

# ESMD-480A D\ UW: 9a i `g]ZYf





## ESMD-480A

#### **Phaco Emulsifier**



#### **General Description**

ESMD-480A Ultrasonic Phaco Emulsifier is a medical device designed for surgery of cataract extraction. It utilizes ultrasound energy to crash the cataract lens, emulsifies it and pumps it out. In order to cope with cases often occurred in the process of surgery, ESMD-480A is designed with anterior segment vitrectomy, bipolar cautery. Vitrectomy is for cutting the lens, and cautery is used to burn the blood vessels to stop bleeding.

#### Structure

ESMD-480A consists of the Main Unit (Phaco Emulsificator) Handpiece, Bipolar Cautery Forceps, Vitrector, (Irrigation/Aspiration) Handpiece, Footswitch and accessories.

- Ultrasonic Emulsification (U/S)
- Irrigation/Aspiration (I/A)
- Vitrectomy (VIT)
- Cautery (CAUTERY)







- All parts of the system are fully controlled and monitored by Microprocessor Technology
- Smoothly and efficiently controlling the emulsifier process with digital frequency tracing technology of handpiece
- · Easy operation and user-friendly interface with large TFT touch screen and functional menu
- Up to 10 sets of parameters preset meet different requirements and simplify the surgery operation
- Auto test checks tubing and handpiece problems (block or leakage)
- The peristaltic pump gives complete control of aspiration flow rate as well as freedom from anterior chamber shallowing. This way can give stronger suction when working in I/A
- · Built-in Vitrectomy and Cautery
- · Intelligent Voice Reminder



### Technical Features

Ultrasonic Emulsification (U/S)	
Frequency	40kHz
Functional mode	Continuance, Pulse, Linear, Burst
Continuance	Emulsifying power Range: 0 ~ 100
Pulse	Frequency Range 1 ~ 99Hz
Linear	Emulsifying power linearly controlled by the footswitch, 0~100%
Burst-Stopping Time	1.5 ~ 0s
Burst-Working Time	5 ~ 100ms
Maximum Vacuum	500 mmHg
Maximum Flux Rate	40 ml/min
Irrigation/Aspiration	
Source	Peristaltic Pump
Flux Rate	0 ~ 40 ml/min
Reflux Rate	20 ml/min
Max Vacuum	0 ~ 500 mmHg
VIT (Vitrectomy)	
Cutting Power Source	Air Pump
Reflux Rate	20 ~ 600/min, step 10/min
Max Vacuum	500 mmHg
Maximum Flux Rate	40 ml/min
Cautery	
Maximum Power	$10 \text{ W} \pm 20 \% (200\Omega)$
Туре	Bipolar
Power preset between	0 ~ 100%

Working Conditions		
Power supply	AC220V± 10%. 50Hz± 2%	
Temperature	10°C-30°C	
Relative Humidity	<70%	



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