

**ALAN**®

Since 1997.....

# Elsy-360 M+

*Advanced Microcontroller based digital***Electrosurgical Unit****With  
Ligator****CE**  
**0120**

ALAN's Electrosurgical Unit (Diathermy) is designed with latest miniature electronic circuit design technology. The advanced microcontroller based technology helps in achieving the desired tissue effects. It is Small in size but Surprises on Performance.

**+Safety**

- Patient Plate Contact Quality Monitoring System.
- HF leakage monitoring & controlling system.
- Multiple Microcontroller supervision for RF power accuracy.
- Realtime tissue Impedence monitor for Power control
- Power up Selftest to ensure, the unit healthiness.
- Handswitch and footswitch short detection during Selftest.
- Timeout.

**+Reliability**

- No need of Voltage Stabilizer, can work in lower voltage.
- Convection Cooling System, offers better Reliability.
- Built-in line filter protects from voltage surges and bad line Conditions. Hence no need to use of spike buster.
- Works on Generator, Inverter & UPS.
- ALAN's proven track record for more than 10 years.

## General Features

- Feather touch membrane keyboard for Power, Mode, Program and Footswitch selection etc. for easy operation of Machine.
- User programmable 99 memory locations.
- Can Seal up to 7mm Vessels.
- 5 Different ligation levels for different Vessel Thickness.
- 2 Different Fast Ligation Levels for Faster Sealing Cycle.
- Faster Sealing Cycle with Less Thermal spread.
- Works with all sealing instruments, 5mm, 10mm etc...
- Isolated Monopolar & Bipolar outputs.
- Simultaneous Coagulation for 2 surgeons in Monopolar mode.
- Monopolar outputs can be activated via Handswitch and Footswitch.
- Special EndoCut mode for Polypectomy & Papillotomy.
- 9 levels are given in Endocut to achieve varying speed, depth and sharpness of the cut.
- Auto-Stop in Bipolar & Monopolar for optimum coagulation effect.
- Digital volume control and audio-visual indications for all outputs.
- Restoration of previous activated power settings.
- Reduced R.F distortion due to noiseless performance.
- User Settable Auto start delay in Bipolar.
- User settable maximum RF activation Timeout limit.
- Multiple Microcontrollers supervision Automatic Diagnosis enables Instant power response against tissue density & impedance variation and Adjust power.
- PPCM monitors Split/Non-Split type patient plates and deactivates output power with audio-visual alarm during improper contact between patient and patient plate to eliminate the risk of site burns.
- Using Alan's 3 pedal footswitch Monopolar and Bipolar can be operated without changing any settings in the machine.
- 3 Pedal Footswitch is explosion proof and water proof.
- Compatible with Wireless Footswitch.
- Well suited for Underwater (TURP), Micro, Major, Gynaec, General and all other Surgeries
- Upgradable to Argon beam coagulator \*
- Maximum output of 400 Watts.

▲ Refer User manual

\* Optional Feature

● Specifications are subject to change due to continual Development & upgradation.

● ESU is Also Popularly Known as E. S. Diathermy & E.S. Cautery.

## + Clinical Benefits

### MONOPOLAR :-

|                          |                                                                                                                  |
|--------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>Pure-Cut</b>          | : Monopolar Cut mode for underwater (TURP) and general surgeries.                                                |
| <b>Low-Cut</b>           | : Mode specifically tailored for Laparoscopy.                                                                    |
| <b>Blend</b>             | : Cutting with coagulation effect.                                                                               |
| <b>Endocut</b>           | : Special mode for Polypectomy & Papillotomy                                                                     |
| <b>Spray</b>             | : Impulse modulated sinuous waveform for non-contact coagulation and (TURP) underwater procedures.               |
| <b>Fulgurate / Force</b> | : A low spray waveform suitable for non-contact coagulation on oozing surfaces and (TURP) underwater coagulation |
| <b>Desiccate</b>         | : Standard coagulation mode.                                                                                     |
| <b>Soft</b>              | : Low Voltage coagulation mode for Delicate tissues.                                                             |

### BIPOLAR :-

|                      |                                                                                                |
|----------------------|------------------------------------------------------------------------------------------------|
| <b>Cut /Standard</b> | : Best coagulation mode when used with graspers. Specially designed mode for bipolar scissors. |
| <b>Force/Macro</b>   | : Faster Bipolar coagulation                                                                   |
| <b>Micro/Precise</b> | : Pinpoint coagulation for delicate tissues with less thermal spread                           |
| <b>Auto Stop</b>     | : Auto stop Coagulation delicate tissues.                                                      |
| <b>Auto Start</b>    | : Auto start Coagulation in bipolar mode                                                       |

### LIGATE :-

|                 |                                                              |
|-----------------|--------------------------------------------------------------|
| <b>Ligate</b>   | : 5 Different Ligation levels for standard seal mode         |
| <b>F-Ligate</b> | : 2 Different fast Ligation modes for Faster Sealing Cycle.▲ |

## Input Supply

|                     |                                               |
|---------------------|-----------------------------------------------|
| Input Supply        | : 230VAC $\pm$ 20% 50 Hz                      |
| Power Consumption   | : 750VA Max.                                  |
| Loading Duty Factor | : 10Sec (Active) /<br>30Sec (Pause)           |
| Input Fuse          | : 5A T                                        |
| Output Control      | : Digital Display, Push buttons in all Modes. |

## Safety Standards

|                                |                                                                                 |
|--------------------------------|---------------------------------------------------------------------------------|
| Basic Construction             | : Accordance with<br>IEC 60601 - 1,<br>IEC 60601 - 1 - 2 &<br>IEC 60601 - 2 - 2 |
| Protection Class               | : 1                                                                             |
| Unit Type                      | : CF                                                                            |
| All Outputs                    | : Floating Outputs                                                              |
| Electrical Potential Balancing | : Connecting Pin and Indicated by Symbol.                                       |
| Max Weight                     | : 6 Kg.                                                                         |
| Size (in mm)                   | : 340(W) x 160( H ) x 420( D )                                                  |

Manufactured by,



Since 1997.....

## ALAN ELECTRONIC SYSTEMS PVT. LTD.

Factory:

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