

Introduction
Thank you for purchasing a NA100 Compressor Nebulizer. With proper care and use, your nebulizer will provide you with many years of reliable treatments. This unit operates on standard AC power. Treatments are delivered quickly, safely and conveniently making this unit ideal for all ages in health care structures 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.

Cautions
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

- Do not handle the shock: keep unit away from water.
- Do not electrical shock: use power cord with wet hands.
- Do not immerse the unit in liquid.
- 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 sprays 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.
- 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.
- Do not service or maintain device while in use.

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 5 ml and should not be over-filled.
- 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.
- Pentamidine is not an approved medication for use with this device.

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 DISCLAIMER:

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 8 minutes each time at room temperature (25°C). Durable 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 | | |

Power Consumption	AC 230V/50Hz or AC 220V/60Hz or AC 110V/60Hz
Sound Level	≤ 55 dBA (1 meter away from NA100)
Compressor Pressure Range	≥ 29 psi (200 kPa)
Operating Pressure Range	≥ 15 psi (103 kPa)
Operating Flow Range	≥ 3.5 l/min
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
Dimension (L x W x H)	280mmx190mmx100mm (11.02x7.48x3.93 inches)
Weight	1750g (without accessories)
Medication Capacity	5ml(cc)
Particle Size (MMAD)	0.5 μm
Average Nebulization Rate	Fully open Valve ≥ 0.4ml/min (0.9% Saline Solution) Closed Valve ≥ 0.15ml/min (0.9% Saline Solution)

Product specifications

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Standard Accessories	1. Nebulizer Kit, 2. Nozzle, 3. Angled Mouthpiece, 4. Air Filter, 5. Child Mask, 6. Adult Mask, 7. Air Tube, 8. Power Switch, 9. Air Filter Slot, 10. Air Adjust, 11. Air Intake, 12. Power Cord
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B. Valve Adjustable Technology

The proprietary adjustable valve is able to deliver medications of different viscosity level according to every user's conditions and needs at ease. Our VA technology allows users to adjust particle sizes.

The nebulization rates can be adjusted by the user in a very easy way without exchanging parts. Higher nebulization rate fully open is for higher viscosity medications and higher breathing capacity user while lower nebulization rate with closed valve will be more appropriate for kids / infants with lower breathing capacity.

C. 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).
- Make sure that the nozzle is properly installed on the upper cover. The stem inside the medication cup inserts into the tube of the nozzle.
- Add the prescribed amount of medication to the medication cup.
- 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 center for safe treatment.

D. 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 2–5 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.

E. 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 hot tap water.
- Do not use dry clean towels or completely dry it.
- 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. The nebulizer kit is dishwasher safe.

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 unit.

F. 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 pulling forward.
- 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 NA100 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:

- Unit does not operate when power switch is pressed: Check the AC connection to the outlet.
- 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 inside 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 BF applied parts:

- Mouthpiece and mask .

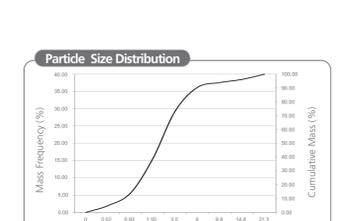


Protection against harmful ingress of water and particulate matter:

- 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)



Particle Size Distribution
Mass Frequency (%)
Cumulative Mass (%)
Particle Diameter (µm)
Concentration Mass (%)

Electromagnetic Compatibility Information

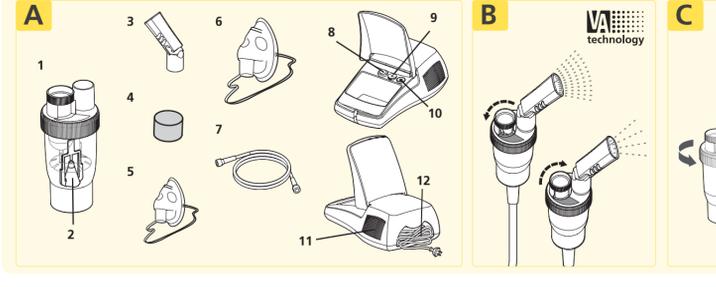
- This device needs to be installed and put into service in accordance with the information provided in the user manual.
- WARNINGS:** Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the NA100, including cables, than the recommended separation distance calculated from the equation below. Otherwise, degradation of the performance of this device could result. If higher IMMUNITY TEST LEVELS than those specified in Table 9 are used, the minimum separation distance may be lowered. Lower minimum separation distances shall be calculated using the equation specified in 8.10.

Manufacturer's declaration-electromagnetic immunity			
The NA100 is intended for use in the electromagnetic environment specified below. The customer or the user should verify that the actual electromagnetic environment into which it will be used does not exceed these levels.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment guidance
Conducted RF	3 Vrms 0.15 MHz – 80 MHz 6 Vrms in ISM 15 Vrms in GSM and amateur radio bands between 0.15 MHz and 80 MHz	3 Vrms 0.15 MHz – 80 MHz 6 Vrms in ISM 15 Vrms in GSM and amateur radio bands between 0.15 MHz and 80 MHz	Portable and mobile RF communications equipment should be used no closer to any part of the NA100 including cables, than the recommended separation distance calculated from the equation below.
			Application to the frequency of the transmitter: Recommended separation distance: d = 1.2 √P / d = 1.2 √P/800MHz to 800 MHz, d = 3.0 m Where P is the maximum output power rating of the transmitter in Watts (W) according to the transmitter manufacturer and if the recommended separation distance in metres (m). In interference may occur in the vicinity of equipment marked with the following symbol:
Radiated RF	10 V/m 80 MHz – 2.7 GHz 80 MHz AM at 1 kHz	10 V/m 80 MHz – 2.7 GHz 80 MHz AM at 1 kHz	Portable and mobile RF communications equipment should be used no closer to any part of the NA100 including cables, than the recommended separation distance calculated from the equation below.
			Application to the frequency of the transmitter: Recommended separation distance: d = 3.0 m Where P is the maximum output power rating of the transmitter in Watts (W) according to the transmitter manufacturer and if the recommended separation distance in metres (m). In interference may occur in the vicinity of equipment marked with the following symbol:

More information on EMC compliance of the device can be obtained from Rossmax website: www.rossmax.com

Name	Model No	Material	Disinfecting Method: Boiling O/Applicable, X: Not applicable
Nebulizer bottle set (N1) Bottle + Mouthpiece	NB_AC_001_00	PP	X
Nebulizer bottle (N1)	NB_AC_026_00	PP	X
Adult Mask	NB_AC_003_00	PVC	X
Child Mask	NB_AC_004_00	PVC	X
Air Tube (1.5M)	NB_AC_005_00	PVC	X
Air Filters (015x10mm) x 5pcs	NB_AC_006_00	PVC	X
Mouthpiece	NB_AC_021_00	PP	O

* Please follow the disinfecting methods to boil and wash the accessories.



ES Español

Introducción

Gracias por comprar el nebulizador de compresor NA100. Con el cuidado y uso adecuado, su nebulizador le proporcionará tratamientos fáciles por muchos años. La unidad funciona con corriente alterna estándar. Los tratamientos pueden ser realizados de manera rápida, segura y de manera conveniente haciendo de esta unidad un elemento válido para todas las edades y prácticamente en cualquier entorno tanto doméstico como hospitalario. Recomendamos que lea este manual de usuario atentamente para llegar a conocer las características de su nebulizador. Su nebulizador de compresor debería utilizarse bajo la supervisión de un médico y/o terapeuta respiratorio licenciado. Junto con su médico o su terapeuta respiratorio, podrá sentirse confortable y confiadente sabiendo que está obteniendo los tratamientos de inhalación más efectivos para su enfermedad respiratoria.

NOTA: Su nebulizador se ha concebido para su uso en el tratamiento de asma, EPOC u otras enfermedades respiratorias, en las cuales se requiere una medicación aerosolizada durante la terapia. Por favor consulte a su médico y/o farmacéutico para determinar si su medicación recetada está autorizada para el uso de este nebulizador. Con respecto al tipo, a la dosis y al régimen de la medicación, observe las instrucciones de su médico o terapeuta respiratorio.

Este aparato satisface las exigencias de la Directiva 93/42/CEE (Directiva de Productos Sanitarios) de la CE y la Norma Europea EN 13544-1:2007+A1:2009 Equipos de terapia respiratoria - Parte 1: Sistemas de nebulización y sus componentes.

Por favor, lea este manual cuidadosamente antes del uso. Por favor, fíjese en guardar este manual.

Precauciones

Por favor, tome las precauciones de seguridad generales al estar operando su nebulizador. Esta unidad sólo deberá usarse para el fin descrito en este manual de usuario y con medicamentos bajo la supervisión e instrucción de su médico. No use este dispositivo en circuitos de anestesia o respiración..

Precauciones referentes al producto

LEA LO SIGUIENTE ANTES DEL USO

- Para prevenir choques eléctricos: mantenga la unidad alejada de agua.
- No maneje la unidad o el cable de alimentación con las manos mojadas.
- No sujete la unidad o líquido.
- No lo use al estar tomando un baño.
- No trate de agarrar una unidad que ha caído al agua. Desenchufe la unidad inmediatamente.
- No use la unidad si tiene alguna pieza dañada (incluyendo el conector o de alimentación), si ha sido sumergida en agua o si se ha caído. Envíe la unidad sin demora a que se examine y repareada.
- La unidad no deberá usarse en un lugar donde se estén usando gas inflamable, oxígeno o productos atomizados.
- Mantenga los orificios de ventilación descubiertos. No coloque la unidad en una superficie blanda en la que pudieran obstruirse los orificios.
- Si la taza de la medicación está vacía, no trate de operar la unidad.
- Si ocurre cualquier anomalía, no use la unidad hasta que no haya sido examinada y reparada.
- La unidad no deberá dejarse desatendida al estar conectada a la red eléctrica.
- No la incline ni sacuda mientras que está en operación.
- Desconecte la unidad de la toma de corriente eléctrica antes de la limpieza y el llenado, y después de cada uso.
- No use accesorios que no hayan sido autorizados por el fabricante.
- No desmonte o intente arreglar esta unidad.

- No utilice este aparato o en circuitos de anestesia o de respiración forzada
- No use el tubo de la manguera y el adaptador de CA / cable de alimentación para ningún otro fin que el especificado, ya que pueden causar peligro de asfixia.
- No haga ningún mantenimiento del dispositivo mientras aun esté en funcionamiento.

- Mantenga sus ojos alejados de la salida de la neblina de medicación.
- La capacidad máxima de la taza de la medicación es de 5 ml y no deberá sobrepasarse.
- No use esta unidad al estar conduciendo un vehículo.
- Si se presenta cualquier malestar o anomalía, pare el uso de la unidad inmediatamente.
- No utilice este aparato si el tubo de aire está doblado
- La Pentamidine no es una medicación aprobada para su uso con este aparato

Precauciones de almacenaje

- No guarde la unidad en un lugar expuesto directamente al sol, a altas temperaturas o humedad.
- Mantenga la unidad fuera del alcance de niños pequeños.
- Siempre mantenga la unidad desconectada de la red eléctrica mientras que no la esté usando.

Precauciones de operación

- Se recomienda encarecidamente una supervisión estrecha cuando la unidad es usada por niños o personas con discapacidad.
- Mantenga sus ojos alejados de la salida de la neblina de medicación.
- La capacidad máxima de la taza de la medicación es de 5 ml y no deberá sobrepasarse.
- No use esta unidad al estar conduciendo un vehículo.
- Si se presenta cualquier malestar o anomalía, pare el uso de la unidad inmediatamente.
- No utilice este aparato si el tubo de aire está doblado
- La Pentamidine no es una medicación aprobada para su uso con este aparato

Precauciones de almacenaje

- No guarde la unidad en un lugar expuesto directamente al sol, a altas temperaturas o humedad.
- Mantenga la unidad fuera del alcance de niños pequeños.
- Siempre mantenga la unidad desconectada de la red eléctrica mientras que no la esté usando.

Precauciones de limpieza

- Examine el filtro de aire, el dispositivo nebulizador, la boquilla y cualquier otra pieza opcional antes de cada uso. Las piezas que estén sucias o desgastadas deberán sustituirse.
- No sumerja la unidad en agua. La unidad podrá quedar dañada.
- Desconecte la unidad de la toma de corriente eléctrica antes de la limpieza.
- Limpie todas las piezas necesarias después de cada uso del modo descrito en este manual de usuario.
- Elimine siempre cualquier resto de medicación después de cada uso. Use medicación nueva cada vez que use este aparato.
- No almacene el tubo de aire con humedad o restos de medicación ya que esto podría ocasionar infecciones bacterianas.

DESCARGO DE RESPONSABILIDAD MÉDICO:

Ni este manual ni el producto se han concebido para sustituir cualquier consejo proporcionado por parte de su doctor u otro profesional médico.

No use la información presentada aquí o este producto para el diagnóstico o el tratamiento de un problema de salud, o para recetar alguna medicación. Si sospecha tener algún problema médico, consulte a un médico sin demora.

La vida útil de este dispositivo es como sigue, asumiendo que el producto se utiliza para nebulizar 2 ml. de medicación unas 2 veces al día durante 8 minutos cada vez a una temperatura ambiente de 25° C.

La vida del equipo suministrado puede variar dependiendo de las condiciones ambientales de uso.

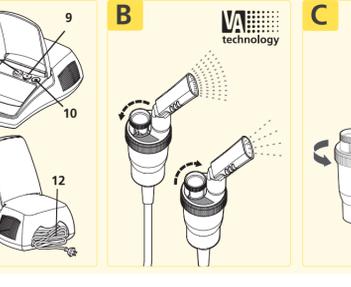
- Unidad central
- Dispositivo nebulizador
- Tubo de aire ,Boquilla acodada
- Filtro de aire
- Máscara de niño ,Máscara de adulto

Potencia	AC 230V/50Hz o AC 220V/60Hz o AC 110V/60Hz
Consumo de potencia	≤ 130 W
Nivel sonoro	≤ 55 dBA (a 1 m de distancia del NA100)
Rango de presión del compresor	≥ 29 psi (200 kPa)
Rango de presión de operación	≥ 15 psi (103 kPa)
Caudal	≥ 3.5 l/min
Rango de temperatura de operación	De 50 a 104°F (10 a 40°C)
Rango de humedad de operación	10 a 90% RH
Rango de presión ambiental de funcionamiento	700 – 1060 hPa
Rango de temperatura de almacenaje	De -4 a 140°F (de -20 a 60°C)
Rango de humedad de almacenaje	De 10 a 90% RH
Dimensiones (L x A x H)	280mm x 190mm x 100mm (11.02x 7.48x 3.93 inches)
Peso	1750 g (sin accesorios)
Capacidad de medicación	5ml(cc)
Tamaño de partículas (MMAD)	≤ 2.2 μm

Especificaciones del producto

NOTE: At 80 MHz and 800 MHz, the recommended separation distance applies.
NOTE: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

More information on EMC compliance of the device can be obtained from Rossmax website: www.rossmax.com



Velocidad de nebulización promedio	Válvula completamente abierta ≥ 0.4ml/min (Solución Salina del 0.9%) Válvula cerrada ≥ 0.15ml/min (Solución Salina del 0.9%)
Accesorios estándar	Dispositivo nebulizador, Tubo de aire, Boquilla, Filtros (5 uds.), Máscara de adulto y niño
* Sujeto a modificaciones técnicas sin notificación.	
* El rendimiento podrá variar con medicamentos como suspensiones o alta viscosidad. Vea la hoja de datos del abastecedor del medicamento para más detalles.	

A. Identificación del producto

- Dispositivo nebulizador
- Boquilla
- Boquilla acodada
- Filtro de aire
- Máscara de niño
- Máscara de adulto
- Tubo de aire
- Interruptor
- Ranura del filtro de aire
- Salida de aire
- Entrada de aire
- Cable de alimentación

B. Tecnología de válvula ajustable

La tecnología propia de válvula ajustable permite el suministro de medicaciones de distintas viscosidades en función del estado de cada paciente y las necesidades del momento.

Nuestra tecnología de válvula regulable permite al usuario ajustar