Presented by:

POOLSCAPE

PREVIOUSLY Sundance Pools

SWIMMING POOL HEAT PUMP UNIT

Installation & Instruction Manual

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4.Use and Operation Instruction of Wire Controller

4.1.Interface display



4.2.Key and icon function instruction

2.1 Key function instruction

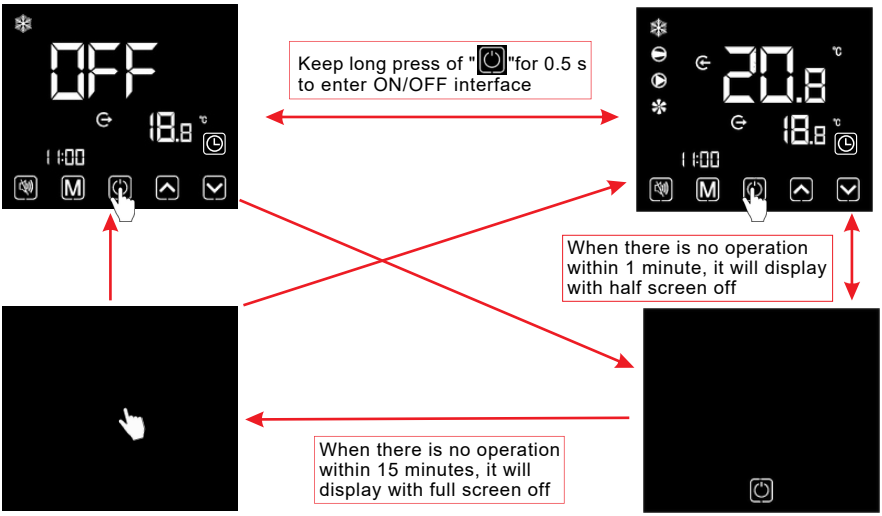
Key symbols	Designation	Function
	Mute key	Under the heating mode or heating mode under the automatic mode, the mute key operation is effective and used to enter and exit the mute mode with one click.
	Mode key	It is used to switch the unit mode, temperature setting, and parameter setting.
	On-off key	It is used to carry out startup & shutdown, cancel current operation,and return to the last level of operation.
	Up key	It is used to page up, and increase variable value.
	Down key	It is used to page down, and decrease variable value.
	Clock key	It is used as user clock, and to carry out timing setting.

2.2.Icon function instruction

Icon symbol	Designation	Function
	Cooling symbol	It will display during cooling (there is no limit to startup & shutdown, and it is optional when the unit is cooling-only unit or heating-and-cooling unit).
	Heating symbol	It will display during heating (there is no limit to startup & shutdown, and it is optional when the unit is heating-only unit or heating-and-cooling unit).
	Automatic symbol	It will display under the automatic mode (there is no limit to startup & shutdown, and it is optional when the unit is heating-and-cooling unit).
	Defrosting symbol	It will display in the defrosting process of the unit.
	Compressor symbol	It will display when compressor is started.
	Waterpump symbol	It will display when water pump is started.
	Fansymbol	It will display when fan is started.
	Mutesymbol	When the timing mute function is started, it keeps bright for a long time. When it is in mute state, it will flash. Or else, it is off.
	Timingsymbol	It will display after the user sets the timing, and multiple timing intervals can be set .
	Wateroutlet symbol	When the axillary display area displays the water outlet temperature, the light is on.
	Waterinlet symbol	When the main display area displays the water inlet temperature, the light is on.
	Lockingkey sym bol	When the keyboard is locked, it is on.
	Faultsymbol	In case of unit fault, it is on.
	Wirelesssignal symbol	When the unit is connected to WIFI module, it will display according to the strength of WIFI signal.
	DegreesCelsius symbo l	When main display area or auxiliary display area displays degrees Celsius, it is on.
	DegreesFahrenheit symbol	When main display area or auxiliary display area displays degrees Fahrenheit, it is on.
	Settingsymbol	When the parameter is adjustable, it is on
	Secondsymbol	When main display area displays second digit, it is on.
	Minutes ymb ol	When main display area displays minute digit, it is on.
	Hoursymbol	When main display area displays hour digit, it is on.
	Pressure symbol	When main display area displays pressure, it is on.
	Flowsym bol	When main display area displays flow, it is on.

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4.3. Startup & shutdown



Notes:
Startup & shutdown operation can only be conducted in the main interface.
When it displays with half screen off or full screen off, click any key for returning to ON/OFF main interface.

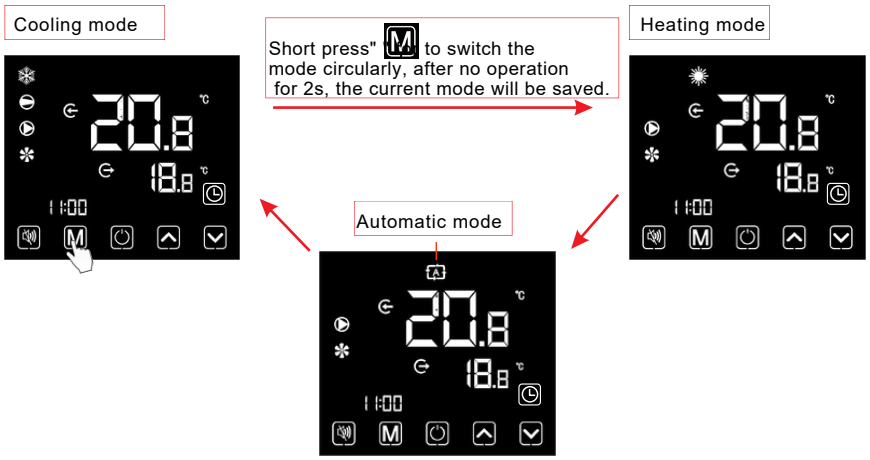
When the unit is started under the control of wire controller, if using the emergency switch to shut down, the wire controller will display as follows:
Operations are the same as under ON/OFF main interface.



4.4. Mode switch

Under the main interface, Short press" M "to switch the unit among heating" ☀ ", cooling" ❄ " and automatic mode " A ".

4.Use and Operation Instruction of Wire Controller



Operation descriptions:

1). Mode switch operation can only be conducted in the main interface.

2). When the unit is under the defrosting state, the defrosting symbol is on,with the display interface as follows:

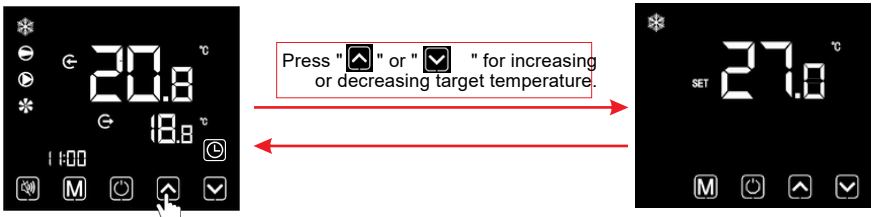


Notes:

1).After completing the defrosting, the unit will be automatically switched to the heating/ automatic mode (keeping consistent with the mode before defrosting).

During the defrosting, mode switch is available. And when switching the mode, the unit won't work under a new mode until defrosting is completed.

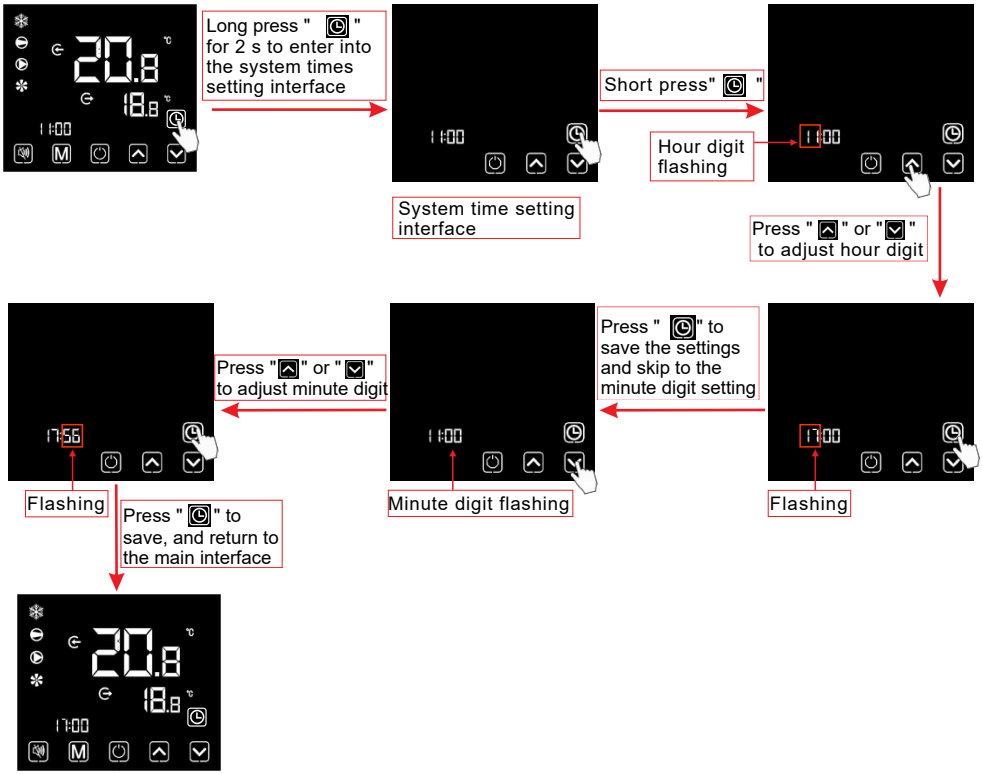
5. Temperature setting



Notes: Under the temperature setting interface, if short press " ", the system will return to the main interface without any changes saved; If there is no operation for 5 s or short press " M ", the current mode will be saved, and return to the main interface.

4.6. Clock setting

6.1 System time setting

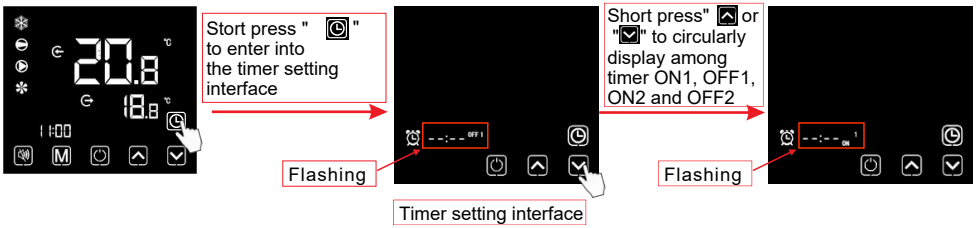


Notes: Under the clock setting interface, if there is no operation for 20 s, the system will automatically memorize use's settings, and return to the main interface; if short press " " during any operating steps, the changes will not be saved and return to the main interface.

6.2 Setting and cancelling the Timer ON/OFF function

6.2.1 The wire controller can set up a two-stage timing switch: Timer ON1~ OFF1;Timer ON2~OFF2.

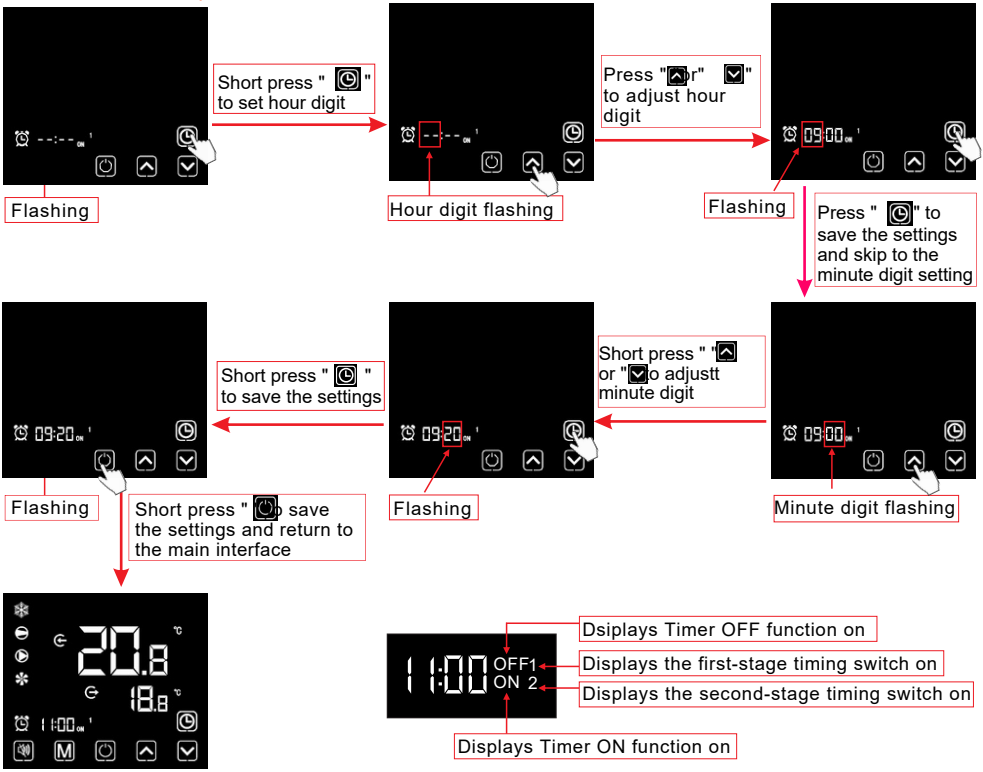
6.2.2 Select " On1 " " OFF1 ", " On2 " or " OFF 2 " timer setting interface:



6.2.3 Setting the Timer ON/OFF function

While enter into the " ", " ", " ", " ON2 " or " OFF 2 " timer setting interface, set the Timer ON/OFF as below:

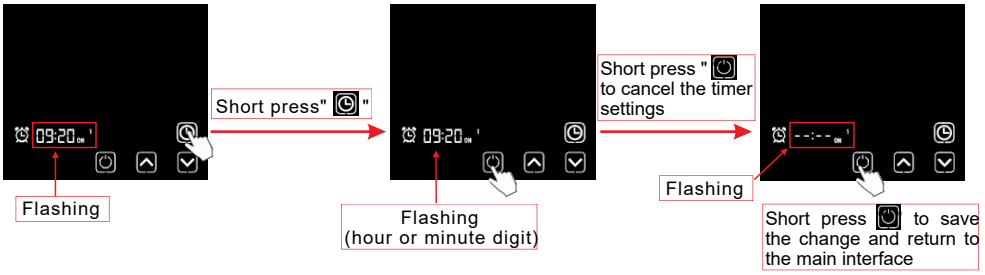
* Take ON1 for example:



6.2.4 Cancelling the Timer ON/OFF function

1) Select " ON "" ", " ", " ON2 " or " OFF 2 " timer setting interface refers to 6.2.1, cancel the Timer ON/OFF as below:

* Take ON1 for example:

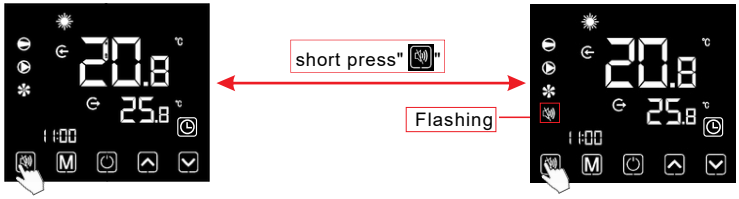


2) To cancel the first-stage timing switch: cancel both " " and " OFF1 ";
To cancel the second-stage timing switch: cancel both " ON " and " 2 ";
To cancel the tw ostagetimingswitch:cancelall " ON ", " ", " ON2 " and " OFF 2 "

Note: Under the Timer ON/OFF setting interface, if the timing symbol and entire time digits flash at the same time, click " " to return to the main interface;

4.7. Silent setting

7.1 One-click silent function

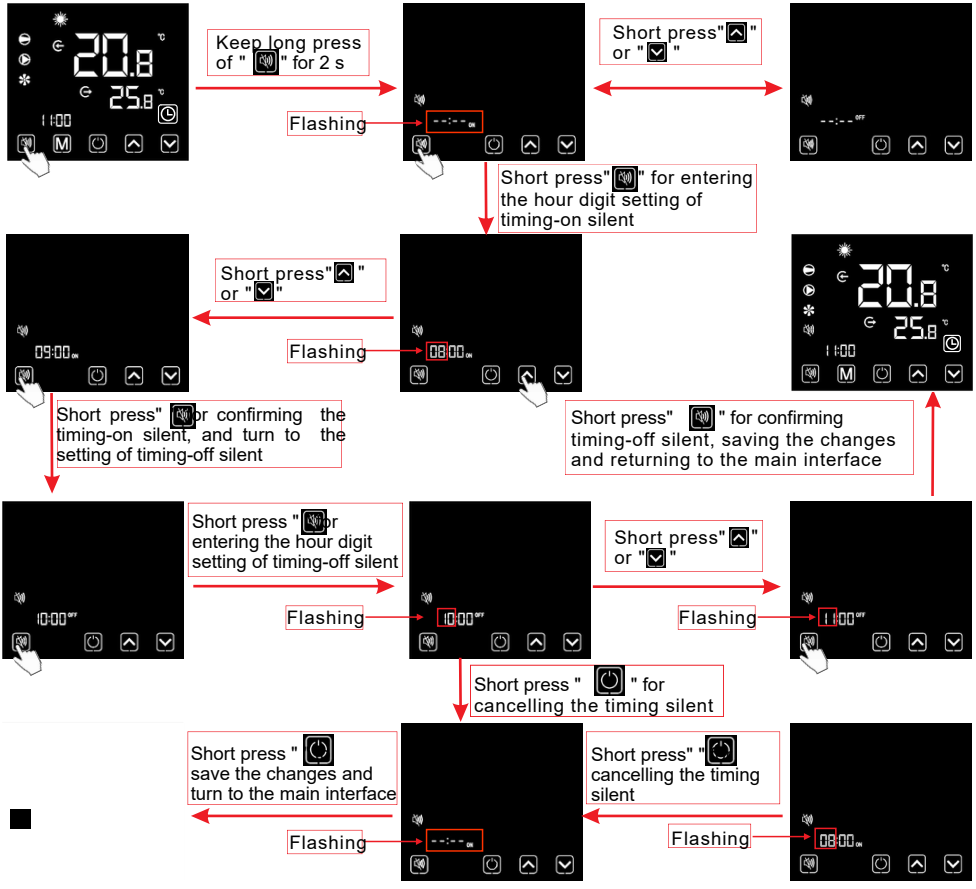


Notes:

1). If one-click silent and timming silentaare stared at the same time, short press" " for canceling one-click silent and quitting the timing silent for this time.

2). At night or the rest time, user can start one-click silent or timing silent function to reduce the noise.

7.2 Setting and cancelling the silent function



Notes:

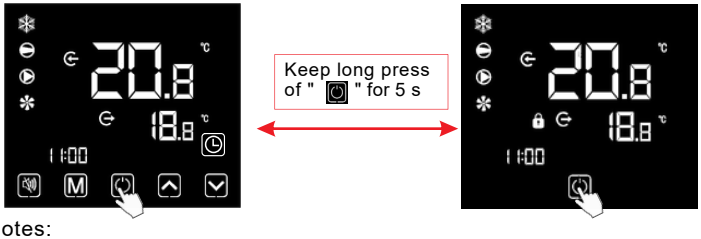
1). When the silent icon" " is lighten:The timing mute has been set, but it's not under silent status.

2). When the silent icon" " flash:It's under the silent status.

3). When the silent icon" " disappear: The timingsilent is not set.

4.8.Keyboard lock

Toavoid others' misoperation, please lock the wire controller after completing thesetting.



Notes:

1).Under the locked screen interface, only unlocking operation is available, and the screen will be lighten after other operations conducted.

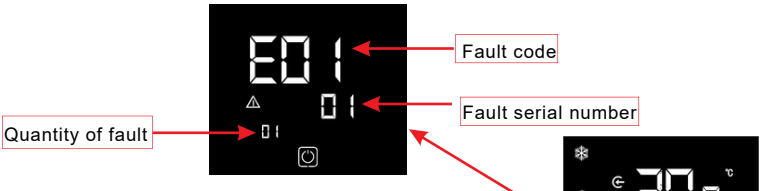
2).Under the OFF interface, locking operation is available , and the operation method is the same as locking screen under the ON interface.

4.9.Fault interface

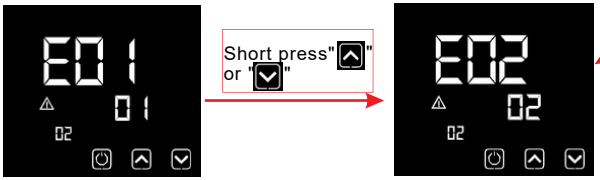
When the unit fails, the wire controller can display the corresponding code according to the fault reason. Refer to the fault table for the specific definition of the fault codes.

For example:

1).Single fault:



2).Two or more faults:



Remark:

The wire controller can display the temperature unit as " ℉" or "℃" according to the unit model you bought.

4.Use and Operation Instruction of Wire Controller

4.10 . Parameter list and breakdown table

10.1 Electronic control fault table

Can be judged according to the remote controller failure code and troubleshooting

Protect/fault	Fault disp lay	Reason	Elimination methods
Inlet Temp. Sensor Fault	P01	The temp. Sensor is broken or short circuit	Check or change the temp. Sensor
Outlet Temp. Sensor Fault	P02	The temp. Sensor is broken or short circuit	Check or change the temp. Sensor
Amibent Temp. Sensor Fault	P04	The temp. Sensor is broken or short circuit	Check or change the temp. Sensor
Coil 1 Temp. Sensor Fault	P05	The temp. Sensor is broken or short circuit	Check or change the temp. Sensor
Coil 2 Temp. Sensor Fault	P15	The temp. Sensor is broken or short circuit	Check or change the temp. Sensor
Suction Temp. Sensor Fault	P07	The temp. Sensor is broken or short circuit	Check or change the temp. Sensor
Discharge Temp. Sensor Fault	P081	The temp. Sensor is broken or short circuit	Check or change the temp. Sensor
Exhaust Air over Temp Prot.	P082	The compressor is overload	Check whether the system of the compressor running normally
Antifreeze Temp. Sensor Fault	P09	Antifreeze temp sensor is broken or short circuited	check and replace this temp sensor
Pressure sensor Fault	PP	The pressure Sensor is broken	Check or change the pressure Sensor or pressure
High Pressure Prot.	E01	The high-preesure switch is broken	Check the pressure switch and cold circuit
Low Pressure Prot.	E02	Low pressure1 protection	Check the pressure switch and cold circuit
Flow Switch Prot.	E03	No water/little water in water system	Check the pipe water flow and water pump
Waterway Anti-freezing Prot.	E05	Water temp.or ambient temp. is too low	
Inlet and outlet temp. too big	E06	Water flow is not enough and low differential pressure	Checkthe pipewater flowand whether watersystem isjammed ornot
Anti-freezing Prot.	E07	Water flow is not enough	Checkthe pipewater flowand whether watersystem isjammed ornot
Winter Primary Anti-freezing Prot.	E19	The ambient temp. Is low in winter	
Winter SecondaryA nti-freezing Prot.	E29	The ambient temp. Is low in winter	
Comp. Overcurrent Prot.	E051	The compressor is overload	Check whether the system of the compressor running normally
Communication Fault	E08	Communicat ion failure between wire controlle rand mainboard	Check the wire connection between remote wire controller and main board
Communication Fault (speed control module)	E081	Speed control module and main board communication fail	Checkthe communication connection
Low AT Protection	TP	Ambient temp is too low	
EC fan feedback Fault	F051	There is something wrong with fan motor and fan motor stops running	Check whether fan motor is broken or locked or not
Fan Motor1 Fault	F031	1. Motor is in locked-rotor state 2.The wire connection between DC-fan motor module and fan motor is in bad contact	1.Change a new fan motor 2.Check the wire connection and make sure they are in good contact

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4.Use and Operation Instruction of Wire Controller

Fan Motor2 Fault	F032	1. Motor is in locked-rotor state 2.The wire connection betweem DC-fan motor module and fan motor is in bad contact	1.Change a new fan motor 2.Check the wire connection and make sure they are in good contact
Communication Fault (speed control module)	E081	Speed control module and main board communication fail	Checkthe communication connection

Frequency conversion board fault table:

Protection/fault	Fault display	Reason	Elimination methods
Drv1 MOP alarm	F01	MOP drive alarm	Recoveryafterthe150s
Inverter offline	F02	Frequency conversion board and main boa rdcommunicationfailure	Checkthecommun ication connection
IPM protection	F03	IPM modular protection	Recoveryafterthe150s
Comp. Driver Failure	F04	Lack ofphase, step or drive hardware damag	Checkthemeasuringvoltagecheck requency conversion board hardware
DC Fan Fault	F05	Motor currentfeedbackopencircuitor shortcircuit	Che ckwheth ercurre ntretu rnwir es connected motor
IPM Overcurrent	F06	IPM Input current is large	Che cka ndadju stt hecurre nt measurement
Inv. DC Overvoltage	F07	DC bus voltage>Dc bus over-voltage protectionvalue	Checktheinputvoltagemeasurement
Inv. DC Lessvoltage	F08	DC bus voltage<Dc bus over-voltage protectionvalue	Che ck t heinp utvolta gemeasureme nt
Inv. Input Lessvolt.	F09	The inpu tvoltage is low ,causing the inputcurrentistoohigh	Check the input voltage measurement
Inv. Input Overvolt.	F10	Theinpu outagepro tvoltage is too high,IPM more than	Check the input voltage measurement
Inv. Sampling Volt.	F11	The inpu tvoltage sampling faul t	Che cka ndadju stt hecurre nt measurement
Comm. Err DSP-PFC	F12	DSPand PFCconnectfault	Che ckt hecommunicati onconnection
Input Over Cur.	F26	The equipmentloadistoo large	
PFC fault	F27	ThePFC circuitprotection	Che ckth ePF Cswit chtub e sho rtcircu it ornot
IPM Over heating	F15	TheIPMmoduleisoverheat	Che cka ndadju stt hecurre nt measurement
Weak Magnetic Warn	F16	Compressormagneticforce isnot enough	
Inv. Input Out Phase	F17	Theinputvoltage lostphase	Che cka ndmeasu ret hevolta ge adjustment
IPM Sampling Cur.	F18	IPMsamplingelectricityisfault	Che cka ndadju stt hecurre nt measurement
Inv. Temp. Probe Fail	F19	Sensorisshortcircuitoropen circuit	Inspe cta ndrepla cet hesensor
Inverter Overheating	F20	Thetransducerisoverheat	Che cka ndadju stt hecurre nt measurement
Inv. Overheating Warn	F22	Transducertemperature istoohigh	Che cka ndadju stt hecurre nt measurement
Comp. OverCur. Warn	F23	Compressorelectricityislarge	T hecompress orover-curre nt protection
Input Over Cur. Warn	F24	Inputcurrentistoolarge	Che cka ndadju stt hecurre nt measurement
EEPROM Error Warn	F25	MCU erro r	Checkwhe therthechipisdamaged Rep lacethe chip
V15V over/undervoltage fault	F28	The V15V is overload or undervoltage	Check the V15V input voltage in range 13.5v~16.5v or not

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10.2 Parameter list

Meaning	Default	Remarks
Refrigeration target temperature set point	2 ℃	Adjustable
Heating the target temperature set point	7 ℃	Adjustable
Automatic target temerature set point	2 ℃	Adjustable
	7	
	2	
	7	

WIFI Module

USER'S MANUAL



Please read this user's manual carefully before use
Please keep this user's manual properly

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Basic Parameters

Form	WiFi	Bluetooth
Transmission frequency (GHz)	2.412~2.472	2.402~2.480
Max transmission power	802.11b: +16dBm(@11Mbps)	10dBm
	802.11g: +15.5dBm(@54Mbps)	
	802.11n: +15dBm(@HT20,MCS7)	
Power Supply Voltage (V)	3.0~3.6	
Supply Current	Peak (continuous transmission): 260mA	
	Average (STA, networked standby): 24mA(DTIM1)	
	Average (STA, 1KB/s): 54mA	
	Average (AP): 85mA	
Working Temp(°C)	-40~85	
Storage Temp(°C)	-40~125	

Disposal instructions

Disposal of the old appliance

Appliance marked with the symbol shown here must not be disposed of in the domestic refuse. You are obliged to dispose of such old electronic appliances separately. Please consult your local authority about the possibilities of organised disposal. With this environment-friendly form of disposal, old appliances are recycled or used in other forms.

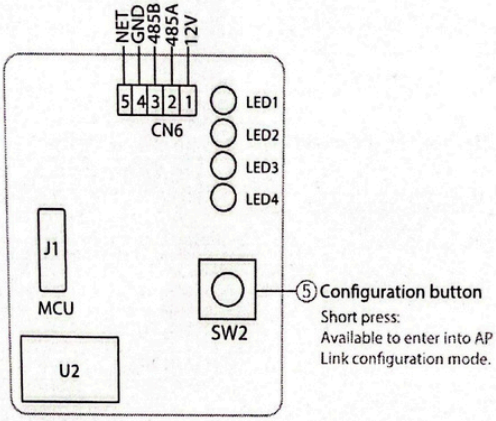
Installation

- There is a magnet on the back of the WIFI module, it can be installed indoors or outdoors, and avoid direct sunlight;
- Please scan the following QR code to download APP;

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Functional Description





MXL-WX17

ITEM	NAME	LONG LIGHT	SLOW FLASH	EXTINGUISH
①	Network configuration indicator	Configuring Network	SmartLink configuring	Done
②	Router connection indicator	Normal	Abnormal	----
③	Cloud server connection indicator	Normal	Abnormal	----
④	485 communication indicator	Normal	Abnormal	----

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Account Login

Use email address and password to register, login or reset the password.

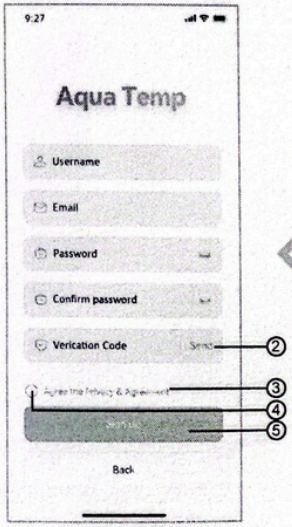


Fig.2 Account Registration interface

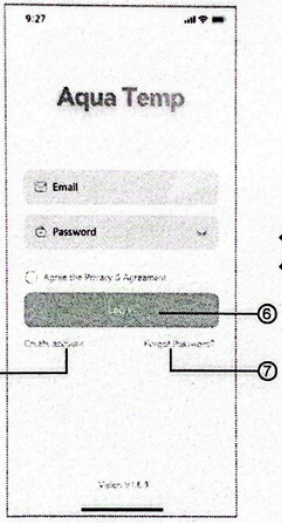


Fig.1 Login interface

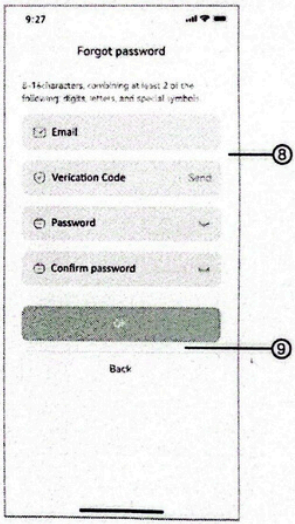


Fig.3 Forgot Password interface

1. Account Registration: To register an account, click ① (Fig.1) to jump to the Account Registration interface, fill in the relevant information and click ② to receive verification code, while completed the application information, click ③ to read the details of the Privacy Policy, then click ④ to agree, and click ⑤, registration is done.

   Please note, the valid time of one verification code is 15min, please fill in the verification code within 15min, otherwise you need to ask for a new one.

2. Log in: Follow the instructions on the page(Fig.1), enter your registered email address and password, click ⑥ and jump to device list;

3. Forgot Password: While forget your password, click ⑦ (Fig.1), jump to the Forgot Password interface (Fig 3). Follow the instructions on the page, fill in the relevant informations, click ⑧ to receive verification code from your mailbox, click ⑨ to comfirm and password reset is done.

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Add Device

After log in, displays My Device interface (Fig. 4) , follow the instruction to add WIFI or DTU.

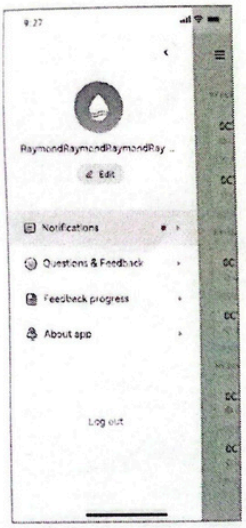


Fig.5 The left-hand menu

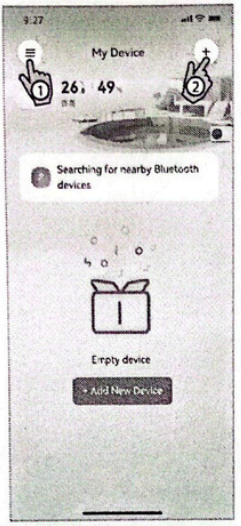


Fig.4 My Device interface

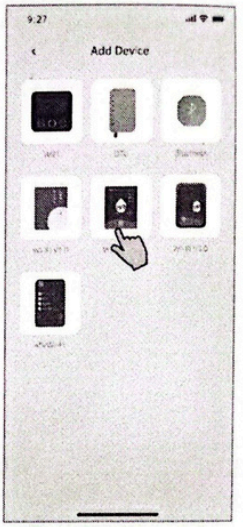


Fig 6 Add Device interface

WIFI Configure Network

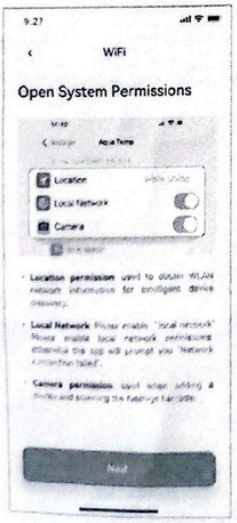


Fig 7 Enable user permission



Fig 8 WIFI Module On interface

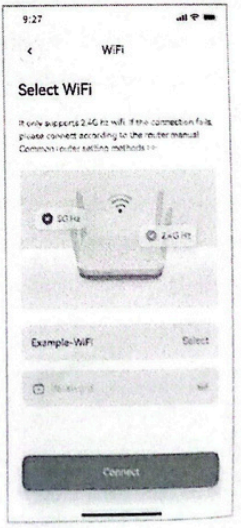


Fig 9 Enter password interface

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WIFI Configure Network

1. Follow the instructions on the page (Fig.8), press button on module and hold for 1s till two lights on, then AP connection is activated;
2. Click "Next" to enter the wifi password for the current connection(Fig 9), the APP automatically searches for wifi module;
3. Click "Scan WiFi Barcode" （Fig.11）to allow the App to use the camera for scanning the serial number/wifi code on the heat pump;
4.Click "Confirm", device bond is done (Fig.12);
5. After WIFI bonding is done, and jump back to My Device(Fig. 13).

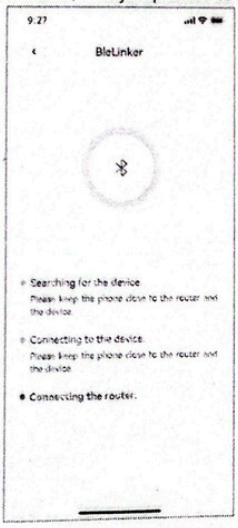


Fig.10 Searching device interface

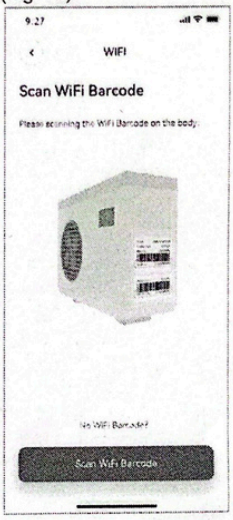


Fig.11 Scan WiFi Barcode

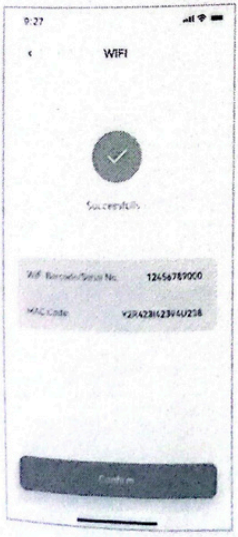


Fig 12 Bond device done interface

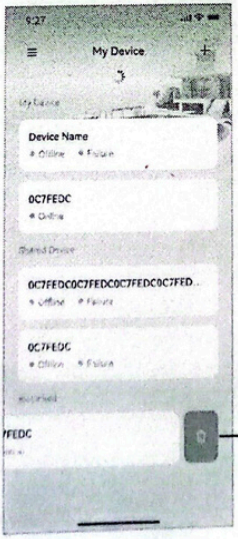


Fig 13 Device management interface



Fig 14 Device Main interface

POOLSCAPE
PREVIOUSLY SundancePools

Device Management

Device management operations are as below :

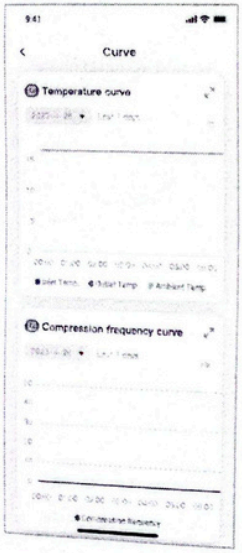


Fig 27 Curve interface

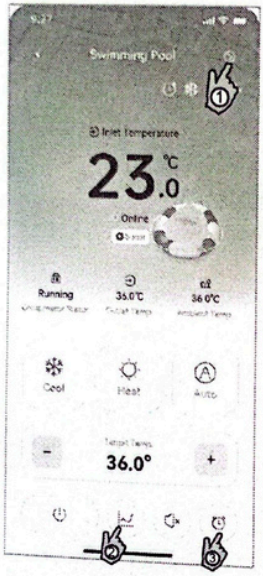


Fig 25 Device Main interface

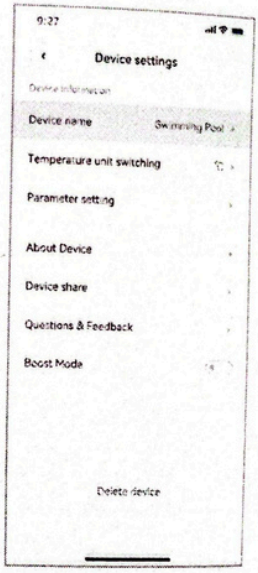


Fig 26 The right-hand menu interface

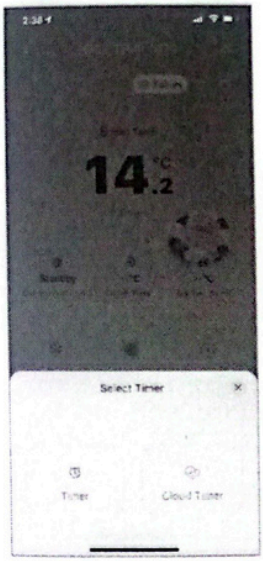


Fig 40 Select timer interface

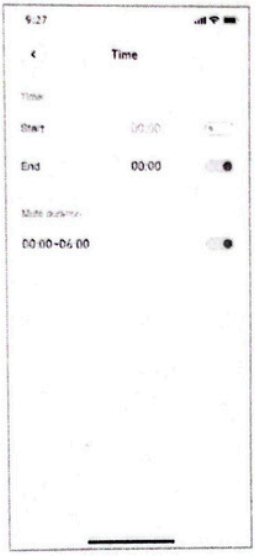


Fig 40 Timer setting interface



Fig 40 Cloud Timer List

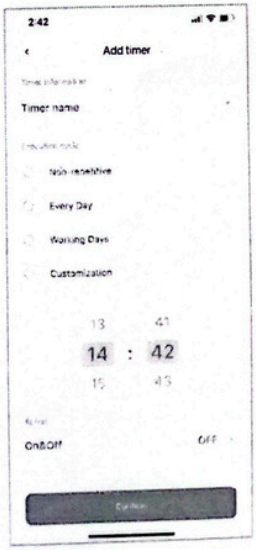


Fig 40 Cloud Timer setting interface

ICON	NAME	FUNCTIONS
	ON/ OFF	Click it to turn on/ off the unit
	Silent Mode Off	Display silent mode off, click it to activate the silent mode
	Silent Mode On	Display silent mode on, click it to turn off the silent mode
	Mode shift	Mode changing: Cooling--Heating--Auto
	Cooling	Display Cooling mode, click it to change operating mode
	Heating	Display Heating mode, click it to change operating mode
	Auto	Display Auto mode, click it to change operating mode
	Timming settings	Click it to jump to the timer on/ off and mute timer setting interface
	Troubleshooting	Click it to jump to the troubleshooting interface
	Menu	Click to unfold or collapse the menu
	Curve	Click to view the temperature curve

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