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It is subject to change without further notice V0

4. Setting steps

4.1 Wireless broadband router setup
If you already have a wireless broadband router in the house and you know the SSID and password, then you can ignore this step.
If your wireless broadband router is a new one, please kindly follow up the following steps (Or ask the technician of your Internet Service Provider for help):

- Please connect the wireless broadband router to the mains supply
- Please check the IP address of the wireless broadband router, normally there will be a sticker writing the IP address, user/password (normally is admin) and the model of the wireless broadband router etc.
- Please input the IP address of the wireless broadband router in the browser of the PC or the laptop (with active broadband connection), then input the user/password.
- Please setup the SSID and password of the wireless broadband router.

4.2 Room thermostat ID setup

- Please connect the wires according to the wiring diagram and then connect the thermostat to the power 85~265VAC.
- Please follow the below steps to set the ID of the thermostat.
 - To open the ID display: When the thermostat is in the ON state, hold the MANU key and the SET key at the same time to open the ID mode. Please press the UP key “▲” or the DOWN key “▼” to switch between ON and OFF of the ID mode.. ON: to open the ID mode and the ID will be displayed on the LCD, OF: to close the ID mode. Please press the POWER key to save and exit.
 - ID setup: When the thermostat is in the ON state, hold the SET key and the DOWN key at the same time to select the ID number as desired. When ID is flashing, please press the UP key “▲” and the DOWN key “▼” to select the ID number as desired. The ID range is 1~99. Please press the POWER key to save and exit.

1. Device introduction

The thermostat is available for boiler, manifold and underfloor heating system with 7-day, 6-period time program control. It has built in Wi-Fi module which is available for remote control by cell phone, Pad and laptop.. Models are with NTC sensor to detect ambient and floor temperature and do the control by comparison with the setting one. Manual, time program and temporary mode can be switched any time by pressing the relevant keys. De-frost protection function will be active when ambient temperature below 5°C, so as to prevent water pipe from freezing and burning.



App including: On/Off device, checking status, setting temperature, setting lock/un-lock, switching mode, Temp. unit setting : C/F, low temperature protection, high temperature protection, setting program etc.

2. Cellphone configuration requirements

- Disk capacity: at least 1GB
- Screen size: 3.7 in.
- Operation system: Android 3.0 or above
- Resolution: 480×800
- Battery capacity: 2500mah or above
- CPU: 1GHz or Above
- Storage type: flash or SD card
- Touch screen: capacitive
- Interface type: Micro-USB、Micro-SD
- WIFI interface

3. System Requirements

- An active broadband connection.
- A mobile device running Android
- A wireless broadband router (with DHCP function)
- 85~260VAC mains supply (for the WIFI capability floor heating thermostat).
- A PC or A laptop with active broadband connection

4. Setting steps

4.3 Connect to WIFI module of room thermostat
Before setting, You should reset the thermostat as follows first. You need to turn off the thermostat, then press “Power”. After one second, press “Power” and “Set” key at the same time for 5 seconds. Then there is a “--” twinkling in the screen. After the “--” stop twinkling, it means the thermostat has connected to router successfully. There is a WIFI module built-in the floor heating thermostat. Please open the WLAN of your mobile device and search the WIFI module of the thermostat. Please connect to the WIFI module of the thermostat.



The name and the password of the WIFI module of the thermostat is as below:
Name: IDC_9D2086 (It is the last 6 digits of the MAC address which we stucked on the thermostat)
Password: 0123456789

4. Setting steps

4.4 Get into App


An APP icon “” will be shown on the screen after installed the Application. Please press it and get into the main interface of the APP as below picture 5-7 shown.

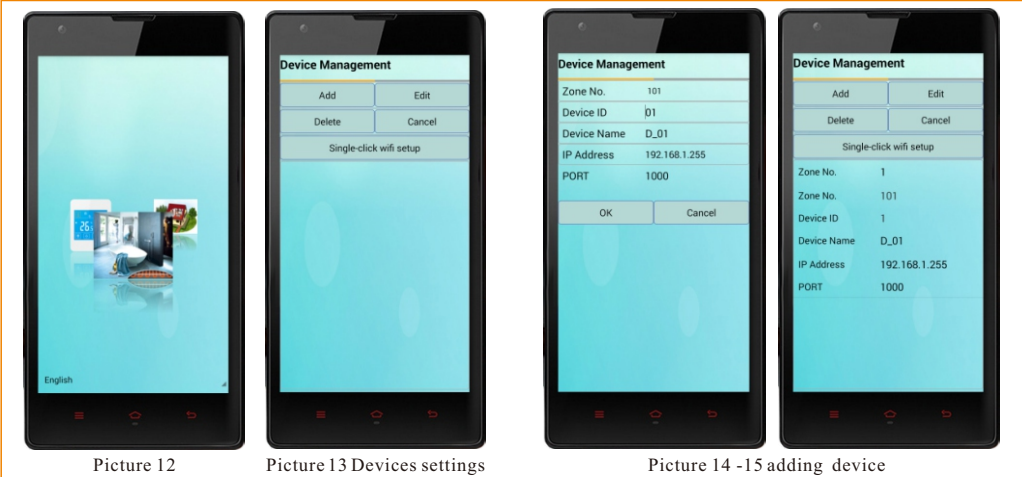


Picture 6 is a navigational interface, you can slide the icons towards left or right or rotate them. Picture 7 is a Multi-language selection, you can choose the language as desired.

4. Setting steps

4.6 Device setting

Please press “” icon as picture 8 shown, and then get into the device setting interfaces.



Please press “Add” to increase the devices. The Device ID should be same as the thermostat ID and the Port should be 1000, the IP address will be assigned by the wireless broadband router after completed the WIFI setup. Please press “OK” to save the settings. Please press “Edit” to change the settings and the operation would be same as above.

4. Setting steps

4.5 Zone setting

Please press “” and get into zone setting interface as below pictures shown.

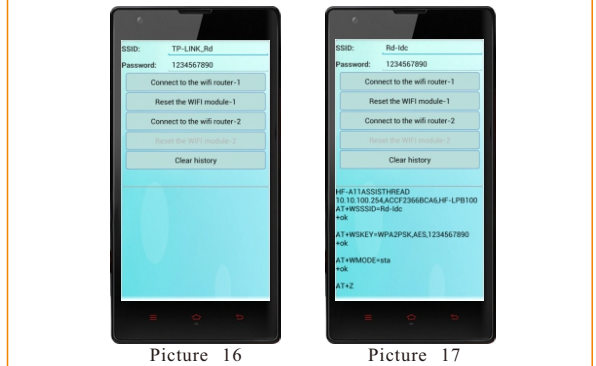


It can be set several zones which has been installed the devices, such as Villa, Hall, badminton Hall, Please press “Add” and get into management adding interface, then press “Edit” to set the desired information, press “OK” to save the information after the setting.

4. Setting steps

4.7. WIFI setup

Please select the thermostat/Device and then press the “Single-click wifi setup” key to enter into WIFI setup interface.



A. Please enter the SSID and password of your wireless broadband router:
SSID: the name of your wifi router
Password: the password of your wifi router
 B. The second line will show the information of module's MAC. The third and fourth lines include router's information, such as name and password etc. You can make confirmation. If there are three OK show on the screen, it stands for the success of configuration.
 Explanation: “Connect to the wifi router-1” is used for previous wifi module; so do “Reset WIFI module-1.”
 “Connect to the wifi router-2” is used for HANFENG wifi module, this key includes “Reset the WIFI module-2”. (It means when you press “Connect to the wifi router-2”, “Reset the wifi router-2” will start too.)

4. Setting steps

4.8. Connect to your wireless broadband router



Picture 18

Picture 19

4. Setting steps

4.9 Operation interface

Please press “ ” icon as below picture 20 shown to get into the operation interfaces.

Click the “ ” and then click “ ” and third click “ ” Now, You can operate the thermostat by your phone.



Picture 20



Picture 21-22 Operation settings



If configuration is needed again after success, please reset APP and then do the operation above again.

4. Setting steps

- Icons introduction:
 - “ ” In the ON state “ ”In the OFF state
 - ON/OFF: Press “ ” to switch on the device, press “ ” to switch off the device.
 - Status checking: Press “ ” to check the device status.
 - Temp. Setting: Press “ ” to increase the temperature, Press “ ” to decrease the temperature.
 - Key Lock: Press “ ”to lock the device, press “ ”to un-lock the device.
 - Mode selection: press “ ” to switch to the Time program mode. Press “ ” to switch to the manual control mode.
 - Advanced settings :press “ ” to get into the advanced settings.
 - Temp. Unit: Press “ ” to switch to Celsius degree , press “ ” to switch to Fahrenheit.

4.10 Advanced settings

You can set temperature compensation, low temperature protection, high temperature protection, choose the program mode etc in the advanced settings.



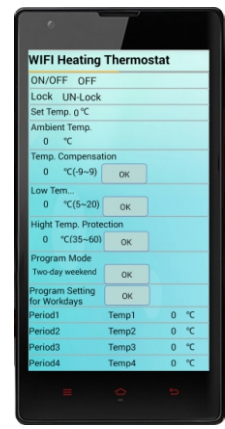
Picture 23 Advanced settings

4. Setting steps

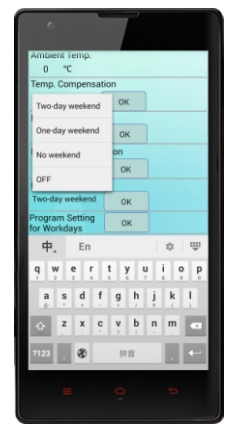
Please touch the original temperature values of the temperature compensation, low temperature protection and high temperature protection, and then input the temperature values as desired.

There are three options for program mode including one-day weekend, two-day weekend, no program and OFF as picture18 shown.

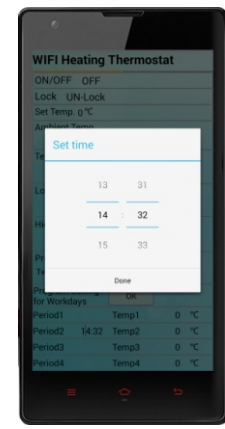
Workday program mode, input the time and temperature, and save them, then the time and temperature will be renewed in the thermostat.



Picture 24-25 Temperature value settings



Picture 26



Picture 27

- The weekend program mode is same operation as the workday .
- Please Click “ Query ” to check the updated state.

5. Thermostat guide

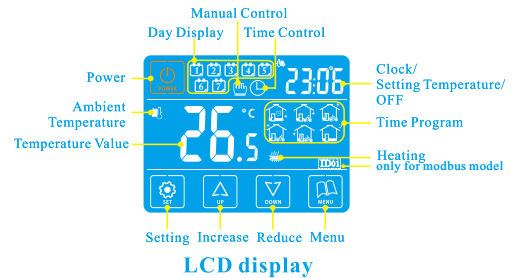
Product Features

- 1、 7-day, 6-period time program
- 2、 Touch screen LCD with blue backlight
- 3、 De-frost protection ≤5°C
- 4、 Key-lock function
- 5、 Memory function
- 6、 Advanced setting
- 7、 Double sensors to control and limit the temp.
- 8、 Ingress Protection:IP20
- 9、 Flame retardant PC

Technical Datas

- Consumption: < 2W
- Power supply: 85~265VAC 50/60Hz
- Max. Current: 20Amp MAX(Resistive load)
- On/Off differential temp: 0.5~5°C
- Working temp. and Humidity: 0~50°C, less than RH90%(Nocondensation)
- Storage temp. and Humidity: 20°C~30°C, RH45%~RH65%
- Setting temp.: 5~35°C/0.5°C per step
- Accuracy: 1°C
- Temp. limitation: 5~60°C(external sensor)
- Wiring port: 2.5mm² max.

LCD Display and functions

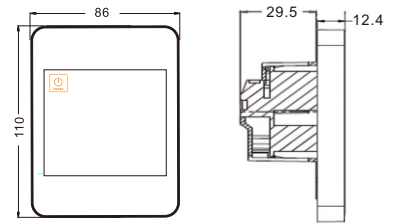


1. Manual control mode
LCD displays “☺”, the controller is under manual setting. In the “ON” state, press “☺” to switch the manual control mode or time program control mode.
2. Time control mode
LCD displays “☺”, adjust temperature of periods automatically against time program setting. In the “ON” state, press “☺” to switch the time program control mode or manual control mode.

LCD Display and functions

3. Temporary control mode
LCD displays “☺” and “☺”, current period is manual control mode, but next period resume to the time program control mode. In the time program control mode, press “☺” or “☺” to enter into temporary control mode.
4. De-frost function
In off mode, when the current temperature is lower than the setting temperature for de-rost, the main output will close, and will show “❄”.

Dimensions



General Setting

1. Power on/off: Press “☺” to turn on or turn off the controller. When power is off, it displays “OFF” and current time alternately; when power is on, it displays setting temp. and current time alternately.
2. Adjust setting temp.: Press “☺” or “☺” to adjust temp. during manual control and temporary control mode.
3. Key-lock function: In the “ON” state, keep pressing “☺” for 3s until the coin “LOC” displays, to lock or unlock the controller.
4. Time and week setting: In the “ON” state, press “☺”, then press “☺” or “☺” to amend the minute; press “☺” to amend the hour; press “☺” to set the day of week, press “☺” to save and exit the setting.
5. Time program: In the “ON” state, keep pressing “☺” for 3s to start setting, press “☺” or “☺” to adjust the current time (15mins/step). Press “☺” again to check related temp, press “☺” or “☺” to adjust setting temp. Press “☺” to adjust next period. Press “☺” to save and exit the setting.
6. Control mode: Press “☺” to switch manual or time program control mode. In time control mode, keep

General Setting

pressing “☺” or “☺” for 3s to enter into temporary control mode.

Periods	Coins	Default Time	Default Temperature
Weekdays	1	☺ 06:00	22°C
	2	☺ 08:00	
	3	☺ 11:30	
	4	☺ 12:30	
	5	☺ 17:00	
	6	☺ 22:00	
Holiday	1	☺ 08:00	22°C
	2	☺ 23:00	

- ☺ Wake up, Period 1
- ☺ Leave(am), Period 2
- ☺ Return(am), Period 3
- ☺ Leave(pm), Period 4
- ☺ Return(pm), Period 5
- ☺ Sleep, Period 6
- ☺ Key-LOC

Advanced Setting

- Normally set by technicians during the first installation. Press “☺” first, then press “☺” for 3s to enter into setting in the “ON” state.
- Tips: (Amend the data via advanced setting, press “☺” to save and exit the setting.)
01. Adj Temperature compensation, press “☺” or “☺” to adjust during range -9~9°C. Press “☺” to enter into next setting.
 02. Sen Sensor selection, press “☺” or “☺” to select the sensor. “IN”-internal sensor, “OU”-external sensor, “AL”-double sensors. Press “☺” to enter into next setting.
 03. Lit Limitation temperature of external sensor, press “☺” or “☺” to change the exact limited temperature of external sensor during 5~60°C, press “☺” to enter into next setting.
 04. Dif Switch deviation (bandwidth), press “☺” or “☺” to adjust the differential temp. during range 0.5~5°C, press “☺” to enter into next setting.
- Main output from “OFF” to “ON”: Room temp. ≤ setting temp. - differential temp.
- Main output from “ON” to “OFF”: Room temp. ≥

Advanced Setting

05. Prg 5+2/6+1/7 or off, press “☺” or “☺” to switch workdays, 5/6/7 workdays, or turn off the time program. Press “☺” to enter into next setting.
- Tips: workdays divided into 6 periods, and holidays divided into 2 periods only.
06. Rle Setting of passive linkage and main output, press “☺” or “☺” to change the condition of linkage; “00” means correspond with main loop output, “01” means opposite, Press “☺” to enter into next setting. (water floor system ONLY)
07. Dly Dry contact function output delay: Press “☺” or “☺” to amend from 0-5 minutes, press “☺” to enter into next setting.
- When the output from “ON” to “OFF”, dry contact will be “OFF” at the same time. (water floor system ONLY)
08. Hit Press “☺” or “☺” to adjust the max. temp. from 35~60°C. Press “☺” to enter into next setting.
09. LIG Backlight setting, press “☺” or “☺” to adjust the setting value, “ON” means open, “OFF” means close. Then press “☺” enter into next setting.

5. Thermostat guide

Advanced Setting

- 10. LT The time for backlight: Press “▲” and “▼” to set the time for backlight, it can be set between 10 s and 30 s. The default is 15 seconds.
- 11. PE Sound setting , Press “▲” or “▼” to select the setting parameter, “ON” means enable, “OFF” means disable, press “⏻” to enter into next setting.
- 12. LP De-frost function setting, press “▲” or “▼” to adjust the setting value, “On” means enable, “OFF” means disable. Then perss “⏻” to enter into next setting.
- 13. TP De-frost temperature setting press “▲” or “▼” to adjust the de-frost value. at the range of 5°C to 12°C. Then press “⏻” to enter enxt setting.
- 14. SF ON/OFF state of thermostat, Press “▲” and “▼” to change the state of thermostat, the default is OF
 ON: When power on, the thermostat is in on state,
 OF : When power on, the thermostat is in off state,
 SF : TO memorize the on/off state before power off.
- 15. CF Setting of temperature unit: Press “▲” and “▼” to switch the temperature unit.

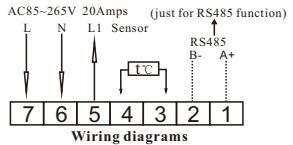
Advanced Setting

- C: Display in Celsius degree°C
- F: Display in Fehrenheit degree°F
- 16. Fac Recover factory setting, press and hold “▲”, then the symbol “-” appears on the screen, and till it changes to “--” to recover the factory setting. Press “▲” to enter next setting; or press “⏻” to save and exit this setting.

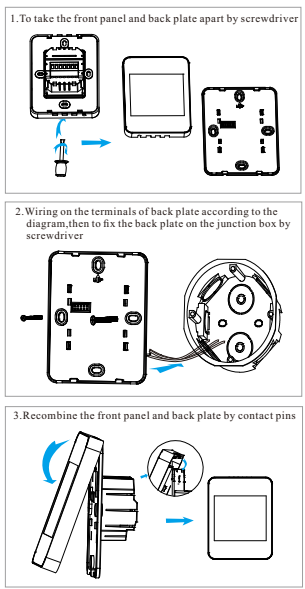
Setting	Adi	Sen	Lit	dif	prg	Rle	Hit	LIG	PE	LP	TP
Default	0	In	35°C	1	5	00	35°C	on	on	on	5°C

Wiring Diagrams

The highest elevation for the controller working under full load situation is 2500m; or if higher than 2500m, the rated power of external loads should be ≤ 80% rated power of the thermostat.



Installation Diagrams



Trouble Shooting

Fault phenomenon	Reasons	Methods
No display	Power line input errors or without Input	Check the power line connection and the power supply
Display Er1	Internal sensor errors	Check the pin of internal sensor if there is a short circuit
Display Er2	External sensor errors	Check the pin of external sensor if there is a short circuit. Choose internal sensor via advanced setting