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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





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





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













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### CONTENTS

### DENTAL

DENTAL		
Implant surgical engine ·	······································	Зр
Electric wireless torque d	river ······	5р
Electric wireless endodontic handpiece ·····		6р
Clinical micromotor ·····		7р
Dental Handpiece Series		11p
LABORATORY		
Electric high speed zirconia trimming motor ······		13p
Brushless type motor	•	16p
Carbon brush motor	•	17p
Portable type motor		18p



# **Implant Surgical Engine**





- · 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.





### **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



### **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 $\sim$ 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

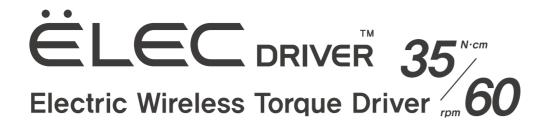
Model: FC-V2

Speed control: Variable Foot control function:

Coolant

Program

Clockwise / Counter clockwise









### Handpiece

Model: TD-C60

RPM range: 15/30/45/60rpm

Torque stages: 5/10/15/20/25/30/35N.cm

Battery type: Li-Ploymer

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



# **Electric Wireless Endodontic Handpiece**







### Handpiece

Model: EH-C500

RPM range:  $120\sim500 \text{rpm}$ 

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 Ø2.35(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



# **Clinical Electric Micromotor**





- · 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).
- $\cdot$  The world's first direct cooling-type micromotor PCT patented.
- · Powerful optic motors to minimize shadow areas.
- $\cdot$  By using M1  $\sim$  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 tyrvine handpoece.



### Margin of the prosthesis

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



Dental prosthesis removal

Powerful prostheses such as zirconia, amalgam, and PFM can ve sasily removed.



### **Other Operations**

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



## Premium Mobile 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

### 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  $\sim$  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



### Premium Panel Type





# 46mm

### 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**







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

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



### Basic Panel Type





# 58mm

### **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







Connect a 6-hole tubing to a dental unit

### **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







### **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



# **Dental Handpiece Series**





### 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)



### 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)



### **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)



### **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( Ø 2.35)



### **Electric High Speed**

# **Zirconia Trimming Motor**





- · 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.



### **Superior Work Speed**

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



### Crack-Prevention

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



### Easy Handling for a Laboratory

Easily workable to reduce stress during usage.





### 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**





- · 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  $\sim$  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  $\sim$  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  $\sim$  AC240V

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.

# MICRONX LET'S MAKE IT BETTER

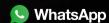
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