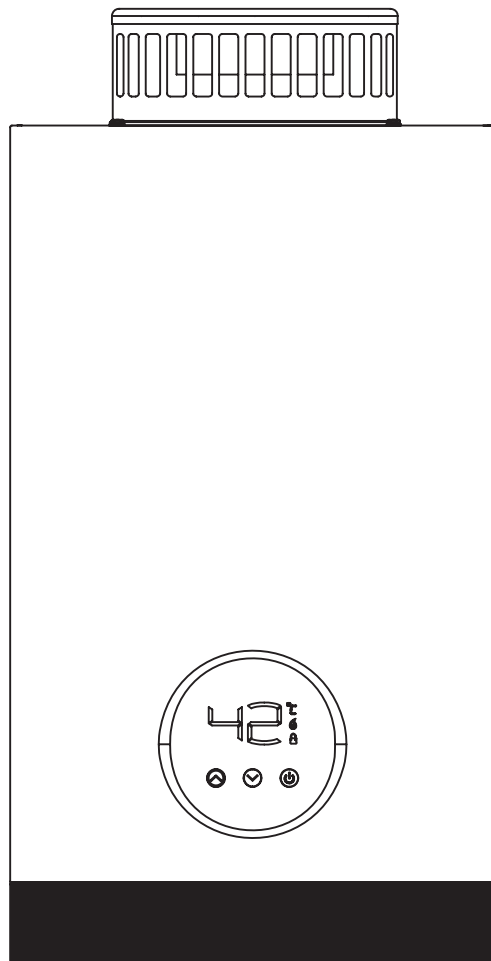


OWNER'S MANUAL  
AND  
INSTALLATION GUIDE

# BENE 10FE

Household Instant Gas Water Heater



Please read this manual carefully before using the product.

**Rubine**<sup>TM</sup>  
*Indulge in the Aqua Lifestyle*

Dear users,

Thank you for selecting Rubine gas instantaneous water heater for your home.

We are confident you will be satisfied with the performance of this water heater as it is designed and produced in accordance with the national standard.

To enjoy the full benefit of this product, please read and keep this user manual for easy reference in future.

## **SPECIAL WARNING**

When the gas water heater works, gas combustion consumes large quantity of oxygen and generates carbon monoxide. Inhalation of excessive carbon monoxide is harmful to human body and can even cause death. Therefore, please ensure the installation and use of gas water heater is strictly in line with the requirement of operation instruction and always keep good ventilation.

The 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 the use of the appliance by a person responsible for their safety.

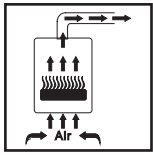
Children should be supervised to ensure that they do not play with the appliance.

## **Contents**

I.	Features & Benefits	1
II.	Packing List	2
III.	Technical Parameter	2
IV.	Structure & Dimension	3
V.	Installation	4
VI.	Installation Steps	5-6
VII.	Operation Method	7
VIII.	Display Function	8
IX.	Safety Warning	9
X.	Maintenance	10
XI.	Troubleshootings	11-12
XII.	Schematic Diagram	13

## I. FEATURES & BENEFITS

This gas water heater is an instant heater with gas as fuel. It can provide hot water continuously and conveniently for shower, washing and other cleaning.



### **Forced Exhaust Type**

Forced exhaust type takes the indoor air for combustion and uses exhaust pipes and fans to forcibly exhaust the gas out of the bathroom.



### **High Efficiency Heat Exchanger / Energy Saving**

Adjust precisely the gas supply through micro-computer and control the rotation speed of the fan to obtain accurate air dose in need and achieve complete combustion. Adopts unique intensified combustion and forced heat exchange technologies to obtain higher heat efficiency than national standard.



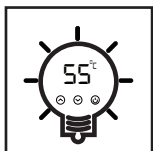
### **Constant Hot Water Temperature**

The core component of the gas water heater is the micro-computer intelligent control system with an advanced mechnronics design. The micro-computer could automatically adjust the gas and air supply accordingly to the temperature set by the users and the difference in outlet water to ensure a constant temperature.



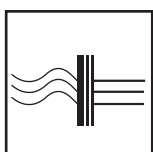
### **Multi-Safe Protection**

Multiple security protections, such as: Self-diagnostic function, Flame-out protection device, Double gas valve safety device, Exhaust air overload pressure self-protection device, Incomplete combustion self-test device, Cleaning system for ignition delay, Overheat protection device and 40mins cut-off function, safety in use.



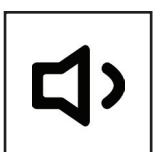
### **Smart LED Display & Touch Screen**

Touch screen digital panel, easy adjustment of the required water temperature; large digital temperature display; 35°C~55°C.



### **Built In Flow Stabilizer**

Preventing the waterflow from flowing up and down.  
The lowest working pressure could be 0.02MPa (water flow is around 3L/min)











### **Low Noise DC Fan**

Our DC conversation fan silently work with limit speed 6000 rpm which is an anti class 12 hurricane. 40db, to maintain a quiet living environment.

## NOTICE

The above safety protection functions conclude from and under experimental environment. Some difference may occur due to the influence by surrounding situation. Please handle the product properly without damage.

## II. PACKING LIST

No.	Picture	Description	Qty	Remark
1		Gas Water Heater	1	
2		User Manual	1	Keep for reference
3		Expanded Screw	1	For gas water heater installation
4		Fisher Plastic Wall Plug	2	For gas water heater installation
5		Mounting Screws	2	For gas water heater installation
6		Screws	2	For decorating plate
7		Crown	1	Place above the gas water heater
8		Decorating Plate	1	For gas water heater

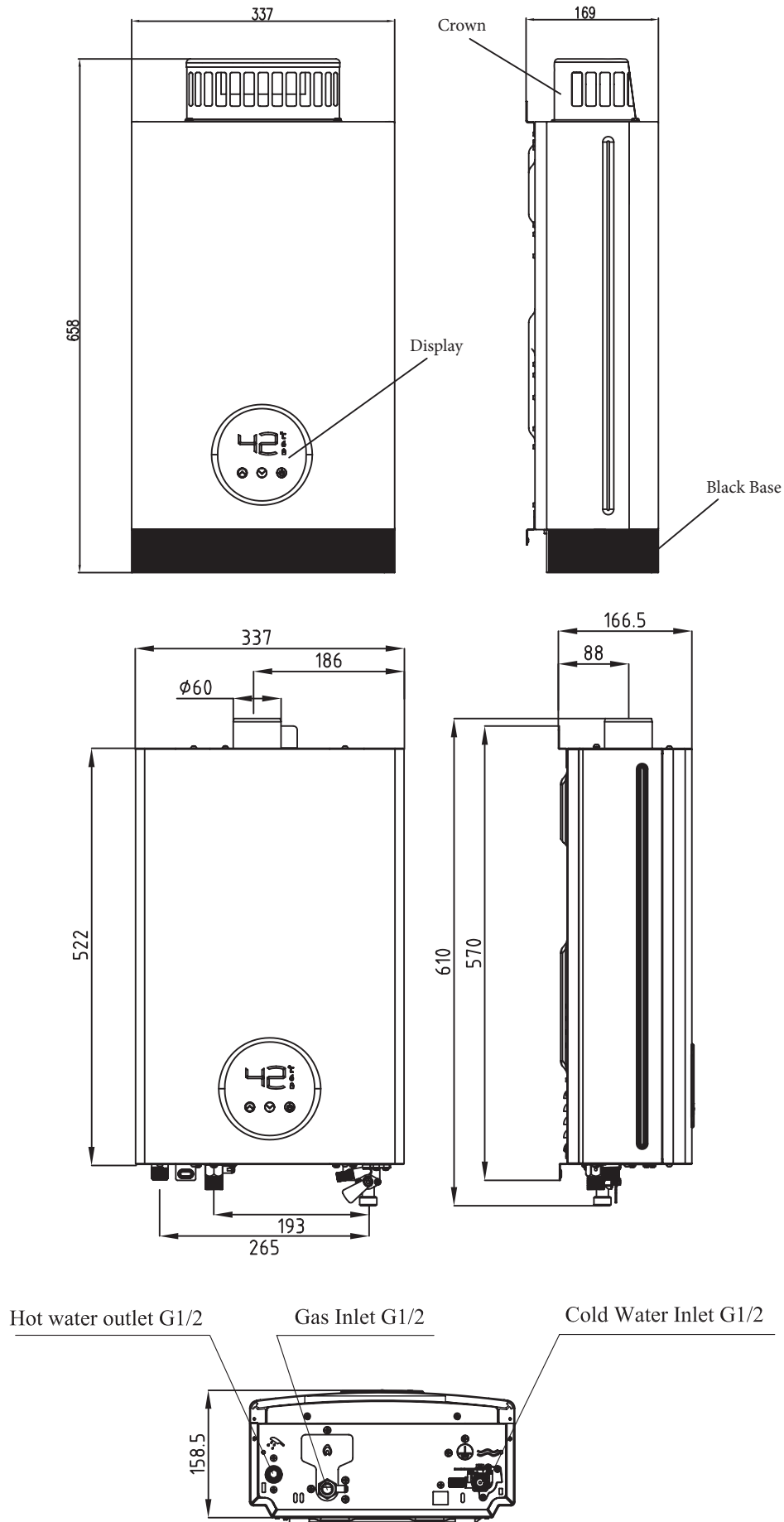
## III. TECHNICAL PARAMETER

Model	BENE 10FE	
Rated heat load (kW)	9	
Minimum rated heat load (kW)	2.4	
Rated hot water supply (T Δ11°C) (kg/min)	10	
Using type of gas	Town Gas (G110)	
Rated gas pressure	10mbars	
Exhaust type	Forced Exhaust Type	
Ignition type	Water control automatic ignition	
Suitable Water Pressure	0.02-0.8MPa	
Connector Specification	Gas inlet	G1/2
	Cold water inlet	G1/2
	Hot water outlet	G1/2
Rated power supply	230V~50Hz	
Rated power	20W	
Flue duct diameter	Ø60	

We reserve the rights to improve and change the product without prior notice.

#### IV. STRUCTURE & DIMENSION

(Measurement in mm)



There may be structure modifications. Please refer to the real objects.  
The structure is subject to modification without notices.

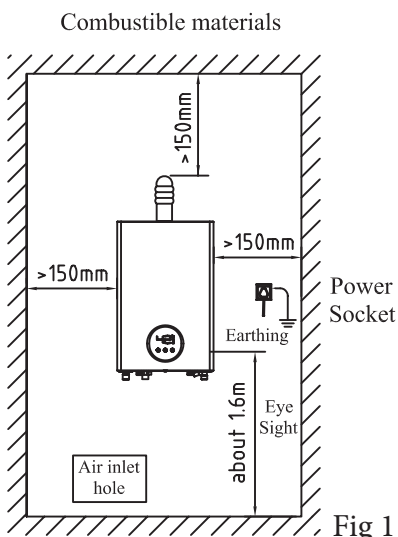
## V. INSTALLATION

The installation and maintenance have to be carried out by qualified professionals, or RUBINE authorised technicians. Do not install the product by yourself at will, for improper installation may cause accident. Please refer to installation requirements and method. The gas water heater is not allow to operate without installing the crown provided or exhaust pipe (sold separately).

The manufacturer shall not be held responsible for any damage or malfunction caused by wrong installation or failure to comply with following instructions included in this user manual.

### REQUIREMENTS

- User must ensure that the used gas type is in-line with the specified on nameplate of water heater. Never use gas type inconsistent with nameplate, or it may result in accidents during operation.
- The forced exhaustion type water heater cannot be installed in the following places.
  - a) Bathroom, bedroom, underground room and guestroom.
  - b) Rooms or closet without ventilation and exhaustion conditions
  - c) Nearby stairs or safety exits (Over 5 meter away from stairs and safety exits is permitted).
  - d) Rooms or stores that keeps flammable, explosive and corrosive materials.
  - e) Outdoor or places with strong wind.
- The installation place of the gas water heater should be constructed by non-combustive materials. If it is constructed by combustive or flame retardant material, it shall be isolated by thermal baffle, which shall be more than 10mm away from wall.
- The distance between the gas water heater and building decorated with combustive and non-combustive materials shall be at least 150mm.
- No open wires and electrical apparatus allowed on the upper part of the gas water heater. It should be more than 400mm far from the electrical apparatus horizontally.
- The power supply for this appliance is 230V~50Hz with reliable earthing. Leakage circuit breaker shall be installed according to safety regulations of power supply.
- The display on the gas water heater should be installed at the height of the user's eyes level. Example: 1.6m
- This product is controlled by intelligent chips, which should be far away from the EMI environment.



### ATTENTION

The drawing on the left is our recommended distance for fire prevention. For maintenance, the side of the appliance must be more than 150mm.

## VI. INSTALLATION STEPS

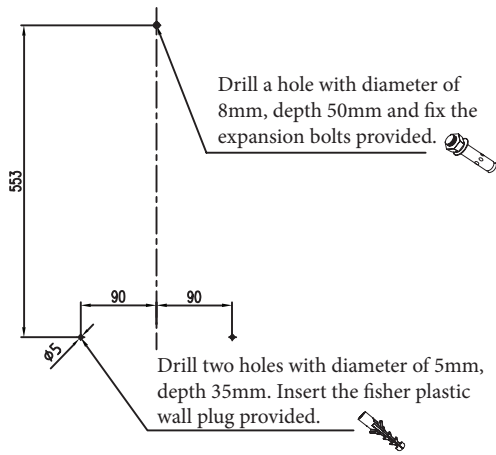


Fig 2

### Step 1

- Drill the top and bottom holes for the gas water heater according to the measurement as shown on Fig 2.
- Hang the gas water heater by the hanging rack slot onto the expansion bolts and tighten the nuts.
- For the bottom, insert the fisher plastic wall plug into the holes and tighten the gas water heater with the mounting screws provided.

### Step 2

#### Installation of Water Inlet and Outlet Pipe

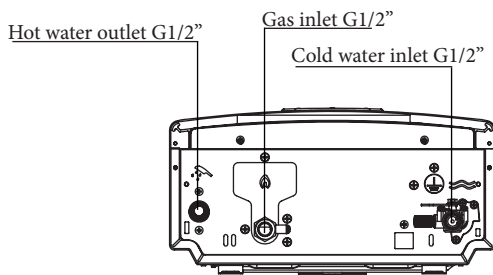


Fig 3

- To avoid blockage, clean the water inlet pipe before connecting to the gas water heater.
- Size of the water pipe joint is G1/2"
- Install a water shut off valve near the cold water inlet which allow the technician to turn off the water source when repairing.

### Step 3

#### Installation of Gas Pipe

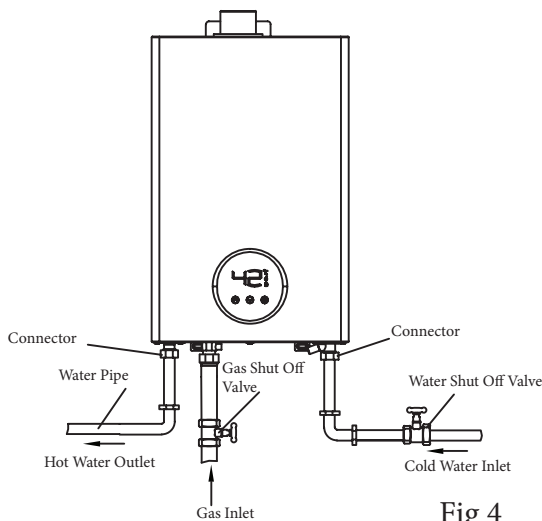


Fig 4

- Please contact the license gas contractor to connect the gas pipe according to the features.
- Size of the gas pipe joint is G1/2"
- Install a gas shut off valve near the gas water heater which allow the technician to turn off the gas source when repairing.

### Step 4

- Place the Crown on the top of the gas water heater.
- Install the Decorating Plate and tighten it with the screws provided.

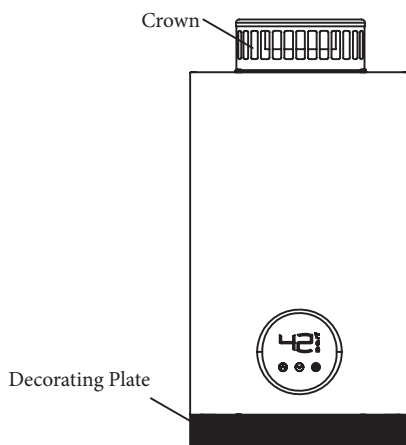


Fig 5

## INSTALLATION OF EXHAUST PIPE (OPTIONAL)

This product is a forced exhaust gas water heater hence in any case you prefer to install the exhaust pipe rather than the crown, you may purchase it separately. The exhaust pipe should be connected at outdoor.

Side face of the exhaust pipe outlet

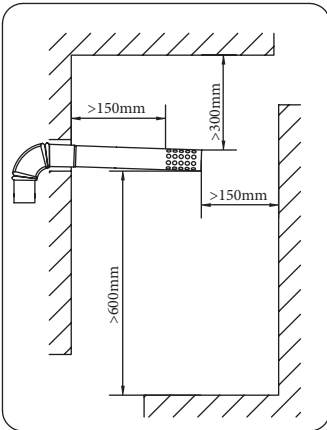


Fig 6

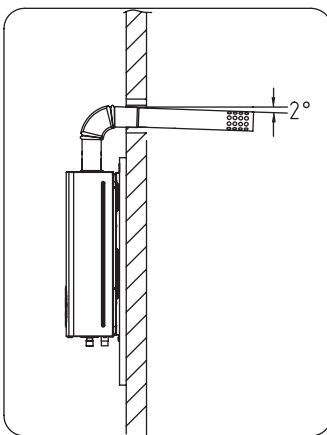


Fig 7

Front face of the exhaust pipe outlet

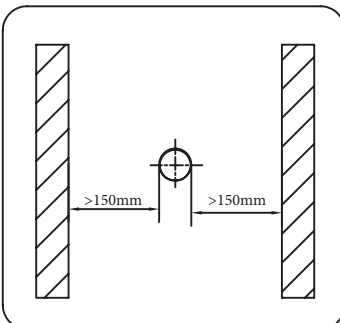


Fig 8

Distance between the outlet of the exhaust pipe and air inlet

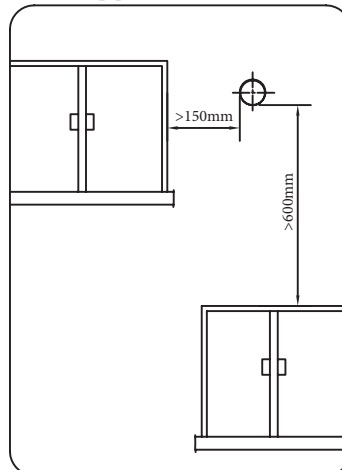


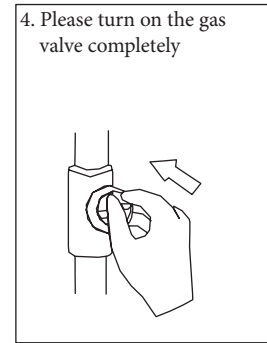
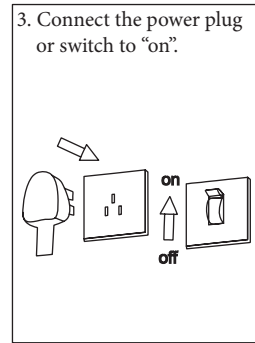
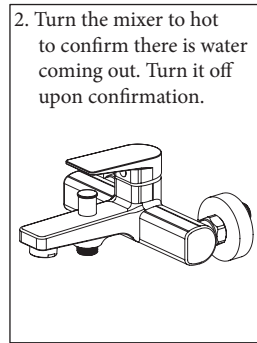
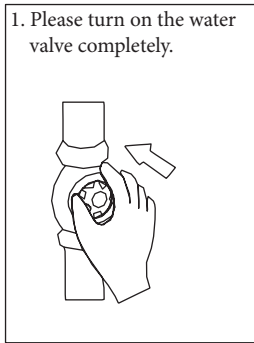
Fig 9

- The image on the left is for your reference. If the exhaust pipe is short, you can lengthen it according to your requirement. Fig 6
- Inspect the exhaust pipe every 6 months to see if there is any damage or smoke leakage.
- The length of the exhaust pipe should be no more than 1.5m.
- The exhaust pipe should be at the shortest possible horizontal length with a downward slope of 2 degrees. It is convenient for the discharge of the condensed water and rainwater. Fig 7
- The distance between the exhaust pipe and the combustible materials should be more than 150mm.
- Use the insulating refractory with more than 20mm in thickness to wrap the exhaust pipe if it needs to pass through the wall or the combustible materials. Fig 8
- The wall hole gone through by exhaustion pipe shall be sealed by incombustible stuff. No cement is to be used for the convenience of maintenance.
- The exhaust pipe should be fixed tightly by using self-adhesive foil to avoid disconnection and waste gas discharging indoor.
- The outlet of the exhaust pipe must be installed outside because when the gas heater is working, there will be condensed water in the outlet.
- The distance between the outlet of the exhaust pipe and the objects surrounding is as shown in Fig 8 and Fig 9.



## VII. OPERATION METHOD

Please check that the gas water heater is and connection parts are installed correctly. After inspection, please carry out the procedures as followed.



- Turn on the power of the gas water heater
- Turn on the mixer to hot. The motor rotates and there is a sound of ignition after 5sec. The combustion is ignited, and the hot water comes out. If the ignition fails, the sound may last for several seconds. If the ignition fails again after several seconds, then this time of ignition finishes and the water valve should be switched off. After 10 to 20 secs, repeat the above procedures.

(Tips: For first start, it may fail to ignite due to a lot of air in the gas pipe. Please repeat the above procedure until the air in pipe is exhausted completely and ignites successfully. (As shown on display).

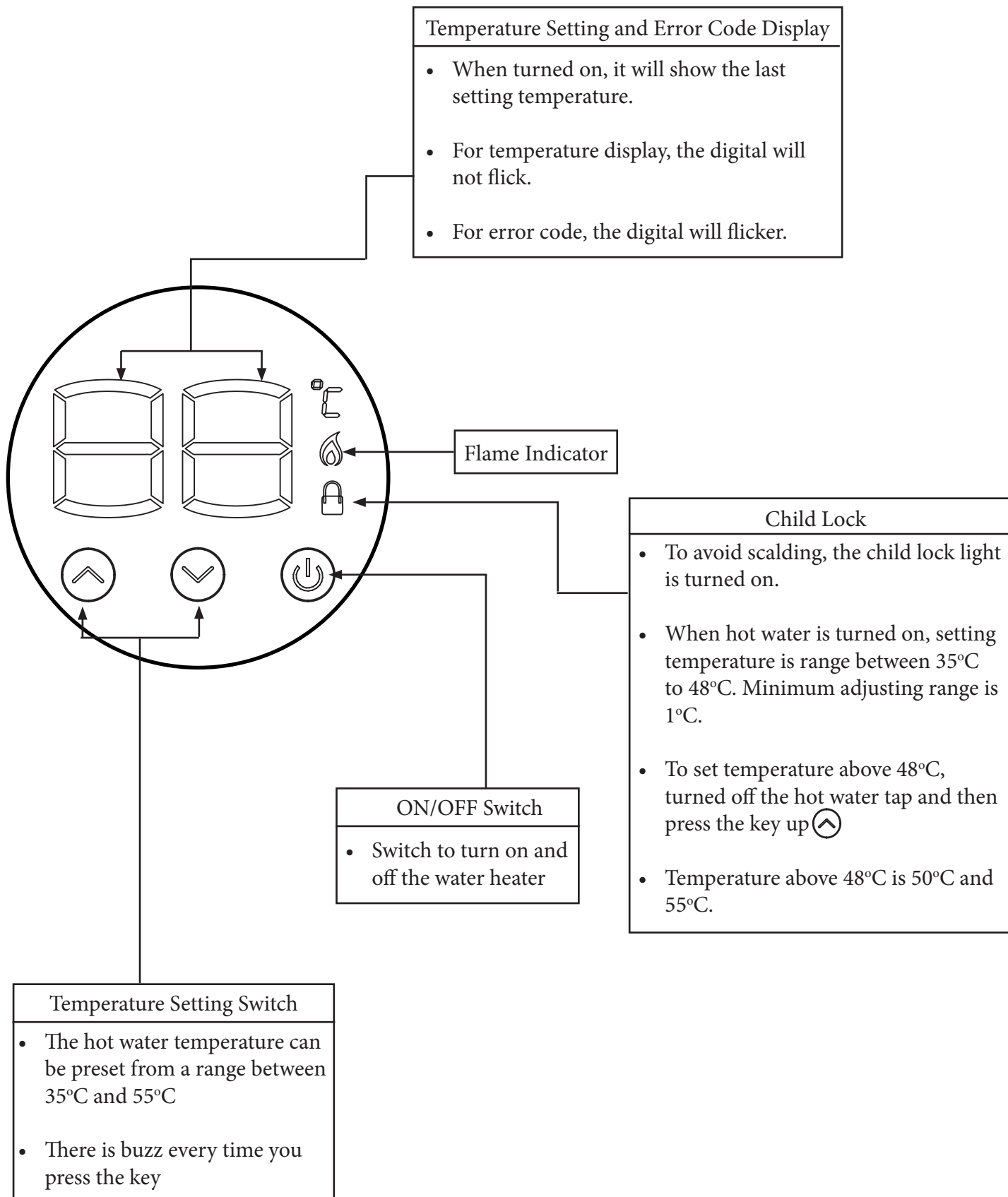
- Turn off the mixer when not using. The gas water heater will automatically cut off the gas source and the combustion extinguishes out.



### ATTENTION

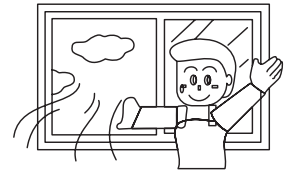
- Do not touch the power plug or switch with your wet hands to avoid electric shock.
- Always use your hand to test on the water temperature before showering to avoid scald.
- The temperature shows on the display is set by you, but when hot water comes out, the temperature may vary according to the length of the pipe or weather especially for the users using mixer. Thus, please make the temperature of the water coming out as a reference.
- After the gas water heater keeps working for about 40mins, the gas water heater will cut off and enter into the safety protection condition. This situation is normal and reminds the users to ventilate the room. To continue showering with hot water, just turn on the mixer to hot again.

## VIII. DISPLAY FUNCTION



## IX. SAFETY WARNING

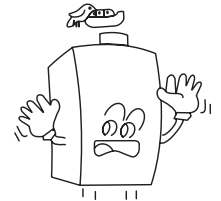
- Make sure the ventilation is good when using the gas water heater.



- Do not install the gas water heater outside with exposure to rain to avoid broken down.



- Check the exhaust pipe frequently to avoid jam. It will lead to CO poison if the waste gas could not go outside.



- Do not touch the area near the flue duct before and after used of the gas water heater to avoid getting scald.



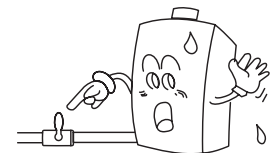
- The gas water heater should stay away from any volatile combustibles, such as gasoline, diesel fuel, alcohol.



- Keep calm in case of abnormal smell, immediately turn off the mixer, cut off gas source and open the window and door to ventilate the area. Ask maintenance department or professional technicians for assistance



- Keep calm in case of abnormal situations. Immediately shut down water heater, cut off gas source and disconnect power supply. Ask maintenance department or professional technicians for assistance.



- Non-professional maintenance personnel is not allow to open the machine cover. There are 230V live parts and precision electronics inside that can cause electric shock accidents and unnecessary losses.



## X. MAINTENANCE

- Please check and maintain the gas water heater frequently for safety use.
- Turn off the gas valve and water valve, unplug the power and let the gas water heater cool first before maintenance.
- There are some electronic components inside the gas water heater, hence never let the water immerse inside the heater. Do not remove the front panel in case of any failure.
- Please do not remove the gas pipe and safety device.
- Please check the gas water heater appearance to make sure there is no damage.
- Please check for any strange sound occurs during usage of the gas water heater.
- Please check for any inflammable substance near the gas water heater, flue outlet and flue pipe.
- Please make sure the installation location of the gas water heater is well ventilation.
- When the cover of the gas water heater gets dirty, slightly wipe it with wet cloth follow by dry cloth again. Do not use chemical cleaning agent for it will cause discoloration and lustering.
- Check gas leakage by using soap water to see if there is any bubble occurs on the connector of the gas pipe. Contact maintenance department or professional technicians for assistance.

## XI. TROUBLESHOOTING

**Phenomena below are not faults.**

Phenomena	Reason and Solutions
It takes a while to get the hot water from the heater after turning on the hot water tap.	When the mixer is turned on, the system will drain out the cold water remaining in the pipe between the heater and hot water tap.
No hot water is generated even when the hot water tap is turned on.	The flame in the gas water heater may not be ignited as hot water tap is not sufficiently turned on to ignite the flame. To rectify this, the hot water tap has to be turned on to the maximum before adjustment.
Difficult to ignite when using for the first time or not being used for a long time.	The air in the gas pipe needs to be discharged before the heater could be ignited and this could be resolved by turning on and off the hot water tap repeatedly.
Fan remains working for a short moment after turning off the hot water tap.	Fan is designed with time delay function for exhausting waste fume from the combustion chamber.
Water flows out from the relief valve.	The water heater system relieves high water temperature pressure by discharging water through relief valve to normalize the pressure in the heat exchanger.

If the icon of the flame disappears while the gas water heater is functioning, it is the result from the safety setting. These error codes shown on the display indicates the reasons of the errors.

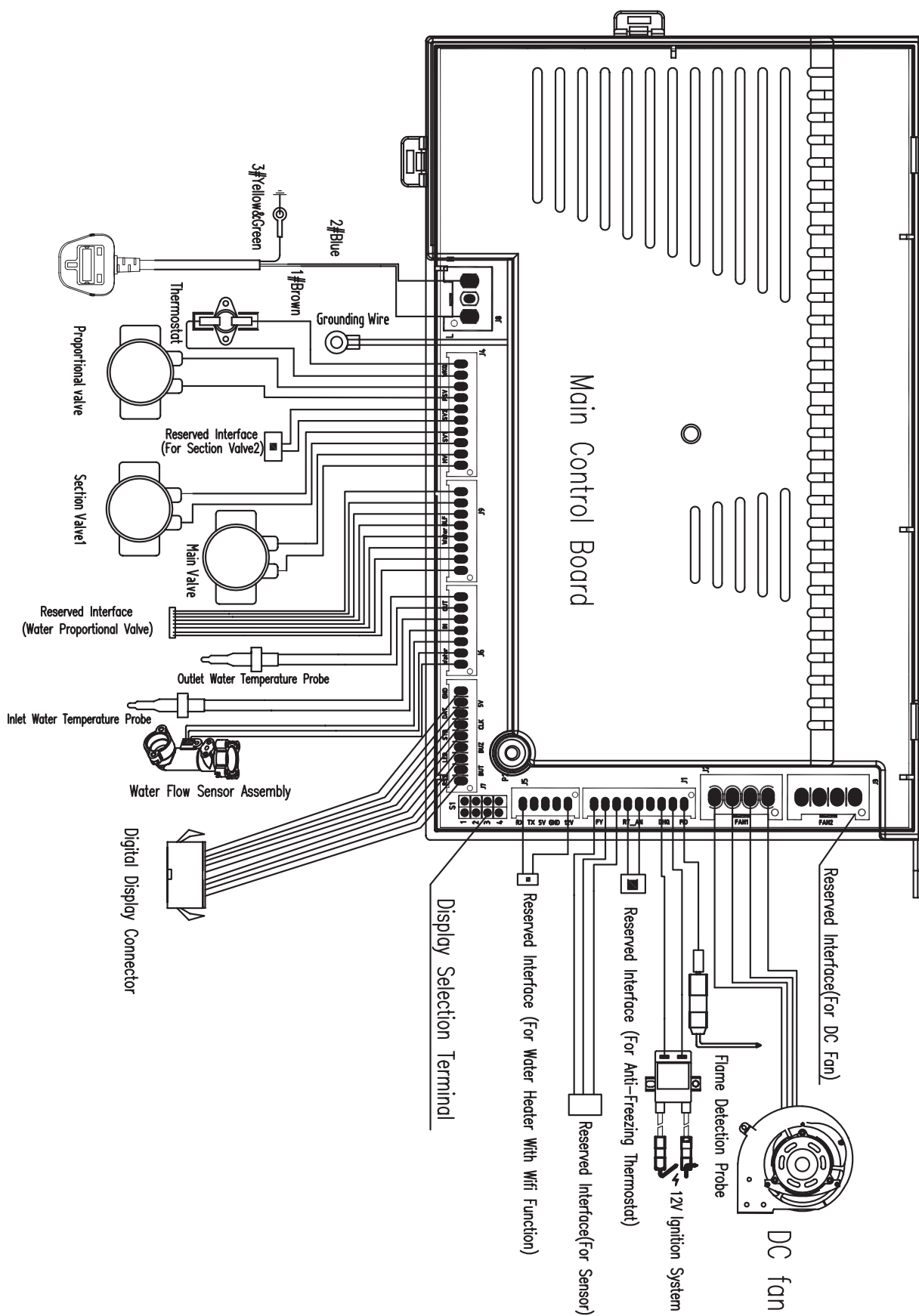
## Fault Code

The error code will flash on the LED screen.

Below are the possible solutions to the respective faults.

Error Code	Errors	Solutions
01	The inlet water temperature sensor fault.	Turn off the main power supply and turn it on again. If the fault is not rectified. Please call the service center.
10	There is a false fame signal	Please call the service center
11	Ignition Error	Turn off water tap and turn it on again. If the fault is not rectified. Please call the service center
12	Flame out accidentally	Turn off water tap and turn it on again. If the fault is not rectified. Please call the service center
13	The thermostat is cut off	Turn off water tap and turn it on again. If the fault is not rectified. Please call the service center.
30	Pressure in flue pipe is too much before ignition.	Make sure the flue pipe is unobstructed. If the fault is not rectified. Please call the service center.
31	Pressure in flue pipe is too much during ignition.	Make sure the flue pipe is unobstructed. If the fault is not rectified. Please call the service center.
32	Pressure in flue pipe is too much when the gas water heater is working normally	Make sure the flue pipe is unobstructed. If the fault is not rectified. Please call the service center.
40	Fan Error	Please call the service center
50	The outlet water temperature is over 85°C	Turn off water tap and turn it on again. If the fault is not rectified. Please call the service center
51	The inlet water temperature is over 65°C	Turn off water tap and turn it on again. If the fault is not rectified. Please call the service center.
60	The outlet water temperature sensor fault.	Turn off the main power supply and turn it on again. If the fault is not rectified. Please call the service center.
70	Parameter setting error	Please call the service center
80	Continuous running for over 40 minutes (safety design)	Turn off water tap and turn it on again. The error code will disappear.

## XII. SCHEMATIC DIAGRAM



(The diagram is subject to change without any prior notice.)

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