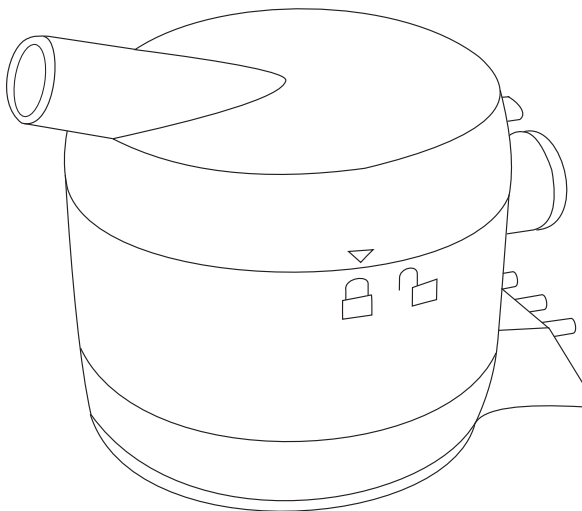


HOFFRICHTER

Quality makes the Difference ■■■■■



User's Manual
Therapy Air Humidifier for
the Respiratory Therapy Device TREND II and
the Ventilator TRENDvent

AquaTREND uni

SERIAL NUMBER

Every HOFFRICHTER GmbH device is supplied with a serial number for traceability purposes.

Please enter your device's serial number here. You will find the serial number on the rating plate on the bottom of the device.

Serial number:

Please always quote the serial number for all queries and complaints.

CONFORMITY



The device complies with the requirements of Directive 93/42/EEC.

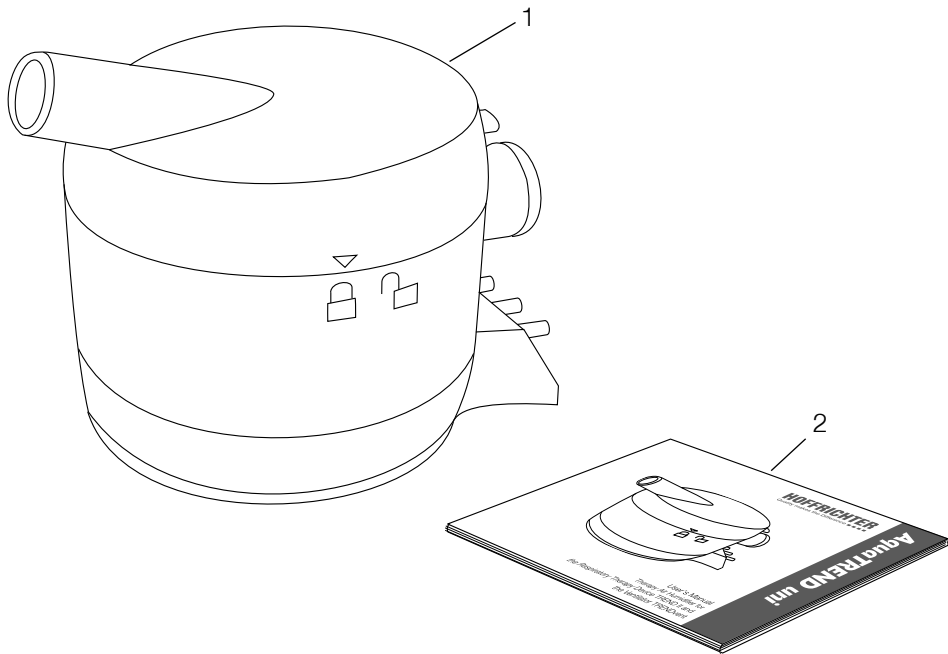
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SCOPE OF DELIVERY

1. Humidifier
2. User's manual



GENERAL

INFORMATION ON USER'S MANUAL

Read this user's manual through carefully before using your therapy air humidifier for the first time.

Follow the safety and cleaning instructions in particular.

Keep the manual in a safe place close to the device so that you can refer to it immediately if necessary.

SYMBOLS USED IN THIS USER'S MANUAL

Important information is denoted by symbols in this user's manual. Be sure to follow these instructions in order to avoid accidents, personal injury and material damage.

In addition, the local accident prevention regulations and general safety regulations in force in the area of use must be observed.



This symbol denotes general safety instructions. Follow these instructions to avoid accidents, personal injury or material damage.

WARNING

This symbol denotes hazardous situations that may lead to serious injuries or death.

CAUTION

This symbol denotes hazardous situations that may lead to moderately severe injuries.

NOTICE

This symbol denotes situations that may lead to material damage or damage to the device.

IMPORTANT

This symbol denotes information, tips and instructions for the efficient, error-free use of the device.

SYMBOLS ON THE RATING PLATE



Observe the warning and safety instructions in the user's manual.



BF application part



Protection class II (protective insulation)



CE conformity declaration



Manufacturer



Follow the user's manual.



Caution hot



Do not dispose of the device with the household waste. Please contact the relevant customer services department to find out how to dispose of the device properly.

SAFETY INFORMATION

GENERAL SAFETY INSTRUCTIONS



- Only use the humidifier in combination with the TREND II respiratory therapy device or TRENDvent ventilator. Follow all the specific user instructions for it.
- Only use accessories that have been recommended and supplied to you by the manufacturer or your specialist dealer.
- Do not start the humidifier if it is damaged or not working. In this event, inform your specialist dealer immediately.
- Change the water in the humidifier daily, as otherwise germs can multiply.

INSTALLATION REQUIREMENTS AND TRANSPORT



- Place the humidifier on a firm, level, heat-resistant surface. Avoid an unfavourable sloping position.
- Never transport or tilt the respiratory therapy device or ventilator with a full humidifier fitted. If you do this, water could get into the therapy device and damage it.
- Do not put the respiratory therapy device or ventilator with a full humidifier fitted in the sun or in the vicinity of heaters or similar.

INTENDED USE

The AquaTREND uni is used to humidify the therapy air flow.

The AquaTREND uni must only be used in combination with a TREND II respiratory therapy device or TRENDvent ventilator.

WARNING

The water in the AquaTREND uni must not contain any additives, such as medicines, salts, aromatic oils or other substances.

If using a TRENDvent ventilator the AquaTREND uni must not be used for invasive ventilation.

IMPORTANT

If using a TRENDvent ventilator the AquaTREND uni can only be used up to a pressure of max. 20 hPa.

CONTRAINDICATIONS

No contraindications are known for the use of the AquaTREND uni.

SIDE EFFECTS

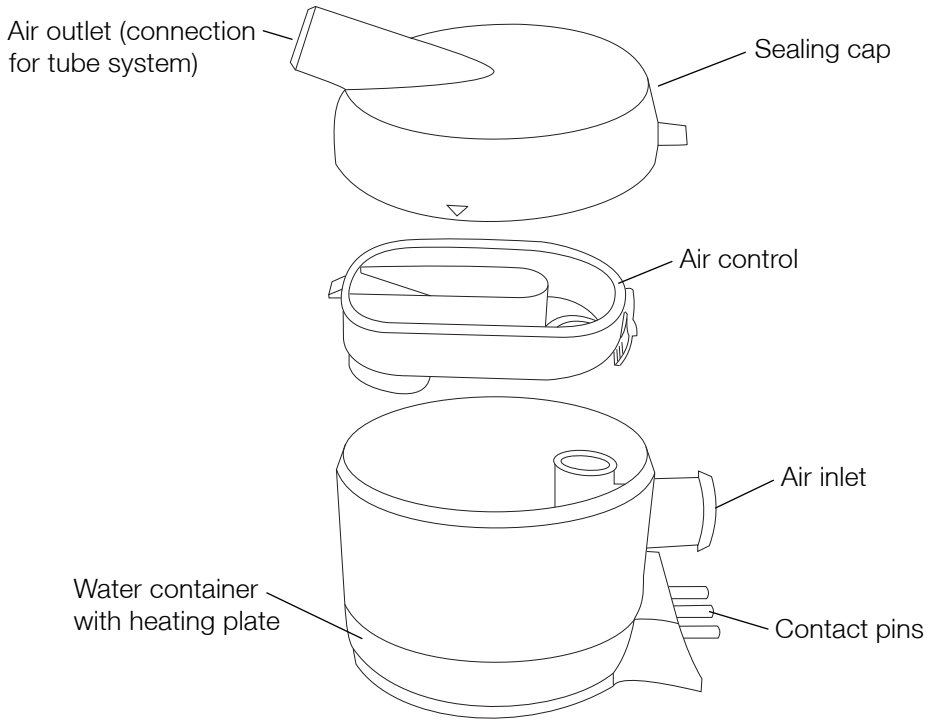
Possible side effects from the use of the AquaTREND uni are not known.

DESCRIPTION OF DEVICE

The AquaTREND uni is a plug-in hot air humidifier for the TREND II respiratory therapy device or TREND-vent ventilator.

It is used to add humidity to the therapy air flow to prevent the mucous membranes in the upper respiratory passages from drying out.

The heating power can be set to 5 different levels and can thus be adjusted to the patient's individual requirements.



USING THE HUMIDIFIER

IMPORTANT

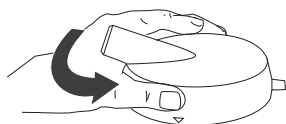
Before using for the first time, rinse the humidifier thoroughly with clear water. To do this, read section "Cleaning" on page 24.

NOTICE

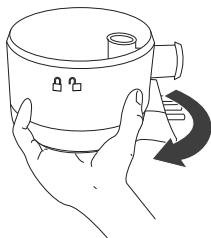
While it is being filled, the humidifier must not be attached to the respiratory therapy device or ventilator.

When the humidifier is full of water, it must not be laid on its side or turned over because water could leak.

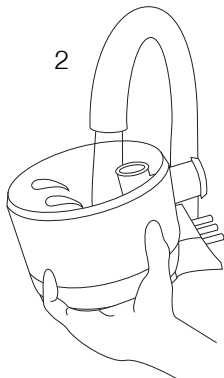
Using the blower when the humidifier is full and not connected to the tube system may lead to drops of water being carried along by the air flow. Therefore, only use the humidifier when the tube system is properly attached.



1-3



2



FILLING THE HUMIDIFIER

1. Open the humidifier by twisting the sealing cap anticlockwise off the water container.
2. Only fill the humidifier with cold, decalcified, boiled water containing no additives. Alternatively, you can also use distilled water for medical purposes.

NOTICE

Note the specified maximum fill level.

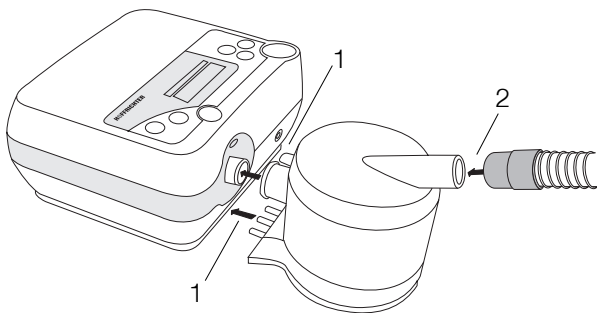
3. Close the water container by placing the sealing cap on the container with slightly pressure and turning it clockwise until it stops.

While carrying the filled humidifier please keep hold of the reservoir.

CONNECTING THE HUMIDIFIER TO THE DEVICE

TREND II RESPIRATORY THERAPY DEVICE

1. Connect the humidifier to the device until it locks into place. Ensure that the contact pins and the air inlet of the humidifier are fitted to the therapy device without being skewed or distorted.
2. Attach the therapy tube to the humidifier's tube connection.

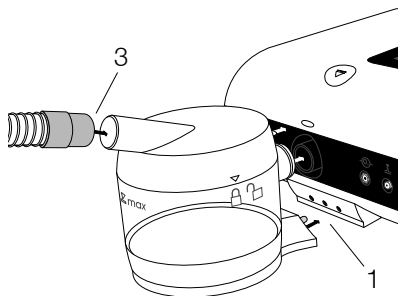


TRENDvent VENTILATOR

1. Connect the humidifier to the device until it locks into place. Ensure that the contact pins and the air outlet of the humidifier are fitted to the device without being skewed and distorted. If the device is set for operation with a valve tube system, the following message appears:

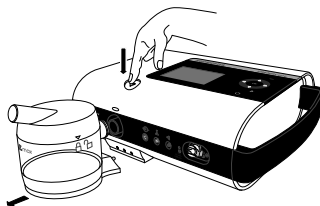
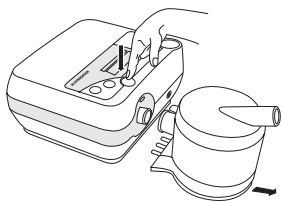
ATTENTION!
Humidifier for non
invasive ventilation only!

2. Confirm the message by pressing the OK button.
3. Attach the ventilation tube to the humidifier's tube connection.








DETACH THE HUMIDIFIER FROM THE DEVICE

To detach the humidifier from the respiratory therapy device or ventilator press the unlocking button and remove the humidifier from the device simultaneously.



USING THE HUMIDIFIER AT THE RESPIRATORY THERAPY DEVICE TREND II


SETTING HEATING LEVEL

1. Press the heater button  up to the heater menu is shown.
2. Press the button . The display of the heating level starts to flash.
3. Set the desired heating level using the buttons  or . You can select a value between 1 to 5. Level 1 represents the lowest heat output and level 5 represents the maximum heat output.
4. Confirm the settings using the button .






SWITCHING ON THE HEATING

To switch on the humidifier's heating, press the heating button . The display now shows the currently set heating level and the heater LED lights. If you start the therapy by pressing the ON/OFF button, the heating is automatically started.

IMPORTANT

You can switch on the heating before starting therapy in order to preheat the water.

SWITCHING OFF THE HEATING

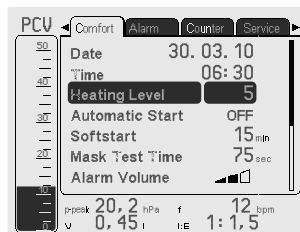
To switch the heating off, press the heating button . The heater LED goes off.

If the humidifier is in heating mode during the therapy and you stop the therapy, the humidifier's heating automatically switches to standby mode (heating LED flashes). As soon as you start the therapy, the heating is also re-activated.

USING THE HUMIDIFIER AT THE TRENDvent VENTILATOR

SETTING HEATING LEVEL

1. Activate the comfort screen using the cursors ◀ or ▶.
2. Select “Heating Level” using the cursor ▼ or touch wheel.
3. Press the OK button.
4. Set the desired heating level using the cursors ▲ or ▼ or the touch wheel. You can select a value between 1 to 5. Level 1 represents the lowest heat output and level 5 represents the maximum heat output.
5. Confirm the settings using the OK button.



SWITCHING ON THE HEATING

To switch on the humidifier's heating, press the heating button. The color of the heating button changes from white to green. If the heating is in standby mode (heating button flashing green) and you start ventilation, the heating is automatically started.

IMPORTANT

You can switch on the heating before starting ventilation in order to preheat the water.

SWITCHING ON THE HEATING

To switch the heating off, press the heating button. The color of the heating button changes from green to white.

If the humidifier is in heating mode during ventilation and you stop ventilation, the humidifier's heating automatically switches to standby mode (heating button flashes green). As soon as you start the ventilation, the heating is also re-activated

CLEANING

CAUTION

Make sure that you follow the cleaning instructions. Disregarding them could damage your health because of germs.

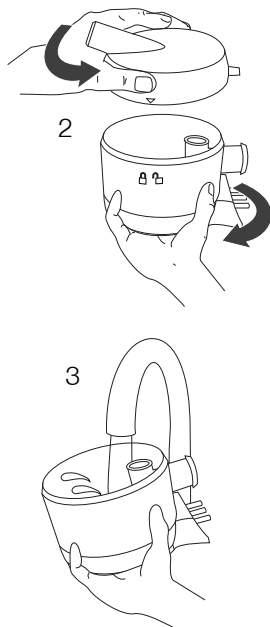
We recommend cleaning the humidifier after each use and leaving it to dry completely during the day. In this way, you will prevent limescale accumulating and germs multiplying.

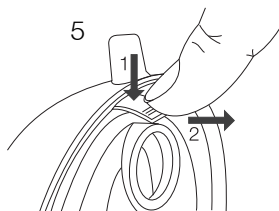
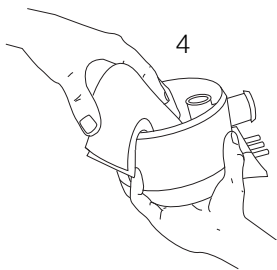
Clean the humidifier as follows:

NOTICE

Never use sharp edged or pointed objects for cleaning.

1. Detach the humidifier from the respiratory therapy device or ventilator by pressing the unlocking button (see page 20) and take it to a sink unit.
2. Open the humidifier by twisting the sealing cap anticlockwise off the water container.
3. Empty the water container and rinse it out under running water.





4. Remove the limescale by wiping it out with a soft cloth. Should stubborn limescale residue remain, we recommend filling the water container with an ordinary household descaler or a weak vinegar solution and leave to stand for some time. Then rinse the container very thoroughly under running water.
5. Remove the air guide as shown.
6. Rinse the sealing cap and the air control under running water. It is sufficient to rinse the device daily with running water.
7. Leave all components to dry completely in the air. You can clean the water container, the air control and the sealing cap in the dishwasher up to a temperature of 60 °C. However, we recommend cleaning them under running water to ensure that food remains from the dishwasher are not deposited on them.

IMPORTANT

The user does not have to perform any technical maintenance or chemical or thermal disinfection on the humidifier.

TROUBLESHOOTING

Problem	Remedy
Water in therapy- or ventilation tube	The heat is set too high. Select a lower heating level.
	Increase the room temperature.
	Run the therapy- or ventilation tube underneath the bedclothes.
No or insufficient humidification	Set a higher heating level.
Set heating level not displayed	Check that the contact pins are inserted into the respiratory therapy device or ventilator as far as the stop and that the locking mechanism lever is horizontal. The respiratory therapy device or ventilator must be switched on.
Water is leaking from the air outlet	Check whether the maximum permissible fill level of the water container has been exceeded. Check the cleaning status.

PREPARING THE HUMIDIFIER WHEN CHANGING PATIENT

WARNING

If the humidifier is to be used for another patient, it must first of all be prepared hygienically.

When being given to another patient, the humidifier must be prepared hygienically by the specialist dealer or the manufacturer.

The preparation procedure is described in detail in the corresponding hygiene plan.

DISPOSAL

HUMIDIFIER

The humidifier must not be disposed of with the household waste.

Please contact the relevant customer services department to find out how to dispose of the humidifier properly.

Proper disposal saves natural resources and prevents harmful substances being released into the environment.



PACKAGING

The packaging is taken back by the distributor but it can alternatively be disposed of separately with the normal household waste.



TECHNICAL DATA

Dimensions (W x D x H)	110 x 150 x 125 mm			
Weight without water	350 g			
Maximum capacity	300 ml			
Operating voltage	24 VDC			
Power consumption	24 VDC		230 VAC	
	TREND II	TRENDvent	TREND	TRENDvent
Heating off	0 W	0 W	0 W	0 W
Heating level 1	< 5 W	< 5 W	< 8 W	< 7 W
Heating level 2	< 9 W	< 9 W	< 14 W	< 12 W
Heating level 3	< 13 W	< 13 W	< 20 W	< 17 W
Heating level 4	< 17 W	< 17 W	< 26 W	< 22 W
Heating level 5	< 20 W	< 20 W	< 30 W	< 25 W
Relative humidity (measured at 22°C and 55 % rel. humidity)	Flow		Level 1	Level 5
	4 hPa		> 75 %	100 %
	10 hPa		> 65 %	> 85 %
	20 hPa		> 50 %	> 70 %

Output of the humidifier system at heating level 5 (measured at 24°C and 34% rel. humidity)	4 hPa : 16 l/min : ≥ 13 mg/l 20 hPa : 37 l/min : ≥ 10 mg/l The humidifier output may vary under different ambient conditions.
Maximum water temperature	≤ 42 °C
Maximum temperature of gas emitted	≤ 36 °C
Operating temperature	+ 5 °C ... + 35 °C
Storage temperature	- 20 °C ... + 70 °C
Relative humidity	15 % ... 95 %
Operating conditions	1060 hPa ... 700 hPa (approx. - 400 m ... 3500 m)
Therapy tube connection	22 mm, cone (as per ISO 5356-1)
Product class according to 93/42/EEC	Ila
Classification according to EN 60601-1	Protection class II, BF type device

CE marking as per EC directive 93/42/EEC.

The manufacturer reserves the right to make technical changes without notice.

DISCLAIMER

HOFFRICHTER GmbH is not liable for consequences in terms of safety, reliability and performance of the product where:

- interventions, modifications, extensions, calibration, repairs and maintenance are carried out by persons not authorized by us,
- other manufacturers' accessories and spare parts are used that have not been approved by us for use on the product,
- the product is used other than as described in the user's manual or
- the hygiene and cleaning instructions described in the user's manual have not been complied with.

Statutory guarantee rights remain unaffected by this.

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