

ENDODONTICS

Create it 

ENDODONTICS

**NSK**

# INDEX

ENDO-MATE TC2 .....	P 03 - 04
ENDO-MATE DT2 .....	P 05 - 06
iPexII .....	P 07 - 08
Heads & Motors .....	P 09
Contra-angles .....	P 10
Scalers .....	P 11 - 12
Spare Parts .....	P 13 - 14

# ENDO-MATE TC2

Cordless  
Endodontic Micromotor

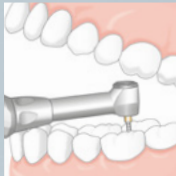
## Smarter & Safer

### 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.



#### Mini head & Slim neck



Miniature head allows access even to the most difficult to reach areas. Slim neck assures higher visibility.

#### Stress free for more comfort

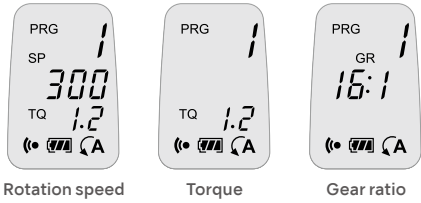
Cordless handpiece delivers freedom of movement. Lightweight, ergonomic design.

#### 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.



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

Selecting gear ratio attachment applies the entire rotation and torque.

Rotation Speed (min <sup>-1</sup> )	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

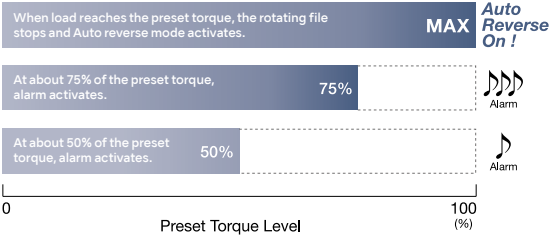
#### Safety for delicate endodontic treatment

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.

#### 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	ORDER CODE
ENDO-MATE TC2	Y1001027

**Contents**  
• MP-F16R Head • ENDO-MATE TC2 Motor • Battery Charger

#### ENDO-MATE TC2 Complete MPA Set

MODEL	ORDER CODE
ENDO-MATE TC2 MPA	Y1001028

**Contents**  
• 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 DT2

Endodontic Micromotor

## smart & portable

ENDO-MATE DT2 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 protocols. 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 easy and comfortable handling for high performance.

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

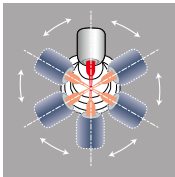
Up to 9 settings (speed and torque etc) can be programmed simply by pushing the memory function button. It's easy to switch between each preset program allowing work with all popular Ni-Ti file manufacturer's protocols.

Gear Ratio	Rotation Speed (min <sup>-1</sup> )
20:1	100-650
16:1	125-800



## Lightweight, smart and ergonomic 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.

### Quick coupling



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

### Push type ultra miniature head

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

### Auto reverse function

The auto reverse function activates when the preset torque level has been reached.

### Other function

Beeping sound notifies user when preset torque limit has been reached.

### 2-way ON/OFF switch



Features are :  
A : Push and release  
• Micromotor operates continuously until the button is pushed again.  
B : Push and hold  
• Micromotor operates continuously until the button is released.

### 2 way power source

ENDO-MATE DT2 has been designed to work with a rechargeable battery for portable use or can be powered using the AC adaptor supplied.

### ENDO-MATE DT2 with 20:1 Head

MODEL	ORDER CODE
ENDO-MATE DT2 (230V)	Y1004230

**Contents**  
• Control unit • Motor and Cord • MP-F20R head (20:1)  
• Handpiece stand • AC Adaptor

### ENDO-MATE DT2 without Head

MODEL	ORDER CODE
ENDO-MATE DT2 W/O (230V)	Y1004231

**Contents**  
• Control unit • Motor and Cord • Handpiece stand • AC Adaptor

**Specifications**  
• Power supply : AC 230 V 50/60 Hz and Battery pack  
• Number of Programs : 9  
• Max Torque : 7 Ncm (when using 20:1 head)  
• Speed range : 100-13,000 min<sup>-1</sup> (With 20:1, 1:1 geared heads)  
• Charge/Continuous use : 5 h / 2 h (depending on workload)  
• Dimensions : W 93 x D 147 x H 100 mm  
• Weight : Unit 440 g / Motor handpiece and Cord 95 g





# iPexII

## 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.

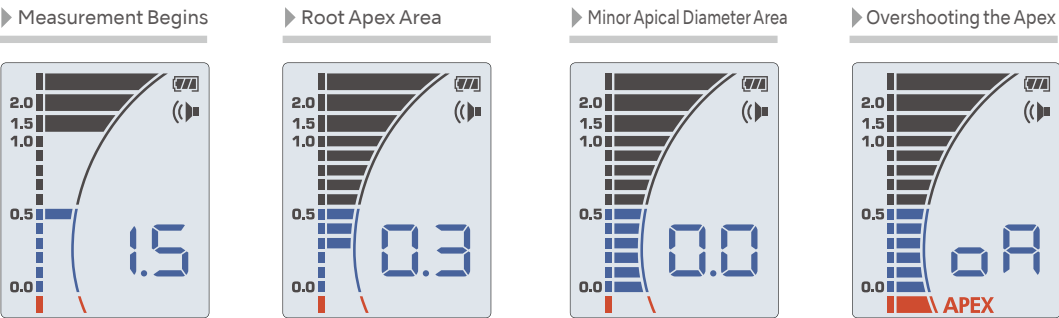


## Next-Generation SmartLogic Controller

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 to file insertion progress.

### The 3 colour LCD visual monitor screen



### Monitoring the Canal Depth

For integration into Endodontic instruments (ENDO-MATE TC2 / ENDO-MATE DT2 / Contra-angle) The NSK endodontics products and iPexII ensure safe, precise and efficient root canal procedures.



### iPexII Complete Set

MODEL	ORDER CODE
iPexII Complete Set	Y1002208

**Contents**

- Control unit
- iPexII Probe (1.8 m)
- iPexII File Clip (3 pcs.)
- Lip Hook (3 pcs.)
- AAA manganese dry batteries (3 pcs.)
- iPexII Tester

**Specifications**

- Power Supply : for 1.5 V AAA (LR03 or R03) batteries
- Continuous use : Approx. 60 h
- Dimensions : W 60 x D 60 x H 86 mm
- Weight : 76 g (unit without batteries)



ENDO-MATE TC2 / ENDO-MATE DT2 Heads & Motors

Heads for Endodontic Application



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

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



Gear Ratio	MODEL	ORDER CODE
16:1 Reduction	MPA-F16R	Y110097

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



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

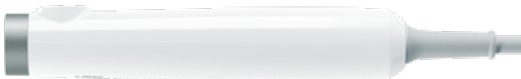
- For Ni-Ti files (ø2.35) • Miniature Head • 360° Rotation
- Connection for Apex locator (For short shank) • Push Button Chuck

Motors



MODEL	ORDER CODE
ENDO-MATE TC2 Motor	E346

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

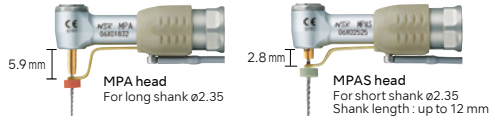


MODEL	ORDER CODE
ENDO-MATE DT2 Motor and Cord	E1169001

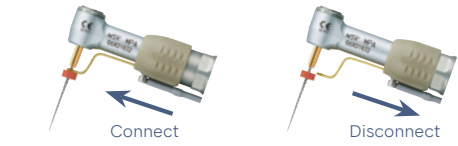
Apex Locator Capability

MPA and MPAS heads are equipped with built in probe ring which enable to use your Apex locator with the ENDO-MATE TC2 & DT2 systems. By combining an Apex Locator with NSK ENDO-MATE TC2 & DT2, clinicians will be able to perform more accurate root canal preparations. All contra-angle heads are autoclavable up to 135°C.

2 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



Gear Ratio	Optic	MODEL	ORDER CODE
10:1 Reduction	●	X35L	C620
10:1 Reduction	—	X35	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	ORDER CODE
QF Adaptor	C877701

FX SERIES



Gear Ratio	Optic	MODEL	ORDER CODE
16:1 Reduction	—	FX75m	C1055001

- Max Speed : 1,250 min<sup>-1</sup> • For engine files • Stainless Steel Body
- 360° Rotation • Push Button Chuck • Miniature Head

Ultrasonic Scaler  
Varios 970

Optic	MODEL	ORDER CODE
●	VA970 LUX 230V S1	Y1004161
—	VA970 230V S1	Y1004160

- Contents**
- Control unit
  - Handpiece
  - Handpiece cord
  - 3 Scaling tips (G4, G8, G16)
  - Foot control (FC-70)
  - 2 x Irrigation bottles
  - 3 x Tip wrench with torque limiter
  - AC power cord
  - Sterilization case



Endodontics

MODEL	ORDER CODE
E4	Z217428

- For root canal cleaning and removal of foreign material

MODEL	ORDER CODE
E4D	Z217528

- Diamond coated
- For root canal cleaning and root canal enlargement

MODEL	ORDER CODE
E5	Z217305

- Water not required
- For lateral condensation

MODEL	ORDER CODE
E6	Z217306

- Water not required
- For lateral condensation

MODEL	ORDER CODE
E7	Z217307

- Water not required
- For removal of filling and foreign material

MODEL	ORDER CODE
E7D	Z217317

- Diamond coated
- For root canal enlargement

MODEL	ORDER CODE
E8	Z217308

- Water not required
- For removal of filling and foreign material

MODEL	ORDER CODE
E8D	Z217318

- Diamond coated
- For root canal enlargement

MODEL	ORDER CODE
E15D	Z217319

- Diamond coated
- For locating root canals and removal of calcifications

MODEL	ORDER CODE
E11	Z217031

- For U files (ø0.8 mm)
- For root canal cleaning
- For anterior teeth
- 120° Angle Holder for U files

MODEL	ORDER CODE
E12	Z217032

- For U files (ø0.8 mm)
- For root canal cleaning
- For posterior teeth
- 95° Angle Holder for U files

MODEL	ORDER CODE
U files 33mm ISO 15	Y900062

- ISO 15
- Pack of 6

U files 33mm ISO 20	Y900063
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- ISO 20
- Pack of 6

U files 33mm ISO 25	Y900064
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- ISO 25
- Pack of 6

U files 33mm ISO 30	Y900065
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- ISO 30
- Pack of 6

U files 33mm ISO 35	Y900066
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- ISO 35
- Pack of 6

Retrograde Endo

MODEL	ORDER CODE
E30RD	Z217212

- Diamond coated
- For posterior teeth (right angled)

MODEL	ORDER CODE
E30LD	Z217213

- Diamond coated
- For posterior teeth (left angled)

MODEL	ORDER CODE
E31D	Z217210

- Diamond coated
- For anterior and posterior teeth (70°)

MODEL	ORDER CODE
E32D	Z217211

- Diamond coated
- For anterior teeth (90°)

Endodontics V-Tip

MODEL	ORDER CODE
V30	Z217030

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

MODEL	ORDER CODE
V-S50	Y900169

- For root canal cleaning 17 mm
- Pack of 3

V-S51	Y900170
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- For root canal cleaning 23 mm
- Pack of 3

V-S52	Y900171
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- For root canal cleaning 26 mm
- Pack of 3

V-S53	Y900172
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- For root canal cleaning 32 mm
- Pack of 3

V-N50	Y900182
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- Ni-Ti Irrigation 17 mm
- Pack of 3

V-N51	Y900183
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- Ni-Ti Irrigation 21 mm
- Pack of 3

MODEL	ORDER CODE
V-S50D	Y900173

- Diamond coated
- Pack of 3
- For root canal enlargement 17 mm

V-S51D	Y900174
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- Diamond coated
- Pack of 3
- For root canal enlargement 23 mm

V-S52D	Y900175
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- Diamond coated
- Pack of 3
- For root canal enlargement 26 mm

V-S53D	Y900176
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- Diamond coated
- Pack of 3
- For root canal enlargement 32 mm



✱ 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  
Ti-Max S970



Optic	MODEL	ORDER CODE
●	S970L	T1005
—	S970	T1020

- Titanium Body with Scratch Resistant DURACOAT
- Cellular Glass Optics
- 3 level Power Ring
- Includes 3 tips (S1, S2 & S3), Tip Wrench (CR-20) and Tip Cover (L)

Endodontics V-Tip

MODEL	ORDER CODE
S75	Z252035

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

MODEL	ORDER CODE
V-U15	Y900177

- V-file Irrigation 23 mm
- ISO 15
- Pack of 6

V-U20	Y900178
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- V-file Irrigation 23 mm
- ISO 20
- Pack of 6

V-U25	Y900179
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- V-file Irrigation 23 mm
- ISO 25
- Pack of 6

V-U30	Y900180
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- V-file Irrigation 23 mm
- ISO 30
- Pack of 6

V-U35	Y900181
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- V-file Irrigation 23 mm
- ISO 35
- Pack of 6



Washable in the thermodisinfectors  
(Exclude Varios 970)



Autoclavable  
(Exclude Varios 970)

ENDO-MATE TC2 / ENDO-MATE DT2 Heads & Gear

Heads for Endodontic Application

MODEL	ORDER CODE
MP-Y	C547

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



MODEL	ORDER CODE
MPA-Y	C548

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



MODEL	ORDER CODE
MPAS-Y	C882

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



MODEL	ORDER CODE
NML-Y	C874

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



Gear

MODEL	ORDER CODE
FC	C873

- 1:1 Direct Drive



MODEL	ORDER CODE
F4R	C872

- 4:1 Reduction



MODEL	ORDER CODE
F10R	C398

- 10:1 Reduction



MODEL	ORDER CODE
F16R	C871

- 16:1 Reduction



MODEL	ORDER CODE
F20R	C399

- 20:1 Reduction



Spare Parts

ENDO-MATE TC2

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

\* Use only a rechargeable battery, size AAA Ni-MH (Nickel Metal Hydride).  
Never attempt to use a non rechargeable battery.

MODEL	PRODUCTS	ORDER CODE
Power Cord		U439550
Cord for MPA / MPAS		C876021

MODEL	PRODUCTS	ORDER CODE
Connection Cord Clip		C876509

ENDO-MATE DT2

MODEL	PRODUCTS	ORDER CODE
ENDO-MATE DT2 Unit		U1138001
ENDO-MATE DT Adaptor		U480
Handpiece Stand		Z095205

MODEL	PRODUCTS	ORDER CODE
Cord for MPA / MPAS		C876021
Connection Cord Clip		C876509

MODEL	PRODUCTS	ORDER CODE
Rechargeable Batteries		U421070
F-Type Spray Nozzle		Z256090

iPexII

MODEL	PRODUCTS	ORDER CODE
iPexII File Clip		U1109351
iPexII Tester		U1109353

MODEL	PRODUCTS	ORDER CODE
iPexII Probe		U1109352
Lip Hook		U501513