



Radio Frequency Diathermy Device

LavaTRON

A System Most Optimized to Secure Beauty & Health
From Controlling Obesity to Relieving Pain

CE
0120

Under progress



Comparable
with Any Other Brand Named Products!



Radio Frequency Diathermy Device

RF Diathermy Device LavaTRON

LavaTRON helps increase the temperature of deep dermis & hypodermis with 3~5cm in depth, improving cellular function, circulation of blood, relief of pain, and enhances the extension of collagen tissues. LavaTRON facilitates the cure of chronic inflammations by using induction heating which refers to a method where high-frequency current applied to a body triggers resistance to convert an electric energy into a thermal energy.



► Model: LVT-250



» How LavaTRON Functions

Polarization

If an alternating high-frequency current is applied to a biological tissue, cations that have been disorderly scattered within its cytoplasmic membranes are orderly arranged toward the cathode, and anions toward the anode, which refers to the polarization.



Producing Frictional Heat

Cations or anions move away from the exiting cathode or anode they are forced around toward their counterpart whenever the polarity of alternating high frequency changes, in which process a frictional heat is produced inside the applicable tissue.



Increasing the Temperature

If the local temperature of a tissue goes up more than 40°C, arteries and capillaries cause their vasodilatation, improving the circulation of blood, and enhancing metabolism. Through these effects the portion of oxygen and nutrient is to be increased facilitating a removal of biological wastes and reinforcing immunity from a disease via increasing the supply of antibodies and immune components.



» Facilitating Lipolysis

A thermal lipolysis is triggered by directly increasing the temperature of applicable adipose tissues, which the effects can be used to control obesity and body shape.



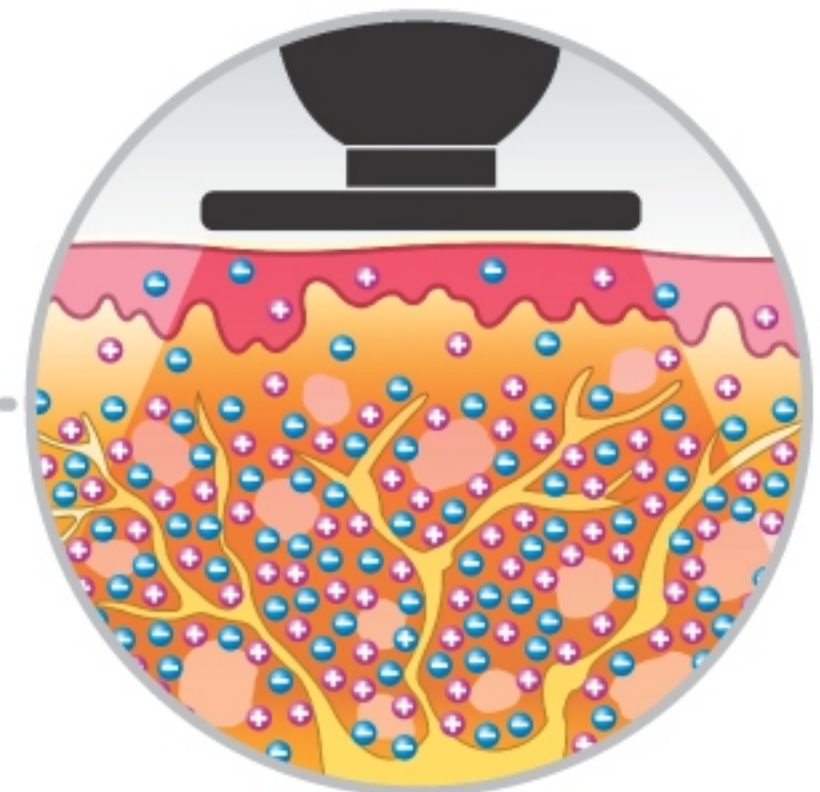
» Increasing the Fibrous Function of Collagen Tissues

If the temperature of collagen tissues goes up to 45°C, their fibrous function increases 5~10 times more. This effect can be used to heighten the elasticity of body skin and to remove wrinkles.



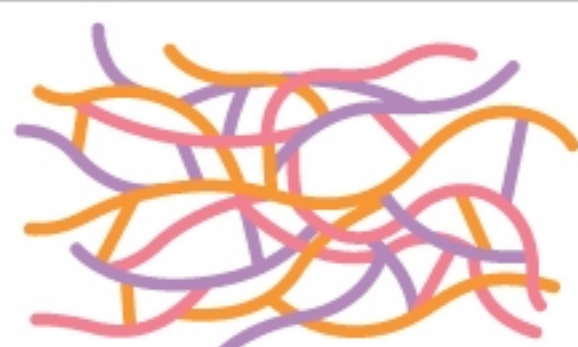
» Relieving Pain

A biologically-generated frictional heat is effective for relieving pain resulting from muscular cramp since it decreases any secondary muscular cramp. In the case of tonicity resulting ischemia, such heat causes pain-relieving by improving vascular current.



Generating deep heat through applying Radio frequency(diathermy)

• A Change in Collagen after an Application of LavaTRON



The structure of collagen before an application of LavaTRON

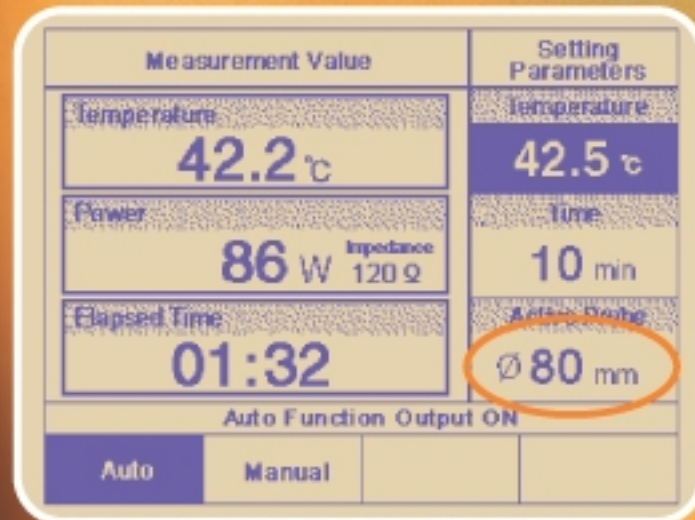


The structure where collagen has been contracted/rebound after an application of LavaTRON

It's the Best Choice!

Convenience & Safety is the Priority of the LavaTRON

➤ The Unique Functions of LavaTRON

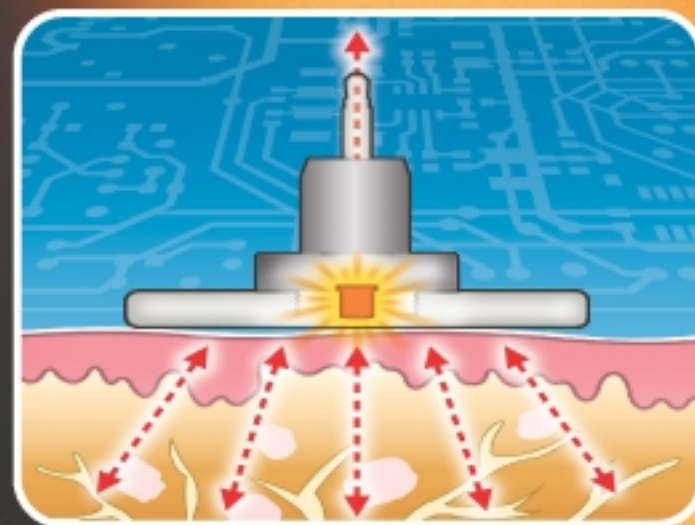


〈 Automatically recognizing the size of lead electrodes 〉

Safety 1 Automatically recognizing electrodes

(patent pending : 20-2005-20566)

Since the size of electrodes connected to the main body is automatically recognized to control the current, against such injuries as a burn that could happen due to carelessness in using can be prevented in advance.

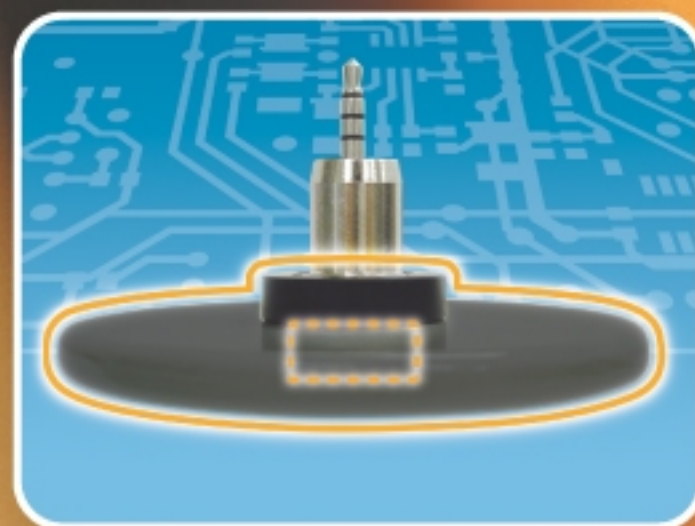


〈 Automatically controlling the temperature via the built-in sensor 〉

Safety 2 Automatically controlling the temperature

(patent pending : 20-2005-20566)

By using a built-in sensor to automatically control how much current will be conveyed, a user can more safely and conveniently use the product, since the lead electrode measures a change in the temperature of body skin on a real-time basis with comparison of a set temperature (39~47 °C)



〈 Perfect insulation of lead electrodes 〉

Safety 3 Excellent insulation of lead electrodes

Since there is no spark resulting from a conveyed current by perfectly insulated lead electrodes, recipients will have no discomfort for the LavaTRON operation.

➤ Electrotherapeutic current & its applications

..... Alternating Current Direct Current

Low Frequency Current	Medium Frequency Current	Radio Frequency Current	Continuous Direct Current	Interrupted Direct Current
<ul style="list-style-type: none"> • Dynamic effects • Pain-relieving • Tissue curing 	<ul style="list-style-type: none"> • Dynamic effects • Pain-relieving 	<ul style="list-style-type: none"> • Lipolysis & softening effect • Increased elasticity of collagen tissues • Increase blood flow around scalp • Pain-relieving 	<ul style="list-style-type: none"> • Chemical effects 	<ul style="list-style-type: none"> • Dynamic effects
<ul style="list-style-type: none"> • Electrical Stimulation • Functional electrical stimulation • Transcutaneous Electrical nerve stimulation • Microamperage current nerve stimulation 	<ul style="list-style-type: none"> • Russian current stimulation • Interferential current stimulation 	<ul style="list-style-type: none"> • Radio Frequency Diathermy 	<ul style="list-style-type: none"> • Medical galvanism curing • Iontophoresis curing • Surgical galvanism curing 	<ul style="list-style-type: none"> • Electrical stimulation

Main Features

Self Control of Output Power □` Auto Mode

Such a burn as could arise from carelessness can be prevented in advance by displaying the temperature of skin upon its contact with the lead electrode on the screen to self-control and maintain the temperature set in advance.

Impedance Monitoring

A measurement of impedance variations shown depending on the location or contact area of patient plate, or a patient's physical constitution under Auto Mode aims at the most optimal output for such impedance to maximize the effect of using the product.

Monitoring a Change in Temperature

Under Auto Mode, changes in the temperature are so monitored in accordance with skin contact per second that, if the temperature is sharply changed, the resulting output can slowly changes. It's the case with the opposite : if there's a slow change in the temperature followed, the output quickly changes to maximize the effect of using the product, which will consistently maintain a patient's effective temperature.

Temperature Monitoring □` Manual Mode

Since the built-in sensor on the surface of lead electrodes is used to measure and display the temperature of skin upon contact, a user can manually adjust the output while using the product.

Automatically Controlling Output

Upon reaching the pre-set time limits, the timer stops the product to avoid its unnecessary uses. The user can stop or start anytime while using.

Variety of Applications

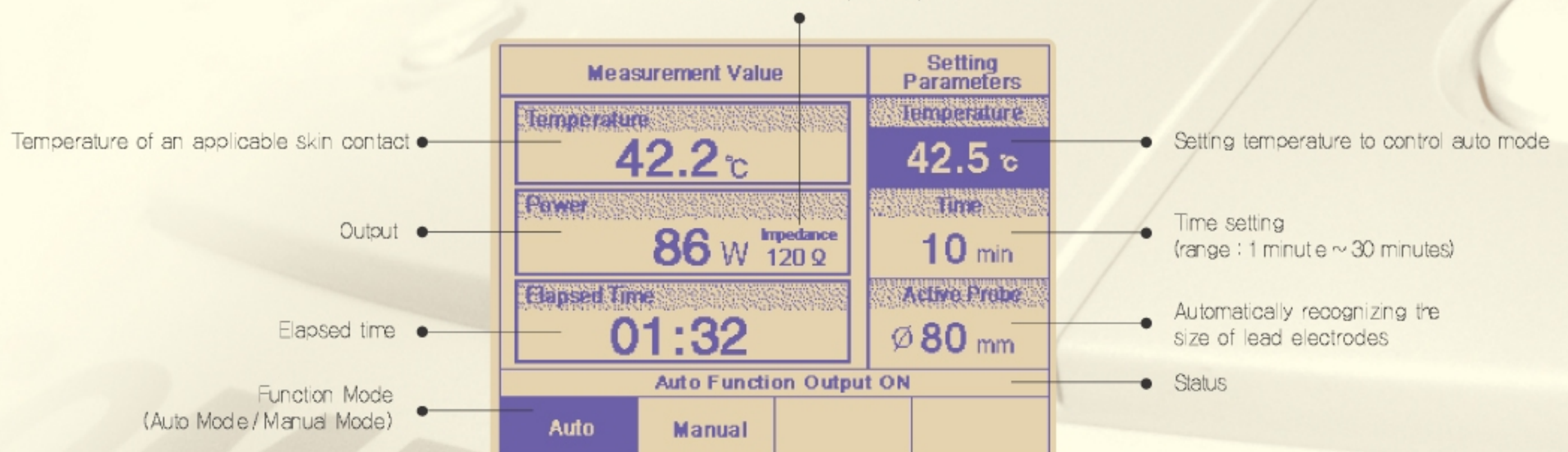
Using various lead electrodes from 20mm to 100mm in diameter, a user can flexibly and widely apply the product.

Flexible Accessories

There are two types of patient plates (large & small) and the patient bar is flexible enough to be used with most patients, while allowing the recipient to find a comfortable posture.



Displaying bio-impedance between lead electrodes and patient plate



<Screen under Auto Mode>

» Applications

Controlling Obesity & Body Shape

- The product helps remove biological wastes through a high-frequency thermal massage that acts deep on a patient's subcutaneous fat, and increase skin elasticity by regenerating his collagen tissues. On top of that, its lipolysis facilitation enables the control of obesity and body shape.

Applications

- Abdominal fat care
- Arm/thigh/calf care



Abdominal Fat Care



Leg Silhouette Care



Hip Silhouette Care

Removing Wrinkles & Skin Health

- The high-frequency thermal massage helps remove biological wastes and increase skin elasticity, but also removes the wrinkles for healthy and beautiful skin.

Applications

- Crow's feet
- Nasolabial fold
- Forehead lifting
- Anti-aging



Crow's Feet



Nasolabial Fold



Forehead Lifting

Enhancing Scalp Health

- Deep heating helps promote blood circulation to supply the scalp with lots of oxygen and nutrients, and sprout hairs, preventing them from falling out through a stimulation and sterilization of their roots via a thermal effect.

Applications

- Alopecia care
- Hair growth
- Alopecia areata
- Seborrheic scalp care



Alopecia Care



Hair Growth

Relieving Pain

- An increase in temperature up to 40~43°C through an application of high-frequency to dermis & hypodermis helps relieve pains by facilitating the fibrous function of collagen tissues, blood circulation, and cellular functions.

Applications

- Chronic arthritis
- Muscle pain
- Lumbar pain
- Rheumatic arthritis
- Frozen shoulder



Shoulder Pain

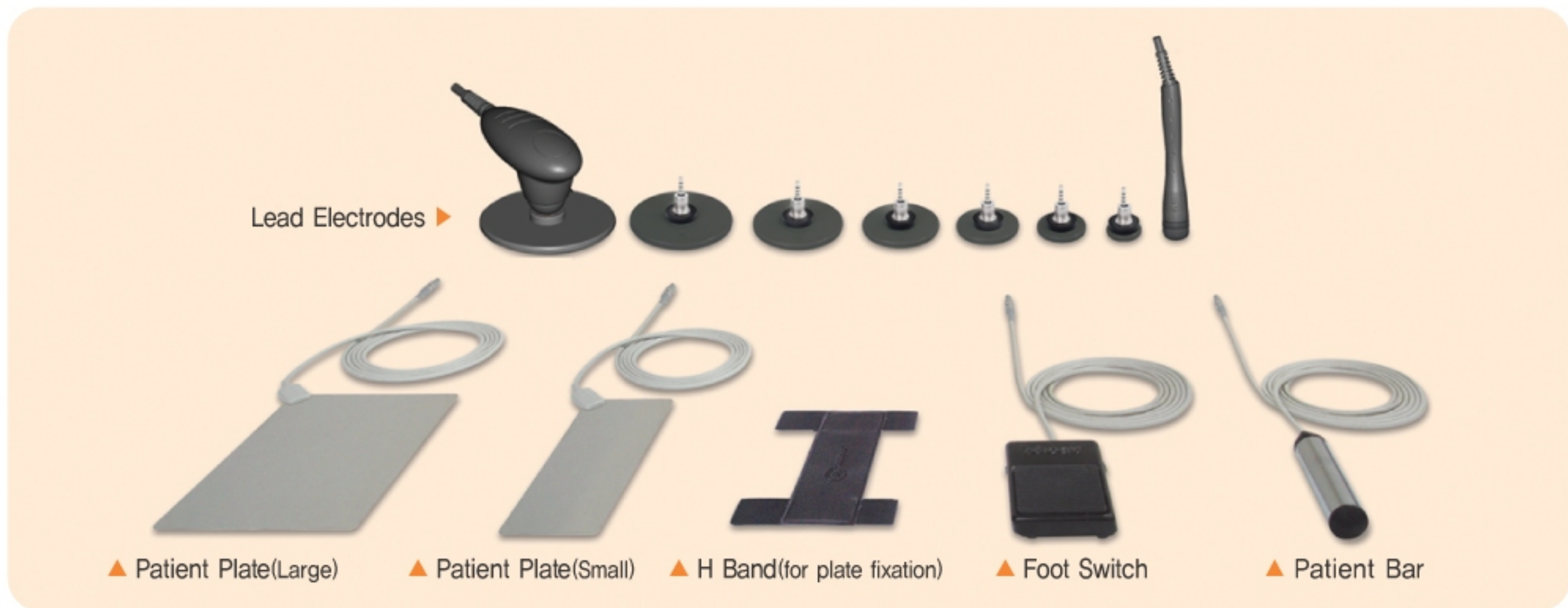


Lumbar Pain



Knee Pain

Accessories



Applicable Body Area According to Lead Electrode Sizes

Size(Diameter)	Application	Effects
20mm	crow's feet, nose, nasolabial fold	wrinkle removing
30mm	face, cheek, jaw, forehead	wrinkle removing, skin care
40mm	face, neck, arm, knee	skin care, pain-relieving
50mm	arm, leg, shoulder, thorax, knee	body shaping, skin care, pain-relieving
60mm	leg, thigh, back, thorax	body shaping, pain-relieving
70mm	back, thigh, abdomen	obesity & body shape controlling, pain-relieving
80mm	back, thigh, abdomen	obesity & body shape controlling, pain-relieving
100mm	back, abdomen	obesity & body shape controlling, pain-relieving

Cautions When Using LavaTRON

A User shall avoid using the product in the following cases of for the specific regions or person :

- The case where such an aid as implant, pace maker or any other artificial organ inside the body
- Pregnancy
- A patient with a coagulation disorder or bleeding tendency
- When the patient does not feel thermal changes
- A hypertensive
- A burn or care after such a burn

LavaTRON Creams

LavaTRON creams refer to specialized ointments which are used depending on what areas of the body to apply the product to for not only maximizing its effectiveness but also giving a soft feeling to comfort the patient.



» High-Frequency Body Cream (500ml)
High-frequency body cream includes caffeine which concerns lipolysis that helps control obesity and body shape, natural aloe liquid to reinforce moisture in the skin and activate metabolism.



» High-Frequency Facial Cream (500ml)
High-frequency facial cream includes retinol and adenosine to increase the elasticity of collagen tissues for removing wrinkles, and natural aloe liquid to reinforce moisture in the skin.



» High-Frequency Hair Cream (400ml)
High-frequency hair cream includes murconine to help promote hair growth, and extracts from iles to sterilize and prevent decaying so that the patient can maintain a clean and healthy scalp.

» Specification

ITEM	DESCRIPTION
Main Power	90~130VAC or 180~260VAC, 47~63Hz, Auto selectable
Auto Mode	39℃~47℃, Temperature measurement accuracy: ±1℃
Manual Mode	1%~100%, Power intensity step: 1%
RF Lesion Output	470kHz ± 10% Sine wave
	Maximum 250 W, Load 500 Ω
	Auto adjustable and Manual adjustable
	1~30min, Time step: 1min
Active Electrodes	∅ 20 mm, ∅ 30 mm, ∅ 40 mm, ∅ 50 mm, ∅ 60 mm, ∅ 70 mm, ∅ 80 mm, ∅ 100 mm
Display	320 x 240 Backlight Mono Graphic LCD

LavaTRON is a RF Diathermy Device
Created by Sometech's Advanced Technologies

Body Care • Skin Care • Hair Care • Pain Control



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