## SMART THERMOSTAT/WIRED CONTROLLER

# USER'S MANUAL

**Model#: TL04-1**

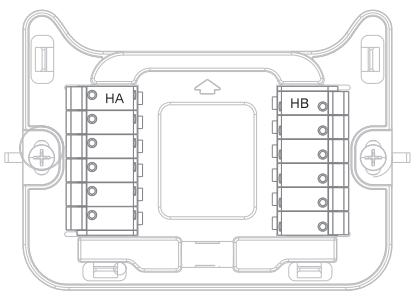



**WARNING: DO NOT destroy or lose this manual. Please read the manual thoroughly before installing or operating the controller. Also, store the manual in a place that allows for easy retrieval and future reference. The actual shape and size of your product may vary.**

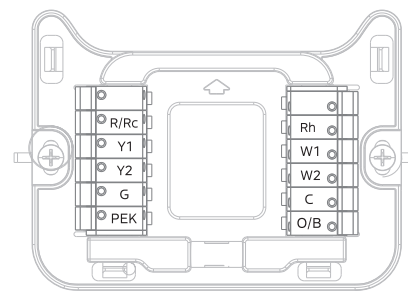
**VERSION DATE: 08-27-26**

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

## Please check your Device Configuration




HA & HB Communication
go to page 01




24V
go to page 20

# Installation Overview

## Click "Get Started" to guide you through the thermostat installation process:

- Basic Information Configuration
- Wiring Detection and Device Configuration
- Wireless Network Configuration
- Register Account and Bind Your Smart Thermostat

If you have any questions about the previous step or want to reset, you can click the back button to return to the previous screen.

## Step 1: Basic Information Configuration

Includes multi-language and region selection. Please select the current region correctly to provide more accurate time and weather services.

## Step 2: Wiring Detection and Device Configuration

The thermostat will automatically detect if the selected wiring is incorrect. Please select your device wiring type: HA & HB Communication or 24 Volts. Configure your device according to the following steps:

- **HA & HB Communication:**

2.1 If you have this type of device, please select this option. After clicking the continue button, the device will automatically recognize the supported modes: Auto Mode, Heating Mode, and Cooling Mode.

2.2 After selecting your preferred temperature unit, proceed to set up the single or dual temperature zones in Auto Mode according to your usage habits. If you choose a single temperature zone, there will be only one temperature setpoint in Auto Mode. If you choose dual temperature zones, there will be two temperature setpoints in Auto Mode. The range between the two temperature setpoints is the deadband, which can be set between 4 and 9 °F / 2 and 5°C. For better temperature control, it is not recommended to set the deadband too large.

2.3 Set the maximum heating setpoint and minimum cooling setpoint for all modes to manage and control energy consumption more conveniently. Please note that if the setpoints in the schedule and vacation settings are outside the set limits, the settings will revert to the default setpoint range.

2.4 Confirm whether the auxiliary heating is connected. This accessory is optional. If connected, please turn on the auxiliary heating switch (after

turning it on, the emergency heating mode will be added to the mode selection on the Main Page). Otherwise, please turn it off. After turning it on, selecting the first option will allow the system to automatically control the auxiliary heating startup method. Please read the system's user manual in detail.

If you select the second option after turning it on, you can change the settings on the thermostat to control the auxiliary heating startup method:

- Turn off the activation temperature (outdoor temperature) switch: After reaching the indoor temperature difference condition to start the auxiliary heating (indoor temperature is 2.5°C lower than the set temperature), you can select a delay time of 0/15/30 minutes to start the auxiliary heating.
- Turn on the activation temperature (outdoor temperature) switch: The auxiliary electric heating will start immediately according to the selected temperature setpoint (outdoor temperature).

## Step 3: Wireless Network Configuration

Connecting to the Internet and logging into your account can make your thermostat smarter. Search for available wireless networks at home. The

list will show the signal strength. Please select a wireless network with a strong signal and enter the password to connect to the home network. If the signal strength is weak, try moving the router closer to the thermostat or adding a Signal Booster.

If you do not want to connect to the Internet at this time, you can skip this step. You can configure the wireless network in the settings later. Once you connect the thermostat to the Internet, you can choose to accept automatic system updates. This will ensure your system is always operating the most up to date software.

## Step 4: Register Account and Bind Your Thermostat

After completing the wireless network setup, you can bind the thermostat to the ACiQ Home App by following these steps:

4.1 Download the ACiQ Home App from Google Play or Apple Store.

4.2 Register your account in the ACiQ Home App. After logging in, click "Add Device" and select "Thermostat" to enter the scanning page.

4.3 After the thermostat completes the wireless network configuration step, it will display a binding QR code. Use the ACiQ Home App to scan the code to bind. After completion, the binding process is finished.

4.4 If you have skipped binding the thermostat to the ACiQ Home App, you can do this later by navigating to the thermostat's settings and choosing Connect App option to ensure that your thermostat is operating the most up to date software.

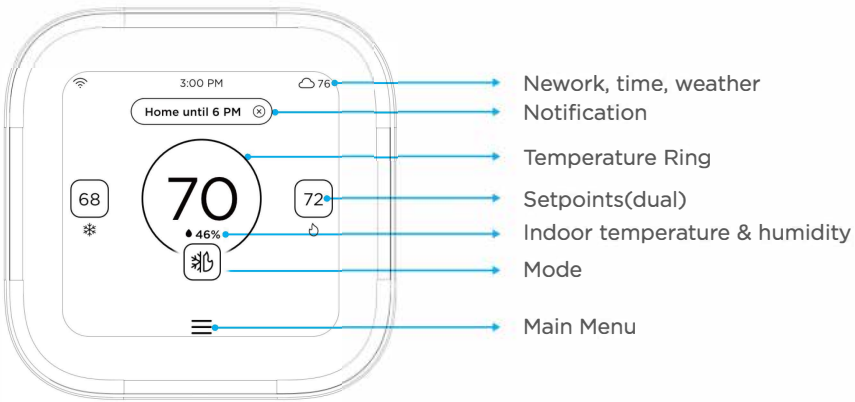
Date & Time

Turn on the Set Automatically button to automatically update time. If you choose to turn it off, you need to manually set Date & Time. The time format can be set in Main Menu - Settings - Unit Settings.

Automatic Updates

Once you connect the thermostat to the Internet, you can choose to accept automatic system updates. This will ensure your system is always operating the most up to date software.

# Main Page




Network

View the signal strength of the wireless network.

Time

View the local time.

Weather

After logging into the ACiQ Home App account, the current weather will be displayed in the upper right corner of the home screen. By pulling down from the top of the Main Page, you can get a 3-day weather forecast.

Notification

View the notifications information, including Schedule, Vacation, iCheck, etc.

Temperature Ring

- In Auto mode, the temperature ring is blue on the left and red on the right when the setpoint is reached. It is red in heating mode and blue in cooling mode.
- In cooling mode, the temperature ring is 50% transparent blue when the fan stops, and bright blue when the fan is running.

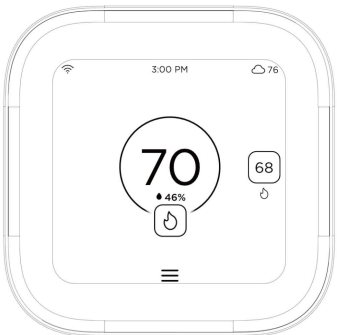



The fan is running




The fan stops running

- In heating and emergency heating modes, the temperature ring is 50% transparent red when the fan stops, and bright red when the fan is running.




The fan is running




The fan stops running

Adjusting the Set Temperature

There are 2 ways to adjust the setpoint: click the temperature setting control in the center and drag the orb that comes out, or click the temperature setting controls on both sides. The left side of the screen adjusts the cooling setpoint, and the right side adjusts the heating setpoint. In dual-zone Auto mode, you can set both cooling and heating setpoints at the same time. In single-zone Auto mode, there is only one setpoint.

Indoor temperature and Humidity

View current indoor temperature and Humidity

Mode

Click the power button to select a mode and turn on the device directly.

Automatically recognizes the model:

- Cooling only System: Cool, Off
- Cooling & Heating System: Auto, Cool, Heat, Off
- With Auxiliary Heat: Auto, Cool, Heat, Off,  Emergency Heat

Main Menu

Click to enter the detailed settings of the thermostat, including Fan, Comfort Presets, Schedule, Vacation, iCheck, Settings, About.

# Main Menu




- **Fan**

  Constant Fan

  If you want the Fan to stop running after reaching the setpoint, you can switch it to Constant Off.

  If you want the Fan to run continuously after reaching the setpoint, you can switch it to Constant On.

  Speed Select

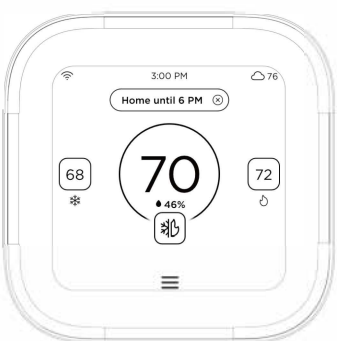
  You can customize the fan speed: Auto, Low, Med, High.

- **Comfort Presets**

  Setup the comfort presets can streamline schedule creation, and gain access to quick changes in the ACiQ Home App. You can set 3 comfort presets: Home, Away, and Sleep.

  - Home: The normal settings for when you are at home and awake.
  - Away: Settings for when you are not at home.
  - Sleep: Settings for when you are sleeping.

- **Schedule**

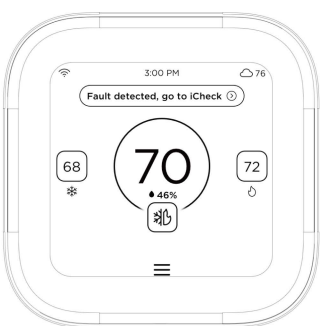


Set a 7-day weekly schedule to make the system run more regularly. You can copy a single or an entire day's schedule to another day.
In the created schedule, the thermostat will maintain the desired mode and temperature until the next schedule arrives.
The home screen will accurately tell you the start time of the next schedule.
When your schedule references Comfort Presets settings, modifying the Comfort Presets settings will also change the corresponding schedule settings.

- **Vacation**

  When you have travel plans, you can set the departure and return times in advance. During your absence, the thermostat will run in the set mode and temperature until you return home, saving energy and maintaining indoor air circulation. When you return home, the thermostat will restore to the pre-departure settings in advance.

- **iCheck**




  When there is a fault in the thermostat or system, the notification prompt will guide you to the detailed iCheck page, where you can detect faults in the thermostat and indoor/outdoor units, making fault content more intuitive and easily accessible, and improving maintenance efficiency.

- **Settings**

  **Connect ACiQ Home App**

  To bind the account using the ACiQ Home App, you need to connect to the wireless network in advance. If you do not have an ACiQ Home App account, please down-load the ACiQ Home App from Google Play or Apple Store and register an account. Go to page 03 to refer to the installation guide to complete the binding.

  **Wireless Network**

  Please select a 2.4G wireless network that supports the 802.11b/g/n protocol. It does not support password-free and enterprise-level wireless networks. Please choose a wireless network with good signal strength.

  **Temperature Calibration**

  Temperature calibration allows the thermostat to display more accurate temperatures in different environments. If you find a deviation between the thermostat and the current environment temperature, try different compensation values to calibrate the deviation. The temperature calibration range is ±9℉ in 1℉ / ±5℃ in 1℃.

### Auxiliary Heat

Confirm whether auxiliary heating is connected. This accessory is optional. If connected, turn on the auxiliary heating switch (after turning on, the emergency heating mode will be added to the mode selection on the Main Page). Otherwise, turn it off.
After turning on, selecting the first option will allow the system to automatically control the activation of auxiliary heating. Please read the system's user manual in detail.

After turning on, if you select the second option, you can change the settings on the thermostat to control the activation of auxiliary heating:

- Turn off the activation temperature (outdoor temperature) switch: After reaching the indoor temperature difference condition for starting auxiliary heating (indoor temperature is 2.5℃ lower than the set temperature), you can select a delay time of 0/15/30 minutes to start auxiliary heating.
- Turn on the activation temperature (outdoor temperature) switch: Start auxiliary heating immediately according to the selected temperature point (outdoor temperature).

**Unit Settings**

- Language
  You can choose English or French. Changing the language will not affect the current settings and status.
- Date & Time
  Turn on the Set Automatically button to automatically update time. If you choose to turn it off, you need to manually set Date & Time. The time format can be 12 hr or 24 hr.
- Location
  Click the Country option and slide to select the country. Click the Time Zone option and slide to select the current time zone.
- Temperature Units
  Click ℃ to change the thermostat and App to ℃. Click ℉ to change the thermostat and App to ℉.

**Preference**

- Display Brightnes
  Slide the button left or right to adjust the screen brightness.
- Auto Sleep
  Select the countdown time to turn off the screen.

- Sounds
  Slide the button left or right to adjust the speaker‘s volume.
- Clean Screen
  If you need to clean the screen, you can activate this feature to lock the screen for a time period, allowing you to clean it.
- Available Set-point Range
  You can set the thermostat to show only a certain range for heating and cooling, which stops users from choosing values outside that range.

### Update

- The thermostat supports automatic updates. It will automatically download new versions in the background and update at midnight. The update process takes about 2-5 minutes, during which the thermostat cannot be used. After the update is complete, it will restart automatically. Do not disconnect the power or network during this period. You can also turn off the automatic update button and choose to manually update the system.

### Service

- Provides Service for professional engineers. For details, please refer to the Service section.

### Factory Reset

- Reset will clear and restore the auxiliary heating settings, schedule, vacation, temperature calibration settings, account settings, and network settings of the thermostat to default values. Please confirm again if you need to Reset.

- **About**

  View the thermostat's serial number, device model name, indoor unit firmware software version, thermostat system software version, and review user agreements and privacy policy terms.

# Other Functions

The thermostat has a proximity screen activation feature, allowing you to control the device simply by approaching the screen. It also offers an intuitive and user-friendly interaction method.

# Installation Overview

## Click "Get Started" to guide you through the thermostat installation process:

- Basic Information Configuration
- Wiring Detection and Device Configuration
- Wireless Network Configuration
- Register Account and Bind Your Smart Thermostat

If you have any questions about the previous step or want to reset, you can click the back button to return to the previous screen.

### Step 1: Basic Information Configuration

Includes multi-language and region selection. Please select the current region correctly to provide more accurate time and weather services.

### Step 2: Wiring Detection and Device Configuration

The thermostat will automatically detect if the selected wiring is incorrect. Please select your device wiring type: HA & HB Communication or 24 Volts. Configure your device according to the following steps:

- **Select 24 Volts**

2.1 According to the actual wiring situation, it will be automatically displayed on the screen. You can check whether the wiring is correct. The thermostat will also determine whether the wiring is reasonable. If it is unreasonable, the next step cannot be performed, and the wiring needs to be checked again.

2.2 According to the actual terminal connection, the thermostat will automatically recognize whether the following modes are available: Auto Mode, Heating Mode, Cooling Mode, and Emergency Heating Mode.

2.3 After selecting your preferred temperature unit, proceed to set the four-way valve power supply selection. If you are unsure which option to choose, you can select "On Heat" to enter the system. After turning on the cooling or heating mode of the system and setting the temperature, feel the temperature of the air outlet to see if it matches the set mode. If it does not match, you can also modify it to "On Cool" in the Menu-Settings-O/B Settings option.

2.4 24 Volts defaults to dual temperature zones and cannot be changed. In Auto Mode, there are two temperature setpoints. The range between the two temperature setpoints is the deadband, which can be set between 2 and 5˚C /4 and 9˚F. For better temperature control, it is not recommended to set the deaband too large.

2.5 Set the maximum heating temperature and minimum cooling temperature for all modes to manage and control energy consumption more conveniently. Please note that if the setpoints in the schedule and vacation settings are outside the set limits, the settings will revert to the default setpoint range.

2.6 If your system has a compressor protection feature, you can still choose the Unit Protection of the thermostat. Selecting the By Unit will fully protect the compressor by your system. Selecting the By Thermostat allows you to set a delay time of 3/4/5 minutes for the thermostat to trigger compressor protection. Regardless of whether your device has a protection feature, the compressor will stop working for the selected time when switching from cooling or heating to other modes. Please note that if you need to change this option later, you need to contact engineering team to enter the Service to change it.

2.7 When selecting different auxiliary heating device types, please note that if the G terminal is not connected, to prevent damage to the device due to overheating of the duct, please ensure that the selected auxiliary heating device can automatically control the fan. After selecting the heat source, you can choose whether to allow the auxiliary heat source to start automatically during heating according to your preference.

## Step 3: Wireless Network Configuration and Automatic Updates

Connecting to the Internet and logging into your account can make your thermostat smarter. Search for available wireless networks at home. The list will show the signal strength. Please select a wireless network with a strong signal and enter the password to connect to the home network. If the signal strength is weak, try moving the router closer to the thermostat or adding a Signal Booster.

If you do not want to connect to the Internet at this time, you can skip the wireless network connection step. You can configure the wireless network in the settings menu later.

Once you connect the thermostat to the Internet, you can choose to accept automatic system updates. This will ensure your system is always operating the most up to date software.

## Step 4: Register Account and Bind Your Thermostat

After completing the wireless network setup, you can bind the thermostat to the ACiQ Home App by following these steps:

4.1 Download the ACiQ Home App from Google Play or Apple Store.

4.2 Register your account in the ACiQ Home App. After logging in, click "Add Device" and select "Thermostat" to enter the scanning page.

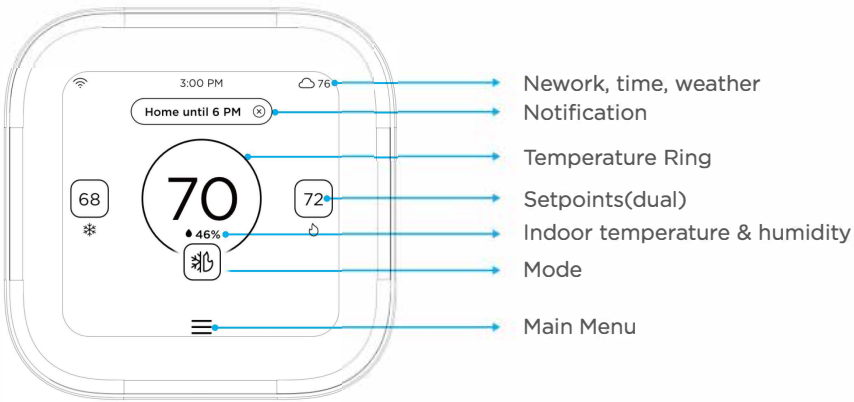
4.3 After the thermostat completes the wireless network configuration step, it will display a binding QR code. Use the App to scan the code to bind. After completion, the binding process is finished.

4.4 If you have skipped binding the thermostat to the ACiQ Home App, you can do this later by navigating to the thermostat's settings and choosing Connect App option to ensure that your thermostat is operating the most up to date software.

Date & Time
Turn on the Set Automatically button to automatically update time. If you choose to turn it off, you need to manually select Date & Time. The time format can be set in Main Menu - Settings - Unit Settings.

Automatic Updates
Once you connect the thermostat to the Internet, you can choose to accept automatic system updates. This will ensure your system is always operating the most up to date software.

# Main Page




Network

View the signal strength of the wireless network.

Time

View the local time.

Weather

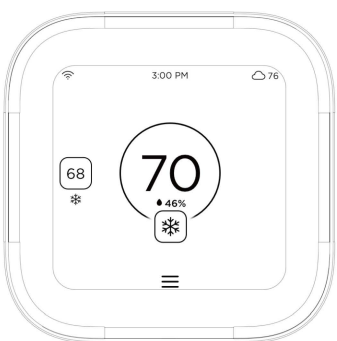
After logging into the ACiQ Home App account, the current weather will be displayed in the upper right corner of the home screen. By pulling down from the top of the Main Page, you can get a 3-day weather forecast.

Notification

View the notifications information, including Schedule, Vacation, iCheck, etc.

Temperature Ring

- In Auto Mode, the temperature ring is blue on the left and red on the right when the temperature is reached. It is red in Heat Mode and blue in Cool Mode.
- In Cool Mode, when the setpoint is above the indoor temperature, the temperature ring is bright blue. When reached the setpoint, the transparency of temperature ring is 50%.




Not reach setpoint




Reached setpoint

- In Heat and Emergency Heat Modes, when the setpoint is below the indoor temperature, the temperature ring is bright red. When reached setpoint, the transparency of temperature ring is 50%.




Not reach setpoint




Reached setpoint

Adjusting the Setpoint

There are 2 ways to adjust the setpoint: click the temperature setting controls in the center and drag the orb that comes out, or click the temperature setting controls on both sides. The left side of the screen adjusts the cooling setpoint, and the right side adjusts the heating setpoint. In dual-zone automatic mode, you can set both cooling and heating setpoints at the same time.

Indoor temperature and Humidity

View current indoor temperature and Humidity.

Mode

Click the power button to select a mode and turn on the device directly.
Power On/Off and Mode Switching

Automatically recognizes the wiring status:

- Cooling only Unit: Cool, Off
- Auxiliary Heat only: Heat, Off
- Cooling & Heating Unit: Auto, Cool, Heat, Off

Main Menu

Click to enter the detailed settings of the thermostat, including Fan, Comfort Presets, Schedule, Vacation, Terminal Check, iCheck, Settings, About.

# Main Menu




- **Fan**

  Constant Fan

  If you want the Fan to stop running after reaching the setpoint, you can switch it to Constant Off.

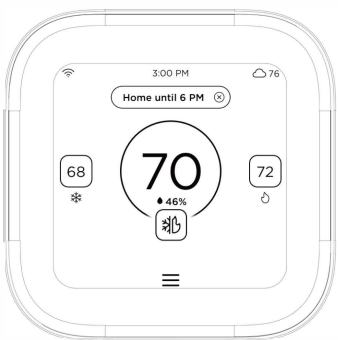
  If you want the Fan to run continuously after reaching the setpoint, you can switch it to Constant On.

- **Comfort Presets**

  Setup the comfort presets can streamline schedule creation, and gain access to quick changes in the ACiQ Home App. You can set 3 comfort presets: Home, Away, and Sleep.

- Home: The normal settings for when you are at home and awake.
- Away: Settings for when you are not at home.
- Sleep: Settings for when you are sleeping.

- **Schedule**




Set a 7-day weekly schedule to make the system run more regularly.
You can copy a single or an entire day's schedule to another day.
In the created schedule, the thermostat will maintain the desired mode and temperature until the next schedule arrives.

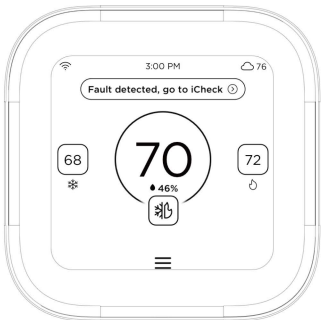
The home screen will accurately tell you the start time of the next schedule.

When your schedule references Comfort Presets settings, modifying the Comfort Presets settings will also change the corresponding schedule settings.

- **Vacation**

  When you have travel plans, you can set the departure and return times in advance. During your absence, the thermostat will run in the set mode and temperature until you return home, saving energy and maintaining indoor air circulation. When you return home, the thermostat will restore to the pre-departure settings in advance.

- **iCheck**




When there is a fault in the thermostat or system, the Main Page prompt will guide you to the detailed iCheck page, where you can detect faults in the thermostat, making fault content more intuitive and easily accessible, and improving maintenance efficiency. Detect thermostat faults.

- **Terminal Check**

Automatically detect wiring anomalies when the system is off. When the wire is aged or the interface is abnormal due to the long use time, the thermostat can detect which terminal is abnormal. You can check the connection on the screen, take action or contact your professional engineers for help.

- **Settings**

  **Connect ACiQ Home App**

  To bind the account using the ACiQ Home App, you need to connect to the wireless network in advance. If you do not have an ACiQ Home App account, please download the ACiQ Home App from Google Play or Apple Store and register an account. Go to page 23 to refer to the installation guide to complete the binding.

  **Wireless Network**

  Please select a 2.4G wireless network that supports the 802.11b/g/n protocol. It does not support password-free and enterprise-level wireless networks. Please choose a wireless network with good signal strength.

  **Temperature Calibration**

  Temperature calibration allows the thermostat to display more accurate temperatures in different environments. If you find a deviation between the thermostat and the current environment temperature, try different compensation values to calibrate the deviation. The temperature calibration range is ±9℉ in 1℉ / ±5℃ in 1℃.

### Type of Auxiliary

- Select Electric
  If you choose to automatically start auxiliary heating, and the heat pump cannot reach the setpoint within a certain time, the auxiliary heating will start and work simultaneously with the heat pump to help the heat pump reach the setpoint.
- Select Furnace or Boiler
  If you choose to automatically start this type of auxiliary heating, and the heat pump cannot reach the setpoint within a certain time, the heat pump will stop working, and the auxiliary heating will start and replace the heat pump as the primary heat source.

### O/B Settings

Select Energized on Cool to activate the reversing valve output (O/B terminal) when there is a call for cooling. Select Energized on Heat to activate the relay when there is a call for heat.

### Fan Runtime after Heating

In heating mode, after reaching the setpoint, if Constant is set to Off, the fan will continue to run for a period to blow residual heat. This time

This time is determined by the Fan Runtime setting. If Constant is set to On, the Fan Runtime setting is invalid, and the fan will continue to run.

**Unit Settings**

- Language
  You can choose English or French. Changing the language will not affect the current data and status.
- Date & Time
  Turn on the Set Automatically button to automatically update time. If you choose to turn it off, you need to manually select Date & Time. The time format can be 12 hr or 24 hr.
- Location
  Click the Country option and slide to select the country. Click the Time Zone option and slide to select the current time zone.
- Temperature Units
  Click ℃ to switch the thermostat and App to ℃ . Click ℉ to switc the thermostat and App to ℉ .

## Preference

- Display Brightnes
  Slide the button left or right to adjust the screen brightness.
- Auto Sleep
  Select the countdown time to turn off the screen.
- Sounds
  Slide the button left or right to adjust the touch volume.
- Clean Screen
  If you need to clean the screen, you can activate this feature to lock the screen for a time period, allowing you to clean it.

## Update

- The thermostat supports automatic system updates. It will automatically download new versions in the background and update at midnight. The update process takes about 2-5 minutes, during which the thermostat cannot be used. After the update is complete, it will restart automatically. Do not disconnect the power or network during this period. You can also turn off the automatic update button and choose to manually update the system.

### Service

- Provides an engineering mode for professional engineers. For details, please refer to the Service section.

### Factory Reset

- Reset will clear and restore the auxiliary heating settings, schedule, vacation, temperature calibration settings, account settings, and network settings of the thermostat to default values. Please confirm again if you need to Reset.

- **About**

  View the thermostat's serial number, device model name, indoor unit firmware software version, thermostat system software version, and review user agreements and privacy policy terms.

# Other Functions

The thermostat has a proximity screen activation feature, allowing you to control the device simply by approaching the screen. It also offers an intuitive and user-friendly interaction method.

**The design and specifications are subject to change without prior notice for product improvement. Consult with the sales agency or manufacturer for details. Any updates to the manual will be uploaded to the service website, please check for the latest version.**

**Model : TL04-1**