# ENDODONTICS

ENDO-MATE TC2 / ENDO-MATE DT / iPexII / Contra-angles / Scalers





# Index

| ENDO-MATE TC2 P 03 - 04 |
|-------------------------|
| ENDO-MATE DT P 05 - 06  |
| iPexII P 07 - 08        |
| Heads & Motors P 09     |
| Contra-angles P 10      |
| Scalers P 11 - 12       |
| Spare Parts P 13 - 14   |



# Smarter & Safer

## Work Smarter and Safer with Freedom of Movement

A large LCD, simple 5-key operation and a lightweight, cordless handpiece assure easy use even during the most delicate endodontic procedures. The Auto Reverse & Alarm Function alerts you with an audible sound to let you know that the load is about to reach the preset torque level allowing you to unload the file even before the Auto Reverse is setting in. 5 programs for different file systems. TC2 supports most major brands of Ni-Ti files.



#### LCD panel

Large LCD panel and access-friendly key.

## Program function

User definable 5 presets - Speed, Torque, Gear Ratio & Auto Reverse mode. Last program settings can be memorized when the power turns on.







#### Safety for delicate endodontic treatment

Smart Auto Reverse & Alarm Function for safer endodontic procedures. The feedback circuit keeps stable rotation even when the load on the motor handpiece changes. Power turns off automatically to improve safety and save energy. Calibration function for more precise rotation speed and torque setting.

This function cannot completely absorb the individual difference of the actual motor handpiece and contra-angle

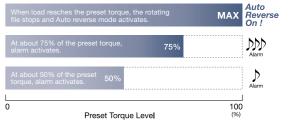
#### Suitable for use with most major brands of Ni-Ti files

Selecting gear ratio attachment applies the entire rotation and torque.

| Rotation Speed (min-1) | Gear Ratio | Torque Level (Ncm) |
|------------------------|------------|--------------------|
| 200 ~ 900              | 10 : 1     | 0.2 ~ 2.2          |
| 140 ~ 550              | 16 : 1     | 0.3~3.0            |
| 100~450                | 20 : 1     | 0.4~4.0            |

#### Two kinds of alarm sound for safer and efficient treatment

Alarm enables operators to prevent to put too much burden on files, realizing less metal fatigue.



#### **ENDO-MATE TC2 Complete Set**

MODEL: ENDO-MATE TC2 (230 V) ORDER CODE: Y1001027

■ MP-F16R Head ■ ENDO-MATE TC2 Motor ■ Battery Charger

#### **ENDO-MATE TC2 Complete MPA Set**

MODEL: ENDO-MATE TC2 MPA (230 V) ORDER CODE: Y1001028

■ MPA-F16R Head ■ ENDO-MATE TC2 Motor ■ Battery Charger

#### Specifications:

- Speed range : 2,000~9,000 min<sup>-1</sup>
- Charge: 1.5 h (depending on workload) Continuous use: 1.2 h (depending on workload)



# ENDO-MATE DT Endodontic Micromotor

# Smart & Portable

ENDO-MATE DT has been developed for use with most major brands of Ni-Ti files. The preprogramming function allows highly efficient treatments using different file manufacturer's procedures. The control unit has been designed to be lightweight and compact. It is fitted with a rechargeable battery providing high mobility. The lightweight and slim handpiece allows high performance.



| Gear   | Head Speed (min-1) |
|--------|--------------------|
| 20 : 1 | 100~650            |
| 16 : 1 | 120~800            |
| 10 : 1 | 200~1,300          |
|        | 500~3,200          |
|        | 2,000 ~13,000      |

#### Fits all popular brands of Ni-Ti files

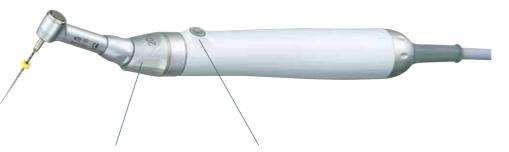
Up to 9 settings (speed and torque etc) can be programmed simply by pushing the memory function button. It's easy to switch between each preset program allowing work with all popular Ni-Ti file manufacturer's required procedures.

#### **Dual ON/OFF control**

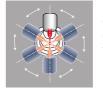


Motor ON/OFF operation is selected with handy switch located on the handpiece body or foot controller according to user's choice. (Foot controller is optional).

# Lightweight, smart and comfortable handpiece.



### 6 head angles for ease of treatment



Depending on the position of treatment site, the head angle can be adjusted to the best angle.

## 2-way ON/OFF switch

#### Features are:

A: Push and release

- · Micromotor operates continuously until the button is pushed again.
- Micromotor operates continuously until the button is released.

## Push type Ultra miniature head

Allows fast and easy exchange of files during procedures. Compact head offers excellent visibility of treatment spots.

## Quick coupling

Quick coupling allows for easy head exchange. All heads are autoclavable up to 135°C.



#### Auto reverse function

The auto reverse function activates when the preset torque level has been exceeded and can be set to operate in the following.



[Continue automatically] The motor reverts to forward rotation after auto everse has freed the file.



[Stop automatically]

he motor stops after auto reverse has freed the file. Alternatively, the auto reverse function can be deactivated.

## ENDO-MATE DT with 20:1 Head

MODEL: ENDO-MATE DT (230 V) ORDER CODE: Y141121

■ Control unit ■ Motor and cord ■ MP-F20R head (20:1) ■ Handpiece stand AC adaptor

#### **ENDO-MATE DT without Head**

MODEL: ENDO-MATE DT W/O (230 V) ORDER CODE: Y141124

● Control unit ● Motor and cord ● Handpiece stand ● AC adaptor

- Power Supply : AC 230 V 50/60 Hz and Battery pack
- Number of Program : 9 Max. Torque : 7 Ncm (when using 20:1 head)
- Speed range: 100~13,000 min<sup>-1</sup> (with 20:1, 4:1, 1:1 geared heads)
   Charge/Continuous use: 5 h / 2 h (depending on workload)
- Dimensions: W 92 x D 148 x H 124 (mm) 
   Weight: Unit 456 g / Motor handpiece & cord 92 g



# iPex**I**

# Advanced Apex Locator

Using the results of numerous clinical trials and verification tests as a base, NSK created SmartLogic, a next-generation Apex Locator compatible with diverse tooth forms, and that provides superior accuracy in detecting the root apex. At the biologically crucial root apex - the Zone of Precision - the iPexII is able to provide a clear, accurate image of the file tip's location on its LCD panel.

### Stylish & Compact Body

Lightweight and with a base just 6 cm in diameter, the iPexII can quickly be set up and used in virtually any environment. The LCD panel is pitched at the ideal angle that allows clinicians to easily and without distraction monitor conditions ensuring safe and smooth root canal procedures.



# Next-Generation SmartLogic Controller

NSK's SmartLogic controller combines two advanced technologies to accurately analyse signals. iPexII SmartLogic technology removes virtually all signal interference from the root canal itself to precisely detect the location of the apex.

- iPexII SmartLogic alternates between two separate frequencies to take measurements. By reducing the noise that interferes with signal analysis, it generates a high-precision wave system that does not require a filtering circuit.
- iPexII SmartLogic uses the whole wave system to analyse the extracted frequency. This produces steady measurement analysis even under varying conditions in the root canal while retaining a constant link

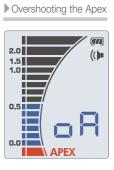
#### The 3 colour LCD visual monitor screen











#### Monitoring the Canal Depth

For integration into Endodontic instruments (ENDO-MATE TC2 / ENDO-MATE DT / Contra-angle) The NSK endodontics products and iPexII ensure safe, precise and efficient root canal procedures.



#### iPexII Complete Set

MODEL: iPexII Complete Set ORDER CODE: Y1002208

Control unit ● iPexII Probe (1.8 m) ● iPexII File Clip (3 pcs.)

■ Lip Hook (3 pcs.)
■ AAA manganese dry batteries (3 pcs.)
■ iPexII Tester

Power Supply : for 1.5 V AAA (LR03 or R03) batteries

• Continuous use : Approx. 60 hours

: W 60 x D 60 x H 86 (mm) Weiaht : 76 g (unit without batteries



## ENDO-MATE TC2 / ENDO-MATE DT Heads & Motors

#### Heads for Endodontic Application

20:1 MODEL: MP-F20R ORDER CODE: Y110044
16:1 MODEL: MP-F16R ORDER CODE: Y110096
10:1 MODEL: MP-F10R ORDER CODE: Y110048

- For Ni-Ti files (ø2.35) Miniature Head 360° Rotation
- Push Button Chuck



Motors

MODEL : ENDO-MATE TC2 Motor

ORDER CODE : E346

- Motor Speed : 2,000~9,000 min<sup>-1</sup>
- Torque Control
   Auto Reverse



20:1 MODEL: MPAS-F20R ORDER CODE: Y110046 16:1 MODEL: MPAS-F16R ORDER CODE: Y110098

- For Ni-Ti files (ø2.35) Miniature Head 360° Rotation
- Connection for Apex locator (For short shank)
- Push Button Chuck



 $\mathsf{MODEL}: \textbf{ENDO-MATE DT Motor \& Cord}$ 

ORDER CODE : **E275** 



### Apex Locator Capability

MPA and MPAS heads are equipped with built in probe ring which enable to use your Apex locator with the ENDO-MATE TC2 & DT systems. By combining an Apex Locator with NSK ENDO-MATE TC2 & DT, clinicians will be able to perform more accurate root canal preparations. All contra angle heads are autoclavable up to 135°C.

 $2\ \mbox{types}$  of file holders are available relevant to the shank length of the file selected.



Attach the Apex Locator Monitor by moving it forward to contact the file. Release by moving away from the file.





## **Endodontic Contra-angles**

#### Ti-Max X SERIES



#### 10:1 Reduction

OPTIC MODEL: X35L ORDER CODE: C620

NON-OPTIC MODEL: X35 ORDER CODE: C624

● Max Speed: 4,000 min<sup>-1</sup> ● For Hand File & Engine File ● 60° Twist ● Titanium Body with Scratch Resistant DURACOAT

● Push Button Chuck ● Single Spray ● Microfilter ● Cellular Glass Optics



MODEL: QF Adaptor
ORDER CODE: C877701

## FX SERIES

External Water Spray



#### 16:1 Reduction

NON-OPTIC MODEL: FX75m ORDER CODE: C1055001

Max Speed: 2,300 min⁻¹
♠ For engine files
♠ Stainless Steel Body
♠ 360° Rotation

Push Button Chuck Miniature Head

#### **EX SERIES**

External Water Spray



#### 64:1 Reduction

NON-OPTIC MODEL: MPA-ER64 ORDER CODE: Y110144

NON-OPTIC MODEL: MPA-ER64M ORDER CODE: Y110184

■ Max Speed: 625 min<sup>-1</sup> ■ Connection for Apex locator (Long shank files) ■ Miniature Head

● For engine files ● 360° Rotation ● Push Button Chuck







## Ultrasonic Scaler

#### Varios 970

OPTIC MODEL: VA970 LUX (230 V) ORDER CODE: Y1001168 NON-OPTIC MODEL: VA970 (230 V) ORDER CODE: Y1001175

- Control unit Handpiece Handpiece cord 3 Scaling tips (G4, G6, G8) Foot control (FC-70)
- 2 x Irrigation bottles 3 x Tip wrench with torque limiter AC power cord Sterilization case

#### **Endodontics**

MODEL : E4 ORDER CODE : Z217428



MODEL: E4D ORDER CODE: Z217528



MODEL: E5 ORDER CODE : **Z217305** 





MODEL : E7 ORDER CODE : Z217307



For removal of filling and foreign material





## NSK Satelece MODEL : E8 ORDER CODE : **Z217308**

Water not required

For removal of filling and foreign material



For enlargement of root canal wall

# MODEL: E15D ORDER CODE: Z217319

For locating root canals and removal of calcifications



MODEL : E11 ORDER CODE : Z217031



#### NSK Satelec®

MODEL: E12 ORDER CODE: Z217032



● For U files (ø0.8 mm) ● For root canal cleaning

● For anterior teeth ● 120° Angle Holder for U files



MODEL: U files 33 mm / #15 ORDER CODE: Y900062

● ISO 15 ● Pack of 6

MODEL: U files 33 mm / #20 ORDER CODE: Y900063

● ISO 20 ● Pack of 6

MODEL: U files 33 mm / #25 ORDER CODE: Y900064

● ISO 25 ● Pack of 6

MODEL: U files 33 mm / #30 ORDER CODE: Y900065

■ ISO 30 ■ Pack of 6

MODEL: U files 33 mm / #35 ORDER CODE: Y900066

● ISO 35 ● Pack of 6

#### Retrograde Endo

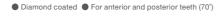


MODEL: E30LD ORDER CODE: Z217213





MODEL: E31D ORDER CODE: Z217210













Pack of 3

Pack of 3

Endodontics V-Tip

■ Includes E-Tip replacement wrench

● V-Tip Holder ● Tip is optional

MODEL: V30 ORDER CODE: Z217030

MODEL: V-S50 ORDER CODE: Y900169

MODEL: V-S51 ORDER CODE: Y900170

MODEL: V-S52 ORDER CODE: Y900171

MODEL: V-S53 ORDER CODE: Y900172

MODEL: V-S50D ORDER CODE: Y900173

MODEL: V-S51D ORDER CODE: Y900174

● Diamond coated ● For root canal enlargement 23 mm

MODEL: V-S52D ORDER CODE: Y900175

MODEL: V-S53D ORDER CODE: Y900176

● Diamond coated ● For root canal enlargement 32 mm

● Diamond coated ● For root canal enlargement 26 mm

● Diamond coated ● For root canal enlargement 17 mm

● For root canal cleaning 17 mm ● Pack of 3

● For root canal cleaning 23 mm ● Pack of 3

● For root canal cleaning 26 mm ● Pack of 3

● For root canal cleaning 32 mm ● Pack of 3

NSK Satelec®

\* In order to reduce the incidence of ledge formation, there is no diamond coating on the end of the tip. (1.0 mm)

Each pack of E11, E12 or V30 includes 1 x E Tip replacement wrench, Replacement wrench is not included when ordering other tips. Please order the replacement wrench separately in this instance.

## Air Scaler



PTIC MODEL : S970L ORDER CODE : T1005 NON-OPTIC MODEL: \$970 ORDER CODE: T1020

- Titanium Body with Scratch Resistant DURACOAT Cellular Glass Optics
- 3 level Power Ring Frequency of oscillation: 5,800~6,200 Hz
- Includes 3 tips (S1, S2 & S3), Tip Wrench (CR-20) and Tip Cover (L)

### Endodontics V-Tip



MODEL: \$75 ORDER CODE: Z252035

■ Includes E-Tip replacement wrench ● V-Tip Holder ● Tip is optional



MODEL: V-U15 ORDER CODE: Y900177

- V-file Irrigation 23 mm #15 ISO 15

MODEL: V-U20 ORDER CODE: Y900178

- V-file Irrigation 23 mm #20 ISO 20
- Pack of 6

MODEL: V-U25 ORDER CODE: Y900179

- V-file Irrigation 23 mm #25 ISO 25

MODEL: V-U30 ORDER CODE: Y900180

- V-file Irrigation 23 mm #30 ISO 30
- Pack of 6

MODEL: V-U35 ORDER CODE: Y900181

- V-file Irrigation 23 mm #35 ISO 35
- Pack of 6

MODEL: V-N50 ORDER CODE: Y900182

● Ni-Ti Irrigation 17 mm ● Pack of 3

MODEL: V-N51 ORDER CODE: Y900183

● Ni-Ti Irrigation 21 mm ● Pack of 3

Washable in the thermodisinfector



## ENDO-MATE TC2 / ENDO-MATE DT Heads & Gear

#### Heads for Endodontic Application

#### MODEL : MP-Y ORDER CODE : C547

● For Ni-Ti files (ø2.35) ● Miniature Head ● 360° Rotation ● Push Button Chuck



## Gear

ORDER CODE: C873 ● 1:1 Direct Drive



#### MODEL: MPA-Y ORDER CODE: C548

- For Ni-Ti files (ø2.35) Miniature Head
- 360° Rotation Push Button Chuck
- Connection for Apex locator (For long shank)

#### MODEL: F4R

ORDER CODE: C872



## MODEL: MPAS-Y ORDER CODE: C882

- For Ni-Ti files (ø2.35) Miniature Head
- 360° Rotation Push Button Chuck
- Connection for Apex locator (For short shank)



## MODEL: F16R

● 16:1 Reduction

MODEL: F10R

● 10:1 Reduction



#### MODEL: NML-Y ORDER CODE: C874

- For Ni-Ti files (ø2.35) Miniature Head
- 360° Rotation Latch type



#### MODEL: F20R 20:1 Reduction

ORDER CODE: C399

ORDER CODE: C398

ORDER CODE: C871



# Spare Parts

## **ENDO-MATE TC2**

| MODEL   | PRODUCTS | ORDER CODE |
|---|----------|------------|
| Ni-MH<br>Rechargeable<br>Battery<br>(Pack of 2) |          | Y900103    |
| Battery<br>Charger                              |          | U614       |

|   | Y900103 | Power Cord             | U439550 |
|---|---------|------------------------|---------|
|   | U614    | Cord<br>for MPA / MPAS | C876021 |
| 6 | 0614    | for MPA / MPAS         | C876021 |

MODEL

| MODEL                   | PRODUCTS | ORDER CODE |
|-------------------------|----------|------------|
| Connection<br>Cord Clip |          | C876509    |

## **ENDO-MATE DT**

| MODEL                   | PRODUCTS | ORDER CODE |
|-------------------------|----------|------------|
| ENDO-MATE DT<br>Unit    |          | U421002    |
| ENDO-MATE DT<br>Adaptor |          | U480       |
| Handpiece<br>Stand      |          | Z095206    |

| Connection<br>Cord Clip |          | C876509    |
|-------------------------|----------|------------|
| Cord<br>for MPA / MPAS  |          | C876021    |
| MODEL                   | PRODUCTS | ORDER CODE |

PRODUCTS ORDER CODE

| MODEL                     | PRODUCTS | ORDER CODE |
|---------------------------|----------|------------|
| Rechargeable<br>Batteries |          | U421070    |
| FC-15<br>Foot Control     |          | Z248       |

#### iPexII

| MODEL               | PRODUCTS | ORDER CODE |
|---------------------|----------|------------|
| iPexII<br>File Clip |          | U1109351   |
| iPexII Tester       | 1        | U1109353   |

| MODEL        | PRODUCTS | ORDER CODE |
|--------------|----------|------------|
| iPexII Probe |          | U1109352   |
| Lip Hook     |          | U501513    |

## FX / EX Series

| MODEL      | PRODUCTS | ORDER CODE |
|------------|----------|------------|
| Tube (RSM) | 9        | Z166101    |