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# HV-400 plus



## HV-400 plus Electrosurgical Generator

### Intelligent Device System

Microprocessor controlled with a wide TFT LCD Touch Screen, clean image quality. The settings and working modes of operation are changed by touching icons on the screen, ensures the users with easy access to all functions, satisfying all the surgeries demands with safety, flexibility, reliability and convenience.

### Characteristics:

Equipment are designed for conventional Electrosurgical procedures with the ability to automatically adjust, designed for various operations.

### Activation:

Designed to perform cutting and coagulation during surgical procedures, output activated by Handswitch or Footswitch

### REM(Return Electrode Monitoring)

Return electrode (for Monopolar) with quality monitoring system(REM).

This REM system continually monitors patient impedance levels and deactivates the generator if a fault in the patient/return electrode contact is detected, at the same time with Audible and Visual Alarms, as well as real-time dynamic display of the contact quality on the screen between the negative plate and the patient's skin.



### Automatic self-test

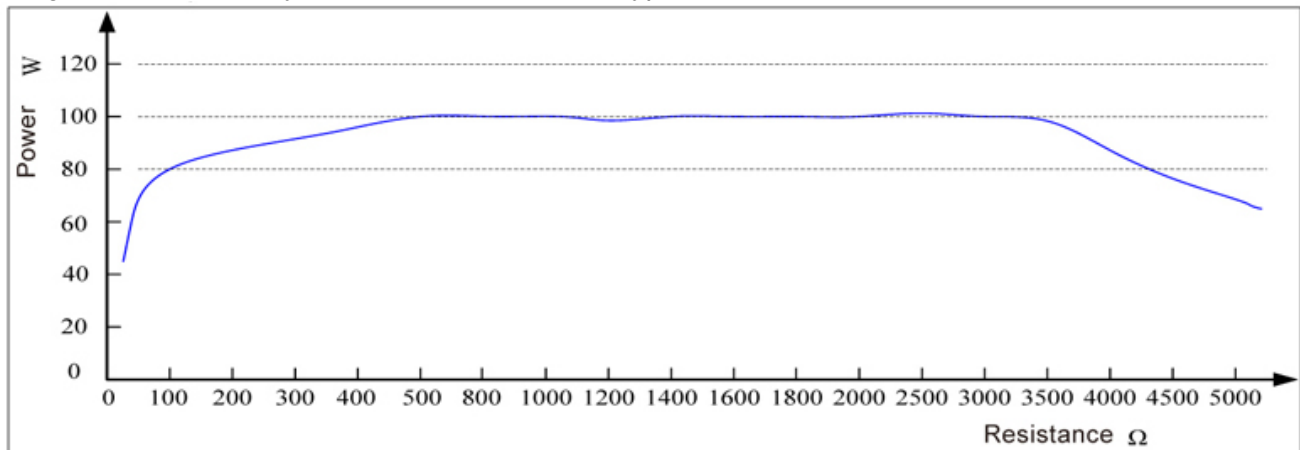
When switch on the machine, it will start automatically self-test routine prior to operation.

### Real-time Monitoring and Instance Response System for Tissue Density

This proprietary technology delivers optimal clinical effects through continuous synchronization of current and voltage. It samples the current and voltage 450,000 times per second which enables it to respond to tissue impedance changes in less than 10 milliseconds, which ensuring the machine achieves optimum energy output levels quicker and more accurately – ensuring that only the precise

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voltage needed is safely delivered to each tissue type.



### **Monopolar Cut**

- Multi Monopolar outlet, 3-pin (4mm) outlets and Laparoscopic Microphone head (4mm, 8mm ) outlet
- Different effects for cutting modes , pure cut for fast tissue dissection, while blend cut with a slight coagulation effect

### **Two Pencils Work Simultaneously**

It can meet the special surgeries like Heart bypass operation and etc, which ensures two users can operate respectively without interference.

### **Monopolar Coagulation**

- Different coagulation modes provides precise, moderate, enhanced, contact-less coagulation effects
- Possibility of argon plasma coagulation

### **Bipolar**

- Cut with different levels of haemostasis, urological cutting and etc
- Coagulation with Forceps for contact coagulation without sparking

### **Automatic Start /Stop**

Under Bipolar cut and coagulation modes, user can choose Pedal control or Automatic control for the operation.

### **TURP Functions**

Both workable under Monopolar and Bipolar operating modes

This mode is used in under water environment for surgery especial Resectoscopy, which removes the tissue in the prostate with kinetic plasma under saline liquid.

### **Polypectomy Function**

Special cutting modes necessary to remove polyps, alternating of cutting and coagulation enables achieving an optimal coagulation for this application and reduces the probability of bleeding.

### **Mastoid Cut Function**

Using needle knife for small size Papillotomy cutting, mainly used for ENT surgeries and etc.

### **Pulse Output (Endo cut)**

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Pulse Cut Technology provides control of cutting depth for critical dissections necessary for Endoscopic retrograde cholangiopancreatography (ERCP), which mainly for the Gastrointestinal (GI) range surgery.

Pulse Coagulation Technology provides pulsing bursts of Coagulation energy for more control of hemostasis during the operations, which make sure less tissue carbonization.

#### **MUCOSAL/Endo-Cut Function**

It produces pulse output under this working modes, alternating of cutting and coagulation, mainly used for the Gastroenterology.

#### **Air-Beam Coag Function**

A mode used for contact-free Coagulation, it eliminates smoke and smell, ensure very shallow and wide coagulation, necessary when there is a risk of perforation.

#### **Ligasure Vessel Sealing (Seal-Safe)**

With Bi-clamp or other instruments, enables permanent sealing up large blood vessels up to 7mm diameter under Seal-Safe working modes during open and laparoscopic surgeries.

#### **Endoscopic Vessel Sealing (Endo-Safe)**

With Ligasure handles, enables permanent sealing up large blood vessels up to 7mm diameter under Endo-Safe working modes during Laparoscopic surgeries

#### **Memory Records Features**

Memory program that allows customize settings for different interventions and surgeons.

#### **Upgrade Interface:**

USB/RS232 interface available to connect with computer, which allows remote problem detect as well as further software upgrade.

#### **Compatible with other Equipment**

1. Argon gas module.
2. Optimum Smoke Evacuation System

#### **Multilanguage Available**

Language options: English, Spanish, Portuguese, Turkish and etc.

#### **Application of Use**

General Surgery; Gastroenterology, Dermatology;  
Vascular Surgery; Obstetrics and Gynecology  
Heart/Thoracic Surgery; ORL/ENT; Minimally Invasive Surgery(MSI)  
Cerebral surgery; Neurosurgery, Orthopedics & Plastic Surgery;  
Trans Urethral Resection (TUR) and etc.

#### **Certificate**

Machines are qualified by internationally recognized construction standards such as: CE, FDA, ISO 13485, ISO 9001.