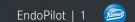


# **EndoPilot**

All-in-one endo motor and apex locator with optional upgrade.







# A Complete Solution for Endodontic Procedures

The EndoPilot combines a customizable endo motor and a real-time apex locator which allows the clinician to see the depth of the file in the canal during a procedure.





### **EndoPilot**

### Innovation in endodontics

This torque and speed controlled endodontic motor provides streamlined preparation of the root canal while the integrated apex locator determines real-time file position during treatment.

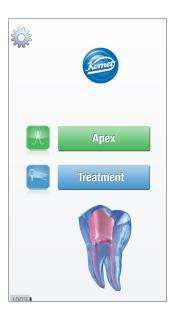
The EndoPilot contains a preprogrammed file library containing the parameters (i.e. speed, torque etc.) of the F360, F6 SkyTaper, Endo ReStart files and other commonly used file systems. The operator also has the option to develop individually adapted sequences and save them based on their own preferences.

With a large, easy-to-read 7-inch touchscreen, the operator can easily navigate the user-friendly menu options.

Due to its small footprint, the wireless rheostat and cordless operation, the EndoPilot is ideal for small workspaces.

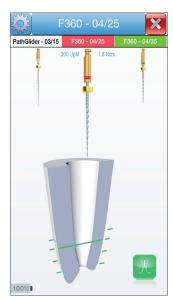
### Features

- Endo motor and apex locator all-in-one
- File position shown in real-time via a patented pulse measurement procedure
- Customizable preparation length at the apex locator
- Reduced torque in vicinity of the apex to prevent chip compaction

















### An endodotic motor with no compromises

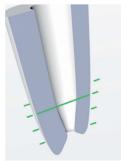
A powerful, torque and speed controlled endodontic motor that features state-of-the-art technology for patient well-being.

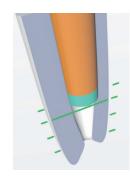
#### **Advantages:**

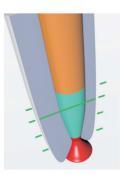
- When preset torque is exceeded, an alternating left and right movement prevents file jamming
- When apex is reached, the motor stops briefly, and slowly resumes clockwise rotation to ensure continuous evacuation of chips from root canal
- Features colored LED lights to indicate the direction of rotation











### An innovative apex locator

The apex locator determines the real-time file location during an endodontic procedure. This is done by transmitting a signal from a contra-angle handpiece and displaying the location of the file relative to the apex.

#### Advantages:

- Fully insulated handpiece eliminates electrical apex location errors
- Touch display allows operator to easily set the depth of preparation relative to the apex
- Can be used to determine the working length with manual files in combination with a file clamp

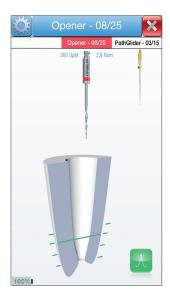


#### 6 | EndoPilot









### Integrated file library

The pre-loaded file system settings are easily accessible and customizable.

#### Features:

- Contains a pre-loaded file library with the parameters (i.e. speed, torque etc.) of Komet's F360, Procodile and F6 SkyTaper files, as well as nearly all other commonly used file systems
- Individual adapted sequences through the "MyFile" function
- File library is easily updated by micro SD firmware uploads
- "Favorites" option which allows quick access to your five favorite file systems



#### **EndoPilot advantages at a glance:**

- Endo motor and apex locator all-in-one
- Motor function that stops once the preparation length has been reached
- Battery lifetime of approximately 15 hours
- Customizable file sequences
- File library with 50+ preset file systems
- Wireless rheostat
- Fully insulated motor and contra-angle
- 7-inch touchscreen display



# The **ReFlex**® motion An intelligent movement

### Exclusively available with the Procodile file on the EndoPilot

The ReFlex motion is a patented, counter clockwise movement and is exclusively available with the Procodile file system on the EndoPilot.

The ReFlex motion starts with an left-cutting rotary motion and then transitions to a reciprocating motion when the EndoPilot senses resistance, decreasing torsional stress on the file.

The ReFlex motion can be operated in two different modes - the ReFlex smart and ReFlex dynamic.

The ReFlex smart mode continuously measures the torque resistance on the file and adapts to minimize the risk of file seperation. The ReFlex dynamic mode operates at a higher rotation until torque resistance is detected and then switches to a reciprocating motion.

#### Advantages of the ReFlex motion:

- Allows the EndoPilot to identify the part of the file that has the most load (i.e. coronal, center or apical third) and adjusts to the specific situation
- Provides optimal removal of debris in the canal by only moving counterclockwise when the file is not subject to resistance
- Minimizes the risk of separation by continously measuring the torsional stress
- Provides extra security and during the preparation of the root canal

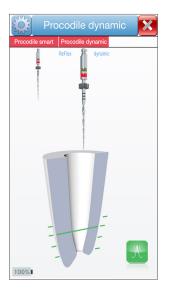
# **Proc**odile

### Intelligent and flexible

With its completely revised file design, Procodile is a new species in the kingdom of root canal preparation.

The innovative, variably-tapered file core makes Procodile more efficient and flexible, making it ideal when shaping a root canal and completing a high-quality preparation.

# Motion one ReFlex **dynamic**

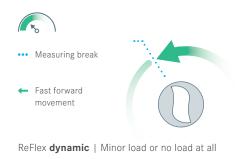


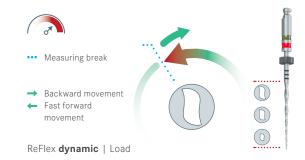
The ReFlex dynamic mode enables a skillful and intact preparation of the root canal.

This mode can adjust from a left cutting rotary to a reciprocating motion based on the resistance detected during the endodontic procedure.

#### Advantage:

• Optimal debris removal









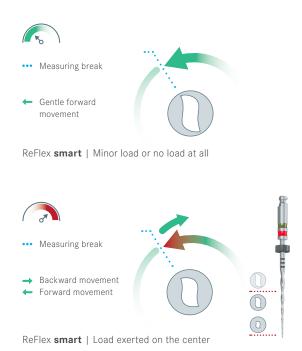
# Motion two ReFlex **smart**

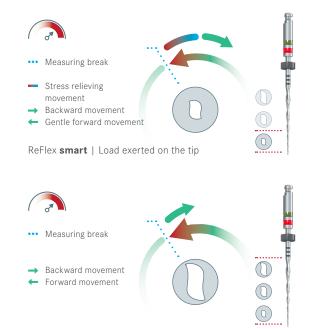
### Adaptive and innovative

The ReFlex smart mode continuously monitors the stress level of each section of the file and adapts the reciprocating motion to minimize the stress.

#### **Advantages:**

- Designed to minimize the risk of file separation
- Intelligent movement that adapts the reciprocating motion to the file stress level
- Ideal for complex canal anatomies due to reduced stress on the file





ReFlex smart | Load exerted on most of the working part

## Accessories

#### Fully insulated contra-angle.

The fully insulated contra-angle was specifically engineered for endodontic use and sends a discreet signal to the apex locator for the highest degree of accuracy.



An easy-to-use cable that allows both real-time apex location through the handpiece and also allows the use of a manual file clip.



#### Wireless rheostat

The EndoPilot comes with an innovative, Bluetooth rheostat that is unlike anything else on the market.







### DownPack and BackFill.

For a modern, efficient obturation of the root canal.

The warm vertical condensation technique is considered to be the most advanced and effective endodontic obturation method. Due to the modular design of the EndoPilot, the DownPack and BackFill modules (sold as a kit or separately) can easily be integrated into the core unit without the need for stand-alone devices.

#### Advantages at a glance:

- Endo motor, apex locator and warm vertical obturation system all-in-one
- The DownPack handpiece is designed to allow an unobstructed view of the treatment site
- The tip of the DownPack handpiece heats up in seconds

- Five standard heating tip sizes to choose from (EF, F, FM, M, ML)
- The DownPack handpiece is ideal for the safe and clean separation of gutta-percha
- The BackFill system provides precise control and flow rate of the filling material



### DownPack and BackFill.

#### DownPack

- DownPack handpiece allows for a modern, efficient obturation of the root canal
- Handpiece design provides an unobstructed view of the treatment site
- The heating tip, available in five sizes, can easily reach the cavity and separates the gutta percha at the canal entrance or closer to the apex
- To prevent filling from loosening, the DownPack handpiece can heat up and cool down in seconds
- DownPack handpiece can also be used for cold filling techniques which guarantees a clean separation of the gutta-percha

#### **BackFill**

- BackFill system safely and efficiently fills the center and coronal thirds of the root canal
- The grip and lever ensure precise control of the filling material and flow rate
- Touchscreen displays different temperatures and ensures short heating times
- The application needles come in three sizes for precise and consistent obturation of any size canal



# Step by Step.

### 1 Preparation

After successfully completing the root canal treatment, coat the master point with KometBioSeal and insert into the canal.

#### 2 Gutta-Percha Removal

Remove excessive gutta-percha with the DownPack heating tip down to the pulp chamber floor.

#### 3 DownPack

Terminate the gutta-percha up to approx. 3 mm short of the apex and condense with a manual handpiece.

#### 4 BackFill

Fill the center and coronal third of the root canal with the BackFill system in sections of approx. 3 mm at a time.

Condense with a manual handpiece after each section.









Schematic representation

# Accessories

# DownPack and BackFill.





EP2302.000.000

#### DownPack/BackFill Holder

Attached at the left-hand side of the EndoPilot for storage of the DownPack handpiece and the BackFill system.

Heating tips for the DownPack handpiece in 5 sizes:

**EP0152.000.504** - ○ grey Heating tip fine, F 050/.04,

**EP0153.000.505 - O yellow** Heating tip fine/medium, FM 050/.05

EP0154.000.507 - • red Heating tip medium, M 050/.07

EP0155.000.509 - • blue Heating tip medium/large, ML 050/.09

EP0156.000.404 - ogreen Heating tip extra-fine, XF 40/.04



EP1044.000.020 - Ø 20 ga, 5 needles

**EP1045.000.023** - Ø 23 ga, 5 needles

EP1046.000.025 - Ø 25 ga, 5 needles



EP0142.000.000

(100 pellets for BackFill system)



EP0148.000.000

Cleaning set (2 brushes) for BackFill system



EPBF00.000 BackFill system kit



#### EP1042.000.000

#### Coupling nut for BackFill gun

The application needle is screwed onto the BackFill system by means of a coupling nut



#### EP1043.000.000

### Protective sleeve for BackFill system,

#### 4 sleeves

For protection from thermal damage



#### EP0147.000.000

#### Multi Tool for BackFill gun

For shaping of the BackFill needles and for screwing them on and off

# Technical data

Туре	EndoPilot
Power supply <sup>1</sup>	Input: 100-240 V/AC (50-60Hz) Output: 12 V/1,25 A/DC or 12 V/1,5 A/DC The power supply unit complies with IEC 60601 for medical devices. (Only use the original power supply unit provided with the EndoPilot). Recharge device regularly, at least every 6 months.
Battery	Li-Ion Akku, 7.2 V, Power: 48 Wh
Electric protection class	Ш
Output	max. 3V/5A or 12V/1.25A (direct current)
Use	The device is designed for short-term use only  Motor: 30 seconds full-load operation/1 minute idle
Speed	200-1.000 min <sup>-1</sup> +/- 10%
Torque	0,2-5 Ncm +/-10%
Device class	Class according to EN 60601: Application part type BF Do not use device in areas exposed to explosion hazards. Keep device away from flammable substances.
IP class	IP31 EndoPilot and rheostat IP40 Power supply unit
MPG/EU class	lla
Environmental conditions During operation: During transport:	Air pressure 800 hPa to 1060 hPa +59 °F to +104 °F/air humidity: 20-80%, non-condensing -59 °F to +140 °F/air humidity: 20-80%, non-condensing
Weight	1450 g EndoPilot Controller
Dimensions	19 cm x 20,5 cm x 17,5 cm
Charging time of the battery	Approx. 9 hours
Battery life in continuous operation	Approx. 15 hours
Batteries for the rheostat	2 x 1.5 V AAA batteries

Subject to technical modifications. 

Do not use other power supply units. The power supply unit is essential for the safe use of the device.

