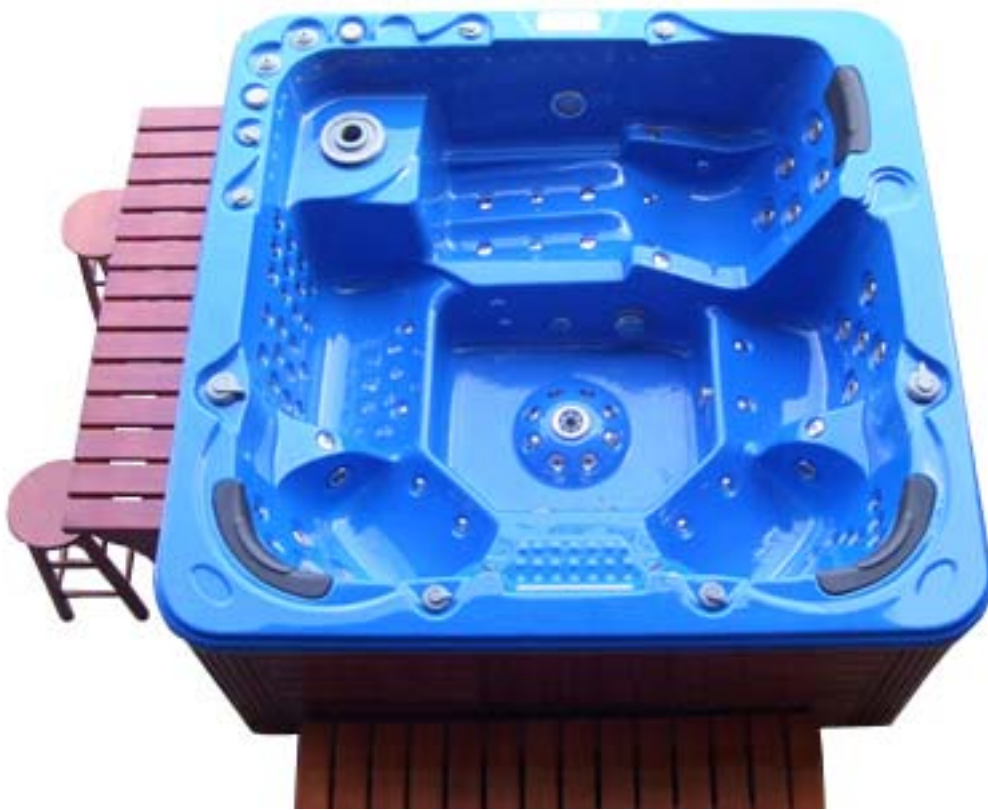


G680

Outdoor SPA Hot Tub



User Manual





I. Function Summary

1. Lock(optional)
2. Clock Display (am/pm)
3. Timing Cycle-Cleaning Setting
4. Preheat Setting
5. Ozone
6. Power On/Off
7. Temperature Setting
8. Radio/CD
9. Synergy Pumps (water pump, air pump, waterfall, water circulation, water column)
10. Lasting Circulation Setting
11. Spa Light
12. Blower Operation (Fahrenheit & Celsius)
13. Prevent Freezing Function
14. Three phase or single phase optional, AC220V
15. When "CD" works, there's DVD or TV options
16. Waterproof LCD screen control panel



II. Operation Illustration

When turning on the power, the background light is dimmed, and the LCD screen will shows the current time and temperature. The "ERR" code means the sensor is open/short circuit. If the screen displays "---", it indicates that the spa is in "power off" status, pre-heating and circulation cleaning function is at the off status.

1. Lock (optional function)

This function was an optional, to start this feature please press " " while the power is off or 30 minutes after pressing other function buttons, and the screen will shows "LOCK", When the spa is in locked status, no buttons but only the " " and " " can be answered. Press " " twice to unlocked, **Note:** the word "LOCKED" will appear and disappear in the corresponding status.

2. Clock Display (Time Setting)

In the status of "Power off", and the preheat and circulation cleaning not been started, please press either " " or " " to start setting the time. The "." will not flash again. But the hour or the minute will flash at this time. The screen will shows "SYSC",

1) In the status of Time Setting, press " " once to add an hour at a time or hold down to continuously add an hour. The hour adjustment range is 0-23.



2) In the status of Time Setting, press " "once to add a minute or hold down to continuously add minutes. The minutes adjustment range is 0-59.



The Time Setting status automatically ends after 6 seconds without pressing any buttons



3. Complete water management system with cartridge filter

In the pre-circulation-cleaning mode circulation will be automatic started once per day. The display will show clearly whether circulation is in action or not.




When setting the pre-circulation-cleaning the display should be in the “Power off” status and the LCD display “---”

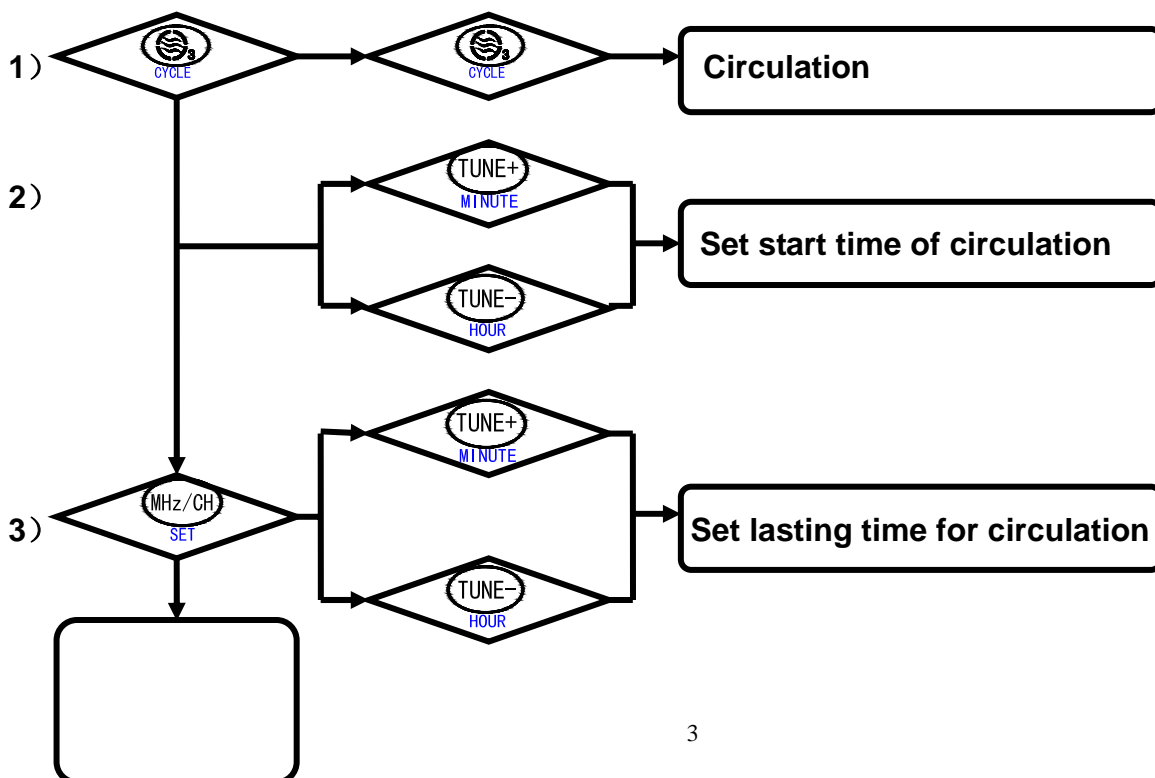
1) Press “” to enter timing cycle-cleaning setting mode, the LCD shows “FLON” and the time will flash then will get into the timing cycle cleaning setting. Press “” again to turn off the setting. And the circulation cleaning at the off status.

2) Press “” (minutes) and “” (hours) to adjust the pre-circulation-cleaning starting time. As following operations:


- a. press “” once to add a minute or hold down to continuously add minutes. The minutes adjustment range is 0-59.
- b. press “” once to add an hour at a time or hold down to continuously add an hour. The hour adjustment range is 0-23.

After setting the starting time for the pre-circulation-cleaning, then go to next step.

3) Press “” go to the status of circulation cleaning lasting working time’s setting, the LCD screen will displays “FLDU”, and the lasting time will flash. Press “” once will add 5 minutes, press “” once to add one hour. The maximum lasting working time is 19hours and 55 minutes. When you completed finished this setting, then continue the next step.



4) 
Finished

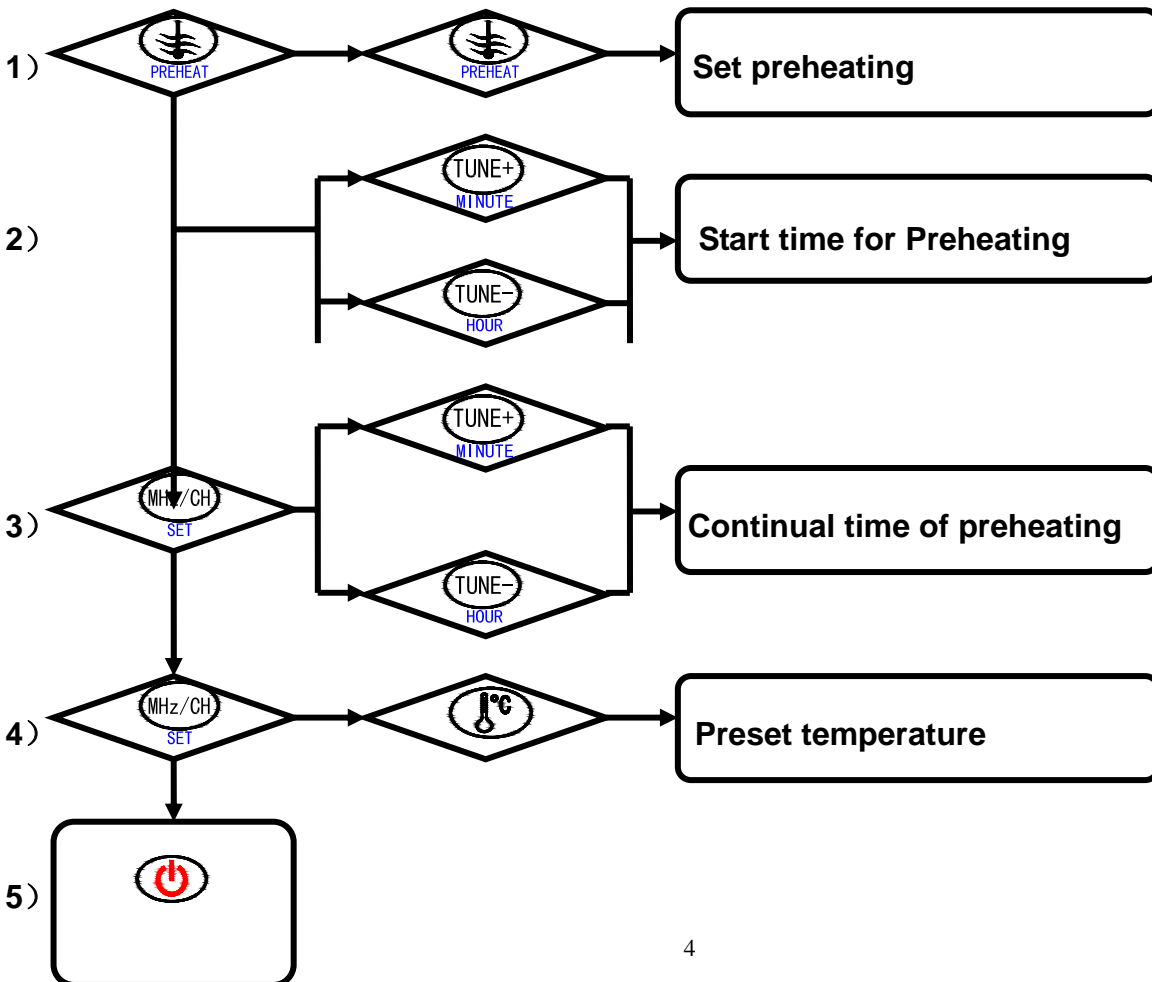
4) If all settings have been adjusted correctly, Please press “

*****Notice*****





- A. All the setting of pre-circulation-cleaning should be at the condition of Power OFF
- B. The Circulate pump and Ozone will not working while setting the pre-circulation cleaning.



4. Preheat Setting (if required)


Only once is allow to set the pre-heat each day if required. The LCD screen can show clearly in the following figures whether pre-heat settings are set or not
 Pre-heat is set when the spa is in the Power Off status and the LCD screen displays “---” to begin the setting.




Finished




1) Press  and enter Pre-heat setting status, and the LCD screen will displays “HTON” and flashes “ON”, and will end the setting’s starting time of the preheating. Only  and  are available to change the time. Press  again will turn off pre-heat and the screen will shows “OFF” without flashing and will exit this setting.



2) Press  (minutes) and  (hours) to adjust the pre-heat starting time. As following operations:



b. press  once to add an hour at a time or hold down to continuously add an hour. The hour adjustment range is 0-23.

a. press  once to add a minute or hold down to continuously add minutes. The minutes adjustment range is 0-59.

After setting the starting time for the pre-heating, then go to next step.

3) Press  go to the status of Preheat lasting working time’s setting, the LCD screen will displays “HTDU”, and this lasting time will NOT flash. Press  once will add 10 minutes, press  once to add one hour. The maximum lasting working time is 19hours and 50 minutes. When you completed finished this setting, then, continue the next step.

4) Press  again to enter setting status for temperature. The LCD screen will shows “HT-T”, press  can change the setting temperature. The temperature’s setting range is: 15~43°C.

5) After all these settings were finished correctly, please press  to confirm and will exit this pre-heat setting mode. And will enter the pre-heat working status and the screen will shows OFF, the pre-heat’s signal flash (To give up and/or exit this setting please press ).

Notice

a) All setting for preheat should be at the condition of Power OFF, when turn on the spa, the LCD screen will display “---”



b) Please pay attention to the LCD screen, if it shows “ON”, means the heater pump was on, when the pre-heat’s setting time was the same as current time, then the

pre-heat will start working. If the screen shows “OFF” that means the heater won’t start to work at any time.

c) Circulate pump and heater pump will not work during the pre-heat’s setting.

About pre-heat

When the current time was the same as the pre-heat’s setting time, and the pre-heat status is “ON” and there’s enough water in the spa pool, then the pre-heat will start to work. At the same time, the circulate pump and the heater pump will also works. The countdown time will be shown on the LCD screen(the middle dashed will not flash any longer), till the preset’s time finished.



When the countdown time ending, the pre-heat will automatically turn off. Or you can press the  or  to stop preheating.

Notice


- a) **When the setting temperature is lower than or equal with water’s temperature, Even the Preheating is on, but the circulate pump and heater pump can not work.**
- b) **If the heater pump shows “I” type frame, then the power circulate pump should be up to 750W or higher. Otherwise the heater won’t work due to not enough water pressure to drive pressure switch.**
- c) **If the above condition b) was meets the requirement and the heater pump still did not works, then, please short-connect the water pressure’s switch control line.**

About the Pre-circle-cleaning

When the current time was the same as the pre-circle clean’s setting time, and the pre-circle status is “ON” and there’s enough water in the spa pool, then the pre-circle will start to work. At that time the countdown time will be show on the LCD screen. (If the pre-heat and pre-circle clean works at the same time, then it will only shows the pre-heat’s countdown time.) Every 15 minutes, the surfing pumps and air pump(blower) will work for 30 seconds. The circle pumps also works at the same time. And the Ozone sterilization system will works also, it will works per 2 hours, and each time works 15 minutes.




During pre-circle cleaning, when the countdown time ending, the pre-circle cleaning will automatically turn off. Or you can press the  or press  two times to stop pre-circle cleaning.

5. Power ON/OFF












In the “power-off” status, press “” to enter the “power-on” status, the LCD screen’s backlighting was luminous, and will shows “WELCOME” on the screen;

In the “power-on” status, press “” to Off(exit) the system.




6. Temperature Setting

In the status of “Power-ON” and “HEATER” is working. Press “” once, the temperature will be add one centigrade, or hold “” to add the temperature continually till reach 45 centigrade degree(Fahrenheit 113 degree). Press “” again, the temperature will change to15 centigrade degree(Fahrenheit 59 degree). The setting temperature range is: 15~45 centigrade degree(Fahrenheit is 59-113 degree).




7. Radio & CD

- 1) “” this button means the ON/OFF switch for radio and CD, and it is only available in the status of power on. Press “” once means turn on the radio, press “” the second time means turn off radio and the CD was on at the same time, press “” the third time will turn off radio and CD.
- 2) After turn on the radio, the LCD screen will shows the current radio channel frequency.
- 3) Under the radio was ON, it can be adjust the frequency by press “” and “”.
- 4) By holding on the “” or “” up or down to get the frequency automatically.
- 5) Press “” and hold on it, the radio will automatic searching radio station from “88.0MHZ” to “108.0MHZ” and memorize all the clear radio station in different channel。 The number of channel is 60 max.
- 6) Can adjust the volume by press “” and “”.



Notice

If there’s not so clear channel, can press “” and “” to adjust it until it’s became clear, and press “” , the LCD screen will shows “SAVE”, and then it will save the channel after the adjustment.

8. Synergy Pumps

The Button , operates the three water pumps for Surfing. The Button , operates the water pump for water fountain column and waterfall inlet. The button , operates the circle pump for circulation-cleaning's time setting and ozone sterilization system. While the circulation cleaning or heating the water(including pre-heating) was ON, the circle pump will ON automatically.

9. About lasting circulation working

This button , means lasting circulation working ON/OFF. Under “power-on” status, press , then the circle pump start to work all the time, the surfing pumps and the blower will work for 30 seconds per every 15 minutes. And the Ozone sterilization system will works for 15 minutes per every 105 minutes. And repeat the same program lastingly.

Notice

While any of the surfing pump or blower start, the ozone sterilization system can't work; while the circle pump OFF, the ozone sterilization system also can't work.



Important:

Please ensure that the ozone sterilization system is not in use while bathing in the spa


10. Spa Lights

Press , to turn ON/OFF the spa lights.


11. Constant Temperature Heating

- 1) When the pre-heat time is up(if the pre-heating has turned on), press , to start the constant temperature heating system.
- 2) Once the constant temperature heating starts up, the circle pump will running all the time.
- 3) When the water temperature was set by 35°C, if the water temperature reaches or exceeds 36°C, then the heater will be turn off automatically, and the circle pump will stop after 5 seconds; When the water temperature is lower than 34°C, the heater pump and circle pump will start up automatically; When the water temperature is over 46°C, the heater pump, water pumps and the blower will stop to work automatically.
- 4) If the temperature sensor is open/short (LCD screen shows “ERR”), then the temperature control system will not available, the heater pump will not work.
- 5) If the circle pump was ON, 5 seconds later cab press , to start with heater pump.

12. Air Pump / Blower

This button  means turns ON/OFF the blower.

13. Fahrenheit & Celsius Temperature

In the status of “power off”, press  can change the mode of Fahrenheit & Celsius degree.

Notice

When there is no water in the spa, the LCD screen will flash with the no water symbol, and all of the water pumps and heater pump can't start up.

14. Prevent freezing function

While the water temperature is lower 5°C, the LCD screen will shows “COOL” when the spa is in “power off” status, and it will shows “FREEZING” when the spa is in “power on” status, then the heater and the circle pump will turn on automatically. While the water temperature is reach at 10°C, the heating will be stop.

Notice

For the prevent freezing function it's request there's good power source condition.

III. Electric parameters

1. Performance index

Rated voltage: 220V-240V/50Hz(60Hz)
Maximum working current: 60 A/220V—240V
Voltage-resistance: 1250V/1 minute without penetration
Isolative resistance: \gg 200M Ω
Water resistance grade: IPX5
Electric shock resistance: First Grade


2. Output loading index

Heater pump: AC220V/3KW x 1
Surf water pumps: AC220V/2 HP x 3
Water column's pump: AC220V/1HP x 1
Air pump (Blower): AC220V/0.7kw x 1

Spa LED lights: AC12V/10W x 2
 Ozone: AC12V/15W x 1
 Water circle pump: AC220v/0.35HP x 1
 Radio: 1) Frequency Range: FM 87.0~108.0MHz
 2) Maximum Output Power: 20W
 3) Speaker: 8Ωdamp proof speaker

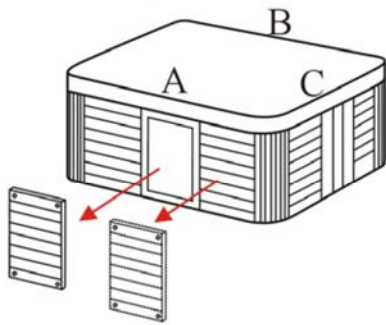
IV. Warning Information

1. Means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.
2. 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.
3. 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.
4. Children should be supervised to ensure that they do not play with the appliance.
5. Details concerning cleaning and other maintenance.
6. Maintenance of water purity, especially PH values and chlorine concentrations.
7. Cleaning and disinfection.
8. Use and installation of a cover.
9. Disposal of water.
10. Precautions to avoid damage due to water freezing.
11. Precautions to avoid damage when the appliance is left empty for extended period..

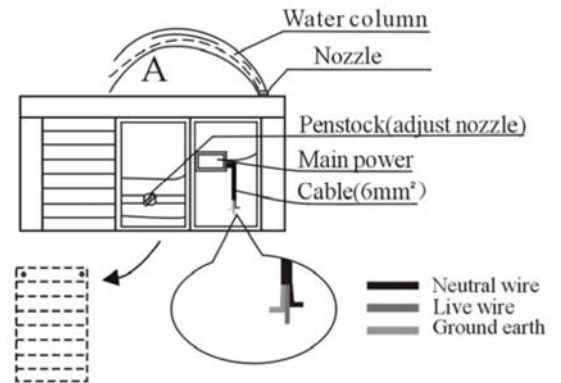
<p>WARNING</p> 	<ol style="list-style-type: none"> 1、 ⚠️ DANGER: RISK OF ELECTRIC SHOCK, Connect only to a circuit protected by a Ground Fault Circuit Interrupted. 2、 Grounding is required. The unit should be installed by a qualified service representative and ground. 3、 FOR YOUR SAFETY-This product should be installed by a professional service technician, qualified in hydrotherapy bath installation. 4、 It's prohibited to cover the instrument with something while operating. 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 was damaged, It must only be replaced by our service representative, As special tools and/or parts are required
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V. Install the power and water source to the Spa

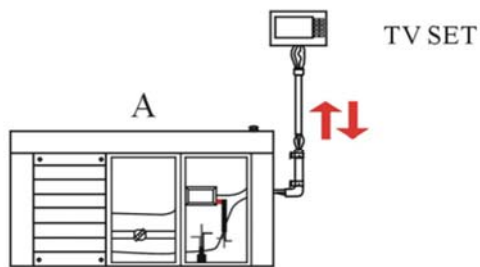
STEP1:uninstall the board like below picture



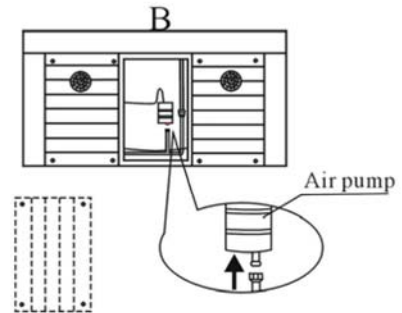
STEP2:connect the main power box to power



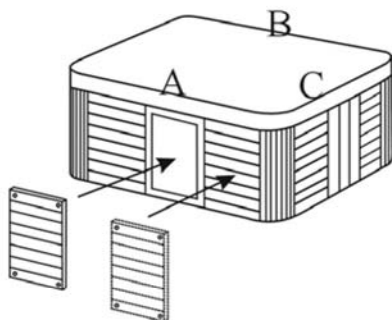
STEP3:put the wire into stainless steel pipe ,connect TV set to the pipe, and fix the pipe.



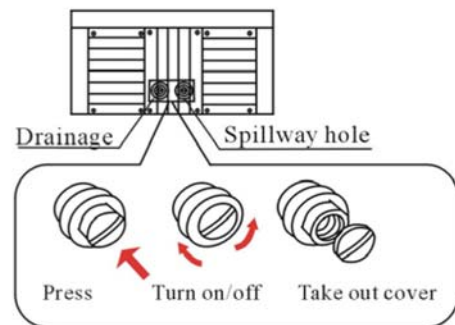
STEP4:connect the union install air pump



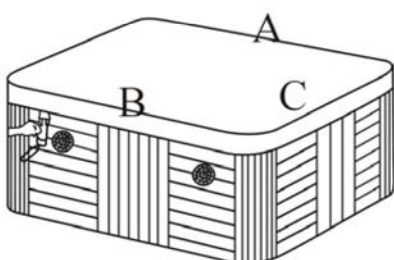
STEP5:install the board



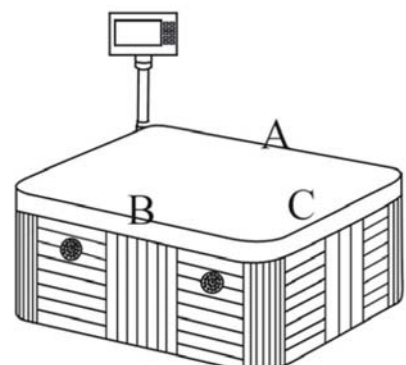
STEP6:install the drainage



STEP7:install the lock



STEP8:finish



VI. Wiring Diagram for the junction box

