

# Operation Manual of HIFU



**Please read user manual carefully before using machine**

# 1. Logo Interface

Opening power switch of machine that enter into below interface ( picture 1 )



Picture 1

Click on any position of the screen, enter into customer information ballot screen ( picture 2 )

The image shows the Ulthera customer information ballot screen. At the top left is the Ulthera logo. At the top right are two tabs: "Patient info" (highlighted) and "Setup". Below the tabs are four input fields: "Patient Name:", "Patient ID:", "Clinician:", and "Treatment Settings:". The "Treatment Settings:" field contains the text "ultherapy Face(80)". To the right of the "Clinician:" and "Treatment Settings:" fields are two circular arrow buttons (up and down). To the right of the "Patient Name:" field is a "Ready" button. Below the input fields is a numeric keypad with the following layout:

1	2	3	4	5	6	7	8	9	0	-
Q	W	E	R	T	Y	U	I	O	P	"
A	S	D	F	G	H	J	K	L	<	>
SHIFT	Z	X	C	V	B	N	M	Backspace		
+/=									Enter	

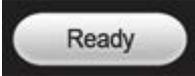
Picture 2

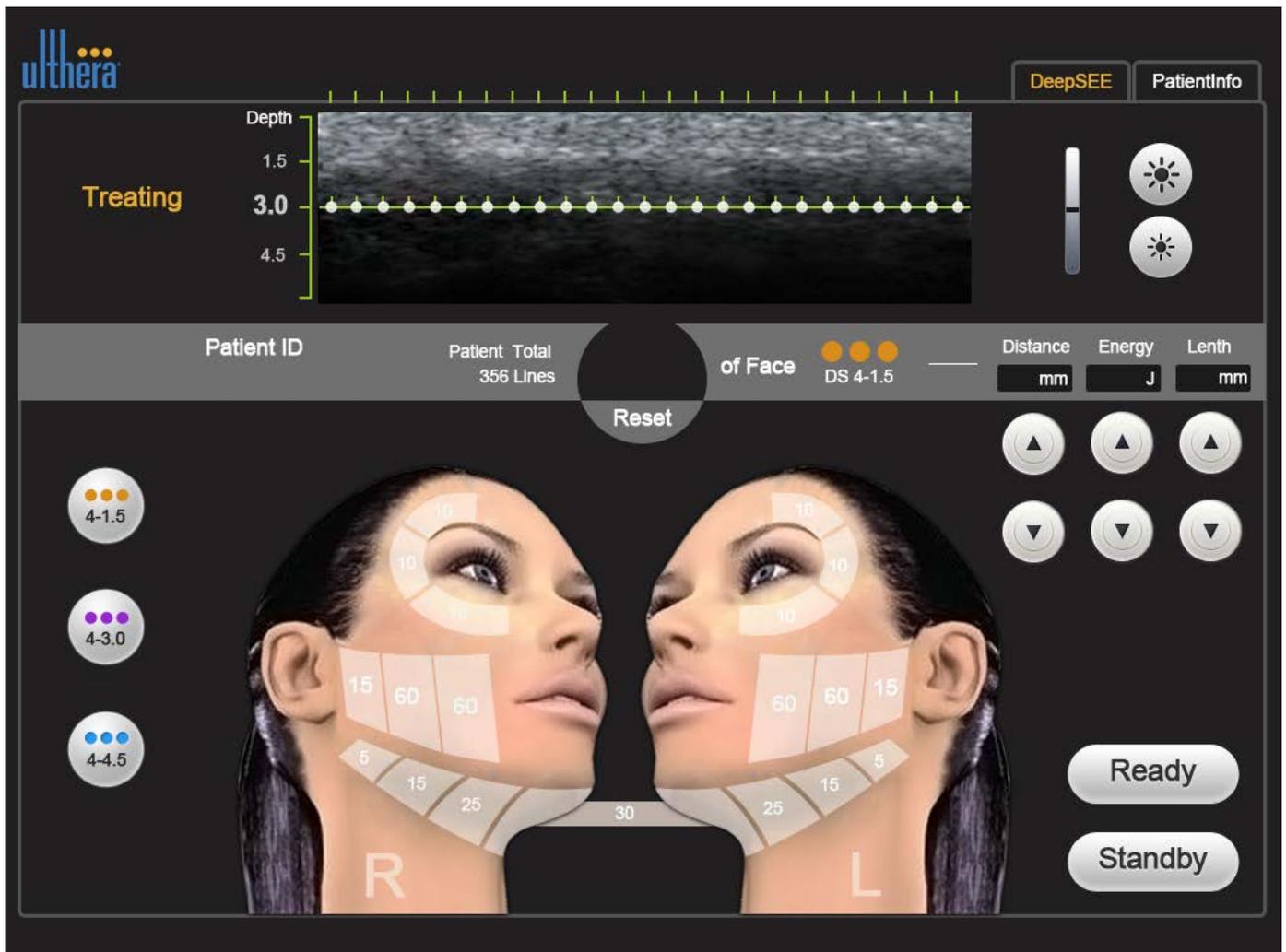
## 2. Customer information ballot interface

Patient Name: input customer's name

Patient ID: this code used to identify customer. Random numbers can be.

Clinician: Name of beautician/ operator

Click  to enter into operation interface ( picture 3 )



Picture 3

## 3. Treatment interface

: return button. Click it that return to customer information interface.

: intensity control, click  brighten. Click  dark.



: number of current use. Change cartridge or customer that will be reset.



: Identify different depth of treatment cartridge.



: Distance between dot to dot ( 1 to 2, 2 to 3, 3 to 4.....). Take below picture 4 as example. Adjustable between 1.0mm to 4.0mm.



Picture 4

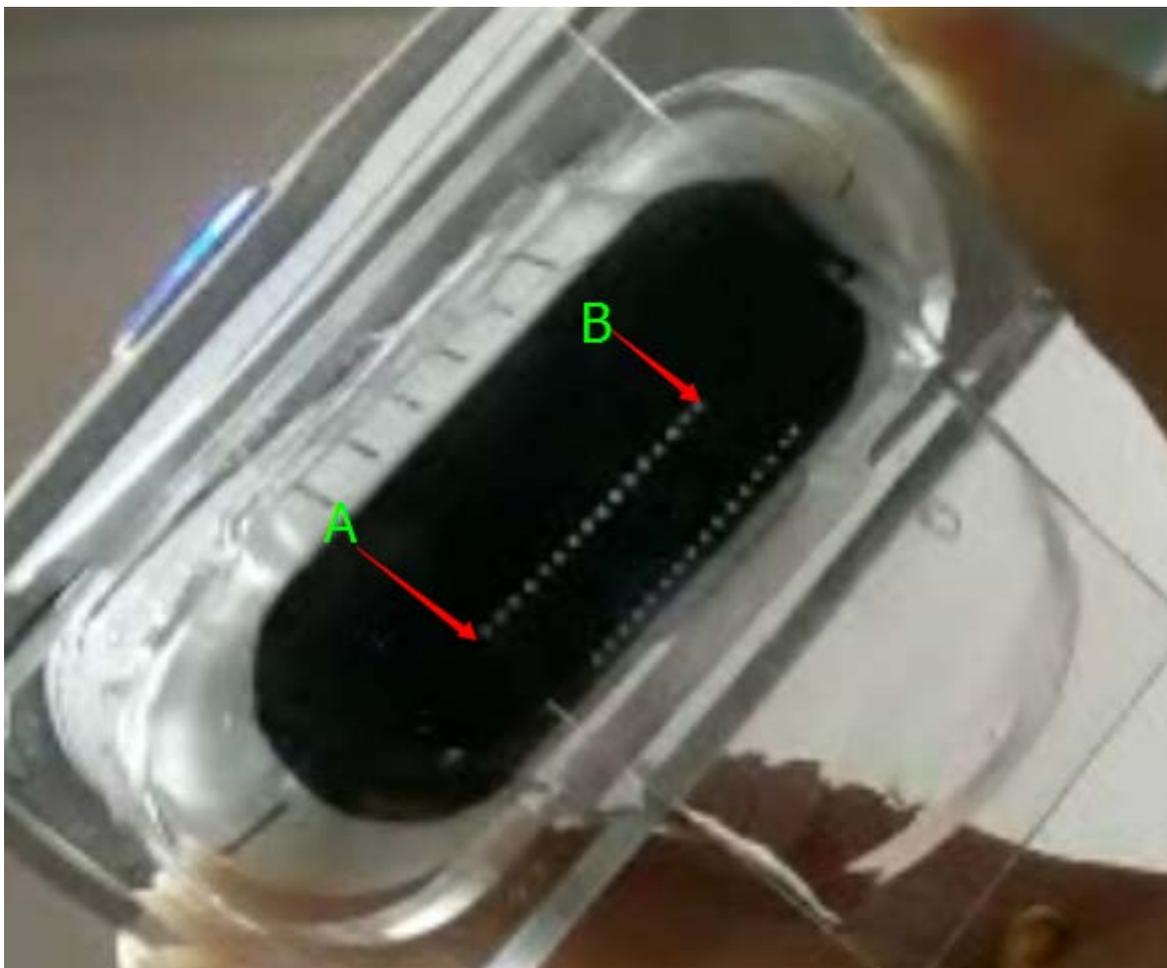


: Energy adjustable, from 0.1J to 3.0J.



: Length ( from A to B ) of the line. Adjustable from 5mm to 25mm. Please check

below picture 5.

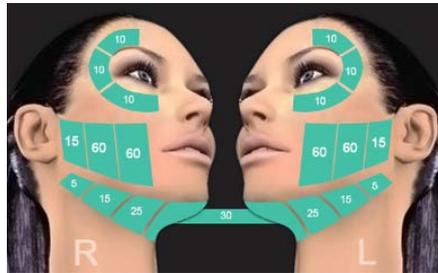


Picture 5



( ): “5061” means remaining shots, “5000” means total shots.

According to different skin therapy depth of cartridge that will show different interface of treatment area. Only green area can be as a reference treatment area. At this moment, please put the cartridge on the face gently. Click the button on the handpiece.



Skin therapy depth of 1.5mm:



Skin therapy depth of 3.0mm:



Skin therapy depth of 4.5mm:

## Principle

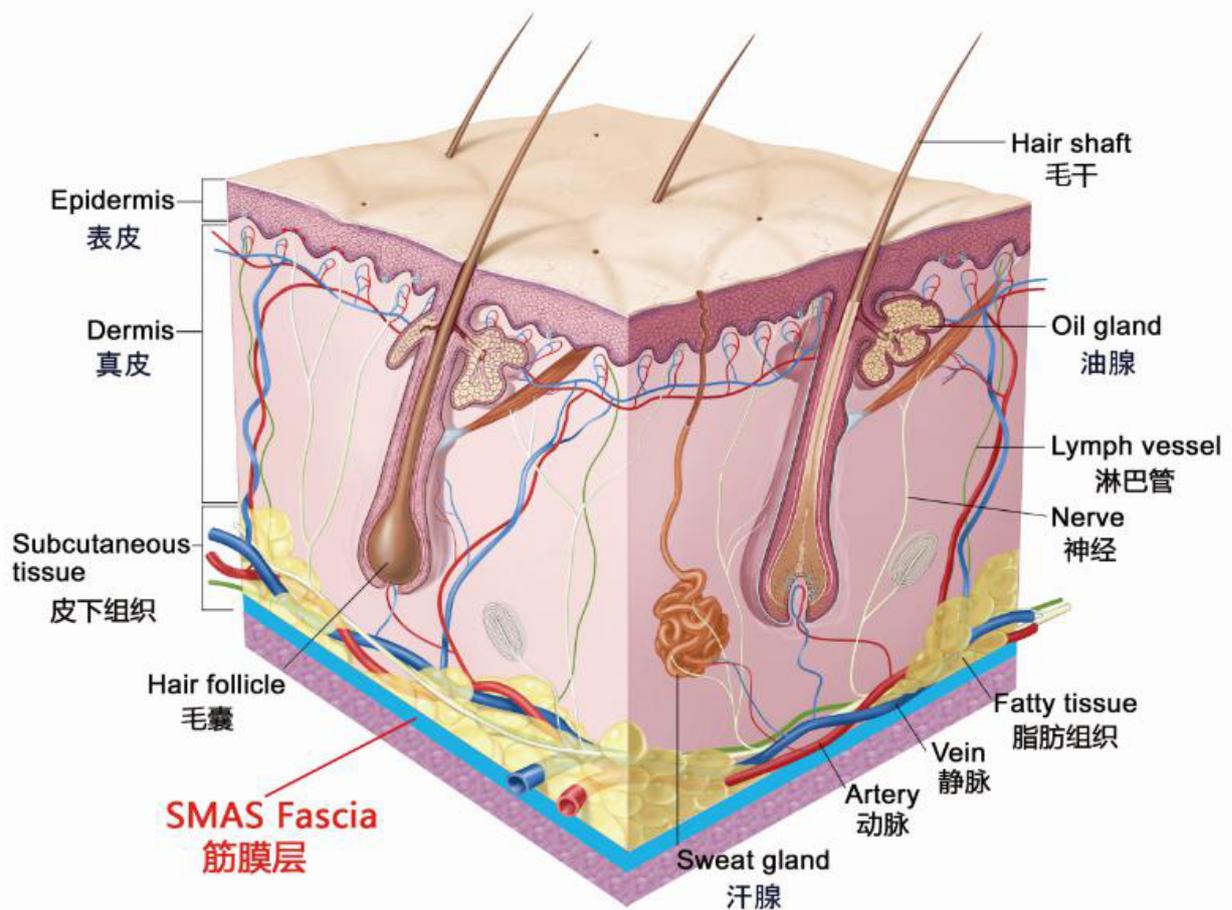
A: **Ultrasound (HIFU)** is a frequency above 20,000 Hz sound waves, which direction is good, strong penetration, easy to get a higher concentration of acoustic energy propagation distance in water, can be used for distance, speed, cleaning, welding, gravel, sterilization and disinfection. In medicine, the military, industry, agriculture has a lot of applications. Ultrasonic its lower frequency limit is approximately equal to the upper limit of human hearing is named.

## B. Ulthera skin lifting

High intensity focused ultrasound is using the latest achievements of the most advanced anti-ultrasound therapy, the use of high-intensity focused ultrasound characteristics, the energy is focused on a precise 3mm depth shallow fascia and fascia layer 4.5mm, highly focused energy wave so focused at the SMAS produce the protein clotting reaction to the freezing point as the center to produce tension around, while freezing point as the center began the rebirth of radial collagen, double strengthen SMAS flexibility. Go to the non-invasive treatment of SMAS layer to be treated when surgical face-lifts, lifting SMAS fascia suspension, a comprehensive solution to the problem of facial sagging and relaxation, but also activate skin collagen layer reorganization and regeneration, improve large pores, wrinkles, elastic tissue changes of facial aging.

## C. What is SMAS?

Superficial Muscular Aponeurotic System superficial tendon membrane system called SMAS. It refers to the broad coverage and deep tissue layer below the dermis, superficial connection with the facial muscles fat layer of connective tissue, extending the facial bones strong.



## Operation and notes

1. There are 3 cartridges of hifu machine: 1.5mm, 3.0mm, 4.5mm. Besides, we will send 10pcs acrylic sheet and 2 pcs testing jig. Depth of 1.5mm jig is using for testing cartridge 3.0. Depth of 3.0mm jig is using for testing cartridge 4.5.
2. Using acrylic sheet to test energy: if the back of acrylic sheet is penetrated but surface smooth that means this energy is safe! Can use this energy to make a treatment to customer. Please check below picture 6. Use finger touch the dots of circled parts that will have concave-convex feeling. But the other side of sheet is smooth. **If both sides of acrylic sheet is penetrated that means energy is too strong, can not use it!!!**



Picture 6

3. Energy adjustable: When we operated hifu machine, it must be carried out in a safe and effective situation. Accordingly, the scope of the energy requirements as follow:

**Cartridge 1.5: safe energy scope: 0.1-0.9J**

**Cartridge 3.0: safe energy scope: 0.1-1.0J**

**Cartridge 4.5: safe energy scope: 0.1-1.2J**

If exceeded this safe energy that customer's face will be hurt by stronger energy! So, must test energy well before using machine.

4. Generally speaking, energy up 0.6J that acrylic sheet can be penetrated. So, the best scope Of energy is:

**Cartridge 1.5: safe energy scope: 0.1-0.9J**

**Cartridge 3.0: safe energy scope: 0.6-1.0J**

## **Cartridge 4.5: safe energy scope: 0.6-1.2J**

**Above energy is safe and effective!**

**(But, eventually, the real energy according to standard test results of actual equipment, so must test energy well before using machine)**

5. How to know which energy is better, such as 0.8J or 1.0J or 1.2J...? We can know from Customer's age and skin condition. If older use bigger energy ( **safe scope** ), younger use small energy ( **safe scope** ). Bigger energy ( **must be in safe scope** ), higher effect!

6. Distance of dots adjustable: Generally set at **1.4-1.6MM**. Bigger energy, larger distance.

Older customer use smaller distance. Smaller distance, better effect!

7. Total length of line: 25MM. We can adjust the length base on customer's face shape and Treatment area. The surface of cartridge should be stick closed to treatment area. Cartridge can not hang in the air. Please DO remember that must use gel when using machine. It should be more than 2.0mm depth of gel.

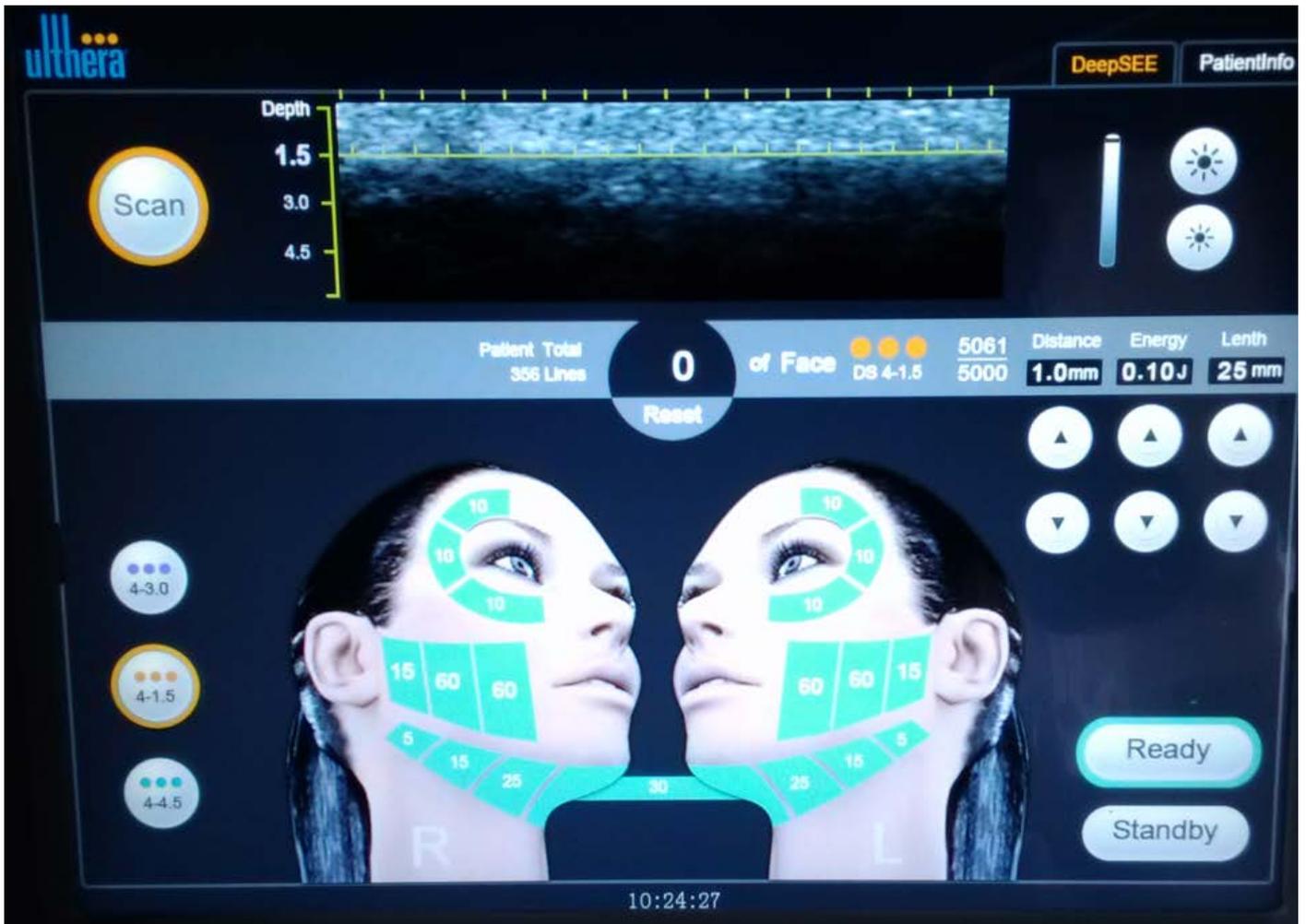
8. When operating and testing machine, we need to put enough gel. If with bubble and spacing of gel that energy can not penetrate. It is as a medium of transmitting ultrasound energy to skin deep.

9. The head of hifu can not shot upward (like below picture 8), also if without gel, but cartridge worked that will be damaged, easy broken for this incorrect operation ! The 3 cartridges are precision spare parts, **no bumping, no falling!**



**Picture 8**

10. When making treatment for customer, DO remember to put enough gel on the treatment parts. If gel not enough, energy can not penetrate to deep skin and hurt cuticular layer.
11. Cartridge can not pressing on the skin during treatment. Treatment parts gently paste on the surface of cartridge is ok!
12. Different cartridge with different admissible working area ( blue area ). Like below picture 9. That means for 1.5 cartridge, blue area is admissible for working on the face.



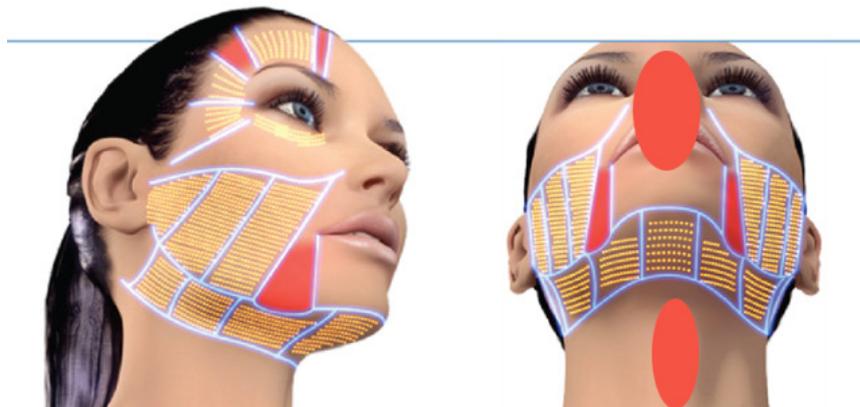
Picture 9

13. Feeling of treatment for different cartridge:

1.5 cartridge: tingling feeling

3.0 & 4.5 cartridge: soreness and distending pain feeling.

14. General recommendations these parts ban on treatment: temple, both upper and lower eyelids, both upper and lower lips, neck and cheekbone. (See the red range on the following picture)



Temple with nervous, customer will has such symptom: dizziness, nausea, vomiting. Eyeball is under upper eyelid, if shot here that easy hurt it. There has dental nerve of lip, so cannot shot here. Neck with artery/ weasand/ laryngeal prominence/ lymph, so can not shot here as well. Cheek with a thin layer

Only, cannot shot! If customer ask for treat these parts, please use **1.5** cartridge with a safe energy **0.3-0.5J!**

15. How to operate? First of all, from below upward and shooting straightly. Then, shooting



Lengthwise.

After treatment, customer feel distending pain feeling, it is normal phenomenon.

16. If causes blistering/ red scratch after treatment that means energy is too big or head not close to the skin.

17. After treatment, customer will feel skin dry and tighten. Please use hydrating mask after one hour. It can not be **frozen**, need normal temperature.

18. A whole face treatment need about 800-1000 shots.

## Announcement

1. Before using machine, please test each cartridge well first.
2. During treatment, if beautician feel motor in the cartridge is abnormal, please stop operation right now. Then, test again.
3. Please DO NOT use **alcohol and other corrosive substance** to clean cartridge and handpiece, also machine. Please use tissue or clean cloth to clean all.

4. Please don't use hot water to wash face within 24 hours after treatment.
5. Please don't have sauna face massage within 2 weeks.
6. Please don't in the sun within 1 week.
7. Please don't have laser and RF treatment within 15 days.
8. Please do hydrating well within 1 week.

## Taboo

1. hypertension, diabetes, heart disease
2. skin disease, or treatment site who have skin lesions
3. pregnant women, epilepsy, and mental illness

## Reference Parameter settings



1、 Distance adjustable:

- A、 30-40 years: suggest use 1.6-1.8
- B、 40-55 years: suggest use 1.4-1.6
- C、 Above 55 years: suggest use 1.4



2、 Energy adjustable:

- A、 1.5mm: 0.2J-0.8J
- B、 3.0mm: 0.5J-1.0J
- C、 4.5mm: 0.6J-1.2J

**3、 Before treatment, please test handpiece and energy, after confirm the handpiece is normal (Making sure working normally), then do treatment.**