

**NOTE!** The laser operator and all staff in the laser treatment room should wear protective eyewear.

Hair type	Wave-length (nm)	Skin type	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Skin type	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Skin type	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	ICD (Pre/Delay/Post)		
<b>Fine</b> (Upper lip)	<b>755</b>	<b>I &amp; II</b>	15	1-2	10-14	<b>III</b>	15	3	12-15	<b>IV</b>	15	5	6-10	<b>20/10/0</b>		
			18		8-12		18		10-12		18		5-8			
			22		6-10		22		6-8		22		4-6			
<b>Medium</b> (Arms, Legs)			15	3	18-22		15	5	10-13		15	8-12				
			18		14-18		18		9-12		18	6-10				
			22		12-16		22		8-10		22	5-8				
		25	8-10		25	6-8	25		4-6							
		<b>Coarse</b> (Beard, Axillary, Bikini line)	15		3	12-16	15		5	6-9	15	8-10				
			18			10-16	18			5-8	18	7-9				
22			6-12	22		4-7	22	6-8								
<b>Fine</b> (Upper lip)		<b>1064</b>	<b>III</b>	15	3	20-26	<b>IV</b>	15	5	12-18	<b>V &amp; VI</b>	15	5-12		8-14	<b>20/10/0</b>
				18		18-22		18		8-12		18			6-12	
	22			14-18		22		6-8		22		5-10				
<b>Medium</b> (Arms, Legs)	15			5	18-22	15		5	16-24	15		8-12				
	18				16-20	18			14-20	18		8-10				
	22				12-16	22			7-16	22		12-20	4-10			
	25		10-14		25	6-14	25		3~							
	<b>Coarse</b> (Beard, Axillary, Bikini line)		15		5	14-20	15		10-20	14-20	15	6-10				
			18			12-18	18			13-18	18	20	4-6			
22			10-16	22		10-16	22	3~								

### ❖ Hair Removal

✓ **IntelliTrak**  May utilize IntelliTrak mode.

- **Endpoint:** Perifollicular edema, mild erythema

- **Procedure:** Shave before the procedure to avoid energy waste and excessive skin reactions like burns. Perform a test spot for an appropriate skin response. In case of excessive skin reaction, decrease fluence by 2 J/cm<sup>2</sup>, then adjust pulse duration.

- **Wavelength:** **755 nm** – Lighter skin / Finer hair / Light hair color  
(The use of 755 nm to skin type IV requires a test spot before treatment.)  
**1064 nm** – Darker skin / Thicker hair / Dark hair color
- **Pulse width:** **Short** – Finer hair / Lighter skin  
**Long** – Thicker hair / Darker skin
- **Fluence:** **High** – Lighter hair color / Lower hair density / Smaller spot size  
**Low** – Darker hair color / Higher hair density / Bigger spot size

- **Post care:** Apply cold compress or Ice pack cooling, and hydrocortisone (~1%) to avoid any possible side effects.  
- **Treatment interval:** 4-6 weeks for the face, and 6-8 weeks for all other areas

**NOTE!** The laser operator and all staff in the laser treatment room should wear protective eyewear.



### Expert's Recommendation

Protocols from experts that are proven to be effective.

Indication	Step	Wavelength (nm)	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Pulse rate (Hz)	ICD (Pre/Delay/Post)	Pass	Interval (week)	Session
Dual Hair Removal	1	1064	Lower the fluence by 2-3 steps than the usual parameter.				20/10/0	1	4-6	3-5
	2	755	Lower the fluence by 2-3 steps than the usual parameter.				20/10/0	1		

#### ❖ Dual Hair Removal

Effectively target various types of hair (thickness, depth, and color) using both wavelengths in one procedure.

- **Procedure:** Lower the fluence by 2-3 J/cm<sup>2</sup> than the usual parameter when performing multiple passes. Perform both steps 1 and 2 in one procedure.

Indication	Wavelength (nm)	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Pulse rate (Hz)	ICD (Pre/Delay/Post)	Pass	Interval (week)	Session
<b>Alex Peel</b> (Fine hair)	755	18	3	6~	2~	10/10/5	1	4-6	3-5
<b>FX Hair Removal</b> (Fine hair)	755	FX(16)	5	10-12	2-3	10/10/0	1-2	4	3-5
<b>Linear Hair Removal</b> (Eyebrow, Hairline, Bikini line)	755	3x10	5	15~	2~	10/10/10	1~	4-6	3~

#### ❖ Alex Peel

Effectively target fine soft hair all over the face, brighten the skin tone, and prevent inflammation. This treatment could be combined with Ice Nevus Removal, Alex Toning, or InnerLift Mild treatment.

- **Endpoint:** Mild erythema

#### ❖ Fractional Hair Removal

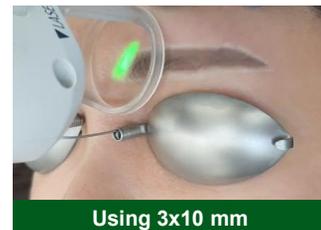
Safely remove fine hair for patients with sensitive skin, PIH, or in the combination treatment. This could also be used in facial fine hair removal like Alex Peel.

- **Endpoint:** Perifollicular edema, mild erythema

#### ❖ Linear Hair Removal

Unwanted hair removal on the bikini line or around the eyebrows.

- **Procedure:** Draw lines that the patient wants to keep using a dermatograph pencil first, then carefully target the hair outside of the line draw.
- **Note:** In case the eye and the eyebrow is closely located, it is recommended to use eye shield in addition to laser safety goggles.



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Indication	Wavelength (nm)	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Pulse rate (Hz)	ICD (Pre/Delay/Post)	Pass	Interval (week)	Session
<b>Diffused Area</b>									
Facial Flushing	1064	12	40-60	20-26	2~	20/10/0	2-3	3-4	3-5
Redness Induced by Inflammation (Red spot)		5	12	85-120	1	20/10/0	1	3-4	1-3
Active Acne		8	20	20	2-3	0/0/10	1-3	1-2	5
<b>Focal Area</b>									
Telangiectasia (Face 0.1-0.5 mm)	1064	3	12-20	150-180	1	10/20/10	1	4-12	3-5
Telangiectasia (Red 0.5-1.0 mm Blue 1.0-4.0 mm)		3, 3x10	40	130-180	1	10/20/10	1		
Varicose Vein		5	40	140-180	1	10/20/10	1		
Spider Angioma		5	40	140-170	1	10/20/10	1		
Nevus Flammeus		5	20	150-170	1	20/20/10	1	6-12	2-3
Cherry Hemangioma		5	40	130-150	1	10/20/10	1		
Venous Lake		5	60	150-170	1	20/20/10	1		
<b>Diffused Area</b>									
Redness Induced by Inflammation (Dark red spot)	755	5	20	50-90	1	20/10/0	1	3-4	1-3
Rosacea		8	12	18-24	1	10/10/10	1	4-12	3-5
<b>Focal Area</b>									
Telangiectasia (Face 0.1-1.0 mm)	755	5	12-20	70-80	1	10/10/10	1	4-12	3-5

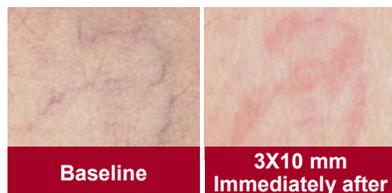
### ❖ Vascular Lesion

- **Endpoint:** One of the following - Disappearance of blood vessels, vasoconstriction, vasospasm, darkening of the veins, or blanching
- **Procedure:** When treating focal vascular lesion, always stretch the lesion and carefully perform a test spot first. Do not overlap or retarget within 1 mm.

- **Wavelength:** 755 nm – Superficial, red and thin vessels in lighter skin type patients  
1064 nm – Deep, thick, large, blue vessels or facial flushing
- **Pulse width:** Short – Lesions with fast blood flow (e.g., telangiectasia)  
Long – Lesions with an abnormal buildup of blood (e.g., hemangioma) or thick vessels

- **Post care:** Apply cold compress or ice pack cooling, and hydrocortisone (~1%) to lower the chance of side effects.

\*\*\*\* 3x10 mm Cartridge – Allows more convenient and effective treatment for long linear vessels (e.g., leg veins).



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### Expert's Recommendation

Protocols from experts that are proven to be effective.



May utilize Skin Temp mode.

Indication	Step	Wavelength (nm)	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Pulse rate (Hz)	ICD (Pre/Delay/Post)	Pass	Interval (week)	Session
Clear Flush (Facial flushing)	*1 (Optional)	755	8	3	14-18	3	OFF	1-2	2  (3-4 weeks for children)	6
	2			5	14-18	3		1-2		
	3			12	14-18	3		1-2		
	4	1064	8	20	20~	3	OFF	1-2		
	5			30	30~	3		1-2		

#### ❖ Clear Flush

Normalize facial flushing and minimize recurrence through dermal remodeling using both 755 nm and 1064 nm.

- **Endpoint: Erythema**

- **Procedure:** Check the temperature of the skin during the treatment using **Skin Temp mode** or skin palpation.

During the treatment, ice pack cooling could be applied to prevent excessive heat accumulation.

- **Note:** For darker skin type patients, step 1 could be skipped.

- **Post care:** Apply cold compress or ice pack cooling, and hydrocortisone (~1%).

Indication	Step	Wavelength (nm)	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Pulse rate (Hz)	ICD (Pre/Delay/Post)	Pass	Interval (week)	Session
Clear Rosacea  * Paper published	1	755	10	12	30~	2-3	20/10/0	1-2	4	3-5
	2	1064	10	0.5	3~	10	OFF	6		

#### ❖ Clear Rosacea (Paper published)

「 Prospective Comparison of Dual Wavelength Long-Pulsed 755-nm Alexandrite/1,064-nm Neodymium:Yttrium-Aluminum-Garnet Laser versus 585-nm Pulsed Dye Laser Treatment for Rosacea 」

This parameter proved effectivity and safety with a similar clinical effect to PDL.

- **Endpoint: Mild erythema**

- **Procedure:** Check the temperature of the skin during the treatment using **Skin Temp mode** or skin palpation.

Perform both steps 1 and 2 in one procedure.

- **Post care:** Apply cold compress or ice pack cooling, and hydrocortisone (~1%).

Indication	Step	Wavelength (nm)	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Pulse rate (Hz)	ICD (Pre/Delay/Post)	Pass	Interval (week)	Session
Vascular Toning (Fine telangiectasia)	1	755	5	0.1	4	5	OFF	2	1	5
	2			0.3	6	5		2		
	3			0.5	8	5		2		

#### ❖ Vascular Toning

Effectively improve micro vessels spread on the cheeks using various pulse widths.

- **Endpoint: Erythema**

- **Procedure:** Target only the treating area using all 3 steps in one procedure.

- **Post care:** Apply cold compress or ice pack cooling.

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Indication	Wavelength (nm)	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Pulse rate (Hz)	ICD (Pre/Delay/Post)	Pass	Interval (week)	Session
<b>Epidermal Lesion</b> (Freckles, Lentiginos)	<b>755</b>	3	0.3-0.7	26~	1	OFF	1	4	1-3
<b>Ice Nevus Removal</b>	<b>755</b>	3	0.3	45~	1	10/10/0	1-2	4	1-3
<b>Alex Ablation</b>	<b>755</b>	2	12	200-300	1	10/10/0	1-2	4-6	1-3

### ❖ Epidermal Pigmented Lesion

Target superficial pigments in the epidermis with minimal thermal damage. After the treatment, the treated lesion may darken, form a crust, and falls off for an average of 7 days.

- **Endpoint:** Grayish color change, perilesional erythema, mild edema
- **Procedure:** Test the darkest side of lesion using low fluence and set an appropriate parameter after observing skin reaction. For darker skin type, allow more time to assess the formation of erythema.
- **Post care:** Apply hydrocortisone (~1%) to lower the chance of possible side effects.

### ❖ Ice Nevus Removal

Effectively remove epidermal pigments and nevus with the use of the ICD function.

- **Endpoint:** Color change or slight shrinkage, perilesional erythema, edema
- **Procedure:** For dark nevus, lower the fluence to avoid pigment ablation.
- **Post care:** Apply hydrocortisone (~1%). For the overly treated lesion, apply a hydrocolloid dressing.



### ❖ Alex Ablation

Without the use of a CO<sub>2</sub> laser, this technique ablates lesions such as protruded nevus or thick seborrheic keratosis with minimal thermal damage in more convenient way.

- **Endpoint:** Immediate ablation of pigment
- **Procedure:** Control the number of passes by observing the lesion.
- **Note:** The chance of PIH is high for skin type IV and above.
- **Post care:** Apply an antibiotic ointment or hydrocolloid dressing.



Indication	Wavelength (nm)	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Pulse rate (Hz)	ICD (Pre/Delay/Post)	Pass	Interval (week)	Session
<b>Seborrheic Keratosis</b>	<b>755</b>	<b>Thin, small sized or light colored</b>							
		5	1	24-28	1	OFF	1	4	1-3
		<b>Thick, large sized or irregular colored</b>							
		5	3-5	22-26	1	OFF	1	4	1-3
		<b>Thick or large sized</b>							
		5	3-5 [C-Toning]	30-40	1	20/10/0	1-2	4	1-3

\* Select one parameter depending on the lesion.

### ❖ Seborrheic Keratosis

Effectively target seborrheic keratosis in different condition.

- **Endpoint:** Slight grayish color change, mild edema
- **Procedure:** C-Toning mode enables milder treatment when the use of high fluence.
- **Post care:** Apply hydrocortisone (~1%).

**NOTE!** The laser operator and all staff in the laser treatment room should wear protective eyewear.

Indication	Wavelength (nm)	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Pulse rate (Hz)	ICD (Pre/Delay/Post)	Pass	Interval (week)	Session
<b>Alex Toning</b> (Melasma, PIH, Uneven skin tone)	<b>755</b>	10	0.3	3-4	5-10	OFF	3-5	1-2	5-10
	<b>755</b>	FX(16)	0.1	0.5-1	5-10	OFF	3-5	1-2	5-10

\* Select one parameter depending on the lesion.

### ❖ Alex Toning

Gentle and safe pigment bleaching technique to treat pigmented lesions across the entire face. Fractional cartridge could be used safely to the patients with melasma, and other pigmented lesions coexist.

- **Endpoint:** Mild erythema
- **Post care:** Soothe and moisturize the skin.



### Expert's Recommendation

Protocols from experts that are proven to be effective.



✓ May utilize Skin Temp mode.

Indication	Step	Wavelength (nm)	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Pulse rate (Hz)	ICD (Pre/Delay/Post)	Pass	Interval (week)	Session
<b>Brightening for Man</b>	1	<b>755</b>	8	0.7	9	5~	OFF	1-2	2	5
	2	<b>755</b>	8	0.3	5.5	5~		2		

### ❖ Brightening for Man

The first step is effective facial fine hair removal, and the second step is to brighten the dull skin tone.

- **Endpoint:** Perifollicular edema, mild erythema
- **Procedure:** Perform both steps 1 and 2 in one procedure.
- **Post care:** Apply cold compress or Ice pack cooling, and hydrocortisone (~1%).

Indication	Wavelength (nm)	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Pulse rate (Hz)	ICD (Pre/Delay/Post)	Pass	Interval (week)	Session
<b>Freckle Toning</b>	<b>755</b>	5	0.5	16-20	2-3	OFF	3-5	4	1-3
<b>FX EP Toning</b>	<b>755</b>	FX(16)	10 [C-Toning]	10-12	1-2	OFF	1-2	2	1-3

### ❖ Freckle Toning

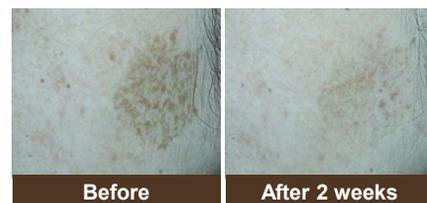
Effectively target numerous superficial pigments such as freckles using toning technique. After the treatment, treated pigments may darken, then form crusts, and fall off for an average of 7 days.

- **Endpoint:** Grayish color change, erythema
- **Procedure:** Keep 1 cm distance from the skin. Adjust the total number of passes according to the endpoint.
- **Note:** Lower the fluence by 2-4 J/cm<sup>2</sup> for darker skin patients to avoid any possible side effects.
- **Post care:** Apply cold compress or ice pack cooling, and hydrocortisone (~1%).

### ❖ Fractional Epidermal Pigment Toning

Effectively target epidermal pigments using a fractional cartridge. Because the treatment uses C-Toning mode, consisting 0.1 ms sub-pulses, it improves various melanosomes that react from 0.1 ms to 10 ms without forming scabs.

- **Endpoint:** Mild erythema
- **Post care:** Apply cold compress or ice pack cooling, and hydrocortisone (~1%).



**NOTE!** The laser operator and all staff in the laser treatment room should wear protective eyewear.

Indication	Wavelength (nm)	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Pulse rate (Hz)	ICD (Pre/Delay/Post)	Pass	Interval (week)	Session
Collagen Toning	1064	8	0.3	5.5	10	OFF	3-5	1-2	5-10

### ❖ Collagen Toning

With the use of 0.3 ms, this treatment induces dermal rejuvenation to improve skin tone, texture, and fine wrinkles. The treatment also is widely used with standard laser toning to prevent melasma recurrence (e.g., dual toning technique).

- **Endpoint:** Mild erythema

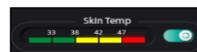
Indication	Wavelength (nm)	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Pulse rate (Hz)	ICD (Pre/Delay/Post)	Pass	Interval (week)	Session
InnerLift Mild	1064	16	0.3	2~	5-10	OFF	5-8	1-2	5-10
InnerLift Moderate	1064	16	20	14~	2~	10/10/0	3-5	1-2	5~
InnerLift Advanced	1064	16	50-60	22-26	2	20/10/0	2-3	2-3	3~

### ❖ InnerLift Mild

Skin rejuvenation technique that improves skin texture and fine wrinkles.

- **Endpoint:** Mild warming sensation, mild erythema

- **Procedure:** Control the number of passes by observing the skin reaction.



May utilize Skin Temp mode.

### ❖ InnerLift Moderate

A laser facelift that does not require anesthesia. It improves the appearance of fine wrinkles and facial flushing by enhancing skin rejuvenation through dermal collagen remodeling. Improved skin elasticity is visible on an average of one month after the procedure.

- **Endpoint:** Moderate warming sensation, mild erythema

- **Procedure:** Consider the general direction of the face lift by targeting the center of the face toward the outer portions.

### ❖ InnerLift Advanced

Traditional skin rejuvenation technique that uses long pulse width and high fluence. It effectively induces collagen remodeling, tightens the pores, and improves the appearance of wrinkles.

- **Endpoint:** Strong warming sensation, erythema, mild edema

- **Procedure:** The laser irradiates from the center of the face toward the outer portions. Turn on the **Skin Temp mode** to observe skin reaction and to reach ~47°C. Apply cooling after the treatment.

- **Post care:** Apply cold compress, skin-soothing, and moisturizing.

## ➤ Example of Combination Treatment:

### 1) INNERLIFT COMBINATION

: A combination treatment that effectively improves skin tone, texture, laxity, pores, and wrinkles.



STEP ① **InnerLift Mild**  
2-3 passes to the entire face

STEP ② **InnerLift Moderate**  
2-3 passes to the perinasal area

STEP ③ **InnerLift Advanced**  
2-3 passes to the jawline

### 2) Melasma Treatment & Collagen Toning

: Improve dermal condition to prevent recurrence of melasma.

### 3) Facial Flushing Treatment & InnerLift Mild

: Normalize dilated blood vessels and induce dermal remodeling.

### 4) Blackhead Treatment & InnerLift Moderate

: Tighten pores after extrusion and rejuvenate the skin.

**NOTE!** The laser operator and all staff in the laser treatment room should wear protective eyewear.



### Expert's Recommendation

Protocols from experts that are proven to be effective.



May utilize Skin Temp mode.

Indication	Step	Wavelength (nm)	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Pulse rate (Hz)	ICD (Pre/Delay/Post)	Pass	Interval (week)	Session
CLA-Rejuvenation	1	755	25	0.3	1.5-1.7	5-10	OFF	3	2	5
	2			0.5	1.5-2	5-10		2-3		
	3			0.7	1.5-2	5~		2-3		
	4	1064	25	0.3	1.5-2	5-10	OFF	3		
	5			0.5	1.5-2	5-10		1-2		
	6			0.7	1.5-2	5~		1-2		

### ❖ CLA-Rejuvenation

Effective skin rejuvenation using 6 different steps of pulse widths shorter than 1 ms. Skin overproduces melanin pigments when exposed to UV light. The 755 nm reduces the amount of UV transmission and improves the epidermal condition. And the 1064 nm improves the dermal condition to maintain the effect and prevents a melasma recurrence.

- **Endpoint:** Erythema, warming sensation

- **Procedure:** Control the number of passes and overlapping by observing the skin reaction.

- **Post care:** Apply cold compress or ice pack cooling in between the treatment, skin-soothing, and moisturizing.

Indication	Step	Wavelength (nm)	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Pulse rate (Hz)	ICD (Pre/Delay/Post)	Pass	Interval (week)	Session
Fractional CLA-Rejuvenation	1	755	FX(16)	3	3	5-8	OFF	2-3	1-2	5-10
	2			10	4	5~		2-3		
	3			12	5	5~		2-3		
	4	1064	FX(16)	3	3	5-10	OFF	2-3		
	5			10	4	5~		2-3		
	6			12	5	5~		2-3		

### ❖ Fractional CLA-Rejuvenation

Preferred treatment for patients who do not want treatment with strong thermal sensation. Unlike CLA-Rejuvenation using 25 mm, the use of a fractional cartridge gradually raises the skin temperature.

- **Endpoint:** Mild erythema

- **Procedure:** Control the number of passes and overlapping by observing the skin reaction.

- **Post care:** Apply cold compress or ice pack cooling in between the treatment, skin-soothing, and moisturizing.

Indication	Step	Wavelength (nm)	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Pulse rate (Hz)	ICD (Pre/Delay/Post)	Pass	Interval (week)	Session
C-Toning Rejuvenation	1	755	16	5 [C-Toning]	5	5	OFF	1-2	1-2	5
	2	1064	16	5 [C-Toning]	5-7	5-10	OFF	3		

### ❖ C-Toning Rejuvenation

Target pigments in the basal layer using a 16 mm spot size and C-Toning mode. This effectively improves melanosomes that react from 0.1-5 ms and gradually heats up the dermis to induce dermal remodeling.

- **Endpoint:** Mild erythema

- **Procedure:** Control the number of passes and overlapping by observing the skin reaction.

**NOTE!** The laser operator and all staff in the laser treatment room should wear protective eyewear.



### Expert's Recommendation

Protocols from experts that are proven to be effective.



May utilize Skin Temp mode.

Indication	Step	Wavelength (nm)	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Pulse rate (Hz)	ICD (Pre/Delay/Post)	Pass	Interval (week)	Session
CLA-Lift	1	755	25	3	1.6~	5~	OFF	3-5	2	5
	2			12	1.8~	5~		2-3		
	3	1064	25	3	1.7~	5~	OFF	3		
	4			12	1.8~	5~		2-3		

#### ❖ CLA-Lift

Effective laser facelift treatment with the use of a 25 mm spot size that penetrates deep in the skin. The use of 755 nm improves the epidermal condition and skin texture. And the use of 1064 nm induces collagen remodeling and increases skin elasticity.

- **Endpoint:** Erythema

- **Procedure:** Cool in between the treatment. Control the number of passes and overlapping by observing the reaction.

- **Post care:** Apply cold compress, skin-soothing, and moisturizing.

Indication	Step	Wavelength (nm)	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Pulse rate (Hz)	ICD (Pre/Delay/Post)	Pass	Interval (week)	Session
Blackheads & Enlarged Pores	1	755	8	3	30	2-3	5/10/5	1-2	4	3-5
	2	1064	12	20	16	2-3	5/10/5	1-2		

#### ❖ Blackheads & Enlarged Pores

Effectively target the blackheads on the nose with 755 nm, followed by enlarged pores and sebaceous gland contraction with 1064 nm.

- **Endpoint:** Mild erythema

- **Procedure:** Perform 2 steps in a day.

- **Post care:** Apply cold compress, skin-soothing, and moisturizing.

**NOTE!** The laser operator and all staff in the laser treatment room should wear protective eyewear.

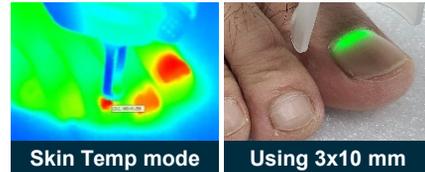
Indication	Wavelength (nm)	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Pulse rate (Hz)	ICD (Pre/Delay/Post)	Pass	Interval (week)	Session
Onychomycosis	1064	3	30	45	1-2	OFF	2-3	2-4	4~
	1064	3x10	30	34	1-2	OFF	2-3	2-4	4~
* Select one parameter depending on the lesion.									
Verruca Vulgaris	1064	2	12	160-220	1-2	OFF	2-10	4-6	2-3
	1064	3	20-30	140-180	1-2	OFF	2-5	4-6	2-3
* Select one parameter depending on the lesion.									
Keratosis Pilaris	1064	10	30	40	2-3	20/10/15	1	3-4	2-3
Verruca Plana	755	2	5	160-200	1	0/0/5	1	4-6	1-2
Soft Fibroma	755	2	3	100	1	0/0/5	1	4-6	1-2

❖ **Onychomycosis**

Effectively target fungal infection in the nail bed, improve nail regrowth, and prevent recurrence using 1064 nm.

- **Endpoint: Total of 2-3 passes, depending on the patient's pain tolerance.**
- **Procedure:** Always clean the handpiece tip with an alcohol swab before and after each procedure.
  - 1) In the case of thickened nails due to fungal infection, treatment may not be effective. Depending on the nail thickness, it may be required to grind the nail surface first before the treatment.
  - 2) The laser irradiates over the entire nail surface, including discolored lesion, about 2 mm margin on both sides of the nail, and about 2-4 mm of lunula covering the nail root. Avoid overtreatment to prevent damage on nail bed.

✓  Use Skin Temp for effective procedure. When it reaches 42°C, an appropriate heat energy has been delivered to the nail bed.



❖ **Verruca Vulgaris**

Unlike a CO2 laser that causes smoke and infects physicians, the use of long-pulsed 1064 nm effectively clears HPV.

- **Endpoint: Darkening**
- **Procedure:** It is recommended to use 2 mm to the face or finger and 3 mm to thicker skin areas such as feet. Start from the margin to the central area.
- **Note:** When using a pulse width of 20 or 30 ms, check the skin reaction every after-laser emission to avoid the necrosis in subcutaneous fat.
- **Post care:** Apply hydrocortisone (~1%).



❖ **Keratosis Pilaris**

Effectively target keratin clogged areas (arms, legs, thighs, etc.,) and improve redness and active acne.

- **Endpoint: Erythema**
- **Procedure:** Slightly float the handpiece and pay extra attention to the area with hair.
- **Post care:** Apply hydrocortisone (~1%).

❖ **Verruca Plana**

Effectively target the HPV without ablating the lesion and creating smokes like a CO2 laser.

- **Endpoint: Mild whitening or grayish color change, mild erythema, perilesional edema**
- **Procedure:** For pigmented verruca plana, lower the fluence to avoid overtreatment.
- **Note:** Too much energy might cause atrophic scars since the depth of VP is usually shallow.
- **Post care:** Apply hydrocortisone (~1%).



❖ **Soft Fibroma**

Effectively target the fibrous lesion without the use of ablative laser.

- **Endpoint: Mild whitening or grayish color change, mild erythema, perilesional edema**
- **Procedure:** For pigmented soft fibroma, lower the fluence to avoid overtreatment.
- **Post care:** Apply hydrocortisone (~1%).

**NOTE!** The laser operator and all staff in the laser treatment room should wear protective eyewear.

## “TOTAL CLEAR SOLUTION”

is a total program designed to resolve complex skin problems in a single treatment session without anesthesia, patient discomfort, bleeding, and additional post-care.

Program includes – Pigment Removal, Facial Hair Removal, Skin Brightening, and Rejuvenation.

Specially designed “Multi-Spot Cartridges” effectively assist users to operate more swiftly and safely.

### In one treatment session:

✓  May utilize Skin Temp mode.

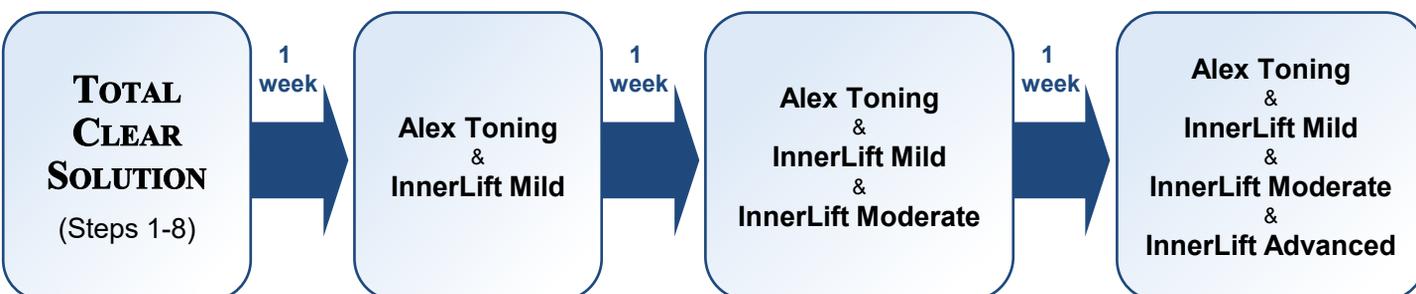
Step	Wavelength (nm)	Indication		Multi cartridge	Spot size (mm)	Pulse width (ms)	Fluence (J/cm <sup>2</sup> )	Pulse rate (Hz)	ICD (Pre/Delay/Post)	Pass	Interval (week)	
1	755	Epidermal Lesions		3 5	3	0.3	26~	1	OFF	1	4	
2	755	Ice Nevus Removal			3	3	0.3	45~	1	10/10/0	1-2	4
3	755	Blackheads			5	5	3	38~	2~	20/10/0	1-2	4
4	755	Alex Peel		15	18	3	6~	2~	10/10/5	1	4-6	
5	755	Alex Toning			18	18	0.3	1.5-2	5-10	OFF	3-5	1-2
6	1064	InnerLift	Mild (Full Face)		18	15	0.3	2.2~	5-10	OFF	5-8	1-2
7	1064		Moderate (Mid Face)	22	15	20	14~	2~	10/10/0	3-5	1-2	
8	1064		Advanced (Lower Face)	15	15	50-60	24-28	2	20/10/0	2-3	2-3	

- **Endpoint:** Mild erythema, color change on the perilesional area

- **Procedure:** Adjust pulse width and fluence according to the patient’s skin type and depth of pigment. More than one step could be skipped depending on the patient’s skin condition and skin response.

- **Note:** Lower the fluence for darker skin type patients to avoid side effects.

### ➤ Example of Treatment Package:



# Operation & Maintenance



## GUI

### Wavelength

Alexandrite 755 nm or Nd:YAG 1064 nm is selectable. Press 2 seconds to change.

### Shot Count

The number of laser shots emitted.

### Pulse Width

Time duration of one laser shot (0.1-300 ms).

### C-Toning Mode

A macropulse consisting of 0.1 ms sub-pulses (3/5/10 ms).

### Operating Switch

Laser radiation control. Select either Finger or Foot switch.

### ICD

**[Intelligent Cooling Device]**  
Select whether to use the cooling function (ON/OFF). When the function is ON adjust (Pre/Delay/Post) time.

### Standby / Ready

When changed to Ready, laser emission is possible.

### Setup

Check total shot count, parameter history, sound volume, etc.

### Memory

Press whether to enter the save mode to save the parameters or load the saved parameters.

### Parameter Capture

Save the parameter displayed on the screen.

### Spot Size

The diameter of the laser beam (mm).

### Fluence

Energy per unit area (J/cm<sup>2</sup>).

### Pulse Rate

The number of the laser shots per second (Hz).

### Overlap Percentage

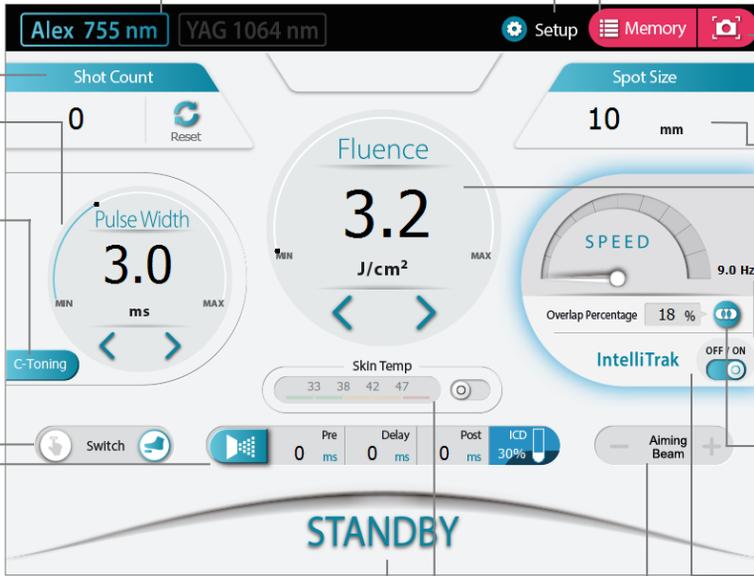
When IntelliTrak mode is ON, Select overlap percentage (-15/0/18/30/50%).

### IntelliTrak Mode

This Mode is only available when IntelliTrak tip is connected (ON/OFF).

### Aiming Beam

When in Ready mode, adjust the brightness of the guide beam.



## IntelliTrak Mode



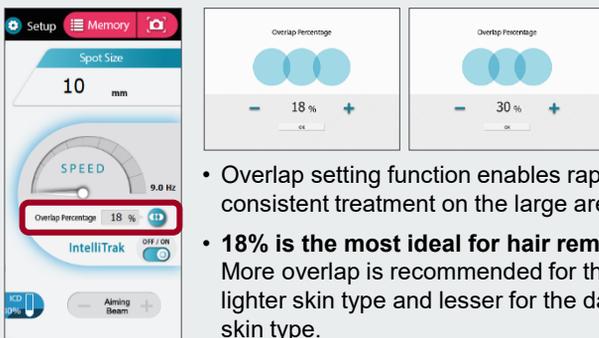
with IntelliTrak Tip

### ❖ Speed Gauge Bar



- In IntelliTrak mode, the pulse rate is displayed on the speedometer with colors of green, yellow, or red.
- If the actual handling speed is faster than the pulse rate, the GUI and the LED color of the handpiece turn to **Red**, and laser emission automatically stops.

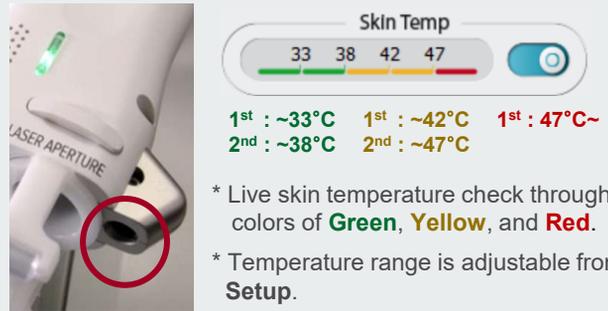
### ❖ Overlap Setting (-15, 0, 18, 30, and 50%)



- Overlap setting function enables rapid and consistent treatment on the large area.
- 18% is the most ideal for hair removal.** More overlap is recommended for the lighter skin type and lesser for the darker skin type.

## Skin Temperature Mode

### ❖ Real-time Skin Temperature Sensor

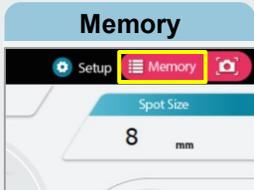


- The Skin Temperature function allows the user to visually check whether the temperature of the skin surface is excessively increased due to laser treatment.
- When the Skin Temp mode is on, it is usable in both the READY and STANDBY status.
- When the color of the Skin Temp bar from GUI and the LED color of the handpiece turn red, the device switches to STANDBY mode with a beeping sound, and laser emission becomes disabled.
- The Skin Temp mode is automatically deactivated if the ICD cooling function of the device is turned on.

# Operation & Maintenance

## Memory & Capture

### Memory



- Press 'Memory' to save frequently used parameter.



- Press 'Rename' button to enter group name and treatment name using a pop-up keyboard.
- Press 'Accept' to save.

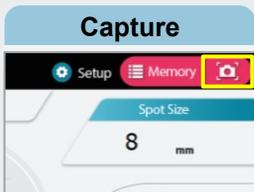


- Press 'Modify' to input parameters then press 'Accept'.
- In case saving current parameter, press 'Import' icon to call the protocol then press 'Accept' to save.



- Select the saved memory.
- Then treatment name appears on the top of the GUI, and parameters are automatically set.

### Capture



- Press 'Capture' to save parameter displayed on GUI.
- Press 'Memory' to view captured history.



- A total of 8 parameters are savable in Capture. When the list is filled, the oldest parameter is deleted and the newest one is saved.



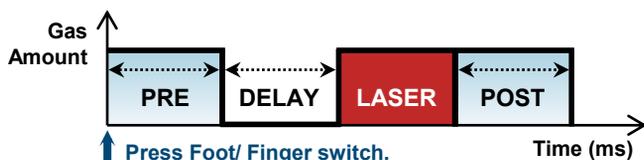
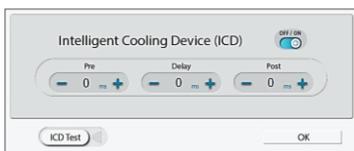
- Press 'Rename' located on the bottom to enter a treatment name using a pop-up keyboard.
- Press 'Accept' to save.



- The capture group can be moved to the top or bottom of the group list, by clicking the buttons located at the bottom.

## ICD

- Activate ICD mode by pressing 'Spray' button.



- **PRE** ICD gas emitting before laser irradiation
- **DELAY** Time interval between pre and post emitting
- **POST** ICD gas emitting after laser irradiation

## How to Replace

- Press the gas amount button to check the percentage of remained ICD gas.
- Whenever a new ICD canister is replaced, set the initial value of ICD amount to 100%.

### 1 Caution (Check 00 00 00 08)

CHK 04 : Replace ICD canister.



- When "Replace" message pops up, open the cap and remove the old ICD canister.

### 2 Caution (Check 00 00 00 04)

CHK 03 : Insert ICD canister.  
... (Multiple system errors detected)



- When "Insert" message pops up, insert a new canister.

**[Note]** ICD mode should be ON.

### 3

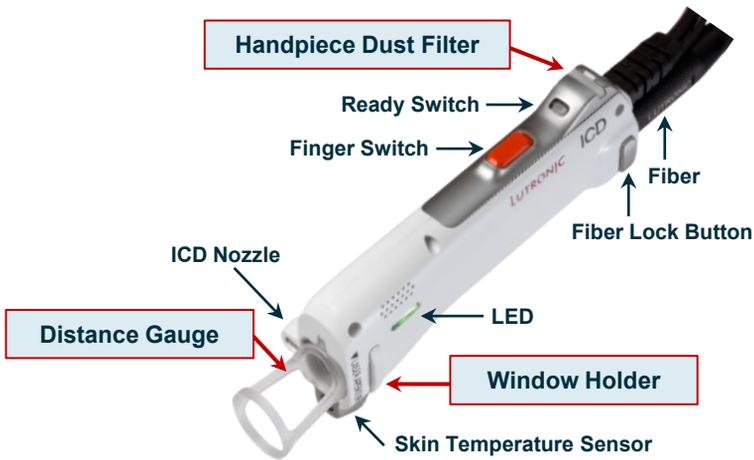


- Press the cap by turning right to fix the canister.



**[Note]** Once replaced, press 'ICD Test' button 3-5 times to remove probable gas bubbles stuck into the fiber.

## Handpiece



\*  : Always check its cleanliness before the treatment.



- To connect the multi-spot cartridge, mount the handpiece securely into the holder.
- Keep the storage box closed to protect accessories from dust.

**[Note!]** Do not bend or wind the optical fiber to a radius of less than 30 cm.

## How to Connect

### Multi-Spot Cartridge



- Select appropriate multi-spot cartridge according to the lesion.
- Attach it to the optical fiber.
- Insert the cartridge with fiber into the handpiece.

### Distance Gauge



- Select appropriate distance gauge.
- Attach the distance gauge in front of the handpiece by matching the groove or port.

\* There is no groove on 'I Tip.'

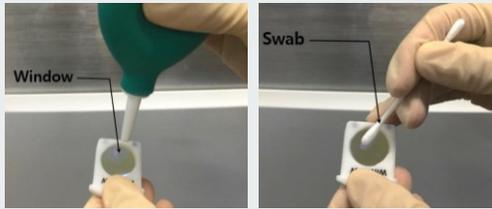
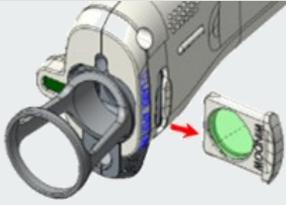
### Replaceable Window



- Insert the window into the slot above Laser Aperture.
- Window is replaceable from the storage box.

## Maintenance

### Handpiece Window



- Pull out the window from the handpiece and check its cleanliness.
- If there is any debris, remove it using an air dust blower or glasses cloth.
- For sticky dust, use a cotton swab soaked with ethanol (70% or higher).

**[Note!]** The window must always be inserted at a correct angle to avoid window damage or break.

- In case of a damaged window, gently push it from the holder to remove and replace it with a new window.

### Distance Gauge



All Tips

- Keep the distance gauge in place or separate from the handpiece.
- Clean the surface with a cotton swab soaked in ethanol (70% or higher) before and after treatment (especially after hair removal).
- For the IntelliTrak tip, separate the roller and clean it with ethanol.



IntelliTrak Tip

### Handpiece Dust Filter



- Pull out the filter from the top of the handpiece.
- Gently rub off the dust with a towel first, then spray water.
- Dry the filter in a shady place, then insert it into the handpiece.

**[Note!]** Check the filter once a month to see if it is dirty.

### Device Dust Filter



- Remove the dust filter from the frontal side of the body by grasping both ends and pulling it downwards.
- Gently wipe the dust from the surface with a towel first, then remove the remaining dust by spraying cold water onto the filter.
- Let the cleaned dust filter dry completely in a shady, well-ventilated place and then couple it back to the device.

**[Note!]** Check the device filter once in 3 months.



▲ After 3 months    ▲ After 6 months

## Patient Post-Treatment Care

- Please do not use cosmetics with retinol or AHA for 48 hours.
- Please do not use hydrocortisone for more than 2 days without a doctor's prescription.
- Please do not use an exfoliator or scrub to the treated area for a week after treatment.
- Please do not take the sauna for a week after treatment.
- Please do not pluck hair after hair removal treatment to avoid folliculitis caused due to inflammation.
- Apply a UVA/B sunblock of more than SPF30, PA++ for at least 30 days after treatment.
- Please inform the doctor about the medications you are currently taking.
- Apply a cooling pack to the excessive erythema affected by the treatment for more than 20 minutes.

**For more information, please contact your physician at the address below.**

