



How to  
use

# How to operate Emax EVolution

Foot pedal

Control unit

Motor handpiece



Ultra-precision brushless  
micro-grinder

Emax Emax EVolution  
**EVolution**

# ① Names of parts

## Forward/reverse select switch

The direction of motor rotation can be selected.



▶ Forward rotation (clockwise)



▶ Reverse rotation (counterclockwise)



Motor rotation speed display

**40** = 40,000 rotations/min

Speed control volume

The rotation speed can be easily adjusted.

LOAD meter

Displays the load status of the motor.

Motor connector A

Power supply switch

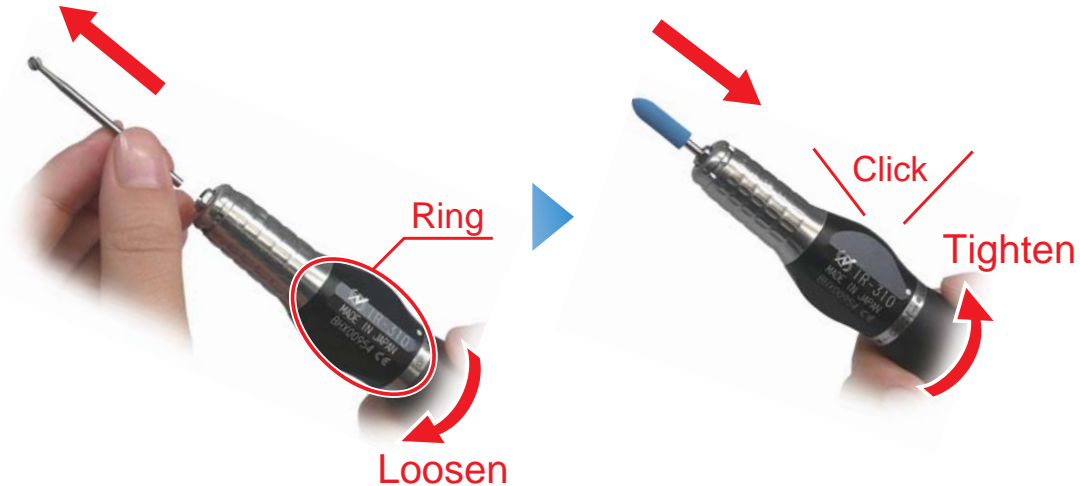
Motor connector B

## Motor switch /

When  /  is turned ON/OFF, the motor connected to motor connector A/B will rotate/stop. \*  and  cannot be operated simultaneously.

## ② How to change tools

1. Loosen the ring and remove the tool.
2. Replace the tool and tighten the ring until a click sound is produced.



### ③ How to start the control unit

1. Turn speed control volume completely to the left.
2. Switch ON the power supply.



\* Please make sure that the speed control display is set to .

## ④ How to start/stop the motor and adjust the rotation speed

\* When motor connector A is connected to the motor.


### — To start —

1. Press  or the motor smart switch. The motor starts to rotate.



Motor smart switch

### — To stop —

2. When the motor is rotating, press  or the motor smart switch. The motor stops rotating.

### — To adjust the rotation speed —

1. Turn the speed control volume to adjust the rotation speed.



# 5 Convenient functions

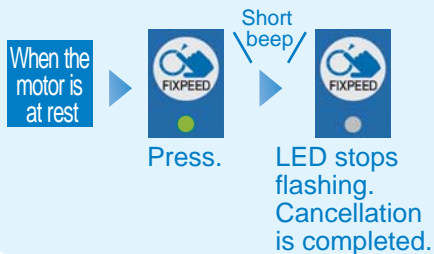
## —FIXPEED function—

FIXPEED allows everyone to set the speed of the motor in advance. The speed that is frequently used can be easily set at the touch of a button.

### How to set



### How to cancel a setting



**NAKANISHI INC.** 

[www.nakanishi-inc.com](http://www.nakanishi-inc.com)

700 Shimohinata, Kanuma, Tochigi 322-8666, Japan

Contents are subject to change without notice.

**NSK America Corp**

[www.nskamericacorp.com](http://www.nskamericacorp.com)

1800 Global Parkway, Hoffman Estates, IL 60192, USA

ver.190404

Excellent operability that makes the best use of advanced high performance

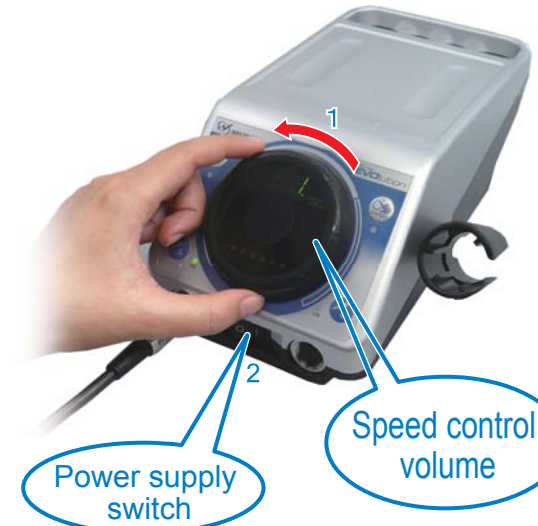
- ① 1. Loosen the ring and remove the tool.  
 2. Replace the tool and tighten the ring until a click sound is produced.



- ② Insert the motor cord plug and the power supply cord.



- ③ 1. Turn speed control volume completely to the left.  
 2. Switch ON the power supply.



\* Please make sure that the speed control display is set to **1**.

- ④ Press the motor ON/OFF switch or the smart switch. The motor starts to rotate.



- ⑤ Adjust the rotation speed using the speed control volume.

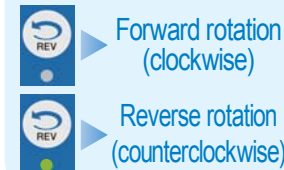


\* The motor stops when the motor ON/OFF switch or the smart switch is pressed again.

**Names of parts**

**Forward/reverse select switch**

The direction of motor rotation can be selected.



Motor rotation speed display  
**40** = 40,000 rotations/min

Speed control volume  
 The rotation speed can be easily adjusted.

LOAD meter  
 Displays the load status of the motor.

Motor connector A

Power supply switch

Motor connector B

**Motor switch A/B**

When **A**/**B** is turned ON/OFF, the motor connected to motor connector A/B will rotate/stop. \* **A** and **B** cannot be operated simultaneously.

**Specifications (Ring Standard Emax EVOLution Standard Set)**

**Control unit**

- Model: NE249
- Weight: 2.3 kg
- Power source: AC120V, 50/60Hz, 41VA / AC230V, 50/60Hz, 41VA
- Dimensions: W130 × D254 × H97 (mm)

**Handpiece**

- Model: ENK-410S
- Motor Attachment: IR-310
- Max power: 73 W
- Max torque: 4.3 cN·m
- Weight: 182 g (w/o Cord)
- Speed range: 1,000 - 40,000 min<sup>-1</sup>