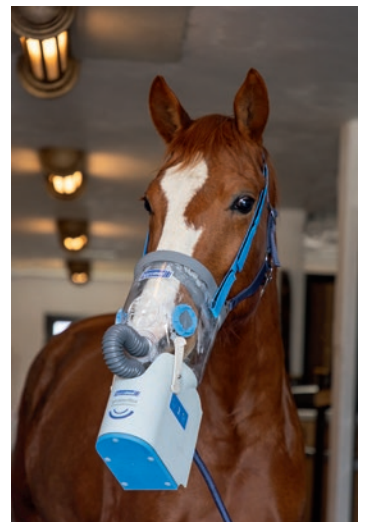


AirOne Flex Akku-Ultraschall-Inhalator für Pferde

#3211804 #3211805



- (FR) Inhalateur à ultrasons sans fil pour chevaux
- (EN) Battery Ultrasound Inhaler for Horses
- (IT) Inalatore a ultrasuoni a batteria per cavalli
- (NL) Accu ultrasone inhalator voor paarden
- (SV) Batteridrivnen ultraljudsinhalator för hästar
- (PL) Akumulatorowy inhalator ultradźwiękowy dla koni
- (DA) Batteridrevet ultralydsinhalator til heste



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(EN) Read and pay attention to these operating instructions before assembly and initial commissioning! Keep these operating instructions for future reference!

1. Foreword

1.1 Information about the manual

We reserve the right to make changes due to further technical development compared to the data and illustrations mentioned in this manual.

Reprints, translations and reproductions in any form, including excerpts, require the written consent of the manufacturer.

Abbreviations, units, technical terms, special designations or industry-standard terminology used in this manual are explained in more detail in the "Appendix" section.

This manual is part of the scope of delivery.

- It must be kept close at hand and remains with the unit even if it is sold.
- This manual is not subject to a revision service. The respective current status can be obtained from the specialist trader or directly from the manufacturer.
- It has a modular structure and refers exclusively to the named product.
- These operating instructions describe the operation, use and maintenance of the unit.

The safety instructions are intended to prevent personal injury, damage to animals and the unit. All operators are required to read and observe these safety instructions at all times. The manufacturer accepts no liability or warranty for damage and malfunctions resulting from non-observance of the operating instructions!

1.2 Notes on the operating instructions

Version/revision: 1.0

Creation date: 2021-11-23

Last change: 2022-04-07

Language of the original operating instructions: German

1.3 Representation of safety instructions

1.3.1 Safety instructions in the operating instructions



Danger!

Imminent danger which leads to serious physical injury or death.



Caution!

Risk of physical injury to people and animals and material damage if used incorrectly!

Important!

Potentially harmful situation that could damage the product or an object nearby.

2. Safety

2.1 General

- Read the following instructions carefully before commissioning and using the unit.
- Anyone tasked with commissioning, operation or maintenance must have read and understood the operating instructions and in particular the chapter on safety.
- The unit must only be operated, maintained and repaired by trained and authorised personnel.
- Failure to comply with the individually listed points in the operating instructions can result in physical injury or material damage for which the manufacturer assumes no liability.

2.2 General information regarding safety and warning instructions

Danger!

Imminent danger which leads to serious physical injury or death.

Lithium-ion batteries (Li-ion) pose a risk of explosion and fire. All safety instructions must be observed in order to reduce the risk and to prevent misuse.

- The unit contains a Li-ion battery.
- Fire hazard.
- The Li-ion battery cannot be replaced. Do not open the product!
- Only connect the unit to a supply network with a protective earth conductor.
- Only use the supplied mains adapter and cable to charge the unit/battery.
- Check the unit, mains adapter and charging cable for damage before use.
- Only operate the unit if it is undamaged.
- Do not operate the unit in an explosive atmosphere.
- Do not subject the unit to mechanical shocks, as this could damage the battery.
- Do not allow children to play with the unit.
- Protect the unit from heat (> +60 °C), excessive sunlight and fire, as there is a risk of explosion.
- Store the unit at room temperature. Do not store the unit near heat sources or heaters.
- Keep the unit dry.
- Do not open faulty units. Faulty units may only be repaired by the manufacturer.

- Do not dispose of the unit with the Li-ion battery in household waste, fire or water. Observe local disposal regulations.

Caution!

Risk of physical injury to people and animals and material damage if used incorrectly!

- Children and infirm individuals must only use the device under supervision.
- Note the safety and maintenance instructions.
- The unit must be used exclusively in accordance with intended use and in a technically safe condition! The operational safety of the unit is only guaranteed if it is used for its intended purpose. Failure to comply with the individually listed points in the operating instructions can result in physical injury or material damage for which the manufacturer assumes no liability.
- Keep all safety and danger notices on/at the unit complete and always in a legible condition.
- The maintenance intervals specified in these operating instructions must be observed.
- Only use genuine spare parts.

3. Residual risks and foreseeable misuse

Risks for persons:

under the following circumstances, the safety of persons and material objects can be endangered:

- Troubleshooting, adjustment, cleaning, repair and maintenance work contrary to the instructions in the operating instructions.
- If untrained personnel are working on electronic parts.
- Failure to comply with the safety instructions in the operating instructions.
- Unauthorised modifications to the unit.
- Use of non-original manufacturer spare parts

The following points summarise further measures aimed at protecting against personal and material risks:

- Mount the unit in a place that is well ventilated and free from electromagnetic interference.

Risk for animals:

- The animals are not yet accustomed to using the inhaler (risk of panic reaction).
- The animals are unsupervised during use.
- The animals are not tethered correctly to the site.

4. Description

4.1 Description of the unit

Ultrasound Inhaler for Horses

The devices are designed to split (nebulise) inhalants by ultrasound into components small enough for them to be optimally absorbed by the horse through inhalation. The choice of inhalant is the operator's responsibility.

Caution!

The unit must be used exclusively in accordance with intended use and in a technically safe condition! The operational safety of the unit is only guaranteed if it is used for its intended purpose. Failure to comply with the individually listed points in the operating instructions can result in physical injury or material damage for which the manufacturer assumes no liability.

4.2 Scope of delivery

The AirOne Flex ultrasound inhaler is made up of the following components:

1. Nebuliser and charger (1.1)
2. Nebulising pot (fixed component of the nebuliser)
3. Removable nebulising pot cover with connecting pieces (3.1)
4. Breathing mask with connecting pieces (4.1), adjustable fresh air supply (4.2), rubber seal (4.3), adjustable head strap (4.4) and one inhalation (4.5) and two removable exhalation valves (4.6)
5. Connecting pieces, breathing tube 170 cm (5.1)
6. Wall bracket with 4 screws, 4 dowels and installation instructions
7. Transport box with cover (not shown)

The accessories also include:

a measuring cup, 30 nebuliser cups, 1 litre of contact liquid.



4.3 Correct use

This unit must only be used to generate ultrasonic mist with the original contact liquid. The use of nebuliser add-ons is the sole responsibility of the operator. The regulations set out in these operating instructions must be complied with. Any other use of the unit, e.g. in any other area than those described, shall be deemed incorrect use. The manufacturer accepts no liability for any resulting physical and/or material damage.

4.4 Technical data

Item number / type designation: AirOne Flex battery-powered ultrasound nebuliser

Power consumption: 700 mA (0.7 A)

Nebuliser output: average: 6.7 ml/min, maximum: 15 ml/min

Particle size: 0.47 - 6 µm

Input voltage: AC 14.4 V 50 Hz

Charger: 100 V-240 V AC 50-60 Hz

Protection class: III

Protection type: IP54

Weight of base unit: 700 g

Ambient conditions

during operation: 0°C to 40°C and 700 to 1060 hPa

5. Preparation and commissioning

You have chosen a quality product from Hippomed! With the **AirOne Flex** you have acquired an innovative inhaler that combines all the experience of the last 20 years on the subject of ultrasound-based cold nebulisation. Of course, you can assume that the proven quality features and characteristics of the AirOne series in terms of ultra-fine particle size and optimal nebulisation have been retained in the AirOne Flex. This means that not only are the bronchi reached, but also the further branches down to the alveoli.

5.1 Preparation

5.1.1 Positioning the AirOne Flex

The unit can be wall mounted or used integrated with the mask directly on the horse. We recommend the integrated use including mask directly on the horse.

5.1.2 Nebulising chamber and nebuliser cups

Grip the nebulising chamber cover at the tube connection piece and pull it upwards with a slight tilting movement. The locking mechanism releases and the nebulising chamber cover can be removed and placed to one side. Pour in **60 ml of contact fluid** into the nebulising chamber using the measuring cup. Shake well beforehand.

Then place the nebuliser cup in the nebulising chamber and add the medium to be nebulised to the cup up to a **maximum fill level of 50 ml**. Replace the nebulising chamber cover and push it down firmly until it closes flush with the upper edge of the housing.

Important: the AirOne Flex delivers its best performance with a **MAXIMUM** fill level of **50 ml** in the nebuliser cup. **You should therefore avoid exceeding this amount.**

The duration of inhalation is determined by the properties of the preparation to be nebulised. Please do not nebulise any **oil-containing** substances. The generally recommended duration for inhalation is around 15 - 20 minutes. For technical reasons, the nebulisation output diminishes towards the end of a treatment session. A residual volume of around 5 ml may remain in the nebuliser cup. A comparatively long nebulising session is needed to nebulise this remaining amount. We therefore recommend ending the treatment session. **Also, always make sure** that the white clamping ring in the attachment piece of the nebulising chamber cover is located as far as possible at the front of the opening towards the tube and that the slot in the clamping ring is facing upwards.



The following statements only apply to stationary use with the 175 cm tube: this prevents too much of the bubbling medium from travelling into the tube and accumulating there. Condensation may occur in the breathing tube during treatment. Occasional raising of the tube can cause a backflow of the condensation water into the nebuliser cup.

5.1.3 Preparing the horse for inhalation

For safety reasons, the horse being treated must wear a halter and be tethered on both sides with rubber ropes (www.kerbl.de, Art No. 3210370 - 3210372).

5.1.3.1 Stationary use

Check the correct fit of the rubber seal on the breathing mask. The arrow on the rubber seal must point towards the front of the mask and down towards the connection piece. Push the mask with the rubber ring over the horse's nostrils and fasten it securely with the head strap.

5.1.3.2 Mobile use

Ideally, you already adjust the length of the head strap before the first inhalation so that it only needs to be attached directly to the mask with the small hook-and-loop fastener.

After filling and preparing the nebuliser, the mask can be attached to the it:

1. slide the guide rail on the mask into the slot at the back of the nebuliser
2. If the mask is correctly seated in the rail, you can pull the fastening strips on both sides over the retaining pins on the nebuliser
3. Check the tight fit between the nebuliser and the mask and the correct fit of the grey seal on the mask
4. Take the connecting piece and turn it slightly clockwise onto the connection of the nebulising chamber cover, turn the other end of the connector slightly clockwise onto the connection on the mask (it does not have to be turned as far as it will go, as there is no tension)
5. Stand to the left of the horse
6. Slip the mask on from the neck over the nostrils
7. Hold the AirOne Flex with one hand and place the blue head strap over the neck with the other hand, then fasten the short hook-and-loop fastener to the mask.



The AirOne Flex has a special feature. Use can be interrupted for a short time in the event of sideways movements of the head, depending on the filling quantity and the movement. The water level indicator lights up and goes out as soon as the head returns to the starting position. Inhalation continues automatically. If the LED does not go out automatically, please check the filling quantity of the contact liquid.

Caution!

The fresh air supply must be fully open to avoid possible panic reactions by the horse.

5.2 Commissioning and setting the fresh air supply

Switch the AirOne Flex on by pressing the ON/OFF button on the control panel. The function is signalled by a green operation indicator lighting up. Inhalation of the mist is best checked on the top of the nebulising chamber cover.

5.2.1 Adjusting the fresh air supply on the breathing mask

Stepless closure of the fresh air supply on the breathing mask means that the nebulisation quantity and thus the efficiency can be varied. However, this must be done only very carefully and at the same time observing the horse's behaviour.

The animal should show calm, even breaths. If the fresh air supply to the breathing mask is closed completely too soon, the horse may panic. The horse must first learn inhalation (breathing) and therefore the inhalation times vary depending on the horse and its state of health. The inhalation time period is 10 to max 20 minutes.

5.2.2 Meaning of the LED displays

5.2.2.1 Temperature LED lights up

If the "Temperature" indicator on the AirOne Flex's control panel lights up, the unit has switched off due to overheating of the contact liquid. Allow the contact liquid to cool down for at least 10 minutes.

i The warmer the contact medium, the sooner the unit switches off. The same also applies to extremely high outside temperatures, in which case you should use a cooled contact medium.

5.2.2.2 Water level LED lights up

When the "Water level indicator" lights up on the AirOne Flex's control panel (membrane keypad), there is normally too little contact liquid in the nebulising chamber. Switch off the unit, remove the nebulising chamber cover and nebuliser cup and replace the contact liquid. After switching on, treatment with the AirOne Flex can be continued. If the control indicator continues to light up, this could also be due to deposits on the sensors in the nebulising chamber. Carefully remove the deposits with a soft brush and a little vinegar-based cleaner.

If the unit still does not work after this, there is probably a technical defect and you must send it to the service centre for inspection.

5.3 Instructions for battery and charger

i The battery in the AirOne Flex must be charged both before and after inhalation. If the device is not used for a prolonged period of time, you should charge the battery every two to three months to increase the life of the battery pack and avoid deep discharge.

Caution!

To charge, **first** insert the plug of the charger supplied into the socket and then the plug of the power adapter into the charging socket on the back of the AirOne Flex.

The AirOne Flex cannot be switched on during the charging process. The charging time is approx. 2 to 3 hours, depending on the charge status of the battery. The charger's LED changes its colour from permanent to flashing **yellow-orange** to **green** (fully charged). If the LED **flashes** green after connecting to the charging socket, please check that the plug is inserted correctly as far as it will go, otherwise there is no connection and the battery will not be charged. In any case, **red** means that there is a **technical fault** and says nothing about the state of charge.

If you pull the plug out of the charging socket after charging and immediately plug it in again, the charger will not show **green** (fully charged), but will initially flash **yellow-orange** for a period of up to approx. 4 min. and then return to **green**. This is a normal process while the charger checks the state of charge.

i See also the enclosed manufacturer's operating instructions

The charger can only charge the battery in a temperature range of 0 °C to + 40°C. If you are outside this temperature, this is signalled by a **white** flashing LED. With a fully charged battery pack, you can provide inhalations for at least two 20-minute cycles, with a 10-minute break between cycles.

Caution!

Only use the original charger supplied with the AirOne Flex. Other chargers will inevitably damage the AirOne Flex. Failure to do so automatically voids the warranty. This special charger must be used exclusively with the AirOne Flex and not with the previous-version AirOne battery. Similarly, the charger for the AirOne battery must not be connected to the AirOne Flex. Both have a different output voltage and the units would be damaged.

i For safety reasons, the battery has an automatic cut-off in the event of a possible overload. If such a case occurs, the AirOne Flex can no longer be switched on. **A reset is performed by briefly plugging and unplugging the charging cable into / from the charging socket. The unit should now work again by pressing the ON/OFF membrane button.** If this is not the case, there is a fault and the unit must be checked by a service centre.

6. Maintenance and care

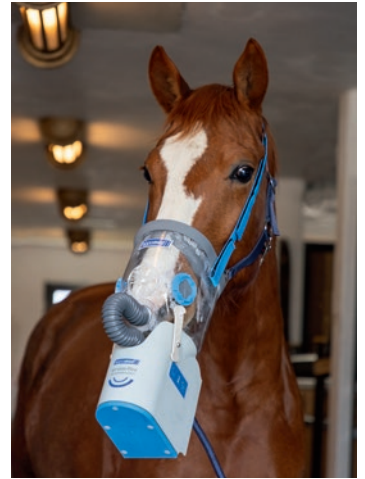
6.1 Careful cleaning and disinfection


To ensure a sustained high level of treatment success, it is essential that the AirOne Flex is carefully cleaned and disinfected after each use. Commercially available washing-up liquid is suitable for external cleaning. For disinfection, please use the disinfectant included with the AirOne. Follow the instructions for use on the disinfectant label. Remove the exhalation valves on the breathing mask by turning them a quarter turn to the left (bayonet catch) and remove the nebulising chamber cover on the nebuliser. Carefully spray all components, namely the mask, valves and nebulising chamber cover. Hang up the breathing tube and spray into the tube. Please observe the information on exposure time on the disinfectant's instructions for use. The nebuliser cup can be used again after cleaning. However, it is recommended that the cup is replaced after 3 treatments. After the exposure time, rinse all parts with fresh water and leave to dry in a suitable place. Then reassemble all the parts and store them in the transport box provided. The AirOne Flex is thus perfectly prepared for the next use.

6.2 Important information about the contact liquid

Caution!

Long-term trouble-free operation is only guaranteed if the contact fluid supplied is used. If other agents such as distilled or tap water are used as a contact medium, the oscillator unit, the heart of the unit, will be **permanently damaged** and the unit will then have to be repaired and all warranty claims will be invalidated. The contact agent is produced in the laboratory with a conductivity specially adapted to the AirOne Flex. If this is not or no longer correct, the water level indicator lights up.



 The contact liquid is only renewed when the water level indicator lights up or there is visual contamination. If the AirOne Flex is not used for more than a week, please remove the contact fluid and only refill the AirOne Flex when it is used again.

6.3 Further care instructions

Caution!

Do not carry out any descaling activities. These permanently damage the surface at the bottom of the nebulising chamber (ultrasonic oscillator / transducer) and it will need to be replaced. Never touch or clean the oscillator with a hard object. Do not use acidic cleaning agents. For optimal care of the nebulising chamber, take a soft brush, pour water without additives into the nebulising chamber and use the brush to swirl up any possible residue and then rinse it out. You can wipe the housing with a damp cloth and then rub it dry.

Any questions?

We'll be happy to advise you - simply contact us on:

T: +49 (0)8086 933 327

T: +49 (0)5204 92970

E: inhalatoren@kerbl.com

For chargeable or warranty repairs, please download the Hippomed repair application and fill it out in full:

<https://www.kerbl.com/de/service/downloads>

7. Troubleshooting

Error	Remedy
Temperature LED lights up	Chapter 5.2.2.1
Water level LED lights up	Chapter 5.2.2.2
Horse is not inhaling properly	Check the inhalation valves for contamination Check the tube connection between the unit and mask Check the air supply setting on the mask
No inhalation mist visible	Check the content of the nebuliser cup Unit not switched on (switch LED must light up green) Oscillator contaminated - see Chapter 6.3 Oscillator faulty - contact the service centre
Unit does not switch on	No battery charge - charge the battery Switch faulty - contact the service centre
Battery not charging/no LED display on the charger	Check the power supply to the charger
Battery not charging/LED display on the charger	See chapter 5.3 or the charging socket is oxidised: wet the plug with contact spray, plug it in and out several times and turn it in the socket at the same time.

8. Warranty conditions

Albert Kerbl GmbH grants you a 2-year warranty on the ultrasound base unit in accordance with our general warranty conditions. These general warranty conditions can be found at www.kerbl.com/guarantee. We will also be happy to send you the warranty conditions by post. Your statutory warranty rights remain unaffected by our guarantee.

This warranty begins on the date of purchase. The warranty does not cover:

1. Damage caused by natural wear and tear (wear parts such as the oscillator / transducer, battery), excessive strain and incorrect use (non-compliance with operating instructions).
2. Damage caused by force majeure or sustained during transport.
3. Damage to rubber parts, e.g. on access lines.
4. Damage to the mask including its attachments (valves) and the tube.

Warranty repairs are only carried out by the service centre for DE/AT or an authorised contracted workshop! The manufacturer reserves the right to reject any warranty claims in the event of non-compliance.

The unit must for this purpose be delivered to the specified service address, at the risk of the unit's owner, complete, packaged and with sufficient postage, including the original invoice.

Please provide as much information as possible on the nature of the problem.

Costs incurred as a result of unjustified defect claims will be invoiced to the unit's owner.



9. CE-/UKCA-conformity declaration

Albert KERBL GmbH hereby declares that the product / device described in these instructions complies with the fundamental requirements and other relevant stipulations and regulations. The CE-/UKCA-mark confirms compliance with the Directives of the European Union or the relevant UK legislation.



10. Electrical waste

It is up to the operator to dispose of the device responsibly after its useful life in accordance with local regulations. Consult the relevant regulations for your country. The device must not be disposed of in household waste. Under the terms of the EU Directive on the disposal of old electrical and electronic equipment, the unit can be taken to local authority-run refuse sites or recycling plants free of charge, or returned to dealers who offer a returns service. Correct disposal protects the environment and prevents any possible harmful impacts on humans and the environment.

11. Spare parts and accessories

Item number	Article designation	Illustration
3211805	Complete inhaler with warmblood mask and accessories in transport box	_____
3211804	Inhaler with accessories without mask	••••••••••
3211804-0	Inhaler without accessories	1
3211821	Wall bracket incl. 4 screws and 4 dowels with installation instructions for AirOne	6
3211826	Transport box with cover	7
3211816	Complete warmblood mask with valves, seal and head straps	4-4.6
3211817	Complete coldblood mask with valves, seal and head straps	4-4.6
3211816-0	Warmblood mask without accessories	4
3211832	Seal for warmblood mask	4.3
3211830	Inhalation valve for breathing mask	4.5
3211828	Coldblood mask without accessories	4
3211859	Seal for coldblood mask	4.3
3211831	Exhalation valve for breathing mask	4.6
3211825	Head strap for breathing mask	4.4
3211823	Breathing tube 170 length	5.1
3211824	Connecting piece 25 cm	5
3211839	Nebulising chamber cover	3
3211841	Snap ring for nebulising chamber cover	8
3211818	Nebuliser cup, pack of 30	10
3211822	Measuring cup 250 ml	9
3211819	Contact fluid 1 litre	11
299310	Disinfectant 1 litre (Please ask for availability outside DE/ AT!)	12

