

SYLFIRM X[®]



Device Preparation



Cable Connection

A. Make sure the power cable, hand-piece cable and foot switch cable are securely connected to the back of the device.



Power Button

B. Press "I" to turn on the main power switch on the back of the device.
C. Press the power button on the top left of the device.



Foot Switch

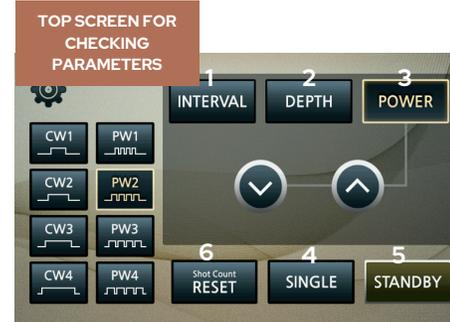
D. Place the foot switch near where the practitioner will sit.

User Interface

NAME	FUNCTION	RANGE
1. INTERVAL	Time interval between shots	0.1-1.0 sec
2. DEPTH	Needle depth	0.3-4.0 mm
3. POWER	RF energy	level 0-12
4. SINGLE / AUTO	To set single or continuous shot irradiation. Pressing down the foot switch fires only one shot in single state and continuous shots at set intervals in auto state.	
5. STANDBY/ READY	To start the operation	
6. SHOT COUNT/ RESET	To check/reset the number shots used	



Monitor for checking parameters ↗



Monitor for adjusting parameters ↗

PW MODE

Pulsed Wave Mode Skin Complexion¹



- World's first Pulsed Wave RF microneedling mode.
- PW mode creates selective coagulation on the basement membrane and vessels located within the epidermal junction and upper dermis, with no noticeable effect on the surrounding tissue.
- Provides more stable radio frequency energy.

CW MODE

Continuous Wave Mode Skin Revitalization²



- CW mode creates wide, independent coagulation around each electrode.
- The coagulation area continues from deeper dermis to upper dermis with one penetration.
- Promising optimal skin revitalization, for a firmer, more youthful looking appearance.
- Provides more stable radio frequency energy.

300 MICRON

300 Micron Depth is the only treatment that is capable of treating three layers at the same time: Epidermis, Basement membrane, Papillary dermis.

ECM (Extracellular Matrix)

- Provides a physical environment for cells to grow.
- Takes a role of connecting cells.
- The role of sorting and supplying the necessary biochemical factors.
- Composition: collagen, elastin, structural proteins, GAG (glycosaminoglycan), growth factors.

BM (Basement Membrane)

- ECM's composition.
- Collagen Type IV is located on lamina densa of the Basement Membrane.
- Support of epidermal stem cells.
- Connection of epidermis to dermis.

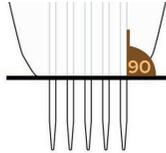
¹ Skin complexion treatment targets the basement membrane and vessels to create a visibly more youthful, even toned and textured complexion.

² Skin revitalization treatment targets dermal layers of the skin to increase collagen and elastin fiber through hemostasis and electrocoagulation.

General Techniques

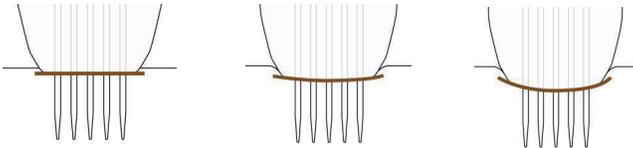
Angle of the Needle Tip

Maintain the needle tip of the handpiece perpendicular to the skin, and then irradiate RF energy by pressing the footswitch. This ensures that the energy is delivered accurately to the target location. Make sure the needle tip is completely in contact with the skin.



Pressure

Vary the pressure of pressing the needle tip of the handpiece against the skin in accordance with the thickness or firmness of the skin. Gently press on thinner skin areas, like the upper eyes or upper lips, firmly press in general areas, and forcefully press on fleshy areas, such as the cheeks.



Handpiece Movement

- Do not move or pull the handpiece from the skin during RF energy irradiation as indicated by red light at the needle tip connected to the handpiece.
- Keep the set interval in mind and move the handpiece to the next treatment area after the red light goes out.

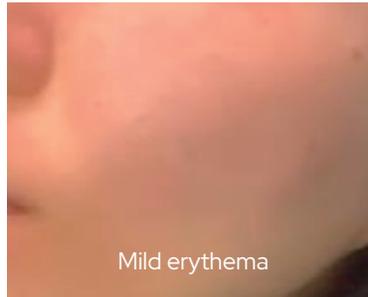
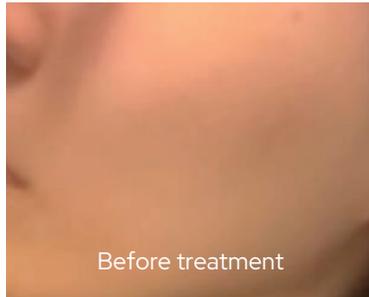


Scan to watch
the video



Test Shot

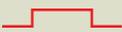
- Even if the same parameters are applied to patients with the same lesion and skin type, each patient may respond differently.
 - Before starting the procedure, test shots should be taken to confirm and set the appropriate parameters for each patient.
- A. Set conservative parameters.
 - B. Take a few test shots (NO double or multiple shots in one spot) in an inconspicuous area.
 - C. Observe the endpoints appearing a few minutes after RF irradiation. In most cases, the appropriate endpoint is mild to moderate erythema.
 - D. If the skin reaction is excessive, such as dark redness or/and excessive swelling, reduce the power by 1-2 levels or change the mode.
 - E. If skin reaction is insufficient, increase the power by 1-2 levels or change the mode.
 - F. If the patient complains of pain, decrease the depth in 0.2 mm increments.



8 Modes and Main Applications

Continuous Wave

Mainly for Skin Rejuvenation & Scar Treatment

Mode	Pulse Duration	Main Applications
CW1 	120 msec	Scalp
CW2 	160 msec	Face
CW3 	200 msec	Body, Scar
CW4 	300 msec	Body, Scar

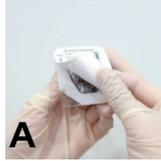
Pulsed Wave

Mainly for Pigmented & Vascular Lesions

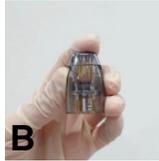
Mode	Pulse Duration	Main Applications
PW1 	30 msec	Melasma, Diffuse Redness (sensitive)
PW2 	40 msec	Melasma, Diffuse Redness
PW3 	50 msec	Telangiectasia
PW4 	60 msec	Acne Vulgaris

Needle Tip Guide

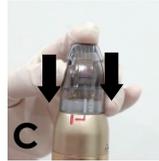
Before use



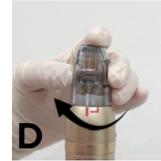
A
Remove the sterile packaging prior to the procedure.



B
Caution: Do not open the tip cap immediately after opening the tip.



C
Align the line of the tip with the L-shaped line of the handpiece and connect while pressing.

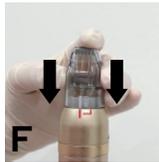


D
Turn clockwise to secure the tip.

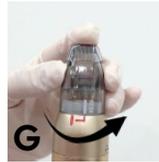
After Use



E
Caution: Do not remove the tip without the cap after the procedure.



F
Close the tip cap.



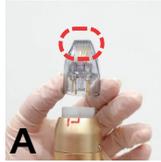
G
Turn it counterclockwise to align the tip line with the L-shaped line on the handpiece.



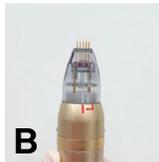
H
Remove the tip from the handpiece.

Precautions

Keep the tip cap closed at all times except during treatment.



A
When connecting and removing the tip with the cap removed,



B
The needle protrudes out of the tip.



C
After the tip is connected to the handpiece, the protruding needle cannot be inserted back into the tip until the tip is removed.

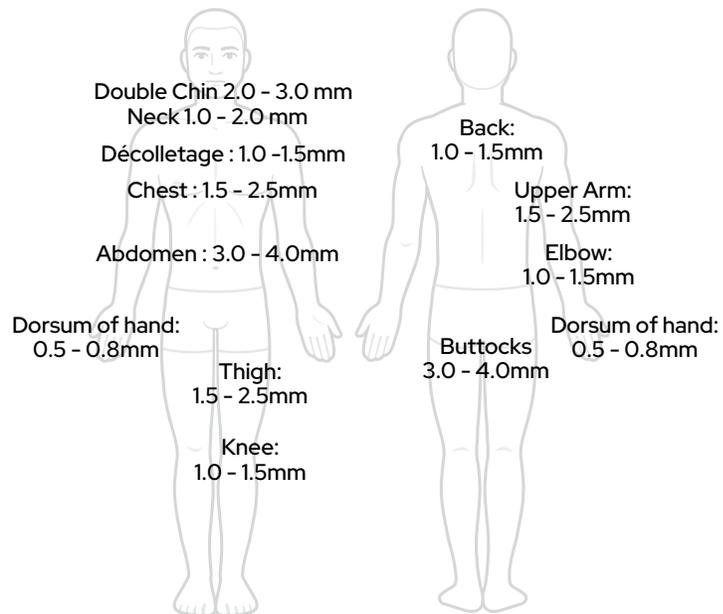
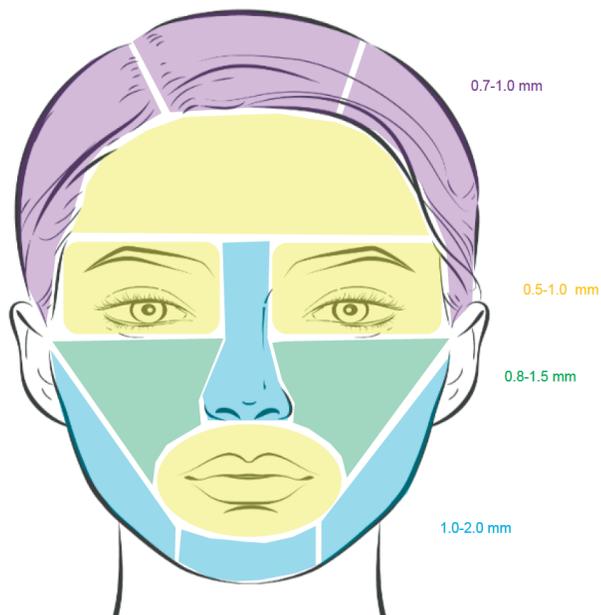
Treatment Site & Needle Depth

300µm (0.3mm) Targeted Treatment

- Melasma
- Diffuse redness

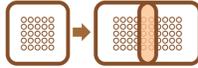


Different Depths Depending on the Treatment Area



STANDARD TIP

5x5 (25) pins, 2mm intervals

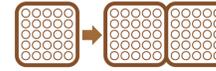


Features: A high performance tip designed for larger treatment areas and more efficiency.

Remarks : 20-30% overlap.

XE TIP

5x5 (25) pins, 2mm intervals



Features: A high performance tip designed for narrower treatment areas and more efficiency.

Remarks : No overlap.

Parameter

Indication		Mode	Depth (mm)	FST I-II	FST III-IV	FST V-VI	Technique	Pass	Endpoint
				Power					
Melasma	Basic	PW2	0.3	4-6	4-5	3-5	Stamping	2	Mild Erythema
	With Telangiectasia	PW2	1) 0.3	4-6	4-5	3-5		1 (Pigment)	Mild Erythema
		PW2	2) 0.8-1.5	4-6	4-5	3-5		1 (Vessel)	
PIH	-	PW2	Face: 0.8-1.5 Body: 1.0-2.0	4-6	4-5	3-5	Stamping	1-2	Mild to moderate Erythema
Diffuse Redness	Basic	PW2	0.3	4-5	4-6	3-5	Stamping	2	Moderate Erythema
	With Telangiectasia	PW2	1) 0.3	4-5	4-6	3-5		1 (Redness)	Moderate Erythema
		PW2	2) 0.8-1.5	4-5	4-6	3-5		1 (Vessel)	
Rosacea	Erythematous	PW2	0.3	4-5	4-6	3-5	Stamping	1-2	Moderate Erythema
	Telangiectactic	PW3	0.8-1.5	4-6	4-6	3-5		1-2	Moderate Erythema
	Papulopustular	PW4	0.8-1.5	4-6	4-6	3-5		1-2	Moderate Erythema

Indication		Mode	Depth (mm)	FST I-II	FST III-IV	FST V-VI	Technique	Pass	Endpoint
				Power					
Facial Scar	Old, White	CW3	Shallow: 0.8-1.5 Deep: 1.0-2.0	5-6	4-6	4-5	Stamping	1-2	Moderate Erythema, Pinpoint Bleeding
	Early, Red, Pigmented	PW2	Shallow: 0.8-1.5 Deep: 1.0-2.0	5-6	4-6	4-5		1-2	Moderate Erythema, Pinpoint Bleeding
Body Scar, Stretch Mark	Old, White	CW3-4	1.5-4.0	5-6	4-6	4-5	Stamping	2-3	Moderate Erythema, Pinpoint Bleeding
	Early, Red, Pigmented	PW2-3	1.5-4.0	5-6	4-6	4-5		2-3	Moderate Erythema, Pinpoint Bleeding
Acne Vulgaris	Inflammatory (papules, pustules)	PW4	1.2-1.8	4-6	4-6	4-5	Stamping	1-2	Moderate Erythema
	Non-Inflammatory (comedones)	CW3	1.2-1.8	4-6	4-6	4-5		1-2	Moderate Erythema
Wrinkles	Fine Wrinkles	CW3	0.5-1.0	4-6	4-5	3-5	Pulling	1-2	Moderate Erythema, Mild Edema
	Deep Wrinkles	CW3	1.0-2.5	5-6	4-6	4-5		1-2	Moderate Erythema, Pinpoint Bleeding
Pore	Enlarged Pores	CW3	0.8-1.5	4-6	4-6	4-5	Stamping	1-2	Moderate Erythema
	Blackheads	PW4	0.8-1.5	4-6	4-6	4-5		1-2	Moderate Erythema, Sebum Like Sweat

Parameter

Indication		Mode	Depth (mm)	FST I-II	FST III-IV	FST V-VI	Technique	Pass	Endpoint
				Power					
Skin Texture and Tone	Full Face	PW2	0.3-0.5	4-6	4-5	3-5	Stamping	1-2	Moderate Erythema
	Lower Face	CW3	1.0-2.0	5-6	4-6	4-5	Pulling	1-2	Moderate Erythema, or/and Immediate Improvement
Facial Tightening & Lifting	Mid-Face	CW3	0.8-1.5	5-6	4-6	4-5		1-2	
	Upper Face	CW2-3	0.5-1.0	4-6	4-5	3-5		1-2	
Scalp Tightening & Lifting	Temporalis	CW1	0.7-1.2	7-8	7-8	6-8	Pulling	1-2	Mild to Moderate Erythema, or/and Immediate Improvement
	Frontalis	CW1	0.7-1.2	7-8	7-8	6-8		1-2	
Neck Tightening Lifting	-	CW3	1.0-2.0	5-6	4-6	4-5	Pulling	1-2	Mild to Moderate Erythema, or/and Immediate Improvement

Parameter

Indication		Mode	Depth (mm)	FST I-II	FST III-IV	FST V-VI	Technique	Pass	Endpoint
				Power					
Body Contouring	Eye Bags	CW4	1.0-2.0	5-6	4-6	4-5	Pulling	1-2	Moderate Erythema, or/and Immediate Improvement
	Double Chin	CW4	2.0-3.0	5-6	4-6	4-5		2-3	
	Décolletage	CW3-4	1.0-1.5	4-6	4-6	3-5		1-2	
	Elbow, Knee	CW3-4	1.0-1.5	4-6	4-6	3-5		1-2	
	Abdomen, Buttocks	CW4	3.0-4.0	5-6	4-6	4-5		2-3	
Eye Wrinkles	Lower Eyelids	CW3	0.5-1.0	4-6	4-5	3-5	Pulling	1-2	Moderate Erythema, Mild Edema
	Upper Eyelids	CW3	0.5-1.0	4-6	4-5	3-5		1-2	
	Crow's Feet	CW3	0.8-1.2	4-6	4-5	3-5		1-2	

Parameter

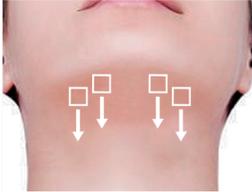
Indication		Mode	Depth (mm)	FST I-II	FST III-IV	FST V-VI	Technique	Pass	Endpoint
				Power					
Eyebrow Lifting	1) Lower Eyebrow	CW3	0.5-1.0	4-6	4-5	3-5	Pulling	1-2	Moderate Erythema, or/and Immediate Improvement
	2) Upper Eyebrow	CW3	0.5-1.0	4-6	4-5	3-5		1-2	
Eye Bags	-	CW4	1.2-2.0	5-6	4-6	4-5	Stamping	1-2	Moderate Erythema, or/and Immediate Improvement
Dark Circles	-	PW2	0.8-1.5	4-6	4-5	3-5	Stamping	1-2	Mild to moderate Erythema

- The above parameters are widely used, but they should not be applied equally to all patients.
- Adjust the needle depth considering the thickness of the skin and the degree of lesion (except for melasma and diffuse redness treatment), and the power according to the skin reaction.
- For Melasma or diffuse redness, more than 3-5 treatments are required every 2-4 weeks. *Take longer time intervals if the skin condition is poor or skin recovery is slow.
- For other indications, 3-5 treatments are recommended every 4-6 weeks.

Treatment Vector

Pulling Technique

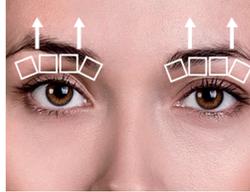
Double Chin



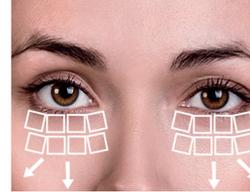
Submandibular



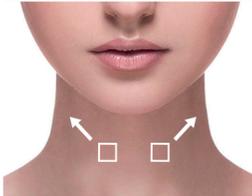
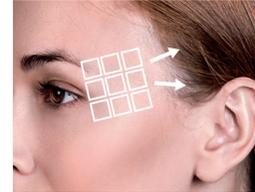
Wrinkles on Upper Eyelids



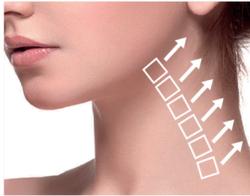
Wrinkles on Lower Eyelids



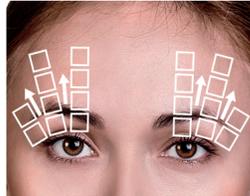
Crow's Feet



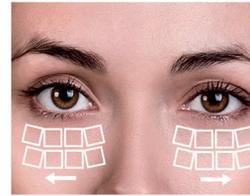
Neck



Neck



Eyebrow Lifting



Eye Bags

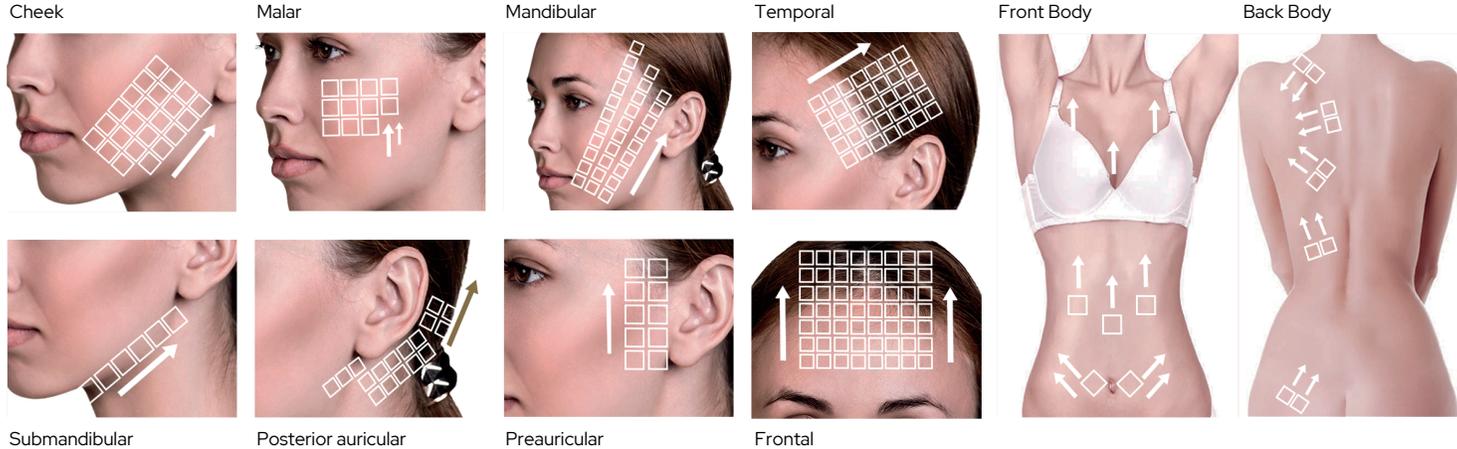


Cheeks

- This technique is to further maximize the therapeutic effect of skin rejuvenation, tightening and lifting procedures.
- With one hand, pull the the saggy skin upwards or/and outwards and then anchor it.
- Hold the handpiece with the other hand and press the foot switch to irradiate the RF energy along the vector (space indicating magnitude and direction in which the skin is pulled).
- Carefully cover the treatment area while paying attention to the set interval and overlap.
- For eye safety, the lower eyelids are treated by pulling the skin down.

Treatment Vector

Pulling Technique



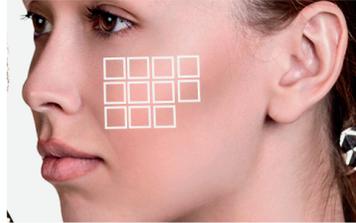
- This technique is to further maximize the therapeutic effect of skin rejuvenation, tightening and lifting procedures.
- With one hand, pull the the saggy skin upwards or/and outwards and then anchor it.
- Hold the handpiece with the other hand and press the foot switch to irradiate the RF energy along the vector (space indicating magnitude and direction in which the skin is pulled).
- Carefully cover the treatment area while paying attention to the set interval and overlap.
- For eye safety, the lower eyelids are treated by pulling the skin down.

Treatment Vector Stamping Technique

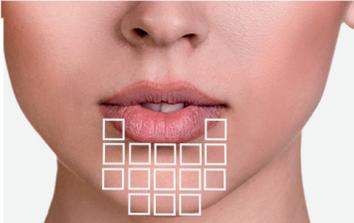
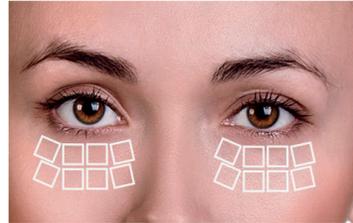
Cheek



Malar



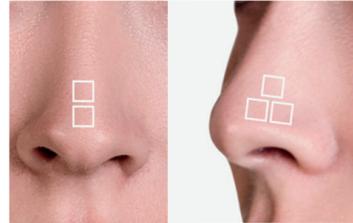
Dark Circles



Mandibular



Philtrum



Nose

- This technique is a general technique used for all the procedures except skin rejuvenation, tightening, and lifting.
- Make sure that the needle tip of the handpiece is in full contact with the skin and is perpendicular to the skin.
- And then press the foot switch to irradiate RF energy.
- Carefully cover the treatment area while paying attention to the set interval and overlap.