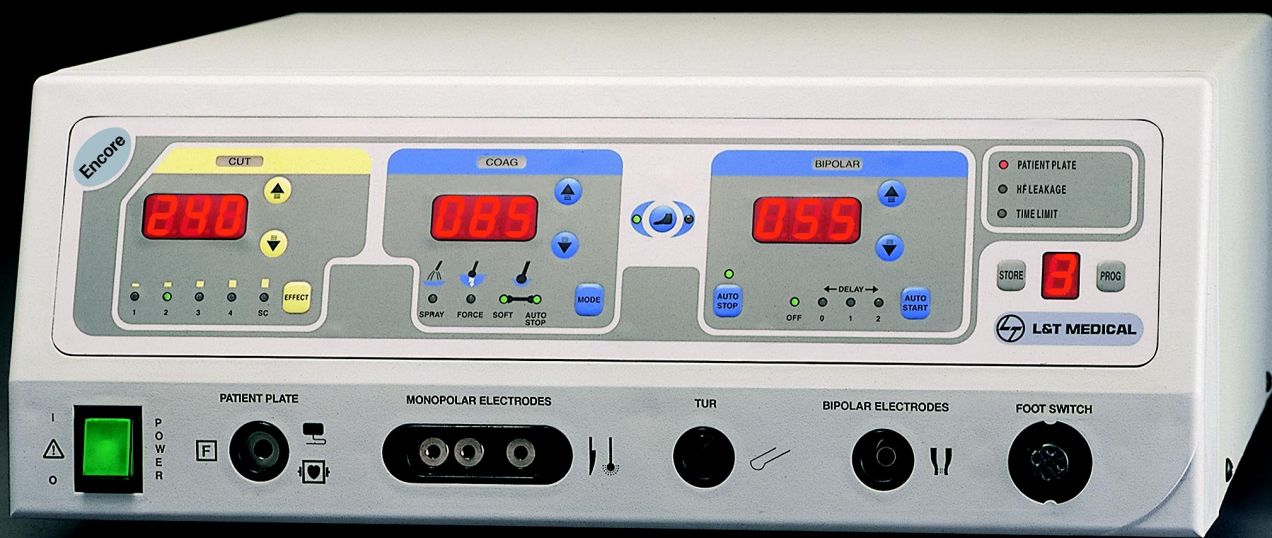


Automatic power controlled surgical diathermy with **SFS***



*Smart Feedback System

- Automatic Power Regulation
- Digital display for power settings
- Monopolar and Bipolar cutting
- Soft, Forced and Spray coagulation
- Bipolar coagulation with auto start/stop
- Programmable power settings
- Meets safety standards (IEC 601.1)

Cut (auto power control)

HF power adjustment	With Up/down Soft keys
Form of HF voltage	Un modulated sinusoidal
Frequency of HF voltage	350 kHz +/- 20 kHz
Haemostasis (blend)	4 steps coag. Degree control from front panel
Max. HF voltage (Monopolar cut)	1.4kV peak to peak
HF output (Monopolar cut)	300 W at 100-700 ohms (for SC) 300 W at 100-700 ohms in mode 5 300 W at 100-500 ohms in mode 8
Power settings (Monopolar cut)	From 1 to 300 Watts in increment of 1 Watt
Delivered output power tolerance	+/- 15% or 5 W which ever is greater, from 100 to 700 ohms for SC
Max. HF voltage (Bipolar cut)	700 V peak to peak
HF output (Bipolar cut)	120 W at 70-500 ohms
Power settings (Bipolar cut)	From 1 to 120 Watts in increment of 1 Watt

Monopolar Coagulation (auto power control)

HF power adjustment	With Up/down Soft keys, from 1 to 120 Watts in increment of 1 Watt
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Monopolar SOFT COAG

Form of HF voltage	Un modulated sinusoidal
Frequency of HF voltage	350 kHz +/- 20 kHz
Delivered output power tolerance	+/- 15% or 5 W which ever is greater, at 150 ohms +/- 20% or 5 W which ever is greater, at 100 & 200 ohms
Maximum HF voltage	450 V peak to peak
HF output	120 W at 100-200 ohms
Auto stop facility	Yes

Monopolar FORCED COAG (pin point coag)

Form of HF voltage	Pulse modulated
Frequency of HF voltage	500 kHz +/- 20 kHz
Delivered output power tolerance	+/- 15% or 5 W which ever is greater, at 300 ohms +/- 20% or 5 W which ever is greater, at 250 - 600 ohms
Maximum HF voltage	3000 V peak to peak in mode 9 & 2200 V peak to peak in all other modes
HF output	120 W at 300 ohms

Monopolar SPRAY COAG

Form of HF voltage	Pulse modulated
Frequency of HF voltage	500 kHz +/- 20 kHz
Delivered output power tolerance	+/- 15% or 5 W which ever is greater, at 300 ohms +/- 20% or 5 W which ever is greater, at 250 - 600 ohms
Maximum HF voltage	5000 V peak to peak
HF output	120 W at 300 ohms

Bipolar Coagulation (auto power control)

HF power adjustment	With Up/down Soft keys, from 1 to 120 Watts in increment of 1 Watt
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Form of HF voltage	Un modulated sinusoidal
Frequency of HF voltage	350 kHz +/- 20 kHz
Delivered output power tolerance	+/- 15% or 5 W which ever is greater, at 150 ohms +/- 20% or 5 W which ever is greater, at 100 & 200 ohms
Maximum HF voltage	450 V peak to peak
HF output	120 W at 100-200 ohms
Activation of HF output power	Auto start or pedal
Auto start delay	0-0 sec, 1-1 sec, 2-2 sec.
Auto stop facility	Yes

Memory

Program facility	4 front panel settings can be saved and recalled for various applications. 6 factory set application specific settings which can be changed but not saved
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Safety Precautions

Check for HF leakage current	LED blinks if HFL > 150 mA (power is ON) LED remains on if HFL > 300 mA (no power)
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Check for LF leakage current as per IEC 601.1

Earth leakage current	Maximum 0.5 mA
Enclosure leakage current	Maximum 0.1 mA
Monopolar output leakage current	Maximum 0.01 mA
Bipolar output leakage current	Maximum 0.01 mA
Safety class & Type (IEC 601.1)	Class 1, CF with floating reference

Neutral electrode monitor	Auto. patient plate detection, audio-visual alarm on patient plate disconnection LED glows if activated for more than 10 seconds & shuts off the HF power after 5 more seconds.
Time limitation for output power	Latest 10 errors are stored

Error memory (technical support)

Environmental Condition

Operating Temperature	0° to 40°C
Operating Humidity	10 to 90%RH (non condensing)
Storage Temperature	-10° to 50°C
Storage Humidity	0 to 90% RH (non condensing)
Operating Pressure	500 to 900 mm Hg
Storage Pressure	500 to 900 mm Hg

Input Characteristics

Input line voltage	230 V ac +/- 15%, 50 Hz
Maximum power consumption	800 VA Maximum
Line fuse	5A slow-blow
Idle power consumption	40 VA Maximum

Mechanical Details

Dimension (W x H x D)	425 x 172 x 440 mm
Weight	12.5 Kg. Maximum

• Technological upgradation is a continuous process at L&T. Hence, specifications and availability of any of the products mentioned in this leaflet are subject to change without notice. Some of the accessories featured in this leaflet are optional and are not part of the standard scope of supply

OPERA conforms to CE marking under Medical Device Directive 93/42/EEC