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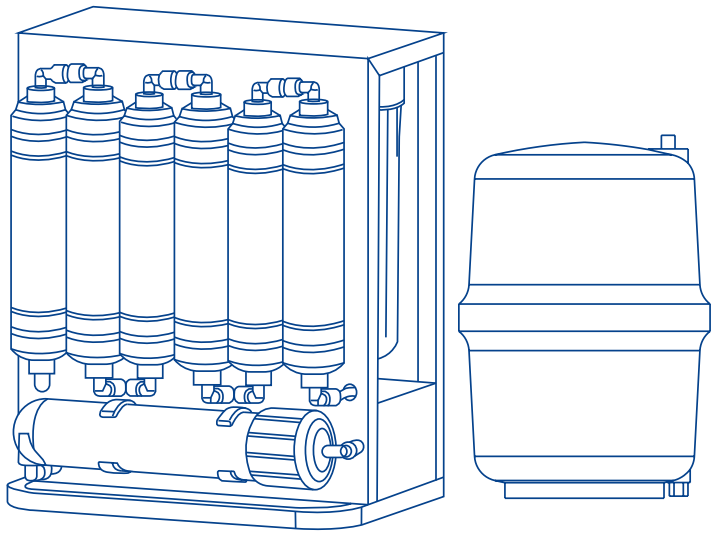
HÒA PHÁT ĐIỆN MÁY GIA DỤNG | 1800 64 64 96 | dienmaygiadungHoaPhat | www.dienmay.hoaphat.com.vn

HÒA PHÁT
ĐIỆN MÁY GIA DỤNG

USER MANUAL FOR
HOA PHAT RO WATER PURIFIER



WARRANTY REGISTRATION METHODS

METHOD 1
Send an SMS to 8100

METHOD 2
Visit the website
baohanhdienlanh.hoaphat.com.vn

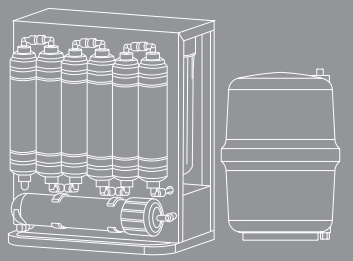
METHOD 3
Scan the serial number QR code
Ứng dụng Điện máy Hòa Phát

METHOD 4
Call the hotline 1800 64 64 96

Products of Hoa Phat Group

HOA PHAT
ĐIỆN MÁY GIA DỤNG

HOA PHAT
RO WATER PURIFIER



CONTACT FOR WARRANTY

Guide to Activate Electronic Warranty:

Method 1: Send a text message in Vietnamese without accents to activate the warranty via mobile phone with the following format:

HPG (space) **Serial Number** (space) **Customer Name** (space) **Phone Number** (space) **Province** (space) **District** to **8100**

Example: HPG 22941A1A1001 01 Tam 0943868xxx TuyenQuang SonDuong to 8100

Method 2: Visit **http://baohanhdienlanh.hoaphat.com.vn** and follow the instructions.

Method 3: Download the **Hoa Phat Household Appliances** app, create an account, then scan the Serial Number and register the customer information.

Method 4: Contact the toll-free hotline **1800 64 64 96** for guidance and warranty support.

Warranty Conditions:

- Products must be registered for electronic warranty.
- The main product must be purchased from Hoa Phat Household Appliances Joint Stock Company or its authorized distributors in Hà Nam Province.
- The model number and Serial Number on the product must match the registration information.
- Only covers manufacturing defects.

For any inquiries, please contact the toll-free hotline **1800 64 64 96** for support.

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PRODUCT INTRODUCTION

Hoa Phat Home Appliances would like to express our sincere gratitude to our valued customers for trusting and using Hoa Phat RO Water Purifier.

Hoa Phat is a leading industrial manufacturing corporation in Vietnam, operating across five sectors: Steel (construction steel, rolled steel, hot-rolled steel), Steel Products (pipes, galvanized sheets, drawn wire, pre-stressed steel), Agriculture, Real Estate, and Home Appliances.

With a strategy to expand its business scope, in 2021, Hoa Phat Group entered the home appliances industry, and one of its flagship products is the RO Water Purifier - a key product of Hoa Phat Home Appliances Division.

Hoa Phat RO Water Purifier is designed to meet the essential needs of consumers for using clean, healthy water. The purifier ensures a filtration efficiency of up to 99.99% for bacteria, heavy metals, and harmful chemicals with sizes as small as 0.0001 microns, producing pure water. The purified water is safe for health, suitable for direct drinking, washing fruits, cooking, and even preparing formula for infants.

Before using the Hoa Phat RO Water Purifier, please read the user manual carefully.

Sincerely!

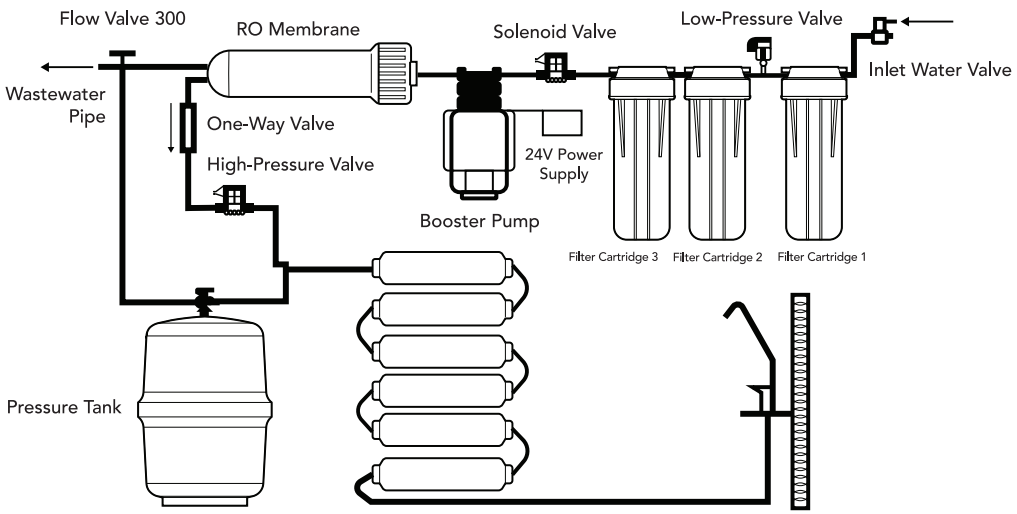
STRUCTURE AND OPERATING PRINCIPLE

Introduction to RO Reverse Osmosis Filtration Technology

Reverse Osmosis (RO) filtration technology is a significant scientific and technical achievement that emerged in the 1960s in the United States. It has been widely applied in fields such as aerospace, healthcare, food processing, and more. Today, RO is the primary technology in the water purification industry.

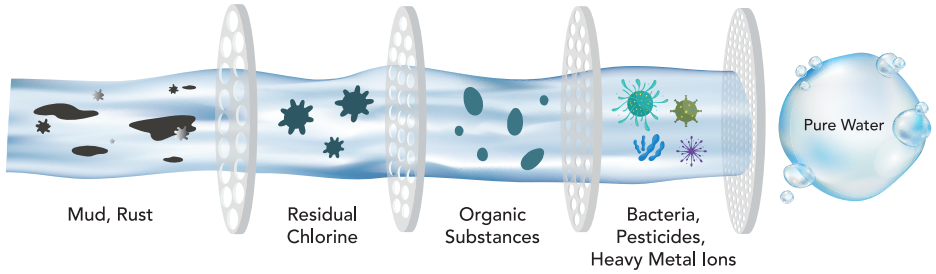
RO technology can remove impurities as small as 0.0001 microns, equivalent to particles 500,000 times smaller than a human hair. This ensures that the purified water is entirely clean and safe for consumption.

1. Structural Diagram



2. Operating Principle of RO Membrane

RO reverse osmosis technology is a solution to separate pure water from contaminated environments containing harmful impurities. By applying pressure through a high-powered pump, water is forced through the filtration membrane, removing impurities to deliver pure water.



3. Technical Specifications

Product	Hoa Phat RO Water Purifier
Filter Membrane	RO Membrane
Filtration Capacity	12 - 20 L/h
Efficiency	40 - 60% (Depending on RO membrane type)
Voltage	220V/ 50Hz
Minimum Pressure, Maximum Pressure	10 - 125 psi (0.7 - 8.6 bar)

4. Filtration System

The filtration system and the number of filters are arranged based on each product code.

No	Filter Name	Composition	Replacement Time	Function
1	Filter Cartridge 1	PP fibers with a pore size of 5 µm	3 - 6 months	Removes coarse impurities such as sediment, sand, rust, etc., with particle sizes above 5 µm.
2	Filter Cartridge 2	Activated carbon	6 - 9 months	Removes odors, heavy metals, organic substances, residual chlorine, and pesticides in water.
3	Filter Cartridge 3	PP fibers with a pore size of 1 µm	9 - 12 months	Removes impurities, algae, and fine particles larger than 1 µm in water.
4	RO Membrane	RO Membrane	24 - 36 months	Removes 99.99% of bacteria, viruses, heavy metals, harmful chemicals, and organic particles larger than 0.0001 µm.
5	T33 Filter	Coconut shell activated carbon	≤12 months	Improves water taste and smell, removes organic contaminants, stabilizes pH levels.
6	Maifan Stone Filter	Mineral-rich Maifan stone	≤12 months	Enhances water quality by adding essential minerals (e.g., calcium, magnesium) and balances pH levels between 6.5–8.5.
7	Tourmaline Filter	Tourmaline, ORP particles	≤12 months	Generates beneficial ions and reduces water molecule size, making water easier to absorb.
8	Hydrogen Filter	Activated carbon, Hydrogen ceramics	≤12 months	Adds hydrogen, removes harmful free radicals, enhances minerals like K+, Zn2+, Mg2+, and raises pH to a neutral or alkaline level.
9	Far Infrared Filter	Far-infrared ceramics	≤12 months	Activates water molecules by breaking their clusters, improving nutrient absorption.
10	Nano Silver Filter	Activated carbon with nano silver coating	≤12 months	Kills bacteria and prevents microbial contamination during water contact with air.
11	Alkaline Filter	Alkaline ceramic ball	≤12 months	Enhances pH, balances acidity and alkalinity, and improves water for better health.

Note: RO filters are sealed to ensure quality.

STRUCTURE AND OPERATING PRINCIPLE

1. Recommendations for installation and use

The water supply to the machine must meet the standard of clean water as per QCVN 02:2009/BYT (national water source).

For special water sources with pollution like lime, salt, arsenic, or manganese, use specialized filters.

The water supply temperature should not exceed 40°C.

Check all connections and ensure they are tight and secure, preventing leaks or water overflow.

Rinse the filter system before use.

Regularly monitor the machine operation and replace filters (refer to page 7 - filter system) to ensure the water input quality meets QCVN 6-1:2010/BYT standards (Replacement time may vary depending on source water quality and usage frequency).

2. Installation instructions

Step 1

Connect the inlet valve

Split the water inlet to the machine from the water tank or water source, and turn off the water before installation.

Step 2

Connect the pipes

Connect the water inlet, wastewater, tank water, and outlet pipes as directed on the body of the machine.

Step 3

Close the pressure tank valve

Turn the valve handle to the closed position to prevent water from entering the pressure tank.

Step 4

Install the pre-filters

Remove the plastic wrapping from filters 1, 2, and 3 and insert them into the corresponding filter housings. Then, tighten the housings for filters 2 and 3, and only gently tighten the housing for filter 1 to avoid air leaks.

Step 5

Flush filters 1, 2, 3

Detach the hose connected to the RO filter port and insert the 1/4 - inch hose provided with the machine to guide water out during the flushing process. The flushing time is 20 - 30 minutes.

Step 6

Power the machine

Plug the power cord into the socket to supply power for the machine to operate.

Step 7

Supply water to the machine

Open the water supply valve to provide water to the machine. Water will immediately flow into the pre-filter housings, creating a pressure of 6 - 8 psi in the system. The system is now operational.

Step 8

Discharge dirty water

After the machine runs for about 3–5 minutes, water will flow out of the faucet. At this stage, the water will appear black due to carbon particles from the filters. Continue running the machine (open faucet) until the water becomes clear and free of carbon residue.

Step 9

Open the pressure tank valve

Turn the valve handle to the open position to allow water to fill the pressure tank.

Step 10

Flush the faucet

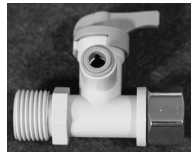
Open the faucet and let water flow continuously for about 5 minutes. During this time, the water may appear black due to carbon particles. Close the faucet and repeat the flushing process 4 - 5 times or until the water is completely clear and free of carbon residue.

Step 11

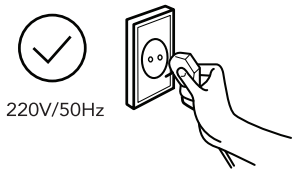
Cleaning

Clean and wipe dry any spilled water on the floor and the machine's surface.

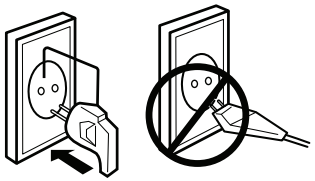
3. Accessories included with the machine

1 Water inlet split valve	**2** Pressure tank
	
3 Inlet and RO water pipe (3/8")	**4** Wastewater pipe (1/4")
5 Pre-filter housing wrench	**6** RO water faucet
7 Pressure tank release valve	**8** Straight fitting

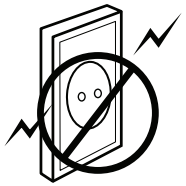
4. Instructions for safe use



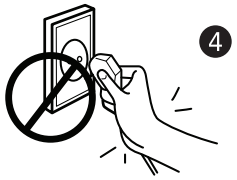
1 Use power supply as per machine specifications (220V/50Hz)



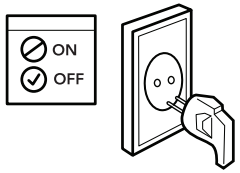
2 Check the socket and plug before use



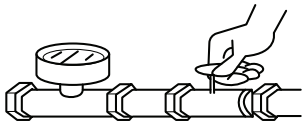
3 Do not use unstable or unsafe sockets



4 Do not handle the plug with wet hands



5 Turn off the power when inspecting, repairing, or replacing the filter



6 Close the water supply valve to the machine before repairs

STRUCTURE AND OPERATING PRINCIPLE

No	Common Problem	Possible Causes	Solutions
1	The machine does not operate	Incorrect power source	Check the power source and ensure it is 220V/50Hz
		Damaged power cord	Replace the power cord
2	Water is cloudy	Filtration system not flushed before use	Flush the filtration system
		Air bubbles in water passing through filters	Use continuously for one week, the problem will resolve
3	Water has an unusual smell	Pressure tank or RO membrane is corroded	Check and replace the pressure tank or RO membrane
4	Slow filtration	Low water pressure slows down filtration	Check the water supply pressure
		Old filter not replaced	Replace filters as recommended
5	Water leakage	Loose or improper installation	Check all connections and fittings
6	Wastewater flows out too slowly	Flow restrictor valve is clogged	Clean or replace the flow restrictor valve
7	Excessive wastewater discharge	Incoming water contains too many impurities	Check the water source
		RO membrane is clogged	Replace the RO membrane
8	Unusual noise	Uneven installation	Place the machine on a flat, stable surface
		The machine is touching other devices when operating	Make sure no other equipment touches the machine during operation
9	Noise from the faucet	Faucet is clogged	Clean the faucet
10	Pump does not operate	Power is not connected	Check the power supply, high-pressure, and low-pressure valves
		Worn carbon brushes	Clean and adjust the pump's carbon brushes
		Loose or damaged electrical connector	Reconnect or replace the connectors
11	Pump operates intermittently with noise	Insufficient inlet water pressure or clogged filters	Check the inlet water pressure, or replace clogged filters. Use a booster pump if needed

No	Common Problem	Possible Causes	Solutions
12	Motor does not turn	Power supply is weak or unstable	Check the power supply, replace if necessary
		There is a foreign object in the pump	Check the vanes or impeller
13	Machine runs continuously	High pressure switch	Clean or replace the high-pressure switch
		RO membrane is dirty	Replace the RO membrane
		water leak	check the system again
14	Low water pressure in the tank	Low pressure in the tank	Increase the tank pressure to 5-6 PSI
15	No clean water and wastewater	Solenoid valve is stuck	Check the solenoid valve and coil, replace if necessary
		One of the functions is clogged	Replace the clogged part
		Pressure tank is leaking	Refill the pressure tank
		Kinked or clogged water inlet pipe	Check and fix

USAGE WARNINGS

- This product is not intended for use by persons with reduced physical, sensory or mental capabilities, unless they are supervised 1 or instructed concerning the use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- Do not operate the appliance if 3 it is damaged or malfunctioning.
- If the power cord is damaged, it must be replaced by a qualified technician to avoid any unwanted damage.