
UltraDuo

Skin-improving beauty treatment with multi-frequency modulation ultrasonic irradiation



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1. Device setting

1.1 Product configuration

The configuration of the product is as follows.

- ◆ Main body x 1
 - ◆ Handpiece x 2
 - ◆ 220V Power cord x 1
 - ◆ Cart x 1
 - ◆ UltraDuo protocol x 1
 - ◆ User Manual copy x 1
-

1.2 Installation condition

1.2.1 Installation environment and location.

The equipment installation environment and location are as follows.

① Installation environment

- ◆ Install this device in a well-ventilated area.
 - ◆ Indoor air
 - Corrosive acidic air can cause corrosion in electric cords, electric parts and so on.
 - The equipment should be installed in a relatively clean space environment with almost no dust in the air.
 - ◆ Installation temperature and humidity
 - The optimum installation and operating temperature is 15 ~ 30°C, and the relative humidity of the device is 0 ~ 90%.
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② Installation location.

- ◆ Keep at least 30 cm of space from all sides of the device.
 - ◆ It should be installed as far as possible from other medical device, specially from those that consume large amount of power
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1.2.2 Electrical Installation

The power installation environment of the equipment is as follows. The following conditions must be met to ensure optimum equipment conditions.

-
-
- ◆ Power outlets on the wall must contain single or two terminals and a ground terminal.
 - ◆ Make sure that the power output of the wall outlet is single-phase, 220V AC, 50Hz or 60Hz on the wall, and then plug the power directly into the wall outlet.
 - ◆ This device is designed to protect the equipment from overvoltage and overcurrent by using two 250VAC /20A power supply fuses. It has a built-in lightning protection circuit so that it can operate normally even with external lightning or abnormal voltage.
-
-

1.3 Installation instructions

1.3.1 Name and installation method of the power supply part

The power connection, parts name and installation method are as follows.

◆ Power Cord

- Insert the power cord into the main socket located on the bottom rear of the device.
- Make sure that the power contacts are fully connected until they are no longer inserted to prevent unstable operation.
- Only connect the power cord to the wall outlet of the building when using the device, and disconnect it after use.

◆ Circuit Breaker







- The circuit breaker located at the center of the rear bottom of the device, should be connected to the main body, then switched on in the opposite direction of the yellow button.
 - In case of turning ON the switch, it should be moved to the end with proper force until it feels that the switch is fully locked.
 - After using the device, it should be switched off in the opposite direction. Now, push the switch with hand without pressing the yellow button
-
-

2. User guide

2.1 Overview

This product uses high voltage, so be sure to use it safely according to the correct information. Be sure to read this manual before using the equipment.

2.2 Safety signs

Index	Title	Contents
	Prohibition	Indicates prohibitions on use or misuse of the product other than the use of the clinician.
	Emphasis	Describes important tips for use and explains how to avoid errors that can cause problems with the device.
	Caution	Describes the possibility of personal injury or damage to the product due to negligence in the use of the device.
	Warning	Explains that it may cause injury to the clinician, the patient, and staff personnel, or that the device may have a severe impact.
	Danger	Describes a hazardous condition that could result in an electric shock or fire, which could cause serious injury to the clinician, patient and staff personnel.
	Danger	Describes a hazardous situation, if not avoided by the Clinician, patient or staff personnel, it may result in serious injury from exposure to the laser beam.

2.3 Device operation

This device consists of main body, transducer, handpiece, etc., and the power of the equipment is operated at 220V AC, 50Hz and 60Hz. When connecting the equipment to the power source, make sure to connect the power cord to an outlet with ground terminal. Turn the selector switch on the top center of the main body to turn on the power. Check whether the touch panel screen is displayed, and then select the screen appropriate for use.

2.4 Basic principles of UltraDuo

2.4.1 (Skin-improving beauty treatment with multi-frequency modulation ultrasonic device)

◆ Definition

By conducting microscopic alternation of ultrasonic waves of multiple frequencies, this device acts simultaneously on the facial and dermal layers to improve the skin.

◆ Features

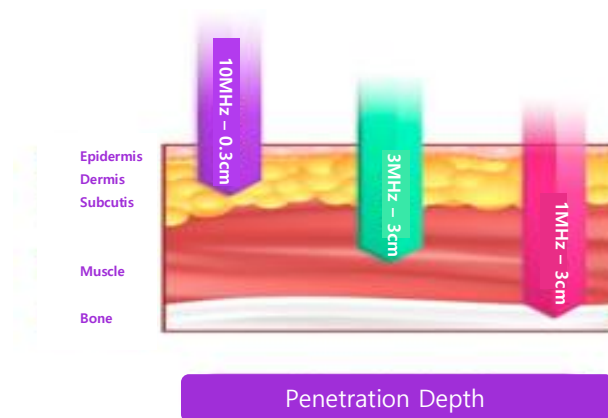


Fig 2-1. Penetration depth according to ultrasonic frequency

◆ Advantage

-Multiple frequency-modulated ultrasound waves reduce proteolytic enzymes (MMPs) that cause skin aging and induces an increase in heat shock proteins (HSPs) and hydrophilic polysaccharides (GAGs) that promote skin regeneration and moisture content. Ultrasound technology of 10MHz performs this role well.

The UltraDuo is programmed in a variety of modes, allowing the user to use ultrasound of complex patterns and simple operation on the touch screen.

◆ Applicable body parts

- Facial except the eyes and mouth



3. Safety and precautions







3.1 Overview











Operation or use of the device other than those specified in this manual may result in blindness or serious health risks if exposed to hazardous laser light.








Therefore, the clinicians and staff who operate this device should be fully familiar with the warnings and precautions in this manual. These precautions should be given to the patient in advance. In addition, the clinician operating this device is responsible for the safety of all procedures.

3.2 Warning and precautions

Warning and precautions	
	Please read the manual thoroughly before use. Please use according to the purpose.
	Do not use with medical electronic devices: 1. Pacemaker implant patients. 2. Cardiopulmonary implant patients. 3. Electrocardiograph implant patients.

	<p>Do not use with the following patients:</p> <ol style="list-style-type: none"> 1. People with acute illnesses or people with hemorrhagic diseases above 38 °C. 2. People with extreme blood pressure, people with infectious diseases, or people with tuberculosis. 3. People with malignant tumors, or those with heart disease. 4. People who are allergic or hemophiliacs. 5. Persons who can affect capillary dilatation due to long-term use of steroid hormones and liver function disorders. 6. A person who is suffering from an atomic bomb disease or a person with an epidemic. 7. People with fever, or people who are on outpatient treatment. 8. People taking medication or children under 12 years old.
	<p>Do not use with other electrical products. It may cause malfunction due to noise.</p>
	<p>Please stop immediately when there are lightning strikes. An overcurrent caused by lighting may flow to the main device, causing abnormal output.</p>
	<p>Do not store it in a place where strong radio waves and magnetic fields are generated. It may cause malfunction.</p>
	<p>Do not use the power supply other than AC 220V, 50Hz and 60Hz. It may cause fire, electric shock, or malfunction.</p>
	<p>Do not place a container containing liquid such as water on the top of the main body. It may flow inside and cause fire, electric shock, or malfunction. If it is spilled, please stop using it immediately and ask for inspection.</p>

	<p>No detergents of any type should be sprinkled or poured directly into the device. This may result in electric shock or equipment damage.</p>
	<p>Do not use in high temperature, dusty, humid places (near humidifier). An electric shock (spark) may occur and cause malfunction.</p>
	<p>Do not attempt to repair, disassemble or modify the controller or the main body by yourself. Failure to do so may cause fire or burns.</p>
	<p>Do not handle the device or remove the cord with wet hands. It may cause electric shock.</p>
	<p>Do not use a stripped power cord. Doing so may cause fire or electric shock.</p>
	<p>Do not forcefully unplug or heat the power cord. Do not place heavy objects on it. It can result in fire or electric shock.</p>
	<p>Do not let the handpiece hit against a hard object and do not drop it. It may cause injury or breakdown.</p>
	<p>Unplug the power plug from the outlet when not in use for a long period of time. It may cause a fire.</p>
	<p>Please observe the instructions in the instruction manual for the operating time and frequency of use.</p>
	<p>During the procedure, make sure that the clinicians is not separated from the patient.</p>

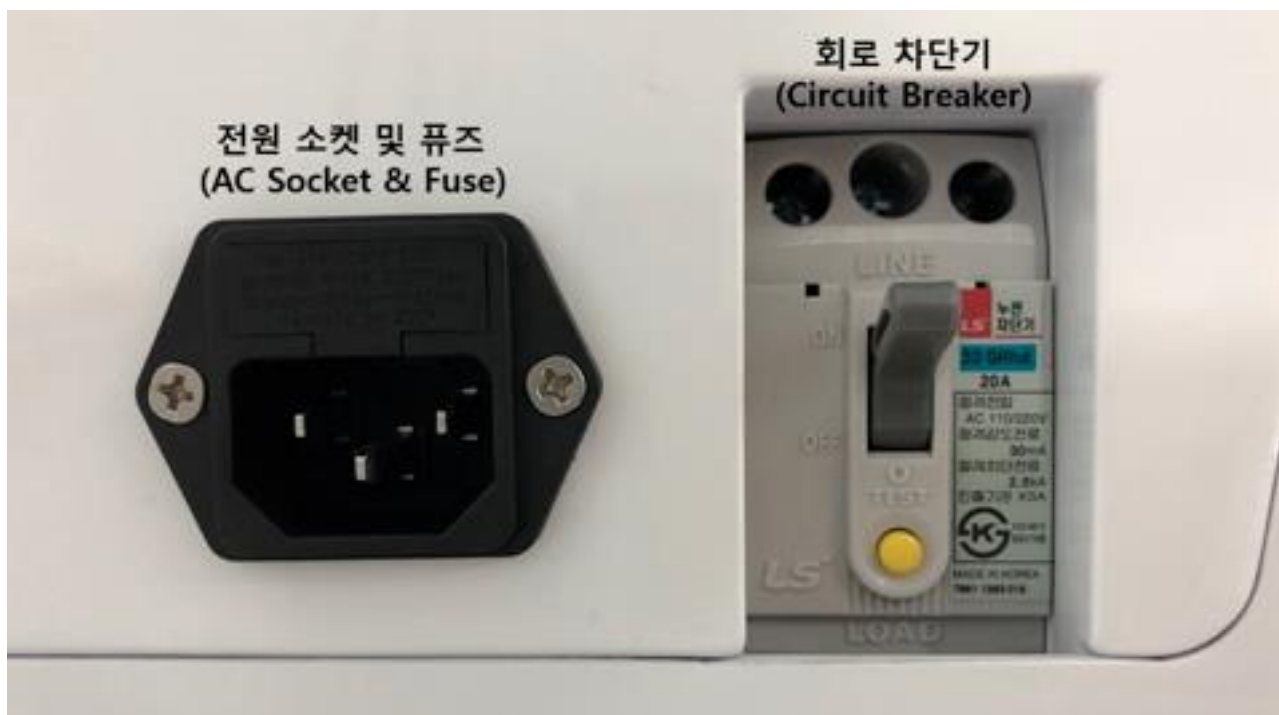
	<p>Make sure to carry out the test inspection. If any abnormality is found, please ask for repair.</p>
	<p>Only authorized clinicians can access the device. If not performed correctly, it may cause injury and breakdown.</p>
	<p>Do not use on people who are not in a good health condition, people who are not sober, or with high fever and exhausted.</p>
	<p>The tip of the handpiece should be in close contact with the procedure area of the patient. Do not leave the used handpiece for more than 30 seconds with the device turned on. It may cause malfunction or burns.</p>
	<p>Do not stop or concentrate the handpiece for more than 10 seconds at one spot of the body. It may cause burns due to over-irradiation.</p>
	<p>Do not allow the tip of the handpiece to touch the hand or body the during the procedure. It may cause burns and inflammation.</p>
	<p>Make sure to use it in close contact with the skin when you perform the procedure.</p>

3.3 Safety device

UltraDuo has the following safety devices.



Bottom right front of main body



Bottom right bottom of main body

Figure 3-1. Device safety device

3.3.1 Power push switch

This device can be turned on by turning the selector switch to the right. When not in use, make sure to turn OFF the switch to prevent any other person's operation.

3.3.2 Circuit Breaker

The lower rear center of the product has a circuit breaker. If an instantaneous over-voltage or over-current is detected from the outside, the breaker automatically goes off, and if power is secured, the switch is in the opposite direction.

The yellow button on the breaker stops when the user detects and presses a momentary hazard.

3.3.3 AC Socket & Fuse

There is a power socket and a fuse terminal on the right side of the rear bottom of the device. The fuse terminal has two built-in 220VAC / 20A power supply fuses. The power supply fuse protects the equipment and human body from overvoltage and overcurrent that may flow from the outside to the equipment. If the fuse line is broken, contact the service center for inspection.

4. Device description

4.1 General configuration

This product is consisted of the following in Figure 4-1. Familiarize yourself with each name so that you can use it correctly.



Figure 4-1. Each part of UltraDuo

#No	Name	Function	Remark
1	Body case	A case to protect parts inside the body	
2	Monitor	Monitor with touch screen feature to operate the device	
3	Selector switch	Power ON/OFF switch.	
4	Cart	It is used for device movement	
5	3/10MHz handpiece connector	The main body and the 3/10MHz handpiece are connected.	
6	1/3 MHz handpiece connector	The main body and the 1/3MHz handpiece are connected.	
7	Handpiece holder	It is used to hold the handpiece after use.	
8	Power Inlet	It is used to connect the power cord wire to supply 220V power (Including two power supply fuse 250V 20A)	
9	Circuit breaker	It will automatically turn off the power when overload (15A).	
10	Ventilation	It is used to circulate the air below the body.	
11	3/10MHz handpiece	It is used for 10 MHz and 3/10 MHz frequency. The blue LED lights when the procedure is started.	
12	3/10MHz handpiece	It is used for 1/3MHz frequency. When the procedure starts, the pink LED lights up.	

4.2 Device main body

The main body of this device is composed of transducer handpiece, drive of touch panel, and device controlling the operation control of the device. There is a selector switch module that turns the power ON or OFF.

4.2.1 Touch Panel

This screen is composed of UI (User Interface) so that the clinician can use various functions of the device. By touching the pictures and letters on the touch panel, the clinician can use various functions of the device and check the status during the treatment.



fig 4-2. Touch panel UI mode screen

4.2.2 Switches and Emergency stop switches

Use the push switch to turn the power on or off. To turn on the power of the main unit, press the push switch so that the blue light turns on. To turn it off, press the switch again so that the

switch turns blue and turns back to flat state.

- In case of an emergency stop due to abnormal operation of the device, turn off the circuit breaker, disconnect the power cord and contact the service center

4.2.3 Cart

It enables the equipment to move around easily. Move the equipment slowly on a flat floor. Stop the equipment by pushing the foot brakes of the rear casters before operation. If not performed correctly, it may cause injury or damage to the equipment.

4.2.4 Hand-piece



3/10MHz Handpiece

Blue LED



1/3MHz Handpiece

Pink LED

Figure 4-3. LED lighted handpiece picture

The handpiece is connected to the body. The handpiece can be operated by operating the touch

panel. The 3/10MHz handpiece lights up the blue LED when used and the 1 / 3MHz handpiece lights up when the pink LED is on.



Figure 4-4. 1 / 3MHz handpiece replacement popup window

DW and AP, both modes use 3/10MHz handpieces as well as 1/3MHz handpieces. If you need to replace the handpiece, a pop-up window [Please change 1/ 3MHz probe] will appear and the blue LED on the 3/10MHz handpiece will turn off. The 3/10MHz handpiece used in this case is put on the cradle. Touch the popup window and replace it with the 1/3MHz handpiece. Press the STOP / START button in the center of the screen again and the pink LED, on the handpiece will light up and the procedure resumes.

4.2.5 Power supply and circuit breaker

Circuit breaker and ground terminal, fuse box, and main power socket is located on the lower rear side of the main frame.

Circuit breaker cuts off electric power supply automatically to protect persons and the equipment when a sudden high voltage or current is detected.

Name	Spec	Description
Power cable	Single phase 220VAC/15A, 2M	External power supply
Fuse box	220VAC/20A	If overload such as momentary overvoltage and overcurrent flowing from the outside is applied, it will be blocked for the safety of equipment, human body and fire.
Circuit breaker	220VAC/15A	

4.2.6 Ventilation

The unit has a built-in cooling unit.

- ◆ Since this equipment uses high voltage, the internal temperature of the device will increase when used for a long time. If the temperature of the unit rises, it may cause malfunction. To cool down the system, a cooling fan is installed at the upper rear side of the main unit. Also, a ventilation hole is located at the bottom for sucking outside air. The air sucked from the outside is circulated inside the body and then discharged through the cooling fan.

5. Device operation

5.1 Operation process

5.1.1 Preliminary check points

Check if foreign substance is attached on the hand-piece. Check if power cable is connected to 220VAC outlet on the wall.

5.1.2 Starting the device

1. Turn the power selector switch to turn on the power.
2. The unit starts to operate and after a while, the logo screen is displayed on the touch panel.



Figure 5-1. UltraDuo initial logo screen

3. Main menu screen is displayed soon after 'UltraDuo' logo screen.



Figure 5-2. Main menu screen



Figure 5-3. Detailed screen when selecting AESTHETIC



Figure 5-4. Details screen when selecting DERMATOLOGY

5.2 After using the device

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- ◆ When the procedure is finished, press the power switch.
 - ◆ If the handpiece is dirty, clean it with a clean sponge or cloth.
 - ◆ Cover the handpiece with a dust cover.
 - ◆ Unplug the power cord from the wall outlet
-

6. Maintenance and troubleshooting

6.1 Maintenance of device

Maintenance is required to use this device continuously without failure.

If the device does not operate normally, refer to the troubleshooting instructions in this manual. If you continue to experience problems after following the instructions in the manual, please contact our service center.

Any repairs or disassembly by a person other than a service worker authorized by Healux Co.,Ltd., may be void even if the warranty period remains. In addition, if a person other than a regular service person performs the service, the malfunction of the device may cause serious injury to the clinician or the patient.

NOTE

- ◆ The warranty period of this product is one year after purchase, and if disassembled and assembled in any way, it can be invalidated even if there is a warranty period remaining.
- ◆ Damage to equipment caused by negligence may result in replacement and repair costs.
- ◆ During the warranty period, you may be charged for the replacement of the consumables.
- ◆ You may be charged for the service charge in case if there is a problem with the device that occurs after the warranty period.

Healux Co.,Ltd., the manufacturer of this product, is responsible for the functionality, reliability, and safety of the device only in the following cases.

- ◆ When the process of transportation, installation, initial operation, change, maintenance and repair of the equipment is performed by authorized service personnel.
 - ◆ When the electrical equipment and environment of the space where the equipment is installed and used satisfy the installation conditions of this device.
 - ◆ Equipment and accessories are used in accordance with the instructions in this manual.
 - ◆ When received training or clinical trials from headquarters and authorized personnel.
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When installing this device, be sure to select the following location.

- ◆ Where there is no water and humidity is low.
 - ◆ A clean environment with low temperature and dust.
 - ◆ Placed flat and safe from vibration or shock.
 - ◆ A grounded power outlet is directly installed out of the building.
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Other Usage Precautions

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- ◆ While using the device, check the status of the device from time to time.
 - ◆ If an abnormality occurs in the device or an adverse reaction is observed from the patient, stop the treatment immediately then record the problem and contact the service center.
 - ◆ Do not allow anyone other than the clinician to access the device or prevent the device from operating, including the patient.
 - ◆ Do not disassemble, assemble, replace, or change the device.
 - ◆ Do not use the device near high voltage or generator such as X-ray devices.
 - ◆ The patient shall not be left with the device on during the treatment.
 - ◆ When engaging the handpiece with the main unit, tighten the locking screws to prevent contact failure and detachment from the main unit.
 - ◆ Do not use excessive force on the equipment or make any impact on the equipment.
-

6.2 Fuse replacement

The fuse terminal is located on the right rear side of the device. By using a flat-blade screwdriver in the groove, fix the fuse terminal and take out the cap then replace the fuse. Make sure to use gloves and disconnect the power cord from the power socket of the device and leave the circuit breaker in the Off state.

6.3 Device body maintenance

Clean the outside surface of the device with a soft towel or cloth that has been cleaned

with a non-corrosive liquid cleaning agent, and then wipe it with a clean dry cloth.

6.4 Handpiece maintenance

Handpieces must be completely removed from foreign material after the treatment. If you do not remove any foreign material from the handpiece after the procedure is completed, foreign matter between the devices may cause serious injury to the clinicians and the patient.

Handpiece cleaning process

- ① Turn off the main power supply and circuit breaker.
 - ② Wear sanitary gloves.
 - ③ Use clean sponge or cloth to wipe out used castor oil residues and foreign substance on the handpiece
 - ④ For areas that are difficult to remove, apply 100% ethanol.
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- ◆ Make sure electrical power is OFF before cleaning the handpiece.
 - ◆ Use approved cleaning agents only. Do not use other cleaning or bleaching agents.
 - ◆ Remove the foreign objects and castor oil residues by following the user manual method. If not managed correctly, it may cause skin injury or equipment.
 - ◆ Service fee might be charged for equipment damages due to improper cleaning procedures of the user.
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6.5 Troubleshooting guide

Check the following information when the equipment does not turn on.

- ◆ Is the AC power cable properly connected to the device?
 - ◆ Is the main power switch on?
 - ◆ Is the circuit breaker on?
 - ◆ Is the fuse status of the device normal?
 - ◆ If any of the above does not apply, stop the device, disconnect the power, and contact the service center.
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7. Clinical guidance

The clinical data below are simply suggestions from experienced professionals who have used this device. Therefore, Healux Co.,Ltd. is not responsible for any problems caused by misuse or abuse of this device.

7.1 Training

Before using this device, the clinician should read this manual carefully and be aware of the relevant information. Users should always refer to the new clinical literature.

If you need more detailed information, please contact Healux Co., Ltd. +82-2-2169-2880.

7.2 Clinical coverage

The purpose of 'UltraDuo' is to destroy fat-cell in lower belly, upper belly, thigh, forearm, and love handle, etc.

7.3 Counseling

All clinicians should provide detailed information about the patient's symptoms, choice of treatment, risks, insurance benefits, possible complications, and anticipated therapeutic effects prior to the operation of this device. At the time of consultation, the patient's past medical history is reviewed to confirm the presence of contraindications.

7.3.1 Precautions for therapeutic effects

Most patients can achieve excellent clinical results after treatment, but some patients may have minimal clinical benefit. Therefore, you should provide relevant information in advance so that the patient does not have unrealistic expectations about the treatment.

7.3.2 Pain

Depending on the patient, the sensitivity of the pain during the procedure may be different, but there is a bit of pain during the treatment. Patient may feel heat however, local anesthesia is not necessary.

7.3.3 Skin reaction after procedure

Depending on the sensitivity of the patient's skin, the skin reaction after the procedure may be different. In general, the treatment area can be reddened immediately after the procedure, usually about 12 to 24 hours.

7.4 Treatment cases

Healux Co.,Ltd. does not recommend specific parameter values or treatment guidelines for the operation of this device. The following is a compilation of the clinical experience of doctors who have used this device and the recommendations of many of the literature.

7.4.1 What is the treatment process?

The treatment process using this device is to record the history of each patient through counseling. To inform them of the exact diagnosis of the lesion, the expected treatment outcome and possible side effects along with the precautions to be taken before/after the treatment, and checking the progress with each visit.

Since the treatment outcome differs depending on the nature of the patient or lesion, accurate clinical outcome after the treatment is very difficult to predict. A clinical understanding is required to select the appropriate treatment parameters for each site and obtain effective clinical results

7.4.2 Procedure interval and rotation

Perform treatment 3 ~ 4 times within 8 ~ 10 days interval, and adjust operation numbers and intervals by observing the skin reaction to the treatment.

It is difficult to meet 100% of individual patient satisfaction. Determine operation numbers and intervals according to treatment results and level of patient's satisfaction.

7.5 Clinical notes

7.5.1 Monitor guide

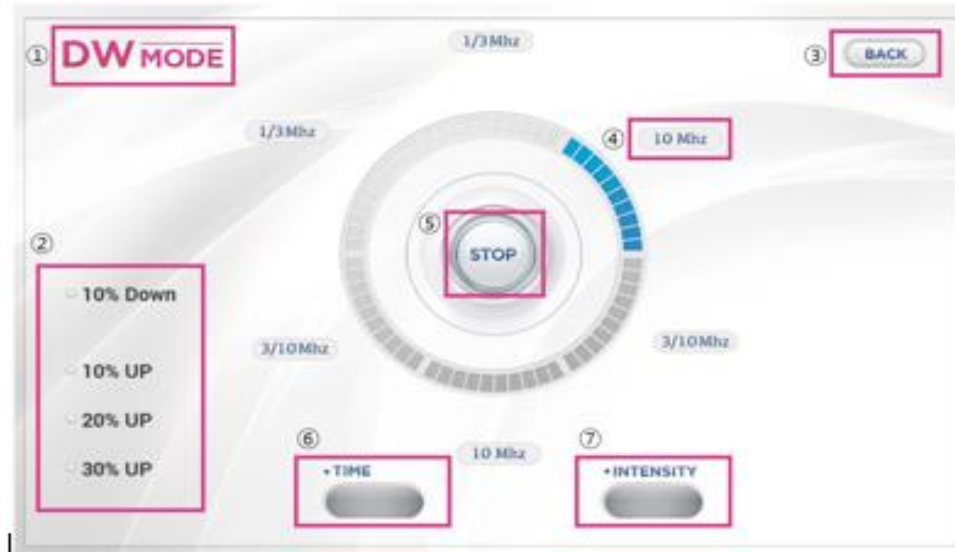


Figure 7-1. Ultrasound mode screen

No.	Feature	Function	Remark
①	Mode indication	Indicates the currently selected mode.	
②	Adjust intensity value	The ultrasound output power (W / cm^2) can be adjusted to a total of five steps: 10% DOWN, 10% UP, 20% UP, 30% UP and default.	
③	Back	You can return to the previous menu.	
④	Frequency used by section	It represents the frequency of the ultrasonic waves by each section.	
⑤	STOP/ START	Pressing starts the procedure and pressing stops during the procedure.	
⑥	Time	Displays the remaining treatment time. You can skip the process by frequency by touching the TIME area before START or START.	
⑦	Intensity	(W / cm^2) of the ultrasonic wave currently being investigated.	

7.5.2 Software function

No	Feature	Function name	Function
1	Initial Screen	Loading screen	Display the loading screen with the name of the product for about 10 seconds after the power is turned on.
2	Main menu screen	Main menu selection	You can select the menu with the desired mode from the two main menus (aesthetic and dermatology)
			Different modes are stored for each menu.
3	Detailed menu	Aesthetic	There are 6 modes which are W, DW, ST, SR, AA, P
		Dermatology	There are nine detail modes, AC, AP, AD, PD, E, HS / K, AS, CLU and LE.
4	Mode screen	Back	Return to previous menu
		10% DOWN	The ultrasonic wave is irradiated at 10% down from the basic output setting value per mode.
		10% UP	The ultrasonic waves are irradiated at an intensity 10% higher than the basic output set value per mode.
		20% UP	The ultrasonic waves are irradiated at an intensity 20% higher than the basic output setting value per mode.
		30% UP	The ultrasound is irradiated at an intensity that is 30% higher than the basic output setting value for each mode.
		STOP/START	Start or stop the procedure.
		Time	You can skip the process one section at a time.
		Intensity	Indicate the output strength (W/cm ²) of the irradiated ultrasound.

7.5.3 Equipment usage and operating sequence

Equipment usage

- 1) Select procedure mode.
 - 2) Adjust the value or the time, if necessary.
 - 3) Start the procedure when the STOP button is pressed to change START.
 - 4) Use a hand piece with LED on it and perform the procedure on the affected area.
 - 5) Turn off the power switch after use.
-
-

Operation procedure

- 1) Loading screen after power is on



Figure 7-2. Ultra Duo initial LOADING screen

2) Start-up screen and setup guide



Figure 7-3. Ultra Duo Main Menu Screen

When the status bar of the loading screen is full, it switches to the main menu



Figure 7-4. Detailed menu screen when aesthetic mode is selected

W, DW, ST, SR, AA and P. There are six submenus.



Figure 7-5. Detailed menu screen when dermatology mode is selected

AC, AP, AD, PD, E, HS / K, AS, CLU and LE.

3) Select the desired procedure mode.

4) Setting range

- Intensity: 10% DOWN, 10% UP, 20% UP, 30% UP can be set.
- Time: Prior to the procedure start, press the time area, step by step, skip the process and select the desired location. You can select the frequency section or set the procedure time by adjusting it.

5) Program setting method (Each program setting method is the same)

- Select procedure mode: Select the desired procedure mode.
- Intensity selection: If necessary, select the INTENSITY value in the lower left corner.
- Time selection: If necessary, press the TIME to adjust the frequency and procedure time.
- Press the STOP button to enter the START state.
- The LED lighted handpiece is placed on the affected area and then treated.
- After the end of the procedure, the used handpiece is placed on the base attached to

the main body.

- Turn off the power switch after use.

7.5.4 Clinical Parameter

AESTHETIC			
W	Helps improve wrinkles	12min	3/10MHz
DW	Helps to improve deep wrinkles	18min	3/10MHz, 1/3MHz
ST	Helps improve skin elasticity	12min	3/10MHz
SR	Helps to improve moisturizing (dry skin)	12min	3/10MHz
AA	Helps improve anti-aging (pore reduction)	12min	3/10MHz
P	Helps to improve phonophoresis (help penetrate drugs with ultrasound)	12min	3/10MHz
DERMATOLOGY			
AC	Helps to improve acne blemishes	12min	3/10MHz
AP	Helps to improve purulent acne	18min	3/10MHz, 1/3MHz
AD	Helps to improve atopic dermatitis	10min	3/10MHz
PD	Helps to improve cheilitis	10min	3/10MHz
E	Helps to improve eczema	10min	3/10MHz
HS/K	Helps to improve hypertrophic scars / keloids	10min	3/10MHz
AS	Helps to improve acne scars	12min	3/10MHz

CLU	Helps to improve fungal ulcers	10min	3/10MHz
LE	Helps to improve lupus erythematosus	12min	3/10MHz

This device may help alleviate the above symptoms.

-
- ◆ **The parameters are not applicable to every patient because of differences in skin or fat thickness states.**
 - ◆ **The energy setting value varies from one person to other. When the patient is exposed to a lot of heat during the procedure, it is recommended to lower the level to leave the patient in a relaxed state.**
 - ◆ **Proposed parameters in the table above are not absolute.**
-

7.5.5 Cautions after operation

- ◆ Immediately after the procedure, a small amount of erythema may occur and may swell but naturally calm down.
 - ◆ If the patient moves suddenly during the procedure, it may cause burns.
 - ◆ Do not treat on dry skin without using gel.
 - ◆ Do not apply to the patients such as pregnant, the elderly and infirm if possible. (See section 3. Safety and Precautions.)
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7.6 Question and Answers

7.6.1 Q&A about 'UltraDuo'

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- ◆ Q: Is the treatment painful?
 - ◆ A: You may feel a warm feeling, unlike other equipment's, UltraDuo does not hurt.

 - ◆ Q: How long will the treatment sessions take?
 - ◆ A: The treatment takes 8~10 times every 3~4 days interval. However, it may be shorter or longer depending on the thickness of the skin.

 - ◆ Q: How long does the treatment take?
 - ◆ A: It takes 10~18 minutes. The time might take less or more, depending on the body part.

 - ◆ Q: Are there any side effects.?
 - ◆ A: If you follow the instructions carefully in conjunction with other laser treatments, there is almost no side effects such as burns or pigmentation.

 - ◆ Q: Are there any inconvenience in my daily life?
 - ◆ A: There is no disruption in daily life after the procedure.

 - ◆ Q: Can I use other obesity treatments such as liposuction?
 - ◆ A: Yes! Those will create a synergy effect.
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8. Specifications and warranty

8.1 Equipment specifications

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- 1) Rater voltage and frequency : AC 220V 50/60 Hz
 - 2) Power consumption: 40 VA
 - 3) Energy output: 0.3~2.0W + 30%
 - 4) Frequency output: 1, 3, 10MHz
 - 5) Type: Ultrasound
 - 6) Diameter: 3.1cm
 - 7) Cooling method: Air cooling system
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8.2 Product warranty

Product warranty

Product name	UltraDuo	customer's name	
Serial number		Phone number	
Address			
Distributor name		Phone number	
Address			
Purchase date		Product Warranty Period	1 year after purchase

1. This product is manufactured through strict management and inspection process.
2. If the product fails in normal condition within the warranty period, we will repair it for free.
3. Damage to the device caused by negligence or misuse, may be charged even if the warranty period remains.
4. If you have any questions or inquiries, please contact 'Healux' Customer Center.

509, Dusan-ro, Geumcheon-gu, Seoul, Rep. of Korea

TEL.+82-2-2169-2880 FAX.+82-2-2169-2888

Healux Co.,Ltd.

