

T961NN50

Universal Wired Thermostat



User Manual

Installation | Setup and Configuration | Operation

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Support

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Important Safety Instructions

SAVE THESE INSTRUCTIONS

The applied nameplate is located at the bottom or rear of the product.

When using your thermostat equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury, including the following:

1. This product should be installed by a qualified technician.
2. Read and understand all instructions.
3. Follow all warnings and instructions marked on the product.
4. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
5. Do not expose the product to liquid or install this in wet areas such as bathroom, near a sink, near a swimming pool, or in a damp basement.
6. Do not install this product on an unstable surface.
7. This product should not be installed near or over a radiator or heat register, or in any area where proper ventilation is not provided.
8. This product should be operated only from the type of power source indicated on the marking label.
9. To reduce the risk of electric shock, do not disassemble this product. Opening or removing parts of the thermostat may expose you to dangerous voltages or other risks. Incorrect reassembling can cause electric shock.
10. Remove this product and refer servicing to an authorized service facility under the following conditions:
 - a. If liquid has spilled onto the product.
 - b. If the product has exposed to rain or water.
 - c. If the product does not operate normally by following the operating instructions. Adjust only controls covered by the operation instructions.
 - d. If the product has been dropped resulting in physical damage.
 - e. If the product exhibits a distinct change in performance.
11. Avoid using the thermostat during an electrical storm. There is a remote risk of electric shock.
12. The thermostat should be mounted at a height of less than 6 feet.



CAUTION:

- Keep small metallic objects such as pins and staples away from the thermostat.
- Avoids to use battery in following conditions:
 - High or low extreme temperature during use, storage or transportation.
 - Replacement of a battery with an incorrect type that can defeat a safeguard.
 - Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery. that can result in an explosion.
 - Leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas.
 - Extremely high temperature and/or extremely low air pressure that can result in an explosion or the leakage of flammable liquid or gas.
- Use 18~24 AWG only.
- For supply connections, use wires rated for 167°F (75°C) minimum.

Instructions de sécurité importantes

CONSERVEZ CES INSTRUCTIONS

La plaque signalétique se trouve en bas ou à l'arrière de l'appareil.

Lors de l'utilisation de l'équipement de votre thermostat, des précautions de base doivent toujours être prises pour réduire les risques d'incendie, d'électrocution et de blessure, notamment les suivantes :

1. Ce produit doit être installé par un technicien qualifié.
2. Lire et comprendre toutes les instructions.
3. Respectez tous les avertissements et toutes les instructions figurant sur le produit.
4. N'utilisez pas de nettoyeurs liquides ou en aérosol. Utilisez un chiffon humide pour le nettoyage.
5. N'exposez pas le produit à des liquides et ne l'installez pas dans des endroits humides, tels qu'une salle de bain, près d'un évier, près d'une piscine ou dans un sous-sol humide.
6. Ne pas installer ce produit sur une surface instable.
7. Ce produit ne doit pas être installé à proximité ou au-dessus d'un radiateur ou d'une bouche de chaleur, ni dans un endroit où une ventilation adéquate n'est pas assurée.
8. Ce produit ne doit être utilisé qu'avec le type de source d'alimentation indiqué sur l'étiquette de marquage.
9. Pour réduire le risque d'électrocution, ne pas démonter ce produit. Ouvrir ou retirer des pièces du thermostat peut vous exposer à des tensions dangereuses ou à d'autres risques. Un réassemblage incorrect peut provoquer une électrocution.
10. Retirez ce produit et confiez-le à un service de réparation agréé dans les conditions suivantes :
 - a. Si du liquide s'est répandu sur le produit.
 - b. Si le produit a été exposé à la pluie ou à l'eau.
 - c. Si le produit ne fonctionne pas normalement en suivant les instructions d'utilisation. Ne réglez que les commandes couvertes par le mode d'emploi.
 - d. Si le produit est tombé et a subi des dommages physiques.
 - e. Si le produit présente un changement distinct de performance.
11. Évitez d'utiliser le thermostat pendant un orage. Il y a un risque d'électrocution.
12. Le thermostat doit être fixé à une hauteur inférieure à 6 pieds.



MISE EN GARDE :

- Tenir les petits objets métalliques, tels que les épingles et les agrafes à l'écart du thermostat.
- Évitez d'utiliser la pile dans les conditions suivantes :
 - Température élevée ou basse extrême pendant l'utilisation, l'entreposage ou le transport.
 - Remplacement d'une pile par un type de pile incorrect qui peut neutraliser une mesure de protection.
 - L'élimination d'une pile dans le feu ou dans un four chaud, ou l'écrasement ou le découpage mécanique d'une pile, ce qui peut entraîner une explosion.
 - Laisser une batterie dans un environnement à température extrêmement élevée, ce qui peut entraîner une explosion ou une fuite de liquide ou de gaz inflammable.
 - Température extrêmement élevée et/ou pression atmosphérique extrêmement basse pouvant entraîner une explosion ou une fuite de liquide ou de gaz inflammable.
- Utiliser uniquement des câbles 18~24 AWG.
- Pour les connexions d'alimentation, utiliser des fils prévus pour une température minimale de 167°F (75°C).

FCC and IC Regulatory Statements

FCC Compliance Statement

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.

Warning: Changes or modifications to this unit not expressly approved by the manufacturer 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.

RF Exposure Information

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm during normal operation.

ISED Warning

This device complies with Innovation, Science, and Economic Development Canada license exempt RSS standard(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.

Operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

⚠ WARNING

- **INGESTION HAZARD:** This product contains a button cell or coin battery. **DEATH** or serious injury can occur if ingested.
- A swallowed button cell or coin battery can cause **Internal Chemical Burns** in as little as **2 hours**.
- **KEEP** new and used batteries **OUT OF REACH of CHILDREN**.
- **Seek immediate medical attention** if a battery is suspected to be swallowed or inserted inside any part of the body.
- The product contains **Non-replaceable batteries**.
Compatible battery type: CR1220
Nominal battery voltage: 3V



⚠ Cautions

- The factory installed clock backup battery is not replaceable and rechargeable. There may be a risk of explosion if a wrong type of clock backup battery is used. Use only the factory installed non-replaceable battery (Compatible battery type CR1220, Nominal battery voltage 3V) and do NOT recharge the battery.
- Even used batteries may cause severe injury or death.
- Do not force discharge, recharge, disassemble, heat above 212°F (100°C) or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.
- Call a local poison control center for treatment information.
- Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate.
- Battery must be removed from the thermostat before it is scrapped.
- Thermostat must be disconnected from the supply mains when removing the battery.
- Battery is to be disposed of safely.

AVERTISSEMENT

- **RISQUE D'INGESTION** : Ce produit contient une pile bouton ou une pile bouton. **LA MORT** ou des blessures graves peuvent survenir en cas d'ingestion.
- Une pile bouton ou une pièce de monnaie avalée peut provoquer des **brûlures chimiques internes** en seulement **2 heures**.
- **CONSERVEZ** piles neuves et usagées **HORS DE LA PORTÉE des ENFANTS**.
- **Consulter immédiatement un médecin** en cas de suspicion d'ingestion ou d'insertion d'une pile dans une partie quelconque du corps.
- Le produit contient **Piles non remplaçables**.
Pile compatible de type CR1220. Tension nominale de la pile de 3 V.



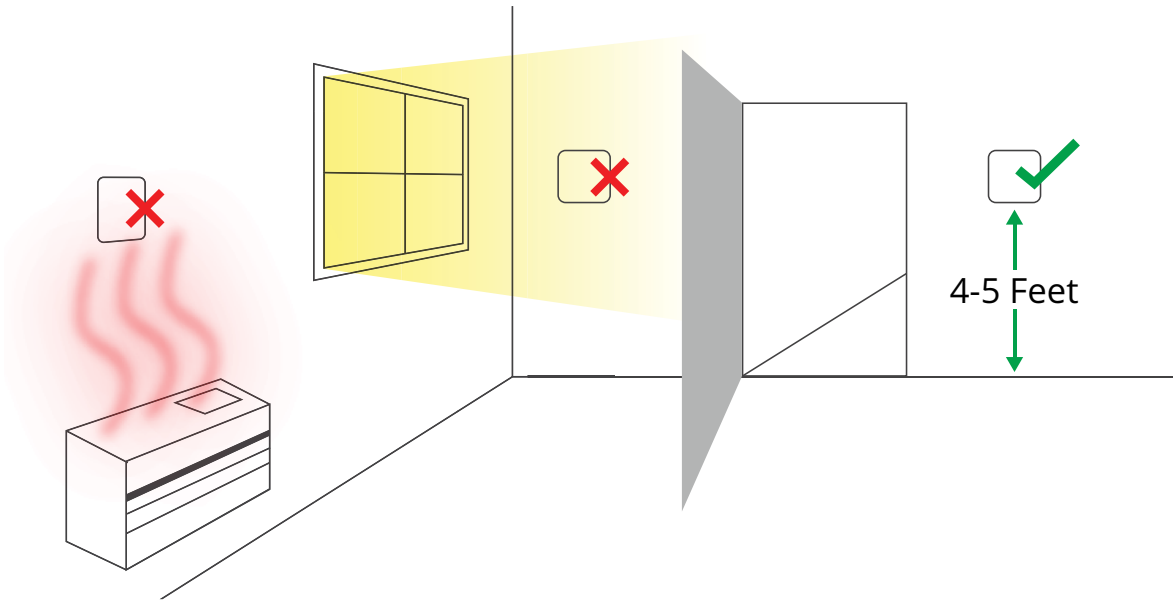
Mises en garde

- La pile de secours de l'horloge installée en usine n'est ni remplaçable ni rechargeable. Il peut y avoir un risque d'explosion si l'on utilise un mauvais type de pile de sauvegarde de l'horloge. Utilisez uniquement la pile non remplaçable installée en usine (pile compatible de type CR1220, tension nominale de la pile 3V) et ne rechargez PAS la pile.
- La pile de secours de l'horloge installée en usine n'est ni remplaçable ni rechargeable. Il peut y avoir un risque d'explosion en cas d'utilisation d'un mauvais type de pile de sauvegarde de l'horloge. Utilisez uniquement la pile non remplaçable installée en usine (pile compatible de type CR1220, tension nominale de la pile 3V) et ne rechargez PAS la pile.
- Les piles, même usagées, peuvent provoquer des blessures graves, voire mortelles.
- Ne pas forcer la décharge, ne pas recharger, ne pas démonter, ne pas chauffer à plus de 100°C (212°F) et ne pas incinérer. Vous risqueriez de vous blesser en raison d'un dégagement, d'une fuite ou d'une explosion entraînant des brûlures chimiques.
- Appelez un centre antipoison local pour obtenir des informations sur le traitement.
- Retirez les piles usagées et recyclez-les immédiatement ou mettez-les au rebut conformément aux réglementations locales et tenez-les hors de portée des enfants. Ne jetez PAS les piles dans les ordures ménagères et ne les incinerez pas.
- La pile doit être retirée du thermostat avant d'être mise au rebut.
- Le thermostat doit être déconnecté du réseau d'alimentation lors du retrait de la pile, qui doit être mise au rebut en toute sécurité.
- La pile doit être mise au rebut en toute sécurité.

Installation and Wiring

Important Things to Know Before Installation

- This product should be installed by a qualified technician.
- Carefully read these instructions. You could damage this product or cause a hazardous condition if you fail to follow these instructions.
- Electrical Hazard Caution: Turn OFF power to your HVAC system before installation. Failure to disconnect the power before beginning to install this product can cause electrical shock or equipment damage.
- Do not over-tighten the screws during mounting.



The thermostat **should be mounted:**

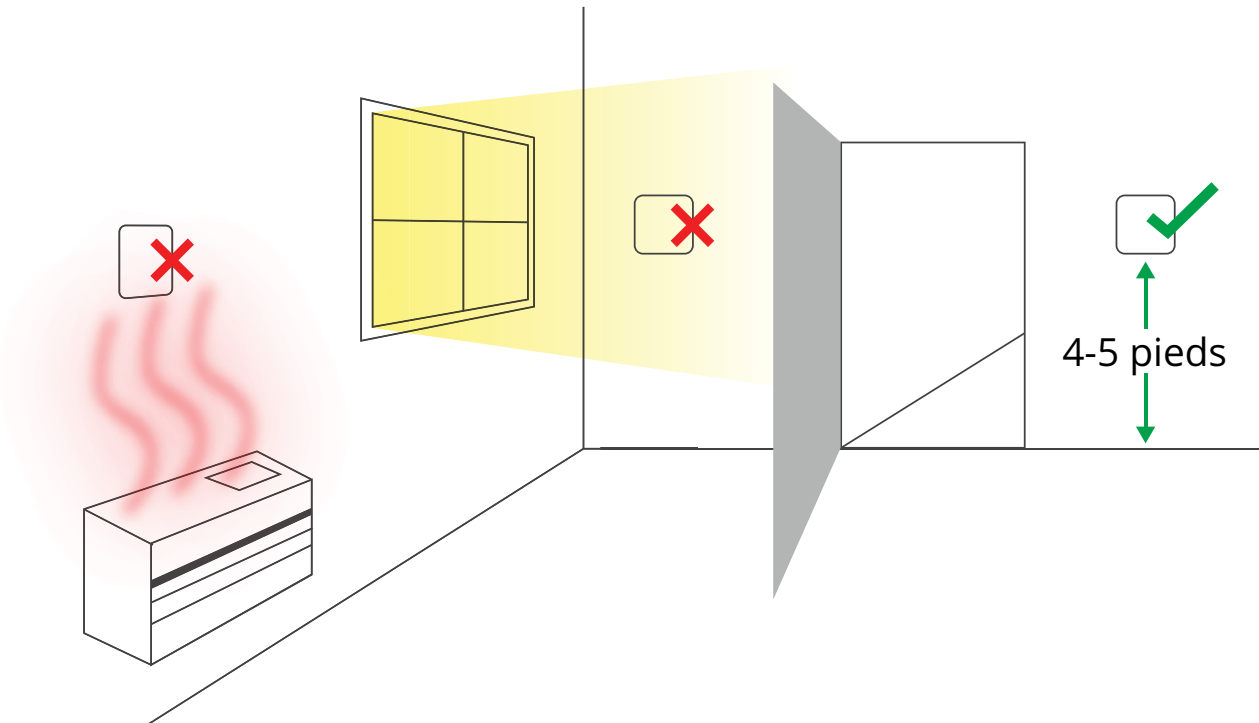
- Approximately 4 - 5 feet above the floor
- In a central location with average temperature and humidity
- On an interior wall that is easily accessible
- In a location with good air circulation

The thermostat **should not be mounted:**

- Where it is exposed to direct sunlight
- To a wall that contains concealed chimneys or pipes
- Where there is obstructed air flow such as in corners or behind doors
- Directly above or below an hot or cold air ducts
- On an exterior wall

Ce qu'il faut savoir avant l'installation

- Ce produit doit être installé par un technicien qualifié.
- Lisez attentivement ces instructions. Vous risquez d'endommager ce produit ou de provoquer une situation dangereuse si vous ne suivez pas ces instructions.
- Risque électrique Attention : Coupez l'alimentation de votre système de chauffage, de ventilation et de climatisation avant l'installation. Si vous ne coupez pas l'alimentation avant de commencer l'installation de ce produit, vous risquez de vous électrocuter ou d'endommager l'équipement.
- Ne pas trop serrer les vis pendant le montage.



Le thermostat **doit être installé** :

- Environ 4 à 5 pieds au-dessus du sol
- Dans un endroit central où la température et l'humidité sont moyennes
- Sur un mur intérieur facilement accessible
- Dans un endroit où l'air circule bien

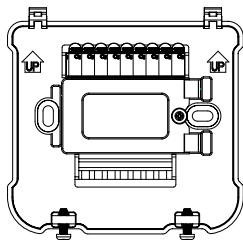
Le thermostat **ne doit pas être installé** :

- Lorsqu'il est exposé à la lumière directe du soleil
- Sur un mur qui contient des cheminées ou des tuyaux cachés
- Là où le débit d'air est obstrué, par exemple dans les coins ou derrière les portes
- Directement au-dessus ou au-dessous d'un conduit d'air chaud ou froid
- Sur un mur extérieur

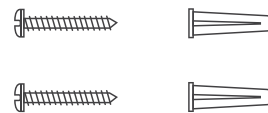
In the Box



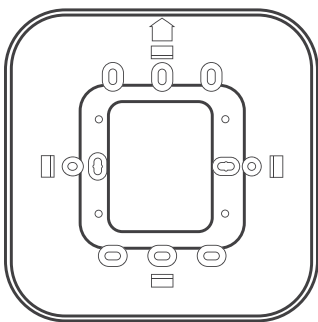
Thermostat



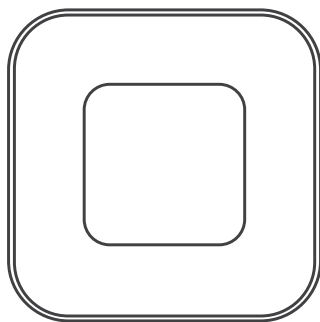
Wall Plate



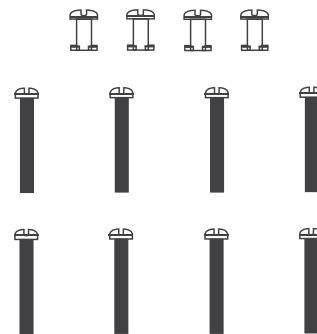
Wall Mount Screws & Anchors



Universal Deco Plate



Deco Plate Cover



T-Lock & Junction Box Screws

Required but Not Supplied

- Screwdriver set
- Drill and drill bits; 3/16" for drywall and 7/32" for plaster
- Pencil
- Level

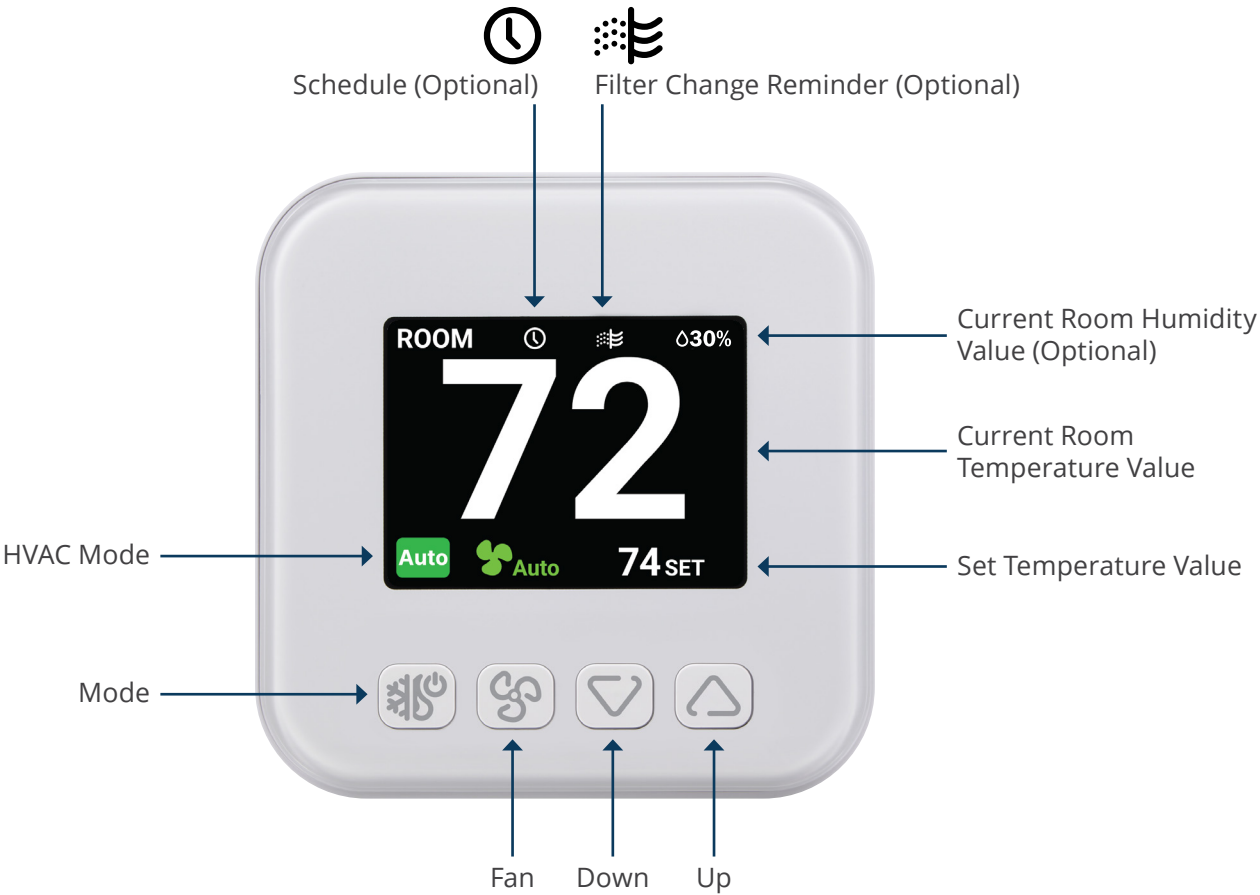
Device Required



Smartphone with Bluetooth® feature

- iOS 15 or higher
- Android 12.0 or higher

Thermostat Layout



Note
Only when the humidity, schedule, and filter change reminder features are enabled via the EC Tool Pro app, can the current room humidity, schedule, and filter change reminder be displayed on the screen.

Specifications

Product Dimensions	3.9" x 3.9" x 1.1" (9.9cm x 9.9cm x 2.7cm)
Mounting Type	Surface Mount, Junction Box*
HVAC System	PTAC/VTAC/Heat Pump/Conventional
Power Requirements	Input: 24VAC~ 50/60Hz with "C" common wire Output: 1.5A Max @ 24V AC
Display	2.8" TFT (240 x 320, RGB)
Display Back Light	Configurable - Dimming or Off
Display Brightness	3 Levels
Number of Buttons	4 Hard Buttons
HVAC System Modes	Auto, Cool, Heat, and Off
Fan Modes	Fan Modes in 1 Fan Speed Setting: Auto, On, and Off Fan Modes in 2 Fan Speed Setting: Auto, Low, High, and Off
Temperature Set Range	49°-89°F / 9.5°-31.5°C
Room Temperature Display Range	32°F-122°F / 0°C-50°C 32°-122°F / 0°-50°C (If the real room temperature drops below 0°C or rises above 50°C, the thermostat screen will still show 0°C or 50°C.)
Room Humidity Display Range	0-95% RH (If the real room humidity rises above 95%, the thermostat screen will still show 95%.)
Terminal Connections	R, C, Y1, W1/AUX, W2/O/B, Y2/Gh, G/GI
Max Stages Supported	PTAC/VTAC: 2H1C 2-speed Fan Heat Pump: 3H2C 1-speed Fan Conventional: 2H1C 1-speed Fan
Recommended Wire	18~24 Gauge (Solid)
Fuel Types	Gas, Electric
Disconnection Type	1.B
Rated Impulse Voltage	800V
Pollution Degree	2
Automation Cycle	50,000

* A universal deco plate kit is required for junction box mounting.

Caractéristiques

Dimensions du produit	9.9cm x 9.9cm x 2.7cm (3.9" x 3.9" x 1.1")
Type de montage	Montage en surface, boîte de jonction*
Systèmes CVC	PTAC/VTAC/Pompe à chaleur/Conventionnel
Besoin en énergie	Entrée : 24 V CA 50/60 Hz 3,0 A avec fil commun « C » Sortie : 1,5 A max à 24 V CA
Afficher	Écran TFT 2,8" (240 x 320, RVB)
Rétroéclairage de l'écran	Configurable - Atténuation ou arrêt
Luminosité de l'écran	3 niveaux
Nombre de boutons	4 Boutons durs
Modes du système CVC	Auto, refroidissement, chauffage et arrêt
Modes de ventilateur	Modes de ventilation en 1 réglage de vitesse : Auto, Marche et Arrêt Modes de ventilation avec 2 réglages de vitesse : Auto, Faible, Élevé et Arrêt
Plage de réglage de la température	9,5°C-31,5°C / 49°F-89°F
Température ambiante Plage d'affichage	0°C-50°C / 32°F-122°F (Si la température réelle de la pièce descend en dessous de 0°C ou monte au-dessus de 50°C, l'écran du thermostat affichera toujours 0°C ou 50°C.)
Affichage de l'humidité ambiante Gamme	0%-95% RH (Si l'humidité réelle de la pièce dépasse 95 %, l'écran du thermostat affichera toujours 95 %.)
Connexions des terminaux	R, C, Y1, W1/AUX, W2/O/B, Y2/Gh, G/GI
Niveau maximal pris en charge	PTAC/VTAC : 2H1C, ventilateur à 2 vitesses Conventionnel : 3H2C, ventilateur à 1 vitesse Pompe à chaleur : 2H1C, ventilateur à 2 vitesses
Fil recommandé	Calibre 18~24 (solide)
Types de carburant	Gaz, Électrique
Type de déconnexion	1.B
Tension d'impulsion nominale	800V
Degré de pollution	2
Cycle d'automatisation	50,000

* A universal deco plate kit is required for junction box mounting.

Installation and Wiring Processes

1. Power off your HVAC system

Disconnecting the power protects you and avoids damage. After disconnecting, adjust the set temperature to confirm the system is off.

2. Carefully remove the cover from your old thermostat

3. Verify system compatibility

Inspect the wire connections to verify system compatibility.

CAUTION: The T961NN50 is compatible with low-voltage (24V), single transformer systems only. If you inspect and find any of the following, then the T961 is not compatible with your system.

1. Labels on the wiring or old thermostat warning of High Voltage, 120V, or 240V connections.
2. Thick electrical wires that are connected using wire nuts.
3. If your old thermostat supports RC and RH terminals that are wired separately (not connected via jumper wire)

If you have any enquiries about system compatibility, email tstatsupport@vtechhotelphones.com.

4. Remove jumper wires (if any)

Jumper wires are short wires between two connectors. You won't need them.

5. Take a photo of the wires while connected to your old thermostat

Take a photo of wire color/terminals that you can refer to later. You may also consider labeling the wires to match the terminals (R, C, G, Y, W, etc.).

6. Disconnect wires from old thermostat

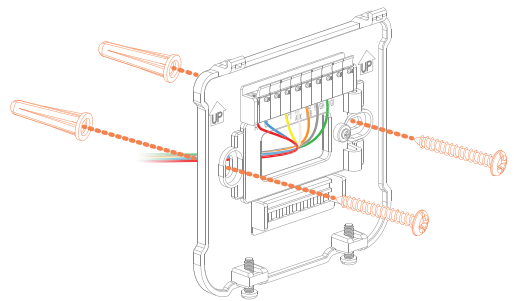
Carefully disconnect the wiring from the old thermostat. Once removed, wrap the wire bundle around a pencil to prevent them from falling back into wall.

7. Attach the wall plate

Mounting Option 1: Direct Wall Mounting

Hold the wall plate up to the wall where you want the thermostat to be mounted. Make sure that the wire bundle aligns near the center of the wall plate. Verify the plate is level with a bubble level, then mark the screw positions through the screw holes in the wall plate.

Using your marks as reference, drill 2 holes and install the provided wall anchors. If you will be using c-wire or 24vac adapter to power the thermostat, route the wires through the opening in the center of the wall plate, then secure it to the wall with the provided screws. The slots in the wall plate will help to compensate for any minor misalignment.

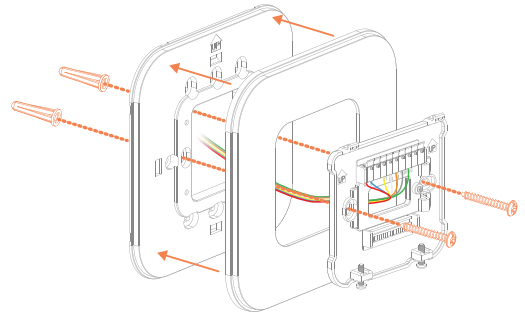


Installation and Wiring Processes

7. Attach the wall plate

Mounting Option 2: Direct Wall Mounting with Deco Plate Kit

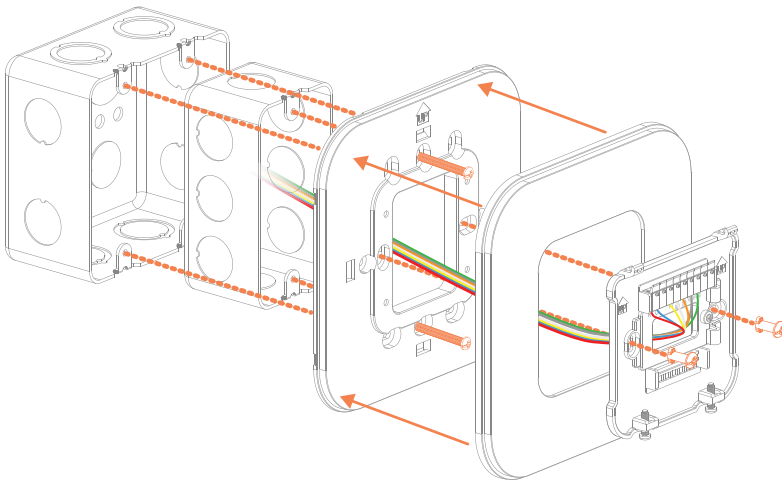
Hold the deco plate up to the wall where you want the thermostat to be mounted. Make sure that the wire bundle aligns near the center of the deco plate. Verify the plate is level with a bubble level, then mark the screw positions through the screw holes in the deco plate.



1. Push the cover towards the deco plate until it clicks into place.
2. Using your marks as reference, drill 2 holes and install the provided wall anchors. Route the wires through the opening in the center of the deco plate, then the wall plate.
3. Align the screw holes and secure them to the wall with the provided screws. The slots in the wall plate will help to compensate for any minor misalignment.

Mounting Option 3: Direct Wall Mounting with Junction Box and Deco Plate Kit

1. Attach the deco plate to the junction box with the provided junction box screws.
2. Push the cover towards the deco plate until it clicks into place.
3. Attach the wall plate to the deco plate with the provided T locks.
4. Route the wires in the junction box through the openings in the centers of the deco plate and the wall plate.



8. Connect wires to the wall plate

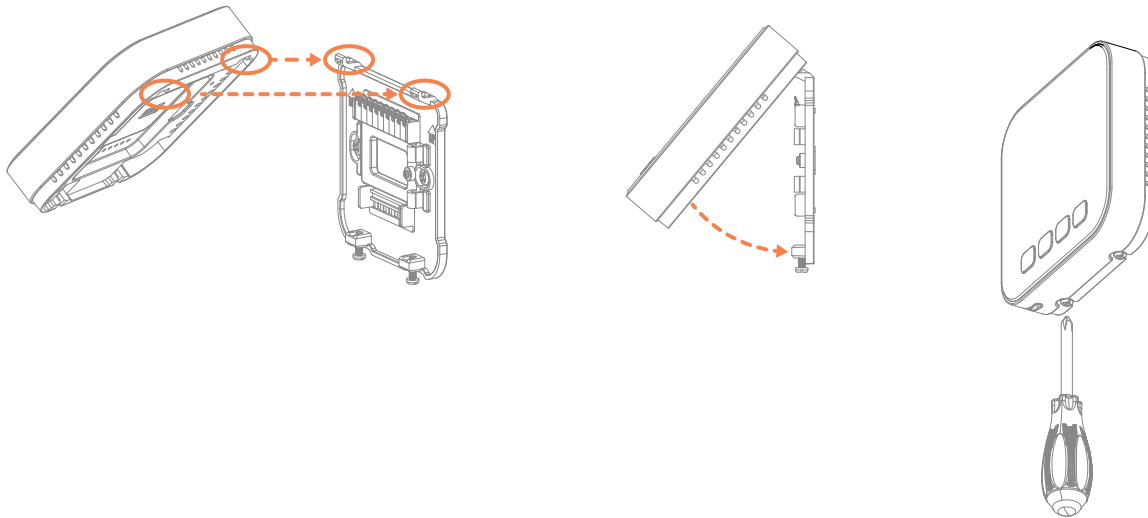
To wire the wall plate, refer to the wiring guide displayed in the system profile that you created for your HVAC system using the EC Tool Pro App or the T961NN50 Wiring Guide. Once all wires are securely connected, press the wires down to ensure they are flush with the wall plate.

Installation and Wiring Processes

9. Attach the thermostat

Swing the thermostat into position by engaging the lugs at the top of the wall plate before pushing it carefully home into its plug-in terminal block.

Lock the thermostat into place by tightening the 2 Phillips screws located on the bottom edge of the thermostat. Switch the power back on.



Processus d'installation et de câblage

1. Éteignez votre système CVC

Débrancher l'alimentation électrique vous protège et évite les dommages. Après la déconnexion, réglez la température de consigne pour confirmer que le système est éteint.

2. Retirez soigneusement le couvercle de votre ancien thermostat

3. Vérifier la compatibilité du système

Inspectez les connexions des fils pour vérifier la compatibilité du système.

PRUDENCE: Le T961NN50 est compatible uniquement avec les systèmes basse tension (24 V) à simple transformateur. Si vous constatez l'un des problèmes suivants lors de l'inspection, le T962WN50 n'est pas compatible avec votre système.

1. Étiquettes sur le câblage ou l'ancien thermostat avertissant des connexions haute tension, 120 V ou 240 V.
2. Fils électriques épais connectés à l'aide de serre-fils.
3. Si votre ancien thermostat prend en charge les bornes RC et RH qui sont câblées séparément (non connectées via un fil de liaison)

Si vous avez des questions sur la compatibilité du système, envoyez un e-mail à tstatsupport@vtechhotelphones.com.

4. Retirez les fils de liaison (le cas échéant)

Les câbles de liaison sont des fils courts reliant deux connecteurs. Vous n'en aurez pas besoin.

Processus d'installation et de câblage

5. Prenez une photo des fils lorsqu'ils sont connectés à votre ancien thermostat

Prenez une photo de la couleur des fils et des bornes pour vous y référer ultérieurement. Vous pouvez également étiqueter les fils en fonction des bornes (R, C, G, Y, W, etc.).

6. Débranchez les fils de l'ancien thermostat

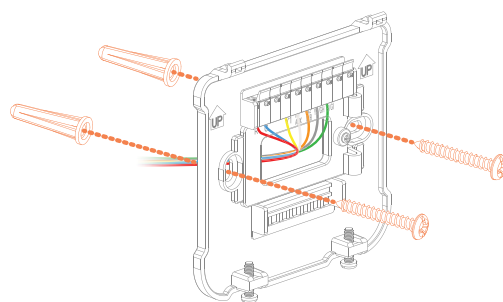
Débranchez soigneusement le câblage de l'ancien thermostat. Une fois retiré, enroulez le faisceau de fils autour d'un crayon pour éviter qu'il ne retombe dans le mur.

7. Fixez la plaque murale

Option de montage 1 : montage mural direct

Maintenez la plaque murale contre le mur où vous souhaitez installer le thermostat. Assurez-vous que le faisceau de câbles est aligné près du centre de la plaque murale. Vérifiez que la plaque est de niveau avec un niveau à bulle, puis marquez les emplacements des vis dans les trous de la plaque murale.

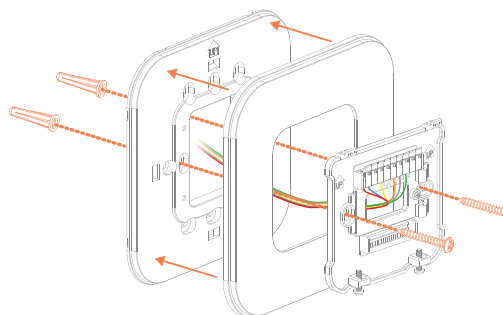
En vous servant de vos repères, percez deux trous et installez les chevilles murales fournies. Si vous utilisez un câble C ou un adaptateur 24 VCA pour alimenter le thermostat, faites passer les fils par l'ouverture centrale de la plaque murale, puis fixez-la au mur avec les vis fournies. Les fentes de la plaque murale permettront de compenser tout léger désalignement.



Option de montage 2 : montage mural direct avec kit de plaque décorative

Maintenez la plaque décorative contre le mur où vous souhaitez installer le thermostat. Assurez-vous que le faisceau de câbles est aligné près du centre de la plaque décorative. Vérifiez que la plaque est de niveau avec un niveau à bulle, puis marquez les emplacements des vis dans les trous de la plaque décorative.

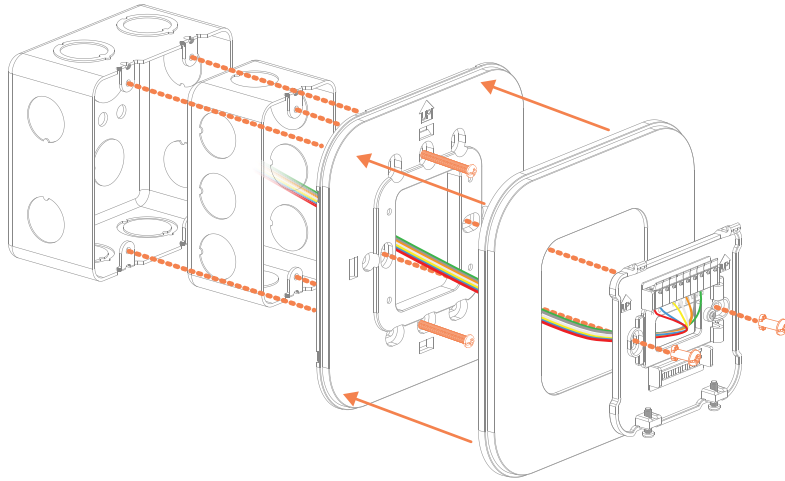
1. Poussez le couvercle vers la plaque décorative jusqu'à ce qu'il s'enclenche.
2. En vous servant de vos repères, percez deux trous et installez les chevilles fournies. Faites passer les fils par l'ouverture centrale de la plaque décorative, puis par la plaque murale.
3. Alignez les trous de vis et fixez-les au mur avec les vis fournies. Les fentes de la plaque murale permettront de compenser tout léger désalignement.



Processus d'installation et de câblage

Mounting Option 3: Direct Wall Mounting with Junction Box and Deco Plate Kit

1. Fixez la plaque décorative à la boîte de jonction à l'aide des vis de boîte de jonction fournies.
2. Poussez le couvercle vers la plaque décorative jusqu'à ce qu'il s'enclenche.
3. Fixez la plaque murale à la plaque décorative à l'aide des verrous en T fournis.
4. Acheminez les fils dans la boîte de jonction à travers les ouvertures au centre de la plaque décorative et de la plaque murale.



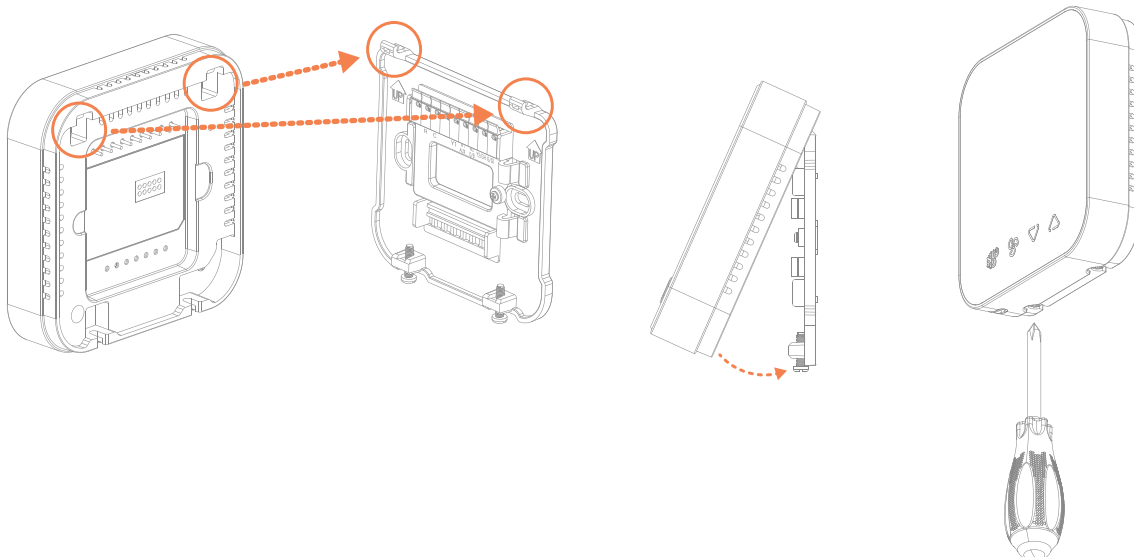
8. Connectez les fils à la plaque murale

Pour câbler la plaque murale, reportez-vous au guide de câblage affiché dans le profil système que vous avez créé pour votre système CVC à l'aide de l'application EC Tool Pro ou du guide de câblage T962WN50. Une fois tous les fils correctement connectés, appuyez dessus pour les aligner parfaitement avec la plaque murale.

9. Fixez le thermostat

Faites pivoter le thermostat en position en engageant les pattes situées en haut de la plaque murale avant de le pousser soigneusement dans son bornier enfichable.

Verrouillez le thermostat en serrant les deux vis cruciformes situées sur le bord inférieur. Remettez l'appareil sous tension.



Configuration

About the EC Tool Pro App

The EC Tool Pro app is an essential tool that will allow you to configure your T961NN50 thermostat to control a variety of hvac systems. Once you have installed the app and completed custom profile, the app will guide you through the wiring configuration and allow you to quickly and securely transfer the profile from the app to your thermostat in seconds.



EC Tool Pro App

Scan the QR code or click the link of one of the App stores



Setting up your thermostat is easy:

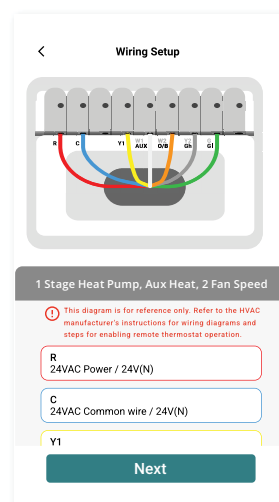
1. Get the app.



2. Create a custom profile for your HVAC system.

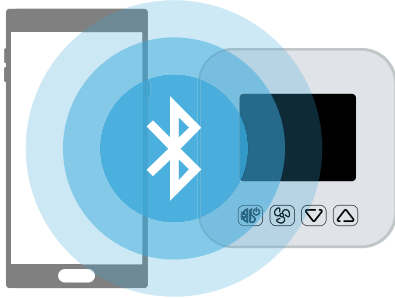


3. Follow the in-app wiring instructions.



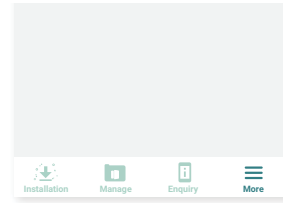
About the EC Tool Pro App

4. Tap to install your profile on the thermostat via Bluetooth and take control of your HVAC system.



Check for More Information About the EC Tool Pro App

Tap More tab, then About the App to view the version number.



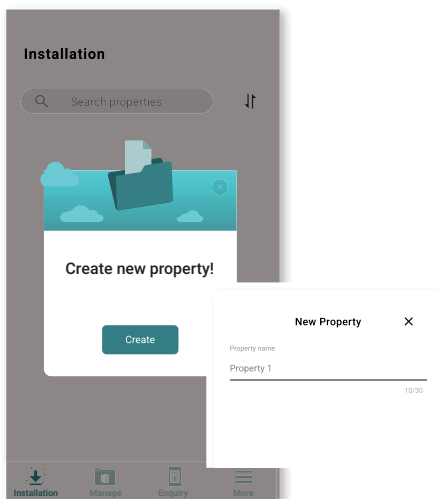
Create Your First Profile

The EC Tool Pro app organizes custom HVAC profiles by property name. When using the EC Tool Pro for the first time, it will be necessary to create a property name under which you will save all of the custom profiles for this property for future reference.

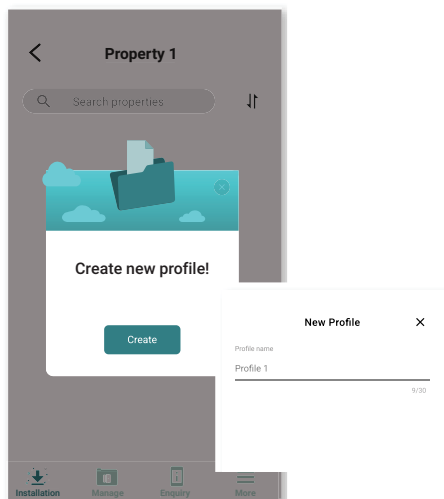
Note

When you visit the EC tool for the first time after this tool is installed on your smartphone, where no property or profile has been created, the message Create new property! will pop up.

1. Tap Create, then enter your property name (example Property 1) and tap Next.



2. Tap Create when the message Create new profile! pops up. Enter your profile name and tap Next.

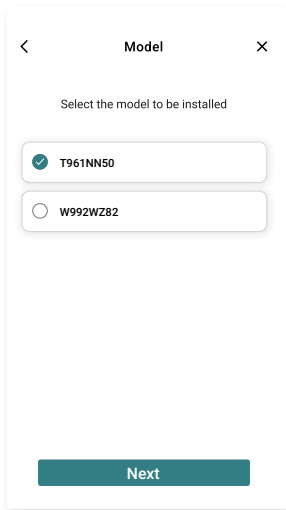


Note

1. Property/profile naming rule: Only numbers, letters and spaces up to 30 characters are allowed.
2. Each property name must be unique and not repeated.
3. Profile names can be duplicated, but must be unique within each property.

Create Your First Profile

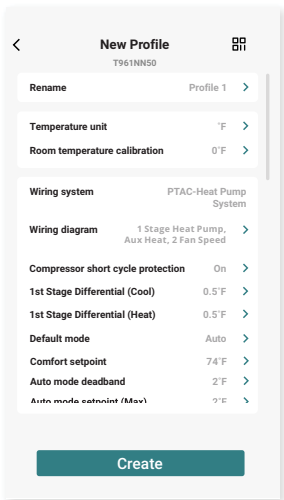
3. Tap to select your thermostat's model, T961NN50, and tap Next.
4. Select a wiring system and tap Next, wiring diagram and tap Next, fan speed and tap Next, and review your wiring setup and tap Next.
5. Tap Create to save this new profile without changing any default settings or values. Or you can define this profile's settings and values on this interface and then tap Create.



Note

1. If you do not know the type of HVAC system you will be controlling, please refer to the thermostat wiring guide provided by the manufacturer of your HVAC system or contact an authorized HVAC technician.

2. Please consult with your wiring technician to match your choices with the wiring system that will be wired for your thermostat. Selecting an incorrect wiring diagram may damage your system.



The items in the table below are available in all wiring diagrams

Item	Setting Options or Values	Default Setting or Values
Rename	Fill in the new profile name or ignore this item. Note - In this item, you can rename the profile name that you have input in step 2. If you don't want to rename it, just ignore this item. - Only numbers, letters and spaces up to 30 characters are allowed. Padding profile name with ellipsis on this interface if it's too long. - Profile names can be duplicated, but must be unique within each property.	The auto generated profile name or the profile name you have input in Step 2 (e.g., Profile 1).
Wiring System	- PTAC-Conventional System - PTAC-Heat Pump System - Conventional System - Heat Pump System Note - In this item, you can change your wiring system choice in step 4. If you don't want to change it, just ignore this item. - Please consult with your wiring technician to match your choices with the wiring system that will be wired for your thermostat. Selecting an incorrect wiring system may damage your system.	The option you have chosen in Step 4.

Create Your First Profile

The items in the table below are available in all wiring diagrams

Item	Setting Options or Values	Default Setting or Values
Wiring Diagram	• 1 Stage Cool • 1 Stage Cool, 1 Stage Heat • 1 Stage Cool, 1 Stage Heat, Aux Heat • 1 Stage Cool, 2 Stage Heat • 1 Stage Cool, 2 Stage Heat • 2 Stage Cool, 2 Stage Heat • 2 Stage Cool, 2 Stage Heat, Aux Heat • 1 Stage Heat • 2 Stage Heat Note • In this item, you can change your wiring diagram choice in step 4. If you don't want to change it, just ignore this item. • Please consult with your wiring technician to match your choices with the wiring diagram that will be wired for your thermostat. Selecting an incorrect wiring diagram may damage your system.	The option you have chosen in Step 4.
Fan Speed	• 1 Speed • 2 Speed Note • In this item, you can change your fan speed choice in step 4. If you don't want to change it, just ignore this item. • Please consult with your wiring technician to match your choices with the fan speed that will be wired for your thermostat. Selecting an incorrect fan speed may damage your system.	The option you have chosen in Step 4.
Default Mode	• Auto • Heat • Cool Note The default mode will be the primary HVAC mode that is activated each time the system is turned on.	Auto
Override Mode	• On • Off When setting to 'On', the following options will appear: • 30 minutes • 45 minutes • 60 minutes • 75 minutes • 90 minutes • 105 minutes • 120 minutes	On

Create Your First Profile

The items in the table below are available in all wiring diagrams

Item	Setting Options or Values	Default Setting or Values
Temperature Scale	- Fahrenheit (°F) - Celsius (°C) Note The Setpoint Range resets to default values after changing scale.	Fahrenheit (°F)
Comfort Setpoint	Range: 55-82°F (13-28°C)	74°F (23.5°C)
	Note The value of Comfort setpoint is not allowed to be bigger than the maximum cool mode setpoint and smaller than the minimum cool mode setpoint.	
Protection Setpoint	- On - Off When setting to 'On', the range of the protection heat setpoint will be 41-48°F (5-9°C), and the range of the protection cool range 90-95°F (32-35°C).	Off When setting to 'On', the default protection heat setpoint will be 45°F (7°C), and the default protection cool setpoint 90°F (32°C).
Room Temperature Calibration	-4°F (-2°C) -3°F (-1.5°C) -2°F (-1°C) -1°F (-0.5°C) 0°F (0°C) 1°F (0.5°C) 2°F (1°C) 3°F (1.5°C) 4°F (2°C) Note This allows you to adjust the calibration of the ambient room temperature in order to increase its accuracy and ensure that you're getting a proper temperature reading.	0°F (0°C)
Always On Display	- On - Off When setting to On, the following options will appear: - Level 1 (Min) - Level 2 - Level 3 (Max)	Off When set to On, the default is Level 2.

Create Your First Profile

The items in the table below are available in all wiring diagrams

Item	Setting Options or Values	Default Setting or Values
Room Temperature Calibration	• -4°F (-2°C) • -3°F (-1.5°C) • -2°F (-1°C) • -1°F (-0.5°C) • 0°F (0°C) • 1°F (0.5°C) • 2°F (1°C) • 3°F (1.5°C) • 4°F (2°C) Note This allows you to adjust the calibration of the ambient room temperature in order to increase its accuracy and ensure that you're getting a proper temperature reading.	0°F (0°C)
Always On Display	• On • Off When setting to On, the following options will appear: • Level 1 (Min) • Level 2 • Level 3 (Max)	Off When set to On, the default is Level 2.
Schedule	• On • Off When setting to On, Create schedule button will appear. Tap Create schedule, select the days of the week and then tap Add block 1 of 4. Set the starting time and temperature and then tap Save. Note Each day of the week must be created with block(s). Otherwise, the schedule's setting cannot be saved.	Off
Filter Change Reminder	• On • Off When setting to 'On', the following options will appear: • 15 days • 30 days • 60 days • 90 days • 120 days • 150 days • 180 days	Off When set to On, the default is 30 days.

Create Your First Profile

The items in the table below are available in all wiring diagrams

Item	Setting Options or Values	Default Setting or Values
Humidity	- On - Off When setting to On, the current room humidity value will be displayed on the screen.	Off
Daylight Saving Time	- On - Off Note Daylight savings time (DST), (United States, Canada, and Australia), or summer time (United Kingdom, European Union, and others), is the practice of advancing clocks (typically by one hour) during warmer months so that darkness falls at a later time.	On

PIN

Enter your new 6-digit PIN to reset PIN, 000000 or ignore this item to let the current PIN remain unchanged.

X

PIN

✓

Current thermostat PIN:

000000

ⓘ If the current PIN above doesn't match the one on your thermostat, please enter the current thermostat PIN here.

Reset thermostat PIN to:

Note

- 6 digits are required for a valid PIN.
- Both profile and thermostat's default PINs are 000000.
- It is allowed to set new PIN identical to current PIN.
- Reset thermostat's PIN
 - Enter the thermostat's current and new PINs in this item.
 - Install the updated profile on your thermostat.
- If you need to upload a profile to a thermostat, enter the current PIN of the thermostat you are setting up in this item. To check your thermostat's current PIN, refer to pages 25-28.

Create Your First Profile

The items in the table below are only available in some wiring systems:

PTAC-Conventional System | Conventional System

Item	Setting Options or Values	Default Setting or Values
Fan Operation	- Gas (for system control) - Electric (for thermostat control)	Gas (for system control)

PTAC-Heat Pump System

Item	Setting Options or Values	Default Setting or Values
Changeover Valve	- Energized in cooling (O) - Energized in heating (B)	Energized in heating (B)

The items in the table below are only available in some wiring diagrams:

1 Stage Cool, 1 Stage Heat | 1 Stage Cool, 1 Stage Heat, Aux Heat | 1 Stage Cool, 2 Stage Heat
2 Stage Cool, 2 Stage Heat | 2 Stage Cool, 2 Stage Heat, Aux Heat

Item	Setting Options or Values	Default Setting or Values
Auto Mode Deadband	2°F (1°C) 4°F (2°C) 6°F (3°C) 8°F (4°C) 10°F (5°C) Note A deadband is a temperature range in which neither heating nor cooling system turns on. The deadband prevents the thermostat from activating heating and cooling in rapid succession. This conserves energy by providing a range of temperatures requiring no energy consumption.	2°F (1°C)
Wiring System	PTAC-Conventional System PTAC-Heat Pump System Conventional System Heat Pump System	
Auto mode setpoint (Max)	Range from comfort setpoint +1 to 89°F (31.5°C).	80°F (26.5°C)
Auto mode setpoint (Min)	Range from comfort setpoint -1 to 49°F (9.5°C).	65°F (18.5°C)
Note - Example of Auto Mode Setpoint If the comfort setpoint is set to the default value 74°F (23.5°C), the maximum auto mode setpoint range is 75-89°F (24-31.5°C), and the minimum auto mode setpoint range is 49-73°F (9.5-23°C).		

Create Your First Profile

The items in the table below are only available in some wiring systems:

PTAC-Conventional System | Conventional System

Item	Setting Options or Values	Default Setting or Values
Fan Operation	- Gas (for system control) - Electric (for thermostat control)	Gas (for system control)

PTAC-Heat Pump System

Item	Setting Options or Values	Default Setting or Values
Changeover Valve	- Energized in cooling (O) - Energized in heating (B)	Energized in heating (B)

The items in the table below are only available in some wiring diagrams:

1 Stage Cool, 1 Stage Heat | 1 Stage Cool, 1 Stage Heat, Aux Heat | 1 Stage Cool, 2 Stage Heat
2 Stage Cool, 2 Stage Heat | 2 Stage Cool, 2 Stage Heat, Aux Heat

Item	Setting Options or Values	Default Setting or Values
Auto Mode Deadband	2°F (1°C) 4°F (2°C) 6°F (3°C) 8°F (4°C) 10°F (5°C) Note A deadband is a temperature range in which neither heating nor cooling system turns on. The deadband prevents the thermostat from activating heating and cooling in rapid succession. This conserves energy by providing a range of temperatures requiring no energy consumption.	2°F (1°C)
Wiring System	PTAC-Conventional System PTAC-Heat Pump System Conventional System Heat Pump System	
Auto mode setpoint (Max)	Range from comfort setpoint +1 to 89°F (31.5°C).	80°F (26.5°C)
Auto mode setpoint (Min)	Range from comfort setpoint -1 to 49°F (9.5°C).	65°F (18.5°C)
Note - Example of Auto Mode Setpoint If the comfort setpoint is set to the default value 74°F (23.5°C), the maximum auto mode setpoint range is 75-89°F (24-31.5°C), and the minimum auto mode setpoint range is 49-73°F (9.5-23°C).		

Create Your First Profile

The items in the table below are only available in some wiring diagrams:

1 Stage Cool | 1 Stage Cool, 1 Stage Heat | 1 Stage Cool, 1 Stage Heat, Aux Heat | 1 Stage Cool, 2 Stage Heat
2 Stage Cool, 2 Stage Heat | 2 Stage Cool, 2 Stage Heat, Aux Heat

Item	Setting Options or Values	Default Setting or Values
Compressor Short Cycle	- On - Off Options when setting to On: 3 minutes 4 minutes 5 minutes	On - 3 minutes
Cool Mode Setpoint (Max)	Range from comfort setpoint +1 to 89°F (31.5°C).	
Cool Mode Setpoint (Min)	Range from comfort setpoint -1 to 49°F (9.5°C).	
Note - Example of Auto Mode Setpoint If the comfort setpoint is set to the default value 74°F (23.5°C), the maximum auto mode setpoint range is 75-89°F (24-31.5°C), and the minimum auto mode setpoint range is 49-73°F (9.5-23°C).		
1 st Stage Differential (Cool)	0.5°F (0.25°C) 1°F (0.5°C) 1.5°F (0.75°C) Note - 1st Stage Differential (Cool) 1 st Stage Differential (Cool) - determines the level of control and consequently the cycle rate. Adjustable between 0.5°F (0.25°C) and 1.5°F (0.75°C), this is the value above the set point that the temperature must rise to start the cooling. It is also the value below the set point that the temperature must fall for the cooling to stop.	0.5°F (0.25°C)
2 nd Stage Differential (Cool)	1°F (0.5°C) 2°F (1°C) Note - 2nd Stage Differential (Cool) Adjustable between 1°F (0.5°C) and 2°F (1°C), this also determines the level of control by determining when to use the 2 nd stage of cooling. It can also be used to keep 2 nd stage cooling from coming on too soon when 1 st stage is acting to control temperature levels.	2°F (1°C)

Create Your First Profile

The items in the table below are only available in some wiring diagrams:

1 Stage Cool, 1 Stage Heat | 1 Stage Cool, 1 Stage Heat, Aux Heat | 1 Stage Cool, 2 Stage Heat
2 Stage Cool, 2 Stage Heat | 2 Stage Cool, 2 Stage Heat, Aux Heat | 1 Stage Heat | 2 Stage Heat

Item	Setting Options or Values	Default Setting or Values
1 st Stage Differential (Heat)	• 0.5°F (0.25°C) • 1°F (0.5°C) • 1.5°F (0.75°C) Note - 1st Stage Differential (Heat) Determines the level of control and consequently the cycle rate. Adjustable between 0.5°F (0.25°C) and 1.5°F (0.25°C), this is the value below the set point that the temperature must fall to start the heating. It is also the value above the set point that the temperature must rise for the heating to stop.	0.5°F (0.25°C)
2 nd Stage Differential (Heat)	• 1°F (0.5°C) • 2°F (1°C) Note - 2nd Stage Differential (Heat) Adjustable between 1°F (0.5°C) and 2°F (1°C), this also determines the level of control by determining when to use the 2nd stage of heating. It can also be used to keep 2nd stage heating from coming on too soon when 1st stage is acting to control temperature levels or to keep costly auxiliary heat from coming on too soon when the heat pump is sufficient.	2°F (1°C)
3 rd Stage Differential (Heat)	• 1°F (0.5°C) • 2°F (1°C)	2°F (1°C)
Heat Mode Setpoint (Max)	Range from comfort setpoint +1 to 89°F (31.5°C).	80°F (26.5°C)
Heat Mode Setpoint (Min)	Range from comfort setpoint -1 to 49°F (9.5°C).	65°F (18.5°C)

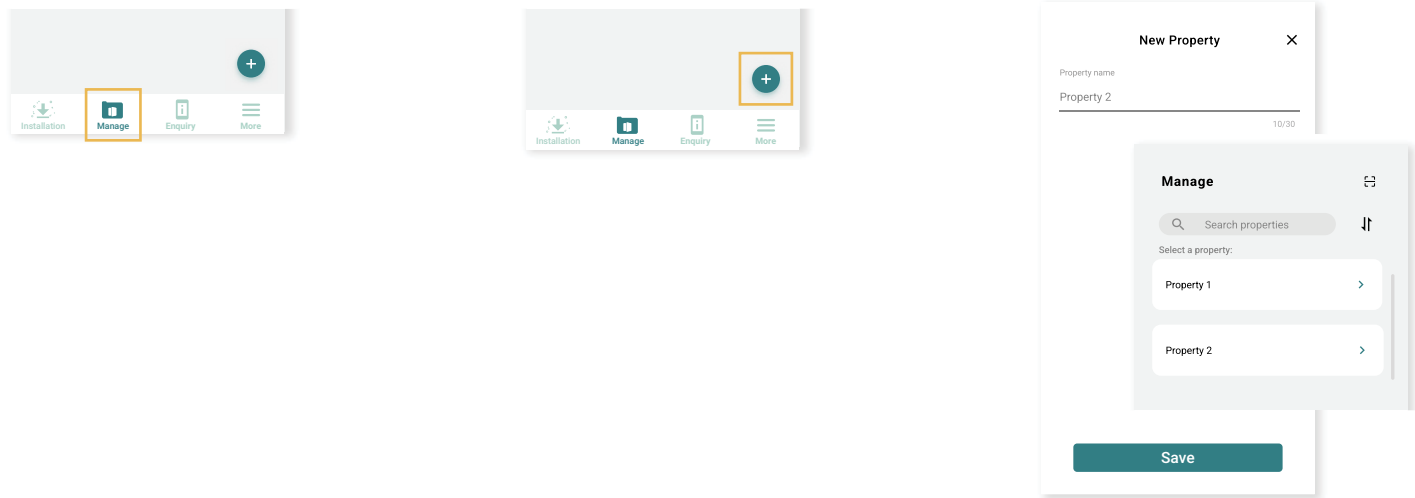
Note - Example of Heat Mode Setpoint

If the comfort setpoint is set to the default value 74°F (23.5°C), the maximum heat mode setpoint range is 75-89°F (24-31.5°C), and the minimum heat mode setpoint range is 49-73°F (9.5-23°C).

Manage Properties and Profiles

Create a Property

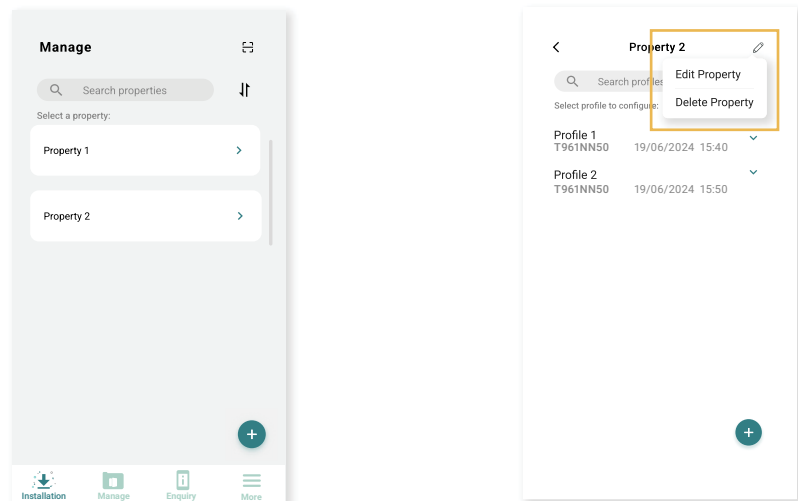
1. Tap the Manage tab.
2. Tap the Add button ().
3. Enter your property name and then tap Save.



Note
The system will automatically generate a property name during creating a new property, such as Property 2.

Edit a Property

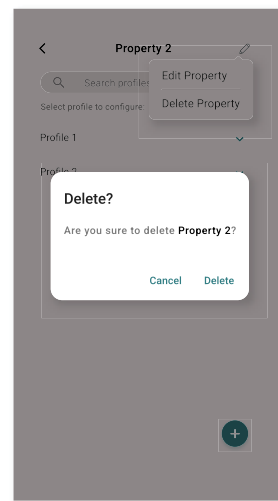
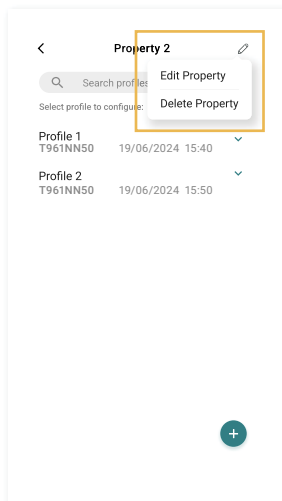
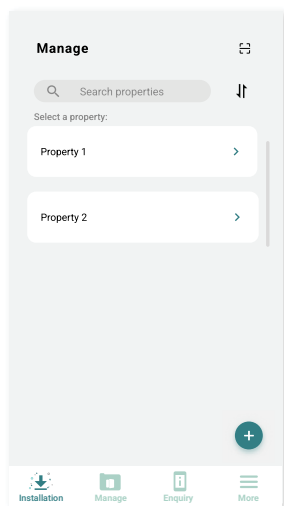
1. Tap the property you want edit.
2. Tap the Edit icon (), then select Edit Property from the drop down menu and then enter the new property name and tap Save.



Manage Properties and Profiles

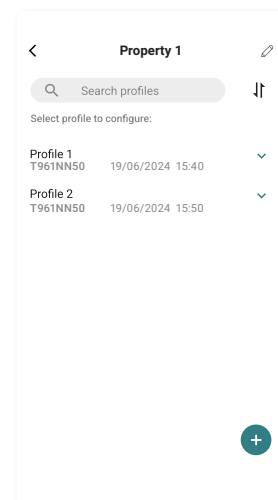
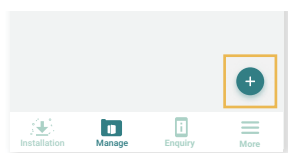
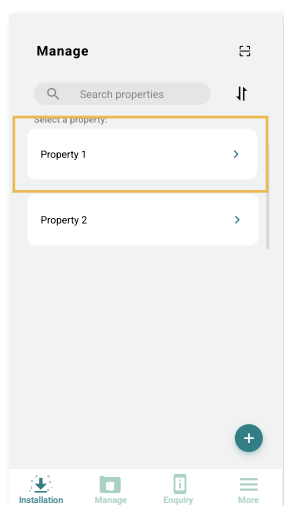
Delete a Property

1. Tap on the property you want to delete.
2. Tap on the Edit icon (✎) and select Delete Property from the drop-down menu
3. Tap Delete on the popup window to confirm deletion.



Create a Profile

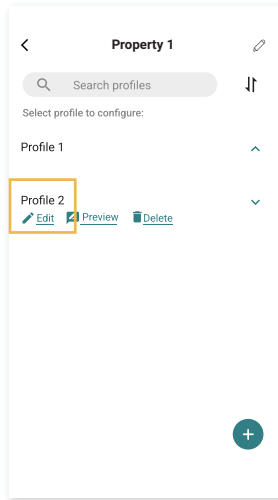
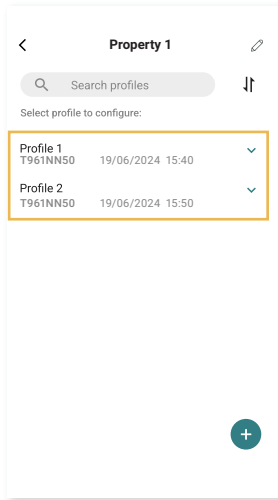
1. Tap to select a property.
2. Tap the Add icon (+) to create a new profile.
3. Follow the steps on page 4 to create a new profile: Enter your profile name, and select thermostat model, wiring diagram, etc.



Manage Properties and Profiles

Edit a Profile

1. Tap on the property you want to edit.
2. Tap edit ( Edit) to edit the selected profile and follow the steps in Define profile settings and values on pages 5-11.

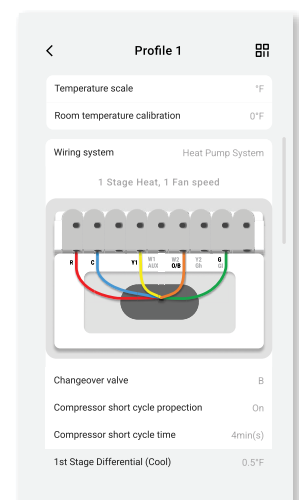
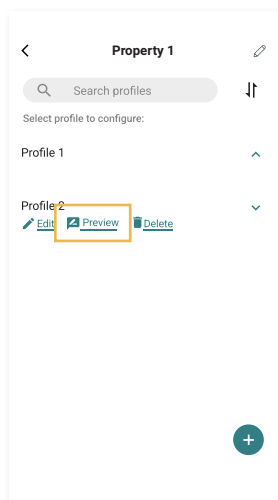
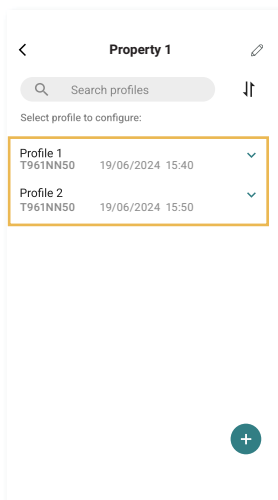


Note

To quit the editing process, tap X in the top right at any time. The changes you have made will not be saved to the EC Tool Pro app.

Preview a Profile

1. Tap on the profile you want to view.
2. Tap preview ( Preview) under the selected profile.
3. Scroll down through all of the settings.

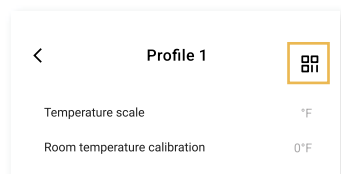


Manage Properties and Profiles

Preview a Profile

4. Save the profile's QR code (optional)

Tap the QR code icon on the top right. Tap Save Photo to save the QR code to your photo library on your smartphone and send it to another smartphone for scanning it later to view the profile. You can also ask another system administrator or engineer to scan this QR code saved on your smartphone.

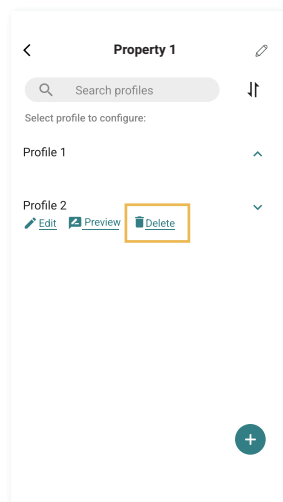


Note

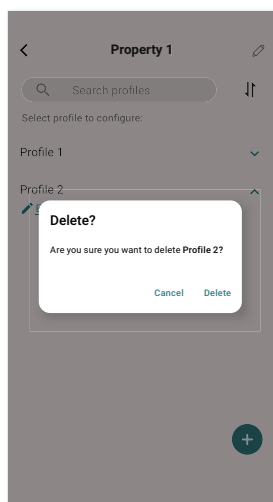
- The interface is a preview only and no settings can be adjusted here. To edit the profile settings, tap the Edit icon instead.
- **Save the profile's QR code features** - Transferring a profile to another EC Tool Pro app. This feature helps you easily transfer a profile. After saving the profile to another EC Tool Pro app, you can edit it there to be a new profile.

Delete a Profile

1. Tap on the profile you want to delete. Then tap the delete ( Delete).



2. Tap Delete on the popup window to confirm deletion.



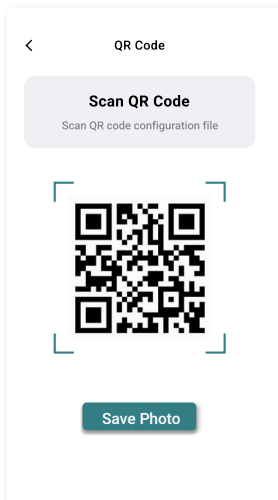
Manage Properties and Profiles

View Profile - QR Code

Tap Scan icon on top right and scan the QR code you have sent to another smartphone to view the profile's details.

Note

The interface is a preview only and no settings can be adjusted here. To edit the profile settings, tap the Edit icon instead.

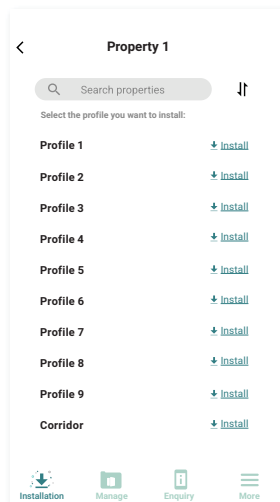


Install a Saved Profile

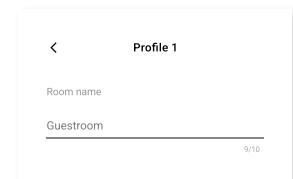
1. Tap Installation tab, then select a property.



2. Tap the Install icon for the profile you want to install.



3. Enter your room name and tap Next.



Note

- System will automatically generate Guestroom as the room name.
- Naming rule: Only numbers, letters, and spaces up to 10 characters are allowed.

Install a Saved Profile

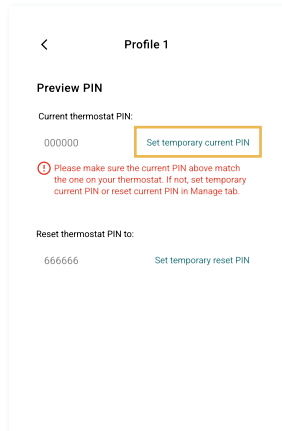
Preview PIN

4. If the current PIN recorded in the profile here matches the one on your thermostat, Tap Next. If it doesn't match, tap Manage tab to update the current thermostat PIN recorded in the profile to match the one on your thermostat, then tap Installation tab to restart the installation process.

or

Tap Set temporary current PIN, then enter the temporary current PIN to match the one on your thermostat, and tap Next.

- To cancel setting temporary current pin, tap Remove temporary pin.

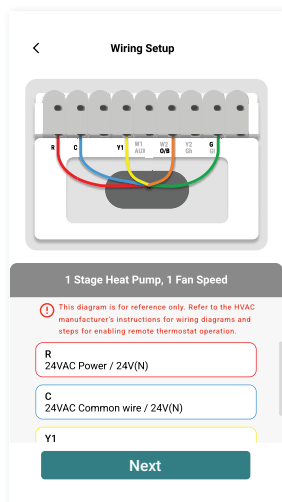


Note

- To check your thermostat's current PIN, refer to pages 25-28.
- To set temporary reset PIN, tap Set temporary reset PIN. After installing the profile on your thermostat, your thermostat's PIN will be updated to the temporary reset PIN, but neither the temporary current PIN nor the temporary reset PIN will be recorded in the profile.

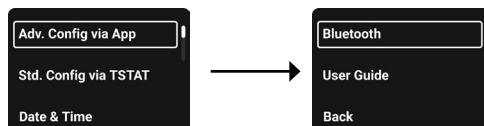
Preview Wiring Diagram

5. Tap Next after previewing the wiring diagram.



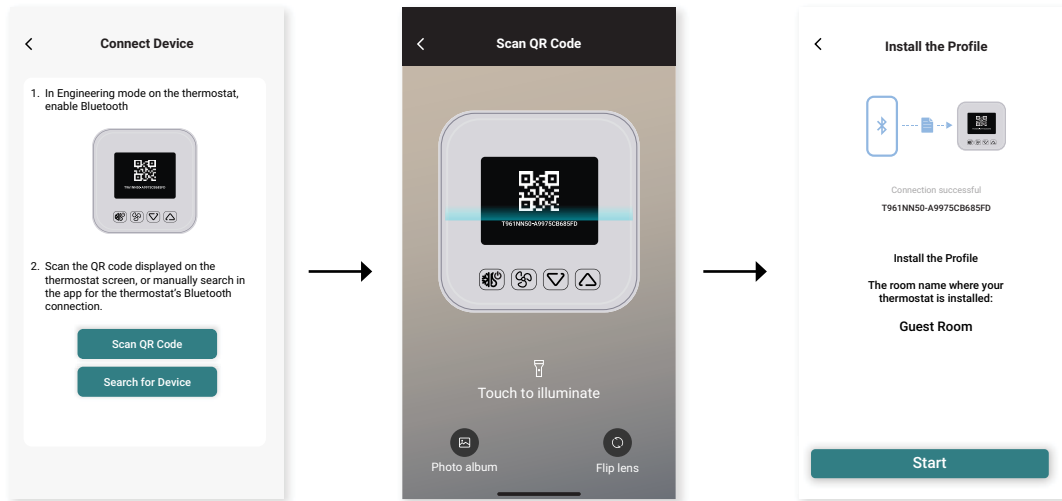
Install Profile

6. Once you see the Connect Device screen in the app, move to the thermostat. Using Mode (⌘), Up (△), and Down (▽) keys, select System Settings > System Configuration > Adv. Config. via App > Bluetooth.



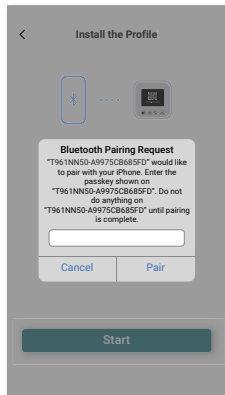
Install a Saved Profile

7. After selecting Bluetooth, a QR code will appear on the thermostat display. Using the app, tap Scan QR Code, then use your camera to scan the QR code displayed by the thermostat.

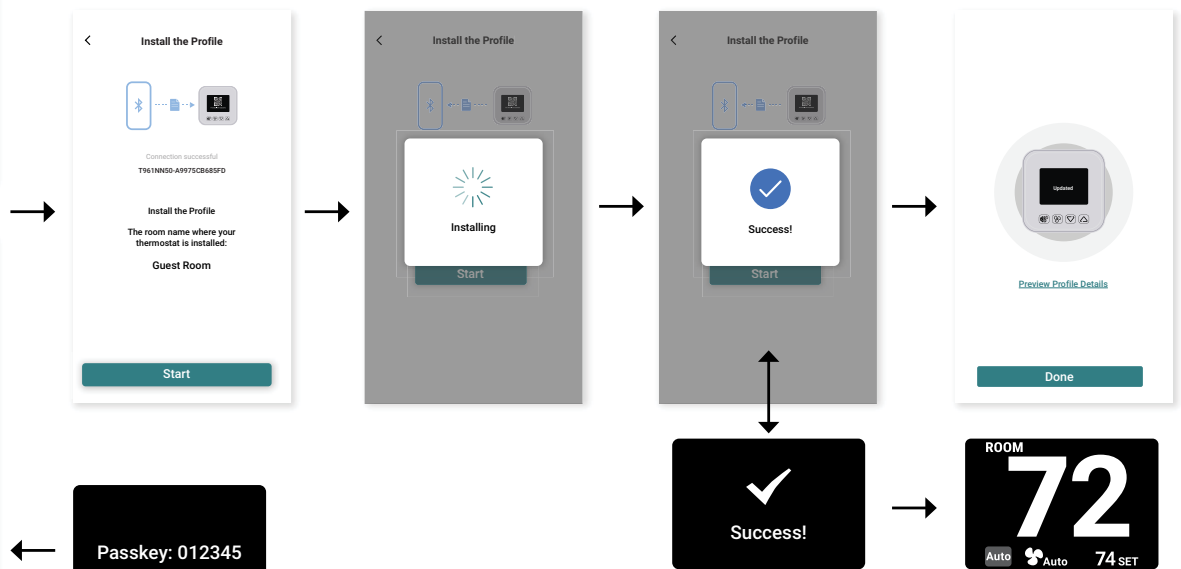
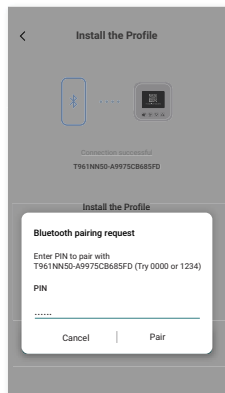


8. Enter the Bluetooth passkey that appears on the thermostat into the app, then tap Start to install the profile. Once the profile has been installed, you will see Success popup in the app and the thermostat. The thermostat will reboot upon completion and tap the Done button in the app. You can now test the thermostat.

iOS

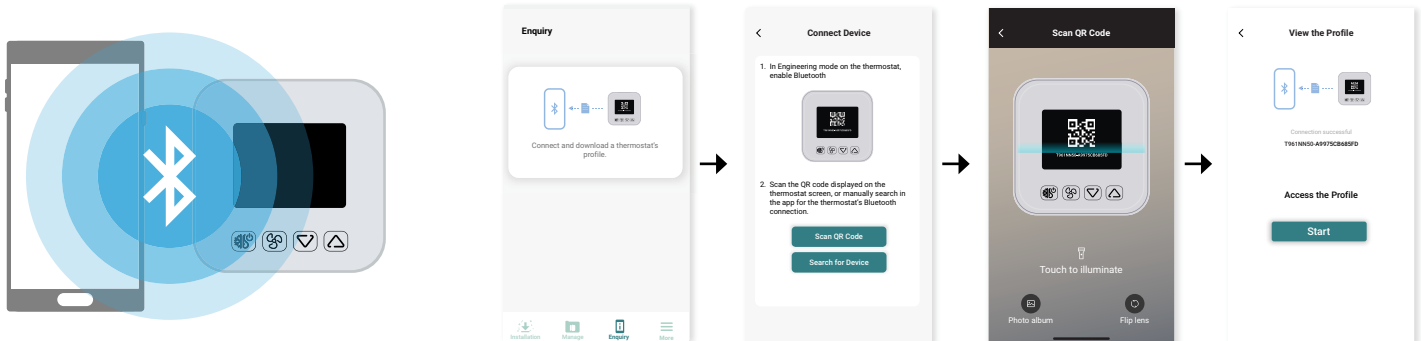


Android



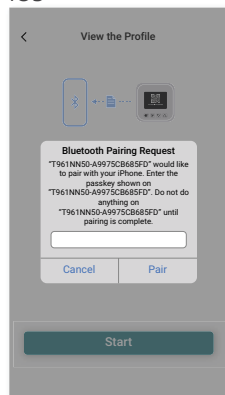
Download a Thermostat's Profile

1. In the Engineering mode on the thermostat, enable Bluetooth and connect to your phone.
2. Tap the Enquiry tab in the app, then select Connect and download a thermostat's profile. You will then be required to enter the security PIN that was assigned to this thermostat.

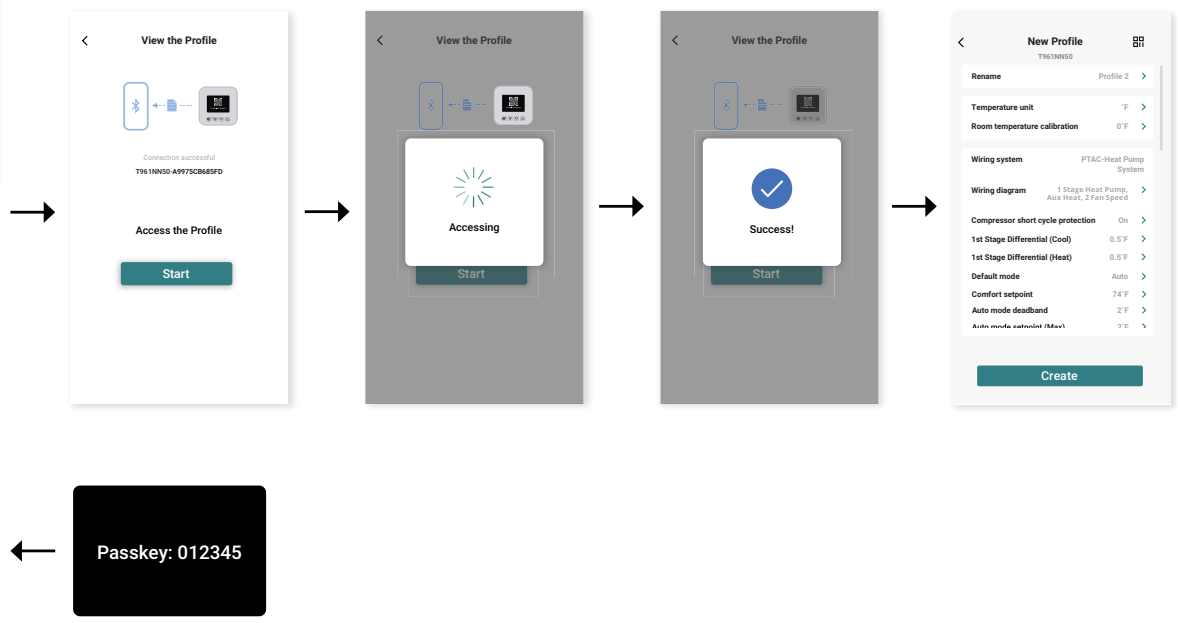
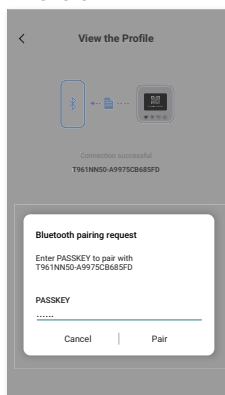


3. Enter the randomly generated six digit Bluetooth passkey that appears on the thermostat into the app, then tap Start to access the profile.

iOS



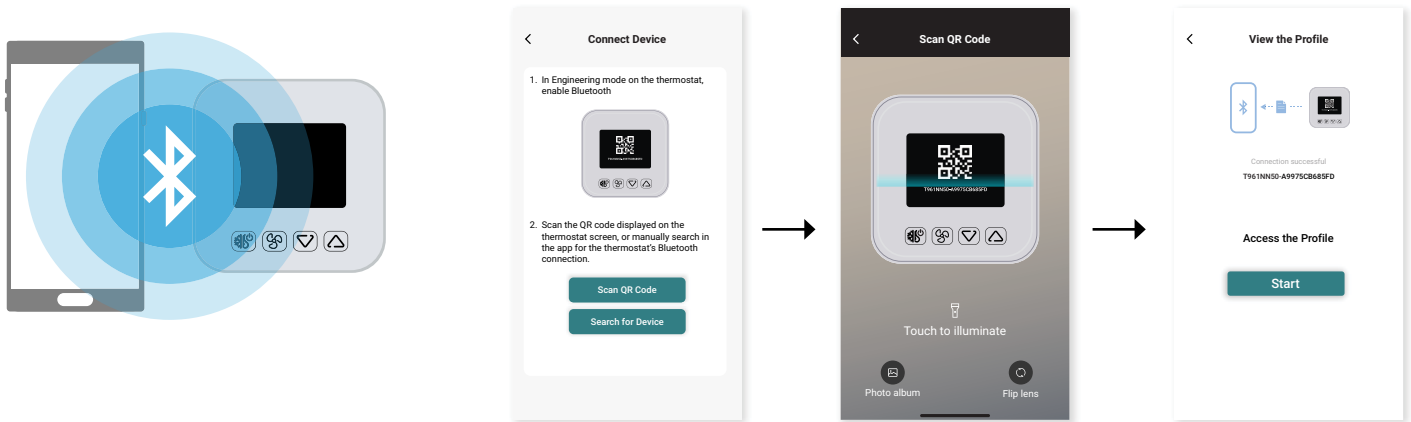
Android



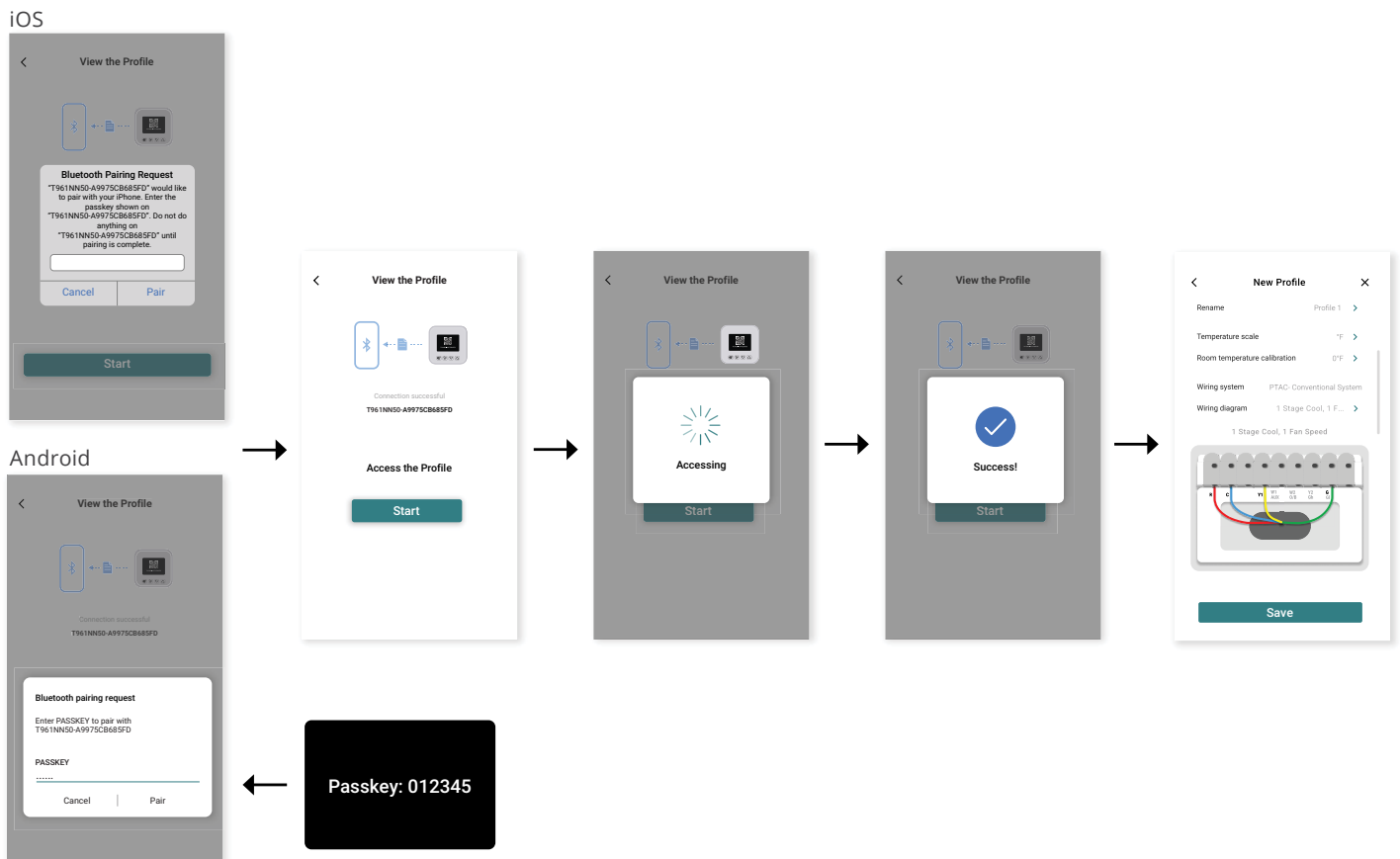
Passkey: 012345

View Thermostat's Profile

1. In the Engineering mode on the thermostat, enable Bluetooth and connect to your phone.
2. After selecting Bluetooth, a QR code will appear on the thermostat display. Using the app, tap Scan QR Code, then use your camera to scan the QR code displayed by the thermostat.



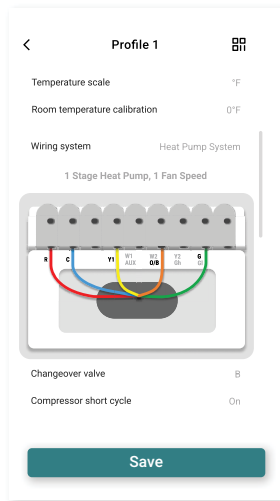
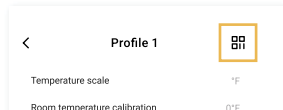
3. Enter the Bluetooth passkey that appears on the thermostat into the app, then tap Start to download the profile.



View Thermostat's Profile

Save Profile's QR Code

4. Tap the QR code icon () on the top right to open the profile's QR code.
5. Tap Save Photo to save the QR code to your photo library. Send it to another smartphone for scanning it later to view the profile. Then tap < on top left to go back to the interface for profile setting details.
6. Tap Save.



Save Profile to EC Tool Pro App

7. Tap to select your target property, or tap Add icon () to create a new property.
8. Tap Next to save the profile to this target or newly-created property and go back to the property list in Manage tab.

Note

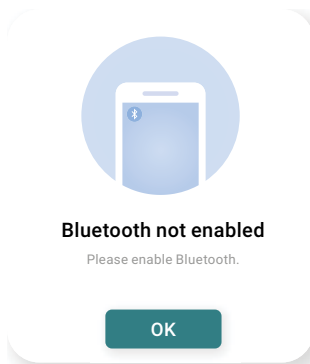
- If your target property already has a profile with the duplicated name, the app will remind you to rename this profile. You can rename it or choose to quite the saving.
- **Save profile's QR code and Save profile features**
Transferring a profile to another EC Tool Pro app is important. Both features help you easily achieve this goal. After saving the profile to another EC Tool Pro app, you can edit it there to be a new profile.

App Error Messages and Troubleshooting

Popup Error Message

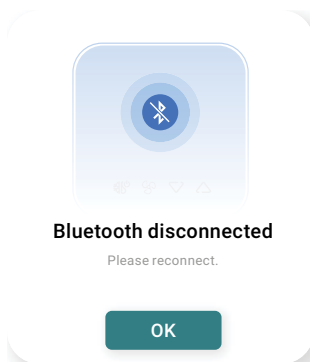
Solution

1.



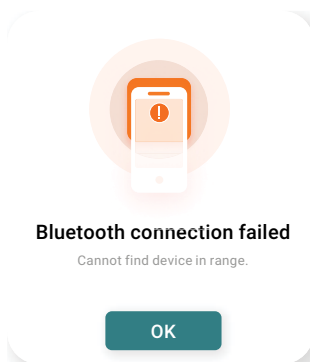
Tap OK and enable Bluetooth on your device.

2.



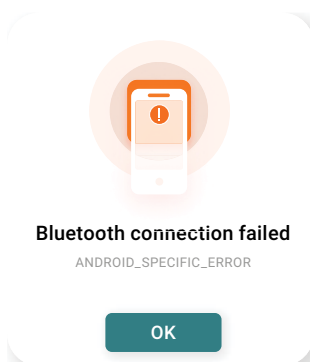
Tap OK and reconnect your device to the thermostat.

3.



Tap OK. Then tap < on the top left to go back to the Connect Device page. Tap Scan QR Code or Search for Device.

4.



Tap OK. Then tap < on the top left to go back to the Connect Device page. Tap Scan QR Code or Search for Device.

App Error Messages and Troubleshooting

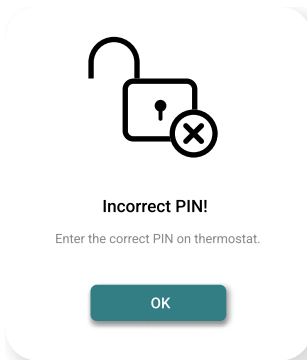
Popup Error Message	Solution
5. The profile does not match the thermostat model. Verify the profile is consistent with the thermostat model: Profile model: W992WZ82 Thermostat model: T961NN50 OK Tap OK. Then tap < on the top left to go back to the Connect Device page. Tap Scan QR Code or Search for Device.	
6. Communication exception Please try again. OK Tap Retry to retransmit the profile.	
7. Incorrect PIN The current thermostat pin recorded in the profile doesn't match the one on your thermostat. Please visit the engineering menu on your thermostat to check its current pin, and then update the current pin in the profile. OK Profile 1 Preview PIN Current thermostat PIN: 000000 Set temporary current PIN Please make sure the PIN above is correct. Reset thermostat PIN to: 666666 Set temporary reset PIN Next Profile 1 Preview PIN Current thermostat PIN: 000000 Remove temporary PIN Please make sure the PIN above is correct. Set the temporary current thermostat PIN: 111111 Reset thermostat PIN to: 666666 Set temporary reset PIN Next 1. Tap OK to set temporary current pin. 2. Check the thermostat's PIN in the engineering menu PIN & Room Name. 3. Tap Set temporary current pin, then enter the temporary current PIN. 4. Tap Next to go on installing the profile. • To remove temporary current pin, tap Remove temporary pin. OR 1. Tap Manage to Go to the homepage of Manage tab. 2. Check the thermostat's PIN in the engineering menu PIN & Room Name. 3. Select the profile you are installing in Manage tab, then tap Edit to enter the correct current thermostat PIN. 4. Try again to install the profile on your thermostat via Bluetooth.	

App Error Messages and Troubleshooting

Popup Error Message

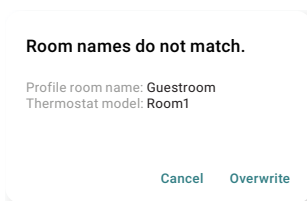
Solution

8.



1. Tap OK.
2. Check the thermostat's PIN in the engineering menu PIN & Room Name.
3. Select the profile in Manage tab, then tap [Edit](#) to enter the correct current PIN on thermostat.
4. Try again to install the profile on your thermostat via Bluetooth.

9.

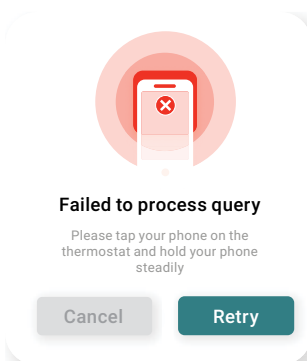


1. Tap Yes to confirm to overwrite the room name recorded in your thermostat, then go on the profile transfer via Bluetooth.
OR
Tap Cancel to quit the installation.
2. Check the thermostat's room name in the engineering menu PIN & Room Name.
3. Select the profile in Manage tab, then tap [Edit](#) to rename this profile.
4. Try again to install the profile on your thermostat via Bluetooth.

Note

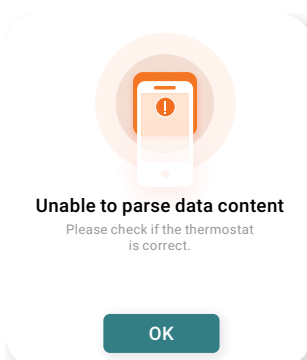
To check the thermostat's room name, refer to Engineering settings on pages 25-28.

10.



Tap Retry, then tap your phone on the thermostat and hold the phone steadily while scanning.

11.



Tap OK, then check if your thermostat's model number is T961NN50. If yes, tap the Installation tab and install a profile on your thermostat.

App Error Messages and Troubleshooting

Popup Error Message	Solution
12. App needs to be updated. Please update your EC Tool Pro to the latest version. Cancel Update	Tap Upgrade to upgrade your EC Tool Pro to the latest version.
13. Cannot connect to App Store. Cancel Retry Cannot connect to Google Play. Cancel Retry	Tap Retry to connect to App Store or Google Play for upgrading your EC Tool Pro App.

Engineering Menus

Engineering Settings

If no profile has been installed on your thermostat, the thermostat will enter its engineering mode when it is powered up. If a profile has been installed on your thermostat, press and hold the FAN/ , DOWN/ , and UP/  buttons simultaneously for at least 8 seconds at home screen to enter the engineering mode menu. If the thermostat is not at home screen or you are setting temperature on the thermostat, you will not enter the engineering mode even if you press and hold these three buttons simultaneously for at least 8 seconds.



Engineering Menus

Engineering Mode Menu

- Follow these steps to set up your thermostat on its four-level engineering menus:
1. Press DOWN/▽ and UP/△ to rotate through the menu items. The last item loops back to first item at the end of items in menu. Press MODE/⌂ or FAN/⌂ to enter a sub-menu item.
 2. Press DOWN/▽ and UP/△ to change the setting in the sub-menu item. Press MODE/⌂ or FAN/⌂ to confirm the setting and return to menu item selection. Settings will not be changed unless you confirm the setting by pressing the MODE/⌂ or FAN/⌂ button.
 3. To leave Engineering Mode, rotate until (Exit) menu item appears and press MODE/⌂ or FAN/⌂ .

Primary	Secondary	Tertiary	Quaternary
System Settings	System Configuration		
	Date & Time	Check Date & Time	
		Set Date & Time	
		Set Time Zone	Eastern Time (EST)
			Central Time (CST)
			Mountain Time (MST)
			Pacific Time (PST)
		Daylight Saving Time	Daylight Saving Time On
			Daylight Saving Time Off
		Back	
	Filter Change Reminder	Check Change Time	
		Reset Filter Change Time	Reset
		Back	Cancel
	About This Unit		
	PIN & Room Name		
	Back		
Tour			
Exit			

Engineering Menus

Engineering Mode Menu

System Configuration	Scan the QR code displayed in this menu to visit T961NN50's web page at www.vtechhotelphones.com .
Check Date & Time	This menu may display: 1. Factory default time. 2. User setting time. 3. The message Clock is not set yet. One of the time zones may display in this interface: (EST) -5, (CST) -6, (MST) -7, (PST) -8, the four time zones of United States and (UTC) +8, the coordinated Universal Time
Set Date & Time	Follow these steps to set the clock date and time. 1. The four digits of the year will start to flash on the display. 2. Repeatedly to select the year, and then press MODE or FAN. 3. Press UP or DOWN to cycle through the years until the required year is displayed and leave it to activate. 4. Repeat step 2 to change your month > day > time > AM/PM > Time Zone > Daylight Saving Time. A check mark will appear when the setting is activated. NOTE • If you do not press any button for about 5 minutes while setting the clock, the current setting page will stay on the screen when waking up the screen. • You can also set time zone and turn daylight saving time on or off in the menu Set Time Zone and Daylight Saving Time respectively.
Set Time Zone	• Press UP or DOWN or to go through the time zones and press MODE or FAN to select your desired time zone. It will take 3 to 4 seconds to update the setting. A check mark will appear when the setting is activated. • Four time zone options: (EST) -5, (CST) -6, (MST) -7, (PST) -8 • If you have set the date and time in "Set Date & Time" menu, then change the time zone in this menu, the set date and time will be automatically updated to the new time zone.
Daylight Savings Time	If you select Daylight Saving Time On or Daylight Saving Time Off, it will take 3 to 4 seconds to update the setting. A check mark will appear when the setting is activated.
Filter Change Reminder	If no profile has been installed on your thermostat or Filter Change Reminder is disabled, this menu will not appear in the engineering mode menu.
Check Filter Change Time	The screen may display the days left or the filter change reminder. 1. The days remaining of 7 days or above. 2. The days remaining (shown in red text) of the last 6 days or below. 3. The red message The filter change time has expired / Replace your filter immediately displays when time is out. The filter change reminder/  displays on the screen at the same time.

Engineering Menus

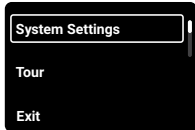
Engineering Mode Menu

Reset Filter Change Time	Select Reset to restart the countdown of filter change time. The countdown days, namely filter change time, have been and can only be configured in the EC Tool Pro app.
About This Unit	About This Unit Model T961NN50 Firmware Version No. [Firmware version No. (E.g., W01B21)] Serial No. [Your thermostat's serial number (e.g., 12LA020000001)]
PIN & Room Name	If a profile has been installed on your thermostat, it will display: About PIN & Room Name PIN [The 6-digit password set in the profile (e.g., 666666)] Room Name [The room name set in the profile (e.g., Guestroom1)] If no profile has been installed on your thermostat, it will display: About PIN & Room Name PIN 000000 (the factory default password) Room Name UNKNOWN
Tour	If no operation is performed in 5 seconds, the system returns. Nothing will be saved during TOUR mode.

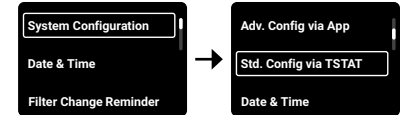
Configuration via the Thermostat Menu

If you need to reenter the Engineering Menu to make any changes after configuration is completed, press and hold    for 10 seconds. If you used the App for configuration and set a security PIN, you will need to make all changes from the app.

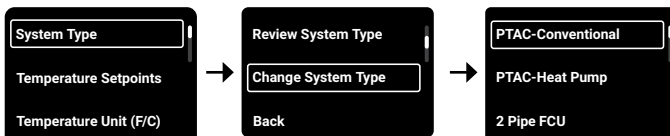
1. Turn on the power to your HVAC system. When the thermostat powers up, you will see the Main menu. Select System Settings by pressing the Mode/Fan button.



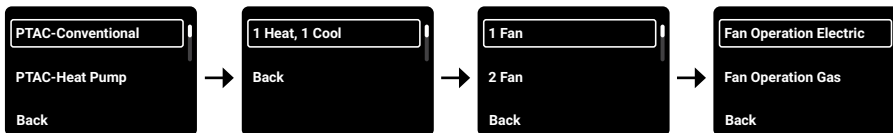
2. Then select System Configuration and choose Std. Config via TSTAT.



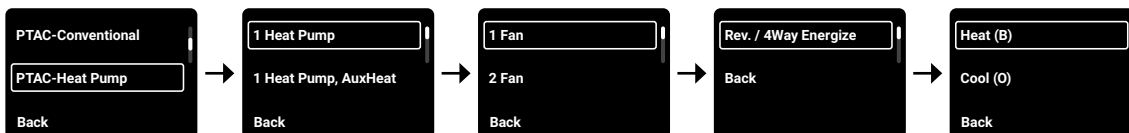
3. Select System Type, then Change System Type. From there, you will select the system your facility uses and the settings associated with your system.



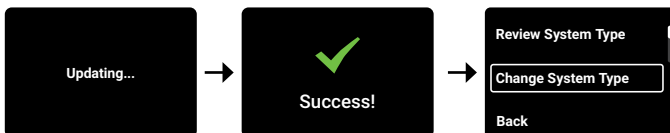
PTAC-Conventional



PTAC-Heat Pump



4. Once you are done with the settings, press the Mode/Fan button and you will see the thermostat updating. Once it has been updated, you can continue within settings or scroll down to the Back button. Test your system to verify functionality and replace the cover.



Note
You will have to manually navigate to the beginning of the settings and exit the menu.

Power Outages

When a temporary or extended power outage occurs or there is a power loss that affects the HVAC equipment, the thermostat display will turn off. Once power is restored to the system, the thermostat will automatically resume HVAC control based on the last known settings prior to the outage with a few possible exceptions:

Before Powering Off	After Powering On Again
	HVAC mode, fan mode, temperature unit and set temperature remain unchanged.
The schedule icon/🕒 is on the screen.	The schedule icon/🕒 is still on the screen.
The schedule held icon/👉 is on the screen.	The schedule held icon/👉 is still on the screen if the next schedule event hasn't begun yet.
An error alert with E01-E05 error code(s) displays on the thermostat screen.	The error alert is still there if the problem wasn't automatically fixed during the restart.

Before Powering Off	While Powering Off	After Powering On Again
The schedule icon/👉 is on the screen.		The schedule hold icon/👉 changes back to the schedule icon/🕒 if the next scheduled event has been executed at its preset start time.
An error alert with E01-E05 error code(s) displays on the thermostat display.		The error alert is cleared from the display if the problem has been automatically fixed during the restart.
The thermostat is in override mode.		The thermostat exits override mode.
	A new profile is installed on the thermostat.	The new profile is activated and the thermostat settings are updated with the new profile.

Restore Factory Defaults

The thermostat can be reset to factory default. Resetting to factory default will remove all stored programs and parameters. Once the reset is complete, the thermostat must be reprogrammed before it will function again.

To perform a factory reset:

1. The thermostat must be connected to a 24v power source.
2. When your thermostat is on the home screen, press and hold FAN/🌀, DOWN/▽, and UP/△ simultaneously for at least 8 seconds to enter the Engineering Mode
3. With the thermostat in Engineering Mode, press and hold MODE/⚙️, FAN/🌀, DOWN/▽, and Up/△ simultaneously for 8 seconds to restore the factory default settings.

After the reset is complete, the thermostat will return to the default engineering menu.

Thermostat Error Alerts and Troubleshooting

If an error alert displays on your thermostat's screen, the screen will turn off after 5 minutes of idleness. To wake the thermostat screen from idle, press any of the four hard buttons (MODE/ , FAN/ , DOWN/ , or UP/ ) on the thermostat display unit. From there, you can check the current error alert again.

Error Alert Examples



Call for service
E01

T: Zigbee FW Version: 10123001
T: UI FW Version: W01B21



Call for service
E02

T: Zigbee FW Version: 10123001
T: UI FW Version: W01B21



Call for service
E03

T: Zigbee FW Version: 10123001
T: UI FW Version: W01B21



Call for service
E04

T: Zigbee FW Version: 10123001
T: UI FW Version: W01B21



Call for service
E01 E02 E03

T: Zigbee FW Version: 10123001
T: UI FW Version: W01B21



Call for service
E01 E02 E04

T: Zigbee FW Version: 10123001
T: UI FW Version: W01B21

Error Code	Error	Severity Rating
E01	Low voltage - Thermostat's voltage is insufficient and not within the normal range.	Critical

Reason	Solution	Note
Wiring error or circuit problem	Power off the HVAC equipment, check the wiring and circuit, and then power up it again after making sure the current and circuit is normal.	The standard power supply of the thermostat is 24V, and the normal voltage range is 18-30V. The voltage range of E01 alarm occurs when the voltage detected is 30.1-33V and 17.9-9V.

Thermostat Error Alerts and Troubleshooting

Error Code	Error	Severity Rating
E02	High internal heat - Thermostat's internal temperature is above 167°F (75°C).	Critical
Reason	Solution	Note
Wiring error or circuit problem	Power off the HVAC equipment, check wiring and circuit, and then power up thermostat again after its internal temperature is below 167°F (75°C).	

Error Code	Error	Severity Rating
E03	Clock is not set or RTC lost power.	Critical
Reason	Solution	Note
The clock hasn't been set yet, or RTC lost power during the power outage.	After powering up the thermostat again, press FAN, DOWN, and UP for at least 8 seconds to enter Set Date & Time menu to set date & time, time zone, and turn Daylight Saving Time on or off, or install the profile into thermostat by Bluetooth feature.	RTC will lost power due to both a dead or failing backup battery and HVAC power failure. The RTC backup battery is a non-replaceable battery designed for an operational life of 10 years.

Error Code	Error	Severity Rating
E04	RTC (Real time clock) IC is not working.	Critical
Reason	Solution	Note
RTC IC is damaged.	Replace the existing thermostat with a new one.	RTC IC is non-replaceable.

Operation

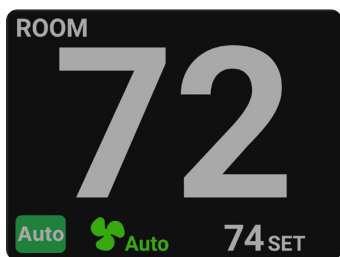
Wake up Screen

There are two types of idle screens. If Always-on display is enabled via the EC Tool Pro app, the thermostat's screen will go dim after eight seconds of idleness and the idle screen can show the current HVAC mode, fan mode, room temperature, and the set temperature.

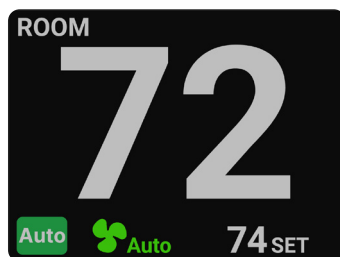
When the thermostat is c-wire powered and Always-on display is enabled via the EC Tool Pro app, the thermostat's screen will go dim after eight second of idleness. The idle screen will show the current HVAC mode, fan mode, room and set temperatures. If the thermostat is powered by AA batteries, then the display will turn off when not in use to preserve battery life.

There are three brightness levels for the dimmed display. Dimmed display brightness is set to level two by default. level three is the brightest, while level one is the dimmest. You can adjust the level of dimmed display brightness via the EC Tool Pro app.

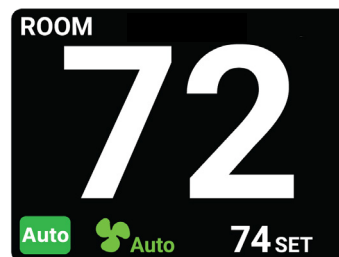
Levels of Dimmed Display Brightness



Level 1 (minimum)



Level 2 (default)



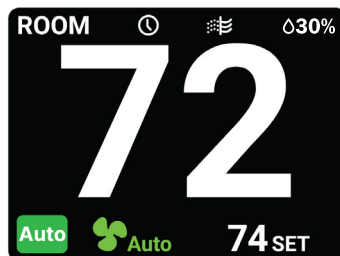
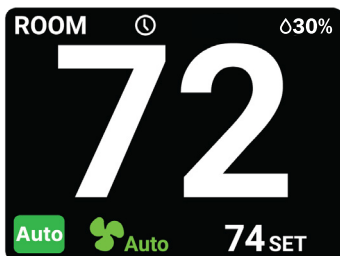
Level 3 (maximum)

If the Always-on display is disabled (or when powered by AA batteries), the display will dim, then turn black after eight seconds of idleness.

To wake the thermostat screen from idle, press any of the four hard buttons (Mode, Fan, Down, or Up) on the thermostat.

From there, you can check the current HVAC mode, fan mode, room temperature, and the set temperature.

The humidity, schedule and filter change reminder features are disabled by default. If these three features are enabled via the EC Tool Pro app, the current room humidity and schedule icon will also be displayed on both the dimmed screen and awake screen, but the filter change reminder will only be displayed on the screen when your filter life is low and it's time to replace.

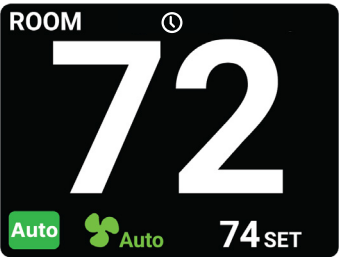


Note

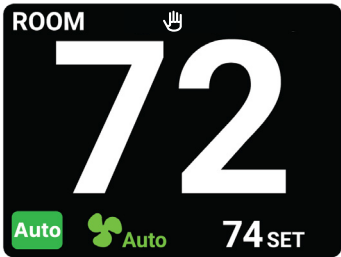
If you press the up or down button to wake up the screen, the set temperature will go to the next available degree by $\pm 1^{\circ}\text{F}$ or $\pm 0.5^{\circ}\text{C}$.

Schedule

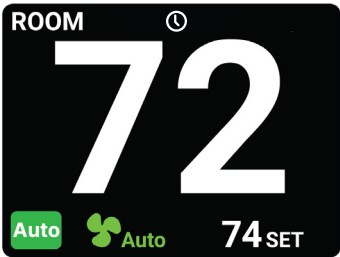
If a daily schedule has been programmed via the EC Tool Pro app, you will see a schedule icon displayed on the screen. Adjusting any settings will override the existing schedule and a hold icon will be displayed until the next scheduled event. You can exit the hold and return to your schedule at any time by tapping and holding the Fan button for three seconds.



Schedule Enabled



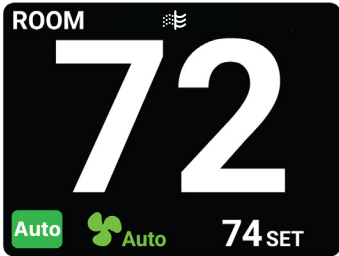
Schedule On Hold



Schedule Resumed

Filter Change Reminder

Filter change reminders are configured in the EC Tool Pro app and include run time options from 15 to 180 days. Once the HVAC system has run for this number of days, you will see a filter change reminder. After cleaning or replacing the filter, the system icon can be reset in the thermostat's engineering menu "Reset Filter Change Time". The filter change reminder will disappear until it's time to change your filter again.



Set HVAC Mode

1. When the screen is awake, press Mode to cycle to the next available HVAC system mode.
2. Cycle through the modes until the required HVAC system mode is displayed and leave it to activate.

HVAC System Modes

Auto		Auto mode (Auto-changeover) - The thermostat will switch the HVAC system mode (heat / cool) automatically after deadband limit is reached.
Heat		Thermostat set to only heat to the target temperature
Cool		Thermostat set to only cool to the target temperature
Off		HVAC system is turned off

Set HVAC Mode

Note
To quickly change the HVAC mode to Off mode, press and hold the Mode button for three seconds.



Set Fan Mode

- 1. When the screen is awake, press Fan to cycle to the next available fan mode.
- 2. Cycle through the modes until the required fan mode is displayed and leave it to activate.

Fan Modes in Auto, Heat, and Cool Modes

	Fan Mode	Fan Status
Fan modes available	Auto  Auto	Fan cycles on/off with call for heat or cool.
	Low 	Continuous low fan
	High  Auto	Continuous high fan

Note
Available fan modes vary with fan speed settings and HVAC mode selection.

Fan Modes in Off Mode

	Fan Mode	Fan Status
Fan modes available	Off —	Fan is turned off.
	Low  Low	Continuous low fan
	High  High	Continuous high fan

Note
If you set the fan mode to Off, no icon will be displayed at the fan mode position on the screen.



Switch Temperature Unit Between °F and °C

When the screen is awake, press and hold up and down buttons at the same time for three seconds to switch to the opposite unit of temperature. If the screen had been displaying the default temperature unit °F, it will now display °C and vice-versa.

Adjust Set Temperature

When the screen is awake, press the up or down button to adjust the set temperature to the next available degree by +/-1°F or +/-0.5°C.

Set your desired temperature beyond range by override mode

The thermostat can be programmed to limit the maximum and minimum temperature settings that are available to occupants. This feature as well as the override timeout can be enabled or disabled as a parameter within the profile you used when programming the thermostat using the EC Tool Pro app.

When Temporary Override is enabled, occupants have the ability to temporarily override the minimum or maximum temperatures that have been defined via the EC Tool Pro app. To override the preset threshold, press the up or down button until the maximum temperature setting is reached, then press and hold the up or down button for three seconds. This will allow the occupant to override the current setting for the predefined period of time. Once the override time has expired, the system will automatically return to the current schedule or previous mode.

Set Temperature Range

Cool 		Auto 	Heat 
Available temperature range	49°F-89°F (9.5°C-31.5°C)		
Comfort point range	55°F-82°F (13°C-28°C)		
Setpoint range	Maximum setpoint range: Comfort point +1°F to 89°F (+0.5°C to 31.5°C) Minimum setpoint range: Comfort point -1°F to 49°F (-0.5°C to 9.5°C)		
Set temperature range in normal operation	Minimum setpoint - Maximum setpoint		
Override temperature range	Press Up button: Maximum setpoint +1°F to 89°F (+0.5°C to 31.5°C) Press Down button: Minimum setpoint -1°F to 49°F (-0.5°C to 9.5°C)		
Comfort point (default)	74°F (23.5°C)		
Setpoints (default)	Maximum: 77°F (25°C) Minimum: 64°F (18°C)	Maximum: 80°F (26.5°C) Minimum: 65°F (18.5°C)	
Normal operation (default)	64°F-77°F (18°C-25°C)	65°F-80°F (18.5°C-26.5°C)	
Override mode (default)	Press Up button: 78°F-89°F (25.5°C-31.5°C) Press Down button: 49°F-63°F (9.5°C-17.5°C)	Press Up button: 81°F-89°F (27°C-31.5°C) Press Down button: 49°F-64°F (9.5°C-18°C)	

Restore Profile Defaults

Press and hold Mode and Up buttons at the same time for eight seconds to restore the default settings of the profile installed on your thermostat, which was configured via the EC Tool Pro app.

Maintenance

Your thermostat contains sophisticated electronic parts, so it must be treated with care.

Avoid rough treatment

Place the thermostat down gently. Save the original packing materials to protect your thermostat if you ever need to ship it.

Avoid water

Your thermostat can be damaged if it gets wet. Do not use the thermostat outdoors in the rain or handle it with wet hands. Do not install thermostat near a sink, bathtub, or display.

Electrical storms

Electrical storms can sometimes cause power surges harmful to electronic equipment. For your own safety, take caution when using electrical appliances during storms.

Cleaning your thermostat

Your thermostat has a durable plastic casing that should retain its luster for many years. Clean it only with a soft cloth slightly dampened.