

AniSeal AS-100

— Smart Energy in
Your Hands

**AOHUA VETERINARY ENDOSCOPY
AND M.I.S SOLUTION**





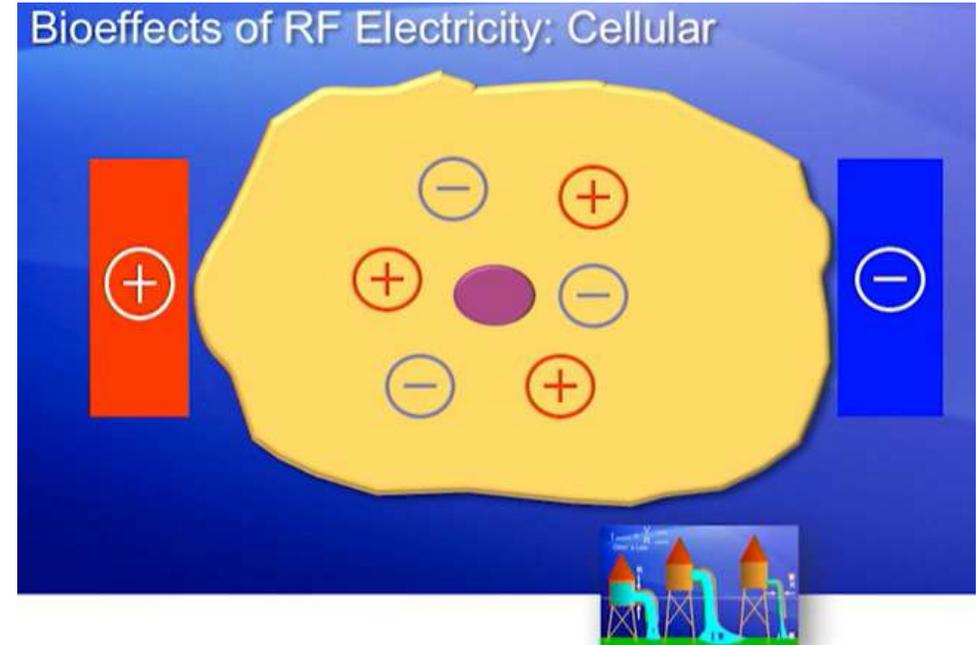
Content

- Introduction — Electrosurgery
- Fundamentals of Electrosurgical Technology
- Product Overview
 - *AniSeal AS-100* Electrosurgical Generator
- Installation & Quick Start
- Clinical Applications
- Troubleshooting & FAQs
- Electrosurgical Safety



What is Electrosurgery?

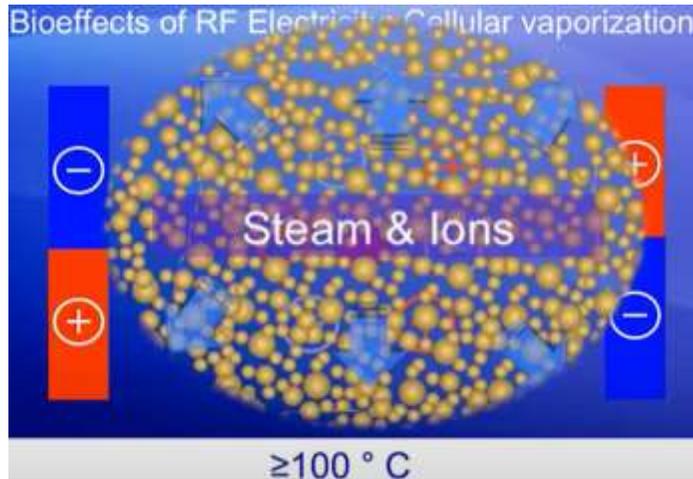
- Electrosurgery has been described as **high-frequency** electrical current passed through tissue to create a desired clinical effect.
- Results in **cutting** and **coagulation** of tissue at the point of application.



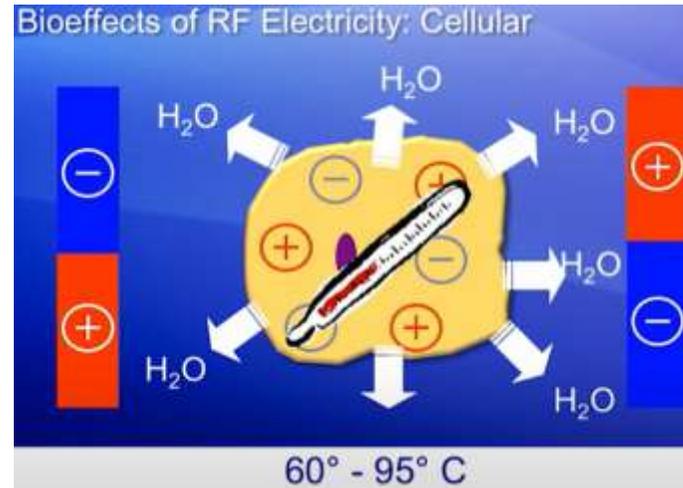
Summaried by Joules law of heat: $Q = I^2 \cdot R \cdot t$

Heat= Current² (ESU output) × Resistance (Animal body) × Time (Application duration)

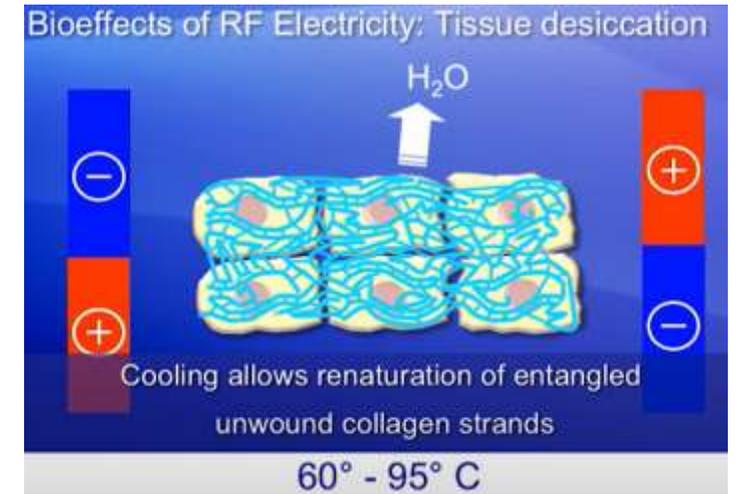
Bioeffects of Radiofrequency Electrosurgery



Vaporization 汽化



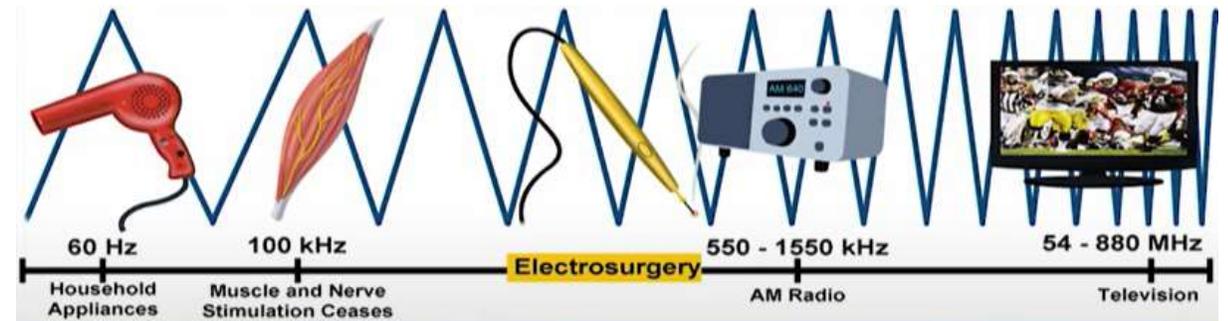
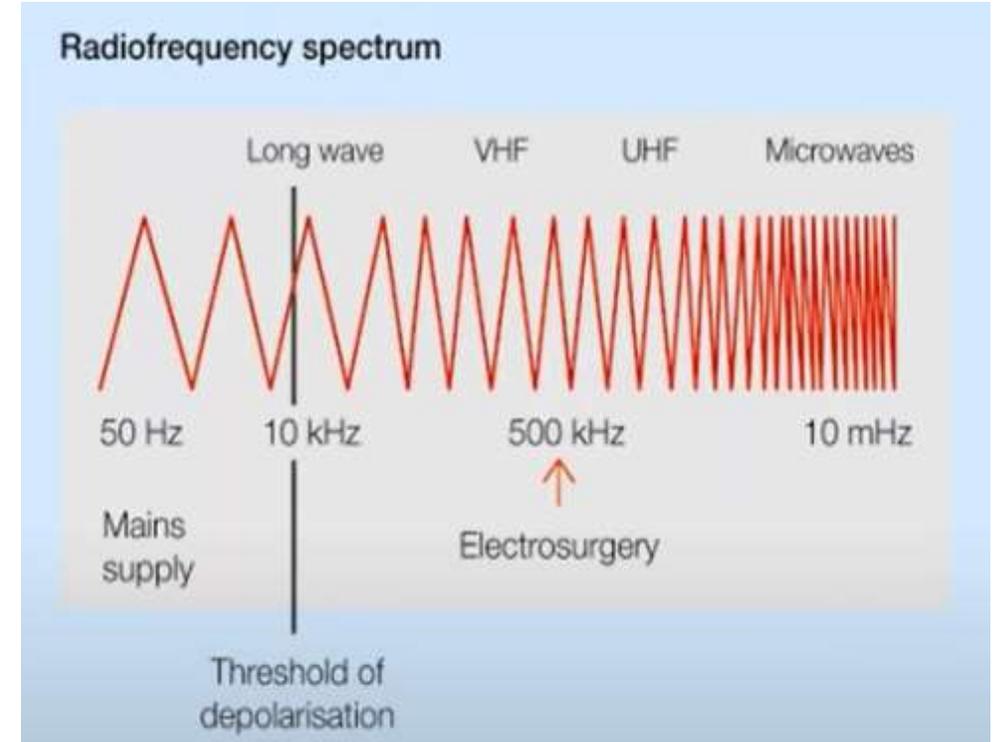
Desiccation 干燥



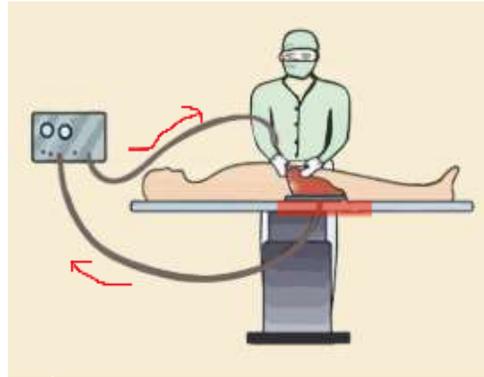
Coagulation 凝固

Principle of Electrosurgical Safety at High Frequency

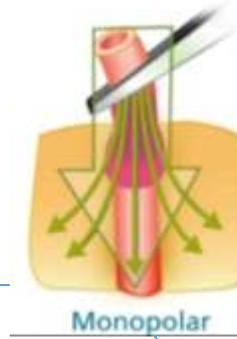
- **Key Concept**
 - Above threshold of depolarization
 - RF does not depolarize Nerves and Muscles
- Household electricity: Low frequency (50–60 Hz) → within the response range of nerves/cardiac muscle → action potentials triggered → spasm, ventricular fibrillation, fatal outcome
- High frequency (300 kHz–5 MHz) → beyond the physiological response range → no nerve/cardiac muscle reaction → only heat effect → cutting/coagulation



Monopolar Vs Bipolar

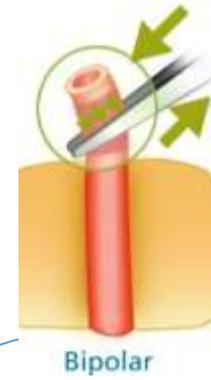


Need return electrode pad!

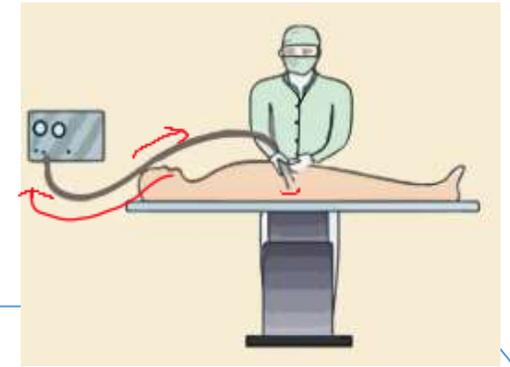


Monopolar

Tissue vs. Patient



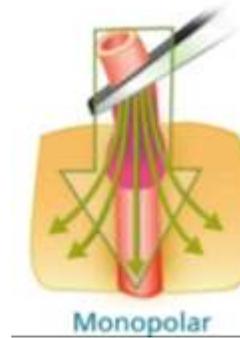
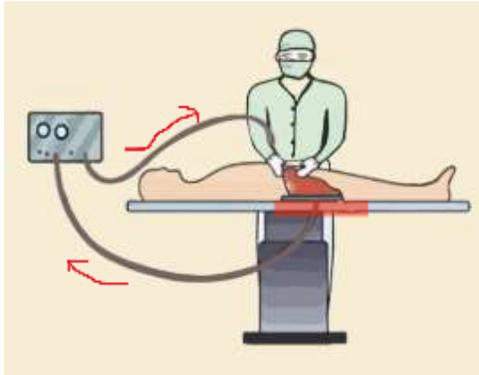
Bipolar



Active electrode



Monopolar



- Cutting (e.g., abdominal incisions)
- Large-area coagulation (e.g., liver bleeding, surface hemostasis)
- Spray / Blend modes (rapid hemostasis, simultaneous cutting + coagulation)

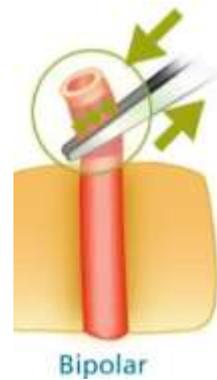
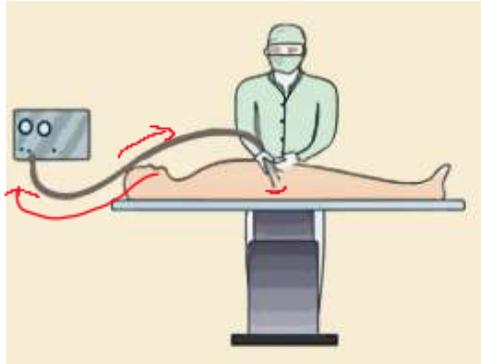
Advantages:

High power, suitable for large-scale tissue handling

Disadvantages:

Wide thermal spread, potential damage to surrounding tissues; electrode pad safety must be ensured

Bipolar



- Precise hemostasis (e.g., small vessels, hemostasis near nerves)
- Neurosurgery, urology, microsurgery (sensitive tissue areas)
- **Vessel sealing systems (advanced bipolar)**

Advantages:

Localized effect, high safety, ideal for operations near sensitive/critical organs

Disadvantages:

Limited cutting ability, mainly used for coagulation and sealing

AniSeal AS-100

Smart Energy Platform for EndoVet
& Minimally Invasive Surgery

Precision · Efficiency · Safety

The *AniSeal AS-100* is a smart electrosurgical platform integrating multiple cutting, coagulation, and vessel-sealing modes for versatile, efficient, and precise veterinary surgery.



Key Features

AniSeal AS-100 Electrosurgical Generator

Full-glass LCD Touch Panel

Intuitive interface with melody feedback — modern, easy to operate, and user-friendly.

Smart Energy Feedback System

Automatically adjusts power output in real time according to tissue impedance, ensuring consistent, safe, and precise energy delivery.

REM Contact Quality Monitoring System

Continuously monitors the contact of the return electrode and automatically cuts off power in case of poor connection — preventing burns and ensuring patient safety.

Memory & Quick Recall Function

Stores up to **9 sets of modes and power parameters**, allowing quick recall of recent settings for improved workflow efficiency.

Fanless Electronic Cooling Design

Ensures silent operation, ideal for **laminar flow operating rooms**.



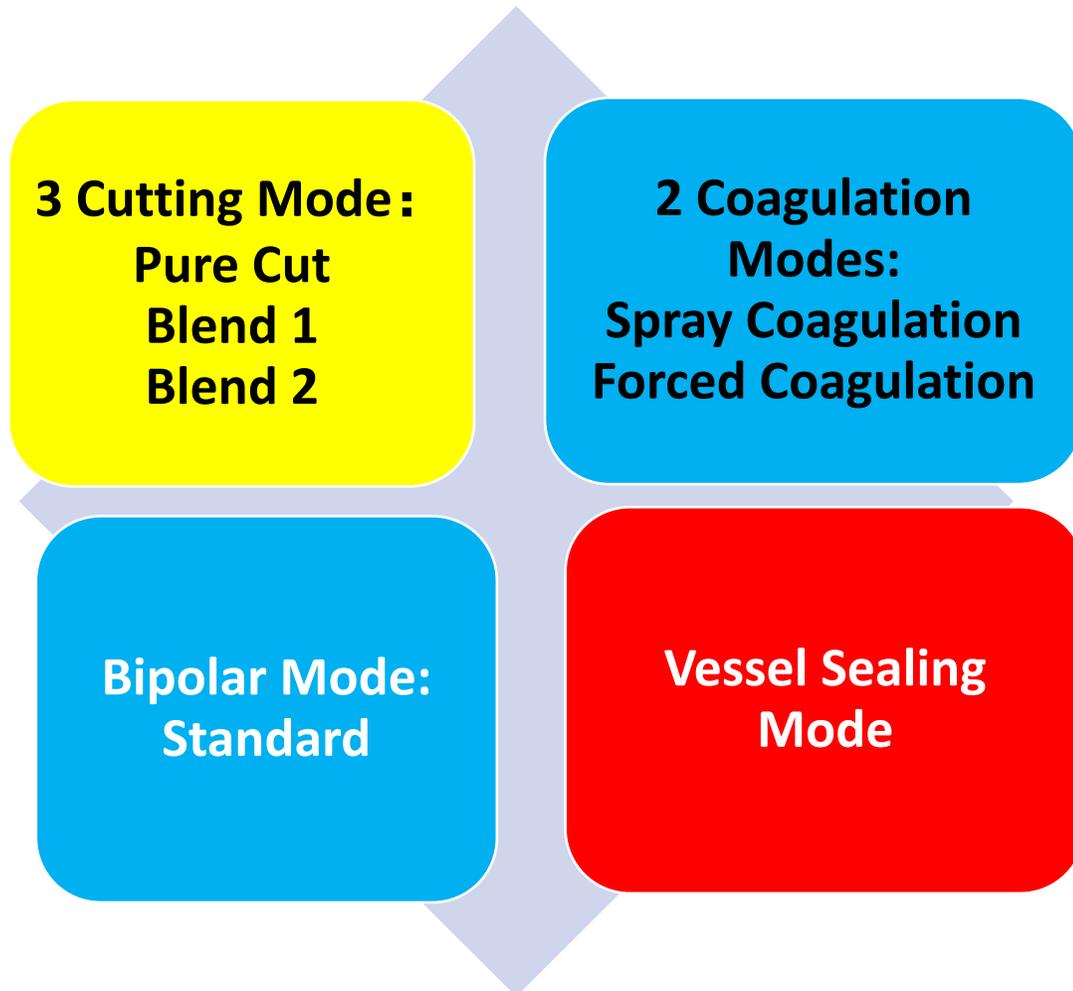
Bare unit:

Net weight: 5.60 kg

Dimensions: 415 mm (L) × 250 mm (W) × 140 mm (H)

Key Features

AniSeal AS-100 Electrosurgical Generator



Monopolar Cutting Modes

- **Pure Cut** – clean, precise cutting
- **Blend 1** – 70% cut / 30% coag for reduced bleeding
- **Blend 2** – 50% cut / 50% coag for stronger hemostasis

Coagulation Modes

- **Spray Coag** – non-contact surface coagulation with shallow penetration
- **Forced Coag** – controlled thermal effect with minimal carbonization

Bipolar Mode

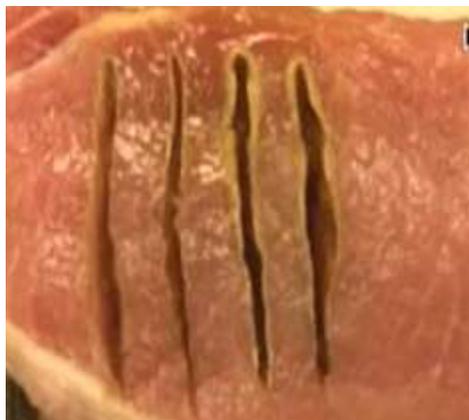
Low-voltage output prevents sparking and tissue adhesion.

Vessel Sealing Mode

Seals vessels up to **7 mm** in diameter; intelligent feedback ensures uniform compression and reliable sealing.

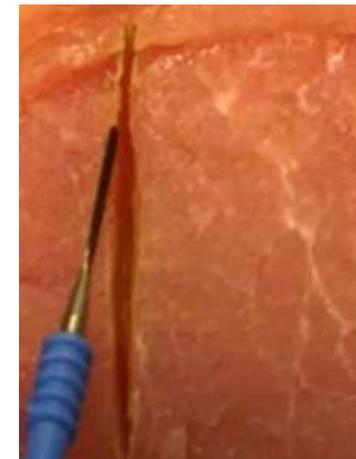
AniSeal AS-100 Electrosurgical Generator

**3 Cutting Mode:
Pure Cut
Blend 1
Blend 2**



➤ **Pure cut:**

Cut the tissue cleanly and accurately without coagulation



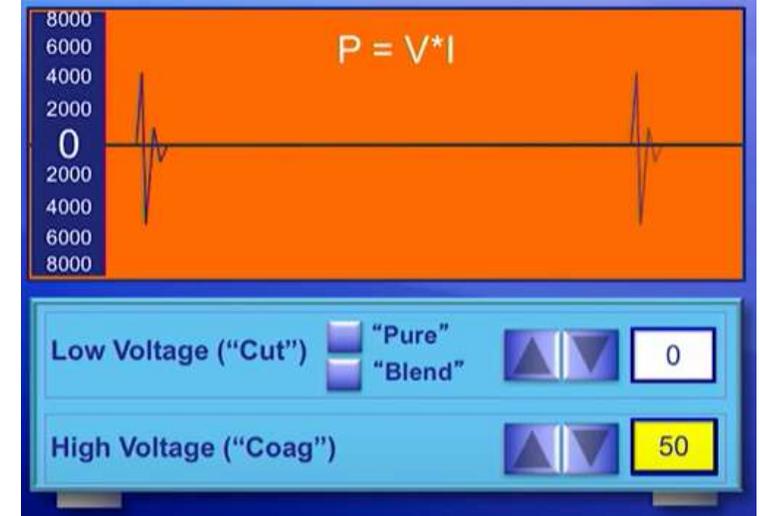
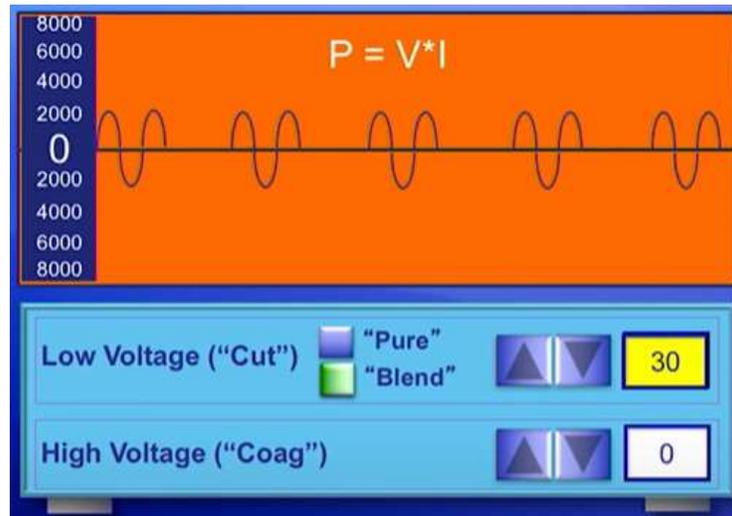
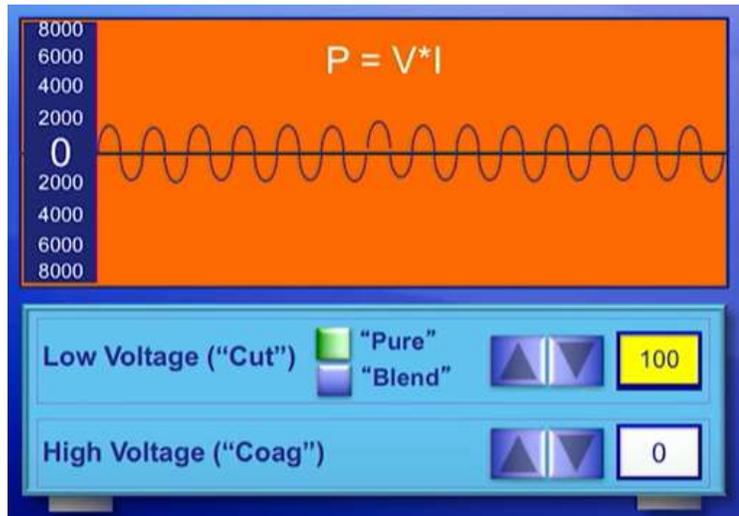
➤ **Blend 1:**

Use when the cutting speed is slightly slow and a small amount of hemostasis is required.

➤ **Blend 2:**

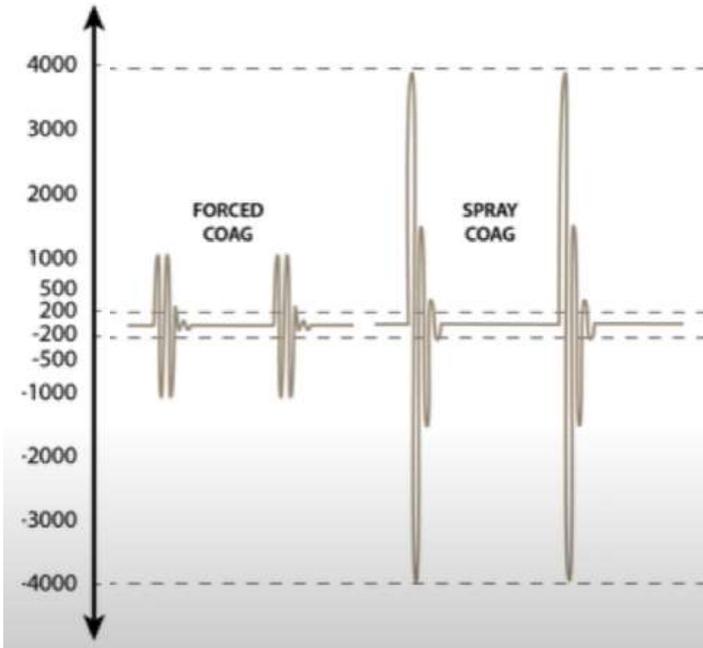
Compared with blend 1, it is used when the cutting speed is slightly slower and the better hemostatic effect is needed.

Cut Vs Blend Vs Coagulation



AniSeal AS-100 Electrosurgical Generator

2 Coagulation Modes: Spray Coagulation Forced Coagulation



➤ Spray Coagulation:

- Superficial coagulation
- Covers a large surface quickly
- Ideal for surface bleeding



➤ Forced Coagulation:

- Deeper coagulation
- Localized and targeted effect
- Ideal for vessel ends or small bleeding areas, e.g. snare polypectomy



AniSeal AS-100 Electrosurgical Generator

**Bipolar Mode:
Standard**

➤ **Standard:**

- Suitable for most bipolar applications.
- Maintains low voltage to prevent sparking.
- Gentle tissue coagulation, reducing carbonization and adhesion.

AniSeal AS-100 Electrosurgical Generator

Vessel Sealing Mode

- Seals blood vessels **up to 7mm** in diameter.
- No need for extensive dissection or anatomical separation.
- Simple and efficient operation.



Key Features

AniSeal AS-100 Electrosurgical Generator

Interchangeable Hand-pieces

Multiple handpieces available, with a **detachable and autoclavable design option** for enhanced hygiene and cost efficiency — a solution thoughtfully developed to meet veterinarians’ real clinical needs and address everyday pain points.



Unboxing & Quick Start

Standard Packing list

AS-100	Electrosurgical Generator
	Accessories
1	AH-FS-B01 Foot-pedal (Bipolar) x 1pc
2	AH-FS-M01 Foot-pedal (Monopolar) x 1pc
3	/ Electricity Cable x 1pc
4	CPW07C Monopolar Electrosurgical pen x 1pc
5	AH-NE-02 Return Electrode x 1pc
6	AH-NE-R01 Electrode Connecting Cable x 1pc
7	SJR-BF-001 Bipolar Coagulation Forceps x 1pc
8	Monopolar connection cable (for use with flexible scope accessories) x 1pc
9	Monopolar connection cable (for use with laparoscopic instruments)x 1pc
10	Monopolar adapter x 1pc



Vessel Sealing Forceps 1pc (any one of four options as standard)



Autoclavable!

Monopolar Electrosurgical pen

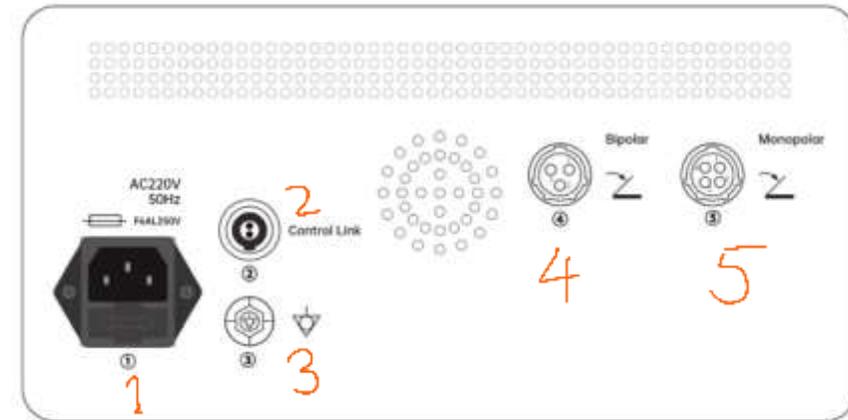
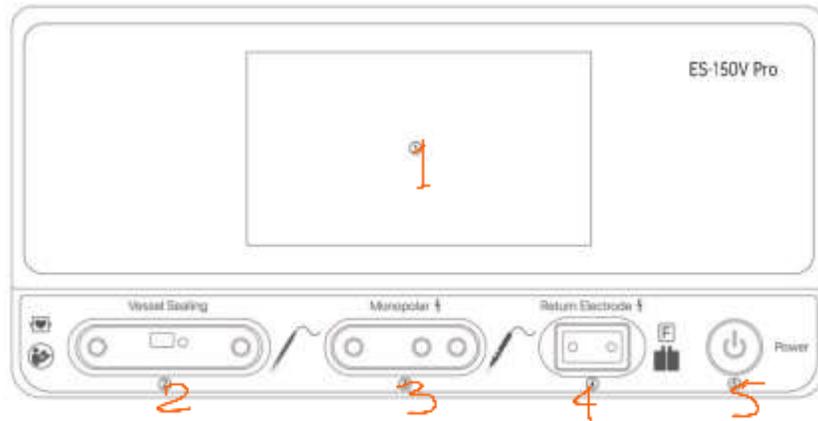
Bipolar Coagulation Forceps



Not Autoclavable!



Installation & Quick Start



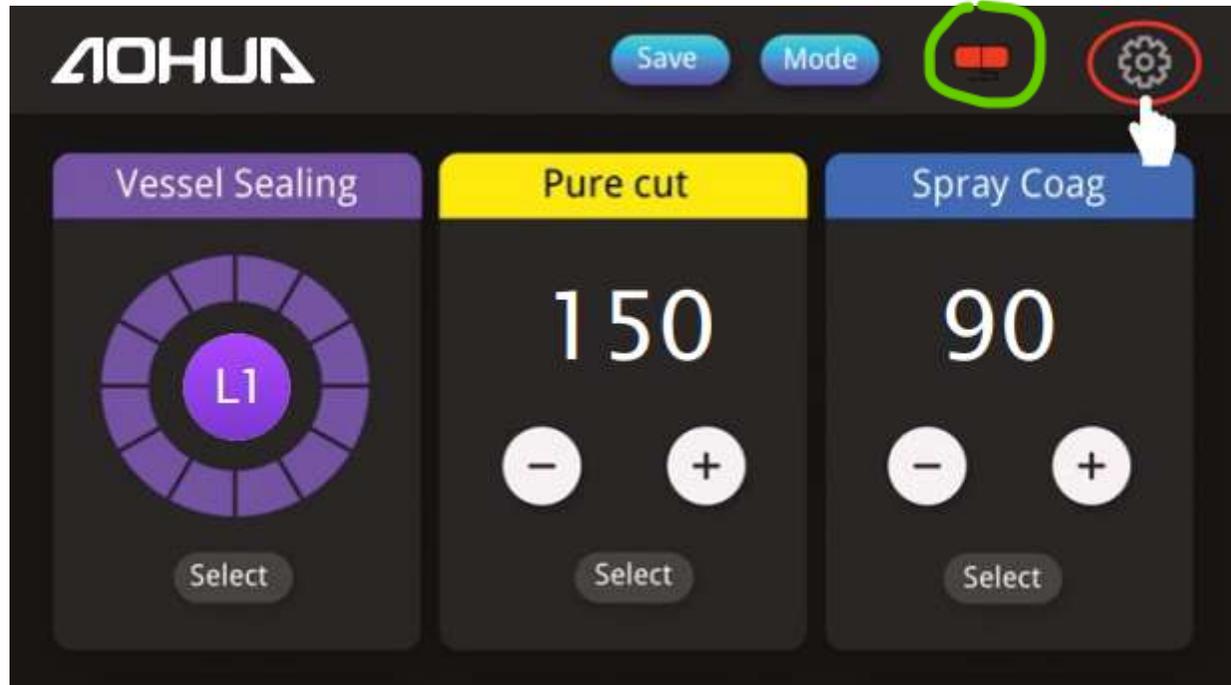
- ① 5 inch LCD touchscreen
- ② Bipolar /Vessel Sealing output interface
- ③ Monopolar output interface
- ④ Return electrode interface
- ⑤ Power switch

- ① Power input module
- ② Control Link
- ③ Equipotential earth terminal
- ④ Bipolar /Vessel Sealing Foot switch socket
- ⑤ Monopolar Foot switch socket

Installation & Quick Start

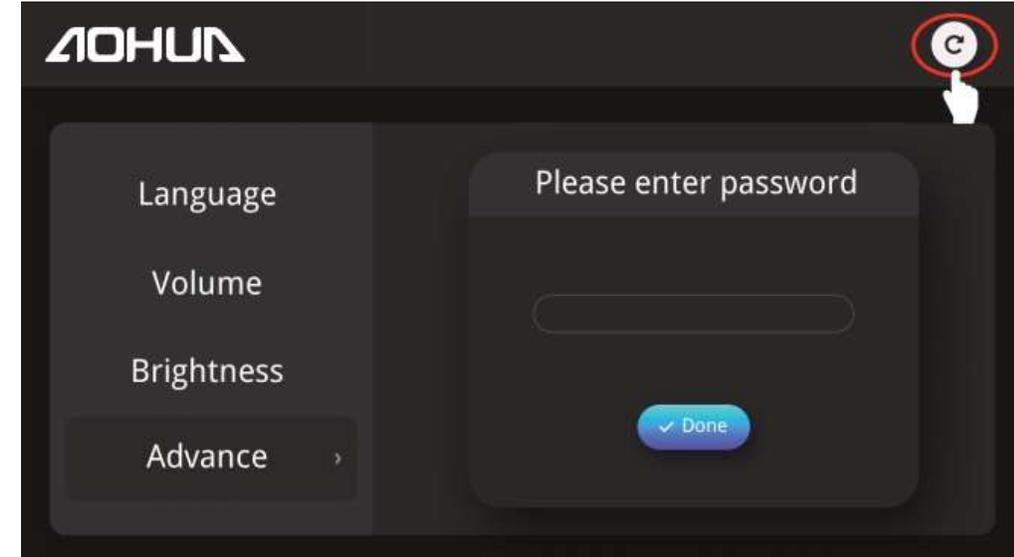
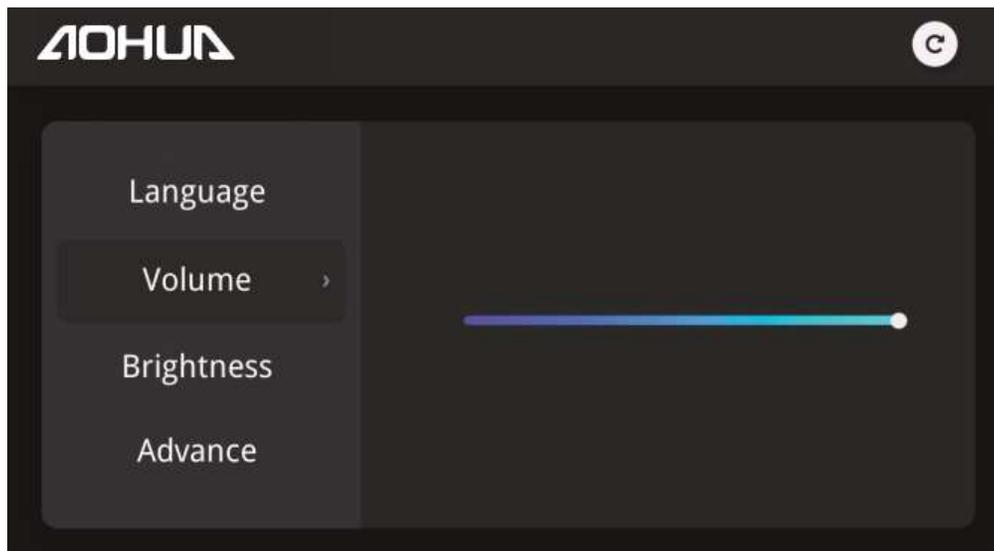
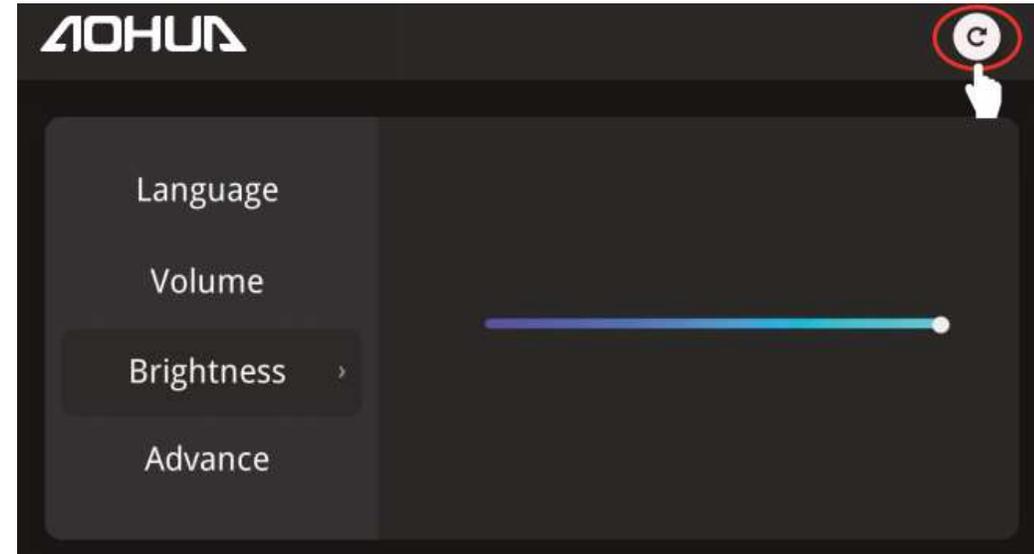
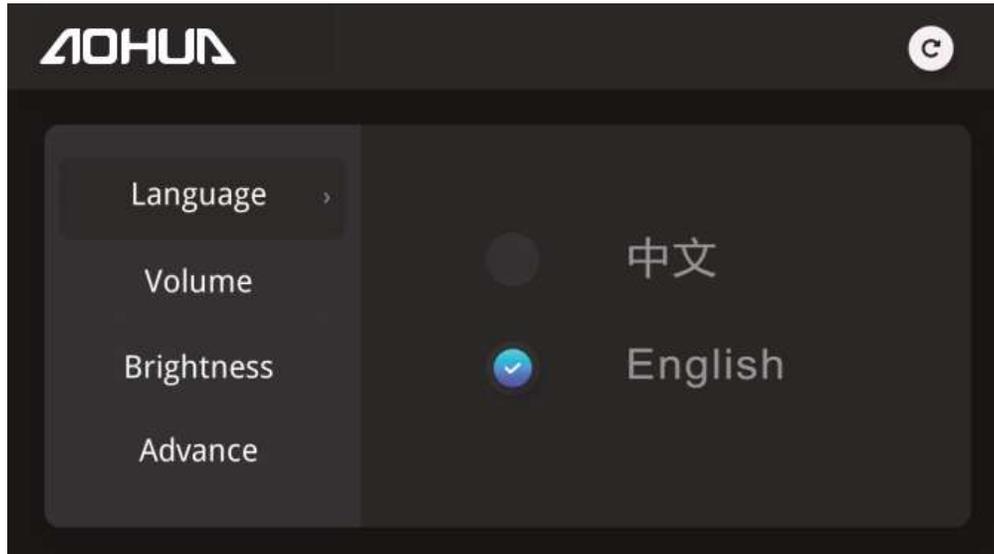


Getting started!



REM (Return Electrode Monitoring)
 Real-time monitoring of the contact status between the **return electrode (negative plate)** and the patient's skin.

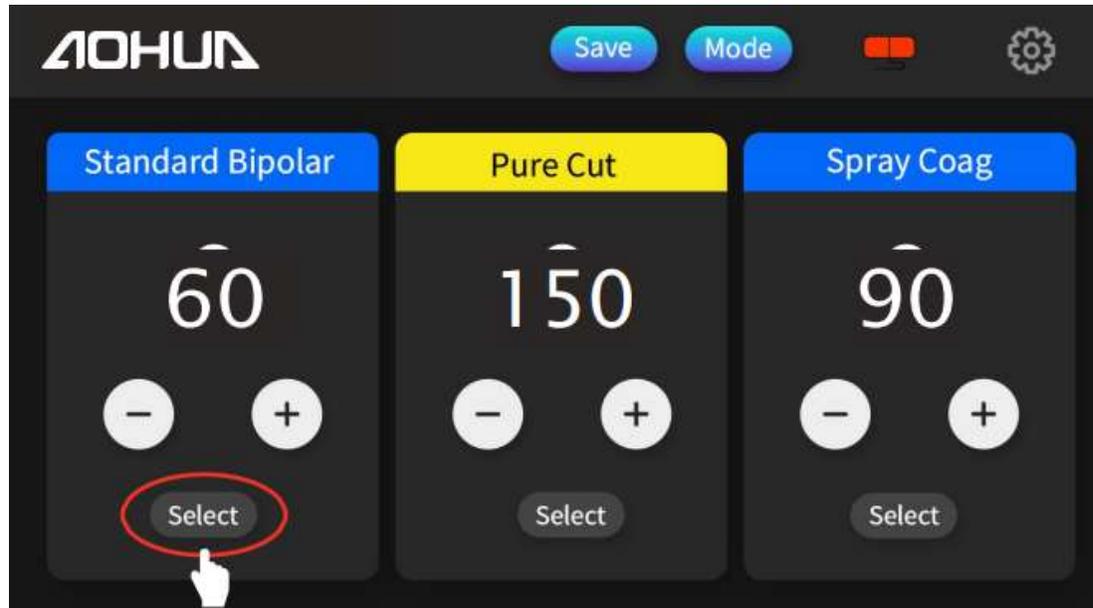
Touchscreen Setting



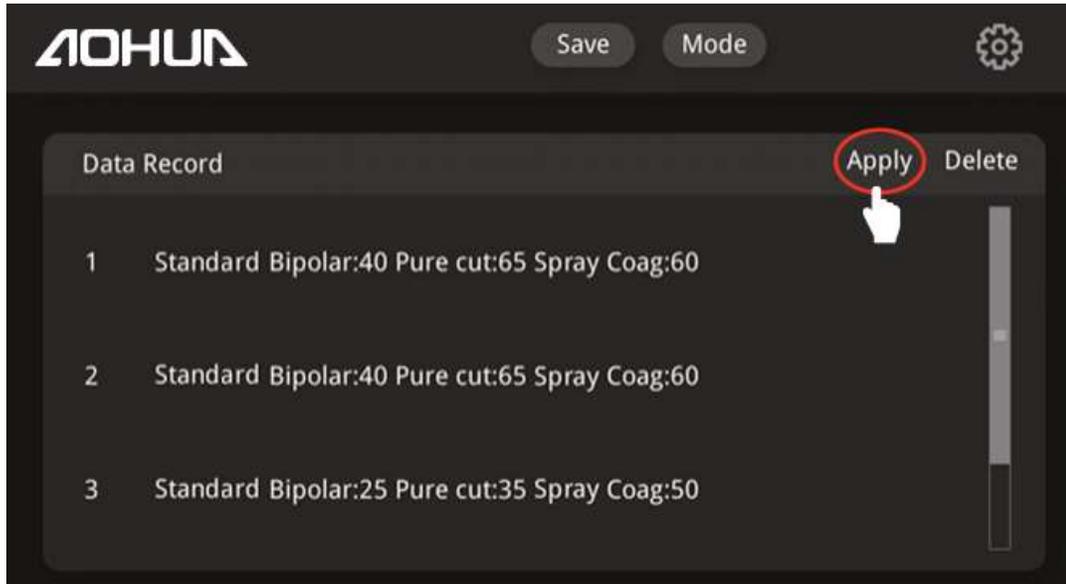
Press  to go back to main screen.

Advance is only for manufacturer.

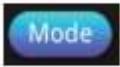
Mode Selection and Parameter Adjustment



Mode Selection and Parameter Adjustment



Press  save current power setting

Press  to view all the saved record

Can **store** up to **9 sets** of modes and parameters, which can be quickly recalled.

Monopolar Mode Application

Need return electrode pad!



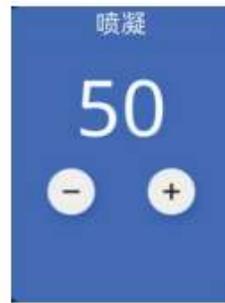
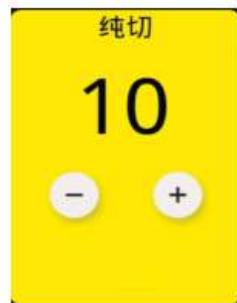
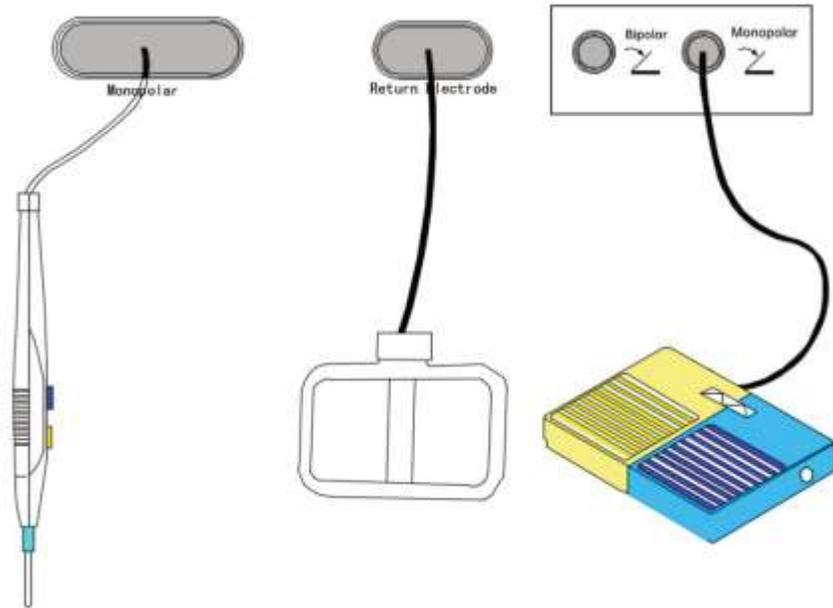
Active electrode



Monopolar Mode Application

Electrosurgical Pen for Open Surgery

Need return electrode pad!



Monopolar Mode Application

Laparoscopic Surgery

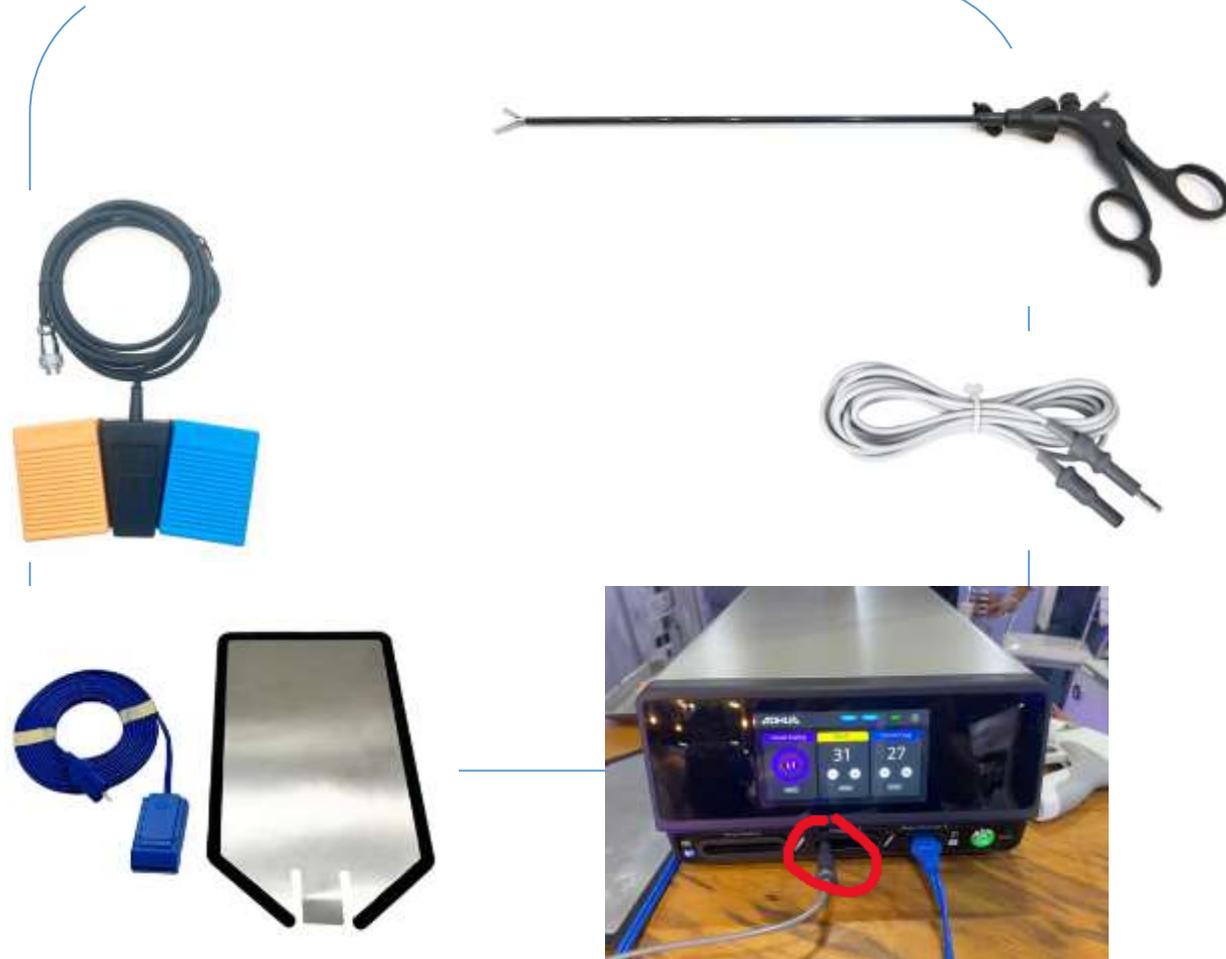
Electrosurgical hook



Monopolar Mode Application

Laparoscopic Surgery

Monopolar laparoscopic instrument



Laparoscopy Kit-13-pieces

A variety of forceps available, and the coagulation bipolar forceps can be connected to a High Frequency Electrocautery for vascular closure.

	Name	Description	Quantity
	Laparoscope	0°/30° Ø 5 x 290mm	1 pc
	Magnetic Trocar I	Ø 5.5 x 65mm	2 pcs
	Magnetic Trocar II	Ø 10 x 65mm with reducer sleeve Ø 5.5	1pc 1pc
	Vessel Needle	Ø 2.5 x 150mm	1 pc
	Claw Grasping Forceps	Ø 5 x 330mm	1 pc
	Dissecting Forceps	Ø 5 x 330mm	1 pc
	Atraumatic Grasping Forceps	Ø 5 x 330mm	1 pc
	Biopsy Forceps	Ø 5 x 330mm	1 pc
	Curved Scissors	Ø 5 x 330mm	1 pc
	Bipolar Coagulation Forceps with Bipolar Cable	Ø 5 x 330mm	each-2-pcs

Monopolar Mode Application

Work with Flexible scope

Hot Snare



Standard Bipolar Mode Application

Open Surgery

Bipolar forceps



Standard Bipolar Mode Application

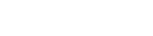
Laparoscopic Surgery

Bipolar laparoscopic forceps



Laparoscopy Kit-13-pieces

A variety of forceps available, and the coagulation bipolar forceps can be connected to a High Frequency Electrotome for vascular closure.

	Name	Description	Quantity
	Laparoscope	0°/ 30° Ø 5 x 290mm	1 pc
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	Bipolar Coagulation Forceps with Bipolar Cable	Ø 5 x 330mm	each-2-pcs

Standard Bipolar Mode Application

Laparoscopic Surgery

Bipolar laparoscopic forceps



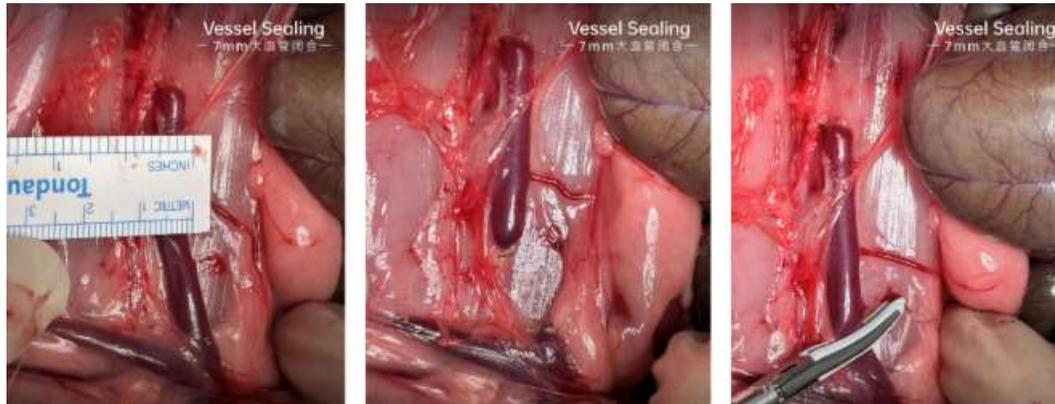
Vessel Sealing Mode Application



Key Features

Interchangeable Hand-pieces

Autoclavable design! ! (10 times)



Seals blood vessels **up to 7mm** in diameter.

Laparoscopic Surgery



Open Surgery



Interchangeable Hand-pieces

Laparoscopic Surgery



AF-1500C Pro

AniSeal Vessel Sealing Forceps, Maryland, 5mm/37cm

Use with high-frequency surgical equipment

Shaft Diameter 5 mm, Shaft Length 37 cm

Seal Plate Length 20 mm Cut Length 18.4 mm

Proximal Seal Plate Width 4 mm

Distal Seal Plate Width 1.8 mm

359 degree rod rotation

Elbow, single-open pliers

Toothed surface

Blade included

Manual trigger mode

Activate with buttons or pedals

Instruments can be autoclaved

straight是直头

远端和近端宽度都是4mm

近端闭合宽度4mm

elbow是弯头

远端闭合宽度1.8mm



Interchangeable Hand-pieces

Laparoscopic Surgery

AF-1500 Pro

AniSeal Vessel Sealing Forceps, Straight, single-open pliers, 5mm/37cm

Use with high-frequency surgical equipment

Shaft Diameter 5 mm, Shaft Length 37 cm

Seal Plate Length 18 mm Cut Length 16.4 mm

Proximal Seal Plate Width 4 mm

Distal Seal Plate Width 4 mm

359 degree rod rotation

Straight, single-open pliers

Toothed surface

Blade included

Manual trigger mode

Activate with buttons or pedals

Instruments can be autoclaved



straight是直头

远端和近端宽度都是4mm

近端闭合宽度4mm

elbow是弯头

远端闭合宽度1.8mm



How to Trigger?



Manual trigger -- Activate with buttons or pedals

Interchangeable Hand-pieces

Open Surgery



AF-2150Pro

AniSeal Forceps Vessel Sealing Forceps Small Jaw Open, 22mm/23cm

Use with high-frequency surgical equipment

Device Length 23cm

Seal Plate Length 23.6mm Cut Length 22mm

Proximal Seal Plate Width 3.88mm

Distal Seal Plate Width 1.8mm

Elbow, Slimline Plier Head

Toothed surface, Blade included

Smoking device is available

Automatic trigger mode

Activate with buttons or pedals

Instruments can be autoclaved

How to Trigger?

AF-2150Pro



Automatic trigger
Activate with buttons or pedals



Interchangeable Hand-pieces

Open Surgery



AF-1200Pro

AniSeal Vessel Sealing Forceps, Straight, Double-open Pliers, 10mm/23cm,

Use with high-frequency surgical equipment

Shaft Diameter 10 mm, Shaft Length 23cm

Seal Plate Length 22 mm Cut Length 20 mm

Proximal Seal Plate Width 6 mm (2×3 mm)

Distal Seal Plate Width 6 mm (2×3 mm)

359 degree rod rotation

Straight, double-open pliers

Blade included

Manual trigger mode

Activate with buttons or pedals

Instruments can be autoclaved

Detachable

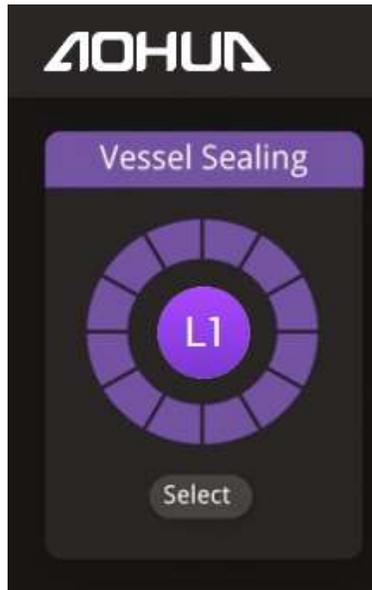
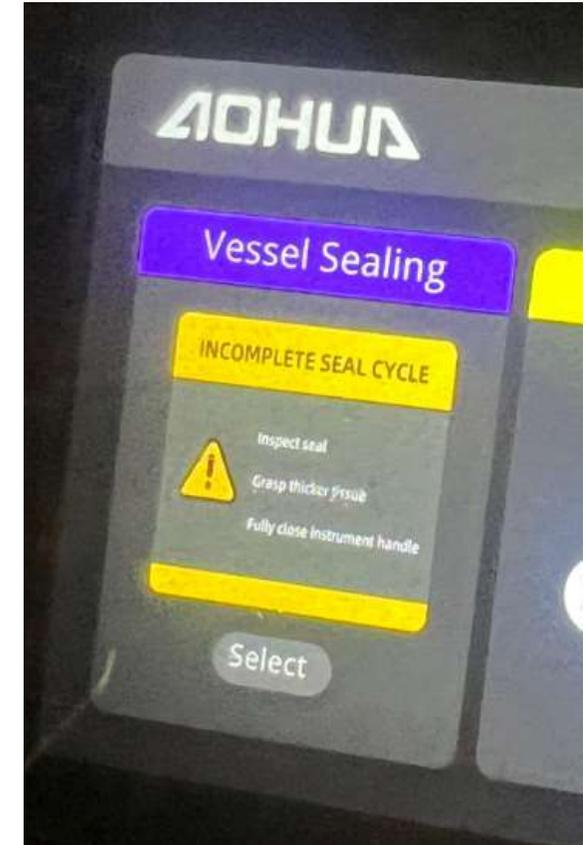
AF-1200Pro

Disassembly

Installation



Not working? Common causes



Energy level too low

Poor contact due to a dirty tip

Grasp too thin tissue

THANKS



AniSeal AS-100 — Smart Energy, Precise Control, Better Outcomes.