# 5. Equipment commissioning

- **5.1**. Connect the water pipe, add water to the bathtub, and ensure that there is no leakage at each interface.
- **5.2** After adding enough water, plug in the power supply (Must be equipped with a leakage protector and an effective grounding wire).
- **5.3**. Press the water pump button (the water pump indicator light is on) to start the water pump, Press the run button again to turn on the device (refrigeration light flashing, heating light flashing, or constant temperature light on indicates that it has been turned on ), If the cooling indicator light flashes or the heating indicator light flashes, then it indicates that it is delayed starting (It will start in about 3 minutes)
- **5.4.** Check if the water pump is running and if the water is circulating normally, if it is cooling mode: the fan starts for about 5 minutes to blow hot air (Indicates that the machine is functioning properly); if it is heating mode: start the fan for about 5 minutes and blow cold air (indicates that the machine is running normally).
- **5.5**. If there is a malfunction or any problem, please contact the dealer.

#### 6, other

### 6.1 Random files and accessories

operation instructions————————————————————————————————————
Supporting filter element—————
certificate1

**6.2.** Manufacturer's commitment, warranty, and after-sales service

The production, assembly, and debugging of every product in our company all are carried out under strict quality control, To ensure that users use all qualified products.

# operating manual



Ice bath 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 using 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.

See more content>>) .

# directory

one、Main uses and scope of application······	•1
two、Conditions of use should be·····	·1
three Installation schematic	2
four、Parameter setting3	3-8
five、Equipment debugging ······	9
six、notes	9



## 1. Main uses and scope of application

Longyu series chiller is Foshan Jiahe Refrigeration Equipment Co., Ltd., which is developed and produced for Bathtub refrigeration, industrial cold water, hydroponic agriculture, seafood culture, etc.

# 2. Requirements for use conditions

## 2 .1 Working environment conditions

\*Altitude: <; 2000m

\*Ambient temperature:

Single cooling series 0°C-+55°C cold and warm series-5°C-+55°C

\*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 equipment parameters. 2.3.1

power source

\*Rated voltage: 115v, with allowable deviation 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

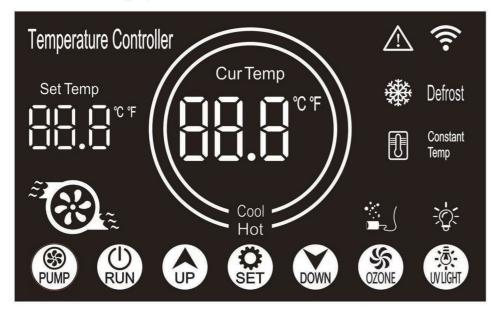
# IoT-TempControllerHY01 Operating instructions

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

#### 4.1. Technical Parameter

- 1). Power consumption:  $\leq 5W$
- 2). Output load: compressor  $\leq 40$ A, others  $\leq 5A$
- 3). Display range:  $0 \sim 45$  °C
- 4). Control range:  $0 \sim 45^{\circ}$ C
- 5). Resolution: 0.1 °C, Accuracy: ± 1 °C three-way switch detection
- 6). Working voltage: AC 220V/110V $\pm$ 10% 50 / 60Hz 7). Working environment: 10°C  $\sim$  50 °C RH  $\leq$  95%
- 8). Control objects: compressor, fan, four-way valve, light, oxygen pump and water pump
- 9). Input signal: one way temperature sensor (NTC: 10K) and

# 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	In the case of parameter setting: Used to upward adjust parameters.  When the pump is not running: Press [UP] and [DOWN] for 5 seconds at the same tin 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 10S 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] for 5 seconds at the same time, the parameters are restored to factory defaults, and the buzzer buzzes four times.			
OZONE	Ozone	Turn the oxygen pump on or off.			
UVUGHT	UV Light	Turn the lights on or off.			

#### 4.4. Indicator Light

Icon Name		Description		
		Always bright: Ozone turn on Light Off: Ozone turn off		
₩ UV Light condition		Always bright: Light turn on Light Off: Light turn off		
Defrost	Defrosting condition	Always bright: Defrosting Light Off: Stop defrosting		
Constant Temp	Constant Temp  Constant temp  Constant temp  Constant temp  Always bright: Target temperature 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 server is not connected Quick blinking: The network is being configured		

#### 4.5. Parameters List

ID	Name	Range	Initial value	Description
NULL	Set temp	0~45 (°C) 32~113 (°F)	25 (°C)	Set target temperature.
Pd	Password	000~999	850	Menu password: Used 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	Temperatures 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 work (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 trigger 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 trigger 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	abnormal 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	Whether to enable the defrosting temperature sensor	
P13	Defrosting starting temperature	-10~1 (°C) 14~33.8 (°F)	-4 (°C) 24.8 (°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 period 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 period of time	

# 4.6. Error Code

Name	Description	Restrict work objects
Temperature sensor fault	The water temperature sensor is connected abnormally or damaged	Compressor, fan, four-way valve
The secondary temperature sensor is faulty	When P11 is greater than 1 ° C or P11 is greater than 1.8 ° F, the connection of the auxiliary temperature sensor is abnormal or damaged	Compressor, fan, four-way valve
Water flow fault	When the pump is started, no water flow is detected for a certain period of time	Water pump, compressor, fan, four-way valve
Low pressure fault	When the compressor is running, the low pressure alarm sensor is connected abnormally or damaged	Compressor, fan, four-way valve
High pressure fault	When the compressor is running, the high pressure alarm sensor is connected abnormally or damaged	Compressor, fan, four-way valve
Current overload	When the compressor is working, the current value exceeds the set value of "P09"	Compressor, fan, four-way valve
Defrosting temperature sensor malfunctions	When parameter P12 is enabled, the defrosting temperature sensor is connected abnormally or damaged	Compressor, fan, four-way valve
Major fault of temperature difference	When the parameter P11 is greater than 1°C or P11 is greater than 1.8°F, the temperature difference between the main and secondary temperature sensors is greater than P11	Compressor, fan, four-way valve
Ultra low temp fault	The temperature measured by the water temperature probe exceeds the set value of "P08"	Compressor, fan, four-way valve
Ultra high temp fault	The temperature measured by the water temperature probe exceeds the set value of "P07"	Compressor, fan, four-way valve
	Temperature sensor fault  The secondary temperature sensor is faulty  Water flow fault  Low pressure fault  High pressure fault  Current overload  Defrosting temperature sensor malfunctions  Major fault of temperature difference  Ultra low temp fault  Ultra high temp	Temperature sensor fault  The secondary temperature sensor is connected abnormally or damaged  When P11 is greater than 1 ° C or P11 is greater than 1.8 ° F, the connection of the auxiliary temperature sensor is abnormal or damaged  When the pump is started, no water flow is detected for a certain period of time  Low pressure fault  When the compressor is running, the low pressure alarm sensor is connected abnormally or damaged  When the compressor is running, the high pressure alarm sensor is connected abnormally or damaged  When the compressor is working, the current value exceeds the set value of "P09"  Defrosting temperature sensor malfunctions  Major fault of temperature difference  When the parameter P12 is enabled, the defrosting temperature sensor is connected abnormally or damaged  When the parameter P11 is greater than 1.8°F, the temperature difference between the main and secondary temperature sensors is greater than P11  The temperature measured by the water temperature probe exceeds the set value of "P08"

If the following faults occur, 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 alarm

6

Err 003 、Err 004 、Err 005 、Err 006

#### 4.7. APP Download

Through the following link: <a href="https://support.tuya.com/zh/help/">https://support.tuya.com/zh/help/</a> detail/Kahkl86jqflgj</a> . Or directly use the mobile 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 to register 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 figure 3-2.

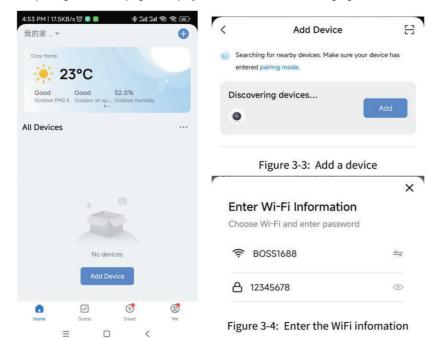


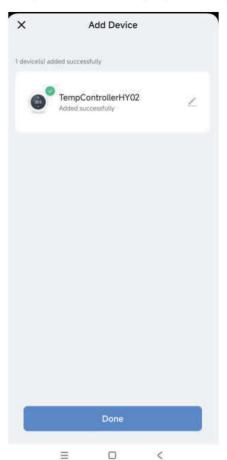
Figure 3-2: Smart life APP home page

#### 4.9. Add Device

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 shown in Figure 3-3, as shown in the red box, there is a device discovery information, and there is an add button with white characters on a blue background on the right. After 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".



Chiller Cur Temp: 23.4°C Set Temp - 25.0°C Work Mode Warm

Figure 3-5: The device is added

Figure 3-6: Home page