

Stelpro ST402PFF

Stelpro ST402PFF Programmable Electronic Thermostat User Manual

IMPORTANT SAFETY INFORMATION

WARNING: Before installing or using this thermostat, ensure the main power supply to the heating system is disconnected at the circuit breaker. Installation must be performed by a qualified electrician in accordance with local and national electrical codes. This thermostat is designed for high voltage systems. Failure to follow these instructions can result in electric shock, fire, or property damage.

This thermostat is intended for use with fan heaters and fan-forced units. Do not use it for any other purpose.

PRODUCT OVERVIEW

The Stelpro ST402PFF is a programmable electronic thermostat designed for accurate temperature control of fan heaters and fan-forced units. It offers programming capabilities to manage heating schedules and contributes to energy efficiency. The thermostat features a clear display and touch controls for user interaction.



Figure 1: Front view of the Stelpro ST402PFF Thermostat.

SETUP AND INSTALLATION

Pre-Installation Checklist

- Ensure the main power supply to the heating system is OFF at the circuit breaker.
- Confirm the thermostat is compatible with your heating system's voltage (120V, 208V, or 240V) and wattage (up to 4000W).
- Verify that a junction box is available for mounting.
- Gather necessary tools: screwdriver, wire strippers, electrical tape, and wire nuts (included).

Mounting the Thermostat

The thermostat utilizes an S3 mounting plate for secure installation. Attach the mounting plate to the junction box using appropriate screws. Ensure the plate is firmly secured before proceeding with wiring.



Figure 2: S3 Mounting Plate for secure installation.

Electrical Connection

This thermostat requires a three-wire electrical connection. Connect the thermostat wires to your heating system's wiring within the junction box using wire nuts. Refer to the diagram below for correct wiring. Ensure all connections are tight and secure.

THREE-WIRE ELECTRICAL CONNECTION

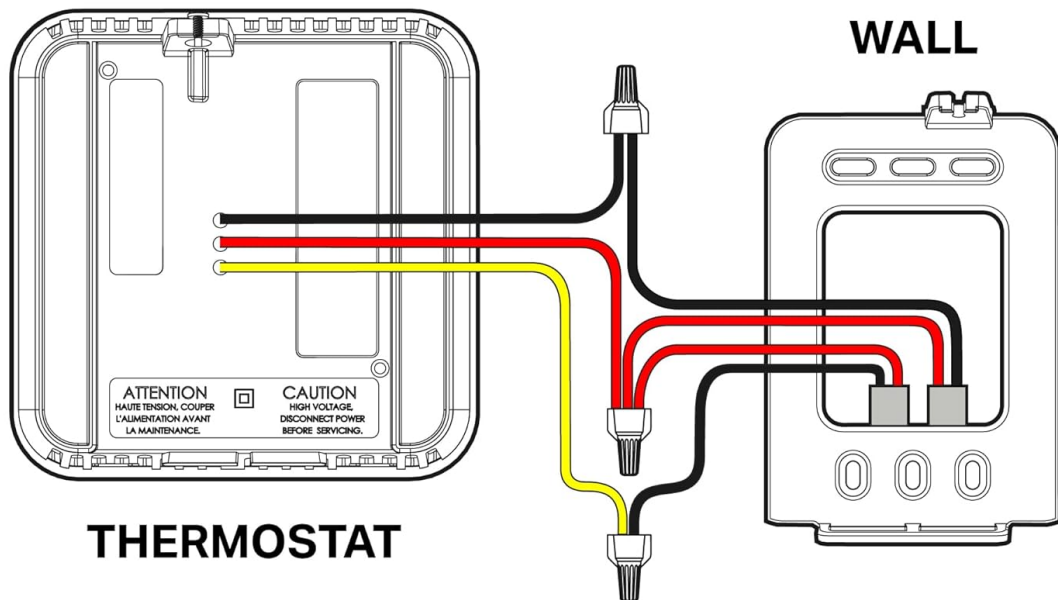


Figure 3: Three-Wire Electrical Connection Diagram.

After wiring, carefully push the wires back into the junction box and attach the thermostat to the mounting plate. Restore power at the circuit breaker.

OPERATING INSTRUCTIONS

Basic Operation

The thermostat features touch controls integrated into the faceplate. Use the left and right touch controls to decrease or increase the desired temperature setpoint. The digital display shows the current temperature and is backlit when in use for improved visibility.

Programming Modes (5/2 Day)

The ST402PFF thermostat offers 5/2 day programming capability, allowing you to set different heating schedules for weekdays and weekends. This includes specific setpoints for 'wake', 'leave', 'return', and 'sleep' periods to optimize comfort and energy usage.

Consult the full programming guide (if provided separately or online) for detailed steps on setting up your customized schedules.

Heat Boost Mode

Activate the heat boost mode for a rapid increase in room temperature. This feature provides quick warmth when needed, temporarily overriding the programmed schedule.

Temperature Range

The adjustable temperature range for this thermostat is from 41°F (5°C) to 86°F (30°C).

MAINTENANCE

The Stelpro ST402PFF thermostat requires minimal maintenance. Periodically wipe the exterior with a soft, damp cloth to remove dust and dirt. Do not use abrasive cleaners or solvents. No internal user-serviceable parts are present.

TROUBLESHOOTING

Thermostat Heats Up During Extended Operation

During extended periods of heating, the left side of the thermostat, where the high-power TRIAC is located, may become noticeably warm (surface temperature above 30°C). This is considered normal operation. This internal heating can temporarily affect the built-in temperature sensor, potentially causing the thermostat to cycle the heating load off prematurely and then restart it after a short interval as the TRIAC temperature decreases. The target temperature will still be reached, though the process may take slightly longer with brief pauses. This behavior is more apparent during long heating cycles, such as when recovering from significant temperature drops.

General Issues

- **No Display:** Check the circuit breaker to ensure power is supplied to the heating system and thermostat.
- **Incorrect Temperature Reading:** Ensure the thermostat is not exposed to direct sunlight, drafts, or heat sources that could interfere with its sensor.
- **Heating Not Activating:** Verify the setpoint is above the ambient temperature and that the programming schedule is active.

SPECIFICATIONS

Brand	Stelpro
Model Name	ST402PFF
Product Dimensions (H x W x D)	4.94" x 4.94" x 1.38" (125.5 mm x 125.5 mm x 35 mm)
Color	White
Voltage Compatibility	120 V, 208 V, 240 V
Maximum Wattage	4000 W (also supports 2000 W / 3475 W)
Temperature Range	41°F to 86°F (5°C to 30°C)
Temperature Control Precision	±1°F (±0.5°C)
Programming	5/2 Day Programmable
Item Weight	13.4 ounces
UPC	626296599075

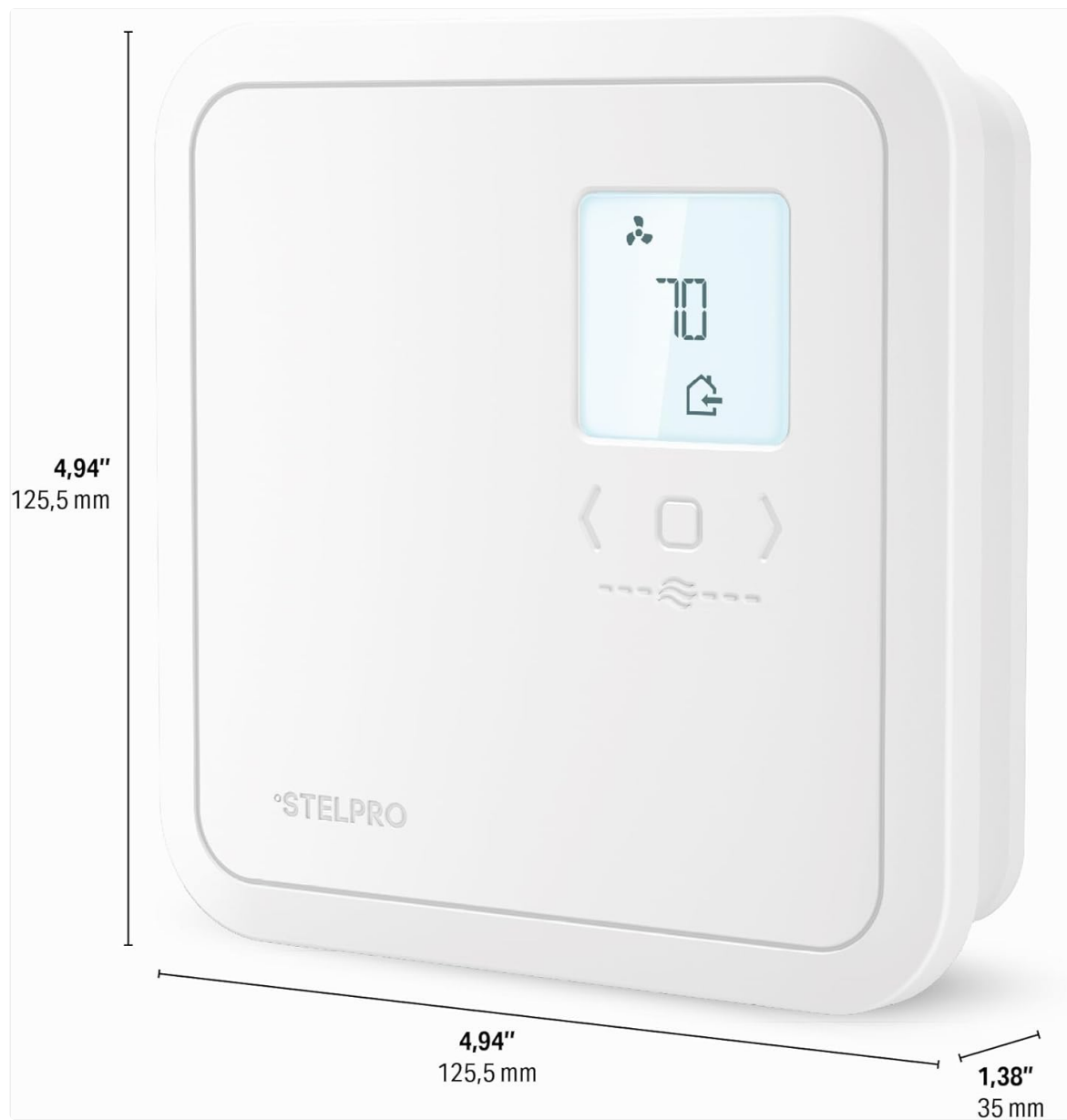


Figure 4: Product Dimensions of the ST402PFF Thermostat.

WARRANTY INFORMATION

The Stelpro ST402PFF Programmable Electronic Thermostat is covered by a **5-year warranty** from the date of purchase. This warranty covers defects in material and workmanship under normal use. Please retain your proof of purchase for warranty claims.

UNMATCHED PRECISION



UP TO

20%

IN ENERGY SAVINGS

Figure 5: Warranty and Key Features Overview.

CUSTOMER SUPPORT

For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact Stelpro customer service. Visit the official Stelpro website for contact information and additional resources.

Stelpro Official Website: www.stelpro.com