



CONNEX[™] Smart Thermostat CST-240



7215100100 R00

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SAVE THESE INSTRUCTIONS

IMPORTANT SAFETY INFORMATION: Always read this manual first before attempting to install or use this device. For your safety, always comply with all warning and safety instructions contained in this manual to prevent personal injury or property damage.

To view the full line of Dimplex products, please visit www.dimplex.com

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WELCOME

Thank you for choosing to purchase a CONNEX[™] Smart Thermostat from Dimplex. The CST-240 is an easy to install and easy to use unit that works with any convection or fan forced heater. It provides precise temperature control and will lower your energy costs by up to 10% versus a mechanical thermostat.

Please carefully read and save these instructions.



FCC Compliance

CAUTION: This unit has been tested and found to comply with the limits for Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This unit generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception, which can be determined by turning the unit OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- · Increase the separation between the unit and the receiver.
- · Connect the unit into an outlet on a circuit different from the receiver.
- · Consult the dealer or an experienced radio/TV technician for help.

This unit complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This unit may not cause harmful interference, and (2) this unit must accept any interference received, including interference that may cause undesired operation.

FCC CAUTION: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

IMPORTANT NOTE: This equipment complies with RF exposure limits set forth for an uncontrolled environment. This equipment shall be installed and operated with a minimum separation distance of 7.87 in (20 cm) between the transmitter's radiating structure(s) and the body of the user or nearby persons.

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FEATURES

The CONNEX[™] Smart Thermostat CST-240 works with all new and existing electric heaters without built-in thermostats. It works with new and old heaters, either fan-forced or convection.

The CST-240 changes your heater into a smart heater. It makes any heater work with optional CONNEX[™] controllers to provide wireless and WIFI connectivity.

SPECIFICATIONS

Dimensions: 4-4/8" W x 5-1/8" H x 1-1/2" D (11.7cm W x 13.0cm H x 3.6cm D) Weight: 0.5lb (0.23kg) Electrical: 240V, 4000W, ~60Hz, copper conductor only Device Type: Line voltage room thermostat, Type 1 Action Functional Temperatures: -20° C (-4° F) to 80° C (176° F) Operating Termperatures: 5° C (41° F) to 30° C (86° F)

SELECTING THE HEATING TYPE

The CST-240 is capable of controlling both convection and fan forced heaters. The thermostat has been optimized for each type of heater but is factory pre-set for convection.

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Convection

For this type of heater, the CST-240 will control convectors to within 0.5° C (1°F) by operating the heaters every minute. It is not recommended to operate fan forced heaters in this mode due to additional stress placed on the fan motor.

To change the type of heater Convection:

- 1. Press sequence ★/☑, ↔, +, -HOME/AWAY, SYNC, +, -
- 2. Checkmark (\checkmark) icon and CO displays.

Fan Forced

For this type of heater, the CST-240 will control the fan forced heaters to a slightly larger temperature differential by operating the heaters approximately every 10 minutes.

To change the type of heater to Fan Forced:

- Press sequence f/ Ø, ↔, +, -HOME/AWAY, SYNC, +, -
- 2. Checkmark (\checkmark) icon and FF displays.

CAUTION: Read all instructions and warnings carefully before starting installation. Failure to follow these instructions may result in a possible electric shock or fire hazard and will void the warranty.

WARNING: The installation of the thermostat must comply with the applicable Local and/or National Electrical Codes and utility requirements. Entrust the installation to duly qualified personnel where required by law.

WARNING: Make sure all wiring connections to the thermostat are correct and tight to prevent electrical shorts. Use the appropriate wire to meet local and national electrical codes for rated power consumption.

INSTALLATION

Select a location that is:

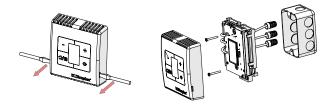
- 1.5m (5ft) above the floor level
- · on a section of wall without air ducts or pipes
- in an area with good airflow to best sense the average room temperature

Avoid a location that is:

- · close to a window or other external opening
- directly exposed to a source of heat, such as sunlight or heater exhaust

The CST-240 mounts directly into a standard 2 x 4 inch vertical electrical outlet box.

- Disconnect power supply to prevent electrical shock or product damage.
- 2. Run line voltage wiring to the thermostat location.
- 3. Remove the thermostat cover.



- 4. Connect the black LINE lead on the thermostat to the L1 line from the power supply panel.
- 5. Connect the red LOAD lead from the thermostat to the line lead on the heater.
- Connect the white L2 lead from the thermostat to L2 line from the power supply panel and the heater.

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- Secure the ground wire to the ground screw in the outlet box.
- 8. Make sure all electrical connections are tight.
- 9. Insert wires and connectors into the outlet box taking care not to damage the sensing device or wiring.
- 10. Mount the thermostat base into the wall box and secure using the two supplied screws.

Note: Do not over tighten mounting screws.

11. Replace thermostat cover.

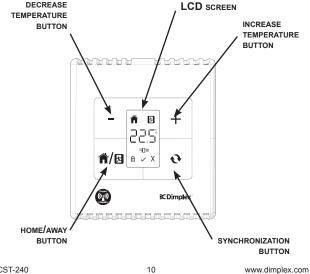
CONTROL PANEL (USER INTERFACE)

The CONNEX[™] Smart Thermostat CST-240 has a user-friendly, easy-to-use interface. It consists of four capacitive touch buttons and an LCD screen. You will use the buttons and LCD to control and direct the CST-240.

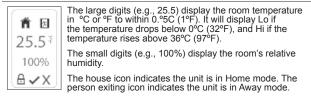
You have the option of using other products (sold separately), such as CONNEX[™] Multi-Zone Programmable Controller (CX-MPC) or the CONNEX[™] WIFI Multi-Zone Controller (CX-WIFI) to control the CST-240 wirelessly.

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The LCD is backlite whenever a button is pressed. The backlight shuts off after 10 seconds. During regular operation, the LCD displays the ambient room temperature.



LCD Screen



The lock icon indicates the unit is in Lock mode and unable to be changed using the buttons.

The \checkmark and X marks provide feedback of either a successful or unsuccessful action.

Buttons

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Press the Home/Away button to toggle between modes. In Home mode, the heater Home set point displays when either the + or – button is pressed. In Away mode, the heater Away set point displays when either the + or – button is pressed.

Ð	To sync a CONNEX [™] wireless controller to your CST-240 thermostat instead of a CONNEX [™] heater, place your controller in sync mode and follow the below instructions
	Press the synchronization button for 5 seconds to enter the CST-240 into a pairing mode with a CONNEX™ wireless controller. While the unit is in sync mode, the ✓displays for 30 seconds and it will be able to receive an RF message and update its sync information. If the unit has not successfully synced in 30 seconds, the X symbol displays.
+	Press the + (up) button to increase the temperature set point by 0.5° C (1°F) up to a maximum of 30°C (86°F).
	Press the – (down) button to decrease the temperature set point by 0.5° C (1°F) up to a minimum of 5°C (41°F).
-	Press the + and – buttons at the same time to toggle the display and set point information between °C and °F.
₿	This function disables all buttons until the child lock is disabled
	Press a sequence of +, -, +, -, +, - to enable the child lock and disable all button functions. The CST-240 will still respond to wireless controller commands.
	Press a sequence of -, +, +, -, + to disable the child lock.

OPERATION

The CONNEX[™] Smart Thermostat is easy to use and easy to program. Simply touch the + or – buttons to raise or lower the temperature.

In addition, you can program the heater to maintain one temperature when you are at Home and a different temperature for when you are Away. Simply press the Home/Away button when entering or existing the room to switch between the preselected set points.

Set the at Home Temperature

- 1. Make sure child lock is off (lock icon does not show on the LCD).
- 2. Press the Home button **f**. The Home icon and the set temperature on the LCD should illuminate.
- Press the + or button to increase or decrease the set temperature.

Set the Away Temperature

- 1. Make sure child lock is off (lock icon does not show on the LCD).
- 2. Press the Away button 🔂 . The Away icon and the set temperature on the LCD should illuminate.
- Press the + or button to increase or decrease the set temperature.

Wireless Connection

The CST-240 has wireless (RF) communication capability. The unit can receive wireless signals from existing CONNEX[™] heating control products. See www.dimplex.com for information about the CONNEX[™] Single-Zone and Multi-Zone Programmable Controllers.

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LIMITED WARRANTY

All Dimplex Thermostats are warranted against defects in workmanship and materials for three years from date of sale. This warranty does not apply to damage from accident, misuse, or alteration, nor where the connected voltage is more that 5% above the nameplate voltage, nor to equipment improperly installed or wired or maintained in violation of the instruction sheet.

This limited warranty applies only to purchases made in Canada or USA except for Yukon Territory, Nunavut, or Northwest Territories , Hawaii, or Alaska.

This limited warranty applies to the original purchaser of the product only and is not transferable. No other written or oral warranty applies. No employee, agent, dealer or other person is authorized to give any warranties on behalf of Dimplex.

The customer shall be responsible for all costs incurred in the removal or reinstallation and shipping of the product for repairs. Within the limitations of this warranty, inoperative units shall be returned to the nearest Dimplex authorized service center, and we shall repair or replace, at our option, at no charge to you with return freight paid be Dimplex. It is agreed that such repair or replacement is the exclusive remedy available from Dimplex and that DIMPLEX IS NOT RESPONSIBLE FOR DAMAGES OF ANY KIND, INCLUDING INCIDENTAL AND CONSEQUENTIAL DAMAGE. Some States do not allow the exclusion or limitation of consequential damages, so the above exclusion or limitation may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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