

USER MANUAL




B135 / B135N

● TABLE OF CONTENTS

- INTRODUCTION
- USER GUIDELINES
- PRODUCT FEATURES & ADVANTAGES
- PRODUCT COMPONENTS
- PART NAME OF CONTROL BOX
- BUTTONS ON THE OPERATION PANEL
- CONNECTION OF EACH PART
- OPERATION PROCESS
- MAINTENANCE OF THE PRODUCT
- PRODUCT SPECIFICATION
- WARRANTY
- SYMBOL

● INTRODUCTION

Make sure to read this user manual before using.
This user manual is to assure proper installation and use.
Pay attention to read this manual in order to making the best use of this product and to assure the prolonged lifespan before using.

Specially, pay attention the contents with marks such as , , and .

<Classification of equipment>

- Type of protection against electric shock
- Control Box: Class II appliance
- Not suitable product in the atmosphere that exist flammable anesthetic mixture with air or with oxygen.
- Classification according to mode of operation: Intermittent operation

Design and specification of the product can be subject to be changed without notice for improving the quality.

● USER GUIDELINES

WARNING

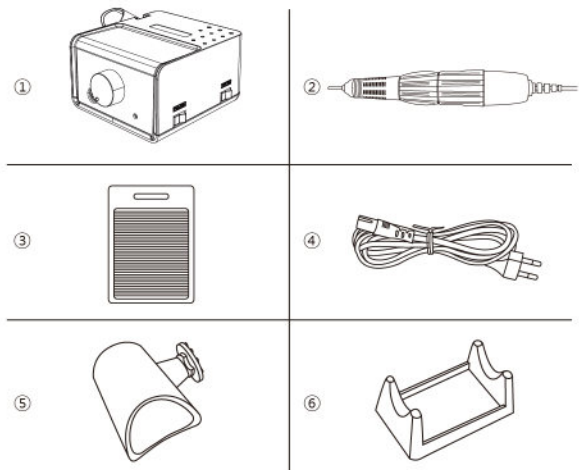
- Do not use as condition the collet chuck is opened. It causes product's malfunction.
- Do not open the collet chuck while the handpiece is operated.
- Check the power switch before connecting the power cord in order to decrease the danger by sudden operation of product.
- Connect the power cord after setting speed control dial at the '0' place (the end of counterclockwise).
- Circuit breaker is provided to protect the motor. It is actuated when an overload occurs which the motor cannot stand. Always use this product within allowable load range.
- Store the product as condition a bur is fixed at the collet chuck.
- Change the rotation direction after stopped the handpiece.
- Do not use the damaged bur. It causes product's malfunction and accident.
- Do not work in a dangerous place. Do not use the control box in a humid place.
- Do not disassemble or modify the product as one pleases. It causes accident.
- Use the compatible handpiece and foot controller with control box.
- Check the problems such as excessive vibration of bur, defective speed control and etc.
- Handle the speed control dial smoothly.
- Replace the bur after stopped the handpiece.
- Be careful not to drop the product as it may be damaged or broken. In case that it is dropped, check if the bur is bent or that any overheat is generated while carefully operating it.
- If any problem occurs in product, use after repairing.
- Do not put the handpiece down before it stops completely.
- Use the appropriate voltage for the product.
- Use the appropriate accessories for the product.
- Wear proper protective clothes and equipment, including a dust mask and safety goggles.
- Keep the workplace clean. Debris may cause an accident.
- Do not touch the power cord and handpiece power cord with wet hand.
- Do not bend or press the power cord excessively. It causes fire or electric shock.
- Do not place the product nearby superheater, candle, lighter and etc. It causes fire.
- If use the extension cord, do not use many electric device at one time. It causes fire or electric shock.
- "This appliance can be used by children aged from 8 years and above and person with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in safety way and understand the hazards involved." "Children shall not play with the appliance."
- "Cleaning and user maintenance shall not be made by children without supervision"
- Follow the user manual by manufacturer of bur to use bur.
- Keep the recommended speed limit by manufacturer of bur to use bur.
- If exceed the speed limit, it might cause an accident.
- Appliance is only to be used with the unit provided.

● PRODUCT FEATURES & ADVANTAGES

- Hand/Foot Control Type
- Handpiece of DC Type
- Max. 35,000 / 40,000 rpm
- Max. 3 Ncm
- Rotation Direction Select Function (Forward/Reverse)
- Use the standard Bur $\Phi 2.35\text{mm}$
- Collet Chuck Type
- Overload Protection Function

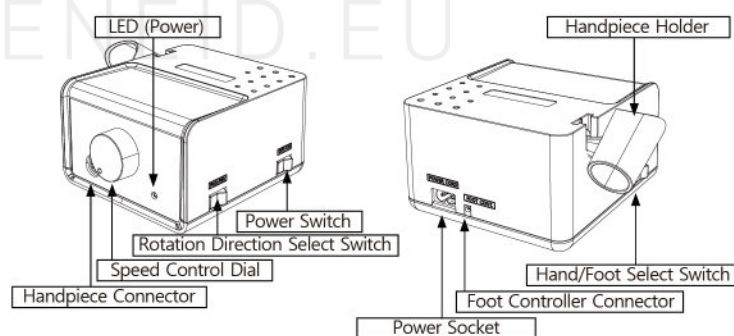
● PRODUCT COMPONENTS

* Please check all components are included.



No.	Component
1	Control Box (B135 / B135N)
2	Handpiece
3	Foot Controller (on/off)
4	Power Cord
5	Handpiece Holder (OPTION)
6	Handpiece Stand (OPTION)

● PART NAME OF CONTROL BOX



● BUTTONS ON THE OPERATION PANEL

■ Power Switch:

This switch is used to turn on the power or off.

- I: Power On
- O: Power Off

■ Speed Control Dial:

This dial is used to control RPM. Turn the clockwise, RPM is increased. Turn the reverse, RPM is decreased.

■ Rotation Direction Select Switch:

This switch is used to select rotation direction to the clockwise or reverse.

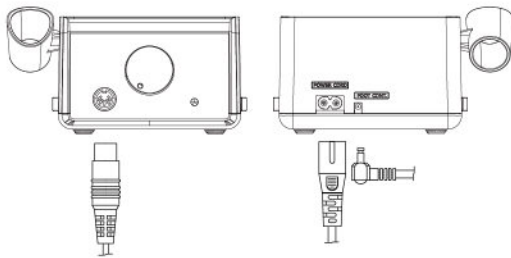
■ Hand/Foot Select Switch:

This switch is used to select the handpiece operation method.

- Hand: Handpiece is operated by turning dial.
- Foot: Handpiece is operated by foot controller.

● CONNECTION OF EACH PART

■ Control Box Connection



1. Connect the power cord to the power socket.

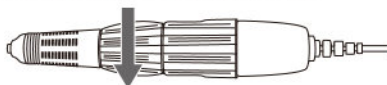


- Before connect the power cord, make sure to check the power off.
- Make sure to check that the speed control dial is set to '0'.

2. Connect the foot controller cord.
3. Connect the handpiece cord.

■ Bur Insertion

1. Turn the handle to open the handpiece chuck.



2. Insert the bur in the front of handpiece.



3. Lock the handpiece chuck by turning the handle.



- Be sure to lock the chuck before use.
It may cause damage to the handpiece.
- Make sure that the bur is not damaged.
- Check the Bur dimension. (Bur Dimension: $\Phi 2.35\text{mm}$)

● OPERATION PROCESS

1. Put up the handpiece and turn on the control box.
(The LED(Power) is turned on when turning power on)
2. Select the operation method by pressing the Hand/Foot Select Switch.
From the front of switch, the left is hand, the right is foot.
3. Select the rotation direction by pressing the Rotation Direction Select Switch.
From the front of switch, the left is forward direction, the right is reverse direction.

■ How to use when select the hand

4. Control the desired speed by turning the speed control dial.

■ How to use when select the foot

4. Control the desired speed by turning the speed control dial.
5. Operate the handpiece by pushing the foot controller.
6. Foot controller is released, handpiece is stopped.

■ Overload Protective Function

If handpiece is overloaded, the handpiece is slow or stop.
For using handpiece again, turn it off and rest 5 minutes.

● MAINTENANCE OF THE PRODUCT

1. Keep the place around in handpiece clean from dust and grindings.
2. Remove dust on handpiece with alcohol and avoid humidity around.



- Do not apply the oil and water to the product.
- The grease inside of the bearing could melt away due to the oil.

3. Air cleaning is acceptable but air pressure may affect the handpiece or motor.
4. Store the product as condition a bur is fixed at the collet chuck.

● PRODUCT SPECIFICATION

■ Control Box

	Model Name	B135
	Input	AC 100-120 V, 50/60 Hz AC 220-240 V, 50/60 Hz
	Fuse	AC 100-120 V, 5A AC 220-240 V, 2A
	Power Consumption	16 W
	Maximum Load Current	2 A

	Model Name	B135N
	Input	AC 100-240 V, 50/60 Hz
	Fuse	AC 250 V, T2AL
	Power Consumption	16 W
	Maximum Load Current	2 A

■ Handpiece

	Model Name	STRONG series
	Max. RPM	35,000 / 40,000 rpm
	Torque	3.0 N·cm
	Bur Replacement Type	Collet Chuck Type
	Bur Dimension	$\Phi 2.35\text{ mm}$
	Motor Type	DC Type

● WARRANTY

SAESHIN guarantees out product for 1 year from invoice date, and product warranty means that SAESHIN has responsibility of defective material or operation failure. The product warranty does not cover user's misuse, wrong installation, inappropriate maintenance and repair, and normal wear of consumables such as bearings, spindle, gear, and motor. To check the warranty requires the operating condition, environment information, serial number of the product and stamped invoice. The warranty will be performed as repairs or exchanges by manufacturer's judgement and analysis of product.

Exception of warranty

- User's misuse or improper use and treatment
- Use the product with incorrect input voltage (AC voltage)
- Drop the device during setting, moving, using
- Use the not recommended consumables or accessories
- Malfunction after repairing the product at the not recommended repair shop
- Normal wear of the consumables such as ball bearing, gear, chuck, spindle case ass'y, motor
- Faulty by Act of God
- Attempt to disassemble or modify product.

Operating condition	Temperature ($^{\circ}\text{C}$)	10~30
	Relative humidity (%)	10~80
	Atmospheric pressure (hPa)	700~1,060
Transport and Storage condition	Temperature ($^{\circ}\text{C}$)	-20~60
	Relative humidity (%)	10~90
	Atmospheric pressure (hPa)	500~1,060

● SYMBOL

	On (Power)		Off (Power)
	Consult Instruction For Use		General Warning Sign
	Serial Number		Class II appliance
	Fuse		Alternating Current
	This product should not be mixed with other commercial waste for disposal.		CE Marking



SAESHIN
SAESHIN PRECISION CO., LTD.

52, Secheon-ro 1-gil, Daseup,
Dalseong-gun, Daegu, Korea
Tel. 82-53-587-2341 / Fax. 82-53-580-0999
대구광역시 달성군 다사읍 세천로 1길 52(성서5차산업단지)
Tel. 053-587-2345 / Fax. 053-580-0918

www.saeshin.com / trau@saeshin.com

SOM-L0805-KE [Rev.3] 2021-04-25