

## Troubleshooting

Symptom	Things to Check	Solutions
No water	1 Whether the water supply has stopped or whether the water pressure is too low	Check
	2 Whether the water-usage point is blocked or whether the hot water valve is opened	Check and clean
Only cold water but the heating indicator lamp is lit	1 Whether hot water outlet is not opened	Check and open
	2 Whether the water temperature is adjusted	Increase the temperature to the required value. Once the water is heated to the pre-set temperature, control flow volume of cold and hot water using the moderating mixing valve.
	3 Heating time is too short and set temperature is not achieved	Continue heating
	4 Whether heating pipe is damaged	Confirm this is not due to the reasons ①②③, then contact Maintenance Department
Only cold water and the heating indicator lamp is not lit	1 Whether power is properly connected	Check power socket
	2 Whether thermostat is out of control	Confirm that this is not due to reason ①, then contact Maintenance Department
Heating indicator light is on all the time	1 Water has not reached the set temperature	Continue heating
	2 Whether thermostat is out of control	Confirm it is not due to reason ①, then contact Maintenance Department
Water volume is sometimes large or small, or water is sometimes hot or cold	Whether water pressure is stable	Set lower mixing valve or ensure water pressure is stable before use
Small hot water outflow volume	1 Whether the present temperature setting is too low	Calibrate using the method stipulated in the Instruction Manual
	2 Whether water pressure is too much	Set lower mixing valve

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## Haier Home Water Heater Instruction manual

ES50V-G1(H)

ES70V-G1(H)

ES100V-G1(H)

ES100V-R1(H)



- Please read this Instruction Manual carefully before use.
- Please retain this manual for future reference.

## Safety Notices (Please read before use)

### Meanings of Icons

	Prohibited Forbidden		Compulsory Matters Warning		Essential Matters Caution
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Immediately cut off power supply and contact our Service Center once the water heater does not work properly or emits burnt smell.



This icon is used by Haier Water Heaters to indicate "safety warning experts". It indicates that the product is equipped with special technology that constantly monitors the status of your earth line, to ensure safety during showering. If the icon is lit, it means that there is electricity in the earth line. You should immediately stop using the water heater and disconnect the power plug. Do not touch the outer casing of any electrical appliances in your home. Remember to also contact the local After-sales department or property management company in order for them to engage qualified electricians to carry out a system check until the icon is no longer lit.



Storing of inflammable and explosive items near the water heater is strictly prohibited.



Do not connect to power when installing or repairing the water heater.



Non-professionals are strictly prohibited from carrying out repairs, maintenance, dismantling or revamping of the water heater.



Installation of water heater outdoors is strictly prohibited.



Do not install the water heater in an environment which is susceptible to ice-formation. Ice will cause the container and water pipe to break, leading to scalding and water leakage.



Please take precautionary measures during cold weather, in order to prevent damage to water heater from freezing.



If the soft power cable is damaged, it must be replaced by professional staff from the manufacturers or Maintenance Department in order to avoid danger.



Take care not to be scalded by heated water.



Touching of hot water valve and pipes is strictly prohibited.  
Make sure to check the water temperature before use; use only when it feels suitable.



Do not use water from the water heater for drinking or similar purposes.



Please cut off the power supply if the water heater was not used for an extended period of time. Drain the water heater of all water according to the instructions in the chapter on Cleaning and Maintenance.



The product is only available for alternating current.



To ensure safety, the water heater should be connected to independent sockets (do not use adapters), with reliable earthing. In addition, the power socket must conform to national standards. Use of water heater without reliable earthing is strictly prohibited. Use pen multimeter to check whether the live line and zero line are reverse.

Do not use damaged wire and power socket. Promptly clean the dust on the power plug and socket.

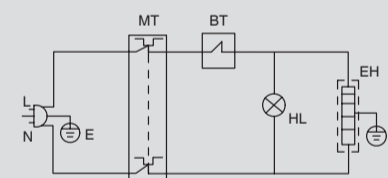
Check the power meter and the electric wire's diameter to ensure that they comply with the rated current for the water heater. Where necessary engage qualified electrician to check the electric circuit.

Do not touch the plug with wet hands, and make sure that the water heater, plug socket do not come into contact with water. If they are accidentally wet,

## Electrical Diagram · Exterior and accessories · Technical parameters

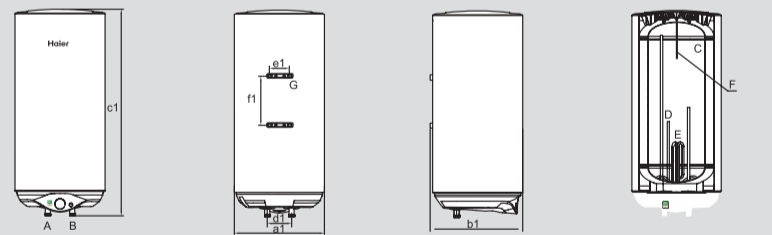
### Electrical Diagram

L : Live wire (brown)  
N : Zero line (blue)  
MT : Manual-reset thermostat  
BT : Adjustable thermostat  
HL : Heating indicator light  
EH : Heating pipe  
E : Earth line (yellow-green; dual color)



### Exterior and accessories

Front view Rear view Side view Cross-section view



A : Hot water outlet B : Cold water inlet C : Inner chamber  
D : Temperature measurement pipe E : Heating pipe  
F : Magnesium rod G : Wall hook

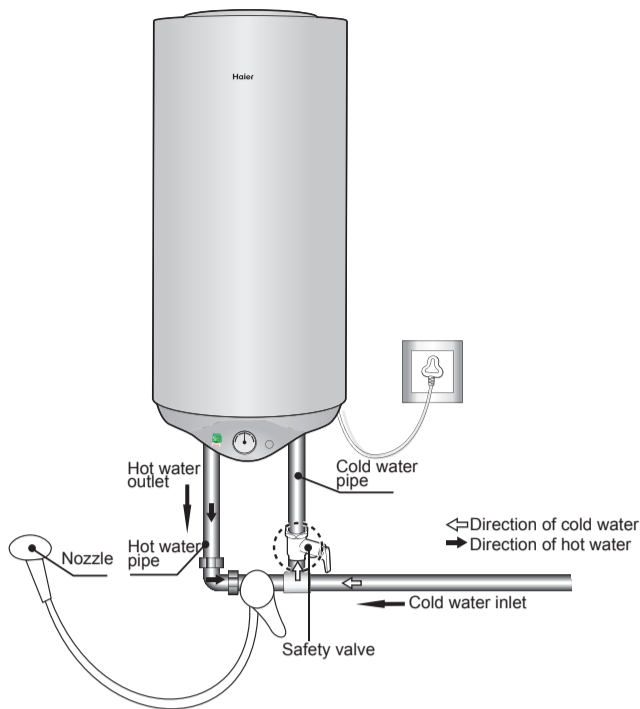
Model No.	Capacity (L)	Net weight(kg)	a1 (mm)	b1 (mm)	c1 (mm)	d1 (mm)	e1 (mm)	f1 (mm)
ES50V-G1 (H)	50	21	410	420	775	100	200	220
ES70V-G1 (H)	70	26	410	420	980	100	200	480
ES100V-G1 (H)	100	33	410	420	1300	100	200	730
ES100V-R1 (H)	100	33	410	420	1300	100	200	730

Note: 1. The margin of error for the above parameters (measurements, weight) is  $\pm 10\%$ .  
2. The thermometer is not a precision instrument. It consists of three areas denoted by blue, orange and red, which indicate the temperature of water in the inner chamber from low to high respectively.

### Technical parameters

Ltem	Unit	ES50V-G1(H)	ES70V-G1(H)	ES100V-G1(H)	ES100V-R1(H)
Rated voltage	V	230	230	230	220
Rated frequency	Hz	50	50	50	50
Rated pressure	MPa	0.80	0.80	0.80	0.80
Power	W	2150	2150	2150	2000
Rated temperature	°C	75	75	75	75
Waterproof rating	/	IPX4	IPX4	IPX4	IPX4
Water pressure	MPa	No less than 0.05MPa	No less than 0.05MPa	No less than 0.05MPa	No less than 0.05MPa
Diameter of power wire	mm <sup>2</sup>	3 × 1.5	3 × 1.5	3 × 1.5	3 × 1.5

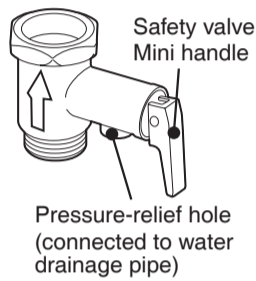
## Installation instruction



### Installing safety valve

Install the safety valve which has a rated pressure of **0.80MPa** (its connection is G1/2) into the water intake pipe with the arrow on the safety valve pointing at the water heater. When the water heater is heated by electricity, a small amount of water will flow from the safety valve's pressure relief hole due to the expansion of water in the heater. This is normal. The pressure-relief hole should be connected to the atmosphere and free from blockage at all times.

Installation method for safety valve's drainage pipe: Attach an end of the water drainage pipe onto the pressure relief hole on the safety valve. You may cut the water drainage pipe to make it shorter, or extend it depending on the situation. Connect to the other end of the water drainage pipe to the lower water outlet. This will prevent the water from the pressure relief hole from splashing. The water drainage pipe connected to the safety valve should be installed in a slanted manner and in an environment which is not prone to frost.



### Installation Precautions

- When installing the water heater, certain space should be reserved (not less than 250mm from the top and bottom, and not less than 700mm from the front and the sides) for ease of subsequent maintenance and repair. If the water heater was to be built into clip boards, the bottom section of the clip board should be movable for ease of removal of plastic cover during maintenance.
- Make sure the pressure on the water intake is not less than 0.05MPa, and not more than 0.75MPa.

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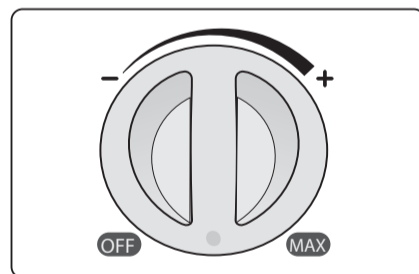
## Instruction manual

### Operation

- After completion of installation, make sure to turn on the water intake valve and mixing valve since there is no water in the inner chamber. Turn the mixing valve to the maximum for hot water outlet. Turn off the out-flow valve when water flows out from the sprinkler or the water outlet (indicating that the container is filled with water). Turn off the water outlet valve. Inspect all connections to ensure that there is not water leakage before connecting to power.

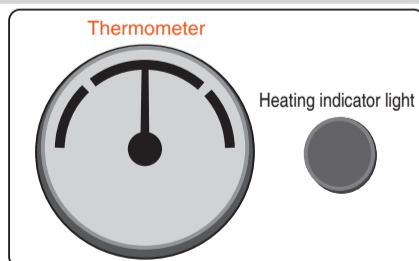
#### 1 Adjust the water temperature knob at the bottom of the water heater to set the temperature.

- The maximum temperature setting is 75°C. Temperature adjustment knob: Turn the knob gradually clockwise to raise the temperature setting. The knob will not continue to turn once it reaches maximum temperature setting. Turn it anti-clockwise gradually to reduce the temperature setting.



- If the heating indicator light is lit, it means that the water heater is heating.
- If the heating indicator is power off, it means that heating is finished and it will enter heating insulation state or get closed totally.

#### 2 Observe thermometer the current water temperature.



- Power will be automatically cut off when the water temperature reaches the set temperature. Once it lowers to certain temperature power will be automatically connected.
- When the water pressure is  $\geq 0.80\text{MPa}$  and the pressure-relief hole on the safety valve emits large volume of water, it means that the water pressure is excessive. In such case, please notify the After-sales Department.

### Things to note during use

- Do not connect the power before filling the inner chamber with water in order to prevent damage to the water heater.
- Adjust the water temperature to the suitable level before use in order to prevent scalding.
- As long as the hot water is adequate, set a lower temperature to reduce heat loss, high temperature corrosion and scaling, thus extending the water heater's lifespan.
- Do not place inflammable substances such as petrol near the water heater; otherwise it may cause fire.
- To avoid danger caused by accidental resetting of the heating breaker, the power for the heat cannot be supplied by timer and other external switch devices or connected to circuit with frequent switching for facility use.

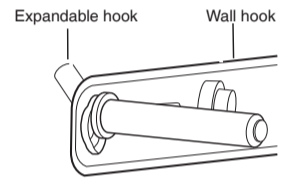
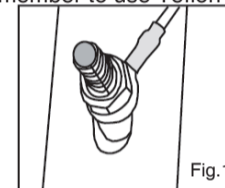
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### Installation Precautions

- The water heater should be installed indoors in a place where the ambient temperature is above 0°C. The pipes should be closely laid out. The hot water outlet should be too far away from the point of usage. If the distance exceeds 8 meters, the hot water pipe should have insulation protection, in order to prevent heat loss.
- The wall on which the water heater should be strong such as it is able to withstand four times the weight of the water heater when filled with water. If the wall was not weight-bearing wall or made of hollow bricks, adequate protective measures such as addition of support and high-strength wall screw with back panel should be adopted.
- The water heater should be installed in places such as it is easy to use and maintain and with floor drain. In order that it will not cause damage to nearby facilities or those in the lower levels during a leakage of the water tank or water pipe. It should not be installed over toilet bowls, bathtub, wash basin or door frame in order that users do not feel oppressed or insecure.
- Power socket for the water heater should be installed in dry places which do not easily come into contact with water, in order not to affect the heater's normal operation (it would be best equipped with protective cover).
- Do not reverse the installation for the water intake and outlet. The safety valve should be installed in the designated position and not moved without permission. The safety valve's pressure-relief hole should be connected to the atmosphere and free from blockage at all times.
- Use pen multimeter to check whether the live line and zero line are reverse. Turn on power supply only when you have ensured that the heater is filled with water and that there is no water leakage. The power supply should also conform with requirements.
- Safety reminder: In order to prevent accidents, please use our company's accessories during installation. Do not replace them on your own or use substitutes. Please make sure to contact our Maintenance Department if the accessories are damaged and replace them with the accessories supplied by our company. Our company shall not be liable for any direct or indirect losses caused as a result of accidents for failure to comply with the aforesaid.
- All water pipes should be installed by qualified water pipe installation workers. The pipelines should comply with the national standards and regulations on the prohibition of prevention tools to draw water to water source pipelines by way of inverse siphon, as well as local building codes.

### Installation method

- Must be installed by personnel in our company's After-sales Department or designated installation personnel.
- The water heater is wall-mounted type.
- Determine the installation location of the water heater and drill 4 holes of 12mm and 65mm deep in the wall with a churn drill. Insert the expansion hooks and expansion bolts into corresponding holes and fasten them. Then, lift the water heater to put the hangers on the hooks and bolts. Mount the flat shims, connecting wires on the back of the water heater and nuts on the bolts in turn (as shown in Fig. 1) and fasten the nut. Then, check if they are firm. Refer to "Install relief valve" to install the relief valve and other accessories (only for installation reference). Remember to use Teflon tape to avoid leakage.



- For ease of installation and removal of water heater, we would recommend that G1/2 loose joints be installed at appropriate locations on the water inlet and outlet pipes of the water heater. Determine the position of the hot water supply. Connect the water intake and outlet pipe together with the water pipe to the positions reserved for use of hot water. Hot water pipe should preferably not be too long in order to prevent heat loss.  
**Note:** Make sure that the water heater is securely attached to the hook before letting it go; otherwise it may drop and cause injury or property damage.

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## Cleaning and Maintenance • Packing List

### Cleaning and Maintenance

#### Warning!

The water heater must be repaired or maintained by qualified professionals. Improper methods may cause serious injury or damage to property.

#### Cleaning

##### External cleaning

- Power must be switched off before cleaning the water heater.
- Take a wet cloth and dab it with small quantity of neutral detergent. Lightly wipe the water heater. Do not use petrol or other solvents. Finally use a dry cloth to wipe; make use to dry the water heater thoroughly. Make sure not to use detergents containing abrasive agents (e.g. toothpaste); acidic substances; chemical solvents (e.g. alcohol) or polish to clean the water heater.

##### Internal cleaning

In order to ensure that the water heater will work with high efficiency, clean the heating tube and inner chamber once every three years. Take care not to damage the exterior of the heating pipe and the protective layer on the surface of the inner chamber. Depending on the local water quality and usage habit, the magnesium rod should be regularly replaced. If maintenance is required, please contact the local Maintenance Department.

#### Check

- When the water heater is in use, the safety valve should be checked once every month. To check it, turn the safety valve's small handle on the side of the water intake (take care not to hurt your hand). If there is water flowing out, the safety valve is working normally. Please contact the local After-sales Department if no water flows out. In the event of damage to the safety valve, please replace it with a safety valve of similar specifications.
- Regularly engage service personnel to carry out safety inspection and promptly clear the water heating pipes of the scale. Check also the consumption of the magnesium rod; change it if consumption becomes excessive.

#### Not in use for an extended period of time

If the water heater is not used for an extended period of time, please carry out the following steps:

- Turn off the water pipe valve.
- Screw the water drainage pipe to the safety valve's pressure-relief hole; turn on the safety valve handle.
- Turn the hot water valve to the maximum (at the same time unscrew the soft sprinkler pipe from the water outlet valve; take care not to be scalded by hot water), drain the inner chamber of water.

When the water heater needs to be used again, our recommendation is to open hot water valve before switching on the power in order to prevent accidents. Allow any gas that may be trapped in the pipe to be discharged. Do not smoke or allow other exposed fire to be near the opened valve. At the same time, make sure to carefully examine all the parts of the water heater and ensure that they are in a perfect condition. Make sure to fill the inner chamber with water before use.

### Packing list

Quantity	Name of parts	Electric water heater (unit)	Safety valve drainage pipe (set)	Expand-able screw (pcs)	Expand-able Hook (pcs)	Instruction Manual (copy)
	Product Model No.					
	ES50V-G1(H)	1	1	2	2	1
	ES70V-G1(H)					
	ES100V-G1(H)					
	ES100V-R1(H)					

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