stomdevice

APEX LOCATOR & PULP TESTER

C-ROOT I (V)

INSTRUCTIONS



CE 0482

*Thanks for applying the apex locator & pulp tester instrument. For the sake of safety and efficient use of the product, please read this manual carefully.

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

CONTENT

Introduction	1
Intended use/indications	1
Contraindications	2
Warnings	2
Precautions	2
Adverse Reactions	2
Contents	4
Recharging the Battery	4
Sound Adjustment	5
How to use your apex locator	5
How to use your pulp tester	9
Automatic Shutdown	13
Service and Maintenance	13
Guarantee	13
Technical Specifications	14
Standard symbols	14

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

Introduction

Congratulations on the purchase of C-Root I (V), as an apex locator which is precise, ergonomic, and able to determine the exact working length in seconds, as a pulp tester which is a wise assistant to judge the pulp vitality.(Fig.1)(Fig.2)

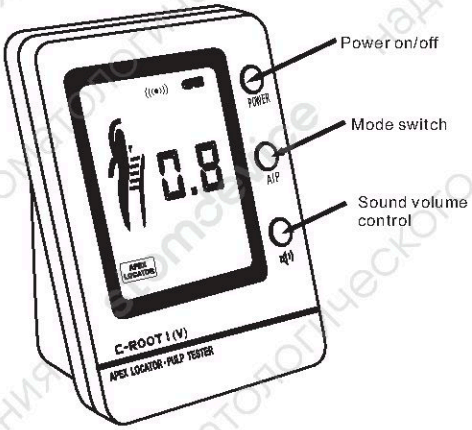


Fig.1

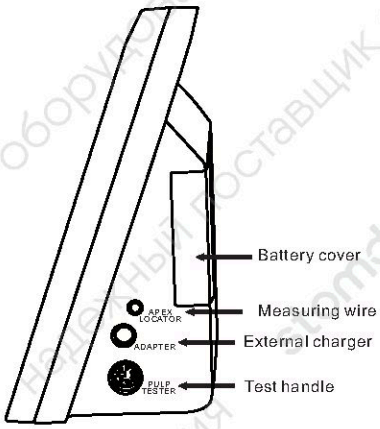


Fig.2

Intended use/indications

C-Root I (V) is an electronic device used for apex location determination and as an aid in establishing pulp vitality.

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

Contraindications

In case where a patient has been fitted with an implanted heart pacemaker (or other electrical instrument) and has been cautioned against the use of small electrical appliances (such as electric shavers, hair dryers etc.) it is recommended that the C-Root I (V) not be used.

Warnings

Do not modify this instrument. Modification may violate safety codes and endanger patient and operator. Any modification will void the warranty.

Precautions

Before using, the user shall determine the suitability of the product for its intended use and the user assumes all risk and liability whatsoever in connection with such use.

- *C-Root I (V) is only used by a properly licensed practitioner.*
- *We do not advise the use of C-Root I (V) on patients fitted with pacemakers (or other electrical instrument) for safety reasons.*
- *Do not expose C-Root I (V) to any liquid.*
- *C-Root I (V) must be stored in normal temperature (< 70 C) and humidity conditions.*
- *Do not use in the presence of inflammable products.*

Adverse Reactions

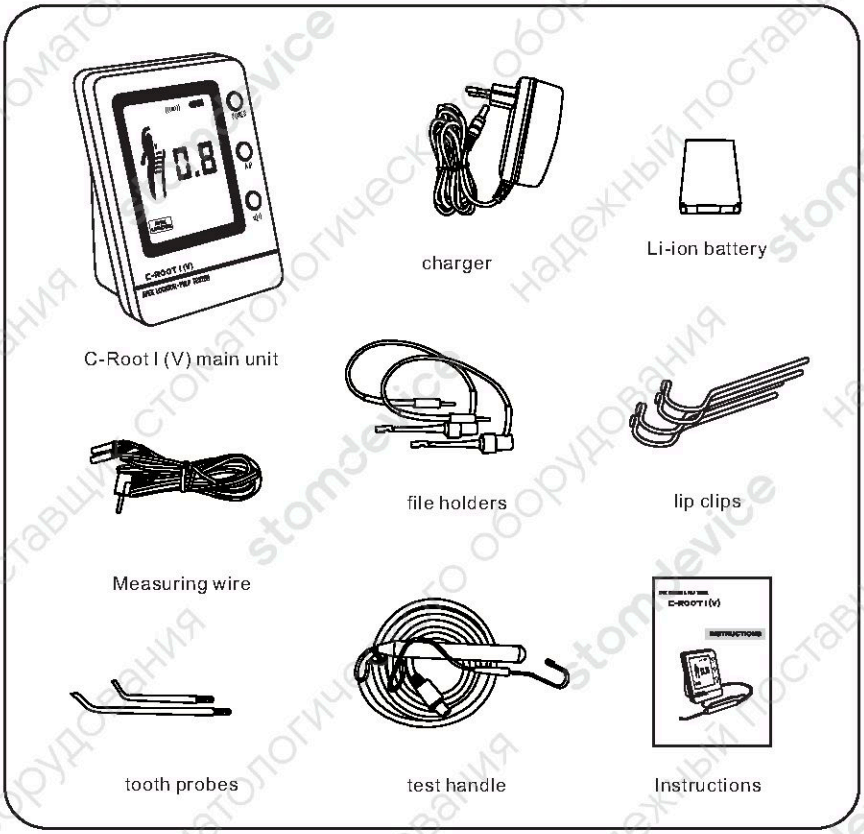
None known.

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

Contents

Before use, please check the exact contents of the new instrument:

- 1 C-Root I (V) main unit
- 1 charger
- 1 Li-ion battery (Already installed in instrument)
- 1 Measuring wire (apex locator)
- 2 file holders (apex locator)
- 4 lip clips
- 2 tooth probes (pulp tester)
- 1 test handle (pulp tester)
- Instructions



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

Recharging the Battery

The C-Root I (V) is delivered with a rechargeable battery.
The C-Root I (V) screen has an indicator showing the level of charge of the battery. When it's empty, the battery requires recharging.

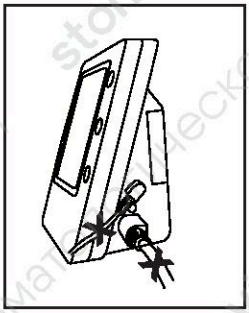


Fig.3

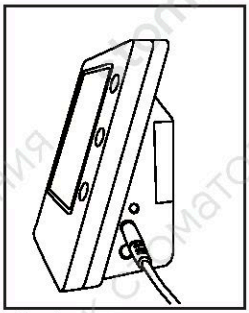


Fig.4

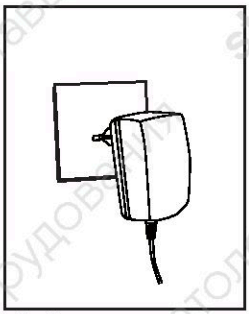


Fig.5

Procedure for recharging the battery:

1) Disconnect the Measuring wire or test handle.(Fig.3)

2) Connect the charger cable to the instrument. (Fig.4)

3) Connect the charger to the mains. (Fig.5)

When the instrument is connected to the charger, beeper emits tone 3 times and LCD will display: AC IN DISABLED ;
Battery sign " " will run during charging procedures .Battery sign will stop when charging is complete.
Duration of charging: about 4 hours (24 hours after long periods without use).

Note:
C-Root I (V) cannot be used while charging.
Used batteries must be disposed of in accordance with any applicable legislation.

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

Sound Adjustment

C-Root I (V) is equipped with a sonic indicator which enables monitoring of the progression of the file within the canal or the stimulus on the probe.

This function, in conjunction with the digital display of progression, enables working "blind" while still monitoring the process of theworking. The volume can be adjusted to one of four levels: mute, low, normal and high, by successive presses on the VOLUME button. Visual of different volumes will be showed.

How to use your apex locator

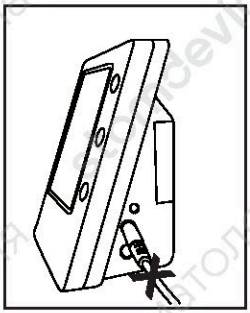


Fig.6

Getting Started:

1) Disconnect the charger from the instrument if connected.(Fig.6)

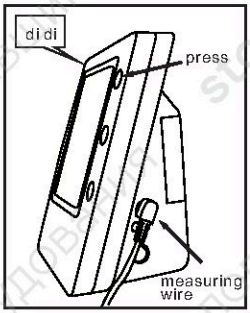


Fig.7

2) Connect the measurement wire and switch on the instrument, two tones audio signal are emitted when the unit is turned on.(Fig.7)

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ



Fig.8

3) Switch to apex locator mode by succ-essive presses on the MODE SWITCH button, visual information appears APEX LOCATOR and appear READY indicates that the apex locator is ready for use (Fig.8).

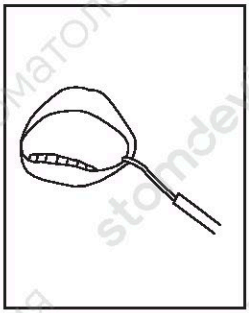


Fig.9

4) Link the lip clip to the patient.(Fig.9)

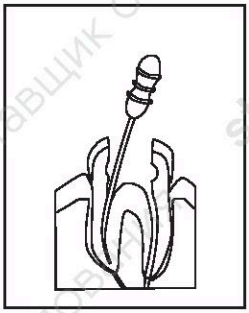


Fig.10

5) Insert the file into the canal.(Fig.10)

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

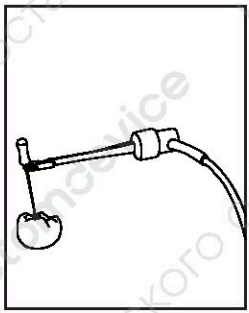


Fig.11

6) Connect the file holder to the file. (Fig.11)

Note: no other specific adjustment is necessary before commencing measurement.



Fig.12

Search for the Apex:

1) Median Zone
Slowly introduce the file into the canal. While the file within the canal, on the screen, a vertical arrow appears . (Fig.12)



Fig.13

2) Pre-apical Zone (approx. 2 to 3 mm before the apex)
When the file reaches an area 3 mm from the apex, beeper emits tone slowly. On the screen, a smile tooth appears. Segments and numbers will indicate as visual information of file progression from 3.0 to 0.0(apex). (Fig.13)

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ



Fig.14

3) Apical Zone
When the file approaches the apical zone (0.9 to 0.0), on the screen, APEX appears. In conjunction with the visual information, beeper emits audible information of file progression via a series of progressive beeps. When the apex is reached, beeper emits a solid tone (Fig.14) (Fig.15).

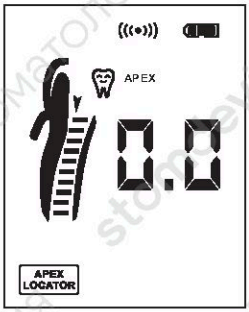


Fig.15

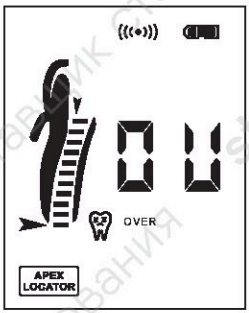


Fig.16

4) Beyond the Apex
On the screen, a red segment, a red horizontal arrow, a red sad tooth and red "OVER" (in conjunction with a warning signal) indicates that you have passed the Apex (Fig.16).

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

Precautions for Apex Locator Use

. To ensure that short circuits do not impair the measurements, be particularly careful with patients fitted with metal crowns or bridges.
. Avoid excessive liquids inside the tooth cavity to prevent overflow and incorrect measurements.
. Make sure that the canal is wet enough to ensure reliability of the measurement.
. Ensure that the file does not touch another instrument.
. Measurements in canals with open apex may provide results with reduced precision.

How to use your pulp tester

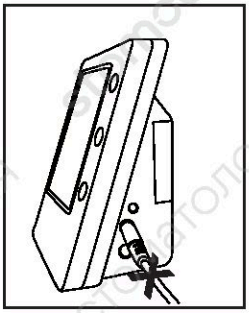


Fig.17

Preparation

1) Disconnect the charger from the instrument if connected.(Fig.17)

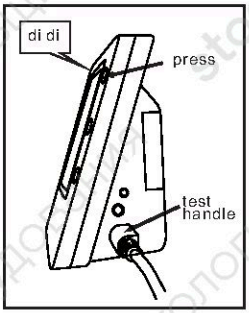


Fig.18

2) Connect the test handle and switch on the instrument, two tones audio signal are emitted when the unit is turned on. (Fig.18)

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

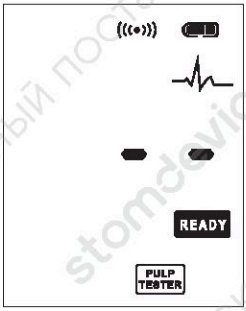


Fig.19

3) Switch to pulp tester mode by successive presses on the MODE SWITCH button, visual information appears, PULP TESTER and appear READY indicates that the pulp tester is ready for use (Fig.19).

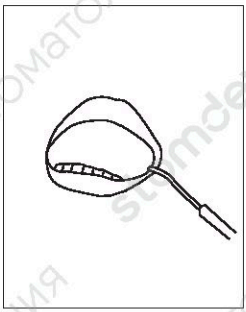


Fig.20

4) Link the lip clip to the patient's lip; instead the patient may hold the lip clip firmly in the hand.(Fig.20)

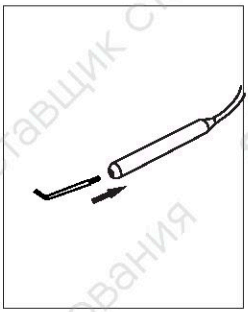


Fig.21

5) Insert the tooth probe into the handle. (Fig.21)

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

Note: no other specific adjustment is necessary before commencing test.

Getting Started

1) Clean and dry the tooth to be tested.

2) To improve contact between tooth and probe, apply a little prophy paste or toothpaste to the metal tip.

3) Place the probe on the middle of the labial or lingual surface of the tooth. Avoid soft tissue and restorations such as crowns, amalgams or composites.

4) When the probe contact tooth unquestionable, the unit activated automatically. The number will indicate that an increasing Gentle-Pulse stimulus is being applied to the tooth.

5) When the patient feels the stimulus,leave the probe from the tooth. The stimulus will stop immediately. The display will flash and hold the final reading for approximately 5 seconds, so it can be noted, at this time contact tooth again, the unit will apply stimulus continuative. After 5 seconds the unit will automatically turn to ready status.

6) During 20-50, beeper emits tone slowly. During 50-80, emits tone faster. after 80,emits a fastest tone.

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

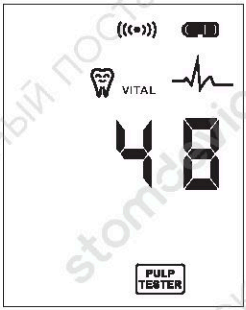


Fig.22

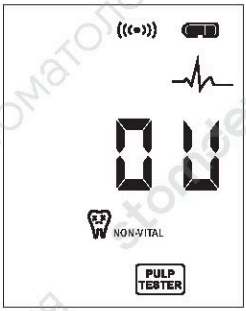


Fig.23

Clinical Observations:

1) The reading corresponding to the normal stimulus is 1-99. When the stimulus stopped within 1-99, on the screen, a smile tooth and green "VITAL" appear (Fig.22).

2) No sensation at the maximum stimulus (OU) suggests that the tooth is non-vital, at this time, on the screen, a sad tooth and red "NON-VITAL" appear (Fig.23). This conclusion should be confirmed by thermal testing.

3) Generally, incisors have similar thresholds about 10 – 30, premolars about 25 – 45, molars about35 – 70.

4) Molars generally require greater stimulus than premolars, but the threshold may also be affected by such factors as the age of the patient, trauma and pathology.

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

Automatic Shutdown

C-Root I (V) automatically shuts down after 3 minutes without use. It is advisable, however, to manually switch off instrument after working by simply press the POWER key.

Service and Maintenance

The instrument doesn't contain user serviceable parts. The service and repair should be provided by trained service personnel only.
The instrument may be cleaned with a damp cloth and wiped with a cold sterilant. Use of chemical agents may cause damage to the instrument.
The measuring wire and test handle can't be autoclaved.
The accessories (lip clip, file holder, tooth probe) can be sterilized between treatments (by autoclave at 134 C).

Note: autoclaving does not remove debris that may have accumulated. To assure adequate sterilization, wash the autoclavable components in warm, soapy water (before autoclaving).

Guarantee

C-Root I (V) is guaranteed for 24 months from the date of purchase. The accessories (wire, battery etc.) are guaranteed for 6 months.

The guarantee is valid for normal usage conditions. Any modification or accidental damage will render the guarantee void.

We will repair or replace, at its option, a defective unit. This warranty is in lieu of all warranties of merchantability, fitness for purpose or other warranties express or implied. We do not accept liability for any loss or damage, direct, consequential or otherwise, arising out of the use of or the inability to use the product herein described.

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

Technical Specifications

C-Root I (V) belongs to following category of medical devices:
-Internally powered equipment (7.4 V Li-ion rechargeable battery)
-Type LF (Low Frequency) applied parts
-Not suitable for use in the presence of flammable anaesthetic mixtures with air or with oxygen or nitrous oxide
- Continuous operation
-Ingress of liquids – not protected
-Environmental conditions during transportation:
temperature: -20 C to +60 C (0 to 140 F)
relative humidity: 10% to 90%, non-condensing

Technical specifications
Type of screen: liquid crystal
Supply: Li-ion 7.4 V battery
External charger: Input : AC100-240V 50/60 Hz or 220V /50 Hz
Output :DC 6V 1.5A

Standard symbols

On the instrument or external charger label appear standard symbols as follows:


Class II equipment


Type B applied part


Attention, consult accompanying documents


Direct current


Certified to MDD93/42/EEC


WEEE

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice



Foshan COXO Medical Instrument Co., Ltd
Address: 21 Wufeng Si Road, Foshan, Guangdong, China

EC REP **Wellkang Ltd.**
Address: Suite B, 29 Harley Street, London W1G 9QR, United Kingdom

ver 2.0

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ