INSTRUCTION MANUAL OF THERAPY CHILLER

Please read this manual carefully before installation, operation and maintenance.

CONTENT

⚠ CAUTION

1. Do not install the chiller in closets, cabinets, or other small unventilated places.
2. Make sure there is 100cm clear space around the chiller vents when in use.
3. Never cover the intakes or exhaust openings with clothes, towels, or other objects.
4. Never turn, or store the chiller upside down.
5. Do not climb, sit, or stand on the chiller, or place objects on top of it.
6. Use extreme caution when operating near children, the elderly or infirm.
7. Never insert fingers of foreign objects into the ventilation grilles or other parts of the chiller.
8. Do not place heavy objects on the power cord or run the cord under carpets or rugs.
9. Do not touch, or use the chiller with wet hands.
10. The operators of the chiller must be at least 18 years old.

⚠ WARNING

Electricity is very dangerous, in order to prevent accidents or death please pay attention to safety and ensure you fully read this instruction manual before use.

1. During and after transportation, the Chiller Unit must stay upright on a stable surface at all times.
2. After transportation, and before use, the chiller must be left for 24hrs for the refrigeration gas to settle.
3. Make sure there are no water leaks from the Chiller Unit, or inlet and outlet pipes when connected to the Recovery Tub.
4. Make sure the Chiller Unit is plugged into an AC socket or extension cable that is suitable for use, properly grounded, has a built in surge protector and preferably is IP65 rated.
5. Ensure the Chiller Unit is kept dry at all times, do not immerse, splash or spray the unit with water. If the unit does get wet, unplug it immediately and do not use.
6. Never leave the Chiller Unit switched on when using the Recovery Tub, always ensure the unit is switched off during your cold water therapy session.
7. If the Chiller Unit stops working or doesn't work when switched on, unplug it immediately and do not use.
8. We accept no responsibility for misuse or failure to use this equipment safely as instructed.

I- USING THE WIFI CONNECTED MOBILE APP

You can use the Tuya Smart or Smart Life mobile APP to control your Smart chiller via WiFi. Download the app from the respective app store for your device. Use the QR Code below to start now.

WIFI
ENABLED

Please note: As these are both 3rd party apps, we accept no responsibility for issues or incompatibility when using this with your smart chiller.

Tuya Smart

Smart Life

At present, Tuya Smart can only support 2.4G WiFi signal. Therefore, before connecting the phone to the chiller, please confirm that the WiFi used by your phone is in the 2.4G frequency band. It will not be able to connect to the chiller if it is in the 5G band.

II- PACKING ACCESSORIES LIST

1 x Smart Chiller / Heater Unit
1 x high-density water filter
1 x Washable hair filter
2 x Water Pipes
2 x Inlet & outlet adapter
4 x large 2-inch wheels

UNPACKING YOUR SMART CHILLER

1. First find a suitable ventilated area and flat solid surface to unpack and set up.
2. Complete the steps in the QUICK START GUIDE to assemble your Smart chiller.
3. Read carefully through this user manual before using the Smart chiller.

III- QUICK START GUIDE

1. SETTING UP THE SMART CHILLER

1) Ensure you have assembled your Recovery ice bath first before continuing.
2) Place the Smart Chiller on a stable surface near to the Recovery ice bath.
3) Connect both the Inlet and Outlet water pipes, and ensure the valves are tight.
4) Next, ensure the hair filter is installed and filter is fully secured using the supplied wrench.
5) Insert the blue particle water filter into the bottle, and ensure the bottle is tight.

2. WHEN FILLING WITH WATER

1) Your Recovery can be filled with cold or hot water, up to a maximum temperature of 50°C. Always start filling with room temperature water first, adjusting to your desired temperature as the Recovery tub gets closer to full.
2) Never fill your Recovery tub to more than ⅔ full so to compensate for your body mass and displacement of water when you enter. It's always best to start ½ full and then adjust afterwards.

3. SWITCHING ON THE Smart Chiller

1) Plug in and switch on the Smart Chiller, the unit will self-prime until its ready to use.
2) Once the chiller has finished its priming cycle it will start to chill and filter the water within a few minutes.
3) It can take up to 3-4hrs to chill the water from 18°C down to a frosty 3°C.
4) Once the desired temperature is reached, switch off the Smart Chiller unit before starting your cold water therapy session.

4. CUSTOMER SUPPORT

If you have any questions about setting up or using your recovery product, please visit our website for further information, FAQs, troubleshooting and customer support.

IV- TECHNICAL SPECIFICATIONS

Model	1/2HP chiller	1.0HP chiller Pro	1.5HP chiller Max
For Recover Tub	125~200L	200L-400L	400L-600L
Setting temp.	2-40°C	2-40°C	2-40°C
Temp. Units	°F & °C	°F & °C	°F & °C
Wireless control	WIFI & Bluetooth	WIFI & Bluetooth	WIFI & Bluetooth
Physical control	Touch screen	Touch screen	Touch screen
Mobile APP	iOS & Android	iOS & Android	iOS & Android
Compatibility	Amazon Alexa, Google Assistant, SmartThings, IFTTT		
Voltage (EU)	220V/50HZ	220V/50HZ	220V/50HZ
Voltage (US)	110V/60HZ	110V/60HZ	110V/60HZ
Input power	518w-578W	810W	1120W-1160W
Input current	4.6A-5.2A	7.0A	10.3A
Cooling power	1840W	2720W	4465W
Heating power	2320W	3100W	4700W
Refrigerant	R32/360g	R32/600g	R32/700g
Sterilizer	UV Sterilizer	UV Sterilizer	UV Sterilizer
Filter (built-in)	5L	10L	10L
Pump power	80W	100W	100W
Pump flow	25L/min	40L/min	40L/min
Advised water flow	3.5-4.5L/min	5.0-7.0L/min	6.0-8.0L/min
Noise	≤55DB	≤55DB	≤60DB
Product Size	560*380*435mm	625*425*445mm	655*455*475mm
With wheel	560*380*495mm	625*425*505mm	655*455*525mm
Net weight	36.0Kg	45.0Kg	52.0Kg
Gross weight	43.0Kg	54.5Kg	62.0Kg

***** Due to the continuous upgrading of product technology, the above data is subject to update without prior notice. Please refer to the nameplate on the machine.

V- INSTALLATION AND CONNECTION

⚠ ATTENTION

1) Always keep the chiller upright. If it is tilted more than 30°, the chiller must be left for 24 hrs for the refrigeration gas to settle.

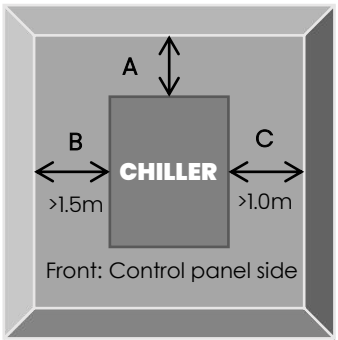
2) After connecting the chiller, do not add corrosive cleaning agents into the bathtub. Any chemical additives may reduce the service life of the chiller.

1 Location of your Chiller

1) The water chiller will work properly in any desired location as long as the following three factors are present:

Fresh Air Electricity RecoveryTub Water

2) The unit may be installed in virtually any outdoor location as long as the specified minimum distances to other objects are maintained (see drawing below).



Side A: Filter and water hose connector. There is no requirement for the gap distance as long as it does not affect the connection.

Side B: Fan outlet, it should be at least 1.5 meter away from obstacles.

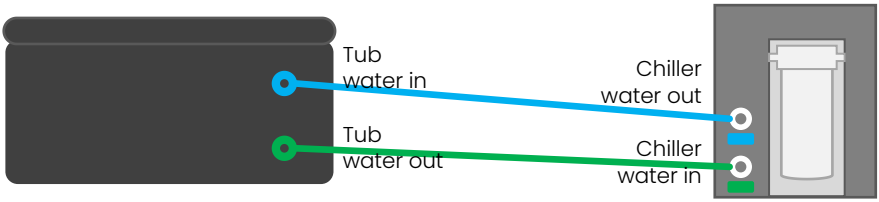
Side C: Radiator location, keep at least 1.0meter away from obstacles

3) Never install the machine in a closed room with limited air volume in which the air discharged from the machine will be reused, or close to shrubbery that might block the air inlet. Such locations impair the continuous supply of fresh air, may reduce the running efficiency and possibly prevent sufficient heat output.

So please make sure that the spacing is sufficient to prevent the device from getting hot due to poor heat dissipation, which may burn out the device motherboard and shorten its service life.

2 Connect Chiller and Recovery tub

1) Connect the tub green-marked water outlet to the chiller green-marked water inlet via a water hose.
2) Use another water hose to connect the tub blue-marked water inlet to the chiller blue-marked water outlet.
3) Tighten the chiller and recovery tub hoses joints, always ensure there are no leak.
4) Use the accessory plastic wrench to tighten the filter bottle so it does not leak.



*Contact the merchant to obtain relevant operation guidance videos.

3 Recovery tub filling

1) Fill the water to exceed the recovery tub green-marked outlet.
2) Power on the chiller, set temperature, the chiller water pump starts working.
3) Stop filling when the water is close to the tub blue water inlet, continue filling when the chiller water flow becomes normal.
4) Close the tub lid, wait for the water temperature to reach the target temperature.

ATTENTION

When the chiller is turned on, there is a lot of air in chiller that needs to be exhausted from the bathtub water inlet. If the bathtub water level exceeds the bathtub water inlet, water will flow back into the chiller, making it difficult for the air to be exhausted, resulting in poor water flow in the chiller.

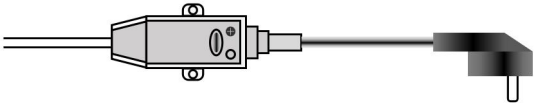
4 Electrical connection

After all water hoses are connected, please follow the steps below:

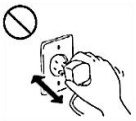
1) Turn on the water pump, check if the device is leaking, and confirm that water flows from the bathtub to the chiller and back to the bathtub.
2) Connect the power supply to the chiller, and after setting the target temperature on the control panel, the machine will start.
3) After a few minutes, check if the air blowing out of the f is hot air.
4) When you turn off the water pump, the device should also turn off automatically.

⚠ ATTENTION

Before connecting the machine, make sure that the supply voltage matches the operating machine's voltage.



There's RCD plug that equipped with power cable; it helps to offer a full electrical protection.



- Make sure the power plug is secured: loose plug may cause electric shock, or fire.
- Never pull out the power plug when your machine is running: Such improper operation may cause an electric shock or fire.
- Never use damaged or unspecified electric wire: it may cause electric shock or fire.

5 Initial operation note

1) In order to cool the recovery tub water, the water pump must run firstly to make the water circulated through the machine. Chiller will not start up if the water is not circulating.

2) Depending on the operating conditions, it may take a long time for the water to be heated or cooled to the target temperature. A properly insulated cover can significantly reduce this time and prevent heat loss;

6 Condensation

The air suctioned into the machine will be cooled to be a very low temperature by the evaporation process of your machine's refrigerant, at its heating mode. This may cause condensation on fins of the evaporator, which might be as much as several litters per hour at high relative humidity.

Sometimes users may treat this phenomenon as water leakage, while this is quite normal and no need to do anything.

7 First time use precautions

1) Before installing the chiller, be sure to clean the recovery tub and rinse off any foam-generating detergent to prevent clogging of the chiller filter;

2) When installing the hose, connect the tub and the chiller inlet and outlet correctly according to the instructions, and do not connect them in reverse;

3) When filling the tub with water for the first time, the water level in the tub should not be higher than its inlet, You can continue to add water after the chiller water flow is normal;

4) The chiller water inlet must be lower than the tub water level, ensure the chiller inlet hose is filled with water, and Water can automatically flow into the chiller. Water hose cannot be hung high in the air, otherwise the equipment will not work.

8 Solutions to Noise

The chiller may make strange noises or have intermittent water flow. This is due to air in the chiller and water hoses. please follow these instructions below:

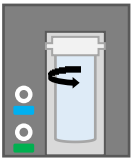
1) Pour enough water into the bathtub to cover the chiller inlet.

2) Loosen the filter bottle slightly to create a gap for air to escape.

3) Run the chiller, allowing water to enter the filter and air to escape through the gap.

4) Once water flow is sufficient, the chiller will function normally.

5) Tighten the filter bottle cap

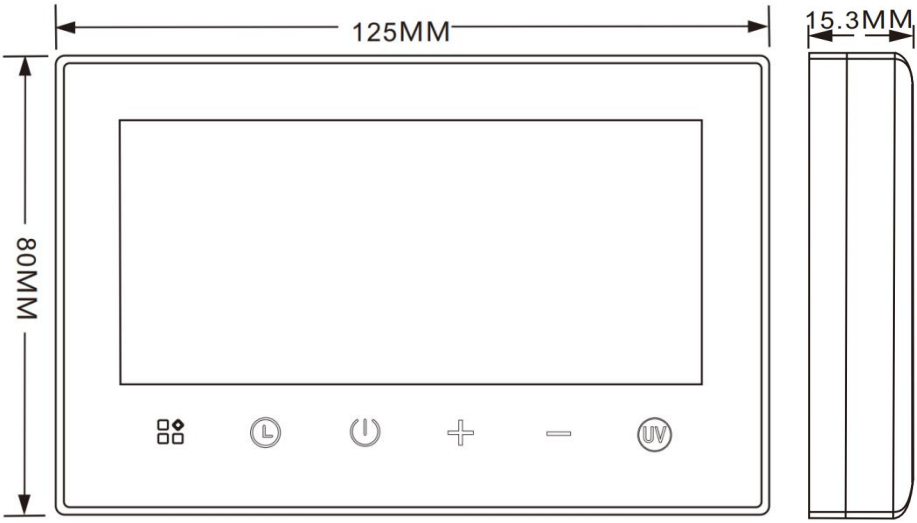
	Rotate the filter bottle to the left, loosen the filter bottle slightly by 1-2 turns leaving a gap to release the air.
	After water flow into the filter bottle, the air is pushed out by the water through the gap. Tighten the filter bottle by twisting it to the right.

You can also remove the chiller drain pipe, let the air flow out with the water, and then reinstall the water pipe.

ATTENTION

All installation and testing must be done on the premise that the product is not damaged and is safe to operate.

VI- OPERATION GUIDE



(LxWxT: 125x80x15.3MM)

1 Controller Panel

Control Power: 90-250VDC, 50/60Hz

Temperature setting range: 17~176°F

Temperature display range: -4~248°F

Display & set accuracy: 1°F

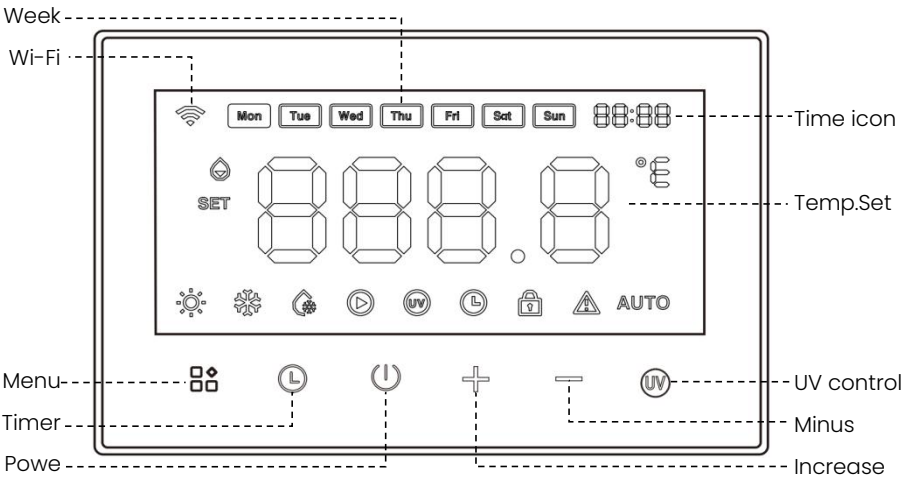
Transport temp. range: -13~176°F

Ambient temperature: -13~176°F

2 Technical Feature

- VA LCD display Touch control
- WIFI communication
- Timer on/off
- Automatic defrost function
- Forced defrost function
- Winter antifreeze function
- Electronic expansion valve control
- Exhaust high temp. protection
- With power-off memory function
- Water temperature automatic control
- Compressor safety protection function
- Temperature sensor fault self-check
- Circulating water pump automatic control
- Water flow detection/protection function
- High/low voltage protection function
- Electric heating control

3 Display Icon Description



Icon	Name	Icon	Name
	Menu/Function		Heating
	Timer/Clock		Cooling
	Power on/off		Defrosting
+	Plus		Water pump circulation
—	Minus		Child lock
UV	UV switch		Alarm
	Wi-Fi connection	AUTO	Automatic mode

4 Key instructions

Power

Press to turn the smart chiller on/off.

Menu

1) When the power is on, long press to query the advanced option parameters, short press to switch modes.

2) When the power is on, long press for 5 seconds to query the setting parameter, and use the + or — to query the next or previous parameter.

3) When the power is off, long press for 5 seconds to enter the parameter setting.

Timer

Clock setting

1) Short press ⏲ to enter the scheduled on/off time setting, that is, the hour position of "scheduled on" flashes, and the +/— are used to adjust;

2) Short press ⏲ again to enter the "scheduled on" minute position flashes, and the +/— are used to adjust;

3) Short press ⏲ again to enter the "scheduled off" hour position flashes, and the +/— are used to adjust;

4) Short press ⏲ again to enter the "scheduled off" minute position flashes, and the +/— are used to adjust;

5) Short press ⏲ again to exit the scheduled on/off setting; (When the scheduled on and scheduled off times are set to be exactly the same, the timing function is canceled)

Scheduled on/off setting

1) Press and hold ⏲ for 5 seconds to enter the current clock adjustment, that is, the entire clock flashes:

2) Following the step-1), short press ⏲, the hour digit flashes, and the clock is adjusted to the current hour by the +/—;

3) Short press ⏲ again, the minute digit flashes, and the clock is adjusted to the current minute by the +/—;

4) Short press ⏲ again to exit the clock setting.

\+ Plus

1) Short press + to increase the set temperature. Long press + to increase continuously.

2) In the power-on state, press + and ❖ for 5 seconds to force electric heating on. Press + and ❖ for 5 seconds or press ⏻ to exit the forced electric heating.

— Minus

1) Short press — to reduce the set temperature. Long press — to reduce it continuously.

2) In the power-on state, long press — and ❖ for 5 seconds to start forced defrosting, and then press — and ❖ for 5 seconds or press ⏻ to exit forced defrosting.

UV sterilization lamp control

1) Short press UV to turn the UV sterilizer on or off.

2) The default setting is automatic mode when the power is on. When the water pump is on, the UV light turns on. When the water pump is off, the UV light turns off.

3) Long press UV to check the temperature.

If you stop the operation for 30 seconds during the above operations, the settings will automatically exit.

VII- PARAMETER QUERY

When the power is on, long press ⊞ for 5 seconds to query the setting parameter, and use the + or — to query the next or previous parameter.

No.	Parameter	Display Range	Measured value
L0	Water inlet sensor Temp.	-4~248°F	°F
L1	Defrost sensor Temp.	-4~248°F	°F
L2	Ambient sensor Temp.	-4~248°F	°F
L3	Exhaust sensor Temp.	-4~248°F	°F
L4	Return air sensor Temp.	-4~248°F	°F
L5	Evaporation sensor temp.	-4~248°F	°F

VIII- ADVANCED OPTION SETTINGS

1 When the chiller is turned off, press and hold ⊞ for 5 seconds to enter the advanced option settings.

2 In the advanced option state, press and hold ⊞ for 5 seconds to reset the device and restore it to factory settings.

No.	Parameter/default value	Rang	Mark
P01	Temperature upper limit (122°F)	55~122	
P02	Temperature lower limit (37°F)	37~50	
P03	Difference temperature (2°F)	2~20	
P04	Temperature compensation (0)	-16~16	
P05	Antifreeze temperature (0)	0~16	
P06	Defrost start temperature (27°F)	-4~22	
P07	Defrost start time (30min)	1~99	

P08	Defrost start ambient temperature (77℉)	14~95	
P09	Defrost end temperature (50℉)	32~86	
P10	Defrost operation time (8min)	0~30	
P11	Defrost temperature difference (20℉)	10~40	
P12	Electric heating start ambient temp. (46℉)	5~95	
P13	Cooling superheat (10℉)	10~16	
P14	Heating superheat (10℉)	10~16	
P15	Exhaust high temp. protection temp. (160℉)	122~302	
P16	Electronic expansion valve MIN. opening (50℉)	10~50	
F1	Water flow switch selection (0)	Off	0: off; 1: on
F2	High pressure switch selection (0)	Off	0: off; 1: on
F3	Low pressure switch selection (0)	Off	0: off; 1: on
F4	Refrigerant detection switch selection (0)	Off	0: off; 1: on

IX- FAULT CODE AND SOLUTIONS

Code	Fault description	Phenomena	Troubleshooting
E00	Water tank temp. sensor failure	Chiller stops working	Replace the water tank temperature sensor (10K)
E01	Coil temperature sensor failure	Chiller stops working	Replace the coil temperature sensor (10K)
E02	Ambient temp. sensor failure	Chiller stops working	Replace the ambient temperature sensor (10K)
E03	Exhaust temp. sensor failure	Chiller stops working	Replace the exhaust temperature sensor (10K)
E04	Return air temp. sensor failure	Chiller stops working	Replace the return air temperature sensor (10K)
E05	Evaporation temp. sensor failure	Chiller stops working	Replace the evaporation temperature sensor (10K)
E06	High pressure failure (locked 3 times within 1 hour)	Chiller stops working	1: If the high-pressure switch is not used, please short to ground wire 2: Check whether the circulating water pump is running 3: Check whether the circulating water circuit is unobstructed 4: Is there too much refrigerant?

E07	Low pressure failure (locked 3 times within 1 hour)	Chiller stops working	1: If the low-pressure switch is not used, please short to ground wire 2: Check if the refrigerant is leaking
E08	Exhaust temperature exceeds 230℉	Chiller stops working	1: Make sure the exhaust temp. sensor is 10K 2: Check if the four-way valve is leaking 3: Check if the refrigerant is leaking (Air pressure will not be lower than 3 bar)
E09	Water flow switch failure	Chiller stops working	If the water flow switch is not used, please short to ground protection.
E10	Communication failure	Run by last condition	Check the communication line.
E11	Lack of refrigerant	Chiller stops working	Turn off the power and add refrigerant.

X- ENABLE WIFI REMOTE CONTROL

1 Smart Chiller Networking

With the power off, press and hold the + and − at the same time. When the screen is fully displayed, The WiFi on the screen is flashing, the control panel is already in the network configuration state. When stops flashing and remains on, it means the network is connected successfully.

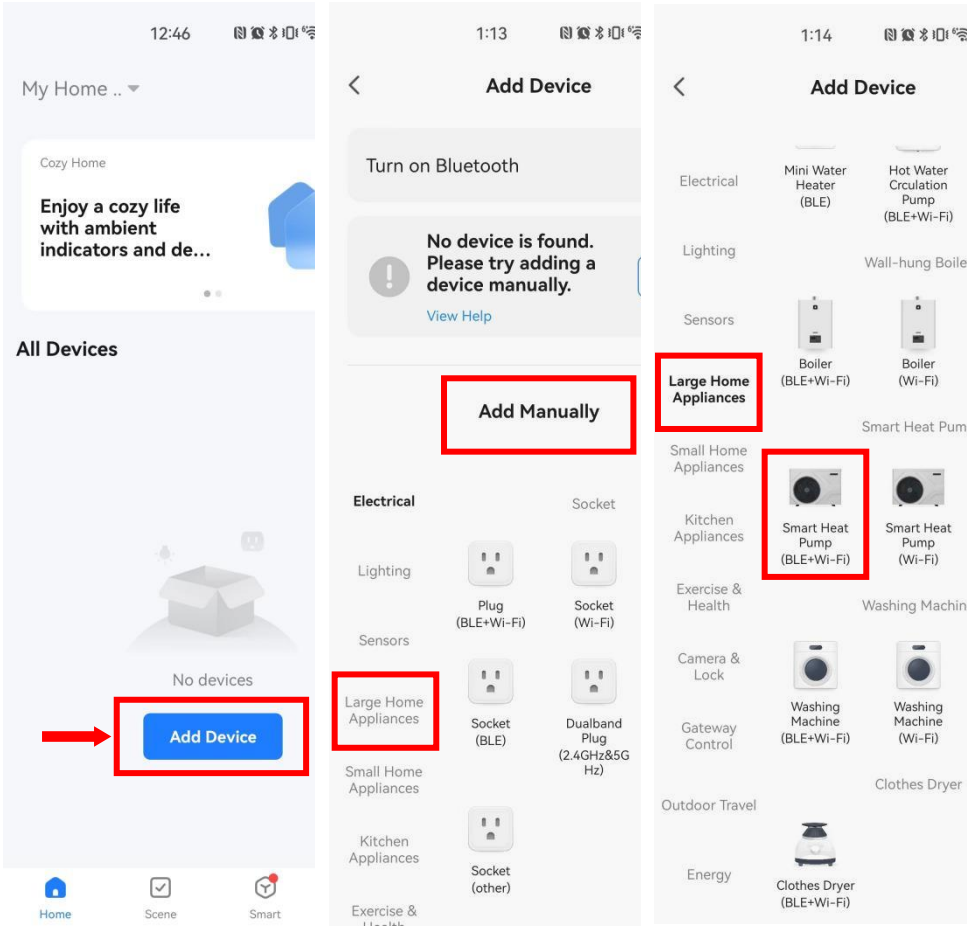
2 Pairing the Tuya Mobile APP to smart chiller

1) Ensure your mobile WiFi is switched on, turn on 2.4G WiFi and Bluetooth
2) Open the Tuya APP (or Smart Life) on your Apple iOS/Android phone
3) Select 'Add device' (APP auto-detects if the chiller is in pairing mode, else choose manually)
4) Choose your WiFi connection and enter your WiFi password
5) Once connection has been established, you can then enter the chiller app control panel

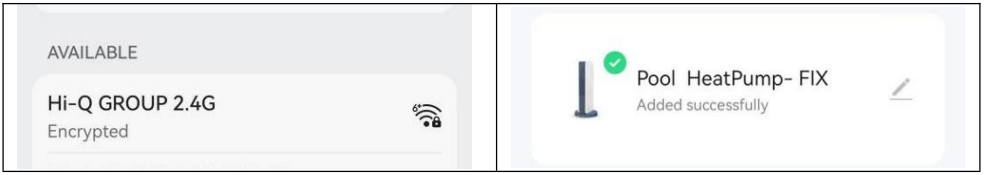
3 Add device manually

When you click "Add Device", APP auto-detects if the chiller is in pairing mode. If the App does not find the chiller, please follow the steps below to add it manually:

1) Add Device/ Add Manually/ Large Home Appliances/ Smart Heat Pump (BLE+Wi-Fi)



2) Follow the prompts to select a Wi-Fi network and enter the Wi-Fi password.



4 Network exit instructions

Network exit instructions for the chiller and mobile phone APP

Turn off Chiller, press and hold the + and — at the same time until the panel screen is fully displayed, the control panel has reset the network and the on the screen is flashing.

If you have any questions about setting up or using your recovery system, please visit our website for further information, FAQs, troubleshooting and customer support.

XI- SAFETY & USAGE NOTES

1 Safety

1) Some countries and regions prohibit the transportation of refrigerants. The chiller you received may no-refrigerant. Refrigerant needs to be added before use. Running without refrigerant will seriously damage the machine!

2) Refrigerant filling and maintenance must comply with local laws and regulations and be performed by professional technicians. Please refer to the machine nameplate for the refrigerant model and dosage.

3) Sharp edges and coil surfaces are harmful and should be avoided. The power must be turned off before installing or removing the equipment

4) If the device is not powered on for a long time, in a cold environment, the water in the chiller may freeze, causing the pipes to rupture. Please drain the water when not in use. The power switch should be set above 1.4 meters high and out of reach of children.

2 Usage Notes

1) Never install Smart chiller in closets, cabinets, or other small unventilated places.
2) Ensure there is 100cm clear space around the Smart chiller vents when in use.
3) Never leave the Smart chiller outside in temperatures below 1°C.
4) Never clean your Smart chiller with strong bleach-based detergents.
5) To empty your Smart chiller, use the drain tap located at the rear of the unit.
   Take care with the drain tap, don't force it and make sure it is fully closed after use.
6) Though not essential, to ensure a long service life and for hygiene purposes, we recommend draining, cleaning and drying your chiller every two to three weeks.

3 HOW LONG SHOULD YOU STAY IN COLD WATER?

Cold water therapy works best with the right combination of time and temperature. For example, if you are in water with a temperature of 10°C, we would recommend you stay for no more than 10mins.

Temperature to Time examples:
1°C = 1 minute submersion
2°C = 2 minutes submersion
3°C = 3 minutes submersion
5°C = 5 minutes submersion
10°C = 10 minutes submersion
15°C = 15 minutes submersion

XII- MAINTENANCE

1 The users should check the water supply system regularly to avoid the air and dirty stuff to enter the system and to cause low water flow, because it would reduce the performance and reliability of your water chiller unit. You can ask supplier for a video of the water pump cleaning, or ask a professional to maintain it.

2 Clean your recovery tub and filtration system regularly to avoid the damage caused to your heat unit as a result of the dirty of clogged filter. Use neutral disinfectant to reduce corrosion to chiller.

3 If the chiller is not used for a long time, especially in winter, the water inside should be drained to keep the equipment dry.

4 When you use again the water chiller after a long period, please check if the water pipeline at proper condition and make the water pump run firstly before startup the unit.

5 Clean the radiator regularly (wash the surface of the radiator with tap water). A radiator that absorbs dust will reduce the heat exchange of the equipment.

6 At the end of the device's useful life, to prevent damage to the environment or human health caused by uncontrolled waste disposal and to promote the

sustainable reuse of material resources, you can return expired appliances to the supplier or a recycling station.

XIII- SERVICE & WARRANTY

If you have any questions or need more information, please contact: Hi-Q GROUP customer service on +86 181 2364 4306, Monday – Sunday from 09:00 – 18:00, Or contact us by email, service or maintenance appointment: info@hi-qtech.com

1 Limited warranty

1) We guarantee that all parts are free of defects in materials and workmanship for one year from purchase. The warranty covers only material or manufacturing defects that prevent the product from being able to be installed or operated in a normal way. Defective parts will be replaced or repaired.
2) The warranty does not cover transportation damage, any use other than what is intended, damage caused by incorrect assembly or improper use, damage caused by impact or other error, or damage caused by frost cracking or improper storage.

3) The warranty becomes void if the user modifies the product. The warranty does not include product-related damage, property damage, or general operational loss.

4) The warranty is limited to the initial retail purchase and cannot be transferred and it does not apply to products moved from their original location.

5) The manufacturer's liability cannot exceed the repair or replacement of defective parts and does not include labor costs to remove and reinstall the defective part, transportation costs to and from the service center, and all other materials necessary to repair.

2 This warranty does not cover failure or malfunction as a result of the following:

1) Lack of proper installation, operation, or maintenance of the unit by our published "User's Guide" supplied with the unit.

2) Not maintaining a proper chemical balance in your pool [pH level between 7.0 and 7.4. Free chlorine between 0.5~1.5 mg/l. Total dissolved solids (TDS) less than 1,200 ppm. Salt maximum 8 g/l].

3) Misuse, alteration, accident, fire, flood, lightning strike, rodents, insects, negligence or unforeseen actions. Scaling, freezing up, or other conditions that cause insufficient water circulation.

4) Operation of the device without complying with the published minimum and maximum flow specifications. Use of non-factory authorized parts or accessories in conjunction with the product.

5) Chemical contamination of combustion air or improper use of water care products, such as the supply of water care products upstream of the heater and the hose or through the skimmer.
6) Overheating, improper wiring, improper power supply, indirect damage caused by the failure of O-rings, sand filters, or cartridge filters, or damage caused by running the pump with inadequate amounts of water.

XIV- LIMITATION OF LIABILITY

This is the only warranty provided by the manufacturer. No one is authorized to make any other warranties on our behalf.

This warranty is instead of all other warranties, expressed or implied, including but not limited to any implied warranty of fitness for a particular purpose and saleability. We expressly disclaim all liability for consequential damage, accidental damage, indirect loss, or loss related to a breach of the expressed or implied warranty.

This warranty gives you specific legal rights, which may vary by country.

Complaints

In the event of any warranty claim a valid purchase receipt must be presented. Read about raising a warranty-claim under section XIII. For other items not listed in this manual, you can also contact us for further information.