



## EN English

### Introduction

Thank you for purchasing a NL100 Compressor Nebulizer. With proper care and use, your nebulizer will provide you with many years of reliable treatment. This unit is operated on standard AC power. Treatments are delivered quickly, safely and conveniently making this unit ideal for all ages in health care practices like hospitals and home care. We encourage you to thoroughly read this guidebook to learn about the features of your nebulizer. Your compressor nebulizer should be used under the supervision of a licensed physician and/or a respiratory therapist. Together with your physician and/or respiratory therapist, you can feel comfortable and confident knowing that you are obtaining the most effective inhalation treatments for your respiratory condition.

**NOTE:** Your nebulizer is intended for use in treatment of asthma, COPD and other respiratory ailments in which an aerosolized medication is required during therapy. Please consult with your physician and/or pharmacist to determine if your prescription medication is approved for use with this nebulizer. For type, dose, and regime of medication follow the instructions of your doctor or respiratory therapist.

This device fulfils the provision of the EC directive 93/42/EEC (Medical Device Directive) and the European Standard EN 13544-1:2007+A1:2009 Respiratory therapy equipment- Part 1: Nebulizing systems and their components.
**Please read this manual carefully before use and be sure to keep this manual.**

### Precautions

Please use general safety precautions when operating your nebulizer. This unit should be used only for its intended purpose as described in this guidebook and with medications only under the supervision and instruction of your physician. Do not use the device in anesthetic or ventilator breathing circuits.

### Product cautions

READ THE FOLLOWING BEFORE USING

• To avoid electrical shock keep unit away from water.

• Do not handle the unit of power cord with wet hands.

• Do not immerse the unit in liquid.

• Do not use while bathing.

• Do not reach for a unit that has fallen into water immediately unplug the unit.

• Do not use the unit if it has any damaged parts (including plug). If it has been submerged in water or dropped. Promptly send the unit for examination and repair.

• The unit should not be used where flammable gas, oxygen or aerosol spray products are being used.

• Keep the air vents open. Do not place the unit on a soft surface where the openings can be blocked.

• If the medication cup is empty, do not attempt to operate the unit.

• If any abnormality occurs, discontinue to use until the unit has been examined and repaired.

• The unit should not be left unattended while plugged in.

• Do not tilt or shake the unit when in operation.

• Disconnect the unit from the electrical outlet before cleaning, filling and after each use.

• Do not use attachments unless recommended by the manufacturer.

• Do not disassemble or attempt to repair the unit.

• Do not use the device in anesthetic or ventilator breathing circuits.

**Operating cautions**

Close adult supervision is highly recommended when the unit is used by children or invalids.

• Keep your eyes away from the output of medication mist.

• The maximum capacity of the medication cup is 6 ml and should not be overfilled.

• Do not use this unit while operating a vehicle.

• If any discomfort or abnormality occurs, stop using the unit immediately.

• Do not use the device if the air tube is bent.

• Replacement of the nebulizer medication for use with this device.

• Do not service or maintain device while in use.

• Do not use the tubing and/or AC adaptor/power cord for any other purpose than those specified, as they can cause risk of strangulation.

• Electromagnetic interference: Avoid strong electrical or electromagnetic fields in the direct vicinity of the device (e.g mobile telephones, microwave ovens) or less than 1.5 km from AM, FM or TV broadcast antennas. These may lead to temporary impairment of function.

This device should not be used adjacent to or stacked with other equipment.

• Please do not use any other cables or accessories not approved by the manufacturer in this manual to avoid negative influence on electromagnetic compatibility.

### Storage cautions

• Do not store the unit in direct sunlight, high temperature or humidity.

• Keep the unit out of reach of small children.

• Always keep the unit unplugged while not in use.

### Cleaning cautions

• Check air filter, nebulizer, mouthpiece and any other optional component before each use. Dirty or worn parts should be replaced.

• Do not immerse the unit in water. It may damage the unit.

• Disconnect the unit from the electrical outlet before cleaning.

• Clean all necessary parts after each use as instructed in this guidebook.

• Always dispose of any remaining medication in the medication cup after each use. Use fresh medication each time you use the device.

• Do not store the air tube with moisture or medication remaining in the air tube. This could result in infection as a result of bacteria.

### MEDICAL CLAIMS:

This manual and product are not meant to be a substitute for advice provided by your doctor or other medical professionals.

Don't use the information contained herein or this product for diagnosing or treating a health problem or prescribing any medication. If you have or suspect that you have a medical problem, promptly consult your doctor. Durable periods are as follows, provided the product is used to nebulize 2ml of medication 2 times a day for 12 minutes each time at room temperature (25°C).

Duration period may vary depending on usage environment.

• Main unit                    5 years                    \* Air Filter                    60 days

• Nebulizer Kit                1 year                    \*Adult and child masks    1 year

• Air Tube, Mouthpiece    1 year

Product specifications					
Power	AC 230V/50Hz or AC 220V/60Hz or DC 110V/60Hz				
Power Consumption	≤ 150 VA				
Sound Level	≤ 67 dBA (1 meter away from Nebulizer)				
Compressor Pressure Range	23 psis (159 kPa)				
Operating Pressure Range	≤ 10.5 psi (72.4 kPa)				
Operating Flow Range	≤ 3.5 lpm				
Operating Temperature Range	10°C to 40°C (50°F to 104°F)				
Operating Humidity Range	10% ~ 90% RH				
Operating Atmospheric Pressure Range	700-1060 Hpa				
Storage Temperature Range	-20°C to 60°C (-4°F to 140°F)				
Storage Humidity Range	10% ~ 90% RH				
Storage Atmospheric Pressure Range	700-1060 Hpa				
Dimensions (L x W x H)	135 x 135 x 100 mm (5.31 x 5.31 x 3.94 inches)				
Weight	0.94kg (without accessories)				
Medication Capacity	6 ml (cc)				
Particle Size (MMAD)	≤ 3.8 μm				
Average Nebulization Rate	≥ 0.20 ml/min				
Standard Accessories	3. Child Mask, 4. Adult Mask, 7. Air Tube, Mouthpiece, 8. Air Tube, Mouthpiece, 9. Adult and child masks				

\* Subject to technical modification without prior notice.
**†** Performance may vary with drugs that are suspensions or high viscosity.
**‡** See drug supplier's data sheet for further details.

### A. Product Identification

1. Nebulizer Kit 2. Nozzle 3. Angled Mouthpiece 4. Air Filter
5. Child Mask 6. Adult Mask 7. Air Tube 8. Air Output
9. Air Filter Slot 10. Air Intake 11. Power Cord 12. Power Switch

### B. Assembling Your Nebulizer Kit

Follow the cleaning instructions in this guidebook under "Cleaning technique" prior to using your nebulizer for the first time or after it has been stored for an extended period of time.

**REMEMBER:** Always unplug the compressor and make sure the power-switch is turned to the "OFF" position before cleaning, assembling and before or after each use.

- Place the compressor on a flat, stable surface within reach.
- Gently twist and pull straight up on the lid of the nebulizer kit to separate into two parts (medication cup and cover).
- The stem inside the medication cup inserts into the tube of the nozzle.
- Add the prescribed amount of medication to the medication cup.

5. Reassemble the nebulizer kit by carefully twisting the medication cup and cover together. Make sure that the two parts fit securely.

**WARNING:** The symbol on this product means that it's an electronic product and following the European directive 2012/19/EU the electronic products have to be disposed on your local recycling centre for safe treatment.

### C. Operating your nebulizer

The nebulizer kit is operable at up to a 45° angle. If the angle is greater than 45°, no aerosol will be generated.

- Attach one end of the air tube connector to the air output.
- Carefully attach the opposite end of the air tubing connector to the stem at the base of the nebulizer kit.
- Attach the angled mouthpiece or mask to the top of the nebulizer kit.
- The capacity of the medication cup is 6 ml.

**NOTE:** A 30-minute interval is recommended after each use. The compressor will automatically shut off if it becomes overheated. If / when this happens, immediately:

- Press the power-switch to the "OFF" position.
- Unplug the power cord from the outlet.
- Allow the motor to cool for 30 minutes.

Before restarting the unit, make sure that the air vents are not obstructed.

### Operating your nebulizer

After every use:

- Unplug the unit from the power source.
- Allow the unit to completely cool.
- Carefully detach the air tubing from the nebulizer and pour out any remaining medication.
- Follow the cleaning procedures provided in this guidebook.

### D. Cleaning procedures

Rinsing technique (performed after each treatment or before first use).

- Make sure that the power-switch has been turned to the "OFF" position and the unit has been disconnected from the power source.
- Disconnect the air tube from the nebulizer device.
- Gently twist and pull up the cover of the nebulizer kit to open and separate.
- Rinse the nebulizer kit and components with tap water <40°C (104°F).
- Dry with clean towels or completely air dry.
- Reassemble the nebulizer kit.

**NOTE:** For the first time cleaning or after the unit has been stored for an extended period of time, thoroughly clean all components, except the air tube.

### Cleaning the compressor

Wipe the compressor daily using a soft cloth.

**NOTE:** Any other form of cleaning or cleaning agents may damage the finish of the compressor.

**3. Changing the air filter**
It is important to change the air filter approximately when the air filter turns gray. It is recommended to change air filter every 2 months.

- Remove the air filter cover by gently pressing down and pulling backwards.
- Discard the gray filter.
- Replace with a new, clean air filter.
- Securely re-attach the air filter cover to the unit.

**NOTE:** Air filters cannot be cleaned or washed. Only NL100 air filters can be used. Do not substitute alternate material such as cotton. Do not operate without an air filter.

### Troubleshooting

If any abnormality occurs during use, please check and correct the following:

1. Unit does not operate when power switch is pressed; Check the AC connection to the outlet.

2. No misting or low rate of misting.

- Check that there is medication in the nebulizer cup.
- Check the main unit if there is any physical damage.
- Check the position of the nozzle in the nebulizer.
- Make sure that air tube and other components are properly attached.
- Check the air filter and replace if necessary.

### Protection against electric shock:

• Class II equipment.

### Type B-FI applied parts:

• Mouthpiece and mask.

### Protection against harmful ingress of water and particulate matter:

• IP21

**Degree of safety in the presence of flammable anesthetics or oxygen:**

• No AP/APG (not suitable for use in the presence of flammable anesthetics or oxygen).

