I.PRODUCT SPECIFICATIONS

Product Name: Compressor Nebulizer
Applicable Model: OLV-S01,OLV-S02,OLV-S03,OLV-S05
Lifetime: 1000 hours(cumulative use) or 2 years

Power	AC220V ± 22V, 50HZ ± 1HZ
	AC110V ± 22V, 60HZ ± 1HZ
Power Consumption	OLV-S01,OLV-S03: 160VA
	OLV-S02,OLV-S05: 32VA
Average Nebulization Rate	＞0.2ml/min
Noise level	＜60dB
Particle size	5μm-20μm
Fuse	OLV-S01,OLV-S03: 5X20mm F2AL 250V
	OLV-S02,OLV-S05: F2AL 250V (power adapter)
Operating temperature range	5°C~40°C(41°F~104°F)
Operating humidity range	5%~80%
Atmospheric pressure	86Kpa~106Kpa

Note:
When stored at temperature below 5 ℃(41℉), should be placed in the normal operating temperature more than 4 hours before using the device. Do not use the device where the device may be exposed to flammable gas, explosive or mixed narcotic gas environment.

SUPPLEMENTARY INSTRUCTIONS:

a. Classified by anti-shock: Class II
b. Classified by anti-shock: Type B application
c. Classified by the protection level of the input fluid: General equipment
d. Classified by the safety level of operating under conditions of flammable anesthetic gas mixed with air or flammable narcotic gas mixed with oxygen or nitrous oxide: Non-AP/APG type
e. Operation mode: Continuous operation
f. Without signal transfer part
g. Working system: Constant working system
h. No application part for protection of defibrillation
i. Non-permanent installation

II.PRODUCT DESCRIPTION

Product components:
- Compressor
- Nebulizer kit
- Air tube
- Mouth piece(optional)
- Adult/Child Mask(optional)

III.INTEND USE

The Compressor Nebulizer System is intended to provide air to the pneumatic nebulizer in order to aerosolize medications for inhalation by the patient for respiratory disorders. The system is designed for use with pediatric (defined by the prescribed medication) and adult patients at home, in the hospital, and sub-acute settings.

IMPORTANT INFORMATION AND SAFEGUARDS:

To ensure the correct use of the product, basic safety measures should always be followed including the warnings and cautions listed in this instruction manual.

CAUTIONS: Risk of Electrical Shock and some other possible damage
1.Unplug the AC adapter from the electrical outlet after using the device.
2.Do not use or store the device in humid locations, such as a bathroom. Prohibit use the device while taking a shower.
3.Do not store the device nearby the bathtub.
4.Do not immerse the device in water or other liquid.
5.If the device drops into the water or liquid spills on it, immediately unplug the AC adapter and wipe off the liquid with gauze or other soft absorbent material.
6.Unplug the AC adapter when leaving home.
7.Provide close supervision when this device is used by, on, or near infants, children or compromised individuals.
8.Use only with the authorized parts and accessories. Do not use the parts and accessories which are not recommended by manufacturer.
9.Do not operate the device with damaged power cord or plug.

10.Do not operate the device if the product is dropped or damaged.
11.Keep the AC adapter away from the overheated shell.
12.Do not use the device while sleeping or if drowsy.
13.Do not inlet any object into the tube and the main unit.
14.Do not use a cellular phone or any other electronic devices near the device. It may result in an operational failure. Please use them separately.

ATTENTIONS:

1.To ensure the correct use of the product, please follow the instruction manual.
2.Make sure the air inlet filter is dry before use. If the filter is damp, please change it first.
3.Clean and disinfect the nebulizer kit regarding the indicates.
4.To avoid the risk of electronic shock and the damage on the compressor, the device only can be worked at the indicated power supply.
5.In high humidity environment, may cause water drops inside the tube. If this kind of situation occurs, can dry it through connecting the tube only and operating the compressor.
6.It is necessary cut off the power supply when adding the medication, should not be over added.
7.Please contact the manufacturer or local supplier if need to change the power cord or plug.
8.It is normal that may cause heat the shell and the output connector when using the device.
9.Caring the device in the best condition regarding the instruction. If need to change, install the new component directly at the next time when you use it.

WARNING:

For type, dose, and regime of medication, follow the instructions of your physician pr licensed healthcare practitioner.

OPERATING THE DEVICE:

1.Wash your hand before using the device.
2.Twist the air tube plug slightly and push it firmly into the air tube connector on the compressor.
3.Put the disassembly plug on the medicine cup (baffle) into the cup, add the prescribed amount of medicine, hold stably the cup and assembly it to the protective cover.

4.Insert the mouthpiece and the “T” cup (if have) to the up side of the protective cover of the atomizing cup. If using the mask, attach the mask to the inhalation top.
5.Twist the air tube plug slightly and push it firmly into the air tube connector on the button of the nebulizer kit.
6.Press the “– “ button to generate compressor.
7.Place the mouthpiece into mouth and close the mouth, breath through the mouthpiece deeply and slowly to make sure the medication function efficiently. If necessary, press the “o” button to stop the device.
8.If using with mask, place the mask over the nose and mouth, pull the elastic strap over head. Inhale the medication and exhale normally through the mask.
9.After medication, press “o” button to turn off the device and unplug the AC adapter from the electric outlet.

CARING FOR THE DEVICE:

Following the instructions or professional indications to caring the device after each use.
Warning:
1.Wash the nebulizer parts after each use. Dry the parts immediately after washing.
2.Disinfect the nebulizer kit and mouthpiece, or optional masks or optional nosepiece after the last treatment. Prohibit share the same nebulizer kit with others to avoid the cross infection.
Cleaning after each use:
1.Put hot water and white vinegar in proportion to 3:1 into a clean container, then immerse the used components in it for 30 seconds. Or using the bacteria disinfectant provided by the manufacturer and clean it strictly according to the instructions of the manufacturer.
2.Get the components out of the liquid, wash them with hot water, dry them then put them in a sealed bag for storage.
3.Unplug the AC adapter from the electric outlet before cleaning the device.
4.Clean the casing of the main unit by using a soft cloth moistened with water or a mild detergent. Do not use abrasive cleaners. Dry the casing immediately using a soft clean cloth.

CHANGING THE AIR FILTER

1.If the air filter has changed color or has been used average for more than 60 days, replace it with a new one.

Compressor Nebulizer Instruction Manual

OLV-S01,OLV-S02,OLV-S03,OLV-S05

Home&Hospital | Small nebulized medicine particles | Quiet operation | No oil efficient piston pump

2.Pull the air filter cover to remove the dirty air filter.
3.Insert a new air filter.
4.Put the air filter cover back on the compressor.

CAUTION:

Before inserting the new air filter make sure the air filter is clean and free of dust. Do not operate the device without the air filter. Use only the air filter supplied by manufacturer. Dispose of the dirty air filter according to applicable local regulations. Unlawful disposal may cause environmental pollution.

STORING THE DEVICE:

Place the compressor, the nebulizer kit and the inhalation accessory(air tube, mouthpiece, optional components) in the storage bag. Store them in a safe, clean location at temperature range –20℃–55℃ and humidity less than 93%.

TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION	NOTES
The device is abnormally loud	The air filter cover is incorrectly attached or even do not attached.	Attach the air filter cover correctly.Make sure the air filter cover is not blocked.	
No power to unit when the power switch is on	The Ac adapter is not plugged into the electric outlet	Turn the power switch off. Plug the AC adapter into the electric outlet then turn the device on.	
No nebulization or low nebulization when the power is on	The nozzle is damaged	Change the nozzle.	To ensure the efficiency of the treatment , the nebulizer kit shall be changed when it has been used for about 30 times
	The nozzle is blocked	Clean the nebulizer kit to remove the blockage	
	The nebulizer kit is not correctly assembled	Re-assemble the nebulizer kit and make sure it assembled correctly then inhalation accessory.	
There is obvious liquid drop inside the tube	No medication in the medication cup,Too much or too little medication.	Add the correct amount of prescribed medication to the medication cup.	
	Medication over added or do not dry in after cleaning	Connect the air tube to the compressor, turn on the device, repeatedly using the figure to block and free the other aperture of the tube to output the liquid drop.	

GUIDANCE AND MANUFACTURER' S DECLARATION

Important information regarding Electro Magnetic Compatibility(EMC)

The Compressor Nebulizer is intended for use in the electromagnetic environment specified below. The customer or the user of the Compressor Nebulizer should assure that it is used in such environment.

Electromagnetic emissions		
Emissions test	Compliance	Electromagnetic environment – guidance
RF emissions GB4824	Group 1	The Compressor Nebulizer use RF energy only for its internal function, Therefore, its RF emissionsare very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions GB4824	Class B	The Compressor Nebulizer is suitable for use in allestablishments, including domestic establishments and those directly connected to the public low–voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions GB17625.1	Class A	
Voltage fluctuations/ flicker emissions GB17625.2	Complies	

GUIDANCE AND MANUFACTURER'S DECLARATION

Electromagnetic immunity			
Immunity test	IEC 60601 Test level	Compliance level	Electromagnetic environment – guidance
Electrostatic discharge GB/T 17626.2	± 6 kV contact ± 8 kV air	± 6 kV contact ± 8 kV air	Floor should be wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relativehumidity should be at least 30 %.
Electrical fast transient/burst GB/T 17626.4	± 2 kV for power supply lines ± 1 kV for input/output lines	± 2 kV for power supply lines * 1)	Mains power quality should be that of a typical commercial and/or hospital environment.
Surge GB/T 17626.5	± 1 kV line to line ± 2 kV line to earth	± 1 kV line to line ± 2 kV line to earth	Mains power quality should be that of a typical commercial and/or hospital environment.
Voltage dips, short interruptions and voltage variations onpower supply GB/T 17626.11	<5 % U T (>95 % dip in U T) for 0.5 cycle	<5 % U T (>95 % dip in U T) for 0.5 cycle	Mains power quality should be that of a typical commercial and/or hospital environment. If the user of the Compressor Nebulizer requirescontinued operation during power mains interruption, it is recommended that the Compressor Nebulizer be powered f rom an uninterruptible power supply or battery.
	40 % U T (60 % dip in U T) for 5 cycles	40 % U T (60 % dip in U T) for 5 cycles	
	70 % U T (30 % dip in UT) for 25 cycles	70 % U T (30 % dip in U T) for 25 cycles	
	<5 % U T (95 % dip in U T) for 5 sec.	<5 % U T (95 % dip in U T) for 5 sec.	
Power frequency (50/ 60 Hz) magnetic field IEC GB/T 17626.8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
Note: U T is the A.C. mains voltage prior to application of the test level.			
* 1) The test of input/output lines is not applicable since they are shorter than 3.0m.			

GUIDANCE AND MANUFACTURER'S DECLARATION

Electromagnetic immunity			
Immunity test	IEC 60601 Test level	Compliance level	Electromagnetic environment – guidance
Conducted RF GB/T17626.6	3 V rms 150 kHz ~ 80 MHz	3 V rms	Portable and mobile RF communications equipment should be used no closer to any part of the Compressor Nebulizer including cables,than the recommended separation distance calculated from the equation appropriate to the frequency of the transmitter.Recommend separation distance d = 1.2 √P 80 MHz to 800 MHz d = 2.3 √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 meters (m). Field strengths from fixed RF transmitters as determined by an electromagnetic site survey,* 2) should be less than the compliance level in each frequency range. * 3)Interference may occur in the vicinity of equipment marked with he following symbol:
Radiated RF GB/T17626.6	3 V/m 80 MHz to 2.5 GHz	3 V/m	
Note1: At 80 MHz and 800 MHz, the higher frequency range applies. Note2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.			
* 2) Field strengths from fixed transmitters, such as base stations for radio (cellular/ cordless) telephones and land mobile 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 the Compressor Nebulizer is used exceeds the applicable RF compliance level above, the Compressor Nebulizershould be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the Compressor Nebulizer. * 3) Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.			

GUIDANCE AND MANUFACTURER'S DECLARATION

Recommended separation distance between portable and mobile RF communications equipment			
The Compressor Nebulizer is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customers or the users of the Compressor Nebulizer can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Compressor Nebulizer as recommended below, according to the maximum output power of the communications equipment.			
Output Power of Transmitter in Watt	Separation distance according to frequency of transmitter in meter		
	150 kHz to 80 MHz d = 1.2 √P	80 kHz to 800 MHz d = 1.2 √P	800 MHz to 2.5GHz d = 2.3 √P
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.
Note: At 80MHz and 800MHz, the separation distance for the higher frequency range applies
Note: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

EMC tests have included the AC adapter as included with the product.

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