

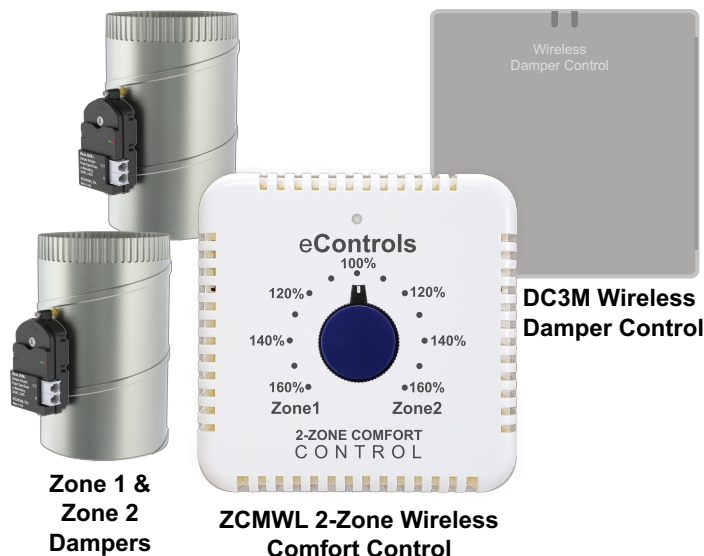
The ZCMWL 2-Zone Wireless Comfort Control works with any thermostat to provide you with a uniformly comfortable home in every season.

The ZCMWL enables you to direct more heating or cooling to the zone that needs it to balance the upstairs and downstairs temperatures. Or, focus more heating or cooling upstairs or downstairs as desired and less to the unoccupied space to save energy and improve comfort.

Save energy at night by directing more heating or cooling to the upstairs sleeping zone and less to the unoccupied downstairs zone..

 Look for this symbol throughout the manual to see how the ZCMWL can save energy as well as reduce wasted energy.

To learn how the ZCMWL complements smart thermostats with remote sensors, see page 2 for more information.



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HOMEOWNER

Understanding Your 2-Zone Comfort Control

The ZCMWL 2-Zone Wireless Control is installed on any wall, a wireless damper control is installed near the equipment and two modulating dampers are installed in the duct work to control the distribution of heating and cooling to the downstairs and upstairs zones.

Green LED Blink Indicates a successful communication. You should see the blink within about 15 seconds of making an adjustment of 5% or more.

Red LED Blink Indicates that the wireless communication was not successful. The control will continue to resend every 15 seconds, up to three times. After a successful communication, you will see the LED blink green. If not, please refer to the Troubleshooting section in the Installer section of the manual.

No LED Blink Indicates that the battery voltage is low and the battery needs to be changed.

HOMEOWNER

Improve Comfort to Zone 1 (Downstairs)

To direct more cooling or heating downstairs, simply **Turn the Knob** to the **Left**. Try an adjustment of 5 to 10% and increase if necessary. Within about 15 seconds, the LED will blink green, indicating a successful communication.



- Reduces the wasted energy used to heat or cool the unoccupied upstairs zone and saves energy by satisfying the heating and cooling calls sooner.

Improve Comfort to Zone 2 (Upstairs)

To direct more cooling or heating upstairs, simply **Turn the Knob** to the **Right**. Try an adjustment of 5 to 10% and increase if necessary. Within about 15 seconds of an adjustment, the LED will blink green indicating successful communication.



- Reduces the wasted energy used to heat or cool the unoccupied downstairs zone and saves energy by enabling you to adjust your heating and cooling set to temperatures to more energy saving settings without sacrificing comfort.

Night Comfort

At night, direct more heating or cooling upstairs and less to the unoccupied downstairs to improve comfort and save energy. Try a 30% adjustment and increase or decrease if necessary.



- Night Comfort reduces the wasted energy used to heat or cool the unoccupied downstairs zone at night and saves energy by enabling you to adjust your heating and cooling set to temperatures to more energy saving settings without sacrificing comfort.

Smart Thermostats w/ Remote Sensor

The ZCMWL 2-Zone Comfort Control optimizes the comfort features in smart thermostats with remote sensors while adding valuable energy savings.

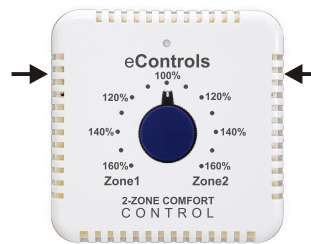
- At night, use the thermostat's remote sensor located upstairs in the bedroom space to control the heating and cooling calls. Night Comfort directs more heating or cooling upstairs and satisfies the heating or cooling call sooner, saving energy and optimizing comfort.
- When more heating or cooling is directed upstairs, use the thermostat's remote sensor located upstairs to control the heating and cooling calls. This satisfies the heating or cooling call sooner, saving energy and optimizing comfort.

Loss of Communication

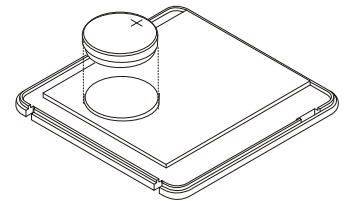
If there is a loss of communication between the ZCMWL Wall Control and the DC3M Damper Control for more than 10 minutes, the dampers will go to a fully open position (green LED).

Changing the Battery

The ZCMWL 2-Zone Control is powered by a CR2450 Lithium Coin Cell Battery. Battery life is typically 3 years.



Press and hold in the areas indicated near the top of the control to release the cover.



Remove the battery. Insert a CR2450 Lithium Coin Cell battery. Make sure + side is facing up.

Replace cover by lining up the plastic tabs on the wall base to the grooves on the bottom of the cover then snap into place.

Power Outage

When power is restored, the dampers go to a fully open position (green LED). After about 10 minutes, the control communicates the current damper position and the dampers adjust.

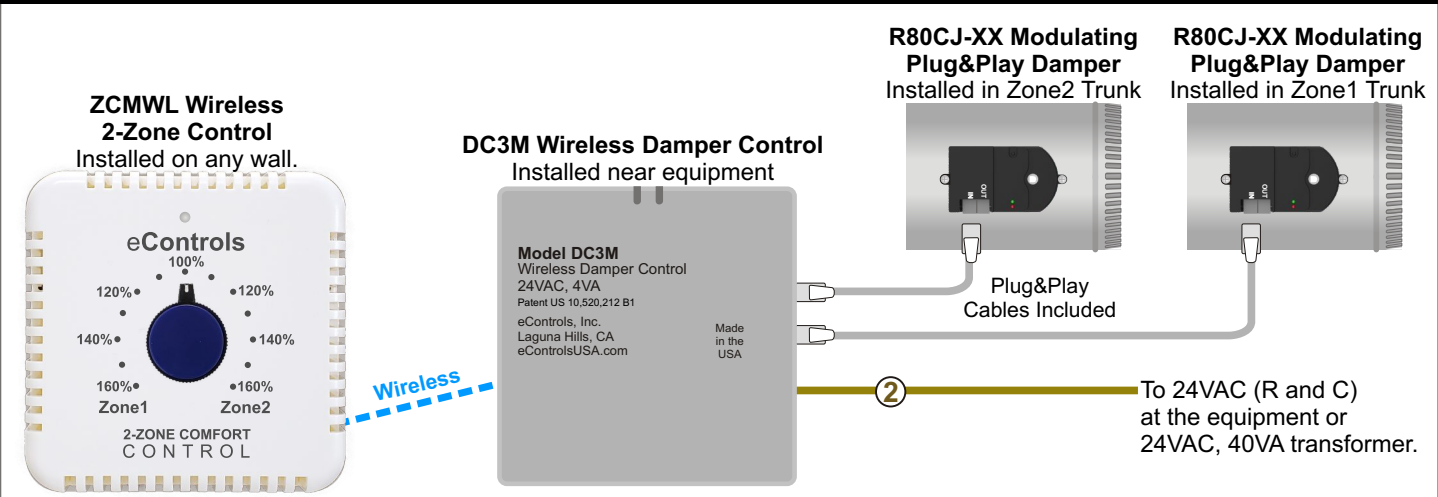
INSTALLATION

CAUTIONS

- Before installing the ZCMWL system, turn off all power to the HVAC system.
- Read entire manual first and follow all instructions carefully.
- Follow all local electrical codes during installation. All wiring must conform to local and national electrical codes.
- Use cautions when mounting components to surfaces that may have concealed wiring beneath the surface.
- When servicing products or accessing products, turn off all power to these items.

INSTALLATION

Wiring Diagram

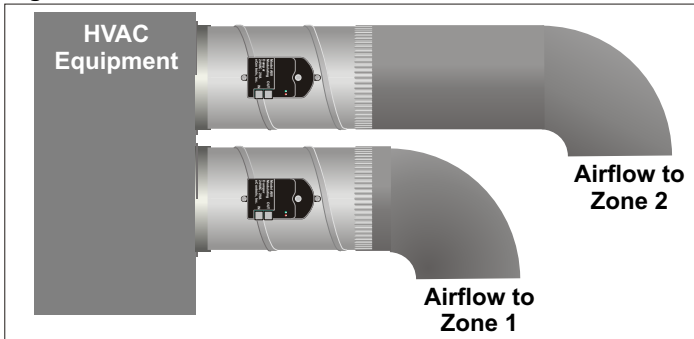


STEP 1 Install Dampers

In a typical installation, Zone 1 is the downstairs living zone and Zone 2 is the upstairs sleeping zone.

- Install an R80CJ or RT80CJ damper in the trunk supplying air to Zone 1. Install an R80CJ or RT80CJ damper in trunk supplying air to Zone 2. Install so crimped end is in the direction of airflow. Each damper uses 2VA of power. See Figure 1.

Figure 1



STEP 2 Install DC3M Damper Control

- Remove cover of the DC3M Damper Control by pressing the tabs in the area indicated to release the cover. See Figure 2.
- Mount DC3M near the HVAC equipment using the hardware provided. Locate it on a wall, stud or roof truss. Do not install on a metal surface or near 120VAC lines. See Figure 3.

Figure 2

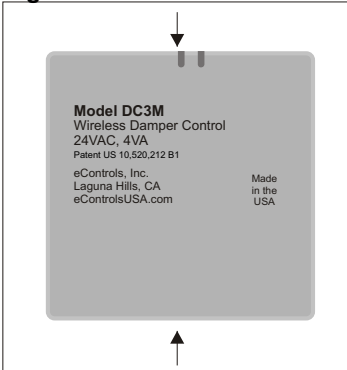
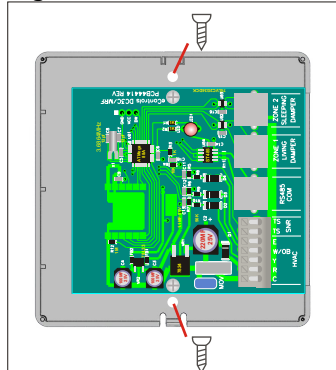


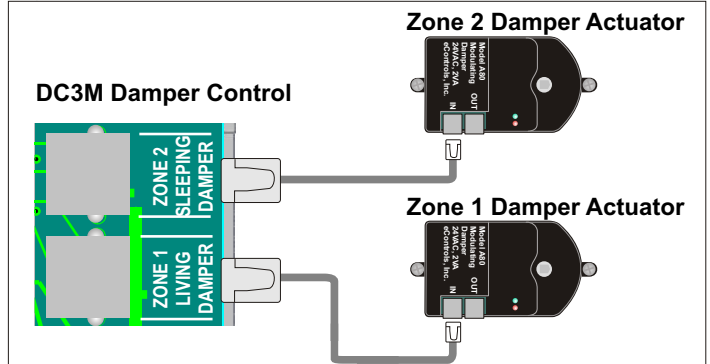
Figure 3



STEP 3 Connect Dampers to DC3M

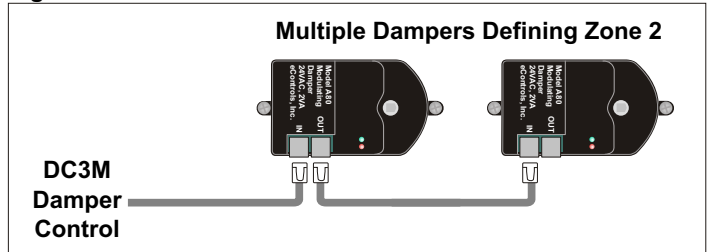
- Using one of the plug&play cables included with the dampers, plug one end of the cable into the "IN" connector on the Zone 1 damper actuator then plug the other end into the Zone 1 connector on the DC3M Damper Control. Using the other cable, plug one end of the cable into the "IN" connector on the Zone 2 damper actuator then plug the other end into the Zone 2 connector on the DC3M Damper Control. See Figure 4.

Figure 4



- If needed, up to 4 dampers can be connected together to define the upstairs and downstairs zones. See Figure 5.

Figure 5



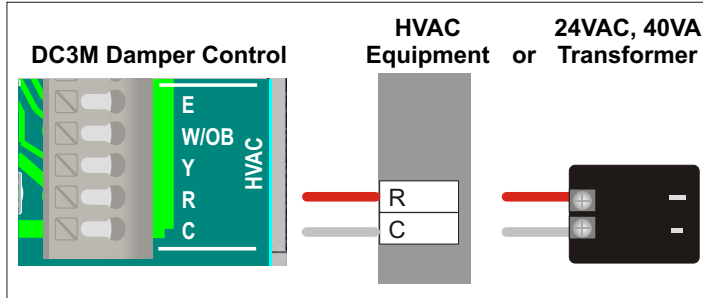
INSTALLATION

STEP 4 Wire DC3M to Equipment

The DC3M Damper Control is wired to the equipment for power using the R and C terminals. Or, a separate 24VAC, 40VA transformer can be used.

- Use 2-conductor, 18 or 20 gage thermostat cable to connect the DC3M Control terminals R and C to the equipment terminals R and C or to a 24VAC 40VA transformer. See Figure 6.

Figure 6



STEP 5 Power DC3M and Dampers

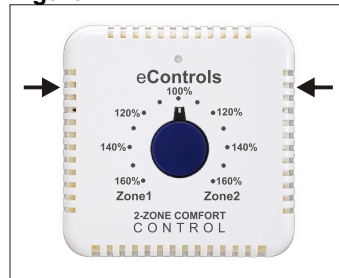
- Turn on power to the HVAC equipment or 24VAC transformer. Observe a green LED on the DC3M and green LEDs on all damper actuators.

STEP 6 Mount & Power ZCMWL Control

The ZCMWL 2-Zone Control can be mounted on any wall.

- Press the areas indicated to release the cover. See Figure 7. Install the battery.
- Mount the base using the included hardware.

Figure 7



TEST ZONE 1 AIRFLOW

Activate a cooling call. With the ZCMWL set to 100%, measure or feel the airflow going to Zone 1 downstairs and Zone 2 upstairs as a reference.

Rotate the knob on the ZCMWL fully counterclockwise to direct 160% airflow to Zone 1. Within about 15 seconds the LED will blink green after a successful communication. You should measure or feel more airflow to Zone 1 and less airflow to Zone 2. If not, see troubleshooting.

TEST ZONE 2 AIRFLOW

Rotate the knob on the ZCMWL fully clockwise to direct 160% airflow to Zone 2. Within about 15 seconds the LED will blink green after a successful communication. You should measure or feel more airflow to Zone 2 and less airflow to Zone 1. If not, see troubleshooting.

Return the ZCMWL knob to the center position (100%).

Troubleshooting

Airflow appears to be reversed or not changing.

Make sure the connections for the upstairs and downstairs dampers are not reversed. Make sure the DC3M is powered by observing lit LED on the DC3M. Make sure the dampers are powered by observing a green LED on the actuators when the dampers are in a 100% open position.

Understanding Damper LEDs and Airflow

Airflow Displayed	Zone 1 Damper	Zone 2 Damper
100% Zone 2 100% Zone 1	Open Green LED	Open Green LED
More Airflow to Zone 1	Open Green LED	Partially Closed No LED
More Airflow to Zone 2	Partially Closed No LED	Open Green LED

ZCMWL LED Does Not Blink

Indicates low battery. Change the battery.

ZCMWL LED Only Blinks Red

Indicates the wireless communication was not successful. The control will continue to resend the communication every 15 seconds, up to three times. If you continue to get a red LED, make sure the DC3M Damper Control is powered - green LED on. Make sure the ZCMWL and DC3M are within range - about 100' within the home. Make sure the ID #s on the ZCMWL and DC3M match. The ID #s can be found on the circuit boards of both devices.

Limited 5-Year Warranty

The 5-year warranty is limited to the repair or replacement of defective product due to parts failure or defective workmanship.

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