Manuals+ — User Manuals Simplified.

coxo DB-686 Nano 001 Curing Light User Manual

Contents
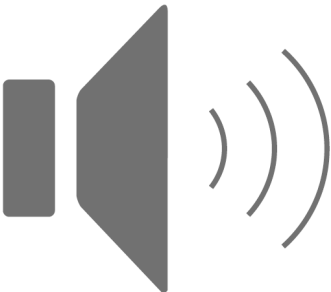
coxo DB-686 Nano 001 Curing Light

| D2		Clockwise/Counterclockwise rotary
E		Control unit power
F		Control unit sound

File Selection
The instrument presents a library of files of major brands. User can choose to use without setting.

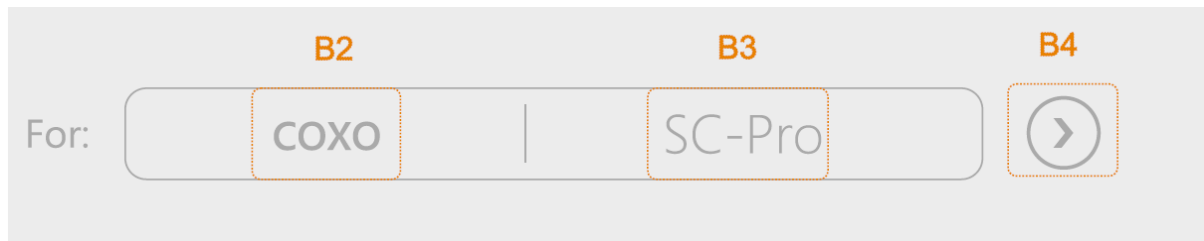1. Manufacturer and NITI system
   - Press icon to enter the NITI system, choose manufacturer and systems by pressing NITI system name

according to your needs.

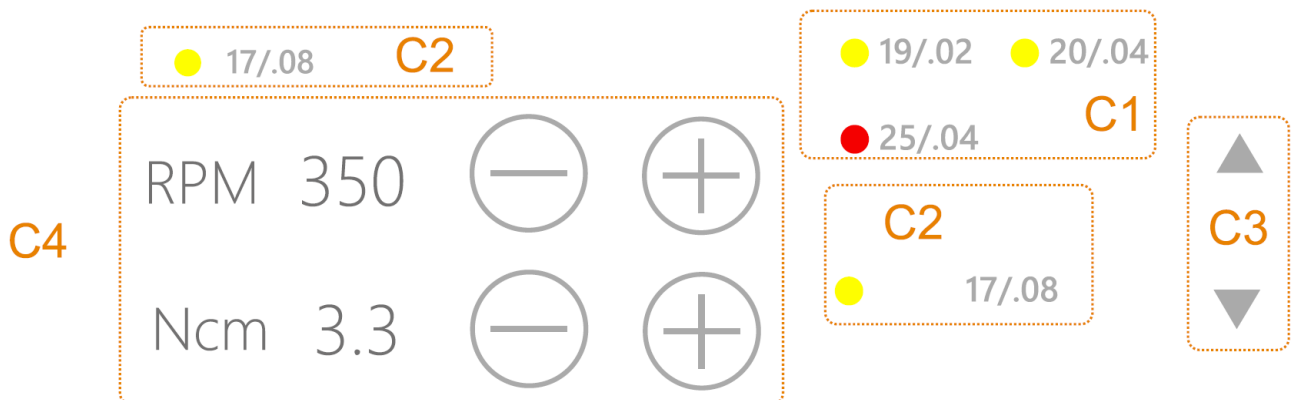- Press Direction keys to switch pages and press OK key to exit selection.
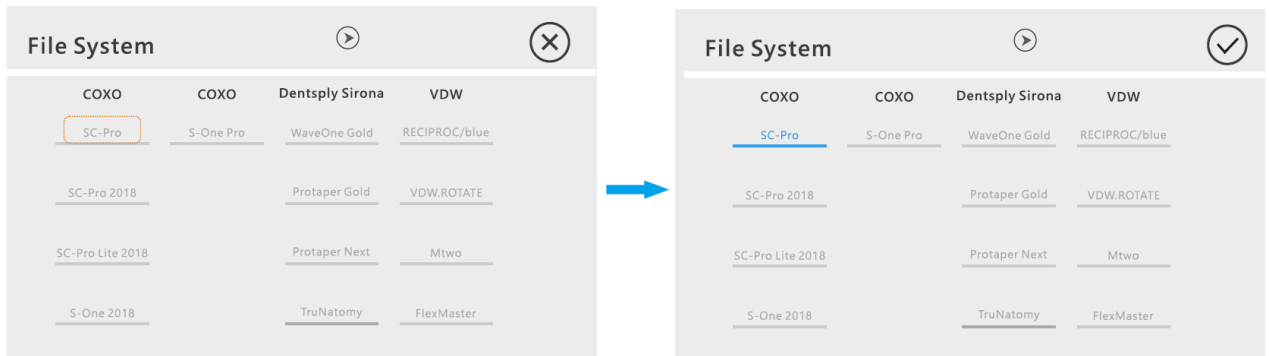
- After the selection is completed, the status bar of the main page displays the selected NITI system.

- B2 File manufacturer
- B3 NITI system name
- User can also press Right Direction key (B4) to select different NITI system under the same manufacturer.

2. File Selection

- C1 File list in the current NITI system
- C2 File(s) selected for use
- User can press UP and DOWN keys (C3) to select file(s)
- C4 Speed and torque value of the currently selected file(s), change speed and torque.

Handpiece LED Light

Press Settings to enter setup state.

1. Press High Brightness icon to change the LED status as below.

   When icon is disabled the LED is off, otherwise the LED will light up when the motor is running

2. Press button as below to select delay time.

| +0s	+1s	+3s	+5s
0s delay	1s delay	3s delay	5s delay

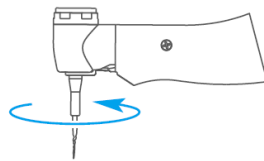After the motor stops running, the LED will continue to light up until the delay time expires.

Torque Reverse

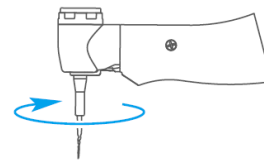1. Press OFF to turn on torque reverse.

   During operation, when load reaches preset torque limit value, motor will automatically reverse. When the load is reduced, the motor will automatically return to forward rotation.
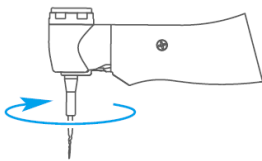
Load within the torque limit value.　　Load beyond the torque limit value.　　When the load is reduced, the motor is automatically restored.

2. Press ON to turn off torque reverse.

   - During operation, when load reaches preset torque limit value, motor will stop.
   - Restart handpiece to restart the motor.

Rotary Direction

- Before working, press Clockwise / Anti-Clockwise buttons on the screen or long press icon on the handpiece to change rotary direction.
- During working, user can only change the direction by long press icon on the handpiece.

Start Working

Press icon, motor rotates according to the set speed and rotary direction, press again to stop it.

● 19/.02 ● 20/.04 ● 25/.04

RPM **350**

Ncm **3.0**

Torque reverse on

● 17/.08

● 19/.02 ● 20/.04
● 25/.04

● 25/.06

● 35/.04

When the torque exceeds the set limit, the motor will stop or automatically reverse.

Change Speed and Torque
Usually, the default settings do not need to be adjusted; however, user can modify the default speed and torque values.

- Press – and + on the screen to adjust speed or torque.
- When the setting is changed, Rpm (Ncm) will become Rpm (Ncm).

Rpm 350 ⊖ ⊕   →   Rpm 350 ⊖ ⊕

Ncm 1.5 ⊖ ⊕   Ncm 2.0 ⊖ ⊕
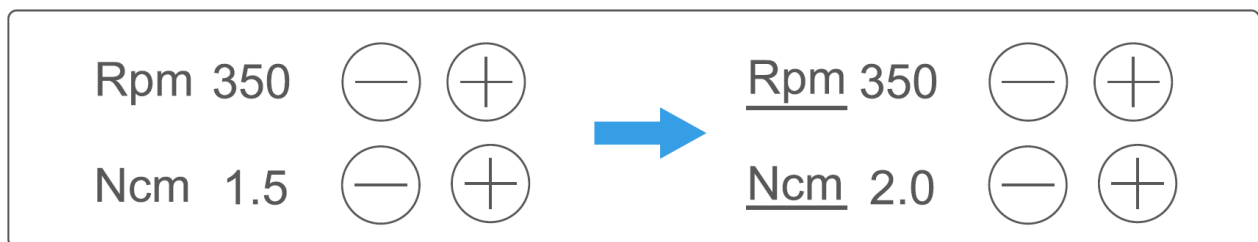
User System

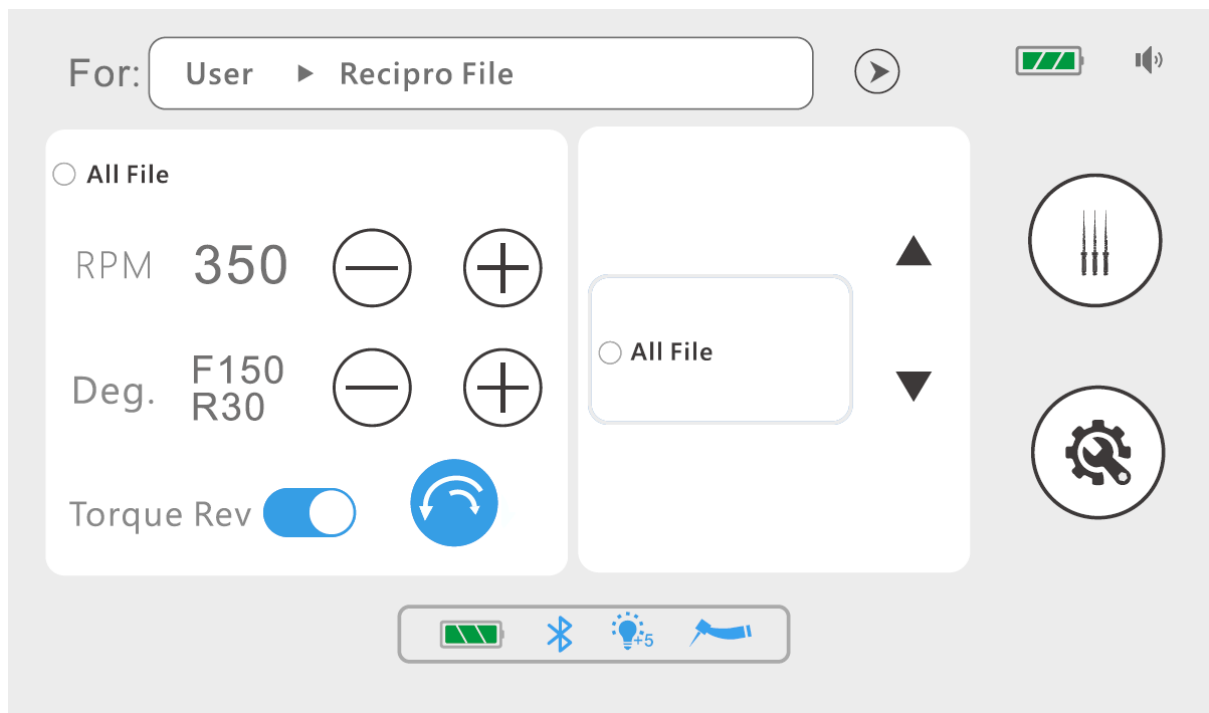The instrument contains two user's systems: Rotary File and Recipro File.

1. Rotary File

   There are 5 continuous rotary files in the system and user can set speed and torque as required.

2. Recipro File

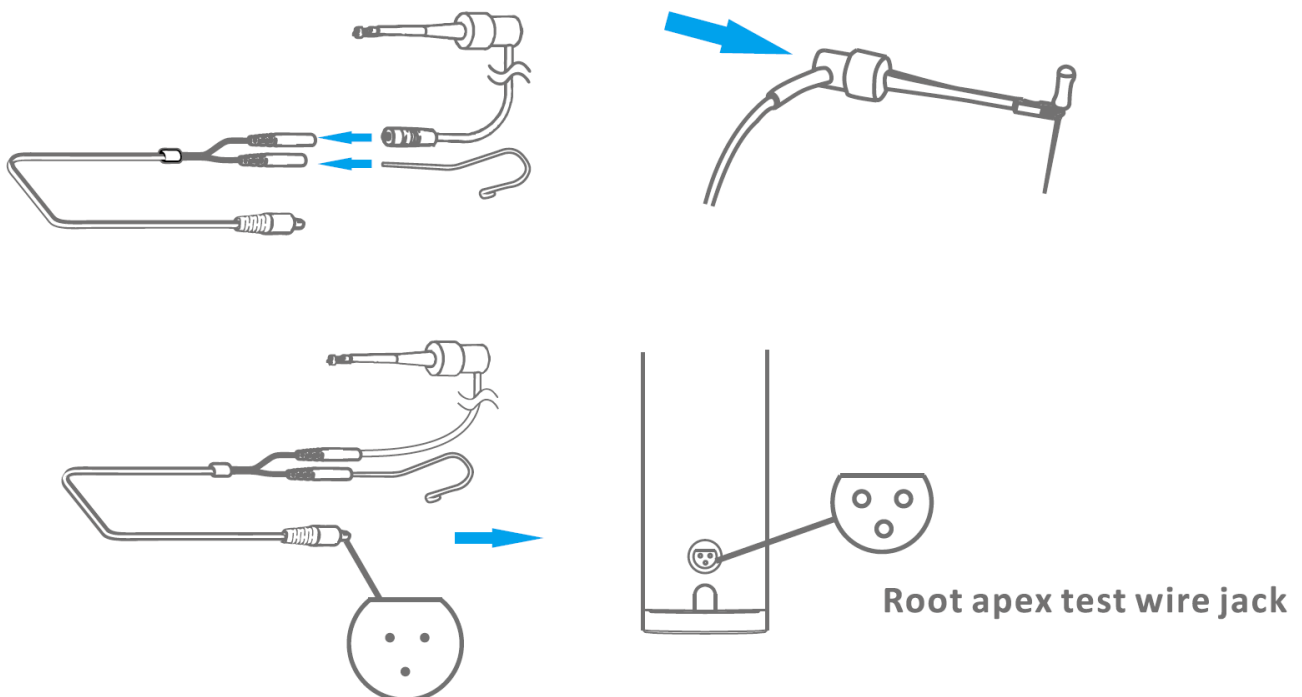   There is a reciprocation rotary file in the system and user can set speed and rotation angle as required.
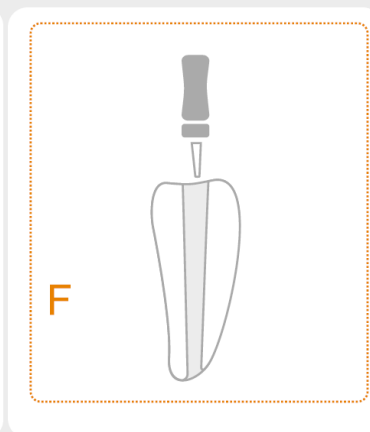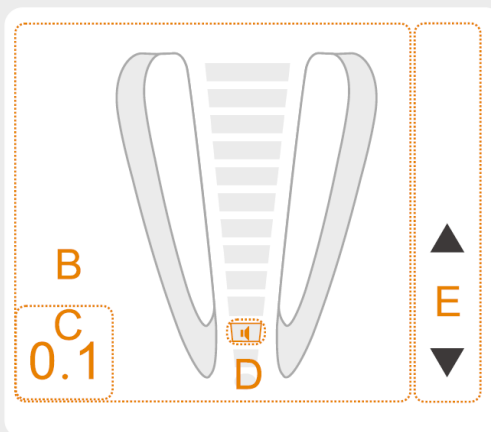
Apex Locator Mode

If the root apex test wire is connected to hand piece, it enters the Apex Locator Mode automatically.

Connection Accessories
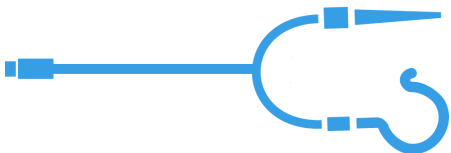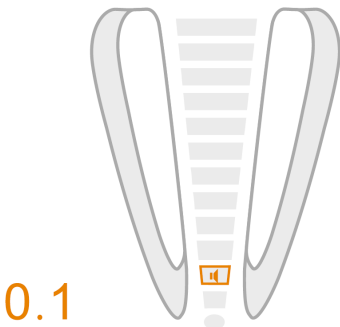Connect the components: lip Hook, file clip, root apex test wire and handpiece.

Root apex test wire jack

Interface Overview

B

C
0.1

D

E

F

A

A		Apex Locator Function
B		Root apex area, shows the root apex area and indicate where file was reached
C, D		Apical reference position (The number represents the relative position of file tip and apical hole, the smaller the value, the closer to the apical hole)
E		Set the DR's CHOICE apex position
F		Complete root canal image Shows file entering the root canal opening

Set the DR's CHOICE Apex Position
Press UP or DOWN on the screen to set the DR's CHOICE apex position, and then clear visual and audio indication is given that file has reached the pre-selected position.
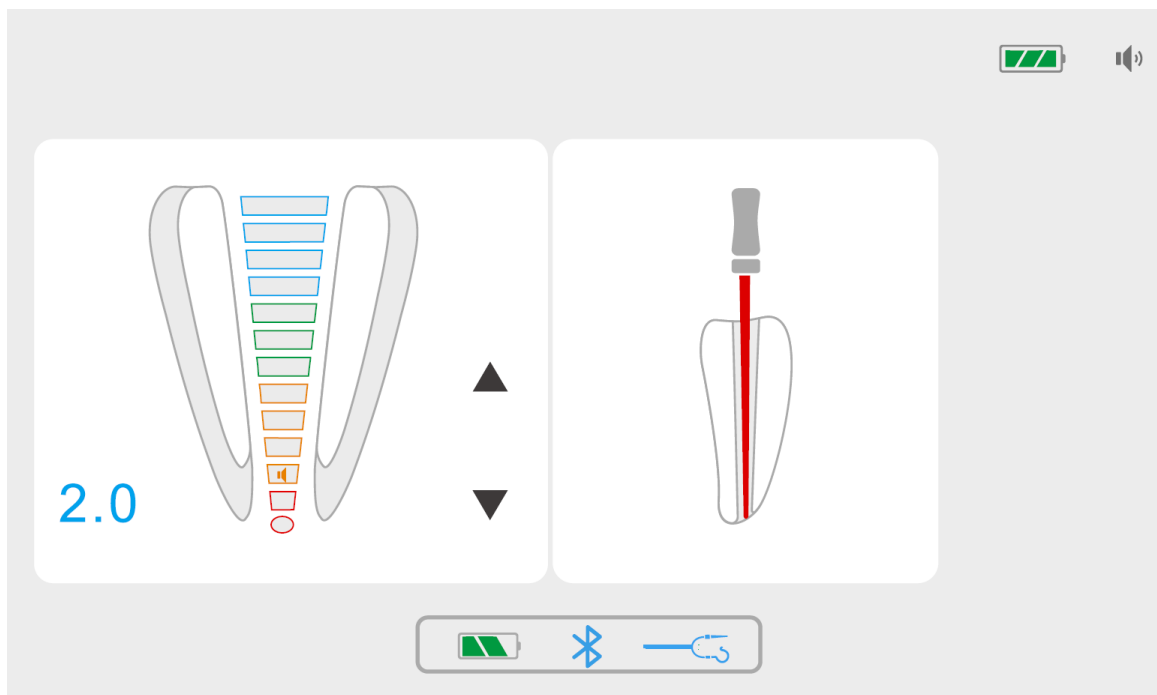
Operation Check
It is recommended to check the performance of the apex locator once a week ,the detailed methods refer to 8.1and 8.2.
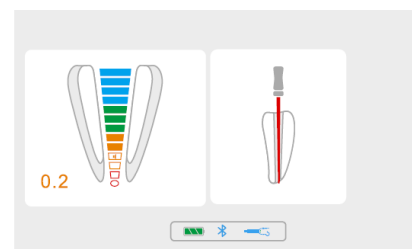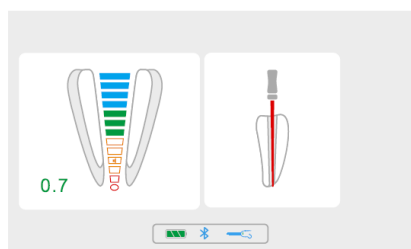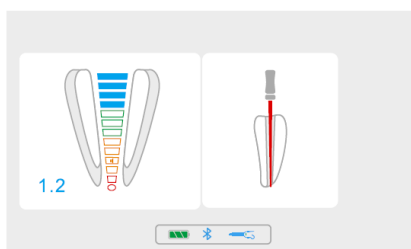
Measurement

- Hook the lip hook in the corner of the patient's mouth and slowly insert the file into the canal.
- The file movement in the canal is shown on the full canal image as below.

Apex Enlargement Area:

- Indicators indicates the exact position and changes accordingly from blue to green and then to yellow as shown below.

    Blue (Close to Apex Area)   Green to yellow (Reach Apex Area)

- File movement is accompanied by audio signals as additional indication of file position. The shorter the sound interval, the closer the distance between file and apex.
- When file reaches apical foramen indicators is marked red and a constant sound is emitted.
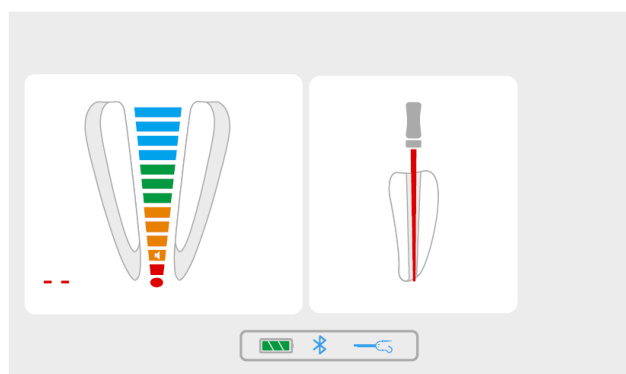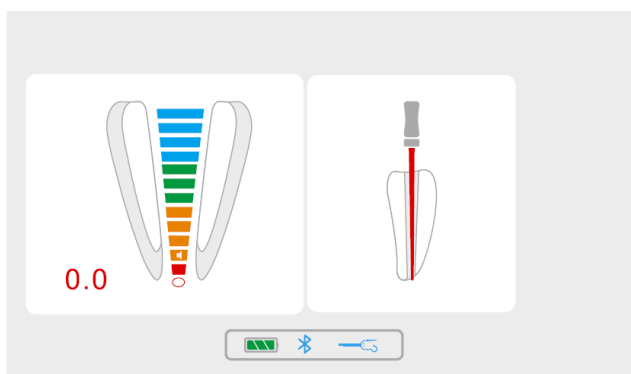
    Red (Located in apex foramen)   Red (Beyond apex foramen)

- During measurement, the color of Apex locator indicator is displayed in synchronization with indicator bar's as shown below:
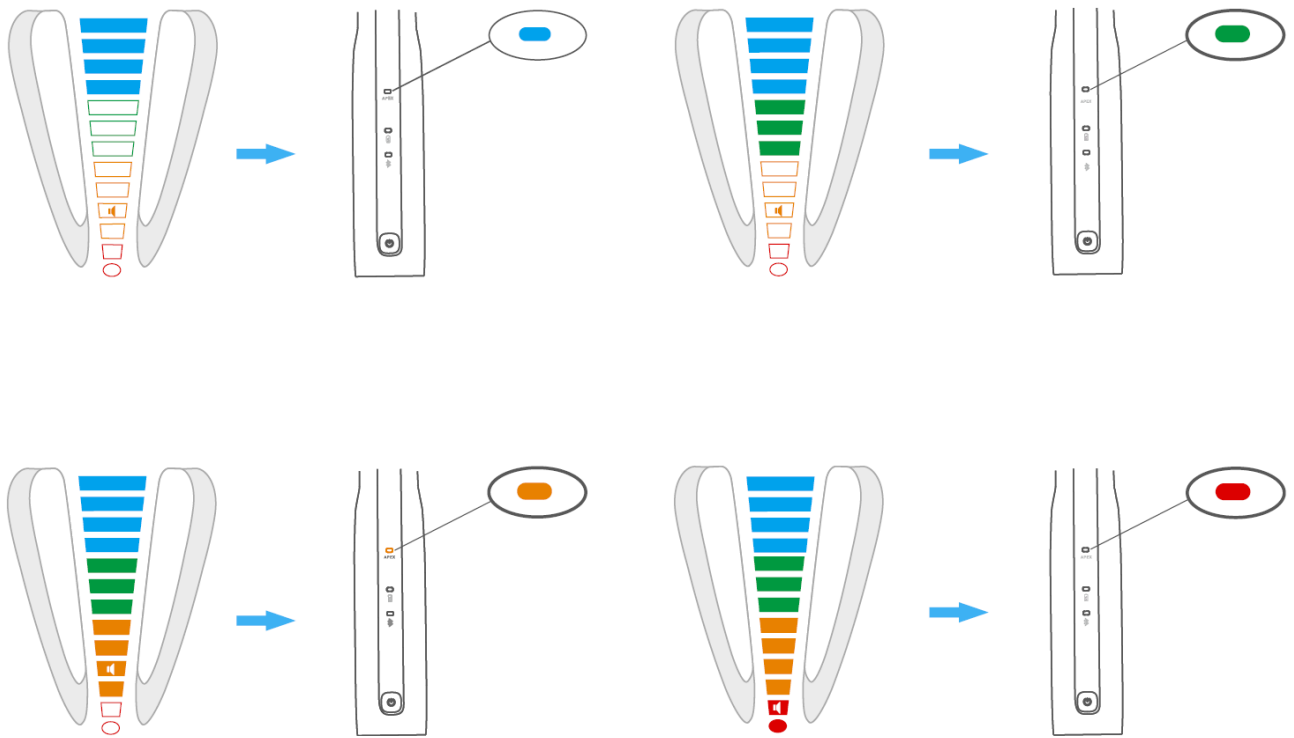
Electric Measurement of Root Canal Length

Multi-Function Mode
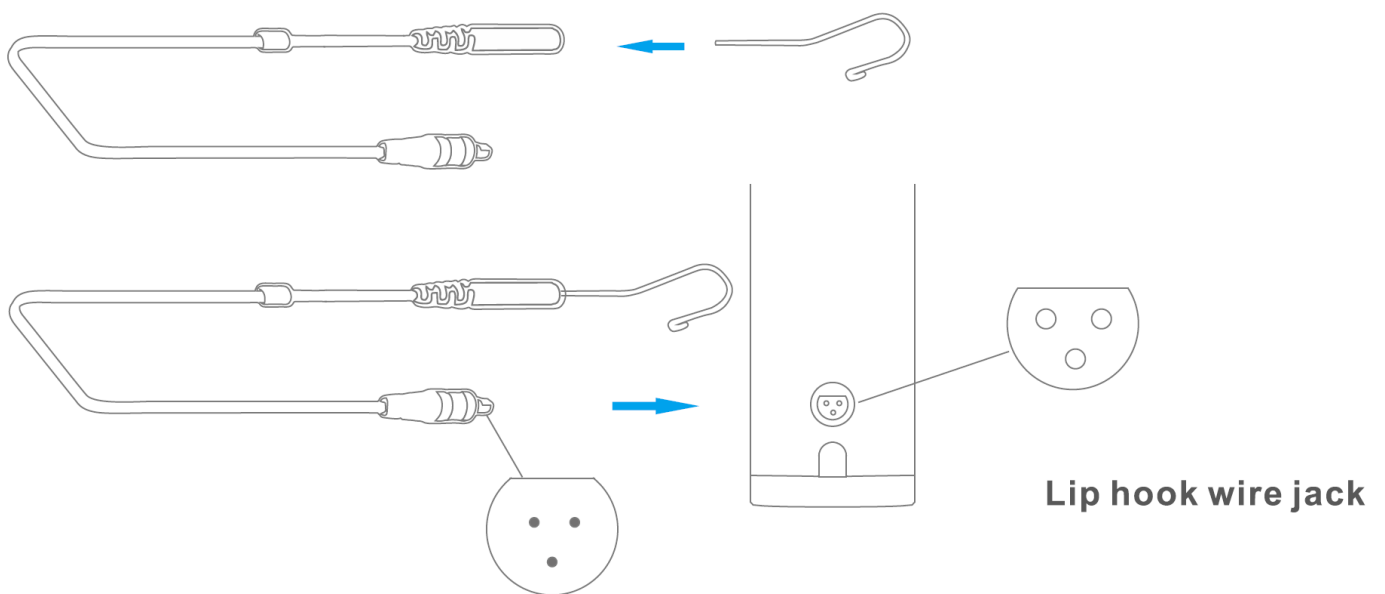If lip hook wire is connected to handpiece, it enters the Multi-Function Mode automatically.
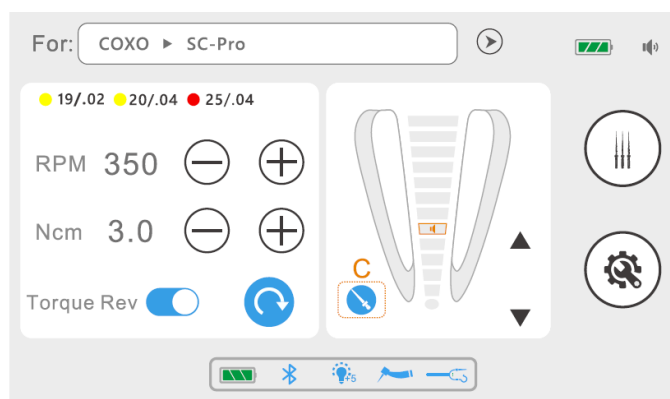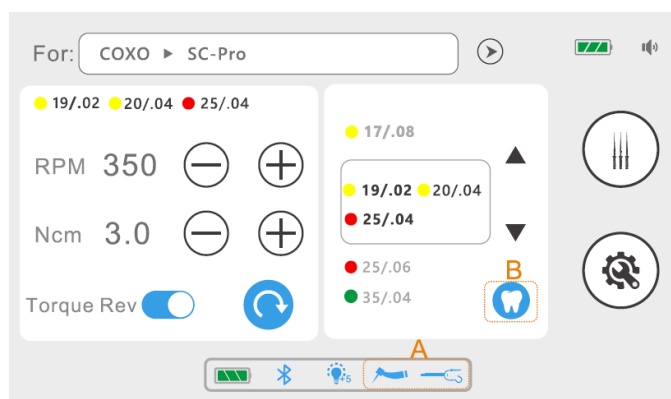
Connection Accessories
Connect the components: handpiece, contra-angle, file, lip hook, lip hook wire.

- Connect contra-angle
- Connect file
- Connect lip hook and lip hook wire

Lip hook wire jack

Interface Overview

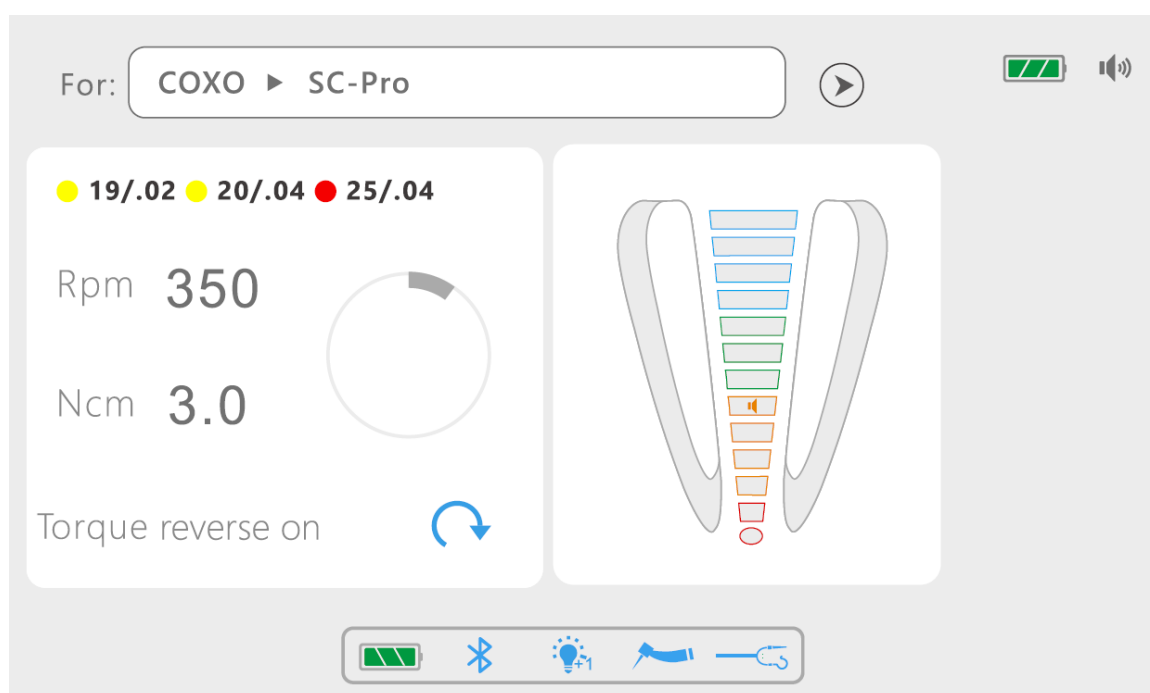|		
A		Endo Motor and Apex Locator Function
B		Press to enter root apex display interface
C		Press to enter file selection interface

Start Working

- In multi-function mode. When the file is contact with root canal, length is measured. The movement of the file is displayed on the right side of the screen, accompanied by different prompt sounds.
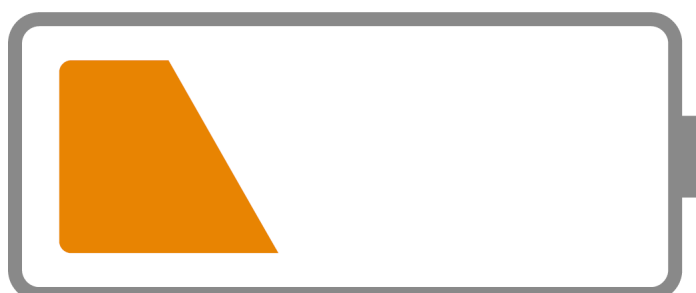
Battery and Charging

Battery Power

Control unit power
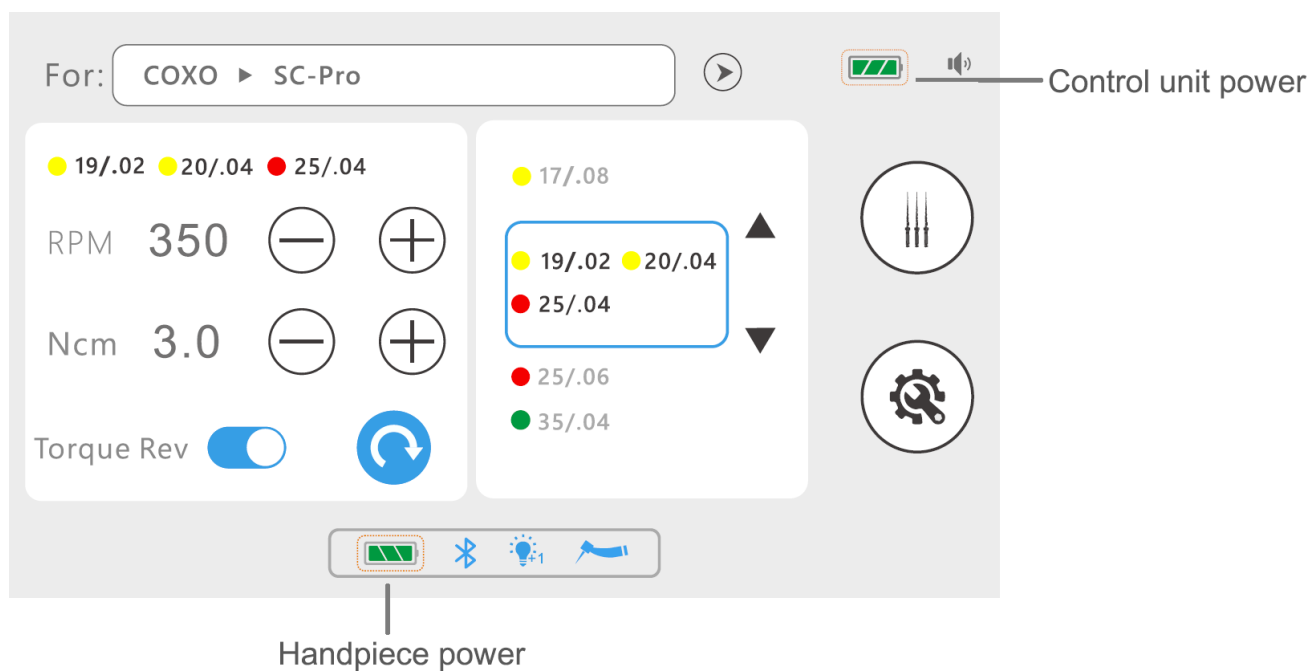
Handpiece power

Battery:

- >70% power

- 20-70% power

- <20% power, low battery level, please charge it in time.
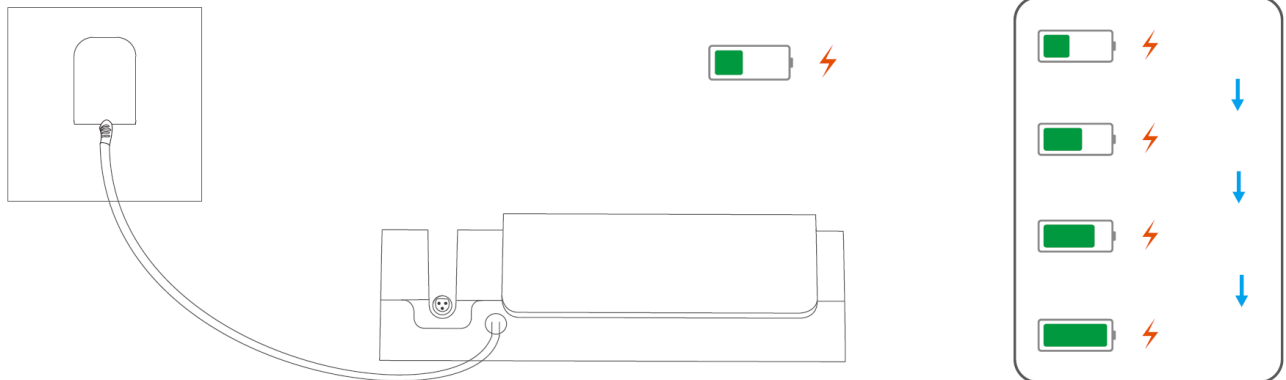

- <5% power, very low battery level.

Charging

1. Control Unit :Connect hand piece and adapter to charge the handpiece, the charging status is shown as follows:

2. Handpiece:

   External charging: Connect control unit and adapter, and place handpiece on handpiece charger to charge;

   Internal charging: Control unit can charges handpiece without external input.

   - Press setup icon to enter setup state and then press Off / On to turn on/ off internal charging.
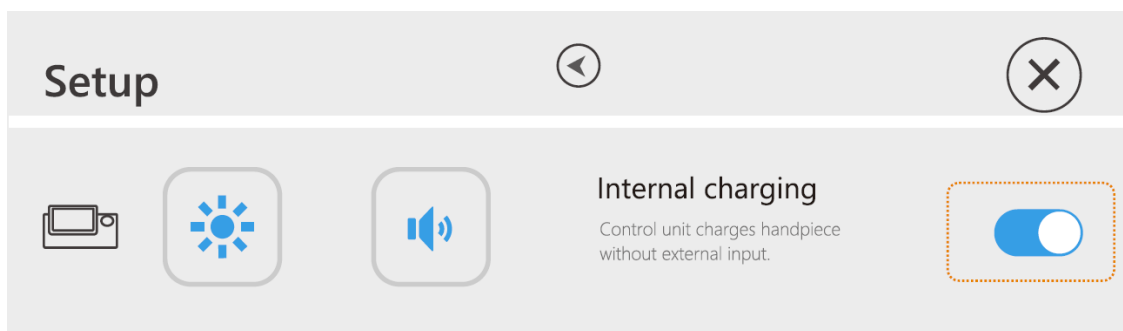
   - The function turns off when control unit 'battery level is less than 20%.

Replacement Battery

1. Open the rubber cover or remove the screw;
2. Remove the battery cover as shown in the illustration;
3. Remove the old battery ;
4. Connect the new battery ;
5. Install the cover and its screw or rubber cover.

a
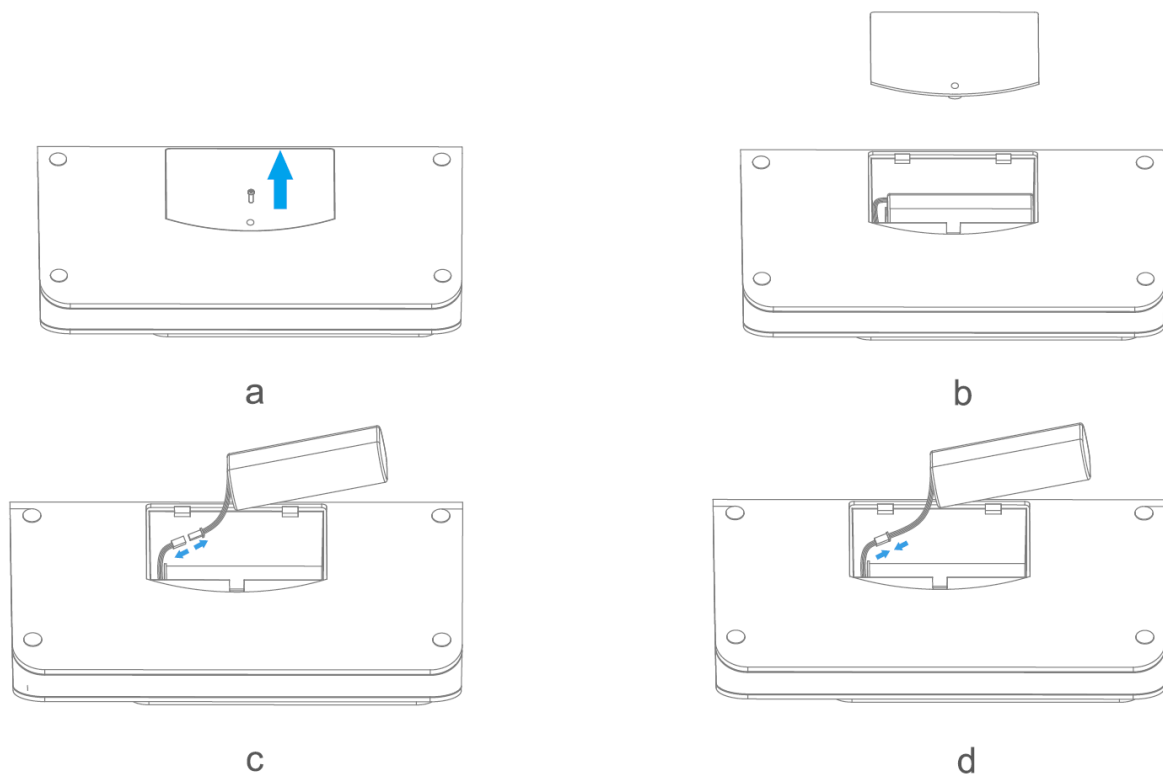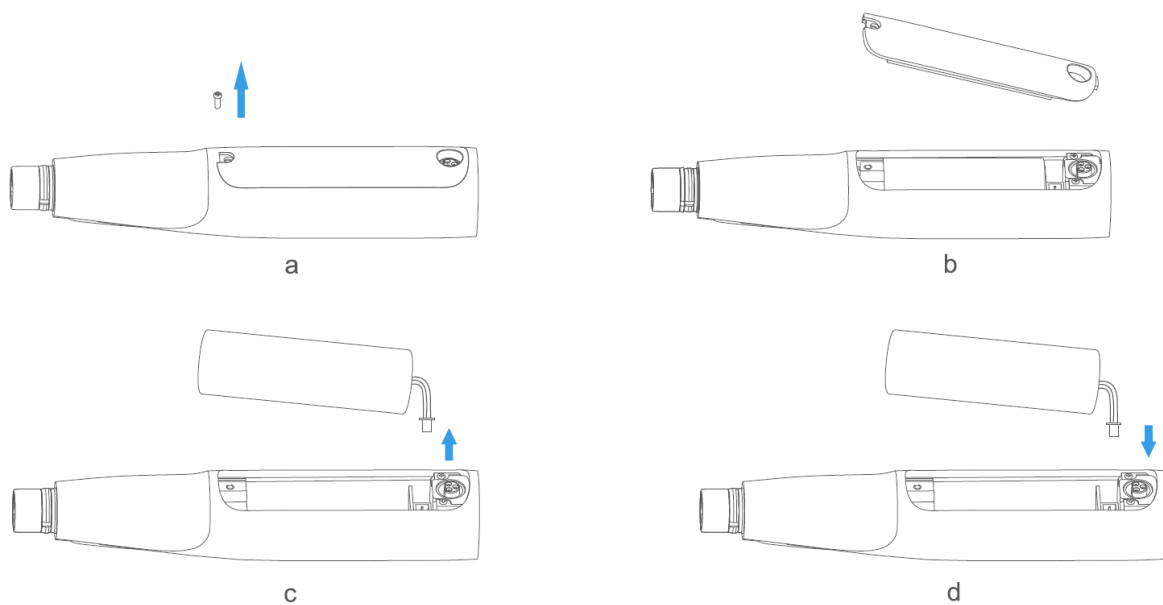

b

c

d

Control Unit

a

b

c

d

Hand piece

EMR (Electric Measurement of Root Canal Length)

Accurate measurement cannot be obtained with the root canal conditions shown below.

A huge apical hole
Root canal that has an exceptionally large apical foramen due to a lesion or incomplete development cannot be accurately measured.
Root canal with blood overflowing from the opening
If the blood overflows and contact with the gums, ii will cause electrical leakage, and accurate measurement results cannot be obtained. After the bleeding has completely stopped, thoroughly clean the inside of the root canal and the opening, and then perform the measurement.
Root canal with a chemical solution overflowing from the opening
An accurate measurement cannot be obtained if chemical solution is overflowing from the canal opening. In this case, clean the canal and its opening. It is important to get rid of the solution overflowing the opening.

Broken crown
If the crown is broken and a section of the gingival tissue intrudes into the cavity surrounding the canal opening, contact between the gingival tissue and the file will result in electrical leakage and an accurate measurement cannot be obtained. In this case, build up the tooth with a suitable material to insulate the gingival tissue.
Fractured tooth
Leakage through a branch canal
Fractured tooth will cause electrical leakage and an accurate measurement cannot be obtained.
A branch canal will also cause electrical leakage.

Re-treatment of a root filled with gutta-percha
The gutta-percha must be completely removed to eliminate its insulating effect. After removing the gutta-percha, pass a small file all the way through the apical foramen and then put a little saline in the canal, but do not let it overflow the canal opening.
Crown or metal prosthesis touching gingival tissue
Accurate measurement cannot be obtained if the file touches a metal prosthesis that is touching gingival tissue. In this case, widen the opening at the top of the crown so that the file will not touch the metal prosthesis before taking a measurement.
Cutting debris on tooth

Pulp inside canal
Thoroughly remove all cutting debris on the tooth.
Thoroughly remove all the pulp inside the canal. Otherwise an accurate measurement cannot be obtained.
Caries touching the gums
In this case, electrical leakage through the caries infected area to the gums will make it impossible to obtain an accurate measurement.

Blocked canal
The meter will not move if the canal is blocked.
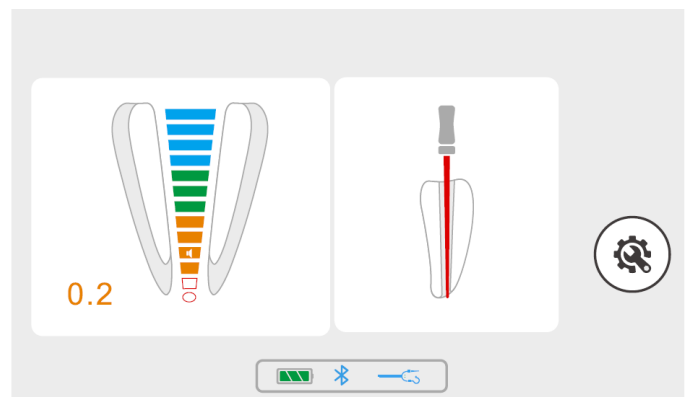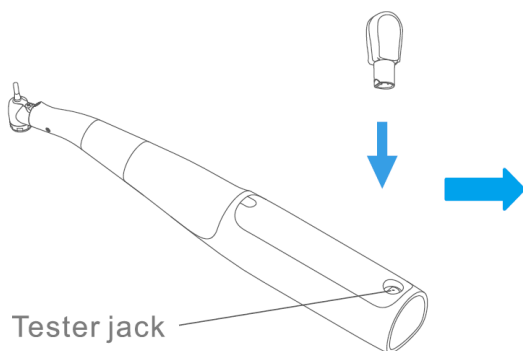Open the canal all the way to the apical constriction to measure it.

Extremely dry canal
If the canal is extremely dry, the meter may not move until it is quite close to the apex. In this case, try moistening the canal with oxydolor saline.
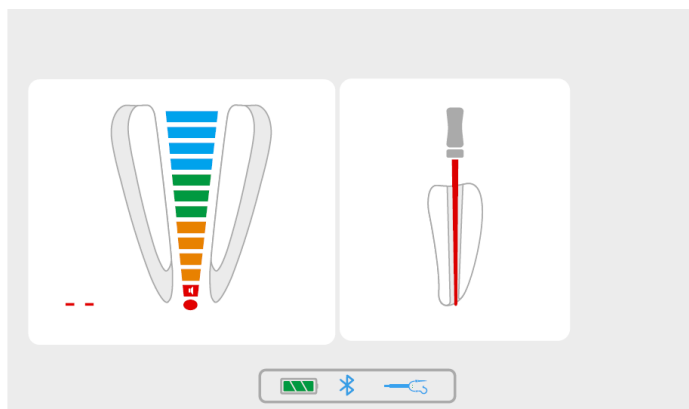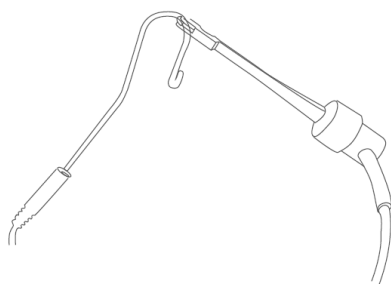
Maintenance

Check with Tester

- Connect tester to handpiece;
- Confirm whether indicators are lit between 0.1-0.5.

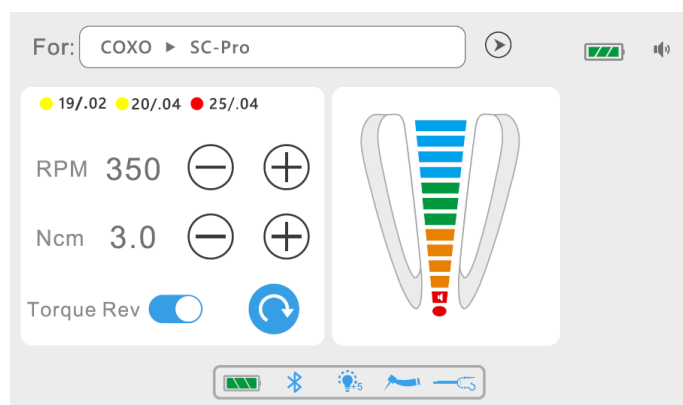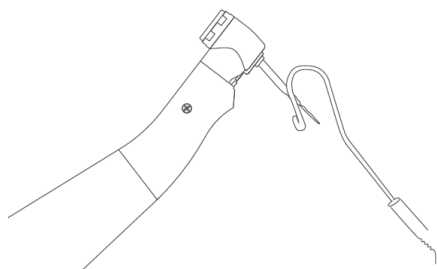Tester jack

0.2

Check Canal Measurement Function

Check Test Root Apex Test Wire

Check the test root apex test wire and confirm whether indicators are lit.

Check Lip Hook wire

Check the lip hook wire and confirm whether indicators are lit.

Documents / Resources

coxo DB-686 Nano 001 Curing Light [pdf] User Manual
001, 2A2C6-001, 2A2C6001, 002, 2A2C6-002, 2A2C6002, DB-686 Nano 001 Curing Light, Nano 001 Curing Light, Curing Light