# ICE BATH Instructions Manual


## LSP-30R/S3N2-HY1

## CONTENTS

## RECYCLING AND DISPOSAL

**Processing by individuals of electronic appliances reaching the end of their lifespan:**

The symbol depicting a barred wastebin on the product's main parts indicates that it must not be discarded alongside household waste. It must be brought to an adequate collection point where electronic appliances are recycled (information available from your local waste treatment service). This product contains potentially hazardous substances.

## DELIVERY AND TRANSPORT

- When unpacking the ICE BATH, please check the content to report any damage.

- The ICE BATH should always be stored and transported vertically, on a pallet, and inside its original packaging.

- Transporting and/or storing the ICE BATH horizontally will void the guarantee.
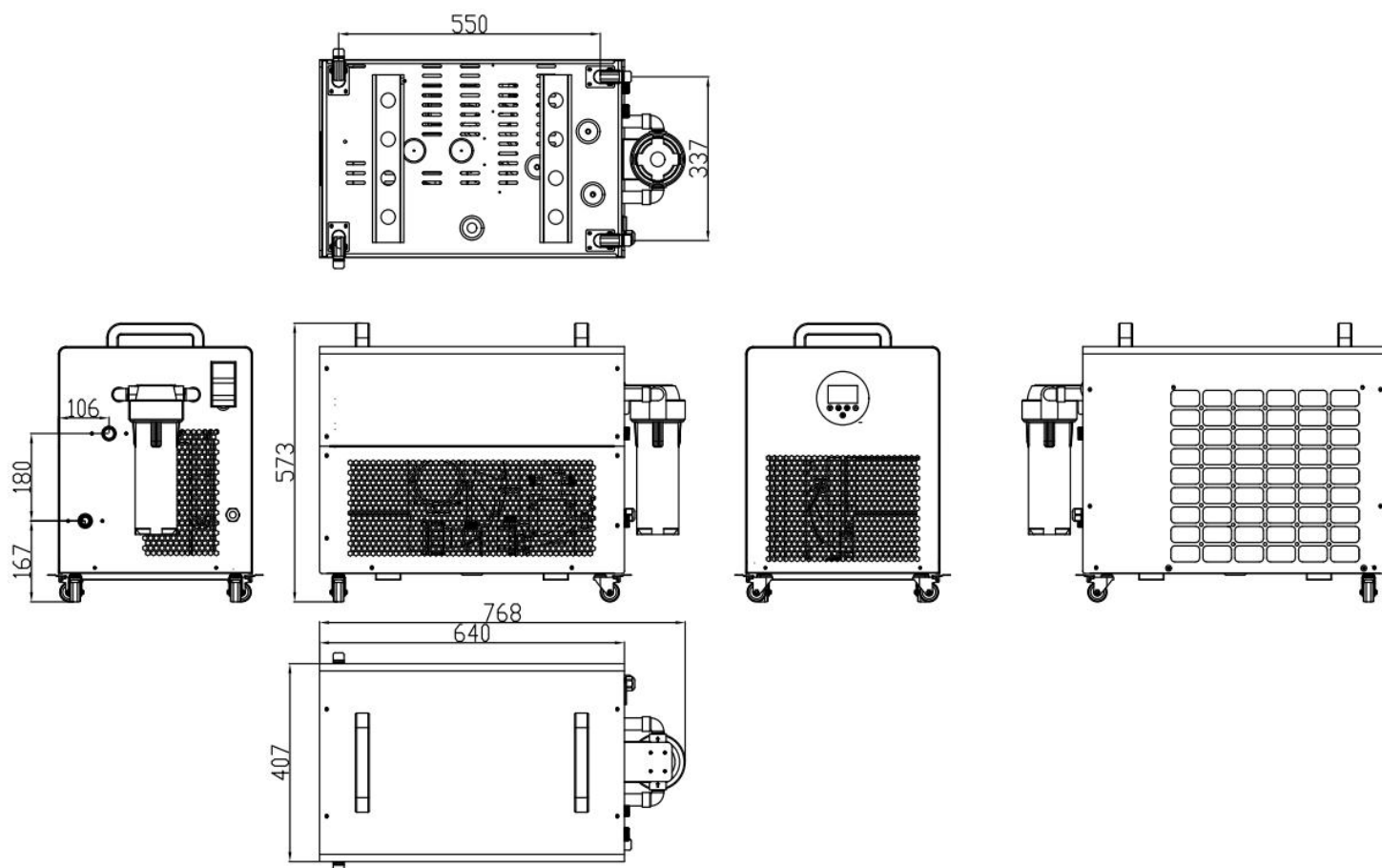
This symbol indicates that the operating manual should be read attentively before use.

It is therefore quite normal not to feel a temperature difference at the outlet of the circuit when the ICE BATH is operating. A cooled pool should be covered to prevent heat losses.

• Failure to comply with the warnings could cause damage to the equipment as well as severe injuries or death.

• Only a qualified person possessing adequate technical skills (electricity, hydraulic, refrigeration) is authorized to undertake maintenance operations or repairs on the device. A qualified technician working on the device must use/wear personal protective equipment (safety goggles, protection gloves, etc...) to avoid all risks of injury arising during work on the device.

• Before any intervention on the device, ensure that it is powered down and has undergone the lockout procedure.

• The device is designed specifically for use in swimming pools and spas;it must not be used for purposes other than the ones it was designed for.

• This device is not intended for children.

• 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 the use of the appliance by a person responsible for their

safety.

This device is not intended to be used by persons (including children, of 8 or more) who lack experience or who suffer from physical, sensory, or mental impairment

• If it is operated under supervision or with operating instructions issued by a person responsible for their safety and if they understand the risks taken.

• Children must be supervised to ensure that they do not play with the device.

• The installation of the device must be carried out according to the local code, NEC, and CEC national code. The installer is responsible for the installation of the device and compliance with national regulations relating to installation procedures. The manufacturer will not be liable in case of non-compliance with the installation standards that apply locally.

• For any action other than simple maintenance operations by the user as described in this manual, the product should be maintained by a certified professional.

• Any improper installation and/or use can cause damages and severe injuries (and even death).

• Do not touch the fan or the moving parts, and do not insert objects or your fingers close to the moving parts when the device is operating.

• Moving parts can cause severe injuries and even death.

• Do not pull on the hoses and the connections to move the machine.

**R32 REFRIGERANT SAFETY**

● **Eco-Friendly Refrigerant:** The ice bath utilizes R32 refrigerant, known for its excellent cooling efficiency and lower Global Warming Potential (GWP) compared to traditional refrigerants, making it a more sustainable choice.
● **Flammability:** R32 has a low flammability risk, though caution is still needed during installation and operation.
● **Installation Safety:** The chiller should never be installed near open flames or high-heat sources.
● **Ventilation**: Ensure proper ventilation around the installation area to prevent refrigerant buildup in enclosed spaces.
● **Regular Inspections:** Conduct regular leak checks by certified technicians to maintain safety and proper operation.
● **Environmental Responsibility:** R32 refrigerant represents the latest in sustainable cooling technology, offering both high performance and environmental benefits.

**WARNINGS CONCERNING ELECTRICAL APPLIANCES:**

• If a fixed device does not feature a power cord and a plug, or any other means to disconnect from the power supply with a separation of the contacts in all the poles, enabling total disconnection in case of a category III electrical surge, the manual will mention that the disconnection means must be integrated with the fixed wiring, as per relevant wiring rules.

• An adapted disconnection method, complying with all local and national requirements relating to category III electrical surges and disconnecting all the poles of the supply circuit, must be installed in the device's supply circuit. This disconnection method is not provided with the device and should be provided by the installation technician.

• Before installation, check that:

   • The voltage featured on the information plate of the device matches the voltage of the power supply

   • Do not use an extension to connect the device;

   • The power supply is suitable for operating the device and has an earthing connection.


• Power cable and leakage circuit breaker are optional.  Generally, they are not installed on the entire product.  By default, it is installed by the electrician specified by the user.  When installing the power cable, ensure that the plug of the power cable is plugged into a waterproof socket.

**WARNINGS RELATING TO DEVICES CONTAINING A COOLANT:**

• Do not release R410A fluid into the atmosphere. This fluid is a greenhouse effect fluorinated gas, covered by the Kyoto Protocol, with a global warming potential (GWP) = 2000 for R410A.

• The device must be stored in a well-ventilated place and kept away from flames.


• Install the unit outdoors. Do not install the unit indoors or in an outdoor area that is closed and poorly ventilated.

• To comply with the relevant standards and regulations in terms of the environment and installation procedures, a search for leaks in the cooling circuit must be conducted at least once a year. This operation should be carried out by a certified specialist in cooling devices.


• Please keep and transmit these documents for reference throughout the lifespan of the device.

- WARNING: The installation of the device must be installed according to the local code, NEC, and CEC national code.

- Maintain 1 m (30 cm minimum) of open space in front of the vertical air intake grids (behind and on the side of the ICE BATH) and 3 m（1.5m minimum） at the outlet of the fan (in front) of open space without any obstacles.

- Prepare sufficient space around the ICE BATH for maintenance operations.

- Prepare a water evacuation system close to the ICE BATH to protect the installation zone.

- Keep the ICE BATH out of the reach of children, insofar as possible.

The ICE BATH should never be installed:

- in an area covered by sprinkling systems, or subject to spray or running water or mud (close to a road, take into account the effects of wind),

- under a tree,

- close to a source of heat or of flammable gas,

- in an area where it would be exposed to oil, flammable gases, corrosive products, and compounds containing sulfur,

- close to equipment operating at high frequencies,

- in a place where snow is likely to accumulate,

- in a place where it could be flooded by the condensates produced by the device as it operates,

- on a surface that could transfer the vibrations to the house.

Advice: dampen the possible noise nuisance caused by your ICE BATH.

- Do not install it close to or underneath a window.

- Do not direct the outlet of the fan towards your neighbors' property.

- Do not direct the fan outlet (Heat air) towards the bath bucket.

- Install it in an open area (sound waves bounce off surfaces).

- Install a sound barrier around the ICE BATH, making sure to maintain the required distances.

- Install 50 cm of PVC piping at the water inlet and outlet of the ICE BATH.

⚠ *Maximum cable length between heat pump and head of line protection (C curve current protection) It is recommended to use a wire terminal for better electrical contact between wire and power supply terminal.

These data are only indicative, you must ask an electrician to determine the exact data for your pool installation.

The power supply must be equipped with grounding and 30 mA differential protection.

Power cable and leakage circuit breaker are optional. Generally, they are not installed on the entire product. By default, it is installed by the electrician specified by the user. When installing the power cable, ensure that the plug of the power cable is plugged into a waterproof socket.

• Use the cable gland and the pass-through provided inside the ICE BATH for the passage of the cable.

• As this heat pump is installed outdoors, it is mandatory to pass the cable through a protective sheath for this purpose. The power supply of the ICE BATH must be fitted with a protection device following the legislation in force.

• The electric cables must be buried at a depth of 50 cm (85 cm under a road or a path) in an electrical sheath (red corrugated). When a cable buried in a sheath crosses another cable or a pipe (gas, water, etc.) the distance between them must be greater than 20 cm.

Caution: The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, according 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 following 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 to 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.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

# LED Display



1. Cooling mode: 

2. Fan on: 

3. Compressor on: 

4. When the WiFi connection is successful: 

5.  "ON/OFF": Turn on/turn off. Long press  Lock Screen.

6.  "MODE": Press this button once to display the current set temperature.

7.  and  When turning on the main interface, adjust the set temperature.

8.  clock and timing setting.

Press this key to enter the clock setting,The clock flashes to indicate entering the clock setting.

If you need to set the clock, press the  key to enter the hour setting of the clock setting.

Use the  key to change the hour setting of the clock. After the setting is completed,

press the  key again to enter the minute setting of the clock setting. Use the  key to change the

minute setting of the clock. After the setting is completed, click  to complete the setting and return to the main interface.

9. Under the main interface,Long press the  and  keys for 3S to convert degrees Celsius and Fahrenheit.

| Protection/fault | Fault codes | Check（professional is required） |
|---|---|---|
| Protection against excessive temperature difference between inlet and outlet water (3 consecutive times within 30 minutes) | E2 | • Check if the filter is clogged<br>• Check if the inlet pipe connection is tight |
| Protection against high exhaust temperature | E3 | • Check if the electronic expansion valve is in operation<br>• Check for leaks in the refrigerant system |
| System pressure too high | E4 | • Check if the fan is rotating |
| Protection against low ambient temperature | E6 | • Check if the current weather temperature exceeds the usage range |
| Communication Failure | E8 | • Check if there is a signal from the remote controller |
| Refrigeration coil sensor malfunction | P1 | • Check if the connection between the coil probe and the circuit board is loose |
| Compressor out sensor malfunction | P2 | |
| Water inlet sensor malfunction | P3 | |
| Water outlet sensor malfunction | P4 | |
| Compressor in sensor malfunction | P5 | |
| The difference in inlet and outlet water temperature is too large | P6 | • Check if the filter is clogged<br>• Check if the inlet pipe connection is tight |
| Ambient temperature sensor malfunction | P7 | • Check if the connection between the coil probe and the circuit board is loose |
| System pressure too low | P9 | • Check for refrigerant leakage |
| Winter first level antifreeze protection | PC | Check if the water temperature is less than 4 ° C and if the ambient temperature is less than 2 ° C |
| Water flow fault | PL | • Check if the exhaust pump is working<br>• Check if there is air intake in the waterway system |

| NO. | Frequentiy asked questions | Processing method |
|---|---|---|
| 1 | The display screen does not light up | • Check if the power cord is securely plugged in<br>• Check if the leakage switch is set to the power-off position |
| 2 | Press the key button and the machine will not start | • Check if the current water temperature has reached the set temperature |
| 3 | Low water flow rate | • Check if the filter is clogged |
| 4 | The universal wheel does not roll | • Check if the universal wheel is in the braking state |
| 5 | leaking | • Check if the water connector is tightened<br>• Check for missing sealing rings |

Before any maintenance operation, the heat pump must be completely stopped for few minutes before connecting pressure controllers. This is because high pressure and temperature inside the heat pump could be harmful.
Please check the following on a monthly basis:

- Check settings.

- Check securities.

- Check all electrical connections and ground.

- Check condenser cleanliness.

- Use soft soap and water to clean the heat pump casing, do not use solvents.

- After every 5-8 plunges, the water must be replaced, and the filter should be changed. Regular cleaning of the strainer is also essential to maintain water quality and system efficiency.

- It is recommended to replace the filter element every other month (users can adjust the cycle of replacing the filter element according to the actual water quality)

## COLD PLUNGE MAINTENANCE & USAGE GUIDELINES

● **Regular Maintenance:** Ensure regular filter changes, clean the strainer and replace dirty water to maintain long-term reliability. The cold plunge requires ongoing care.
● **Water Temperature:** Each 3-minute plunge may raise the water temperature by approximately 1°C. With multiple consecutive plunges, the temperature can increase significantly.
● **Stainless Steel:** 316 marine-grade stainless steel is highly durable but may show signs of corrosion in certain environments. It is the highest grade for this application.
● **Placement:** Install the cold plunge in a shaded, well-ventilated outdoor area. Direct sunlight can reduce energy efficiency and cooling performance.
● **Cooling Engine:** The cooling engine must be well-ventilated for optimal function.
● **Condensation:** Expect condensation around the filter manifold and ball valves, particularly with the cold plunge steel. The floor may get wet during use, filter replacement, or due to condensation.
● **Daily Use:** The cold plunge is designed for up to 5 plunges daily. Exceeding this will increase strain on the compressor, water pump, and internal components, affecting performance, efficiency, and cool-down times.
● **General Advice:** The cold plunge is not a "set and forget" product. Regular care ensures a reliable, long-lasting experience.

## TIMBER CARE

● **Material:** The ice bathtub is made from high-quality Western Red Cedar, which is more durable and resilient compared to Japanese cedar. It has a tighter grain structure and fewer knots, enhancing both its strength and appearance.
● **Natural Aging:** Over time, the wood will naturally develop a grey patina, adding a rustic charm to the tub.
● **Periodic Oiling:** To maintain the tub's fresh appearance, periodic oiling(quarterly) is recommended. This helps preserve the wood's natural beauty and offers additional protection against environmental elements.
● **Effect of Oiling:** Oiling will darken the timber significantly, changing its original color.
● **Normal Wear:** Minor cracking, movement, and color changes are typical for outdoor wooden products exposed to varying weather and water conditions.
● **Maintenance:** Regular care and maintenance will help the tub retain its durability and aesthetic appeal over the years.
● **Exposure to Sunlight:** Exposure to the sun will reduce performance and lead to premature fading and degradation of the cover, phone cradle, and chiller enclosure paint. Timber on the cold plunge may also fade and age sooner if exposed to the sun.

## WARRANTY

● The warranty period is 180 days from the date of purchase.
● Except for the filter, which requires regular replacement, other parts are not specified as needing replacement.
● Replacement of parts depends on the specific fault, its location, and the identified cause.
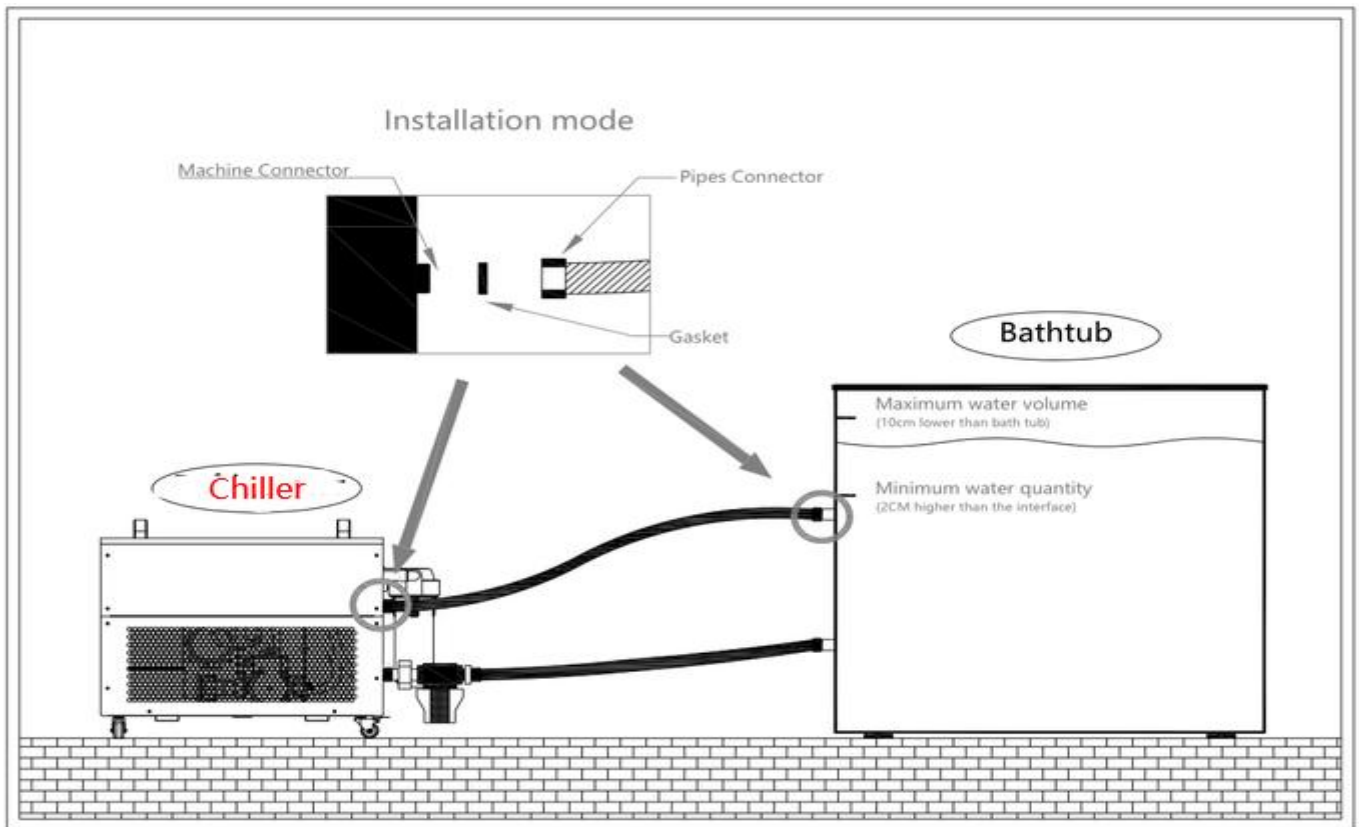● Further details will be provided upon follow-up.

| NO. | NAME. | QUANTITY. |
|---|---|---|
| 1 | Prefilter Fitting | 1 Pcs |
| 2 | Converter | 1 Pcs |
| 3 | Water Pipes | 2 Pcs |
| 4 | Gasket | 8 Pcs |
| 5 | Filter | 2 Pcs |
| 6 | Filter Spanner | 1 Pcs |

## PRODUCT NAMEPLATE

| ICE BATH COOLING UNIT | |
|---|---|
| Unit model | LSP-30R/S3N2-HY1 |
| Cooling capacity | 2.75 kW (A32°C/W25°C) |
| Running current (max.) | 8.5 A (12.0 A) |
| Power supply | 1 ~ / 120 V / 60 Hz |
| Ingress protection | IPX4 |
| Minimum circuit ampacity | 13 A |
| Maximum fuse/ circuit breaker | 15 A |
| Compressor rated load amperes | 6.0 A |
| Compressor locked rotor amperes | 38.9 A |
| Fan motor rated load amperes | 0.8 A |
| Max. inlet water temperature | 40°C |
| Electrical shock | I |
| Noise level | 52 dB (@ 1m) |
| Water connections | 3/4" |
| Water flow necessary | 1.3 m³/h |
| Water flow range | 10-25L/min |
| Refrigerant | R410a (0.45 kg) |
| Net/gross weight | 50 kg (54kg) |
| Max. allowable pressure (High side) | 4.4 Mpa (638 PSIG) |
| Max. allowable pressure (Low side) | 2.2 Mpa (319 PSIG) |
| Guangdong Hongyuan Home Furnishing Co., Ltd. | |

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FOR OUTDOOR USE LES UTILISATION À L' EXTÉRIEUR

Installation mode

Machine Connector

Pipes Connector

Gasket

Bathtub

Chiller

Maximum water volume
(10cm lower than bath tub)

Minimum water quantity
(2CM higher than the interface)

Obstacle

A distance of at
least 1.5 meters is
recommended

Fan heat sink

Chiller

A distance of at
least 0.3 meters is
recommended

Keep the water pipe
as straight as possible

Obstacle

Bathtub
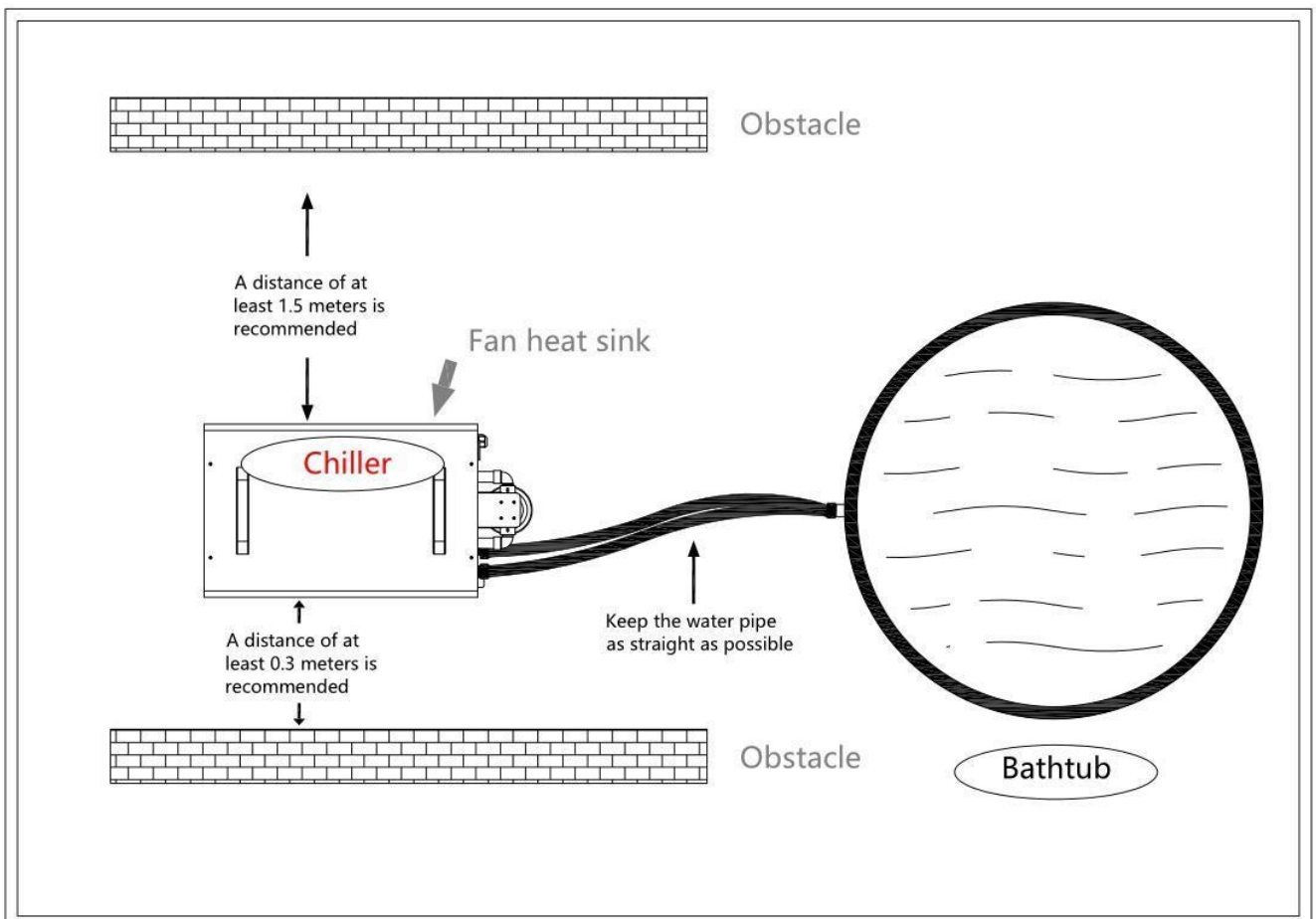
# WIFI：

Press and hold the ⏺ and ▲ keys for 3 seconds at the same time to enter the WIFI fast connect

mode configuration. The buzzer will sound once and 📶 flash quickly.

# Download the App

Search "Smart Life" in the Apple App Store or Google App Store.

Scan the QR code below, and download and install the "Smart Life" APP.

# User Registration

Click the icon 🏠 to start the software.

To use the "Smart Life" software for the first time, you need to register users: create a new account → enter a mobile phone number/email → enter a verification code, set a password → confirm

After successful registration, the software will jump to the "Create Family" interface: Create Family → Set Family Name → Set Location → Add Room → Finish.
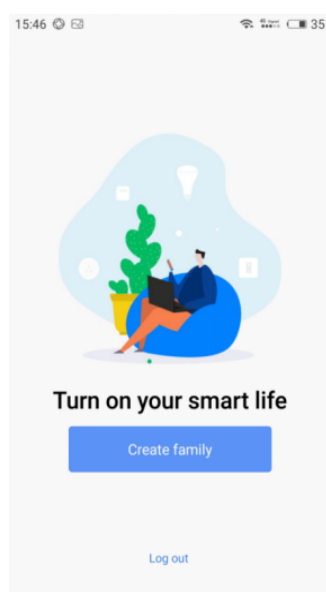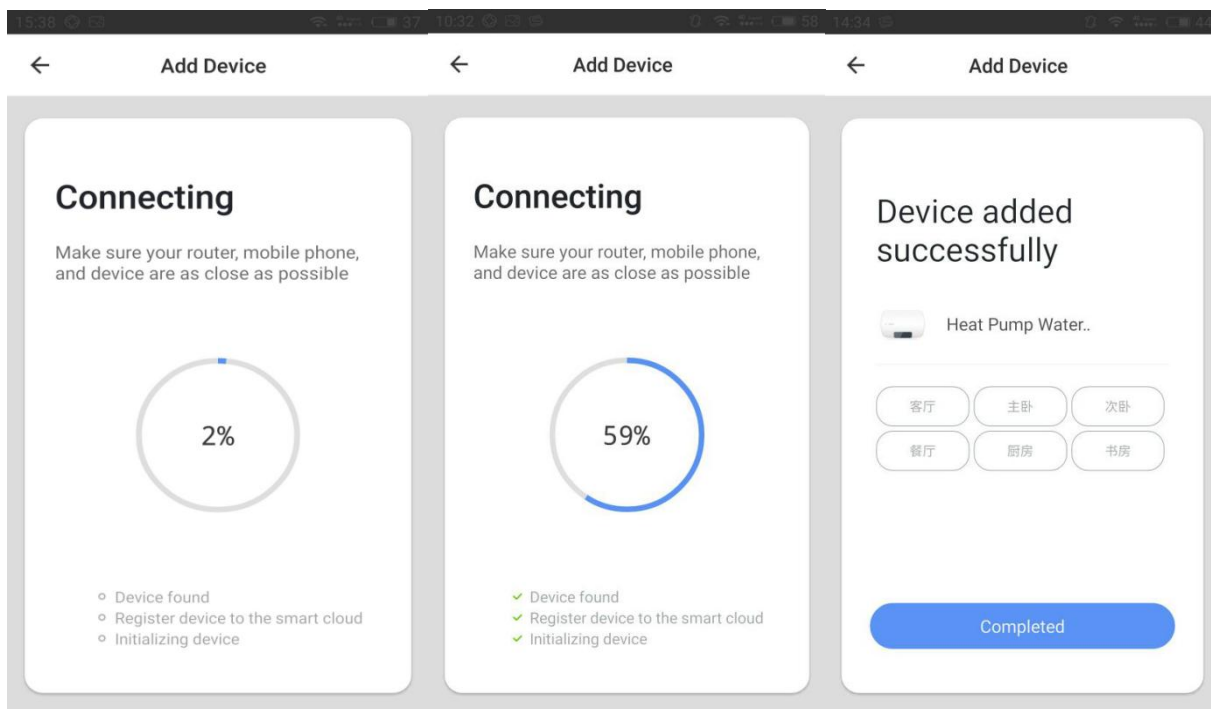
# Equipment connection steps

## 1. SMART mode

OPEN "WLAN"

Connect to the network
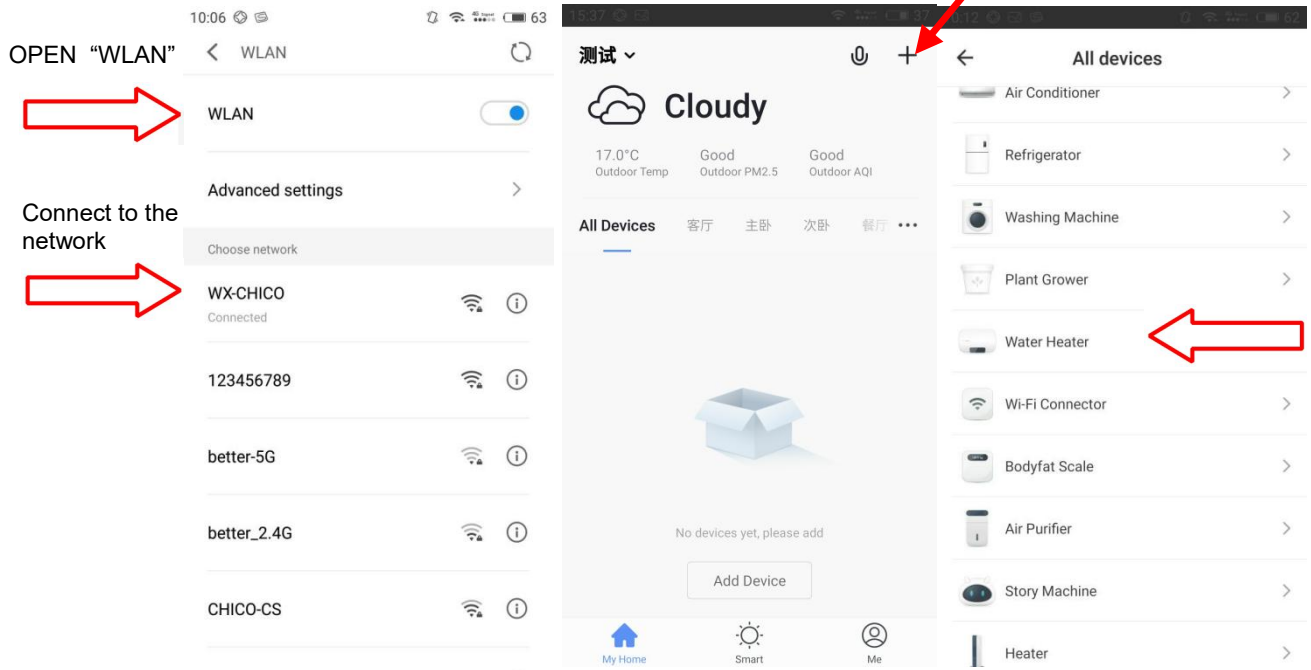
Long press the WIFI reset button for 3 seconds, and then click "confirm that the indicator is flashing".
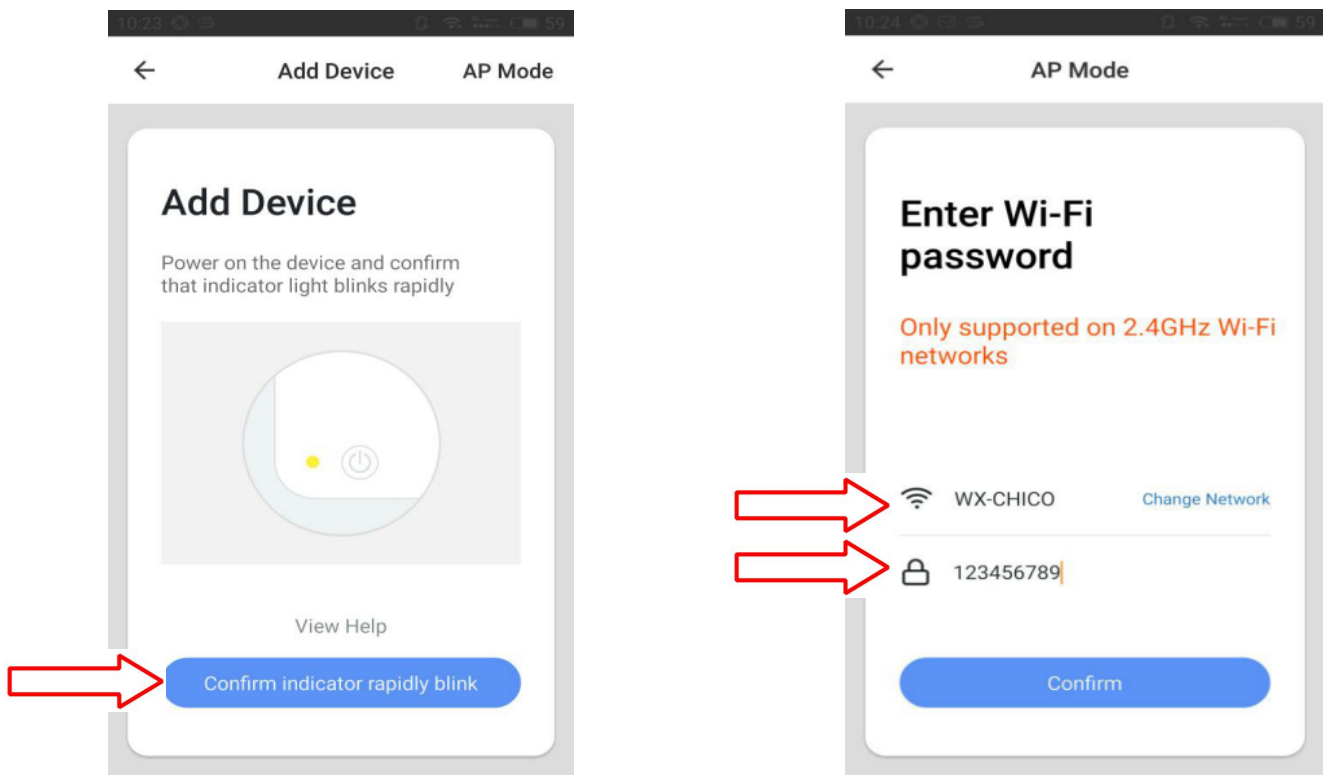
# Operation

The device is bound successfully. Click "completed" to enter the operation page directly.



Model

Setting temperature

Water temperature

Set temperature regulation

ON/OFF

Setting

Model