

■ Safety Information

- Installation by a qualified professional is required in some area. Refer to your local laws and building codes before installation.
- Make sure the power is OFF at the circuit breaker controlling the HVAC(Heating, Ventilation, and Air Conditioning) system before you start installing the smart thermostat.
- The thermostat must be installed in accordance with your HVAC wires codes. If you are unfamiliar with these codes, or feel uncomfortable performing the installation, please call a qualified professional.
- Do NOT install the thermostat with wet hands or when standing on wet or damp surfaces.
- Compatible with low voltage(24V~) HVAC systems. NOT compatible with high/line voltage(120 or 240V~) electric heating system.

■ Package Contents



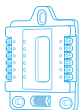
Smart Wi-Fi
Thermostat x 1



User Manual
x 1



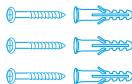
Trim Plate
x 1



Backplate
x 1

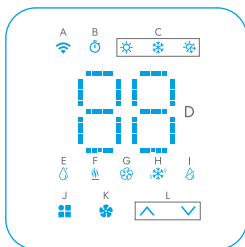


Wiring Sticker
x 1



Screws and
Anchors x 3

■ Getting to Know Your Thermostat



Indicators:

A — Wi-Fi

B — Working on schedule

C — Working mode: Heat, Cool, Auto

D — Current temperature/Set temperature

E — Humidifying

F — Heating

G — Fan mode: The light is on for Hold mode and off for Auto mode. In Hold mode, the fan runs continuously, either permanently or for a timed duration(set in the Meross app). In Auto mode, the fan operates when the HVAC system requires it, such as when cooling or heating.

H — Cooling

I — Dehumidifying

Buttons:

J — Mode: Tap to switch between Heat, Cool, Auto, and Off modes. Long press the mode button for 3 seconds to temporarily unlock the child lock. When in Off mode, press and hold for 3 seconds to restart the device.

K — Fan mode:

1. For a single-speed fan, tap to toggle between Hold and

Auto modes.

2. For a multi-speed fan, tap to change fan speed, press and hold to toggle between Hold and Auto modes.

L — Up and Down: Tap to adjust the temperature, press and hold the two buttons at the same time for 5 seconds to factory reset the device.

■ Installation Guide

(1) Download the Meross app.



(2) Set up the device.

- ① Connect your smartphone or tablet to a 2.4 GHz Wi-Fi network.
- ② Make sure where you want to install the device is covered by strong 2.4GHz Wi-Fi signal.
- ③ The smart thermostat should be set up with the smartphone running iOS 16.1/Android 8.1 or later. It is recommended that you upgrade your smartphone to the latest iOS/Android version before setting up the device.
- ④ Launch the Meross app and log in to your account, or if you are a new user, tap Sign up to create a new account.
- ⑤ Tap the "+" icon to select the type of Smart Thermostat, then you can just follow the setup wizard to finish the configuration.

Note:

1. This device only supports 2.4GHz Wi-Fi network.
2. While this device works with Matter, it requires configuration with HVAC-specific details like wiring information. Therefore, the initial setup must be done through the Meross app. Once configured, you can share the device with other Matter controllers, such as Apple Home.
3. As long as you have completed the configuration, you can view and modify HVAC-related settings by going to Device Settings -> Advanced -> Installation Settings within the Meross app.
4. Find more at <https://www.meross.com/support>

■ Wiring Diagram

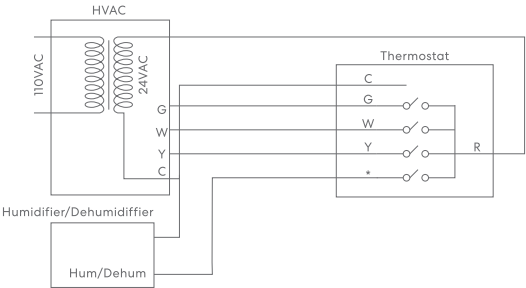
This smart thermostat is compatible with most low-voltage (24V~) HVAC systems, including single or multi-stage heating and cooling systems, heat pumps(with or without AUX heating), and fan coil units. It supports up to 2-stage cooling, 3-stage heating, 2-stage heat pump, 3-speed fan, and a humidifier or dehumidifier.

Terminals	Conventional	Heat Pump	2-Pipe Fan Coil	4-Pipe Fan Coil
R	24V~ Single Transformer - Heating or Cooling			
Rc	24V~ Dual Transformer - Cooling			
Rh	24V~ Dual Transformer - Heating			
C	Common			
G	Fan			
Y	Stage-1 Cool	Stage-1 Compressor	Valve	Cool Valve
Y2	Stage-2 Cool (2nd-speed Fan)	Stage-2 Compressor (2nd-speed Fan)	2nd-speed Fan	2nd-speed Fan
W/AUX	Stage-1 Heat	Stage-1 AUX Heat	AUX Heat	Heat Valve
W2	Stage-2 Heat (3rd-speed Fan)	Stage-2 AUX Heat (3rd-speed Fan)	3rd-speed Fan	3rd-speed Fan
O/B	N/A	Reversing Valve	N/A	N/A
E	N/A	Emergency Heat	Emergency Heat	N/A
*	Humidifier/Dehumidifier/W3/AUX3			

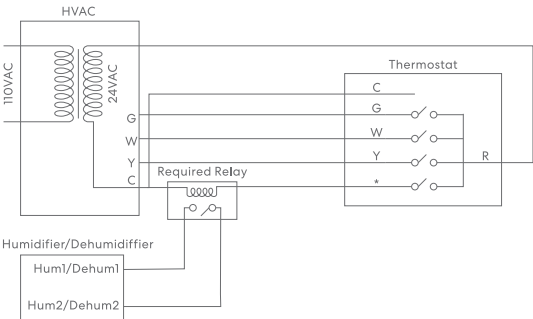
Note:

1. If you have one R, Rc, or Rh wire, connect it to the R terminal, and keep the jumper between the Rc and Rh terminals. If you have both Rc and Rh wires, remove the jumper from the device's Rc and Rh terminals, then insert the Rc and Rh wires into their respective terminals.
2. If installing a 1-wire humidifier or dehumidifier, connect it directly to the * terminal. For a 2-wire unit, an additional 24VAC relay is required. The diagrams are shown below. We recommend using the 90-290Q model or a similar relay.

1-Wire Installation



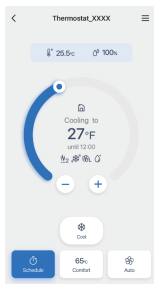
2-Wire Installation



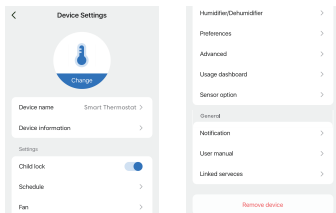
■ How to Use

(1) Device Control Page

On the Control page, you can adjust the Mode, set Heat/Cool temperatures, control the Fan, and enable or disable the Schedule.



(2) Device Settings



Device icon: Set the device icon.

Device name: Set the device name.

Device information: View the device information.

Child lock: Lock the buttons. Long press the mode button for 3 seconds to temporarily unlock.

Schedule: View and edit daily schedules with target temperatures and times for different periods throughout the week.

Fan: Check and adjust the fan settings.

Humidifier or Dehumidifier: Manage humidifier or dehumidifier settings.

Preferences: Customize display light, temperature presets, hold actions (temporary temperature overrides), and temperature units.

Advanced: Adjust temperature and humidity calibration, emergency heat settings (for some heat pump systems), installation settings, and air filter maintenance settings.

Usage dashboard: Check the usage dashboard.

Sensor option: You can set external sensors for the thermostat temperature control there.

Notification: Check and edit the notification settings.

User manual: Check the user manual.

Linked services: Add or remove third-party smart home services compatible with Matter, such as Apple Home, or Google Home. If you don't have a Matter Hub or don't use the Matter platform, you can still link the thermostat directly to voice assistants on the User page.

SIMPLE DEVICE SIMPLIFY YOUR LIFE

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5028362



Confirmed to UL 60730 &
CAN/CSA E60730

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MADE IN CHINA

CAN ICES-3 (B)/NMB-3(B)

■ FAQ

At Meross, we strive to assure your satisfaction. Attached below is a non-exhaustive list of questions that users are mostly concerned about.

1. What is a C wire and what if I don't have a C wire?

The C wire (typically blue, sometimes labeled as COM or Com) is the "common" wire, providing 24 VAC power to the thermostat. While many older thermostats use batteries and don't require a C wire, smart thermostats need it to power Wi-Fi and other advanced functions. If not connected to your old thermostat, the C wire may be hidden in the wall.

If you don't have a C wire at your thermostat, you have three options:

- (1) Run a new C wire from your HVAC control board.
- (2) Install a Meross C Wire Adapter to your HVAC control board.
- (3) Install a 24VAC transformer directly to the thermostat's C and R terminals.

2. Why do I need to configure the smart thermostat with the Meross app initially, rather than with other Matter-compatible apps like Apple Home?

The Meross app is required for initial setup because it allows you to configure specific HVAC system settings needed for the thermostat to function correctly. The Matter protocol does not support this specialized HVAC configuration process.

3. My thermostat panel shows "st", what does that mean?

When your thermostat panel displays "st", it indicates that the device has not been initially configured. This means you need to set up and add the thermostat using the Meross app.

4. Why does my thermostat display that it's heating or cooling, but the HVAC system isn't actually heating or cooling?

This issue can occur when the wiring configuration in the thermostat settings doesn't match the actual wiring installation. Alternatively, your HVAC system might have built-in protection features that prevent the system from repeatedly turning on and off within a short period to protect the equipment.

5. Why is my heat pump heating when it should be cooling, and cooling when it should be heating?

This issue likely occurs due to an incorrect setting for the reversing valve. You can adjust this setting in the Meross app on the following page: Meross app > Device Settings > Advanced > Installation setting > HVAC equipment > O/B reversing valve type.

6. What if my heating or cooling cycles too frequently, not often enough, or doesn't trigger the second stage?

HVAC system operation is controlled by various thresholds, such as heating and cooling differentials. You can adjust these settings in the Meross app: Device Settings > Advanced > Installation Setting > Threshold Settings.

7. What should I do if some of my wires are not listed in the app's setup guide?

You may have wires with the following labels, which can be configured as follows:

- (1) G1, Gm, Gh: These wires represent fan speeds (low, medium, high). In the app, select G, G2, and G3 respectively.
- (2) H/Hum1, H2/Hum2: These wires are for humidifiers. H/Hum1 corresponds to Hum in the app. If you have two "Hum" wires, your humidifier requires a 2-wire installation method. Please

refer to the "Wiring Diagram - Note" section on page x.

(3) D/DH, DH2/Dehum2: These wires are for dehumidifiers. D/DH corresponds to Dehum in the app. If you have two "Dehum" wires, your dehumidifier requires a 2-wire installation method. Please refer to the "Wiring Diagram - Note" section on page x.

(4) L: Usually used in some systems to indicate Emergency Heat status. The Meross thermostat doesn't require this wire, you can leave it unconnected.

(5) PEK: This wire typically appears when a C Wire Adapter from certain brands is installed. Please contact our customer support for further investigation.

(6) L1, L2: These are Live wires used in 120V/240V high-voltage electric heating systems. If you have these wires, our device is not compatible with your system.

To learn more, you can visit <https://www.meross.com/support/faqs> to find solutions for more frequently asked questions.

■ Warranty

Meross products are covered by a 12-month limited warranty from the date of purchase. Please visit <https://www.meross.com/support/warranty> for detailed warranty policy and product registration.

■ Disclaimer

1. The function of this smart device is tested under a typical circumstance described in our specifications. Meross does NOT guarantee that the smart device shall perform exactly the same as described under all circumstances.
2. By using third-party services including but not Amazon Alexa, Apple HomeKit and SmartThings, customers

acknowledge that Meross shall not be held liable in any way for the data and private information collected by such parties. Meross's total liability is limited to what is expressly covered in its Privacy Policy.

3. Damages arising from ignorance of the SAFETY INFORMATION shall not be covered by Meross aftersales service, nor does Meross take any legal responsibility therefrom. Customers acknowledge understanding of these articles clearly by reading this manual.

■ **FCC Compliance Information Statement**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of

the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

■ **Canadian Compliance Statement**

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s).

Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- 1) L'appareil ne doit pas produire de brouillage;
- 2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le

fonctionnement.

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance. Le dispositif rencontre l'exemption des limites courantes d'évaluation dans la section 2.5 de RSS 102 et la conformité à l'exposition de RSS-102 rf, utilisateurs peut obtenir

l'information canadienne sur l'exposition et la conformité de rf. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body. Cet émetteur ne doit pas être Co-placé ou ne fonctionnant en même temps qu'aucune autre antenne ou émetteur. Cet équipement devrait être installé et actionné avec une distance minimum de 20 centimètres entre le radiateur et votre corps.

meross

MTS300
User Manual