# TSR12 Series WiFi Thermostat User Guide



## For fan coil unit

Thank you for purchasing Spectre™ Smart WiFi Thermostat.

Your new thermostat will provide uniform and comfortable temprature control throughout every room in your property. We bring together technology, craftsmanship and the highest quality materials to provide you with a safe, reliable product combined with sleek, contemporary design.

Please read this installation/programming manual for comprehensive instructions on installing and operating your thermostat. Please also ensure that a qualified technician who complies with all local regulations installs your thermostat.

## In the box you will find

| | | | |
|---|---|---|---|
| TSR12 Thermostat | x1 | Screws | x2 |
| User Guide | x1 | Wall plate | x1 |
| QC Certificate | x1 | | |

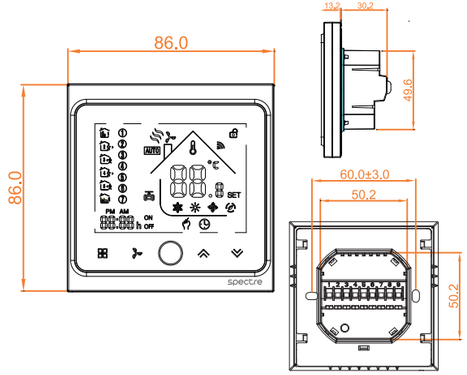
## ABOUT YOUR THERMOSTAT

TSR12 series Modern Touch Screen Room Thermostats are designed to on/off control the fans and valves in air conditioning applications by comparing the room temperature and set temperature to reach the aim of comfort and energy saving.

## FEATURES

- 86mm hidden box or European 60mm round box compatible.
- LED matrix display with low energy consumption
- Touch buttons for simple operation
- 0.5 accuracy to keep temprature within desired limit.
- Data memory when power is cut off
- 5+2 programmable periods to maximize comfort and energy saving.
- Temporary schedule.
- Smart scene compatibility. No limit for adding thermostats in Smart Life or Tuya Smart app.
- Create thermostat group for centralized control.
- Integration with Amazon Echo, Google Assistant, IFTTT, etc.
- Device sharing support.

## DIMENSIONS




## TECHNICAL DATA

Power supply: 95 ~ 240VAC / 50~60Hz
Fan relay amps resistance: 5A ; Inductive: 3A
Valve relay amps resistance: 3A ; Inductive: 1A
Sensor: NTC3950, 10KΩ
Accuracy: ±0.5°C
Set temperature range: 5 ~ 35°C
Display temperature range: 5 ~ 99°C
Ambient temperature: 0 ~ 45°C
Ambient humidity: 5 ~ 95% RH (Non condensing)
Storage temperature: -5 ~ 45°C Timing Error: < 1%
Power consumption: <1.5W
Timing Error: <1%
Shell material: PC + ABS (Fireproof)
Installation box: 86x86mm Square or 60mm Round Box
Wire terminals: Wire 2x1.5mm² or 1x2.5mm²
Protection class: IP20
Buttons: Capacitive touch buttons

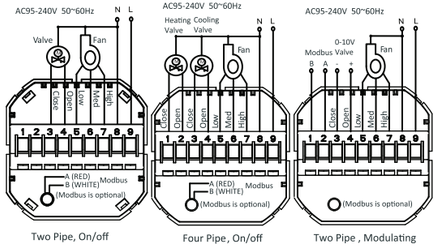
## BEFORE WIRING AND INSTALLATION...

1. Read the instructions carefully. Failure to follow them could damage the product or cause a hazadous condition.
2. Check the ratings given in the instructions and on the product to make sure the product is suitable for your application.
3. Installer must be a trained and experienced service technician.
4. After installation is complete, check out product operation as provided in these instructions.

***CAUTION!***

***Electric Shock or Equipment Damage Hazard***
***DISCONNECT POWER SUPPLY BEFORE INSTALLATION***

## WIRING YOUR THERMOSTAT




Two Pipe, On/off — Four Pipe, On/off — Two Pipe , Modulating

## INSTALLATION

Your thermostat is suitable for installation within a standard 86x86mm pattress box or European 60mm round pattress box.

**STEP 1.** Keep the electricity cut off. *(See Fig. 1)*

**STEP 2.** Remove the mounting plate by rotating the screen. *(See Fig. 2)*

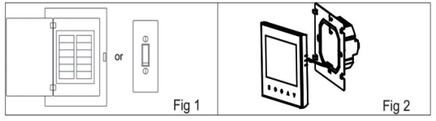



Fig 1 Fig 2

**STEP 3.** Connect the wires into appropriate terminals. *(See "WIRING YOUR THERMOSTAT" for details and Fig. 3)*

**STEP 4.** Fix the mounting plate onto the wall with the provided screws. *(See Fig. 4)*

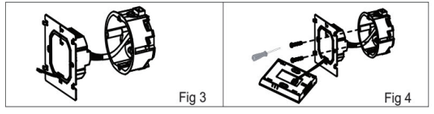


Fig 3 Fig 4

**STEP 5.** Fasten the display screen onto the mounting plate by rotating the screen. *(See Fig. 5)* Installation is complete *(Fig. 6)*

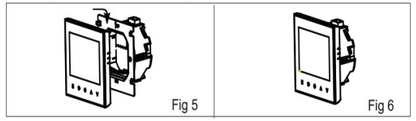
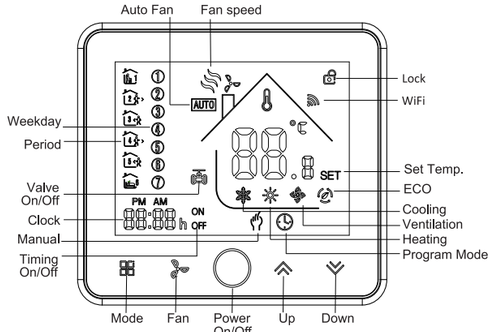


Fig 5 Fig 6

## HOME SCREEN QUICK REFERENCE




## OPERATION

- **Power On/Off:** Press ◯ to turn the thermostat on/off.
- **Manual & Programmable modes:**
  Press and hold ⊞ until ☝ begins to flash. Press ⌃ and ⌄ to toggle between manual ☝ and programmable mode 🕒.
- **Setting temperature:**
  In manual mode, press ⌃ ⌄ to set temperature. ☝ icon is displayed.
- **Locking your thermostat:**
  Press and hold the ⌃ ⌄ icons for 5 seconds to lock/unlock your thermostat.
- **Select mode:**
  Press ⊞ to select system mode: HEATING, COOLING, and VENTIALTION. In ventilation mode, the valve is off but the fan runs.
- **Setting the fan speed:**
  Press 🌬 to change fan speed to AUTO, HIGH, MED or LOW.
- **Adjusting/Setting the time:**
  Press and hold ⊞ until ☝ begins to flash. Press ⊞ to set minutes, hours, and weekdays by using ⌃ ⌄ arrows. After 3 seconds the values will be confirmed automatically.
- **Adjusting the weekly program:**
  Your thermostat provides six scheduled heating and cooling periods for each weekday: Three *Comfort* periods - 1, 3, & 5 (the desired temperature when the room is occupied) and three *Economy* periods - 2, 4, & 6 (the required temperature when the room is unoccupied). You can set both the time and temperature for each of these six daily periods.
  *NOTE: Adjusting/setting the schedules can only be carried out when in program mode (🕒).*
  ***Weekdays: 1=Monday, 2=Tuesday, etc.***
  When in program mode, tap the ⊞ icon four times until the weekday schedule settings appear (① ② ③ ④ ⑤) will show on the screen.
  Use the ⌃ and ⌄ arrows to adjust the time for the 1st (Comfort) period. Then press ⊞ icon and use ⌃ and ⌄ arrows to set the temperature.
  Repeat this process for periods 2 to 6.
  Press ⊞ icon once more to enter the weekend schedule settings ( ⑥ or ⑦ ). Repeat the above process to set the weekend schedule. Press ⊞ again to confirm and exit.

**Default settings for weekly program schedule:**

| Time display | Workdays (MON to FRI) | | Weekend (SAT) | | Weekend (SUN) | |
|---|---|---|---|---|---|---|
| | TIME | TEMP. | TIME | TEMP. | TIME | TEMP. |
| Period 1 | 06:00 | 20°C | 06:00 | 20°C | 06:00 | 20°C |
| Period 2 | 08:00 | 15°C | 08:00 | 20°C | 08:00 | 20°C |
| Period 3 | 11:30 | 15°C | 11:30 | 20°C | 11:30 | 20°C |
| Period 4 | 13:30 | 15°C | 13:30 | 20°C | 13:30 | 20°C |
| Period 5 | 17:00 | 22°C | 17:00 | 20°C | 17:00 | 20°C |
| Period 6 | 22:00 | 15°C | 22:00 | 15°C | 22:00 | 15°C |

**Setting advanced functions and options**

When powered off, press and hold ⊞ and 🌬 at the same time for 5 seconds in order to enter system functions.
Then press ⊞ to toggle between different items. All settings will take effect automatically when the thermostat is powered back on.

| Code | Function | Settings and options | Default |
|---|---|---|---|
| 1 | Temperature compensation | -7°C to +7°C | -1 |
| 2 | Fan control | 00: Fan turns off when room temp. reaches the set point<br>01: Fan keeps running when room temp reaches set point | 0 |
| 3 | Button lock | 00: All buttons are locked except for Power button<br>01: All buttons are locked | 01 |
| 4 | Heat/Cool | 00: Cool only 01: Heat/Cool | 01 |
| 5 | Min. set temperature | 5°C to 15°C | 05 |
| 6 | Max. set temperature | 15°C to 35°C | 25 |
| 7 | 12 / 24 hours | 00: 12h 01: 24h | 01 |
| 8 | Display mode | 00: Display both set temp. and room temp.<br>01: Display set temp. only | 00 |
| 9 | Energy saving mode | 00: Non-energy saving mode<br>01: Energy saving mode, set temp. keep economy temp. | 00 |
| A | Heating Economy temp. | 10°C to 30°C | 20 |
| B | Cooling Economy temp. | 10°C to 30°C | 26 |
| C | Deadband temp. | 1°C to 5°C | 1 |

## USING YOUR THERMOSTAT FOR THE FIRST TIME

Before using your Wi-Fi thermostat for the first time, you must configure the Wi-Fi signal and settings through your smartphone or tablet. This will allow communication between your connected devices.

### STEP 1. Download your App

If you don't have **Smart Life** app or **Tuya Smart** app installed, you can download them by scanning the below QR codes, or directly from App Store or Google Play.

*NOTE: You don't need to download both apps. Either one would be appropriate. Herein we will explain the procedure with Smart Life app. The procedure is the same for Tuya Smart app.*

*NOTE: App menus are subject to change by its developers without prior notice. Nevertheless, the functionality will remain the same.*

Available on the App Store

GET IT ON Google Play

Smart Life App:

Tuya Smart App:

### STEP 2. Register your account

Open "Smart Life" app and when prompted, tap *Allow* to enable notifications. If you already have an account, please *Log in*. Otherwise tap *Register* and enter your phone number or email, then enter the received verification code.

### STEP 3. Connect your thermostat to Wi-Fi

*EZ Mode:*

**On your app**

Tap on the ⊕ icon on the upper right corner of the page (Fig. 3-1) to add a new device. Under *Smart Home Appliances* menu, under *HVAC* section, choose *Thermostat (WiFi)* (Fig. 2-2). Select the WiFi network and enter its password and tap *Next*.

**On your thermostat**

With power off, touch and hold the ⌄⌄ arrow for eight (8) seconds.

The WiFi icon ᯤ will start flashing once per second.

**On your app**

Confirm that the indicator is blinking rapidly and tap Next (Fig. 3-3). The app will automatically connect to your thermostat. This may take up to 120 seconds to complete.

***NOTE: If you have successfully connected your thermostat, please ignore the AP Mode instructions below.***

*AP Mode:*

If your router does not support EZ mode or your WiFi signal is weak, or you could not connect the device in EZ mode, switch to AP mode on the upper right corner in Fig. 2-1.

**On your thermostat**

With power off, touch and hold the ⌄⌄ arrow for eight (8) seconds.

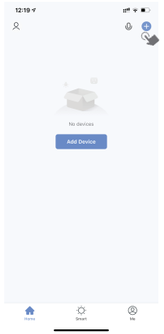



Fig. 2-1




Fig. 2-2

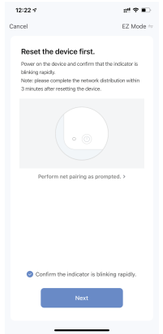



Fig. 2-3

The WiFi icon ᯤ will start flashing once per second.

Touch and hold the ⌄⌄ arrow for eight (8) seconds again.

The ⚙ icon will start flashing once in every three (3) seconds.

**On your app**

Confirm the indicator is blinking slowly and tap Next. Then you should connect your mobile phone to the device's hotspot by tapping on *Go to Connect* (Fig. 3-1) to go to WiFi settings on your phone. Connect to SmarLife-XXXX or SL-XXXX network (Fig. 3-2) and switch back to the app.

The app will now connect to the thermostat. This may take up to 120 seconds to complete.

**You can edit the thermostat name by tapping on ✎ after the device is added (Fig. 3-3)**

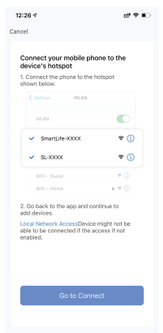



Fig. 3-1

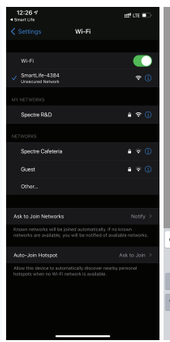



Fig. 3-2




Fig. 3-3

## PROGRAMMING YOUR THERMOSTAT

When the device is successfully added, it will be displayed on the you app home screen (Fig. 4-2).

Click on the device name to start using your thermostat.

The control screen is shown in Fig. 4-1

Manual mode: In this mode the temperature can be set manually. (i.e. NOT using the pre-programmed settings)

Program mode: When this mode is selected, your thermostat is in program mode and will follow any pre-set heating/cooling schedule.

Eco mode: In this mode, the temperature will be set to 26°C. This cannot be changed or adjusted.

Lock/Unlock button. You can lock or unlock the screen controls with this button.

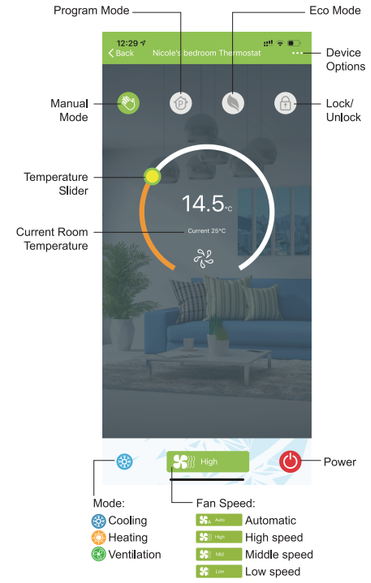



Fig. 4-1

** When in Program mode, click on Schedule Settings (Fig. 4-3) at the bottom of the page to open the menu where you can schedule heating/cooling for the Work days (Monday to Friday) and Saturday and Sunday (Fig. 4-4). You can set 6 different periods (time and temperature) for each day.*

*Once the Schedule is set, tap on SAVE and the app will send the new schedule to your thermostat.*

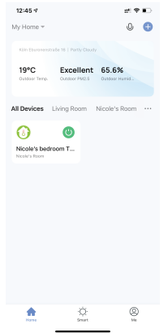



Fig. 4-2

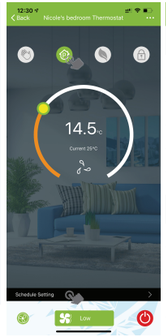



Fig. 4-3

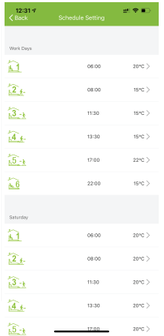



Fig. 4-4

## HOME MANAGEMENT

In the app home screen, Tap on *Me* at the bottom of the screen and then choose *Home Management* (Fig. 5-1). In this menu you can edit the current home (*My Home...*). Create a new home, or join an existing home. You can edit their names, define home members, manage rooms and select the home location on map.

## CREATING A GROUP

In order to be able to control all rooms at the same time, you will need to create a group in your app.

When in thermostat control screen on your smartphone, tap on the three dots on the upper right corner of the screen (Device Options) and choose *Create Group* (Fig. 6-1). Select all desired installed thermostats in various rooms and confirm.

*NOTE: In this menu you can also modify device name, share the device, and collect information on the thermostat.*

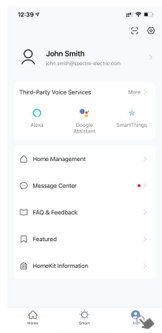



Fig. 5-1

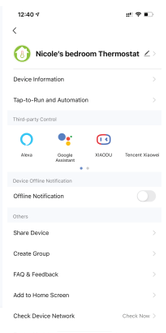



Fig. 6-1

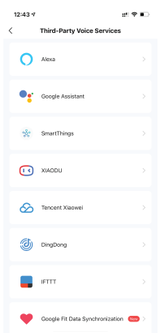



Fig. 7-1

## SHARING THE DEVICE WITH YOUR FAMILY MEMBERS

When in thermostat control screen on your smartphone, tap on the three dots on the upper right corner of the screen (Device Options) and choose *Share Device* (Fig. 6-1).

Then you can send an invitation to a family member account to share this device.

## CONNECTING THE DEVICE TO AMAZON ECHO, GOOGLE HOME, AND OTHER 3RD PARTY ASSISTANTS.

In the app home screen, Tap on *Me* at the bottom of the screen and then choose an option in *Third-Party Voice Services* (Fig. 5-1). You can also tap on *More >* to see other options. (Fig. 7-1). Choose a third-party voice service and follow the on-screen instructions.

## USING SMART SCENARIO

You can also customize your own personal scenes to suit your needs in various custom occasions. For example to turn off the thermostat when you leave home.

To create a smart scenario, in app main screen, tap on *Smart* on the bottom of the screen (Fig. 8-1), and tap + sign at the upper right corner. Then set a condition and then set a related task to be performed when this condition is met (Fig 8-2).

You can also create a Tap-to-Run scenario, where numerous actions are done, with a single tap (Fig. 8-2).

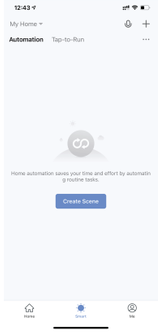



Fig. 8-1

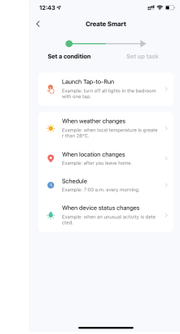



Fig. 8-2

## SERVICE

Your thermostat carries a 24-month warranty from the date of purchase. Service outside warranty period may incur a charge. For more details please contact us directly at www.spectre-electric.com

spectre
the beauty of smartness