

If your **Raypex® 5** does not seem to work properly, it does not necessarily mean that the device does not work correctly. Please first review the below checklist in order to exclude any user error or anatomic/ other peculiarities before contacting your dealer.

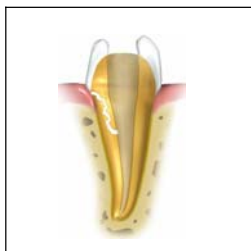
If the problem persists please contact either your local dealer or VDW GmbH Company, Germany directly.

Problem	Possible Cause	Solution
The device cannot be switched on with the ON/OFF button	Is the battery empty?	Check the battery-low indicator! If necessary charge the battery with the charger.
	Is the battery placed correctly?	Open the battery compartment, and by disconnecting and reconnecting check the battery.
	Does the button function correctly?	Check the button by pressing it several times.
The device shuts off abruptly while measuring	Is the battery empty?	Check the battery-low indicator! If necessary charge or change the battery.
No acoustic signal while measuring	Is the volume set at "mute"?	Adjust the sound level.
Display not steady while measuring	Is there contact between the lip clip and the oral mucosa?	Ensure good contact between the mucosa and lip clip. (Place lip clip in the buccal pouch on the opposite side of the tooth to be treated!)
	Is the file clip soiled?	Clean the file clip (with Ethanol)
	Is the file clip connected properly to the measuring file?	Place the file clip on the metal part of the file below the plastic handle.

<p>The electric circuit is not complete, i.e. display does not accurately represent the file movement in the root canal: Apex Zoom is not displayed</p>	<p>Is the lip clip connected?</p> <p>Are the cable and plugs connected correctly?</p> <p>Is the measurement cable damaged, e.g. torn?</p> <p>Is the measuring file correctly attached to the file clip, i.e. clamped onto the plastic handle?</p>	<p>Check the cable and plug connections: Are they plugged-in correctly?</p> <p>Check visible damage to cable or plug?</p> <p>Check if the file clip is clamped onto the metal part of the file below the plastic handle.</p> <p>Test to control the function: Moisten the palm of your hand and bring the file and the lip clip together on it. to test the conductivity (the display will react and show the apex).</p>
<p>The electric circuit is not complete</p>	<p>Is the root canal obliterated?</p> <p>In the case of re-treatment: are old filling material residues blocking the root canal?</p> <p>Is the root canal blocked by remnants of a medicated substance (e.g. calcium hydroxide)?</p> <p>Is the root canal extremely dry?</p> <p>Is the measuring file too small for a large root canal?</p>	<p>Check the comparative x-ray image for hints. Catheterisation with ISO 06/ 08 file until working length.</p> <p>Take a check x-ray image and try to remove old root filling material remnants prior to measuring.</p> <p>Completely remove remnants prior to measuring.</p> <p>Rinse root canal with NaCl. Dry the access cavity with a cotton pellet/ air-blower.</p> <p>Use a larger file.</p>

<p>Display reaction is over-sensitive: Apex Zoom is activated before the apex is reached.</p>	<p>Short circuit due to excess liquid (irrigation solution, saliva, blood) in the pulp chamber?</p> <p>Is there a direct contact of the measuring file with the gingiva or gingival proliferations, e.g. a fractured metal crown?</p> <p>Is there a direct contact of the measuring file with metal restorations (crown, parapulpal post, amalgam filling)?</p> <p>(Direct electric current from metal to gingiva or to the parodontium creates a leakage current causing premature display of the foramen apicale).</p>	<p>Dry the access cavity with a cotton pellet / air-blower.</p> <p>In case of excess bleeding wait until it can be stopped.</p> <p>Ensure adequate preparation filling, and/or electro-cauterise. Use rubber dam to isolate the working area.</p> <p>Carefully enlarge access cavity and put some flow composite on it for isolation.</p> <p>Insulate the measuring file by placing 2-3 silicone stoppers on it, or insert the measuring file in a small polyvinyl tube before use.</p>
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In case of root fracture or perforation it is impossible to take a precise length determination.

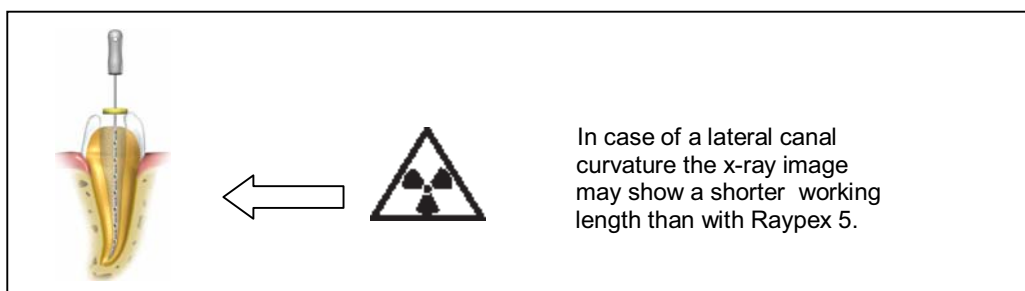


The electric current is lead along the fracture gap or the perforation.

► **Electric Length Determination and X-Ray Technique**

As radiographs only reproduce in a two-dimensional way a three-dimensional root canal system, there are a few cases in which the x-ray image and the result obtained with electric length determination do not match. This does not mean that your Raypex® 5 is not working properly or that the x-ray image is inaccurate.

These discrepancies in measurement occur due to anatomical variation. The actual apical foramen may not be located at the radiographic apex of the root. In these cases, it is important to use the Raypex® 5 recording as the more accurate measurement.



In case of a lateral canal curvature the x-ray image may show a shorter working length than with Raypex 5.