



For further information and troubleshooting, please consult our full user manual on the enclosed CD.

NOTE: When starting treatment, first take a manual measurement using a manual file.

NOTE: In order to fully prepare the canal using the hand piece and rotary files, keep the D.A.L. "on" and in measuring mode (connected), to ensure that the apex is not perforated.

NOTE: Working with handpiece requires a thin file alternately after the thick one for additional cleaning of the remnants. The D.A.L. will not be accurate if the pulp chamber is full of liquid. It should be completely dry.

ATTENTION: In order to avoid a "false positive" reading if contact with the soft tissues occurs, the handpiece can be covered with a rubber sleeve. It is not, or may not serve as an alternative for the rubber dam, which is mandatory in endo procedures. The rubber sleeve is a single use item and should be disposed after use to prevent cross infection. It cannot be sterilized. The rubber sleeve is sold separately.

Verify conductivity between the handpiece and the D.A.L. by connecting the 0.5 validation cable to the D.A.L. Make contact between the endo file and the lip hook cable. The 0.5 LED on the D.A.L. should light, verifying conductivity of the electric current between the D.A.L. and the endo file, allowing accurate measurement of the canal length.



Digital Apex Locator

Dual Function Apex Locator

Quick Guide

Manual



Riding



Satellite



The D.A.L. can be used in three modes:

Manual Mode: Independently with a manual endo file

Riding Mode: Assembled and "riding" on a rotary handpiece

Satellite Mode: Disassembled but attached to a rotary handpiece with a wire.

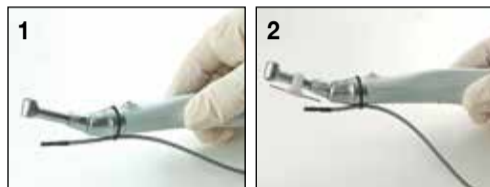


Using the D.A.L. in Manual Mode

Connect the two lead wires **6** to the device **1**. Attach the lip hook **5** and file holder each to one lead wire.



Assembling the Universal Connector



Attach the special adaptor cable **4** using an o-ring **6** to the handpiece.

Clip the universal connector **5** firmly to the handpiece and connect it to the cable.

Pic. 1, 2, 3

Ensure that the universal spring connector makes full contact with the file, in order to conduct the electric circuit from the file to the D.A.L. **Pic. 5**

Using the D.A.L. in "Riding Mode"



Assemble the "saddle" **3** onto the micro-motor, securing it with the strap **2** that best fits the handpiece diameter. Secure the strap around the handle locking the two pins on either side of the strap into place. Complete assembly by sliding the D.A.L. **1** into its track on the "saddle". **Pic. 7, 8, 9, 10.** Connect the adaptor cable **4** to the device using the extension cable **9.** **Pic. 6** Attach the lip hook **7** to the lead wire **8** and connect the lead wire **8** to the socket on the right side of the device (the side with the LEDs and the printed lip hook symbol). **Pic. 11, 12**

Using the D.A.L. in "Satellite Mode"



Connect the free end of the adaptor cable **4** to the device **1** by using the extension cable **9.** **Pic. 6.** Attach the lip hook **7** to the lead wire **8** and connect the lead wire **8** to the socket on the right side of the device (the side with the LEDs and the printed lip hook symbol). **Pic. 11, 12**

Setting up the D.A.L.

Position the lip hook over the lip, on the opposite side to the side being treated. **Pic. 13**

To activate the D.A.L., make contact between the lip hook and the file. **Pic. 14**

Once activated, the LEDs will flash in sequence as a "self check". **Pic. 15**

When the file reaches 2.00 mm from the apical constriction, the LEDs will light and an alarm will sound. The frequency of the alarm increases as the file nears the apical constriction. This is



Note: a traditional File Holder can be used as well in a "Satellite Mode" when other options had been found inapplicable. **Pic. 17**



a particularly sensitive area when working with a handpiece, and use of a file beyond this point requires great caution. When the file reaches the apical constriction, the red "APEX" LED lights and the warning alarm reaches a higher frequency. If the file passes the apex the warning alarm will reach the highest pitch and frequency and the "-0.00" (past apex) LED will flash.

The device can be protected by inserting it into a plastic sleeve **Pic. 16.**

Maintenance

Note: The D.A.L.'s battery is assembled. Remove the protective plastic tab that insulates the battery from contact by pulling out firmly. **Pic. 20**



Replace the battery by removing the battery housing with the display panel facing down. Insert a new CR2450 battery into the housing with the + terminal in line with the + sign on the battery housing. **Pic. 18, 19**