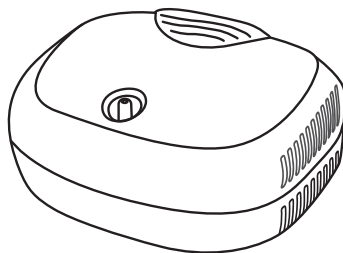


UNIVERSAL
PISTON COMPRESSOR nebulizer
AEROSOL MIST



USER MANUAL

Please read the instructions carefully before operating the product.

1. INTRODUCTION

The Medical Air Compressor Nebulizer System is a medical device designed to deliver medicine prescribed by a physician to the airways of the lungs. The Nebulizer Kit and the Air Compressor combined provides aerosol mist for inhalation by the patient for medical treatment only. **INTENDED FOR HOME AND HOSPITAL USE.**

2. WORK PRINCIPLE

This unit is compact, simple to operate and convenient to carry. It uses a non-oil lubricating, single-cylinder piston pump to create air pressure. The air flow created by the Air Compressor comes out of the jet outlet and then enters the Nebulizer Kit. The main air flow into and out of the air compressor unit is illustrated in *Figure 1*.

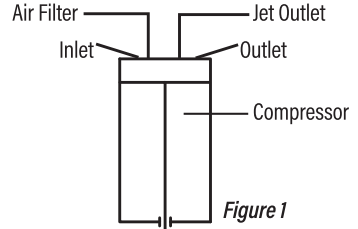


Figure 1

3. FEATURES

Before using this product, make sure you have the following items:

- 1 x Main Device (Compressor) • 1 x Nebulizer • 1 x Air Tube • 1 x Mask (Large & Small) • 1 x Mouthpiece • 5 x Filters • 1 x Nosepiece

Components The Standard Nebulizer components are diagrammed below in *Figures 2*.

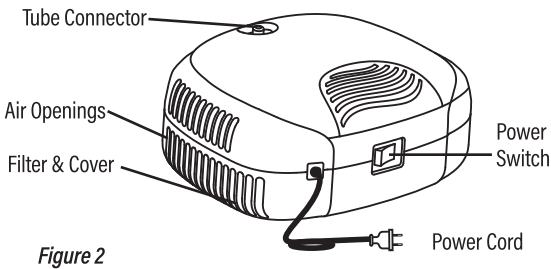


Figure 2



4. FILLING MEDICINE

To pour the medicine into the Nebulizer, do the following:

1. Gently twist the top part of the nebulizer counter-clockwise to disassemble the Nebulizer (see Figure 3).
2. Fill the Medicine Container with medicine as prescribed by your physician. Be sure that the cone is put inside the bottom section and the medicine does not exceed the liquid line of 8 ml.
3. Place the cap on the medicine container and gently twist the top part clockwise to re-assemble the Nebulizer. Be sure the two sections fit well.
4. Connect the mouthpiece or mask per your choice to the top section of nebulizer.

Note: The mouthpiece is to be used for oral inhalation only.

5. OPERATION

Note: Prior to initial operation, the nebulizer should be thoroughly cleaned referring to the Cleaning Procedures in this manual.

To operate the Nebulizer, do the following:

1. Place your device on a flat and stable surface. Be sure that you can easily reach the controls when you are seated.
2. Plug the power cord of Air Compressor in, but do not connect the Nebulizer. Make sure the power switch is at "OFF" status.

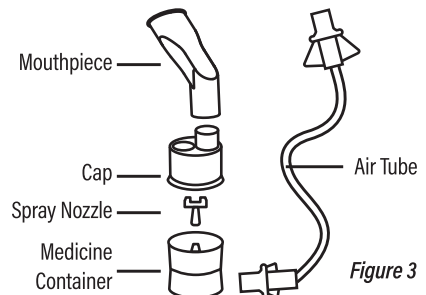


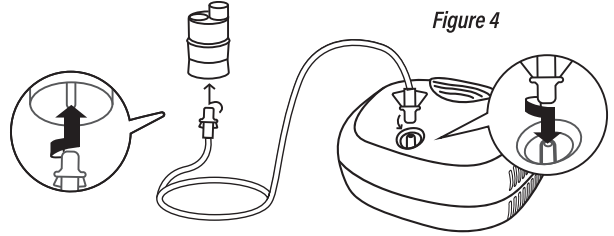
Figure 3

3. Make sure that the air filter is attached to the Air Compressor.
4. Turn on the power switch.
5. After the Air Compressor runs properly for 1-2 minutes, switch off and connect the jet outlet of the Air Compressor to the inlet of the Nebulizer by the air hose. (see Figure 4).

CAUTION:

- Make sure the device is correctly assembled and the air tube is correctly connected to the compressor and the nebulizer. Air may leak from the air tube during use if not securely connected.
- Do not use the device if the air tube is bent.

6. Begin treatment according to your physician's instructions.
7. Inhale and exhale naturally. Be sure to stop when the medicine is used up.
8. When you have finished, turn the Air Compressor device off before you disconnect the air hose.



IMPORTANT:

The compressor motor has a thermal protector which will shut off the device before the device is overheated. When the thermal protector shuts the device off, please:

- a. Switch off the device.
- b. Unplug the device from the electrical outlet.
- c. Wait 30 minutes for the motor to cool down before another treatment. Make sure the air openings are not obstructed.

6. IMPORTANT SAFEGUARDS

CAUTION: Failure to read and observe all precautions could result in personal injury or equipment damage.

CONTRAINDICATIONS: Patient allergic to PVC or PP should use the device with caution or under the guidance of the medical staff.

WARNING To avoid risk of burns, electrocution, fire or injury:

- Connect this product to an appropriate voltage outlet for your model.
- Do not use extension cords. Plug the power cord directly into the electrical outlet.
- Keep the device away from water. If liquid spills on these parts, immediately unplug the power cord and wipe off the liquid with gauze or other soft absorbent material.
- Do not use or store the device in humid locations, such as a bathroom. Use the device within the operating temperature and humidity.
- Do not reach for a device that has fallen into water – immediately unplug the device.
- Do not cover the compressor with a blanket, towel, or any other type of cover during use. This could result in the compressor overheating or malfunctioning.
- Never block the air openings of the main device or place it where the air openings may be obstructed.
- Never operate the device if it has any damaged parts (including power cord), if it has been dropped or submerged in water, or if it does not work properly.
- Do not use the device where the device may be exposed to flammable gas or vapors.
- Disconnect the device from the electrical outlet before cleaning, filling and after each use.
- When using this product near TVs, microwave ovens, cellular phones, Xrays, or other strong electric field, there may be electrical interference. It is recommended to be far away from these devices when using the product.

CAUTION for Operating:

- This device is intended for aerosol therapy only. Any other use is not recommended.
- This device is not suitable for use in anesthetics breathing systems.
- For type, dose, and regime of medication follow the instructions of your licensed physician and/or respiratory therapist.
- If you feel anything unusual during use, stop using the device immediately and consult your physician.
- After nebulization and removing the mask, be sure to wipe your face to remove medication residues.

- Provide close supervision when this device is used by, on, or near infants, children or compromised individuals.
- Do not add more than 8 ml of medication to the medication cup.
- Use only manufacturer authorized parts and accessories. Parts and accessories not approved for use with the device do not perform the expected specification or it may damage the device.

CAUTION for Storage:

- Do not store the device under direct sunlight, high temperature or humidity. Store the device within the storage temperature and humidity.
- Keep the device out of reach of small children.
- Always keep the device unplugged while not in use.
- Store the device and the Components in a clean, safe location.
- Do not wrap the power cord around the Compressor (main device).

CAUTION for Cleaning:

- Clean and disinfect the nebulizer, air tube, mouthpiece or masks before using them for the first time after purchase.
- Disconnect the device from the electrical outlet before cleaning.
- Do not immerse the device in water. It may damage the device.
- Clean all necessary parts after each use as instructed in this users manual.

7. MAINTENANCE

To keep your Nebulizer working properly, do the following:

CLEANING

Rinsing (after each treatment)

1. Disconnect the air tube, nebulizer, mouthpiece and mask.
2. Gently twist the nebulizer cap to open it.
3. Discard remaining medication in the nebulizer.
4. Rinse the nebulizer, mouthpiece and mask with water.
5. Dry them with clean soft towel or let it air dry.
6. Reassemble the nebulizer when completely dry and put these parts in a dry, sealed container.

Cleaning the main unit (compressor)

1. Clean the casing of the main device by using a soft cloth moistened with water or a mild detergent.
2. Do not use abrasive cleaners.
3. Dry the casing immediately using a soft clean cloth.

Changing The Air Filter

CAUTION:

- Do not wash or clean the filter.
- Change the filter every 30 days or when the filter turns gray.
- Do not operate the device without the air filter.
- Before inserting the new air filter make sure the air filter is clean and free of dust.
- Use only the manufacturer air filter designed for this device.

Changing procedure:

1. Pull the air filter cover to remove from the back side of the Air Compressor.
2. Remove the dirty air filter.
3. Replace the used filter with a new one.
4. Put the air filter cover back on the Air Compressor.

DISINFECTION

Please follow the following steps to disinfect your Nebulizer. It is suggested that the device is disinfected after the last treatment of the day.

1. Use one part white vinegar with three parts distilled water. Make sure mixed solution is enough to submerge the nebulizer, mouthpiece and mask. **DO NOT IMMERSER THE MAIN UNIT IN WATER!**
2. Complete rinsing steps 1-3 from section "Rinsing".
3. Wash nebulizer, mouthpiece and mask in warm water and a mild detergent. Then wash them in hot tap water.
4. Submerge these parts in the vinegar and water solution for thirty minutes.
5. Complete rinsing steps 4-6 from section "Rinsing".

WARNING: Do not boil the Nebulizer. Doing so could damage it.

8. SPECIFICATION

EVOLU UNIVERSAL nebulizer Features

Power: 230 VAC, 50 Hz

Power Consumption: Below 47 W

Nebulizer Flow: 3 l

Compressor Flow: 6 l

Air Tube: 1.5 m

Medicine Container Capacity: 2-8 ml

Particle Size: 0.5 to 6 microns

MMAD: 2.44 microns

Average Mobilization Rate: 0.2 ml/min

Remain Amount: 0.15 ml

Noise Level: below 60 dBA

Compressor Pressure Range: 23 to 32 psi / 160 to 220 kPa / 1.6 to 2.2 bar

Operation Pressure Range: 5 to 8 psi / 30 to 55 kPa / 0.3 to 0.55 bar

Operating Temperature Range: +10°C to +40°C (+50°F to +104°F)

Operating Time: 30 min. ON - 30 min. OFF

Operation Humidity: 10% to 95% RH

Storage Temperature Range: -20°C to +70°C (-4°F to +158°F)

Storage Humidity Range: 10% to 95% RH

Dimension: (L x W x H): 166 x 143 x 80 mm

Product Weight: 1.10 kg

Ingress Protection Rating: IP 21

Classification: Type BF

9. SYMBOLS DESCRIPTION



Manufacturer

Authorized Representative in EU



CE Mark



Batch code



Serial number



Keep dry



Refer to instruction manual/booklet



Type BF applied part



WEEE symbol

IP21

Protection level against penetration of water and particulate matter



Mobius loop

10. TROUBLESHOOTING GUIDE

Symptom	Probable Cause	Solution
Too much noise	No filter in the device	Put a filter in the device
The Nebulizer does not run	Main compressor switch is off.	Turn the device on
	Nebulizer was not cleaned after its previous use	Clean the device
	Air hose is bent	Remove any bend or kink in the air hose
	The filter is clogged	Replace the filter
	No medicine is left	Add the appropriate amount of medicine prescribed by your physician to the Medicine Container
	The cap is not attached properly	Reattach the cap
Water Drops are formed in the air hose	The medicine was over-full	Adjust the amount of medicine in the Medicine Container to the appropriate level, connect the air hose to the main unit, and turn the device on
	The Nebulizer was washed but not dried	Open and close the Nebulizer repeatedly until the drops disappear

NOTE: Please contact dealer for assistance in case you have any other difficulties.

11. WARRANTY CARD

Type of product _____
 Serial No. _____
 Name of customer _____
 Date of purchase _____
 Contact number _____
 Address _____
 Sale company _____
 Contact number _____
 Address of sales company _____



The period of host free for warranty service is 2 years.

The accessories (Nebulizer, Masks, Mouthpiece, Air Tube and etc.) does not come in the warranty category since it is consumable item, details please refer to the manual.

The following case does not include the warranty.

Damage cause by human behaviours, holding, touching, soaking and wetting.

Damage cause by not correctly operating the product according to the manual.

Damage cause by accident.

The user disassemble and change the product without authorization.

No invoice, warranty card, the product serial being torn or can not identify.

Attention: please contact our distributor when the device needs maintenance. Please keep the packing of product so that it could be used when return the device to maintenance.

UNIVERSELL KOLBENKOMPRESSOR-Vernebler

MODELL: JLN-2300Air

Bedienungsanleitung

Bitte lesen Sie die Gebrauchsanweisung vor Inbetriebnahme des Geräts sorgfältig durch.

1. EINLEITUNG

Das medizinische Luftkompressor- Vernebler ist ein medizinisches Gerät, das entwickelt wurde, um von einem Arzt verschriebene Medikamente an die Atemwege der Lunge abgegeben werden können. Der Vernebler und der Luftkompressor bilden zusammen einen Aerosolnebel, den der Patient nur zur medizinischen Behandlung einatmen kann.

VORGESEHEN FÜR DEN EINSATZ ZU HAUSE UND IM KRANKENHAUS.

2. FUNKTIONSWEISE

Dieses Gerät ist kompakt, einfach zu benutzen und mitzunehmen. Um den Luftdruck zu erzeugen wird ein Einzylinder-Kolben ohne Ölschmierung verwendet. Der vom Luftkompressor erzeugte Luftstrom tritt aus dem Auslass aus und tritt in den Vernebler ein. Der Hauptluftstrom, der in das Gerät eintritt und aus dem Gerät austritt, ist in **Abbildung 1** dargestellt.

3. EIGENSCHAFTEN

Vergewissern Sie sich, dass folgende Teile bereit liegen, bevor Sie dieses Produkt verwenden:

• 1 x Hauptgerät (Kompressor) • 1 x Nasenkappe • 1 x Vernebler • 1 x Luftschlauch • 1 x Maske (groß & klein) • 1 x Mundstück • 5 x Filter

