

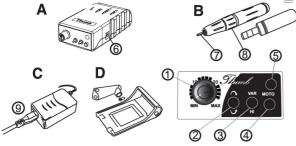
# 1.Features

- \* 30,000 RPM
- Rechargeable
- \* Up to 8-hour battery life \* 5-hour battery full charge \* Variable speed control
- \* Light weight handpiece
- \* Chuck Locking
- Easy bit change Uses standard 2.35mm (3/32") bits
- High torque
- Quiet operation
- No vibration

### www.saeshin.com / sales@saeshin.com

Read all instructions before operating Keep this user's manual for future reference.

# 2. Product Components & Part Name



- A. Contorller
- B. Handpiece / E-type motor
- D. controller bag (holder) Optional
- Speed Control Knob
   Forward / Reverse Selector
- VAR / HI Selector
- Handpiece Connector 5) On / Charge lamp
- 6) Battery Charger Connector Bit
- Collet Chuck Handle (bit open & lock)
  9) Power cord

# 3. Setting & Operation

- (1) Charging the battery (Approx. 5 hours to full charge)
  - a. Connect the adaptor DC plug in Power Connector on the side of the controller.
  - Connect the AC power adaptor to outlet (wall socket).

  - When the lamp changes red to green, the charge is completed. Disconnect AC Adaptor from Controller after charging is completed. ( Lamp color : Red --> Green )



## (The battery could overheat in this case)

e. While operating the handpiece, the battery can be charged connecting the power cord

## (2) Operating of Handpiece

- a. Connect Handpiece Cord to the jack marked as "MOTOR"
- a. Comed handplece Cord to the jack marked as MOTOR (DC Motor Connector) in the front of the controller.
  b. Turn the Speed Control Knob to start the handpiece. Turn it until click sound to power off and to stop the handpiece.
  c. Turn the Forward/Reverse Selector to "FWD" to run the motor in the forward direction, or to "REV" to run it in the
- Reverse direction.
- d. Handpiece Motor speed can be varied between 0 and 30,000 rpm by the Speed Control Knob

### (3) Insertion and removal of bits

Turn the handle in the counter-clock direction until the click sound to open the chuck.

The chuck is opened and the bit is removed.

Turn the handle in clock direction until the end and the chuck is closed and the bit is locked.

# Caution

- Do not work in a dangerous place. Do not use the product in humid
- Transport and storage conditions:

Temperature: -20 ~ 60°C

Humidity: 0 ~ 90% RH

Atmospheric Pressure: 500hPa to 1060hPa

- Use the bit conforming to ISO standards
- Be careful not to drop the handpiece as it may be damaged or broken. In case that it is dropped, check if the bit is bent or if any excessive heat is generated operating slowly and carefully
- Do not turn on the power of controller while the collet of handpiece open. short circuit of the handpiece may be caused
- Make sure that the power is off before putting the power plug in the socket in order to avoid an expected injury due to sudden start.
- Keep the handpiece with bits mounted.
- Do not put handpiece down before it stops completely
- Be sure to pull out the power cord before moving the control box.
- Use the specified voltage
- Use accessories suitable for this product
- Keep the workplace clean. Debris may cause an accident

# 4. Suggestion for maintenance

- Keep the place around in handpiece clean
- Remove dust on handpiece wiping with isopropyl alcohol and avoid

Do not apply the oil to the goods and do not clean with water. The grease inside of the bearing could melt away due to the oil.

- Air cleaning is acceptable but air pressure may affect the handpice or

# **▲** Warranty

- -warranty does not include misuse or normal wear of consumable parts.





- The battery used in the control unit is a Nickel-Hydrogen type, and recycled. -In case of contact the liquid to clothing or body skin or eyes, wash immediately.
- -in case of shortening the operating time or the speed becomes slower, it may means the replacement of the battery.
  -Follow the government or local law for battery disposal.

-The battery used in the control unit is a Nickel-Hydrogen type, and is a wearable component. The battery life is limited. Battery capacity decreases little by little as you use it more and more, and as time passes. Its life varies depending on storage, operating conditions, and environment. When not in use for a porlonged period, the battery might deteriorate. Under normal use of the unit and battery charged once a day, it should last 1 year. When the battery operating time seems to have been considerably shortened, a probable cause is that the battery has reached the end of its life. For replace it, send to the dealer.

"This equipment has been tested and found to comply with the limits for medical devices in IEC/EN 60601-1-2:2005.

These limits are designed to provide reasonable protection against harmful iterference in a typical medical installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to other devices in the vicinity. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to other devices, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving device.
- Increase the separation between the equipment.
- Connect the equipment into an outlet on a circuit different from that to which the other device(s) are connected.
- -Consult the manufacturer or field service technician for help."

## Warranty

- -This equipment and accessories are to be disposed of safely after the life span of them and national regulation must be observed.
- -This equipment and accessories are to be disposed according to the instructions given by national regulations or ask a specialized waste service company to dispose of it.
- -Follow local governing ordinances and recycling plans regarding disposal or recycling of device components



This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmental y safe recycling.

Business users should contact their supplier and check the terms and conditions of the

This product should not be mixed with other commercial wastes for disposal.

- ◆Type of protection against electric shock: Class I equipment
- Degree of protection against electric shock:
- Type BF Applied Part Classification according to the degree of protection against ingress of water as detailed in the current edition of IEC 529:

IPX0, ordinary equipment

- This equipment is not suitable for use in the presence of flammable anesthetics or oxygen
- Mode of operation: Continuous operation with intermittent loading ("Loading time: max. 2 minutes; Resting time: min. 15 minutes)

### Trouble shooting

### (1) Motor

Troubles	Trouble Detail	Cause	Remedy
Motor fails to run.	Control unit fully charged. but motor fails to run.	<ul><li>(1) Loose connection motor plug with jack in control unit.</li><li>(2) Defect in motorcord.</li><li>(3) Trouble in motor.</li></ul>	Correctly plug the Motor cord.  Replace motor cord.  Replace Carbon brushes.  Check motor and repair if the motor is trobuled.
	Motor stops in 2-3 seconds.	Battery has not been charged.	Charge battery.
	Motor runs with insufficient power and stop in a few minutes.	Worn battery.	Replace battery.

### (1) Battery

Troubles	Trouble Detail	Cause	Remedy
	Battery seemed to have been fully charged, but when used, motor fails to run, or motor runs but stops in a few minutes.	◆Power cord is not connected to the power supply(AC power adaptor)	◆Check at power supply.
		◆Speed Control Knob is at OFF.	◆Set Speed Control Knob at ON.
Battery recharging fail.		◆DC plug is not connected or loosely connected to the control unit.	◆Check if DC plug is correctly connected to the control unit.
		◆Blown fuse in AC power adaptor.	◆Check and replace AC power adaptor.
		◆Loose connection at Power cord.	◆Check for DC plug.
		◆Defect in Power cord.	◆Replace Power cord.
		◆Speed Control Knob malfunctions.	◆Replace Speed Control Knob.
		*saeshin-thumb AC power adaptor is not used.	◆Use only saeshin- thumb AC power adaptor.

\* In case any malfunction is found, consult with the dealer the unit was purchased from.

Caution

# **Specifications**

### AC power adaptor

Input: 100-240V 50/60Hz 1.0A MAX Output: 30V .... 0~1,000mA

### Contorller

Input: 30V .... 0~1,000mA Output: 24V

Size : 65(W) x 129(D) x 36(H) Weight: 388a

### Handpiece

Rotation (r.p.m): 0~20,000rpm Dimensions:  $\phi$ 19 x L135(mm) Weight: 172g

# E-type motor

Rotation (r.p.m): 0~30,000rpm Dimensions:  $\phi20 \times L100(mm)$ 





This product should not be mixed with other commercial wastes for disposal

SAESHIN PRECISION CO., LTD.

Factory

EC REP

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