



# INSTRUCTION MANUAL AND WARRANTY CARD

**USHA care**

Toll free  
**1800-1033-111**  
usha\_care@ushainternational.com

## USHA INTERNATIONAL LTD.

Plot No.15, Institutional Area, Sector 32, Gurgaon - 122 001 (Haryana) Tel : +91-124-4583100, Fax : +91-124-4583200  
E-mail : corporate@ushainternational.com Website : www.ushainternational.com

Regd. Office : Surya Kiran Building, 19 Kasturba Gandhi Marg, New Delhi (India) Tel : +91 11 23318114 Fax : +91 11 23318118

ISO 9001: 2008  
Certified Company

### Storage water heater



**SHRIRAM**

Fans • Sewing Machines • Home Appliances • Engines & Pumpsets • Electrical Motors & Pumps • Water Coolers & Dispensers  
• Inverters • Cook Tops, Hobs & Hoods • Auto Components

**USHA** © Registered Trademark and Copyright of USHA INTERNATIONAL LTD.  © Registered Trademark of USHA INTERNATIONAL LTD.

Dear Customer,

Congratulations!

You are now the proud owner of an Usha Storage Water Heater.

Please read the instruction manual carefully before using and keep it cautiously after reading for future reference.

Innovatively designed, using only the highest quality material and components, your storage water heater is designed to offer trouble free service.

This is another quality product from Usha International Limited. A name synonymous with trust and reliability.

Best Wishes

## Special Features



High pressure resistance suitable for high rise buildings



**Incoloy 800 Coated Heating Element:**

Incoloy 800 Coated Heating Element offers superior heating performance with its excellent resistance to both oxidation & carbonization at high temp. setting. Also resists erosion against most extreme and hard water conditions thus extending life span of heating element with minimum energy loss



**Heavy duty Magnesium Anode Rod to prevent rust and corrosion:**

Magnesium Anode Rod protects enamelled tank from rust and corrosion. Also enhances life of tank and element even with the usage of hard water



5 Star Rated (15L / 25L ) energy efficient



High grade ABS material of outer body for better finish and strength



High grade thermostat(VDE mark) and thermal cut out (CE Mark)to cut off electricity when temperature exceeds set limit



High Density PUF Insulation reduces heat loss and improves energy efficiency



Soft Touch Digital Panel with Remote Control

## Safety Features



Capillary type high precision with highest safety UL mark:

“Cut-off” and “Cut-in” functions regulate the power supply between a narrow band of temperature range. Functioning of indicator lamps during ‘cut-off’ and ‘cut-in’ indicates proper working of thermostat. This device is provided with an adjustable knob to set the desired water temperature.



Preset Thermal cut out with CE mark:

A non-self resetting thermal cutout is provided as a safety device. When the thermostat fails to function, this cut-off the power at 90°C. The thermal cutout has to be manually reset before the heater can start operating again.



4in 1-Multi Function Safety Valve (MFV):

The MFV used with this unit is a unique Safety Valve. This has four functions:

1. Pressure Release Valve (PRV)
2. Non Return Valve (NRV)
3. Drain Device



ELCB - Earthing Leakage Circuit Breaker:

This water heater is equipped with an Earth Leakage Circuit Breaker (ELCB) which will cut-off the power immediately in case of any current leakage. This will ensure protection against electric shock in case of current leakage. In order to ensure that the ELCB is working normally, press the ‘Testing’ button on the Device. If ELCB cuts off the power to the heater, it means that it is working properly. After testing, please reset button to restore normal functioning of the heater. It is advisable to periodically repeat this test to verify the functioning of the ELCB.



16 Amp Power Plug



Dry Heating/Over Pressure Protection



Weather Proofing IPX4

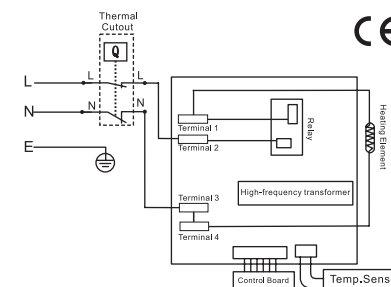
## General Maintenance

- Check frequently if the connection of power source plug and the outlet is in good condition. The plug’s outlet is well connected to the ground or not.
- Clean the heating parts once in a year in order to assure high efficiency of storage water heater.

## Caution and Installation Instructions

- Do not install the Electric water heater without Multifunctional Valve.
- Before installing the Electric Water Heater check the water pressure of the Inlet connection. If it is more than the rated pressure, install pressure reducer valve before connecting with the Inlet of Heater.
- Usha strongly recommends use of ELCB
- It is Strongly recommended to use flexible pipes at inlet and outlet points
- Do not tamper with the settings of Multi functional Valve.
- To have longer life of Heating Element, ensure the water hardness should not be more than 100TDS
- Please ensure Water Heater is mounted on solid cement walls and installed 200M above the ground
- In case of new installation of water heater, make sure that before electric supply is switched on, the water should flow freely from the outlet tap or spout
- Inlet water line should be continuously open when water heater is in use except when it is being serviced
- It is recommended that the “IN/OUT pipes and heating element be de-scaled at least once a year. Dilute hydrochloric acid is recommended for scale removal

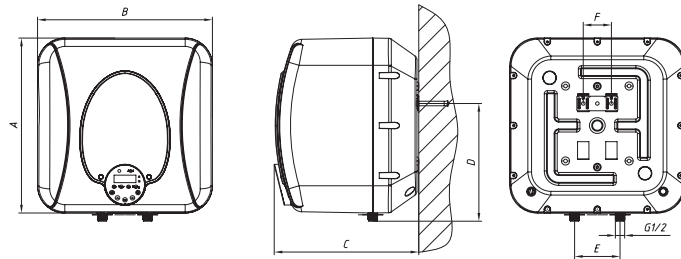
## Circuit Diagram to be referred



### Operating Guides

**Temperature Settings:** According to your required temperature rotate the temperature adjusting knob in clockwise direction. You can select to use the heating temperatures without grades in the temperature range from 20° to 75° C from low to high

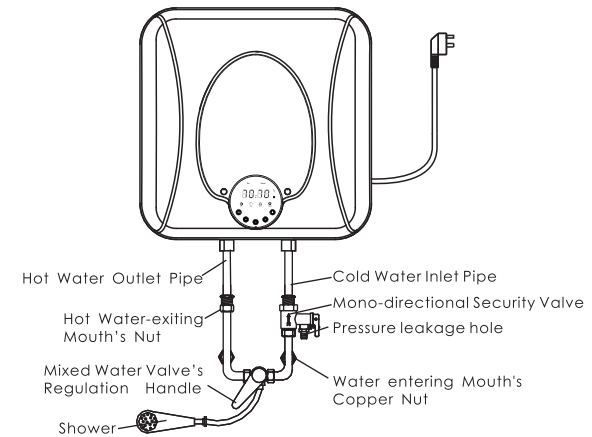
### Technical Specification



Model / Characteristics	Verve 25L	Verve 15L
Volume, L	25	15
Mounting	Vertical	Vertical
Dimensions, mm		
A		
B		
Voltage, V/hz	220-240/50	220-240/50
Power, W	2000	2000
Pressure, bar	7.5	7.5
Protection, IP	IPX4	IPX4
Standing loss in KWH/24hrs/45		
Star Rating		

\*Under standard test conditions, when tested in accordance with relevant standards. Actual electricity consumption will depend on how the appliance is being used.

### Operating Instructions



The water heater works under the pressure defined by the main water-pipe line when connected.

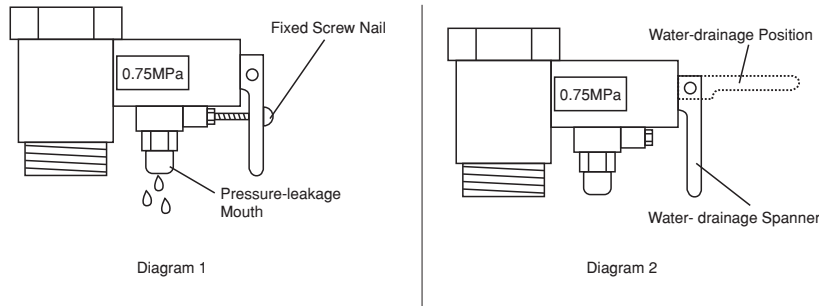
#### Water Entering:

After connecting all the pipes, rotate the hot and cold water blending valve in clockwise direction towards maximum temperature. Then, open the water inlet pipe. At this time the water will start flowing in the tank.

#### Cautions:

During operation, please make sure that the Inlet Valve is open before switching on the Water Heater, till the time it is switched off. The inlet valve can be closed partially to regulate the flow of water. The Outlet Valve is used to control the flow of heated water. Please make sure that the tank is filled with water by opening the outlet valve once before switching on the power.

### Security Characteristics



### SECURITY VALVE

This electric water heater has a Single-directional safety valve. It must be installed at the water inlet. When the tank's pressure is over 0.75 MPa, this valve will automatically release the pressure to protect the Water Heater against high inlet pressure. It may cause water drops to fall at the pressure relieving vent. Under any conditions, this pressure relieving vent should not be blocked or obstructed (Diagram 1).

### NOTE

It is possible that the inner pressure relieving Safety Valve's exit vent is not allowing water to exit, or else, during heating, the inlet pipe's cover area under the Safety Valve is becoming hot. This indicates that it is internally-draining the pressure. To empty the tank, first close the inlet valve and open the outlet valve. Then open the fixed screw nail on the Security Valve with tools. Lift up the water drainage spanner to horizontal position and let the water in the tank to naturally flow out (Diagram 2).

### Instructions for use

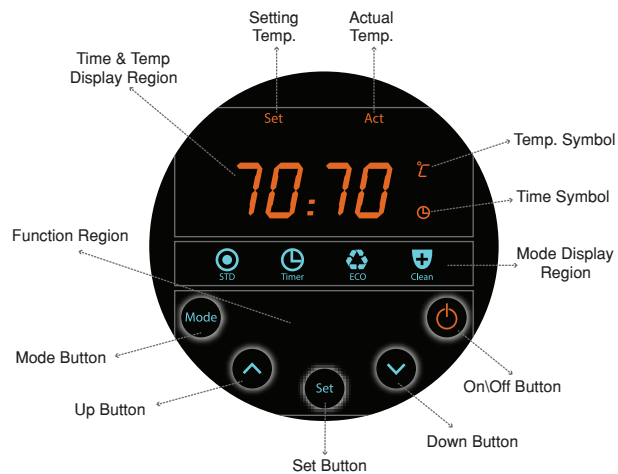
#### A. Using the heater for the first time:

1. Do not switch "ON" the power supply before filling the heater with water.
2. Leave the hot water tap open. Now fill the heater by opening the control valve at the inlet.
3. When the heater is full, water will start flowing through the hot water tap. Close the hot water tap.
4. Now the heater will always have water inside. Water drawn will be replaced by water from the over head tank.
5. Always keep the inlet control valve open.
6. Now switch "ON" the power supply to the heater.

#### B. Using the heater regularly:

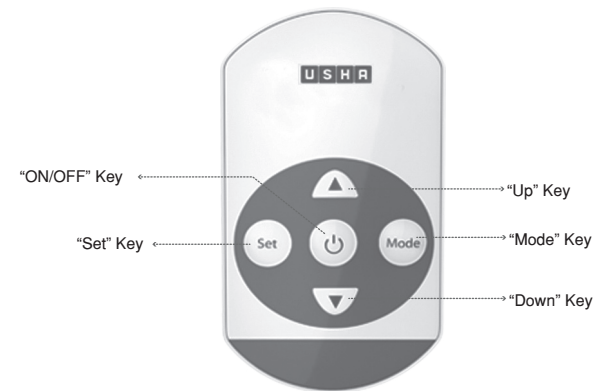
1. Always keep the inlet valve open so that water drawn from the hot water tap is automatically replaced from the mains.
2. When the water reaches the required temperature the thermostat will cut-off the power supply automatically.
3. The thermostat setting can be changed by the user to suit outlet water temperature (DO NOT TAMPER THE SETTING FREQUENTLY)
4. Lowering the setting of the thermostat will give a lower hot water temperature; increasing the setting will give a higher hot water temperature.
5. Initially it may take a long time for the water to get hot, it is recommended to switch "ON" the water heater at least an hour before you want to use it.
6. If you require hot water early in the morning, switch "ON" previous night itself, thermostat would cut-off the power automatically, when the water reaches the set temperature.
7. The heater can also be kept "ON" always, if required since the heater is completely insulated, the water will remain hot. The thermostat will cut-in and cut-off automatically to keep the water at constant temperature. In this way you can always get hot water.

Buttons on Digital Panel



- The user interface is constituted by LED display and 5 buttons. This is how the display panel looks like
- Press [On/off] button to change on/off state (switch on/off)
- Press [Set] button to use /set clock function, setting time for operation, change the setting temperature of water
- Press [Mode] button to set different modes in the heater
- Press [Up] and [Down] button, to set clock function, setting time for operation, change the setting temperature of water

Buttons on Remote Control



- The remote control is constituted by 5 buttons. This is how the remote looks like
- Press [On/Off] button to change on/off state (switch on/off)
- Press [Set] button to use /set clock function, setting time for operation, change the setting temperature of water
- Press [Mode] button to set different modes in the heater
- Press [Up] and [Down] button, to set clock function, setting time for operation, change the setting temperature of water

**Display Interface**

- In the normal case, there would be four display interface in the display panel



**[OFF] Interface**  
The smart chip will turn off all display



**[Standby] Interface**  
When the heater is not working for long and has gone into standby model



**Time Display Interface**  
The smart chip will show the clock function



**Temp. Display Interface**  
The smart chip will show the setting and actual temperature of water

**Different Modes on Water heater panel**

- In the normal case, there would be four display interface in the display panel



**Standard mode**

Water Heater will work on regular intervals to keep the water at setting temp. (such as 75°C) and supply hot water

**Applicable Interface**

Off	Standby	Time Display	Temperature Display
X	X	✓	✓

**Timer Mode: (Auto Memory function)**  
Water Heater will ensure a hot water supply with set temp. at the required time. (During bathing time it will keep heating for 1 hour to ensure constant amount of hot water supply), for rest of hours it remains in standby status. It features a timely hot water supply everyday for special demand with better energy saving performance (Compared to Standard Mode).



**Timer Mode**

For Example: If timer set as 8:00am, water heater will automatically compute the time to start the heater, computing based on: the setting temperature, actual temperature, capacity, heating power... According to the compute result, the water Heater may start heating at 7:30am, that the hot water at setted temperature will be ready at 8:00am and from 8:00am, the heater will continue heating for 1 hour. After this, water Heater stand by.

**Applicable Interface**

Off	Standby	Time Display	Temperature Display
X	X	✓	✓

### Different Modes on Water heater panel

- In the normal case, there would be four display interface in the display panel

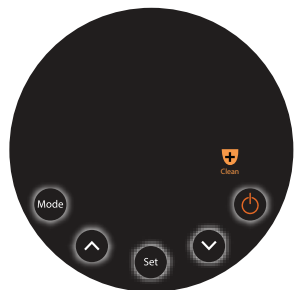


Eco mode

Water Heater will work on regular intervals to keep the water temp. at 55°C for more energy saving.

#### Applicable Interface

Off	Standby	Time Display	Temperature Display
X	X	✓	✓



Anti bacteria Mode

The water will be heated up to 80°C to kill up to 97% of bacteria in the inner tank for one hour. Till the time of operation, the indicator light will be in orange.

Once this operation is finished, the indicator will become blue and water heater will go into standby state.

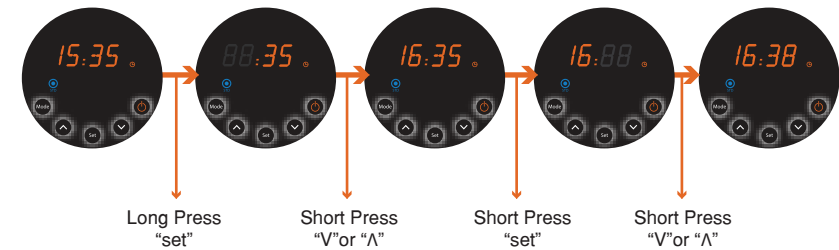
It is recommended that you use this feature once in a month

#### Applicable Interface

Off	Standby	Time Display	Temperature Display
X	X	X	X

### Setting the clock

- User can set the clock with help of remote or buttons on display panel



#### Applicable mode

Standard	Timer	Eco	Anti bacteria
✓	✓	X	X

#### Applicable Interface

Off	Standby	Time Display	Temperature Display
X	X	✓	X

- This function will operate in Standard /Timer mode only
- Short press "Mode" to switch to Standard or Timer Mode
- Press the set key for 3 secs and the "hour" digits start to flash (such as "15") with a clock icon at the right side of screen
- Short press "V" or "Λ" to set digits on hour basis (with long press, digits shall change faster)
- To toggle and change Minute time (such as "35"), press set button once
- Short press "V" or "Λ" to set the digit on minute basis (with long press, digits shall change faster)
- Short press "set" or keep no operation for 5 seconds, updated setting shall be memorized and machine returns to former screen



### Setting the appointment Timer

- In the normal case, there would be four display interface in the display panel



Applicable mode

Standard	Timer	Eco	Anti bacteria
X	✓	X	X

Applicable Interface

Off	Standby	Time Display	Temperature Display
X	X	✓	X

- This function will operate in Timer mode only
- Short press “Mode” to switch to Timer Mode
- The “minute” digits will flash (such as “30”)
- Short press “V” or “Λ” to set the time. The time increment per press is 30min
- Short press “set” to come out of appointment timer setting.

### Setting of water temperature

- User can set the temperature of Water



Applicable mode

Standard	Timer	Eco	Anti bacteria
✓	✓	X	X

Applicable Interface

Off	Standby	Time Display	Temperature Display
X	X	X	✓

- This function will operate in Standard /Timer mode only
- Short press “Mode” to switch to Standard or Timer Mode
- Short press “V” or “Λ” so that the set temperature starts to flash (such as “70”) with a centigrade icon at the right side of screen
- Short press “V” or “Λ” to set the digit on °C basis (with long press, digits shall change faster)
- Keep no operation for 5 seconds, updated setting shall be memorized

### Setting for self cleaning (Anti bacterial function)

- User can start the antibacterial function to kill the bacteria



Applicable mode

Standard	Timer	Eco	Anti bacteria
X	X	X	✓

Applicable Interface

Off	Standby	Time Display	Temperature Display
X	X	X	X

- Long press “Mode” to Cleaning (Anti-bacteria Mode) to start Anti-bacteria function
- The Cleaning (“Anti-bacteria”) icon becomes orange.
- The timer set for cleaning is of one hour duration
- Once this operation is finished, the indicator will become blue and water heater will go into standby state.  
It is recommended that you use this feature once in a month

### Maintenance & Cleaning:

- To benefit from the highest standards of service and to ensure your guarantee remains valid, always contact Usha Approved Dealer.
- Always keep the inlet control valve open.
- Never switch “ON” the water heater without water in the heater. It will damage the heating element.
- Check condition of metal flexible pipe at-least once in a year. If found damaged replace with new pipes.
- Check the condition of power supply cord for “No Damages”. Replace it by an authentic supply cord in case of damage.

### Trouble Cause & Treating Methods

Type of Complaints	Probable Cause	Remedy
Water Heater not working	House fuse blown	Call an electrician and get it corrected
	Power supply off	Check that the water heater main supply plug is connected to wall socket and that the supply is on. Check that the fuse is intact in the supply line.
	Indicator Light not working Overheating Protector in use	Call an USHA customer care representative
Low temperature of Water coming out	Less Heating Time	Wait for water heater to heat water for little longer
	Temperature setting of water on minimum	Adjust the temperature knob
	Temperature controller not working properly Heating element not working	Call an USHA customer care representative
Water Leakage	Various pipe mouth connections are not properly sealed.	Call the plumber to get it corrected

	Leakage in Water heater tank	Call an USHA customer care representative
Water not coming Out	No water in main tap	Wait for water supply to be there in main tap
	Low water pressure in main tap	Use the water heater when there is sufficient pressure for it to fill the water heater tank
	Improper connection of inlet pipe	Call the plumber to get it corrected

### Terms of Warranty

- Usha Storage Water Heater carries warranty of 2 Years (24 months) for all safety device and 5 years against tank leakage from the date of purchase.
- This warranty will be governed by the terms and conditions as mentioned below:
- Warranty shall be valid only for the period as specified above, irrespective of whether the said product has been in use or not for any reason whatsoever OR the product has been moved from one location to another. Please note that the product must be returned to Usha's authorized service centre on Freight paid basis for repair / replacement during the period of warranty.
- Warranty period as specified above includes time taken for repair, replacements, transit time, breakdowns etc. Usha reserves the right to retain any part or component replaced at it's discretion in the event of a defect noticed in the warranty period.
- The warranty herein is in lieu of implied conditions and warranties under the law and is confined to the repair / replacement of defective parts and doesn't cover any consequential or resulting liability, damage or loss arising from such defects. Furthermore, in no case, shall there be return of Payment or return of the product as a whole

- Parts of the product repaired or replaced under the terms of this warranty are warranted only for the remaining period of the original warranty period.
- Surface coating, plastic / glass parts, Bakelite parts, rubber / nylon parts and normal wear and tear of parts shall not be covered under this warranty. All such parts shall be repaired / replaced on costs + taxes basis.
- Only authorized service centres of Usha shall repair the said product.
- It shall be the absolute discretion of the company to affect the repairs or replacement of parts whether at the site of installation or at any authorized service centre.
- The customer is requested to preserve the original invoice for necessary verification and produce the same, as and when required.

The warranty will be VOID in case of the following events:

- If the product is not used as per the instructions given in the User Manual supplied with the product.
- If any repair work carried out by a person other than Usha's Authorized Service Centres.
- If any Spare Part used other than recommended Original Usha Spares.
- If any damage is caused by accident, mishandling, tampering with installation, improper electric circuit outside the product or on account of incorrect power supply other than required 230V AC, 50 Hz.
- If the serial no. of the product or any part thereof is deleted, defaced, damaged, altered, obliterated or tampered with or removal for any reason whatsoever.
- If the product is used for commercial purpose(s).
- If the warranty Card is not completely filled and signed on the purchase of the product.
- In case you find a problem with the performance of the product. Please visit [www.ushainternational.com](http://www.ushainternational.com) for the list of our Authorized Service Centre OR call our Toll Free no. 1800 1033 111 to get your complaints registered.
- The above warranty is applicable only in INDIA. Any disputes relating to the above shall be subject to the Jurisdiction of Delhi, India only.



### Warranty Card

This Storage Water Heater is warranted for two years against all manufacturing defects from the date of sale. In the event of any complaint, please contact your nearest Company Service Centre or call at our Toll Free no: 1800-1033-111

This Warranty is valid only when:

1. The Storage Water Heater has not been opened or tampered with, by any unauthorized person.
2. The warranty card or cash memo duly signed by the authorized dealer are presented with the complaint.
3. The Storage Water Heater has been installed, used and maintained in accordance with the instruction manual.

This Warranty does not apply for:

1. Damages due to chipping, peeling, plating and denting.
2. Breakage or damage to components made out of Bakelite, Urea, ABS, SAN and such plastic, materials, rubber parts and cord.
3. Normal wear and tear of parts.
4. Damage resulting from accidents, mishandling or negligence on part of the customer. Liability for consequential loss or damage is neither accepted nor implied.

S.NO: .....

CASH MEMO: ..... Date.....

DATE: .....

DEALER'S NAME AND ADDRESS: .....

.....

OWNER'S NAME & ADDRESS: .....

.....