

How can I install Sensi to a White-Rodgers 1311 (Three Wire) Zone Valve?

The Sensi Wi-Fi Thermostat will operate a White-Rodgers 1311 3-Wire Zone Valve, however, a common or “C” wire will be required.

1. If you are able to run a new wire from the zone valve to the thermostat for common, follow instructions on page 1 (below) for wiring and configuration. Remember to turn off power to heating system before connecting or disconnecting any wires.
2. If it’s not possible to run a new wire to the thermostat, follow instructions on page 2-3.

Adding a New Wire for Common



At the New Thermostat




Old Thermostat Terminal (Wire)	Attaches to New Thermostat
4, or W, or W/E	W/E
5, or R, or RH	RH
6, or Y, or O/B, or A	O/B
Add a new wire at terminal #1 on zone valve	C

After wiring, configure the thermostat to operate the system

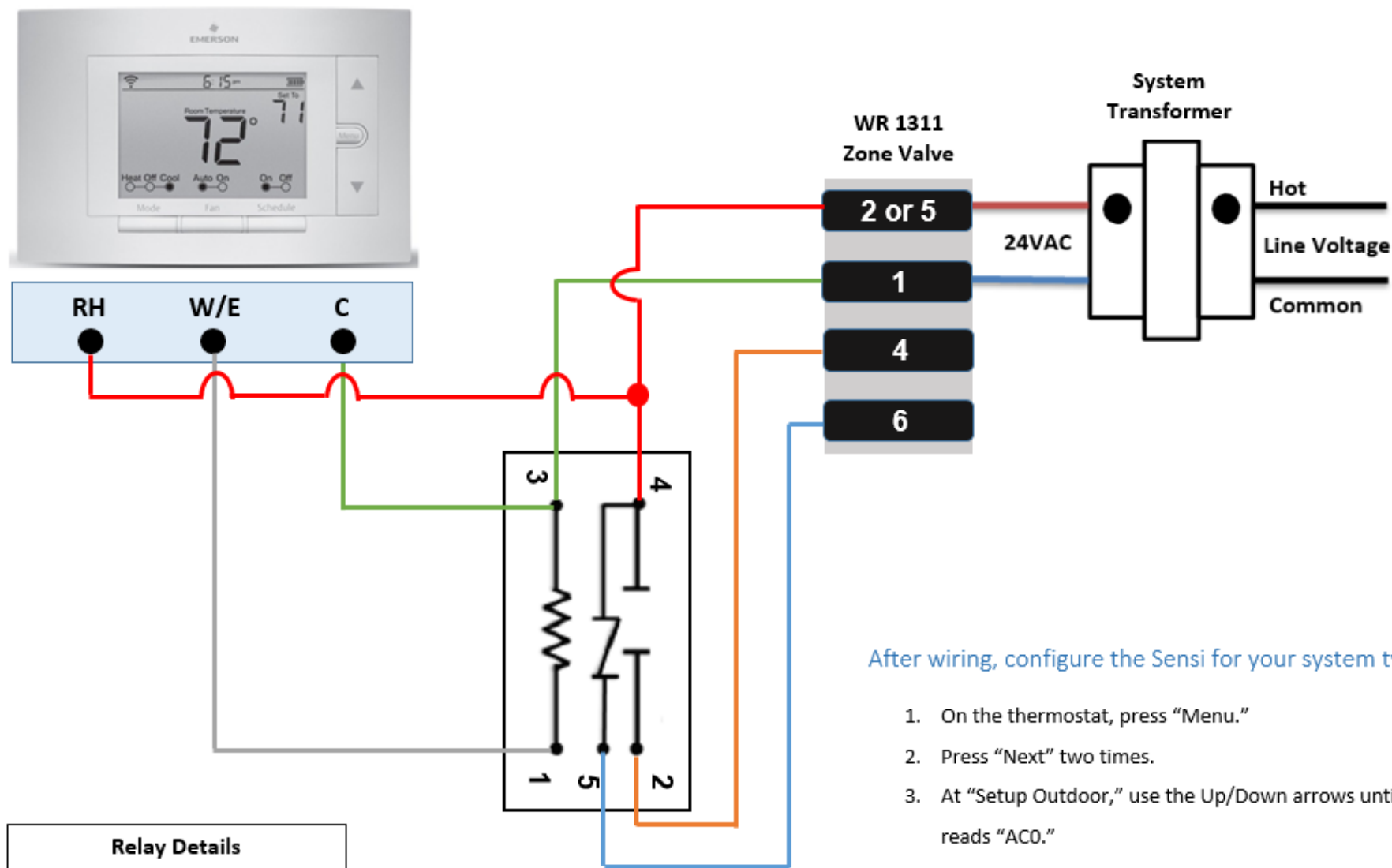
1. On the thermostat, press “Menu.”
2. Press “Next” two times.
3. At “Setup Outdoor,” use the Up/Down arrow until this reads “AC0.”
4. Press “Next” one time.
5. At “Setup Indoor,” use the Up/Down arrow until this reads “6A1.”
6. Press “Next” one time.
7. At this setting, use the Up/Down arrow until this reads “2.”
8. Press “Exit.”

Adding a SPDT Relay for Common

1. Remember to turn off power to heating system before connecting or disconnecting any wires.
2. Mount the relay near the zone valve.
3. To re-wire the system and add a relay, reference the table and wiring diagram below.

				
At the New Thermostat		At the New Relay	At the Zone Valve	Purpose of Connection
Old Thermostat Terminal (Wire)	Attaches to New Thermostat	Attaches to Relay Terminal (See diagram on pg. 3)	Attaches to Zone Valve	Function
4, or W, or W/E	W/E	Relay Terminal #1	No Connection	Powers Relay Coil on Thermostat Call for Heat
5, or R, or RH	RH	Splice or Join to Relay Terminal #4	Attaches to Zone Valve #2 or #5 (#2 and #5 are equivalent)	Power (24V hot)
6, or Y, or O/B, or A	C	Splice or Join to Relay Terminal #3	Splice or Join to Zone Valve #1	Power (24V common)
		Add a Wire on Relay Terminal #2	Attach to Zone Valve Terminal #4	Opens Zone Valve on Call for Heat
		Add a Wire on Relay Terminal #5	Attach to Zone Valve Terminal #6	Closes Zone Valve When Call for Heat Ends

Adding a SPDT Relay for Common (Diagram)



Relay Details

24-volt Relay 90-293Q or Equivalent
"Single Pole Double Throw"

#1 and #3 coil connections are energized in heating.
#4 and #2 are "normally open" (NO) contacts.
#4 and #5 are "normally closed" (NC) contacts.

After wiring, configure the Sensi for your system type

1. On the thermostat, press "Menu."
2. Press "Next" two times.
3. At "Setup Outdoor," use the Up/Down arrows until this reads "AC0."
4. Press "Next" one time.
5. At "Setup Indoor," use the Up/Down arrows until this reads "6A1."
6. Press "Exit."