Endo Pilot



Non-stop to a perfect Endo



Schlumbohm



EndoPilot New Benchmarks for Efficiency and Performance

The perfect solution with EndoMotor, ApexLocator, Ultrasonic, Rinsing and Obturation!

The modular device concept offers different EndoPilot Models. Depending upon requirements, very comfortable, compact device units unfold.

Following modules are available:

for the **preparation**:

- Apex measuring
- EndoMotor
- Ultrasonic with or without rinsing function

The centrepiece, the **EndoPilot**—control unit offers a large, easy to read touch display. Working steps, information and settings can be easily retrieved via the menu which can be intuitively handled.

All hand-pieces are clearly arranged and easy to reach in the sophisticated stand-up display.

Updates, for the saving of new files or functions, for example, are provided on a regular basis. The user can update his device effortlessly with the help of update-cards.

The advantages:

- Modular set-up up to 5 functions in one device
- Safe apex measuring with simultaneous mechanical preparation
- Fully-insulated contra-angle safe apex measuring and position supervision
- File management with "Box administration" and "File wear supervision"
- Comfortable touch-display, quick and intuitive handling
- Ultrasonic with instrument selection and rinse-protocol-timer
- Wireless foot switch
- Reciprocal technique
- SAF expansion, self-adjusting-files can be used

Invest in your future while remaining flexible to your changing needs!

Depending upon requirements and desire, a flexible configuration and therewith an optimized adaption to the individual needs is possible. Functions may also be added later.

Please see the different configuration steps on the next pages.

- for the **root canal filling**:
- DownPack
- BackFill Gun







EndoPilot Set "comfort"

Apex measuring and preparation, footswitch with cable and AC adapter

Control unit:

EndoPilot, touch-screen, blue Base with handpiece holder, white Med. AC/DC converter 90-240V/50Hz footswitch with cable, blue

Preparation:

EDP-Motor ISO-E standard, LED-indicator integrated apex-connection EDP-contra-angle, 1:1, insulated, ISO-E standard **Apex** cord with lip-clip



EndoPilot Set "mobil"

like "comfort", but with battery and wireless footswitch

Control unit:

EndoPilot, touch-screen, blue Mobil base with handpiece holder and battery pack Med. AC/DC converter 90-240V/50Hz Wireless footswitch, blue

Preparation:

EDP-Motor ISO-E standard, LED-indicator integrated apex-connection EDP-contra-angle, 1:1, insulated, ISO-E standard **Apex** cord with lip-clip

Upgradeable:

- DownPack
- BackFill Gun
- Ultrasonic "CoPilot"
- Peristaltic-Pump
- SAF-System

109 0011

109 0016









EndoPilot Set "comfort plus"

like "comfort", but with Obturation

Control unit:

EndoPilot, touch-screen, blue Base with handpiece holder, white Med. AC/DC converter 90-240V/50Hz footswitch with cable, blue Switchbox

Preparation:

EDP-Motor ISO-E standard, LED-indicator integrated apex-connection **EDP-contra-angle**, 1:1, insulated, ISO-E standard **Apex** cord with lip-clip

Obturation:

Down-Pack handpiece, with LED-indicator **Heating tip** size: fine **Back-Fill Gun Gutta Percha Bar** (100 pcs/box) **Heat Insulator** (10 pcs/box) **Needles** 3x Ø23 + 3x Ø25 ga (6 pcs/box) **Accessory tools** and **cleaning set**

Upgradeable:

- Ultrasonic "CoPilot"
- Peristaltic-Pump
- SAF-System











EndoPilot Set "ultra"

Apex measuring and preparation, Ultrasonic, battery-pack, wireless twin-footswitch

Control unit:

EndoPilot, touch-screen, blue **Base** with handpiece holder, white Med. **AC/DC converter** 90-240V/50Hz

Preparation:

EDP-Motor ISO-E standard, LED-indicator integrated apex-connection **EDP-contra-angle**, 1:1, insulated, ISO-E standard **Apex** cord with lip-clip

Ultrasonic:

CoPilot-unit with battery-pack **Ultrasonic-handpiece** Satelec Newtron **Wireless twin-footswitch** with handle, blue

Upgradeable:

- DownPack
- BackFill Gun
- Peristaltic-Pump
- SAF-System



EndoPilot Set "ultra plus"

like "ultra", but with Obturation

Control unit:

EndoPilot, touch-screen, blue **Base** with handpiece holder, white Med. **AC/DC converter** 90-240V/50Hz

Preparation:

EDP-Motor ISO-E standard, LED-indicator integrated apex-connection **EDP-contra-angle**, 1:1, insulated, ISO-E standard **Apex** cord with lip-clip

Ultrasonic:

CoPilot-unit with battery **Ultrasonic-handpiece** Satelec Newtron **Wireless twin footswitch** with handle, blue

Obturation:

Down-Pack handpiece, with LED-indicator **Heating tip** size: fine **Back-Fill Gun Gutta Percha Bar** (100 pcs/box) **Heat Insulator** (10 pcs/box) **Needles** 3x Ø23 + 3x Ø25 ga (6 pcs/box) **Accessory tools** and **cleaning set**

Upgradeable:

- Peristaltic-Pump
- SAF-System

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like "ultra plus", but with additional pump for external rinsing

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Control unit:

EndoPilot, touch-screen, blue Base with handpiece holder, white Med. AC/DC converter 90-240V/50Hz

Preparation:

EDP-Motor ISO-E standard, LED-indicator integrated apex-connection **EDP-contra-angle**, 1:1, insulated, ISO-E standard **Apex** cord with lip-clip

Ultrasonic:

CoPilot-unit with battery **Ultrasonic-handpiece** Satelec Newtron **Wireless twin footswitch** with handle, blue

Obturation:

Down-Pack handpiece, with LED-indicator **Heating tip** size: fine **Back-Fill Gun Gutta Percha Bar** (100 pcs/box) **Heat Insulator** (10 pcs/box) **Needles** 3x Ø23 + 3x Ø25 ga (6 pcs/box) **Accessory tools** and **cleaning set**

Pump: Peristaltic-Pump Sterijoint

disposable pump tube set

Upgradeable:

SAF-System







Battery



109 0021



ApexLocator

patented, highly-precise, digital Apex measuring in real-time

The fully insulated contra-angle, especially developed for the Endodontics enables the apex measuring during the preparation. The precise, electronic length determination works in accordance with the impulse measuring process. Thanks to state-of-the-art micro-processor technology, the exact determination of the preparation length is done with 10-Bit-resolution.

A quick signal analysis provides for the length determination in real-time during the preparation.



Consequently, the user has the file position under control at any point of time and thereby work very safely. The signal of the ApexLocator is directly forwarded from the contraangle, to the file. File contact brackets are obsolete. By the complete insulation of motor and contra-angle, mismeasurements, as they may appear by contact with the mucous membrane, for example, are excluded.

The depth of preparation can be individually adjusted by simple sliding of the marker (cross in the apex display) on the touch display.

In combination with the file clamp, the ApexLocator can of course also be used for the manual length determination, i.e. without motor. The measured value of the manual probing can be stored comfortably via the foot switch and can be used as a reference with the technical preparation.

An additional safety feature is the external voltage control, warning of interfering voltage.





EndoMotor

Safety and Efficiency by integrated Endometrics

The high-performance, torque- and speed-controlled EndoMotor enab-



les a comfortable, economic and above all, a safe preparation of the root canal.

It is light-weight and offers a maximum in tactility.

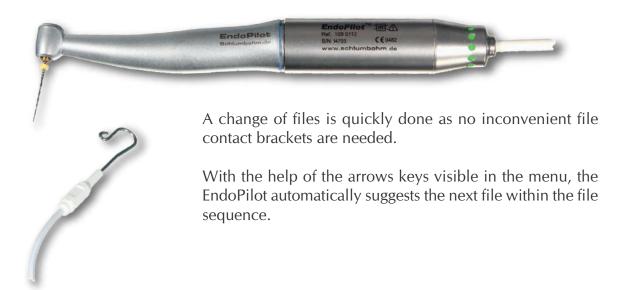
Coloured LED-lights inform about the rotation direction, the load and the apex position.

The optional twist function prevents the blocking of the file by alternating left and right movements as soon as the pre-selected torque has been reached.

Another, patented function is the torque-reduction upon approaching the apex. It limits the cutting performance of the file in the apical area and provides for a constant transportation of the debris out of the canal.

Even upon reaching the apex, the Endo-Motor does not switch into anticlockwise rotation, but stops briefly and then carefully continues in the clockwise rotation. The "change of rotation direction" often used in competing devices causes the undesired transport of the debris towards the apex.

A freely programmable reciprocal drive can be chosen for every file. Different profiles of movement are storable for every file. In combination with the patented EndoPilot contraangle, constant control over the current file position is granted - see ApexLocator -.





Motor

File Library Pre-programmed datab

Pre-programmed database of almost all file systems

The file database contains almost of common nickeltitanium file systems and provides for a free selection of the desired file system.

All parameters (speed, torque, etc.) of every file are already pre-programmed, but may also be changed individually. Own sequences may be defined independent of the manufacturer (Function "MyFile").

The EndoPilot offers storage capacity for 1,000 different files along with individual torque and speed values for all important NiTi-systems.



The software is updated on a regular basis.

That means, new files and/or functions are made available on a regular basis and can be updated easily by the user via update-cards.

File Management

Automatic recognition of the file-wear

The patented file management supervises the wear resp. the load of each file and adds them up. All important wear-paramters like torque, speed and duration of the usage are thereby considered and are shown as a wear-parameter. The curving of the canal can also be chosen as wear-parameter.

The limit of the file alarm is individually determined by the dentist for each file. As soon as the pre-set limit is reached, the following warning will appear:



"File alarm – replace file!"

It is of course the decision of the dentist if a file is replaced.

The determined wear-values will be stored after the switching off of the device. The values will be visible again upon using the file again.

In total, up to 8 file boxes with an unlimited number of different files can be administered.





Favourites Customizing the start page



The menu "Favourites" offers the possibility to store up to 3 "favoured" file systems on the start page of the mechanical preparation. The special advantage is the quick access to the individually favoured file systems and saves the repeated new selection from the entire file assortment.

All additional file systems are listed in alphabetical order.

MyFile System 🏠 My Sequence 1 My Sequence 2 My Sequence 1 🛛 🍋 ł My Sequence 3 \times Opener \times PT Next X2 25/06 My Sequence 4 \times SAF & Pump Ŧ My Sequence 5 ł Ŧ t t ł

MyFile-System

Design of own Sequences via hybrid technique

The function "MyFile" enables a speedy arrangement of individual, producer independent instrument sequences.

Single files from the pre-programmed file database may be combined at will.

Up to 5 sequences with up to 10 files can be individually designed.

Each file can be liberally forwarded into the My-File-sequence. In total, 50 storage places are available.

Type of movement, torque and speed values will be automatically taken over from the file library. An individual adjustment of these values is as possible as is the re-set to the factory setting (the recommendation by the file manufacturer).

The naming of the file always appears easy to read in full text on the display.



DownPack Warming within seconds

An optimal root filling of the prepared and disinfected root canal system is the goal of every endodontic treatment. With the **DownPack**-module, an obturate, three-

dimensional filling of the apical third is achieved.

With the help of the warm, vertical condensation technique, highly efficient, safe and homogeneous root canal fillings can be obtained.

The light DownPack-handpiece guarantees for an optimised handling and the slim form allows for the unobstructed view on the spot of treatment.



The desired heating temperature of the tip can be freely chosen via the display and the heating takes place within seconds!

An integrated LED-display in the handpiece informs about the heating process. The inserting resp. replacement of the heating tip is easy, quick and safe.



The following heating tips are available:

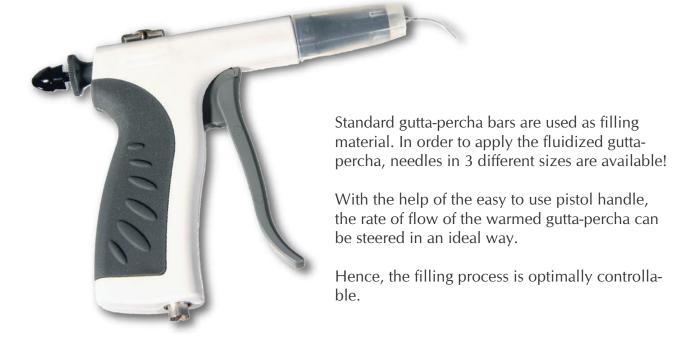


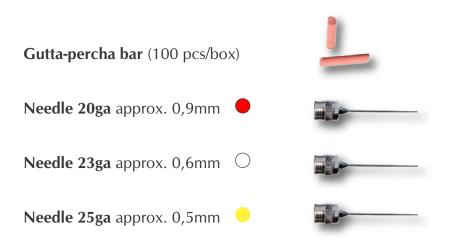


<u>BackFill</u> Optimal control of the flow velocity

Finally, a thermoplastic filling of the middle and coronal third with the BackFill-Pistole is done. The temperature selected via the touch display is reached very quickly by the high-performance steering.









Wireless

Battery

CoPilot

The CoPilot is an additional module and supplements the device concept by the ultrasonic function.

With the perfect supplement, the EndoPilot becomes to an **all-in-one** unit.

The module expands the EndoPilot by the following functions:

- Ultrasonic-handpiece
- Battery operation
- Additional DownPackconnection
- Wireless Twin-footswitch



The adjustable countdown-timer allows for the use of standardized rinsing-protocols.

The CoPilot module offers a twin wireless foot switch as well as the battery-powered operation.

The setting of the ultrasonic performance, the runtime and the selection of pre-programmed ultrasonic instruments is done easily via the touch display.

The CoPilot set can be combined smoothly with all EndoPilot sets resp. can be upgraded retroactively. A peristaltic pump can be added as an option.

CoPilot Ultrasonic extension

CoPilot:

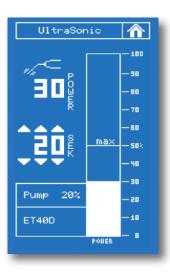
CoPilot-Unit Ultrasonic handpiece Satelec, Newtron **Wireless Twin-footswitch** with handle Power supply **adapter cable** for CoPilot

Accessories:

Rinsing adapter mounting material, M4x12 Socket wrench Universal instrument tool

109 3002





Peristaltic Pump

If working with liquid supply is desired, it is possible to expand the CoPilot by the CoPilot-Peristaltic Pump. The liquid is provided to the "Sterijoint" at the ultrasonic handpiece via an external hose.

The amount of liquid can be set via the touch display of the EndoPilot. When using the foot switch, the pump works either permanently, or, depending upon the setting, only a small portion of liquid at the beginning (Injection Function).



The peristaltic pump can be integrated into the existing stand-up display without the need of additional space. The power supply is provided via the CoPilot module.



Expansion Module "mobil" Flexible and independent





The flexible variation possibility to the EndoPilot "comfort".

The classic EndoPilot "comfort" (ApexLocator and EndoMotor) becomes a flexible and independent unit with the expansion module "mobil".

The module "mobil" contains an especially narrow stand-up display with integrated **battery-pack**.

The EndoPilot "mobil" is operated comfortably via a **wireless footswitch**. The external power supply is only needed for the charging process.



Extension "mobil"

109 2310 "mobil" stand incl. battery109 2361 Wireless footswitch, single

Expansion SAF-System

SAF-System (SAF = self-adjusting-file): Cleaning, treatment and rinsing in a single step.

The compressible hollow design of the SAF instrument adapts to the form of the root canal and allows a novel, minimally invasive treatment concept. Depending on the stage of expansion, an extension of the different EndoPilot–device versions with the SAF-System can be done without problem. Please contact us.

The EndoPilot controls both, the SAF-motor and the pump. The instrument-head converts the rotary motion of the motor (5000 rpm) into an oscillating movement. The peristaltic pump supplies the SAF-file continuously rinsing liquid. The application time of the SAF-file should be 4 minutes. This is detected by EndoPilot and displayed on the screen. In addition, an acoustic signal informs about the treatment time in minutes.

With the help of My File function customized files sequence can optimize the workflow of the practitioner.



SAF-expansion for "Ultra Plus"

SAF-expansion for "Comfort plus"

EndoPilot Motor for SAF with ISO-E connection,	EndoPilot Motor for SAF with ISO-E connection,
LED-indicator, 5000 upm	LED-indicator, 5000 upm
SAF-Pump with Switch function	SAF-Pump
SAF-Motor rest	SAF-Motor rest
109 5103	109 5102
109 5112 SAF-head RD73-NX	109 5112 SAF-head RD73-NX

Trolley

The EndoCart for the Endopilot

Pre-set with 3 drill holes for the safe mounting of EndoPilot or CoPilot incl. mounting material.

- 3 levels
- two sockets
- storage space: 40 x 30 cm



Trolley with 3 levels

109 2403 Trolley

Consumables

DownPack:

109 0156 🗢	Heating tip XF	040/.04
109 0152 ●	Heating tip F	050/.04
109 0153 🗕	Heating tip FM	050/.05
109 0154 🔴	Heating tip M	050/.07
109 0155 🔵	Heating tip ML	050/.09



BackFill:

109 0146Needle Ø 25ga(6 pcs)109 0145 ○Needle Ø 23ga(6 pcs)109 0144Needle Ø 20ga(6 pcs)	109 0142	Gutta-percha	(100 pcs)
$109 0144 \bullet \text{Neeule & 20ga} (0 \text{ pcs})$	109 0145 〇	Needle Ø 23ga	•



Passive ultrasonic irrigation:

109 4221	File IRRI 20-21	(4 pcs)
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Ultrasonic Retreatment:

109 4241 Instrument ET40

Pump:

103 2500	Disposable pump tupe set, steril
	lead 1.95m

Accessories:



109 2311 Apex-cable-Set, complet

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109 2313	Cable with file-clamp

109 2314 Lip-clip

*The prices listed are without obligation and are applicable for deliveries ex factory plus the applicable legal Value-Added-Tax. Prices are subject to change without notification; errors, omissions and misprints





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