



Intelligent Hydrogen Generator

User Manual



Please read this manual carefully before use and retain it for future reference.

Revive Hydrogen
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Preface

Thank you for purchasing the Revive Hydrogen High-Flow Hydrogen Generator. This product has been carefully designed and manufactured to provide high-purity hydrogen gas in a safe and reliable way. It features advanced electrolyzer technology, intelligent controls, and a durable design for long-term use.

To ensure proper operation and safety, please read this manual thoroughly before using the generator. Familiarizing yourself with the instructions will help you operate the machine correctly and efficiently, maintain the generator in optimal condition, and understand important safety precautions.

We are committed to providing excellent product quality and customer service. If you encounter any problems while using this product, please contact our support team for assistance.

Product Overview

Our Intelligent High-Flow Hydrogen Generators produce high-purity hydrogen and oxygen gas through water electrolysis. It is suitable for personal or professional wellness use.

Product Specifications

Specification	Details
Product Name	Hydrogen Generator
Models Available	HYD-3000, HYD-1800, HYD-1500
Hydrogen/Oxygen Flow (mL/min)	Total Gas Flow (mL/min)
	HYD-3000: 3000 / 2250 / 1500
	HYD-1800: 1800 / 1350 / 900
	HYD-1500: 1500 / 1350 / 900
	Hydrogen Flow (mL/min)
	HYD-3000: 2000 / 1500 / 1000
	HYD-1800: 1200 / 900 / 600
	HYD-1500: 1000 / 900 / 600
	HYD-3000: 750
Rated Power (W)	HYD-1800: 450
	HYD-1500: 375
Hydrogen Purity	99.992%
Net Weight	32 lbs (14.5 kg)
Power Input	AC 110 V 60 Hz / 220 V 50 Hz
Required Water	Distilled water (TDS ≤ 5)
Water Tank	6 L, with integrated UV-C treatment

Important Safety Information

Please read all instructions before using the machine. Failure to follow these precautions may result in damage to the unit or risk to the user.

Water Use

- Use only **purified or distilled water**. Do not use tap water, mineral water, or water containing impurities.
- When adding water, do not overfill. Add slowly to avoid overflow. Fill only until the water shortage light turns off or the MAX fill line is reached.
- Drain and refill the tank with fresh distilled water every 60 hours of accumulated use or every month, whichever comes first. Drain and refill immediately if the TDS indicator activates.

Placement & Environment

- Always place the machine on a **flat, stable surface**.
- Keep at least **8–12 in (20–30 cm)** away from walls or objects.
- Do not place near heat sources, flammable materials, or in direct sunlight.
- Do not use in environments with extreme temperature changes.
- Some condensation may appear inside the unit after shipping or factory testing. This is normal—wipe dry with a soft cloth.

Electrical Safety

- Ensure the power plug is connected to a **properly rated outlet** as indicated on the machine's rating plate. If the plug does not fit the outlet, contact a qualified electrician. Do not alter the plug or use an adapter.
- Do not operate with **wet hands** or allow the plug or unit to come into contact with water.
- Do not immerse the machine or any components in water.
- Do not attempt to view, remove, or bypass the UV-C source. UV-C light can cause eye and skin injury. Operate the unit only with the water tank cover closed.
- Do not use extension cords unless approved by local authorities.
- If the cord is damaged, it must be replaced by a qualified service professional.

Operation & Use

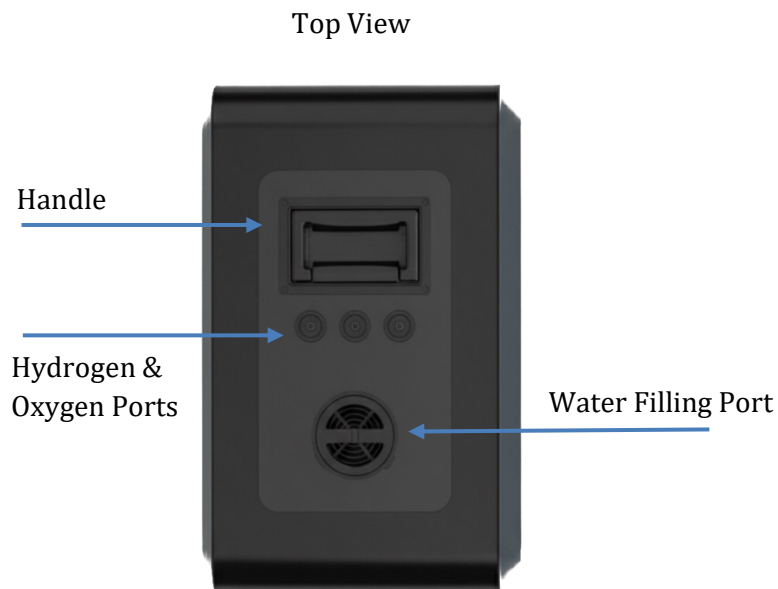
- Keep the machine **out of reach of children and pets**. Children should only use it under adult supervision.
- This product is intended for individuals able to use it safely. People with weakness, poor physical fitness, or breathing difficulties should consult a doctor before use.
- Before inhalation, allow the machine to run for **one minute** to stabilize output.
- The water tank includes an integrated UV-C source. Do not attempt to view, remove, or bypass it. UV-C light can cause eye and skin injury. Operate the unit only with the water tank cover closed.
- Do not insert sharp objects, push, bend, squeeze, or strike any part of the machine.
- Do not open, repair, or modify the unit yourself.
- If abnormal noise, smell, or smoke occurs, switch off immediately, unplug, and contact support.
- Static electricity may occasionally cause a crackling sound during use—this is normal.

Cleaning & Maintenance

- Always unplug the machine before cleaning, draining, or refilling.
- Use only a **soft, dry cloth** to wipe the exterior. For heavier dirt, use a slightly damp cloth. Do not use detergents, sprays, or abrasive materials.
- Do not spray water or flammable substances on the unit.
- Do not operate the machine for more than **10 hours continuously**. Allow it to cool for at least 1 hour before restarting.
- For long-term storage, unplug the unit but leave the water in the tank — the electrolyzer should not be allowed to dry out. Drain and refill with fresh distilled water before returning the unit to use.
- Drain the tank fully before transporting the machine.
- The water tank includes integrated UV-C treatment. This supplements regular draining and refilling; it does not replace them.
- Empty and refill the humidification bottles with fresh distilled water regularly — daily where the machine is used by more than one person.

Accessories

- Use only **disposable suction pipes** for personal use. If reused, sterilize in boiling water or replace with new accessories.
- Ensure all outlets are clear to prevent blockage or pressure buildup.



First-Time Setup & Operation

1. Position the Machine

- Place the unit on a flat, stable surface.
- Keep at least 8–12 inches (20–30 cm) of clearance on all sides.
- Avoid direct sunlight, heat sources, flames, or humid environments.



2. Attach the Humidification Bottle Brackets

- Locate the two humidifier bottle brackets included in the accessory kit.
- Align each bracket with the mounting holes on the side of the machine.
- Secure using the included screws.
- Confirm both brackets are firmly attached before hanging the bottles.

3. Fill and Install the Humidification Bottles

- Fill each bottle with distilled or purified water between the MIN and MAX lines.
- Do not overfill—overfilling may cause water to enter the gas line.
- Reattach the lids securely.
- Slide the bottles into their brackets until they click into place.
- Connect the short gas outlet nozzle from the machine to the top inlet of each bottle.



4. Fill the Water Tank

- Make sure the machine is powered OFF and unplugged.
- Open the water tank cover on the top of the unit.
- Add purified or distilled water slowly until the level reaches the MAX mark or until the water shortage indicator turns off on the control panel.
- Close the tank cover.

First-time priming procedure (required once):

- After filling, wait 5 minutes.
- Remove the drainage rubber plug at the bottom.
- Let water drain for 15 seconds.
- Reinstall the plug securely.
- The machine is now ready for normal use.

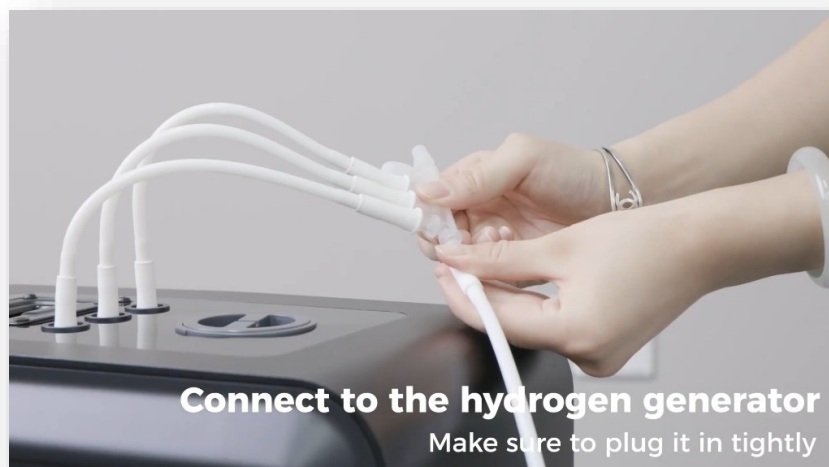
5. Connect the Power

- Plug the power cord into a properly rated wall outlet.
- Switch on the main power switch at the back of the machine.
- The machine enters standby mode.



6. Attach the Cannula Hoses

- **Your generator supports:**
 - Single-user inhalation, or
 - Dual-user simultaneous inhalation



Single Use

- Connect one hose from one hydrogen port to the humidifier bottle (left or right).
- Connect the outlet of that bottle to one nasal cannula.
- Ensure each connection fits tightly.



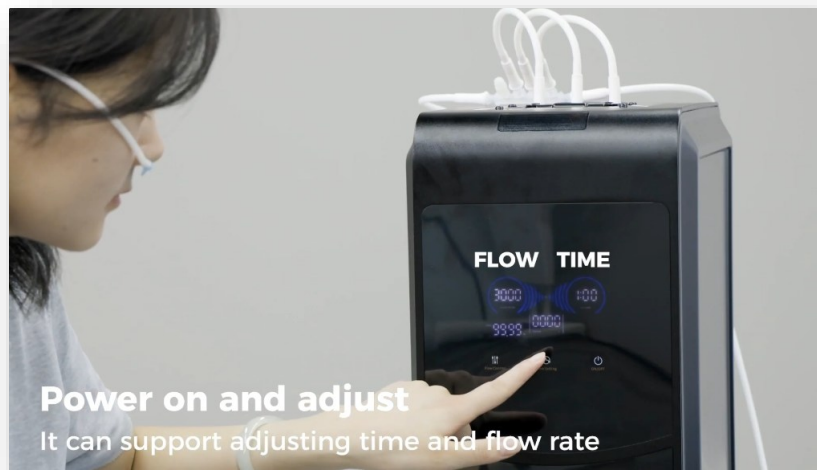
Double Use

- Connect one hose from each hydrogen port to the manifold.
- Route two hoses, each to a separate humidifier bottle.
- Attach two nasal cannulas—one per bottle.
- Ensure all hoses are fully seated and any empty manifold ports are capped to avoid leakage.
- Important: All hydrogen must pass through a humidification bottle before inhalation.



7. Power On and Begin Operation

- Press the **Flow Rate** button on the front panel to choose flow rate.
- Press the **Timer** button to select your desired session length (30 min–8 hours). The machine will start automatically.
- Allow the machine to run for one minute before inhalation—this stabilizes hydrogen output.
- The session timer will count down.
- When the session ends, the unit beeps and returns to standby after a few minutes.



8. Adjust the Flow Rate

- Touch the Flow Adjustment button to choose your flow level. Figures below are total gas output; hydrogen is two-thirds of each.
 - HYD-3000: Adjustable to 1500ml/min, 2250ml/min, 3000ml/min.
 - HYD-1800: Adjustable to 900ml/min, 1350ml/min, 1800ml/min.
 - HYD-1500: Adjustable to 900ml/min, 1350ml/min, 1500ml/min.

9. Choosing Your Flow Setting

Hydrogen research is generally framed around FiH_2 —the fraction of hydrogen in the air actually reaching your airway—rather than the machine's output. These are not the same number. How much hydrogen reaches you depends on your breathing rate, whether your nose is clear, whether you breathe through your mouth, and your elevation.

Published research generally describes effects in a range of roughly 1–4% FiH_2 , with most studies clustering between 2% and 4%. Concentrations above 4% are not recommended: hydrogen becomes flammable above that threshold in air, and there is no demonstrated additional benefit.

The table below estimates FiH_2 for each setting using standard respiratory modeling at typical resting breathing. These are estimates for an average adult at rest, not measurements. Your actual value will differ.

Single user — one port (as described in Step 6, Single Use)

Setting (total gas)	Hydrogen to you	Estimated FiH_2
HYD-3000 1500 / 2250 / 3000	500 / 750 / 1000 mL/min	~1.7% / ~2.5% / ~3.3%
HYD-1800 900 / 1350 / 1800	300 / 450 / 600 mL/min	~1.0% / ~1.5% / ~2.0%
HYD-1500 900 / 1350 / 1500	300 / 450 / 500 mL/min	~1.0% / ~1.5% / ~1.7%

Two users — one port each

Each user shares the amounts shown above.

Practical guidance

- **HYD-3000, single user:** use one port. All three settings fall within the researched range, with the highest setting near the middle of it. Connecting both ports to one person at the two upper settings would place you above the 4% ceiling and is not recommended.
- **HYD-1500 and HYD-1800, single user:** you may connect both ports to a single cannula line if you want a higher concentration. All settings remain at or below 4% when doing so.
- **If you are congested, breathing partly through your mouth, physically active during your session, or at high elevation,** less hydrogen reaches you than the table indicates. A higher setting may be appropriate in those conditions.
- **If in doubt, start at the lowest setting** and discuss with your healthcare provider before changing it.

There is currently no consumer device that measures FiH_2 directly — verifying it requires laboratory gas chromatography. The figures above are modeled estimates provided to help you make an informed choice, not a prescription.

10. Normal Operation & Standby Mode

- When a session ends, the unit will beep then power down and enter standby mode after about 3 minutes.
- During operation, the machine can be paused by pressing the Power (START/PAUSE) button. To end a session early, hold the Power button for 3 seconds. The timer will reset to 0:00 and the unit will enter standby mode after about 3 minutes.
- For short breaks, you may leave the machine in standby.
- For long-term non-use, turn off the power at the back and unplug the power cord.

Notes:

1. Before use, watch the setup and operation video at this link: <https://youtu.be/o-3aHdRzuPM?si=12STcy8W7BaCFlaz>
2. Ensure all outlets are clear and open; blockages may cause damage.
3. Add water slowly to avoid overflow.
4. Use only pure or distilled water. Tap or mineral water may damage the machine.
5. The flow display shows **total gas output** (hydrogen plus oxygen combined). Because electrolysis produces hydrogen and oxygen in a fixed 2:1 ratio, hydrogen is always two-thirds of the displayed figure. A display reading of 3000 mL/min means 2000 mL/min of hydrogen and 1000 mL/min of oxygen.
6. The display shows both session time and accumulated hours. Accumulated hours indicate total usage time since startup.
7. If any indicator (TDS, water shortage, full water, internal pressure, overheat, imbalance) turns on, the machine will stop working. Troubleshoot the cause and restart (see **Troubleshooting** section).



Adding Water

Before using the hydrogen generator, or when the Low Water indicator lights up, fill the water tank with purified or distilled water only.

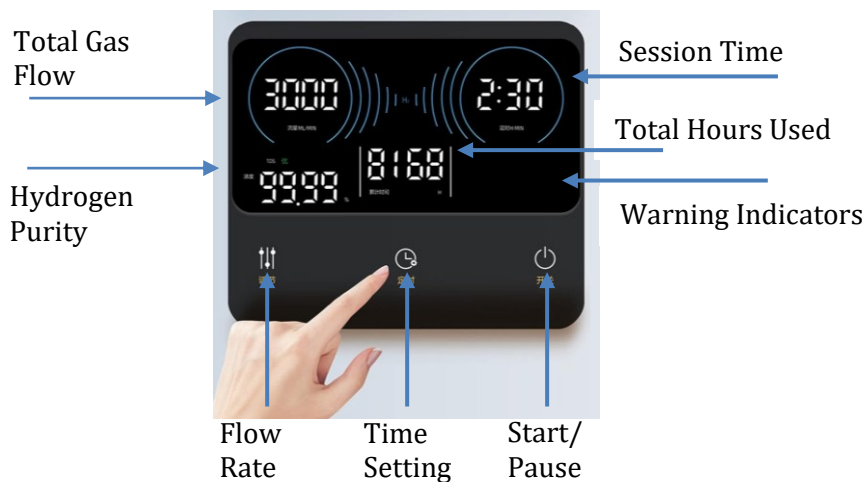
1. Ensure the power is OFF and the unit is unplugged.
2. Open the water filling port cover.
3. Pour purified or distilled water until the water level reaches the MAX line or the red Low Water light goes off.
4. Close the filling port securely.
5. Wipe away any spills before powering on.

Draining Water

Regular draining and refilling maintains water quality and extends electrolyzer life. Drain and refill every 60 hours of accumulated use or every month, whichever comes first — the display's accumulated-hours counter shows total usage time. Under heavy or commercial use this typically falls every one to two weeks. Drain and refill immediately whenever the TDS indicator activates.

1. Switch OFF and unplug the unit.
2. Locate the drain outlet.
3. Place a container beneath the outlet.
4. Open the drain plug and empty the tank.
5. Close the drain plug before refilling.

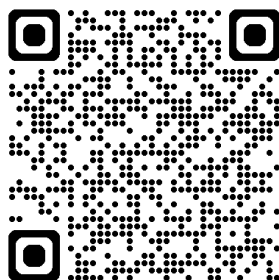
Control Panel



General Operating Instructions

1. Fill the water tank to the correct level.
2. Plug the unit into a power outlet.
3. Switch ON the main power switch.
4. Adjust flow rate and session time. Session will start automatically.
5. The display will show operation status and alerts.
6. Attach the nasal cannula securely.
7. Sit comfortably and breathe normally during the session.
8. Typical session duration: 30–60 minutes, unless otherwise advised.
9. When session ends, machine will beep then enter standby mode.
10. To end session early, hold Power button for 3 seconds. Unit will enter standby mode.

Scan the QR code for a
video to assist with setup.



Troubleshooting

ISSUE	ACTION	CHECKPOINTS AND EXCLUSION POINTS
Machine will not start	Check power connection and switch.	–
TDS indicator light is on	Machine stops working; water quality (TDS) light is on. Please replace purified water in time.	Water quality does not meet requirements. 1. Open the drain port and drain the water tank. Then add pure or distilled water, drain again, and circulate once. 2. Close the drain port and refill with pure or distilled water until the light is off, then continue using.
Water shortage indicator is on	Machine stops working; water shortage light is on. Please add pure water promptly if the water level is too low.	The water volume in the tank is too low. Fill in water that meets requirements and resume after the shortage light turns off.
Water-full indicator light is on	Machine stops working; tank is full and the water-full light is on.	Too much water added. Drain to lower water level: unplug the drain port, attach the pipe, and drain excess water.
ISSUE	ACTION	CHECKPOINTS AND EXCLUSION POINTS
Unbalance indicator is on	Machine stops working; unbalanced light is on. Please place the unit on a flat level surface.	Ensure the machine is placed flat, not tilted, so normal use is not affected.
Unusual noise/smell	Stop use immediately, unplug, and contact support.	
Overheat indicator light is on	Machine stops working; overheating light is on. Wait until the temperature normalizes before use.	1. Check if the air outlet is blocked, which may cause overheating. 2. Drain and refill to lower temperature. 3. Open windows for ventilation to reduce ambient temperature. 4. If used frequently, allow more rest periods between sessions.
E7 error	Display flashes E7, indicating a faulty probe. Please contact support.	Contact your Revive Hydrogen for a replacement temperature probe.
Viewing window not lit	Disconnect power, empty tank, and let machine stand upside down overnight. If unresolved, contact support.	–

ISSUE	ACTION	CHECKPOINTS AND EXCLUSION POINTS
Filter element and water changed, but TDS remains high	–	Check if foreign matter is in the TDS probe. Blow air into the drain outlet to clear.
Nasal cannula feels warm / hot air comes out	–	This indicates the machine has been working for a long time. Shut down for 1 hour to allow automatic cooling.
Error code displayed	Refer to display indicators or contact support.	

Warranty Information

3-Year Limited Warranty

Backed by the manufacturer of Revive Hydrogen generators.

What We Cover

Revive Hydrogen warrants that your hydrogen inhalation generator will be free from defects in materials and workmanship for a period of **three (3) years** from the date of original purchase. If your unit develops a covered defect during the warranty period, we will arrange repair or replacement of the affected components at no charge, including parts and technical labor guidance.

What Is Not Covered

This warranty does not cover:

- **Water quality damage** — damage resulting from use of tap water, mineral water, or any water with a TDS above 5 ppm, as specified in this manual
- **Consumable degradation** — normal decline in hydrogen production capacity of the electrolyzer over time, and normal wear on nasal cannulas, goggles, and filters
- **Misuse or improper operation** — damage from use outside the guidelines in this manual
- **Accidental damage** — drops, spills, power surges, or physical damage
- **Cosmetic wear** — scratches, discoloration, or appearance changes that do not affect function
- **Unauthorized modifications** — any alteration or repair performed by anyone other than an authorized service provider

How to Obtain Warranty Service

1. Email support@revivehydrogen.com with your proof of purchase and a description of the issue. Photos or video of the problem are helpful.
2. We work with you and the manufacturer's technical team to diagnose the issue remotely — most problems can be identified without shipping the unit anywhere.
3. In most cases, the manufacturer ships the needed replacement part with instructional guidance for a straightforward swap. For more complex issues, a video call with a manufacturer technician can be arranged.
4. Our goal is to resolve every warranty issue with minimal disruption and no return shipping required in the vast majority of cases.

Additional Terms

Limitation of Liability. This warranty is your exclusive remedy. Revive Hydrogen is not liable for incidental or consequential damages arising from the use or inability to use this product.

Transferability. This warranty applies to the original purchaser only and is non-transferable.

Warrantor. Revive Hydrogen LLC, Dry Ridge, Kentucky. For questions, contact support@revivehydrogen.com.