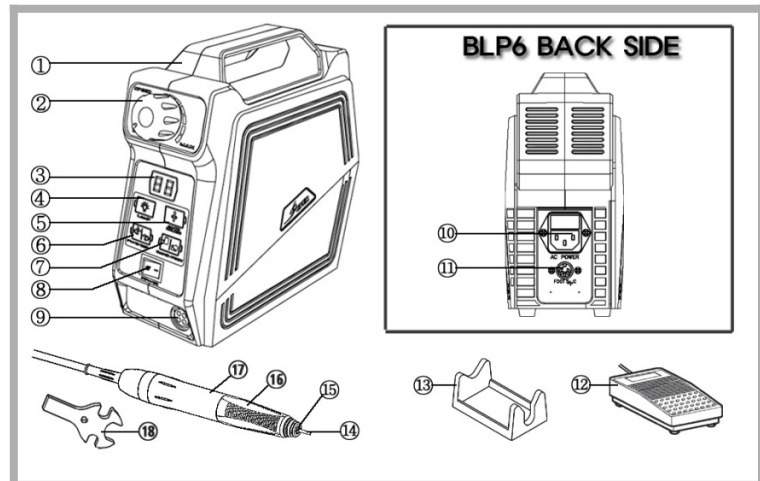


# Instruction for users

## SUPER-BLP6+BLH1(50,000R.P.M)

For your safety, please read this Instruction before use completely.  
This product is mainly designed for dental laboratory use.

### Product description



- |                                    |                       |
|------------------------------------|-----------------------|
| ①. Power unit                      | ⑫. Foot speed control |
| ②. Speed control dial (front side) | ⑬. Handpiece stand    |
| ③. RPM display                     | ⑭. Test bur           |
| ④. Lamp(use for M1)                | ⑮. Chuck              |
| ⑤. Auto cruise button              | ⑯. Handle             |
| ⑥. Forward/Reverse button          | ⑰. Motor              |
| ⑦. Hand/Foot button                | ⑱. Wrench             |
| ⑧. Power switch                    |                       |
| ⑨. Motor connection                |                       |
| ⑩. Power connection (back side)    |                       |
| ⑪. Foot speed control connection   |                       |

### How to operate

1. Connect the main power cord to the outlet and check the connection.
2. Set the speed dial②. to 'MIN' on the power unit.
3. Turn on the power switch⑧.

The lights on the main power switch and the LED display will illuminate.

4. Select R.P.M / speed control method (Hand or Foot.)

- 1). Control by foot

-Select "Foot" on Hand/Foot button ⑦ on power unit. The "Foot" light on the button will illuminate.

-Set the desired maximum R.P.M by turning the speed control dial②.

-The current speed will be shown on R.P.M LED③.

**※. Take caution when exceeding speeds over 40,000R.P.M always keep the permissible speed inside the recommended speed of the bur manufacturer.**

2).Control by hand

-Select the hand position by depressing the hand/foot control⑦ on the power unit.

-Control the R.P.M by the speed control dial②.

5. Be Automatic Rotation (fixed speed / “Auto Cruise”)

-Creation:

1) Select desired rotational direction as you cannot change rotational direction after setting auto.

2) Press the button of Automatic Rotation⑤ on the power unit.

3) Operate the handpiece. For 3 seconds at desired speed. An audible “beep” will sound; the motor will maintain the speed until canceled.

-Cancellation: Press the AUTO CRUISE button⑤ the mode is canceled and back in “create” mode. or depress the foot control and the unit is back on full variable speed mode.

6. Change Direction of Rotation.

-Select the direction of the rotation by Forward/Reverse button⑥.

on the power unit. Press the button, to change forward/reverse indicated by the LED light.

**※SAFETY FEATURE TO NOTE**

1).If the unit is turned on by the power switch⑧ when the speed control is in the “hand” mode dial ② The handpiece will not work. Position the dial back to “0” then adjust the speed to the desired speed.

This safety feature prevents damage to the handpiece and injury to the user by inadvertently switching on the unit.

## **Caution in use**

1 Follow all installation procedure.

2. Do not disassemble, repair, reconstruction.

Only authorized person can install or repair the unit.

3. Take every possible care not to drop or damage handpiece.

4. Do not block the ventilation openings at the bottom or never insert any object into the product.

5. Do not touch power cord with a wet hand.

6. Do not install in a location where water might be splashed on the product or in a location exposed to excessive moisture where condensation may form on the product surface. Danger of electric shock and fire.

7. Do not install in a location where fire, gas and oxygen are being administered - Danger of fire.

8. Never operate this product if it has a damaged cord, if it is not working properly, if it has been dropped, damaged or dropped into water.

9. Do not excessively bend power cord or allow the cord to be pinched.

10 Unplug from power supply when it is thunder or lightning and while not being using for a long time.

11. Please Unplug immediately, when you detect noise, smell, and smoke.

12. Use only in rated voltage.

13 Use only 250V/1A fuse for power unit.

(For 110V~115V, use 250V/2A fuse)

14. Before replacing the mains fuse, please make sure the mains plug has been disconnected from the power source.
15. Our handpiece, foot switch should be only used at our power unit.
16. Do not lubricate or wash handpiece at any time.
- 17 Please remove any dust or water on the pins of power plug.
18. Do not open chuck lever while operation.
19. Do not connect power supply while the collet chuck of handpiece is open.
20. Do not use rusty shank or bent burs. Do not use or store without setting the collet chuck.
21. Turn off the power supply when shank changing.



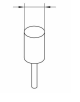
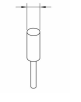
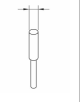


(\*When the handle of handpiece is opened and closed, turn until you hear a sound "tick". )

## 22. Bur

- (1).Dimensions of bur:Ø2.35mm(ISO7785-2 TYPE2)
- (2).Minimum fitting length of bur:10mm
- (3).When locked in the chuck, the maximum projection length of bur should be less than 35mm
- (4).Do not use rusty and bent bur
- (5).Check for any trouble, including vibration of bur, at low speed (R.P.M 10,000 below), and then turn to a higher speed.
- (6).Please be aware of the proper R.P.M. recommended by the bur size for safety.

### ※.Proper bur size by R.P.M

**(BLDC motor / handpiece produces very strong Torque. The maximum bur diameter must be used within a range of the allowable R.P.M. R.P.M. could be different based on bur material and type.)**

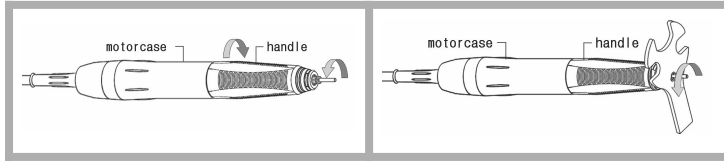
Speed (R.P.M)	0 ~ 15,000 below	15,000 ~ 20,000 below	20,000 ~ 25,000 below	25,000 ~ 30,000 below	30,000 ~ 40,000 below	40,000 ~ 50,000 below	50,000 ~ 60,000 below
Dimension of bur	Ø28mm below 	Ø18mm below 	Ø9mm below 	Ø5mm below 	Ø4mm below 	Ø3mm below 	Ø2.34mm below 

23. Wear protective glasses during operation.
- 24 Keep the children away from the unit. and don't leave children alone during operation.
25. Don't keep R.P.M over 50,000~60,000 more than 5minutes. Excessive heat may be generated.
26. Environmental condition
  - (1).In door use
  - (2).Temperature: ±10°C ~ +40°C
  - (3).Humidity Min: 30%~75%
  - (4).Air pressure: 700~1,060hPa
  - (5).Nominal voltage: Main supply voltage fluctuation up to ±10% of the nominal voltage
  - (6).Pollution Degree: II

※.Use this product only for its intended purpose as described in this manual and do not use attachments not recommended by the manufacturer. **Failure to use this unit for its intended purpose or failure to follow safety precautions may cause unsafe working environment.**

## How to change collet chuck

- ※. Clean and assemble the chuck very carefully.



1. Hold the handpiece and turn the handle in the arrow direction to open the chuck.
2. Turn the chuck counter clock wise to separate the chuck.
3. In case of not turning by hand, please use wrench.
4. Change the chuck.
5. Fix the bur and turn the chuck clock wise. And then turn again counter clock wise a bit to set the tension and remove the bur.

### Technical data

#### 1. Error code

Error code	Status	Cause	How to solve
E1	Motor error, overload	<ul style="list-style-type: none"> <li>• Collet chuck is opened, and the handle of handpiece is placed in the middle state.</li> <li>• Handpiece is broken.</li> </ul>	<ul style="list-style-type: none"> <li>• In case of opening the collect chuck, lock the chuck by turning handle.</li> </ul>
E2	Moving error	<ul style="list-style-type: none"> <li>• Operation of driver is error.</li> </ul>	<ul style="list-style-type: none"> <li>• Turn off power and then turn on power again.</li> </ul>
E3	Motor connection error	<ul style="list-style-type: none"> <li>• Motor code is unplugged or defected.</li> <li>• Motor code is broken.</li> </ul>	<ul style="list-style-type: none"> <li>• Plug in motor code correctly.</li> </ul>

#### 2. Specification

Trouble		How to check
The power LED is not on.		<ul style="list-style-type: none"> <li>• Make sure that the power cord is correctly plugged.</li> <li>• Check the fuse.(Fuse place on the back of the connection jack)</li> </ul>
Hand piece	Excessive vibration and noise.	<ul style="list-style-type: none"> <li>• Make sure that the collet chuck is free form dirt (Clean the collet chuck after disassembled.)</li> <li>• Check if the specified test bur or if get curved bur.</li> </ul>
	Overheat	<ul style="list-style-type: none"> <li>• The ball bearing are defective. Repair the micro motor handpiece.</li> </ul>
	BUR is released	<ul style="list-style-type: none"> <li>• Check if the collet chuck is loose and if loose, tighten the collet chuck.</li> </ul>
The foot pedal does not work		<ul style="list-style-type: none"> <li>• Make sure that the foot pedal cord is properly plugged.</li> <li>• Set up "foot" by pressing hand/foot button.</li> </ul>


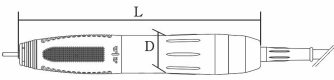
※. If the product dose not work after checking, please contact to the manufacturer.

#### 3. Specification

Section	Input	Output	R.P.M	Maximum load power	Power Consumption	Fuse
1	AC110/220V, 50HZ/60HZ	—	—	—	—	—

2	AC115/230V, 50HZ/60HZ	==	U	230W	50W	110V~115V:4A 220V~240V:2A
		DC	~			
3	AC240V, 50HZ	36V	50,000			

#### 4. Dimension

SUPER-BLP6	Width	Length	Height	Weight
	W: 100mm	D: 200mm	H: 200mm	2,500g
SUPER-BLH1	Diameter	Length	Weight	
	D: Ø25mm	L: 162mm	358g	

### Warranty

#### 1. Service for free

- Handpiece, control box & foot pedal is 1 year.

Warranty does not include misuse or normal wear of bearing, collet chuck, motor, spindle and armature.

#### 2. Service for charge

(1). In case of the fault or malfunction from the misuse or the user.

-Using with wrong input voltage. (AC voltage)

-In case of user's misuse or improper use

-Using consumable parts or accessories not recommended by manufacturer

-Malfunction after repairing at the places not recommended by manufacturer

(2). Other cases

-Faulty by act of god (Fire, sea wind or water, flood etc.)

-Replacing by the normal wear of the consumable parts

(bearings, collet chuck, motor, spindle or armature etc.)