Venstar T1900

Venstar T1900 Residential Slimline Platinum Thermostat User Manual

Model: T1900

INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Venstar T1900 Residential Slimline Platinum Thermostat. Please read this manual thoroughly before attempting to install or operate the thermostat to ensure proper function and to avoid potential damage.

IMPORTANT SAFETY INFORMATION

- Always turn off power to the heating/cooling system at the main circuit breaker or fuse box before installing or servicing the thermostat.

- This thermostat operates on 24 Volts AC. Do not connect to line voltage (120V or 240V).

- Installation should be performed by a qualified technician if you are unfamiliar with electrical wiring.

- Do not short circuit the terminals on the gas valve or at the system control to test the thermostat. This will damage the thermostat and void the warranty.

- Ensure all wiring connections are secure and insulated to prevent short circuits.

PACKAGE CONTENTS

Verify that your package contains the following items:

- Venstar T1900 Thermostat Unit

- Mounting Hardware (screws and wall anchors)

- User Manual (this document)

PRODUCT OVERVIEW

The Venstar T1900 is a 7-day programmable digital thermostat designed for residential use. It offers precise temperature control and energy-saving scheduling capabilities. This thermostat is compatible with heat/cool, heat pump, and dual-fuel systems, controlling up to three heat stages and two cool stages.

Figure 1: Front view of the Venstar T1900 Thermostat. This image displays the thermostat's LCD screen and control buttons, indicating its slimline design.

Key Features:

- **7-Day Programmability:** Allows for customized heating and cooling schedules for each day of the week.

- **System Compatibility:** Works with heat/cool, dual-fuel, and heat pump systems.

- **Multi-Stage Control:** Manages up to three heat stages and two cool stages.

- **Remote Control Capability:** Controllable by phone using an optional add-on (sold separately).

- **Automatic or Manual Operation:** Provides flexibility for scheduled or on-demand temperature adjustments.

INSTALLATION GUIDE

Tools Required:

- Screwdriver (Phillips and/or flathead)

- Drill with appropriate drill bit (if installing new wall anchors)

- Wire strippers

- Pencil

- Level (optional)

1. Turn Off Power

Locate the circuit breaker or fuse box that controls your heating and cooling system. Turn off the power completely before proceeding with any wiring.

2. Remove Old Thermostat (if applicable)

1. Carefully remove the cover of your old thermostat.

2. Take a picture of the existing wiring connections for reference.

3. Label each wire with the terminal designation it was connected to (e.g., R, G, Y, W).

4. Disconnect the wires and remove the old thermostat's mounting plate from the wall.

3. Mount the New Thermostat Base

1. Separate the front cover of the T1900 thermostat from its base plate.

2. Position the base plate on the wall where you want to install the thermostat. Ensure it is level.

3. Mark the mounting holes with a pencil.

4. Drill pilot holes if necessary and insert wall anchors.

5. Secure the thermostat base plate to the wall using the provided screws.

4. Wiring

Connect the wires from your HVAC system to the corresponding terminals on the T1900 thermostat base. Refer to the wiring diagram provided with your specific HVAC system for precise connections. Ensure wires are stripped approximately 3/8 inch and securely fastened under the terminal screws.
Common Terminal Designations:

- **R/Rc/Rh:** 24V Power (Heating/Cooling)

- **C:** Common (24V return)

- **G:** Fan

- **Y/Y1:** Compressor Stage 1 (Cooling)

- **Y2:** Compressor Stage 2 (Cooling)

- **W/W1:** Heat Stage 1 (Heating)

- **W2:** Heat Stage 2 (Heating)

- **O/B:** Reversing Valve (Heat Pumps)

Note: The T1900 supports various system types. Consult the detailed wiring diagrams in the full installation manual for specific configurations (e.g., heat pump with auxiliary heat, conventional multi-stage systems).

5. Attach Thermostat to Base

Once wiring is complete and verified, carefully align the thermostat front cover with the mounted base plate and snap it into place.

6. Restore Power

Return to your circuit breaker or fuse box and restore power to your heating and cooling system.

Initial Setup

Upon initial power-up, the thermostat may prompt you to configure basic settings. Follow the on-screen instructions to set the current date, time, and system type (e.g., Conventional, Heat Pump).

System Type Configuration:

It is crucial to correctly configure the thermostat for your specific HVAC system. Incorrect settings can lead to improper operation or damage. Access the installer settings menu (refer to the full installation guide for specific button sequences) to select:

- **System Type:** Heat/Cool, Heat Pump, Dual Fuel

- **Number of Heat Stages**

- **Number of Cool Stages**

- **Reversing Valve Operation:** O (Cooling) or B (Heating)

OPERATING INSTRUCTIONS

Understanding the Display:

The LCD screen displays the current temperature, set temperature, system mode, fan mode, time, and programming status. Refer to the icons and indicators on the screen for current operational status.

Setting System Mode:

Press the **MODE** button to cycle through available system modes:

- **HEAT:** The system will operate to maintain the heating setpoint.
- **COOL:** The system will operate to maintain the cooling setpoint.
- **AUTO:** The thermostat automatically switches between heating and cooling as needed to maintain the set temperature range.
- **OFF:** The heating and cooling system is turned off.

Setting Fan Mode:

Press the **FAN** button to cycle through fan modes:

- **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.

Adjusting Temperature:

Use the **UP** and **DOWN** arrow buttons to adjust the desired temperature setpoint. In programmable modes, this will temporarily override the schedule until the next scheduled change.

Programming Schedules (7-Day):

The T1900 allows for 7-day programming, enabling different schedules for each day of the week. This feature helps save energy by adjusting temperatures when you are away or asleep.

1. Press the **PROGRAM** button to enter programming mode.
2. Use the **DAY** button to select the day or group of days you wish to program (e.g., Mon-Fri, Sat-Sun, or individual days).
3. Use the **TIME** button to cycle through the four available periods: Wake, Leave, Return, Sleep.
4. Use the **UP** and **DOWN** arrow buttons to set the desired temperature for each period.
5. Use the **HOLD** button to exit programming mode or save changes.

Refer to the detailed programming section in the full user guide for advanced options and specific button sequences.

Remote Control (Optional Add-on):

The Venstar T1900 thermostat can be controlled remotely via a phone using an optional add-on module (sold separately). This module connects to the thermostat and allows for remote access and control through a dedicated application. Installation and setup instructions for the remote control module are provided with the module itself.

MAINTENANCE

Cleaning the Thermostat:

To maintain the appearance and functionality of your thermostat, periodically wipe the exterior with a soft, damp cloth. Do not use abrasive cleaners, solvents, or chemical sprays, as these can damage the plastic and electronic

components.

Battery Replacement:

The Venstar T1900 thermostat does not require batteries for operation as it is powered by the 24V AC system.

TROUBLESHOOTING

If you experience issues with your Venstar T1900 thermostat, consult the following common problems and solutions:

Problem	Possible Cause	Solution
Thermostat display is blank	No power to the thermostat.	Check the circuit breaker for your HVAC system. Ensure all wiring connections are secure.
Heating/Cooling system does not respond	Incorrect system mode selected; wiring issue; system lockout.	Verify the system mode (HEAT/COOL/AUTO). Check wiring connections. Wait 5 minutes for system lockout to reset.
Temperature reading seems inaccurate	Thermostat location; sensor obstruction.	Ensure the thermostat is not exposed to direct sunlight, drafts, or heat sources. Clean any dust from the thermostat vents.
Programming schedule is not working	Program not saved; temporary override active; incorrect time/day setting.	Ensure programs are saved. Check if a temporary override is active and cancel it. Verify current time and day settings.
Fan runs continuously in AUTO mode	Fan mode set to ON; wiring issue.	Press the FAN button to ensure it is set to AUTO. Check fan wiring.

If these solutions do not resolve the issue, please contact customer support or a qualified HVAC technician.

SPECIFICATIONS

Feature	Specification
Brand	Venstar
Model Name	Venstar T1900
Controller Type	Push Button
Special Feature	Programmable
Color	White
Specific Uses For Product	Heat Pump, Heater
Temperature Control Type	Programmable, Smart/Remote (with add-on)
Voltage	24 Volts AC
Display Type	LCD or LED
Control Method	Remote (with add-on)

Feature	Specification
Backlight	Yes
Product Dimensions	5.3 x 2 x 2 inches
Item Weight	0.01 Ounces
Batteries Required?	No

WARRANTY INFORMATION

Venstar products are manufactured to high-quality standards. This product is covered by a limited warranty against defects in materials and workmanship. The specific terms and duration of the warranty may vary. Please refer to the warranty card included with your product or visit the official Venstar website for detailed warranty information and registration procedures.

CUSTOMER SUPPORT

For technical assistance, troubleshooting, or warranty inquiries, please contact Venstar customer support. You can typically find contact information, including phone numbers and email addresses, on the official Venstar website (www.venstar.com) or on the product packaging.
When contacting support, please have your thermostat model number (T1900) and any relevant purchase information ready.