# 2- STAGE WIFI THERMOSTAT

R02P033

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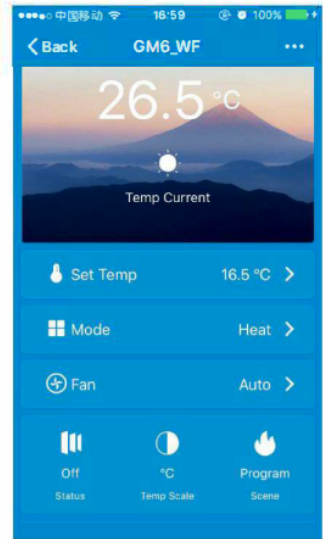
INSTALLATION MANUAL

# R02P033

# 2-STAGE WIFI THERMOSTAT



**Thermostat**



**Phone App**

| FAILURE TO READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY BEFORE INSTALLING OR OPERATING THIS CONTROL AND SYSTEM COULD CAUSE PERSONAL INJURY AND/OR PROPERTY DAMAGE. |
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## PRODUCT OVERVIEW

The R02P033 2-Stage WiFi Smart Thermostat combines user-friendly touch sensitive buttons with WiFi wireless smart control application, offering unparalleled user control. Its efficient control (local and remote wireless) system, can save up to 32% of heating and cooling costs. It includes a local energy-saving programmable solution to provide highly accurate temperature control (full 7-day schedule), as well as a remote wireless control through the application to easily bring a comfortable lifestyle with total control. The App supports Google Home and Amazon Echo integration.

## FEATURES

This thermostat has been designed to control conventional heating and cooling system or heat pump system.
- Compatible with Google Home and Amazon Echo
- Touch sensitive buttons
- 4.3" LCD screen clear display
- White backlit display
- White bright digits
- Apps for IOS and Android devices

## SPECIFICATIONS

**Power Supply**: 24V$_{AC}$ 50/60Hz
**Power consumption**: 2W
**Dimensions**: 136 x 94 x 26mm
**Max Output Current**: 1A (Resistive load)
**Sensor**: NTC Thermistor
**Temperature setting range**: 5-37°C
**Accuracy**: ±0.5°C
FCC Certificate

⚠ **WARNING**
Thermostat installation and all components of the control system shall conform to Class II circuits per the NEC code.

⚠ **WARNING**
To prevent electrical shock and/or equipment damage, disconnect electric power to system at main fuse or circuit breaker box until installation is complete.

**ATTENTION:**
**MERCURY NOTICE**
This product does not contain mercury, but it may replace a product that contains mercury. Mercury and products containing mercury must not be discarded in household trash. Do not touch any spilled mercury. Wearing non-absorbent gloves, clean up any spilled mercury and place it in a sealed container. For proper disposal of a product containing mercury or a sealed container of spilled mercury, place it in a suitable shipping container. On the Internet, visit `www.switchthestat.ca.com` for a location where the product containing mercury can be sent.

# Table of Contents

# 1   Installation

## 1.1   Wiring

**Step 1**:

Separate the thermostat from its base by holding point A and B and pulling apart. Insert the wires into the corresponding terminals following the wiring diagram for the appropriate system. Fasten the wall plate to a mounting box with the provided M x 25 mm screws. Ensure the proper orientation of the wall plate with the arrows on it pointing Up.
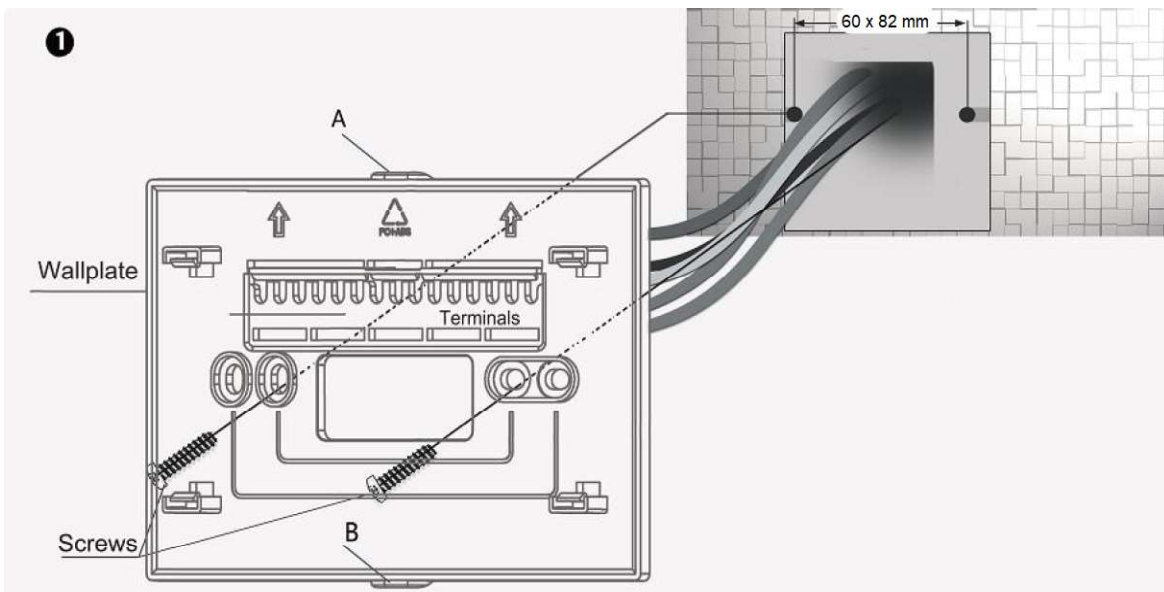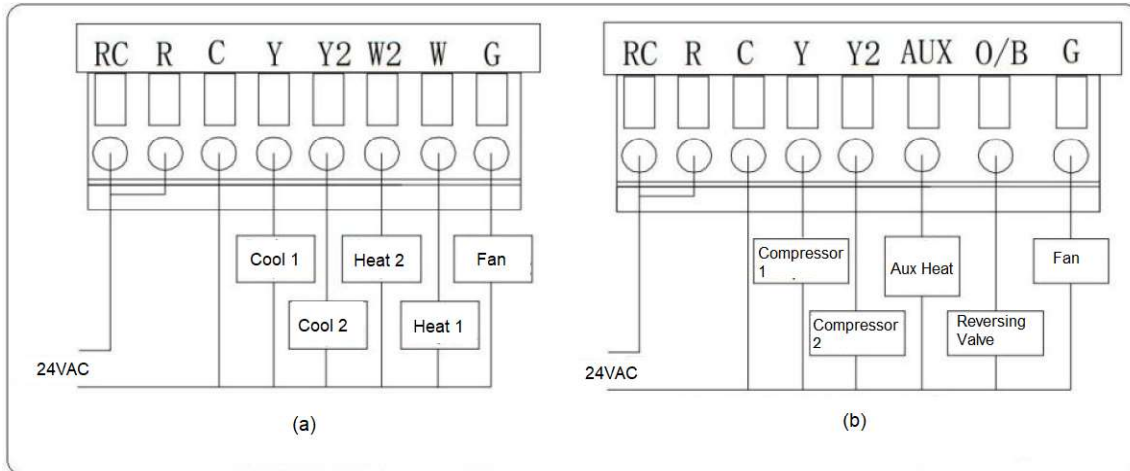


**Step 2**:

Double check the wiring and then evenly push the face plate into the wall plate until both parts fit tightly.
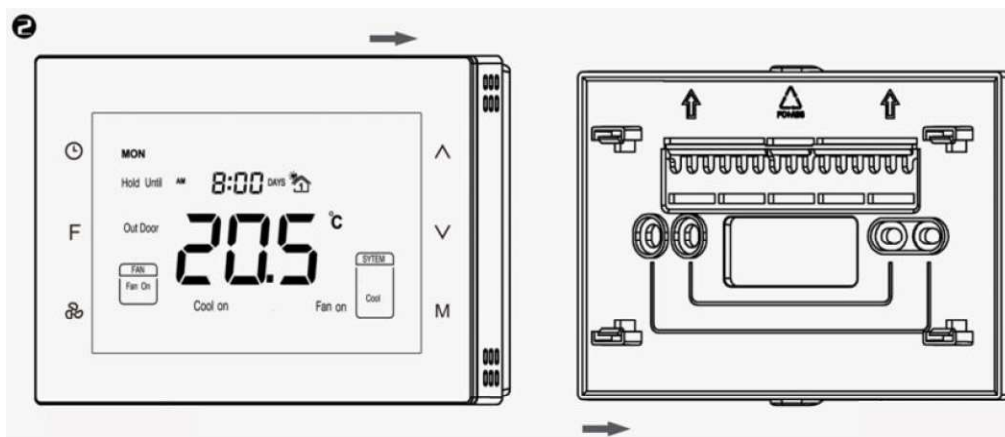
## 1.2　Wiring Diagram



(a) Conventionnal system

(b) Heat pump system

| Terminal | Definition | Information |
|---|---|---|
| RC | Cooling Power (2 transformers) | Jumpered with R (only one transformer) |
| R | Heating Power | |
| W (O/B) | Heating output | Reversing valve output (heat pump) |
| Y | Cooling output | Compressor output (heat pump) |
| G | Fan output | |
| Y2 | Cooling output 2 | Compressor output $2^{nd}$ stage (heat pump) |
| W2 (AUX) | Heating output 2 | Auxiliary heat output (heat pump) |

## 1.3　System Modes

| # | Type | Terminals | System | Compressor delay |
|---|---|---|---|---|
| 0.0 | 1H/1C (conventional) | R, C, W, Y | Conventionnal | N/A |
| 1.0 | 1H/2C | R, G, W, Y, Y2 | | |
| 2.0 | 2H/2C | R, G, W, Y, W2, Y2 | | |
| 3.0 | 2H/1C | R, G, W, Y, W2 | | |
| 4.0 | 1H/1C | R, G, O/B, Y | Heat pump | 1 min (default) |
| 5.0 | 2H/1C | R, G, O/B, Y, AUX | | |
| 6.0 | 2H/2C | R, G, O/B, Y, Y2 | | |
| 7.0 | 3H/2C | R, G, O/B, Y, AUX, Y2 | | |

# 2 Operation

## 2.1 Display and Controls
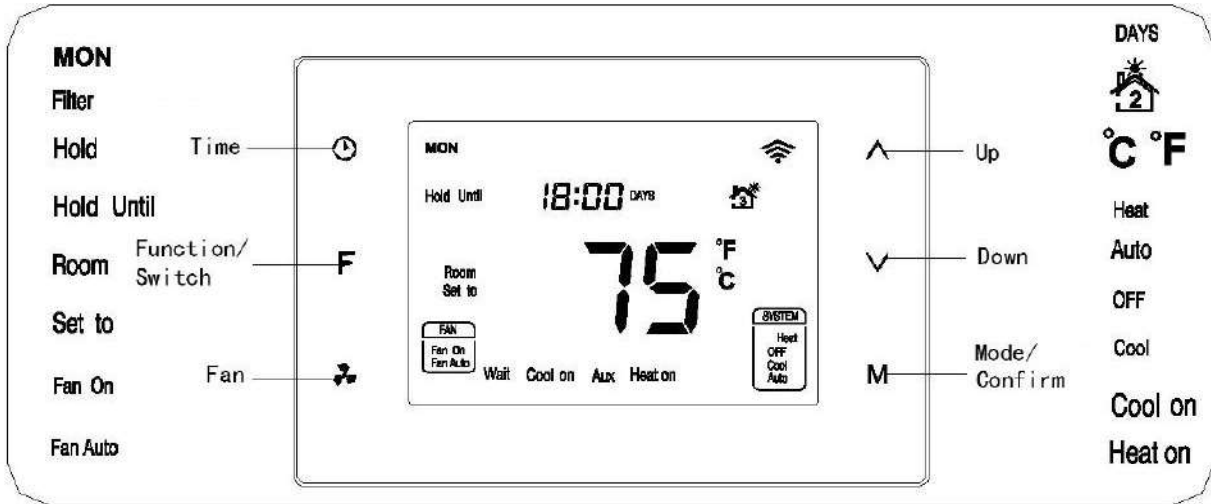


Temperature set point can be adjusted using $\wedge$ and $\vee$. Normal display resumes after a short delay, or by pressing F.

## 2.2 Display Settings

**Temperature display**

*Not available in Hold or Hold Until modes.*

On the main screen, press ⊕ and F simultaneously to switch the display between degrees Celcius and Fahrenheit.

**Setting the clock**

*Not available in Hold Until mode.*

Press and hold ⊕ for 3 seconds to enter the clock setting interface. **00** will be displayed. Adjust to the current year using $\wedge$ and $\vee$. Once set, press ⊕ to switch to month setting (**01**). Repeat to set the month (**01**), day (**02**), hours (**03**) and minutes (**04**). Press F to save and exit.

## 2.3 Operating Settings

**Operating Mode**

At the main display, slowly press M to switch among **Heat**, **OFF**, **Cool** and **Auto**. After the state change, **Set to** will be displayed and the temperature value will flash for 5 seconds. During this time,

the temporary temperature set point can be adjusted.

**OFF**: In this state, the system will not be running.

**Auto**: In this state, the system will maintain the set temperature, automatically switching between heating and cooling based on room temperature.

**Heat**: If the room temperature is 1°C colder than the set point, the thermostat will display **Heat on** and activate the first heating stage. If the room temperature is 2°C colder than the set point, the second stage will be activated (2-stage systems only). The second stage is deactivaed when room temperature is within 1°C of the set point. The first stage is deactivated when room temperature reaches the set point.

With a heat pump system: the reversing valve is activated. Below 3 degrees, auxiliary heat is activated and **AUX** will be displayed on the thermostat. Otherwise, **AUX** is displayed on the 2nd stage.

**Cool**: If the room temperature is 1°C hotter than the set point, the thermostat will display **Cool on** and activate the first cooling stage. If the room temperature is 2°C colder than the set point, the second stage will be activated (2-stage systems only). The second stage is deactivaed when room temperature is within 1°C of the set point. The first stage is deactivated when room temperature reaches the set point.

With a heat pump system: the reversing valve is not energized.

**Compressor Protection**

After an operation of the heat pump, there will be a one minute off delay to protect the compressor. **Wait** will be displayed if another request is made during this delay.

**Fan Mode**

Press ⊗ to switch between **Fan On** and **Fan Auto**.

When **Fan On** is selected, the circulating fan is always on. When **Fan Auto** is selected, the circulating fan will run only when there is a heating or cooling demand. If the system mode is set to **OFF**, the fan will always be off.

## 2.4   Schedule Settings

Press **F** to switch between **Schedule**, **Hold** and **Hold Until** (Holiday) scheduling options.

**Schedule**

Each of ![icons 1 2 3 4] stand for one time period of the day.

To set the schedule, press ⊙ under the time setting interface. Then, select the schedule format between **7 days** (each day set individually), **5+2 days** (different settings for weekend)or **1 day** (same setting for each day).

1. Press ⏲ and then use ∧ and ∨ to set the blinking hour, minute and temperature value for the chosen time period.

2. Press M to switch to the temperature setting, and adjust using ∧ and ∨.

3. Press M to switch to the next time period of the current day, and repeat steps 1 and 2. Press ⏲ to save and switch to the next day.

Once the schedule is set, press F to return to the main display.

Factory default schedule:

| Period | Time | Parameters | | Fan |
| --- | --- | --- | --- | --- |
| | | Heating | Cooling / Auto | |
| 1 | 06:00 | 21.0℃ | 25.5℃ | On |
| 2 | 08:00 | 16.5℃ | 29.5℃ | On |
| 3 | 18:00 | 21.0℃ | 25.5℃ | On |
| 4 | 22:00 | 16.5℃ | 28.0℃ | On |

**Hold**

In this mode, the thermostat will permanently maintain the set temperature. Schedule is disabled.

**Hold** and **Set to** are displayed and the temperature is blinking. Set the value using ∧ and ∨. Save the setting using F.

**Hold Until**

In this mode, the thermostat will maintain the set temperature for an adjustable number of days (for holidays) before returning to the schedule.

**Hold** and **Set to** are displayed and the temperature is blinking. Set the value using ∧ and ∨. Save the setting using F. Then, select the number of days (between 1 and 180).

**Temperature Override**

During any schedule period, press ∧ or ∨ to override the temperature setting, and press F to confirm. Changes only apply for the current period.

## 2.5　WiFi and App

**WiFi Network Configuration**



1. Power on the thermostat.
2. Press $\wedge$ for 3 seconds, until the WiFi icon starts blinking.
3. Use $\wedge$ or $\vee$ until **-E-** is displayed, and confirm with M.
4. Follow the instructions indicated on the phone application.

**Mobile App**

To download, search "**Plus Thermostat**" in the App Store or Google Play, or scan the QR code on the cover page of this manual.

Access rights can be shared between users registered with the application.

## 2.6　Specific Messages

**Filter Cleaning Reminder**

**Filter** will periodically be displayed on the screen as a reminder. The default period is 90 days. To clear the message, hold ⚙ for 3 seconds.

**Sensor Error**

If **FF** flashes instead of the temperature display, there is an error with the temperature sensing circuitry of the thermostat. The system will not operate while this error is displayed.

## 2.7　Factory Reset

To reset all settings to factory defaults, hold ⚙ and M for 3 seconds.

# 3    Installer Menu

In Schedule mode, hold $\wedge$ and $\vee$ to reach the installer menu. Password is 5138.

Use $\wedge$ and $\vee$ to change the setting. Press M to move to the next menu item.

| Item | Parameter | Range | Default | Note |
|------|-----------|-------|---------|------|
| Pb | O/B selection | 0.0 / 1.1 | 0.0 | 0.0: 0; 1.0: B |
| 0 | System mode | 0.0 - 7.0 | 0.0 | See  section 1.3 |
| 1 | 1H/1C differential | 0.5 - 2.2℃ | 1.0℃ | |
| 2 | Temperature adjustment | -10 - 10℃ | 0.0℃ | |
| 3 | Max. set point | 0 - 37℃ | 37.0℃ | max. > min. |
| 4 | Min. set point | 0 - 37℃ | 5.0℃ | |
| 5 | Filter change reminder | 1 day - 120 days | 90 days | |
| 6 | Clock format | 12 / 24 h | 24.0 | |
| 7 | Compressor protection delay | 0 - 10 min | 1 min | |
| 8 | Backlight | OF / ON | OF | ON: Always ON<br>OF: Dimmed when unused |
| | Factory Reset | OF / ON | OF | ON: Reset |