

# The Bio Tuner

## Model BT6pro 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**.

## **LEARN MORE**

To learn more about the Bio Tuner 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) Bio Tuner Unit
- · One (1) 9-Volt Alkaline Battery
- One (1) Product Manual





#### **HEADSET OPTION**

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

#### CONDUCTIVE PADS OPTION

- . One (1) Cord
- · Ten (10) Pair Disposable Conductive Pads

#### **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 the Bio Tuner is in operation and the current is flowing through the Headset. Also indicates Modes 1 through 3.

RED: Indicates the battery is low and will soon need replacing. Also indicates Modes 4 through 6.

## HOW TO USE THE BIO TUNER

- 1. Place the 9-Volt Alkaline battery in the unit.
  - a. On the back of the unit, slide off the battery cover.
  - b. Clip the battery connections in the battery compartment to the 9-Volt Alkaline battery terminals.
  - c. Slide the 9-Volt Alkaline battery into the case and push down.
  - d. Slide the cover back onto the unit.

#### **HEADSET OPTION**

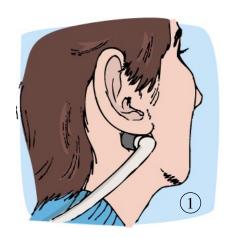
- 2. Clean the area behind each ear to remove oils from the skin. This will allow for better conductivity.
- 3. Wet the cotton sleeves with water and place them over the Headset electrodes.
- 4. Position the Headset electrodes in the hollow behind the ears as in image 1.
- 5. Insert the Headset Cord into the jack on the unit.

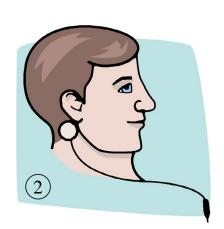
## **CONDUCTIVE PADS OPTION**

- 2. Clean the area behind each ear to remove oils from the skin. This will allow for better conductivity
- 3. Insert the Cord into the jack on the unit
- 4. Attach one set of Conductive Pads to each connection on the Cord.
- 5. Attach a Conductive Pad behind each ear lobe as in image 2.

## **EAR CLIPS OPTION**

2. Clean ear lobes to remove oils from the skin. This will







- allow for better conductivity.
- 3. Insert the Cord into the jack on the unit.
- 4. Insert the pins on the cord into the Ear Clips.
- 5. Wet the conductive rubber on the Ear Clips with water or conductive gel.
- 6. 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 3.

## **TURNING THE UNIT ON**

- 7. Turn the unit ON by rotating the ON/OFF switch clockwise.

  The GREEN light on the end panel will begin to flash alternately once every second, indicating the unit is in Mode 1. If the lights do not
- come on, the battery may not be properly connected.

  8. Gradually turn up the intensity to a comfortable level. See 'How It Should Feel' on
- page 6.
- 9. Place the unit in a pocket.
- 10. Change Modes by pushing the Mode Select button. The table below indicates how to identify each Mode. For more information on the Modes, see 'Output of Six Modes' on page 8.

MODE	INDICATED BY
MODE 1	GREEN light flashes once (1) per second.
MODE 2	GREEN light flashes twice (2) times per second.
MODE 3	GREEN light flashes three (3) times per second.
MODE 4	RED light flashes once (1) per second.
MODE 5	RED light flashes twice (2) times per second.
MODE 6	RED light flashes three (3) times per second.

11. After the 20-minute timed session, the unit will automatically cycle into Sleep Mode and both the GREEN and the RED lights will stop flashing and come on steady.



- 12. While in Sleep Mode the battery is still being used.
  - a. 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.
  - b. To continue with another session, turn the unit ON again and choose your desired Mode. Before starting a second timed cycle, wet the cotton sleeves again.

#### **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, the timing starts again for a new 20 minute session.

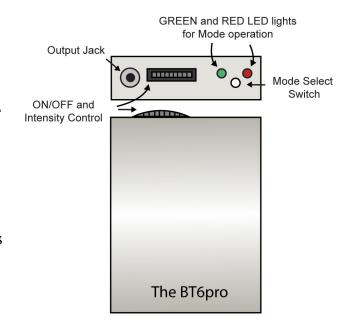
## Care of Bio Tuner Cord and Ear Clips:

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.



#### CONDUCTIVE PADS OPTION

- a. Clean the area behind the ears again.
- b. Replace the Conductive Pads.

#### **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**

**Length of Session:** One cycle is timed for ~20-minutes. One session can be 20 to 40 minutes or more.

The unit can be used daily or as often as needed throughout the day. It often takes at least 30 consecutive days of use to experience benefits.

**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: The unit should be used daily, for a minimum of 4 weeks or longer. After benefits have been achieved, simply use the unit as needed.

**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, readjust the intensity.

**Sensitive Skin:** During the first few weeks of use, the skin may become irritated when using the Ear Clip Option. Over time, irritation usually decreases or disappears. Apply a healing lotion after use if the ear lobes become red or irritated.

**Drink plenty of water:** It's 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.

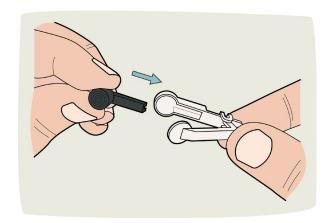


## REPLACING THE CONDUCTIVE RUBBER ELECTRODES HEADSET OPTION

- 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 uS 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 NiMH 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 <~10uA, 10 Volt Peak-Peak at lowest setting. Output impedance ~20k ohm.

1,000 Hz (+/- 1%) pulse-modulated by 111.11 Hz (+/- 1%). 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.

## REPLACEMENT ACCESSORIES

To replace your accessories, contact your supplier.



#### WARRANTY

The Bio Tuner Model BT6pro is 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 or call 1.250.770.2023 or 1.800.224.0242 (toll-free in Canada & USA).

Designed, Engineered and Made in Canada.