**User Manual** 

# LT-100A



# Preface

Dear users:

We're pleased to present to you *Pro Toy-block 480 LEDs PDT LED Photon Photodynamic Beauty Machine IR Healing* that adopts the IR+LED technology, targeting at facial fine lines, skin dullness, acne skin, poor skin absorption and so on. We aim at a safe and, at the same time, effective beauty result by using high-end technologies. *Pro Toy-block 480 LEDs PDT LED Photon Photodynamic Beauty Machine IR Healing* is specialized skin care machine for professional use, which needs to be handled by professionals with proper training. Any improper use will result in adverse consequences. 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**

*Pro Toy-block 480 LEDs PDT LED Photon Photodynamic Beauty Machine IR Healing* is currently the most popular beauty machine that works on skin rejuvenation, acne removal, wrinkle removal, dark spots removal, skin firming and overall quality betterment. It's an effective replacement of various sorts of LED photon rejuvenation and skin care treatment. It's convenient and easy to operate. It solves both skin of face and body management issues for beauty-lovers. This equipment requires no injection, no medication, no operation, thus having no side-effects. It is used externally during the whole process and has an immediate effect. *Pro Toy-block 480 LEDs PDT LED Photon Photodynamic Beauty Machine IR Healing* can activate deep cells, accelerate cell growth, stimulate fiber cell tissue to produce collagen, so as to achieve the beauty results of refining skin, fading fine lines, and brightening skin.

# Advantages

1. Multi-functional LED PDT light beauty device can effectively solve various skin problems of face and body.

2. Multiple color LED lights can be selected or combined together for different needs of skin rejuvenation.

- 3. Simple, convenient, fast, safe and effective, no side effects.
- 4. Multiple color wave physiotherapy can purify and whiten skin and protect skin deeply and evenly.
- 5. Wide range of operation; suitable for any skin; powerful repair function.
- 6. No consumables, long lifespan, stable performance and long continuous working time.
- 7. No pain, no trauma, quick recovery time.
- 8. Different light penetrates into the skin at different depths, resulting in different effects.
- 9. It can be used with Spa products and has a wide range of practical applications.

# Principles

It adopts photodynamic principle to activate deep cell, let skin carry on metabolism better. Light is absorbed by the skin, and light energy is converted to energy in cells, accelerate the growth of cells, accelerate blood circulation, stimulate fiber cells to produce collagen, increase skin elasticity, repair aging cells, acne skin, fade spots, firm and relieve sun burn skin and so on. It brings about effective relaxation and aggrandizement of capillary and cause photochemical reaction enzymatic reaction with the skin, increase glycogen and protein content, so as to promote cell metabolism and synthesis. **Red LED**: 640NM, reach into skin 1-6mm. Red light can increase the activity of cells, promote the metabolism of cells, and make the skin secrete collagen and fibrous tissue to fill itself. It can accelerate blood circulation, improve skin elasticity, improve sallow and dull skin condition, so as to achieve anti-aging, anti-oxidation and repair effect.

**Blue LED**: 423NM, reach into skin 1mm. Blue LED has a rapid inhibitory effect on inflammation. During the formation of acne, propionibacterium is mostly to blame. Blue LED can effectively destroy the bacteria without any damage to skin tissues, greatly reducing the formation of acne and significantly reducing the inflammation of acne in a short period of time.

**Green LED**: 532NM, reach into skin 0.5-2mm. Green LED of specific wavelength helps to calm, repair skin, relieve pain, and promote blood circulation. It is suitable for those with thin corneum, and who are prone to allergy and redness.

**Yellow LED**: 583NM, reach into skin 1-2mm. It can add energy to skin cells, promote the role of glands, assist digestion, treat skin diseases, enhance immune function, accelerate blood circulation, effectively repair red marks, red spots, relieve swelling, pigmented spots, and is suitable for removing spots and brightening.

**Purple LED**: 640NM+423NM, dual frequency of red and blue LED. It combines the efficacy of two kinds of phototherapy and has a particularly good and repair effect especially for the treatment of acne and acne marks.

**Turquoise LED**: 423NM+532NM, dual frequency of green and blue LED. It gradually enhance cell energy, and works great on metabolism.

**Hybrid LED**: 640NM+423NM+583NM. It reaches deep into skin, accelerated metabolism of active cells, decompose pigments, reduce fine lines, tight skin. It can also relax skin, balance sebum production and control oil secretion.

**Infrared LED**: Infrared LED (IR) is an electromagnetic wave whose wavelength is between microwave and visible light. The wavelength is between 760nm and 1mm, which is longer than red LED. IR can activate water molecular activity, raise the oxygen content of the body, dilate blood vessels, boost blood circulation, metabolism, and enhance human body resistance.

# Main Effects

- 1. Calm skin and balance oil secretion.
- 2. Fade fine lines and brighten skin.

- 3. Fade wrinkles and pigmented spots.
- 4. Promote collagen formation and repair damaged skin.
- 5. Improve uneven facial skin tone, dull and sallow skin.
- 6. Destroy propionic acid bacillus, and fight inflammation.
- 7. Calm and relieve pain, promote blood circulation.
- 8. Boost metabolism and enhance body resistance.

# **Applicable Range**

- 1. Those with coarse skin, and exuberant oil production.
- 2. Those with dull skin and uneven skin tone.
- 3. Those whose skin is prone to be flushing and burning hot.
- 4. Those whose skin is prone to acne of all sorts and inflammation at the bottom.
- 5. Those with thin layer of corneum and compromised skin barrier.
- 6. Those with fine lines, wrinkles, pigmented spots and poor absorption of nutrients.

7. Those whose skin barrier is damaged and whose body defense mechanism is weakened.

## Inapplicable Range

- 1. Those with severe sensitive skin or who's during the allergic phase.
- 2. Those with large area of facial wounds.
- 3. Those who are pregnant, or those with serious heart disease, severe "3 H" (hypertension, hyperglycemia, hyperlipidemia), or other serious illness.
- 4. Those with skin diseases and infectious diseases.
- 5. Those who are sensitive or allergic to lights.

## Notes after Operation

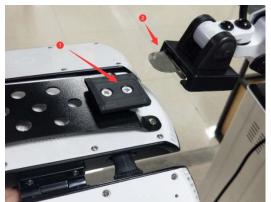
1. Stay hydrated and use sun protection.

2. Avoid smoking, drinking, staying up late; Eat more fruits, vegetables and less greasy food.

3. Apply a hydrating mask everyday the first three days after treatment.

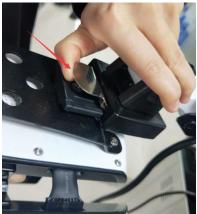
# Part II

1. Detailed Operation



Insert the back of the lamp board (1) into

the joint of the handle (2). You should hear a clicking sound when it's successfully connected.



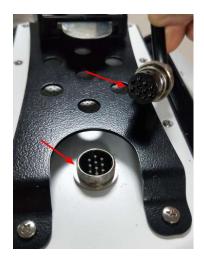
Raise the metal piece (as arrow indicated) with one

hand to assist.



Connect the handle wire with the jack, as shown below



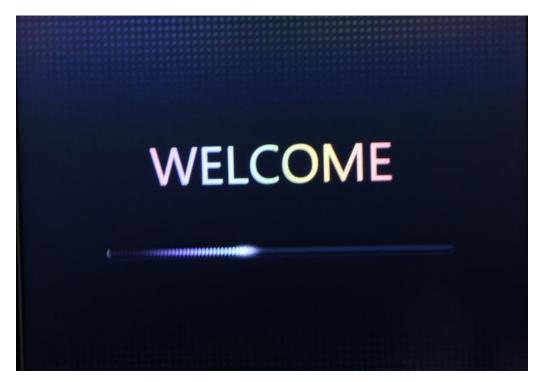


Connect the wire with the jack on the back of the  $\ensuremath{\mathsf{PDT}}$ 

board, as shown below



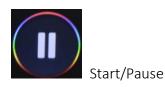
After checking that the instrument is connected properly, the following starting interface will appear when the power supply is turned on.



Then it goes to the interface below:



1.1 Function Selection





Cycle Flashing (One LED or multiple LEDs cycle through)

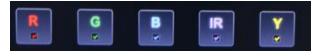


Consecutive (One LED or multiple LEDs stay on constantly)





Working Time Adjustment (20 min is ideal)



LED Light Selection (One or more

LEDs can be selected)

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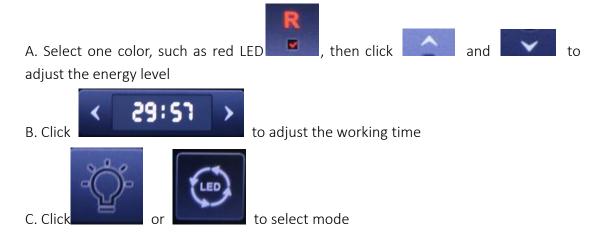
Energy Adjustment of Single LED (Stronger energy level, brighter





Energy Adjustment of All LEDs

#### 1.2 Detailed Operation: Mono LED Light





to start operation

## 1.3 Detailed Operation: Multiple LED Colors

A. Select two or more LED lights, such as red, green, blue, IR or yellow



### 2. Technical Parameters

Input is divided into 110 and 220v (dip switch to adjust switching power supply) Total power: 165w (5 light boards) No light power: 10w (screen, fan, circuit) Monochromatic lamp : Red light: 65W 75mw / cm2 Infrared: 40W 64mw / cm2 Yellow: 38W 40mw / cm2 Blue: 35W 48mw / cm2 Green: 20W 36mw / cm2 The number of single light boards: Red light 108 Yellow 108 Infrared 112 Green light: 40 Blue lights: 40 Total: 408

#### 3. Safety Precautions

Patients with the following symptoms should be cautious about using this instrument. Please consult a doctor or a professional before using the instrument. The details are as follows:

- 1. Those with severe sensitive skin or who's during the allergic phase.
- 2. Those with large area of facial wounds.

3. Those who are pregnant, or those with serious heart disease, severe "3 H" (hypertension, hyperglycemia, hyperlipidemia), or other serious illness.

- 4. Those with skin diseases and infectious diseases.
- 5. Those who are sensitive or allergic to lights.

## 4.Dos and Dont's

1. Use a grounding pin and make sure the power socket of the device is properly

connected before each operation.

2. Ensure that the voltage of the device is appropriate. If the voltage of the local power supply is unstable, we recommend that users increase to the matching power voltage.

3. 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.

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

5. Do not place the device near a strong heat source, because this may shorten the lifespan or affect normal use of the device.

6. Please restrain from using the device on eyes, thyroid, parathyroid, testicles, abdomen of pregnant women, and pacemakers.

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

8. Please turn off the power switch of the device and ensure that the total power supply of the device is turned off before the staff leaves after daily use, so as to ensure the safety of the electrical products.

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

10. Start with the lowest energy setting and increase slowly after adaptation.

11. PDT device can be used alone or coupled with essence and other LED photon device, which brings better esthetic result.

12. Wear protective goggles before PDT treatment.

13. The ideal time for PDT treatment is between 15 to 30 min.

14. PDT treatment is not applicable for those who are receiving AHA treatment or those with skin damage induced by AHA treatment.

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

#### 2. No light flash?

A. Check whether the wires are loose.

B. Please check if you've selected IR LED, which is invisible to human eyes.

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

## 6. FAQs

#### 1. Q: When can I start seeing results of LED photon skin rejuvenation?

A: Everyone absorbs LED light to a different extent. It varies based on one's physical condition, age, skin condition, diet, drinking and smoking and so on. Under normal circumstances, you should start seeing results in 2-4 weeks. Some people started seeing results in 1-3 week while for some people it might take 5-8 weeks, which is rare but not impossible.

#### 2. Q: Does PDT treatment help fight my acne?

A: Yes. Special blue wavelength LED help shrinks pore, balance sebum production, diminish skin inflammation, fight acne of all sorts. Lights of different wavelength have different effects. Choose the LED light tailored to your own needs.

#### 3. Q: Will LED light damage your skin?

A: LED light is not harmful to the skin. LED light is different from high energy lasers. It's safe, fast, painless and is with low energy.

#### 4. Q: Is there any side effects of LED light?

A: LED light has no side effects. It is bioluminescence, a kind of low-calorie natural therapy. This technology is very safe, because light can be absorbed by cells, and will only regenerate cells and won't damage any tissues.

## 7.Packing List

- 1x Main machine
- 5x PDT LED boards
- 1x Board holder
- 1x Protective eyewear
- 1x Power cord
- 4x Screw

#### 8. Operational Diagrams

Parameter Adjustment	Product	Techniques	Diagrams			
Facial Skin Rejuvenation: 30 min, 1-2 times/week						
Time:	Makeup	1. Remove makeups and	No diagrams			
15-30 min	remover+	clean, 5 min.				
	Toner+	2. Apply toner, 1 min.				
Mode:	Sheet	3. Apply sheet mask.				
Red LED	mask+	4. Put on protective				
	LT-100A	eyewear for the customer,				
Energy:		then place the device				
50%-100%		parallel above the				
		customer's face.				
Mode:		5. Turn on the device,				
Intermittent		adjust time, energy, LED				
flashing		mode, and click start,				
		10-20 min.				
		6. Remove the device and				
		protective eyewear.				
		7. Clean face, 2 min.				
		8. Apply toner, essence,				
		cream and sunscreen.				

10 treatments account for one full course. After one treatment, skin is full hydrated, clean, and translucent. After a full course, skin absorbs better with less oily appearance. After two courses, skin is refined, smooth, glossy, hydrated, and has less fine line. Three courses help skin remain at the current state and prevent skin aging.

## Back Skin Rejuvenation: 30 min, 1-2 times/week

Time:	Toner+	1. Clean back with wet	No diagrams
15-30 min	Body	towel.	
	lotion+	2. Apply toner on the	
Mode:	LT-100A	back.	
Multiple LEDs		3. Place the PDT device	
		parallel above the	
Energy:		customer's back.	
50%-100%		4. Turn on the device,	

	adjust time, energy, LED	
Mode:	mode, and click start,	
Consecutive	10-20 min.	
(constantly on)	5. Remove the device.	
	6. Apply toner and body	
	lotion.	

#### Recommended treatment:

10 treatments account for one full course. After one treatment, skin is full hydrated, clean, and translucent. After a full course, skin absorbs better with less oily appearance. After two courses, skin is refined, smooth, glossy, hydrated, and has less fine line. Three courses help skin remain at the current state and prevent skin aging.