

# RESCOMF®

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## XD100 Ventilation Disinfecter

### User Manual

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

EC REP

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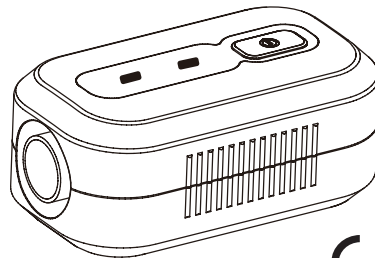


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CE 0598

- ⚠ This user manual provides the operation, regular maintenance and safety information.
- ⚠ Read this user manual carefully before use and save it for future reference.
- ⚠ The manual contains the warranty card. Please keep it for future service use.

## General Description

Thank You for purchasing RESCOMF Ventilation Disinfectant XD100, which has been proven by official tests that it can kill 99.9% of germs and bacteria particularly Escherichia coli (8099), Staphylococcus aureus (ATCC 6538) and Candida albicans (ATCC 10231). Please read this user manual carefully before using your CPAP accessories (e.g. mask, tubing ...) completely through a stream of controlled Ozone for approximately 30 minutes. The entire care free and dry sanitization process requires no water soap or chemical cleaning.

## Safety Precautions

- Be careful to strangulation due to cables and hoses, particularly due to excessive length.
- Do not use the equipment if you notice a change in operating system performance, the system is damaged, or any of its components are worn or frayed.
- The equipment is not recommended in the presence of one of the following conditions:
  - a flammable anesthetic mixture with air or with oxygen or nitrous oxide.
  - operating during transit;
  - magnetic resonance imaging(MRI)equipment;
  - used adjacent to or stacked with other equipment. If necessary, verify normal operation in the configuration.
- When not in use, store the device with the equipment in a dry room and protect it against extreme moisture, heat, lint, dust and direct sunlight.

## General Description

### Environmental Notice

Users are advised to clean and disinfect according to the following methods every three months.

### Cleaning

Keep the outer surface of the instrument clean, without dirt .Use a dry clean,soft cloth to clean the outer surface of the shell. If necessary, clean the case with soap or water soaked in soft cloth and immediately dry with a clean dry cloth.

### Disinfection

After cleaning the equipment according to the above method,use medical alcohol to wipe disinfection, natural air drying(or dry with clean and dry soft cloth).

### Notice

- Please shut down before cleaning.
- Do not use strong solvents such as acetone.
- Wear and tear materials (such as wire or silver polish) are prohibited.
- The water for cleaning the instrument should be below 60 degrees.
- Do not let any liquid enter the shell, nor can any part of the instrument be dipped into the liquid.
- Do not pour the liquid into the instrument during cleaning.
- Do not let any cleaning fluid remain on the surface of the instrument.

# General Description

## Notice

- Do not use low temperature steam or high temperature disinfection treatment.
- Do not use electronic beam and other methods to sterilize.

## Maintenance

Before use, the user must check whether the device has any apparent impact on the patient's safety (or instrument performance). The recommended inspection cycle is once a month (or less). If there is any obvious damage, replace the damaged part before use.

This instrument is precision electronic equipment, must be handled carefully. The following measures are used to maintain the product and prolong the service life of the instrument.

(1) Please timely recharge the battery when the battery power display is insufficient.

(2) The battery should be charged as soon as possible after full discharge. The device should be fully charged every 6 months when not in use. The operation of the battery can prolong the life of the battery.

(3) This instrument must be repaired by authorized qualified engineers from manufacturer or distributor.

(4) The equipment should be kept in the box after cleaning and disinfection for a long time, and placed in a non-corrosive gas and ventilated room.

# Part List

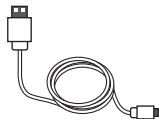
- RESCOMF Ventilation Disinfectant XD100 Device.
- Euro/OS Charger
- USB cable for charging
- User Manual (with warranty card inside)



XD100



Charger  
(Optional)

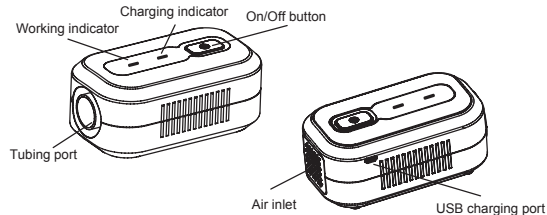


USB cable

## Important

To ensure the electrical charging specifications are followed please use the approved Charger and USB cable.

## Product Structure



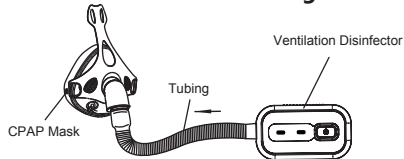
# Technical Specifications

## Specifications

XD100 has optimized its sanitization cycle to 35 minutes including 30 minutes with ozone and 5 minutes with fresh air. Repeating the cycle is not necessary. The manufacturer reserves the right to change the above specifications without notice.

Size	<b>117x68x50(mm)</b>
Weight	<b>205g</b>
Rechargeable Lithium-ion battery 2000mAh	
Power	<b>4W</b>
Transportation and storage conditions:	Environmental temperature:-20°C~55°C Relative humidity:≤93% 80~106kPa
Operating conditions	Environmental temperature:-5°C~45°C Relative humidity:≤85% 80~106kPa
Identification	<b>⏻ on/off</b>
IP (Ingress protection)	<b>IP21</b>
Product life expectancy	<b>5 years</b>
Software release	<b>V1.2</b>

## XD100 disinfection connection diagram



# Guidance declaration

## Electromagnetic emission

XD100 Ventilation Disinfecter is intended for use in the electromagnetic environment specified below. The user of XD100 Ventilation Disinfecter should assure that it is used in such an environment.

Emission test	Compliance	Electromagnetic environment
RF emissions CISPR 11	Group 1	XD100 Ventilation Disinfecter use RF energy only for its internal function. Its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emission CISPR 11	Class B	XD100 Ventilation Disinfecter is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Complies	

## Electromagnetic immunity


XD100 Ventilation Disinfecter is intended for use in the electromagnetic environment specified below. The user of XD100 Ventilation Disinfecter assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level
Electrostatic discharge (ESD) IEC 61000-4-2	±8 kV contact ±15kV air	±8kV contact ±15 kV air
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines	±2kV for power supply lines
Surge IEC 61000-4-5	± 1 kV line(s) to line(s)	±1 kV differential mode
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5% UT (>95% dip in UT) for 0.5 cycle	<5% UT (>95% dip in UT) for 0.5 cycle
	40% UT (60% dip in UT) for 5 cycles	40% UT (60% dip in UT) for 5 cycles
	70% UT (30% dip in UT) for 25 cycles	70% UT (30% dip in UT) for 25 cycles
	<5% UT (>95% dip in UT) for 5 sec	<5% UT (>95% dip in UT) for 5 sec
Power frequency (50Hz/60Hz) magnetic field IEC 61000-4-8	30A/m	30A/m

Immunity test	Electromagnetic environment
Electrostatic discharge (ESD) IEC 61000-4-2	Floors should be wood, concrete or ceramic tile. If floor are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst IEC 61000-4-4	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	Mains power quality should be that of a typical commercial or hospital environment. If the user of XD100 Ventilation Disinfectors requires continued operation during power mains interruptions, it is recommended that XD100 Ventilation Disinfectors be powered from an uninterruptible power supply or a battery.
Power frequency (50Hz/60Hz) magnetic field IEC 61000-4-8	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE UT is the a.c. mains voltage prior to application of the test level.	

## Guidance and manufacturer's declaration

XD100 Ventilation Disinfectant is intended for use in the electromagnetic environment specified below. The user of XD100 Ventilation Disinfectant should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz Outside ISM bands	3 Vrms	Portable and mobile RF communications equipment should be used no closer to any part of XD100 Ventilation Disinfectant, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance $d = 1.2\sqrt{P}$ 26 MHz to 800 MHz $d = 2.3\sqrt{P}$ 800 MHz to 2.5 GHz Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, a) should be less than the compliance level in each frequency range. b) Interference may occur in the vicinity of equipment marked with the following symbol: 
Radiated RF IEC 61000-4-3	3 V/m 26 MHz to 2.5 GHz	3 V/m	

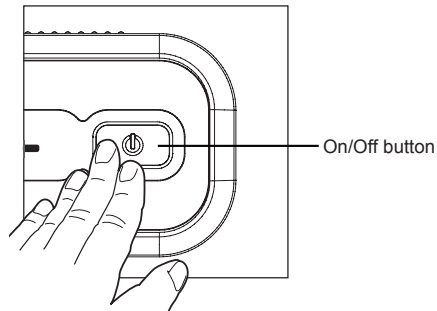
NOTE 1	At 26 MHz and 800 MHz, the higher frequency range applies.
NOTE 2	These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.
a )	The ISM (industrial, scientific and medical) bands between 150 kHz and 80 MHz are 6,765 MHz to 6,795 MHz; 13,553 MHz to 13,567 MHz; 26,957 MHz to 27,283 MHz; and 40,66 MHz to 40,70 MHz.
b )	The compliance levels in the ISM frequency bands between 150 kHz and 80 MHz and in the frequency range 80 MHz to 2,5 GHz are intended to decrease the likelihood that mobile/portable communications equipment could cause interference if it is inadvertently brought into patient areas. For this reason, an additional factor of 10/3 has been incorporated into the formulae used in calculating the recommended separation distance for transmitters in these frequency ranges.
c )	Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which XD100 Ventilation Disinfectant is used exceeds the applicable RF compliance level above, XD100 Ventilation Disinfectant should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating XD100 Ventilation Disinfectant .
d )	Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 10 V/m.

## Operation Instruction

Before using your RESCOMF Ventilation Disinfector XD100 please ensure that;

- Visible residue in the CPAP/BiPAP mask/nasal pillow is wiped clean using a cleansing wipe or damp cloth.
- Accessories to be sanitized are disconnected/removed from the CPAP/BiPAP machine.

For better disinfection results it is recommended that you put your CPAP/BiPAP accessories and RESCOMF Ventilation Disinfector inside an airtight container, the dimension of this container size is smaller or equal to 350x220x140mm(13.78" x 8.66" x 5.57" ).



## Operation Instruction

### Operating your RESCOMF Ventilation Disinfector is simple;

To turn on, press and hold the On/Off button for 3 seconds. The buzzer will beep once, the light will turn green and ozone will start streaming.

Ozone will stream for 30 minutes. then the device will circulate fresh air for 5 minutes. The last 5 minutes of fresh air will remove most of the residual ozone. The smell of Ozone may be unpleasant to some users.

After the 35 minute cycle has been completed, the machine will automatically power off. You will hear 5 beeps when this happens. The green light will also turn off when the cycle has finished.

Please do not use your CPAP/Bi-Level accessories for at least an hour after the cycle has finished.

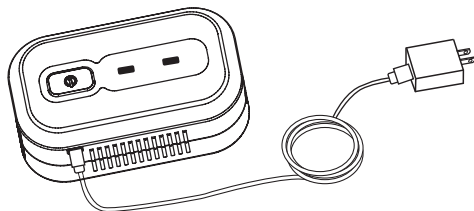
If for any reason you would like to manually turn off the power during the sanitization process, just press and hold the On/Off button for 3 seconds. The machine will sound off with a long beep indicating the machine is powering off and the green light will then turn off as well.

## Charging the battery

The Ventilation Disinfector includes built in rechargeable battery. To charge the battery, connect the product as shown in the illustration. Connect the USB cable to a charging port and power. A red light will come on, to let you know it is charging correctly. The light will turn green when the battery is fully charged.

### Notice:

The USB interface on the device can be charged to the user's device, and there is no other function, please do not connect with other devices.














For the best Lithium battery performance and battery life, power off while charging, the product can run at least 4 full working cycles for 35 minutes per working cycle.

The time required to recharge the battery will vary depending on the ambient temperature and the battery's remaining capacity. If the battery dies quickly even after being fully charged, the battery has reached the end of its service life and the entire unit will need to be replaced.

Low Power indication: When the battery is running low, the main light will blink and you will hear a long buzzer sound. The disinfector will continue to operate till the battery is completely discharged. The unit may not have completed the entire 35 minute cycle so we recommend charging the disinfector as soon as the light starts to blink.



## Symbol List

Symbol	Meaning	Symbol	Meaning
	Temperature limit logo: should keep the temperature limit of transport packaging, the picture on the right says transport packaging temperature limit for -20 to 55 °C.	IP21	Level of protection: 2 represents dust proof level and 1 represents waterproofing grade.
	Stacking limit: the maximum heap number of the same packaging, the right image "6" represents the highest pile of 6 layers.		Mandatory reading mark
	Handle with care		After the phone
	Moistureproof prevent wet	SN	Product serial number
	Upward: indicates that the correct position of the package is vertical.		WEEE
	The manufacturing date	EC REP	Eu representative information
	The manufacturing information		Intelligent protection double insulation

## Important Notes

- After the sanitization process, wait at least an hour before using the CPAP/BiPAP accessories to ensure the ozone odor has dissipated.
- When ozone leaks into ambient and inhaled by people, it will cause irritating such as irritation in the throat and the bronchitis or cause toxicity to man.
- Ozone concentration is regulated by the disinfectant, enclosing container and sanitization time. The product design is based on generating the best sanitization performance whilst maintaining a safe environment. The user is not recommended to alter any settings.
- The 2000mAh rechargeable batteries are the equivalent capacity of a mobile phone battery and is within the acceptable category for travel on most airlines.
- The warranty will become VOID if repairs are undertaken by unauthorized persons and if original RESCOMF parts are not used. To obtain service within the warranty period, please contact your distributor.
- It is recommended to sanitize the tubing and mask weekly.
- Keep away from pets, pests and children .

## Electromagnetic compatibility

**Warning:** Although this device has passed the EMC test and qualified, to avoid the potential risks, please use the equipment according to this manual.

### Limited Warranty

- RESCOMF offers a 2 year warranty on the product commencing on the date of purchase. Related accessories carry a 90 days warranty.
- The warranty does not cover damage due to improper use and normal wear.
- The limited warranty covers defects in the product due to faults in material or workmanship. Warranty service or replacement is at the discretion of RESCOMF.

### Warning

- The product should not be close to or stacked with other devices, and if it must be close or stacked, it should be observed that it works normally under the configuration used.
- The accessories of the products used shall comply with the relevant regulations and standards, otherwise the disturbance of the products may be affected.

### Notice

- XD100 Ventilation Disinfectant is in accordance with IEC60601-1-2 standard electromagnetic compatibility requirements.
- The user should install and use the emc information provided by the random file.
- Portable and mobile RF communication devices may affect the performance of XD100 disinfectant, and avoid strong electromagnetic interference when used, such as proximity to mobile phones and microwave ovens.
- The guide and manufacturer's statement are shown in annex A.

## Trouble shooting

Safety feature situation	Explanation	Solution
The product does not work after turning on	The product is out of power	Connect the product to Charger. Plug the Charger to power outlet, waiting for fully charged of the product
Charging light does not illuminate	Insufficient charging or charger connection is no good.	Check if there is electricity in the power outlet. Make sure the charger has been plug into the power outlet. Check the charger and USB connection. Change new charger and USB cable.
No sound and machine stops	Battery is running out.	Connect the device to power and charge.
The device is not working after charging	The charger connection is not correct. The USB cable is broken.	Check if the charger connection is correct. Replace with a new USB cable. If this does not solve the problem, send the product to your place of purchase for repair or replacement.
After 35 minutes, machine does not stop automatically	System failure	Power the machine down by pressing and holding the On/Off button for 3 seconds. Try the cycle again. If this does not solve the problem, send the product to your place of purchase for repair or replacement.
No ozone generation	Insufficient charging or charger connection is no good.	If you have pressed the On/Off button and there is no light and fan is not working, connect the product to power charger and plug the charger to power outlet. Turn on the product. If working indicator turns on with green light but fan still does not work, send the product back to your place of purchase for repairing or replacement.



## WARRANTY card

**WARRANTY card**

Customer name: \_\_\_\_\_ Contact phone number: \_\_\_\_\_

Contact address : \_\_\_\_\_

Product Series No: \_\_\_\_\_ Purchasing date: \_\_\_\_\_

Distributor Name/ Stamp: \_\_\_\_\_ Repair date: \_\_\_\_\_

**Repair records**

Main Unit : \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Accessories : \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Keep the warranty card and the Sales receipt. The card is valid with distributor stamp or sales receipt. Thank you for cooperation.