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Depending on the system configuration, some of the content mentioned in this manual may not appear on your system.


# PB562

## Operation instruction

V0.2 English

## Contents



## Warning

WIFI:
Operating Frequency: 2012-2472MHz
Output Power: Max 20dBm
RF Hardware Version: xxx
RF Software Version: xxx

EMF:
These devices comply with RF specifications when the device is used at 20 cm from your body.

EMC:
These devices can be connected only to a supply with system impedance no more than 0.099 ohm for Single-phase input or 0.001 ohm for Multi-phase input. In case necessary, please consult your supply authority for system impedance information.

Importer: xxx

RSS-Gen & RSS-247 statement:
This device complies with Industry Canada licence-exempt RSS standard(s).
Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

RSS-102 Statement:
This equipment complies with Industry Canada radiation exposure limits set forth for an uncontrolled environment.
Cet équipement est conforme à l'exposition aux rayonnements Industry Canada limites établies pour un environnement non contrôlé.

## Warning

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution:
Changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

FCC Statement:
"This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help."

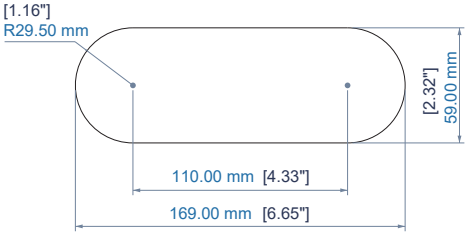
This controller is not intend for transportable pool use.



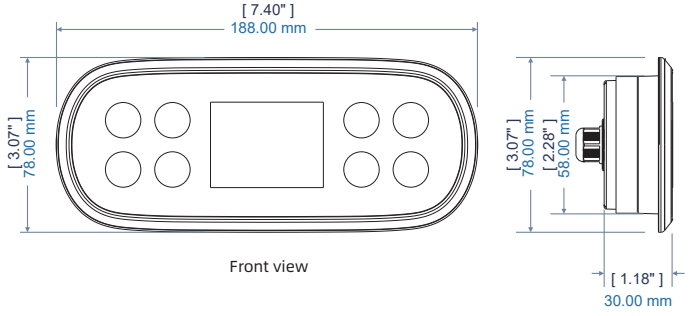
## Control Panel Specifications and Installation Instructions

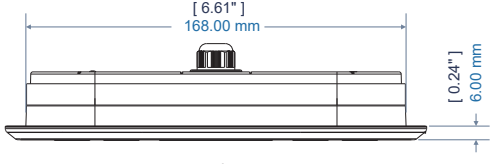
2.4 inch TFT color display screen, 8 capacitive touch buttons

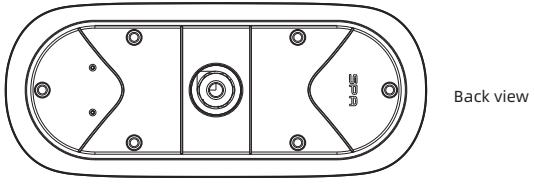

PB562 control panel design




Suggested hole size



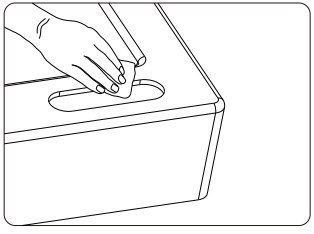



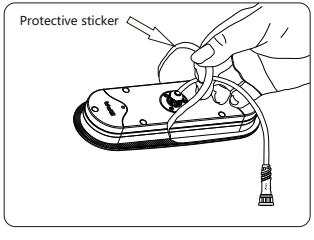





## Control Panel Installation Instructions

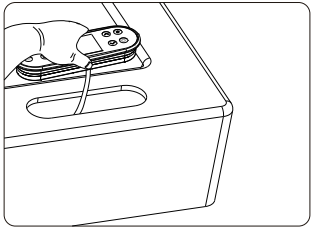


Make a hole in the appropriate position of the hot tub according to the size of the control panel, and clean the surrounding area of the hole, especially burrs, debris, etc., to ensure that the control panel can stick on firmly.



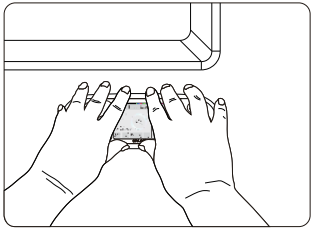

As shown in the figure, remove the adhesive protective sticker from the control panel. Special attention: It is strictly prohibited to touch adhesive with hands; It is prohibited to have water or other impurities from touching the adhesive surface; Install the control panel onto the tub within 60 seconds after removing the adhesive sticker.

3



As shown in the figure, after removing the with the adhesive protective sticker, install the control panel at the cleaned hole.

4



As shown in the figure, after the control panel is installed, press the control panel tightly with hands for 60 seconds and push the control panel back and forth for 5-10 times.





**⚠ Warning**

1. Please connect power by strictly following the SPA wiring diagram.
2. Please do not power on the SPA until the water level reaches the water level line inside the tub.

**⚠ Warning**

Please set the date and time before using the SPA control system.


**Pump 1 shortcut button**

If pump 1 is a single speed pump, it is used to control the on/off of pump 1; If pump 1 is a dual speed pump, press the button continuously to switch between low speed, high speed, or off. The specific sequence is as follows: low speed on ->high speed on ->off.

**Light shortcut button**

There are two modes for the lights. In the on/off mode, press the button to turn the lights on and off. In RGB mode, press the button to turn the lights on and off,and control lights pattern in lights interface or set lights color in lights color interface. (The "on/off mode" or "RGB mode" has been determined at the factory and cannot be changed by the user)

## Button description

**Screen reverse button**

Used to reverse the display content upside down 180 degrees , and the direction of the navigation buttons also changes accordingly.

**Multifunction button**

Used for functions such as pump 2 (if equipped) or blower (if equipped) or user mode.

**Navigation (Up) button**

Used to select functions upwards or adjust parameters upwards in the menu interface.

**Navigation (down) button**

Used to select functions downwards, or adjust parameters downwards in the menu interface.

**Confirm button**

Used to activate the cursor in the function area, change the function status, or enter the function page; In the menu interface, confirm or switch the function status.

**Set (Return) button**

Used as quick access to the set interface, or to save and return when the function status changes.



## Main Interface introduction

Main interface


Details are as follows

① 11:00 Current time.

② The status of the functions in operation.

| | |
|---|---|
| Ozone working | WIFI not connected |
| Heater working | WIFI is connected |
| Heat pump cooling | NOR mode is on |
| Heat pump heating | ECO mode is on |

## Main Interface introduction

The circulating pump is in operation

Bluetooth is connected

Pack number: Displayed when multiple packs are connected at the same time

User mode in operation

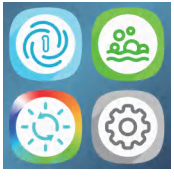
③


Current water temperature °F/℃.

④


Preset heating temperature °F/℃.

⑤



Function control area. Please press the button " " to activate the cursor, then press the button " " or " " to move the cursor and select the corresponding function, and then press the button " " to change the function status or enter the function interface.

The water pump will automatically shut down after working for 30 minutes.

The blower will automatically shut down after working for 30 minutes



## Music

Pump 1

Pump 2

Pump 3

Pump 4

Settings

Music

Blower

Light off

Light on

### Music connection


The music icon will appear and music function can be used only when the system is connected to a Bluetooth audio amplifier.

## Music connection steps:

① On the main interface, press the button " " to activate the cursor, and then press " " " " to move the cursor to select the music icon, and then press the button " " to enter this interface.

② Press the button " " or " " to select the " " function icon in the music interface, and then press the button " " to turn on the Bluetooth function.

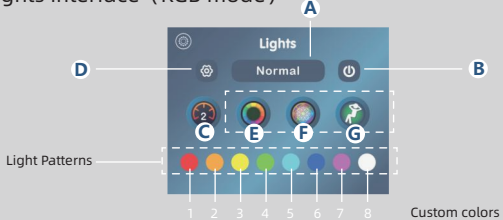
③ Turn on the Bluetooth function on your phone, find the Bluetooth name with the prefix "JOYONWAY_", press Connect, enter the PIN code: 2288, and make the connection.

④ When the "BT Not Connected" prompt on the music interface of the control panel becomes "BT Connected" , the Bluetooth connection is completed.

⑤ Then, you can use the music software on your phone to play music. The control panel can synchronize the phone's operations of pause/play, previous/next song, and high/low volume.

Reminder: Bluetooth connection failed. Please try clicking the button or in the music interface or Select the function icon and press and hold the button for 5 seconds to clear Bluetooth Connection information.

Lights interface（RGB mode）




Press the button " " or " " to select the " " function icon in the main interface, and then press the button " " to enter the lights interface.





Ⓐ Mode toggle button. Select the button and press the " " button to toggle "Normal"/"Water Temp." mode.

Ⓑ Power button. It powers On/Off all User-Controlled lights. If the button icon has a white ring, at least some User-Controlled lights are powered On. If the button doesn't have a white ring, all User-Controlled lights are powered Off.

Ⓒ Speed control for light patterns.The speed supports 0-2.

Ⓓ Go to the color palette button.

Ⓔ Color wheel light pattern. This smoothly cycles through the full color spectrum.

Ⓕ Party light pattern. This cycles through a festive pattern.

Ⓖ Lounge light pattern. This cycles through a soothing pattern.

In the Lights interface, use the up and down buttons " " /" " to switch between function icons, and use the OK button " " to confirm the setup.

### Water Temperature color chat

RED Above 108°F.
*Approximately 42.2℃.*

ORANGE Between 2°F above the set temperature and 107°F.
*Approximately 1℃ above the set temperature and 41.6℃.*

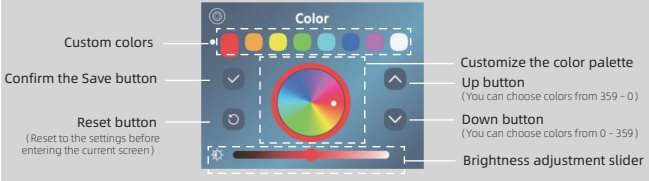
GREEN Within +/- 2°F of the set temperature.
*Approximately within +/- 1℃ of the set temperature.*

BLUE Between 46°F and 2°F below the set temperature.
*Approximately between 7.7℃ and 1℃ below the set temperature.*

WHITE Less than 45°F.
*Approximately less than 7.2°C.*

PURPLE Temperature unknown because the water has not been cycled.

## Color interface（RGB mode）




In the lights interface, Select the icon " " , and press the button " " to enter color interface.

In the color interface, use the up or down buttons " " / " " to switch the status of the ribbon, and use the OK button " " to switch to the next ribbon.





## 1.1 How to enter the setting interface

Press the button " " to enter the settings Interface and proceed with function settings.

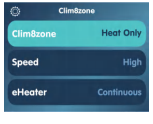
## 1.2 Settings


Interface overview

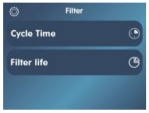
Details are as follows

1 Heat&Cool

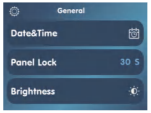

2 Clim8zone



3 Filter



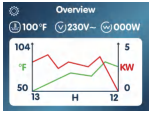

4 General



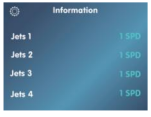

5 User Mode


6 Wifi


7 Overview

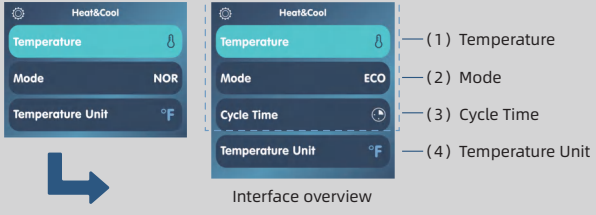



8 Information




## 1.2.1 Settings / Heat&Cool

1 Heat&Cool



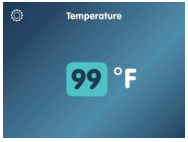

Interface overview

Details are as follows





(1) Temperature




Adjust the preset temperature. Select the "Temperature" function and press the button " ○ " to enter this interface. By pressing the buttons " ∧ " or " ∨ " to adjust the temperature. After the adjustment is completed press the button " ⚙ " to return and save.

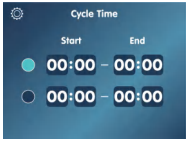
The temperature setting range is from 50 °F to 104 °F/ 10 °C to 40 °C.

When the heating function is activated, this temperature value will be the operating target.

(2) Mode


NOR: The heating/cooling is turned on all day long
ECO: The heating/cooling is only turned on during Cycle Time.

(3) Cycle Time




How to adjust the heating time period: First press the button " ○ " to select number " ● ". Then press the button " ∧ " or " ∨ " to activate or deactivate this time period. Then, press the button " ○ " to select the adjusted time period item (starting hours and minutes, ending hours and minutes), and press the button " ∧ " or " ∨ "to adjust the value, Finally, press the button " ⚙ " to return and save.

Set the daily heating operation time period and its on or off.

- On: The heating will start running within the set time period everyday.
- Off: This time period has no effect on the heating operation.
- Select the currently set time period.

(4) Temperature Unit


Adjust the temperature unit. Select the "Temperature Unit" , and press the button " ○ " to switch between ℃/℉ temperature units.

After setting the ℃/℉ temperature unit, all the temperature units in the system will be based on it.

## 1.2.2 Settings / Clim8zone

**2** Clim8zone（This set option willl only appear when the system is equipped with a heat pump）


Interface overview

Details are as follows

### (1) Clim8zone


Set the heat pump mode. Select "Clim8zone", press the button " ⊙ " to cycle through Disabled/Heat Only/Cool Only/Heat&Cool.

Disabled: The heat pump does not operate in any circumstances.

Heat Only: The heat pump only operates the heating function.

Cool Only: The heat pump only operates the cooling function.

Heat&Cool: The heat pump operates heating and cooling functions.

### (2) Speed


Set the running speed of the heat pump, select the "Speed", and press button" ⊙ "to cycles through Low/High/Auto.

Low: Low speed, the heat pump only operates in low speed mode, consuming less energy.

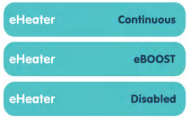
High: High speed, the heat pump only operates in high-speed mode and can quickly reach the preset temperature.

Auto: Automatic, the heat pump automatically adjusts its operating speed according to the environment, taking into account energy consumption and quickly reaching the preset temperature.





### (3) eHeater




Set the electric heating collaboration mode, select the "eHeater" function, press the button" ⊙ "to cycle through Continuous/EBOOST/Disable

Continuous: eHeater will continue to operate when heating is needed. (Clim8zone and eHeater operate simultaneously during heating)

eBOOST: eHeater will only be activated when there is a significant difference between the current temperature and the preset temperature. (During heating, the Clim8zone operates first)

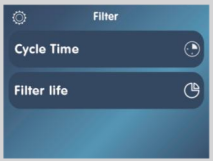
Disabled: eHeater does not operate. (Only Clim8zone runs during heating)

If the "Clim8zone" mode is set to Disabled or Cool Only, the "eHeater" mode can only be Continuous.

If the "Clim8zone" mode is set to Heat Only or Heat&Cool, the "eHeater" mode can be set as Continuous/eBOOST/Disabled.

## 1.2.3 Settings / Filter

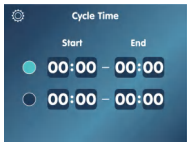
**3** Filter




Interface overview

Details are as follows

### (1) Cycle Time




How to adjust the filtering time period: First press the button " ⊙ " to select number " ● ". Then press the button " ∧ " or " ∨ " to activate or deactivate this time period. Then, press the button " ⊙ " to select the adjusted time period item (starting hours and minutes, ending hours and minutes), and press the button " ∧ " or " ∨ "to adjust the value, Finally, press the button " ⚙ " to return and save.

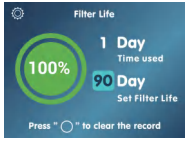
Set the daily filtering running time period and its on and off.

On: The heating will start running within the set time period everyday.

Off: This time period has no effect on the heating operation.

Select the currently set time period.

## (2) Filter Life



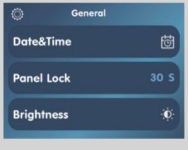

On the Filter usage interface, select the "Filter Life" , press the " " or " " button to adjust the service life, press and hold " " to clear the number of days in use, and press the " " button to return to the previous interface.

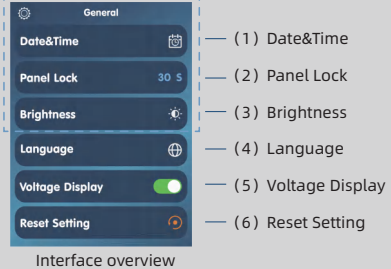
The number of days the filter has been used is displayed.

The preset usage days of the filter are displayed.

## 1.2.4 Settings / General

### 4 General



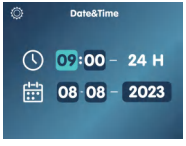

Interface overview

Details are as follows





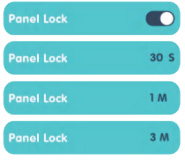
## (1) Date&Time




Adjust the date and time. Select the "Date&Time", and press the button " " to enter this interface, then press the button " " to select the items to be adjusted, and finally press the button " " or " " to adjust the value.

Set the current time, day, month, and year, and the system time will be based on this.

## (2) Panel Lock




Automatic screen lock time adjustment. After selecting the "Panel Lock" function, press the button" " to cycle through /30S/1M/3M.

: Automatic screen lock turned off.

30S: When it reaches 30 seconds without operating on the system, the screen will be locked.

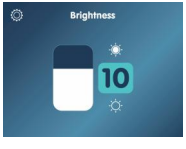
1M: When it reaches 1 minute without operating on the system, the screen will be locked.

3M: When it reaches 3 minute without operating on the system, the screen will be locked.

When the screen is locked, the screen brightness decreases and the " " icon appears on the screen, and the buttons will not react to short presses.

Unlocking the screen: When the screen is locked, press any button to activate unlocking, press in sequence the buttons " " and " " to unlock.

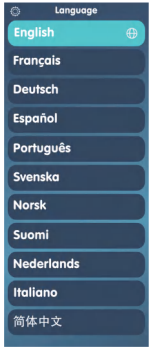
## (3) Brightness




Screen brightness adjustment. Select "Brightness" and press the button" " to enter this interface, and then press the button" " or" " to adjust the brightness and press the button" " to return.

The screen brightness range is 1-16.

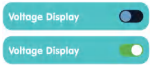
## (4) Language




Language change: select the "Language" function, and press the button " " to enter this page. Choose the language by pressing the button " " or " ". After selecting the language, press the button " " to confirm. Then, press the button " " to return to the main interface and the language chosn takes effect.

The system will display the interface in the corresponding language.

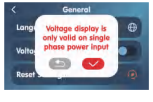
## (5) Voltage Display




Turn on or off the display of electrical parameters in the Overview interface. Select the "Voltage Display" function, and press the button " " to switch between / :

: Display electrical parameters on the Overview interface.

: Do not display electrical parameters on the Overview interface.




Select the "Voltage Display" , and press the button " " to pop up a window. Press the button " " or " " to select " ", and then press the button " " to complete the setup.

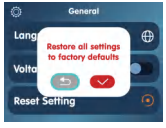
: Return

: Voltage Display confirmation





## (6) Reset Setting




Reset: select the "Reset Setting" function, and press the button " " to pop up a window. Press the button " " or " " to select " ", and then press the button " " to complete the reset.

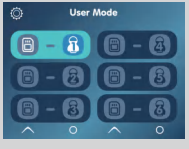
: Return

: Reset confirmation

The reset operation restores all settings to their factory default values.

## 1.2.5 Settings / User Mode

### 5 User Mode




Save and activate user mode: select "User Mode" and then press the button " " to enter this interface. Then press the button " " to select the save location, and then press the button " " to save (simultaneously activated) After displaying the effect " " or selecting a save location, press the button " " to activate the data stored (when there is data stored at this location) .

Not saved, not activated

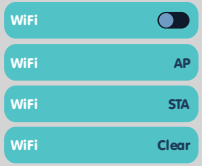
Saved, not activated

Saved, activated

The stored data includes temperature units, automatic locking time, screen brightness, heating cycle time, filtering cycle time, etc.

## 1.2.6 Settings / Wifi

### 6 Wifi




WiFi is turned off

WiFi is in a hotspot state

WiFi is connected

Connection record cleared

### WiFi connection steps:

① Install the "JOYONWAY" app on your phone. Register and log on the APP. Please first enable your phone's location information, and then connect your phone to a 2.4G WiFi network;

② Connection record clearing: On the control panel, move the cursor to the WIFi interface, and press and hold " " for 5 seconds to change the state to Clear.

③ In the WiFi interface of the control panel, press " " to switch to AP status.


④ In the app, find the "Device" interface, press the " " icon, and add a SPA controller;

⑤ Press Next and go to the "Connect WiFi" interface. Enter the name and password of the WiFi that the phone is connecting to;

⑥ Press "Connect" and the "Device Connecting" interface will appear. Go to your phone's WiFi and find the WiFi name starting with the "adh" and connect. When connected, return to the APP;

⑦ When the progress bar of the "Device Connecting" interface reaches 100%, Sta will appear on the Wifi interface of the control panel 

, indicating that the connection is made.

⑧ Then, you can control your SPA on your mobile app "JOYONWAY" through the internet.

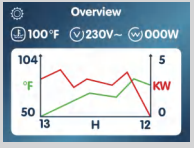
Scan the QR code on the back of the manual and download the APP .





## 1.2.7 Settings / Overview

### 7 Overview





Display current temperature

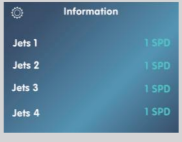
Display current voltage

Display current power

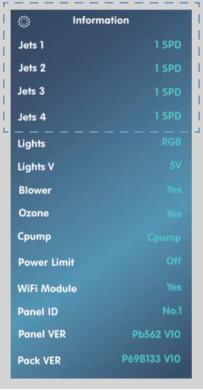
Display changes in temperature and power within 24 hours

## 1.2.8 Settings / Information

### 8 Information



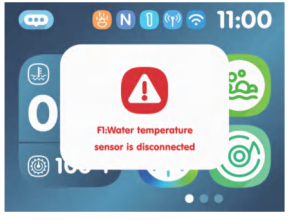

Interface overview




In the "Information" interface, relevant information about the system is displayed.

When there are some states that require user attention in the control system, the control panel will display warning information of the state on the control panel. If there are several types of information that need to be displayed at the same time, these information will be loop displayed.

The following is the screen status when these information are displayed, as shown in the figure:




Warning message display location

When the following fault message appears, first try to power off the SPA and then power on again a few minutes later to clear the fault; If the fault occurs again, please follow the instructions below to handle the fault; During the troubleshooting process, ensure that the power connection to the SPA is disconnected.

## F1:Water temperature sensor is disconnected

**Temperature sensor disconnected**

The control system has detected that the temperature sensor is not connected.
Please check the temperature sensor and its connections, and replace it if necessary.

## F2:Water temperature sensor is short circuit

**Temperature sensor short circuit**

The control system has detected a short circuit in the temperature sensor.
Check the temperature sensor and its connections, and replace it if necessary.





## F3:Water temperature is too high

**Water temperature too high**

The control system has detected that the temperature of temperature sensor is too high.
When the heater is started, if there is no water or water flow is small in the heating tube, this message may appear .
Measure: Please ensure that there is sufficient water in the SPA and the heating circulation pipeline is unobstructed.

## F4:Water temperature is too low

**Water temperature too low**

The control system has detected that the temperature of the temperature sensor is too low.
Please pay attention to frost protection.

## F5:EEPROM error

**Memory Fault**

When a memory fault occurs, please power off the SPA and power it back on after a few minutes. If the memory fault occurs again, contact the service provider or manufacturer.

## F6:Manual-reset thermal switch is open

**Overheat protection switch (manual reset) on**

If the overheat protection switch is turned on, there may be overheating in the heating tube. Please manually reset the overheat protection switch or contact the service provider and manufacturer.

## F9:System setting error

**System settings error**

Reason: The system configuration item read from the motherboard memory by the control system after power on was verified not correct.
Action: Please turn off the power and wait for 10 seconds before powering on again. If this message appears again, please contact the service provider or manufacturer.

## F10:Communications error

**Control panel and control pack cannot communicate**

Reason: The control panel cannot exchange information with the control pack.
Measure: Please turn off the power, and check if the wiring connection between the control panel and the control pack is good and if the connectors are tightly connected. After confirmation, power on again. If this fault cannot be eliminated, please contact the service provider or manufacturer.

## F12:Heater PT temperature is too high

**Heating tube protection temperature too high**

The control system has detected that the surface temperature of the heating tube is too high.
Measure: Please ensure that there is sufficient water in the SPA and the heating circulation pipeline is unobstructed

## F13:Heater PT temperature is too low

**Heating tube protection temperature too low**

The control system has detected that the surface temperature of the heating tube is too low.
Please pay attention to frost protection.





## F14:Heater PT temperature sensor is disconnected

**Heating tube protecting temperature sensor disconnected**

The control system has detected that the heating tube protecting temperature sensor is not connected.
Measure: Please check the heating tube protecting temperature sensor and its connection, and replace it if necessary.

## F15:Heater PT temperature sensor is short circuit

**Heating tube protecting temperature sensor short circuit**

The control system has detected a short circuit in the heating tube protecting temperature sensor.
Measure: check the heating tube protecting temperature sensor and its connection and replace it if necessary.

## F20:Controller fault

**When a microelectronic malfunction occurs**

Please power off the SPA and power it on again after a few minutes. If a microelectronic malfunction occurs again, contact the service provider or manufacturer.

## Heat Pump ER03: Water flow failure

Water flow failure
Cause:
1. The water flow switch fault
2. Low water flow
3. The inlet and outlet water are reversed
4. There is air in the pipe
5. The pipe blocked
Action:
1.Check the water flow switch and replace it if it is faulty
2.Check the water valve and the temperature difference between inlet and outlet water
3.Whether the inlet and outlet water pipes are correctly connected
4.Emptying water system
5.Pipe cleaning

## Heat Pump ER04: Winter anti-freezing

Winter anti-freezing
Cause:
The ambient temperature is lower than the antifreeze setting value
Action:
Normal protection procedure

## Heat Pump ER05: High pressure protection

High pressure protection
Cause:
1. Low water flow
2.. Pressure switch fault
3. The fan motor unwork or the speed too low
4.Overcharged the refrigerant
Action:
1. Check whether the temperature difference between inlet and outlet water is too large, and whether the outlet water temperature is too high
2. Use a multimeter to check whether the high voltage protection switch works
3. Check the water flow of the water pump and the speed of the fan
4. Refill the refrigerant

## Heat Pump ER06:

Low Pressure Failure
Cause:

Action:





## Heat Pump ER09: Communication with the upper computer failed

Communication with the upper computer failed
（Communication with Balboa system failed）
Cause:

Action:
1. Replace the main board
2. Check the communication cables between the main board and Balboa system
3. Check whether the Balboa system software matches

## Heat Pump ER10: Communication fault of frequency conversion module

Communication fault of frequency conversion module (alarm when communication is disconnected between external board and drive board)
Cause:
1. The mainboard or driver board damaged
2. The connector of the communication cable between the mainboard and the driver board is in poor contact or falls off
3. The communication cable is damaged
Action:
1. Replace the main board or driver board
2. Check the communication cables between the main board and driver board
3. Replace the communication cable

## Heat Pump ER12: Exhaust too high protection

Exhaust too high protection
Cause:
1. Less refrigerant or leakage
2. The system blocked
3. Compressor refrigerant oil is insufficient
4. The resistance value of the exhaust probe is offset, and the inlet temperature probe is dropped
Action:
1. Refill the refrigerant
2. Replace the filter
3. Add refrigerant oil to the compressor
4. Replace the exhaust probe and reconnect the water inlet temperature probe

## Heat Pump ER15: Inlet water temp. Error

Inlet water temp. Error
Cause:
The sensor plug is in poor contact or off, or the sensor is damaged
Action:
Check and replace the water inlet temperature sensor (T2 sensor)

**Heat Pump ER16: Outer coil pipe temp. Error**

Outer coil pipe temp. Error
Cause:
The sensor plug is in poor contact or off, or the sensor is damaged
Action:
Check and replace the coil pipe temperature sensor(T3)

**Heat Pump ER18: Exhaust gas temp. Error**

Exhaust gas temp. Error
Cause:
The sensor plug is in poor contact or off, or the sensor is damaged
Action:
Check and replace the exhaust gas temperature sensor(T1)

**Heat Pump ER19:**

DC Fan Motor Failure
Cause:

Action:

**Heat Pump ER20: Abnormal protection of frequency conversion module**

Abnormal protection of frequency conversion module
Cause:
IPM module internal fault, check related problems according to the attached table
Action:

**Heat Pump ER21: Ambient temp. Error**

Ambient temp. Error
Cause:
The sensor plug is in poor contact or off, or the sensor is damaged
Action:
Check and replace the ambient temperature sensor(T4)

**Heat Pump ER23:**

Cooling outlet water temperature low protection
Cause:

Action:

**Heat Pump ER27: Outlet temperature fault**

Outlet temperature fault
Cause:
The sensor plug is in poor contact or off, or the sensor is damaged
Action:
Check and replace the water outlet temperature sensor(T6)





**Heat Pump ER29: Return gas temp. Error**

Return gas temp. Error
Cause:
The sensor plug is in poor contact or off, or the sensor is damaged
Action:
Check and replace the suction gas sensor(T5)

**Heat Pump ER32: Heating outlet water high temperature protection**

Heating outlet water high temperature protection
Cause:

Action:

**Heat Pump ER33: Outer Door Coil High Temperature Protection**

Outer Door Coil High Temperature Protection
Cause:

Action:

**Heat Pump ER35: Compressor Current Protection**

Compressor Current Protection
Cause:

Action:

**Heat Pump ER42: Internal Coil Temperature Failure**

Internal Coil Temperature Failure
Cause:

Action:

**Heat Pump ER44: Ambient Temperature Too Low Protection**

Ambient Temperature Too Low Protection
Cause:

Action:

**Heat Pump ER46: DC Fan Error**

DC Fan Error
Cause:
1.Dc fan failure
2.Plug is in poor contact or off
Action:
1. Replace the DC fan
2. Reconnect cables to the DC fan