

**KENT**  
Ultra Violet  
Water Purifiers  
HOUSE of PURITY



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**KENT**  
**ULTRA STAR**

Next-Gen UV Purifier  
UV+UF Double Purification  
with UV Disinfection in Tank

**KENT**  
Ultra Violet  
Water Purifiers  
HOUSE of PURITY

## Instruction Handbook for Installation, Operation and Maintenance



Keeps Purified Water  
Pure in Storage Tank



**KENT TECHNOLOGY**  
UV + UF + UV in Tank

UV Purifier with Ultra Filtration Process  
Best suitable for low TDS/Tap/Municipal/Water Supply



## Welcome to KENT

Dear Customer

Welcome to the world of KENT, leaders 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 Ultra Star will go a long way in serving you with purer and healthier drinking water – thus keeping you and your family 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 familiarizing you with the operation and maintenance of KENT Ultra Star. Before operating the unit, please read it thoroughly and retain it for future reference. To ensure that the warranty of your water purifier is effective, fill up the enclosed warranty card and send the installation report within 15 days of purchase. 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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## Introduction

KENT proudly presents KENT Ultra Star - the new advanced fully automatic UV purifier with storage tank.

The innovative KENT Ultra Star, developed at KENT laboratory, provides double purification of UV+UF. While the initial purification by UV deactivates bacteria and viruses, the double purification by fine pores of 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.

It has UV LED disinfection light in storage tank that keeps purified water pure.

## Salient Features of KENT Ultra Star

- water purifier with UV disinfection in tank for absolute purification
- Wall mounted design-best suited for domestic purpose
- Double purification, first by Hollow Fiber UF membrane followed by UV-filters out bacteria, virus and even cysts
- Fully automatic operation with auto-on and auto-off facility
- Purified water storage tank with 7L capacity
- Tamper-proof UF Membrane fused inside membrane housing
- Push-fit components give leak-proof and maintenance-free performance
- Mounted SMPS for over-voltage protection
- ABS material construction for corrosion-free life span
- Ideal for Tap/Municipal water supply (preferably low TDS water).
- UV fail alarm which beeps if the lamps is non-functional

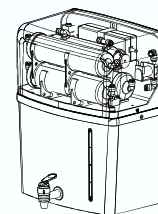
## Items in the Box

1.	KENT Ultra Star	:	01 No.
2.	3-Way Connector	:	01 No.
3.	S.S. Ball Valve	:	01 No.
4.	Food Grade Pipe ¼ inch (White)	:	2.5 meters
5.	Screws & Plastic Inserts	:	02 each
6.	Warranty Card	:	01 No.
7.	Center Drill Sticker	:	01 No.

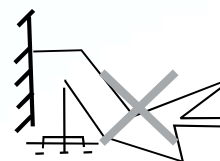
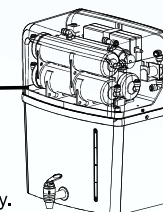
## Important Instructions



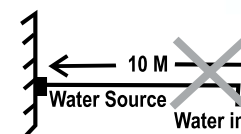
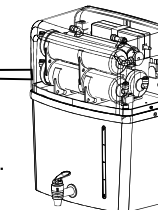
Avoid exposure to direct sunlight and installation in damp areas.



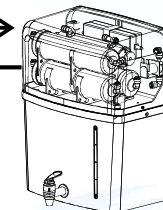
Make sure that the purifier is connected to normal temperature water supply only.



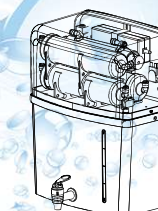
Avoid sharp bends in pipes.



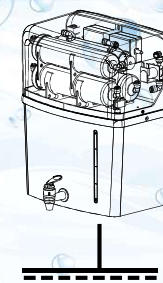
Maximum distance between the water source and the purifier should not be more than 3 meters.



In case the purifier is not to be used for more than two days, switch off the power supply and drain the storage tank.



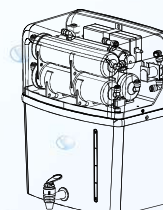
To keep the storage tank clean, it should be drained once in a week.



Use KENT Genuine Spare Parts for optimum performance



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

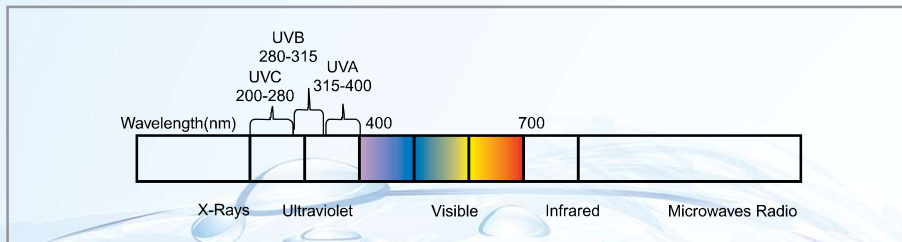




## UV Process

Ultra Violet (UV) rays are high energy rays having a wavelength shorter than the visible light. They are called ultra-violet because they are just beyond the violet light in the spectrum. Technically, ultra-violet light is defined as any wavelength of light which is shorter than 400 nanometer.

When penetrated into water, the UV radiations are absorbed by the DNA of pathogens. These UV rays alter the DNA of these pathogens in such a way that they lose the ability to reproduce, multiply and infect. Thus, they are essentially killed and cannot cause infection. This process of DNA modification is known as inactivation.

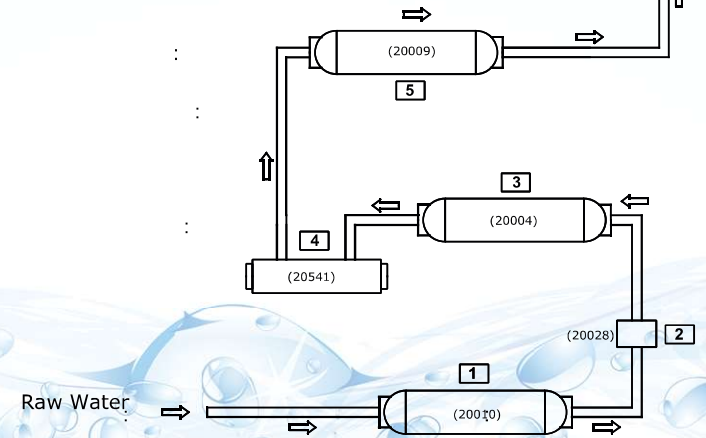
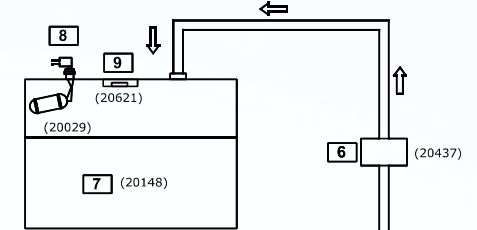


## UF Process

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.

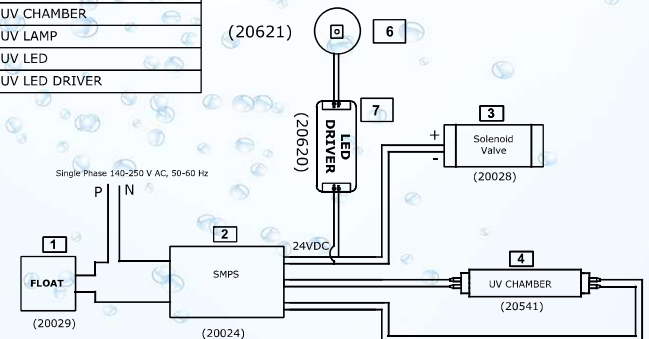
## Water Flow Diagram

S.NO	SPARE PART CODE	ITEM DESCRIPTION
1	20010	SEDIMENT FILTER
2	20028	SOLENOID VALVE
3	20004	UF MEMBRANE
4	20541	UV CHAMBER
5	20009	ACTIVATED CARBON FILTER
6	20437	TDS CONTROL VALVE
7	20148	WATER STORAGE TANK
8	20029	FLOAT VALVE
9	20621	UV LED



## Electrical Circuit Diagram

S.NO	SPARE PART CODE	ITEM DESCRIPTION
1	20029	FLOAT MICRO SWITCH
2	20024	SMPS
3	20028	SOLENOID VALVE
4	20541	UV CHAMBER
5	20540	UV LAMP
6	20621	UV LED
7	20620	UV LED DRIVER



## UV Fail Alarm

KENT Ultra Star has an inbuilt alarm that goes on when the UV Lamp stops drawing sufficient current from the power source. With the help of this unique feature, the user knows whether the UV Lamp is working properly or not. In such circumstances kindly switch off the purifier and call service technician for help.

## Installation Instructions

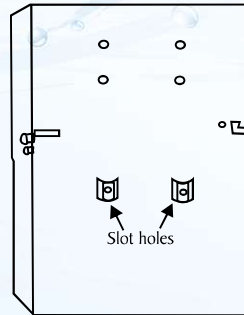
KENT Ultra Star is a convenient and easy-to-install wall mounting model.

### Recommended Site Preparations:

1. Single phase 140-250 V AC, 50-60 Hz. supply not more than 3m away from the point of installation.
2. Raw water supply with ½ inch nipple not more than 3m away.
3. Installation space as per the dimensions of the purifier.
4. Wall/plane surface for mounting screws and holding the machine. Avoid installation on wooden and metallic stands.
5. For optimum inlet pressure, source water tank should be at least 10 ft. above the purifier installed.
6. Install the purifier near a sink for easy availability of inlet water lines.
7. The system and installation must comply with applicable state and local laws and regulation.

### Installation Procedure:

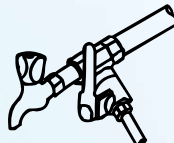
1. Screw in two 10x50 self tapping screws, 5.4 inches (138 mm) apart horizontally.
2. Wall-mount the purifier with the help of slot holes given on the back side.



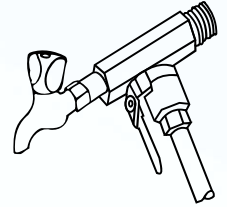
3. Fasten the SS ball valve to 3/8 inch port of 3-way connector.



4. Attach 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 pipe to SS ball valve and other end to elbow fitting connector labeled as WATER IN, on the left side of purifier.
6. Turn on the lever given on SS ball valve to initiate the water flow to purifier.
7. Allow the filters to pre-soak in water for 2-3 minutes.
8. Connect the power supply.
9. Installation is complete.



## Starting-up the purifier

1. Switch on the power supply.
2. Allow the storage tank to fill to its maximum capacity.
3. Switch off the power supply.
4. Open the drain plug present at bottom of the storage tank and drain the tank completely. This would remove the residual dust particles present in different pipes and storage tank.
5. Plug back the drain plug.
6. Switch on the power supply.
7. Purifier is now 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.

1. Storage tank must be cleaned once in a week.
2. In the event of not using purifier for more than two days (while going on a holiday, tour etc.), turn off the raw water supply and drain the storage tank.
3. Replace sediment filter and carbon filter once in a year.
4. Replace UF membrane once in a year.
5. Replace UV lamp once in a year.

### Recommended Frequency for Filter/Membrane Change

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

## Important Safety Instructions

1. 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.
2. Children should be supervised to ensure that they do not play with the appliance.
3. 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

## Technical Specifications

Product	KENT Ultra Star
Product Code	11088
Product Generic Name	Water Purifier
Product Colour	White
Applications	Ideal for Tap/Municipal water supply
Max. Purification Production Rate	60L/hr.* (depending on inlet water pressure)
Body Material	ABS Food-Grade Plastic
Installation	Wall-mounting
Dimensions (mm)	375 (L) x 280 (W) x 410 (H)
Net Weight	4.72 kg
Purified Water Tank Capacity	7L
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
Filter Cartridge	Sediment, Activated Carbon, UF
UF Membrane Pore Size	0.01 Micron
UV Lamp Wattage	11 W
UV LED Wattage	0.7 W
Life of UV Lamp	5000 hrs. of operation
Total Power Consumption	36 W
Input Power Supply	Single Phase 140-250 V AC, 50-60 Hz. □
IP Rating	IPX1