# **User Manual**

# HR-FA50



# Preface

Dear users:

We're pleased to present to you HR-FA50 Professional ND YAG Laser Tattoo Removal Machine that adopts the FOCUS technology to focus energy, 20 times better than traditional laser technology. It pulverizes pigments into fine particles, so that it's easier to process pigments through metabolism. HR-FA50 Professional ND YAG Laser Tattoo Removal Machine is for professional use, which needs to be handled by professionals with proper training. Any improper use will result in adverse outcomes. Therefore we advise any personnel read this guide thoroughly and follow the instructions strictly before operation.

We believe our quality product will bring in good returns on your end. Also, you can count on our worry-free after-sales service.

Thank you!

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## Part I

# **Brief Introduction**

Laser skin rejuvenation beauty instruments are currently the most popular beauty machines that work on whitening skin, removing dark spots, moles, eyebrows and tattoos, etc. It addresses skin issues like dull skin, age spots, tattoos and so on. Moreover, they are convenient and easy to operate. It solves both skin and body management issues for beauty-lovers. This equipment requires no injection, no medication, no operation, thus having no side-effects. The ND YAG laser spots removal machine acts on the melanin in the epidermis and the deep layer of dermis through a specific wavelength laser, blasting the epidermal melanin directly and breaking up the melanin in the deep layer of the skin. The melanin finally are swallowed by phagocytes or discharged directly with sweat glands, thus achieving the efficacy of whitening the skin, removing spots and removing tattoos.

# Advantages

1. Simple operation, safe and effective, no side effects.

- 2. Multiple operation heads can be used according to different requirements.
- 3. Only target at pigment particles without harming normal skin tissue.
- 4. Fast operation and efficient work; the highest is 10HZ, that is, 10 times of light per second.

5. Multi-purpose machine can not only rejuvenates skin, but also remove spots, moles and tattooed eyebrows.

6. No consumption, low cost and quick return.

7. The treatment range is wider and the effect is rapid and significant.

8. The FOCUS technology adopted enables energy to focus, which is 20 times higher than the traditional laser.

# Principles

Black Doll Tip: It's the laser head with wavelength of 1320NM. By applying the nano carbon powder to the face and allowing it to penetrate the pores, the particles are blasted with a laser to shatter the dirt and cutin of the epidermis. Heat generated by the energy transmission to the dermis, fully stimulate skin cell update and vigor, stimulate collagen and elastic fiber repair, using the body's natural repair function, orderly start a new collagen deposition and arrangement, so as to achieve instant effect of eliminating fine lines and wrinkles, skin rejuvenation, shrinking pores, smoothing skin, and restoring the original elasticity.

Tattoo Removal: Tattoo removal uses the Q-switched model, utilizing laser high energy to effectively break down the pigment in the lesion tissue.

1. The Principle of Laser-induced Blasting: The instantaneous high energy emitted by

the laser is used to expand and break the irradiated pigment particles after absorbing the energy. Some of them are split into smaller particles and discharged out of the body, while some are excreted by the human body through the lymphatic system, thus removing the pigment. Because the normal tissue did not absorb the 1064nm laser, the cell framework remained intact and there was no condition for scar formation. This is unmatched by any other method at present. It is because laser pigment removal does not destroy normal tissue. Therefore, its safety maximally ensures that customers will not be troubled by post-operative complications.

2. Treatment Scope: Q-switched laser tattoo removal machine can effectively treat exogenous pigmentation and endogenous pigmentation caused by mixed pigment. It is applicable to hospitals, clinics, and qualified high-end beauty parlor, etc. Q-switched 1064nm laser is suitable for the treatment of nevus, cafe-au-lait spots, freckles, moles, age spots, birthmarks, traumatic pigmentation, tattoo removal (black and blue), eyebrow tattoo, lip tattoo, liner, etc. Q-switched 532nm laser is suitable for the treatment of red birthmarks, erythema, brown cafe-au-lait spots, tattoos (brown, light), eyebrow lines and so on.

# **Carbon Black Doll Facial**

## Effects

- 1. Improve skin blemishes and shrink pores.
- 2. Eliminate skin dullness and dark spots.
- 3. Increase skin elasticity and fight skin aging.
- 4. Help smooth wrinkles, brighten skin and improve skin quality.
- 5. Tighten skin, remove fine lines.
- 6. Tighten and lift skin, fade acne marks, remove blackheads and acne, and improve oil secretion.

## Applicable Range

- 1. Those with excessive oil secretion and are prone to acne.
- 2. Those with enlarged pores and blackheads.
- 3. Those with dull, coarse skin and fine lines.
- 4. Those with lax skin.
- 5. Those who are dissatisfied with their skin tone.

## Inapplicable Range

- 1. Those whose skin is having an allergic reaction or extremely sensitive.
- 2. Those in pregnancy, menstruation, or those with heart disease, '3 Hs' (high blood pressure, high cholesterol and high blood sugar).
- 3. Those who have just undergone plastic surgery and are still recovering.

- 4. Use with caution for patients with skin diseases and infectious diseases.
- 5. Those with implants or fillers at the operating site.

6. Those who are allergic to light (solar urticaria, lupus erythematosus) have symptoms such as redness, swelling and oxygen after exposure to the sun.

### Notes after Operation

1. One week before the operation, do not do the following beauty project, such as laser, dermabrasion, AHA skin rejuvenation.

2. Do not overly expose under the sun, sunbathe or SPA within one month before treatment.

3. Keep regular life schedule after treatment and pay attention to the combination of work and rest.

4. Apply at least one hydrating mask every day for one week after operation

5. Do not go to sauna, soak in hot spring or swim within 7 days after the treatment.

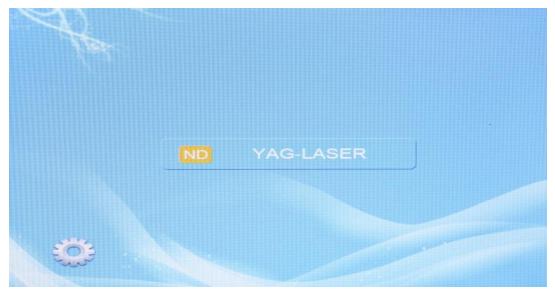
6. Use sunscreen whose SPF level is between 30-50. Use physical measures too, like using umbrella when you're out under the sun.

7. Avoid stimulant skin care products and cosmetics, such as those containing AHAs, , salicylic acid(BHA) and alcohol, for one week after treatment.

## Part II

### 1. Detailed Operation

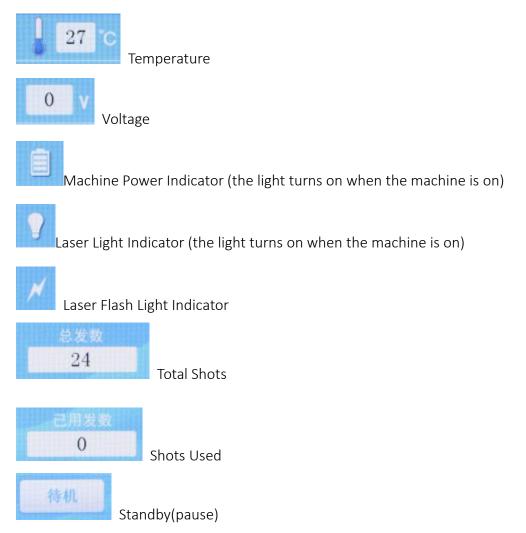
After checking that the instrument is connected properly, the following starting interface will appear when the power supply is turned on.



Interface followed after clicking on the screen

2	D YAG-LASER	
模式选	择	1
532nm 1064n	m 1320nm	and the second s
能量	27 °C 0 v 🗎	9 11
1500 J/cm²	频率	总发数 24
		已用发数 0
	待机	Xa

### 1.1 Function Selection





Ready(start)





Handle Display (handles with different wavelength)



Emergency Button (press on the button to fast turn off the machine when

malfunction occurs)

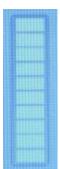


Foot Pedal: After turning on the machine, hold handle with hand and step on the pedal and push with foot (Flash is initiated after pushing on the foot pedal; there's no flash without pushing the peal)

## 1.2 Detailed Operation: 532NM Handle



Energy Level Adjustment of 532NM Handle



Energy Level Display (10 levels in total; adjust according to your own comfort

level; reference value is 4-7)

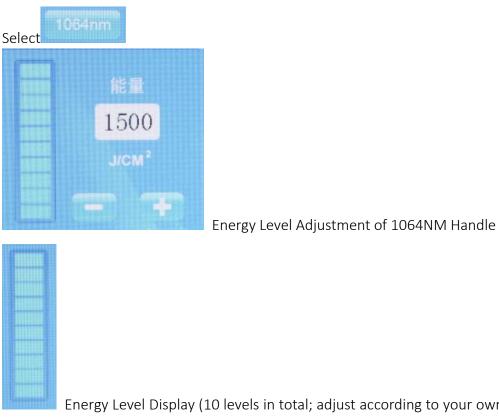


Frequency Adjustment of 532NM Handle (Adjust according

to your own comfort level; reference value is 4-8)



## 1.3 Detailed Operation: 1064NM Handle



Energy Level Display (10 levels in total; adjust according to your own comfort

#### level; reference value is 4-7)



Adjustment of 1064NM Handle (Adjust according to your own comfort level; reference value is 4-8)



## 1.4 Detailed Operation: 1320NM Handle



Energy Level Adjustment of 1320NM Handle

Energy Level Display (10 levels in total; adjust according to your own comfort level; reference value is 4-7)



Frequency Adjustment of 1320NM Handle (Adjust according

to your own comfort level; reference value is 4-8)

Click to start

## 2. Technical Parameters

Cooling condition: wind system+closed circulating+cooling system

Type: Q-switch Nd YAG With RED target light to aim at the skin.

The pulse energy: 0~2000mJ

Frequency:1-5Hz continuous adjustable

Dimension: 530\*340\*340(mm)

Power: 500W

Tips: 1064 nm & 532 nm and black doll tips

## **3.Safety Precautions**

1. Those who have just undergone plastic surgery and are still recovering.

2. Those in pregnancy and lactation; those with heart disease, malignant tumor, folliculitis, vascular disease, severe hyperlipidemia, hypertension, hyperglycemia, and other serious diseases.

3. Those who have just undergone plastic surgery with unhealed wounds.

4. Those who are having allergic reactions.

5. Those with pacemakers.

6. Those who are photosensitive (solar urticaria, lupus erythematosus), and experience swelling, itch and redness when exposed under the sun.

7. Those who have just undergone photoelectric therapy in 30 days.

## 4.Dos and Dont's

1. In order to ensure the therapeutic effect and normal service life expectancy of the device, please use the specified accessories provided or recommended by the original manufacturer.

2. The device should not be placed in wet environment or near water, nor should they be directly exposed to sunlight.

3. Do not place the device near a strong heat source, because this may affect the life and normal use of the device.

4. Patients who are suffering from illness should consult with a doctor and gain permission from the doctor before using.

5. Use device or train device operators in strict accordance with instructions in the user manual.

6. Wait for 15 days if you have recently experienced sunburn or planning a vacation containing sun bathing.

7. Wipe clean the device and handle with saline after one treatment to further prolong it's life expectancy. (Do not use alcohol for cleaning.)

8. Make sure the probe is pressed closely to the skin and there's no air in between to avoid scald.

9. Fill the water tank with water before start to avoid possible machine damage.

10. Wait for a month before treatment if the same area had undergone photoelectric therapy within a month.

11. Wear goggles to avoid scald from laser when operating on face.

12. Foot pedals are required for the operation.

13. When operating, the distance between the probe and the face should be 3-4cm apart.

14. After removal of tattoos, eyebrows, moles and spots, do not wash your face with water for 3 to 5 days.

15. Apply anesthetic on treatment area 15-20 minutes in advance for customers that may experience a strong sense of pain during the operation.

16. The head of the probe must not be pointed at any person or object, especially the eyes area, and the feet must be controlled by the operator.

17. When using black doll tip, do not flash in the same position; The energy must not be too high, as long as you can see the pigment spread out.

18. Observe the whole area after it is completely cooled down, and do a second round for the parts that are not covered.

19. Metal equipment can cause laser reflection, therefore during treatment you should avoid direct laser exposure on these instruments, and avoid wearing watches and necklaces, bracelets and other jewelry that can reflect light.

20. The pigment of human tissue absorbs laser differently, and the energy required for treatment should be selected from low to high.

21. Use more sun protection after the operation to prevent infection.

22. Do not touch the treatment site with hot water for 24 hours. Do not expose to the sun or sauna.

23. Do not consume photosensitive food, medication, seafood, spicy or stimulative food.

24. Let the scab fall off naturally and avoid using your hands to scratch it off.

## 5. Troubleshooting & Solutions

# 1. The instrument cannot be started, but the key light on the back of the instrument does not work?

A. Make sure the power cord is connected to a valid power socket.

B. Whether the fuse tube on the back of the instrument is loose or burnt out.

C. Check if the emergency button is on.

### 2. No light flash?

A. Check whether the start button is pressed after the parameters are adjusted.

B. Turn off the device and restart.

C. Check if you forget to push foot pedals.

D. If the above methods cannot be addressed, please contact the instrument dealer for assistance.

### 3. Carbon powder cannot be spread out?

A. Please check whether the selection mode is wrong.

B. Please check whether the carbon powder is completely dry.

C. If the above methods cannot be addressed, please contact the instrument dealer for assistance.

### 6.FAQs

# 1.Q: What is the difference between black doll facial and other skin rejuvenation treatments?

A: Black doll facial adopts laser method to achieve skin rejuvenation, using carbon powder as the medium, doubling the all-round skin rejuvenation effects, including pore refining, dull skin improvement, skin tightening, etc. Black doll facial covers more ranges of treatment and comes with better effects.

### 2. Q: What skin problems can black doll facial solve?

A: Black doll facial are mainly used to shrink pores, improve dull skin, improve fine line, and tighten skin, etc.

### 3. Q: Can you see results after just one treatment of the black doll facial?

A: Black doll facial integrate skin rejuvenation with RF, medical-grade skin care and so on. One treatment will bring a significant change in the skin. skin appears to be hydrated, bright. Fine lines, spots, and pores are visibly improved.

### 4. Q: Does black doll facial hurt?

A: It shouldn't hurt in general. Some parts may have a bit prickly feeling. Each person's skin sensitivity is different and feels different.

### 5. Q: How long is one treatment? How many treatments do I need?

A: Under general circumstance, if you begin from cleaning face and end with face mask, the whole process takes around 40 minutes.

The number of treatments depends on the skin condition of each person. Generally, one treatment will have obvious effects. Experts recommend more than three treatments for better results according to the individual's situation and needs.

### 6.Q: What other treatments are included in this instrument?

A: Besides black doll facial, it can also remove tattoo, tattooed eyebrow, eyeliner, dark spots, moles and birthmarks.

### 7. Q: Can all spots be removed by this instrument?

A: No, this instrument can remove spots like age spots, pigment spots, freckles and other superficial epidermal spots. Spots at deeper layers of skin, such as chloasma, sunburn spots and others can not be reached and removed completely, but only alleviating.

### 8. Q: Why does black doll facial take one week to see the effect?

A: Because this treatment uses optical principle to stimulate subcutaneous collagen regeneration and cell recombination, and this stimulation takes a certain time for collagen to regenerate and cells to complete recombination, we have to wait for a week before the obvious results to be seen.

## 7.Packing List

- 1 x Main Unit
- 1 x Hand-piece
- 2 x Tips
- 1 x Black doll tip
- 1 x Water funnel
- 1 x Foot touch
- 1 x Protective goggle
- 2 x Goggles (1 for operator, 1 for customer)

1 x Power line (we stock 110V-240V power version and US.UK.UA.EU plugs for the country all of the world)

## 8. Operational Diagrams

Parameters	Product	Techniques	Diagrams
Carbo	on Black Do	oll Facial: 50 min, onc	e/3weeks
Energy Level:	Makeup	1. Remove makeup and	No diagrams
600-1100	remover+	clean, 5 min.	
	Cleanser+	2. Facial hot steam, 10 min.	
Frequency:	Hot steam+	3. Apply a thin layer of	
3-5HZ	Carbon	carbon powder evenly on	

	powder+	face.	
Filter: 1320NM	Facial mask+	4. Wait for 10-20 min for	
	Device+	the carbon powder to	
	Ice bag+	completely dry.	
	Blinder/goggl	5. Put on protective blinder	
	es	or goggles for the customer.	
		6. Adjust energy level,	
		mode and start.	
		7. Device operation: start	
		from jaw and extend to the	
		whole face; make sure one	
		stamp is next to another,	
		once. (The probe should be	
		3-4 cm apart from facial	
		skin.)	
		8. Scan the whole face,	
		keeping the distance of 3-4	
		cm from the probe, once.	
		9. Take off the blinder or	
		goggles.	
		10. Wash face clean, 1 min.	
		11. Apply soothing&repair	
		face mask+cold steam, 15	
		min.	
		12. Wash face clean, 2 min.	
		13. Apply toner, hydrating	
		essence, hydrating cream	
	mont.	and sunscreen.	

### Suggested Treatment:

5 treatments account for one full course. After one treatment, skin will be slightly red but skin tone is brighter. After 3-4 treatments, skin appears to be translucent, and hydrated. After one full course, fine lines and dark spots are gradually disappearing, and pores are refined. 2 courses help consolidate the effects and delay skin aging.

## Tattoo Removal: 60 min, once/45-90 days

Energy Level:	Anesthetic+	1. Clean treatment area.	No diagrams
600-1100	Device+	2. Apply anesthetic on	
	Ultra Repair	treatment area, around 20	
Frequency:	liquid	min.	
3-5HZ	recovery	3. Wipe anesthetic off and	
		clean the treatment area	
Filter:		with clean tissue.	

	4. Select probe and install.
Dark color	5. Adjust energy, filter,
tattoo(black,	frequency and start.
blue):	6. Pinpoint treatment area
1064NM	with the red dot of the
	probe, and move
Light color	accordingly, covering the
tattoo(red,	whole tattoo.
brown):	7. Dab repair liquid with
532NM	cotton swab and apply
	gently on treated area.

### Suggested Treatment:

Complete removal of one tattoo requires around 3-6 treatments (varies according to the tattoo color and each individual's metabolism). After 1-2 treatments, pigments are visibly faded. Tattoo is gradually disappearing around 3-4 times. Tattoo will be completely removed after 5-6 treatments.

## Tattooed Eyebrow Removal: 60 min, once/45-90 days

	1		
Energy Level:	Anesthetic+	1. Clean treatment area.	No diagrams
600-1100	Device+	2. Apply anesthetic on	
	Disposable	treatment area, around 20	
Frequency:	tissue+	min.	
3-5HZ	Ultra Repair	3. Wipe anesthetic off and	
	liquid	clean the treatment area	
Filter:	recovery	with clean wet tissue.	
Dark color		4. Put on protective	
tattoo(black):		eyewear for the customer.	
1064NM		5. Select probe and install.	
		6. Adjust energy, filter,	
Light color		frequency and start.	
tattoo(red,		7. Pinpoint treatment area	
brown):		with the red dot of the	
532NM		probe, and move	
		accordingly, covering the	
		whole tattoo.	
		8. Dab repair liquid with	
		cotton swab and apply	
		gently on treated area.	

### Suggested Treatment:

Complete removal of tattooed eyebrow requires around 3-6 treatments (varies according to the tattoo color and each individual's metabolism). After 1-2 treatments, pigments are visibly faded. Tattoo is gradually disappearing around 3-4 times. Tattoo

will be completely removed after 5-6 treatments.

Note: Techniques of dark spots, birthmark removal are the same as the above.

## Mole Removal: 50 min, once/45-90 days

	1		1
Energy Level:	Anesthetic+	1. Clean treatment area.	No diagrams
600-1100	Device+	2. Apply anesthetic on	
	Disposable	treatment area, around 20	
Frequency:	tissue+	min.	
3-5HZ	Ultra Repair	3. Wipe anesthetic off and	
	liquid	clean the treatment area	
Filter:	recovery	with clean tissue.	
1064NM		4. Select probe and install.	
		5. Adjust energy, filter,	
		frequency and start.	
		6. Pinpoint treatment area	
		with the red dot of the	
		probe, and move	
		accordingly, covering the	
		whole mole.	
		7. Dab repair liquid with	
		cotton swab and apply	
		gently on treated area.	
Suggested Treat	ment:		

Complete removal of mole normally takes one treatment. Chorioplaque and active moles take around 3-4 treatments. After one treatment, pigments are visibly faded and are gradually disappearing after two treatments. Pigments will be completely removed after 3-4 treatments.