Mitsutomo

SMART THERMOSTAT

Installation Guide & User Manual

MT-STATIQ-02

NOTE

Read this manual carefully before installing or operating your new Smart Thermostat. Make sure to save this manual for future reference.

Using Your Thermostat With SmartHome App

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GET IT ON Google Play

Table of Contents

Safety Precautions

To ensure your safety and avoid damage to the device please read the safety precautions.
Look out for these icons. They indicate useful tips and important reminders.

WARNING
This symbol indicates the possibility of personnel injury or loss of life.

TIPS
Are used to highlight suggestions which will result in enhanced installation, reliability, or operation.

REMINDERS
Are prompts to take certain precautions or follow specific steps during the installation process.

⚠ WARNING

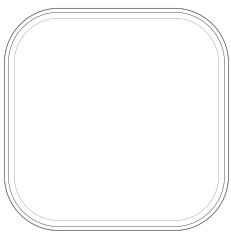
- Please trust the distributor or a professional installer to install the device.
- Installation by non-professionals may result in improper installation, electric shock, or fire.
- Adhere to this installation manual.
- Improper installation may lead to electric shock or fire.
- Reinstallation or changes must be performed by professionals.
- Do not uninstall or make changes to the device randomly. Random changes may lead to abnormal operation, heating, or fire of the HAVC system, and cause damage to the smart thermostat.

🔔 REMINDERS

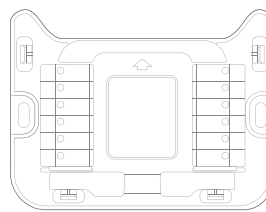
- Do not install the device in a place vulnerable to leakage of flammable gases. Once flammable gases are leaked and left around the smart thermostat, fire may occure.
- Do not operate the device with wet hands. The presence of liquids may cause electric shock or damage the device.
- Always disconnect the device from the power source before installation or maintenance to avoid equipment damage or potential electrical shock.

- The wiring should be rated for the thermostat current and ensure that the power supply for the smart thermostat is securely isolated when connected to a non-communicating HVAC system.
- Ensure the connected cables meet CL2 requirements and meet National and local electrical standards. Otherwise, electric leakage or heating may occur.
- Do not alter the terminals of this device.
- Before drilling through the wall, ensure that there are no electrical wires, water pipes, or gas pipes inside the wall.
- Please install the power supply unit according to the instructions in this manual. Do not alter the power supply unit or use non-specified power supply products.
- During installation and use of the thermostat, please prevent liquid (water, alcohol, etc.) from entering the device.

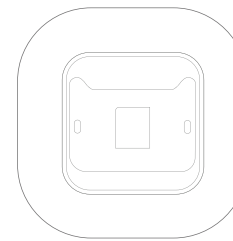
Included In The Box:



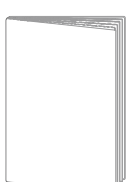
Smart Thermostat



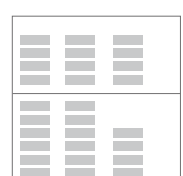
M-base



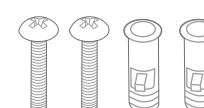
Trim Plate



Installation &
User Manual

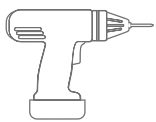


Wire Labels



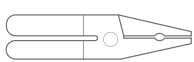
2 Screws & 2 Anchors

Tools You Will Need:

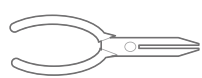


Drill and 3/16 in. Drill Bit

Pencil



Wire Stripper



Needle-Nose pliers

Flathead Screwdriver

Phillips Screwdriver

Wireless Info

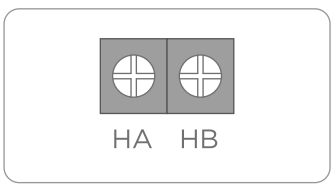
If you do not need to remove the old thermostat, you won't need a small flathead screwdriver and a phillips screwdriver.

Select the installation location

- Do not install the device in a place vulnerable to leakage of flammable gases. Fire may occur once flammable gases are leaked and left around the thermostat.
- Do not install in a place where heavy oil, vapor, corrosive or sulfureted gasses are present. The device could be damaged leading to system malfunction.
- Do not install on an exterior wall.
- Install the thermostat on a flat wall. An uneven wall may lead to an unstable installation.
- Do not install near any heat-producing equipment. This may cause inaccurate temperature control.
- Ensure the device is not exposed to direct sunlight or facing a very dark corner. This may cause the automatic screen awake feature to not work properly.
- Do not place mirrors, ceramics, or other reflective objects within 1 meter at the 12 o'clock direction in front of the touch screen. This may cause the automatic screen awake feature to not work properly.

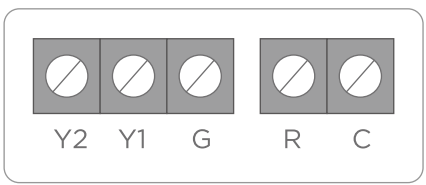
Compatibility

Please consult with your HVAC system dealer or manufacturer to learn about your system's compatibility.



HA&HB
(Communication)

Or



24V

Terminal descriptions

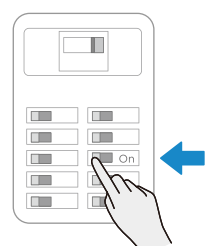
HA, HB	Commiunication non-polarity
R/Rc	Cooling Power
Rh	Heating Power
Y1, Y2	1-2 stages of AC or 1-2 stages of heat pump compressor
W1,W2	1-2 stages of heat or 1-2 stages of auxiliary heat with heat pump
C	24VAC common
G	Fan
O/B	Heat pump reversing valve
PEK+	Extender of a C wire

24V can work with most heating, cooling, and heat pump systems. If you don't have a C wire, please consult with the sales agency for details.

Product Installation

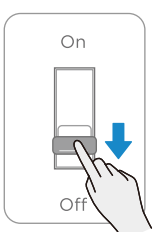
Step 1. Power off your system

Power off your Air-Handler Unit (AHU), Ventilation, and Air Conditioning by using the breaker box or master switch.
Check that your system is off by turning on the heat during winter or the AC during summer. Wait a few minutes; you should not feel any air coming from your vents.



Breaker box

Or



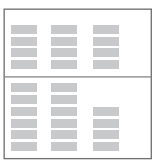
Switch

The thermostat off switch will not turn off the power to the equipment.

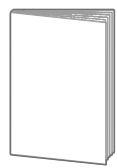
Your breaker box or master switch is usually located in the basement, attic, or closet.

Step 2. Label Wires

Take the labels, tools, AHU Manual, and smart phone to the AHU System.



Wire labels

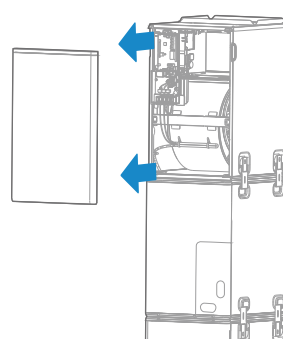


AHU System's manual

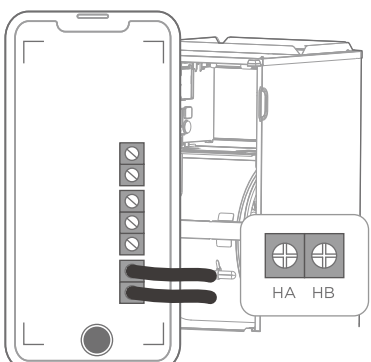
Smart phone

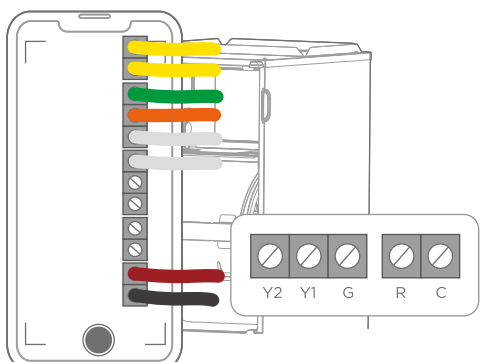
Drill and 3/16 in. Drill Bit

Open the AHU system's cover and locate the display board.



Determine which type of system you have by checking the terminals on the board (HA & HB or 24 V). Label the wires if they are not already labeled. Take a picture of the labeled wires connected to the control board. You may refer to this picture during the installation.

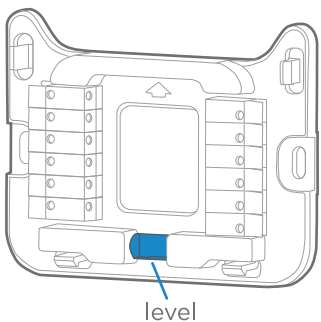




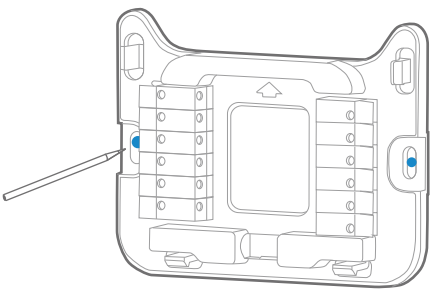
Close the cover to the AHU system and return to your thermostat. If a thermostat is already installed, remove the cover, take a picture of the wiring, and label the wires based on their location on the thermostat. Remove the wires from the terminals and remove the old thermostat.

Step 3. Installation location

Use the M-base to locate the position where you want to place the thermostat.

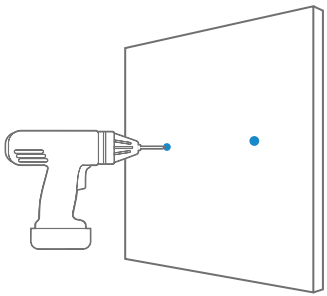


Place the M-base on the wall and use the included level to correctly position the thermostat.

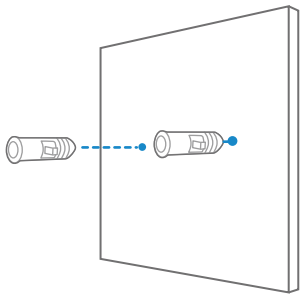


Mark the screw hole position with a pencil, then remove the M-base.

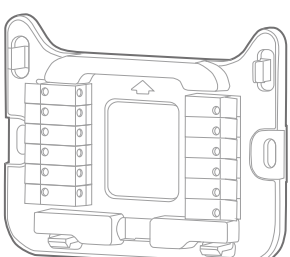
Refer to the “Select the installation location” section for the best location.



It is recommended to use a 3/16 in. drill bit to drill the holes.



Insert anchors.

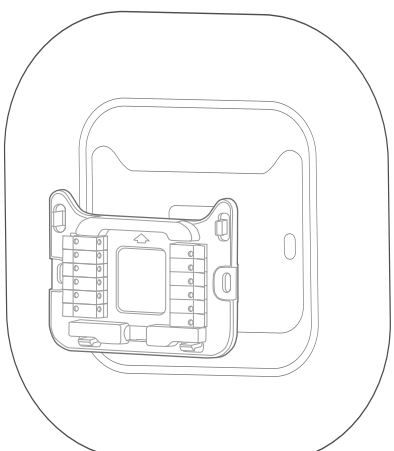


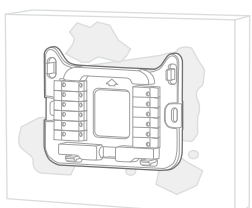
Re-position the M-base.

Decide if you will need to use the trim plate to cover marks or holes left by other systems.

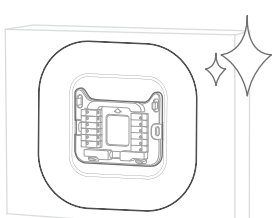
Step 4. Trim plate

- You can choose to use the trim plate with your thermostat.
- If you use the trim plate, please align the mounting holes on the trim plate with the M-base.
- The trim plate is at the bottom of the box.





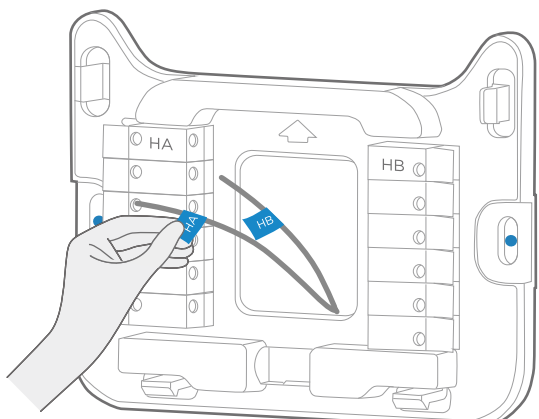
Before



After

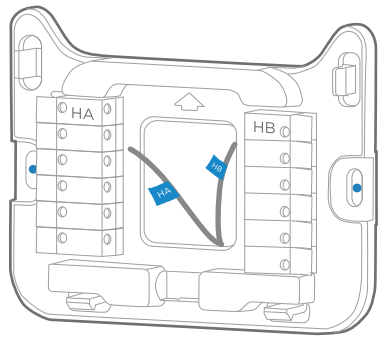
Step 5A. Connect wires HA & HB

Label the HA and HB wires. You can refer to the picture taken perviously in the system.

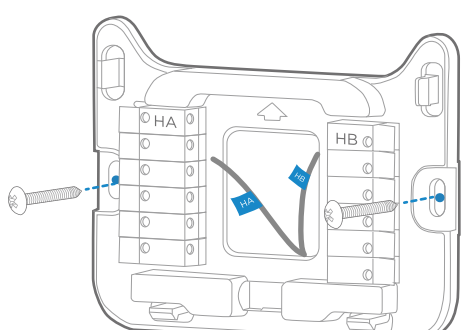


To easily insert wires into the terminals, please ensure each wire is stripped to a length of 0.3-0.4 inches. The terminals are for a wider range of conductor sizes: AWG 18-24.

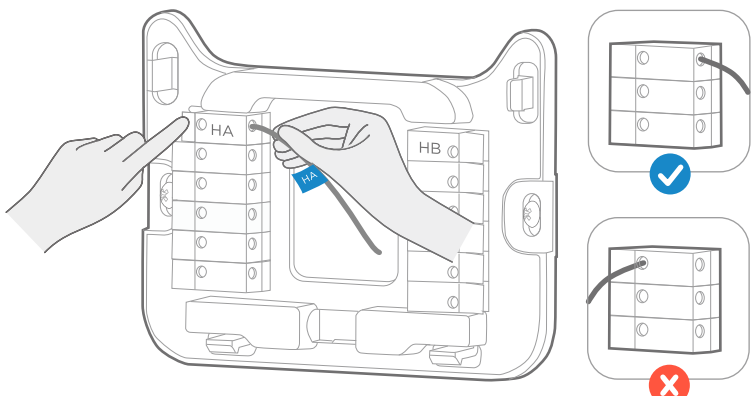
Pull the HA and HB wires through the center hole of the M-base.



Level the M-base and then attach it to the wall using the drywall anchors and screws provided.



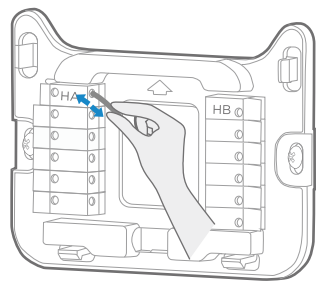
Try pushing the terminal block levers with pencil or use needle nose pliers to insert the wires.

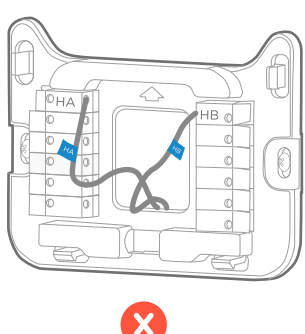


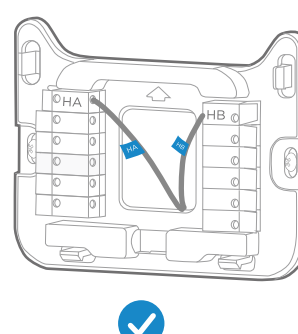
The terminal block levers will be pushed downwards when the wire is connected.

Step 6A. Check wires

Gently tug on the wires to ensure they are securely connected.

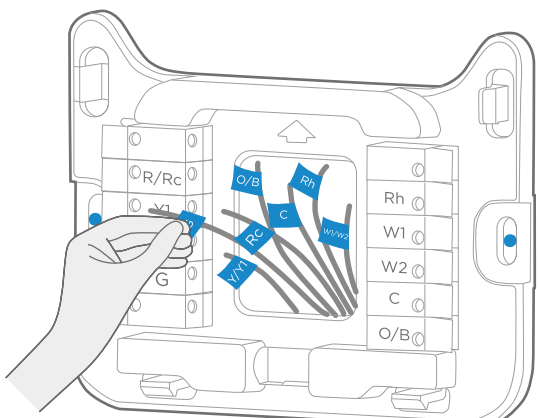






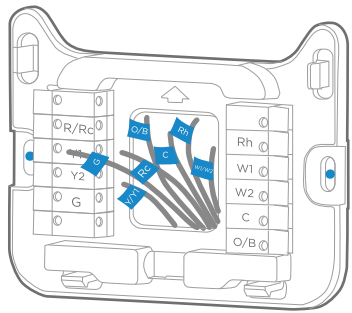
Step 5B. Connect wires 24 Volt

Label the 24V wires according to their color. You can refer to the picture taken perviously in the system.

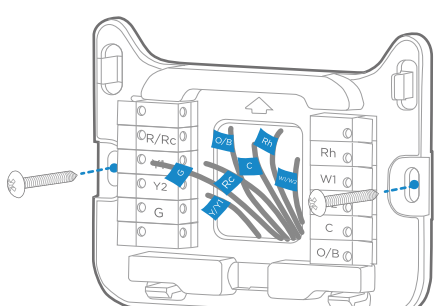


To easily insert wires into the terminals, please ensure each wire is stripped to a length of 0.3-0.4 inches. The terminals are for a wider range of conductor sizes: AWG 18-24.

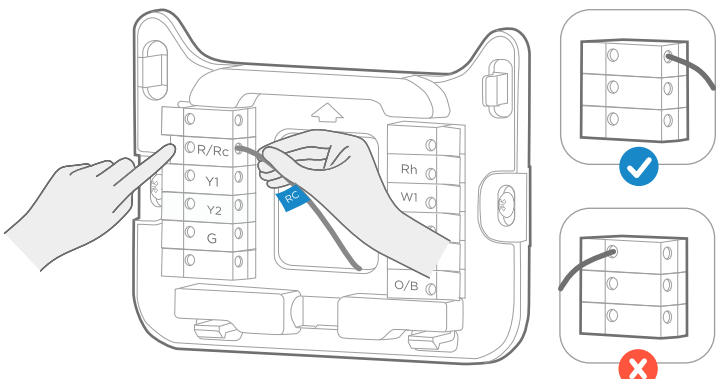
Pull the wires through the center hole of the M-base.



Level the M-base and then attach it to the wall using the drywall anchors and screws provided.



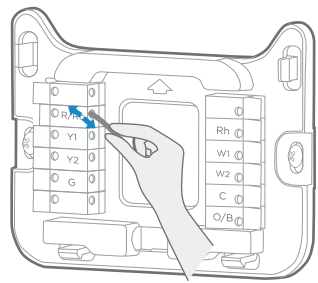
Try pushing the terminal block levers with a pencil or use needle nose pliers to insert the wires.



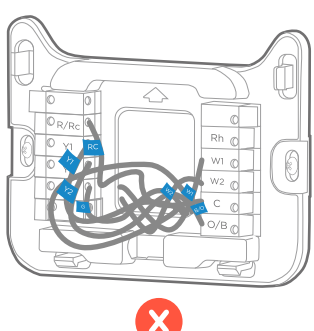
The terminal block levers will be pushed downwards when the wire is connected.

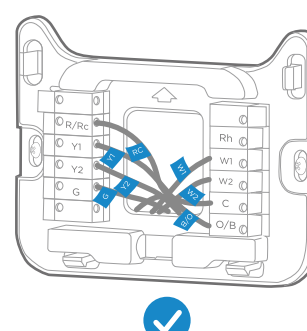
Step 6B. Check wires

Gently tug on the wires to ensure they are securely connected.



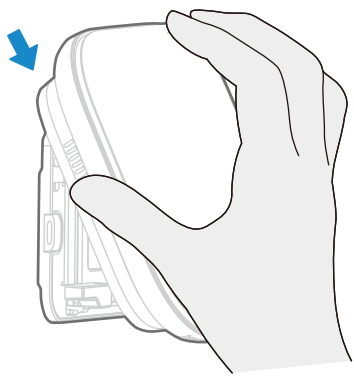
After all wires are securely connected, push any excess wires back into the hole and ensure there are no wires left outside.





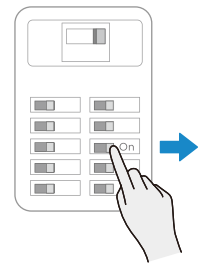
Step 7. Finish The Installation

Gently press the thermostat onto the M-base by using the “ears” of the M-base to align.



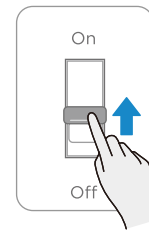
If the thermostat doesn’t automatically turn on or suddenly shuts down after turning on the power, it may due to insuff cient power supply from the indoor unit. It is recommended that you connect the R/Rc and C terminals of the thermostat with the R/Rc and C terminals of the indoor unit to obtain additional power. You can also contact professional installers for assitance. For more information, please contact your sales representative.

Turn on the power to your system by using the master switch or breaker box.



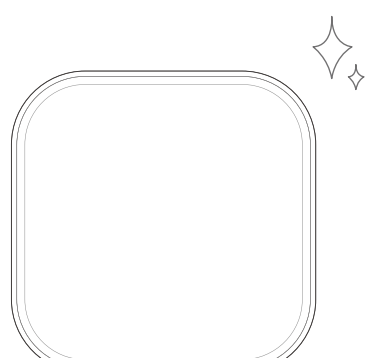
Breaker box

Or



Switch

Say Hi to your Smart Thermostat! Enjoy!



Smart Thermostat

Model: MTL04-1
FCC ID: 2ADQOMDNA26
IC: 12575A-MDNA26

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.

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

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 IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

IC Warning

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Product Information

Construction of Control: Independently Mounted Control
Operation Method: Type 1 Action
Pollution Degree: 2
Purpose of Control: Operation Control
Protection Class: IP00
Ambient operating Temperature: 32~95˚F (0~35˚C)
Storage Temperature: -40~140˚F (-40~60˚C)

Compatibility

This unit works with specific communication systems by HA & HB and most 24V systems.
For communication, HA & HB are commiunication non-polarity.
For 24V, it can control: Heating 1,2 stages(W1, W2); Cooling 1,2 stages(Y1,Y2); Heat Pump with auxiliary and emergency heat(O/B, W1, W2); Fan(G); Power(R/Rc, Rh, C).

Mitsutomo