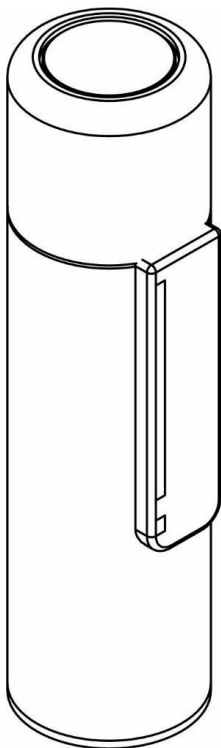


Labex Inspiration UM, 15 February 2021, # 1

LABEX™ INSPIRATION ELECTROLARYNX

USER MANUAL



OVERVIEW

1. What is Labex Inspiration

Labex Inspiration is a digital electrolarynx device. It is specially designed to help laryngectomees talk. Its main feature is the touch slider that allows the user to change the intonation while speaking.

Labex Inspiration is a CLASS I medical device.

General principle of operation for all models electrolarynxes manufactured by Labex Trade Ltd.:

The digital electrolarynx produces mechanical vibrations with a low sound frequency between 60-195 Hz. Applied to the neck, these vibrations create trembling in the oral cavity compensating for the energy generated from the lungs.

The combination of starting and stopping sound vibrations and oral articulation creates comprehensible speech.

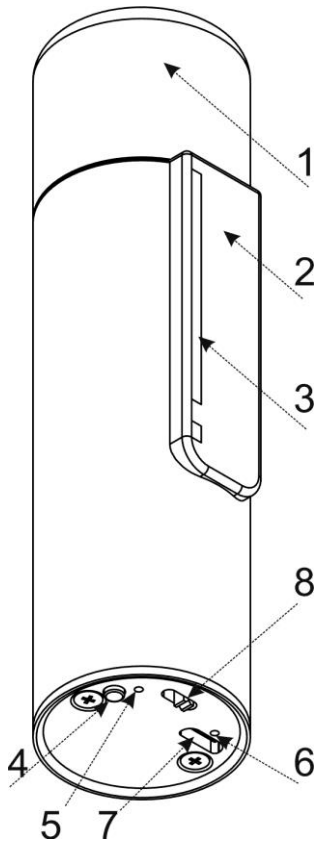
2. In the box

In the box, you will find everything you need to start using the device:

- 1 – Labex Inspiration electrolarynx device;
- 2 – USB charging cable (USB A to micro-USB type B);
- 3 – Intelligent USB charger 5V 2A;
- 4 – Labex lanyard;
- 5 – User manual;
- 6 – Warranty card.

3. Parts and buttons

Labex Inspiration consists of several main components:



- 1) Top Cap – The part which you press against the neck to receive the sound.
- 2) Touch Slider – Touch to produce sound, and slide your finger up and down to change the pitch.
- 3) LED Bar – Active LED bar that shows you information like current pitch level, battery level, etc.
- 4) Settings Button (FB) – Used for changing settings, adjustments, and checking the battery discharge level.
- 5) Red LED – Indicates when the battery is fully charged.
- 6) Green LED – Indicates that the charger slot is properly connected to the power supply.
- 7) USB Port – Used to charge the device with the included USB cable.
- 8) ON/OFF Switch – Used to turn the device on or off.

GETTING STARTED

4. Basic use

The device is partially charged by the manufacturer. After you take the device out of the box, you need to fully charge it before starting usage.

Charging is carried out by the charger included in the box. Plug the provided USB cable into the USB Port of the device, connect the other end of the cable to the charger and plug the charger into the socket. The Green and Red LEDs on the bottom of the device will turn on.

The Green LED next to the micro-USB slot shows that the charger slot is properly connected to the power supply.

While the Red LED is on, the charging is not complete. The Red LED turns off when the charging process is completed.

NOTE: Due to safety regulations a device usage while charging is denied.

Labex Inspiration UM, 15 February 2021, # 7

If you turn the device on from the bottom switch while charging and try to use it, the device will not emit sound and the LED Bar will blink in Red to warn you. To use the device, simply disconnect the charger.

5. After charging the device, it must be turned on.

To do this, use the ON/OFF Switch located on the bottom of the device.

A short and quiet sound will be emitted which indicates that the internal mechanical system of the device is working properly. The active LED strip illuminates briefly and indicates the battery level.

Normal operation of the device is done when the Top Cap of the device is pressed firmly against the neck, then activate the sound by placing your finger on the touch panel to speak. Moving your finger up and down will increase and decrease the pitch of the sound, respectively. This allows the expression of intonation

Labex Inspiration UM, 15 February 2021, # 8

NOTE: During the turn-on process the device performs quick calibration of the touch sensors. **It is important to keep the Touch Bar untouched while switching the unit ON** to avoid missing or improper sensitivity.

6. Finding the sweet spot

A sweet spot is called a place on the throat area where you feel the sound from the electrolarynx transmits through the neck tissue and out of the oral cavity with the most clarity.

The easiest way to find your sweet spot is by tightly pressing the electrolarynx Top Cap in different locations on your neck area and articulating a single vowel while pressing on the Touch Bar.

What you are looking for is the place on your neck, which best transmits the sound. While looking for a sweet spot, it is crucial that you press the device tightly against your neck tissue so the sound transmits through the tissue and out of the oral cavity. **Take your time finding your sweet spot** – this is the most important part of learning to use

Labex Inspiration UM, 15 February 2021, # 9

an electrolarynx. Finding just the right place will set you up for success.

7. First Words

After you have pinpointed the desired spot, you can start making some basic sounds. It is crucial to over-articulate every sound with your mouth until you feel comfortable. After that, you can start practicing short words. Slowly work your way up to sentences and conversation.

In some cases, talking can be achieved in a month, in other cases, it can take only 3 days.

For a more detailed guide, please check our blog:

<https://labextrade.com/tips-for-using-electrolarynx/>

USING THE INSPIRATION

ELECTROLARYNX

The Inspiration can be configured to work in different modes which will be presented later. However, the daily usage is reduced to 3 simple functionalities:

- **Speak & change the pitch while talking** by sliding on the Touch Slider. Touch the panel to start the sound and slide on to change the pitch. Release to stop the sound.
- **Quickly raise or lower the volume level.** To do so first touch the slider, this will start the sound and let you hear the current volume. While keeping your finger on the slider press and hold the Settings Button - sliding to the top will raise the volume, sliding down will lower the volume. Release the Settings Button to confirm the desired volume.
- **Check the battery discharge level and the current intonation mode.** Press and hold the Settings Button only for a couple of seconds.

The LED Bar will show the remaining capacity of the battery. If all or nearly all LEDs light up, that means the battery is close to full. If there are only one or two LEDs that light up, then your battery should be charged soon. If you continue holding the Settings Button, for a second all LEDs will turn off and after another second only one LED will light up, corresponding to the number of the current intonation mode.

THE VARIETY OF MODES ARE COMBINED INTO THE FOLLOWING GROUPS:

8. Intonational variations

- **Standard** /by default/. Regardless of the touch position, the starting pitch is fixed. Sliding up/down the slider will raise or lower the pitch.
- **Linear**. The pitch depends only on the finger position on the slider.

Labex Inspiration UM, 15 February 2021, # 12

- **Musical notes.** The slider is divided into 8 zones and each presents one note from the D Major range.
- **East Asian modulation.** This is a variation of the linear mode.

Which tonal variation you choose depends on your preferences.

NOTE: Practice! It is recommended that you find the “sweet spot” first and start speaking syllables and words, even short phrases, and **then** begin to improvise with intonations.

9. Dynamic volume with a flat tone.

- The pitch is equal to the base pitch. The volume changes with the sliding of the finger on the slider.

10. The settings options are:

- Switching the Start/Stop source. The sound can be started and stopped by touching the touch panel or by pressing the Top Cap against your sweet spot.

Labex Inspiration UM, 15 February 2021, # 13

- Changing the base pitch of the device. This is the pitch in the middle of the pitch range while in the Linear mode and the starting pitch while in the Standard intonation mode.
- Reverting to the factory default values.

Check our website for video tutorials.

<https://labextrade.com/inspiration/>

SETTINGS

The procedure for selecting the mode of operation is veiled to simplify the everyday use of the electrolarynx. It is expected these selections and adjustments to be performed rarely or only at the beginning of usage. A speech therapist can set them according to the user's preferences.

Anyway, it is a simple procedure that can be done unlimited times. In addition, the device can always be reset to the base settings – the state it came from the factory.

11. List of all 8 modes of operation.

- #1 Standard intonation mode: Regardless of where you touch the slider, the sound will start at the same Base Pitch. Sliding your finger up and down will raise or lower the pitch, respectively.
- #2 Linear intonation mode: The pitch of the sound depends on the position of the finger at which you touch the slider. You can slide your finger up and down to change the pitch

higher and lower, respectively. Touching close to the top will give a higher start pitch, touching close to the bottom will lower the initial pitch.

- #3 Volume mode: Sliding the finger up and down on the slider changes the volume up and down, respectively. The pitch remains unchanged and flat, equal to the base pitch.
- #4 East Asian modulation: The slider is separated into five distinct zones with flat tones and quick transitions in between. This mode is specifically designed for East Asian languages.
- #5 Musical notes mode: The slider is divided into 8 zones and each presents one note from the D Major range.
- #6 Automatic START/STOP source switch: Choosing this mode will switch the source for the automatic START/STOP function. Entering this mode will exchange the control point between the slider and the top of the working cap. When the Top Cap is enabled,

Labex Inspiration UM, 15 February 2021, # 16

the device will start producing sound automatically as soon as you press the Top Cap to your neck. To go back to starting the sound from the Touch Slider, select the mode one more time.

#7 Factory reset:

Choosing this option will reset the device to its factory settings.

#8 Base Pitch Select:

From this option, you can choose the Base Pitch you prefer as the starting pitch in the Standard Intonation mode and the pitch of the middle of the slider in the Linear Intonation mode.

When this option is selected, the device will start emitting sound on its own. Slide your finger up and down the slider to change the pitch. When you reach the desired pitch, press the Settings Button to confirm it.

NOTE: You can switch the source for the automatic START/STOP function, regardless of which intonation variation is currently active.

12. How to enter and switch between the modes.

As explained above, the Labex Inspiration has several working modes. Here is the procedure to select different modes of operation.

- 1) The unit must be in an off state. If it is on, turn the device off using the ON/OFF switch.
- 2) Press the Settings Button and hold it pressed.
- 3) While holding the Settings Button, turn the device on using the ON/OFF Switch (and keep the Settings Button pressed). Watch the 8 segments LED Bar Indicator. The LED at the bottom of the slider blinks and the first bar of the LED indicator will light up.
- 4) If you keep holding the Settings Button after 3 seconds, the second bar of the LED will light up in addition to the first one. After another 3 seconds the third bar on the LED indicator will light up too, and so on up to the eight LED of the bar.
- 5) Releasing the Settings Button will enter the mode number, equal to the count of the LEDs that are on at the moment of releasing the Settings

Labex Inspiration UM, 15 February 2021, # 18

Button. (Check up the list in the previous point). A short and quiet sound will be emitted.

EXAMPLE: If you want to choose option #3 - Turn off the device. - Hold the Settings Button. - Turn on the device while holding the Settings Button. - The first LED Bar will light up. Continue to hold the Settings Button until the first 3 LEDs light up and release the Settings Button.

BATTERY

13. Check the battery level

While the device is turned ON, press and hold the Settings Button for about 2 seconds. The LED indicator on the slider will fill up corresponding to the battery charge level. Just like on your mobile phone. If all 8 LED lights are on, then the battery is fully charged, if less than 2 are on, the battery is about to run out and has to be recharged soon. A red light at the bottom of the slider will turn on when it's time to charge your device.

NOTE: When the battery capacity is lower than the first LED, the device will stop emitting sound, and a Red LED will light up every time you activate the Touch Slider or the Top Cap. At that point, you have to charge the device.

NOTE: If you find that the battery in your device can not hold a charge for more than one hour of use, then the integrated battery may be near the end of its life cycle. If this happens, during or outside the

Labex Inspiration UM, 15 February 2021, # 20

included warranty period, please contact your local distributor or Labex Trade Ltd. at <https://labextrade.com/contact-us> or support@labextrade.com.

14. Charging the battery

To charge the device plug the provided USB cable in the USB Port at the bottom of the device. Plug the other end of the provided USB cable into the provided USB charger and plug the charger into a wall socket. The Green and Red LEDs at the bottom of the device should light up. When your device becomes fully charged the Red LED turns off.

NOTE: If the bottom RED LED is flashing - the device has entered a battery protection mode. It can be triggered by one of the following situations:

- The battery temperature may be over 45°C and the charging process is temporarily stopped, while the battery cools below 45°C. This protects the battery. If the device is exposed to direct sunlight, move it to a

Labex Inspiration UM, 15 February 2021, # 21

cooler place. The charging will continue after the device cools down.

- This is a rare situation: A hardware problem may be detected and internal protection is turned on and denies charging the battery.

CARING FOR YOUR DEVICE

15. Cleaning and maintenance:

Since the device is in constant contact with skin and other surfaces, it should be cleaned at least once every 24 hours. Build-up dust and dirt can be the cause of malfunctioning the device. For the best hygiene practices, the following procedure should be followed:

- Clean the outside surfaces of the device with a slightly wet soft microfiber cloth.
- After cleaning all surfaces, you can disinfect the device by applying a small amount of disinfectant gel or alcohol. Alternatively, alcohol wipes can be used.
- Wipe the device with a soft microfiber cloth again.

INFORMATION

16. Warnings

- **Do not submerge the device underwater.** Do not wash the device under running water. This will potentially damage the device.
- **Do not try to disassemble** the device under any circumstances. This will permanently void your warranty.
- **Do not use any third-party chargers** or charging cables. Use the original ones provided in the box. Using any other charging equipment could potentially damage the battery or the device.
- 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 the device if its temperature is below 0°C.
- Do not short-circuit a cell or battery.

Labex Inspiration UM, 15 February 2021, # 24

- The device contains a strong magnet that may interfere with pacemakers or other implantable devices. Consult with your physician before use.

LIMITED WARRANTY

CONDITIONS

This Limited Warranty covers any defects in material or workmanship under normal use of the device, according to the User Manual during the Warranty Period.

During the Warranty Period, Labex Trade Ltd. will repair or replace, at no charge, products or parts of a product that proves defective because of improper material or workmanship, under normal use and maintenance.

This Limited Warranty is not transferable.

Due to the nature of the electrolarynxes and the principle of their use, the device is not intended to be used by multiple people, shared use, and second-hand use. Because of the contact of the device to the user's neck, stoma, or other cavities - the device is for personal use only! Thus the Limited Warranty provided by Labex Trade Ltd. is non-transferable.

Duration of the coverage.

Labex Inspiration UM, 15 February 2021, # 26

The Warranty Period for Labex™ electrolarynxes is two years from the date of purchase. A fully replaced or repaired electrolarynx remains in the warranty period.

The warranty does not cover:

The external batteries as well as the chargers, because it is not possible to guarantee if the customer uses them as described in the UM.

This Limited Warranty does not cover any problem that is caused by:

- Conditions, malfunctions, or damage not resulting from defects in material or workmanship.
- Conditions, malfunctions, or damage resulting from negligence, improper maintenance, or unauthorized modification.
- Damaged or destroyed by natural causes including but not limited to lightning, flood, or another natural disaster.
- Theft or loss of the electrolarynx.

Trying to open or repair the device; causing extensive shock damage (dropping it, hitting it

Labex Inspiration UM, 15 February 2021, # 27
against other objects, etc.); or liquid damaging it
(submerging in water or other chemicals).

Shipping charges as well as the risk of loss or
damage to the electrolarynx while in transit to
Labex Trade Ltd are taken care of by the customer.
The back shipping is covered by the Company.

Please read the warranty card. To learn more
about the Labex warranty, please visit
<https://labextrade.com/warranty-policy/>

If you have any problems with your device, contact
your distributor or check for a possible solution at
<https://labextrade.com/self-assistance/>

17. Information on Disposal for Users of WEEE:

The symbol on the product box and/or
accompanying documents means that used
electrical and electronic equipment (WEEE) should
not be mixed with general household waste. For
proper treatment, recovery, and recycling, please
take this product(s) to designated collection points
where it will be accepted free of charge.

Labex Inspiration UM, 15 February 2021, # 28

Alternatively, in some countries, you may be able to return your products to your local retailer upon the purchase of an equivalent new product. 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. Please contact your local authority for further details of your nearest designated collection point. Penalties may be applicable for incorrect disposal of this waste, following your national legislation.

For professional users in the European Union, if you wish to discard electrical and electronic equipment (EEE), please contact your dealer or supplier for further information.

For disposal in countries outside of the European Union: This symbol is only valid in the European Union (EU). If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

18. Contact information

LABEX TRADE LTD. VAT # BG203819149

Address: 59 Sankt Peterburg Blvd., Floor 6, office 604, 4017 Plovdiv, Bulgaria, European Union

T: +359 32 54 9090, M: +359 878 616 711

Information & orders: sales@labextrade.com

19. Assistance

- You can find the relevant information on the self-assist page:

<https://labextrade.com/self-assistance-inspiration/>

- Submit a ticket at

<http://support.labextrade.com>

- Questions on website and online orders:

admin@labextrade.com

For more information visit <https://labextrade.com>

20. Safe storage:

- Store in a dark and dry place.
- Store the device and its accessories in its original box.
- It is recommended to recharge the battery every 6 months when the device is stored for a longer period. This guarantees the life of the battery.
- Store in temperatures between -20°C to $+45^{\circ}\text{C}$.

21. Technical specifications

General parameters	Labex Inspiration
Adjustable pitch	Yes
Adjustable volume	Yes
Pitch range	55 - 165 Hz
Volume range	60-83 dB
Speech time per charge	20-24 h*
Full charge time	3,15 h with Labex charger
Mechanical buttons	2
Touch ON/OFF sensor	1
Touch slider	1
USB charging	Battery Charging Specification Revision 1.2
* Depending on pitch and volume selected.	
Physical parameters	Labex Inspiration
Diam x Length	∅ 32 x 123 mm
Weight	145 g with battery
Body material	ABS + Aluminium
Dust resistive	Yes
Moisture resistive	Yes
IP Standart	IP40**
** Only for reference.	
Features	Labex Inspiration
Automatic low battery warning	Yes
Check discharge level	Yes
Charge finished indication	Yes
Lanyard holder	Yes
Lanyard	Yes
Power charger	Built-in

Labex Inspiration UM, 15 February 2021, # 32

Charger type	USB charger
Connector type	Micro USB type B
Charge current	5V 1.5A max. - depending on USB port power
Battery information	Labex Inspiration
Capacity	3,7V 3400 mAh
Battery type	Li-Ion, non-removable
Batteries in the package	1 peace, integrated
Rechargeable	Yes
Protection	Smart electronics
Battery cell manufacturer	LG Chemical
Battery recharge life cycles	More than 500
Warranty conditions	Labex Inspiration
Duration	2 years limited warranty
Post-warranty repairs	In the factory
*** For the unit only, it does not cover batteries and chargers.	