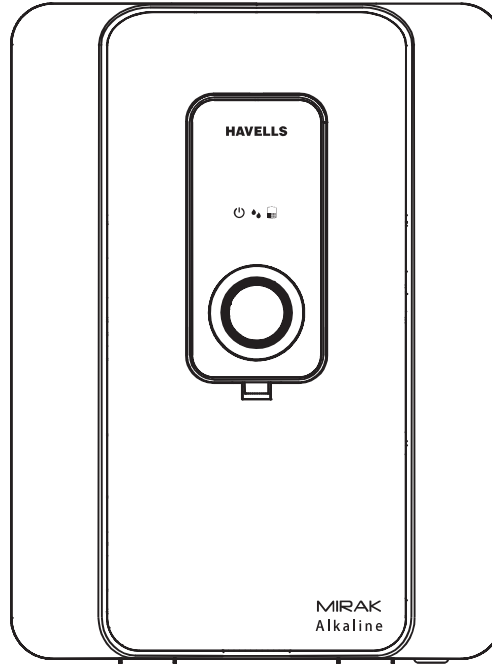




**HAVELLS**



# Water Purifier

## User Manual

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### MIRAK ALKALINE

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100% RO & UV PURIFIED ALKALINE WATER  
SUITABLE FOR TDS UPTO 2000 mg/L (ppm)

## INSTALLATION INSTRUCTIONS

Open the carton and take out the following items from accessory kit for installation:

1. Diverter Valve 2. Mounting plate with plastic insert and mounting screws, 3. PL 4 pipe-White and blue,

Select an appropriate water connection point.

Please note water purifier is connected to ambient temperature water supply only. Fix the water inlet connector with the help of pipe wrench/plumbing equipment's at selected water point.

For wall mounting: Align the mounting plate at appropriate height with the help of mounting screws. Hang the water purifier on mounting plate.

### OR

Place the water purifier on table top position.

Now fix the water inlet pipe from diverter valve to the inlet port of water purifier and open the diverter valve. Ensure there is no leakage of water and bending of pipe at any point. Outlet pipe (blue pipe) is connected to the non drinkable water port of water purifier and is fixed in drain. Now fix the power plug into a 3 pin socket and Switch on the mains and unit should start working. It is advised to drain the first fill of water tank after installation of the water purifier or after changing the filters. This water can be used for washing, cleaning and other household purpose.

**CAUTION:** Before installation/mounting:-Flush all filters and membrane thoroughly and independently for 3 minutes - 5 minutes to remove fine particles & preservatives present in filters. Check input water pressure. Use booster pump if feed water pressure is less than 0.041 MPa (6 psi) if it is more than 0.21 MPa (30 psi) use the PRV (Pressure reducing valve). If the input water iron content is more than 0.3 mg/L [ppm], use of iron remover is recommended as a pre-treatment. If input water turbidity is more than 5 NTU, use of Pre filter is suggested.

The appliance is intended to be permanently connected to the water mains and not connected by a hose-set.

## KEY FEATURES OF HAVELLS WATER PURIFIER

### A. ABSOLUTE SAFETY WITH DOUBLE PURIFICATION THROUGH RO & UV:

During Purification Stage 100% water passes through RO Membrane followed by Germicidal UV column removing chemical impurities and microbiological contaminants, thus ensures absolute Safe and Healthy Drinking water.

### B. BACTERIOSTATIC ALKALINE TASTE ENHANCER:

It improves the pH of purified water by adding back wide spectrum of natural minerals & trace elements such as Calcium, Magnesium, Potassium, Sodium, Copper, Zinc, etc. It lowers the Oxidation Reduction Potential (ORP) resulting into anti-oxidant nature of water, transforms regular water into Alkaline Water, which is healthier & tastier.

### C. CONTEMPORARY DESIGN & AESTHETICS

Futuristic design, superior dual tone colour finish, compact form and functional display panel, compliment your kitchen décor.

### D. TDS REMOVAL OF UP TO 2000 mg/L (ppm)

Havells Water Purifiers work effectively in TDS of 2000 mg/L (ppm) and deliver pure and healthy water that taste good.

### E. INGRESS PROTECTION TANK COVER

Stops external invasion of insects and dust particles.

## TECHNICAL SPECIFICATIONS

PARAMETERS	VALUES
Product dimensions (H x D x W) in cm	(48.4 x 24.1 x 36.1) cm
Net weight	≈ 8.50 kg
Flow rate*	Up to 25 L/h
Storage tank capacity	≈ 6 L
Purification technology	Absolute safety through 100% RO & UV technology
Purification stages	08 stages
Membrane type#	Thin film composite RO membrane
Material of construction for plastic components	Food grade
Power rating (max)	45 W
Working voltage	1 Phase, 150 V - 250 V AC, 50 Hz
% Recovery**	≥40%
TDS reduction**	≥90%
pH##	Purified Water pH in Alkaline range
System disinfection efficiency	6, 4, 3 LRV of Bacteria, viruses & cysts
Water dispensing	Manual with jog dial
Installation type	2 Ways-Straight wall mount & Table top

## RECOMMENDED FEED WATER QUALITY

PARAMETERS	LIMITS
Total dissolved solids	Up to 2000 mg/L (ppm)
Total hardness	Up to 600 mg/L (ppm)
Turbidity***	Up to 5 NTU
Feed water pressure****	0.041 MPa (6 psi) - 0.21 MPa (30 psi)
Feed water temperature	5 °C-45 °C
Iron*****	Less than 0.3 mg/L
Free chlorine	Less than 0.2 mg/L

\*Flow Rate may vary depending upon feed water quality, input water pressure, condition of membrane & cartridges.

\*\* Recovery / TDS percentage reduction may vary depending upon type of feed water, feed water pressure & cartridges life.

\*\*\*In case, input turbidity is more than 5 NTU, you need to install pre filter at an additional cost.

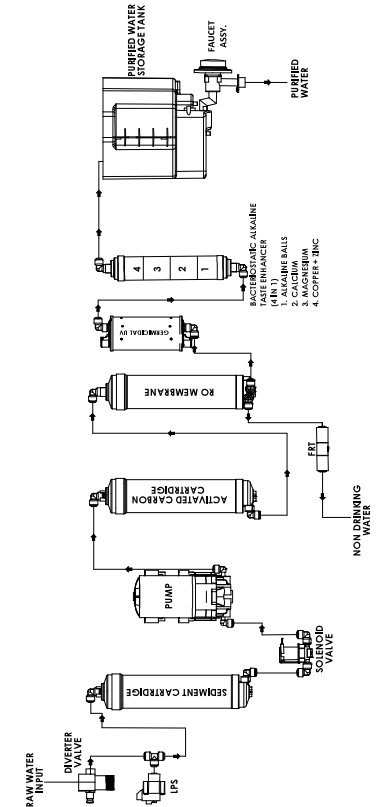
\*\*\*\*In case, input water pressure goes below 0.041 MPa (6 psi), you need to install external booster pump and if pressure is above 0.21 MPa (30 psi), you need to install pressure reducing valve at an additional cost

\*\*\*\*\*In case, the Iron content in input water is more than 0.3 mg/L (ppm), you need to install IRON REMOVER PLUS at an additional cost.

#The chemical preservative used in the RO membrane is of food grade quality.

## Under Standard test conditions of Alkaline Cartridge ( as per BIS standard IS 10500:2012)

## WATER FLOW DIAGRAM - MIRAK ALKALINE



## **DO'S, DON'TS & SAFETY INSTRUCTIONS**

### **DO'S**

- Always install the water purifier in a cool, dry and well ventilated place in upright position.
- Proper earthing should be there in the electrical point.
- Drain the storage tank, if the purifier is not in use for more than 2 days.
- Keep the tank lid closed properly to avoid contamination of water due to exposure to dust, dirt or insects.
- To keep your purifier functioning properly at all times, always use Havells genuine spare parts.
- Call only Havells customer care for any assistance and service requirement.
- Keep the purifier in power on mode to ensure water availability at all times, it is safe & consumes less power in a day.
- If for any reason you are not going to use the water purifier for a long time, for e.g. during a holiday, then make sure that you disconnect the power supply, turn off the input water supply and drain the storage tank.

### **DON'TS**

- Never allow hot water to pass in your water purifier as it is designed to work effectively between input water supply of temperature range between 5 °C to 45 °C.
- Never place any heavy, sharp or wet objects on the purifier.
- Do not buy local spare parts and components during service or replacement in case of a breakdown.
- Do not install product in direct sunlight.

### **SAFETY INSTRUCTIONS**

Havells Water Purifier is designed keeping in mind the highest safety standards, but there are certain safety precautions that need to be followed while using the product for its proper functioning.

- Do not move or relocate the purifier when it's running.
- To avoid electric shock, do not pull out or touch the power plug with wet hands.
- Do not use the water purifier if the power cord / Power adapter is damaged or if there's a strange noise, burning smell or smoke. Quickly switch off the power, unplug the cord and call Havells Customer Care.
- Don't open the purifier yourself to clean the cartridges or to replace any parts.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning 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.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- This appliance 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 appliance in a safe way and understand the hazards involved.
- Cleaning and user maintenance shall not be made by children without supervision.
- Never use the discarded water from the purifier tube for drinking. However it can be used for cleaning, washing, mopping, gardening etc.

## **CALIBRATION & GENERAL MAINTENANCE INSTRUCTION FOR HAND HELD TDS METER**

The functioning of the TDS Meter will be ascertained by our authorized service representative periodically (at least once in 6 months, during Preventive service) or as per the customer request.

### **For Calibration**

1. Take the 100 ml water of standard solution in a beaker.
2. Carefully immerse the probes of the TDS Meter in the standard calibration solution and turn ON the TDS meter.
3. The TDS of water will display, wait for 10 seconds - 20 seconds to stable the reading.
  - i. If value matches with the standard calibration solution ( $\pm 10\%$ ) then calibration is considered as completed.
  - ii. If the value does not match with the standard calibration solution then follow below instructions
    - a. To adjust the readings, long press the HOLD icon for 3 seconds. Hold will starts blinking on display.
    - b. Then press the Temp. icon. TDS of the standard calibration solution will display and blinks on the display to indicate that calibration is completed.
4. Remove the TDS meter from the solution. Clean the probe by purified water and dry it with the help of cloth/cotton.
5. Turn the meter off, wait for a moment & turn ON the meter again to start using.

### **For General Usage & Maintenance**

1. Immerse the meter in the water/solution such that the probes are completely dipped in it.
2. Shake & clean with purified water after each use.
3. The meter is not water proof. DO NOT drop or submerge the meter in water.
4. Do not store the meter in high temperature or direct sunlight.
5. Replace the battery if the display is dim or readings are consistently not accurate.

### **Important Notes.**

1. TDS Meter Range: From 0 mg/L to 2000 mg/L.
2. Tolerance:  $\pm 10\%$  of water TDS.
3. Depending on the make of the meters, the calibration buttons may be "on/off" or "hold" or a combination of both. Contact authorized Havells service technician for support.

## TROUBLESHOOTING

	PROBLEMS	CHECKS	SOLUTIONS
<p>Before calling customer care or service engineer, check the following points:</p> <ol style="list-style-type: none"> <li>1. Power supply should be ON</li> <li>2. Inlet water supply should have sufficient pressure/Waterflow</li> </ol>	Purified Water taste is bad or unusual	<ol style="list-style-type: none"> <li>1. Is the tank clean?</li> <li>2. Is purified water being stored in the tank for a long time?</li> <li>3. Is the Cartridge replacement due as per the service requirement?</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean the storage tank.</li> <li>2. Discard the water stored in tank and clean the tank before starting the purification process again.</li> <li>3. Contact Havells Customer Care to request for the cartridge replacement.</li> </ol>
	Filtration time is very long/short or filtration has stopped/too much water is being purified.	<ol style="list-style-type: none"> <li>1. Is the tap valve open properly?</li> <li>2. Is water pressure below recommended value?</li> <li>3. One or more Cartridges may have been clogged or damaged.</li> </ol>	<ol style="list-style-type: none"> <li>1. Open the water inlet valve completely.</li> <li>2. Contact Havells Customer Care to get the pressure checked and get it resolved.</li> <li>3. Contact Havells Customer Care to get the cartridges replaced.</li> </ol>
	Very less or no water is being flushed out.	<ol style="list-style-type: none"> <li>1. Check if the flushed water tube (Blue colour pipe) is bent anywhere.</li> <li>2. Check if the flushed water tube is blocked in any place.</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove the bend in the flush water tube if found.</li> <li>2. Switch off the purifier and contact Havells Customer Care for proper checking the product.</li> </ol>
	Water leakage in any part.	Check if water is coming out from storage tank of the purifier or some other pipe.	Close the water inlet valve, unplug the power cord and then contact Havells Customer Care for a check-up of the product and get it rectified.

## WARRANTY TERMS AND CONDITIONS

Havells India Ltd (HIL) offers limited warranty for this water purifier against defect arising from faulty design, workmanship and material subject to the following terms and conditions:

1. All electric and functional parts are covered under warranty for 1 year from the date of purchase.
2. Consumables including sediment filter, activated carbon cartridge, RO membrane, Bacteriostatic Alkaline taste enhancer Cartridge. Are not covered under warranty.
3. All consumables and pump carry Havells branded embedded foil (as per Recommendation & important instruction mentioned in content no.9)
4. Havells India Limited will offer two preventive maintenance checkups during this one year term of warranty. Only Havells India Limited authorized service personnel will carry out repairs under warranty.
5. Consumers shall promptly notify the company about any defect noticed and give the company or authorized personnel/representative adequate opportunity to inspect, test and rectify the defect.

6. The company or its representatives are entitled to retain the damaged or defective parts replaced under warranty on free charge basis.
7. The company's liability under warranty will be limited only to the concerned product and its defect, which occur under conditions of normal operations in home application, under proper usage and maintenance. It excludes any defect caused due to faulty care, maintenance, repair and alteration to the product or to its part by unauthorized personnel.
8. It is mandatory to provide original bill/invoice copy along with duly stamped warranty card at the time of any repair work being done by authorized representative.
9. This warranty is confined to the first purchase of the product only and is not transferable.
10. In the event of repair during the warranty period of the purifier, this warranty will thereafter continue and remain in force only for the unexpired period of the warranty. Replacement of part would be purely at the discretion of Havells India Limited, the same part will be replaced with the part model of price equivalent at the time of purchase.
11. The consumer will have no claim under this warranty in an event of any illness, sickness, death, personal injury, property or consequential damages arising either directly or indirectly due to utilization of product. Authorised Service Personnel will carry out repair under warranty.
12. Warranty is not applicable and will be void under the following heads/ circumstances:
  - a. If the warranty card presented to authorized service personnel at the time of service of the product is not duly filled and stamped by the dealer.
  - b. If the product is not operated or handled as per instruction given in the operating instruction booklet.
  - c. If the device is not installed in proper procedure specified.
  - d. If any defect caused due to improper electric circuit outside the device in the house or any defective electric supply.
  - e. If installation and any repair work is carried out by an unauthorized personnel and usage of consumables and parts by unauthorized personnel. (only Havells India Limited Authorised Service Personnel will carry out repair under warranty)
  - f. If any damage caused due to transportation or shifting post installation from consumer's home.
  - g. If 12 months have expired from the date of purchase even though the device is not in use for anytime during warranty period for any reason.
  - h. If the damage is caused by pest infestation.
  - i. If product/item is not installed by company technician/ Authorised Personnel
  - j. If Havells water purifier is used for any purpose other than for home application purpose ( not to be used for commercial purposes)
  - k. If damage to the product is caused by accidents, pests and vermin, lightning, wind, fire, floods, or acts of God
  - l. If any additional accessories were provided on the time of installation/service, the same will not be covered under standard product warranty.
  - m. If any external accessories supplied by the dealer.
13. Warranty does not cover visitation charges of service technician if this water purifier is installed beyond municipal limits of the city in which company's Authorized Service Center is situated/located. All expenses incurred in collecting the units or parts thereof from the company's authorized service center as well as expenses incurred from deputizing service personnel/technicians for conveyance and other incidentals, etc., shall be borne by the customer. Local charges for transportation and handling charges may vary by location. Customers are advised to verify in advance the aforementioned charges. If the customer wishes to bring the unit on his/her own to an authorized service center, such shall be at his/her own risks & consequences.
14. Reinstallation or uninstallation of product based on customer demand and packing material, if used, will be chargeable.
15. Warranty will not cover transportation cost in case customer is moving the product to another location.

## CLEANING AND MAINTENANCE

Storage Tank of this product must be\* periodically cleaned [at least once in 6 months, during Preventive service ] by use of 4-5 drops of disinfectant like hypochlorite solution to water purifier tank ( tank full), keep it for 15 minutes. Discard the disinfectant water and the first fill of water tank completely through water dispensing tap.

\* As per customer need.

Use a wet cloth to clean the external body of the purifier. Do not use detergent or soap.

Avoid excessive rubbing of the decorative part of the purifier while cleaning as it may lead to scratches or loss of shine of the purifier.

Make sure you switch off the power supply and turn off the input water supply whenever you're out of home for a long time.

Do not try to open or tamper the purifier yourself if you observe any problem. Kindly contact Havells Customer Care to resolve the issue. Water purifier should be examined by Havells trained service engineer only at all times.

Do not clean the water purifier or spillage of water on it, while the purification process is on.

## RECOMMENDATIONS AND IMPORTANT INSTRUCTIONS

### Recommended Cartridge Replacement:

Sediment cartridge, Activated carbon cartridge need to be replaced after 1 year of installation or dispensing \*6000 L of purified water, whichever is earlier.

### RO (Reverse Osmosis) Membrane Replacement:

As per the warranty, RO Membrane needs to be replaced after 1 year of installation or dispensing \*6000 L of purified water, whichever is earlier.

### Bacteriostatic Alkaline Taste Enhancer:

Bacteriostatic Alkaline Taste Enhancer Cartridge needs to be replaced after 6 months of installation or after dispensing of 3000 L\* of purified water, which is earlier.

### Germicidal UV Column:

UV LAMP needs to be replaced after 5000 burning hours or based on service requirement.

Note: Please read the warranty details and their terms and conditions for replacement requirement of individual cartridges. \* May vary depending on the feed water quality.

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Actual products may vary in colour, design, description and colour combination etc. Although every effort has been made to ensure accuracy in the compilation of the technical detail within this publication, Specifications & performance data are constantly changing.

## HAVELLS INDIA LTD.

Regd. Office:

904, Surya Kiran Building, K.G. Marg, New Delhi – 110001. (INDIA)

For Consumer Complaint, Contact: Manager,

Address: Same as regd. office

Customer Care No. 08045 77 1313, E-mail: [customercare@havells.com](mailto:customercare@havells.com)





## FUNCTIONS OF SMART INDICATORS:

### SELF-DIAGNOSTIC MODE:

When machine is switched - ON the power indicator will glow solid & same time purification process indicator will also glow solid for 30 seconds. During this period the water present in UV column will get disinfected. After 30 seconds the purification process will start & purification process indicator will blink till the tank is full.

### PURIFICATION PROCESS INDICATOR:

Purification process indicator blinks continuously when the purification is on. It will disappear once purification process stop.

### TANK FULL INDICATOR:

Tank Full Indicator glows solid when the tank is full.

### ERROR INDICATIONS:

In the event of failure of Pump and SV power indicator will start blinking at the rate of 1 second with buzzer sound. If UV intensity is less than adequate for disinfection of water power indicator will start blinking at the rate of 2 seconds with buzzer sound. System will shut off in both the cases to deliver you the promise of safe water or no water.

In case of low pressure condition ( Input water pressure is not adequate ) then only tank indication will blink

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## WARRANTY CARD HAVELLS WATER PURIFIER

Customer Name -----

Customer Address -----

Customer Phone Number -----

Pin Code -----

Date of Purchase -----

Dealer's Name & Address -----

Phone Number -----

Dealer's Stamp: -----

Product Model -----

Product Serial No. -----

\* This warranty card is valid only for products sold by Havells India Limited in Indian market.  
This warranty is not transferable and is applicable to the original purchaser only.

Fill out this record and keep it together with your purchaser docket in a safe place.  
Should you require service under the terms of this warranty, please contact us.



# HAVELLS