

ELEC



ELEC

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GREETINGS

MICRO-NX is a company that continues to connect laboratories with manufacturing plants. This is to ensure the standardization and specialization of quality and to build trust, dependability, and excellence within our industry.

MICRO-NX co.,Ltd. holds international patents in dental electric micromotors such as engines for implant procedures, electric micromotor systems, as well as various other sectors.

MICRO-NX also develops, designs, manufactures, and exports dental equipment based on a foundation of Swiss-type micromotor technology. MICRO-NX holds 30 intellectual property rights and patents.

MICRO-NX was also named the world's best dental handpiece manufacturer in 2011.

CORE TECHNOLOGY

- Developed ultra-high RPM(150,000 rpm) precision brushless motor
- Secured future growth power through development and production of customized micromotors
- Secured technology to manufacture parts for better precision
- Motors for the robot industry and the aerospace sector
- Possessed the technology used to manufacture ultraprecision dental implant instruments
- Localized electric motors for dental procedures and secured international patents
- Registered 20 patents for small Swiss-type BLDC motors
- Developed the world's first LED light-type electric motor with a water spray handpiece

MICRO-NX : OFFICIAL SITE

LET'S MAKE IT BETTER

WEBSITE
www.micronx.co.kr

Introduce MICRO-NX products, news, exhibitions participation information, catalogs, and user manuals which can be downloaded.



YouTube

Introduce MICRO-NX products and share information on how to use it.



1:1 real-time inquiry channel including product inquiry and after-sales information of MICRO-NX
※ PC and mobile users, the program needs to be installed



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ELEC ENGINE™

Implant Surgical Engine



KEY FACT

- Powerful torque up to 70N.cm(20:1 gear handpiece).
- Torque and RPM values can be checked in real time through the 5.5-inch large-screen LCD.
- When the load value is higher than the set torque value, a warning sound rings out for more than 3 seconds and operation of the item stops with a torque limiting function.
- Powerful optic motors to minimize shadow areas.
- If you press the RPM setting buttons ▲/▼ buttons at the same time for 2–3 seconds, the calibration function is enabled.
- By using memory, it is possible to store up to 9 different setting modes about torque and rpm values suitable for various users.



CLINICAL EXAMPLE



Program editing function

Programs that are not in use within the treatment programs in step 6 can be deleted or edited.



Press and hold the program button to disable. You can delete programs that are not in use.



Press and hold the rotation direction setting button to delete. The program can also be repaired.

Thread Cutting Function

Thread cutting is available in the Tapping mode and it includes 6 basic programs.

The thread cutter function supports surgery when it taps implants into dense(D1) bones.



Select tapping mode & Set Torque



When reach preset torque



It automatically reverses



SPECIFICATION



Micromotor

Model: ISM-B70L
Max.Speed: 40,000rpm
Max.Torque: 70N.cm(20:1)
Demension: Ø24xL100mm
Weight: 156g
LED: Fiber optic

Controller

Model: ISE-270M
Power supply voltage: AC 110~240V
Frequency: 50/60Hz
Power consumption: 150VA
Max.coolant flow rate: 110ml/min
Fuse: 2x250V-T2.0AH
Dimension: W285 x D250 x H120mm

Foot pedal

Model: FC-V2
Speed control: Variable
Foot control function:
● Coolant
● Program
● Clockwise / Counter clockwise

ÈLEC DRIVER™ 35^{N·cm} / 60^{rpm}

Electric Wireless Torque Driver



KEY FACT

- Prosthetic screw connection is all in one
- Easy use when the orthodontic mini screw is inserted
- Accurate and quick setup
- TCS(Torque calibration system) Function



SPECIFICATION

Handpiece

Model: TD-C60
 RPM range: 15/30/45/60rpm
 Torque stages: 5/10/15/20/25/30/35N.cm
 Battery type: Li-Polymer
 Battery capacity: 7.4V DC/ 360mA
 Dimension: W30 x D28 x H200mm
 Weight: 200g
 Screw driver: shank Ø2.35(CA type)

Charging Cradle

Model: TD-C12MG
 Input: 12V DC/ 0.5A
 Output: 8.4V DC/ 360mA
 Charging time: Approx. 90min
 Dimension: W105 x D111 x H51mm
 Weight: 80g
 Adaptor Input: 100~240VAC, 0.3A
 Adaptor Output: 12VDC, 0.5A



ÉLEC ENDOIT™

Electric Wireless Endodontic Handpiece



KEY FACT

- Torque range : 0.5 ~ 4.0 N.cm
- RPM range : 120 ~ 500rpm
- Reciprocating Mode
- Torque load protection mode
- 8 memory programs



Reciprocating



SPECIFICATION

Handpiece

Model: EH-C500
RPM range: 120~500rpm
Torque range: 0.5~4.0N.cm(0.5N.cm step)
Battery type: Li-Ploymer
Battery capacity: 7.4V DC/ 360mA
Dimension: W27 x D23 x H157mm
Weight: 148g
Screw driver: shank \varnothing 2.35(CA type)

Charging Cradle

Model: EH-CS12
Input: 12V DC/ 0.5A
Output: 8.4V DC/ 360mA
Charging time: Approx. 90min
Dimension: W105 x D111 x H51mm
Weight: 80g
Adaptor Input: 100~240VAC, 0.3A
Adaptor Output: 12VDC, 0.5A

ÉLECTM 2mini

Clinical Electric Micromotor



KEY FACT

- The smallest and most powerful electric micromotor for dental prosthetics.
- The rotation speed is adjustable from 1,000rpm(20:1 deceleration angle) to 200,000rpm(1:5 incresement angle).
- The world's first direct cooling-type micromotor PCT patented.
- Powerful optic motors to minimize shadow areas.
- By using M1 ~ M3, 3memories can be saved which allows users to instantly save and load their own personal settings.
- Sample installation for Unit Chairs(It can be installed in all types of unit chair).



CLINICAL EXAMPLE



Tooth prep

It can be made faster and smoother than a typical high-speed air turbine handpiece.



Dental prosthesis removal

Powerful prostheses such as zirconia, amalgam, and PFM can be easily removed.



Margin of the prosthesis

It can produce high power even at low speed, so you can complete the optimal prosthesis with precise margin molding.



Other Operations

It is fast and efficient in precision drilling work such as implant stent production.



SPECIFICATION

Premium Mobile Type



Micromotor(mini)

Model: ELM-B40S
Max.Speed: 40,000rpm
Max.Torque: 3N.cm
Max.Current: 5A
Dimension: $\varnothing 20 \times L63$ mm
Weight: 68g
LED: Fiber optic
Water: Internal water

Controller

Model: EL-M40S
Input: 100-240V, 1.4-0.7A,
Frequency: 47-63Hz
Power consumption: 105VA(max.)
Dimension: W70 x D95 x H35mm
Speed range: 100 ~ 200,000rpm
Class of protection: IPX0

Handpiece

Model: CA100L / SA100L
Max.Speed: 40,000rpm
Ratio: 1:1
Material: Stainless steel
LED: Fiber optic
Water: Internal water



SPECIFICATION

Premium Panel Type



Micromotor(mini)

Model: ELM-B40S
 Max.Speed: 40,000rpm
 Max.Torque: 3N.cm
 Max.Current: 5A
 Dimension: Ø20 x L63mm
 Weight: 68g
 LED: Fiber optic
 Water: Internal water

Panel

Model: ELCP-BT
 Dimension: W113 x D12 x H44(mm)

Built-in board

Model: EMT-B40K
 Input: AV24V, 50/60Hz
 Power consumption: 100VA(Max.)
 Dimension: W70 x D95 x H35(mm)

Handpiece

Model: CA100L/ SA100L
 Max.Speed: 40,000rpm
 Ratio: 1:1
 Material: Stainless steel
 LED: Fiber optic
 Water: Internal water

Standard Panel Type



Micromotor

Model: ELM-B40I
 Max.Speed: 40,000rpm
 Max.Torque: 3N.cm
 Max.Current: 5A
 Dimension: Ø20 x L63mm
 Weight: 70g
 LED: No
 Water: Internal water

Panel

Model: ELCP-BT
 Dimension: W113 x D12 x H44(mm)

Built-in board

Model: EMT-B40K
 Input: AV24V, 50/60Hz
 Power consumption: 100VA(Max.)
 Dimension: W70 x D95 x H35mm

Handpiece

Model: CA100R/ SA100R
 Max.Speed: 40,000rpm
 Ratio: 1:1
 Material: Stainless steel
 LED: No
 Water: Internal water



SPECIFICATION

Basic Panel Type



Micromotor

Model: ELM-B40M
 Max.Speed: 40,000rpm
 Max.Torque: 3N.cm
 Max.Current: 5A
 Dimension: Ø20 x L63mm
 Weight: 70g
 LED: No
 Water: No

Panel

Model: ELCP-BT
 Dimension: W113 x D12 x H44(mm)

Built-in board

Model: EMT-B40K
 Input: AV24V, 50/60Hz
 Power consumption: 100VA(Max.)
 Dimension: W70 x D95 x H35mm

Handpiece

Model: CA100/ SA100
 Max.Speed: 40,000rpm
 Ratio: 1:1
 Material: Stainless steel
 LED: No
 Water: No

Brush NXOP-100E

Brush NXHW-100E



Micromotor

Model: NXOP-100E
 Max.Speed: 40,000rpm
 Max.Torque: 3.1N.cm
 Type: Carbon brush
 Weight: 105g
 LED: Fiber optic
 Water: YES
 Control board: EMT-D35K



Connect a 6-hole tubing to a dental unit



Micromotor

Model: NXHW-100E
 Max.Speed: 40,000rpm
 Max.Torque: 3.1N.cm
 Type: Carbon brush
 Weight: 105g
 LED: No
 Water: YES
 Control board: EMT-D35K



ELEC ANGLE SERIES™

Dental Handpiece Series



1:1
RATIO

Low Speed Contra Angle Series

Accurate and stable rotation of up to 40,000rpm and an internal water spray improves work convenience.



Optic model

Model: CA100L
Ratio: 1:1
Max.Speed: 40,000rpm
Dimension: Ø20 x L95mm
Weight: 81g
Material: Stainless steel
LED: Fiber optic
Water: Internal water
Bur: CA bur(Ø2.35)



Non optic model

Model: CA100R
Ratio: 1:1
Max.Speed: 40,000rpm
Dimension: Ø20 x L95mm
Weight: 81g
Material: Stainless steel
LED: No
Water: Internal water
Bur: CA bur(Ø2.35)

1:1
RATIO

Low Speed Straight Handpiece Series

Accurate and stable rotation up to 40,000rpm and an internal water spray improves work convenience.



Optic model

Model: SA100L
Ratio: 1:1
Max.Speed: 40,000rpm
Dimension: Ø20 x L80mm
Weight: 77g
Material: Stainless steel
LED: Fiber optic
Water: Internal water
Bur: HP bur(Ø2,35)



Non optic model

Model: SA100R
Ratio: 1:1
Max.Speed: 40,000rpm
Dimension: Ø20 x L80mm
Weight: 77g
Material: Stainless steel
LED: No
Water: Internal water
Bur: HP bur(Ø2,35)

20:1
RATIO

Implant Surgical Angle Series

With a powerful torque up to 70N.cm and one-touch disassembly and assembly, maintenance such as cleaning and sterilization is easy.



Optic model

Model: SG200L
Ratio: 20:1
Max.Torque: 70N.cm
Dimension: Ø20 x L95mm
Weight: 73g
Material: Stainless steel
LED: Fiber optic
Bur: CA bur(Ø2,35)



Non optic model

Model: SG200
Ratio: 20:1
Max.Torque: 70N.cm
Dimension: Ø20 x L95mm
Weight: 73g
Material: Stainless steel
LED: No
Bur: CA bur(Ø2,35)

16:1
RATIO

Endodontic Angle Series

It is possible to disassemble and assemble with one touch, so maintenance such as cleaning and sterilization is easy.



Optic model

Model: CA160L
Ratio: 16:1
Max.Speed: 2,500rpm
Dimension: Ø20 x L95mm
Weight: 81g
Material: Stainless steel
LED: Fiber optic
Bur: CA bur(Ø2,35)



Non optic model

Model: CA160
Ratio: 16:1
Max.Speed: 2,500rpm
Dimension: Ø20 x L95mm
Weight: 81g
Material: Stainless steel
LED: No
Bur: CA bur(Ø2,35)

ÉLEC EXTREME™

Electric High Speed

Zirconia Trimming Motor



KEY FACT

- The electric motor can reach up to 150,000rpm. It also boasts outstanding efficiency in processing zirconia ceramic.
- Cartridge-free, electric motor-based product that eliminates the need for periodic cartridge replacement.
- The handpiece achieves maximum efficiency through its LED and water spray feature that prevents cracks.
- When the handpiece turns, air is released from its head to prevent dust from penetrating the handpiece.
- The water spray on/off feature enables both wet and dry methods of use.
- Two stage detachable design(Separate controllers are available for independent controllers).



CLINICAL EXAMPLE



Delicate Groove

High power can be generated even at low speeds. Optimal prosthesis can be completed by margin molding.



Crack-Prevention

Water spray function that controls the amount of injection and prevents microcracks of zirconia caused by high temperatures.



Superior Work Speed

It's Possible to process 4 times more zirconia prosthesis in the same time with the same number.



Easy Handling for a Laboratory

Easily workable to reduce stress during usage.



SPECIFICATION



Controller

Model: ML-A150
Power supply voltage: 110-120V/220-240V
Frequency: 50/60Hz
Power consumption: 80VA
Fuse: 250V-T2.0Ah
Weight: 3.65kg
Dimension: W115 x D210 x H270mm

Handpiece

Model: BL-150K
Type: Brushless type
Max.Speed: 150,000rpm
Max.Torque: 4.0Ncm
Dimension: Ø25 x L101mm
Bur: FG bur Ø1.6mm
with Water Spray & LED Light

Dental Laboratory Handpiece



KEY FACT

- Provides handpieces with various specifications to suit the customer's work use (brushless type, brush type).
- Provides stable and high torque output in all rotation ranges.
- The ergonomic design provides a stable grip during precision work.
- Reduces hand fatigue and improves balance through a lightweight and compact design.
- The micro motor is completely sealed to minimize noise and vibration.

BRUSHLESS TYPE



BL-T&K

Max.50,000rpm brushless type motor

Controller

Model: BL-T&K
Input: 120V/ 230V
Output: DC 0~30V
Frequency: 50/60Hz
Max.current: 3A
Weight: 2,9kg
Dimension: W83xD290xH240mm

Handpiece

Model: BL-800C
Type: Brushless type
Max.Speed: 50,000rpm
Max.Torque: 7.0N.cm
Dimension: Ø25 x L158mm
Bur: Ø2,35mm



BL-F(D)

Max.50,000rpm brushless type motor

Controller

Model: BL-F(D)
Input: 120V/ 230V
Output: DC 0~30V
Frequency: 50/60Hz
Max.current: 3A
Weight: 2,5kg
Dimension: W125xD190xH120mm

Handpiece

Model: BL-800C
Type: Brushless type
Max.Speed: 50,000rpm
Max.Torque: 7.0N.cm
Dimension: Ø25 x L158mm
Bur: Ø2,35mm



BL-F

Max.50,000rpm brushless type motor

Controller

Model: BL-F
Input: 120V/ 230V
Output: DC 0~30V
Frequency: 50/60Hz
Max.current: 3A
Weight: 3.1kg
Dimension: W225xD305xH100mm

Handpiece

Model: BL-800C
Type: Brushless type
Max.Speed: 50,000rpm
Max.Torque: 7.0N.cm
Dimension: Ø25 x L158mm
Bur: Ø2,35mm

CARBON BRUSH TYPE



300D

Carbon brush type motor

Controller

Model: 300D
Input: 120V/ 220, 230V
Output: DC 0~30V
Frequency: 50/60Hz
Max.current: 2A
Weight: 2.3kg
Dimension: W81xD222xH166mm

Handpiece

Model: 170S
Type: Carbon brush type
Weight: 200g
Dimension: Ø25 x L156mm
Bur: Ø2.35mm



300B

Carbon brush type motor

Controller

Model: 300B
Input: 120V/ 220, 230V
Output: DC 0~30V
Frequency: 50/60Hz
Max.current: 2A
Weight: 2.3kg
Dimension: W168xD168xH75mm

Handpiece

Model: 170S
Type: Carbon brush type
Weight: 200g
Dimension: Ø25 x L156mm
Bur: Ø2.35mm



New NX-201N

Carbon brush type motor

Controller

Model: New NX-201N
Input: 120V/ 220, 230V
Output: DC 0~30V
Frequency: 50/60Hz
Max.current: 2A
Weight: 1.3kg
Dimension: W112xD190xH84mm

Handpiece

Model: 170S
Type: Carbon brush type
Weight: 200g
Dimension: Ø25 x L156mm
Bur: Ø2.35mm

RECHARGEABLE & PORTABLE TYPE



M1

Max.25,000rpm brush type motor

Controller

Model: M1
Input: AC 100V ~ AC240V
Output: DC 14.8V
Frequency: 50/60Hz
Max.current: 1.2A
Weight: 185g
Dimension: W67xD132xH30mm

Handpiece

Model: M110
Type: Carbon brush type
Max.Speed: 25,000rpm
Weight: 120g
Dimension: Ø25 x L136mm
Bur: Ø2.35mm



M1+

Max.25,000rpm brush type motor

Controller

Model: M1+
Input: AC 100V ~ AC240V
Output: DC 14.8V
Frequency: 50/60Hz
Max.current: 1.2A
Weight: 185g
Dimension: W67xD132xH30mm

Handpiece

Model: M110
Type: Carbon brush type
Max.Speed: 25,000rpm
Weight: 120g
Dimension: Ø25 x L136mm
Bur: Ø2.35mm



M4

Max.25,000rpm brush type motor

Controller

Model: M4
Input: AC 100V ~ AC240V
Output: DC 14.8V
Frequency: 50/60Hz
Max.current: 1.2A
Weight: 185g
Dimension: W69xD130xH30mm

Handpiece

Model: M110
Type: Carbon brush type
Max.Speed: 25,000rpm
Weight: 120g
Dimension: Ø25 x L136mm
Bur: Ø2.35mm



LET'S MAKE IT BETTER

For standardization and specialization of quality, research institutes and factories communicate with each other continuously.

We are also one step ahead in quality and the establishment of trust and value. MICRO-NX Co.,Ltd. always strives to become a creative company.

MICRO NX
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