## Coiiwsei STN7255

# Coiiwsei Programmable Thermostat STN7255 User Manual

Model: STN7255

## Introduction

This manual provides instructions for the installation, operation, and programming of your Coiiwsei Programmable Thermostat, model STN7255. This thermostat is designed for use with various heating and cooling systems to maintain a comfortable indoor environment.

### System Compatibility

**Compatible Systems:**

- Heat pump multi-stage systems
- Conventional multi-stage systems
- Forced air (gas, oil, or electric)
- Electric furnace
- Hot water steam or gravity radiant heat
- Heat only systems
- Heat pump with or without auxiliary or emergency heat
- Millivolt conventional systems
- Gas fireplaces (24V)
- Floor or wall furnaces
- Cool only systems

**Not Compatible With:**

- Two transformer systems
- Dual fuel/hybrid heating
- Electric baseboard heat (110-240 volts)
- Line voltage
- Convectors
- Radiant-ceiling heat

- Mini split systems
- 12V RV systems

**Important: Before installation, verify that this thermostat is compatible with your existing HVAC system.**

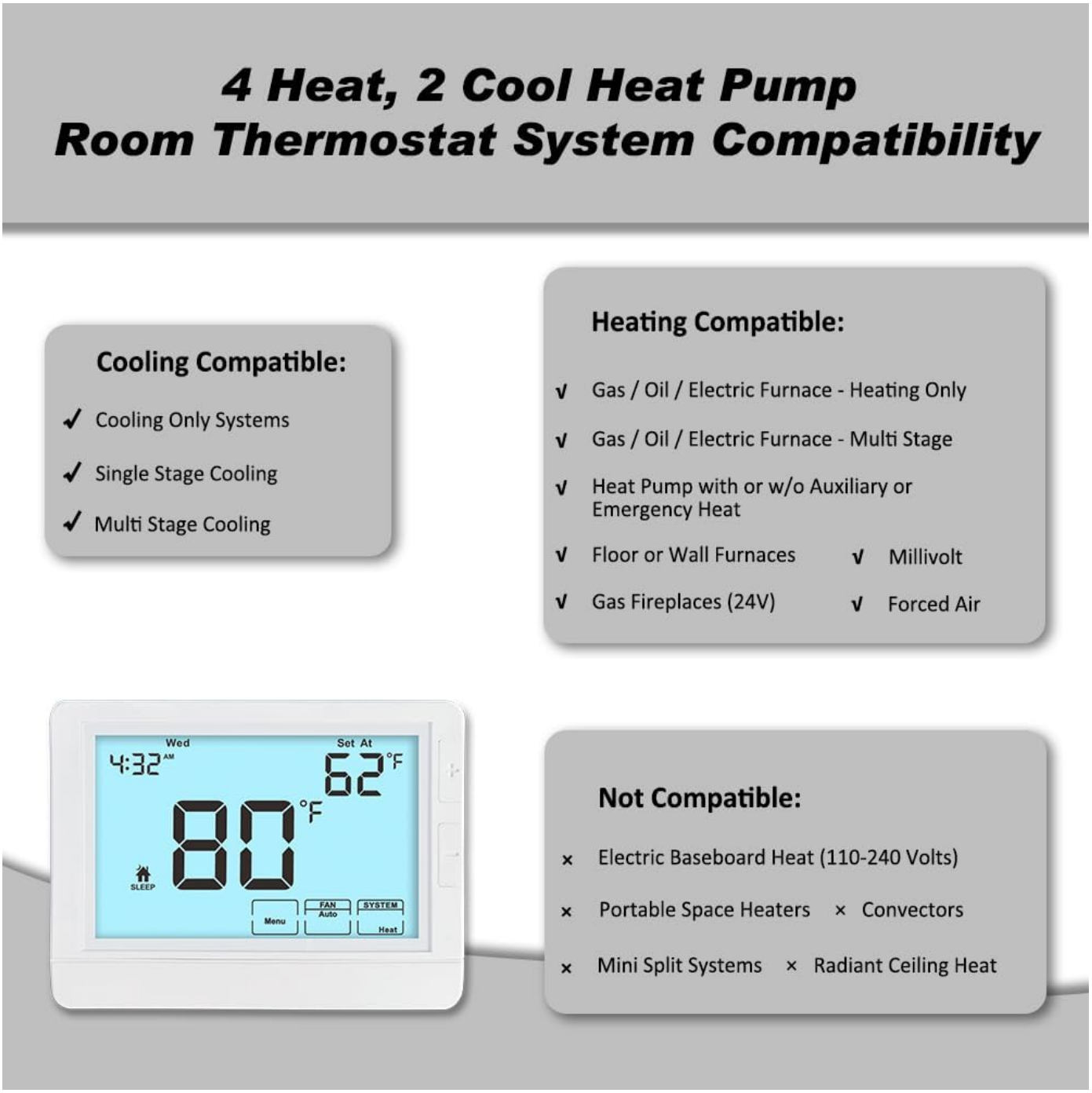



Image: A diagram illustrating the compatibility of the thermostat with various heating and cooling systems, including 2H/2C conventional and 4H/2C heat pump configurations. It lists compatible and incompatible system types.

## Package Contents

Verify that all items are present in the package:

- 1 x Thermostat
- 1 x Wall Plate
- 1 x Instruction Manual
- 1 x Wiring Labels
- 1 x Screw Set (Two screws and anchors)

# Auto Changeover Thermostat System Applications

| | | Y1 | Y2 | W/E | W2 | O | B |
|---|---|---|---|---|---|---|---|
| CONVENTIONAL HVAC | | COOL MODE STAGE 1 | COOL MODE STAGE 2 | HEAT MODE STAGE 1 | HEAT MODE STAGE 2 | – | – |
| HEAT PUMP | 1H / 1C | HEAT 1 COOL1 | | | | HEAT PUMP CHANGEOVER VALVE - ENERGIZED DURING COOLING | HEAT PUMP CHANGEOVER VALVE - ENERGIZED DURING HEATING |
| | 2H / 1C | | | AUX 1 | HEAT 2 AUX 2 | | |
| | 3H / 1C | | | HEAT 2 AUX 1 | HEAT 3 AUX 2 | | |
| | 2H / 2C | | HEAT 2 COOL 2 | | | | |
| | 3H / 2C | | HEAT 2 COOL 2 | AUX 1 | HEAT 3 AUX 2 | | |
| | 4H / 2C | | HEAT 2 COOL 2 | HEAT 3 EMHEAT | HEAT 4 EMHEAT | | |

Image: An illustration showing the complete package contents, including the thermostat unit, wall plate, instruction manual, wiring labels, and mounting screws with anchors.

## Installation

**Safety First: Before beginning installation, turn off power to your heating and cooling system at the main circuit breaker.**

### 1. Remove Old Thermostat

1. Turn off power to your HVAC system at the circuit breaker.
2. Remove the cover of your old thermostat.
3. Take a picture of the wiring connections for reference.
4. Disconnect the wires one by one, labeling them with the provided wiring labels.
5. Unscrew and remove the old thermostat's wall plate.

### 2. Mount the New Wall Plate

1. Position the new wall plate on the wall where the old thermostat was.
2. Mark the screw holes.
3. Drill pilot holes if necessary and insert the wall anchors.
4. Secure the wall plate to the wall using the provided screws.

**Note: Ensure the new thermostat's dimensions cover any marks or holes from the previous installation.**




Image: A diagram showing the dimensions of the Coiiwsei STN7255 thermostat (4.72in W x 3.54in H x 1.02in D) to help ensure it covers the previous thermostat's footprint.

### 3. Wire the Thermostat

Connect the labeled wires to the corresponding terminals on the new wall plate. Refer to the wiring diagram below.

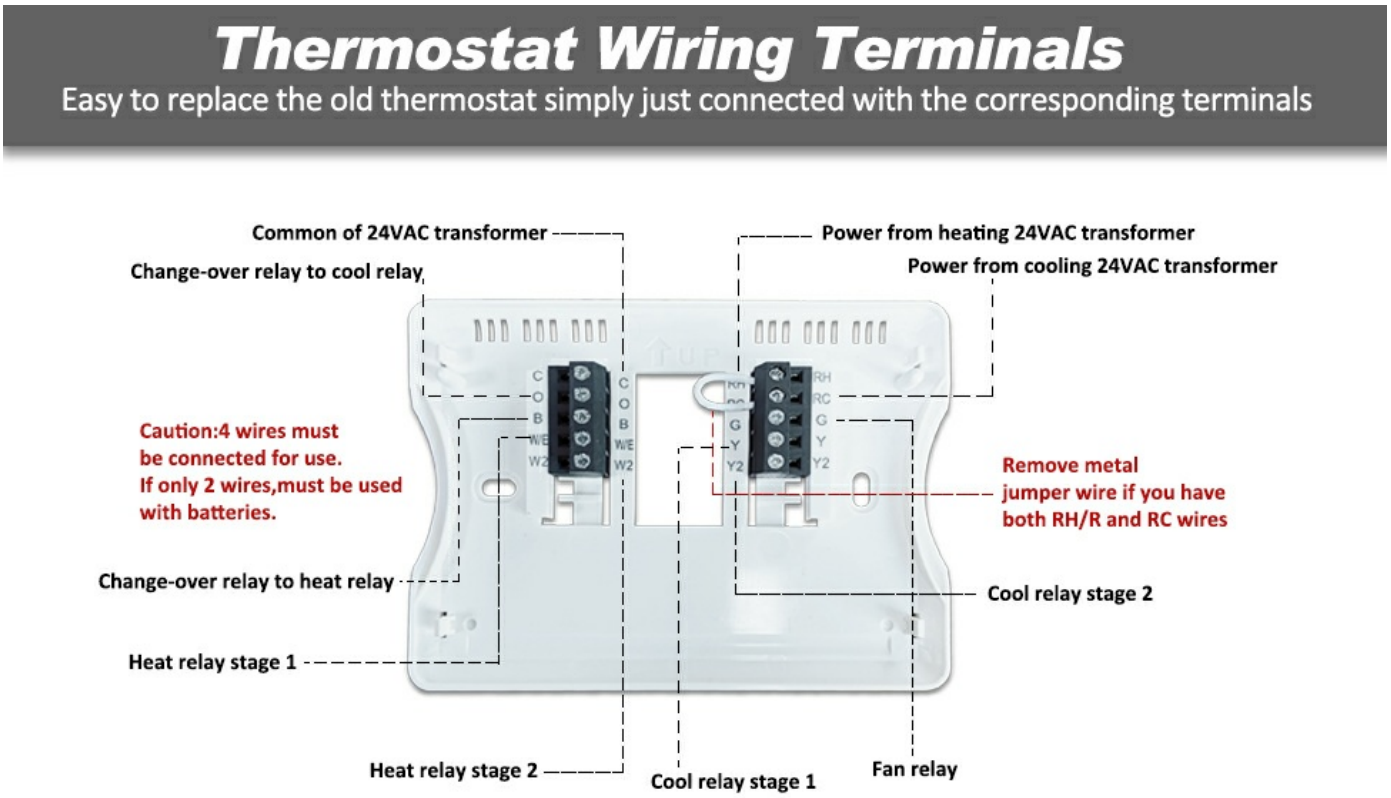



Image: A detailed wiring diagram for the Coiiwsei STN7255 thermostat, showing terminal labels (C, O, B, W/E, W2, RH, RC, G, Y, Y2) and their functions. It also indicates the location of the metal jumper wire for RH/R and RC connections.

**Terminal Definitions:**

**C:** Common 24VAC (system power supply)

**O:** REV VALVE COOL (Change-over relay to cool)

**B:** REV VALVE HEAT (Change-over relay to heat)

**W/E:** Emergency heat relay stage 1 / Heat relay stage 1

**W2:** Auxiliary heat relay stage 2 / Heat relay stage 2

**RH:** 24VAC (system power supply) HEAT = RH to W

**RC:** 24VAC (system power supply) COOL = RC to Y

**G:** FAN (Fan relay)

**Y:** COOL (Cool relay stage 1)

**Y2:** Cool relay stage 2

**Caution: 4 wires must be connected for use. If only 2 wires are used, batteries must be installed. Remove the metal jumper wire if you have both RH/R and RC wires.**

## 4. Install Batteries

This thermostat requires 2 AA alkaline batteries (not supplied) for operation if a C-wire is not available, or as a backup power source to maintain settings during a power outage.

1. Open the battery compartment on the back of the thermostat unit.
2. Insert 2 new AA alkaline batteries, ensuring correct polarity (+/-).
3. Close the battery compartment.

# Thermostat Parameters

*Create a healthy and comfortable life*




| | |
|---|---|
| Series Application | 2H/2C Conventional or 4H/2C Heat Pump<br>7 Day or 5/1/1 Programmable |
| Factory Part Number | 7255 |
| Dimensions | 4.72 x3.54 x 1.02in (120x 90 x 26mm) |
| Mounting Type | Wall or junction box |
| Temperature Range | 44°F to 90°F (7°C to 32°C) |
| Backlight Color | White / Blue / Green |
| Power Source | 24V AC (18 to 30V AC), 50/60 Hz for hardwire common wire or 2 AA 1.5V alkaline batteries (Not included) |
| Terminals | Rh, Rc, C, Y, Y2, W, W2, G, O, B |

Image: A view of the back of the thermostat, showing the battery compartment for two AA batteries and the wiring terminal block. This illustrates where to insert batteries and connect wires.

### 5. Attach Thermostat to Wall Plate

Carefully align the thermostat unit with the mounted wall plate and gently push until it snaps securely into place.

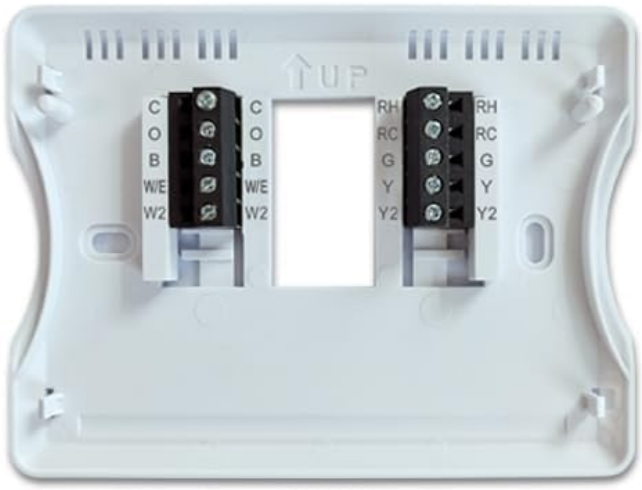
### 6. Restore Power

Turn the power back on to your HVAC system at the main circuit breaker.

## Setup and Initial Configuration

### Understanding the Display and Controls

# Just Install It Yourself!
# You can carry out the installation yourself quickly and easily.




- **C** ..... Common 24VAC (system power supply)
- **O** ..... REV VALVE COOL
- **B** ..... REV VALVE HEAT
- **W/E** ..... Emergency heat relay stage 1
- **W2** ..... Auxiliary heat relay stage 2
- **RH** ..... 24VAC (system power supply) HEAT = RH to W
- **RC** ..... COOL =RC to Y FAN = RC to G
- **G** ..... FAN
- **Y** ..... COOL
- **Y2** ..... Cool relay stage 2




**2*AA alkaline batteries are required when C-wire is not available (Not Supplied Batteries), when C-Wire is available, the batteries provide a back-up power to maintain the settings in the event of power outage.**

Image: A detailed view of the Coiiwsei STN7255 thermostat's front panel, highlighting the large LCD display, temperature adjustment buttons (+/-), and the flap covering the menu, fan, and system mode buttons.

The thermostat features a large, clear, backlit LCD display and user-friendly controls.

**Large Display:** Shows current time, day, set temperature, and actual room temperature.

**Adjustable Up/Down Buttons:** Located on the right side for manual temperature adjustment.

**Menu Button:** Accesses programming options.

**FAN Button:** Controls fan operation (Auto/On).

**SYSTEM Button:** Selects operating mode (Heat/Cool/Off/Auto/Em Heat).

## Initial Power-Up

Upon first power-up or after a battery change, the thermostat may require initial setup for time, day, and system type. Refer to the full operating manual for detailed programming instructions.

## Programming

The thermostat supports 7-day, 5/1/1 programmable schedules, allowing you to customize heating and cooling cycles to match your daily routine.

1. Press the **Menu** button to enter programming mode.
2. Use the **Up**/**Down** buttons to adjust time, day, and temperature settings for each program period.
3. Use the **Menu** button to navigate between programming steps.
4. Save settings by exiting the menu or waiting for the thermostat to return to normal operation.

## Operating the Thermostat

### Changing System Mode

Press the **SYSTEM** button to cycle through the available modes:

- **HEAT:** The system will only heat to maintain the set temperature.
- **COOL:** The system will only cool to maintain the set temperature.
- **OFF:** The heating and cooling system is turned off.
- **AUTO:** The thermostat automatically switches between heating and cooling to maintain the set temperature range.
- **EM HEAT (Emergency Heat):** For heat pump systems, this mode activates auxiliary heat directly.

### Adjusting Fan Mode

Press the **FAN** button to select fan operation:

- **AUTO:** The fan runs only when the heating or cooling system is actively operating.
- **ON:** The fan runs continuously, regardless of heating or cooling calls.

### Setting Temperature

Use the **Up (+)** and **Down (-)** buttons on the right side of the thermostat to adjust the desired temperature. The display will show the set temperature.

## Maintenance

### Battery Replacement

The thermostat features a low battery indicator. When the battery icon appears on the display, replace the 2 AA alkaline batteries promptly to ensure continuous operation and prevent loss of settings.

1. Gently pull the thermostat unit off the wall plate.
2. Open the battery compartment.
3. Remove old batteries and insert 2 new AA alkaline batteries, observing polarity.
4. Close the battery compartment and reattach the thermostat unit to the wall plate.

### Cleaning

Clean the thermostat's exterior with a soft, damp cloth. Do not use abrasive cleaners or solvents.

## Troubleshooting

### Common Issues and Solutions

| Problem | Possible Cause | Solution |
| --- | --- | --- |
| Thermostat display is blank. | No power (C-wire) or dead batteries. | Check circuit breaker. Replace AA batteries. Ensure C-wire is properly connected if used. |

| Problem | Possible Cause | Solution |
|---|---|---|
| Heating/Cooling system not responding. | Incorrect wiring, system mode, or power issue. | Verify wiring connections. Check system mode (Heat/Cool/Auto). Ensure power is on. Allow 5-minute compressor delay if applicable. |
| Temperature reading seems inaccurate. | Thermostat location, calibration needed. | Ensure thermostat is not in direct sunlight or near heat sources/drafts. Refer to the full manual for room temperature calibration adjustment. |
| Thermostat not holding programmed schedule. | Programming error, low batteries. | Re-enter program settings. Replace batteries. |

If you encounter issues not listed here or require further assistance, please contact customer support.

## SPECIFICATIONS

### Technical Specifications

| Feature | Detail |
|---|---|
| Model Name | STN7255 |
| Dimensions (H x W x D) | 3.54" x 4.72" x 1.02" (90 x 120 x 26mm) |
| Power Source | 24 VAC (18 to 30V AC), 50/60 Hz for hardwire common wire OR 2 AA 1.5V alkaline batteries |
| Temperature Control Type | Multi-level systems |
| Temperature Range (Set) | 44°F to 90°F (7°C to 32°C) |
| Temperature Display Range | 32°F to 99°F (0°C to 40°C) |
| Accuracy | +/- 2°F for consistent comfort |
| Display Type | LCD with Backlight (White / Blue / Green) |
| Control Method | Button Control |
| Mounting Type | Wall Mount or Junction Box |
| Programmability | 7-day, 5/1/1 Programmable |
| Special Features | Auto Changeover, Separate Heating and Cooling Swing (Cycle Rate), Low Battery Indicator, 5-minute compressor delay protection (selectable ON or OFF) |

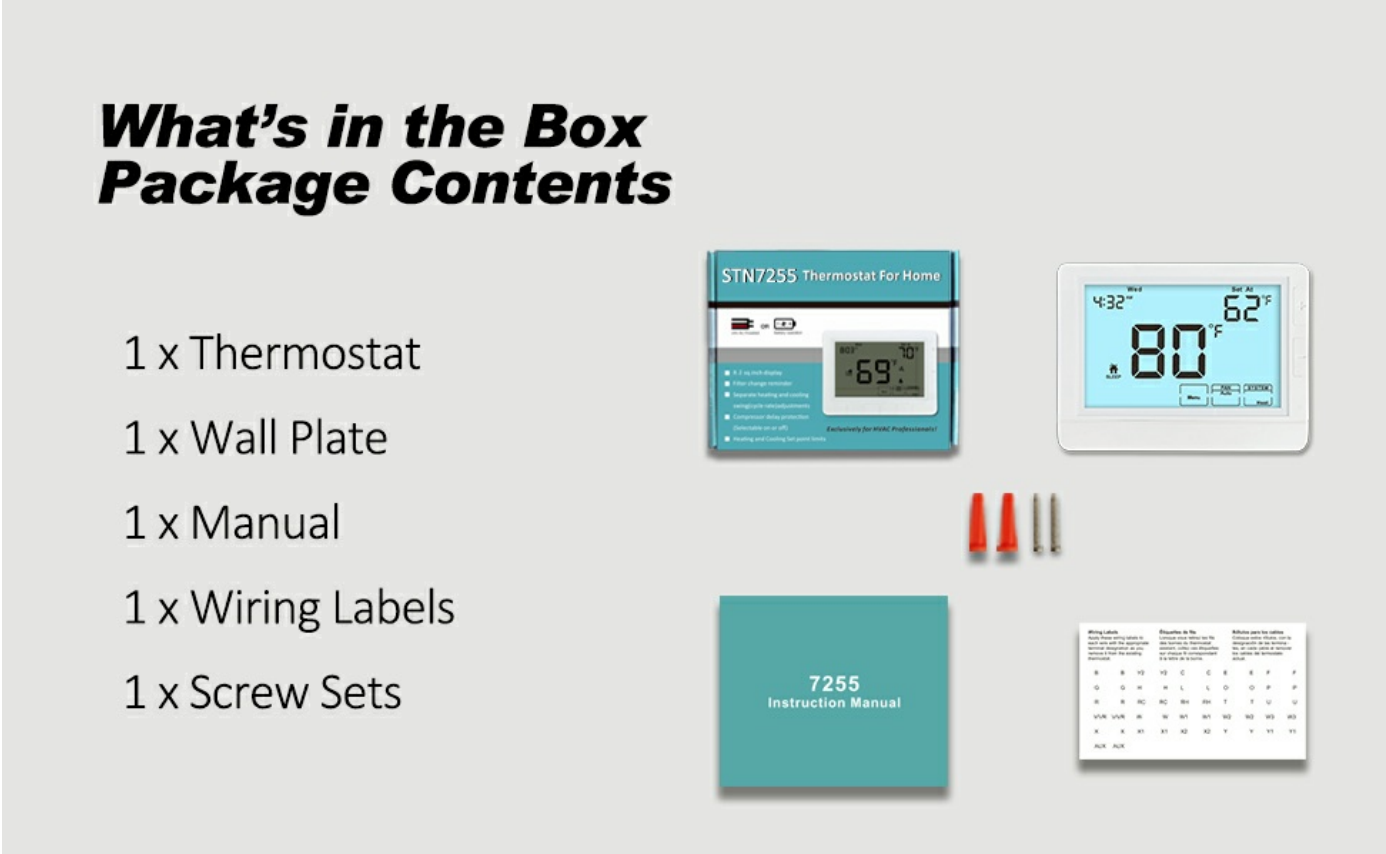



Image: A table summarizing the technical specifications of the Coiiwsei STN7255 thermostat, including series application, factory part number, dimensions, mounting type, temperature range, backlight color, power source, and terminals.

## Warranty and Support

Coiiwsei products are manufactured with quality and reliability in mind. For any questions, technical assistance, or warranty inquiries, please contact Coiiwsei customer service.

Customer service is available 7 days a week, 24 hours a day. Refer to the product packaging or the official Coiiwsei website for contact details.


### Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

**Name**

Anonymous

**Email**

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

**Question**

Example: How do I reset this device or fix this error?

**Details**

Model number, symptoms, what you tried, or the section of the manual you are using.

**Submit question**