

HY818 WiFi thermostat manual

HY818 WiFi series thermostat can be used to control temperature for 3heat/2 cool system , heat pump system etc .

<p>Search for “Smart Life” Download the App from Google Play or APP Store</p>	<p>1) Turn on the thermostat, press and hold the key “K2” Activate WIFI distribution network icon</p> <p>+2 +1 It means WIFI connection is normal, flashing means it is in EZ network configuration mode.</p> <p>+1 Cloud icon: flashing means it is in AP network configuration mode.</p>
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Feature

- ◇ Standard size is 140*90mm
- ◇ Thickness is 32mm
- ◇ Surface mounted type,easy to install.
- ◇ Indoor/remote sensor selection design,safer and more comfortable to use
- ◇ 0.5℃ accuracy ,precise control temperature
- ◇ Power-down memory function, easy to use
- ◇ Program mode :7 /5+1+1 day program
- ◇ Support Centigrade and Fahrenheit
- ◇ Auto changeover heat/cool
- ◇ Support compressor lockout delay
- ◇ Reminder of replacement filter
- ◇ Reminder of replacement UV lamp

Technical data

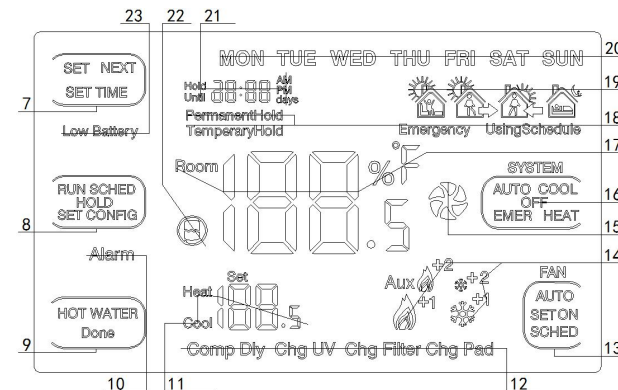
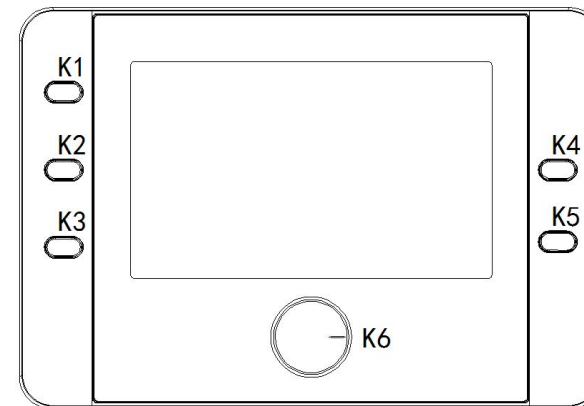
- ◇ Battery supply or AC20-28V
- ◇ Sensor: NTC(10K)1%
- ◇ load Current :2A/30VDC ;0.5A/125VAC
- ◇ Default of setting point: 5~35℃
- ◇ accuracy: ±0.5℃
- ◇ Remote sensor: option (NTC)

◇ Size: 140*90*32mm

Display description of icons

- Low Battery:should replace battery
- Chg UV:should replace UV lamp
- Chg Filter:should replace /clean filter
- Comp Dly:during compressor lockout delay
- Emergency:emergency heat
- E1:Temperature controller indoor sensor failure alarm
- E2:Temperature controller remote sensor failure alarm
- Alarm:Other system failures
- Temporary Hold:temporary Manual mode
- Permanent Hold>manual mode
- Using Schedule:program mode

Button feature



K1: Select key.After short pressing K1 key, (7) will display three following selection:

SET: This option is to set SYSTEM (16), FAN(13), program (8) parameters

SET TIME: Set the system clock

NEXT: next item

Long press K1---(7)display next ---(21)query remote sensor temperature/UV lamp replacement run time /filter replacement run time

K2: (7) display SET,then mean program mode, short press K2, (8) display RUN SCHED/HOLD (16) display OFF, (7) display SET, then press K1, (8) will display SET CONFIG , press SET CONFIG to enter advance option.

K3: confirm key. (9)display Done, after set, press K3 to confirm

K4: System mode set key, (16) display (SYSTEM):

OFF:turn off system

HEAT: heating system

COOL:cooling system

EMER:emergency system

AUTO:auto heating/cooling system

K5: Fan set key, (13) display fan operate status:

ON: fan continuously operate

AUTO: fan auto operate

(13) display SET SCHED, press K5 to program.

K6: adjust number key

Rotate left-minus

Rotate right -plus

Set clock time

1) Press K1---(7)display from SET to SET TIME---press K1 again---(7) display change to NEXT, then minute icon will flash

2) Rotate K6 to set minute

3) Next press K1, hour icon will flash

4) Rotate K6 to set hour

5) Press K1, week icon will flash

6) Rotate K6 to set week

After set ,press K3 or wait 10s without operation to exit

Temporary manual mode





(8) Display RUN SCHED --- rotate K6 to set temperature ---run temporary manual mode until next time section to return program mode to operate

Programming





(7) Display SET--- Press K1---(13)display SET SCHED---press K5 to program---Rotate K6 to select Cool/Heat---short press K1 to set parameter (for example 7day programming, select week->1st section time->1st section temperature->2nd section time->2nd section temperature->3rd section time->3rd section temperature->4th section time->4th section temperature->select week...->.same as above to operate

Default parameter of programming :

Cooling mode

			
Get Up	Go out	Come Back	Sleep
06:00 24°C	08:00 29°C	17:00 24°C	22:00 26°C

Heating mode/auto mode/emergency heat mode

			
Get Up	Go out	Come back	Sleep
06:00 21°C	08:00 17°C	17:00 21°C	22:00 17°C

Advance options

2) Press K4 until (16) display OFF ---Press K3---Press K1,(8) display SET CONFIG--- Press K2 to enter ---Rotate K6 to select item---Press K1 to confirm---Rotate K6 to set parameter --- after set ,short press K1 to come back to select item---after finished all setting,press K3 to save and exit.

Items	Parameter	Parameter describe	default
01	1H, 2H, P2, P1	Select control system 1H: 1cool/1 heat conventional 2H: 2cool/ 2 heat conventional P1: 1 compressor heat pump P2:2 compressors or 2 speed compressor heat pump	1H
02	HA, HE	HA: Gas heating, furnace control blower [H1 H2 heating without fan output] HE: electric heating, thermostat controlled blower [fan output for emergency heating] [fan output for H1 H2 heating]	HA
03	HA, HE	This option apply to P1 or P2 setting in system type option	HA

		HA: Fossil fuel backup heat HE : electric backup heat[Refer to 21 items of auxiliary heating protection]	
04	00, 01	0: manual (cooling and heating)changeover 1: auto (cooling and heating)changeover	00
05	1~4.5	Automatic cold and heat conversion hysteresis, the setting unit is 0.5℃ The factory default value is 1℃ . When the 04 option is 1, this item is valid.	1
06	FA, SL	First heating cycle rate, FA : heating will activate if below 0.5℃ than set point, SL: heating will activate if below 1℃ than set point	FA
07	FA, SL	First cooling cycle rate, FA: cooling will activate if above 0.5℃ than set point SL:cooling will activate if above 1℃ than set point	FA
08	FA, SL	Emergency heating cycle rate, This option apply only to P1 or P2 setting in heating type option FA: emergency will activate if below 0.5℃ than set point, SL:emergency will activate if below 1℃ than set point	FA
09	00, 05	Select compressor lockout delay To protect the compressor from short cycling ,you can select compress Off-time between 0 or 5min ,when the thermostat compressor time delay occurs , “ Comp Dly ” display during compressor lockout	00
10	1, 2, 3	Select backlight display 1: No backlight display	2

		2: backlight to come on about 5s when any button of the thermostat is touched 3: backlight remain continuously (only for 24V supply)	
11	-2~+2	Room display temperature calibration, set in 0.5℃	0
12	C, F	Select °F or °C readout C: Centigrade F: Fahrenheit	C
13	0, 3, 7	7: 7-day program 3: 5+1+1 day program 0: non-program	7
14	FA, SL	Select second stage heating rate This option apply only to P1、 P2 and 2Hsetting in system type option FA: Fast second stage heating, when the temperature is 1℃ below the first stage start heating temperature the second stage heating is activated SL: Flow second stage heating, when the temperature is 1.5℃ below the first stage start temperature the second stage heating is activated	FA
15	FA, SL	Select second stage cooling rate This option apply only to P2,H2 setting in system type option FA : cooling will activate if above 1℃ than set point SL: cooling will activate if above 1.5℃ than set point	FA
16	00~12	Select filter replacement run time The thermostat will display “Chg Filter” after a set time of operation ,This is reminder to change or clean your air filter .the time can be set from 0-12months in one month increments.Selection of 0	00

		will cancel this feature	
17	UF, U0	Select UV lamp replacement run time This is to set the UV lamp replacement reminder. Set to UF to cancel the reminder function, set to U0 to start timing from 0 days to 400 days. When the UV time remaining is 0, the thermostat shows "chg UV" and the alarm can be cancelled by resetting the parameter to UF when the alarm is displayed.	UF
18	24, 12	Selection of time scale Select 12 for 12 hour display for time clock,select 24 for 24hour display for time clock	24
19	0, 1, 2, 3	Select remote sensor option 0: No remote sensor 1: Outdoor sensor(only display) 2: Outdoor control sensor(see manual item 20 heat pump compressor temperature lockout) 3: Indoor sensor, If 3 is selected and the thermostat is installed with an indoor sensor ,display will show the read temperature from the indoor sensor	0
20	— — , -9, -7, -4, -1, 2, 5	Heat pump compressor lockout temperature This option apply only to P1 , P2 setting in system type option and only works when remote sensor option is set 2 — — : No heat pump compressor lockout -9,-7,-4,-1,2,5 °C : heat pump compressor lockout temperature With fossil fuel backup heat,if the thermostat is installed with an optional outdoor sensor,you can select the compressor lockout temperature.when the outdoor temperature is above the compressor lockout temperature .only the compressor operates With electric heat backup ,If the thermostat is installed with an optional outdoor sensor ,you can select the compressor lockout temperature and /or	— —

		an auxiliary heat lockout temperature.when the outdoor temperature is above the auxiliary lockout temperature.only the compressor operates .If the outdoor temperature is between the compressor and auxiliary lockout temperature .both the compressor and auxiliary heat can operate	
21	— —, 5, 7, 10, 13, 16	Heat pump auxiliary heating temperature lockout option This option apply only to P1,P2 setting in system type option and only works when remote sensor option is set 2 — — : No auxiliary heating temperature lockout 5,7,10,13,16 °C : heat pump auxiliary heating temperature lockout (see manual item 20 explains how it work)	— —
22	00, 01	Select audible beeper on/off 00, thermostat will beep when any button touched 01: thermostat will turn off the voice	0
23	reset	Short press the K1 key, [A0] will flash, long press the K3 key Done for 3 seconds to restore factory settings, the screen will return to the standby interface (main interface) after a full screen display	

Battery installation and replacement

Battery installation

If the 24VAC power supply is wired during installation, the battery is optional (can be used as backup power)

Replace battery

When the low battery warning Low Battery starts flashing, the battery must be replaced with a new one immediately. The low battery warning starts approximately 60 days before the battery is depleted. Even if the Low Battery warning does not appear, the battery should be replaced once a year or removed before leaving home for more than a month.

To replace the batteries, set the system to OFF, remove the thermostat from the wall and install the batteries behind the top of the thermostat.

Wiring and installation instructions

1. Read these instructions carefully. Failure to follow these rules may damage the product or cause a dangerous situation.

2. Confirm the maximum load given in the instructions and the product to ensure that the product is suitable for your application.

3. Installers must be trained and experienced service technicians

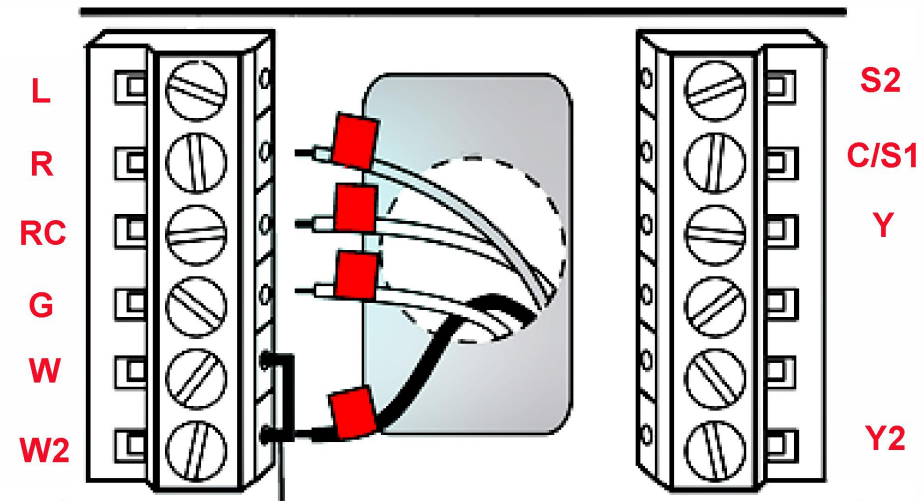
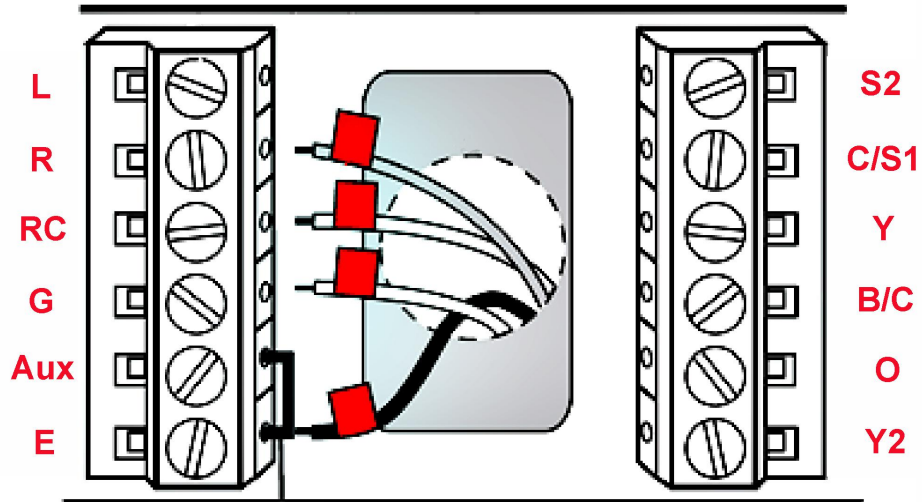
4. After installation is complete, follow the instructions in these instructions



Warning

Work with electric may cause a short circuit or damage the device. Disconnect the power before installation!

Wiring diagram



1H/1C system (1 transformer)

Re power 【1】
 R RH+RC joined by jumper
 W heat relay
 Y compressor contactor
 G fan relay
 C/S1 24V common/remote sensor 【3】
 S2 remote sensor

1H/1C system (2 transformer)

Re power (cooling transformer) 【1,2】
 R power (heating transformer) 【1,2】
 W heat relay
 Y compressor contactor
 G fan relay
 C/S1 24V common /remote sensor 【3】
 S2 remote sensor

2H/2C System (1 transformer)

Re power 【1】
 R RH+RC joined by jumper
 W heat relay 1
 Y Compressor contactor 1
 W heat relay 2
 Y compressor contactor 2
 G fan relay
 C/S1 24V common/remote sensor 【3】
 S2 remote sensor

2H/2C system (2 transformer)

Re power 【1,2】
 R RH+RC joined by jumper 【1,2】
 W heat relay1
 Y compressor contactor 1
 W2 heat relay 2
 Y2 compressor contactor 2
 G fan relay
 C/S1 24V common/remote sensor 【3,4】
 S2 remote sensor

1H/1C heat pump (no auxiliary heat)

Re Power 【1】
 R RH+RC joined by jumper
 Y compressor relay
 O changeover valve energized in cooling
 B changeover valve energized in heating
 G fan relay
 C/S1 24V common/remote sensor 【3】
 S2 remote sensor

2H/2C heat pump (no auxiliary heat)

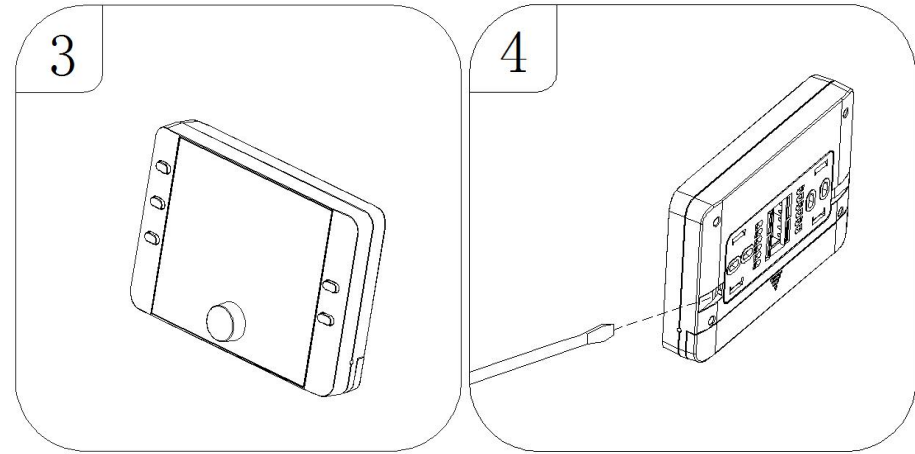
Re Power (cooling transformer) 【1,2】
 R power(heating transformer) 【1,2】
 W heat relay 1
 Y cool relay 1
 W2 heat relay 2
 Y2 cool relay 2
 G fan relay
 C/S1 24Vcommon/remote sensor 【3,4】
 S2 remote sensor

2H/1C heat pump (with auxiliary heat)

- L equipment monitor 【5】
- Rc power 【1】
- R RH+RC joined by jumper
- Y compressor relay
- E emergency heat relay 【6】
- Aux auxiliary heat relay (heat 2) 【6】
- O changeover valve energized in cooling
- B changeover valve energized in heating
- G fan relay
- C/S1 24V common/remote sensor 【3】
- S2 remote sensor

3H/2Cheat pump (with auxiliary heat)

- L equipment monitor 【5】
- Rc power 【1】
- R RH+RC joined by jumper
- Ycompressor relay1
- E emergency heat relay 【6】
- Aux auxiliary heat relay(heat 2) 【6】
- O changeover valve energized in cooling
- B changeover valve energized in heating
- Y2 compressor relay 2
- G fan relay 2
- C/S1 24Vcommon /remote sensor 【3】
- S2 remote sensor



How to install

