

“KZmedical” Bed Sterilizer

Product use manual

KZ-X-DL1

Content

Appendix: Addressing

Items

Shipping list

1. Learn about the machine before use.
 - Befor use
 - In use
2. Installing main machine and accessories
3. External structural diagram
4. Operation directions
 - Manual selection
 - Mode auto selection
5. Maintenance and Malfunction
6. Notes
7. Technical instruction
8. Introductions.
 - Theme basis
 - Product Features
 - Techonlogy criteria

Before installation

- Forbid placing the Bed Sterilizer upside down or horizontally during transport.
- Use 220V AC power. Add stabilizing devices before use if the instability of power voltage exceeds $\pm 10\%$.
- Insert the plugs of power cords into safe and qualified sockets solidly. Choose the products passing safe electric certification if extended wiring board is needed.

In use

- The Bed Sterilizer should be used under the environmental temperature of $5\sim 40^{\circ}\text{C}$, relative humidity $\geq 60\%$. The temperature lower than 5°C may result in difficult starting and that over 40°C may cause overheated operation of the equipment and lower its life.
- Tie the sealed bag well and make sure that the hose and nozzle are connected well to prevent ozone leakage problems.
- Don't open the sealed bag once the procedure is completed, keep it 30 sealed minutes.
- The inner structure has high voltage and high frequency, It is forbid to open it by users. Any questions, please contact manufacturer or agency.
- It should be away from heat source or naked fire and not be placed in humid, high-temperature.

Installing main machine and accessories

Shipping list



No.	Name of product	Unit	Quantity
1	Bed Sterilizer	Set	1
2	Standard Sealed Bag	Piece	3
3	Extension Hose	Piece	1
4	Power Cord	Set	1
5	Manual	Copy	1

Bed Sterilizer



Standard Sealed Bag



Extension
Hose



Power cord



Nozzle

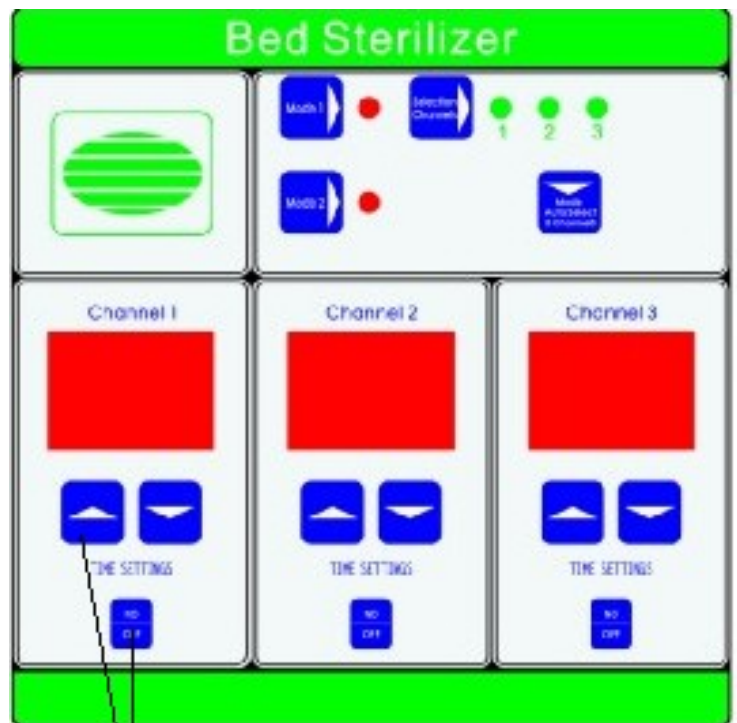


Aluminium
Accessories

External structural diagram



- 1. Handle
- 2. Panel
- 3. Cabinet Cover
- 4. Ear Screw
- 5. Foot wheel
- 6. Safety foot
- 7. Aluminium accessories
- 8. Main Switch
- 9. Hose
- 10. Thin film panel



10

OPERATION DIRECTION

- Put the mattresses, bed clothes, bed sheets, pillows, etc. into the sealed plastic sterilization bags and then connect the gas transport pipes.
- Turn on the power button ON. Then choose the sterilizing time. Last, press the thin film switch ON, and then the equipment would begin to work. Count down the time, and when the clock reaches 00, the disinfecting operation has finished.
- After finishing the sterilizing operation, the equipment would ring. After that, take off the gas transport pipes. The whole sterilization is finished.

Manual Operation

- After main switch on, the Default operation is manual, and the light of channel 1 is on, which shows “18” on the display.
- Press “Selection channels ” to choose the required channels, and the relevant lights will be on.
 1. Light 1 is on, indicating channel 1 is switched on.
 2. Light 2 is on, indicating channel 1 and channel 2 are switched on.
 3. Light 3 is on, indicating channel 1, channel 2, and channel 3 are switched on.
- After choosing the required channels, press the relevant thin film switch “ON”. It will enter into the whole sterilization procedure. The progressing time of each stage is Default. The Default as following:
 1. 1 channel is switched on.

Vaccum:	5 min
Ozone generating:	18 min
Ozone-maintain:	20 min
Ozone decomposition:	6 min
 2. 2 channels are switched on.

Vaccum:	8 min
Ozone generating:	25 min
Ozone-maintain:	20 min
Ozone decomposition:	9 min
 3. 3 channels are switched on.

Vaccum:	10 min
Ozone generating:	30 min
Ozone-maintain:	20 min
Ozone decomposition:	12 min

NOTES:

- If you are not satisfied with the Default Ozone generating time, you could adjust time (1-99 min) by press the relevant “ $\Delta \nabla$ ”, before switch “ON” on thin film.
- After switch “ON”, it shows TIME and SIGN of each stage by turns. The procedure and sign of each stage is as following:
Vaccum (CC) → Ozone generating (O3) → Ozone-maintain (OF) → Ozone decomposition (O2) → OVER (OP).
- The procedure could be stopped when vaccum by switch “OFF”, otherwise, in other stages, any press on thin film will be no function.
- It shows “OP” when whole procedure is completed and buzz 3 times at the same time. After, Turn off the main switch.

Attention:

- The device complete sterilization or stopped by man force, if need continue sterilization, you have to turn off the main switch, and switch on again, otherwise, it will be no function.
- If device enter into ozone generating stage, all the key on thin film will be no function. If want to stop the procedure by force, you have to turn off the main switch.

Auto Operation

Modo 1 is suitable for hospital uses, while Modo 2 is suitable for hotel uses.

- After main switch on, the Default operation is manual, and the light of channel 1 is on, which shows “18” on the display.
- Press “Mode Auto Select 3 Channels” to switch into auto procedure, then you could switch on Modo 1 or Modo 2, which the relevant light will be on and all the channels are switch on. The device will start to enter into procedure. The Default time is as following:

1. Modo 1

Vaccum:	10 min
Ozone generating:	30 min
Ozone-maintain:	10 min
Ozone decomposition:	20 min
The whole sterilization time is 70 min.	

2. Modo 2

Vaccum:	10 min
Ozone generating:	25 min
Ozone-maintain:	10 min
Ozone decomposition:	15 min
The whole sterilization time is 60 min.	

NOTES:

- After start, it shows TIME and SIGN of each stage by turns. The procedure and sign of each stage is as following:
Vaccum (CC) → Ozone generating (O3) → Ozone-maintain (OF) → Ozone decomposition (O2) → OVER (OP).
- During the auto mode procedure, any press on thin film will be no function.
- It shows “ OP” when whole procedure is completed and buzz 3 times at the same time. After, Turn off the main switch.

Maintenance

- Clean the cabinet after used a period of time.
- Don't put wastes or water or oil containers on the Bed Sterilizer.
- Clean the cooling fan at the bottom of device.
- Forbid crash the device.
- Check potential gas leakage on hose, sealed bag at any time. If any, please change it at your earliest time.

How to handle problems during use of Bed Sterilizer?

Malfunction	Reason	Suggestions
No electricity after main switch on	No power supply enter into device	1. Check whether the power plug has inserted into safe and qualified socket solidly. 2. Check if the socket has electricity. 3. Check the fuse.
1. Could not be startup the procedure after power on. 2. Alarm rings continuously 3. Abnormal display	Chipset malfunction	1. Turn off the main switch, and restart it after 1 minutes. Contact with manufacture if still could not be workable. 2. It is better not to repair it if no professional knowledge.
Strong ozone smell when normal sterilization.	Ozone leakage	1. Check the hose, nozzle, sealed bag. If there is any leakage problems, please change it. 2. If inner parts has leakage problems, contact with manufacturer or agency.
No ozone generating when operation.	Ozone cell malfunction.	Contact with manufacturer or agency.

INTRODUCTIONS OF THE PRODUCTS

THEME BASIS

Keeping the hospital environment infection free is a prime concern of any conscientious hospital management. Preventing contamination and spread of infection is an assigned responsibility of the doctors and nurses, which can never be compromised. The most common cause of high internal rate of infection in a hospital is the poor sanitization of the beddings (sheets, pillows, mattresses etc) and the clothing used by the patients.

Till now, the most commonly used methods of sanitizing bed sheets, mattresses, pillows, etc. have been ultra-violet radiation and utilization of highly compressed steam. These methods can, at best, disinfect the surfaces but have not been so effective in eradicating the deep rooted pathogens. Guangzhou Kangzhen Medical Equipment Co. Ltd., following many years of extensive research,

has developed KZ-X-DLI model of fully computer controlled Bed Sterilizer. This Bed Sterilizer can be an excellent facility for cross-infection control and sanitization. It can root-out infection most economically and effectively prevent the spread of diseases in a hospital environment.

The Bed sterilizer is the latest equipment of its kind and has been listed in the Disinfection Technical Standards published by the Department of Health in 2002. This Ozone Bed Sterilizer is now the only assigned method of sterilization.

PRODUCT FEATURES

1. Safe, reliable, efficient and effective in sterilization.
2. Kill bacterium and vermin eggs etc. just in 2-6 minutes normally.
3. Excellent effect of deodorization, gout and stain elimination.
4. Can dispel inorganic and organic pollutants, as well as toxicant.
5. Small size, easy to operate, convenient to move, and it can be put beside the sickbed and sterilize the beddings and the air of the room directly.
6. With vacuum sterilizing and ozone decomposing functions, the equipment can sterilize more effectively, which has been granted by the national patent.
7. It has adopted the most advanced technology of BNP titanium-ceramic structured ozone generator, which can generate large amount of ozone, and the lowest output of ozone can reach 8g/h, and its working life is as 3 times as the other average ozone generators.
8. The interior of the Sterilizer has a huge powerful stainless steel electromagnetic valve which mean reduced equipment downtime.
9. Fully sealed model which prevent any ozone leakage from the equipment can ensure the safety of both patient and hospital staff.
10. The additional ozone degradation function, which has been granted structure patent can decompose the ozone remained, which can prevent the pollution of environment.
11. It is unique in China that can sterilize 3 beds at the same time, which has increase the efficiency of bedding sterilization, and solve out the problem of bed shortage in hospital obviously.
12. It can apply to the clothing sterilization of staff in operating rooms other than bedding sterilization.
13. It is unique in China that has total digital command and automatic function. The whole operation process is just to press one key, and then it would enter four disinfection steps: vacuum, ozone generating, ozone-maintain, ozone decomposition. It is easy to use and no need to watch for.

Technology Criteria

- Minimum ozone working concentration: 1200 mg/ m³
- Minimum ozone generated: 8 g/h
- Noise: <40db
- Operation voltage: 220V 50Hz
- Rating power: 200W
- Output pressure: 6kpa