

Oral Analgesia

Local-Anesthesia Boosting Instrument

Operation manual

I. Function:

It is a professional and painless local anesthesia device for oral cavity, which is applied for all diagnosis offices of stomatology department, and is appropriate for local infiltration anesthesia during the treatments of oral diseases, such as intraoral cure, repair, reform, small size of surgical operation and so on while combined with Primacaine, Scandonest and other major anesthetics for oral cavity. This instrument adopts technologies of advanced rotation needle, steady flow velocity, manufacture of narcotic passageway, and so on, thus there can be no pain throughout the entire treatment. Unique design and easy way of injection make the operation easier. So it makes patients reduce fear, pain and anxiety, at the same time, reduces the doctor's pressure.

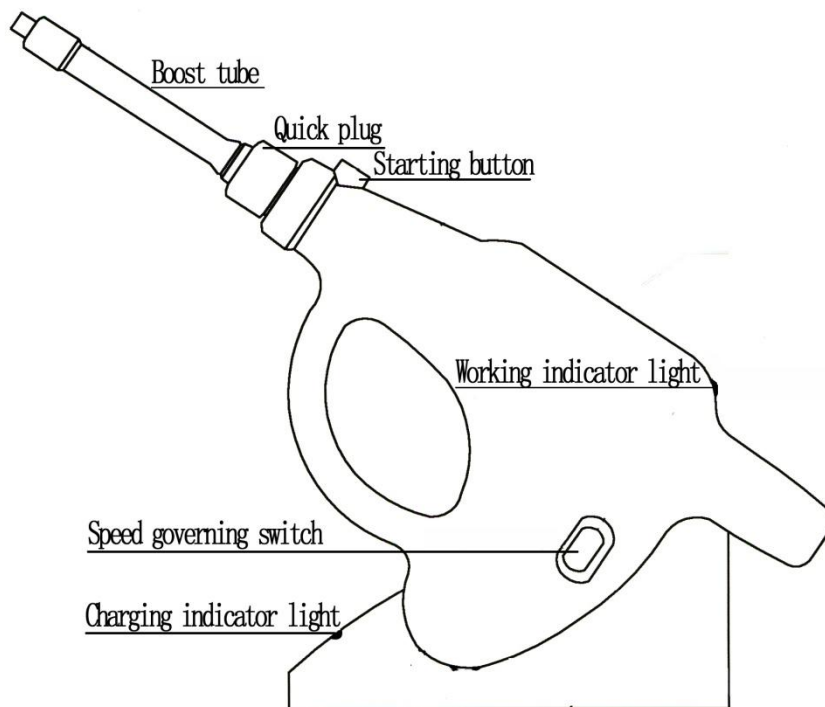
II. Configuration and Composition

One host

Two boosting tubes (one is English system, the other is Metric system, may be disinfected under high temperature and high pressure)

One charging base

One power adapter



III. Parameter

1. **Model:** TR-LAI01

2. **Features:**

- the host uses the standard 1.80 ML card board type anesthetics and two types of needle(the English system and the Metric system). Mainly used for oral anesthesia injection.
- no pipeline or consumables, save the anesthetic and clinical cost.
- unique design , needle type holding and one key type operation , that make the doctor operate it more easily .

3. **Technical parameters:**

- working environment: equipment is suitable for the common environment places.
- power adapter input: AC 100–240V 50/60Hz output: 12VDC
- work power: in-built Lithium battery
- standby time: 30 days
- working time: a sufficient electricity, continuous working time more than 200 minutes

- speed output: high/medium/low three gears, Low-speed: about 360 seconds/1.8ml, Medium speed: about 180 seconds/1.8ml, High-speed: about 108 seconds/1.8ml

- work instructions: LED green lights

- alarm instructions: LED red flashes

- when the battery is insufficient, the LED flashes red, and the frequency is 5 times per second. In this case, the host can continue to be used for 30 minutes, remind to be recharged.

- when handspike is put in place, the motor stops working, delays about 1 second then LED turn red. With no action for 20 seconds, the host will be in a resting state, at present host consumes almost no power, the standby time lasts about 30 days.

- any time triggering buttons can awaken host, enter into the normal working condition.

IV. Operation methods:

1. Host charge:

- put the host in charging base, take note of host bottom two charging touch pieces and charging base two charging probe contacted, and make sure the good contacts.

- if the LED turn red, show host electricity shortage, be recharging, until the LED turn green, show host power sufficient, do not need to recharge, can cut the power adapter.

- charging process, when the host internal battery power is seriously insufficient, LED shows red and says the current rapid charging, when the charging reaches a certain, start to slow charging with small current, when LED displays green it says the battery power is saturated, charging finished, then the power can be disconnected and do not need to be recharged.

2. Charging note:

- first use may need charge-discharge for 3-4 times, then battery can reach working condition ideally.

- If long time no use, suggest power remained, do not have the power completely discharged for long.

3, Host operating:

- set the host speed on the needed gear (high/medium/low)

- based on clinical requirement, put the anesthetic (e.g., Primacaine, Scandonest etc) into boosting tubes, then install the corresponding needle.
- press the starting button ,the host will work .On normal working condition ,LED displays green, when voltage turns higher, LED may have smaller bright changes, and this belongs to be a normal phenomenon.

VI. Attentions:

1. T this product is only applied for the local anesthesia in the Stomatology Department, place the boosting role in constant speed, the selection of anesthetic and needle shall be purchased according to doctors' clinical requirements. Any results caused by misuse of anesthetic and needles have nothing with the product.
2. The host and charger need to be scrub and clean with tissue sprayed disinfectant solution .besides, the boosting tube can be disinfected under 134 °C high temperature and high pressure.
3. The product shall be put in a clean dry and well-ventilated environment, avoid touching the fire source and heat source and corrosive substances. Warehouse temperature $-5^{\circ}\text{C}\sim+35^{\circ}\text{C}$, relative humidity is not more than 75%, with measures of anti-damp , anti-dust, anti-shock, and anti-corrosion .
4. While in use, please keep away from high magnetic field and alternating current equipment, so as to avoid the electromagnetic interference impacting on the normal use.
5. While transporting and using the product, please pay attention to avoid strong vibration, drop, shock and extrusion.
- 6.To prevent the over discharge of battery, it is suggested one charging shall be carried out per 3 months according to the method of standard charging and discharging.
7. Each host shall be charged with the matched battery charging seat and power adapter.
8. If any abnormality of the equipment, please contact with company for the maintenance instead of disassembling arbitrarily, provide the circuit diagram, components and parts list, drawing notes and details of revised according to the requirements with the consent of our company.
9. When this product reaches the deadline of scrapping, the main machine and parts shall be disposed according to the relevant regulations of the country.