

KENT ELIXIR-1

ONLINE PURIFICATION FOR WATER COOLERS

KENT
Ultra Violet
Water Purifiers

HOUSE of PURITY

Instruction Handbook for Installation, Operation and Maintenance

KENT
Ultra Violet
Water Purifiers

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-1 Water Purifier will go a long way in serving you with pure and mineral enriched drinking water, thus keeping you and your customers in good health. 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-1. Before operating the unit, please read it thoroughly and retain it for future reference.

Best Wishes,

KENT RO SYSTEMS LTD

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KENT TECHNOLOGY - A Breakthrough in Water Purification

KENT proudly presents KENT Elixir-1- a technologically advanced commercial water purifier. The innovative KENT Elixir-1, developed at KENT laboratories, provides the double purification of UV+UF. While the initial purification by UV deactivates bacteria and viruses, the double purification by the fine pores of the Hollow Fibre UF Membrane reduces them from the purified water. The Activated Carbon Pre-filter reduces bad taste and odour, so that the water you drink is healthy, safe and tasty.

Salient Features of KENT Elixir-1 Water Purifier

- High Purification Capacity of 50 L/hr.*
- Suitable for attachment to water coolers
- Double Purification by UV + UF effectively filter out bacteria, viruses and cysts
- Fully automatic operation with auto-on and auto-off function
- Tamper-proof UF Membranes fused inside membrane housing
- Push-fit components for leak-proof & maintenance-free performance
- Horizontally mounted SMPS for protection against high voltage
- ABS construction for corrosion-free life span
- Suitable for Purification of Municipal Corporation Water
- Filter change alarm to indicate filter replacement time
- Inbuilt auto-flushing system
- High flow membrane

Items in the Box

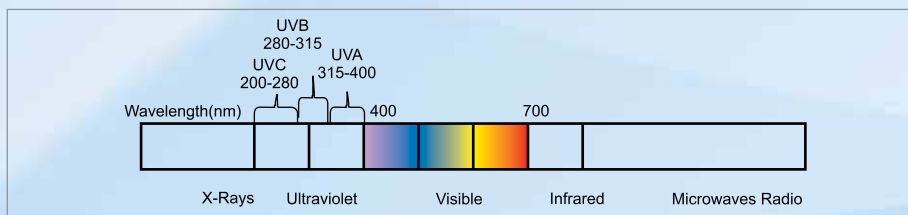
- | | |
|-------------------------------------|---------|
| 1. KENT Elixir-1 Water Purifier | : 1 N |
| 2. 3-Way Connector | : 1 N |
| 3. S.S. Ball Valve | : 1 N |
| 5. Food Grade Pipe (White) 0.962 Cm | : 2.5 m |
| 6. Food Grade Pipe (White) 0.635 Cm | : 2.5 m |
| 7. Screws 8 Plastic Inserts | : 2 N |

UV Process

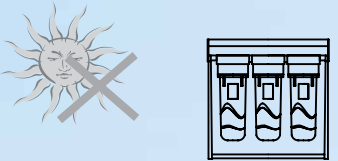
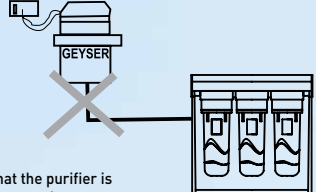
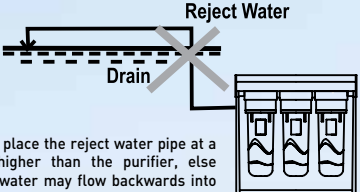
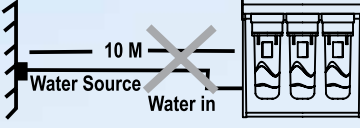
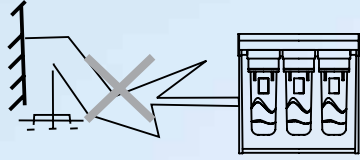
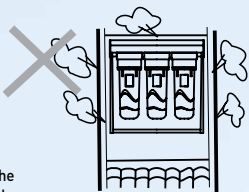

The ultra-violet (UV) light has shorter wavelength (higher energy) than visible light. It is called ultraviolet because it is just beyond violet light in the light spectrum. Technically, ultra-violet light is defined to be any wavelength of light, which is shorter than 400 nanometer.

UV rays, which penetrate into micro-organisms, are absorbed by the DNA of pathogen, in the water.

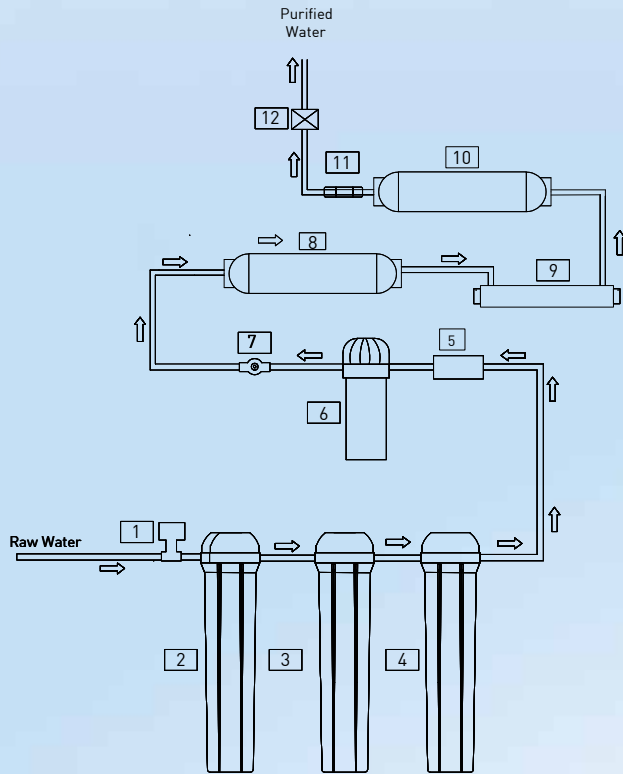
The DNA is altered in such a way that the pathogen cannot reproduce itself. Thus, it is essentially killed and cannot cause infection. This process of DNA modification is called inactivation.



Important Instructions

 <p>Avoid exposure to direct sunlight and installation in damp areas.</p>	 <p>Make sure that the purifier is connected to normal temperature water supply only</p>
 <p>Do not place the reject 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 reject water pipe.</p>	 <p>Do not confine the purifier in a cabinet.</p>
<p style="text-align: center;">KENT GENUINE SPARE PARTS</p> <p>Use Genuine KENT Spares Parts for optimum performance</p>	 <p>Do not try to service the purifier on your own. Instead, call the service technician for help.</p>

Water Flow Diagram

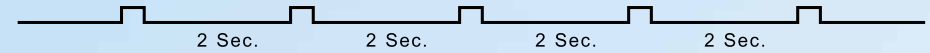


S.NO.	SP - CO.	ITEM DESCRIPTION
1	200035	Low Pressure Switch
2	200011	Sediment Filter
3	200012	Activated Carbon Filter
4	200673	Carbon Block 10"
5	200028	Solenoid Valve
6	200005	Booster Pump
7	300417	Flow Control Valve
8	200003	UF Filter
9	200541	UV Chamber
10	200009	Activated Carbon Filter
11	200058	Non Return Valve
12	200036	High Pressure Switch

UV Fail Alarm

KENT Elixir-1 Water Purifier has an in-built feature that sounds an audible alarm if the Inline UV malfunctions. This feature is provided to ensure purity. This UV Fail Alarm will sound as follows:

Single short beep 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 fall below 0.3kg/cm²
- The purifier automatically restarts when the water level drops below the maximum level

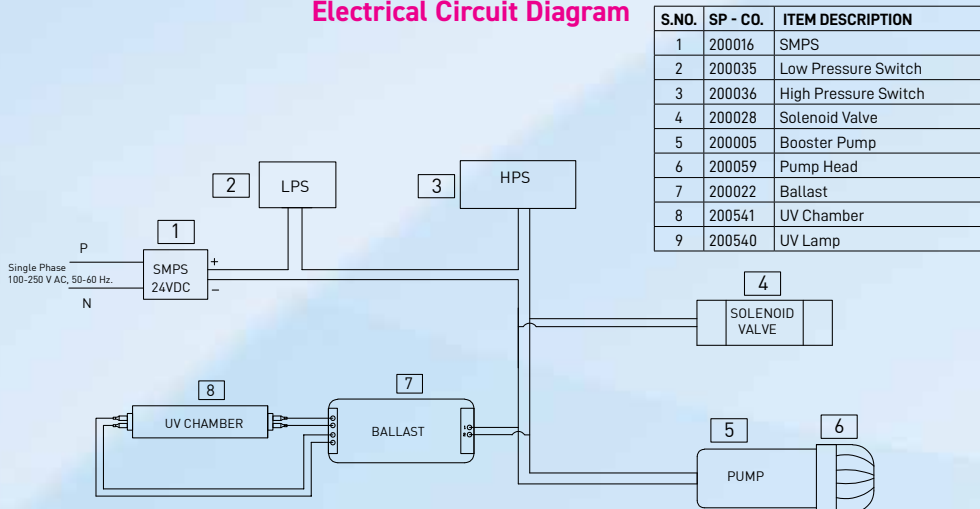
Installation Instructions

KENT Elixir-1 is designed to facilitate wall mounting as well as counter-top purification. It is easy and convenient to install.

Recommended Site Preparations:

- Single phase 230 V AC, 50 Hz. supply not more than 3m away from the point of installation
- 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

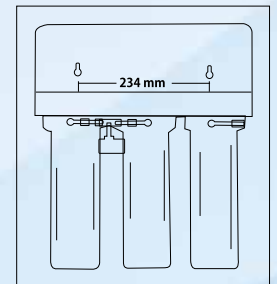
Electrical Circuit Diagram

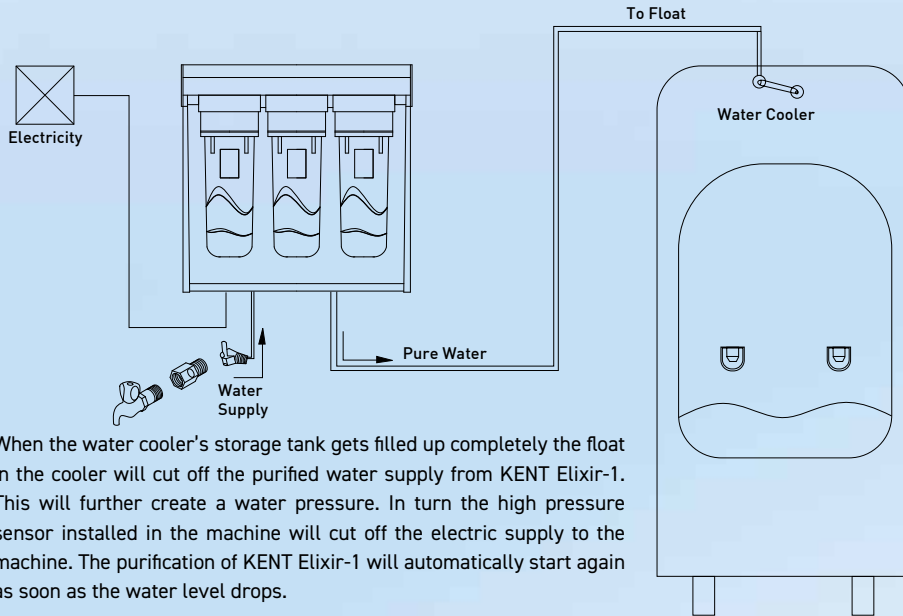


S.NO.	SP - CO.	ITEM DESCRIPTION
1	200016	SMPS
2	200035	Low Pressure Switch
3	200036	High Pressure Switch
4	200028	Solenoid Valve
5	200005	Booster Pump
6	200059	Pump Head
7	200022	Ballast
8	200541	UV Chamber
9	200540	UV Lamp

Installation Procedure:

1. Screw in two 10x50 self tapping screws, 234 mm apart horizontally.
2. Wall-mount the purifier with the help of slot holes given on back side.
3. Fasten the SS ball valve to ¼ inch port of 3-way connector.
4. Attach the threaded end of 3-way connector to raw water supply and plug off the other end or connect to a tap.
5. Now connect one end of white pipe to SS ball valve and the other end to lower elbow fitting connector labeled as WATER IN, on the bottom of purifier.
6. Connect the purified water pipe to the water cooler.
7. Turn on the lever given on SS ball valve to initiate the water flow to purifier.
8. Allow the filters to pre-soak in the water for 2-3 minutes.
9. Connect the power supply.
10. Installation is complete.





When the water cooler's storage tank gets filled up completely the float in the cooler will cut off the purified water supply from KENT Elixir-1. 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-1 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 UF membrane once in a year
- Replace sediment filter, activated carbon
- filter once in a year or earlier if they get clogged.
- Replace Inline UV once in a year

⚠ 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.

Important Safety Instructions

- If the supply cord is damaged, it must be replaced by the original part 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

Warning

- Do not operate the UV-C emitter when it is removed from the appliance enclosure
- Read the maintenance instructions before opening the appliance
- The appliance must be disconnected from the supply before replacing the UV-C emitter

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 they get clogged
- Inline UV → Once in a year

Technical Specifications

Product	KENT ELIXIR-1
Product Code	111170
Product Generic Name	Water Purifier
Product Colour	White
Application	Suitable for Tap Water Municipal Corporation Water
Installation	Suitable as attachment to water coolers
Body Material	ABS Food Grade Plastic
Mounting	Wall-mounted
Purification Production Rate	60 L/hr
Max. Duty Cycle	300 L/Day
Filter Cartridge	Sediment, Activated Carbon, UF
UV Lamp Wattage	11 W
Life of UV Lamp	5000 hrs. of operation
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
Booster Pump Voltage	24 V DC
Total Power Consumption	36 W
Dimension (mm)	415 (L) x 222 (W) x 475 (H)
Net Weight	10.3 Kg
Input Power Supply	Single Phase 230V AC, 50 Hz
IP Rating	IPX1