

TOOLS & SUPPLIES



BAR-CODE READER

FD-106 (OPTION)

► Easy transfer of data from FD-80, via this bar-code reader.

Dimensions		Weight
160 (W) × 90 (D) × 65 (H) mm		2.4Kgs
Power Source	Power Source	
DC5V	260mA	



SIGNAL DISTRIBUTOR

SD-1 (OPTION)

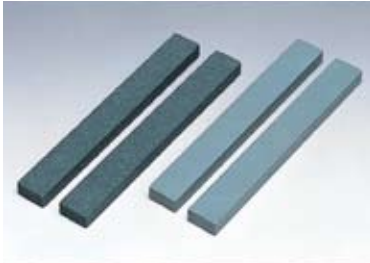
► Five instruments (E950 or AD-820 and LS-82) can be connected with one FD-80 via this equipment, as Data Communication Hub.

Dimensions		Weight
105 (W) × 250 (D) × 110 (H) mm		1.5Kgs
Power Source		
AC120V-230V 1.5W		



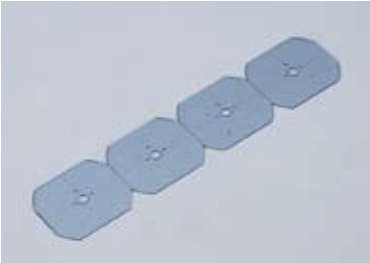
TOOL STAND

TS-1	Round type; steel made
TS-2	Upright type; plastic made
TS-3	Round type; plastic made



DRESSING STONES

#100	for roughing wheel
#400	for finishing wheel



PATTERN PLATE

PP-L	Large size: 60x70x1.7mm (4pcs./sheet)
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TD-6000

Tool Stand with 10 screw drivers



SCREW CUTTER

T-50 (0.6, 0.8, 1.0 or 1.2)

TAKUBO MACHINE WORKS CO., LTD

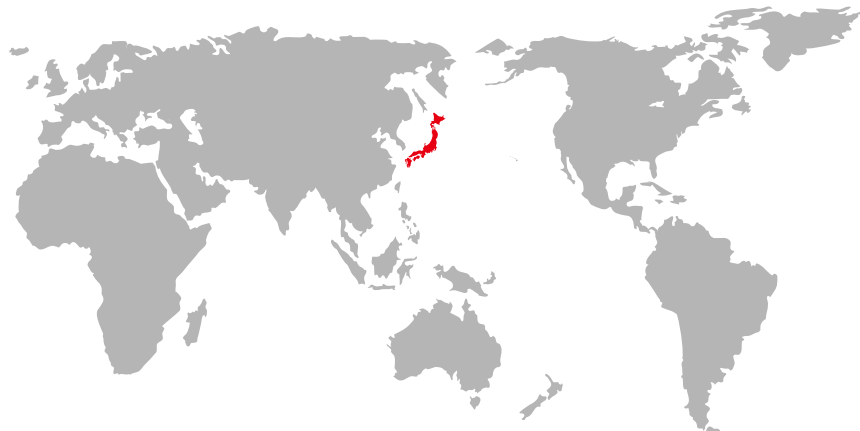
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The specifications and appearance are subject to change without notice.



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Takubomatic

OPTICAL EQUIPMENTS GENERAL CATALOGUE



E-1000

MULTIFUNCTIONAL PATTERNLESS LENS EDGER

- ☐ **GP** Beveling + Chamfering + Grooving + Polishing
- ☐ **Type-P** Beveling+ Polishing
- ☐ **Type-S** Beveling

Multiple

※ English/Spanish/Portuguese/Russian/
German/Turkish/French/Italian/Czech/
Polish/Korean/Chinese/Japanese

Powerful

Accurate

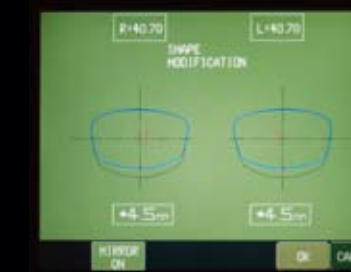
Compact

User-friendly



► High Definition Large Color Screen with Touch-panel Interface

► Various Layout Program 'Box' or 'OPT' (Optical Center) Layout-Style selectable, yet Eyepoint, PD and FPD are also adjustable on the main screen



► Easy Shape Modification As You Like



► Built-in 60 job memory
40 jobs rotating tracedata memory +
20 jobs permanent memory



► Possible to re-edge, even after deblocking the lens cup



► 'Self Lens-Trace' Mode to convert a sample lens or a pattern plate to a shape-data by a built-in sensor without any external tracer unit



► possible to make the Groove after checking the estimated Grooving Line.



► Easy Update of software program by this module

"Available Lens: CR39, Mineral Glass, Polycarbonate"
"Trivex, Hi-Index"

Flat : Min.16mm
Bevelling : Min.18mm
Chamfering : Min.22.5mm
Grooving : Min.20mm



Edging Lens Dia.		Dimensions
Φ25 - Φ100mm		370(W)×370(D)×540(H)mm
Weight	Power Source	Power Consumption
39Kgs	AC100V	600W 50/60Hz

INNOVATION!

E-950

- ☐ **Type-GP** (All-in-one model) Chamfering + Grooving + Polishing
- ☐ **Type-P** Polishing
- ☐ **Type-S** (Basic model)

MULTI-AXIS LENS EDGER

Multiple

※ English/Spanish/Portuguese/Russian/
German/Turkish/French/Italian/Czech/
Polish/Korean/Chinese/Japanese

Powerful

Accurate

Compact

User-friendly



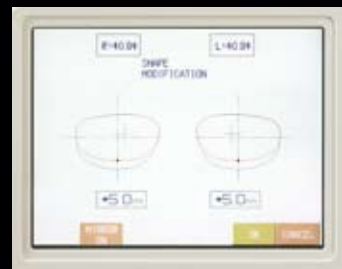
► Clear LCD Screen with Touch-Panel.



► Accurate 3D Sensor system.



► Grooving with step by step function. possible to make the Groove after checking the estimated Grooving Line.



► Easy Shape Modification As You Like



► STABLE CHUCKING Adoption of the Wide-Oblong Chucks and Cups.



► Easy Update by this Memory.



"Available Lens: CR39, Mineral Glass, Polycarbonate"
"Trivex, Hi-Index"

(Flat : Min.16mm
Bevelling : Min.18mm
Chamfering : Min.22.5mm
Grooving : Min.20mm)



Edging Lens Dia.		Dimensions
Φ25 - Φ100mm		370(W)×370(D)×540(H) mm
Weight	Power Source	Power Consumption
39Kgs	AC100V	600W 50/60Hz

E-920 SYSTEM

LENS EDGER

Multiple

※ English/Spanish/Portuguese/Russian/
German/Turkish/French/Italian/Czech/
Polish/Korean/Chinese/Japanese

Powerful

Accurate

Compact

User-friendly

More Economical System with a special-spec tracer only for E920 Lens Edger



► E920 Lens Edger may be sold alone without Tracer



► Clear LCD Screen with Touch-Panel Interface.



► 3D Sensor in E-series lens edger

► Simple 3-Wheel Composition *Rough Wheel for Plastic lens
*Rough Wheel for Glass/Mineral lens *Finish/Bevel Wheel

► Small 18mm Lens with Bevel



"Available Lens: CR39, Mineral Glass, Polycarbonate"
"Trivex, Hi-Index"

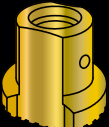
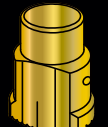
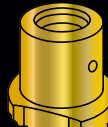
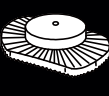
(Flat : Min.16mm
Bevelling : Min.18mm)



Edging Lens Dia.		Dimensions
Φ25 - Φ100mm		370(W)×370(D)×540(H) mm
Weight	Power Source	Power Consumption
39Kgs	AC100V	600W 50/60Hz

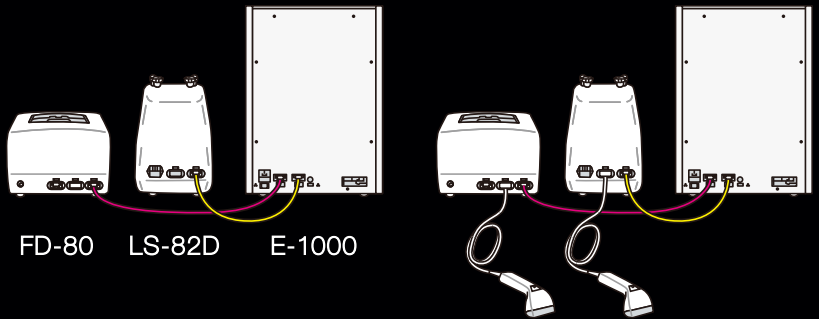
CONNECTON

CHUCK DETAILS FOR E1000 EDGER

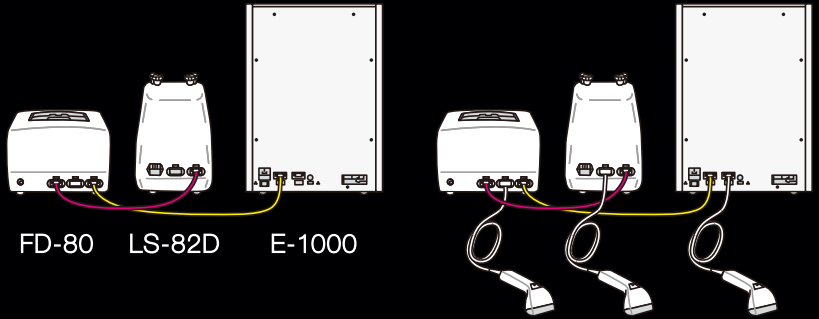
	Standard	For Glass and Fragile Lens	Extra small (Option)	Small (Option)	For Fragile Lens (Option)
Lens Chuck Block/Prism					
	9K-60	9K-66	9K-12	9K-50	9K-54
Adhesive Lens Block					
	9K-61	9K-11	9K-13	9K-51	9K-55
Chuck-Rubber					
	9K-53A	9K-56A	9K-30	9K-53A	9K-56A
Chuck-Rubber					
	9K-63	9K-05	9K-14	9K-52	9K-57

E1000 SYSTEM CONNECTION SAMPLE

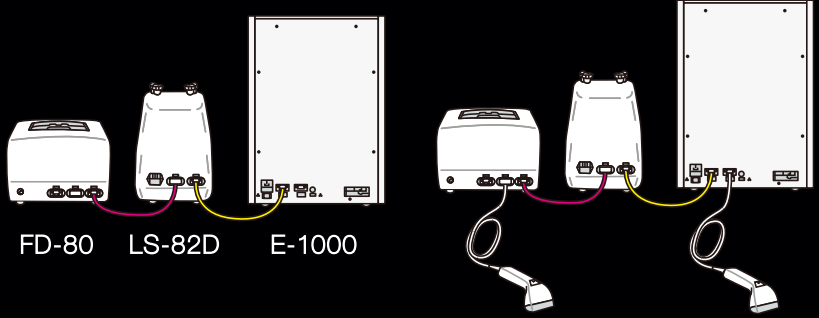
Layout connection (FPD.PD and VC values etc can be adjusted in Lens Edger)



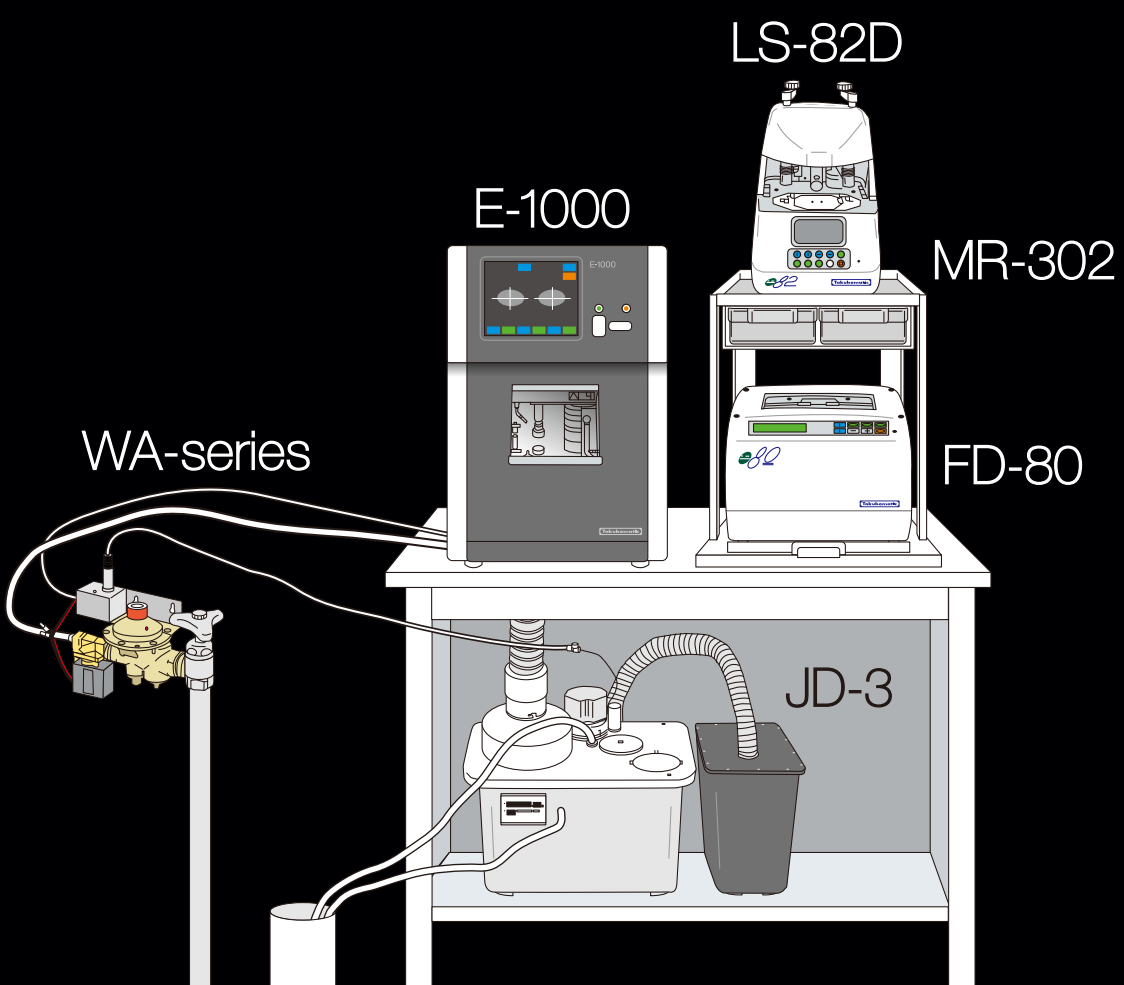
Parallel connection (connection when used with bar-code readers)



Chain connection (connection when used with bar-code readers)



E1000 CONNECTION SAMPLE



WA-series (OPTION)

WATER SERVICE DIRECT CONNECTION KIT

- ▶ The clean water is served to the edger through this kit.
- ▶ This kit is available in E1000, E950, E900, AD820 and Ecom6 Lens Edgers.

Dimensions	Weight
95 (W) × 210 (D) × 140 (H) mm	1.8Kgs
Power Source	Power Consumption
DC24V	8W



JD-3 (OPTION)

DEODORIZER

- ▶ The exhaust nasty smell is deodorized by this compact size instrument (black color).
- ▶ Also it's very easy to replace to the new one, since this box itself is a cartridge.

Dimensions	Weight
170 (W) × 225 (D) × 245 (H) mm	3.1Kgs



MR-301

Rack without drawer-case

MR-302

Rack with drawer-case

RACK



FD-80

**FD-80 has bar-code function (Bar-Code Reader is option)

FRAME SCANNER IN BOTH EYE-MEASUREMENT

FRAME SCANNER IN AUTOMATIC BOTH-EYE MEASUREMENT BY EASY OPERATION!!



- ▶ Asymmetric Frames can be scanned by both-eye measurement.
- ▶ THE MOST SIMPLE AND EASY SETTING of Frame and Lens Tracing Attachment.
- ▶ Unnecessary to exchange Frame Tracer and Lens Tracer.
- ▶ Soft and Stable Lens Holding.
- ▶ 200 job data storable with bar-code reader. (Bar-code reader is option)



(ISO16284 (VCA) correspondence machine)

Measuring Method	Dimensions	Weight
Auto.both-eye measurement in three dimensions	280 (W) × 310 (D) × 180 (H)	7Kgs
Power Source	Power Consumption	Data storing capacity
100-240 V a.c., 50/60Hz	24V d.c., 20W (to be used with A.C. adaptor)	200 data

LS-82S,D

LENS BLOCKER

MANY USABLE LAYOUT FORMATS ARE PROGRAMMED

- ▶ Displays clear image of the eyeshape exactly in the same scale.
For single vision, bifocal or multifocal lenses etc...
- ▶ When you layout Right lens, screen displays the transferred Left lens data by [R-L] switch.
- ▶ Accurately layout setting by "BOX" system.
- ▶ Easy blocking cross marking can lead you perfect finishing.
- ▶ Bar-code interface is available.



Clear Graphics on a Magnified Easy-View Screen with bright & white LED Lighting



Single Vision Layout



Bifocal Lens Layout



Multifocal (Progressive) Lens Layout



LS-82S
SINGLE ARM TYPE



LS-82D
DOUBLE ARM TYPE



Style of Blocking		
Suction cup blocking/Adhesive pad blocking		
Dimensions	Weight	Power Consumption
215 (W) × 270 (D) × 310 (H)	4.5Kgs	16W/50Hz/60Hz

ECOM-6

- ☐ ECOM-6V
- ☐ ECOM-6WM
- ☐ ECOM-6SP
- ☐ ECOM-6M
- ☐ ECOM-6WS
- ☐ ECOM-6S
- ☐ ECOM-6MP

LENS EDGER

COMPACT AND HIGHLY EFFICIENT MACHINE

- Easy and upgraded functions are available.
- Beginners can easily operate machine of your choice.
- Possible to select the type from four variations.
- Easy to make polycarbonate lens grinding by pump function.(Pump Switch)
- 23-100mm with NEW TYPE SMALL CHUCK and BOX Method.(LENS DIAMETER)

{Notice}

- type V, M, WM, MP have a measuring unit.
- type SP, MP is polishing function available.



MEASURING UNIT

- Finishing size of lens is measured by accuracy of 0.1mm.
- Clear digital indication of measurement.



Pump Tank Set as standard Accessories



PUMP SWITCH



FORCE LEVER KNOB

- Allows free-float beveling, forced beveling and manual placement as desired.
- Creates smooth bevel placement by use of Takubo's original technology.

CURVE DIAL

- Smooth and easy bevel placement.
- One-touch setting and curve correcting.

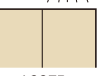


Lens Diameter	Dimensions
25-100mm	430(W)×430(D)×350(H)mm
Weight	Power Consumption
35.0Kgs.(Main Unit), 4Kgs.(Accessories)	225W/50Hz, 250W/60Hz

BEAUTIFUL FINISH OF LENS



- Diameter of grinding wheel matched to lens curve is 100mm, which realizes ideal forced beveling. Also, special curve correcting device ensures accurate beveling. Especially, special beveling wheel ensures beautiful machining regardless of degree of lens curving.

ECOM-6V	ECOM-6M ECOM-6S
 T18R Roughing Wheel	 T14TV0 Beveling Wheel
 T18SV0 Mini-beveling Flat Wheel	 T12F Flat Wheel
ECOM-6WM ECOM-6WS	ECOM-6MP ECOM-6SP (Special type for plastic Lens)
 E18UR Roughing Wheel for plastics	 T14TV0 Beveling Wheel
 K16R Roughing Wheel for Mineral Glass	 A22FP Flat-polishing Wheel
 A22TV0 Flat-beveling Wheel	

DM-50

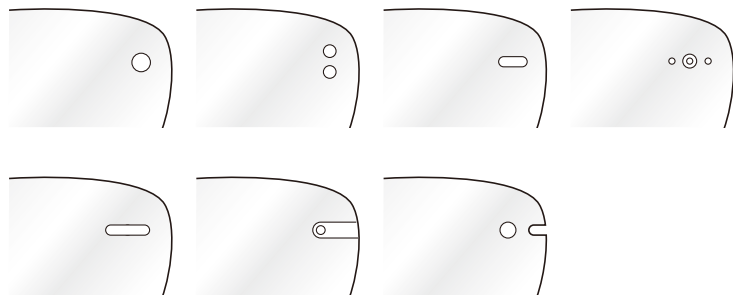
LENS DRILLING MACHINE

EASY AND BEAUTIFUL FINISH WITH DIGITAL LENS DRILLING MACHINE

- CR39,POLYCARBONATE & TRIVEX Lens are available.
- Steady Drilling on the Lens-Mount.
- The right and left symmetrical clamps makes both lenses synchronized turns.
- The hole positions are measured and memorized accurately by the distance from the lens edge.
- Positioning of holes is possible even if the lens shape is changed. (Except for the nose side of the lens.)
- LED spot lighting.
- The drill hole angle can be adjusted.
- Accessories include a hand-reamer for fine adjustment.



► Processing example



Possible dia. of drilling				Revolutions per minute	Dimensions
1.0mm	1.2mm	1.4mm	1.8mm	2.0mm	0~2500rpm
300 (W) × 225 (D) × 165 (H) mm					
Weight	Power source	Power consumption			
5.0 kgs	AC100-230V	50/60Hz 22W			



AG-5EX

AUTO LENS GROOVER

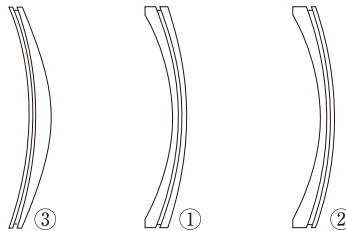
ACCURATE GROOVING WITH VARIOUS LATEST FUNCTIONS



- ▶ New lens chucking for all lenses. (23~70mm Lens diameter)
- ▶ Grooving depth of range 0-0.7mm can be set with a dial by 0.1mm.
Re-grooving is possible if the depth of groove is insufficient.
- ▶ Various lens grooving styles are available with quick operation.
You can choose ①Free-curve grooving (grooving on the center of the lens edge),
②Front-face curve grooving (for -lens) or
③Rear face curve grooving (for + lens).
- ▶ Adjustable lens guide roller (both right and left sides)
for free curve grooving makes the groove position on the lens more accurately.
- ▶ Inclined diamond cutter secures stable grooving width.
- ▶ Standard groove width is 0.6mm. Other width is optionally available.



▶ Lens grooving styles



Groove depth	Groove width	Lens thickness	Lens diameter	Grooving time	Dimensions	Weight	Power consumption
0-0.7mm	0.6mm standard 1.2mm option	1.5-11.0mm	23-70mm	Approx. 40sec. (1 rev.of lens)	170 (W) ×210 (D) ×150 (H) mm	2.7kgs	57W/50Hz, 55W/60Hz

NHseries

HAND EDGERS

EASY OPERATION TAKES PREFERENCE COMPACT SIZE, LIGHT WEIGHT AND WATERPROOF MODEL

- ▶ Forward or reverse rotation can be selected by using the selector switch.
- ▶ For draining, external plumb-down draining equipment or drain tank can be installed.
- ▶ The inside of the machine is constructed to prevent splashing water.



NH-22F

100 dia.by 22 wide flat wheel with a radius of 2 on left edge

NH-30V

100 dia.by 30 wide vee wheel with a radius of 2 on left edge

NH-32WV

100 dia.by 12 wide(rough), 18 wide(finish) flat wheel with a radius of 2 on left edge

NH-22V

100 dia.by 22 wide vee wheel with a radius of 2 on left edge

NH-32TV

100 dia.by 12 wide(rough), 20 wide(finish) vee wheel with a radius of 2 on left edge

NH-30F

100 dia.by 30 wide flat wheel with a radius of 2 on left edge

NH-30W

100 dia.by 32 wide eccentric vee wheel with a radius of 2 on left edge



Wheel Size	Dimensions	Weight	Power Consumption
100mm dia. By 22 to 32mm wide.	220 (W) ×360 (D) ×280 (H) mm	8kgs	97W 50/60Hz

LS-3W

LAYOUT MARKER/BLOCKER



PIONEER OF PRECISE LENS AXIS MARKING AND BLOCKING



- ▶ Easy to set the chucking by pulling the arm.
- ▶ Possible to Axis Marking with Center-dot, Suction and Adhesive Blocking.



Dimensions	Weight	Power Consumption
180 (W) ×245 (D) ×250 (H) mm	3.7Kgs.	14W/50Hz, 12W/60Hz

PM-80.FD-8

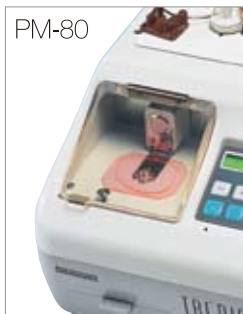
FRAME SCANNER

SCANNING WITH ACCURACY PM80 HAS PATTERN-CUTTING FUNCTION

** PM-80 has pattern making function



PM-80



- ▶ SIMPLE SETTING.
- ▶ "BOX" and "OPT" (Optical Center) layout system Choice.
- ▶ Minimum Tracing Pressure for Delicate frame.
- ▶ Available with Tracing 18mm Lens high.

Tracing Modes	Range of Measurement	Possible Diameter of Pattern
Frame tracing/ Lens tracing	Min:18mm (in height) Max:80mm	Min:18mm (in height) Max:85mm
Dimensions	Weight	Power Consumption
240(W)×350(D) ×260(H)mm	9 Kgs (PM-80) 6 Kgs (FD-8)	47W/50Hz,45W/60Hz (PM-80) 15W/50Hz,15W/60Hz (FD-8)



PM-8

PATTERN MAKER

IMPROVED OPERATION and ACCURACY from PM7

- ▶ Upgraded tracing function.
- ▶ Easy setting.
- ▶ One-touch Measuring Method.
(Boxing Method, Optical Center Method)
- ▶ Applicable with Tracing 18mm Lens high.
- ▶ Copying Function.



Pattern Diameter	Measuring range	Weight
18-85mm	18-80mm Max: 100mm	9.0Kgs.
Dimensions	Power Consumption	
240(W)×350(D)×260(H)mm	47W/50Hz, 45W/60Hz	



DM-3

LENS DRILLING MACHINE



SIMPLIFIED DRILLER TO LENS FOR RIMLESS FRAME



- ▶ Available for all kinds of lenses - mineral glass, plastic (CR-39) and polycarbonate as well.
- ▶ Two-sided drilling system + Powerful and quiet DC motor perform speedy drilling without cracking.
- ▶ Fine-designed, durable drill pits make always attractive finish.
- ▶ Suction lens chucking ensures the drilling angle.
- ▶ The inside diameter of the hole is adjustable with a scale to a precision of 0.2mm and the drilling position can be confirmed with a positioning dial.

Possible dia. of drilling	Dimensions
0.8-2.8mm	140(W)×185(D)×275(H)mm
Weight	Power consumption
4.0 kgs	17W/50Hz, 16W/60Hz



AP-2(DX)

AUTO POLISHER



AUTO POLISHER BRINGS YOU A MUCH HIGHER LEVEL OF QUALITY FOR RIMLESS OR BEVEL EDGE FINISHING



- ▶ Any material of (Plastic) lens can be polished automatically including polycarbonate, hi-index, with the same buffing wheel and polish.
- ▶ No damage is caused to lens surfaces with the buffing wheel on an inclined spindle and an adjustable polishing pressure system.
- ▶ Vacuum cleaner is included as standard accessory.



Materials of lens acceptable		Timer
CR-39, Polycarbonate, Hi-index, etc.		0-4 min
Dimensions (Polisher only)	Weight	Power consumption
214 (W) × 270 (D) × 240 (H) mm	6.7 kgs	85W/50Hz, 75W/60H

