Venstar T4800

Venstar T4800 Commercial Voyager Thermostat User Manual
Model: T4800

1. INTRODUCTION

This manual provides instructions for the installation, operation, and maintenance of the Venstar T4800 Commercial Voyager Thermostat. The T4800 is a programmable thermostat designed for commercial applications, featuring 4 heat and 2 cool stages, a backlit display, and compatibility with Wi-Fi and smart home systems like Alexa.
The thermostat is designed to manage heating and cooling systems efficiently, offering advanced programming options and a condensate overflow warning system with compressor lockout.

2. PRODUCT FEATURES

- Large, easy-to-read digital display with adjustable backlight intensity.
- Backlit, color-coded buttons for intuitive control.
- Supports 4 heat stages and 2 cool stages.
- Flexible programming: 7-Day, 5+1+1 Day, or 1-Day options.
- Up to 3 occupied periods per day for customized scheduling.
- Holiday Mode and 365-day holiday programming capabilities.
- Adjustable deadbands and timers between stages for precise control.
- Outdoor sensor ready, providing high/low temperatures for the day.
- Smart Fan Operation and Smart Recovery features for enhanced efficiency.
- Compatible with condensate overflow warning systems, including compressor lockout.
- Wi-Fi connectivity for remote access and control (requires ACC-VWF1 module).
- Integration with Amazon Alexa and Vera smart home platforms.

3. SETUP AND INSTALLATION

The Venstar T4800 thermostat is designed for wall-mount installation and operates on 24 volts. Proper installation requires careful wiring according to your HVAC system's specifications. It is recommended that

installation be performed by a qualified technician.

3.1 Wiring Considerations

If only four wires are available for installation, the Add-A-Wire accessory (Part Number: ACC0410) may be necessary to ensure proper functionality. Refer to the accessory's instructions for detailed wiring diagrams.
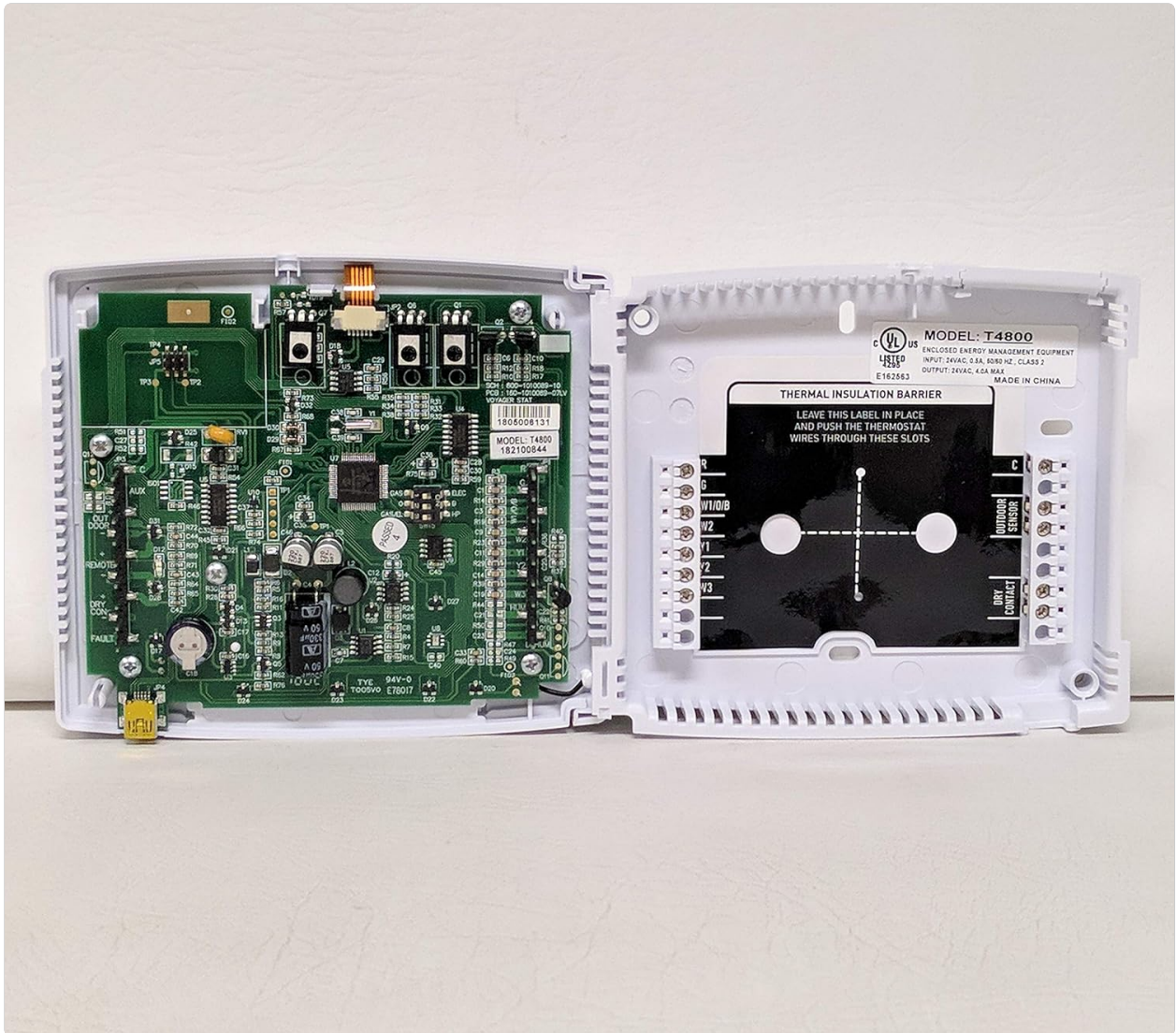

Figure 1: Internal view of the Venstar T4800 thermostat with the cover open, revealing the circuit board and wiring terminals. This image illustrates the connection points for HVAC system wiring, including clearly labeled terminals for various functions.

3.2 Mounting

Mount the thermostat securely to a wall in a location that provides an accurate temperature reading, away from direct sunlight, drafts, or heat sources.

4. OPERATION

The T4800 features a clear digital display and intuitive buttons for daily operation. The main display shows the current temperature and system status, while the backlit buttons allow for easy adjustments.

Figure 2: The Venstar T4800 thermostat with its front panel opened, revealing a row of control buttons beneath the main display. These buttons are used for setting modes, fan operation, and accessing programming features.

4.1 Basic Controls

- **Temperature Adjustment:** Use the 'Warmer' (up arrow) and 'Cooler' (down arrow) buttons to set the desired temperature.
- **Mode Selection:** The 'MODE' button cycles through available system modes such as Heat, Cool, Auto, and Off.
- **Fan Control:** The 'FAN' button allows selection between 'Auto' (fan runs only when heating/cooling) and 'On' (fan runs continuously).
- **Override:** The 'OVERRIDE' button temporarily adjusts settings without changing the programmed schedule.

5. PROGRAMMING

The T4800 offers flexible programming options to optimize energy usage and comfort. You can choose between 7-day, 5+1+1 day, or 1-day programming schedules.

5.1 Scheduling Periods

The thermostat supports up to three occupied periods per day, allowing you to set different temperature preferences for various times of the day. Refer to the full owner's manual for detailed steps on setting up these periods.

5.2 Holiday Programming

Utilize the Holiday Mode for extended periods away from the property. The 365-day holiday programming feature allows for advanced scheduling of temperature setbacks during holidays or non-occupancy periods.

5.3 Advanced Features

- **Adjustable Deadbands:** Configure the temperature difference between heating and cooling setpoints.
- **Timers Between Stages:** Set delays between heating or cooling stages to protect equipment and improve efficiency.
- **Smart Recovery:** This feature learns how long it takes to reach desired temperatures and starts the system early to ensure comfort by the scheduled time.
- **Smart Fan Operation:** Optimizes fan usage for comfort and energy savings.

6. WI-FI CONNECTIVITY

The Venstar T4800 is Wi-Fi ready, allowing for remote control and monitoring. To enable Wi-Fi functionality, the Venstar Wi-Fi Module (Part Number: ACC-VWF1) is required. This module connects to the thermostat and enables communication with your local Wi-Fi network.

6.1 Connecting to Wi-Fi

Once the ACC-VWF1 module is installed, follow the instructions provided with the module to connect your thermostat to your Wi-Fi network. This typically involves using a mobile application or a web portal to configure network settings.

6.2 Smart Home Integration

The T4800 is compatible with Amazon Alexa and Vera, allowing for voice control and integration into existing smart home ecosystems. Refer to the respective smart home platform's documentation for setup instructions.

7. MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your Venstar T4800 thermostat.

- **Cleaning:** Periodically wipe the thermostat's exterior with a soft, damp cloth. Avoid using abrasive cleaners or solvents.
- **Inspections:** Annually, inspect the wiring connections to ensure they are secure.
- **System Checks:** Ensure your HVAC system is regularly serviced by a qualified technician.

8. TROUBLESHOOTING

If you encounter issues with your Venstar T4800 thermostat, consider the following common troubleshooting steps:

- **No Display/Power:** Check the circuit breaker for your HVAC system. Ensure the thermostat is receiving 24V power.
- **System Not Responding:** Verify that the system mode (Heat/Cool/Off) and fan settings are correctly selected. Check wiring connections.
- **Incorrect Temperature Readings:** Ensure the thermostat is not exposed to direct sunlight, drafts, or heat sources that could affect its sensor.
- **Wi-Fi Connection Issues:** Confirm the ACC-VWF1 module is correctly installed and powered. Check your home Wi-Fi network status and signal strength.

For more complex issues or if troubleshooting steps do not resolve the problem, consult a qualified HVAC technician or refer to the comprehensive owner's manual available on the Venstar website.
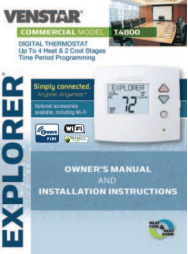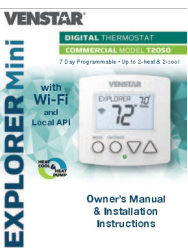
9. SPECIFICATIONS

Feature	Specification
Brand	Venstar
Model Name	T4800
Controller Type	Amazon Alexa, Vera
Special Feature	Programmable
Color	White
Specific Uses For Product	HVAC Control
Temperature Control Type	Cooling, Heating
Connectivity Technology	Wi-Fi (with optional module)
Power Source	AC/DC
Voltage	24 Volts
Material	Plastic
Shape	Rectangular
Display Type	Digital
Control Type	Button Control
Control Method	Voice (via smart home integration)
Connectivity Protocol	Wi-Fi
Mounting Type	Wall Mount
Backlight	Yes
Item Weight	10.4 ounces
Product Dimensions	2.25 x 6.3 x 5 inches
UPC	384929218235

10. WARRANTY AND SUPPORT

For information regarding the product warranty, please refer to the documentation included with your purchase or visit the official Venstar website. For technical support, installation assistance, or to access the full owner's manual, please contact Venstar customer service or visit their support portal online.

Related Documents - T4800

	[Venstar T4800 Explorer Commercial Digital Thermostat Owner's Manual and Installation Guide](#) Comprehensive owner's manual and installation instructions for the Venstar T4800 Explorer commercial digital thermostat, covering setup, programming, features, and troubleshooting.
	[Venstar T2800 Commercial Digital Thermostat Installation Guide](#) Detailed installation instructions for the Venstar T2800 Commercial 7-Day Programmable Digital Thermostat. Covers wiring, setup, configuration, and troubleshooting for HVAC systems.
	[Venstar T2900SCH Commercial School Programmable Thermostat Owner's Manual](#) Comprehensive owner's manual for the Venstar T2900SCH Commercial School Programmable Thermostat, detailing features, operation, programming, and advanced setup for efficient HVAC management in educational environments.
	[Venstar T2050 Explorer Mini Digital Thermostat: Installation and User Manual](#) This manual provides detailed instructions for installing, configuring, and operating the Venstar T2050 Explorer Mini digital thermostat, featuring Wi-Fi connectivity and 7-day programmability for efficient home and commercial HVAC management.
	[Venstar T2700 Commercial Digital Thermostat Installation Instructions](#) Comprehensive installation guide for the Venstar T2700 Non-Programmable Commercial Digital Thermostat, covering wiring, configuration, testing, and troubleshooting.
	[Venstar ColorTouch T8850 Commercial Digital Thermostat - Owner's Manual & Installation Guide](#) Owner's Manual and Installation Guide for the Venstar ColorTouch T8850 commercial digital thermostat. Features include a high-resolution touch screen, Wi-Fi connectivity, scheduling, and energy management. Learn installation, setup, and operation.