The Ultimate in Speed and Simplicity
HABIB® 4X BIPOLAR RESECTION DEVICES

Habib® 4X Laparoscopic Surgery Bipolar Resection Device

RF ON/OFF button on the handle
Electrode & Protective Plate: 3 cm length and char resistant with a push-off, depth-controlling mechanism
Shaft: 15 inch length fits standard 10–12 mm ports

Shaft:
Electrode length 10 cm – primary device for parenchyma resection and tissue coagulation

Shaft:
Electrode length 6 cm – secondary device with agility for smaller, faster resections and easier coagulation applications

Push-off tool: Plastic tool used to support tissue during electrode withdrawal and clean charred tissue off needles/electrodes
The Habib 4X Bipolar Resection Devices procedure protocols are as simple as: Coagulate, Cut and Excise

Liver Procedural Applications
Habib 4X Open and Habib 4X Laparoscopic Bipolar Resection Devices provide the ability to precoagulate liver parenchyma including difficult cirrhotic tissue with minimal blood loss and reduced ICU stays²

Kidney Procedural Applications
New AUA guidelines recommend a Partial Nephrectomy (PN) for patients with T1 tumors < 4 cm.³ Habib 4X Open and Habib 4X Laparoscopic Bipolar Resection Devices are outstanding tools to help Urologists transition to PN.

BENEFITS
• Coagulates an area of tissue approximately 1 cm wide with a depth of up to 4 cm in an average of 8 seconds
• Coagulates and seals vessels up to 3 mm in one application⁶
• Reduces blood loss during hepatic and renal surgeries¹, ², ⁴
• Eliminates the need for vascular clamping in renal and hepatic surgeries¹, ², ⁴
• Reduces operating room time and patient recovery time in major vascular tissue surgeries⁵

“The mean blood loss during parenchymal transection was 75 mL, which is lower than in most major published series”²

“No patient has required a blood transfusion, clamping of the hilum, or conversion to nephrectomy or open surgery for bleeding.”⁴

References:
# HABIB® 4X RESECTION DEVICES

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<td>1500X RF Generator Adapter Cable</td>
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## Habib 4X Adapter Cable

Habib 4X adapter cable is specifically designed for use with the AngioDynamics 1500X RF Generator and is a required accessory with the Habib 4X Open surgical device. The Habib 4X Laparoscopic device is packaged with a sterile pre-attached adapter cable.

## Model 1500X RF Generator

The Model 1500X RF Generator is designed specifically for use with AngioDynamics’ electrosurgical devices. It is the latest radiofrequency generation system that features technological advances including software upgrade capabilities, potential for 250 watts of power, and three flexible serial ports.

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### IMPORTANT RISK INFORMATION

**INDICATION FOR USE:** The Habib® 4X device is used to transmit bipolar radiofrequency energy (provided by the 1500X RF Generator) and to assist in intraoperative coagulation of tissue during surgical procedures. The Habib® 4X Laparoscopic device is used to transmit bipolar radiofrequency energy (provided by the 1500X RF Generator) and to develop a plane of coagulative necrosis along the intended line of transection. The tissue can subsequently be divided with a conventional scalpel through this zone of necrosis. CAUTION: Federal (USA) law restricts the sale of these devices by or on the order of a physician.

**CONTRAINDICATIONS:** Do not use on patients with cardiac pacemakers or other active implants.

**WARNINGS AND PRECAUTIONS:** For single use only. Do not bend/kink the needle arrays or attach anything (i.e., clamps, etc.) to the device; inadvertent patient injury may result. Do not use needle-monitoring or dispersive electrodes. This device may interfere with the operation of other electronic equipment. Improper placement or handling of bipolar electrodes while RF is on may lead to burns. Please see package insert for complete list of warnings and precautions and observe all instructions prior to use.

**POTENTIAL COMPLICATIONS:** Possible complications include problems related to general anesthetics, bleeding, liver abscess, bile leak, liver failure, subphrenic abscess, postoperative heart failure, chest infection, wound dehiscence, wound infection or incisional hernia.

Indications, contraindications, warnings and instructions for use can be found in the instructions for use supplied with each device. Observe all instructions prior to use. Failure to do so may result in patient complications.