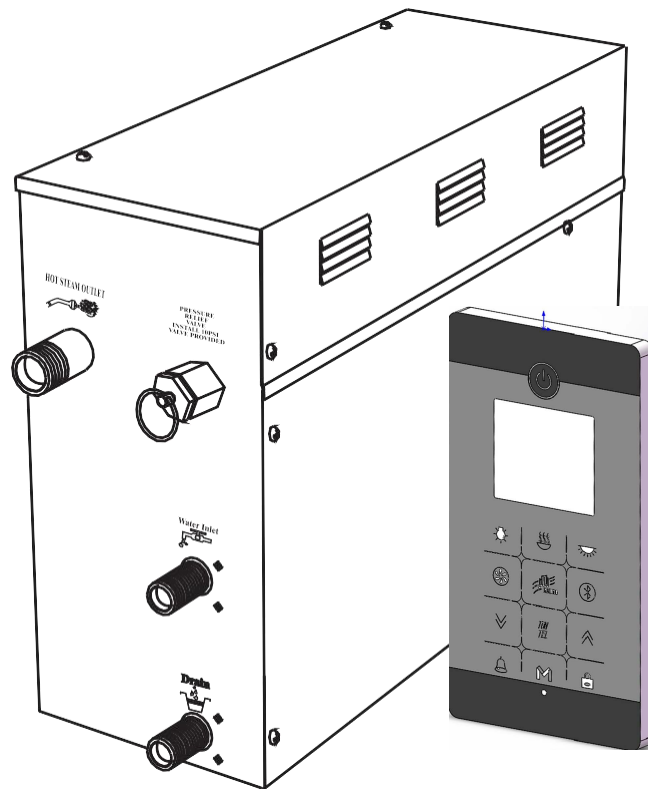


# STEAM GENERATOR MANUAL OPERATION & INSTRUCTION

HD117B-6.0 HD117B-7.5 HD117B-9



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## I. Packing list

Machine	1	pc
Key pad	1 or 2	pc
LED white light	1	pc
LED SMD color light	1	pc
Speaker	1	pc
Bluetooth extension wire	1	pc
Keypad extension wire	1	pc
Instruction manual	1	pc

## **II. Materials to be prepared before installation**

\*Inlet pipe (1/2 inch), \*outlet pipe, \*steam pipe (3/4 inch), \*power cord

## **III. Safety Instructions**

Before using this product, please carefully read and abide by the following instructions:

Warning: In order to reduce accidental injuries, please prohibit children from using this product.

Warning: In order to reduce accidental injuries:

- a. The floor of sauna room is wet and slippery, please pay attention to the safety.
- b. The steam temperature at the steam outlet is relatively high, please forbidden to touch the steam at close range.
- c. Taking sauna for a long time will raise the body temperature and may lose the body's ability to regulate body temperature. It is recommended to use it for 10-15 minutes each time. If there is any discomfort, please stop in time.
- d. High temperature has potential risks to pregnant women and pregnant preparation. Please consult a professional before.
- e. Patients with obesity, heart disease history, hypertension, hypotension, cardiovascular and cerebrovascular diseases and diabetes should consult experts before.
- f. Please consult experts before taking the sauna for the people who are taking the medicine because some drugs have hypnotic effects and will affect heart rate, blood pressure and blood circulation.
- g. When the body temperature exceeds 98.6 Fahrenheit, it indicates that the body temperature is already in a state of hyperthermia. Excessive fever is manifested by rising body temperature, dizziness, sleepiness, lethargy, and fainting. The effects of overheating include: a) Inability to sense temperature; b) Unaware of the need to leave the sauna room; c) Loss of risk awareness; d) Fatal injury to pregnant women; e) Lack of consciousness and inability to get out of the sauna room. Alcohol, drugs and drugs will greatly increase the risk of excessively high people.

## **IV. Keep this manual properly**

### **A. Introduction**

Welcome to HD117B steam generator. This set of products includes one steam generator and one or two control panels. You can control the operating temperature of sauna room through steam generator and set the time as required. The steam system includes overheat protection system, anti-dry burning system and a safety valve, which can prevent overheating and ensure that the steam works at a normal and safe air pressure. This is a top-grade equipment suitable for home, hotel, restaurant, conference room and club. Sauna bath brought by steam generator can accelerate blood circulation, relieve pain, control weight, nourish skin and relieve pressure.

The HD117B series includes three output powers

### **B. User Installation**

#### **ⓘ Warning**

1. Ensure that the machine and accessories are correct including input voltage; Ensure that the usable area matches, and paying special attention to the structure of sauna room. If there are any problems, please refer to the "Technical Parameters" table for size selection.
2. In order to ensure the safe and effective use of the steam generator, please read the Manual carefully and the installation must be carried out by professionals. We are not responsible for the product loss and damage caused by self-installation due to non-compliance with the installation specifications during the installation process.
3. All the products are in one packing box. Please check all the goods carefully.

### **C. Select Location**

#### **ⓘ Important**

Exhaust fans should be installed in sauna room to maintain proper ventilation and exhaust excessive steam. It is recommended to refer to the following installation locations: 1. The installation position of the steam generator should be less than 6 meters away from the sauna room.

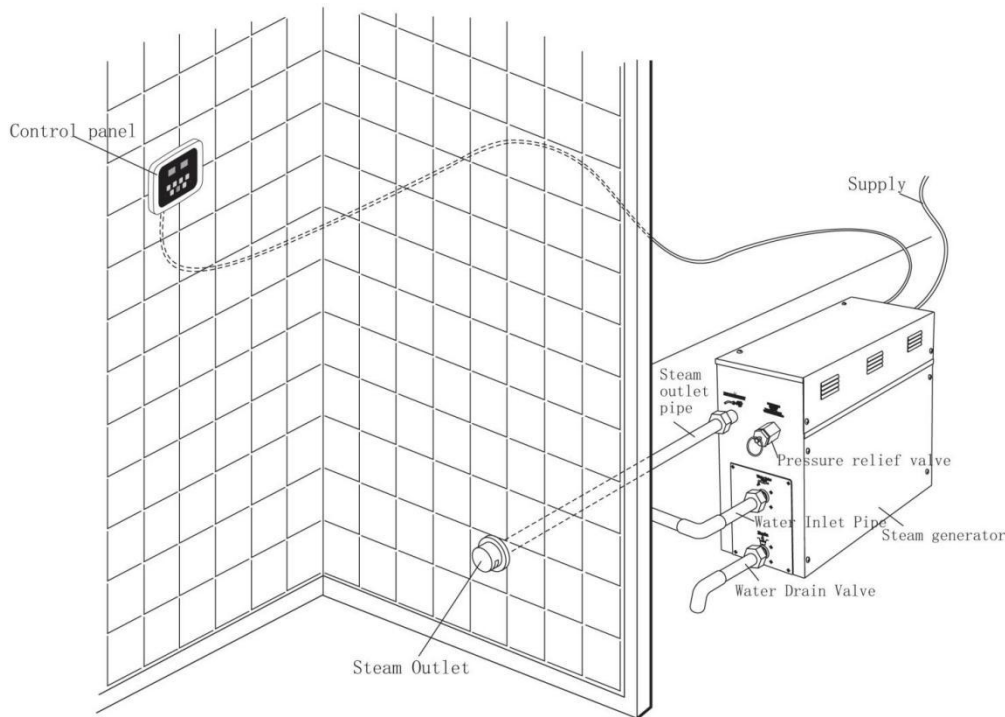
2. Steam generator is prohibited from being installed in sauna rooms.

3. It is forbidden to install it outdoors or in other places that affect the safe use of steam generator.
4. It is forbidden to install in cold areas or any place where water will freeze.
5. Keep away from flammable, corrosive and chemicals (such as gas, coatings, etc.)
6. The installation shall be horizontal and stable. The steam generator shall contain wall hanging parts to ensure the horizontal installation of the steam generator.
7. At least 12 inches of space shall be reserved at the top of both sides of the steam generator.
8. The installation position of the steam generator must be easy to clean and overhaul.
9. Installation location must be easy to drain.
10. After the steam generator stops working for 30 minutes, the steam pipe, safety valve, outlet valve, water pipe, steam outlet, etc. still have relatively high temperature. Some thermal insulation measures must be taken, such as the use of thermal insulation pipes. Steam generator includes control panel. The whole set of products conform to CE, TUV and ETL certification and can be safely used in sauna room.

#### **D. Installation Drawing of the Steam Generator**

### **ⓘ Attention**

Drawings are for reference only. Please adjust the actual design of the sauna room according to the environment.



## E. Installation

### ⓘ Warning

The installation and operation of all piping must be carried out by professional and qualified installation workers.

- ① Pipe fittings are required when connecting pipes.
- ② Only copper pipes and components can be used
- ③ Do not use black galvanized and PVC pipes

#### 1. Water pipe (1/2 inch)

The water inlet pipe connects the water inlet on the steam generator with the water inlet of the sauna room.

When connecting hot water or cold water pipe, it is recommended to connect the cold water pipe directly. If the hot water pipe is connected, the temperature of the hot water pipe shall be controlled at 158 degrees Fahrenheit.

- ① Before connecting the pipe, please thoroughly clean the water inlet pipe.
- ② It is recommended to add filtering and anti-hair equipment at the water inlet pipe. ◦

The water pressure is recommended to be 15-20 pounds/square inch. If necessary, reduce the water pressure according to the situation.

#### 2. Steam pipe (3/4 inch)

First, remove the hexagonal steam nozzle from the machine. One end of the steam pipe is connected to the steam

outlet and the other end is connected to the steam outlet on the wall. Finally, install the steam nozzle to the place on the wall.

- ① Do not install any valves on the steam pipe, the steam cannot be blocked.。
- ② Install a copper steam pipe (3/4 ") connecting the steam outlet to the steam nozzle
- ③ Insulation used to isolate steam pipes shall be resistant to temperatures up to 120 degrees Celsius or higher
- ④ Horizontal parts of the steam pipeline shall be installed in the direction of the steam outlet or steam generator. It cannot be a bend to ensure that cold water will not stay on the bend of the steam pipe.
- ④ Horizontal parts of the steam pipeline shall be installed in the direction of the steam outlet or steam generator. It cannot be a bend to ensure that cold water will not stay on the bend of the steam pipe.

## ❗ Important

Do not install steam pipes up and down at will, which will affect the output of steam.

3. Steam nozzle (3/4 inch)

## ❗ Attention

Due to the high temperature of the steam nozzle and the steam outlet, it is forbidden to install the steam nozzle at a position that is easy for users to contact, so as not to burn users by steam.

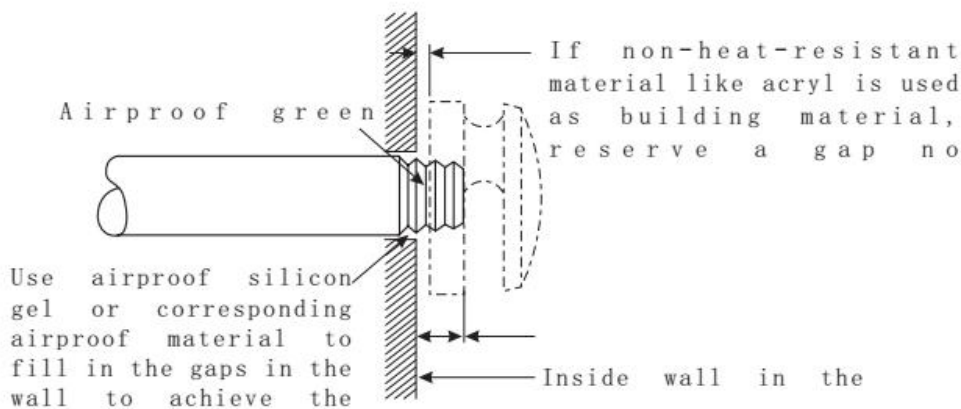
In order to reduce the risk of excessive steam pressure:

- a) Steam outlet pipes must not have depressions
  - b) Do not install valves on steam lines
  - c) Do not connect the drain valve to the steam line.
  - d) Do not connect the overpressure device to the steam line
- ① Install the steam nozzle 6-12 inches from the ground. If the steam bath is in a bathtub or bathroom, install a steam nozzle over 6 inches in the bathtub. If the above sauna room is made of acrylic or heat-resistant plates, thermal insulation layer shall be added.
  - ② The steam outlet shall be installed face down. Wrap several turns of insulating tape on the thread of the steam pipe, install the steam nozzle, and tighten it by hand. In order to protect the steam nozzle, do not tighten it with a wrench or other tools. If the steam nozzle is scratched, please clean it with a little soapy water and soft fabric.



## ❶ Important

- ① For the installation location of steam nozzles, please consult your building material distributor, such as acrylic, glass fiber or other heat protection plates. It is recommended to use MS-103412 heat resistant material.
- ② The whole sauna room requires that steam cannot leak. Pipes, fittings and holes in the wall should be completely correct.



### 4. Drain (1/2 inch)

According to national or local regulations, the steam generator drain valve shall be matched with the drain pipe. The steam generator uses gravity to drain water. Drain pipes should not be tilted upward to drain water.

### 5. Safety valve

Safety valve is a kind of safety equipment to prevent excessive steam pressure caused by various reasons inside the steam generator. The pressure of the safety valve is limited to 15PSI. If this value is exceeded, the pressure will begin to drop.

Safety valves with external drainage pipes can be provided if permitted by local regulations.

## ❷ Warning

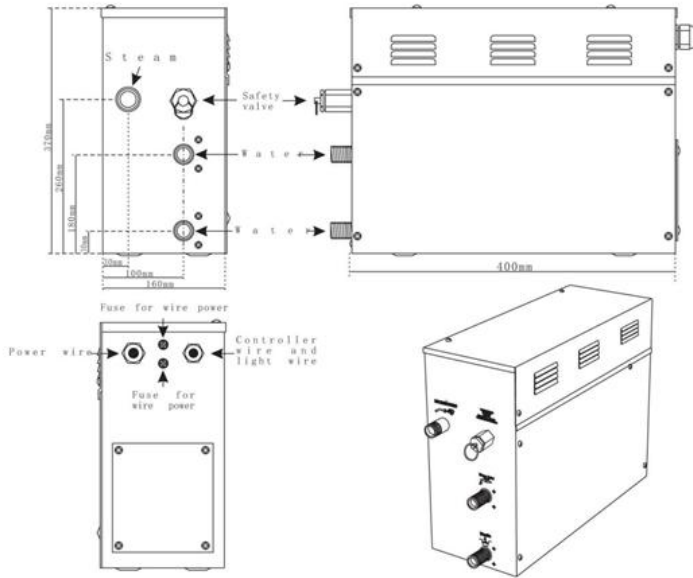
- ① It is forbidden to disassemble the pressure reducing valve at will to avoid danger.
- ② In order to maintain the normal and automatic operation of the safety valve, please do not cover anything on it.

6. Installation of temperature probe: Drill a 11mm hole in the wall 63-71 inches from the ground, fix the temperature probe on the wall with the probe seat, and tighten it.

7. Radio external antenna: Fix the white radio external antenna upwards at a higher place.

8. Bluetooth connection line: Connect the black Bluetooth connection line with the black interface of the control panel.

## F. Steam Generator Schematic Diagram



## ⓘ Attention

For ease of maintenance, keep the steam generator clean. If the information provided is limited, it is forbidden to operate pipelines and electrical equipment at will.

## ⓘ Warning

To avoid equipment damage, do not connect strong current directly to components.

## G. Circuit

Power supply circuit:

1. Test the power supply voltage to ensure that the steam generator uses the appropriate voltage.
2. Insulated copper wire shall use a thermal protection temperature of 70°C and a specified voltage of 500V. Specific specifications refer to national or local electricity consumption specifications. Please refer to the ampere meter below.
3. Select the steam generator of the appropriate model and insert the grounding wire into the grounding port.
4. An independent circuit breaker is installed between the power supply and the steam generator to provide

the power supply with overflow protection and leakage protection.

## ⓘ Attention

All connections must comply with national and local electricity usage codes and be installed by qualified personnel

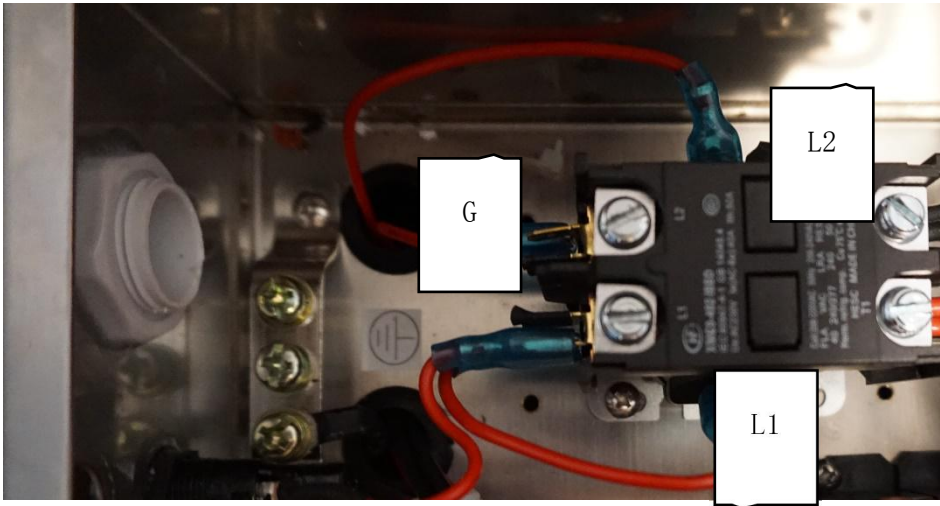
Model	Applicable space	Electricity	Max.Electric	Specifications for power wire
HD117B-6.0	5~8m <sup>2</sup>	240V~, 60Hz, 6500W	27.3A	10 AWG
HD117B-7.5	7~9m <sup>2</sup>	240V~, 60Hz, 8100W	34A	8 AWG
HD117B-9.0	10~12m <sup>2</sup>	240V~, 60Hz, 9200W	39A	8 AWG

Within the field of view of the steam generator, an independent circuit breaker is installed to provide power supply with overflow.

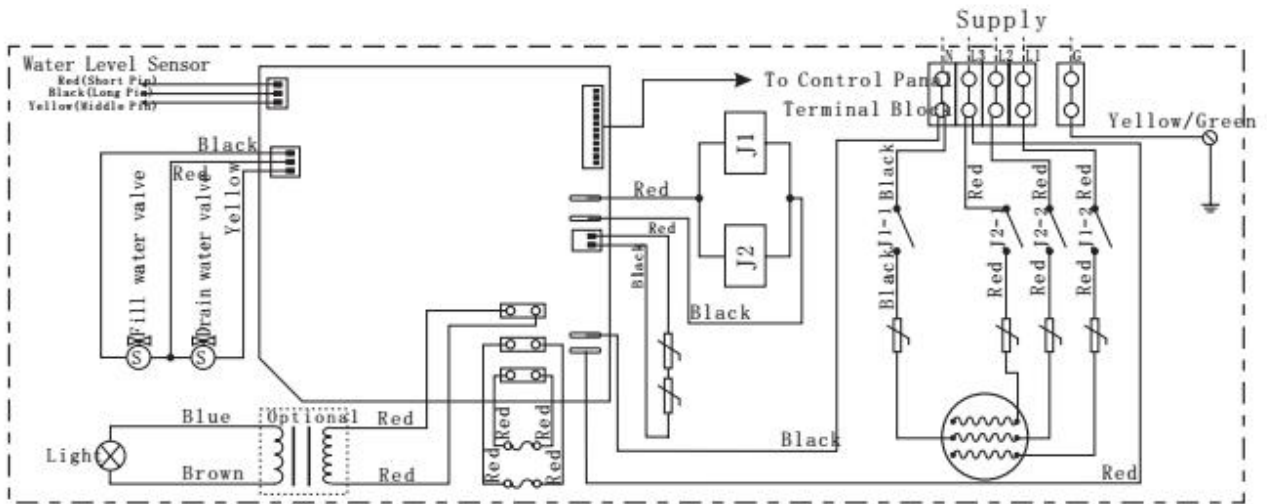
## **H. Assembly Drawing**

To avoid equipment damage, do not connect strong current directly to components.

This Figure is for reference only. For actual installation, please refer to the National Electricity Regulations



**I. Wiring Diagram (220-240V)**



## **J. Light, Fan and Control Panel Installation**

### **ⓘ Warning**

The input voltage of the light is DC 12V. Before connecting the lights, please negotiate the voltage of the lights with the light manufacturer to avoid damage or danger to the steam generator.

If the output voltage of the light is 12V, the power cannot exceed 15W, otherwise the transformer will be burnt out, causing danger.

Moisture-proof measures shall be taken during installation. Do not expose electrical components to humid environment, which will cause damage or short circuit.

Connect lights, fans and keyboards according to the indication labels on the wires.

If you buy a relay and want to connect your own fan and light (output greater than 12V), please connect your own fan and light lines to the connection terminal in the relay, then connect the relay to the control panel, and finally connect the relay to the machine. The fan and light can work at home.

## **K. Maintenance of Steam Generator**

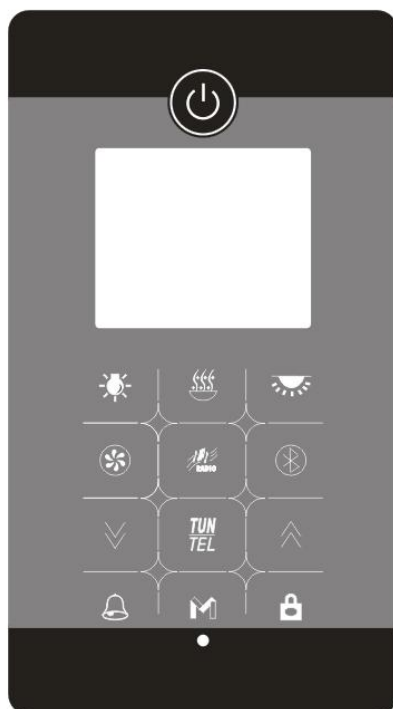
### **ⓘ Important**

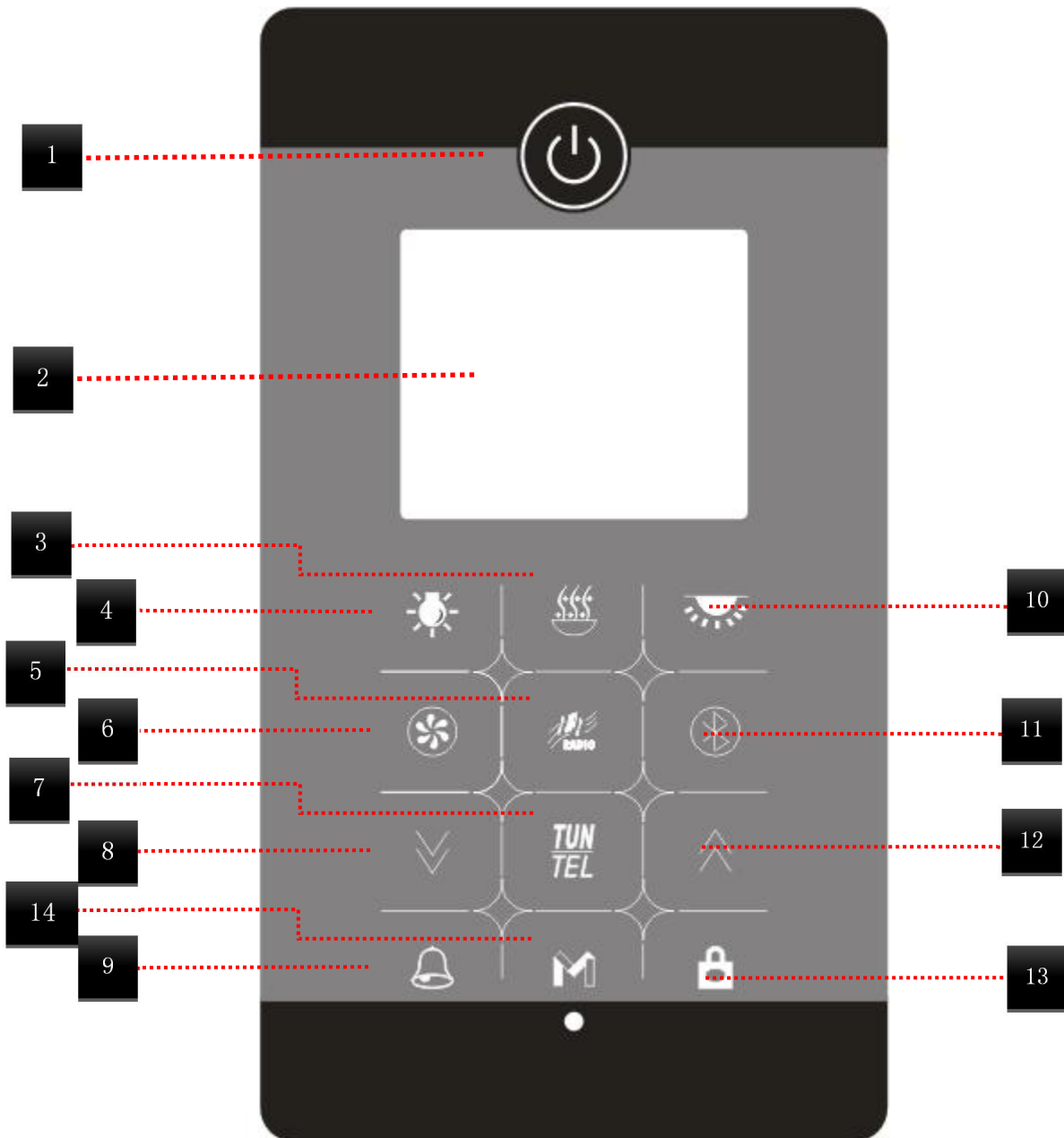
Drainage operation after each use

1. After each use of the steam generator, wait for the automatic drainage to be completed to ensure that the water in the water tank is completely drained, and then cut off the power supply.
2. There shall be no leakage or damage between the steam generator, steam nozzle, components and pipelines. It should be inspected and repaired once a year.
3. Clean the water supply pipe of the steam generator once a year.
4. Check all connections, faucets and connection ports to see if they are loose or damaged due to overheating.
5. Check the scale accumulated in the water tank and electric heating pipe. If the scale is thick, it should be treated in time (soak in diluted citric acid for 15-30 minutes).

# STEAM GENERATOR MANUAL CONTROL PANEL

HD117B-6.0 HD117B-7.5 HD117B-9





1--Power on Key

8--Down

2--Display Screen

9--Alarm

3--Steam on Key

10--LED White Light on Key

4--Colorful Lights on Key

11--Bluetooth Key

5--Key to Radio Broadcasting

12-Up

6--Fan on Key

13--Unlock key

7--Radio FM Key

14--Menu



①	----- Temperature	
②	----- Temperature setting	⑨ -----Telephone
③	----- Time setting	⑩ -----FM tuner
④	----- Radio	⑪ -----FM tuner setting
⑤	----- CD	⑫ -----Locked mark
⑥	-----Lack of water	⑬ -----Fan
⑦	----- Steam	⑭ -----Light



## **B. Control Panel Operation Guide**

### 1. Use of primary and secondary control panels

In general, the steam generator is equipped with a main keyboard, but this machine has the ability to provide a luxurious bathroom decoration option and can be equipped with an additional auxiliary control panel outside the bathroom or steam compartment.

In order to avoid any potential danger to human use, some functions of the sub-control panel are restricted and cannot be used.

The secondary control panel uses

When the system is turned off, the auxiliary control panel is used to turn on the machine. Except for the temperature setting, all functional operations are the same as those of the main control panel.

Before turning on the steam function, press the menu key to set the temperature, and then increase or decrease the temperature setting.

When you need to answer the phone, you can only use the main keyboard.

When the steam is turned on, the secondary control panel cannot raise the temperature, but can only lower the temperature setting.

If you are buying a machine with two control panels, we will provide an additional sub-control panel. After the machine and control panel are installed correctly, the main control panel can operate according to the following instructions:

### 2. Power on Key

When the system is in standby state, press Key 1 (2 seconds or more) until the screen lights up. Press Key 1 again and the system program will shut down (Note: If there is no operation within one hour, the system will shut down automatically by default).

### 3. Display screen

Any function can be displayed on the display screen.

### 4. Steam on key

When the system is on, please press 3 to start the steam mode, and the steam flag will be displayed on the display screen. The default temperature is 70 degrees Celsius (158 degrees Fahrenheit)

Note: The maximum temperature can be set to 70 degrees Celsius and the maximum time can be set to 24 hours.

① There are two options for timing: 5-60 minutes or 1-24 hours. Turn on the system, press the Key 13 for 3 seconds, and switch between the 2 selections.

Time adjustment: Press 9 key to select the time, and then press 13 or Key 8 to increase or decrease the steaming time.

② Temperature: Press Key 9 to select the temperature, the screen displays "-" and "70C" flashes continuously on the screen. Finally, you adjust Key 13 or Key 8 to increase or decrease the temperature (range from 20-70C). Alternatively, "Erro" is displayed on the screen and repeated

#### 5. Background lighting control

When the system is turned on, touch Key 12 on the panel, and the LED white background light will be turned on. Press Key 12 again, and the light will be turned off.

#### 6. Colorful Lights

When the system is turned on, the white background light will be turned on immediately. Touch the panel Key 4 and Key 7 and the 7 colors of the colored lights will change every 3 seconds. Press the light again to fix it to one color. When you press the Key 4 again, the light will be turned off.

#### 7. FM on/off

When the system is turned on, touch the panel Key 5, the radio function is turned on, the radio channel display is turned on, touch again, and the radio function is turned off.

#### 8. FM control

① Automatic Search/Storage: Press the Key 7 for 3 seconds or more to turn on the automatic search/storage function with a channel range of 87.5-108.0 MHZ (1-32 fixed channels are available, depending on the signal condition).

② Manual Search/Storage: Touch Key 7, the channel starts flashing, press Key 13 or Key 8 to select one you like, then touch Key 7 to store the new channel (add the new channel to the preferred list).

③ Tuner Switch: Press Key 13 or Key 8 to add and subtract channels.

#### 9. Volume adjustment:

Key 9, Key 13 or Key 8 adjust the volume (0-40DB).

#### 10. C/F switching

Press the Key 7 for 3 seconds or more to change C into F or F into C.

#### 11. Fan control

When the system is turned on, touch panel Key 6, the fan starts to work, press it again, the fan function is turned off, and the control panel displays the fan on/off.

#### 12. Down key

When the system is turned on, the lower key can be used to reduce the temperature, channel, time, volume and Bluetooth music.

### 13. Up key

When the system is turned on, the Add key can be used to turn up the temperature, channel, time, volume and Bluetooth music.

### 14. Menu key

When the system is turned on, press Key 9, and when "do" is displayed on the screen, the temperature, time and volume can be adjusted.

### 15. Alarm bell

When starting up, press the Key 10 to turn on the alarm bell function. At the same time, both the indicator light and the fan start to work, and touch and turn off again.

### 16. Bluetooth function key

① First of all, connect the Bluetooth audio cable (black) on the keyboard with another audio cable (black) on the machine, press Key 12, turn on the Bluetooth function of the smart phone, search for new devices, and usually find a device "Sprout". (The Bluetooth feature connects automatically when it is used again.)

Then press the OFF/ON key to open the control panel and turn on the Bluetooth function. The indicator light flashes and displays the letter "BT".

③ Select the device "Sprout" to automatically match the connection, and then the indicator lights up to indicate that your mobile phone has successfully connected to the computer board. After the connection is successful, press the Key 7 to play music and answer the phone using Bluetooth. Press the Key 13 to jump directly to the next one; Press the Key 8 to jump directly to the previous one; Press the Key 7 to pause the playback, and then press the Key 7 button to continue the playback. When there is an incoming call from the mobile phone, press the Key 7 to answer, then press the Key 7 to hang up the phone, and press the Key 12 to turn off the Bluetooth function.

④ Every time the control panel is opened, Bluetooth will automatically search for a recently used device. If it can be searched, it will automatically connect.

### 17. Unlock key

At present, the unlock key is not available and cannot be used.

## C. Technical Reference Table

Due to the continuous improvement policy, the manufacturer reserves the right to change the specifications without prior notice.

Configuration Parameter Table				
Load type	Rated operating voltage	Rated load frequency	Rated operating power	Quantity
Steam generator	Ac240V	60Hz	Max. 9200 W	1
Light	Ac12V	60Hz	Max. 10W	1
Back light	Ac12V	60Hz	Max. 5W	1
Fan	Dc12V	—	Max. 4W	1

### WARNING!

Don't touch the steam outlet when the steam function is on, and don't block it at anytime.