

ENDODONTICS

Create it 

ENDODONTICS



**NSK**

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# ENDO-MATE TC2 Cordless Endodontic Micromotor

## Smarter and 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

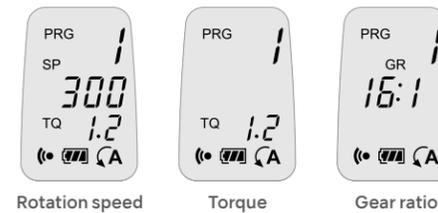
Cordless handpiece delivers freedom of movement. Lightweight, ergonomic design.

#### 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

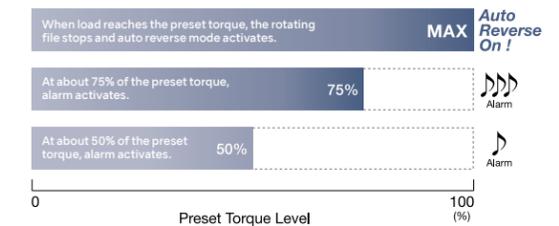
#### Safety for delicate endodontic treatment

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 too much burden on files, realizing less metal fatigue.



#### ENDO-MATE TC2 Complete Set

MODEL	ORDER CODE
ENDO-MATE TC2	Y1001036

**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 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 <sup>-1</sup> )
20 : 1	100-650
16 : 1	125-800
10 : 1	200-1,300
4 : 1	500-3,200
1 : 1	2,000-13,000

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

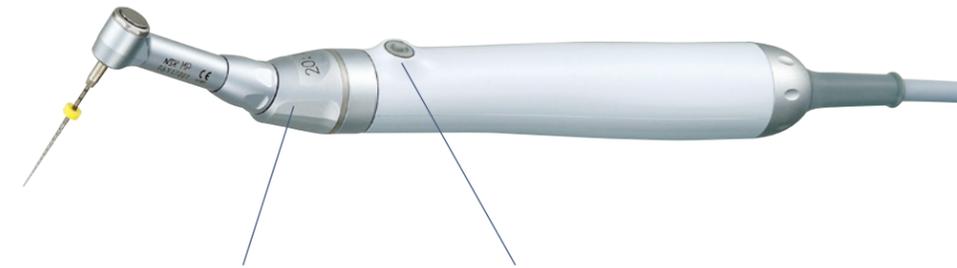
Up to 9 settings (speed and torque etc) can be programmed simply by pushing the memory function button. It's easy to switch between each preset program allowing work with all popular Ni-Ti file manufacturer's required procedures.

### Dual ON/OFF control

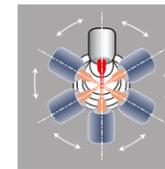


Motor ON/OFF operation is selected with handy switch located on the handpiece body or foot controller according to user's choice. (Foot controller is optional).

Lightweight, smart and 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.

### 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.

### 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 modes:

- Modes:
- [Continue automatically]  
The motor reverts to forward rotation after auto reverse has freed the file.
  - [Stop automatically]  
The motor stops after auto reverse has freed the file. Alternatively, the auto reverse function can be deactivated.

### ENDO-MATE DT Complete Set

MODEL	ORDER CODE
ENDO-MATE DT	Y141120

#### Contents

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

#### Specifications

- Power supply : AC120 V 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, 16:1, 10:1, 4:1, 1:1 geared heads)
- Charge / Continuous use : 5h / 2h (depending on workload)
- Dimensions : W 92 x D 148 x H 124 mm
- Weight : Unit 456 g / Motor handpiece & cord 92 g



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

## Heads for Endodontic Application

MODEL	ORDER CODE
<b>MP-Y</b>	<b>C547</b>

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



MODEL	ORDER CODE
<b>MPA-Y</b>	<b>C548</b>

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



MODEL	ORDER CODE
<b>MPAS-Y</b>	<b>C882</b>

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



MODEL	ORDER CODE
<b>FC</b>	<b>C873</b>

- 1:1 Direct Drive



MODEL	ORDER CODE
<b>F4R</b>	<b>C872</b>

- 4:1 Reduction



MODEL	ORDER CODE
<b>F10R</b>	<b>C398</b>

- 10:1 Reduction



MODEL	ORDER CODE
<b>F16R</b>	<b>C871</b>

- 16:1 Reduction



MODEL	ORDER CODE
<b>F20R</b>	<b>C399</b>

- 20:1 Reduction



## Motors



MODEL	ORDER CODE
<b>ENDO-MATE TC2 Motor</b>	<b>E346</b>

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



MODEL	ORDER CODE
<b>ENDO-MATE DT Motor &amp; Cord</b>	<b>E275</b>

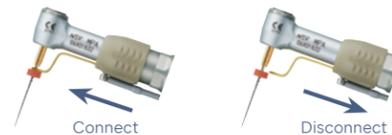
## Apex Locator Capability

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 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
<b>10:1 Reduction</b>	●	<b>X35L</b>	<b>C620</b>

- 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
<b>QF Adaptor</b>	<b>C877701</b>

## EX SERIES HEADS & HANDPIECES

### Heads for Endodontic Application

MODEL	ORDER CODE
<b>MP-Y</b>	<b>C547</b>

- Max Speed: 20,000 min<sup>-1</sup>
- Miniature Head
- Push Button Chuck



MODEL	ORDER CODE
<b>MPA-Y</b>	<b>C548</b>

- Max Speed: 20,000 min<sup>-1</sup>
- Miniature Head
- Connection for Apex locator (For long shank)
- Push Button Chuck



MODEL	ORDER CODE
<b>MPAS-Y</b>	<b>C882</b>

- Max Speed: 20,000 min<sup>-1</sup>
- Miniature Head
- Connection for Apex locator (For short shank)
- Push Button Chuck



MODEL	ORDER CODE
<b>TEQ-Y</b>	<b>C849</b>

- Max Speed: 4,000 min<sup>-1</sup>
- 80° Twist
- For engine files (ø2.35)
- Push Button Chuck



MODEL	ORDER CODE
<b>TEP-Y</b>	<b>C837001</b>

- Max Speed: 4,000 min<sup>-1</sup>
- 60° Twist
- For hand files
- Push Button Chuck



### Handpieces

MODEL	ORDER CODE
<b>EC</b>	<b>C100008</b>

MODEL	ORDER CODE
<b>ECM</b>	<b>C100007</b>

- 1:1 Direct Drive



MODEL	ORDER CODE
<b>ER4</b>	<b>C634</b>

- 4:1 Reduction



MODEL	ORDER CODE
<b>ER10</b>	<b>C635</b>

- 10:1 Reduction



MODEL	ORDER CODE
<b>ER16</b>	<b>C636</b>

- 16:1 Reduction



MODEL	ORDER CODE
<b>ER64</b>	<b>C637</b>

- 64:1 Reduction



# Spare Parts

## ENDO-MATE TC2

MODEL	PRODUCTS	ORDER CODE	MODEL	PRODUCTS	ORDER CODE	MODEL	PRODUCTS	ORDER CODE
	<b>Ni-MH Rechargeable Battery</b> (Pack of 2) 	<b>Y900103</b>		<b>Power Cord</b> 	<b>U438550</b>		<b>Connection Cord Clip</b> 	<b>C876509</b>
	<b>Battery Charger</b> 	<b>U614</b>		<b>Cord</b> for MPA / MPAS 	<b>C876021</b>			

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

## ENDO-MATE DT

MODEL	PRODUCTS	ORDER CODE	MODEL	PRODUCTS	ORDER CODE	MODEL	PRODUCTS	ORDER CODE
	<b>ENDO-MATE DT Unit</b> 	<b>U421002</b>		<b>Cord</b> for MPA / MPAS 	<b>C876021</b>		<b>Rechargeable Batteries</b> 	<b>U421070</b>
	<b>ENDO-MATE DT Adaptor</b> 	<b>U479001</b>		<b>Connection Cord Clip</b> 	<b>C876509</b>		<b>FC-15 Foot Control</b> 	<b>Z248</b>
	<b>Handpiece Stand</b> 	<b>Z095205</b>						

Manufacturer

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Specifications are subject to change without notice.