°STELPRO

PROGRAMMABLE ELECTRONIC THERMOSTAT FOR BASEBOARDS, CONVECTORS ANS FAN HEATERS

ST402PFF

1-844-STELPRO
WWW.STELPRO.COM

IMPORTANT INSTRUCTIONS

THE THERMOSTAT MUST BE INSTALLED BY A CERTIFIED ELECTRICIAN.

Connect the thermostat to a 120 to 240 VAC power source ONLY and comply with load limits.

WARNING – HIGH VOLTAGE. Turn off the power supply before installation and maintenance. Leave at least 12 in. (30 cm) clearance around the thermostat to ensure that it is properly vented.

SAVE THESE INSTRUCTIONS

TECHNICAL SPECIFICATIONS

VOLTAGE AND LOAD			
PRODUCT CODE	SUPPLY VOLTAGE	LOAD AT 120 V	LOAD AT 240 V
	VOLTS	WATTS	WATTS
ST402PFF	120-240	150-2000	300-4000

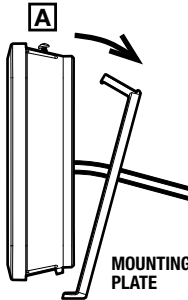|	
Load control type	Resistive
Frequency	60 Hz
Storage temperature	-40°C to 50°C (-40°F to 122°F)
Operating temperature	-20°C to 50°C (-4°F to 122°F) LC display less effective below 0°C (32°F)
Humidity	5 % to 98 % without condensation
Action	Type 1.Y
Pollution degree	2
Software	Class A
Rated impulse voltage	Category II overvoltage (1500 V)
Independently mounted control for surface mounting	
Thermistor used as a sensor, carries no load current	
Overload protection device external to the control: circuit breaker (refer to local electrical code)	

BEFORE YOU GET STARTED

- The box contains one (1) thermostat with mounting plate, two (2) mounting screws, three (3) twist-on wire connectors and one (1) owner's manual.
- To install this thermostat, you will need a #2 Phillips screwdriver.
- Install your thermostat about 5 ft (1.5 m) from the floor on an inside wall facing the heating system.
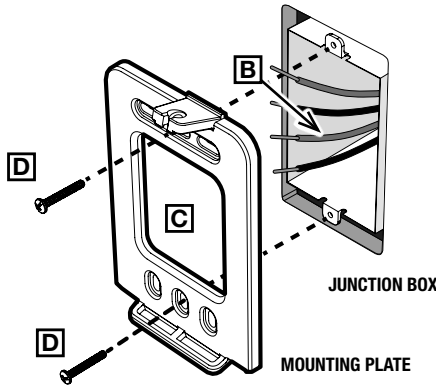
INSTALLATION

1 ATTACH THE MOUNTING PLATE

WARNING: Turn off the power supply.

1. Loosen the screw **[A]** at the top of the thermostat without removing it.
2. Separate the mounting plate from the thermostat. Pull the top of the plate and rotate.

3. Take the power wires **[B]** out of the junction box and run them through the large opening in the center of the mounting plate **[C]**.
4. Using the two (2) mounting screws provided **[D]**, attach the thermostat mounting plate to the junction box. The plate can be centered on the junction box or shifted to the left or right.
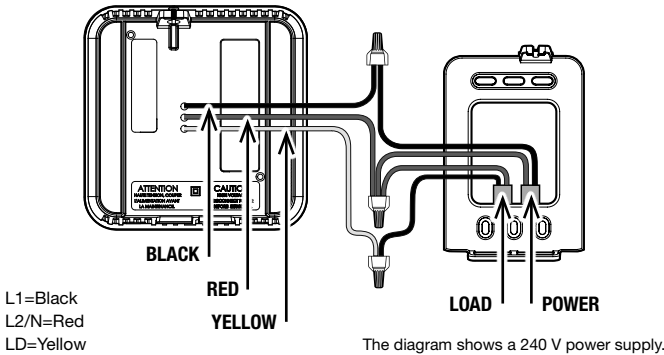

JUNCTION BOX

MOUNTING PLATE

2 CONNECT THE POWER SUPPLY WIRES

WARNING: Incorrectly connected electrical wires could result in a fire hazard.
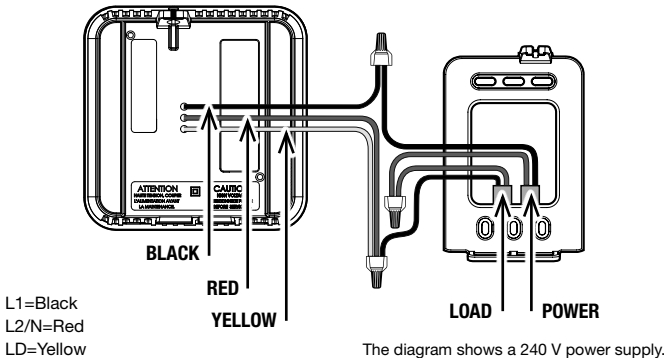
1. Complete the thermostat's electrical connection according to the diagram below. Tighten the wires securely in the supplied wire connectors.
2. Push the wires and connectors into the electrical box.

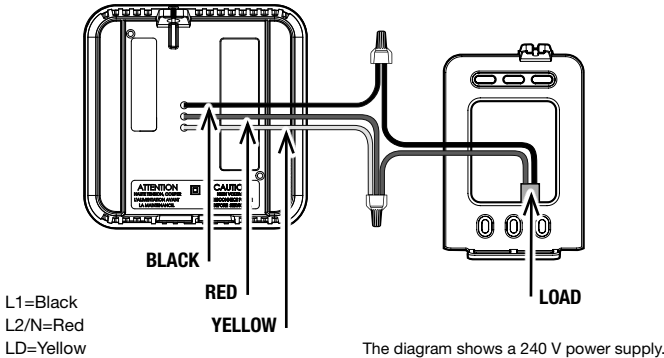NOTE: If the electrical wires are aluminum, use CO/ALR connectors instead (not supplied).

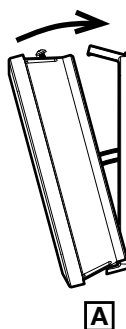**FOR BASEBOARDS, CONVECTORS AND FAN HEATERS**

L1=Black
L2/N=Red
LD=Yellow

BLACK · RED · YELLOW · LOAD · POWER

The diagram shows a 240 V power supply.

FOR BASEBOARDS AND CONVECTORS ONLY

L1=Black
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The diagram shows a 240 V power supply.

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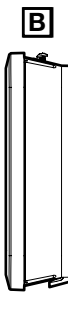The diagram shows a 240 V power supply.

3 ATTACH THE THERMOSTAT

1. Using the alignment guide, hook the bottom **[A]** of the thermostat into the bottom of the plate. Be sure not to jam the wires between the thermostat and mounting plate.
2. Rotate the thermostat upwards and attach it on the top hook of the mounting plate.

3. Tighten the screw at the top of the thermostat **[B]** to hold it in place securely.
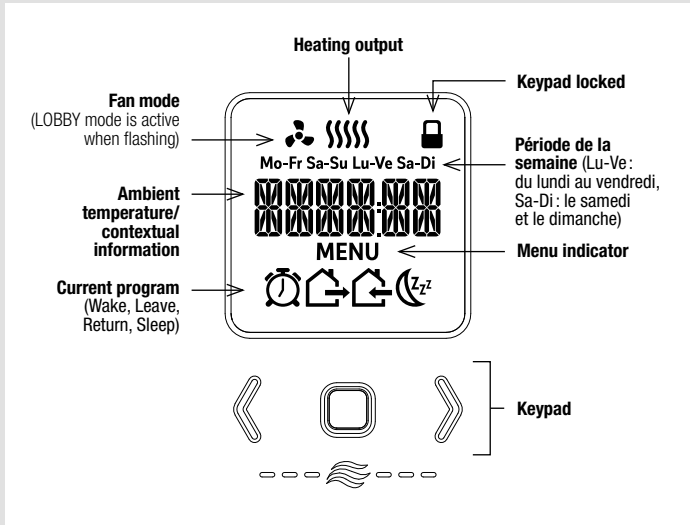4. Restore the power at the circuit breaker.

NOTE: If you need to remove the thermostat, follow step 1 in section 1, then use a straight screwdriver to unhook it from the top of the mounting plate.

INTERFACE

This thermostat is programmable. PROGRAMMABLE mode allows you to define the setpoint temperature according to time of day and day of the week. (See the INITIAL SETTINGS AND PROGRAMMING section.) You can also use this thermostat in MANUAL mode, i.e. the setpoint temperature will be constant.

Touch the keypad once to activate the backlight, then you can make changes

INITIAL SETTINGS AND PROGRAMMING

To begin with, follow the on-screen instructions to adjust your thermostat's settings. Press 《 or 》 to change your selection and ☐ to confirm.

- **Language:** FRA / ENG (Français / English)
- **Temperature format:** °C / °F (Celsius / Fahrenheit)
- **Load type selection:** CONV / FAN (Convection / Fan Heater). FAN HEATER mode is enabled by default.
- **Lobby mode:** STD / LBY (Standard room / Lobby).

In LOBBY mode (LBY), the thermostat automatically provides 100% heating for five minutes as soon as a sudden drop in temperature is detected. This mode can be useful for heaters located near an entrance. When this mode is activated, the ♣ icon flashes. LOBBY mode is available only if the heating mode selected is FAN HEATER.

- **Operation mode:** PROG / MANUAL (Programmable / Manual). If you selected MANUAL mode, your thermostat is now ready to use! **If you selected PROGRAMMABLE mode, configure the following settings:**
  - **Date and time**
  - **Automatic daylight savings time switchover:** DST Y / DST N (Daylight savings time Yes / Daylight savings time No)
  - **Program setpoint temperatures:** (Wake, Leave, Return, Sleep)
  - **Monday to Friday program hours:** [Mo-Fr] (Wake, Leave, Return, Sleep)
  - **Saturday and Sunday program hours:** [Sa-Su] (Wake, Sleep)

The following table shows the default program values:

WEEK DAYS			
WAKE	LEAVE	RETURN	SLEEP
6:00 AM	8:00 AM	4:00 PM	10:00 PM
21°C / 70°F	16°C / 61°F	21°C / 70°F	17°C / 63°F

WEEKEND DAYS	
WAKE	SLEEP
7:00 AM	11:00 PM
21°C / 70°F	17°C / 63°F

FEATURES

KEY FEATURES

1. Press 《 or 》 once to lower or raise the setpoint temperature by 0.5°C / 1°F. If you are in PROGRAMMABLE mode, the setpoint change will be considered as a temporary override to the programming. The thermostat will return to PROGRAMMABLE mode when the next program begins. To cancel the override and return to PROGRAMMABLE mode, press ☐ .
2. Press ☐ once to switch from MANUAL to PROGRAMMABLE mode and vice versa.
3. If Programmable mode is selected, press ☐ twice to go to the next program.
4. Press 《 and 》 simultaneously to activate BOOST mode ≋. Then, press 《 or 》 to select BOOST mode duration (10, 20, 30, 40, 40, 50 or 60 minutes). The thermostat will then heat at 100% for the time specified. When BOOST mode is on, the time remaining is displayed on the screen. To cancel the BOOST mode, press ☐ .

ADVANCED MENU ACCESS AND USE

1. Press and hold ☐ for 3 seconds to access the thermostat's advanced menus.
2. Press 《 or 》 to change your selection.
3. Press ☐ to confirm your selection and proceed to the next menu.
4. Press and hold ☐ for 3 seconds to exit the advanced menus.

ADVANCED MENU LIST

- **Language:** FRA / ENG (Français / English)
- **Temperature format:** °C / °F (Celsius / Fahrenheit)
- **Load type selection:** CONV / FAN (Convection / Fan Heater). FAN HEATER mode is enabled by default.
- **Lobby mode:** STD / LBY (Standard room / Lobby).

LOBBY mode is available only if the heating mode selected is FAN HEATER.

- **Operation mode:** PROG / MANUAL (Programmable / Manual) **When PROGRAMMABLE mode is selected, you can change the following settings:**
  - **Date and time**
  - **Automatic daylight savings time switchover:** DST Y / DST N (Daylight savings time Yes / Daylight savings time No)
  - **Program setpoint temperatures:** (Wake, Leave, Return, Sleep)
  - **Monday to Friday program hours:** [Mo-Fr] (Wake, Leave, Return, Sleep)
  - **Saturday and Sunday program hours** [Sa-Su] (Wake, Sleep)
- **Keypad lock:** LOCK / UNLOCK (Lock keypad / Unlock keypad)
- **Reset thermostat to default values:** RST N / RST Y (No / Yes)

USING THE TECHNICAL MENUS:

1. Press ☐ for 10 seconds to access the thermostat's technical menus (the advanced menu will appear after 3 seconds but continue to hold for another 7 seconds).
2. Use 《 ou 》 to change your selection.
3. Press ☐ to confirm your selection and continue to the next menu.
4. Press ☐ for 3 seconds to exit the thermostat's technical menus.

TECHNICAL MENU LIST

- **t1:** Maximum room temperature setpoint limit (5°C to 30°C / 41°F to 86°F). The default setting is 30°C.
- **t2:** Minimum room temperature setpoint limit (5°C to 30°C / 41°F to 86°F). The default setting is 5°C.

NOTE: The maximum setpoint limit must be higher than the minimum setpoint limit, and the minimum setpoint limit must be lower than the maximum setpoint limit.

- **t3:** Year of production
- **t4:** Month of production
- **t5:** Identification number
- **t6:** Software version
- **t7:** Thermostat control code