ENDODONTICS

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# 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.

# 71121

#### **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-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

#### **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

ENDO-MATE TC 2 MPA	Y1001028
MODEL	ORDER CODE

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)

#### 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.

	When load reaches the preset torque, the rotating file stops and Auto reverse mode activates.	МАХ	Auto Reverse On !
	At about 75% of the preset torque, 75% alarm activates.		)))) Alarm
	At about 50% of the preset torque, alarm activates. 50%		Alarm
l	Preset Torque Level	100 (%)	



## 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



#### NSK ENDO-MATE DT2



## 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.



#### 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.

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

MODEL	ORDERCODE
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

#### Quick coupling

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

#### 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.



# **i**Pex**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

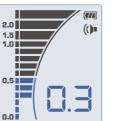
#### NSK's SmartLogic controller combines two advanced technologies to accurately analyse signals. iPexII SmartLogic technology removes virtually all signal interference from the root canal itself to precisely detect the location of the apex.

- 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 to file insertion progress.

#### The 3 colour LCD visual monitor screen







#### Monitoring the Canal Depth

15

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

20

1.5

0.5

0.0

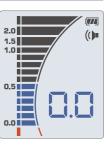
iPexII Complete Set	Y1002208
MODEL	ORDERCODE

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)



Minor Apical Diameter Area





Overshooting the Apex



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

## **Endodontic Contra-angles**

#### 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

ORDER CODE

ORDER CODE

MPAS-F20R Y110046

MPAS-F16R Y110098

Y110097

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

MODEL

MODEL

Connection for Apex locator (For short shank) 
 Push Button Chuck

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

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

MPA-F16R

Gear Ratio

Gear Ratio

20:1 Reduction

16:1 Reduction

16:1 Reduction

#### Motors



MODEL ORDER CODE
ENDO-MATE TC2 Motor E346

• Motor Speed : 2,000-9,000 min-1

Torque Control
 Auto Reverse



#### Ti-Max X SERIES



**FX SERIES** 



#### 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.



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



#### the file. Release by moving awa



Gear Ratio	Optic	MODEL	ORDER CODE
10:1 Reduction	•	X35L	C620
10:1 Reduction	_	X35	C624

• Max Speed : 4,000 min-1 • 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



Gear Ratio	Optic	MODEL	ORDERCODE
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
_	VA970230V S1	Y1004160

• 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

MODEL



NSK Satelec®

611

#### Endodontics

E15D	Z217319	
MODEL	ORDERCODE	
For root canal		
Diamond coat		
E8D	Z217318	
MODEL	ORDERCODE	
<ul> <li>Water not requ</li> <li>For removal of</li> </ul>	uired f filling and foreign mater	r
E8	Z217308	
MODEL	ORDERCODE	
<ul> <li>Diamond coat</li> <li>For root canal</li> </ul>		
E7D	Z217317	
MODEL	ORDER CODE	
• Water not requ • For removal of	uired f filling and foreign mater	
E7	Z217307	
MODEL	ORDER CODE	
For lateral con		
• Water not requ		
MODEL	ORDER CODE <b>Z217306</b>	
NODE:		
• Water not requ • For lateral con		
E5	Z217305	
MODEL	ORDER CODE	
<ul> <li>Diamond coat</li> <li>For root canal enlargement</li> </ul>	ed cleaning and root canal	
E4D	Z217528	
MODEL	ORDER CODE	
<ul> <li>For root canal of foreign mat</li> </ul>	cleaning and removal erial	
E4	Z217428	

E11	Z2170	31		J <sub>120</sub>
	0.8 mm) • For re eeth • 120° Ang			Q.
MODEL	ORDER	CODE	NSK Satelec <sup>e</sup>	610
E12	Z2170	32		95°
	0.8 mm) • For ro teeth • 95° Ang			(A
MODEL		ORDERCC	DDE	
U files 331 • ISO 15 • Pac	<b>mm ISO 15</b> k of 6	Y900062	2	
U files 331 • ISO 20 • Pac	mm ISO 20 k of 6	Y900063	3	
U files 331 • ISO 25 • Pac	mm ISO 25 kof 6	Y900064	4	
U files 331 • ISO 30 • Pac	mm ISO 30 k of 6	Y90006	5	
U files 331 • ISO 35 • Pac	mm ISO 35 k of 6	Y90006	6	
Retrogra	de Endo			
MODEL	ORDER	CODE	NSK Satelec <sup>e</sup>	

ORDER CODE

MODEL	ORDER CODE	NSK Satelec <sup>®</sup>
E30RD	Z217212	
Diamond coated	For posterior teeth	(right angled)



• Diamond coated • For posterior teeth (left angled)

MODEL ORDER CODE NSK Satelec<sup>®</sup> E31D Z217210

 $\bullet$  Diamond coated  $\:\bullet$  For anterior and posterior teeth (70°)

MODEL ORDER CODE NSK Satelec<sup>®</sup> E32D Z217211

• Diamond coated  $\,$  • For anterior teeth (90  $^\circ)$ 

Washable in the thermodisinfector (Exclude Varios 970)





Autoclavable (Exclude Varios 970)

Endodontics V-Tip MODEL ORDER CODE NSK Satelec<sup>e</sup> V30 Z217030 • Includes E-Tip replacement wrench • V-Tip Holder • Tip is optional

8

430 431

V-S50 Y900169 • For root canal cleaning 17 mm • Pack of 3

ORDER CODE

MODEL

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

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

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

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

V-N51 Y900183 • 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

• Diamond coated • Pack of 3 • For root canal enlargement 23 mm

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

V-S53D Y900176

• Diamond coated • Pack of 3 • For root canal enlargement 32 mm



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## Air Scaler Ti-Max S970



Optic	MODEL	ORDER CODE
•	\$970L	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



Z252035

6 - AR 100

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

MODEL	ORDER CODE
V-U15	Y900177
V-file Irrigation 23 m     ISO 15 • Pack of 6	ım
V-U20	Y900178
<ul> <li>V-file Irrigation 23 m</li> <li>ISO 20</li> <li>Pack of 6</li> </ul>	ım
V-U25	Y900179
<ul> <li>V-file Irrigation 23 m</li> <li>ISO 25</li> <li>Pack of 6</li> </ul>	ım
V-U30	Y900180
V-file Irrigation 23 m     ISO 30 • Pack of 6	ım
V-U35	Y900181
V-file Irrigation 23 m	m

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

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

Heads fo	or Endodontic App	olication	Gear	
MODEL	ORDER CODE		MODEL	0
MP-Y	C547	問題:57 55	FC	С
	22.35) • Miniature Head • Push Button Chuck		• 1:1 Direct Driv	e
			MODEL	0
MODEL	ORDER CODE		F4R	с
МРА-Ү	C548	Overed" TITLE	• 4:1 Reduction	
<ul> <li>360° Rotation</li> </ul>	o2.35) • Miniature Head • Push Button Chuck • Apex locator (For long shank)			
			MODEL	0
			F10R	С
	ORDER CODE	9	• 10:1 Reduction	n
MPAS-Y	C882			
360° Rotation	92.35) • Miniature Head • Push Button Chuck • Apex locator (For short shank)		MODEL	0
Connection for			F16R	с
			• 16:1 Reduction	ı
MODEL	ORDER CODE	ar (1)		
NML-Y	C874	in the second se	MODEL	0
For Ni-Ti files (@ 360° Rotation	92.35) • Miniature Head • Latch type		F20R	с

ORDER CODE
C873



ORDER CODE C398

ORDER CODE C871



ORDER CODE

C399

• 20:1 Reduction

## **Spare Parts**

MODEL	PRODUCTS	ORDER CODE	MODEL	PRODUCTS	ORDER CODE	MODEL	PRODUCTS	ORDER CODE
Ni-MH Rechargeable Battery (Pack of 2)		Y900103	Power Cord	60	U439550	Connection Cord Clip		C876509
Battery Charger		U614	Cord for MPA / MPAS	$\bigcirc$	C876021			

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

MODEL	PRODUCTS	ORDER CODE	MODEL	PRODUCTS	ORDERCODE	MODEL	PRODUCTS	ORDER CODE
ENDO-MATE DT2 Unit		U1138001	Cord for MPA / MPAS	$\bigcirc$	C876021	Rechargeable Batteries	1	U421070
ENDO-MATE DT Adaptor		U480	Connection Cord Clip		C876509	F-Type Spray Nozzle	ŧ	Z256090
Handpiece Stand	ank.	Z095205						

iPexII					
MODEL	PRODUCTS	ORDER CODE	MODEL	PRODUCTS	ORDERCODE
iPexII File Clip		U1109351	iPexII Probe	Q	U1109352
iPexII Tester	620	U1109353	Lip Hook	$\langle$	U501513

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Specifications are subject to change without notice.