Ultrasonic humidifier Airbi TWIN



Instruction manual

(version 1.3)

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1.1 Why humidify the air?

Stay in heated rooms can be not only unpleasant, but also insanitary. One of the main reason is low humidity. Optimal humidity is between 45% and 60%, while in many of our homes in winter humidity drops below 20%.

What does low humidity causes? Dust particles, bacteria, viruses, dust mite feces are collected by nasal mucosa are exhaled back in normal state, but due to dry air these particles get into the lungs and reduce natural defense. This actions overload the immune system and irritate the mucous membranes, cough, cracked lips and it is very close to any kind of disease.

Ultrasonic humidifiers Avair are ideal for apartments, offices, everywhere where low humidity can cause health problems for people. Ultrasound produced vapor is harmless to health. The biggest advantage of the ultrasonic humidifiers is high performance together with low energy consumption.

1.2 Principle of ultrasonic humidifier

Ultrasonic Humidifier use the ultrasonic high-frequency oscillator to break up water into tiny water particles with the diameter of about 1-5 μ m. The ventilation system blows out this water into the dry air where they evaporate to give the required humidity. The clearly visible smooth and even fog can be seen out of the unit.

1.3 Security instructions

- Always read the user guide instructions carefully before using the device.
- Keep this User's Manual for future reference.
- After unpacking, make sure that humidifier wasn't damaged during transport. If you find any damage, contact your dealer as soon as possible. We recommend you keep the packaging for possible future use.
- Before first use check that the device parameters (electric voltage, etc.) correspond to local conditions.
- Always put the humidifier on a hard, flat horizontal surface, at least 15cm from the walls and away from any source of heat such as burners, radiators etc. The humidifier cannot operate on a surface that is not horizontal. We do not recommend using the humidifier on wooden furniture or the floor, as water vapor may liquefy around the unit.
- Keep the humidifier out of reach of children. Do not permit children to play with it.
- Before using the humidifier, unwind the cord and check if it is not damaged. Do not use it if the cord is damaged.
- Do not plug or unplug the humidifier with wet hands.
- Never disassemble the basic unit.
- Never operate the humidifier with a defective plug or cord, or after a breakdown or damage
 of any kind. In these cases, return the appliance to the nearest approved dealer/repairer for
 verification and any necessary repairs or adjustments.
- Do not use additives such as perfumes, essences, etc.

- Do not shake the humidifier. This could spill water into the base unit and affect its operation.
- Do not leave the humidifier in the sun for a long period.
- If an unusual odour occurs during normal use, turn off the appliance, unplug it and have it verified by qualified personnel.
- Unplug the humidifier before cleaning or if removing the tank.
- Never touch the water or the immersed components when the appliance is in operation.
- Never turn on the humidifier when there is no water in the tank.
- Never scratch the transducer.
- To prevent any damage to the components, do not allow water to splash inside the base unit.
- Never wash the entire unit with water; do not immerse it.
- The ultrasonic humidifier should be cleaned regularly. To do this, refer to the cleaning instructions in this manual and respect them.
- Do not use the humidifier if the air in the room is already sufficiently moist (more than 50% relative humidity). Excessive humidity gives rise to condensation on cold surfaces or walls in the room.
- Device is only for indoor use.
- This device is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless they are supervised or have the person responsible for their safety.
- Clean and dry device according to the following guidelines before storage. Don't store device when the water is inside. Store device on dry and cool place, out of reach of children.

2 Description

2.1 Technical specifications

Model: SPS-702

Evaporation rate: 120-300 ml/h Water tank capacity: 5 litres

Ions production: 3 000 000 ions/cm3

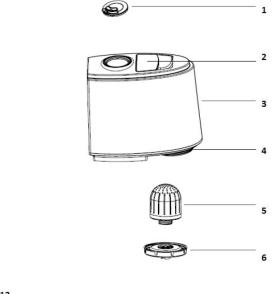
Ozone production: < 0,05 ppm (according EU limits) Dimensions (H x W x D): 33,5 x 15 x 28,5 cm

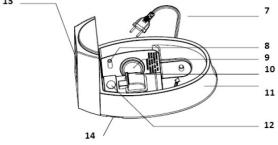
Weight: 2,6 kg without water

Color: black, white

Noise level: < 35 dB (A) Power supply: 220-240 V Frequency: 50/60 Hz Total power: 30W

2.2 Humidifier's diagram





- 1. output nozzle
- 2. handle
- 3. water tank
- 4. water inlet
- 5. filter cartridge
- 6. tank cover
- 7. cord & plug with humidity sensor
- 8. water level sensor
- 9. transducer
- 10. fan
- 11. base
- 12. led light/indicator on
- 13. display with touch buttons
- 14. aroma box

2.3 Features

Low energy consumption, save 85-90 percent of electricity of normal steam humidifier. Automatic control to humidity level, lack-water security protection.

Aromatherapy

Ionizer to benefit your health.

Ceramic filter to soften and purify the water.

Three moisture control settings.

Timer settings to ensure 1-12 hours of running time.

Releases abundant anion, promotes cellular metabolism, increases vitality and appetite, purifies blood and soothes one's nerve.

Easy to refill water into the water tank

Increase and regulate relative humidity of the room air.

Eliminate electrostatic charges.

Prevent different diseases.

Keep your appearance fit and protect your skin.

Long lifetime.

2.4 Further information about ionization

Among the factors that significantly affect air quality include ions. Ions are atoms or molecules that have lost or gained an electron. Ions which have lost an electron are positive ions, the ions that are obtained electron negative ions.

The open space is regularly significantly subsidized ionized air particles. In cities and in enclosed, poorly ventilated areas, the situation is worse. In urban flats concentration of negative ions is very low.

Here are the concentration of negative ions in different locations.

Location	Concentration of negative ions
air in a city apartment	50-100 ions/cm ³
air in the street	100-500 ions/cm ³
air in the forests or by the sea	1 000-5 000 ions/cm ³
air close to waterfalls	10 000-50 000 ions/cm ³
air after storm	10 000-50 000 ions/cm

High concentration of positive ions leads to their penetration into the lungs. Using inhalation ions get into the blood and into the body where they can cause adverse reactions. Air ionizer is a device that uses high voltage or electric negative charge for ionization of air molecules (negative ions production). Ionizers help to improve mood, relieve depression and improve skin condition. Ionizer also helps with clustering dust and other particles in the air, so we can say that ionizers particularly also clean the air.

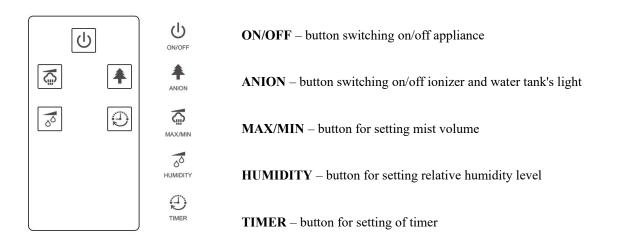
3.1 Device control

The device can be controlled by five buttons located on the front panel under the display.

()	LCD Display
ON/OFF	ON/OFF – button switching on/off appliance
ANION	ANION – button switching on/off ionizer and water tank's light
MAX/MIN	MAX/MIN – button for setting mist volume
HUMIDITY	HUMIDITY – button for setting relative humidity level
TIMER	TIMER – button for setting of timer

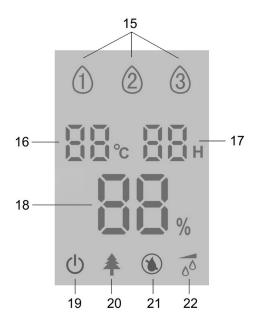
3.2 Remote control

The device can be also controlled via five buttons on the remote control. Their function is identical to the function keys with the same name directly on the device. Before first use of remote control it is necessary to remove the protective film in the battery area.



3.3 LCD display

The LCD display shows the measured values of temperature and humidity around the device and the other symbols for the different functions of the device.



Description of all segments on LCD display:

- 15. mist volume
- 16. temperature (°C)
- 17. timer
- 18. relative humidity (%)
- 19. switch off icon
- 20. indication of ionizer
- 21. indication of empty water tank
- 22. indication of automatic mode

3.4 Getting started

Before first use, allow the device to adjust room temperature at least half an hour. The device is recommended for use in the temperature range 5-40 °C and relative humidity less than 80%. Remove the water tank, unscrew the cover from the bottom of the tank and fill the tank with clean water (water temperature should be under 40°C). After filling water tank close it.

Check the bottom part of the humidifier and make sure that this part is clean. Carefully place the water tank on the base and wait a few seconds before the water gets into the basin. Plug the cord into the outlet (NEVER SWITCH ON DEVICE WITHOUT WATER IN BASIN). If the device is switched off but plugged in el. network, display shows switch off icon (19).

Switch on the unit with **ON/OFF** button. After switching on device is in manual mode which means that device releases mist permanently and mist intensity is set at medium level. Two jets at the outlet of the humidifier can be set in any direction. Outlet nozzles should not be set directly to persons nearby devices (eg, sleeping child, etc.).

MAX/MIN button changes mist level (low, medium, high). This change is accompanied by change of number on the top of LCD screen (15). Please note that if the device is in automatic mode, it can adjust the mist level by itself.

Pressing the **HUMIDITY** button activates automatic mode (indicated by blinking icon of automatic mode - 22). You can select the desired humidity level by pressing this button repeatedly until the required humidity level is displayed (from 45% to 75% in increments of 5%). Once you select your desired humidity level, simply stop pressing the button and your humidity level will be set. Wait another 5 seconds and the numeric value on the LCD display will switch to the current humidity level as measured by the built-in Hygrostat. When the

humidity level in the room reaches the set humidity level, the machine will go into automatic sleep state and stop producing mist. When the room's actual humidity level drops below your set humidity level then the machine will start producing mist again.

You can deactivate automatic mode very easily by pressing the humidity button until you reach 75% RH. Press the button one more time and you will now be in manual mode.

Pressing the **ANION** button will activate/deactivate the negative ion generator (more info in section 2.4.) and water tank's light. After switching humidifier on, ion generator and water tank's light are off. Press button once to switch ion generator and light on. Press button again to switch light off. Press button again to switch ion generator off and light on. Press button again to switch ion generator and light off. Ion generator function is represented by tree icon on LCD.

TIMER button sets the timer which determines how long is the device switch on. User can set time for 1-12 hours and after this period device switches itself off. If this feature is active display shows actual time until it will switch off.

If humidifier run out water during operation, it automatically turns off, beep sound and starts to light on **indicator of empty water tank** (21).

After activation of any button, LCD display lights up and if not pressed any button display dims after 10 seconds.

Humidifier is equipped with a ceramic water filter (5), which consists of inner cylinder, the outer cover and ceramic balls. Plastic section contains silver nanoparts which purify water and destroy microbes (anti-bacterial function). Ceramic balls soften the water (catch mineral substances) and eliminate the unpleasant odor of water.

In the case of regular use of humidifier it is necessary to exchange water filter regularly once a year. Once a month, the filter must be cleaned to ensure perfect water filtration. For more information, see Section 5 - Maintenance.

3.5 Aromatherapy

Humidifier enables the use of aromatic essences. Open the aroma box (14) at the side of the device, pour 5-10 drops of your favorite essential oil on the pas and close the aroma box. Humidifier uses the latest techniques based on ultrasound, so that essential oils and water atomized into microscopically small droplets. With this technology, you can take advantage of the positive potential of aromatherapy for their needs.

Please note: excessive use of aromatic essences may damage plastics in the device. Never add aromatic substances directly into the water container or into the lower chamber of the device. In case you want to use a different scent, it is recommended to use a new piece of dry cotton wool or felt in aroma box. Use only fragrance, aroma essences that do not contain alcohol. Alcohol can damage equipment. Equipment that is damaged by alcohol essences can not be guaranteed.

4 Troubleshooting

Trouble	Possible reason	Solution
Power lamp off, humidifier	No power supply	Connect power supply,
does not work		switch on
Power lamp on, no mist outlet with wind	No water in water tank	Fill water into water tank
Abnormal smell mist New unit		Take out water tank, open
		cover, let it stay 12 hours in
		cool position
	Dirty water or long time	Cleaning water tank, fill in
	staying water	clear water
Power lamp on, unit doesn't	Cover of water tank is	Tighten the cover properly.
work, water is leaking.	loose.	
	Water tank is broken	Contact authorized service
Mist fog is too small	Too much scum in the water basin	Clean transducer
	Water is too dirty or water	Clean water tank, change to
	kept too long in the tank	fresh clear water
Abnormal noise	Resonant in water tank when water is too less	Fill water into water tank
	Unit is on an unstable surface	Move the unit to a stable flat surface
Mist coming out from	There are apertures between	Dip the nozzle in water for a
around nozzle	the nozzle and water tank	while and then fix it to the
		socket on water tank

As faulty is not considered the following:

- If use too hard water in humidifier white coating of sediment may appear in the room. This is not malfunction. Please use soft water.
- Gurgle of water which can be heard close to humidifier is a normal sound.
- The device operates quietly, but not completely noiseless. Noise less than 35 db is not considered as defect.

WARNING!

Should up mentioned solutions do not work please contact the manufacturer or agent. Do never arbitrarily disassemble, repair or restructure the apparatus.

5 Maintenance

In case when the water is hard which means water contains too much calcium and magnesium, they can cause "white powder" problem and give heavy scum on the surface of water basin, transducer and inner surface of the water tank. Scum on the surface of transducer will make the unit work improperly.

We recommend:

- 1. Use cold boiled water or distilled water.
- 2. Clean the transducer, water tank and basin unit every week.
- 3. Change the water in water tank more often to keep it fresh.
- 4. Clean the whole unit, and make sure to keep all parts of the unit dry completely when the unit is not in use.

How to clean the transducer:

- 1. Put 5-10 drops of vinegar on the surface of the transducer, wait for 2-5 minutes.
- 2. Brush out the scum on the surface.
- 3. Rinse the transducer with clean water.
- 4. Never use sharp and solid objects for cleaning of transducer

How to clean the basin unit:

- 1. Clean the water basin with soft cloth and the vinegar if there is scum in it
- 2. If the scum is covered on the security switch, drop the vinegar on the scum and clean it out with the brush.
- 3. Rinse the water basin with clean water.

How to clean water filter:

- 1. Take the filter system away from the tank cover.
- 2. Put the filter system into the white vinegar for about 10 minutes.
- 3. Take the filter system away from the white vinegar; shake for several times, clean it with clear water.

How to replace water filter:

- 1. Take the filter system away from the tank cover.
- 2. Fix new water filter.
- 3. Replacement is finished.

If you don't plan to use humidifier longer time remove the water filter and let it dry thoroughly. Then wrap it in protective packaging and keep it dry and dark place.

6 Disposal of the device (environment)



At the end of the product lifecycle, you should not throw this product into the normal household garbage but bring the product to a collection point for the recycling of electrical and electronic equipments. The symbol on the product, user guide and/or box indicate this. Some of the product materials can be re-used if you bring them to a recycling point. By reusing some parts or raw materials from used

products you make an important contribution to the protection of the environment. Please contact your local authorities in case you need more information on the collection points in your area.

Batteries must be removed before disposing of the device.

Dispose of the batteries in an environmental manner according to your country regulations.

This product is in compliance with the essential requirements and other relevant provisions of Directive 89/336/EEC. The device was approved for use in EU countries, therefore, bear the CE. All necessary documentation is available at the importer address.

Changes in technical parameters, properties, printing errors in the instruction manual reserved.

Importer address:

Bibetus s.r.o. Loosova 262/1 Brno 638 00 Czech republic

E-mail: info@bibetus.cz Tel: +420-544214627