLIPS OPTION**

- One (1) Cord
- One (1) Pair of Ear Clips with Conductive Rubber Electrodes

## **DO NOT USE**

1. Do not use in the following situations as safety has not been explored:
  - a. In the case of pregnancy.
  - b. With an 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.
3. Do not:
  - a. Suddenly increase the intensity to the maximum level. The intensity should be increased gradually to a comfortable level to ensure safety.

## **CAUTIONS**

1. If you are on psychiatric medication, have a neurological condition or seizures, please consult your health care provider prior to using the Bio Tuner.
2. If you experience an increase in tinnitus or ringing in the ears, please discontinue use.
3. If you experience headaches or nerve pain when using the unit, consider Modes 4, 5 or 6 as they have a gentler output. If headaches or nerve pain persist, please discontinue use.
4. 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:** Indicates which Mode is selected.

**RED:** Indicates the battery is low and will soon need replacing.

**YELLOW:** Used for testing to ensure the flow of current through the Unit and the Headset or the Ear Clips and Cord.

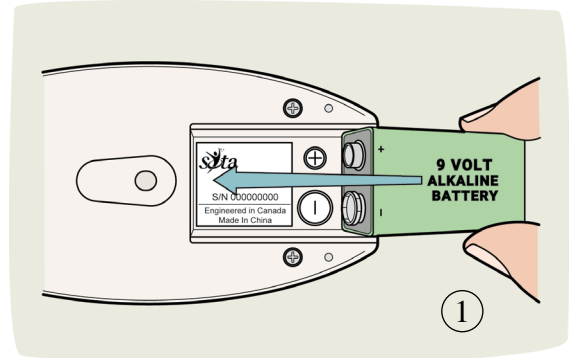
## HOW TO USE THE BIO TUNER

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

- On the back of the unit, slide off the battery cover.
- Position the 9-Volt Alkaline battery so the positive (+) and negative (-) terminals line up as in image 1.

Note: The smaller circle on the battery matches the smaller circle in the case ... the larger battery circle matches the larger circle in the case.

- Slide the 9-Volt Alkaline battery into the case and push down.
- Slide the cover back onto the unit



2. Slide the Arm Band up the arm to a comfortable position. Tighten the band to secure it in place as in Image 2.

Options:

- If preferred the unit can be placed in a pocket.
- If the Arm Band is too large a shorter Arm Band is available.

### HEADSET OPTION

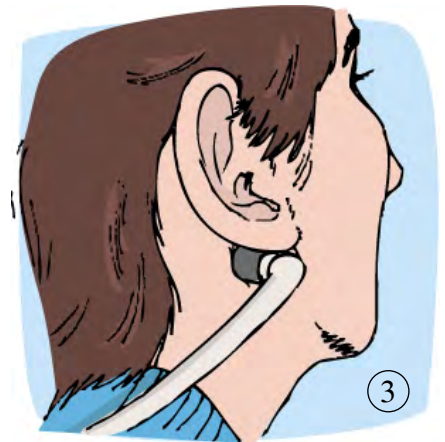
3. Clean the area behind each ear to remove oils from the

skin. This will allow for better conductivity.

4. Wet the Cotton Sleeves with water and place them over the Headset electrodes.

5. Position the Headset electrodes in the hollow behind the ears as in image 3.

6. Insert the Headset Cord into the jack on the unit. The flat side of the plug should be



facing up. When the plug is positioned correctly, it will slide in gently. Do not force.

7. Slide the clip on the back of the Bio Tuner into the holding clip on the Arm Band as in image 4.

## EAR CLIPS OPTION

3. Clean ear lobes to remove oils from the skin. This will allow for better conductivity.
4. Insert the cord into the jack on the unit as in image 5. The indented square on the plug should be facing up. When the plug is positioned correctly, it will slide in gently. Do not force.



5. Slide the clip on the back of the Bio Tuner into the holding clip on the Arm Band as in image 4.

6. Insert the pins on the cord into the Ear Clips.

7. Wet the conductive rubber on the Ear Clips with water or conductive gel.

8. Place one Ear Clip on each ear lobe, positioning the Ear Clip with the conductive rubber at the back of the ear lobe and close to the jaw as in image 6.

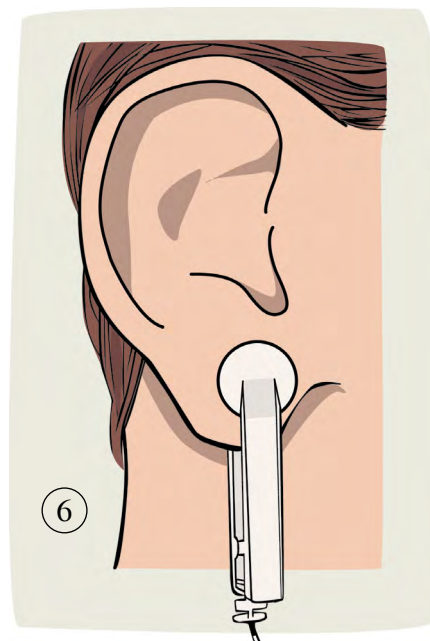
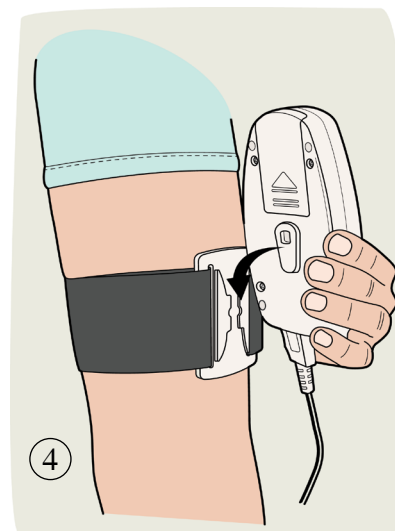
## TURNING THE UNIT ON

9. Turn the unit ON by rotating the ON/OFF switch clockwise.

All the lights will flash once, before starting the unit in Mode 1. If the lights do not come on, the battery may not be placed correctly.

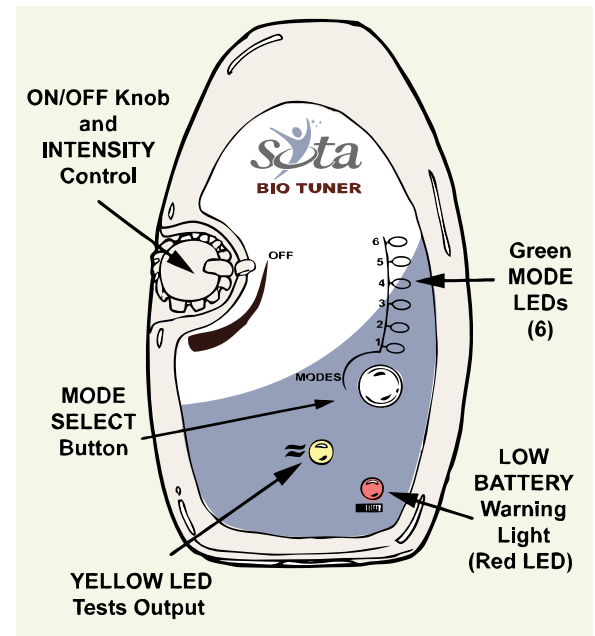
10. Gradually turn up the intensity to a comfortable level. See 'How It Should Feel' on page 7.

11. Change modes by pushing the Mode button. The GREEN light indicates which Mode is selected and that the timing has started. See Mode information on 8.





12. After the 20-minute timed session, the unit will automatically cycle into Sleep Mode and the GREEN Mode light will flash every 2 seconds.
13. While in Sleep Mode the battery is still being used. Either reset to continue or turn the unit OFF.
  - a. To reset, push the Mode button for another timed session. Before resetting for a second timed cycle, wet the Cotton Sleeves or Ear Clips again.
  - b. To turn the unit OFF, rotate the ON/OFF switch counter clockwise until it clicks. Do not force the ON/OFF switch past its natural stopping point.



14. Unplug the Headset or the Cord. Do not store the unit with the Headset or Cord plugged in as this can damage either the Headset or the Cord.

#### Notes:

**Headset and Ear Clips:** The Headset and the Ear Clips may feel more comfortable with the use of either conductive gel or aloe vera gel rather than water. Over time, the Conductive Rubber Electrodes in the Ear Clips may lose their conductivity and will need to be replaced.

**Changing Modes:** When the Mode is changed during a timed session, one of the following will occur depending on when your unit was made: 1) the timing continues without interruption to complete a session of approximately 20 minutes or 2) the timing starts again for a new 20 minute session.

**Output:** The YELLOW light is used to test the output of the unit. During normal operation, when the unit is turned ON and the Headset or Ear Clips are positioned correctly, the YELLOW light may or may not come on. As long as the current is felt, the unit is operating correctly, regardless of the YELLOW light.

**Care of Bio Tuner Cord and Ear Clips:** Occasionally, remove the conductive rubber from the Ear Clips to clean in a mild soap solution. Rinse thoroughly. If necessary, gently wipe the metal pins of the Bio Tuner Cord.

**Low Battery Warning:** The RED light comes on when the battery is low. This means the battery will soon need to be replaced.

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

## HOW IT SHOULD FEEL

1. The sensation is a pleasant buzzing. It is not necessary to turn the intensity up to an uncomfortable level. If it feels prickly or unpleasant, try the following:

### HEADSET OPTION

- a. Wet the Cotton Sleeves again.
- b. Apply conductive gel or aloe vera gel to the hollow behind the ears.

### EAR CLIPS OPTION

- a. Wet the conductive rubber of the Ear Clips again.
  - b. Apply conductive gel or aloe vera gel to the ear lobes.
  - c. Clean the Conductive Rubber Electrodes.
  - d. Replace the Conductive Rubber Electrodes.
2. With repeated use, the buzzing sensation may not be felt as much. The intensity may be turned up if desired.
  3. You may feel a sensation on one side more than the other.
  4. In rare instances, some individuals may not feel the current.

## 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:

- **Length of Session:** Start with 1 cycle (20 minutes) per day for 3-4 days. Then increase to 2 cycles (40 minutes) per day. If deeper relaxation is desired, gradually increase to 4-6 cycles or more, spaced throughout the day.
- **Length of Use:** We suggest following the SOTA Wellness Program for 6 to 12 months. It may take a minimum of 30 days daily use to notice results.
- **Intensity Level:** The intensity should always be set to a comfortable level. Be sure to reduce the intensity before changing modes. After the new mode is selected, re-adjust the intensity.

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

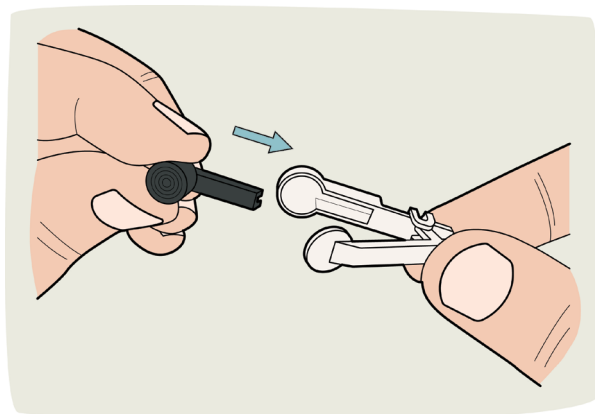
## REPLACING THE CONDUCTIVE RUBBER ELECTRODES

### HEADSET OPTION

1. Gently pull the black Conductive Rubber Electrodes off the Headset.
2. Slide new Rubber Conductive Electrodes onto the Headset pins.

### EAR CLIPS OPTION

1. Remove the Ear Clips from the Cord.
2. Gently pull the black Conductive Rubber Electrodes out of the Ear Clips.
3. Insert the new Conductive Rubber Electrodes into the Ear Clips. Press the Electrode into place.



## OUTPUT OF SIX MODES

The Bio Tuner provides six different comfort Modes to experiment with and discover which feels or works best. Try the different Modes to determine which one feels most comfortable. One Mode is not considered more beneficial than another.

In all Modes, the base frequency of 1,000 Hz pulse-modulated by 111.11 Hz is present. Modes 4, 5, and 6 have a more gentle feel.

### BIO TUNER MODES

#### MODE 1-3 (550 uS pulse width)

Mode 1: 1,000 Hz modulated by 111.11 Hz,  
Output = Continuous

Mode 2: 1,000 Hz modulated by 111.11 Hz,  
Output = 1 Second ON, 1 Second OFF (0.5 Hz)

Mode 3: 1,000 Hz modulated by 111.11 Hz,  
Output = Amplitude Modulated by 7.83 Hz Schumann (Earth) Sine Wave



## BIO TUNER MODES

### MODE 4-6 (220 $\mu$ S PULSE WIDTH)

Mode 4: 1,000 Hz modulated by 111.11 Hz,  
Output = Continuous

Mode 5: 1,000 Hz modulated by 111.11 Hz,  
Output = 1 Second ON, 1 Second OFF (0.5 Hz)

Mode 6: 1,000 Hz modulated by 111.11 Hz,  
Output = Amplitude Modulated by 7.83 Hz Schumann (Earth) Sine Wave

## ELECTRICAL SPECIFICATIONS

### POWER REQUIREMENTS

Use a 9-Volt Alkaline battery for optimal operation.

### OPTIONAL POWER INPUT

The Bio Tuner can also be operated using rechargeable batteries. When purchasing rechargeable batteries, it is suggested to take the unit with you to ensure the batteries will fit the enclosure.

### OUTPUT SPECIFICATIONS

Maximum <1.5mA Peak ~40 Volts Peak-Peak into typical 4k ohm load. Minimum <~10 $\mu$ A, 10 Volt Peak-Peak at lowest setting. Output impedance ~20k ohm.

1,000 Hz (+/- 1 Hz) pulse-modulated by 111.11 Hz (+/- 1 Hz). Waveforms are Quartz Crystal-Controlled for precise frequency output. There is also a broad range of harmonic frequencies delivered in each pulse as observed on a frequency domain spectrum analyzer.

Pulses are an alternating current (AC) output with no direct current (DC) or offset bias. Output is transformer coupled so that no DC can appear at electrodes.

## TROUBLESHOOTING

A Troubleshooting Guide for the Bio Tuner is available at [www.sota.com/manuals](http://www.sota.com/manuals). This Guide is a great tool to check if you are experiencing any issues with your unit.

## **COUNTRIES THAT PARTICIPATE IN MANUFACTURING**

The manufacturing of the SOTA Products is a global collaboration. The following countries have participated in the making of the Bio Tuner (listed in alphabetical order): **Canada, China, Hong Kong, Malaysia, Morocco, Taiwan and Thailand.**

## **REPLACEMENT ACCESSORIES**

To replace your accessories, contact your supplier.

## **WARRANTY**

The Bio Tuner Model BT7 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 your supplier for return instructions. For information about your closest repair depot, contact [repairs@sota.com](mailto:repairs@sota.com) or call 1.250.770.2023 or 1.800.224.0242 (toll-free in Canada & USA).



Made in China. Designed and Engineered 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 •