

# HiPro

## User's Manual



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# 1. Product Introduction

HiPro is a device that uses high-intensity focused ultrasound (HIFU) to concentrate the ultrasound energy under the surface of the skin to raise the temperature, and to apply this change to the skin's endothelial tissue to lift the skin.

## 1-1 Product Configuration

[Body]



[Cartridge FACE1 / FACE2 / BODY/ EYE]



- Two cartridges are included in the product, and the other cartridge needs to be purchased separately.

[ Adapter and AC power cord ]



[Stand]



## **1-2 Principle of Operation**

This product is a focused ultrasound stimulation system composed with a main body, two cartridges for face, and one cartridge for body. And each cartridge can be used according to the desired treatment.

The frequency formed by the focused ultrasound frequency generator circuit mounted inside the main body generates ultrasound vibrations through the transducer in the cartridge.

The ultrasound vibration output from the transducer concentrates at the penetration depth and raise the temperature using the gathered energy. This heat effect is used to transform the skin's endothelium and lift the skin.

## **1-3 Precautions**

### **1-3-1. Precautions for Installation**

- 1) Store the device in an environment with less heat and humidity. The insulation of the device weakens under moisture and water exposures.
- 2) Users must be aware of all hazards, warnings, cautions, and other important matters specified in the User Guide.
- 3) Be careful not to wet the device.
- 4) Do not share a multi-outlet with other products. Connecting a number of products to a multi-outlet may cause fire due to abnormal heat.

### **1-3-2. Precautions for Use**

- 1) Before use, users must be aware of all hazards, warnings, cautions, and other important matters specified in the User Guide.
- 2) To charge or use from the external power, only use the specified adapter.
- 3) Check the cartridge for damages on the surface of the ultrasound output. If found, stop using the cartridge and replace it before reusing.
- 4) Do not keep flammable objects such as anesthetics or solvents near the device
- 5) Select cartridge and the intensity of output considering the skin thickness of the treatment area.
- 6) Users need to have anatomical understandings of face blood vessels and nerves before treatment.
- 7) Keep the cartridge adjacent to skin. If the cartridge contacts skin incorrectly the focused

ultrasound energy may cause a skin burn.

- 8) Do not repeat the treatment on the same area. If the heat energy is applied to the same spot continuously, it may cause a skin burn.
- 9) Do not move the main body during the treatment. If the user moves the main body or the patient moves due to pain, energy may be concentrated on the surface of the treatment area and cause a skin burn.
- 10) Continue to check for any abnormality of the device in general or the patient while treatment.
- 11) If abnormality is found, stabilize the patient, turn the device off, and take proper measures.
- 12) If any malfunction is found in the device, stop using the device and turn it off.

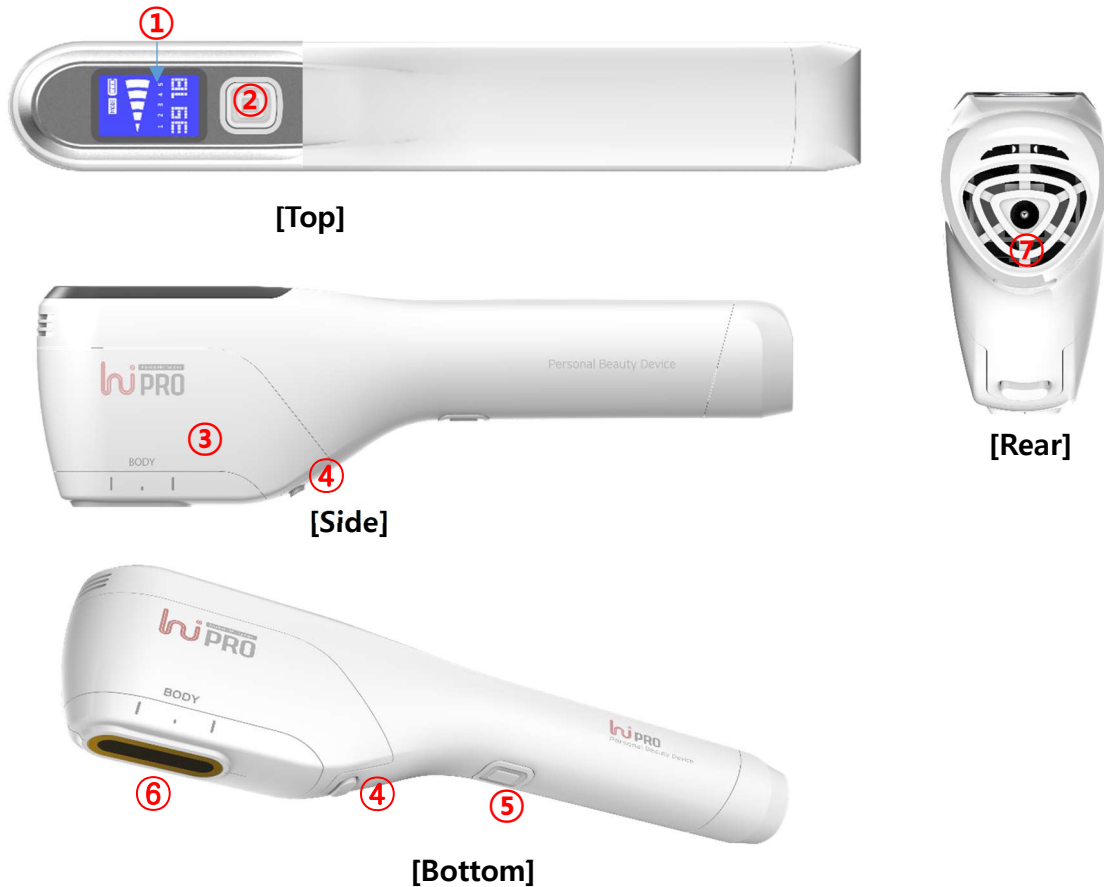
### **1-3-3. Safety related Precautions**

- 1) Be sure to use the device after consulting a doctor in the following cases.
  - A. Patients wearing implanted medical devices such as metal prosthetic devices or pacemakers.
  - B. Patients with skin disease.
  - C. Patients with infectious disease.
  - D. Patient with acne, skin treatment, dermatitis, or allergic skin.
  - E. Patients who had plastic surgeries.
  - F. Patients with other diseases or physical illness.
  - G. Patients who is pregnant or underage.
- 2) Only use the device on the specified body parts. In particular, be sure to avoid the eye area (protrusions on the eyes) and the nerve bundles on the neck.
- 3) General Safety
  - A. Do not disassemble or refurbished the product without approval.
  - B. Always keep the User Guide next to the device.
  - C. Anyone with infectious disease or injury, must not use or contact the device.
  - D. Do not use the device if the surface is cracked. It may cause serious injuries.
- 4) Electrical and Explosion Safety
  - A. Do not touch or use this product with wet hands. If water flows into the device, it may damage the product.

- B. Be careful not to spill water or other liquids on the product.
- C. Do not use the device near electronics that generate strong electric fields such as televisions or electromagnetic devices.
- D. Do not use the device adjacent to other devices or stack them. The electromagnetic interactions between the devices may cause a failure.

## 2. Specifications

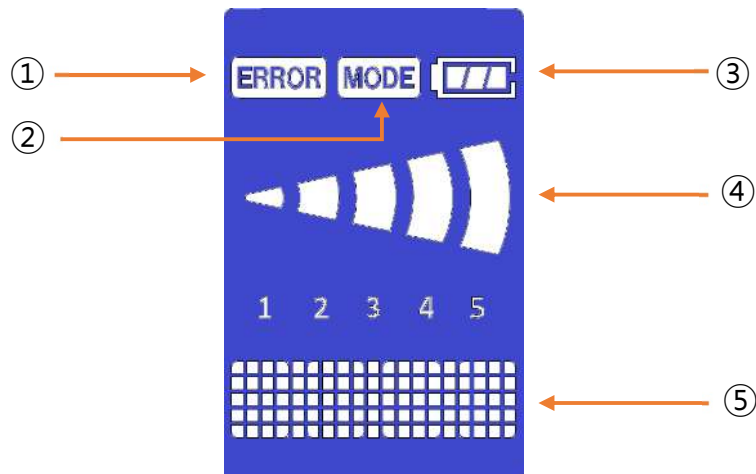
### 2-1 Appearance



| No. | Name                               | Function  |
|-----|------------------------------------|---|
| 1   | LCD                                | Indicates shot intensity and number of shots / operation status   |
| 2   | Top Button                         | Power ON,OFF / Select functions and shot intensity / Display charging status on external power connection |
| 3   | Cartridge                          | EYE / FACE / FACE 2 / BODY Cartridge  |
| 4   | Cartridge Removal Button           | Press and hold the button while detaching the cartridge.  |
| 5   | Bottom Button                      | Changes selected PITCH value / operates SHOT  |
| 6   | Cartridge Film                     | Ultrasound wave is irradiated through this part.  |
| 7   | External Power Connection Terminal | Connects the adapter connector  |



## 2-2 LCD Display



| No. | Name              | Function   |
|-----|-------------------|--|
| 1   | ERROR             | Lights up when an error occurs and displays Error No. in ⑤ below.  |
| 2   | MODE              | Mode indication – Lights up when the Pitch is changed  |
| 3   | Battery           | Indicates remaining battery level  |
| 4   | Shot Intensity    | Displays the shot intensity in 1 to 5 steps  |
| 5   | Operation Display | 1. The number of remaining shots (Max. 8,000 shots)<br>2. Pitch value set by the user<br>3. The cartridge type<br>- EYE Cartridge : EYE<br>- FACE 1 Cartridge : FA30<br>- FACE 2 Cartridge : FA45<br>- BODY Cartridge : BODY<br>4. Error No. |

## 2-3 Product Specifications

| Item                      | Description  |                                  |
|---------------------------|--|----------------------------------|
| Electrical specifications | AC Adaptor   | Input : AC 100~240V, 50/60Hz, 1A |
|                           |  | Output : DC15V / 5A              |
|                           | built-in battery   | 11.7V / 720mAH                   |
| Main body's size/weight   | 37 mm(W) x 245.8mm(L) x 71.5mm(H) / TBD                      |                                  |
| irradiation intensity     | 1 ~ 5단계  |                                  |
| Top button                | Power / Function selection                                   |                                  |
| Bottom Button             | Shot operation   |                                  |
| Cartridge                 | EYE [2.0mm] / Face 1 [3.0mm] / Face 2 [4.5mm] / Body [6.0mm] |                                  |
| Irradiation length        | 18mm   |                                  |
| Irradiation interval      | 1.5mm (13dots) / 2.0mm (10dots)                              |                                  |

# 3. How to Use

## 3-1 Preparation Before Use

### 3-1-1 Power Check

- Learn how to use the device before use.
- Connect the cartridge to the main body.
- Attach the device to an adapter and connect it to a commercial power supply of 100 to 240V, 50/60Hz to check if the device is powered and charged.

## 3-2 How to Use and Operation Procedure

### 3-2-1 Cartridge Installation and Removal

#### 1) Cartridge Installation



① Align the groove marked with an arrow to the cartridge as shown in the picture.



② Push in the direction of the arrow to engage the main body and the cartridge.



③ Cartridge installation complete.

#### 2) Cartridge Removal




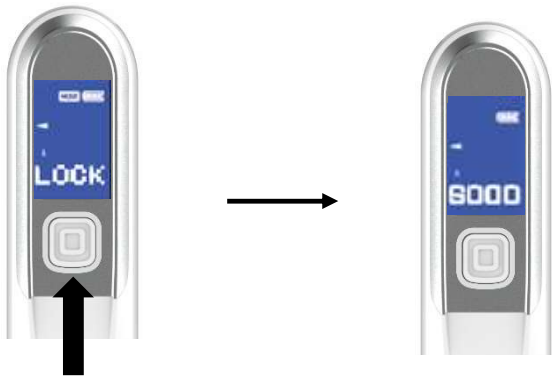

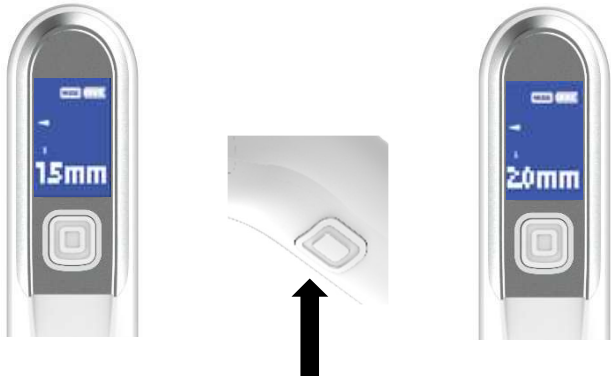

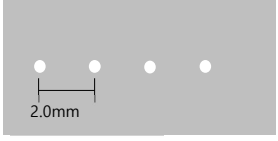
**Cartridge removal button**


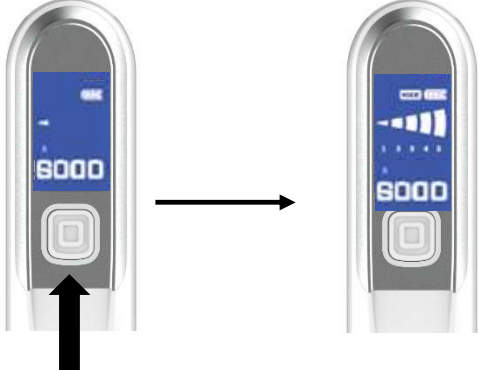
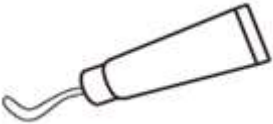
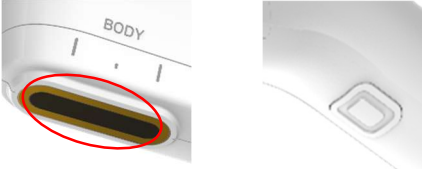
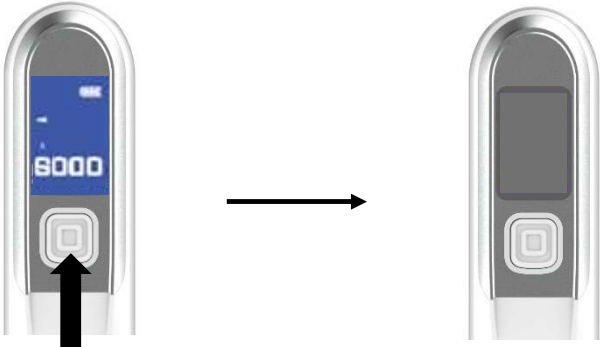
① While pressing the button, pull out the cartridge in the arrow direction.



② Cartridge removal complete.

### 3-2-2 How to Use

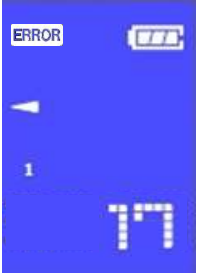

|  |  |
|--|--|
|  <p><b>Press 3 seconds</b></p>  |  <p><b>Double Click</b></p>  |
| <p>Press the top button for 3 seconds to turn the power on.</p>  | <p>When the power is on, initial LCD screen is on the LOCK mode. In this mode, press the top button twice quickly to unlock the screen. As it unlocks, MODE indication disappears and if the cartridge is installed, it indicates a remaining number of shots (maximum 8,000 shots).</p>   |
|  <p><b>Double Click</b></p>   |  <p><b>Bottom Button Click</b></p>   |
| <p>Press the top button twice quickly to change to setting MODE and Pitch appears in LCD. Press the bottom button to change the pitch. (1.5mm / 2.0mm)</p> |  |
|  <p><b>&lt;Pitch : 1.5mm &gt;</b></p>                                   |  <p><b>&lt;Pitch : 2.0mm &gt;</b></p> <p>The picture above shows the type of ultrasound waves irradiated according to the pitch value. 1.5mm is recommended for narrow treatment area since it radiates dense ultrasound waves, and 2.0mm for wide treatment area or sensitive skin.</p> |

|   |   |
|---|---|
|  <p style="text-align: center;"><b>Double Click</b></p>  |  <p style="text-align: center;"><b>Click Once</b></p>           |
| <p>After choosing a Pitch, press the top button twice quickly to select the desired Pitch. If the Pitch is selected, MODE indication on the LCD disappears and turns to SHOT available state.</p> | <p>Press the top button once to increase the output intensity by 1 level and press the button again in step 5 to return to step 1.</p>            |
| <p style="text-align: center;">If LCD has no indication of MODE or ERROR, the device is available for SHOT.<br/>Prepare treatment as shown below.</p>   |   |
|   |  <p style="text-align: right;"><b>Bottom Button Click</b></p>  |
| <p>Apply the ultrasound gel to the skin on the treatment area and spread it evenly.</p>   | <p>After making complete contact on the desired treatment area with the cartridge film, press the lower button to irradiate ultrasound waves.</p> |
|  <p style="text-align: center;"><b>Press 3 seconds</b></p>  |   |
| <p>After the treatment is completed, press the upper button for 3 seconds to turn the power off.<br/>(After the treatment, wipe the gel on the device with a tissue to keep it clean.)</p>        |   |

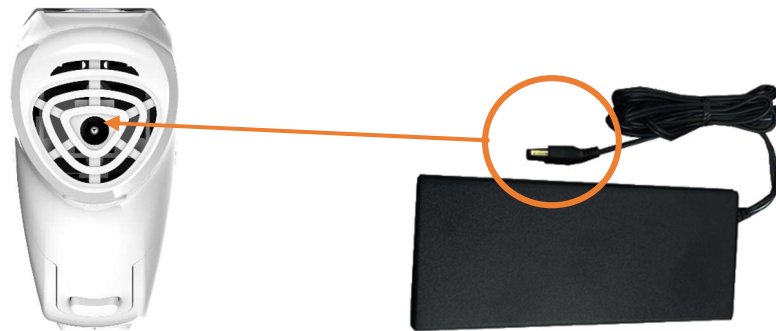
**\* WARNING \***  
**It may cause skin burn if the cartridge film is not completely contacted with the skin during the treatment**

### 3-2-2 Types of Errors and its Measures

|                           |   |  |   |
|---------------------------|---|--|---|
| <p><b>Error</b></p>       |    |    |    |
| <p><b>Description</b></p> | <p>Motor initial position alignment error</p>                                       | <p>Cartridge movement error<br/>– Occurred upon cartridge initialization</p>         | <p>Cartridge recognition error</p>  |
| <p><b>Measures</b></p>    | <p>Power ON/OFF</p>   | <p>Reinstall cartridge</p>   | <p>Reinstall cartridge</p>  |
| <p><b>Error</b></p>       |   |   |   |
| <p><b>Description</b></p> | <p>Invalid cartridge data</p>   | <p>Cartridge usage count exceeded</p>  | <p>Invalid cartridge</p>  |
| <p><b>Measures</b></p>    | <p>Reinstall cartridge</p>  | <p>Replace cartridge</p>   | <p>Replace cartridge</p>  |
| <p><b>Error</b></p>       |  |  |  |
| <p><b>Description</b></p> | <p>Invalid cartridge data</p>   | <p>Cartridge movement error<br/>– Occurred during Shot</p>                           | <p>No cartridge<br/>– Occurred when Shot starts</p>                                   |
| <p><b>Measures</b></p>    | <p>Reinstall cartridge</p>  | <p>Reinstall cartridge</p>   | <p>Reinstall cartridge</p>  |




|                    |  |   |   |
|--------------------|--|---|---|
| <b>Error</b>       |   |   |  |
| <b>Description</b> | Cartridge missing on SHOT mode   | Motor position alignment error after SHOT completion                                | Cartridge temperature error   |
| <b>Measures</b>    | Reinstall cartridge  | Power ON/OFF  | Use after cooling the cartridge   |
| <b>Error</b>       |  |  |   |
| <b>Description</b> | Body internal temperature error  | No battery  |   |
| <b>Measures</b>    | Use after cooling the main body  | Battery charging  |   |

### 3-3 How to Charge the Product



To charge the device, use commercial power supply of 100 to 240V, 50/60Hz by connecting the adapter to the external power connection terminal. It takes 2 hours and 30 minutes in maximum to fully charge

When charging is in progress, the lamp around the top button lights up. It indicates charging complete or charging in progress depending on the color of the lamp. Treatment is available while charging

|                 |   |   |   |
|-----------------|---|---|---|
| <b>State</b>    |  |  |  |
| <b>Color</b>    | Blue  | Green   | None  |
| <b>Function</b> | Charging  | Charging complete<br>SHOT operates while<br>charging                                | Power is not connected  |



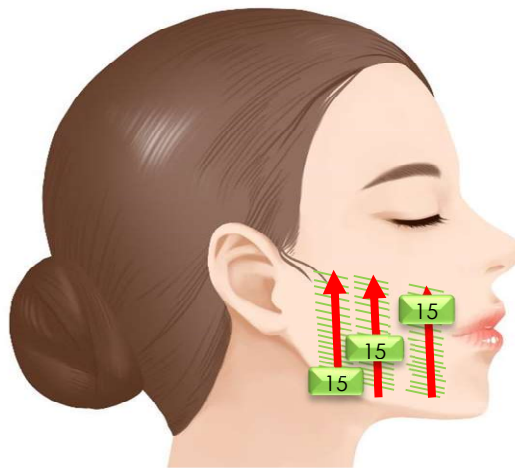
### 3-4 Product Care After Use

- 1) Turn the power off and disconnect the power cord and the power supply. Store the power cord separately from the outlet.
- 2) Immediately wipe the gel off the product with a soft cloth.
- 3) Return other components to their original places.
- 4) Store the product in a dry place.
- 5) For long-term storage, remove the power cable and put on a protective cover such as vinyl.
- 6) Do not use or store the device in an environment where the temperature can be increased by direct sunlight.
- 7) Be careful not to damage the main body by dropping. In particular, the cartridge is very weak on impact and it may cause leakage inside the cartridge.
- 8) Store it out of children's reach.
- 9) Do not store in a harmful environment with air pressure, temperature, humidity, ventilation, sunlight, air containing dust and salt.
- 10) Do not store the device in a place with high temperature, high humidity, and direct sunlight or a massive dust and corrosive gas.
- 11) Store with awareness of inclination, vibration, and shock.
- 12) Do not store in a chemical storage or a gas generating place.
- 13) If the product was unused for over a month, check safety before reusing it.
- 14) If the liquid inside the cartridge freezes, the component may be damaged. Always keep the device at room temperature (25 °C) and never drop below 10 °C.
- 15) Post-treatment care
  - Check the presence of edema, erythema, blisters on the treatment area.
  - Use cold water or mild cleanser to avoid straining the treatment area.
  - The skin gets sensitive after the treatment. Do not irritate the skin by using stimulating cosmetics or having other treatments.
  - In the outdoor after treatment, the patient should avoid direct exposure to sunlight and wear sunblock in SPF 30 or higher.

## 4. How to Perform Treatments

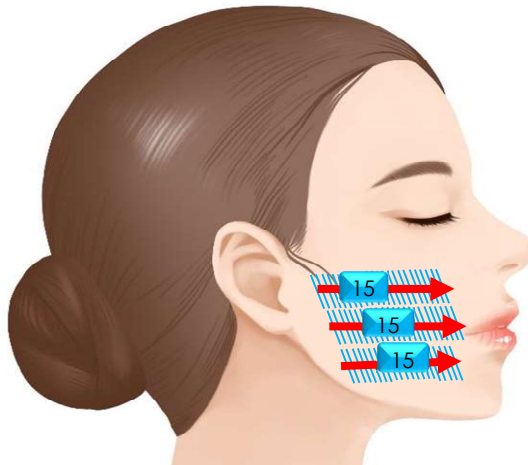
- It is recommended to be noted on the patient's skin condition and the treatment area and irradiate by increasing the level step by step from the low level. To avoid overlapping the irradiation range, divide sections and perform the treatment at uniform and tight intervals.
- In a face treatment, the effect increases when both FACE 1 and FACE 2 cartridges are used in order.

### 4-1 FACE Treatment (use FACE cartridge)



#### 1) Both Sides Area (Top to Bottom Treatment)

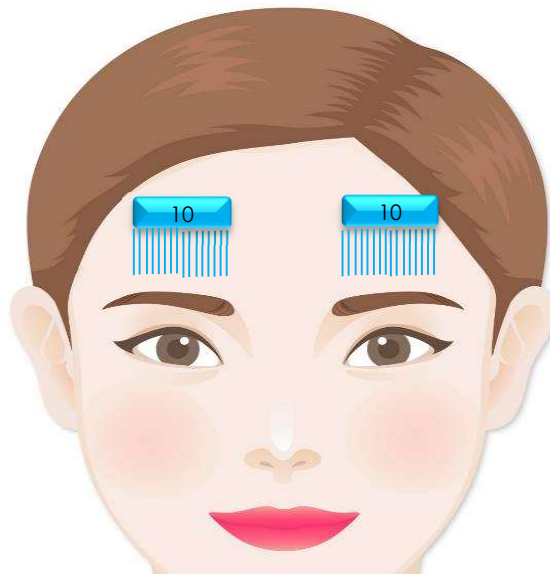
Divide a cheek into 2 ~ 3 sections without overlapping and irradiate dense and uniform shots.  
(45 ~ 55 shots)



#### 2) Both Sides Area (Side to Side Treatment)

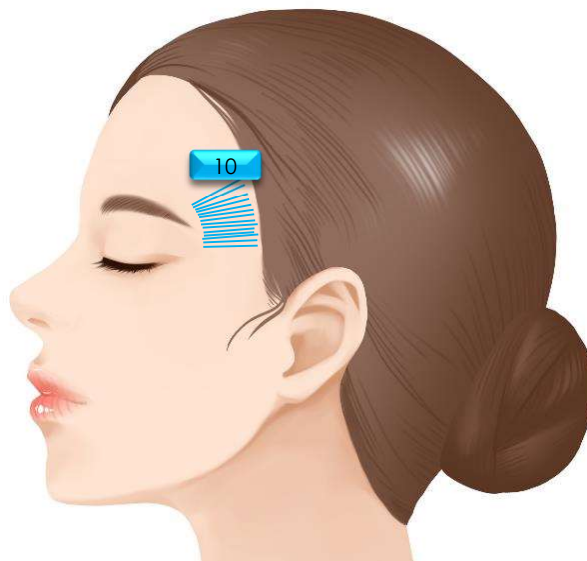
Divide a cheek into 2 ~ 3 sections without overlapping and irradiate dense and uniform shots.  
(45 ~ 55 shots)

## 4-2 FACE Treatment (use EYE cartridge)



### 3) Forehead Area

Irradiate on the back of the eyebrows at uniform and tight intervals. (20 ~ 30 shots)



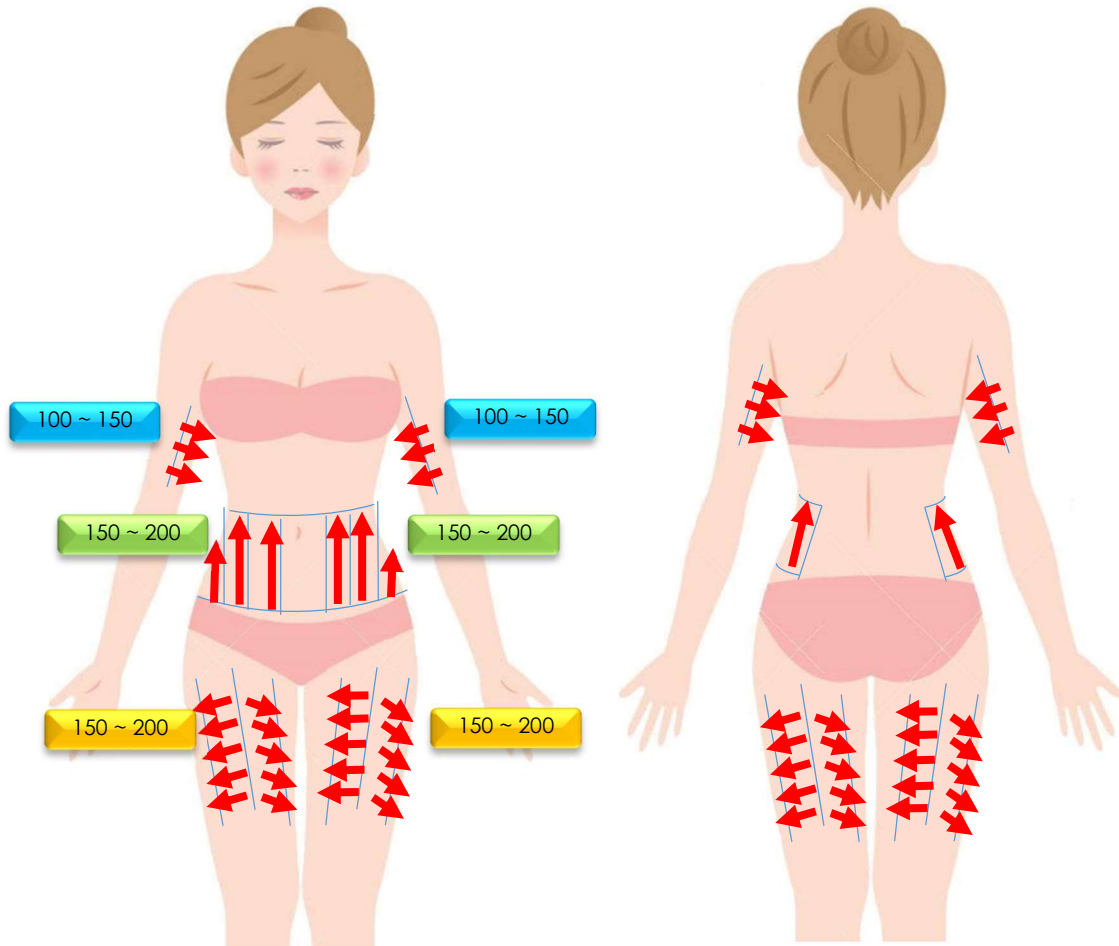
### 4) Eye Area

Irradiate on the outside of the eyebrows with tight intervals. (10 ~ 15 shots)

**\* WARNING \***

**Do not irradiate on the protrusions on the eyes**

### 4-3 BODY Treatment (use BODY cartridge)



- 1) Arm : 100~150shot
- 2) Abdomen : 150~200 shot
- 3) Thighs : 150~200shot
- 4) Side : 150~200shot

► The given number of shots is a recommendation and needs be adjusted according to the body type ◀

#### 4-4 General Treatment (Use FACE or BODY cartridge)

##### 1) Under Chin (30 ~ 40 shots)



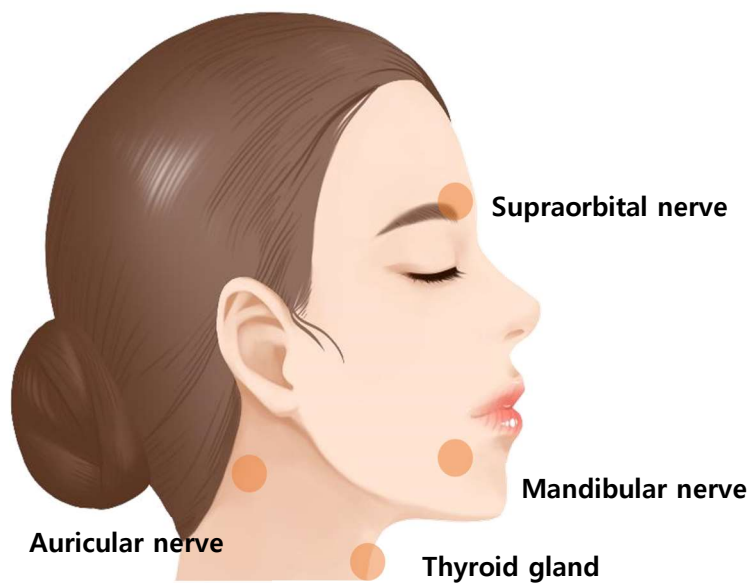
Divide the area without overlapping and irradiate dense and uniform shots.  
(30 ~ 40 shots)

**\* WARNING \***

**Do not irradiate on the passage of neck nerves**

#### 4-5 Warning

**Be careful not to irradiate the following nerve areas**



## 5. Warranty

1. Please note that this product is produced through strict quality control and inspection process.
  2. Therefore, any product failures of the normal use during the warranty period will be repaired free of charge according to the contents of the warranty.
  3. Please check if the warranty is written upon purchase and present this warranty for repair services.
- Guarantee free of charge repair warranty for one year from the date of purchase is provided.
  - This warranty is not transferable and is limited to the purchased clients.
  - If you encounter any product failures, check User Guide to confirm its failure and contact us.
  - Warranty Exceptions
    - ◆ Any product failures caused during client's use, mishandling, and exposure to moisture.  
(caused by moving, dropping, impact, damage, or overuse)
    - ◆ Abrasion or minor defects in range of normal use
    - ◆ Any product failures due to nonfulfillment of matters specified in the User Guide.

### Warranty

|              |         |  |                 |  |
|--------------|---------|--|-----------------|--|
| Product      |         |  |                 |  |
| Model        |         |  |                 |  |
| Purchased on |         |  | Warranty period |  |
| Seller       | Name    |  | Phone No.       |  |
|              | Address |  |                 |  |
| Customer     | Name    |  | Phone No.       |  |
|              | Address |  |                 |  |

## 6. Q&A

**Q : I can't get the device to turn on.**

A : Charge the device, it might have been discharged.

A : Check if the adapter cable is properly connected to the device.

A : Check if the power cord of the adapter is properly connected to the power supply.

**Q : Can I use the device every day?**

A : It is recommended to use in 5 to 10 days interval.

**Q : After treatment, is there anything I should be careful about?**

A : Try to avoid direct exposure to sunlight when you are outside.

(Check the User Guide for more details.)

**Q : What should I do if the device is broken or damaged?**

A : During the warranty period, product failures within the normal usage range are repaired free of charge. However, if the product failure is due to the user's mishandling the cost of repair will be charged. Please check the warranty for more details.

**Q : How long does it take for a full charge and how many shots can I use per charge?**

A : To charge fully from discharge state will take about 2 to 3 hours. And when it's fully charged, about 200 shots are available