

ENDY 6000

Generations...

- 1942 Suzuki discovers consistent values of the electrical resistance between an instrument inserted into a root canal and the oral mucosa
1. Generation: direct current (DC)
 - 1979 2. Generation: high frequencies (AC) and coated files
 - 80's 3. Generation: two frequencies for measurement of the impedance (1/resistance)
 4. Generation: measures impedance and capacity at two frequencies – uses microcontroller
 5. Generation: matching of measurement with extensive database – no calibration

necessary

Endy 6000

First View

5th Generation apex-localisation



5th generation
measurement principle
for

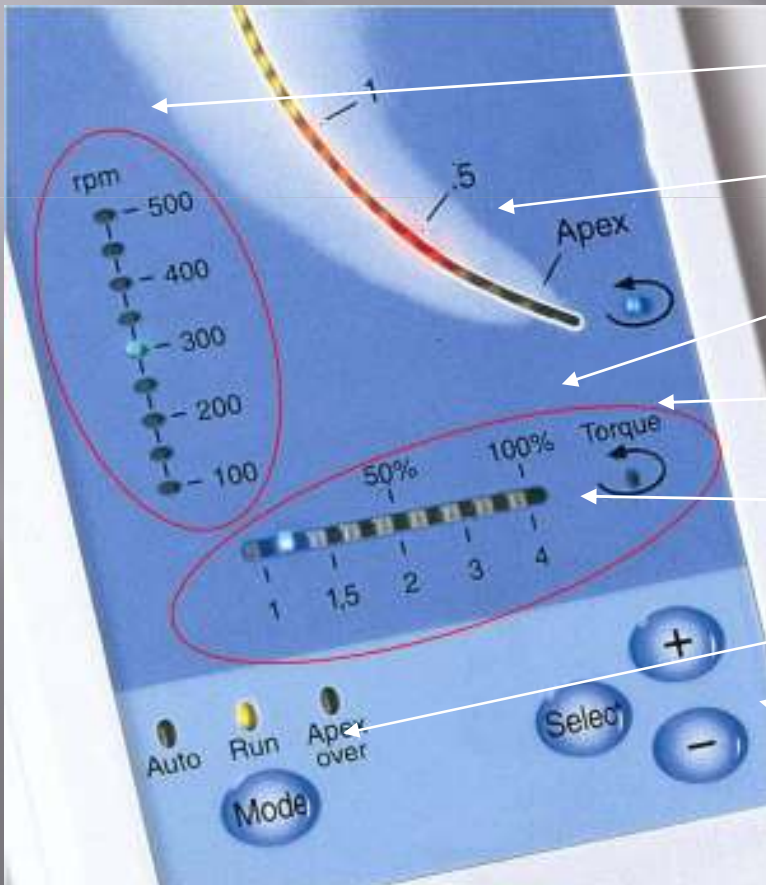
-precise determination of the
apex position

- preparation of the root-canal
with micro-motor driven nickel-
titanium (NiTi) files

Endy 6000 - Display

Display

small, but big performance...



rounds per minute (rpm) 100-500 rpm

position of the NiTi file in [mm]

percentage of torque [%]

direction of rotation (left - right)

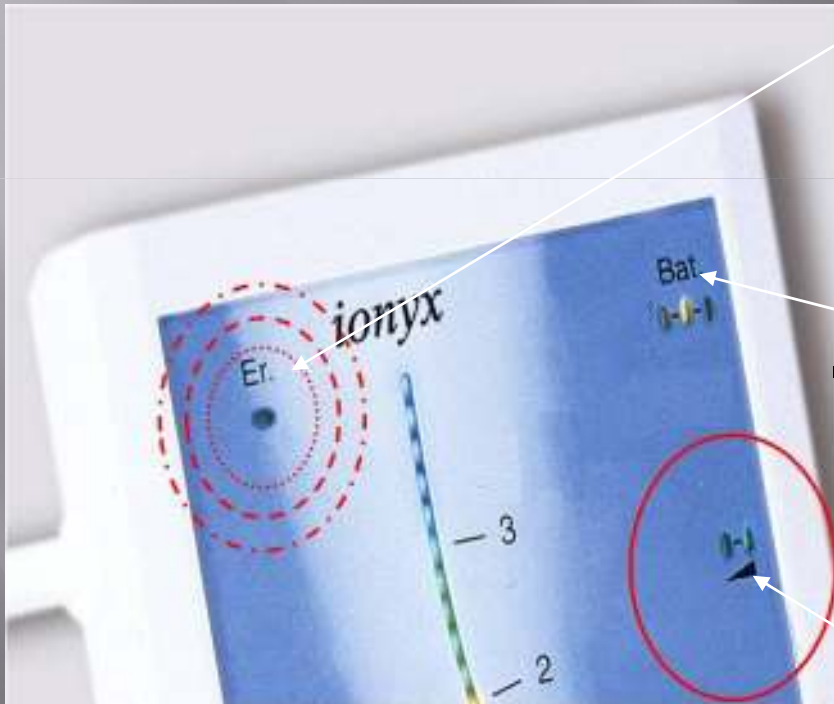
torque (Newton Meter) - [Nm]

working modes & on / off

increase / decrease values

Endy 6000 - Display

simple, but smart...



Error detection

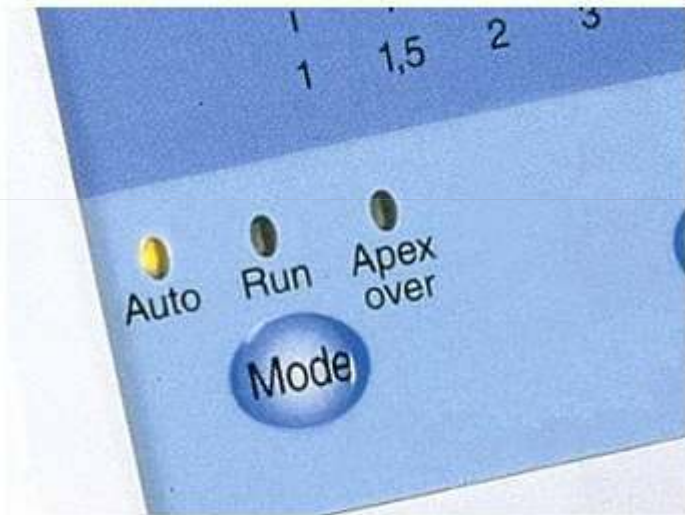
e.g. to much liquid in restoration,
metal close by, short circuit

Battery Status

3 hours continous work with
micro-motor/ charges over night

Sound volume tuneable

standard, but not standard...



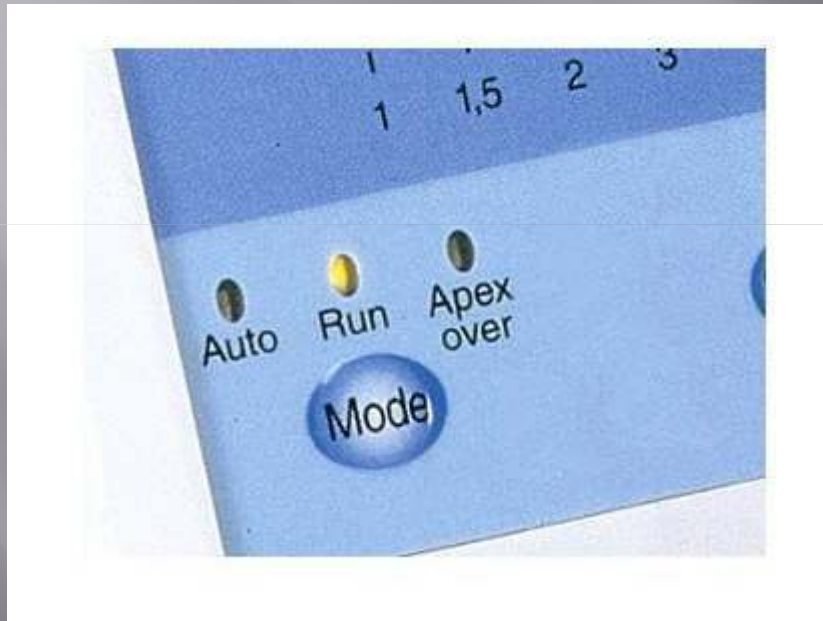
standard application – first time of root canal treatment

Auto Mode

- 1. automatic start of micro-motor when entering the root canal**
- 2. working with the adjusted speed and torque till user programmed depth or torque is reached**
- 3. automatic stop of micro-motor for 1.5 seconds**
- 4. automatic change of rotation-direction and automatic switch into lowest speed => 100 rpm**

Endy 6000 – Working Modes

individual, but controlled...



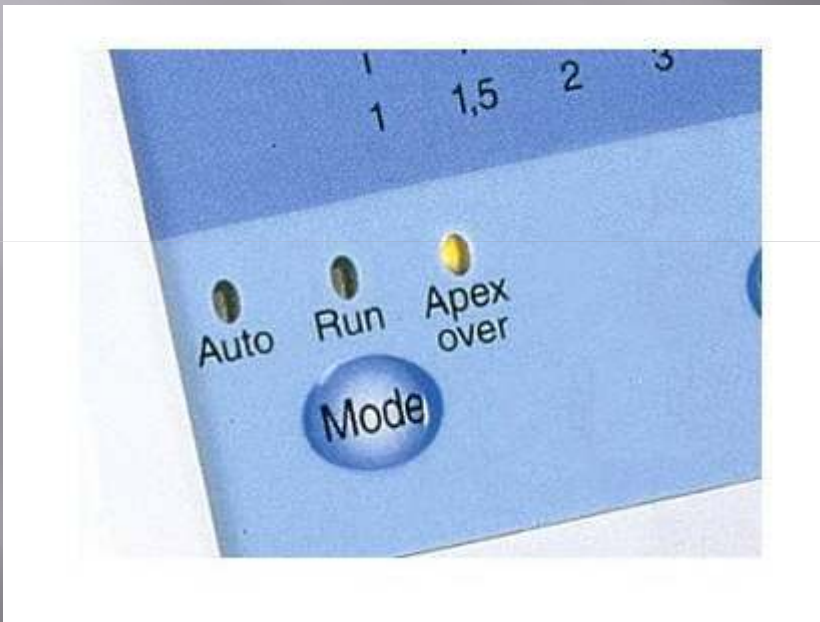
e.g. second time of root canal treatment – gutta percha filling (electric insulation!)

Run Mode

- 1. start of micro-motor by choosing « Run-Mode »**
- 2. working with the adjusted speed and torque till user programmed depth or torque is reached**
- 3. automatic stop of micro-motor for 1.5 seconds**
- 4. automatic change of rotation-direction and automatic switch into lowest speed => 100 rpm**

Endy 6000 – Working Modes

uncontrolled, but controled...



*deliberate penetration
of the apex*

Apex over Mode

1. automatic start of micro-motor when entering the root canal
2. working with the adjusted speed and torque
3. display of distance to apex
4. **no stop of micro-motor**
5. **no change of rotation-direction**
6. display of « apex-over » penetration depth in [mm]

Endy 6000

User Advantages

all in one...

- safety and less trouble for the patient and dentist
- little risk of penetration of the apex
- reduced risk of file breakage
- compatible to all NiTi files within the market
- 3 Modes for adaptation on clinical situation
- 3 hours unrestricted use of micro-motor due to battery
- less application of X-ray necessary
- autoclavable handpiece and electrode
- distinct audio-visual signals
- drawer flat design
- additional probe for manual apex location

