



# HUMIDIFIER

## INSTRUCTION MANUAL

The humidifier helps you to restore an appropriate level of humidity and eliminate the discomfort associated with dry air. The ventilation system diffuses water in the form of a cool or warm vapor in order to provide the desired level of humidity. This vapor is characterized by a mist discharged through the diffusion nozzle. We wish you many years of healthy indoor air with this efficient and effective product.

We recommend you spend some time reading this instruction manual in order to fully understand all the operational features it offers.

#### **\* SAFETY WARNING**

**Read all the safety instructions carefully before use and keep this instruction manual for future reference:**

- 1) Please follow all the safety precautions listed below for safety and to reduce the risk of injury or electrical shock.
- 2) This humidifier can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the humidifier in a safe way and understand the hazards involved. Children shall not play with the humidifier. Cleaning and user maintenance shall not be made by children without supervision.
- 3) Before using this humidifier ensures that the voltage of your electricity supply is the same as that indicated on the rating plate of the humidifier.
- 4) Always place the humidifier on a hard, flat and level surface. Avoid exposure to direct sunlight and always keep it away from walls and heat sources such as stoves, radiators, etc. Warning: The humidifier may not work correctly if it is not placed on a level surface.
- 5) Do not insert or remove the electric plug on the humidifier with wet hands.
- 6) If the mains cable is damaged it must be replaced by the manufacturer, its service agent, or similarly qualified person in order to avoid a hazard.
- 7) To reduce the risk of electric shock, do not remove screws. The humidifier does not contain any user-serviceable parts. Please leave all maintenance work to qualified personnel.
- 8) Fill the tank with fresh, distilled or demineralized water. Do not drop any other liquid into water tank or water basin. Do not run the humidifier when there is no water in the tank or the water basin.
- 9) Do not shake the humidifier as this might cause the water spill over into the base of humidifier.
- 10) Never touch the water or components while the humidifier is in operation.
- 11) If there is an unusual smell when it is being used as described in these manual, switch the humidifier off, unplug it and have it examined by your dealer.
- 12) Do not pour hot water into the tank, i.e. at a temperature in excess of 40°C.
- 13) Unplug the humidifier before cleaning it or removing the tank.
- 14) Do not immerse the humidifier or the mains cable or plug in water or other liquids.
- 15) Never scrape the transducer with a hard tool. The humidifier must be cleaned regularly. To do this, refer to the cleaning instructions in this manual.
- 16) If you spill any liquid into the humidifier, it can cause serious damage. Switch it off at the mains immediately. Withdraw the mains plug and consult your dealer.
- 17) Disconnect the humidifier from the power supply when not in use and before cleaning.
- 18) Ensure that the mains cable does not touch any hot surface and that it does not overhang a table edge.

- 19) Never use this humidifier in a room where aerosol products (sprays) are used or in a room or where oxygen is being administered.
- 20) Do not put items of clothing or towels on top of the humidifier. If the nozzle is obstructed, this may cause the humidifier to malfunction.
- 21) When moving the humidifier, lift it by the base humidifier and not by the water tank.
- 22) Do not use the humidifier if the air in the room is already sufficiently humid.
- 23) The ideal relative humidity level for human comfort is in fact between 45% and 65%. Excess humidity shows up in the form of condensation on cold surfaces or cold walls in the room. To measure the room's humidity correctly, use a hygrometer available in most specialist shops and hypermarkets.
- 24) The humidifier is designed for indoor and domestic use only.

**\* Working Principle:** Ultrasonic Humidifier uses the ultrasonic high-frequency oscillator to break up water into tiny water particles with the diameter of about 1-5um. 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 humidifier.

**\* Correct Humidity Level:**

What exactly is relative humidity: Relative humidity is the amount of water vapor in the air, expressed as a percentage of the maximum amount that the air could hold at the given temperature. We normally mark it with %RH, like 45%RH. Atmospheric air always contains water vapor, the percentage of which depends on the meteorological conditions. The higher the temperature is the more the air keeps water vapor. Therefore, we use the concept of 'relative humidity'. In winter, when the cold air is heated up to the comfort temperature, the relative percentage of the water vapor falls which means the relative humidity drops. In order to keep a comfortable and healthy environment at home, we need some artificial addition of water or water vapor to the room air- that's air humidification.

Ideal relative humidity levels under different situations.

The most comfortable RH for human being: 45-65%RH

Ideal RH for prophylactic and curative purpose: 40-55%RH

Computer and telecom apparatuses: 45-60%RH

Furniture and musical instruments: 40-60%RH

Library art gallery and museums: 40-60%RH

**\* Relative Humidity**

- 1) The percentage of water mist in a given space with a given air temperature is named as relative humidity, usually marked as %RH, i.e. 45%RH. The air contains water mist more or less. The proportion of water mist to the air varies according to different air temperatures. The higher the temperature, the more water mist inhaled in the air.
- 2) In winter, the cold air outside enters the room and becomes warmer by the higher temperature in the room. As a result, the relative humidity decreases. If you want to keep the healthy environmental humidity, we need to increase the mist volume in the air. The humidifier can do that for us.
- 3) Relative humidity in different environments suitable for people:

Bedroom, living room: 45-65%RH

Patient's room: 40-55%RH

Room with computer, experiment equipment: 45-60%RH

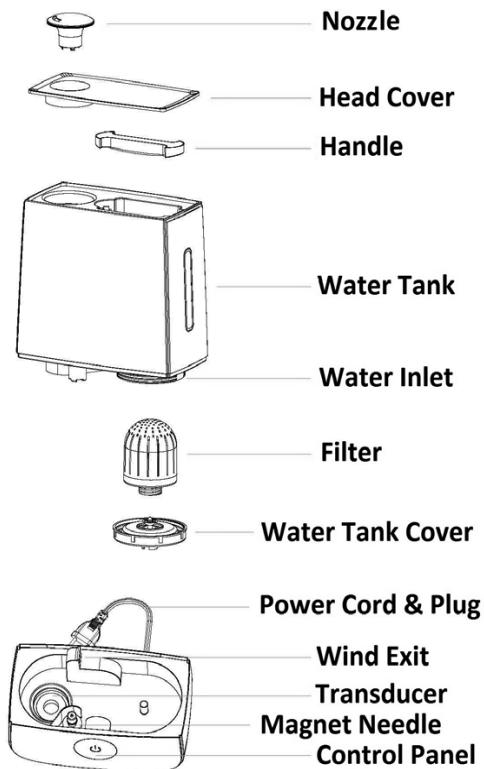
Room with piano: 40-60%RH

Museum, exhibition hall, and library: 40-50%RH

#### \* Water filter

- 1) Ceramic balls can soften the hard water.
- 2) Ceramic filter can eliminate the strange smell in the water.

#### \* Product Overview



#### \* **Features:**

- 1) Easy to refill the water tank with water.
- 2) Built-in security device will switch off the unit automatically when the water tank is empty.
- 3) Noiseless and energy-saving.
- 4) High-quality transducer guarantees a lasting and satisfactory function.
- 5) Soothing nightlight.

#### \* **Technical data:**

Model: SPS-809H

Power supply: 220-240V 50/60Hz

Humidify power: 30W

Water tank capacity: 4 L

Evaporation Rate: 300ml/H ( $\pm 50\text{ml/H}$ )

Noise level:  $\leq 35\text{dB(A)}$

Product size: 23.7x12.8x34.4cm

#### \* **Operation Instruction**

First Operation, put humidifier in the room temperature for half of an hour before running.

It is recommended to use the humidifier under temperature of 20°C, relative humidity less than 80%RH.

Use clear water not over 40°C.

Check the water basin, make sure it is clear.

#### \* **Instructions for usage**

- 1) Put the humidifier on a flat surface.
- 2) Remove the top cover and lift the water tank by the carrying handle.
- 3) Unscrew the water tank cover. Clean the tank and fill it with cold clean water.
- 4) Tighten the water tank cover and check that there are no water leaks.
- 5) Reposition the water tank on the base.
- 6) Check if the rated voltage meets the input voltage, and plug into the socket.
- 7) Touch the power button and the humidifier begins to work with mist output.
- 8) Select required mist speeds by pressing power button. There are three speeds available.
- 9) Auto Shut-Off: Once the water in the basin is not enough to keep the humidifier working, the humidifier will automatically stop. Red decoration light will turn on. Refill the water tank and restart the humidifier. Otherwise, humidifier will automatically power off.

## \* Trouble Shooting Guide

If any trouble is found in normal operation, please kindly refer to below:

Trouble	Possible Cause	Solution
Power lamp is off when switched on.	Humidifier is not plugged in.	Plug the humidifier into a powered electrical socket.
	Power cord is damaged.	
	Humidifier is defective or malfunctioning.	Immediately discontinue use and contact Customer Support.
Power lamp is on when switched on, but no mist come out.	Humidifier is not turned on.	Press the power button to turn it on.
	The target humidity is reached.	Increase the target humidity or change mode.
Water shortage indicator is on.	No water in the tank.	Refill the water tank wait at least 1 minute.
	Water level is low.	
	The water level required has not yet reached the vaporization compartment.	Wait at least 1 minute.
	The water tank isn't well positioned.	Check the positioning of tank on the base.
	The humidifier isn't on a flat surface.	Check the positioning of the humidifier.
Humidifier produces an unusual smell.	Humidifier is new.	Take out water tank, open cover, let it stay 12 hours in cool position.
	Dirty water or water sitting too long.	Clean water tank, fill with clear water.
Humidifier makes a loud or unusual sound.	Resonant in water tank when water is too low.	Fill water into water tank.
	Humidifier is on an unstable surface.	Move the humidifier to a stable flat surface.
	Water tank is positioned incorrectly.	Turn off and unplug the humidifier, then align the water tank cover with its respective opening in the inner chamber.
	Humidifier is malfunctioning.	Immediately discontinue use and contact Customer Support.
The humidification capacity is too low.	There is natural or artificial air replacement in the room which interfere the increase of %RH.	Check if doors and windows are closed. Check if there is no air conditioning working in the room.
	The air inlet grids and nozzle could be blocked.	Remove any blocking items from the grids and the nozzle.
	Too much scale in the water basin.	Clean transducer.
	The humidity speed is too low.	Increase mist output speed.
	Water is too dirty or water kept too long in the tank.	Clean water tank, change to fresh clear water.
The ambient humidity is too high.	Humidifier keeps working.	Select a lower speed or turn it off.
	The humidity speed is too high.	Select a lower speed.
	Room is not well-ventilated.	Open a window to ensure proper air flow for your humidifier, or move the humidifier to a more well-ventilated room.
	Excess water tank has spilled while filling the water tank or replacing the	Wipe off excess water from the top and bottom of the base before replacing the

	water tank back onto the base.	water tank.
There is condensation in the room.	The room temperature is too low.	Heat the room up.
The mist suddenly stops coming out.	Programmed timer period has run out. The water shortage indicator is on.	Turn humidifier on. Refill water tank.
Control panel does not work.	Hands are too wet when operating control panel. Humidifier has malfunctioned.	Keep hands dry while operating the control panel. Contact Customer Support.
White dust appears around the humidifier.	Water being used has a high mineral content. Humidifier was not properly cleaned after last use.	Use distilled water with the humidifier. If distilled water is not available, use purified or filtered water. Remember to clean water tank at least once a week. Clean humidifier.
Mist is coming out from the base Mist fog coming out from around nozzle.	Water tank is not positioned correctly. There are apertures between the nozzle and water tank.	Turn off and unplug the humidifier, then align the water tank cover with its respective opening in the inner chamber. Reposition the cover and check if the nozzle is well plugged in the cover.

**\* The following is not considered faulty operation:**

- 1) If your water is very hard (containing abnormally high levels of minerals) the humidifier may produce white dust. This is not a malfunction. The solution would be to clean the filter more often or use softer water.
- 2) If you stand very close to the humidifier, you will hear the gurgling sound of water. This is normal.
- 3) The humidifier operates very quietly but it is not completely silent. Noise levels less than 35dB(A) is considered normal.

**\* Maintenance**

In a case when the water is hard which means water contains too much calcium and magnesium, it can cause a “white powder” problem and leave heavy scales on the surface of water basin, transducer and inner surface of the water tank. Scales on the surface of transducer will let the humidifier work improperly.

**\* We recommend:**

- 1) Use cold boiled water or distilled water.
- 2) Clean the transducer, water tank and basin humidifier every week.
- 3) Change the water in water tank more often to keep it fresh.
- 4) Make sure to pour out water from the water tank and dry the water basin before you store it unused for a long time.
- 5) Clean the whole humidifier and make sure that all parts of the humidifier are dried completely if it is supposed to be leaved unused for a long time.

**\* How to clean the transducer:**

- 1) Clean with clean water or citric acid if there is scale in it.
- 2) Brush off the scale from the surface.
- 3) Rinse the transducer with clean water.

**\* How to clean the basin humidifier:**

- 1) Clean the water basin with soft cloth or use citric acid if there is scale in it.
- 2) Rinse the water basin with clean water.

**\* How to clean ceramic filter:**

- 1) Clean and activate the ceramic ball filter after using 1000L water regularly. Depend on water quality. If ceramic ball is dirty, it needs to be cleaned more frequent.
- 2) It can be dipped in vinegar about 5 minutes. Then rinse it cleanly with clean water.
- 3) Then put filter under the sun for 4-6 hours.



**DISPOSAL:** Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.