

# “Kitsilano RF MicroNeedling” User manual



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## User notice:

Please carefully read this user manual before using the device. This user manual is an instruction manual, not a warranty, for the product. LELA maintains the right, at any time, to interpret and change any printing mistakes, software updates, and product updates included in this manual. Without prior notification, these modifications will be immediately integrated into the updated user manual. Piracy has to be looked into; this user handbook was created and printed by LELA Group.

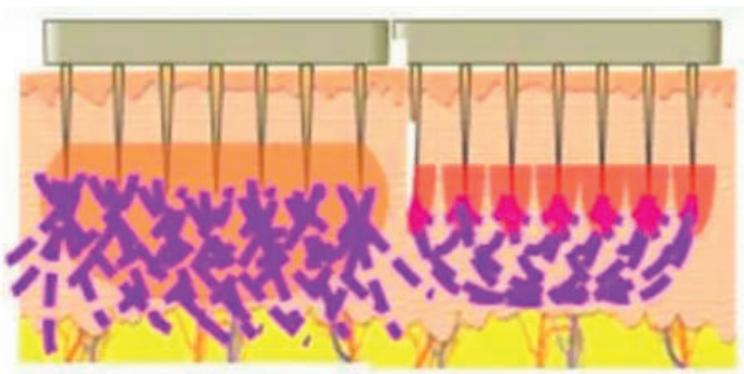
## Preface

RF Device is the world's most cutting-edge scientific beauty technology. The dermis's collagen quickly regenerates and reorganizes under the stimulation of radio frequency energy via the use of microneedles with an insulating coating and radio frequency technology, which precisely acts on target tissues at various depths while heating them. It successfully addresses the underlying causes of skin issues such as acne scars, dullness, and sagging skin.

Excessive moisturizing skin care products, covering cosmetics, mental stress, staying up late, lack of sleep, and environmental pollution may cause acne, sensitivity, wrinkles, etc. Face cleaning, a healthy lifestyle, and normal skin care can only cure superficial skin issues. The Kitsilano RF Microneedling device may swiftly break through the epidermal barrier and produce a standardized puncture channel. Target the deep layer and address skin issues from the base. After treatment, there will be a minor

redness but no blood spots or scabs. Recovery takes 2-3 days. It's minimally invasive. RF Device is one of the safest and most effective device for wrinkle and acne-removal. Radio frequency waves penetrate the epidermal basal melanocyte barrier, heat the collagen fibers in the dermis to 55°C-65°C, and destroy sebaceous glands and, improving facial pores, acne scars, reduce sebum production, and dark complexion. The treatment also gets rid of Propionibacterium acnes and reduces inflammation. It inhibits sebaceous gland oil production and prevents acne. Radio frequency radiation works on scar tissue, stimulating cells to produce collagen to remove acne blemishes and scars.

RF The microneedling device is designed particularly for acne skin, pores, folliculitis, acne, dark circles, under-eye bags, uneven skin tone, and other skin issues. It combines microneedle minimally invasive, segmented shuttle technology with radio wave function, with depth-adjustable microneedle radio wave probes. When the probe's microneedle penetrates the skin, it will simultaneously emit 1 million HZ radio waves. This electric pulse is only emitted at the bottom tip and does not heat the epidermis; thus, it may safely, precisely, and uniformly heat the collagen in the deep dermis to stimulate collagen denaturation, reorganization, and coagulation. In addition, the microneedles' low invasiveness promotes a number of activating elements to create the skin from the epidermis to the deep fascia, achieving skin regeneration, firming and lifting, reducing wrinkles, and reshaping the facial contours.



The RF Device is so effective that it has been called "the terminator of skin conditions" by experts. It employs cutting-edge technology that is safe for the skin.

Stretch marks, sagging skin, wrinkles, age spots, enlarged pores, and other skin discolorations respond dramatically to the radiofrequency treatment delivered by the this device. This cutting-edge method of skin rejuvenation may lengthen the skin and provide noticeable results.

## Device Operation

This innovative treatment utilizes a "microneedle probe and radiofrequency energy" design. Using a microneedle probe to reach the dermal layers of skin after applying nutrient-rich mask to the skin. After penetrating the deep skin layers, the device releases its radio frequency energy at the precise instant it reaches the dermis, injecting it straight into the dermis.

Based on the location and depth of the lesion, the penetration depth and radio frequency energy of the microneedle are modified during treatment. In conjunction with the three approaches of minimally invasive microneedle, high-temperature radiofrequency, and transdermal drug administration, collagen denaturation, recombination, coagulation, stimulation, and induction of collagen Protein recombination and regeneration are induced.



After microneedles transmit radio frequency energy to the deep skin layer, the energy is pumped into the dermis to induce protein denaturation, rearrangement, and collagen production. After a substantial quantity of new collagen is generated, skin creases will be smoothed and skin tissue will be tightened, causing the skin to smoothen out the fine lines and wrinkles and tightening up the skin, making the skin seem younger and healthier in no time at all. RF radiation destroys apocrine and eccrine sweat glands, lowering armpit odor and sweating.

#### **Device Advantage :**

1. The energy is transmitted directly to the deep layer, protecting the epidermis from the micro-needles that penetrate deep into the skin. After the layers are applied, radio waves are sent from the needle's end (the deep layer of the skin). It focuses energy on the desired tissue rather than the surrounding areas, protecting the epidermis and upper dermis from heat. Recovering after surgery is quick and painless, with no scabbing or scarring.

2. **Depth-adjustable, customized treatment:** When the microneedle is injected into the dermis, radio frequency radiation is released from its tip. In order to achieve more precision and control, the depth to which the microneedles penetrate and the quantity of radio frequency energy used may be modified based on the depth and tolerance of the target tissue.

3- **Comprehensive real-time monitoring and smart process control:** The risk of epidermal burns and inefficient energy regulation, both of which are common in conventional treatments, is eliminated due to the treatment process system's

real-time monitoring of skin temperature.

4. The effectiveness of a medicine is increased by twofold when applied transdermally. After the microneedle makes an incision in the skin, a channel is created. The microneedle creates a channel that can be used to introduce a cosmetic drug in a very targeted manner, with much improved results.

The automated needle negative pressure detecting device is a handy feature. Because the needle doesn't release its energy until the skin is completely bonded to it, unintentional harm to the surrounding skin is significantly reduced, and the needle's overall safety is greatly enhanced. Turn on the power of regeneration in the skin. Collagen in the deep dermis is safely, correctly, and uniformly heated by radio frequency radiation, which then stimulates skin metabolism, generates new skin energy, and maintains the skin's youthful texture.

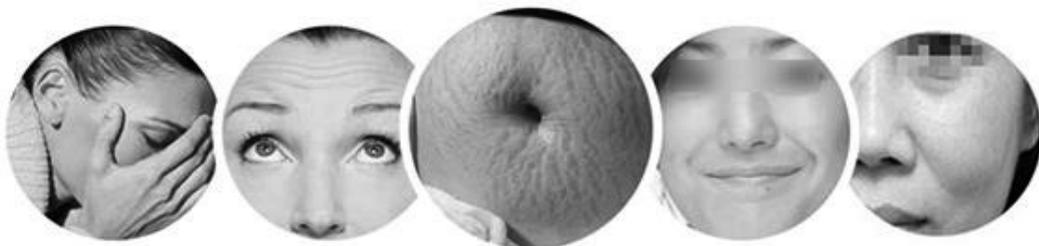
Turn on the skin regeneration code. The micro-needle fixed-point puncture technique enables precise localization of the skin issue site, simple transdermal distribution to the inner layer of the skin, efficient removal of heavy metals, elimination of free radicals, and internal skin rejuvenation.

This device's major functions are to tighten and smooth out wrinkles, remove acne scars, treat underarm odor, remove scars, and rejuvenate the skin. This study specifically combines microneedles with radiofrequency, which may reach the dermis directly, to enable the skin tissue to build a significant quantity of new collagen, promote metabolism, and provide the desired aesthetic result. The healing period is also shorter and the microneedle radio frequency project is quite easy to complete.

## Conditions it treats

### I . Treatment range

1. Facial rejuvenation, firming and lifting, crow's feet, forehead lines, nasolabial lines, perioral lines, neck lines and other wrinkles, and tightens the skin;
2. Wrinkles: crow's feet, forehead lines, nasolabial folds, neck lines;
3. Stretch marks
4. Skin rejuvenation: large pores, dull skin;
5. Scars: acne scars, burn scars;
6. Active acne;
7. Regular skin maintenance;



## II . Working Theory

### 1. Penetrates the skin barrier easily

In a short amount of time, the dense microneedles create a standard, uniform puncture channel, penetrate the protective barrier of the facial epidermis, accurately target the deep layer of the target, and stimulate the renewal and reorganization of collagen, leading to improved firmness and elasticity in the skin.

### 2. Activates the skin's natural repair system

Collagen in the deep dermis is safely, accurately, and uniformly heated by radio frequency energy, which in turn stimulates the metabolism of the skin, generates new skin energy, and helps maintain the skin's young texture.

### 3. Stimulates Skin Rejuvenation

Micro-needle fixed-point puncture technology enables precise localization of the skin's problem area, quick transdermal direct delivery to the skin's inner layer, and, ultimately, the elimination of heavy metals, the neutralization of free radicals, and the restoration of the skin's natural youthfulness.

## III. Method/steps

First, after washing your face, spread the sesame ointment evenly over the area where the treatment will be done. After the anesthetic has been put on, it can be covered with plastic wrap to keep it from evaporating. Most of the time, it takes 30 minutes to put on Epima cream. Note: Evenly apply the sesame oil.

Step 2: Remove the epithelial ointment and clean the area with the gauze soaked in saline (Note: pay attention to disinfection, be sure to disinfect and wipe the treated area)

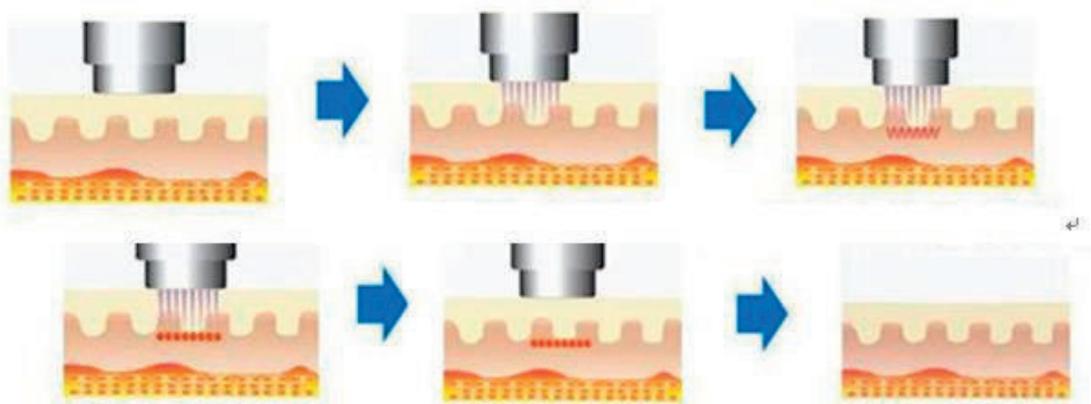
Step 3: After the patient's skin has been cleaned and disinfected, they will lay face up on the treatment bed. Turn on the radio frequency equipment with gold microneedles after all the preparatory work is done.

Step 4: Start the treatment. The operator holds the treatment handle and uniformly delivers radio frequency to the treated area of the individual being treated.

Note: Because the disposable needle is only intended for a single use (repeated uses are prohibited), special care must be taken with how it is handled and stored after administration.

Step 5: Apply a repair mask to the patient after the treatment is done. It takes about half an hour.

Step 6: After putting on the repair mask, take it off to finish the treatment.



#### IV. Parameter Suggestion:

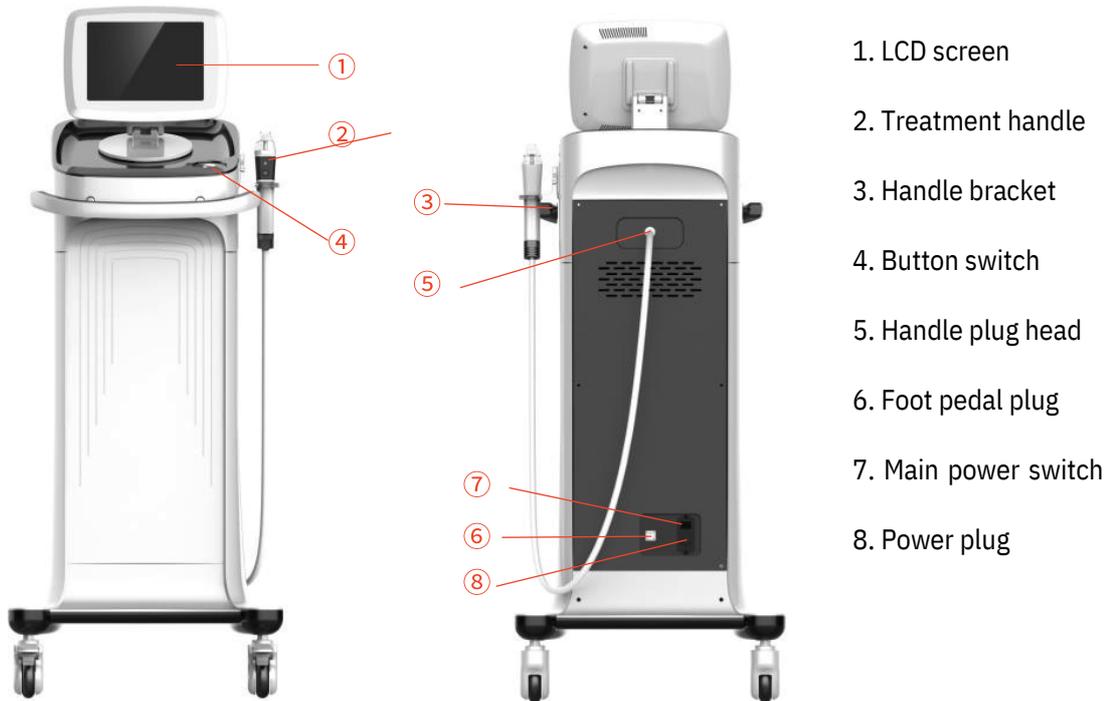
Treatment Area	Depth(mm)	Pulse duration(ms)	Needle Speed	Vacuum	Passes/Tim
Eye around	1mm	600-800	1--3	1--3	e 3-5
Face	1mm/1.5mm/2mm	600-800	1--3	2--4	3-5
Neck	1.5mm/1.5mm/2mm	600-800	1--3	2--4	3-5
Acne Scars	1.5mm/2.0mm/3.0mm	800-950	1--3	2--4	3-5
Stretch marks/Scars	1.5mm/2.0mm/3.0mm	800-950	1--3	2--4	3-5

## V. Post-Treatment Protocols

1. Wash your face with clean water within 3 days after treatment, and use moisturizing and healing products after washing. Avoid touching your face with your hands for the rest of the day.
2. Wear sunblock when you go out.
3. The affected area's skin may become red, swollen, and itching within one to three days. Having this experience is common. You can use moisturizers.
4. It is best to avoid using makeup for a week.
5. Avoid consumption of any foods that include fruit acid, A acid, salicylic acid.
6. Avoid Sauna & Swimming.

# Device Install Instruction

## I . Device appearance introduction



Front of the Device Back of the device

## II . Accessories



### III. Accessories installation

The accessories are installed as follows:



Treatment handle installation Pedal installation Power installation

### IV. Start the machine

After testing the machine's safety, press "I" to activate the main switch on the rear, then push the button switch to start the machine for use.

### V. Precautions

The device is suitable for use in either medical facilities or spas. There are a few safety measures that must be taken before installation:

- Proceed to unbox and set up the device in the desired spot.
- Verify that all of the equipment's parts are in working order.
- Check If the power source is properly grounded.
- The handle must be securely fastened, and the cable connecting it must be securely attached, before it can be used.
- Verify that all equipment operations are normal.

# Interface operation

## I. Interface Selection

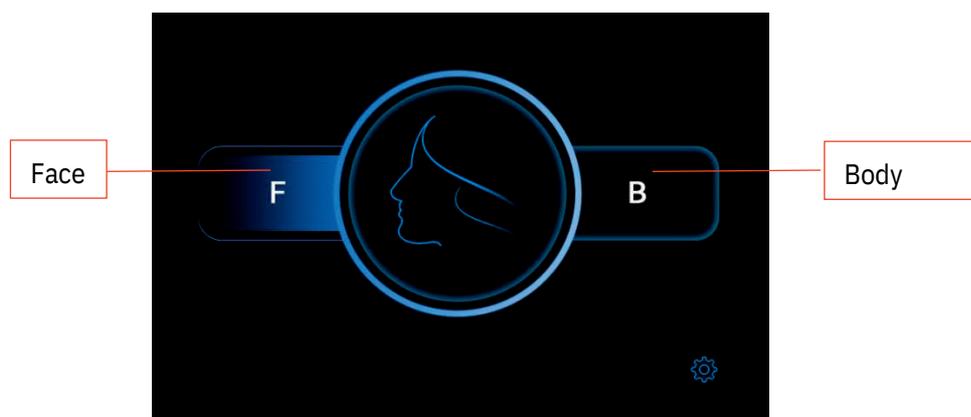
### 1. Connect the power supply

Start the machine normally by plugging in an electrical outlet, turning on the main power control switch, and pressing the switch button. To power off the unit, press the button labeled "Switch." Keep the display safe from scratches by keeping sharp objects away from it.

### 2. Start Interface

When the power is on, you may begin the process of making a choice. In the process of treatment plan, you may pick from a variety of body and facial options. To access the treatment interface, first click the area you want to treat, then click the icon at the appropriate place.

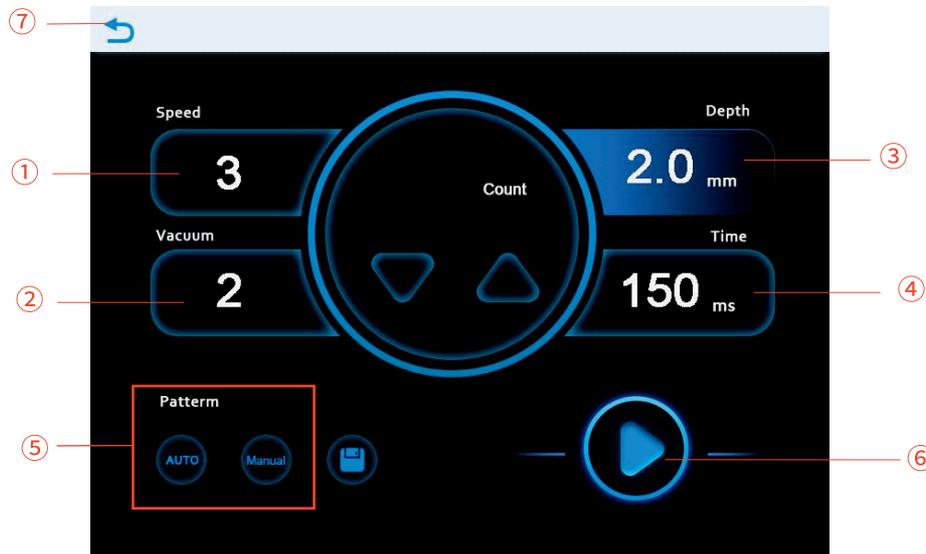
Based on what is shown in the diagram:



Selection Interface

## II. Interface Functionality

To access the functionality interface, as seen in the figure, click selection interface.



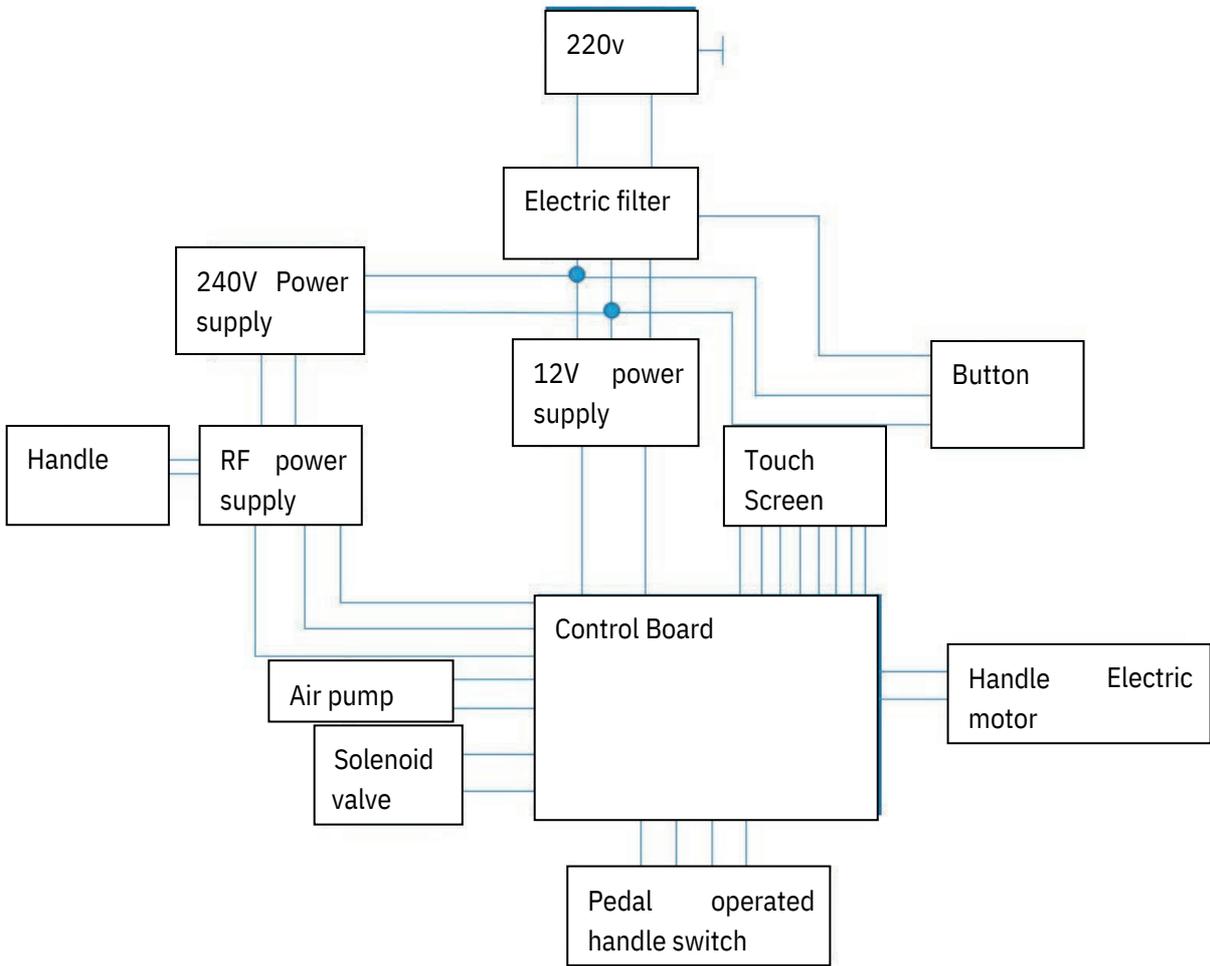
## Function interface

### Function interface description:

- ① **Speed** : Please click the needle ejection speed icon and then use the up and down arrows to customize the speed to your liking (the range is 1–5)
- ② **Vacuum** : Here's where you can tweak the level of negative pressure for optimal results with your treatment; the slider goes from 1 to 5.
- ③ **Depth** : The microneedle puncture depth may be adjusted from 0.5mm to 3.5mm using the up and down arrow buttons; the range of adjustment is 0.5mm to 3.5mm, and the step is 0.5mm.
- ④ **Time** : Here is the display button for regulating the radio frequency energy release time once the microneedle has penetrated the skin. Click the icon and use the up and down arrows to modify the penetration time based on the demands of the treatment. The adjustment range is 50ms to 950ms, with a 50ms step.
- ⑤ **Pattern** : The modes are split into Manual mode and Continuous mode; choose the appropriate mode based on the treatment requirements.
- ⑥ Click the "Start" button to begin the treatment phase, then click it again to end it.
- ⑦ **Return button**: Click this button to return to the upper interface.

# Device Safety

## I. Electrical schematic



## II. Troubleshooting

Failure	Possible reason	Solution
<p>The machine cannot be powered on</p>	<p>1- Check to see that the instrument's power source is plugged in and switched on.</p> <p>2- Make sure the instrument's power wire is firmly plugged into the power outlet.</p> <p>3- For this instrument, "I" indicates that the socket switch is on and "O" indicates that it is off.</p> <p>4- Check the instrument's fuse to see whether it's in working order.</p>	<p>1- The AC mode of the multimeter is used to get voltage readings.</p> <p>2- Plug in the power wire all the way.</p> <p>3- Place the instrument's socket switch in the "I" position.</p> <p>4- Using a screwdriver, remove the fuse holder and make sure the fuse inside is not blown.</p>
<p>The Display remains Blank</p>	<p>1- Ensure that the machine has electricity.</p> <p>2- Whether or not the switch is on.</p> <p>3- Check if the LCD screen wire connected securely.</p> <p>4- If the aforementioned causes are ruled out, the issue might be the control board or the LCD panel.</p>	<p>1- Snap the switch into position.</p> <p>2- Using a multimeter, determine whether the LCD is securely connected and if any of the wires are damaged.</p> <p>3- After-sale support</p>
<p>The control board is inoperable</p>	<p>1- Whether the handle is connected or not.</p> <p>2- Is the foot pedal plugged in.</p> <p>3- Whether the push rod of the treatment head is connected to the motor.</p> <p>4- If the preceding explanations are ruled out, the issue might be with the control board or the motor.</p>	<p>1- Insert the handle into its proper position.</p> <p>2- Place the foot pedal in position.</p> <p>3- Care and support.</p>
<p><b>Note: If any of the aforementioned issues arise, the user may consult the aforementioned table in order to determine the root of the problem. Once the issue has been resolved, the device may be used normally again.</b></p>		