# TruTone PLUS<sup>®</sup> Electrolarynx Instructions

Note: This electrolarynx is designed to increase intelligibility by giving you the option to add prosody (i.e. NOT be monotone). Please read all instructions to learn all features, especially Sections 4 & 11.

### 1. TruTone Plus<sup>®</sup> Electrolarynx

- A Sound-Head (x2)
- B Sound-Head Spacer
- C Power Button & Pressure Sensor
- D Volume Knob
- E Body
- F Botty
- G Battery Cap
- H Battery Connector
- I Oral Tube (2 + 2)
- J Oral Adapter
- K Tone (Pitch)
- Adjustment Knob
- LED LED Indicator Light
- M MODE Button
- U USB Dust Cover
- V USB Charge Jack

# 2. When Your Electrolarynx Arrives (Contents)

- 1. Adjust the Base-Tone and Mode (Section 4)
- 2. Choose your Sound-Head (Section 5)
- 3. Decide if the Sound-Head spacer is used (Section 5b)
- 4. Set the MODE (Section 6)
- 5. Charge your battery the first night you receive it, then once a week (Section 7)
- 6. General Care/Troubleshooting (Section 8)
- 7. See tips on using an electrolarynx in Sections 9-10
- 8. Use the EMOTION<sup>TM</sup> Button to be more intelligible! (Section 11)
- 9. Get more out of your TruTone Plus (Section 12)
- 10. Warranty & Warnings are on the last page.

# 3. Volume Level

Set the volume by turning the Volume Knob (D). Do not force the knob. Turn UP towards the Sound-Head for a higher volume. Turn DOWN towards the battery cap to reduce volume. All the way DOWN is OFF, which is handy when you do not want to accidentally activate the device.

# 4. Adjusting Tone

- The Tone Adjustment Knob (K) is located to the left of the Power Button.
- Turn UP towards the Sound-Head Cap for a higher tone.
- Turn DOWN towards the Battery Cap for a lower tone.
- A TIP: Hold the power button down while you make your initial adjustment.

# 5. Sound-Head

• **Optional Extra Sharp Sound-Head** – (With the gray Sound-Button) If you have hard neck tissue, the Sharp Sound-Head Cap has a sharper sound, which may penetrate tissue better. This may also be helpful if you work in a loud environment. This cap is not as smooth sounding, so the voice may not be as pleasant.

# 5b. Sound-Head Spacer

- If you regularly use a higher tone, you may remove the Sound-Head Spacer (B); Unscrew the Sound-Head Cap, remove the Spacer, and screw the Cap back on.
- Test the device, listening to the tonal qualities. If you prefer the tonal qualities without the spacer, be sure to store the Spacer in a safe place, such as the box your device came with.

# 6. Setting the MODE:

The MODE Button is inside, under battery cap; the arrow on the battery points towards the button. (NO TOOLS!)

NOTE: For users with a Legacy *TruTone*<sup>®</sup> electrolarynx, the MODE button replaces the red Range adjustment.

**6a. Changing modes:.** To change the mode, press both the Mode button and the Power button. (The timing is not critical.) The MODE changes immediately, but if you continue to hold the Power button, the device will beep to indicate the new MODE setting. The number of beeps and the tone of the beeps indicate which mode it is in.

**6b. MODES 1 & 2:** Are like the original *TruTone*® electrolarynx, with preset Ranges. Mode is nearly monotone, so if you are intentional, you will hear a variation. Mode 2 has an increased range on the button, approximately 1/2 octave, depending on your tone setting.

# 7. Batteries & Charging

- Use only approved Li-Ion Batteries.
- Install Battery (F) as shown; it only fits one way. The Battery Connector (H) alignment tab points up, with the red wire to the right.
- Use until volume begins to fade, which is at 80% drained. You will still have up to another week or more of battery life (depending on your talk time), and battery life will be extended by the volume reduction.

# 7a. Indicator Light, Battery Low:

The LED light turns on if the battery is 80% drained (or more) when you press the Power button to let you know it is fully functioning, but approaching time to charge.

# 7b. Charging

- You may charge on a schedule, proactively; i.e. once a week, or once every two weeks.
- To charge, pull the USB Dust Cover (U) out at the top end, revealing the USB Charge Jack (V).
- Plug in a Micro-USB Cord into the USB Charge Jack (V).
- Charger Specifications: 5v, 750mA minimum (or .75A minimum). 7c. Indicator Light, Charging:
- When charging, the LED indicator light turns on solid.
- When charging is complete, the LED indicator light flashes.
- Unplug the unit when the charging is complete to conserve power.

# 8. General Care and Troubleshooting

- Cleaning Wipe with a damp cloth. Do not use oils, electrical contact cleaner, or other chemicals as they may cause damage. Rubbing Alcohol is safe. Do NOT use a soaking wet cloth. Use of an overly wet cloth may allow excess liquid to penetrate the device and cause damage.
- 2. Water Damage Remove the caps and USB Dust Cover from the

body and unplug the battery. Place into a sealed container with dry rice for two days before testing.

- Low Volume or Muffled Sound Try using or removing the Sound-Head Spacer. Charge the Battery.
- 4. Excessive Buzzing Ensure you have a complete seal between the device and the neck, all the way around the flat surface of the Sound-Head. Try different positions. Adjust the tone and volume level. Try the Oral Adapter.
- 5. Unsteady Tone Try a MODE with a lower sensitivity
- 6. Oral Adapter Use A sanitary cover, large finger cot, or even plastic wrap is recommended for use with the oral adapter to keep the device clean and moisture free.

# 9. Electrolarynx Neck Placement

- Place the Sound-Head (A) against your neck and activate the power button. Do not cover stoma.
- Speak as sound is carried into your mouth. Do not force air out.
- Ensure an airtight seal between the Sound-Head and your neck.
- Try different positions until you get the best sound. NOTE: Even a 1/8" (3mm) position change can have a great impact on the sound volume.
- Try cheek placement, or use the oral adapter in cases of a tender neck or excess buzzing.

# 9a. Neck Placement Tips

- Adjusting the Base Tone up or down may produce a better voice.
- Mid-Range tones are easier to hear for most people.
- See Toubleshooting, section 8.3

# 10. Optional Oral Adapter and Oral Tubes

- Insert Oral Tube (I) into top of Oral Adapter (J). Ensure the tube does not protrude into the cap area.
- Place Oral Adapter over Sound-Head (A).
- Place Oral Tube into mouth, at corner of mouth.
- Activate Electrolarynx. Speak around Oral Tube.
- NOTE: The tube is optional! You may hold the device with the oral adapter to the corner of your mouth!

# 10a. Oral Adapter Use Tips

- The larger rigid Oral Tubes do a very good job of getting sound into your mouth, but can be more difficult to speak around.
- The soft clear Oral Tubes are easier to speak around, but may not get as much sound into your mouth. If your tongue blocks the sound, you may want to cut an angle on the end to prevent blockage.
- You may hear excess "buzzing" (soft clear tubes). Try getting a better seal between the Oral Adapter and the Tube. Remove the Oral Tube from the Oral Adapter and push it back in again.
- Practice talking with the Oral Tube. Form words around the tube before turning on the electrolarynx.
- A good position for many people is found by placing the tip of the tube just behind your front teeth, and to one side, or toward the back of the mouth just ahead of where the tongue touches the roof of your mouth when you make the "G" sound (i.e. "GO").

# 11. Using the Pressure Sensitive ${\rm EMOTION^{TM}}$ Button to increase intelligibility—it's EASY!

WHY LEARN THIS? By increasing and decreasing pressure on the button you will be able to add **emotion** to your speech. This can help your voice sound more natural, and can help the listener understand you better, so you will have greater **intelligibility**—a benefit proven in a study by the University of Minnesota. Small changes in tone are enough to remove the





"robotic edge" to your voice, and will help your listener connect to you better.

HOW? Follow these easy steps to get started:

- It is recommended to use MODE 2 for the exercises. (See "Setting the MODE".)
- Press the Power Button lightly to activate the Base Tone.
- Hold the electrolarynx in the air to practice at first.
- Increase pressure slightly to increase the tone. Decrease pressure to come back down to the base tone.
- Practice a smooth up and down transition, slowly increasing and decreasing pressure on the button. Be aware of the bezel around the button as you release pressure, so your voice does not cut out unitentionally.
- GREETING: While still buzzing the device in the air, mouth the greeting "How *ARE* you?", which should mimic the slow up and down tone. Once you have the timing accurate, speak using the device. Practice this a few times.
- RESPONSE: Now, practice the response "How are YOU?" with the tone raised on the word 'you'. First, practice in the air while you mouth the words, holding steady for the first two words, then increasing pressure for the final word "YOU", and finally, snap your thumb off of the power button so you don't drag on. Once you have the timing down, speak using the device.
- BORED: Finally, practice the less common bored phrase "*HOW ARE* you?", where you snap the power button down quickly, then slowly reduce pressure for the final word, "you". This one is tricky because you don't want to release before you are finished speaking. Practice until you get the timing accurate.

#### WHEN?

- Just remember to press the power button as light as possible, and increase the pressure when you want to show emotion or emphasis. Place your emotions into the power button.
- You do not need to use the intonation in each word, but you will
  naturally add some to emphasize individual syllables, words or
  phrases as needed.
- Do not worry about sounding perfect—you will get better, and at least you will not be monotone.
- Only press as hard on the button as your personal health and comfort allow.
- Even if you do not consciously use the EMOTION<sup>TM</sup> Button, you
  may still achieve some natural vocal inflection with natural changes
  in pressure on the button.

#### **Some Practice Phrases**

woOOow. vs. wow. (Note: Excited vs. Bored)	I LOVE you. vs. I love YOU.
How <i>ARE</i> you? vs. How are <i>YOU</i> ? (Greeting vs. Response)	BYE bye, vs. Bye BYE.

Then, practice on some phrases that you commonly say—phrases that are a part of your personality. You might have a friend or family member suggest phrases that they are accustomed to hearing you say. Just increase and decrease pressure slightly with the rhythm of each changing word and syllable. Don't think about it too hard while you are in conversation— eventually, it will come naturally.

# 12. Getting More out of your Electrolarynx

Phone Use – For telephone use, these two tips go a long way towards improving communication:

- Turn the volume DOWN! Turn the device as quiet as it can be, and still make a tone. This way, your articulation is as loud or louder than the tone from the device. Otherwise, the tone may be overpowering.
- Mic Placement: Position the phone mic up by the nose. This maximizes the distance between the microphone and the electrolarynx and stoma, so it does not pick up stoma blast and electrolarynx buzzing.

Please contact your distributor if assistance is required in using or maintaining your electrolarynx, or to report any issue with your electrolarynx.

For more help, contact Atos Medical, Inc, or visit <a href="http://TruToneEmote.com/Help.html">http://TruToneEmote.com/Help.html</a>

#### Limited Warranty

For warranty contact your local distributor.

### **Electrolarynx Speech Aid Information**

**Intended Use:** An electrolarynx is a battery-powered artificial larynx that is externally applied and intended for use in the absence of the larynx to produce sound. When held against the skin in the area of the voicebox, or by insertion of a tube in the oral cavity (with an oral adapter), the device generates mechanical vibrations which resonate in the oral and nasal cavities and can be modulated by the tongue and lips in a normal manner, thereby allowing the production of speech. The device is intended for multiple uses by a single patient.

**Intended operator:** The patient is the intended operator. **Applied Part:** The entire device is considered a Type BF Applied Part **Environmental Conditions for Operation:** +5°C to +25°C; 15% to 93% relative humidity; 700 hPa to 1060 hPa

**Environmental Conditions for Transportation and Storage:** To maintain optimal battery life, maintain the following environmental conditions:  $-20^{\circ}$ C to  $+25^{\circ}$ C; 0% to 45% relative humidity.

**Mode of Operation:** 30 minutes of activation during a 24 hour period **Power Source:** Internally powered.

**Expected Service life:** The expected service life is 5 years. **Magnetic and Electromagnetic fields:** 

- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
- (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- This device complies with CAN ICES-3(B)/NMB-3(B) Warnings:

# Do not insert any part of the electrolarynx or any accessories into the

- stoma.Do not burn or physically damage the battery.
- Do not charge non-rechargeable batteries.

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- Devices and batteries may become warm (up to 45°C) during charging. Allow the device to cool before use if it becomes too warm.
- Do not short-circuit a cell or battery. Do not store cells or batteries haphazardly in a pocket, purse, box or drawer where they may short-circuit each other or be short-circuited by conductive materials such as coins or keys.
- Use caution when replacing the battery. Incorrect installation of the battery may result in a hazardous situation, such as extreme heat or fire.
- Electrolarynx devices contain a magnet that may interfere with pacemakers or other implantable devices. Consult with your physician before use. Maintain a minimum distance of 6" between your electrolarynx and any implanted devices. If interference between the devices is suspected, discontinue use and consult with your physician.
- Electrolarynx devices generate magnetic and electromagnetic fields that may interfere with certain procedures or treatments. Consult with your physician before any procedure or treatment.
- No modification of this equipment is allowed. Modifying your electrolarynx or using it with other equipment not described in the instructions may result in unsafe operation.
- Electrolarynx devices contain small parts that may become dislodged and present a choking hazard. Keep away from small children.
- Used electrical and electronic products should not be mixed with general household waste. For proper treatment, recovery and recycling, please take this product to a local collection point or recycling location. Recycle or dispose of the battery according to local regulations for lithium-ion batteries.
- Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling.

