

HX900 Hydrogen Inhaler

Instruction Manual



What is Molecular Hydrogen ?

Molecular hydrogen (i.e. H₂ gas) is gaining significant attention from academic researchers, medical doctors, and physicians around the world for its recently reported therapeutic potential. One of the earliest publications on hydrogen as a medical gas was in 1975, by Dole and colleagues from Baylor University and Texas A&M. They reported in the journal Science that hyperbaric (8 atm) hydrogen therapy was effective at reducing melanoma tumors in mice. However, the interest in hydrogen therapy only recently began after 2007, when it was demonstrated that administration of hydrogen gas via inhalation (at levels below the flammability limit of 4.6%) or ingestion of an aqueous-solution containing dissolved hydrogen, could also exert therapeutic biological effects. These findings suggest hydrogen has immediate medical and clinical applications.

Although the research is early, the 1000+ scientific articles suggest that H₂ has therapeutic potential in over 170 different human and animal disease models.

Molecular hydrogen (H₂) or diatomic hydrogen is a tasteless, odorless, flammable gas.

H₂ reduces oxidative stress and improves redox homeostasis partly mediated via Nrf2 pathway, which regulates levels of glutathione, superoxide dismutase, catalase, etc.

H₂, like other gaseous-signaling molecules (e.g. NO*, CO, H₂S), modulates signal transduction, protein phosphorylation, and gene expression, which provides its anti-inflammatory, anti-allergy, and anti-apoptotic protective effects.

Information source: <http://www.molecularhydrogeninstitute.com/>

Working Principle

Hydrogen inhaler (with SPE hydrogen production technology) is to feed the water that meets the requirements (density greater than 2MΩ electrons or deionized water or secondary distilled water for the analytical industry) into the anode chamber of the electrolysis cell. After the electricity is energized, the water is immediately decomposed at the anode: Hydrogen ions and oxygen are generated, and oxygen is discharged from the anode. Hydrogen ions in the form of hydrated ions (H₃O⁺) under the action of power plant, through the SPE ion membrane, reach the cathode to absorb electrons to form hydrogen, which is discharged from the cathode chamber and enters the gas-water separator to generate humid high-concentration hydrogen.

The SPE hydrogen production technology is called solid polymer electrolyte electrolyzed water to produce hydrogen, the core is a solid polymer electrolyte electrolysis cell, and the electrolysis cell is composed of a membrane-titanium alloy component and a sealing component. The membrane module is the core component of the electrolyzer, which determines the performance of the electrolyzer, ensures the purity of the hydrogen output of the hydrogen machine, and the pressure is stable and safe.

1. Product Show



2. Operating Instruction

- ① Open the water tank lid counterclockwise, fill in 1L pure or distilled water (**mineral and tap water are strictly prohibited**), and close the lid clockwise after filling the water.



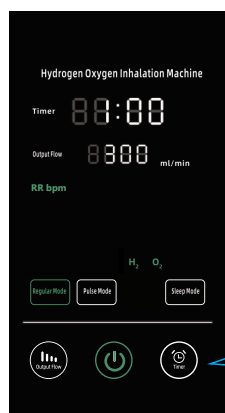
- ② **1 Continuous Mode & Sleep Mode:**

Remove the O2 and H2 output caps. Install each of the 2 humidification bottles on the machine (see the picture on the right). Then connect each of the 2 ports on one end of the tee tube to the left humidification bottle, and insert the other end of the tee tube from above to the port of the right humidification bottle. Connect the nasal cannula to the humidification bottle on the right side..



2 Pulse Mode: Insert the nasal breathing tube directly into the H2 port. (No need to install the humidification bottles under this mode)

- ③ Connect the power supply, the display will automatically turn on.
The power interface is on the back of the machine near bottom.



- ④ Touch the corresponding buttons to set time, mode, and flow.

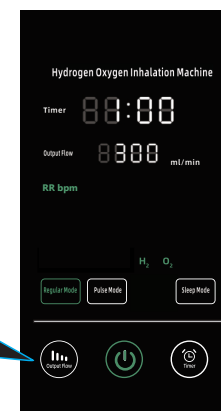


- ⑤ Mode selection

Continuous Mode

Touch the continuous mode button, the machine starts working and outputs hydrogen continuously.

This mode is suitable for making hydrogen-rich water too.



How to connect the hydrogen diffusion stone to this unit and make hydrogen water?

Directly connect the cannula to H₂ outlet, and put another side of h₂ diffusion stone into the drinkable water, then start continuous mode to make hydrogen water (Please do not use humidification bottle under this function)





Pulse Mode

■ Insert the nasal breathing tube directly into the H2 port, touch the pulse mode button, the machine will automatically release the pressure to release the gas and make a popping sound, at the same time the machine will make a popping sound when it sensed your breathing:

If the breathing is very weak, the sensor can not monitor the pressure difference, so the stored gas will not come out, only when the breathing is stronger can monitor the pressure difference and the machine works normally.

In the pulse mode, the screen will display the respiratory symbol.

Sleep Mode

Touch the sleep mode button, the machine works normally and produces hydrogen, the screen enters the sleep state, touch the button again, the screen returns to the normal state.



3. Operating Notice:

Water shortage

The pattern of water shortage in the water tank appears on the screen, indicating that the water tank is short of water. Please add pure water to the water tank in time. It is recommended that the amount of water added should not exceed 1L.

Overheat

When the temperature is overheat, an overheating pattern will appear on the screen. In this condition, please check whether the water level in the water tank is too low, and wait for the machine to cool down before using it again. In case of unknown reasons, please contact the distributor.

TDS

TDS appears on the screen, indicating that the water in the water tank is impure, please pour pure water (TDS<5) into the water tank again.

Filter

When the filter icon appears on the screen, please replace the filter in time.

Drainage and water change:

The water in the tank should be replaced every 2 weeks.

Steps:

First cut off the power, then open the drain of the machine, drain the water in the tank, and then the drain cover tightly, add new water, clean the tank (after adding a small amount of new water, and cover the tank, gently shake to clean), pour off the water in the tank, pour fresh pure water into the tank.

4. Cautions

1. Please use the machine in a ventilated environment

2. Do not tilt this product during use

3. Please add pure water or distilled water only

4. No open flames are allowed near the machine during use

5. Please drain the water when the equipment is transported or out of use



Cautions

5. Specifications

| | |
|----------------|-------------------------|
| Product name | Hydrogen oxygen inhaler |
| Model No. | SG-450 SG-600 SG-900 |
| Voltage | 110V~240V |
| Power | <350W |
| Working time | 1hour~6hours |
| Product size | 185mm*218mm*248mm |
| Product weight | Around 4.5KG |
| Carton size | 302mm*262mm*395mm |
| Gross weight | Around 5.5kg |

6. Package Included

| Name | Quantity | Picture |
|-------------------------|---------------------|---|
| Hydrogen oxygen inhaler | 1 Unit |  |
| User manual | 1 Booklet or E file |  |
| Power supply | 1 Piece |  |
| Nasal cannula | 1 Piece |  |
| Tee Tube | 1 piece+3pieces |  |
| Humidification bottle | 2 Sets |  |

7. Warranty Rules

1. The warranty period is one year from the date of purchase.
2. During the warranty period, the machine should be replaced with the proof of purchase and warranty card. If the normal spare parts are replaced, the user should pay for the spare parts.
3. Problems caused by incorrect operation or self-disassembly during the warranty period are not covered by the warranty, but paid service is available.

Warranty Card

| Warranty Card | |
|---------------------|--|
| Problem description | |
| Purchase date | |
| Customer name | |
| Telephone & Phone | |
| Email | |
| Customer address | |