INSTALLATION AND USER MANUAL

240V Wired Programmable Thermostat
Contents

Thermostat specification ....................................... 1
Important safety information ................................. 2
Display ..................................................................... 3
Time setting ............................................................ 7
Programme setting .................................................. 8
Operation mode ...................................................... 9
Alarm instructions ................................................... 10
Installation ............................................................ 11
Wiring diagram ....................................................... 12
Configuration Menu ............................................... 13
Connecting the App ................................................. 17
Specifìcation

Power source: 100-240VAC 50/60Hz
Load current output: 250VAC 3(2)A
Temperature setting range: 5~35°C
Display accuracy: 0.1°C
Setting accuracy: 0.5°C
Storage temperature: -10~60°C, 0~90%RH
Ambient temperature: 0~50°C, 0~80%RH
Wifi frequency: 2.4GHz
## Important safety information

Read all of the information in this manual before installing this thermostat.

Always turn off the power at the main power source by unscrewing the fuse, or switching the circuit breaker to the off position before installing, removing, cleaning, or servicing this thermostat.

Only a professional contractor should install this thermostat.

All wiring must conform to local and national building and electrical codes and regulations.

If the system is not operating properly, check the wiring and replace the fuse if necessary.

Use this thermostat only as described in this manual.
Thermostat display

a  ON/OFF/Boost
b  Time setting
c  Menu button
d  Lower temperature setting
e  Raise temperature setting
f  Reset
Thermostat display

1. If the icon 🗺 is not shown then WiFi is not connected. If the signal is lost after connection the icon will flash.
2. Manual mode
3. Programming mode
4. Key lock
5. Boiler on/off
6. Frost protection
7. Holiday mode
8. Settings menu
9. Mode: Room mode, floor mode, dual temperature mode
10. Sleep mode
11. Away mode
12. AM/PM
13. Back home mode
14. Wake up
15. Temperature setting/Boost display
16. Weeks icon
17. Room temperature/time display
**ON/OFF function**
Press ‘ şi ’ to turn the thermostat ON. Press and hold ‘ şi ’ again to turn the thermostat OFF.

**Key lock function**
In the main display interface, press and hold ‘ ’ ‘ ’ at the same time to activate or cancel the key lock. When activated, no keys can be used. The thermostat will display ‘ ’.

**Boost function**
Press ‘ şi ’ to switch the setting temperature or boost control. When the display shows ‘ ’, press ‘ ’ ‘ ’ to select boost. The length of time the heating will be boosted is displayed. When the time elapses the screen returns to the temperature display.
Press ‘ şi ’ to cancel and go back to the temperature display setting.

**Holiday mode**
With the power on, press ‘ ’ to switch between manual mode, programming mode and holiday mode. After selected holiday mode ‘ ’ will display and will run at 16°C. Press ‘ ’ to cancel holiday mode. Boost function can be used during holiday period.
**Open window function**
If the room temperature drops 6°C in 4 minutes, the open window function will activate and display ‘[ ]’, then turn down all heating. When the room temperature increases by 2°C the thermostat will return to normal operation. Press any button to cancel the open window function while it is active.

**Anti-seize function**
If the thermostat has not been activated for over 1 week then to prevent the valve and pump from seizing, the thermostat will run the system for 5 minutes.

**Frost protection**
In frost protection mode, when the temperature drops below what has been selected, the thermostat will start the heating until the temperature has been raised by 3°C.

**Intelligent function**
The intelligent function adjusts the starting time for home heating according to the temperature measured within the building. It preheats your rooms to the temperature according to your schedule.

**Time Proportional and Integral (TPI) display**
The TPI function increases boiler efficiency by firing the boiler at regular intervals, adjusting firing duration with demand, to maintain set room temperatures. It can provide great cost savings.
**Time setting**

Press and hold ‘蓉’ for 4 seconds, press ‘蓉’ to select year, month, day, time scale, time, press ‘˅’ ‘˄’ to adjust setting, press ‘蓉’ to confirm.
If there are no actions for 10 seconds, the thermostat will return to temperature display mode.
Press ‘蓉’ to check time, year, month, day.

**Setting the date and time on initial start up**
Plug in the power supply. Press ‘˅’ or ‘˄’ to set year, press ‘蓉’ to set month, day, time scale, time, press ‘˅’ ‘˄’ to adjust the setting.
Programme setting

Programme setting: 4/6 period programming optional (factory default: 6 period).
When thermostat is on, press and hold ‘≡’ to enter the programming mode. Press ‘✓’ or ‘ ’ to select the programming week (5+2, 5+1+1 or 7 individual day optional).
Press ‘≡’ to enter time setting mode. Press ‘✓’ or ‘ ’ to select time, press ‘≡’ to enter temperature setting mode, Press ‘✓’ or ‘ ’ to select temperature. Press ‘≡’ to save and exit. If no buttons are pushed for 10 seconds, the thermostat will exit program setting automatic.

Default programming (6 period programming)

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wake up</td>
<td>Away</td>
<td>Back home</td>
<td>Away</td>
<td>Back home</td>
</tr>
<tr>
<td>6:00</td>
<td>20°C</td>
<td>8:00</td>
<td>16°C</td>
<td>11:00</td>
<td>20°C</td>
</tr>
<tr>
<td></td>
<td>14:00</td>
<td>16°C</td>
<td></td>
<td>18:00</td>
<td>20°C</td>
</tr>
<tr>
<td></td>
<td>22:00</td>
<td>16°C</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(4 period programming)

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wake up</td>
<td>Away</td>
<td>Back home</td>
<td>Sleep</td>
</tr>
<tr>
<td>6:00</td>
<td>20°C</td>
<td>8:00</td>
<td>16°C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>18:00</td>
<td>20°C</td>
<td>22:00</td>
<td>16°C</td>
</tr>
</tbody>
</table>

In programming state, press and hold ‘✓’ ‘ ’ at the same time to restore factory settings, display ‘EFF’
Operation mode

Programming mode (The factory default is programmable)
The thermostat will run according to the pre-set schedule. The screen will show ‘ورد’

Manual mode
From programming operation mode, press ‘โปรแกรม’ to enter the manual mode, the screen will display ‘ manus’. Press ‘↑’ or ‘↓’ to immediately adjust the temperature and save automatically.

Temporary hold mode
The thermostat will keep the room at the temporary set temperature, and will resume the programme operation mode when you enter the next programme. In programming operation mode, press ‘↑’ or ‘↓’ to enter the temporary hold mode, the screen display ‘ manus’. Press ‘↑’ or ‘↓’ to immediately adjust the temperature and save automatically.
## Alarm instructions

<table>
<thead>
<tr>
<th>Err. display</th>
<th>Err. condition</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Er1</td>
<td>Internal sensor short circuit</td>
<td>Thermostat shut down all heating output</td>
</tr>
<tr>
<td>Er2</td>
<td>Internal sensor open circuit</td>
<td>Thermostat shut down all heating output</td>
</tr>
<tr>
<td>Er3</td>
<td>External sensor short circuit</td>
<td>Thermostat shut down all heating output</td>
</tr>
<tr>
<td>Er4</td>
<td>External sensor open circuit</td>
<td>Thermostat shut down all heating output</td>
</tr>
</tbody>
</table>
Installation

1. Install the base
2. Mounting screws
3. Install the panel
4. Finish
Wiring diagram

Wiring diagram for 230V connections:
Power: 100-240VAC 50/60Hz
I_max: 3(2)A

Wiring diagram for volt-free connection (e.g. boiler control)

Suggest cable is not over 1.5mm
Configuration menu

With the thermostat turned off, press and hold ‘≡’ to enter the configuration menu. Press ‘≡’ to select different parameters. Press ‘↑’ ‘↓’ to adjust parameters. Press and hold ‘≡’ for 3 seconds, display ‘def’, indicates all the configuration settings have reverted to factory default setting. The thermostat will return to ‘off’ mode if no buttons are pushed within 10 seconds.

<table>
<thead>
<tr>
<th>Item</th>
<th>Press button</th>
<th>Displayed (factory default)</th>
<th>Press ▼ or ▲ to select</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>≡</td>
<td>CL (0.0°C)</td>
<td>-6°C ~ +6°C</td>
<td>Temperature correction value</td>
</tr>
<tr>
<td>2</td>
<td>≡</td>
<td>RH (35°C)</td>
<td>20°C ~ 50°C</td>
<td>Select maximum setting temperature</td>
</tr>
<tr>
<td>3</td>
<td>≡</td>
<td>RL (5.0°C)</td>
<td>5°C ~ 20°C</td>
<td>Select minimum setting temperature</td>
</tr>
</tbody>
</table>
| 4    | ≡            | BL (2)                      | 1/2/3                  | Backlight mode  
1: Backlight always bright  
2: When a button is pressed, the backlight is bright for 15 seconds  
3: Backlight is off |
## Configuration menu

<table>
<thead>
<tr>
<th>Item</th>
<th>Press button</th>
<th>Displayed (factory default)</th>
<th>Press ▼ or ▲ to select</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>≡</td>
<td>db (05°C)</td>
<td>0.2°C ~ 5°C</td>
<td>When the temperature is &lt; room temperature -setting value, the heating will stop. When the temperature is &lt; room temperature + setting value, the heating will start.</td>
</tr>
<tr>
<td>6</td>
<td>≡</td>
<td>Pr (On)</td>
<td>ON/OFF</td>
<td>Program option ON/OFF</td>
</tr>
<tr>
<td>7</td>
<td>≡</td>
<td>SE (6)</td>
<td>4/6</td>
<td>Select Programming period in one day 6-6 time zones; 4-4 time zones</td>
</tr>
<tr>
<td>8</td>
<td>≡</td>
<td>ES (OFF)</td>
<td>On/OFF</td>
<td>Intelligent function option ON : Turn on intelligent function OFF : Turn off intelligent function</td>
</tr>
<tr>
<td>9</td>
<td>≡</td>
<td>OP (OFF)</td>
<td>On/OFF</td>
<td>Open window function option ON/OFF</td>
</tr>
</tbody>
</table>
## Configuration menu

<table>
<thead>
<tr>
<th>Item</th>
<th>Press button</th>
<th>Displayed (factory default)</th>
<th>Press or to select</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>≡</td>
<td>AF (ON)</td>
<td>On/Off</td>
<td>Frost protection option ON/OFF</td>
</tr>
<tr>
<td>11</td>
<td>≡</td>
<td>PP (100°C)</td>
<td>5°C~17°C</td>
<td>Frost protection temperature setting</td>
</tr>
<tr>
<td>12</td>
<td>≡</td>
<td>PI (ON)</td>
<td>On/OFF</td>
<td>TPI function option: ON/OFF</td>
</tr>
<tr>
<td>13</td>
<td>≡</td>
<td>RL (ON)</td>
<td>On/OFF</td>
<td>Anti-seize function selection: ON/OFF</td>
</tr>
<tr>
<td>14</td>
<td>≡</td>
<td>bX (NC)</td>
<td>nC/nO</td>
<td>Select the actuator type NC/NO</td>
</tr>
<tr>
<td>15</td>
<td>≡</td>
<td>Sn (100)</td>
<td>100/10</td>
<td>External sensor 100 : NTC100K 10 : NTC10K</td>
</tr>
<tr>
<td>16</td>
<td>≡</td>
<td>Cts (Sr)</td>
<td>Sr/SF/rF</td>
<td>External sensor function option Sr : room mode rF : room and floor mode SF : floor mode</td>
</tr>
</tbody>
</table>
## Configuration menu

<table>
<thead>
<tr>
<th>Item</th>
<th>Press button</th>
<th>Displayed (factory default)</th>
<th>Press (\uparrow) or (\downarrow) to select</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>(\equiv)</td>
<td>(P_{\text{c}}) (270°C)</td>
<td>6 – 45°C</td>
<td>Select maximum floor setting temperature limitation</td>
</tr>
<tr>
<td>18</td>
<td>Press ‘*’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note item 14, if connected to a wiring centre all actuators should be the same configuration.
Connecting the App

Download and register
Click App store (click Android application market)
Search for ‘JG Underfloor’ and download
Login

When you finish the registration, log into your email and click on the link to activate your account. Your APP is now ready to use.

Registered mailbox/phone number

Insert your password
First, please turn on the location of your phone
Before adding the thermostat to your app, make sure to turn off the thermostat and then press and hold ‘
\[\text{on}\]’ for 3 seconds, the thermostat display will show ‘
\[\text{on}\]’. Then go to the JG underfloor app.
1. Click ‘➕’ on the top right
2. Click ‘Wired thermostat’
3. Select your home Wi-Fi, and enter password, then click ‘Next’
4 Adding device

5 Added successfully
Temporary leaving mode:
If you are away from home temporarily, click the ‘Away’ button, the temperature will remain at 16°C, the energy-saving icon ‘Prefab’ turns green and is on. After you arrive at home, click the button again to recover the previous temperature setting.

Press ‘<’, ‘>’ to adjust temperature
Click the 'Program' to enter the programming mode

Click the 'History' for checking the history

Click the 'Setting' for setting implicit parameters
APP Setting-Multi-day Programming

1. Click the ‘Program’ to enter the programming mode
2. Slide up and down to select the time, press ‘↑’ ‘↓’ to set temperature in different periods of time
3. Click ‘Submit’ to confirm

Click ‘Confirm’ after selecting the date
Optional Parameter Setting

Slide up and down to select different optional parameters
History

Click here to check the history

Thermostat

20.0°C
Set Temp

>>Slide off

Day | Week | Month | Year
---|------|-------|------

°C | (%)
---|------
36 | 100  
27 | 75   
18 | 50   
 9 | 25   

Set Temp | Current Temp | Heating Time
Remove devices

Click the icon ‘🗑’

Click ‘Remove Device’
Voice command:

After waking up the speaker you can say

Amazon Alexa

* Alexa, turn on bedroom.
* Alexa, turn off bedroom.
* Alexa, raise the bedroom by 1 degree.
* Alexa, drop the bedroom by 1 degree.
* Alexa, set the bedroom to 16 degrees.

Google Assistant

* Ok, Google, turn on bedroom.
* Ok, Google, turn off bedroom.
* Ok, Google, set the bedroom to 16 degrees.

Tips:

Bedroom is the device name. You can name it during the device set up. The temperature graduations and format must be the same in the speaker and the thermostat.
Reliance Worldwide Corporation (UK) Limited

Horton Road
West Drayton
UB7 8JL
United Kingdom
Tel: +44 (0) 1895 449233

Reliance Worldwide Corporation (UK) Limited reserves the right to make changes to the product which may affect the accuracy of information contained in this leaflet.

www.johnguest.com