

# KENT ELIXIR-2

Double Purification UV+UF



HOUSE of PURITY

## Instruction Handbook for Installation, Operation and Maintenance



HOUSE of PURITY



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Made in India

**KENT TECHNOLOGY**

UV + UF

Ultra Violet + Ultra Filtration Purification

## Welcome to KENT

Dear Customer

Welcome to the world of KENT, leader of water purification industry in India. With a KENT product you have all the reasons to smile, since at KENT we take pride in the quality and laboratory-tested performance of our products.

We are confident that your decision to own KENT Elixir-2 water purifier will go a long way in serving you with purer and mineral enriched drinking water - thus keeping you and your family healthier. We assure you, that you will be satisfied with its trouble-free performance and quality which comes without any compromise.

This manual is an effort towards familiarising you with the operation and maintenance of KENT Elixir-2. Before operating the unit, please read it thoroughly and retain it for future reference. Should you need further assistance, do not hesitate to contact your nearest KENT dealer or branch,

Best Wishes

KENT RO SYSTEMS LTD.

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## KENT Technology - A Breakthrough in Water Purification

Presenting the KENT Elixir-2 Water Purifier, it uses futuristic and state-of-the-art technology to provide purer & healthier drinking water.

The heart of KENT Elixir-2 Water Purifier is a Reverse Osmosis membrane having capillaries as small as 0.0001 microns that reduces dissolved impurities (salts and heavy metals) and converts hard water to sweet and purer drinking water. KENT Elixir-2 Water Purifier also allows user to control Total Dissolved Solids (TDS) level of purified water.


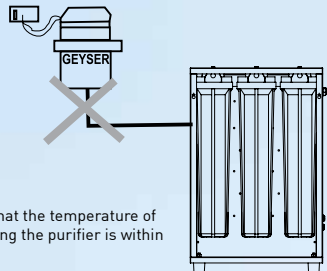
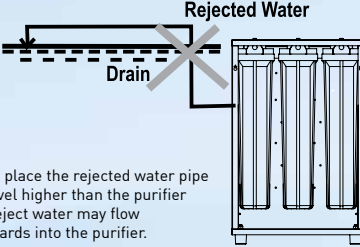
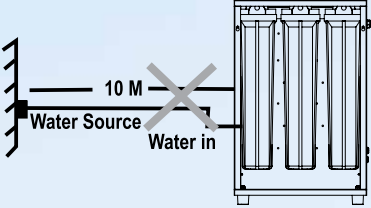
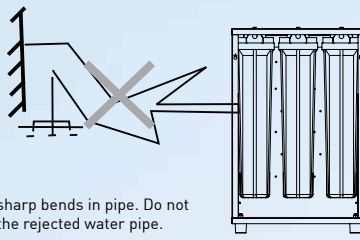
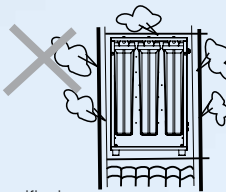


### Salient Features of KENT Elixir 2

- Suitable for attachment to water coolers
- Double Purification by UV+UF effectively filters out bacteria, viruses and cysts
- Fully automatic operation with auto-on and auto-off facility
- Tamper-proof UF Membrane fused inside membrane housing
- Push-fit components for leak-proof & maintenance-free performance
- Vertically mounted SMPS for over voltage protection
- Stainless steel construction for corrosion-free life span
- Suitable for purification of Tap Water/ Municipal Corporation Water Supply
- Filter change alarm to indicate filter replacement time
- Super high flow membrane.
- High capacity of 120 L/hr.

### Items in the Box

- |                                 |              |
|---------------------------------|--------------|
| 1. KENT Elixir-2 Water Purifier | : 1 N        |
| 2. S.S. Ball Valve              | : 1 N        |
| 3. 3-Way Connector              | : 1 N        |
| 4. Pipe (White 1/2 inch)        | : 2.5 meters |
| 5. Pipe (White 3/8 inch)        | : 2.5 meters |
| 6. Cooler fitting               | : 1 N        |
| 7. Union Connector              | : 1 N        |
| 8. Warranty Card                | : 1 N        |

## Important Instructions

 <p>Avoid exposure to direct sunlight and installation in damp areas.</p>	 <p>Make sure that the temperature of water entering the purifier is within 10-40°C.</p>
 <p>Do not place the rejected water pipe at a level higher than the purifier else reject water may flow backwards into the purifier.</p>	 <p>Maximum distance between the purifier and water source should not be more than 3 meters.</p>
 <p>Avoid sharp bends in pipe. Do not block the rejected water pipe.</p>	 <p>Do not confine the purifier in a cabinet.</p>
 <p>Use Genuine KENT Spare Parts for optimum performance</p>	 <p>Do not try to service the purifier on your own. Instead, call the service technician for help.</p>

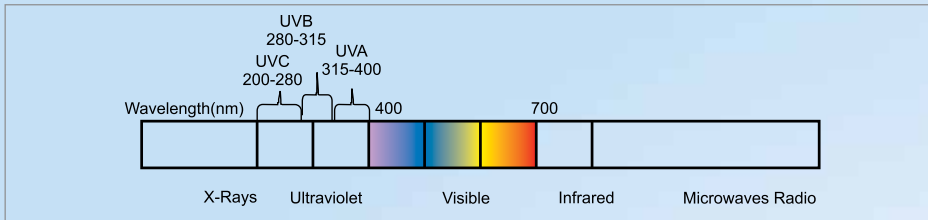
## UF Process

KENT Ultra-Filtration is a separation process that uses UF membrane with pore size of 0.1-0.01 micron. This UF membrane has the capacity to remove colloidal materials including bacteria, cysts and even viruses from drinking water. Low applied pressure is therefore sufficient to achieve high flux rates from an Ultra Filtration membrane.

## UV Process

The ultra-violet (UV) light has shorter wavelength (higher energy) than visible light. It is called ultra-violet because it is just beyond violet light in the light spectrum. Technically, ultra-violet light is defined to be any wavelength of light, which is shorter than 400 nanometer,

UV rays, which penetrate into micro-organisms, are absorbed by the DNA of pathogen, in the water. The DNA is altered in such a way that the pathogen cannot reproduce itself. Thus, it is essentially killed and cannot cause infection. This process of DNA modification is called inactivation.



## UV Fail Alarm

KENT Elixir-2 Water Purifier has an in-built feature that sounds an audible alarm if the UV lamp malfunctions. This feature is provided to ensure purity. This UV Fail Alarm will sound as follows: Single short beeps after every two seconds.

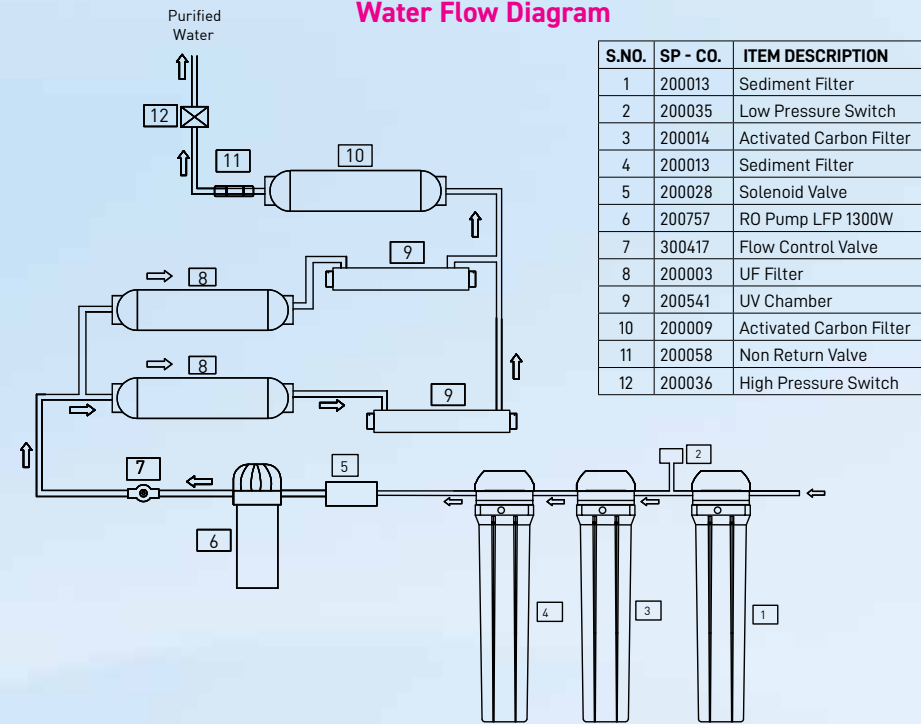


In case such an alarm is audible, kindly switch off the purifier and call the service technician for help. The purifier will stop its purification process in such a circumstance.

## Automatic Operation

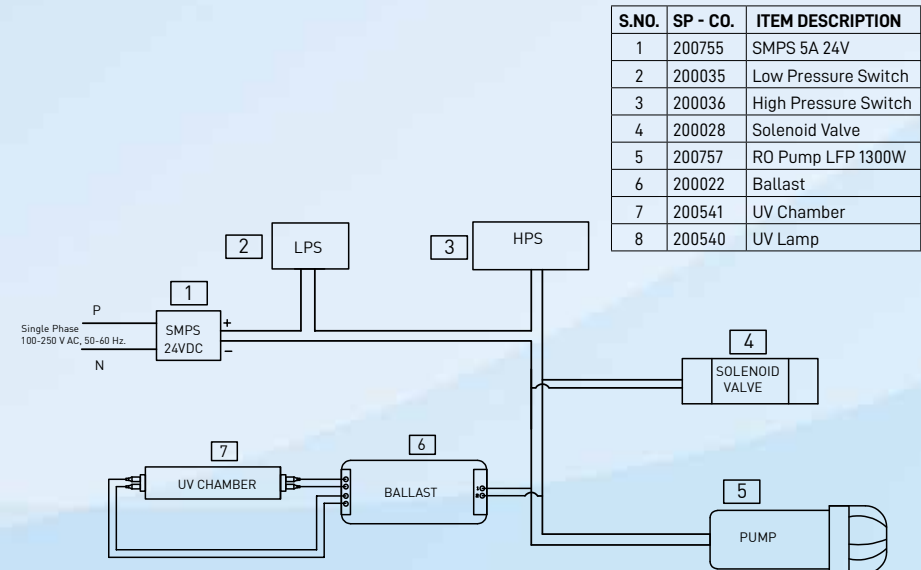
- The purifier automatically shuts off when the tank is full
- The purifier does not start when inlet water supply pressure falls below 0.3kg/cm<sup>2</sup>
- The purifier automatically restarts when the water level drops below the maximum level
- The purifier does not allow any water rejection in absence of electricity or when tank is full
- The purifier automatically flushes & cleans the RO membrane on periodic intervals

## Water Flow Diagram



S.NO.	SP - CO.	ITEM DESCRIPTION
1	200013	Sediment Filter
2	200035	Low Pressure Switch
3	200014	Activated Carbon Filter
4	200013	Sediment Filter
5	200028	Solenoid Valve
6	200757	RO Pump LFP 1300W
7	300417	Flow Control Valve
8	200003	UF Filter
9	200541	UV Chamber
10	200009	Activated Carbon Filter
11	200058	Non Return Valve
12	200036	High Pressure Switch

## Electrical Circuit Diagram



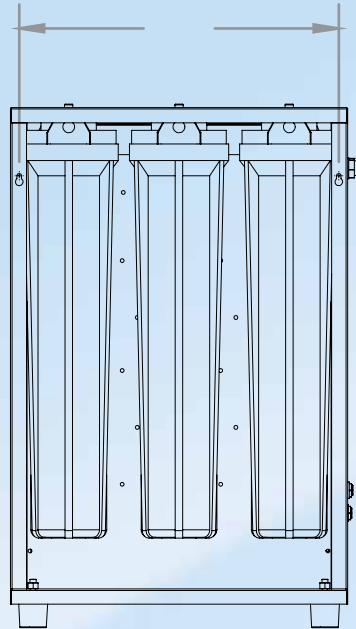
S.NO.	SP - CO.	ITEM DESCRIPTION
1	200755	SMPS 5A 24V
2	200035	Low Pressure Switch
3	200036	High Pressure Switch
4	200028	Solenoid Valve
5	200757	RO Pump LFP 1300W
6	200022	Ballast
7	200541	UV Chamber
8	200540	UV Lamp

## Installation Instructions

KENT Elixir-2 is designed to facilitate wall mounting as well as floor standing purification. It is easy and convenient to install.

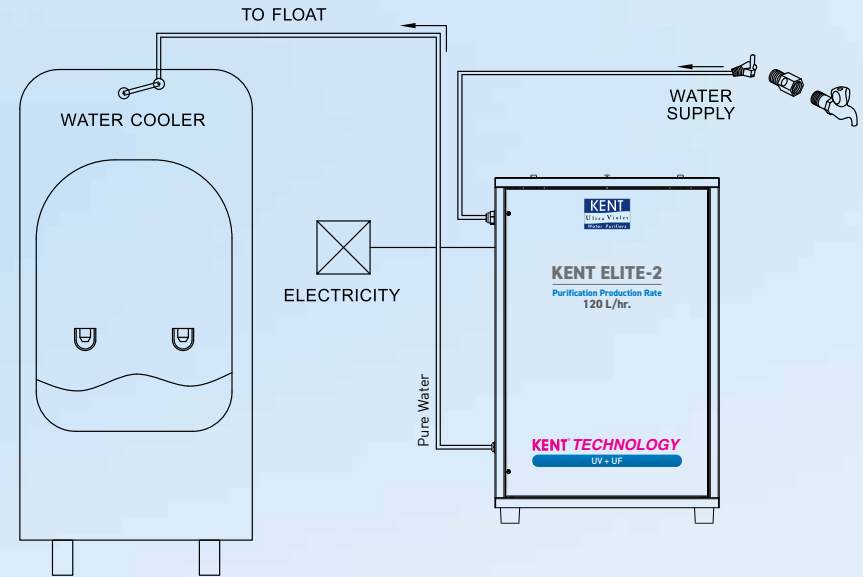
### Recommended Site Preparations:

- Single Phase 220±10V AC, 50 Hz. connection not more than 3m away from the point of installation of purifier
- Raw water supply with ½ inch nipple not more than 3m away
- Installation space as per the dimensions of the purifier
- For proper installation make sure that the purifier is mounted on a wall surface.
- Avoid installation on wooden and metallic stands
- For optimum inlet pressure, source water tank should be at least 10 ft above the purifier installed
- The system and installation must comply with state and local laws and regulations



### Installation Procedure:

1. Fasten the SS ball valve to raw water supply.
2. Now connect one end of white pipe to SS ball valve and the other end to 3/8" Bulk head fitting connector labeled as WATER IN.
4. Connect the purified water pipe to water cooler.
5. Turn on the lever given on SS ball valve to initiate the water flow to purifier.
6. Allow the filters to pre-soak in water for 2-3 minutes.
7. Connect the power supply.
8. Installation is complete.



When the water cooler's storage tank gets filled up completely the float in the cooler will cut off the RO purified water supply from KENT Elixir-2. This will further create a water pressure. In turn the high pressure sensor installed in the machine will cut off the electric supply to the machine. The purification of KENT Elixir-2 will automatically start again as soon as the water level drops.

### Starting-up the Purifier

- Switch on the power supply
- Allow water to fill to the maximum level
- Switch off the power supply
- Open the faucet and drain water to remove residual dust particles present in the pipes
- Close the faucet and switch on the power supply
- Purifier is ready to use

### 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.

- Tank must be drained and cleaned once in every 15 days
- Replace the UF Membrane once in a year
- Replace UV Lamp once in a year
- Replace sediment filter, activated carbon filter once in a year or earlier if they are clogged. It is recommended to change FRT along with the filters

⚠ Please note that the replacement time of consumables such as filters and membranes is dependent on the quality of raw water and the quantity of water consumed.

#### Replacement of spare parts are as under:-

-200013	SP Inline Sediment Filter 20"
-200014	SP Inline Carbon Filter 20"
-200004	SP UF Membrane 8"
-200009	SP Inline Carbon Filter 8"

#### Recommended Frequency for Filters / Membrane Change

For optimum performance we recommend the following frequency for replacement of cartridges:

Sediment/Activated Carbon	→ Once in a year or earlier if it gets clogged
UF Membranes	→ Once in a year or earlier if it gets clogged
UV Lamp	→ Once in a year

#### Important Safety Instructions

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid hazard

Children should be supervised to ensure that they do not play with the appliance

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.

#### Technical Specifications

Product	KENT ELIXIR-2
Product Code	111171
Product Generic Name	Water Purifier with Ultra-Violet Disinfection
Product Colour	White
Application	Suitable for Tap Water Municipal Corporation Water
Installation	Suitable as attachment to water coolers
Body Material	Stainless Steel
Mounting	Floor Standing/Wall-mounting
Purification Production Rate	120 L/hr (2L/min.)
Max. Duty Cycle	600 L/Day
Filter Cartridge	Sediment, Activated Carbon, UF
UV Lamp Wattage	11 W
Life of UV Lamp	5000 hrs. of operation
UF Membrane	0.1-0.01 Micron
Inlet Water Pressure/Temp (Min.)	0.3 kg/cm <sup>2</sup> /10°C
Inlet Water Pressure/Temp (Max.)	4 kg/cm <sup>2</sup> /40°C
Min./Max. Operating pH	6.5-8.0
Booster Pump Voltage	24 V DC
Total Power Consumption	60 W
Dimension (mm)	505 (L) x 360 (W) x 746 (H)
Net Weight	26.4 Kg
Input Power Supply	Single Phase 220±10V AC, 50 Hz <input type="checkbox"/>
IP Rating	IPX1