

# Xtreme Drill 4

- User Manual -



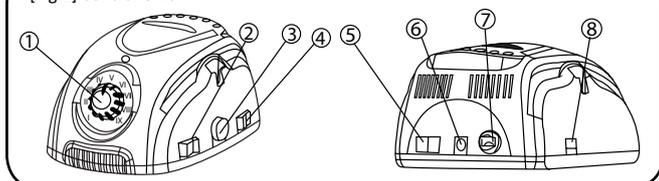
READ ALL SAFETY INSTRUCTIONS THOROUGHLY BEFORE OPERATING THE UNIT.  
KEEP THIS USER'S MANUAL IN A SAFE PLACE FOR FUTURE REFERENCE.

## 1. COMPOSITIONS

### (1) Control unit [Fig.1]

- |                            |                          |
|----------------------------|--------------------------|
| ① Speed Control Knob       | ⑤ Hand/ Foot Selector    |
| ② Power Switch             | ⑥ Foot Pedal Connector   |
| ③ Motor Connector          | ⑦ Power Cord             |
| ④ Forward/Reverse Selector | ⑧ Input Voltage Selector |

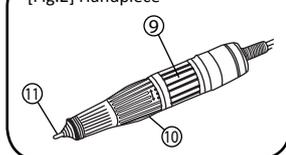
[Fig.1] Control Unit



### (2) Handpiece [Fig.2]

- ⑨ Micro motor  
⑩ Chuck Handle ⑪ Test Bit

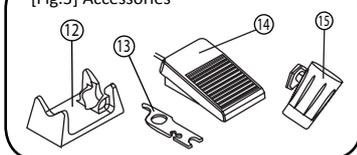
[Fig.2] Handpiece



## 2. ACCESSORIES [FIG.3.]

- ⑫ Handpiece Stand ⑭ Foot Pedal (Option)  
⑬ Chuck Wrench ⑮ Handpiece Holder

[Fig.3] Accessories



## 3. FEATURES

- Forward / Reverse rotation.
- Non-stage speed dialing system.
- Foot Pedal for on-off operation available as an option.

## 4. PRECAUTION

\* Below Safety instructions must be read to avoid potential hazards that could result personal injuries or damage to the unit.

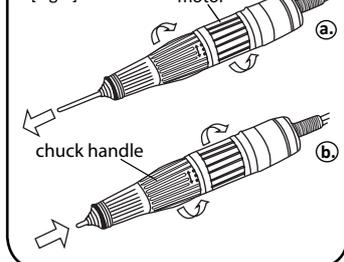
- Install the Control Unit in the room at suitable temperature (0-40°C). Using it in an excessively dusty, warm or humid location it damages to the Control Unit.
- When taking your Control Unit from the box, never let it fall on the floor. Please handle with care.
- Take care not to drop the handpiece. It will damage the Ball Bearing or weaken durability of the handpiece.
- Never plug or unplug the Power Cord with wet hands to avoid electric shock.
- Never use the damaged electric cable to avoid electric shock.
- Do not insert too many power cords into one socket. It gives rise to fire.
- Be sure not to disassemble or alter the units.
- Never allow water or other liquids to spill onto or into the control unit and the micro motor, as such could cause short-circuit. Abnormal heating or other troubles by rusting of metal parts.
- Consider the safety of the patient or customer first, and operate the unit carefully.
- Use only in the dental treatment by authorized personnel.
- Do not use or leave the unit in a high heat environment such as in direct hot sun, or in a parked car under hot sun. near fire or stove.
- Always check the unit for looseness, vibration, sound, and the operating temperature. Check the unit at a distant before using on the patient. If abnormality is detected, immediately stop operation. and call the dealer.
- Always put the Handpiece on its stand ⑫ while in use.
- Use the device only with the Country of residence required main voltage (AC115/230V~). In any case, always check the state of the device Voltage selector ⑧ before you put the device under it charge. Otherwise it cause damage to the equipment. **Note:** The device Voltage selector ⑧ are set to the European Union a standard mains voltage 230V~.

## 5. OPERATION PROCEDURE

### (1) Mounting and Removing of Bit [Fig.4]

- To remove a bit ⑪ turn the Chuck Handle in the direction of the arrow until it clicks to stop, and pull out the bit.
- To mount a bit. make sure that the chuck is in open position. Insert a bit all the way into the chuck, and turn the Chuck Handle in the opposite direction until it clicks to stop.

[Fig.4]



Importer: Elite Cosmetix Ltd. ; Jozsef Krt. 44., 1085 Budapest, Hungary

### ▲ Notice

- Always thoroughly clean the Collet Chuck and bit before reassembled.
- Always completely turn off before attempting to chance the micro motor or the bit.
- Make sure to insert the bit shank all the way, until it touches the back of the Collet Chuck. Then tighten the Collet Chuck. If the bit is used while not inserted completely, it is very dangerous because it may come out by the vibration of itself. Held before running the Handpiece.
- After replace a bit, it is necessary to make sure that the Collet Chuck is securely.
- Do not turn the chuck release ring of the micro motor while the motor is in operation.
- Never use bent, asymmetrical or damaged bits. Always use standard bits.
- When the Handpiece is not in use, it is recommended a test bit be inserted into the Collet Chuck of the Handpiece.

### (2) Operating of Motor

- Connect Motor Cord to the jack marked as "MOTOR"(Motor Connector ③) in the right place of the control unit.
- Turn the Hand/Foot Selector ⑤ to "H"(HAND) in the rear of the control unit.
- Turn on the power switch ② to start the motor. Turn it to "OFF" to stop the motor.
- Turn the Forward/Reverse Selector ④ to "FWD" to run the motor in the forward direction, or to "REV" to run it in the Reverse direction.
- Motor speed can be varied between 0 and 30.000 RPM by the Speed Control Knob ①.

### ▲ Notice

- While the Handpiece is running, DO NOT try to adjust the Chuck Handle to prevent the Control Unit from being damaged.
- Before operating the Forward/Reverse Selector to turn a rotating direction, it is surely required to make sure that the Micromotor has been stopped.
- Do not leave the Handpiece long in break state. Otherwise, it may be troubled or malfunctioned.

### (3) For using optional Foot Pedal

- Connect the Foot Pedal ⑭ plug to the jack marked as FOOT (Foot Pedal Connector ⑥) in the rear of the control unit.
- Turn the Hand/Foot Selector ⑤ to "F"(FOOT) in the rear of the control unit.
- Turn on the Speed Control Knob ①.
- Step on the Foot Pedal ⑭ to run the motor.

## 6. SAFETY PROTECTION SYSTEM

To protect the motor and the control unit from excessive temperature rise what can be caused by overloading such as by the failure of ball bearing, greater loading to the bit. etc., the temperature sensor activates, when the temperature rises above the preset value, to be shut off the power supply. When this safety protection system functions, turn off the unit. After over 30 seconds, restart the unit.

## 7. TROUBLE SHOOTING

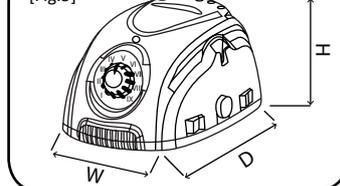
Troubles	Cause	Remedy
Motor fails to run.	a./ Loose connection motor plug with jack in control unit.	Correctly plug the Motor cord.
	b./ Defect in motor.	Replace motor cord.
	c./ Trouble in motor.	Check motor and repair if the motor is troubled.
Motor stops suddenly in use. (Safety protection system functioned.)	Overloaded, or Chuck is opened during operation.	See 6. Safety Protection System. Check the chuck and close it, if it's opened.
Motor fails to run when Foot Pedal is used.	a./ Hand/Foot Selector is at "H" position.	Set it at "F" position.
	b./ Foot Pedal fails to function.	Check and replace the Foot Pedal.
	c./ Defect in Foot Pedal cord.	Check and replace the Foot Pedal.
	d./ Loose connection Foot Pedal plug with the jack in the control unit.	Check the Foot Pedal plug and connection.
	e./ Switch OFF.	Check Power Switch is "ON".

If any case of malfunction was found, please contact with to the dealer where the unit was purchased.

## ■ SPECIFICATIONS

Xtreme Drill 4. [Fig.5]	Input Voltage	Cycle	Output	Weight (g)	Dimensions (mm)		
					W	D	H
	AC 115/230V	50/60HZ	DC 30V; 0.5A	1.250	118	156	78
Handpiece [Fig.6]	Input Voltage	Torque	Max.RPM	Weight (g)	Dimensions (mm)		
					Φ	L	
	DC 30V; 0.5A	300gf·cm	30.000	214	28	153	

[Fig.5]



[Fig.6]

