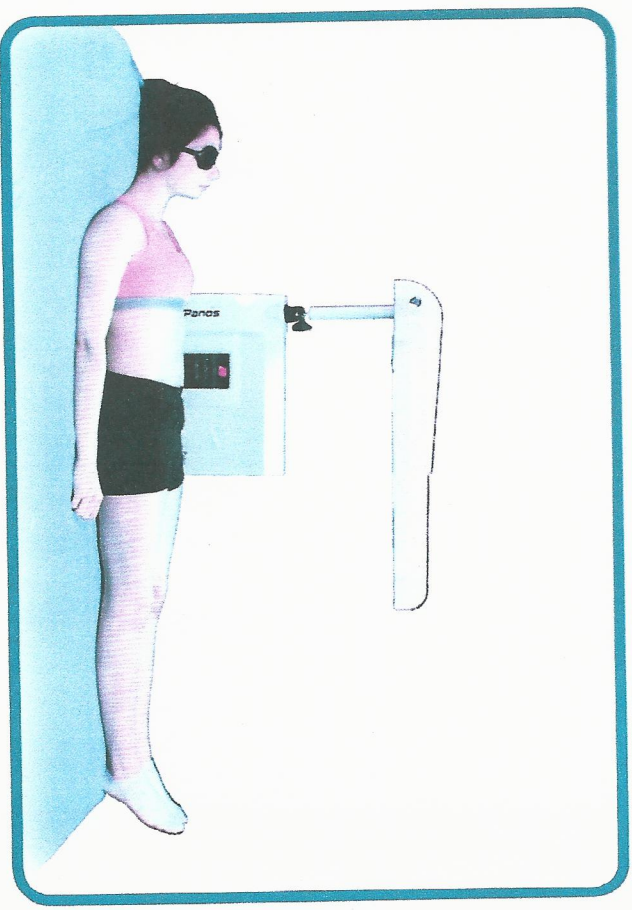




SEM YEONG Biotech
SEM YEONG Biotech Co.

USER' S MANUAL



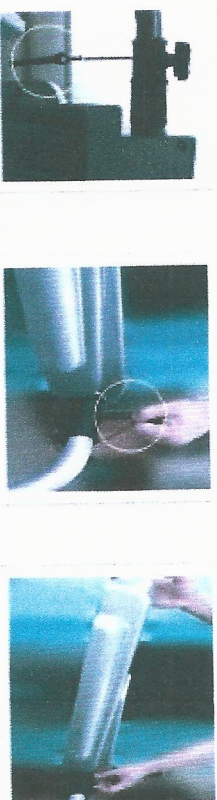
UV Irradiator (KPA-01,KPA-02)

● Installation of base plate



▶ After unpacking the product, lay it on its back and fasten the base plate with the screws enclosed.

● Fixing the lamp shade



▶ Fix the lamp shade with the pin when you use the equipment

▶ If you want to remove the pin, lift up the shade a bit to pull it out.



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1. Description of the Product

1.1 General Information

This medical equipment is an instrument for treating skin disease by applying ultraviolet rays of fluorescent UV lamp. Three fluorescent UV lamps that irradiate the ultraviolet wavelength of 309nm are installed at the top of the equipment and the patient can be treated on a fixed type bed or on a mobile type bed.

▷ Composition

UV irradiator is composed of main body, light source (ballast, fluorescent UV lamp), power source, controller and power cable.

▷ How to work

AC voltage supplied from power source is input into the fluorescent UV lamp through lamp ballast to produce light. (You can set the irradiation time at 5, 10, 20 minutes)

▷ Purpose of use or efficacy and effectiveness

It is used for the treatment of skin disease by means of the irradiation of UV rays.

1.2 Product Features

*Rated type of protection and degree of protection: 1st degree, BF type equipment

*How to operate

1) Switch "on" power
Power comes on the controlling parts (switch for irradiation time, light source device, buzzer)

2) Control the irradiation time switch (5, 10, 20 minutes)
If the operator determines the irradiation time, he should set the time by adjusting the time switch (5, 10, 20 minutes)

3) Buzzer starts to sound when the irradiation is finished.
You must switch "off" power when you hear the buzzer sound.

*Electric Rating: 220-230 VAC, 50/60Hz, 70W

*Safety Devices

-Buzzer sound when operation is completed.

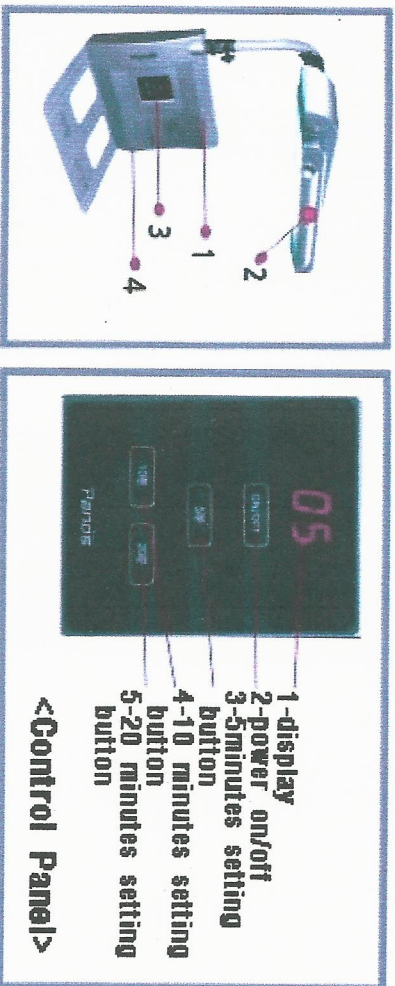
-Fuse works to cut off power in case of overload

-Power is cut off by circuit breaker in case of overcurrent

-No output will be made if you cut off power during operation and resume the operation.

2. Appearance and Structure

2.1 appearance and structure



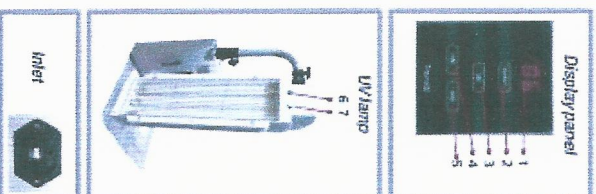
No.	Name	Function
1	Main body	It contains ballast, power source, control panel and withstand their load and has protective function for safety (against overturning). It fixes the lighting devices on the top and functions to adjust the height of irradiation.
2	Light source	It is the lighting fixture that contains electronic ballast and UV lamp inside.
3	Control Panel	It controls the irradiation time and functions to put or cut off power and guard against electric leakage
4	Power source	It supplies power

No.	Name	Function
1	Display	It displays the setting time etc
2	Power ON/OFF	It switches on or off power of UV irradiator
3	5 minutes	It is used to set the irradiation time at 5 minutes
4	10 minutes	It is used to set the irradiation time at 10 minutes
5	20 minutes	It is used to set the irradiation time at 20 minutes

3. How to operate/use the equipment

3.1 Description of Control Panel

No.	Name	Function
1	Display	It displays the setting time etc
2	Power ON/OFF	It switches on or off power of UV irradiator
3	Operating time setting button (for setting 5 minutes)	It is used to set the irradiation time at 5 minutes
4	Operating time setting button (for setting 10 minutes)	It is used to set the irradiation time at 10 minutes
5	Operating time setting button (for setting 20 minutes)	It is used to set the irradiation time at 20 minutes
6	UV lamp ON/OFF button (for 2 nd /3 rd level selection)	It is used to select 2 nd or 3 rd level of UV lamp (on/off button)
7	UV lamp ON/OFF button (for 1 st level selection)	It is used to select 1 st level of UV lamp (on/off button)



3.2 Preparations before use

- Check the socket outlet to ensure that the right voltage is supplied
- Insert the plug of power cord into the socket outlet
- Fix the equipment so that it does not move during operation
- Doctor is supposed to determine the volume of UV irradiation (by controlling the time) depending upon the symptoms of the patients
- Patient should expose only those areas to be treated and cover the other part of his body with cloth etc. Patient is supposed to wear protective goggles (eye glasses for UV cut)

3.3 How to use/operate

- (1) Switch on power
- Make sure to insert power cord into the socket outlet before you switch on power

(2) Select irradiation time and start to irradiate

- Control the irradiation time switch (selection of 5, 10, 20 minutes)
- Irradiation starts and when the buzzer sounds, irradiation is finished

3.4 How to store and manage after use

- Change of fluorescent lamp: unfasten the screws of the cover that holds the lamp and remove the protective cover. And turn the socket to remove the fluorescent lamp.
- Remove the stains etc of the main body with anti-static cloth or general detergent.
- Check the condition and connection of the fluorescent lamp when you store it after use.
- Do not use alcoholic solution like ethyl alcohol etc for cleaning because inappropriate solution may cause damage.

3.5 Precautions

(1) Unskilled staffs are not allowed to operate the equipment.

(2) Patient or any other users must wear goggles for UV cut.

(3) Pay attention to the followings when you install the equipment

- Avoid wet area. Pay attention to the safety factors such as vibration, shock etc.
- Do not install the equipment at the place where chemicals are stored or gases are being produced.
- Check whether voltage and frequency is correct and also pay attention to power consumption
- Be careful of the followings before you start to use
 - Check the contact of switches and confirm the equipment is working normally.

- Make sure that all the cords are safely and firmly connected.

- Combined use with other equipments should be allowed only when the exact diagnosis is made and risks are not existent.

- Recheck the external circuit that directly contacts the patient.

(5) Always pay attention to the followings during operation

- Make irradiation from the designated place all the time.
 - Make sure of the time and volume of irradiation for treatment
 - Irradiation should be made only to those spots to be treated and other parts should be protected from UV rays.
 - Immediately stop the irradiation when you find hypersensitivity reaction to UV irradiation (erythema) and follow the doctor's instruction.
- Patient is not allowed to use without authorization

(6) Pay attention to the followings after the use of the equipment

- Do not pull out the plug forcibly

- Pay attention to the followings when you store the equipment.

① Don't store the equipment at a wet place

② Place the equipment at a place where the air is not adversely affected by atmospheric pressure, temperature, ventilation, dust, wind, salt and stains etc.

③ Be careful of inclination, vibration, shock etc.

④ Don't place the equipment at a place where chemicals are kept or gases are being produced.

(7) In case of failures of the equipment, please mark the failing part properly and contact the technical staff for repair.

(8) Do not modify the equipment without authorization

(9) Precautions to be taken for the operation of UV irradiator

- Use the equipment in accordance with a doctor's prescription and instruction

- Do not use the equipment for other purposes than the treatment of skin disease

- Excessive exposure to UV rays can result in skin burns

- Continuous exposure to sunlight or UV ray generated by UV equipments may cause skin cancers (cutaneous melanoma, ocular melanoma) as well as permanent skin aging

- Young persons under the age of 19 should consult the doctor first before use

- Following persons should pay more attention to the use of UV rays because of higher risk of side effect and danger

* Person with lots of warts

* Person who are susceptible to freckles

* Person who suffers burns easily when exposed to sunlight

* Person who already suffered burns by sunlight

* Person who is suffering from skin cancer or has a higher risk of skin cancer

* Person who is sensitive to UV or who is using the cosmetics that are sensitive to UV

- Precautions to be taken before you use UV irradiator

* Always wear protective glasses that are provided with the equipment

* Remove make-up and do not apply sun screen prior to exposure to UV irradiation. If you are not sure, consult the medical specialist.

* Wait for 48 hours before you are exposed to UV irradiation for the second time.

- Sunbathing and UV treatment should not happen on the same day
- Follow the instructions on exposure time, interval of exposure and the distance from the lamp
- Consult a doctor if you have persistent tumor or pain or if the color of the spot treated changes

4. How to store the equipment

- *Store the equipment at a place where its light source is not affected by atmospheric pressure, temperature, humidity, sunlight, dust or by the air that contains salinity and ion etc.
- *Environment for storage: Keep it at room temperature
- *Store the equipment at a place where there are no inclination, vibration and shock.
- *Avoid such a place where chemicals are stored or gases are being produced.

5. Maintenance and Inspection

- *Switch off power after use and pull out the power plug when it is not used for a long time.
- *Use a soft, dry cloth for cleaning.
- *Do not dip the main body or cable in the liquid or detergent
- *Please stop using the equipment and contact us when you find the equipment is old or damaged while doing maintenance or inspection.

6. Performance and Purpose of use

6.1 Performance

- *Electric performance
- 1) Rated voltage: 220-230V
- 2) Frequency: 50/60Hz
- 3) Power consumption: 70W
- 4) UV wavelength: 309nm
- 5) UV output: UVR(309nm):10 μ W/cm² at 20cm

- 6)Setting time: 5, 10, 20 minutes
- 7)Weight and dimension
Size: Length 340mm x Width 210mm x Height 473mm
Weight: 9kg
- *Type and degree of protection against electric shock: 1st degree, Bf type mounting

6.2 Purpose of use: An equipment used for the treatment of skin disease

7. Introduction to our Warranty Policy

7.1 Free service

*Free service is available for one year from the date of purchase

7.2 Paid service

*Never fail to read the followings before use

- When you do not follow the precautionary instructions for use and installation
- Failures by the act of God (thunder, fire, storm & flood, gas, sea water, earthquake etc)
- When foreign matters (water, drink, toy etc) got into the equipment
- Use of wrong voltage
- Loss, repair or damage due to the unauthorized disassembly
- Faults resulting from repair or modification by other persons than the special technician.
- When you do not abide by the correct way of use or safety instructions
- Consumable parts that are subject to normal wear and tear (including UV lamp)
- Failures caused by the use of other parts or consumables than the original ones
- When the warranty expired

7.3 Purchase of consumables

*Contact AS team (Tel: 070-7887-7431) to buy those consumables that are subject to normal wear and tear.

Other Information

- ◆ Name and address of the manufacturer: SEMYEONG BIOTECH B1,3F Seongseo B/D 323, Seongseodong-ro Dalseo-gu Daegu, Korea
- ◆ Name of Product, Model: UV irradiator, PANOS KPA-01(KPA-02)
- ◆ Product Permit No.: 10-1242(KPA-01), 11-308(KPA-02)
- ◆ Serial number and date of manufacturing: written on the back of the main body
- ◆ Packing unit: one set
- ◆ Purpose of use: equipment for the treatment of skin disease
- ◆ Storage: to be stored at room temperature
- ◆ How to operate/use and precautions: refer to the user's manual
- ◆ Type and degree of protection against electric shock: 1st degree, BF type equipment
- ◆ Rating: AC220-230V, 50/60Hz, 70W(KPA-01), 45W(KPA-02)
- ◆ Tel No. of A/S team: +82-70-7887-7500

▶ "Our product is medical equipment" ◀

How to do irradiation

- ▶ Apply 2~3 times per week
- ▶ Keep a proper distance when doing irradiation (50~70cm from the lamp)
- ▶ Do irradiation directly to the spot to be treated in case of skin disease
- ▶ For the first irradiation, we recommend 5 minutes for children aged 10 or under, 10 minutes for persons aged 20 or under and 20 minutes for adults
- ▶ Change the lighting gradually from 1st-2nd-3rd degree thereafter.

WARRANTY

Contents of Service Quality Warranty

◆ Steps to be taken for the product A/S

1. Our product is manufactured under a strict quality control and inspection process.
2. If you have problems or inquiries, you can call our A/S team. A/S team Tel +82-70-7887-7500
3. After discussion over phone, please send the product through LOGEN delivery service, the company with whom we are in cooperation. -If you use other delivery service companies than LOGEN on freight collect, the delivery can be rejected.

◆ Issues related with

1. Warranty is applicable only to those products whose initial defects are found within one week (7 days) from the receipt of the same. (defective or poor quality hardware)
2. Fill in the following format and send it together with the product.

◆ Responsibility for A/S expenses

1. A/S is available free of charge for one year in principle.
2. Any costs incurred by the act of God or the customer's defaults should be paid by the customer.
3. In case of consumables, they cannot be returned but can be changed if request for A/S is made within one week(7 days)

◆ Issues related with product return

1. A/S is available free of charge for one year in principle.
2. If the customer changes his mind or cannot familiarize himself with the product, compatibility of the parts and decides to return the product, he shall bear the cost of return delivery service.

Request for A/S

Name of customer	Purchase site	
Contact point	item	
Address		
Details of A/S request		

"We would like to extend our deep thanks to our customers who have been patronizing SEMYEONGH BIOTECH"



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