Operating manual



Icebath chiller

First, please read the instruction manual carefully.



Thank you very much for choosing the bathtub chiller developed by our company. In order to facilitate your purchase and safe, correct and efficient use of this equipment, please read this manual carefully and pay attention to the following points when usingi it.



Pay attention to:

Power supply with leakage protector and reliable grounding must be used. (The device´s own leakage protector is not included).

You must disconnect the power supply before touching the water (Unplug the plug).

When the ambient temperature is below 0 degrees Celsius, it is forbidden to use the equipment and the water in the equipment should be drained (Prevent equipment damage caused by icing).

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1. Main use and scope of application.

The products can be used in bathtub refrigeration, industrial cold water, hydrophonic agriculture, seafood farming, etc.

2. Requiermnent for use conditions.

2.1 Working environment conditions.

***Altitude :** <;2000m

*Ambinet temperatuure:

Single cooling seried 0℃-+55℃ cold and warm seried -5℃-+55℃

*Relative humidity: 50%- 95%

*Atmospheric pressure: 86-106kpa.

2.2 Ambient environment requirements.

The place where the device is used shall be free from explosion, corrosive gas,conductive dust and violent vibration source.There are condensed water floor drains and measures to prevent lightning and static electricity.

2.3 Power requirement.

The power supply is alternating current and the voltage and frequency are nameplate according to the parameters.

2.3.1

Power source

*Rated voltage: 115v with allowable of 5%

*Frequency: 60Hz

Ougui power supply

*Rated voltage: allowable deviation of 220v~240v is 5%

*Frequency: 50Hz

2.3.2 Configure 16a leakage protector and effective grounding wire.

3. Water pipe connection.





4. Parameter setting.

LoT-TempControllerHY01 operating instructions

LoT-TempControllerHY01, a temperatuure controller is a professional cold/warm water machine, cold and warm seafood machine designed by the split line automatic constant temperatuure Control new mode, to more perfect system monitooring intelligent, automatic identification of cooling/ heating conversion Control mode. Sensor fault self-test function, simple operation and compleate functions make the majority of users get better application in use.

4.1 Technical Parameter

1) Power consumption: ≤5W
2) Output load: compressor ≤40A, others ≤5A
3) Display range: 0~45°C
4) Control range: 0~45°C
5) Resolution: 0,1°C, Accuracy: **±**°C
6) Working voltage: AC 220V/110V±10%50/60Hz
7) Working environment: -10°C~50°C RH≤95%
8) Control objects: compressor, fan, four- way valve, light, oxygen pump and water pump
9) Imput signal: one way temperatuure sensor (NTC: 10K) and three-way switch detection

4.2 Front of Display.



4.3.Key

Icon	Name	Description
PUMP 	**Water pump**	Turn on or off the water pump.

RUN 	**Run**	Run or stop the device only after the pump is runnings.
UP 	**UP**	In the case of parameeter setting: Use to upward adjust parameters when the pump is not running: Press [UP] and [DOWN] or 5 second at the same time, the parameters are restored to factory defaults and the buzzer buzzes four times.
SET 	**SET**	If no parameter settings are displayed, press and hold down for 10 seconds to enter the distribution mode manually. The buzzer buzzes three times. In the case of parameter setting: Press to switch to parameter setting and hold down to exit parameter setting.
DOWN 	**DOWN**	In the case of parameter setting: Used to adjust parameters downward. When the pump is not running:Press[UP] and [DOWN] or 5 seconds at the same time, the parameter are restored to factory defaults and the buzzer buzzes four times.
(S) ZONE	**0ZONE**	Turn the oxygen pump on or off.
GH	**UV Light**	Turn the lights on or off.

4.4. Indicator Light

Icon	Name	Description
	0Zone condition	Always bright: 0zone turn on. Light off: 0zone off

	UV Light condition	Always brig ht: Light turn on. Light off: Light turn off
Defrost	Defrostin condition	Always bright: Defrosting. Light off: Stop defrosting.
Constant temp	Constant temp	Always bright: Target temperatuure reached. Light off: Not at target temperature.
	Alarm	Always bright: A fault occurs. Light off: No fault occurs.
	WiFi	Always bright : The server is connected. Blinking slowly: The serve is not connected. Quick blinking: The network is being configured.

4.5 Parameters List

ID	Name	Range	Initial value	Description
NULL	Set temp	O~45 (°C) 32~113(F)	25°C	Set target temperatuure.
Pd	Password	000~999	850	Menu password: Use to encrypt the data in the menu to prevent misoperations by non-professionals.
P01	Temperature calibration	-10~10 (°C) -18~18 (F)	0(°C) 0(F)	Temperature correction: This function can be used to correct the deviation between the displayed temperature and the actual temperature.
P02	Temperature return difference	0~10 (°C) 0~18 (F)	0(°C) 0(F)	When the water temperature is equal to or greater than the set temperature +

				temperature difference, start cooling or heating.
P03	Defrosting Cycle	10~240 (minute)	60 (minute)	When the continuous heating time reaches this set value, the defrosting sensor temperature will be detected to check whether the defrosting work is in line with the defrosting wokr (With the defrosting sensor enabled, the defrosting work will be directly started).
P04	Defrosting time	1~45 (minute)	3 (minute)	The working time during defrosting operation. When the time is over, defrosting will exit（with the defrosting sensor enabled, reaching the defrosting stop temperature (P14) will also exit the defrosting.)
P05	Temperature unit	0: °C 1: F	0: °C	Toggle the display temperature in degrees Celsius or Fahrenheit.
P06	Working mode	0: HC 1: SC	0: HC	HC: cold and warm mode. C: single cold mode.
P07	Upper temperature limit	-10~100 (°C) 14~212 (F)	60 (°C) 140 (F)	Limit the maximum value of shutdown temperature and the temperature exceeds this setting to triger ultra- high temperature protection.
P08	Lower temperature limit	-10~100 (°C) 14~212 (F)	-1 (°C) 30,2 (F)	Limit the minimum value of shutdown temperature and the temperature is lower than this setting to triger ultra-low temperature protection.
P09	Current overload protection	1~50 (A)	8 (A)	When the compressor is working, the current exceeds the set value to trigger overload protection.
P10	Overload delay protection	1~29 (Sec)	10 (Sec)	The overload duration of the working current of the compressor is greater than

				the set value to trigger the protection.
P11	Abnorma temperature alarm	0~8 (°C) 0~14.2 (F)	0 (°C) 0 (F)	Set to 0= (single water temperature probe mode). Set 1 to 8 °C (1.8 to 14.2°F)as the dual water temperature probe mode.When the temperature difference between the main water temperature and the standby water temperature is greater than this set value, abnormal protection will be triggered.
P12	Defrosting temperature sensor	0: Disable 1: Enable	0: Disable	Wheter to enable the defrosting temperature sensor.
P13	Defrosting starting temperature	-10~1(°C) 14~33.8 (F)	-4 (°C) 28.8 (F)	When the defrosting temperature sensor is enabled, the defrosting starts when the temperature is reached.
P14	Defrosting stop temperature	0~10(°C) 32~50(F)	1(°C) 33.8 (F)	When the defrosting temperature sensor is enabled,reach the temperature to exit defrosting.
P15	Compressor start-up delay	0~600 (Sec)	60 (Sec)	After the fan starts, delay the compressor for a certain periood of time.
P16	Fan starting delay	0~600 (Sec)	120 (Sec)	When the working mode enters cooling or heating, start the fan after a delay of a periood of time.

4.6 Error Code

Code	Name	Description	Restrict work objects
Err 001	Temperature sensor fault	The water temperature sensor is connected abnormally or damaged.	Compressor, fan, four-way valve
Err 002	The secondary temperature sensor is fault	When P11 is greater than 1C or P11 is greater than 1.8F; the connection of the auxiliary temperature sensor is abnormal or damaged.	Compressor, fan, four-way valve
Err 003	Water flow fault	When the pump is started, no water flow is detected for a certain periood of time.	Water pumo, compressor, fan, four-way valve
Err 004	Low pressure fault	When the compressor is running, the low pressure alarm sensor is connected abnormally or damaged.	Compressor, fan, four-way valve
Err 005	High pressure fault	When the compressor is running, the high pressure alrm sensor is connected abnormally or damaged.	Compressor, fan, four-way valve
Err 006	Current overload	When the compressor is working, the current value exceeds the set value of P09	Compressor, fan, four-way valve
Err 007	Defrosting temperature sensor malfunctions	When parameters P12 is enabled, the defrosting temperature sensor is connected abnormally or damaged.	Compressor, fan, four-way valve
Err 008	Major fault of temperature difference	Whe the parameters P11 is greater than 1°C or P11 is greater than 1.8F; the temperature difference between the main and secondary temperature sensor is greater than P11	Compressor, fan, four-way valve
Err 009	Ultra low temp fault	The temperature measured by the water temperature probe exceeds the set value of P08	Compressor, fan, four-way valve
Err 010	Ultra high temp fault	The temperature measured by the water temperature probe exceeds the set value of P07	Compressor, fan, four-way valve

If the following faults occurt, the fault will be locked and the alarm will be kept. After the fault is locked, it is necessary to manually shut down and then turn on to eliminate the current alrm.
Err 003. Err 004. Err 005. Err 006

4.7 APP Download

Through the following link: https:/support.tuya.com/zh/help/detail/Kahk186igflgi
or directly use the mobiile browser to scan,
scan the QR- Code in Figure 3-1 and download it.

Figure 3-1:Smart Life download QR code

4.8 Open the APP

After opening the APP, if you have not registered an account, it will prompt you toregister an account. You can choose to register an account according to the prompt or experience it directly. After opening, the home page is displayed as shown in the following figuure 3-2.



Figure 3-2: Smart life APP home page

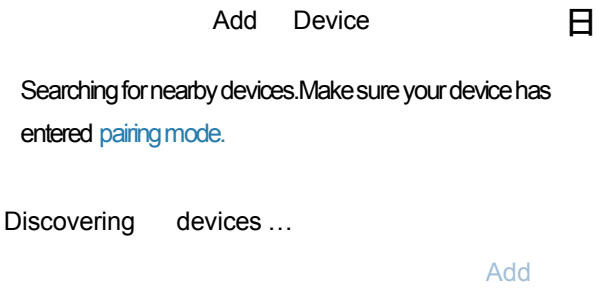


Figure 3-3: Add a device

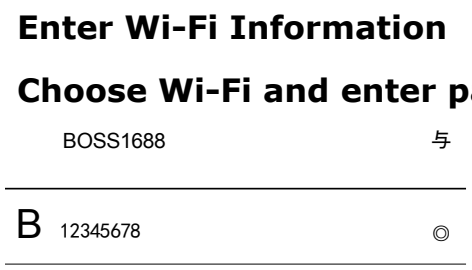


Figure 3-4: Enter the WiFi information

4.9 Add Decice

After connecting to WiFi and turning on Bluetooth and GPS ,
Click „ Add device" in Figure 3-2 or the plus sign in the blue circle in the upper right corner, there will be a „Add device" Under the plus sign.
After clicking „Add device" you will enter the page as shovn in Figure 3-3, as shown in the red box, there is a device discovery information and there isa n add button with white characters on a blue backround on the right. Aftre clicking, it will be prompted to enter WiFi information, as shown in Figure 3-4.

Click „NEXT" and wait for a while. After the device is successfully added, the APP page is displayed as shown in Figure 3-5 and then it will jump to the main page (Figure 3-6) of the device after clicking „Done".

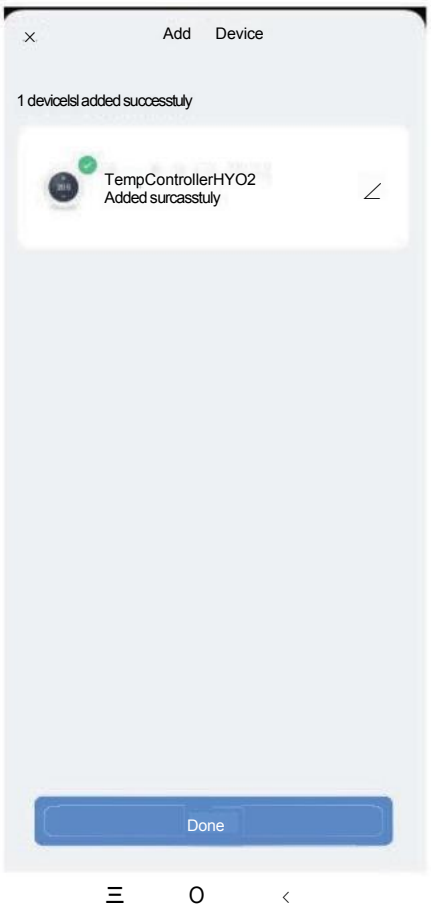


Figure 3-5:The device is added



Figure 3-6:Home page



PM-1HP

ICE BATH CHILLER parameters	
Adjustable Temperature Range:3-45℃	
Machine size	470*500*600MM
Machine Power	780W
Cooling capacity	2720W
Water pump	Power 60W
	Flow rate 2000L/H
UV	18W
Ozone	5W
Water inlet filter	Stainless steel mesh
Water outlet filter	PP cotton
WIFI	Tuya smart
Noise	65dB - 72dB
Water inlet and outlet	3/4INCH
Water pipe	With insulation 2 meters
Packaging size	63cm*51cm*68cm
Gross weight	45kg

Water volume 300L			
Ambient temperature ℃	Starting temperature ℃	Arrive temperature ℃	Time ≈H
25	25	12	2
25	25	5	4
25	25	3	5
Water volume 450L			
25	15	1	4
25	1	38	5
25 out door，no cover	14	3	8
Water volume 500L≥6.9H			
Water volume 750L≥13H			