INTRODUCTION

Products introduction

According to the different materials (like glass, resin or PC), sizes, types (like round lens, small lens or right-angle lens) or shapes (like flat and bevel), it can edger the lens that fit for the lens frame, or same as the pattern or demo lens through the running of the machine controlled by the main electrical optical boar.

Safe Notice

1. the marks on machine and the information
NOTICE, which means that the wrong operation to the machine will be danger to people.

Tt means the operation forbidden (forbidden notice). The special forbidden notice shows on or near to the mark.

It means the necessary operation, The special notice shows on the mark.

2. the using surrounding (Do not operate the machine under the unavailable situations as follow:)

- A. Out of the stipulated temperature range
- B. Sharing power socket
- C. Strong shake
- D. Direct sunshine
- E. Dust/smoke
- F. Humid

3. Notice during the operation

\triangle

A. Don't make the machine by sudden shock;

B. Don't press the keys heavily, just gentle is OK;

C. Don't lie against the machine, otherwise the machine falling will hurt people;

D. After one-day's work, to turn off the power and clean the machine;

E. Don't use the insecticide or any other volatile solvent, otherwise it will damage to the machine and its cover.

A. Don't touch the plug when hands with water, or it will cause electric shock;

B. Don't use the alternative current without indicated rate, or it will cause fire disaster or electric shock;

C. Don't use the same power socket with any other high power machine, or it will lead to wide fluctuations in voltage, which will result in the machine problem. To be sure to offer with a single power socket;

D. Don't put metal or container like flower vase, flowerpot or cup on machine. If there is metal or any liquid in machine, it will cause fire disaster or electric shock; E. Don't do any damage to the wires, don't put anything on the wires or pull the wires or bend the wires, otherwise it will case the fire disaster or electric shock;

F. Don't break up, fix or amend the machine by yourself. The high voltage and hot part and the sharp object will hurt people.



A. To be sure that the good ground connection, the outer power should be ground connected also. The unavailable connection will cause fire disaster or electric shock;

B. If the machine fall down, or the machine cover is broken, to cut down the power supply right away. Then to pull out the plug from the power socket then to contact with the sales agent or after-sales services of Supore. If you continue to run this machine, it will cause fire disaster or electric shock.

C. When pull the plug, please be sure to take the whole part. The wires will be broken if you only take the wires, which will cause the fire disaster or electric shock.

D. If there is any abnormal condition with machine after operating for some time, like smog or smelling, which maybe cause fire disaster or electric shock, then please cut down the power supply and pull out the plug. Then to contact with the sales agent or after-sales services of Supore.

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-、 machine introduction

1.1 main body (name of outer part and diagram direction)



Diagram direction:

(1) outer cover (voice-proof)

cover

- (3) head pressure adjusting knob
- (5) the sensor of head base(cursor)
- (7) power switch
- (9) horizontal adjustment foot (10) operation panel
- (11) water valve adjusting knob

- (2) water-proof inner
- (4) the head
- (6) lens chuck
- (8) wheels

1.2 control panel



Direction:

F1:	lens choice(PC, resin lens, HI Index, HC superhard coating, glass lens,		
	Trivex)		
F2:	choice for bevel and flat shape		
F3:	chuck pressure choice $1/2/3$		
F4:	polishing choice		
F5:	Boxing system and PD system choice		
DATA:	adjustment to the scanning data		
MENU:	menu		
M1:	ID works number(not available yet)		
M2:	$\triangle X$ (horizontal excursion)		
M3:	riangleY (vertical excursion)		
M4:	$\triangle \theta$ (turning angle)		
M5:	DBL (distance of nose bridge)		
M6:	SIZE choicedefault		
+:	increase		
-:	decrease		
START:	start		
V:	rebuilding		

STOP:stopL:left side lens (or move head to left)R:right side lens(or move head to right)LOCK:chuck lensUNLOCK:loosen lens

$\Box_{\mathbf{v}}$ operation

2.1 assembling

2.1.1 assembling of main body direction:

A.to find a stable and horizontal table which is fixed and strong enough.

B. to put the main body on the table, then open the cover of LCD screen, as figure 1.

c. To take down the small plastic cover and take down the screws which are used to fixed head and save them carefully. As figure 2, 3.



Figure 1 To put the main body on the table as figure 1 and open the cover of LCD screen.







Figure 3 To take down the screws which fixed the head and save them.

2.1.2 assembling of water tank and water pipe





Figure (2)

Direction:

A. to assemble water tank and connect the wires of water pump to the back of main body as Figure 1 as above.

B. To connect the water output pipe as Figure 2 as above.

C. The finished one as Figure 3 as above.

Note::

A.to often clean the filter net

B.to often exchange the water in the water tank

 $\ensuremath{\mathsf{C}}\xspace$ to prevent the block to the outlet of the water pump from the dirty water

D.to fix the power wire out of the water tank to prevent from falling into the tank

E.to put the pump fully into water

2.2 Adjustment



A.to put the pressure knob of the head to B level

B. to move the head by hand so that it can be put on the wheels.

C. if the head is not moving from left to right, then the head is in good condition.

D.if the head moves to right, then to adjust the right foot higher(turning in clockwise direction, as figure 1)

E. if the head moves to left, then to adjust the left foot higher (turning in clockwise direction, as figure 2)

2.3 Edger

2.3.1 Preparation work

- A. to switch on the machine and turn on the water supply
- B. to scan a frame by the scanner or set into a memoried number pattern. After scanning, to press DATA to set the figure

2.3.2 To settle the lens



图(3)

A. to make the point on the cup match with the point on the chuck axis, as the figure 3.

2.3.3 To lock the lens

A. to press F4 to choose the pressure of the chuck

B. to choose the pressure of chuck

a. I (low pressure): being used to the Trivex lens (Ultra-thin glass) and the superhard lens

- b. II (middle pressure): GL, CR
- c. III (high pressure): PC, Trivex, CR
- C.to press the LOCK to lock the lens

D.to press the UNLOCK, then the chuck will loosen the lens.

2.3.4 To choose the lens

A. to press F1 to choose the material of lens, which can choose the PC, CR, HI lens, Superhard lens, Glass lens and Trivex lens.

2.3.5 To choose the shape

A.to press F2, to choose the bevel shape or the flat shape

2.3.6 To choose the Polishing

A.to press F3 to choose the polishing or unpolishing

NOTE: there is no polishing to glass wheel!

2.3.7 To choose the center mode

A. to press F5 to choose the mode of geometric center or the optical center.

NOTE: when using the geometric center to match the light center, the cup should be put on the geometric center of the frame. It is usually

usable to the condition with lower degree and lower horizontal offset to ΔX_{\circ} While matching the light center with the optical center, the cup is put on the center of the lens. It depends on the optometrist' s choice during the actual operation to choose the way of light center matching. These two are incompatible, otherwise it will make serious error to PD.

2.3.8 To input PD

A.the preference data of patient's data should be 64, and it can amend the PD data.

B.to press M2 to choose $\bigtriangleup X$ (horizontal shift), the mark to M2 is showed embolus.

C. To press + or - to amend the horizontal shift. When there is changes to $\triangle X$, PD will be changed accordingly.

Note: the computational formula is : $FPD=PD+2* \triangle X$.

2.3.9 to input PH (the height of pupil)

- A. the preference data of the $PH \triangle Y$ (vertical shift) should be 2, and it can be adjusted according to the actual operation.
- B. To press M3 to choose $\triangle Y$ (vertical shift), the mark to M3 is showed embolus.
- C. To press + or to change the data of $\triangle Y$.

2.3.10 the change to the point of view

A the point of view of the shape $\triangle \theta$ could be changed according to the need of practical situation.

B. to press M4 to choose $\triangle \theta$ (the turning to the point of view), the mark to the key M4 is showed embolus.

C.to press + or - to change the data of $\triangle \theta$. + stands for the turning to anti-clockwise direction while the - stands for the turning to clockwise direction.

2.3.11 to amend the distance of bridge of the nose (DBL)

A. the data of DBL is offered by the scanner and the data could be amended.

B. To press M5 to choose the DBL, and the mark to the key M5 is showed embolus.

C. to press + or - to amend the DBL. When there is changes to the DBL, then the FPD will be changed accordingly.

NOTE::

A the computational formula is , $\ensuremath{\texttt{FPD}=DBL+2*A}$

B. when there is changes to DBL, but no change ti PD, then the accordingly change is just to ΔX (horizontal shift)

2.3.12 Edger



To press START to start the edger.

NOTE: 1. To be sure that the water-proof cover is on during the operation, in case of the unexpected accident.

2. when the noise is too loud, please take on the sound-proof cover.

2.3.13 to move the lens

A. the position of the lens on the wheel can be moved according to the practice need by press L or R.

B. To move lens as the correct way as A, which can prolong the service life of the wheels.

2.3.14 to input the size

A.to check the panel size which showed on the control panel according to the need.

a. if it found out that the size of lens is smaller, then to press $\mbox{+}$ to increase it.

b. If it found out that the size of lens is bigger, then to press - to decrease it.

B.to press M6 to choose the size, and the mark of the key M6 is showed embolus.

C. To press + or - to amend the data of the size.

NOTE: when switch on the machine or press DATA to inset the figure, the "+/-" will be tacitly approved with the size function.

2.3.15 Rebuilding

A. if the size of finished lens is bigger, then this function can be used.B. To press "-" to reset the size again.

C to press ${\tt V},$ the machine will reedger the lens on the second wheel according to the decreased size.

2.4 the calibration to wheels

NOTE: the data set before will be cleared when you make the calibration to wheels. So, if there is no any special situation or not in serious need, please do not use this function. During operate this function, please be sure accurate settings.

2.4.1 operation under these condition

A.when there is any part of wheels broken

 $\ensuremath{\mathsf{B}}\xspace.$ when there is large difference between the lens size and the data

size

C. when the serviceman is making the maintenance

2.4.2 the preparation work

A.to put the V measure gauge on the left axis of the head, then to press LOCK.



B. Wheels



Direction:

- ① rough grinding wheel: used for CR or PC rough grinding
- 2 bevel polishing wheel: used for CR or PC bevel polishing
- ③ flat polishing wheel: used for CR or PC flat polishing
- ④ glass rough grinding wheel: used for glass rough grinding

(5) bevel fine grinding wheel: used for bevel fine grinding(6) flat fine grinding wheel: used for flat fine grinding

2.4.3 calibration way

A.to press MENU to get into the USER'S MENU, then to press F1 or F2 to choose "MACHINE CHECK" (number 3).

用户菜单
1. 初始参数设置
2. 圈数设置
3. 机器检测 ←
4. 机器信息
5. 语言选择

B. then to press F5 to get into the "MACHINE CHECK" interface. After that, to press F1 or F2 to choose the "CALIBRATION TO WHEELS POSITION" (number 6), then to press F5 to start the calibration.



C. The calibration to CR rough grinding wheel:

- a.to adjust the V measure gauge as the condition ① (CR rough grinding wheel) by L and R. It is usually on the left-center of the wheel.
- b. To press STOP to confirm and save it.

D. The calibration to bevel polishing wheel:

a. To adjust the V measure gauge as the condition 2 (bevel polishing

wheel) by L and R. To fine adjust the V measure gauge at the bottom of the V groove as condition 2 by LOCK and UNLOCK (the fine adjustment step is 0.1mm). NOTE: this step is very important, please be sure the accurate adjustment.

b. To press V to so the falling bottom check.

c. To press STOP to confirm and save it.

E. The calibration to flat polishing wheel:

- a.to adjust the V measure gauge as the condition ③ (the flat polishing wheel) by L and R. It is usually on the left-center of the wheel.
- b. To press STOP to confirm and save it.

F. The calibration to the glass rough wheel:

- a.to adjust the V measure gauge as the condition (4) (the glass rough wheel) by L and R. It is usually on the left-center of the wheel.
- b. To press STOP to confirm and save it.

G. The calibration to the bevel fine wheel:

- a. to adjust the V measure gauge as the condition (5) (the bevel fine wheel) by L and R. And to make the fine adjustment by LOCK and UNLOCK (the fine adjustment step should be 0.1mm) so that the V measure gauge should be at the condition (5), and it should be at the bottom of the V groove. NOTE: The action is very important, and to be sure that you have adjusted it well.
- b. To press V to check if it is just falling into the V groove.
- c. To press STOP to confirm and save it.

H. The calibration to the flat fine wheel:

- a.to adjust the V measure gauge as the condition (6) (the glass rough wheel) by L and R. It is usually on the left-center of the wheel.
- b. To press STOP to confirm and save it.
- I. To press DATA to back to the main interface.
- J. To press UNLOCK to take down the V measure gauge.

2.5 language settings

To press MENU to get into "USER' S MENU", then to press F1 or F2 to choose "Language choice".



B. To press F5 to get into language settings interface.



C. To press F1 or F2 to choose language (Chinese or English), to press MENU to save.

D. To press DATA back to main interface.

2.6 connecting to scanner

A. To plug one side of the wire to the OMA injection on scanner and the other side to the machine. The two sides are different, be careful when you connect it.



Ξ , maintenance

3.1 daily care

A. To change water: to often change the water, generally, it should be changed when edger about 100 pieces of lens.

- B. Maintenance to the jet: there is some blocking to the jet when operation. It should be cleaned in time and to change water.
- C. Maintenance to wheels: during the edger, there will be some damage to wheels. When it needs long edger time or the bevel shape is not so good, please grind oilstone on the wheels.
- D.grinding way:
 - a. To press MENU to enter into the menu interface, and press F1

or F2 to choose "machine check" .



b. Then to press F5 to enter into "machine check" interface and press F1 or F3 to choose "main motor, water pump", after that , to press F5 again.

机器检测				
1. 提升杆电机				
2. 机头行程电机				
3. 镜片旋转电机				
4. 主电机、水泵				
5. 整机测试(拷机)				
6. 砂轮位置校正				
•				

To press START to start the main motor, press START again, it will stop.

c. Put the oilstone in water for 2 to 3 minutes, when the rotation of wheels turn to slow, to put the oilstone on the wheels for grinding.

- d. Repeat this operation 5 to 10 times.
- e. The way above just fit for the fine grinding wheel and polishing wheel.
- f. After the grinding, to press DATA back to the first interface.

3.2 Cleaning

- A. To clean the machine by brush.
- B. Any water into machine will cause it with trouble.
- C. To clean the cover and the operation screen by dry soft cloth or wring cloth with cleaning solution. Don' t use the corrosive material or volatile solvent to machine.

3.3 notice in machine moving

- A. To cut off power supply and pull the plug out
- B. To take the pipe down from machine so that machine can be moved.
- C. After moving, it should be calibrate again.

3.4 services information

To contact with agent once a year after purchase, so that to clean the inside of machine. The heavy dust in machine may cause fire disaster or problem to machine. Before the rainfall coming, the machine cleaning is very efficient.

四、Simple fault phenomenon and solution

4.1 the wheels not rotation and no water supply

A. To check if the power switch is on.

4.2 always with BEEP sounds

- A. To check if the water switch closed
- B. To check if the jet is blocked
- C. To check if there is enough water in the water tank (80% of the volume is

OK)

D. To check if the motor of water pump is still in working

E. To check if the pipe connected well

4.3 difference in center

A. To be sure that there is no water on cup when it points the center.

B. To check if the cup broken

4.4 unusual with bevel when edgering

- A. To check if the horizontal of machine is OK.
- B. To check if wheels work well.

五、performance parameter

Out size: 650×550×480mm Weight: 60Kg Hz: 50Hz Sounds: ≤80DB Voltage: 220V±10% Power: $\leq 500W$ Power of main motor: 380W Working environment: $5^{\circ}C^{\sim}40^{\circ}C$

六、Attached list (packing part)

No.	NAME	QUANTITY
1	Cross screwdriver	1
2	Spanner	1
3	V board	1
4	Сир	4
5	Rubber chuck	1
6	Fuse	2
7	Maintenance card	1
8	Certificate of quality	1
9	Operation manual	1
10	Desiccant	2
11	Power wire	1