

1. I、 Illustration to buttons

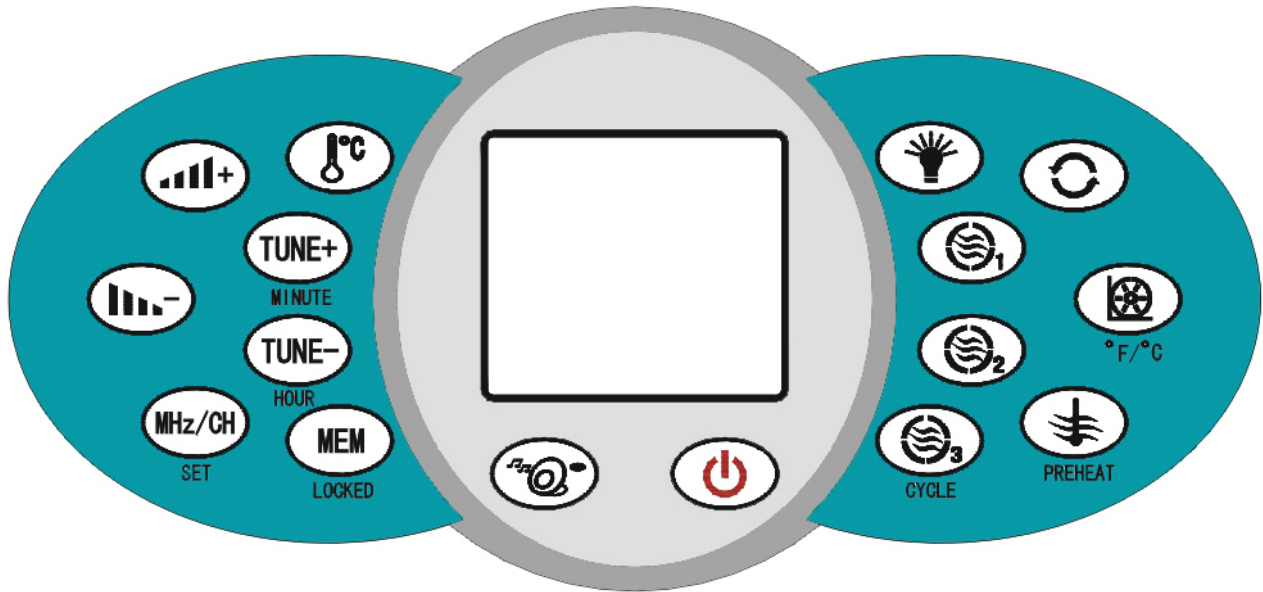


















Fig.1: Control Panel

“  ” Frequency up- searching / Minute	“  ” On-off/Setting confirm
“  ” Frequency down- searching/ Hour	“  ” Radio or DVD/TV Switch/ On-off
“  ” Volume up/ Set switch	“  ” Blower On-off/°F or °C Switch
“  ” Volume down/ Open	“  ” Spa Light On-off
“  ” Radio channel Memory/ Lock	“  ” Surfing pump 1 On-off
“  ” Radio channel read / Close	“  ” view pump 2 On-off
“  ” Lasting Circulation Cleaning On-off	“  ” Surfing pump3 +circulation pump On-off/Set Circulation Cleaning Time
“  ” Heating On-off / Set Pre-heating	“  ” Set Temperature
<p>Note:</p> <p>.The functions listed with blue letters only works on the condition of on-off</p>	

II、 Function Summary

- 1、 Max. with 6 KW heating system, set pre-heating, set and display temperature
- 2、 With 3 surfing pumps,1 circulation pump, 1 view pump, and 1 blower.
- 3、 Ozone, Spa lights.
- 4、 CD audio-input / Display of radio frequency and preserve 10 channels

- 5、 Volume display and 87 frequency adjustment
- 6、 Circulation cleaning and time set of circulation cleaning
- 7、 24 hours display and time set
- 8、 Memory preserve once power off
- 9、 Fahrenheit & Celsius degree switch
- 10、 Antifreezing functions
- 11、 Keys with backlight
- 12、 Lock setting
- 13、 Three-phase or single-phase, available of 110-120VAC or 220-240VAC
- 14、 Choice with “CD” function, offering a AC supply for circumscribing DVD or TV
- 15、 Choice with power control
- 16、 Choice with galvanoscope device

III、 Operation

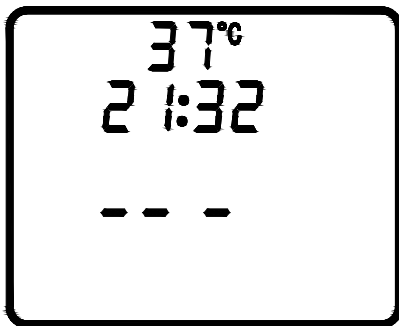


Fig.3: Temperature Normal Display

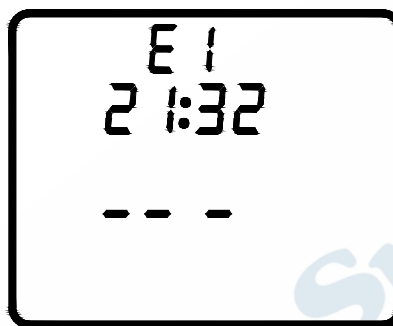




Fig.4: Sensor on/short circuit display

- 1、 When you first start the spa, the backlight will be dimmed and the LCD will show the current time and temperature. If there is a problem with the circuit board the controller will display the code “E1”. When the radio frequency is displayed as “---” it indicates that the spa is in “power off” model, and pre-heating and circulation cleaning function is off.



2、 Lock memory Mode(optional function):



The memory lock will start work by pressing “” key in the status of “power off” when the spa has not been adjusted for a period of 30 minutes. When the memory locked key is pressed TWICE



“” the spa will become unlocked and the word “LOCKED” will disappear.

3、 Adjusting Time:

In the status “Power off” and the pre-heating and circulation cleaning are not starting. Pressing

“” or “” adjust time . The Minute and Hour display flash at this time. It will add 1 hour when

pressing “” each time and the hours can be adjusted continually when pressing the “” without stopping. The hour adjustment range is 0-23.

In the status of time setting It will add 1 minute when pressing “” each time and the minutes could be added continually when pressing the “” without stopping. The minute adjustment range is 0-59

The system will quit the time-setting status automatically after 6 seconds without pressing any buttons

4. Set pre- circulation-cleaning:

In the pre-set mode circulation will be automatic once per day. The display will show clearly whether circulation is in action or not. See following Fig 5-6:



Fig.5: Circulation-cleaning off

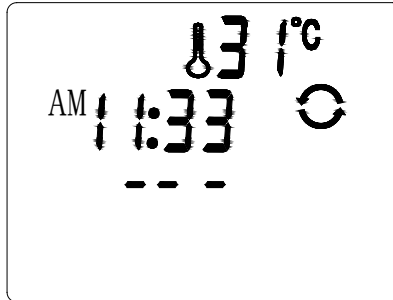










Fig.6: Circulation-cleaning on

When setting the Circulation-cleaning the display must be in the “Power off” status and the LCD display “---”

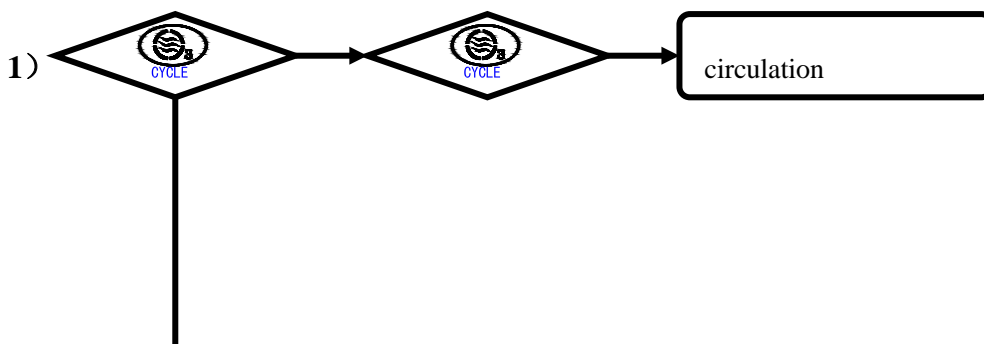
1) Press “” to enter Circulation-cleaning setting mode and the LCD shows and flashes “”, and then the circulation works on. Press “” again to off the circulation cleaning, and the “” will disappear.

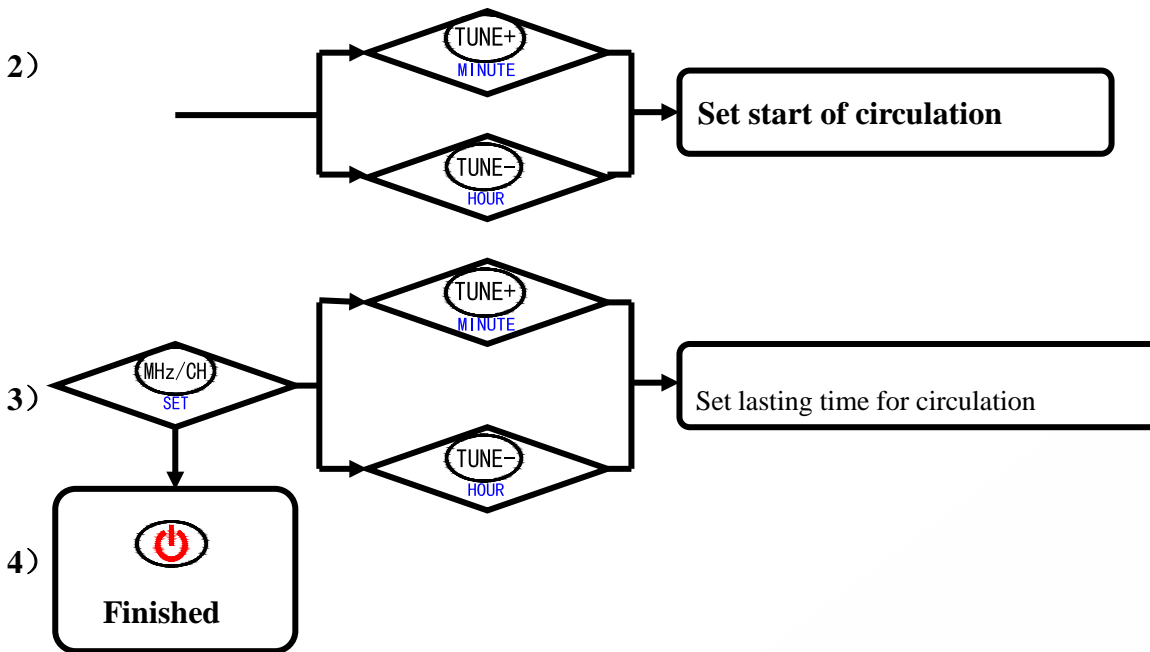
2) Press “” (minutes) and “” (hours) to adjust the time.




It will add 1 minute when pressing “” each time and the minutes could be added continually. The adjustment range is 0~59.



It will add 1 hour when pressing “” each time and the hours could be added continually. The adjustment range is 0-23.

After setting the circulation cleaning pre-set timing, go to next step.





3)、 Press “” to set the circulation times; it will show the minimum(5 minutes) on the LCD and this time will not flash. It will add 5 minutes by pressing “” each time. It will add 1 hour by pressing “” each time. The maximum working time is 19hours and 55 minutes. When you have completed this procedure continue to the next setting.

4)、 If all settings have been correctly, set Press “” for confirmation , the system will quit this mode automatically(press key “” to clear settings and exit).

*****Notice*****

- 1 All the setting of Circulation-cleaning must be set on Power OFF status
- 2 Circulation PUMP and OZONE are not working while setting the circulation cleaning.

5、 Set preheating (if required):

Only one pre-heating setting is allowed each day if required.The LCD can show clearly in the following figures whether pre-heating settings are set or not

See following Fig.7-8:

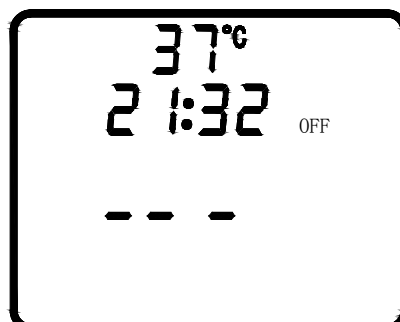
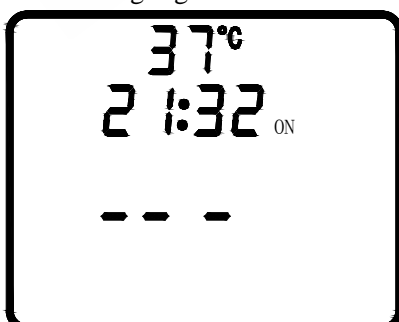
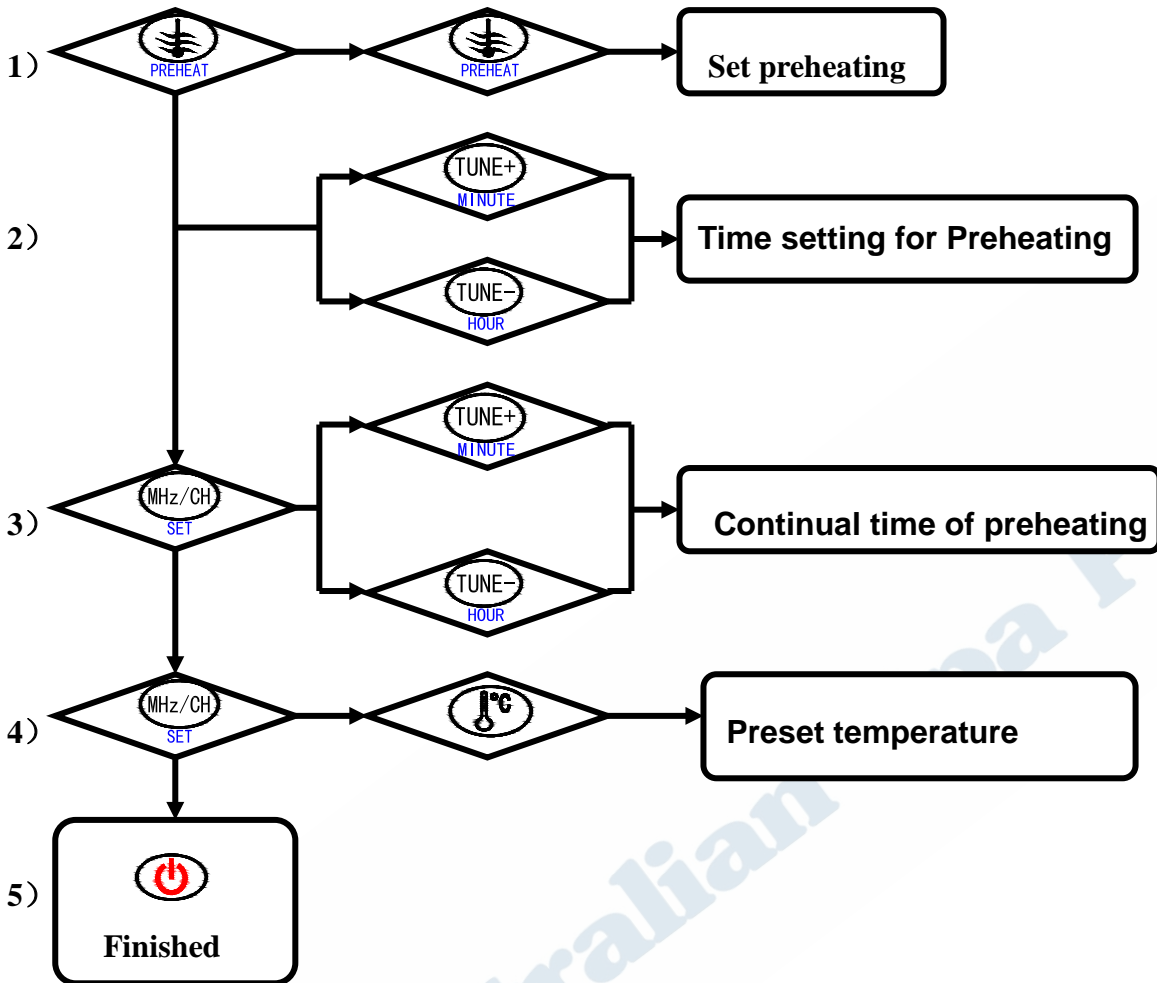






Fig.7: Pre-heat On


图 8: Pre-heat Off

Pre-heating is set when the spa is in the “Power off” status and the LCD display shows “---”




1) 、 Press  “ ” and enter Pre-heating setting mode, and the LCD flashes of “ON” , the “PREHEAT” icon will flash , and then the circulation works on. Press “  ” again to turn off pre-heating. The LCD will show “OFF” without flashing.




2) 、 Press “  ” (minutes) and “  ” (hours) to adjust the time.



It will add 1 minute when pressing “  ” each time and the minutes could be added continually.


The adjustment range is 0~59.

It will add 1 hour when pressing “” each time and the hours could be added continually. The adjustment range is 0-23.

After setting the heating pre-set timing, proceed to the next step.

3)、Press “” to set the circulation times; it will show the minimum(10 minutes) on the LCD and this time will not flash. It will add 10 minutes by pressing “” each time. It will add 1 hour by pressing “” each time. The maximum working time is 19hours and 50 minutes. When you have completed this procedure continue to the next setting.

4)、Press “” again It will show “ SET” on the LCD panel. Press “” button to change the setting temperature. The range of temperature setting is: 15~40°C。

5)、When everything is set correctly, press the “” to confirm, the system will quit the pre-heating setting mode.

*****Notice*****

1、 All setting of preheating must be in Power OFF mode, just turn on the spa, the LCD will display “---”



2、 Please note that it shows "on" or "off" on the LCD. "on" means preheating is turned on mode. when the time of pre-heating is as same as current time, the heater will start working. "off" means the heater won't start to work an any time.

3、 Circulation PUMP and HEATER without working while setting preheating.

6、 Operation of preheating:

When the preheating time is as same as the current time, the LCD screen shows “on” and the tub is also filled with water. The heater will start to work. The heater, circulation pump and time counting work at simultaneity. The countdown time will be shown on the LCD screen, till the preset time is finished.


During the preheating, The preheating will be turned off automatically once the preset time is finished.


Or Pressing the “” or “” key can stop preheating.

*****Notice*****



- i. When setting temperature is lower than or equal with water temperature, Even the Preheating is on, but the circulation PUMP and HEATER are not working.**
- ii. When the HEATER is “1” type frame, The power of circulation PUMP must reach 750W. Otherwise the heater won't work due to not enough water pressure to drive pressure switch.**
- iii. Conditions meet the above “2”, and the HEATER is still not working, Please short the line of water pressure switch.**

7、 Circulation-cleaning:

When the current time is as same as the presetting time, the preset is “” and the tub is filled with water, the circulation cleaning will start, the circulation pump works at the same.. The LCD shows the countdown time. All the surfing pumps and blower will work for 30 seconds at every 30 minutes. The Ozone works at every 15 minutes.

During the preheating, the Circulation cleaning will be turned off automatically once the preset time is finished. or Pressing the “” key can stop directly.

8、 Operation to Power ON/ OFF

Pressing the key “” from “power-off” status to enter the “power-on” status. To pressing the  in the status of “power-on” to enter the “power-off” status. The LCD screen shows the on or off. See following Fig.9-10

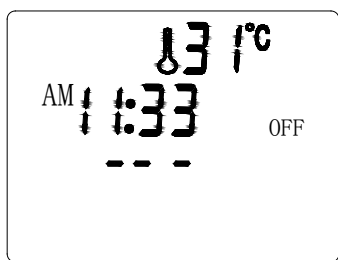


Fig.9: OFF

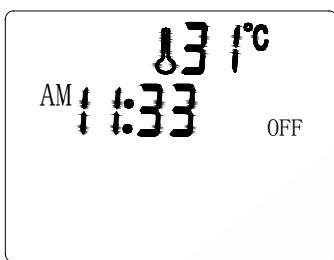





Fig.10: ON

9、 Temperature setting:

Under the status of “Power-on” can setting temperature. It will add 1 centigrade by press “” each time, the temperature will be added continually till reach 40 centigrade(106 Fahrenheit) by press “” without stop. Press “” again, and the temperature is show 15°C (59 Fahrenheit) 。 The range of adjustment is: 15~40°C (59~106 Fahrenheit) 。

10、 Operation Radio & CD:

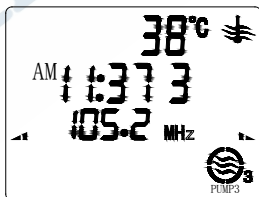










Fig.11: Radio frequency is 105.2 MHz, Save the present frequency to channel 3 (Save channel) or Exchange the frequency form channel 3 to the present (Searching channel)



I、“” is the ON/OFF key for radio and CD. and it is only available in the status of power on. The first pressing “” is turning on the radio, the second pressing “” will turn off the radio and turn on the CD at the same time, and the third pressing “”, will turn off the radio and CD simultaneous.



II、 LCD will show present frequency and volume of the radio after turning on the radio.

III、 In the working of radio, the present radio frequency can be changed by pressing “” and “”




IV、 Pressing the key “” will take out the memorized radio frequency, Pressing the key

“  ” continually will take out the memorized radio frequency from channels will be saved at present channel by pressing this key continually. If none of the channel, LCD will display “---”.


V、 Press the key “  ” could memorize the present radio frequency, Pressing the key “  ” continually will memorize the present radio frequency in different channel. The channel of max is 10, Name of channel is 0-9.

VI、 The volume can be changed by pressing key “  ” and “  ”

11、 Operation of Pump:

The Button  , operates pump 1; The Button  operates pump 2; The button  operates pump 3. When Circulation cleaning and heating (including preheating) turn on, circulation pump will be working automatically.

12、 Operation of lasting circulation cleaning:

Press the key “  ” at any time to turn on or off the lasting circulation cleaning, work mode is like the preset circulation cleaning. The surfing pumps and blower work for 30 seconds at every 30 minutes. Ozonizer works for 15 minutes at every 105 minutes, and repeat in this program.


Once any surfing pumps or blower pump be start, the ozonizer without working. The ozonizer can not work if the circulation pump is without working.

IMPORTANT: Please ensure that the ozone function is not in use whilst bathing in the spa.


13、 Operation of spa lights:

Press the “  ” button to control the ON/OFF of the LED lights and the Fiber optic lights.


14、 Setting the constant Temperature Settings:

- 1)、 Pressing the “  ” button will start the constant temperature heating.
- 2) With the setting above, the circulation pump will work automatically.
- 3)、 If the temperature is set at 35°C, when the water temperature reaches or exceeds 36°C, the heater will be turned off automatically and the circulation pump will stop after 5 seconds. When the water temperature reaches or is lower than 34°C, the heater will start up again.
- 4)、 In the case of an error the LCD shows "E1". If this happens, the thermostatic heating system will NOT be available, the heater doesn't work.

15、 Operating the Air Blower:

Press “  ” controls the blower.

16、 Fahrenheit & Celsius Temperature shift:

In the status of “Power off” pressing the key “  ” can change the mode of Fahrenheit & Celsius degree.

17、 When there is no water in the spa. All water pumps and heating system can not start up. However the corresponding signals will flash on the LCD.

18、 Prevent freezing function:

The heater & circulation pump will work automatically once the water temperature is below 5°C, when the water temperature is reach at 10°C, heating will stop. This function is only available while the spa is on normal power supply.

IV、 Electric parameters

1、 Performance index:

Rated voltage: 220V/50Hz

Maximum working current: 60 A/220V—240V~

Voltage-resistance: 1250V/1 minute without penetration。

Isolative resistance: » 10MΩ

Water resistance grade: IPX5

Electric shock resistance: first grade

(2) Output loading index

Heater: AC220V/3KW x 1

Surf Water pump AC220V/: 2 HP x 3

water pump: AC220V/1HP x 1

water pump: AC220v/0.35HP x 1

Air pump: AC220V/0.7kw x 1

spa light: AC12V/5W x 2

Ozone: AC12V/15W x 1

Radio: 1) Frequency Range: FM: 87.0~108.0MHz

2) Maximum Output Power: 10W

3) Speaker: 8Ω damp proof speaker

5.Warning Information


- a. Means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.
- b. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- c. 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.
- d. Children should be supervised to ensure that they do not play with the appliance.
- e. Details concerning cleaning and other maintenance
- f. Maintenance of water purity, especially PH values and chlorine concentrations.
- g. Cleaning and disinfection
- h. Use and installation of a cover.
- i. Disposal of water
- j. Precautions to avoid damage due to water freezing
- k. Precautions to avoid damage when the appliance is left empty for extended period.

2.2 Sub-clause 7

The installation instruction shall state the substance of the following:

- Earthed appliances must be permanently connected to fixed wiring;

- The appliance should be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30 mA.
- The floor has to be capable of supporting the expected load.
- An adequate drainage system has to be provided to deal with overflow water.
- Details of how to follow the wiring rules, for example, specifying that parts are installed in the correct zone and that equipotential bonding is carried out.

<p>WARNING</p> 	<ol style="list-style-type: none"> 1、 ⚠️ DANGER: RISK OF ELECTRIC SHOCK, Connect only to a circuit protected by a Ground Fault Circuit Interrupter. 2、 Grounding is required. The unit should be installed by a qualified service representative and ground. 3、 FOR YOUR SAFETY-This product should be installed by a professional service technician,qualified in hydrotherapy bath installation. 4、 It's prohibited to cover the instrument with something while opeating. 5、 when using at the first time ,Be sure there is water in heater pipe before staring. 6、 parts containing live parts, except parts uplied with safety extra-low voltage not Exceeding 12V,must be inaccessible to person in the bath; 8、 earthed appliances must be permanently connected to fixed wiring; 9、 the appliance should be supplied through a residual current device (RCD)having a rated residual operating current not exceeding 30 mA. 10、 If the mains cord of this appliance is damaged,It must only bereplaced by our service representative,As special tools and/or parts are required
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Solutions of Fault

Phenomenon	Reason	How to Solve the problem
No power supply	<ol style="list-style-type: none"> 1. The electric leakage switch was breaked off 2. The Fuse be break off 	<ol style="list-style-type: none"> 1. Check and eliminate the malfunction, restart the spa 2. Please change fuse
No display on control panel	<ol style="list-style-type: none"> 1. The plug which connected with the panel loose or disconnected 2. The Panel happened with malfunction 	<ol style="list-style-type: none"> 1. to connect the plug of the control panel and the main box 2. Change a new control panel
LED light not work	<ol style="list-style-type: none"> 1. Power of the light be break off 2. Fuse be break off 3. light be burn 	<ol style="list-style-type: none"> 1. To check if cable of the light is well connected with main box or not 2. Change a fuse 3. Change a new lampwick
Ozone not work	<ol style="list-style-type: none"> 1. Ozonater burn 2. Fuse be break off 	<ol style="list-style-type: none"> 1. Change a new ozonater 2. change a fuse

	3. Cable of the ozonater be cut off	3. check if the cable of the main power is connected with the main box or not.
Displaied "E1""FF" in control panel	1. temperature detector be cut off or shortcirculate 2. plug of the temperature detector be nundated by water	1. Connect the temperature detector 2.Change a new temperature detector
being incapable of activate water pump,and water pump icon flashing	1.water not achieve the appointed level 2. water detector not connect well	1. To add more water to make it up to the water detector 2. To re-connect the line of water detector
Heater not work, and heating icon on panel flashing	1. setting water temperature lower then the water temperature	1. set the temperature degrees higher than the water in tub temperature(between 15 and 43 °C.
Leakage	1. silicon plaster not good 2. PVC plaster not good 3. Blow out of the water pipe	1. To remove the jets then re-install one 2. To plaster once again Change water pipe

