



# Thermostat Installation Guide

## Supported Models and Requirements

CCZ-101-W Decora White Thermostat

## Important Safety Instructions

- WARNING!** Install in accordance with all national and local electrical codes.
- IMPORTANT!** This product is not intended for use with line-voltage baseboard heaters.
- IMPORTANT!** Improper use or installation can cause LOSS/DAMAGE OF PROPERTY.
- IMPORTANT!** Operate within limits of this device as specified in the *Control4 Thermostat Installation Guide* (this document) and *Control4 Thermostat User Guide*.
- IMPORTANT!** Using this product in a manner other than outlined in this document voids your warranty. Further, Control4 is NOT liable for any damage incurred with the misuse of this product. See the warranty information in the *Control4 Thermostat User Guide*.

## General Description

This thermostat enables intelligent HVAC control as part of a Control4 automated system. It uses ZigBee (IEEE 802.15.4) wiring standards and communicates to the Control4 system using a wireless connection.

The Control4 Wireless Thermostat features a backlit LCD display showing time, temperature, date, fan status, hold status, and HVAC operating mode. The front panel allows for temperature setpoint adjustment, HVAC mode change, variable hold options and fan control. It can also operate as a stand-alone set-point thermometer if it loses communication with the system.

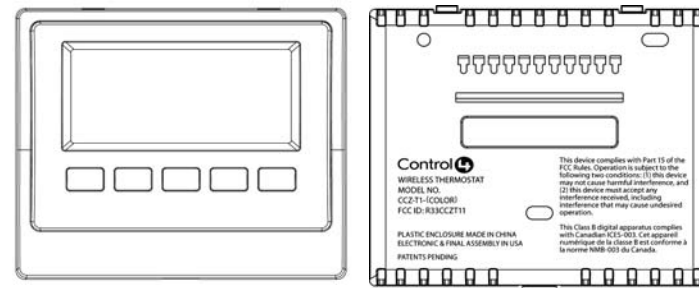
## What is in the Box

- Thermostat
- CR123A (3V) Battery
- 3 Screws (#6 x 1 inch sheet metal screws)
- 3 Plastic wall anchors (#4-6 x 7/8)
- Product Registration Card
- *Control4 Thermostat Installation Guide*
- *Control 4Thermostat User Guide*

## Requirements

- Pencil
- Drill with 3/16 drill bit
- Small Level (optional)
- Small flat-blade screwdriver (13 mm approx.)
- Phillips screwdriver
- Tape for labeling wires

## Specifications Front and Rear View



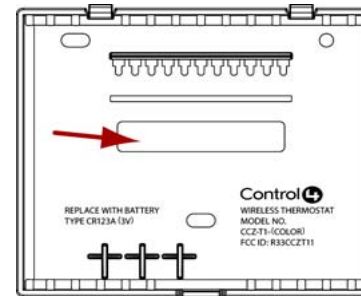
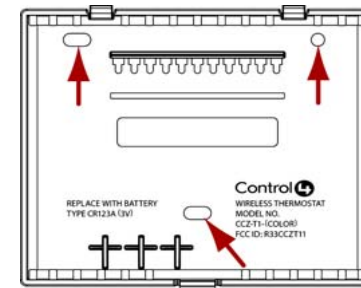
The specifications are described as follows.

<b>Recommended Wiring:</b>	22 AWG (36 ft. max) 18 AWG (100 ft. max)
<b>Power Source</b>	24 Volt or battery
<b>Power:</b>	1/10 W at 24 VAC, 50/60 Hz
<b>Operating Temperature:</b>	41 to 104 F (5 to 40 C)
<b>Storage Temperature:</b>	14 to 122 F (-10 to 85 C)
<b>Operating Relative Humidity:</b>	0 to 95% (non-condensing)
<b>Dimensions (HxWxD):</b>	4.5 x 3.7 x 0.9 inches
<b>Communications:</b>	ZigBee (IEEE 802.15.4 GHz), 15-channel, spread spectrum radio

## Installation

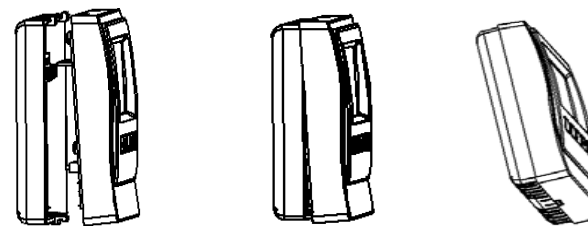
- 1** Place the thermostat in an good location to ensure its efficiency and avoid unnecessary cycling of the furnace or air conditioner.
  - Make sure the thermostat gets good ZigBee wireless reception by (1) ensuring that the thermostat is not too far from another Zigbee device and (2) avoiding electrical equipment that may cause interference with the Zigbee signal (such as microwaves and cordless telephones that operate on the 2.4 GHz frequency).
  - Place thermostats and external thermostat sensors away from direct sunlight, drafts, doorways, skylights, windows, and exterior walls.
- 2** Locate and turn OFF the power supply for the HVAC system.
- 3** If replacing an existing thermostat, check the number and type of wires attached to your old unit. If installing a thermostat for the first time, see "Sample Wiring Configuration" on page 2 for details on wiring the thermostat.
- 4** When you are sure the power has been shut off, remove the old thermostat's cover from its rear plate, but do not disconnect any wires yet.
- 5** Unscrew and remove the old thermostat's rear plate from the wall. Typically, the old thermostat has a letter identifying each wire. Use a piece of tape to label each wire that corresponds to the letter on the old thermostat.
  - TIP:** You can wrap the wires around a pencil or tape them to keep them from falling back into the wall.
- 6** Disconnect the old thermostat.
- CAUTION!** Discard the old thermostat properly or recycle it. Mercury is a hazardous waste. You MUST dispose of it properly.
- 7** Route thermostat wires through the large, rectangular hole in the rear plate and let wires hang. (Later steps describe how to match wires).
- 8** Position the new thermostat rear plate against the wall to make sure it sits flush.

- 9** Use a small level or visually check that the rear plate is level, then mark the locations of the three screw holes on the wall.
- 10** Remove the rear plate from the wall and drill 3/16-inch-mounting holes at the three screw hole locations you marked previously.
- 11** Press the plastic wall anchors that were included in the product into the holes you drilled in Step 10.
- 12** Thread the wires from the wall through the rear plate of the new thermostat to place the rear plate against the wall.
- 13** Insert the mounting screws into the wall anchors and tighten them.
- 14** Connect the wires to the screw terminals in the rear plate, matching the labeled wires (Step 5) to the letters on the terminals. The wiring can differ depending upon the wires available, (see Sample Wiring Configuration).



- IMPORTANT!** Do not connect the common ground lead to the thermostat. Doing so can cause your system to malfunction.
- 15** Set the dipswitches that sit next to the battery compartment: set for either an electric or fuel heating system; and for either a conventional or heat pump system.
- 16** Install the CR123A (3V) battery (included with the product) in the new Control4 thermostat faceplate according to labels on thermostat.
  - NOTE:** If the battery was in place and you changed dip switch settings, remove the battery and reinstall it. This forces the thermostat to reboot with the new configuration.
  - IMPORTANT!** Do not install the battery in the wrong polarity.
- 17** Install the faceplate to the thermostat rear plate. To do this:

1. Align the faceplate with the rear plate and push the straight pins to the back of the thermostat.
2. With the faceplate slightly above the rear plate, slide the top edge of the faceplate onto the rear plate, engaging the plastic hooks with the corresponding holes.
3. Press firmly on the bottom center edge of the faceplate to snap and lock the bottom connector in place.



- 18** Turn ON power supply for the HVAC system.
- 19** Test the thermostat in both the auto and manual modes to confirm that the furnace and air conditioner cycle on and off at the appropriate settings. See the *Control4 Thermostat User Guide* for specific instructions.

**TIP:** Keep in mind that you need to set back the temperature for at least eight hours (either at night or while you are at work) to see a noticeable energy savings.

## Programming Instructions

As part of a Control4 system, the thermostat can follow a schedule with up to six different set points per day. You can also control the thermostat using the Wireless Touch Screen, the On-Screen Navigator (on your TV with the System Remote Control), or the Mini Touch Screen. See the *Composer Online Help* for programming instructions and see the *Control4 Thermostat User Guide* for instruction on programming using one of the navigation devices).

## Troubleshooting

If thermostat is not working:

- Ensure HVAC system is not turned OFF.
- Check for proper wiring. (See the Sample Wiring Configuration section.)

For help on the installation or operation of this product, email or call the Control4 Technical Support Center. Please provide your exact model number. Contact [support@control4.com](mailto:support@control4.com) or see the web site [www.control4.com](http://www.control4.com).

## Warranty

See the *Control4 Thermostat User Guide* for warranty information.

## About this Document

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## Regulatory Compliance

This product complies with standards established by the following regulatory bodies:

- Federal Communications Commission (FCC)
- Industry Canada

### FCC

FCC ID: R33CCZT11

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

This equipment has been tested and found to comply with the limits for a 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 equipment 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 communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment 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 equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**IMPORTANT!** Changes or modifications not expressly approved by Control4 void the user's authority to operate the equipment.

### Industry Canada

This Class B digital apparatus complies with Canada ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

## Sample Wiring Configuration

## Connections for Heating, Cooling and Fan



**WARNING!** Do not install LINE VOLTAGE wires to a LOW VOLTAGE wire.



**IMPORTANT!** Do not install any wire to one of the TS terminals (leading to a remote sensor) other than supported external temperature sensors (Flush Mount Remote Temperature Sensor, Aprilaire Model 8051; or Duct/Outdoor Remote Temperature Sensor, Aprilaire Model 8052).

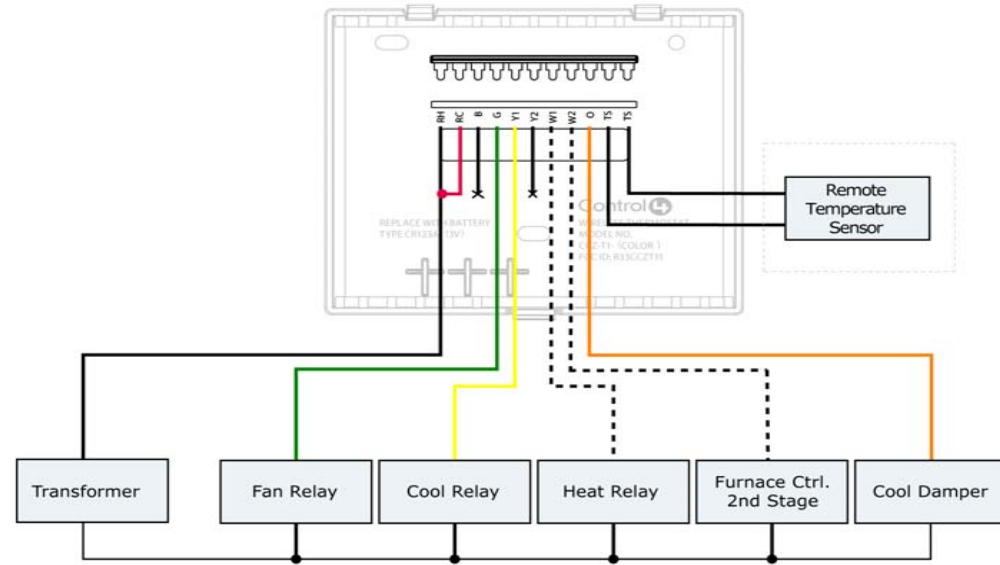


**NOTE:** Install jumper wire between RC and RH for a single stage system.

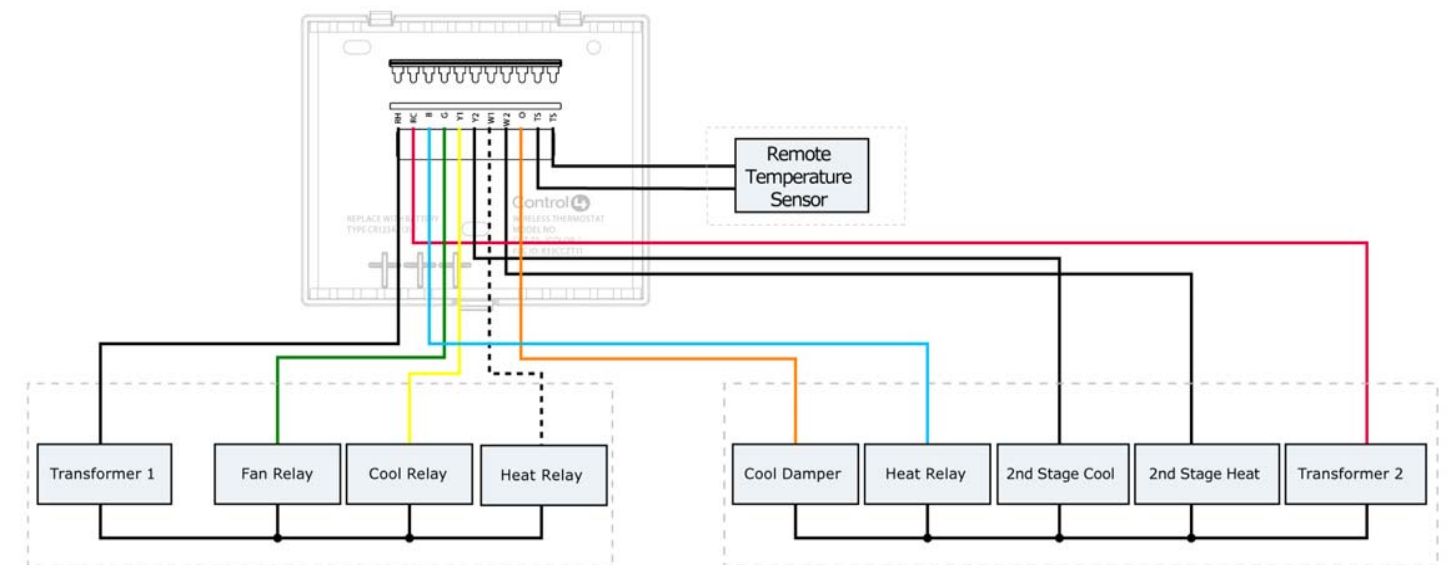
	Pin	1	2	3	4	5	6	7	8	9	10	11
	Code	RH	RC	B	G	Y1	Y2	W1	W2	O	TS	TS
	Color	Black	Red	Blue	Green	Yellow	Yellow	White	White	Orange		
HVAC Type	Conventional	24VAC Primary Stage Source (Heat)	24VAC Second Stage Source (Cool)	Damper Control (Heat)	Fan Relay	Air Conditioning Compressor Control First Stage	Air Conditioning Compressor Control 2nd Stage	Furnace Control	Furnace Control 2nd Stage Heat	Damper Control (Cool)	Remote NTC Temperature Sensor	Remote NTC Temperature Sensor
	Heat Pump	24VAC Primary Stage Source (Heat)	24VAC Second Stage Source (Cool)	Changeover Valve (Heat)	Fan Relay	Heat Pump Primary Stage	Heat Pump Second Stage	Auxiliary Heat	Heat Pump Fourth Stage	Changeover Valve (Cool)	Remote NTC Temperature Sensor	Remote NTC Temperature Sensor

### Conventional Systems

#### Single Stage, Single Transformer

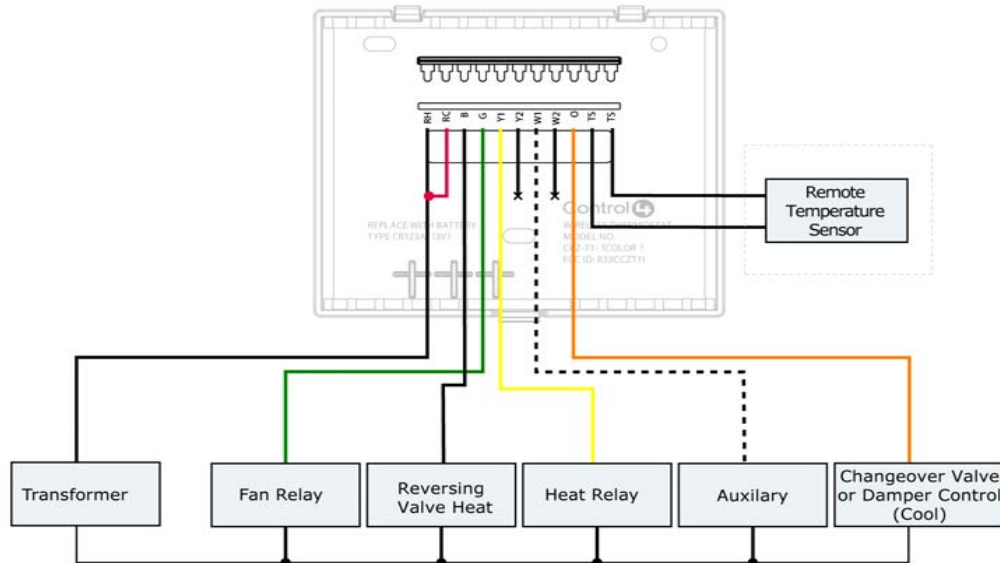


#### Dual Stage, Dual Transformer



### Heat Pump Systems

#### Single Stage, Single Transformer



#### Dual Stage, Dual Transformer

