KENT
Mineral RO™
Water Purifiers
HOUSE of PURITY

CE Water Quality Association

TÜV SÜD ISO 9001 TÜV SÜD ISO 14001 TÜV SÜD ISO 45001

To request for service 24x7, download KENT Service App by scanning the QR code or by giving a missed call: 9212252852

To speak to customer care executive call: 92-789-12345

Innovations for Better Living

Marketed by:
KENT RO SYSTEMS LTD.
E-6, 7 & 8, Sector-59, Noida, U.P.-201 309, India.
E-mail: sales@kent.co.in | Website: www.kent.co.in

Manufactured by:
KENT RO SYSTEMS LTD.
1) Khasra No. 93, Village-Bantakhedi, Tehsil-Roorkee, District-Haridwar, Uttarakhand-247 668, India.
2) A-6, Sector-87, Noida-201305, U.P., India.

For customer complaints, contact our Customer Care Officer at:
E-6, 7 & 8, Sector-59, Noida, U.P.-201 309, India. Call: 92-789-12345
E-mail: service@kent.co.in or visit us at www.kent.co.in

KENT WONDER+

Wall-Mounted
Detachable Tank
RO Water Purifier

KENT
Mineral RO™
Water Purifiers
HOUSE of PURITY

Instructions Handbook

Mineral RO™ TECHNOLOGY
Removes Dissolved Impurities
Retains Essential Minerals
Multiple Purification

RO + UF + TDS Control

Kent Deta Hai

Sabse Shudh Paani

Welcome to KENT

Dear Customer,

At the outset, allow us to thank you for your trust in **KENT** water purifier. We take pride in our reputation for product quality and industry proven performance. We are certain that your decision to own **KENT** WONDER+ Mineral RO™ Water Purifier will go a long way towards keeping you and your family in good health. We are confident that you will be satisfied with its performance and that it will serve your need for safer and cleaner drinking water without any compromise.

This guide will help you in getting the best out of your water purifier. Please go through this booklet to familiarise yourself with its operation and maintenance.

You can look forward to years of trouble-free service. To ensure that the warranty of your water purifier is effective, it is important that you fill up the enclosed warranty card and mail us the installation report within 15 days of purchase. In case you need any further information, contact your nearest **KENT** dealer/branch.

Best Wishes,

KENT RO SYSTEMS LTD.

KENT
Mineral RO™
Water Purifiers
HOUSE of PURITY

Table of Contents

KENT TECHNOLOGY - A Breakthrough in Water Purification*

KENT proudly presents KENT WONDER+ Mineral RO™ Water Purifier it is a new and advanced domestic water purifier which provides purer & healthier drinking water.

The futuristic KENT WONDER+ Mineral RO™ Purifier developed at KENT laboratory broadly comprises of state-of-the-art RO+UF+TDS Control System. The initial purification by RO membrane having porosity as fine as 0.0001 microns reduces even dissolved impurities (hard salts, heavy metals, etc.). Double purification by UF membrane gives additional protection from deadly harmful micro-organisms. Moreover, the patented TDS Control System intelligently retains essential natural minerals in purified water, thus taking total care of your health and wellbeing.

Salient Features of KENT WONDER+ Mineral RO™ Water Purifier

- Wall-mounted/Counter-top design, best suited for domestic purpose
- Double purification by RO + UF process
- Adjustable TDS Control System allows adjustment of TDS level of purified water
- Detachable storage tank for easy on-site cleaning on regular basis
- 7 L storage tank provides water on demand
- LED indicators for power and purification process status display
- Fully automatic operation with auto-on/off functions
- Tamper-proof RO and UF Membrane fused inside membrane housing
- Vertically mounted SMPS for protection
- Push-fit components for leak-proof & maintenance-free performance
- ABS construction for corrosion-free life span
- Suitable for purification of Brackish/Tap water/Municipal Water Supply

Items in the Box

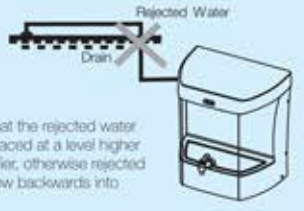
1.	KENT WONDER+ Mineral RO™ Water Purifier	:	01 No.
2.	3-Way Connector	:	01 No.
3.	S.S. Ball Valve	:	01 No.
4.	Screws & Plastic Inserts	:	02 Nos. each
5.	Warraty Card	:	01 No.
6.	Sticker Center Drill	:	01 No.
7.	Food Grade Pipe ¼ inch (Blue)	:	2.5m
8.	Food Grade Pipe ⅜ inch (White)	:	2.5m

* Tested & Certified by TUV-SUD South Asia (P) Ltd.

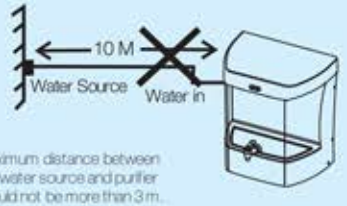
Important Instructions

Avoid exposure to direct sunlight and installation in damp areas.

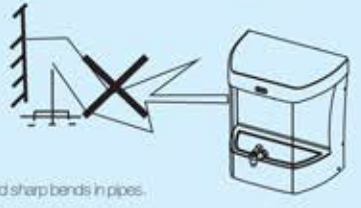
Make sure that the purifier is connected to normal temperature water supply only.



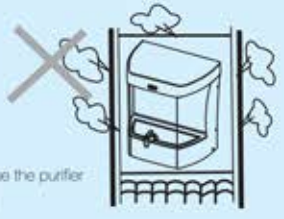
Make sure that the rejected water pipe is not placed at a level higher than the purifier, otherwise rejected water may flow backwards into the purifier.



Maximum distance between the water source and purifier should not be more than 3 m.



Avoid sharp bends in pipes.



Do not confine the purifier in a cabinet.

In case of not using the purifier for more than two days, kindly switch off the power supply and drain out the storage tank.

To keep the storage tank clean, it should be removed, cleaned and wiped in every 15 days.

KENT

GENUINE

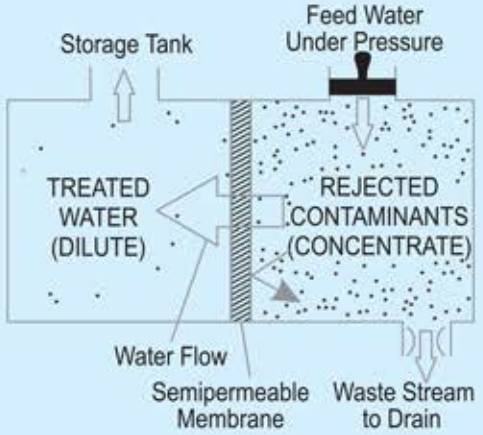
SPARE PARTS

Use Genuine KENT spares for optimum performance.

Do not try to service the purifier on your own. Instead, call service technician for help.

Reverse Osmosis Process

Reverse Osmosis process, also known as hyper-filtration, is the finest filtration process known till date. It ensures reduction of particles as small as ions from a solution. Reverse Osmosis process uses a semi-permeable membrane to reduce salts from potable/brackish water. In Reverse Osmosis, water pressure is applied to the inlet impure water, resulting in squeezing of purer water from the concentrated end of membrane towards the diluted end.

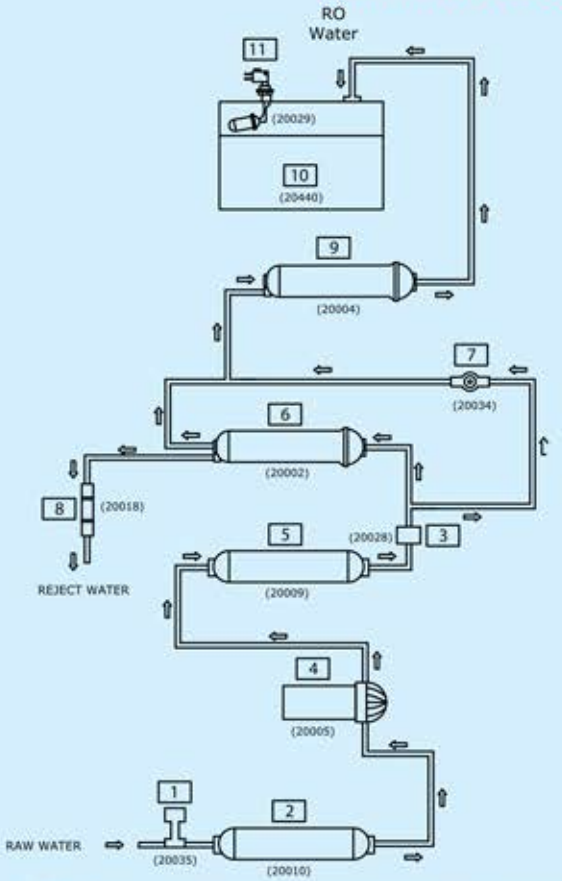


Dissolved salts present in water as charged ions get repelled by the RO membrane and are not allowed to pass through. Similarly, bacteria and germs are also blocked by the ultra fine pores of RO membrane. These rejected impurities suspended on the concentrated end of the membrane are washed away in a stream of waste water, preventing the membrane from clogging.

UF Process

Ultra-filtration is a separation process that uses membranes with pore sizes of 0.01 micron. UF membranes reduce high molecular-weight substances, colloidal materials and organic and inorganic polymeric molecules including bacteria and viruses. Low applied pressures are therefore sufficient to achieve high flux rates from an Ultra-filtration membrane.

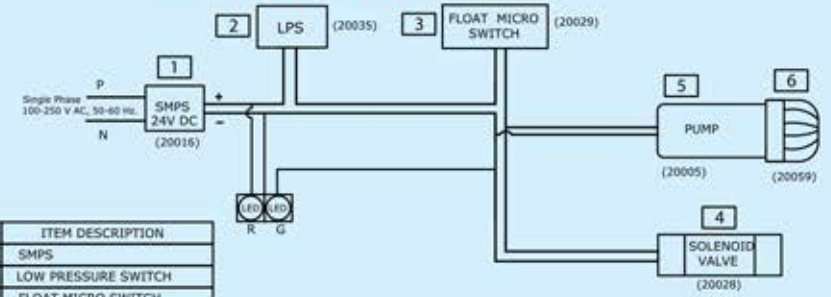
Water Flow Diagram



S.NO.	SP - CO.	ITEM DESCRIPTION
1	20035	LOW PRESSURE SWITCH
2	20010	SEDIMENT FILTER
3	20028	SOLENOID VALVE
4	20005	BOOSTER PUMP
5	20009	ACTIVATED CARBON FILTER
6	20002	RO MEMBRANE
7	20034	TDS CONTROL VALVE
8	20018	FLOW RESTRICTOR TUBE
9	20004	UF MEMBRANE
10	20440	WATER STORAGE TANK
11	20029	FLOAT MICRO SWITCH

[**Note:** The above specifications are subject to modifications for improvement without notice]

Electrical Circuit Diagram



S.NO.	SPARE PART CODE	ITEM DESCRIPTION
1	20016	SMPS
2	20035	LOW PRESSURE SWITCH
3	20029	FLOAT MICRO SWITCH
4	20028	SOLENOID VALVE
5	20005	BOOSTER PUMP
6	20059	PUMP HEAD

Automatic Operation

- The purifier automatically shuts off when the storage tank is full
- The purifier automatically restarts when water level drops below the maximum
- The purifier does not start when inlet water supply pressure is below 0.3 kg/cm²
- The purifier does not allow any water rejection in absence of electricity/when tank is full

Installation Instructions

KENT WONDER+ Mineral RO™ Water Purifier is a convenient and easy-to-install Wall-mounting/Table-top model.

Recommended Site Preparations:

- Single Phase 100-250 V AC, 50-60 Hz. supply not more than 3m away from the point of installation
- Raw water supply with ½ inch nipple, not more than 3m away
- Drain for reject water not more than 3m away
- Installation space as per the dimensions of the purifier
- For optimum inlet pressure, source water tank should be at least 10ft above the purifier installed
- Install the purifier near a sink for easy availability of inlet and reject water lines
- The system and installation need to comply with state and local laws and regulations

Installation Procedure:

Step-1

Wall Hanging Diagram

1. Paste the central drill sticker on wall at (3.6 Feet to 4.0 Feet from the ground) as per your convenience.
2. Ensure that sticker is pasted straight on the wall, then drill holes as per the space provided on sticker.
3. Now, insert the puff up with the help of a hammer.
4. Screw in two 10X50 self-taping screws, 5.4 inches (138 mm) apart horizontally.
5. Carefully hang the purifier on the wall with the help of wall-mounting slot holes provided on back side of the purifier.

Note:

1. If the wall is not straight or the screws are not properly drilled in an even position, it will damage your purifier.
2. Keep the device away from heat or direct sunlight.

Step-2

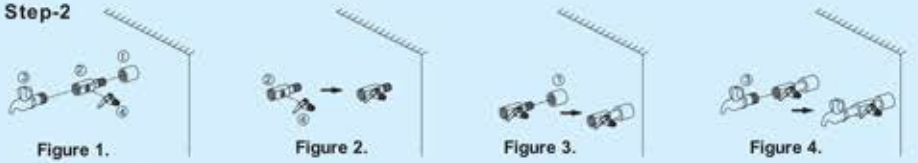
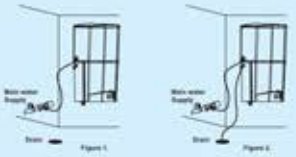


Figure 1. Figure 2. Figure 3. Figure 4.

1. First fix the SS ball valve (marked as no. 4) to the 1/4 inch port of the 3-way connector (marked as no. 2) as shown in figure 2.
2. Connect the 3-way connector to the raw water supply (marked as no. 1) as shown in the figure 3. The 3-way connector is fitted in line with the raw water supply.
3. The other end of the 3-way connector can be connected to a tap (marked as no.3) as shown in figure 4. or can be plugged off if not required.

Step-3

1. Now connect one end of the white pipe to SS ball valve and another end to the upper push-fit elbow fitting to the left hand side of the purifier labelled as WATER IN, as shown in fig 1.
2. Similarly, connect one end of the white pipe to the lower elbow fitting connector in tank labelled as REJECT WATER and leave the other end in the drain, as shown in fig 2.



Step-4

Before connecting the power supply, it is important that you perform the following functions:

1. Open the SS ball valve (Handle parallel to the ball valve) to start the flow of water into the purifier, as shown in the figure.
2. Wait for 2-3 minutes to ensure that the filters are soaked in water.

Step-5

Connect the power supply.

Installation is complete.

TDS Adjustment*

The unique TDS Controller enables customers to retain the contents of natural minerals in purified water, as per their requirement.

- Turning the screw of the valve anti-clockwise results in an increased mineral content
- Turning the screw of the valve clockwise results in a decreased mineral content

☞ We recommend keeping the TDS at the lowest possible level but not below 50mg/l.

* Tested & Certified by TUV-SUD South Asia (P) Ltd.

Starting-up the Purifier

- Switch on the power supply
- Allow the storage tank to fill till the maximum level**
- Switch off the power supply
- Open the upper cover, lift and drain the storage tank to remove residual dust particles present inside the pipe and storage tank
- Place back the storage tank and close the upper cover
- Switch on the power supply
- Purifier is ready to use

☞ The glowing Red LED indicates that the power is ON. The glowing Green LED indicates that the purification process is ON.

** Tested or certified flushing time - 24hrs.

Recommended Usage of Rejected Water

Although the rejected water has high concentration of salts, it is absolutely clean and free from impurities like chlorine, dirt, sand, etc. This rejected water usually goes down the drain, but it can be used for gardening purposes.

The high concentration of salts and minerals accelerate plant growth. Rejected water can also be used for cleaning utensils, mopping, etc.

Maintenance

To ensure that the purifier operates at its best, a routine maintenance must be performed. The frequency of the maintenance will greatly depend upon the raw water quality and consumption of purified water.

- Storage tank must be cleaned once in a week (Refer Cleaning the Water Tank)
- Replace sediment filter and activated carbon filter once in 12 months or earlier if they get clogged. It is recommended to change the FRT along with the filters
- Replace RO membrane once in a year or earlier if it gets clogged
- Replace UF membrane once in a year or earlier if it gets clogged
- In the event of not using purifier for a long time (while going for a holiday, tour, etc.), ensure that you disconnect the power supply, turn off the raw water supply and drain out the storage tank

Cleaning the Water Tank

Switch off the power supply. | Open the upper cover. | Remove the water tank. | Clean it under running tap water and wipe dry.

Note: Filters and membrane are consumables. Their replacement time depends upon the quality of raw water and water consumption. They are not covered under the warranty. However, if a filter chokes within six months and a membrane within a year, it will be cleaned/repaired/replaced free of cost. Changing the filters and system inspection is available on call. The purification capacity of RO membranes will reduce with time due to clogging of pores of membranes.

The Reverse Osmosis System contains a replaceable treatment component critical for the effective reduction of total dissolved solids and that product water shall be tested periodically to verify that the system is performing properly.

Replacement of spare parts are as under:

-20010	SP Inline Sediment Filter 8"
-20009	SP Inline Carbon Filter 8"
-20002	SP RO Membrane Welded 8" Housing
-20004	SP UF Membrane Welded 8" Housing
-20018	SP FRT 550/600

"This Reverse Osmosis System contains a replaceable component critical to the efficiency of the system. Replacement of the reverse osmosis component should be with one of identical specifications as defined by the manufacturer, to ensure the same efficiency and contaminant reduction performance."

Important Safety Instructions

- If the supply cord is damaged, it must be replaced by manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- Children should be supervised to ensure that they do not play with the appliance.
- The appliance is not intended for use by person (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.

Technical Specifications

Product	KENT Wonder+
Product Code	11040
Product Generic Name	Water Purifier
Product Colour	White
Applications	Suitable for Purification of Brackish/ Tap Water/Municipal Corporation Water
Purification Production Rate	15 L/hr.*
Body Material	ABS Food Grade Plastic
Mounting	Wall-mounted/Counter-top
Dimensions(mm)	390 (L) x 285 (W) x 440 (H)
Inlet Water Pressure/Temp (Min.)	0.3 kg / cm^2 / 10° C
Inlet Water Pressure/temp (Max.)	4 kg / cm^2 / 40° C
Min./Max. Operating pH	6.5-8.0
Filter Cartridge	Sediment, Activated Carbon, UF
UF Membrane	0.01-0.1 microns
Membrane Type	Thin Film Composite RO
Net Weight	7.70 kg
Storage Capacity	7 L
Maximum Duty Cycle	75 L/day
Booster Pump Voltage	24 V DC
Total Power Consumption	60 W
Input Power Supply	Single Phase 100-250 V AC, 50-60 Hz. ⧈
IP Rating	IPX1

* Purification capacity tested for raw water having TDS level of 750 ppm at room temperature.

Testing Information

The System has been tested according to IS 10500:2012 (Standards for drinking water as per Bureau of Indian Standards) for reduction of the hazardous substances.