

Series KCW

Ultrasonic Nebulizer

Operation Instructions

KCW – 5T

KCW – 5T_D

KCW – 5T_{SD}

KCW – 5T_{YD}

KCW – 6T

KCW – 6T_D

KCW – 6T_C

KCW – 6T_{YD}

Operation Instructions

Series KCW Ultrasonic Nebulizer ,Our company has accumulated experiences of dozens of years in manufacturing ultrasonic nebulizers. The ultrasonic nebulizer with an international advanced level developed through meticulous selection of raw materials and components with high reliabilities has a unique style of the products of its kind and has a streamline shape. It is easy to dismantle, assemble and make maintenance. The air, vapor and electricity are isolated thoroughly in the structure. It has a powerful spray, a design of an extra-long service life and a splendid and exquisite appearance. It is convenient for operation with safety and reliability and handy as well.

Operation Method:

1. Checking power supply: To select operating power supply which is applicable to this nebulizer and prepare a reliable socket.
2. Adding water to water tank: Following the instructions given on product, take out nebulizing can and nebulizer cap. Press the upper cap (with indication) to remove the upper cap from the main unit (not applicable to Series 6T). Add fresh water into the water tank to the level line (allow the float bowl to fully float up to the top end). Replace the upper cap.
3. Timing function: Set the timing switch to N.O. position (it is not applicable to Model KCW - 5T, 6T, 6TC). It is possible to observe the operation condition of transducer by directly regulating the vapor

amount. It is also possible to set to the timing position for Model KCW - 5TD, 6TD (mechanical timing: 0 - 60 min variable) to make a direct setting according to scales. For 5TSD(45min) 5T, 6TYD(99min), press setting key to make a setting (every press decreases the time by 1 and 5 min. and the time setting is 45 minutes in total) and it needs an interval of 3s between presses. LED(LCD) indicates the position i.e. set time. Turn on the vapor setting switch and indicators of power and water level lit up. Regulate vapor amount and the transducer generates vapor. It operates normally, then turn it to the minimum or turn it off for later use.

*** In case LED does not work normally when the power is turned on or setting key is pressed, it means there is an interference in power. It is only necessary to press the setting key continuously until OFF position is reached and the interference can be eliminated. It will become normal when you turn on it again.**

4. Solution charging of nebulizing can: Make sure that nebulizing can presses against the isolation diaphragm of water and solution without water leakage. Charge the solution into the nebulizing can according to the instructions given by doctor. Then align the nebulizing can with the groove on the upper cap to attach it to the main unit and replace the nebulizer cap.
5. Connection attachment: Connect the vapor delivery tube to the nebulizing can. Mouthpiece or mask is used according to the application locations. Set the vapor amount switch and regulate the air flow. When they are confirmed, start the normal operation.
6. Adjusting operation conditions: For the adjustment required

during operation, repeat the operation as referred in above Step 3 and Step 4.

7. Changing cooling water: When it is used continuously, it is necessary to change cooling water in water tank frequently, in order to maintain clean and effective cooling. It is recommended to change cooling water after each cycle of operation, so as to ensure effective cooling, efficient water deposit timely, and multiplex the service life of transducers (wafer). When changing cooling water, it is possible to pour out water directly from nebulizing can after the nebulizing can and nebulizer cap are removed, and then add fresh water. It is also possible to drain water via the drain valve. Pull the trim of drain valve to open the valve for draining water and push the trim into valve to shut off the drain valve. When the operation is over, always remove the nebulizing can and nebulizer cap to pour off water, then cotton ball is used to wipe out residue water and water deposit from the surface of transducer (wafer). Care shall be taken to prevent hard matter to touch or impact the surface of transducer (wafer).

8. Sterilizing and cleaning nebulizing can: When sterilizing and cleaning nebulizing can, the nebulizing can is unscrewed from the nebulizing can base. The nebulizing can body, can base, diaphragm and seal ring are washed and sterilized separately. Install seal ring against tightly the nebulizing can base and then place the diaphragm. Screw the nebulizing can to the nebulizing can base tightly. Remove the hood of fan of air delivery system. Pull the vane from the main unit and washing it completely and then replace it.

- Soaking sterilization is used, e.g. 75% spirit used for soaking. High-temperature sterilization should not be used.

Method and precautions for inhalation treatment

1. When receiving an inhalation treatment, you should sit upright and relax or stand still, don't walk around as otherwise you will constrict your respiratory passages and impair the effect of inhalation treatment. If you have to be treated in bed, support yourself with pillows so that you can sit as upright as possible. Even if you have to be treated outdoors or in a special environment, keep your respiratory passages as through as possible.

2. Generally, one treatment should not last longer than 15 minutes. Consult your doctor concerning the appropriate inhalation time. The doctor's advice on children's treatment must be observed strictly.

3. Always be calm and relaxed when you inhale. Breathe in slowly and deeply so that the medication can reach the fine, deep bronchial tubes. Hold your breath for a short time, then breathe out slowly in order to allow the medication to be absorbed for a better effect of treatment.

4. After the nebulization treatment is finished, inhale sufficient fresh air.

5. After each treatment, the residual medication should be emptied.

- Safety precautions

1. As soon as you have unpacked the nebulizer, check it for any visible damage or defects. In particular check for cracks in the plastic housing. If this is the case or if you are in doubt, contact an authorized dealer directly.
2. Only use this nebulizer for its intended purpose, i.e. use it for inhalation therapy. Any other form of use constitutes an improper use and is therefore dangerous. The manufacturer cannot be held liable for any risk or damage caused by improper or incorrect use.
3. The unit is not protected against water penetration, therefore, do not submerge the nebulizer in water for cleaning. If it falls into water accidentally, it should be handed over to the specialist for handling it.
4. Do not operate the unit in the presence of anesthetic mixtures which are inflammable when they come into contact with air, oxygen or nitrous oxide.
5. If there is any damages found in any accessory of the nebulizer, or the nebulizer can not be put into normal service, stop using it. Any repair or replacement of parts made to the nebulizer should be undertaken by the authorized dealers, and only the original parts can be used for.
6. The AC power supply device provided with the nebulizer can only be used for this unit. It is not allowed to use the AC power supply device for the other purposes or use the AC power supply device with the other specifications for this unit. The manufacturer shall not be reliable for any consequences of incorrect or improper use. If the provided AC power supply device is in failure, contact

authorized dealer for supplying the original AC power supply device of the same type and size.

• Troubleshooting

If the nebulizer does not nebulize, or only very weakly, check the following conditions:

1. Use the power supply that complies with the rated voltage and frequency of the power supply for the unit, and ensure good connections.
2. Check the air hose for clogging.
3. Check whether the wafer at the bottom of water tank is rusted and aged. If it is discolored remarkably, replace it before use the nebulizer.
4. In case the nebulizer fails to operate although everything is confirmed as being normal, it will be sent to the authorized dealer for repair.

• Main specifications

Electrical classification: This product is classified as the common medical equipment of Class II, Type B.

Supply voltage: 110V/60Hz; 220V/50Hz; 220V/60Hz; 230V/50Hz

Power consumption: $\leq 70\text{VA}$

Ultrasound frequency: 1.7MHz

Diameter of nebulized particle: 1 – 5 μm

Word noise: $\leq 45\text{db (A)}$

Secifications	Medical cup capacity	Nebulization rate	Time control
KCW – 5T	50ml	4ml/min	----
KCW – 5TD	50ml	4ml/min	0-60min
KCW – 5TSD	50ml	4ml/min	0-45min (LED)
KCW – 5TYD	50ml	4ml/min	0-99min (LCD)
KCW – 6T	80ml	5ml/min	----
KCW – 6TD	80ml	5ml/min	0-60min
KCW – 6TC	80ml	5ml/min	----
KCW – 6TYD	80ml	5ml/min	0-90min (LCD)

Operation environment: :

Ambient temperature: 10 ~ 40 °C;

Relative humidity: equals or less than 70%RH;

Atmosphere: 860 ~ 1060 hpa;

Store environment:

Ambient temperature:-10 ~ 40 °C;

Relative humidity: equals or less than 95%RH;

Atmosphere: 500 ~ 1060 hpa