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



# PB562-000

## Operation instruction Manual

V1.2 English

## Contents

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# Warning

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## 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.

## 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

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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."

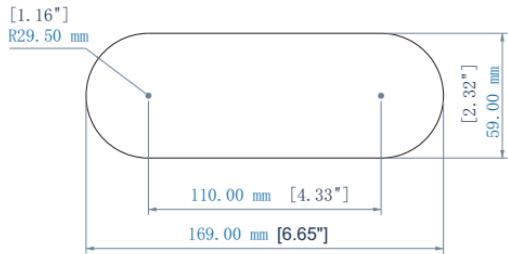
This controller is not intended for transportable pool use.

## Control Panel Installation Instructions

2.4 inch TFT color display, 8 capacitive touch buttons

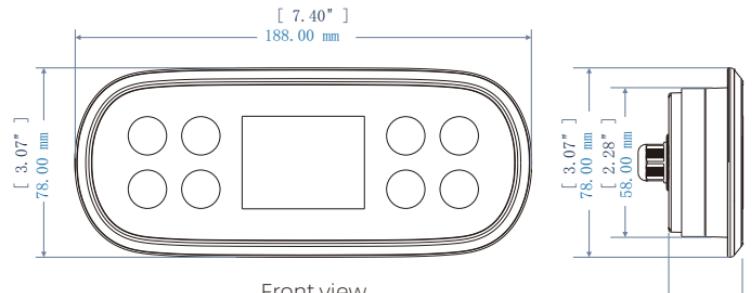


PB562-000 Control Panel Rendering

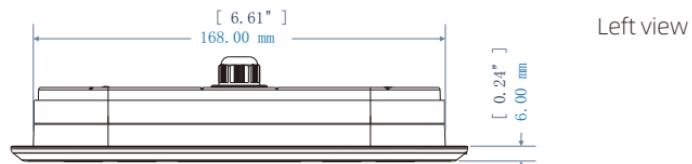


Suggested hole size

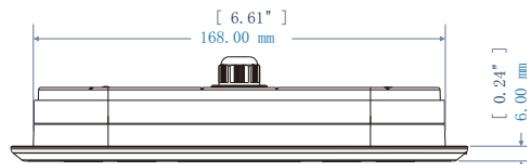
## Control Panel Installation Instructions



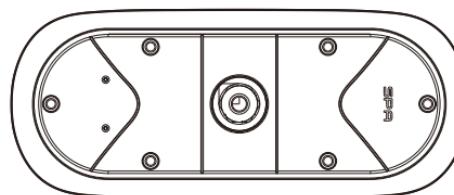
Front view



Left view



Top view

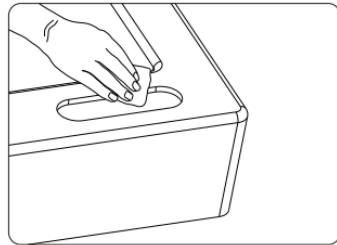


Back view

# Control Panel Installation Instructions

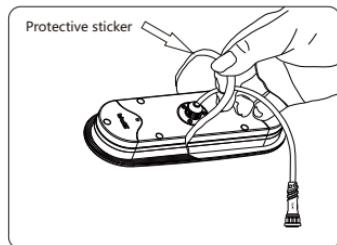
## Control Panel Installation Instructions

1



Make a hole in the appropriate position of the bathtub according to the size of the control panel, and clean the area around the opening with tools, especially burrs, debris, etc. to prevent the control panel from being unfirmlly sticked.

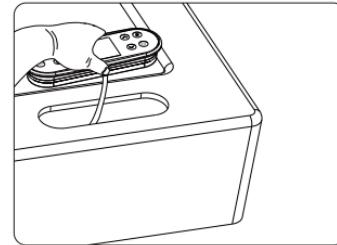
2



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

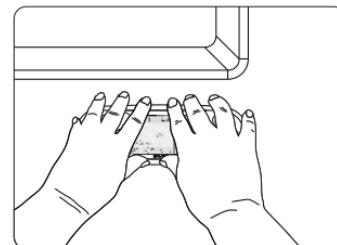
# Control Panel Installation Instructions

3



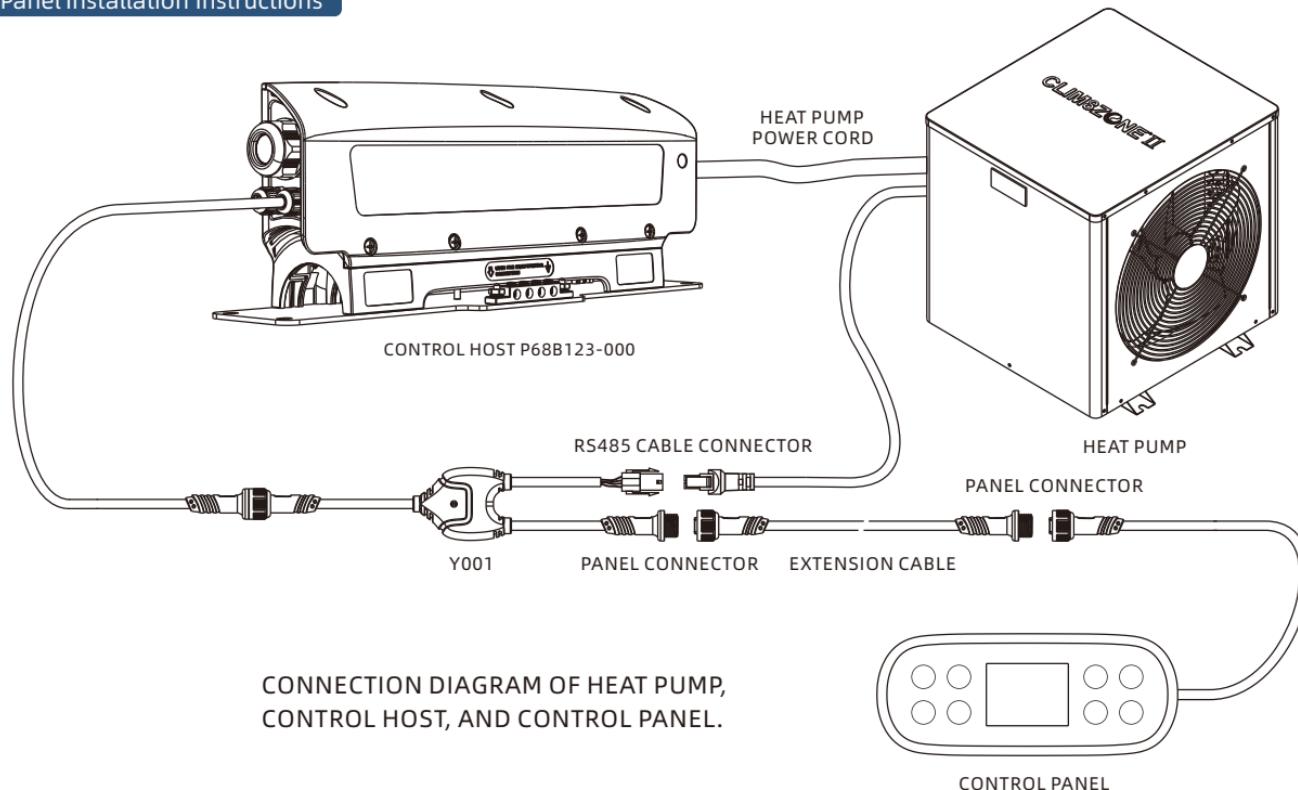
As shown in the figure, remove the adhesive protective sticker, and then install the control panel at the cleaned opening.

4



As shown in the figure, after the control panel is installed, press the control panel tightly for 60 seconds and then push and press the panel several times to make sure it is firmly sticked.

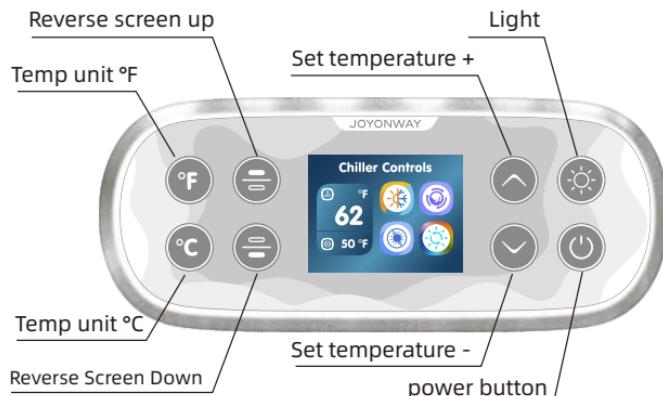
## Control Panel Installation Instructions



## Button Description

### ⚠ Warning

1. Please strictly follow the SPA wiring diagram to connect the power supply.
2. Please do not power on the SPA until the water level reaches the water level line inside the tub.
3. After power on the SPA, wait for 1 minute before pressing the power button to turn on the system.



#### Temp unit: °F

Use this button to switch the display temperature unit of the system to Celsius degrees.



#### Temp unit: °C

Use this button to switch the display temperature unit of the system to Fahrenheit.

## Button Description



#### Reverse screen up

Used to reverse the screen upwards.



#### Reverse Screen Down

Used to reverse the screen downwards.



#### Set temperature +

Used to increase the set temperature .  
The maximum set temperature is 104 °F (40 °C).



#### Set temperature -

Used to reduce the set temperature.  
The Minimum set temperature is 40 °F (5 °C).



#### Light

Used to switch the on/o ffor the light switch.  
The light will automatically turn o ffor after being on for 1 hour.



#### Power button

Used to toggle the system on and off.

After power on the SPA, wait for 1 minute before pressing the power button to turn on the system.

When the system is turned off, all buttons except the power button cannot be operated, and when the system is turned off, all loads will be turned off. When the system is turned on, the screen lights up, the circulating pump and disinfection function are turned on (always running or automatic), all the buttons can be operated, and the system will run automatically, controlling the water temperature to the set temperature.

## Introduction to the main interface

Main interface



Details are as follows



Current water temperature °F/°C.



Preset water temperature °F/°C.



Circulating pump icon



Heat pump icon



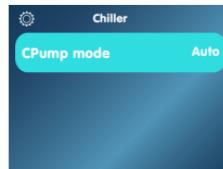
Disinfection icon



Light icon

## Set the circulating pump mode

Set the circulating pump mode (only for installers):



Within 2 minutes after powering on, when the main interface is displayed, touch the "  " button 5s to enter the setting menu, touch the "  " button to change the circulating pump mode, you can set the circulating pump mode to Always On or Auto, at this time touch the "  " button to return to the main interface. Circulating pump mode will remain when power is down.



Always On mode



Auto mode

**Always On mode:** When system is on, the circulating pump is always on.

**Auto mode:** When system is on, the circulating pump is only turned on after the heat pump starts, when the heat pump is turned off, the circulating pump will be closed for a delay of 2 minutes, if the circulating pump has not been run within 1 hour, the circulating pump will run automatically for 1 minute.

# Panel Warning Message

When the control system experiences some states that require user attention, the control panel will display a warning message on the control panel. The following is the screen status when this information are displayed, as shown in the figure



When the following fault messages appear, first please try to power off the system 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, please ensure that the power connection to the system is disconnected.

## F10:Communication error

### Control panel and control pack cannot communicate.

Cause: the control panel cannot exchange information with the control pack.

Action: Please turn off the power, check if the wiring connection between the control panel and the control pack is good, and if the connectors are tightly connected. After confirmation no errors, power on. If this fault cannot be eliminated, please contact the service provider or manufacturer.

## F11: No communication with heatpump

Cause: the control pack and heat pump cannot exchange information.

Measure: Please turn off the power supply, check if the wire connection between the control pack and the heat pump is good, if the connectors are tightly connected, and if the power supply of the heat pump is correctly connected. After confirming that there are no errors, power on again. If this fault cannot be eliminated, please contact the service provider or manufacturer.

# Panel Warning Message

## 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)

## 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)

## DC Fan Motor Failure

Cause:

Action:

Abnormal protection of frequency conversion module

Cause:

IPM module internal fault, check related problems according to the attached table

Action:

## 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)

## Cooling outlet water temperature low protection

Cause:

Action:

## 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)

# Panel Warning Message

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<b>Heat Pump ER29: Return gas temp. Error</b>	<b>Return gas temp. Error</b> Cause: The sensor plug is in poor contact or off, or the sensor is damaged Action: Check and replace the suction gas sensor(T5)
<b>Heat Pump ER32: Heating outlet water high temperature protection</b>	<b>Heating outlet water high temperature protection</b> Cause: Action:
<b>Heat Pump ER33: Outer Door Coil High Temperature Protection</b>	<b>Outer Door Coil High Temperature Protection</b> Cause: Action:
<b>Heat Pump ER35: Compressor Current Protection</b>	<b>Compressor Current Protection</b> Cause: Action:
<b>Heat Pump ER42: Internal Coil Temperature Failure</b>	<b>Internal Coil Temperature Failure</b> Cause: Action:
<b>Heat Pump ER44: Ambient Temperature Too Low Protection</b>	<b>Ambient Temperature Too Low Protection</b> Cause: Action:
<b>Heat Pump ER46: DC Fan Error</b>	<b>DC Fan Error</b> 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